SADHS

South Africa
Demographic and Health Survey 2016





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South Africa
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This report is available on the NDoH website: www.health.gov.za; Stats SA website: www.statssa.gov.za; SAMRC website: www.samrc.ac.za; and on The DHS Program website: www.DHSprogram.com.

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TABLES AND FIGURES

ACKNOWLEDGEMENTS

The need to implement a Demographic and Health Survey (DHS) was identified by the National Department of Health (NDoH) so as to obtain population-based data as a means of informing policy and management of strategic programmes. The survey was conducted as a collaboration between Statistics South Africa (Stats SA) and the South African Medical Research Council (SAMRC) with technical support from ICF through The DHS Program of the United States Agency for International Development (USAID). The DHS surveys are a standard series of national-level surveys focussing on demographic and primary health care indicators. By utilising DHS model questionnaires as the basis and following a standard implementation approach, internationally comparable national data are collected. Such data will contribute towards monitoring progress on the country's National Development Plan (NDP) as well as the global Sustainable Development Goals (SDGs). Furthermore, the information will assist provinces in their planning.

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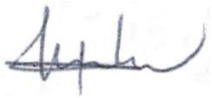

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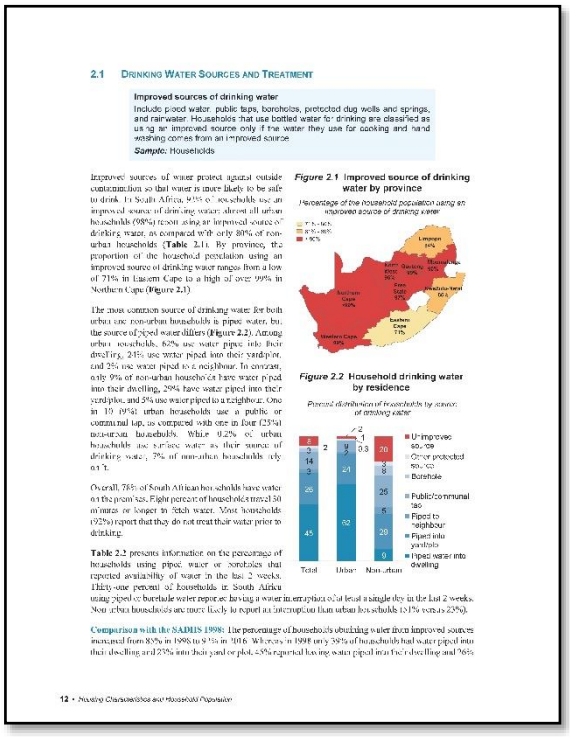
ABBREVIATIONS

ADA	American Diabetes Association
AIDS	acquired immune deficiency syndrome
ANC	antenatal care
ARI	acute respiratory infection
ASAR	age-specific attendance rate
ASFR	age-specific fertility rate
BCG	Bacille Calmette-Guérin
BMI	body mass index
CAGE	Concern/Cut-down, Anger, Guilt, and Eye-Opener
CAPI	computer-assisted personal interviewing
CARMMA	Campaign on Accelerated Reduction of Maternal and Child Mortality in Africa
CBR	crude birth rate
CDC	Centers for Disease Control and Prevention
CHW	community health worker
COPD	chronic obstructive pulmonary disease
CPR	contraceptive prevalence rate
CSPro	Censuses and Surveys Processing
DBE	Department of Basic Education
DSD	Department of Social Development
DBS	dried blood spot
DHS	Demographic and Health Survey
DTaP	diphtheria, tetanus, and acellular pertussis vaccine
DU	dwelling unit
DWCPD	Department of Women, Children and People with Disabilities; now known as the Department of Women
EA	enumeration area
ELISA	enzyme-linked immunosorbent assay
EU	European Union
GAR	gross attendance ratio
GBD	global burden of disease
GCVL	Global Clinical and Viral Laboratory
GFR	general fertility rate
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
GPI	gender parity index
HbA1c	glycated haemoglobin
HepB	hepatitis B
Hib	*haemophilus influenzae* type b
HIV	human immunodeficiency virus
HCT	HIV counselling and testing

IASP	International Association for the Study of Pain
ICCIDD	International Council for Control of Iodine Deficiency Disorders
ICF	ICF *(originally, Inner City Fund)*
IFSS	Internet file streaming system
IPV	inactivated polio vaccine
IUD	intrauterine contraceptive device
IYCF	infant and young child feeding
MMR	maternal mortality ratio
MSF	master sample frame
MTCT	mother-to-child transmission
NAR	net attendance ratio
NCCEMD	National Committee on Confidential Enquiries into Maternal Deaths
NDoH	National Department of Health
NDP	National Development Plan
NGO	nongovernmental organisation
NHI	National Health Insurance
OPV	oral polio vaccine
ORS	oral rehydration salts
ORT	oral rehydration therapy
PCV	pneumococcal conjugate vaccine
PNC	postnatal care
PPM	parts per million
PRMR	pregnancy-related mortality ratio
PSU	primary sampling unit
RHF	recommended homemade fluids
RV	rotavirus vaccine
SADHS	South Africa Demographic and Health Survey
SAMRC	South African Medical Research Council
SASSA	South African Social Security Agency
SD	standard deviation
SDGs	Sustainable Development Goals
SSB	sugar-sweetened beverage
Stats SA	Statistics South Africa
TFR	total fertility rate
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VIP	ventilated improved pit latrine
VMMC	voluntary medical male circumcision
WG	Washington Group on Disability Statistics
WHO	World Health Organization
WtHR	waist-to-height ratio

READING AND UNDERSTANDING TABLES FROM THE SOUTH AFRICA DHS (SADHS) 2016

The SADHS 2016 final report is based on approximately 250 tables of data. They are located for quick reference through links in the text (electronic version) and at the end of each chapter. Additionally, this reader-friendly report features about 110 figures that clearly highlight background characteristics and changes over time. Colourful maps display breakdowns for provinces. The text highlights key points in bullets and clearly identifies indicator definitions in boxes.



2.1 DRINKING WATER SOURCES AND TREATMENT

Improved sources of drinking water

Include piped water, public taps, boreholes, protected dug wells and springs, and rainwater. Households that use bottled water for drinking are classified as using an improved source only if the water they use for cooking and hand washing comes from an improved source

Sample: Households

Improved sources of water protect against outside contamination so that water is more likely to be safe to drink. In South Africa, 93% of households use an improved source of drinking water; almost all urban households (98%) report using an improved source of drinking water, as compared with only 80% of non-urban households (Table 2.1). By province, the proportion of the household population using an improved source of drinking water ranges from a low of 71% in Eastern Cape to a high of over 99% in Northern Cape (Figure 2.1)

The most common source of drinking water for both urban and non-urban households is piped water, but the source of piped water differs (Figure 2.2). Among urban households, 62% use water piped into their dwelling, 24% use water piped into their yard/plot, and 2% use water piped to a neighbour. In contrast, only 9% of non-urban households have water piped into their dwelling, 29% have water piped into their yard/plot, and 5% use water piped to a neighbour. One in 10 (9%) urban households use a public or communal tap, as compared with one in four (25%) non-urban households. While 0.2% of urban households use surface water as their source of drinking water, 3% of non-urban households rely on it.

Overall, 78% of South African households have water on the premises. Eight percent of households travel 30 minutes or longer to fetch water. Most households (92%) report that they do not treat their water prior to drinking.

Table 2.3 presents information on the percentage of households using piped water or boreholes that reported availability of water in the last 2 weeks. Thirty-one percent of households in South Africa using piped or borehole water report having a water interruption of at least a single day in the last 2 weeks. Non-urban households are more likely to report an interruption than urban households (51% versus 25%).

Comparison with the SADHS 1998: The percentage of households obtaining water from improved sources increased from 85% in 1998 to 93% in 2016. Whereas in 1998 only 58% of households had water piped into their dwelling and 23% into their yard or plot, 65% reported having water piped into their dwelling and 26%

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Figure 2.1 Improved source of drinking water by province

Percentage of the household population using an improved source of drinking water

Figure 2.2 Household drinking water by residence

Percent distribution of households by source of drinking water

The following pages provide an introduction to the organisation of SADHS tables, the presentation of background characteristics, and a brief summary of sampling and understanding denominators. In addition, this section provides some exercises for users as they practise their new skills in interpreting SADHS tables.

Example 1: Women's Exposure to Mass Media
A Question Asked of All Survey Respondents

Table 3.4.1 Exposure to mass media: Women 1

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, South Africa DHS 2016

Background characteristic 3	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women 2
Age						
15-19	37.1	71.8	47.3	25.1	20.2	1,427
20-24	40.2	72.1	53.6	27.7	18.0	1,415
25-29	41.3	73.8	55.4	30.2	16.7	1,444
30-34	43.8	75.8	57.8	34.0	16.7	1,333
35-39	40.3	75.1	59.1	31.2	16.4	1,072
40-44	40.4	73.9	55.8	30.6	18.2	941
45-49	38.7	72.9	58.2	28.9	17.7	883
Residence						
Urban	49.8	79.4	60.5	37.1	12.5	5,731
Non-urban	20.9	61.6	43.3	14.1	28.4	2,783
Province						
Western Cape	74.6	91.9	75.2	57.8	2.4	995
Eastern Cape	21.3	62.8	46.5	14.1	27.4	938
Northern Cape	46.1	80.9	53.4	31.8	12.2	173
Free State	46.7	78.1	68.0	37.3	12.1	442
KwaZulu-Natal	30.8	63.3	47.8	22.1	28.2	1,616
North West	33.2	80.3	59.8	25.2	12.3	570
Gauteng	52.2	77.3	60.1	39.5	13.0	2,284
Mpumalanga	27.0	68.0	42.9	15.1	20.3	671
Limpopo	17.4	69.5	39.5	10.4	23.5	824
Education						
No education	11.1	46.7	30.8	8.9	45.2	168
Primary incomplete	11.2	54.1	38.5	9.1	36.0	447
Primary complete	18.4	54.0	40.8	11.1	36.2	327
Secondary incomplete	34.4	71.1	50.6	24.3	20.1	4,195
Secondary complete	52.4	80.9	63.1	39.7	10.8	2,369
More than secondary	61.3	86.1	69.6	45.9 5	5.7	1,008
Wealth quintile						
Lowest	16.1	35.0	31.2	7.8	48.6	1,648
Second	26.2	70.4	48.8	16.7	19.1	1,715
Middle	43.3	83.9	57.2	31.8	9.9	1,805
Fourth	51.1	88.3	66.2	40.1	6.8	1,763
Highest	65.4	89.0	71.1	51.9	5.2	1,583
Total 4	40.3	73.6	54.9	29.6	17.7	8,514

Step 1: Read the title and subtitle. They tell you the topic and the specific population being described. In this case, the table is about women age 15-49 and their access to different types of media. All eligible female respondents age 15-49 were asked these questions.

Step 2: Scan the column headings—highlighted in green in Example 1.They describe how the information is categorised. In this table, the first three columns of data show different types of media that women access at least once a week. The fourth column shows women who access all three media, while the fifth column is women who do not access any of the three types of media at least once a week. The last column lists the number of women interviewed in the survey.

Step 3: Scan the row headings—the first vertical column highlighted in blue in Example 1. These show the different ways the data are divided into categories based on population characteristics. In this case, the table presents women's exposure to media by age, urban/non-urban residence, province, educational level, and wealth quintile. Most of the tables in the SADHS report will be divided into these same categories.

Step 4: Look at the row at the bottom of the table highlighted in pink. These percentages represent the totals of all women age 15-49 and their exposure to different types of media. In this case, 73.6%* of women watch television weekly and 54.9% listen to the radio weekly.

Step 5: To find out what percentage of women with more than secondary education access all three media at least once a week, draw two imaginary lines, as shown on the table. This shows that 45.9% of women age 15-49 with more than secondary education access three types of media weekly.

Step 6: By looking at patterns by background characteristics, we can see how women's access to media varies across South Africa. Mass media are often used to communicate health messages. Knowing how mass media exposure varies among different groups can help program planners and policy makers determine how to most effectively reach their target populations.

*For the purpose of this document, data are presented exactly as they appear in the table including decimal places. However, the text in the remainder of this report rounds data to the nearest whole percentage point.

Practice: Use the table in Example 1 to answer the following questions:

a) What percentage of women in South Africa do not access any of the three media at least once a week?
b) What age group of women are most likely to read a newspaper weekly?
c) Compare women in urban and non-urban areas—which group is more likely to listen to the radio weekly?
d) What are the lowest and highest percentages (range) of women who do not access any of the three media at least once a week by province?
e) Is there a clear pattern in exposure to television on a weekly basis by education?
f) Is there a clear pattern in exposure to radio by wealth quintile?

Answers:

a) 17.7%

b) Women age 30-34—43.8% of women in this age group read the newspaper at least once a week.

c) Women in urban areas—60.5% listen to the radio weekly compared with 43.3% of women in non-urban areas.

d) 2.4% of women in Western Cape do not access any of the three media weekly, compared with 28.2% of women in KwaZulu-Natal.

e) Exposure to television on a weekly basis increases as a woman's level of education increases; 46.7% of women with no education watch television weekly compared with 86.1% of women with more than secondary education.

f) Exposure to radio on a weekly basis increases as household wealth increases; 31.2% of women in the lowest wealth quintile listen to the radio weekly, compared with 71.1% of women in the highest wealth quintile.

Example 2: Prevalence and treatment of diarrhoea

A Question Asked of a Subgroup of Survey Respondents

Table 10.12 Prevalence and treatment of diarrhoea 1

Percentage of children under age 5 who had diarrhoea in the 2 weeks preceding the survey; and among children with diarrhoea in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage with diarrhoea	Number of children	Among children under age 5 with diarrhoea: Percentage for whom advice or treatment was sought[1]	Among children under age 5 with diarrhoea: Number of children with diarrhoea
Age in months				
<6	7.0	363	(36.9)	25
6-11	16.3	325	66.2	53
12-23	16.8	677	62.4	114
24-35	8.2	660	55.9	54
36-47	8.5	688	79.6	58
48-59	7.1	730	(63.0)	52
Sex				
Male	11.2	1,783	59.9	200
Female	9.4	1,661	67.1	157
Source of drinking water[2]				
Improved	10.2	3,111	62.9	318
Unimproved	11.4	333	(64.3)	38
Type of toilet facility[3]				
Improved	10.4	2,523	64.3	263
Unimproved sanitation	10.2	920	59.6	94
Shared facility[4]	10.6	724	60.7	77
Unimproved facility	9.1	73	*	7
Open defecation	8.3	123	*	10
Handwashing place				
Observed, fixed place	8.6	1,727	71.2	148
Observed, mobile place	13.5	1,177	52.5	159
Not observed	9.2	539	(72.8)	49
Residence				
Urban	9.0	2,204	65.5	199
Non-urban	12.7	1,240	60.0	157
Province				
Western Cape	5.4	306	*	16
Eastern Cape	9.4	382	(63.8)	36
Northern Cape	8.1	67	*	5
Free State	5.8	156	*	9
KwaZulu-Natal	13.7	636	56.4	87
North West	16.4	269	57.9	44
Gauteng	8.6	980	(73.2)	85
Mpumalanga	10.7	309	(69.3)	33
Limpopo	12.0	338	57.1	41
Mother's education				
No education	10.6	49	*	5
Primary incomplete	17.4	167	(61.6)	29
Primary complete	13.1	133	*	17
Secondary incomplete	10.3	1,680	58.5	173
Secondary complete	9.6	1,027	76.9	98
More than secondary	8.6	388	(49.1)	34
Wealth quintile				
Lowest	11.8	744	55.1	88
Second	13.8	822	53.7	114
Middle	8.7	766	80.3	67
Fourth	8.7	642	(65.6)	56
Highest	6.8	470	(77.8)	32
Total	10.3	3,444	63.0	356

2 a b 3 4

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes advice or treatment from the following sources: public sector, private medical sector, and supermarket. Excludes advice or treatment from a traditional health practitioner

[2] See Table 2.1 for definition of categories

[3] See Table 2.3 for definition of categories

[4] Facilities that would be considered improved if they were not shared by two or more households

Step 1: Read the title and subtitle. In this case, the table is about two separate groups of children: children under age 5 (a) and children under age 5 with diarrhoea in the two weeks before the survey (b).

Step 2: Identify the two panels. First, identify the columns that refer to all children under age 5 (a), and then isolate the columns that refer only to children under age 5 with diarrhoea in the two weeks before the survey (b).

Step 3: Look at the first panel. What percentage of children under age 5 had diarrhoea in the two weeks before the survey? It's 10.3%. Now look at the second panel. How many children under age 5 had diarrhoea in the two weeks before the survey? It's 356 children or 10.3% of the 3,444 children under age 5 (with rounding). The second panel is a subset of the first panel.

Step 4: Only 10.3% of children under age 5 had diarrhoea in the two weeks before the survey. Once these children are further divided into the background characteristic categories, there may be too few cases for the percentages to be reliable.

- What percentage of children under age 5 with diarrhoea in the two weeks before the survey whose mothers have more than secondary education sought advice or treatment? 49.1%. This percentage is in parentheses because between 25 and 49 children under age 5 whose mothers have more than secondary education had diarrhoea in the two weeks before the survey (unweighted). Readers should use this number with caution—it may not be reliable. (For more information on weighted and unweighted numbers, see Example 3.)
- What percentage of children under age 5 with diarrhoea in the two weeks before the survey whose mothers have no education sought advice or treatment? There is no number in this cell—only an asterisk. This is because fewer than 25 children under age 5 whose mothers have no education had diarrhoea in the two weeks before the survey (unweighted). Results for this group are not reported. The subgroup is too small, and therefore the data are not reliable.

Note: When parentheses or asterisks are used in a table, the explanation will be noted under the table. If there are no parentheses or asterisks in a table, you can proceed with confidence that enough cases were included in all categories, i.e., that the data are reliable.

Example 3: Understanding Sampling Weights in SADHS Tables

A sample is a group of people who have been selected for a survey. In the SADHS, the sample is designed to represent the national population age 15-49. In addition to national data, most countries want to collect and report data on smaller geographical or administrative areas. However, doing so requires a minimum sample size per area. For the SADHS 2016, the survey sample is representative at the national and provincial levels, and for urban and non-urban areas.

Table 3.1 Background characteristics of respondents

Percent distribution of women age 15-49 by selected background characteristics, South Africa DHS 2016

Background characteristic	Women		
	Weighted percent (3)	Weighted number (2)	Unweighted number (1)
Province			
Western Cape	11.7	995	656
Eastern Cape	11.0	938	1,041
Northern Cape	2.0	173	718
Free State	5.2	442	854
KwaZulu-Natal	19.0	1,616	1,360
North West	6.7	570	863
Gauteng	26.8	2,284	863
Mpumalanga	7.9	671	1,054
Limpopo	9.7	824	1,105
Total 15-49	100.0	8,514	8,514

To generate statistics that are representative of South Africa as a whole and the 9 provinces, the number of women surveyed in each province should contribute to the size of the total (national) sample in proportion to size of the province. However, if some provinces have small populations, then a sample allocated in proportion to each province's population may not include sufficient women from each province for analysis. To solve this problem, provinces with small populations are oversampled. For example, let's say that you have enough money to interview 8,514 women and want to produce results that are representative of South Africa as a whole and its provinces (as in Table 3.1). However, the total population of South Africa is not evenly distributed among the provinces: some provinces, such as Gauteng, are heavily populated while others, such as Northern Cape are not. Thus, Northern Cape must be oversampled.

A sampling statistician determines how many women should be interviewed in each province in order to get reliable statistics. The **blue column (1)** at the right in the table above shows the actual number of women interviewed in each province. Within the provinces, the number of women interviewed ranges from 656 in Western Cape to 1,360 in KwaZulu-Natal. The number of interviews is sufficient to get reliable results in each province.

With this distribution of interviews, some provinces are overrepresented and some provinces are underrepresented. For example, the population in Gauteng is about 27% of the population in South Africa, while Northern Cape's population contributes only 2% of the population in South Africa. But as the blue column shows, the number of women interviewed in Gauteng accounts for only about 10% of the total sample of women interviewed (863/8,514) and the number of women interviewed in Northern Cape accounts for almost the same percentage of the total sample of women interviewed (8%, or 718/8,514). This unweighted distribution of women does not accurately represent the population.

In order to get statistics that are representative of South Africa, the distribution of the women in the sample needs to be weighted (or mathematically adjusted) such that it resembles the true distribution in the South Africa. Women from a small province, like Northern Cape, should only contribute a small amount to the national total. Women from a large province, like Gauteng, should contribute much more. Therefore, DHS statisticians mathematically calculate a "weight" which is used to adjust the number of women from each province so that each province's contribution to the total is proportional to the actual population of the province. The numbers in the **purple column (2)** represent the "weighted" values. The weighted values can be smaller or larger than the unweighted values at province level. The total national sample size of 8,514 women has not changed after weighting, but the distribution of the women in the provinces has been changed to represent their contribution to the total population size.

How do statisticians weight each category? They take into account the probability that a woman was selected in the sample. If you were to compare the **green column (3)** to the actual population distribution of South

Africa, you would see that women in each province are contributing to the total sample with the same weight that they contribute to the population of the South Africa. The weighted number of women in the survey now accurately represents the proportion of women who live in Gauteng and the proportion of women who live in Northern Cape.

With sampling and weighting, it is possible to interview enough women to provide reliable statistics at national and province levels. In general, only the weighted numbers are shown in each of the SADHS tables, so don't be surprised if these numbers seem low: they may actually represent a larger number of women interviewed.

SUSTAINABLE DEVELOPMENT GOAL INDICATORS

South Africa DHS 2016

Indicator	Sex			SADHS table number
	Male	Female	Total	
2. Zero hunger				
2.2.1 Prevalence of stunting among children under 5 years of age	29.8	25.0	27.4	11.1
2.2.2 Prevalence of malnutrition among children under 5 years of age	17.6	13.8	15.7[a]	na
a) Prevalence of wasting among children under 5 years of age	2.1	2.8	2.5[a]	11.1
b) Prevalence of overweight among children under 5 years of age	15.5	11.0	13.3[a]	11.1
3. Good health and well-being				
3.1.2 Proportion of births attended by skilled health personnel	na	na	96.7	9.6
3.2.1 Under-5 mortality rate[1]	49	35	42	8.2
3.7.1 Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods	na	79.7	na	7.11.2
3.7.2 Adolescent birth rates per 1,000 women				
a) Girls aged 10-14 years[2]	na	1	na	5.1
b) Women aged 15-19 years[3]	na	71	na	5.1
3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older[4]	37.3	7.8	22.6[a]	18.1.1 and 18.2.2
3.b.1 Proportion of the target population covered by all vaccines included in their national programme[5]	53.2	52.3	52.7	10.4
5. Gender equality				
5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months[6,7]	na	13.0	na	20.4
a) Physical violence	na	7.7	na	20.4
b) Sexual violence	na	2.3	na	20.4
c) Psychological violence	na	9.1	na	20.4
5.3.1 Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18				
a) Before age 15	na	0.9	na	4.3
b) Before age 18	na	3.6	na	4.3
5.6.1 Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care[8]	na	60.2	na	na
5.b.1 Proportion of individuals who own a mobile telephone[9]	88.5	91.2	89.9[a]	19.6.1 and 19.6.2

Indicator	Residence			SADHS table number
	Urban	Non-urban	Total	
7. Affordable and clean energy				
7.1.1 Proportion of population with access to electricity	93.6	85.9	90.8	2.4
7.1.2 Proportion of population with primary reliance on clean fuels and technology[10]	91.3	56.1	78.5	2.4

Indicator	Sex			SADHS table number
	Male	Female	Total	
8. Decent work and economic growth				
8.10.2 Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider[11]	57.0	53.9	55.4	19.6.1 and 19.6.2
17. Partnerships for the goals				
17.8.1 Proportion of individuals using the Internet[12]	52.0	47.4	49.7	3.5.1 and 3.5.2

na = Not applicable
[1] Expressed in terms of deaths per 1,000 live births for the 5-year period preceding the survey
[2] Equivalent to the age-specific fertility rate for girls age 10-14 for the 3-year period preceding the survey, expressed in terms of births per 1,000 girls age 10-14
[3] Equivalent to the age-specific fertility rate for women age 15-19 for the 3-year period preceding the survey, expressed in terms of births per 1,000 women age 15-19
[4] Data are not age-standardised
[5] Data are presented for children age 12-23 months receiving all vaccines included in their national programme appropriate for their age: BCG, two doses of oral polio vaccine, three doses of DTaP-IPV-Hib, three doses of HepB, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of measles vaccine.
[6] Data are available for women age 18 and older
[7] In the DHS, psychological violence is termed emotional violence
[8] Data are available only for currently married women who are not pregnant
[9] Data are available only for women and men age 15-49
[10] Measured as the percentage of the population using clean fuel for cooking
[11] Data are available for women and men age 15-49 who have and use and account at bank or other financial institution; information on use of a mobile-money-service provider is not available
[12] Data are available for women and men age 15-49 who have used the Internet in the past 12 months
[a] The total is calculated as the simple arithmetic mean of the percentages in the columns for males and females

SOUTH AFRICA

INTRODUCTION AND SURVEY METHODOLOGY 1

Statistics South Africa (Stats SA), in partnership with the South African Medical Research Council (SAMRC), conducted the South Africa Demographic and Health Survey 2016 (SADHS 2016) at the request of the National Department of Health (NDoH). Technical assistance was provided through The DHS Program. Timely information about the health of the nation is essential for monitoring and evaluation. Survey data collection took place from 27 June 2016 to 4 November 2016.

1.1 SURVEY OBJECTIVES

The primary objective of the SADHS 2016 is to provide up-to-date estimates of basic demographic and health indicators. Specifically, the SADHS 2016 collected information on fertility levels; marriage; sexual activity; fertility preferences; awareness and use of contraceptives; breastfeeding practices; nutrition; childhood and maternal mortality; maternal health, including antenatal and postnatal care; key aspects of child health, including immunisation coverage and prevalence and treatment of acute respiratory infection (ARI), fever, and diarrhoea; potential exposure to the risk of HIV infection; coverage of HIV counselling and testing (HCT); and physical and sexual violence against women. Another critical objective of the SADHS 2016 is to provide estimates of health and behaviour indicators for adults age 15 and older, including use of tobacco, alcohol, and codeine-containing medications. In addition, the SADHS 2016 provides estimates of the prevalence of anaemia among children age 6-59 months and adults age 15 and older, and the prevalence of hypertension, anaemia, high HbA1c levels (an indicator of diabetes), and HIV among adults age 15 and older.

The information collected through the SADHS 2016 is intended to assist policymakers and programme managers in evaluating and designing programmes and strategies for improving the health of the country's population.

1.2 SAMPLE DESIGN

The sampling frame used for the SADHS 2016 is the Statistics South Africa Master Sample Frame (MSF), which was created using Census 2011 enumeration areas (EAs). In the MSF, EAs of manageable size were treated as primary sampling units (PSUs), whereas small neighbouring EAs were pooled together to form new PSUs, and large EAs were split into conceptual PSUs. The frame contains information about the geographic type (urban, traditional, or farm) and the estimated number of residential dwelling units (DUs) in each PSU. The sampling convention used by Stats SA is DUs. One or more households may be located in any given DU; recent surveys have found 1.03 households per DU on average.

Administratively, South Africa is divided into nine provinces. The sample for the SADHS 2016 was designed to provide estimates of key indicators for the country as a whole, for urban and non-urban areas separately, and for each of the nine provinces in South Africa. To ensure that the survey precision is comparable across provinces, PSUs were allocated by a power allocation rather than a proportional allocation. Each province was stratified into urban, farm, and traditional areas, yielding 26 sampling strata.[1]

The SADHS 2016 followed a stratified two-stage sample design with a probability proportional to size sampling of PSUs at the first stage and systematic sampling of DUs at the second stage. The Census 2011 DU count was used as the PSU measure of size. A total of 750 PSUs were selected from the 26 sampling

[1] Western Cape does not have traditional residential geotype PSUs, so only two substrata are applicable.

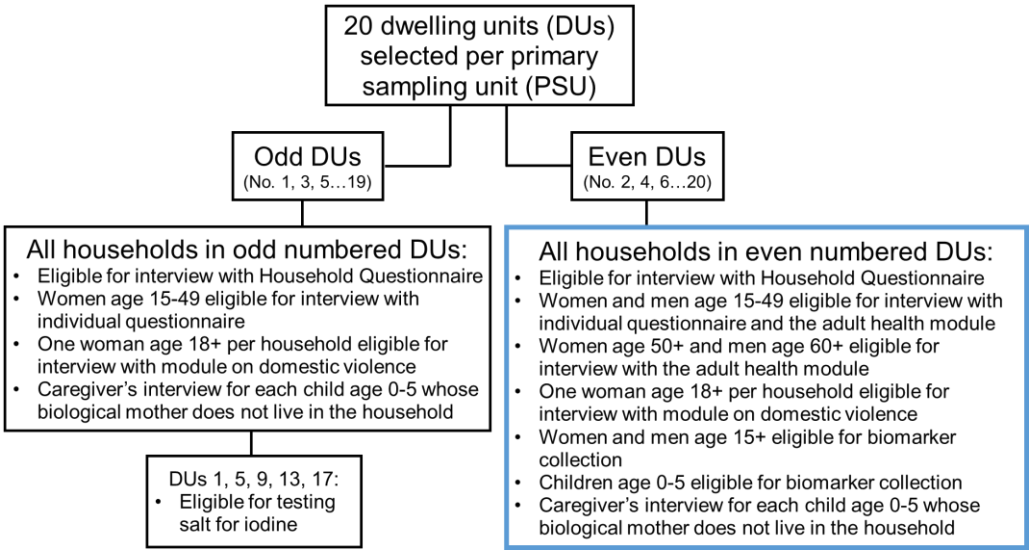
strata, yielding 468 selected PSUs in urban areas, 224 PSUs in traditional areas, and 58 PSUs in farm areas.[2]

A listing operation was carried out in all selected PSUs from January to March 2016, and the updated lists of DUs served as a sampling frame for the selection of DUs in the second stage. In the second stage of selection, a fixed number of 20 DUs per cluster were selected with systematic selection from the created listing. All households in a selected DU were eligible for interviews.

Some of the selected PSUs were informal, unstructured settlements with no clear identifications of DUs. To ensure listing coverage within each informal, unstructured PSU selected,[3] segmentation was carried out, with the PSU divided into multiple segments of about 20 DUs each. Only one segment was selected at random for the survey; in segments with 20 DUs or fewer, all DUs in the segment were eligible for the survey. In segments with more than 20 DUs, 20 DUs were randomly selected and were eligible for the survey. A cluster in the SADHS 2016 is therefore either a PSU or a segment of a PSU.

Figure 1.1 diagrams the subsampling followed in the survey. In half of selected DUs, all households were eligible for interviews with the Household Questionnaire, and all women age 15-49 who were either permanent residents of the selected households or visitors who stayed in the household the night before the survey were eligible for interviews with a standard individual questionnaire. Within this subsample, households in every other DU were eligible to have their salt tested for the presence of iodine.

Figure 1.1 **Subsampling scheme followed in the SADHS 2016**



In the remaining half of DUs, all households were eligible for interviews with the Household Questionnaire, and all women and men age 15 and older who were either permanent residents of the selected households or visitors who stayed in the household the night before the survey were eligible for individual interviews and for biomarker collection. Women age 15-49 and men age 15-59 were eligible for the standard individual questionnaire, as well as a South Africa-specific module on adult health; women age 50 and older and men age 60 and older were eligible for a few sections of the individual questionnaire and the adult health module. In addition, children age 0-59 months were eligible for biomarker collection.

Finally, in all households in selected DUs, one woman age 18 and older was selected for a module on domestic violence. In addition, for each child age 0-5 whose biological mother did not live in the household, a guardian was eligible to complete the Caregiver's Questionnaire.

[2] Four PSUs were dropped from the sample: one was vacant, two were non-accessible due to refusals, and one was an industrial area.

[3] There were 26 informal, unstructured PSUs in the SADHS sample.

1.3 QUESTIONNAIRES

Five questionnaires were used in the SADHS 2016: the Household Questionnaire, the individual Woman's Questionnaire, the individual Man's Questionnaire, the Caregiver's Questionnaire, and the Biomarker Questionnaire. These questionnaires, based on The DHS Program's standard Demographic and Health Survey questionnaires, were adapted to reflect the population and health issues relevant to South Africa. Input was solicited from various stakeholders representing government ministries and agencies, nongovernmental organisations, and international donors. After the preparation of the questionnaires in English, the questionnaires were translated into South Africa's 10 other official languages. In addition, information about the fieldworkers for the survey was collected through a self-administered Fieldworker Questionnaire.

The Household Questionnaire was used to list all of the members of, and visitors to, selected households. Basic demographic information was collected on the characteristics of each person listed, including his or her age, sex, marital status, education, and relationship to the head of the household. For children under age 18, parents' survival status was determined. The data obtained in the Household Questionnaire were used to identify women and men eligible to be interviewed with the relevant individual questionnaire, children whose caregiver was eligible for the Caregiver's Questionnaire, and those persons eligible for the Biomarker Questionnaire. The Household Questionnaire also collected information on characteristics of the household's dwelling unit, such as source of drinking water; type of sanitation facility; materials used for the floor, walls, and roof of the dwelling unit; and ownership of various durable goods. In addition, the questionnaire included a module based on questions developed by the Washington Group on Disability Statistics to estimate the prevalence of disabilities among individuals age 5 and older.

The Woman's Questionnaire was used to collect information from all eligible women age 15 and older. In all households, eligible women age 15-49 were asked questions on the following topics:

- Background characteristics such as age, education, and media exposure
- Birth history and child mortality
- Knowledge and use of family planning methods
- Antenatal, delivery, and postnatal care
- Breastfeeding and infant feeding practices
- Vaccinations and child illnesses
- Marriage and sexual activity
- Fertility preferences
- Women's work and partners' background characteristics
- Knowledge of HIV/AIDS and methods of HIV transmission
- Adult and pregnancy-related mortality

The Man's Questionnaire was administered to all men age 15-59 in the subsample of households selected for the male survey. The Man's Questionnaire collected much of the same information elicited by the Woman's Questionnaire but was shorter because it did not contain a detailed reproductive history, questions on maternal and child health, or questions on adult and maternal mortality.

Both the Woman's and Man's Questionnaires also included a module on adult health that captured information on use of tobacco, alcohol, and codeine-containing medications; consumption of fat, salt, sugar, fruit, and vegetables; health care-seeking behaviours; and self-reported prevalence of a variety of noncommunicable diseases. The module was administered to all men age 15 and older and to all women age 15 and older in the subsample of households selected for the male survey and biomarker collection.

The Caregiver's Questionnaire was used to collect information on children age 0-5 whose biological mother was deceased or did not live in the household. It gathered information on the child's sociodemographic characteristics, vaccinations, and health in the 2 weeks prior to the survey.

The Biomarker Questionnaire was used to record data on biomarkers (anthropometry, anaemia testing, blood pressure measurement, HbA1c testing, and HIV testing) collected from respondents by nurses. In addition, for adults age 15 and older, information on prescribed medications was recorded.

The purpose of the Fieldworker Questionnaire was to collect basic background information on the people who were collecting data in the field, including the team supervisor, interviewers, and nurse.

In this survey, interviewers used tablet computers to record responses during interviews. The tablets were equipped with Bluetooth technology to enable remote electronic transfer of files (transfer of assignment sheets from team supervisors to interviewers and transfer of completed questionnaires from interviewers to supervisors). The computer-assisted personal interviewing (CAPI) data collection system employed in the SADHS 2016 was developed by The DHS Program using the mobile version of CSPro. The CSPro software was developed jointly by the U.S. Census Bureau, The DHS Program, and Serpro S.A.

The survey protocol was reviewed and approved by the SAMRC Ethics Committee and the ICF Institutional Review Board.

1.4 Measuring Iodine Content of Household Salt

Salt collected from the subsample of households eligible for iodine testing was stored in 50-ml polypropylene tubes with screw-tops, away from direct light, and couriered to the SAMRC Iodine Laboratory in Cape Town in batches for testing. After the completion of the fieldwork, the iodine content of the salt was measured using the iodometric titration method recommended by the World Health Organization (WHO), globally recognised as the reference method (WHO/UNICEF/ICCIDD 2007). The titration method for salt fortified with potassium iodate (iodated salt) as described by DeMaeyer et al. (1979) has been slightly modified (Jooste and Strydom 2010). The principle of the method is that free iodine is liberated from the iodate in salt under acidic conditions. Potassium iodide solution is then added to keep the iodine in a dissolved state, and the dissolved free iodine (as triiodide) is titrated with standardised sodium thiosulfate solution, incorporating starch as an external (indirect) indicator.

Specifically, 10 g salt was dissolved in 45 ml deionised water, followed by adding 2 ml of 2N sulfuric acid and 5 ml of 10% potassium iodide. The salt solution was kept in the dark for 10 minutes to reach optimal reaction time, and then titrated with sodium thiosulfate (0.005 N) with constant stirring until the reaction solution turned pale yellow. Next 2 ml starch solution (1% starch dissolved in 15% sodium chloride) was added, forming a blue starch-iodine complex, followed by continued titration with sodium thiosulfate, until the blue colour disappeared indicating that the equivalence point had been reached. As the amount of sodium thiosulfate used is proportional to the amount of free iodine liberated from the salt, the concentration of iodine in the salt sample was calculated based on the titrated volume (burette reading) of sodium thiosulfate using the formula below. The results are expressed as milligrams of iodine per kilogram (mg/kg) of salt or the equivalent parts of iodine per million parts of salt (ppm).

Formula:

mg/kg (ppm) iodine = titration volume in ml x normality of sodium thiosulfate (eq/l) x 21.15 (g/eq I) x 1,000 / salt sample weight in g

The thiosulfate solution was standardised by using 5 ml of 0.005 N potassium iodate and following the same procedure for analysing a salt sample. The normality of the sodium thiosulfate solution is based on the law of equivalents:

normality of sodium thiosulfate = normality potassium iodate x volume potassium iodate / volume sodium thiosulfate

1.5 ANTHROPOMETRY, ANAEMIA TESTING, BLOOD PRESSURE MEASUREMENT, HBA1C TESTING, AND HIV TESTING

In the subsample of households selected for the male survey and the adult health module, the SADHS 2016 incorporated the following biomarkers: anthropometry, anaemia testing, blood pressure measurement, HbA1c testing, and HIV testing. For each biomarker measurement or test for which an individual was eligible, the respondent or the child's parent/guardian was required to provide written consent before the measurement or test could proceed. In the case of never-in-union respondents age 15-17, consent was required from both the respondent and the parent/guardian.

All households in which children underwent anthropometry and/or were tested for anaemia were given a brochure on which the measurements were recorded. The brochure also explained the causes and prevention of anaemia. Similarly, each respondent age 15 and older received a different brochure on which relevant measurements were recorded. This brochure provided information about body mass index (BMI), anaemia, blood pressure, diabetes, and HIV. The brochure also included the national AIDS hotline number to enable respondents to locate nearby facilities that provide HIV testing and counselling.

In contrast with the data collection procedure for the household and individual interviews, data related to all biomarkers were initially recorded on a paper Biomarker Questionnaire and subsequently entered into interviewers' tablet computers.

Anthropometry. Height and weight measurements were recorded for children age 0-59 months for whom consent was obtained from their parents/guardians and for women and men age 15 and older who consented to measurement. Seca 878 digital scales, Seca 417 infantometers (for children under age 2), and Seca 213 portable stadiometers (for children age 2 and older and for adults) were used for these measurements. In addition, waist circumference was measured for women and men using a Seca 201 measuring tape.

Anaemia testing. Blood specimens for anaemia testing were collected from women and men age 15 and older who consented to be tested and from children age 6-59 months for whom consent was obtained from their parents/guardians. Blood samples were drawn from a drop of blood taken from a finger prick (or a heel prick in the case of children age 6-11 months) and collected in a microcuvette. Haemoglobin analysis was carried out on-site using a battery-operated portable HemoCue 201+ analyser. Results were provided verbally and in writing. Parents/guardians of children with a haemoglobin level below 7 g/dl were instructed to take the child to a health facility for follow-up care. Likewise, nonpregnant women, pregnant women, and men were referred for follow-up care if their haemoglobin levels were below 7 g/dl, 9 g/dl, and 9 g/dl, respectively.

Blood pressure. Three blood pressure measurements were taken from consenting women and men age 15 and older using Omron 1300 digital blood pressure monitors. Measurements were taken at intervals of 3 minutes or more. For the purpose of returning the result to the respondent, the third measurement was used to classify the respondent with respect to hypertension, according to internationally recommended categories (WHO 1999). Respondents who were informed that they had high blood pressure were provided with a written referral to a health facility for further management.

HbA1c and HIV testing. Nurses collected finger-prick blood specimens for laboratory HbA1c and HIV testing of women and men age 15 and older who consented. The protocol for blood specimen collection and analysis was based on the anonymous linked protocol developed by The DHS Program. This protocol allows for merging of test results with the sociodemographic data collected in the individual questionnaires after removal of all information that could potentially identify an individual.

Nurses explained the procedure, the confidentiality of the data, and the fact that the test results would not be made available to respondents. Blood for HbA1c and HIV testing was collected on a filter paper card. The card was preprinted with five circles, each of which could hold approximately 75 µl of blood and the

first of which had been treated with a reagent required for HbA1c testing. If a respondent consented to both HbA1c and HIV testing, five blood spots from the finger prick were collected on the filter paper card, to which a barcode label unique to the respondent was affixed. Duplicate barcodes were attached to the Biomarker Questionnaire, one to indicate that the respondent had consented to HbA1c testing and another to indicate that the respondent had consented to HIV testing. A fourth copy of the same barcode was affixed to the dried blood spot (DBS) transmittal sheet to track the blood samples from the field to the laboratory.

Respondents who consented to HIV testing were asked whether they would consent to having the laboratory store their blood sample for future unspecified testing. If respondents did not consent to additional testing using their sample, it was indicated on the Biomarker Questionnaire that they refused additional tests using their specimen, and the words "no additional testing" were written on the filter paper card.

If the respondent consented only to HbA1c testing, a single blood drop was collected on the appropriate pretreated circle of the filter paper card to which the barcode label was affixed, and duplicate barcode labels were attached to the Biomarker Questionnaire and the DBS transmittal sheet.

Blood samples were dried overnight and packaged for storage the following morning. Samples were periodically collected from the field and transported to the Global Clinical and Viral Laboratory (GCVL) in Durban. Upon arrival at GCVL, each blood sample was logged into the CSPro HIV Test Tracking System database, given a laboratory number, and stored at -20°C until tested.

The HbA1c and HIV testing protocols stipulated that blood could be tested only after questionnaire data collection had been completed, data had been verified and cleaned, and all unique identifiers other than the anonymous barcode number had been removed from the data file.

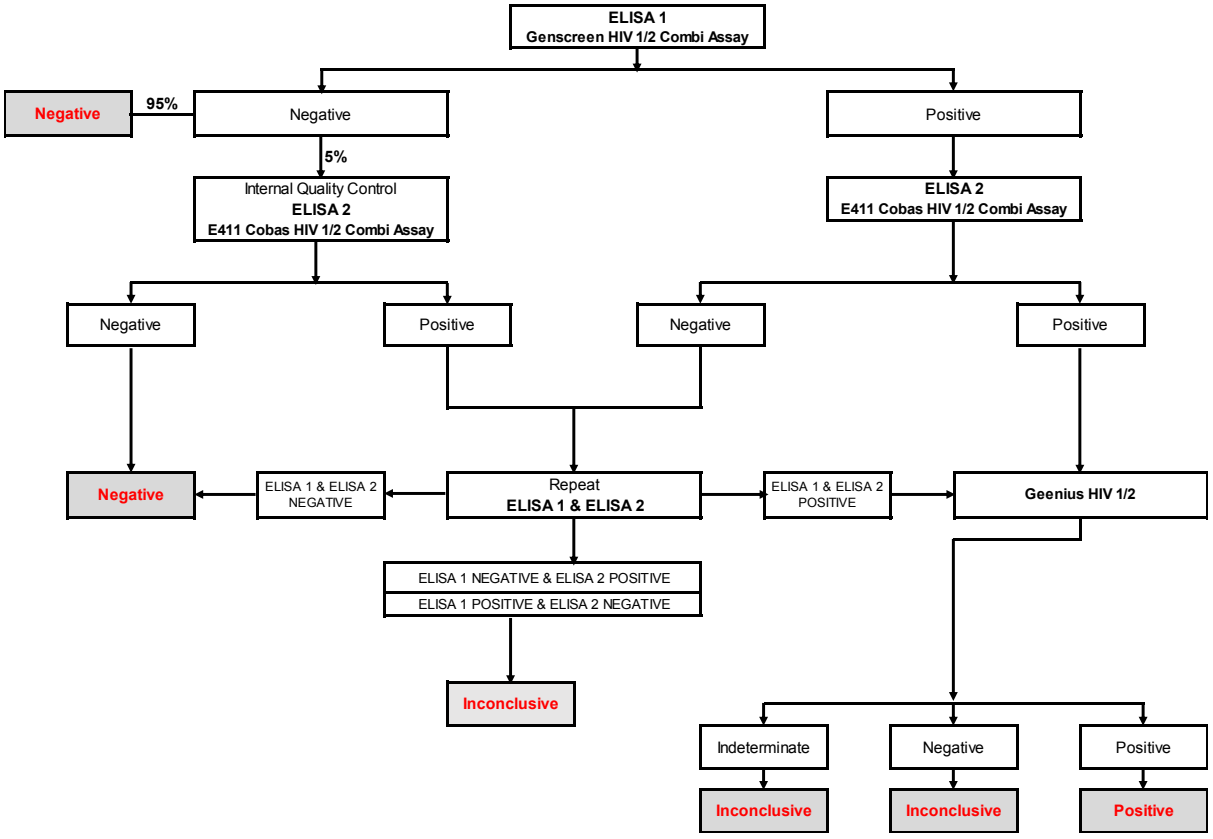
To measure HbA1c, a common method was adapted for use with DBS specimens. Specifically, using a blood chemistry analyser, total haemoglobin concentration was measured by a colorimetric method monitoring the change in absorbance at 410 nm. HbA1c concentration was measured by a turbidimetric immunoinhibition method monitoring the change in absorbance at 340 nm. HbA1c concentration is expressed as a percentage of total haemoglobin.

The HIV testing algorithm (**Figure 1.2**) called for testing all samples with an enzyme-linked immunosorbent assay (ELISA), the Genscreen HIV 1/2 Combi Assay (Bio-Rad). All samples that tested positive on the ELISA 1 were subjected to a second ELISA (ELISA 2), the E411 Cobas HIV 1/2 Combi Assay (Roche). Similar to samples that tested positive on the ELISA 1, 5% of the samples that tested negative on the ELISA 1 were also subjected to the ELISA 2 for internal quality control, while the other 95% were recorded as negative.

Concordant negative results on the ELISA 1 and ELISA 2 were recorded as negative. If the results on the ELISA 1 and ELISA 2 were discordant, the two ELISAs were repeated. If the results remained discordant, the specimen was classified as inconclusive.

Concordant positive results on the ELISA 1 and ELISA 2 were subjected to a third assay, the Geenius™ HIV1/2 confirmatory rapid test (Bio-Rad). When both the ELISA 1 and ELISA 2 were positive, the sample was classified as positive if the confirmatory rapid test was positive, and inconclusive if the confirmatory rapid test was negative or indeterminate.

Figure 1.2 **HIV testing algorithm**



1.6 PRETEST

The pretest for the SADHS 2016 consisted of classroom training and field practice. The classroom portion of the pretest was conducted 11-29 January 2016 at the Kopanong Hotel & Conference Centre in Benoni, Gauteng. The pretest fieldwork took place 1-5 February 2016 in five provinces: Eastern Cape, KwaZulu-Natal, Free State, Gauteng, and North West. Stats SA recruited three female interviewers, one male interviewer, one nurse, and one logistics officer from each of the five provinces selected for field practice, for a total of 30 fieldworkers. Coordinators from Stats SA's provincial offices were trained as supervisors, for a total of five supervisors. Staff from Stats SA's head office, SAMRC, and The DHS Program conducted training sessions. Nurses attended the first week of the main training of interviewers before breaking away for separate biomarker training. Following field practice, a daylong debriefing session was held with the pretest field staff at the Lakes Hotel & Conference Centre in Benoni. Modifications to the questionnaires, translations, and survey protocol were made based on lessons drawn from the exercise.

1.7 TRAINING OF FIELD STAFF

Stats SA recruited and trained nearly 300 fieldworker candidates for the main training of field staff. This number made provision for male and female interviewers, supervisors, logistics officers/drivers, and nurses for 30 teams. Although only 210 fieldworkers were needed to conduct the survey, the number recruited and trained exceeded this figure so that (1) the top performers during the training could be selected for fieldwork and (2) there would be back-up fieldworkers in case anything happened to require replacing any of the appointed fieldworkers during the main data collection. The main training was conducted from 16 May 2016 to 17 June 2016 and took place at the Birchwood Hotel & Conference Centre in Kempton Park, Gauteng.

For all fieldworker candidates except nurses and logistics officers, the training course consisted of instruction regarding interviewing techniques and field procedures, a detailed review of questionnaire

content, instruction on how to administer the paper and electronic questionnaires, and mock interviews between participants in the classroom. In addition, they were trained on map reading so that they could identify the sampled DUs in the field, and they received publicity training to ensure they were comfortable introducing themselves and explaining the purpose of the survey to respondents. A 1-day "on-site" field practice, held on 6 June 2016, paired trainees, and each had to complete a set of paper questionnaires. This provided them with an opportunity to familiarise themselves with the questionnaires in a closed environment. The completed questionnaires were later used during the CAPI training, when the data were entered into the electronic system.

Nurses were trained to collect biomarker data, including taking height/length, weight, and waist measurements; testing for anaemia by measuring haemoglobin level; and preparing DBS specimens for subsequent HbA1c and HIV testing. The biomarker training was held 1-17 June 2016 and consisted of lectures, demonstrations of biomarker measurement or testing procedures, exercises aimed at standardisation of height and weight measurements, and practice with children at a health clinic. The logistics officers trained alongside the nurses to ensure that they would be able to support them.

A 2-day field practice was organised on 14 and 15 June 2016 to provide trainees with hands-on practice before the actual fieldwork. A total of 30 teams were formed and participated in field practice. On the first day of field practice, each team consisted of a supervisor, a minimum of three female interviewers, one male interviewer, and one logistics officer (male). On the second day, each team was joined by one or more nurses.

Training participants were evaluated through homework, in-class exercises, quizzes, and observations made during field practice. Ultimately, 120 (90 females and 30 males) were selected to serve as interviewers, 30 as nurses, 30 as field logistics officers/drivers, and 30 as team supervisors. The selection of team supervisors was based on their experience in leading survey teams and their performance during the main training. Following their selection, team supervisors received additional instruction and practice using the CAPI system to perform supervisory activities. These activities included assigning households for interviews and receiving completed interviews from interviewers, recognising and dealing with error messages, receiving system updates and distributing updates to interviewers, entering biomarker questionnaires and DBS transmittal sheets, dealing with duplicated cases, closing clusters, and transferring interviews to the Stats SA head office via a secure Internet file streaming system (IFSS).

1.8 FIELDWORK

Data collection was carried out by 30 field teams, each consisting of one team supervisor, three female interviewers, one male interviewer, one nurse, and one logistics officer/driver. Electronic data files were transferred to the Stats SA head office in Pretoria every day via the secured IFSS. Senior staff from the Stats SA head office and provincial offices coordinated fieldwork activities. Stats SA also led fieldwork supervision, receiving support from SAMRC on the supervision of biomarker collection and from ICF on standard DHS supervision procedures. Field visits made by independent teams from Stats SA's Survey Coordination, Monitoring and Evaluation chief directorate were an important aspect of supervision. At the midpoint of fieldwork, monitoring teams visited 84 completed clusters in four provinces (Gauteng, Free State, Western Cape, and KwaZulu-Natal) to confirm that the correct DUs had been visited, to ensure household members were correctly listed, and to verify nonresponse. Feedback was provided to provincial coordinators, and, where necessary, clusters were revisited. The survey data collection took place from 27 June 2016 to 4 November 2016.

1.9 DATA PROCESSING AND ANALYSIS

All electronic data files for the SADHS 2016 were transferred via the IFSS to the Stats SA head office in Pretoria, where they were stored on a password-protected computer. The data processing operation included secondary editing, which required resolution of computer-identified inconsistencies and coding of

open-ended questions. The data were processed by a core group of four people; secondary editing was completed by 11 people. All persons involved in data processing took part in the main fieldwork training, and they were supervised by senior staff from Stats SA with support from ICF. Data editing was accomplished using CSPro software. Secondary editing was initiated in October 2016 and completed in February 2017. Checking inconsistencies in dates of immunisations was aided by the digital images of the immunisation page of the Road-to-Health booklet that had been collected on the tablet by fieldworkers at the time of the interview for that purpose.

Appropriate analysis weights were calculated, taking the design probabilities and the response rate into account. Standard methods of analysis (Rutstein and Rojas 2006) were applied involving conversion of all dates to century month codes to facilitate calculation of ages at the time of different life events.

1.10 RESPONSE RATES

Table 1.1 shows response rates for the SADHS 2016. A total of 15,292 households were selected for the sample, of which 13,288 were occupied. Of the occupied households, 11,083 were successfully interviewed, yielding a response rate of 83%.

In the interviewed households, 9,878 eligible women age 15-49 were identified for individual interviews; interviews were completed with 8,514 women, yielding a response rate of 86%. In the subsample of households selected for the male survey, 4,952 eligible men age 15-59 were identified and 3,618 were successfully interviewed, yielding a response rate of 73%. In this same subsample, 12,717 eligible adults age 15 and older were identified and 10,336 were successfully interviewed with the adult health module,[4] yielding a response rate of 81%. Response rates were consistently lower in urban areas than in non-urban areas.

Table 1.1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), South Africa DHS 2016

	Residence		
Result	Urban	Non-urban	Total
Household interviews			
Households selected	9,547	5,745	15,292
Households occupied	8,397	4,891	13,288
Households interviewed	6,556	4,527	11,083
Household response rate[1]	78.1	92.6	83.4
Interviews with women age 15-49			
Number of eligible women	5,858	4,020	9,878
Number of eligible women interviewed	4,805	3,709	8,514
Eligible women response rate[2]	82.0	92.3	86.2
Household interviews in subsample selected for male survey and adult health module			
Households selected	4,751	2,872	7,623
Households occupied	4,164	2,426	6,590
Households interviewed	3,240	2,237	5,477
Household response rate[1]	77.8	92.2	83.1
Interviews with men age 15-59			
Number of eligible men	2,996	1,956	4,952
Number of eligible men interviewed	2,021	1,597	3,618
Eligible men response rate[2]	67.5	81.6	73.1
Interviews with adults age 15+			
Number of eligible adults	7,463	5,254	12,717
Number of eligible adults interviewed	5,685	4,651	10,336
Eligible adults response rate[2]	76.2	88.5	81.3

[1] Households interviewed/households occupied
[2] Respondents interviewed/eligible respondents

[4] The subsample of adults interviewed with the adult health module included all men age 15-59 and all women age 15-49 in those households selected for the male survey.

HOUSING CHARACTERISTICS AND HOUSEHOLD POPULATION

2

Key Findings

- ***Drinking water:*** 92% of households use an improved source of water. Nearly all urban households (98%) use an improved source of water, as compared with only 80% of non-urban households.
- ***Availability of water:*** 31% of households in South Africa using piped or borehole water reported having a water interruption of at least a single day in the last 2 weeks. Non-urban households are more likely than urban households to report an interruption (51% versus 23%).
- ***Sanitation:*** 73% of households use an improved toilet facility, and 22% use a shared toilet facility of an otherwise acceptable type. Two percent of households use an unimproved facility, and 2% have no facility.
- ***Electricity:*** Nine out of 10 households (90%) have electricity.
- ***Household population and composition:*** 37% of the household population falls in a dependency age group: 30% are age 0-14, and 7% are age 65 or older. The average household consists of 3.4 members.
- ***Orphans:*** Among children under age 18, 16% are orphans (one or both parents are dead), and almost one-quarter (23%) do not live with either biological parent.
- ***School attendance:*** The net attendance ratio declines sharply from 88% in primary school to 77% in secondary school. Girls and boys are about equally likely to attend primary and secondary school.
- ***Disability:*** Overall, 20% of the population age 5 and older was reported to have some level of difficulty in at least one functional domain.

Information on the socioeconomic characteristics of the household population in the SADHS 2016 provides a context to interpret demographic and health indicators and can furnish an approximate indication of the representativeness of the survey. In addition, this information sheds light on the living conditions of the population.

This chapter presents information on source of drinking water, sanitation, exposure to smoke inside the home, wealth, handwashing, household population composition, educational attainment, school attendance, family living arrangements, disabilities, and food security among the household population.

2.1 DRINKING WATER SOURCES AND TREATMENT

Improved sources of drinking water

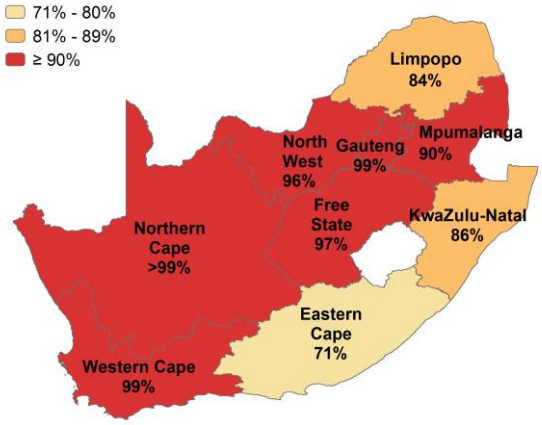
Include piped water, public taps, boreholes, protected dug wells and springs, and rainwater. Households that use bottled water for drinking are classified as using an improved source only if the water they use for cooking and hand washing comes from an improved source.

Sample: Households

Improved sources of water protect against outside contamination so that water is more likely to be safe to drink. In South Africa, 92% of households use an improved source of drinking water; almost all urban households (98%) report using an improved source of drinking water, as compared with only 80% of non-urban households (**Table 2.1**). By province, the proportion of the household population using an improved source of drinking water ranges from a low of 71% in Eastern Cape to a high of over 99% in Northern Cape (**Figure 2.1**).

***Figure 2.1* Improved source of drinking water by province**

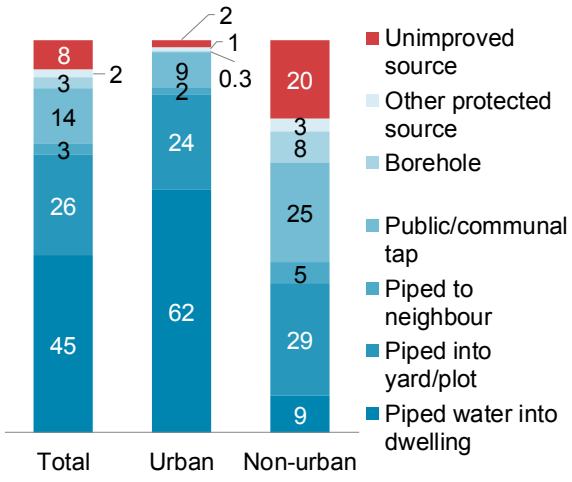
Percentage of the household population using an improved source of drinking water



The most common source of drinking water for both urban and non-urban households is piped water, but the source of piped water differs (**Figure 2.2**). Among urban households, 62% use water piped into their dwelling, 24% use water piped into their yard/plot, and 2% use water piped to a neighbour. In contrast, only 9% of non-urban households have water piped into their dwelling, 29% have water piped into their yard/plot, and 5% use water piped to a neighbour. One in 10 (9%) urban households use a public or communal tap, as compared with one in four (25%) non-urban households. While 0.2% of urban households use surface water as their source of drinking water, 7% of non-urban households rely on it.

***Figure 2.2* Household drinking water by residence**

Percent distribution of households by source of drinking water



Note: Percentages do not sum to 100% due to rounding.

Overall, 78% of South African households have water on the premises. Eight percent of households travel 30 minutes or longer to fetch water. Most households (92%) report that they do not treat their water prior to drinking.

Table 2.2 presents information on the percentage of households using piped water or boreholes that reported availability of water in the last 2 weeks. Thirty-one percent of households in South Africa using piped or borehole water reported having a water interruption of at least a single day in the last 2 weeks. Non-urban households are more likely to report an interruption than urban households (51% versus 23%).

Comparison with the SADHS 1998: The percentage of households obtaining water from improved sources increased from 85% in 1998 to 92% in 2016. Whereas in 1998 only 39% of households had water piped into their dwelling and 23% into their yard or plot, 45% reported having water piped into their dwelling and 26%

into their yard or plot in 2016. Most of the observed gains in access to improved water sources came from an increase in the proportion of non-urban households using water piped into their yard/plot (17% in 1998 versus 29% in 2016).

2.2 SANITATION

Improved toilet facilities

Include any non-shared toilet of the following types: flush/pour flush toilets to piped sewer systems, septic tanks, and pit latrines; ventilated improved pit (VIP) latrines; pit latrines with slabs; composting toilets; and chemical toilets.

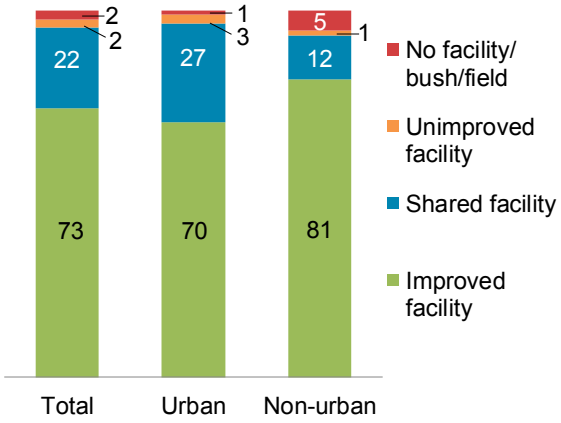
Sample: Households

As shown in **Figure 2.3**, nearly three-quarters (73%) of households in South Africa use improved toilet facilities, which are non-shared facilities that prevent people from coming into contact with human waste and can reduce the transmission of cholera, typhoid, and other diseases. Shared toilet facilities of an otherwise acceptable type are also common, especially in urban areas; 27% of urban households use a shared facility, as compared with 12% of non-urban households. Two percent of households in South Africa use unimproved facilities, with an additional 2% not using any facility (**Table 2.3**).

Comparison with the SADHS 1998: The percentage of households not using any toilet facility decreased from 12% in 1998 to 2% in 2016. Most of this change is due to improvements in non-urban areas; 26% of non-urban households did not use a toilet facility in 1998, compared with 5% in 2016.

***Figure 2.3* Household toilet facilities by residence**

Percent distribution of households by type of toilet facilities



Note: Percentages do not sum to 100% due to rounding.

2.3 EXPOSURE TO SMOKE INSIDE THE HOME

Exposure to smoke inside the home, either from cooking with solid fuels or smoking tobacco, has potentially harmful health effects. Thirteen percent of households in South Africa use solid fuels, consisting mostly of wood, for cooking (**Table 2.4**). Use of solid fuels for cooking is much more common in non-urban areas (33%) than urban areas (3%). Exposure to smoke from cooking is greater when cooking takes place inside the house rather than in a separate building or outdoors. In South Africa, the majority of households (87%) cook inside their house. Eight percent of households cook in a separate building, and 4% cook outside.

Exposure to tobacco smoke is common in South Africa. In 20% of households, someone smokes inside the house on a daily basis, and in 2% of households, someone smokes inside on a weekly basis.

Other Housing Characteristics

The survey collected data on access to electricity, dwelling type, flooring materials, wall materials, and the number of rooms used for sleeping. Overall, 90% of households in South Africa have electricity, and 78% live in a formal dwelling type. The most common flooring materials are cement (39% of households) and ceramic tiles (33%), while the most common materials used for walls are bricks (32%) and cement (28%). Thirty-five percent of households use one room for sleeping.

Household Refuse Disposal

As shown in **Table 2.5**, 57% of households in South Africa report that their refuse is removed at least once a week, 11% have their own refuse dump, and 20% burn their refuse. Households in non-urban areas are far more likely than those in urban areas to use their own refuse dump (25% versus 5%) or burn their refuse (54% versus 4%). Refuse burning is especially common in Limpopo and Mpumalanga (48% and 45%, respectively).

2.4 HOUSEHOLD WEALTH

Household Durable Goods

The survey collected information on household effects, means of transportation, and ownership of farm animals. As shown in **Table 2.6**, 96% of households own a cellphone, 84% an electric or gas stove, 77% a television, 61% a radio, and 22% a computer. Almost 3 in 10 households own an automobile (29%), and 8% own a bicycle. Non-urban households are much more likely to own farm animals than urban households (38% versus 5%).

Wealth Index

Wealth index

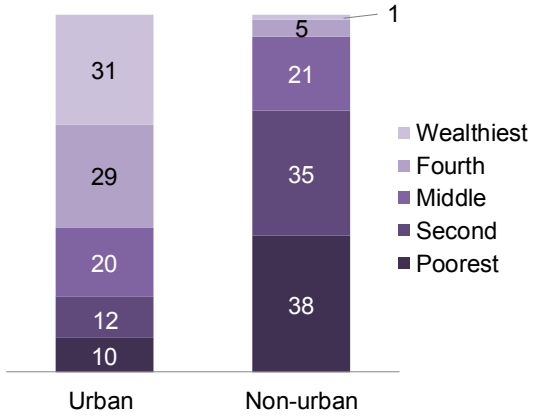
Households are given scores based on the number and kinds of consumer goods they own, ranging from a television to a bicycle or car, and housing characteristics such as source of drinking water, toilet facilities, and flooring materials. These scores are derived using principal component analysis. National wealth quintiles are compiled by assigning the household score to each usual (de jure) household member, ranking each person in the household population by her or his score, and then dividing the distribution into five equal categories, each comprising 20% of the population.

Sample: Households

Table 2.7 presents the distribution of the de jure household population by wealth quintile according to residence and province. In South Africa, urban households are more likely than non-urban households to fall into the higher wealth quintiles, while non-urban households are more likely to fall into the lower wealth quintiles. Fifty-nine percent of the urban population is in the two highest wealth quintiles. By contrast, 73% of the non-urban population falls in the two lowest wealth quintiles (**Figure 2.4**). Wealth varies widely by province. Seventy-eight percent of the population in Western Cape is in the two highest wealth quintiles, as compared with only 14% of the population in Limpopo. Forty-two percent of the population in Eastern Cape is in the lowest wealth quintile, compared with only 3% in Western Cape.

***Figure 2.4* Household wealth by residence**

Percent distribution of de jure population by wealth quintiles



Note: Percentages do not sum to 100% due to rounding.

2.5 HANDWASHING

Handwashing is an important step in improving hygiene and preventing the spread of disease. Rather than asking direct questions on the practice of handwashing, which can be subject to overreporting, interviewers in the SADHS 2016 asked to see the place where members of the household most often wash their hands. A

place for washing hands was observed in 85% of households (**Table 2.8**). In half (50%) of the households where a place for handwashing was observed, interviewers observed soap and water. One-third of handwashing locations (34%) had water but no soap, 1% had soap but no water, and 14% did not have soap, water, or any other cleaning agents. The percentage of households with a place for handwashing in which no water, soap, or other cleansing agent was observed was markedly higher in non-urban areas than urban areas (26% and 9%, respectively).

2.6 HOUSEHOLD POPULATION AND COMPOSITION

Household

A person or group of related or unrelated persons who live together in the same dwelling unit(s), who acknowledge one adult male or female as the head of the household, who share the same housekeeping arrangements, and who are considered a single unit.

De facto population

All persons who stayed in the selected households the night before the interview (whether usual residents or visitors).

De jure population

All persons who are usual residents of the selected households, whether or not they stayed in the household the night before the interview.

How data are calculated

All tables are based on the de facto population, unless otherwise specified.

A total of 37,128 individuals stayed overnight in the 11,083 sample households in the SADHS 2016. Fifty-two percent (19,407) were female, and 48% (17,721) were male (**Table 2.9**). The population pyramid in **Figure 2.5** illustrates the distribution by 5-year age groups and sex. Children under age 15 account for 30% of the population, while individuals age 65 and older make up only 7%.

***Figure 2.5* Population pyramid**

Percent distribution of the household population

As shown in **Table 2.10**, the majority of households in South Africa are male-headed (57%). The average household consists of 3.4 usual members. Non-urban households are on average larger than urban households (3.8 and 3.1 persons per household, respectively). Overall, 22% of households in South Africa are caring for foster or orphaned children.

Comparison with the SADHS 1998: The percentage of the population below age 15 decreased from 38% in 1998 to 30% in 2016, while the percentage of the population age 65 or older held relatively steady, increasing from 6% in 1998 to 7% in 2016. Over this same period, the average household size decreased from 4.2 persons to 3.4 persons, while there was essentially no change in the percentage of female-headed

households (42% in 1998 versus 43% in 2016). The percentage of households with foster and/or orphan children dropped from 28% in 1998 to 22% in 2016.

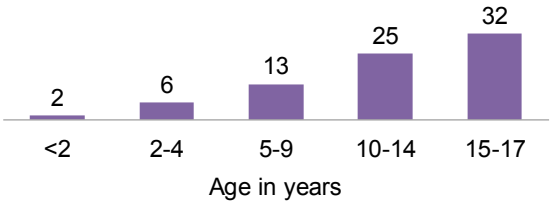
2.7 Children's Living Arrangements and Parental Survival

Orphan
A child with one or both parents who are dead.
Sample: Children under age 18

Twenty-eight percent of children under age 18 are living with both parents, and 23% are not living with a biological parent (**Table 2.11**). Sixteen percent of children under age 18 are orphans, meaning that one or both parents have died. The percentage of children who are orphans rises rapidly with age, from 2% among children under age 2 to 13% among children age 5-9 and 32% among children age 15-17 (**Figure 2.6**). Free State has the highest percentage of children who are orphans (25%).

Figure 2.6 **Orphanhood by age**

Percentage of children with one or both parents dead



Comparison with the SADHS 2016: The percentage of children under age 15 living with both parents decreased from 33% in 1998 to 29% in 2016, while the percentage not living with a biological parent decreased from 25% to 22%. The percentage of children under age 15 who are orphans increased from 10% to 14%.

2.8 Education

2.8.1 Educational Attainment

Median educational attainment
Half of the population has completed less than the median number of years of schooling, and half of the population has completed more than the median number of years of schooling.
Sample: De facto household population age 6 and older

Tables 2.12.1 and **2.12.2** present information on educational attainment among the household population age 6 and over. Overall, 9% of women and girls age 6 and over have never been to school, 22% have attended some primary school, 6% have completed primary but advanced no further, 34% have attended some secondary school, 19% have completed secondary school but advanced no further, and 9% have attained some education after secondary school. Women and girls age 6 and over have completed a median of 8.8 years of schooling.

Educational attainment among men and boys is similar to that among women and girls. Eight percent of men and boys age 6 and over have never attended school, 25% have attended some primary school, 6% have completed primary school, 33% have attended some secondary school, 19% have completed secondary school, and 8% have attained some education after secondary school. Men and boys age 6 and over have completed a median of 8.5 years of schooling.

Comparison with the SADHS 1998: Educational attainment at the household level has increased since 1998. Among women and girls age 6 and over, the percentage who have never attended school has decreased from 14% to 9%, and the median number of years of schooling has increased from 6.4 to 8.8. Among men

and boys age 6 and over, the percentage who have never attended school has decreased from 11% to 8%, and the median number of years of schooling completed has increased from 6.4 to 8.5.

Patterns by background characteristics

- The median number of years of schooling is higher in urban areas than in non-urban areas among both females (9.6 years versus 7.0 years) and males (9.4 years versus 6.7 years).
- The percentage of females and males with no education is higher in non-urban areas than urban areas (14% versus 7% for females and 10% versus 6% for males).
- Educational attainment increases with increasing household wealth. Females in the lowest wealth quintile have completed a median of 6.3 years of schooling, as compared with a median of 11.2 years among females in the highest wealth quintile. The median number of years of schooling increases from 6.2 years among males in the lowest wealth quintile to 11.1 among those in the highest quintile.
- Among both females and males, the median number of years of schooling is highest in Gauteng (10.1 years and 9.7 years, respectively) and lowest in Eastern Cape (7.4 years and 7.1 years, respectively).

2.8.2 School Attendance

Net attendance ratio (NAR)

Percentage of the school-age population that attends primary or secondary school

Sample: Children age 7-13 for primary school NAR and children age 14-18 for secondary school NAR

Gross attendance ratio (GAR)

The total number of children attending primary school divided by the official primary school-age population and the total number of children attending secondary school divided by the official secondary school-age population.

Sample: Children age 7-13 for primary school GAR and children age 14-18 for secondary school GAR

School attendance ratios are shown in **Table 2.13**. Eighty-seven percent of girls age 7-13 attend primary school, as compared with 90% of boys. The net attendance ratio (NAR) drops in secondary school: 77% of boys and 76% of girls attend secondary school.

The gross attendance ratio (GAR) for primary school is 109 for girls and 115 for boys; the GAR for secondary school is 110 for girls and 108 for boys. These figures indicate that a number of children outside the official school-age population for that level are attending primary or secondary school.

Gender parity indices (GPI)

The ratio of female to male students attending primary school and the ratio of female to male students attending secondary school. Each index reflects the magnitude of the gender gap.

Sample: Primary school students and secondary school students

The gender parity index (GPI) for the GAR at the primary school level is 0.95, indicating that in primary school there are slightly more male students than female students. However, at the secondary school level, the GPI for the GAR is 1.01, indicating that there is little disparity in secondary school attendance between boys and girls.

Age-specific attendance rate (ASAR)

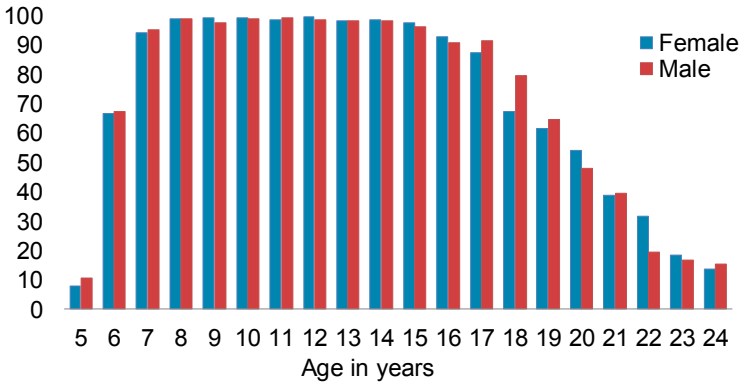
Children and young people attending school, irrespective of whether they are attending the appropriate grade for their age.

Sample: De facto household population age 5-24 attending school

ASARs for the population age 5 to 24 are presented in **Figure 2.7** by age and sex. The ASAR indicates participation in schooling at any level, from primary to higher levels of education. The patterns are generally the same for males and females. By age 6, 7 in 10 children attend school. Between age 7 and age 16, more than 90% of children attend school. The attendance rate declines rapidly from age 17 to 24.

***Figure 2.7* Age-specific attendance rates**

Percentage of the de facto household population age 5-24 attending school



Patterns by background characteristics

- At the primary school level, there is little difference in the NAR between non-urban and urban areas (89% and 88%, respectively). However, at the secondary school level, the NAR is modestly higher in non-urban areas than in urban areas (79% versus 75%).
- Among provinces, Limpopo has the highest NAR and GAR at the secondary school level (87% and 135%, respectively), and Western Cape has the lowest (71% and 92%, respectively).

2.9 DISABILITY

The SADHS 2016 included The DHS Program's disability module, a series of questions from the Washington Group on Disability Statistics (WG) that are based on the framework of the World Health Organization's International Classification of Functioning, Disability, and Health. The questions address six core functional domains—seeing, hearing, communication, cognition, walking, and self-care—and provide basic necessary information on disability comparable to that being collected worldwide via the WG disability tools.

2.9.1 Disability by Domain and Age

The respondent to the Household Questionnaire provided information for all household members and visitors on whether they had no difficulty, some difficulty, a lot of difficulty, or no ability at all in each of the functional domains. Results, based on 33,155 persons, are presented in **Table 2.14** for the de facto household population age 5 and older.

Functional domains

Seeing, hearing, communicating, remembering or concentrating, walking or climbing steps, and washing all over or dressing.

Sample: De facto household population age 5 or above

Overall, 20% of the population age 5 and older was reported to have some level of difficulty in at least one functional domain. Six percent of the population was reported to either have a lot of difficulty functioning

in at least one domain or could not function in a domain at all. Those age 60 or older (23%) were much more likely than other age groups to have a lot of difficulty or not be able to function in at least one domain.

The most common disability was having difficulty seeing (12%), followed by having difficulty walking or climbing steps (6%) and difficulty remembering or concentrating (6%).

2.9.2 Disability by Background Characteristics

Table 2.15 presents disability data among the de facto household population age 5 and older by background characteristics. Women are slightly more likely than men to have difficulties in any functional domain; 22% of women have at least some level of disability in any domain, as compared with 18% of men. The percentage of the population in non-urban areas with one or more disability is greater than the percentage in urban areas (23% versus 19%). Surprisingly, among those receiving a disability grant, 43% are reported to have no difficulty in any domain.

2.10 Social Grants and Food Security

2.10.1 Social Grants by Background Characteristics

A social grant is a sum of money typically paid monthly by the government to qualifying citizens. The types of grants available range from old age grants to social relief of distress. Seventy-one percent of South African households know at least one place where they can obtain social grant forms (**Table 2.16**). Among these households, 97% named the South African Social Security Agency (SASSA), the Department of Social Development (DSD), or a social development office as a place where grant forms can be obtained. Post offices, banks, magistrate's courts, and pay points are among the other places where forms can be obtained, but less than 3% of households named any of these locations.

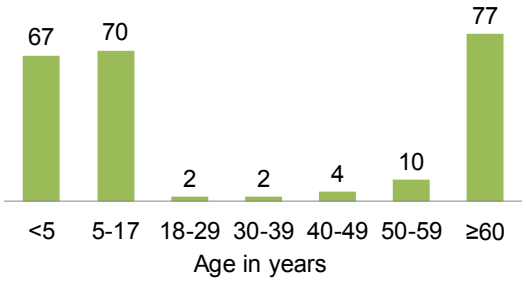
The respondent to the Household Questionnaire was asked whether household members and visitors to the household received any social grants and, if so, which types. Overall, 35% of the household population receives at least one type of grant (**Table 2.17**). Child support is the most common type of grant, received by 24% of the household population.

Patterns by background characteristics

- Non-urban households are more likely to know where to obtain forms for social grants than urban households (78% versus 68%) (**Table 2.16**).
- Children age 0-17 (67%-70%) and adults age 60 and older (77%) are much more likely than those in other age groups to receive a grant (**Figure 2.8**).
- Receipt of grants does not differ by sex; 35% of the male and female household population receives some type of social grant (**Table 2.17**).
- Receipt of a social grant is more common among persons living in non-urban than urban households (48% versus 27%).
- The proportion of the household population that receives a social grant is highest in Eastern Cape and Limpopo (45% each) and lowest in Gauteng (23%).

***Figure 2.8* Receipt of social grants**

Percentage of household population that receives any social grant by age



- Receipt of social grants decreases with increasing household wealth. Forty-seven percent of the household population in the lowest wealth quintile receives social grants, as compared with 15% in the highest quintile.

2.10.2 Food Security by Background Characteristics

Households were asked two questions related to food security. First, they were asked whether any adults in the household had gone hungry in the past 12 months because there was not enough food. Second, they were asked whether any child in the household had gone hungry in the past 12 months.

Nearly all households included at least one adult, and among these households 82% had never experienced problems satisfying adult food needs in the past 12 months, 4% seldom experienced problems, 11% sometimes experienced problems, 2% often experienced problems, and 1% always experienced problems (**Table 2.18**).

Among the households interviewed, only 53% had children age 0-17 as household members. Among these households, 80% reported never experiencing problems satisfying child food needs in the past 12 months, 4% seldom experienced problems, 11% sometimes experienced problems, 2% often experienced problems, and 1% always experienced problems (**Table 2.19**).

List of Tables

For more information on household population and housing characteristics, see the following tables:

- **Table 2.1 Household drinking water**
- **Table 2.2 Availability of water**
- **Table 2.3 Household sanitation facilities**
- **Table 2.4 Household characteristics**
- **Table 2.5 Household refuse disposal**
- **Table 2.6 Household possessions**
- **Table 2.7 Wealth quintiles**
- **Table 2.8 Handwashing**
- **Table 2.9 Household population by age, sex, and residence**
- **Table 2.10 Household composition**
- **Table 2.11 Children's living arrangements and orphanhood**
- **Table 2.12.1 Educational attainment of the female household population**
- **Table 2.12.2 Educational attainment of the male household population**
- **Table 2.13 School attendance ratios**
- **Table 2.14 Disability by domain and age**
- **Table 2.15 Disability among the household population according to background characteristics**
- **Table 2.16 Knowledge of where social grant forms may be obtained**
- **Table 2.17 Social grants**
- **Table 2.18 Food security: Adults**
- **Table 2.19 Food security: Children**

Table 2.1 Household drinking water

Percent distribution of households and de jure population by source of drinking water and by time to obtain drinking water, percentage of households and de jure population using various methods to treat drinking water, and percentage using an appropriate treatment method, according to residence, South Africa DHS 2016

	Households			Population		
Characteristic	Urban	Non-urban	Total	Urban	Non-urban	Total
Source of drinking water						
Improved source	98.1	79.6	92.2	98.5	76.3	90.4
Piped into dwelling	61.8	9.3	45.1	66.6	8.5	45.5
Piped into yard/plot	24.4	28.5	25.7	22.0	27.5	24.0
Piped to neighbour	1.6	5.4	2.8	1.4	5.2	2.8
Public/communal tap	8.9	25.1	14.1	7.3	24.7	13.6
Borehole	0.3	8.1	2.8	0.2	7.4	2.8
Protected well	0.0	0.5	0.2	0.0	0.5	0.2
Protected spring	0.1	0.8	0.3	0.1	0.9	0.4
Rainwater	0.0	1.6	0.5	0.0	1.3	0.5
Bottled water, improved source for cooking/handwashing[1]	1.1	0.3	0.8	0.9	0.2	0.6
Unimproved source	1.7	19.9	7.5	1.3	23.3	9.3
Unprotected well	0.0	3.9	1.3	0.0	5.0	1.8
Unprotected spring	0.1	2.6	0.9	0.1	3.1	1.2
Water carrier/tanker truck	1.4	3.8	2.1	1.0	3.7	2.0
Cart with small tank/water vendor	0.1	2.4	0.8	0.0	2.3	0.9
Surface water	0.2	7.0	2.3	0.2	9.1	3.4
Bottled water, unimproved source for cooking/handwashing[1]	0.1	0.2	0.1	0.0	0.2	0.1
Other source	0.2	0.5	0.3	0.1	0.4	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Time to obtain drinking water (round trip)						
Water on premises[2]	90.0	51.8	77.8	91.8	48.7	76.1
Less than 30 minutes	8.3	25.9	13.9	6.6	26.4	13.8
30 minutes or longer	1.6	20.6	7.7	1.5	23.4	9.5
Don't know	0.1	1.6	0.6	0.1	1.5	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Water treatment prior to drinking[3]						
Boiled	5.4	3.6	4.8	5.3	3.4	4.6
Bleach/chlorine added	0.5	2.8	1.2	0.4	3.0	1.3
Strained through cloth	0.0	0.1	0.1	0.0	0.1	0.0
Ceramic, sand, or other filter	1.9	0.5	1.4	1.7	0.4	1.2
Solar disinfection	0.1	0.0	0.0	0.0	0.0	0.0
Let stand and settle	0.4	0.9	0.5	0.4	1.1	0.7
Other	0.2	0.1	0.2	0.2	0.1	0.2
No treatment	91.8	92.1	91.9	92.1	92.3	92.2
Percentage using an appropriate treatment method[4]	7.6	6.6	7.3	7.3	6.2	6.9
Number of households/population	7,542	3,541	11,083	23,656	13,549	37,205

[1] Households using bottled water for drinking are classified as using an improved or unimproved source according to their water source for cooking and handwashing
[2] Includes water piped to a neighbour
[3] Respondents may report multiple treatment methods, so the sum of treatment may exceed 100%
[4] Appropriate water treatment methods include boiling, bleaching, filtering, and solar disinfecting

Table 2.2 Availability of water

Percent distribution of households and de jure population using piped water or water from a borehole, by availability of water in the last 2 weeks, according to residence, South Africa DHS 2016

	Households			Population		
Availability of water in last 2 weeks	Urban	Non-urban	Total	Urban	Non-urban	Total
Not available for at least 1 day	22.8	51.4	30.5	24.0	54.9	33.3
Available with no interruption of at least 1 day	75.9	47.6	68.3	74.9	44.1	65.6
Don't know	1.3	1.0	1.2	1.1	1.0	1.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number using piped water or water from a borehole[1]	7,392	2,713	10,105	23,287	9,953	33,240

[1] Includes households/population reporting piped water or water from a borehole as their main source of drinking water and households/population reporting bottled water as their main source of drinking water if their main source of water for cooking and handwashing is piped water or water from a borehole

Table 2.3 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities and percent distribution of households and de jure population with a toilet/latrine facility by location of the facility, according to residence, South Africa DHS 2016

	Households			Population		
Type and location of toilet/latrine facility	Urban	Non-urban	Total	Urban	Non-urban	Total
Improved sanitation	69.5	81.4	73.3	77.8	86.6	81.0
Flush/pour flush to piped sewer system	60.0	7.1	43.1	67.6	6.1	45.2
Flush/pour flush to septic tank	0.9	1.7	1.2	1.0	1.2	1.0
Flush/pour flush to pit latrine	0.9	0.7	0.9	0.8	0.6	0.7
Ventilated improved pit (VIP) latrine	1.1	14.8	5.5	1.0	16.4	6.6
Pit latrine with ventilation pipe but no gauze mesh/netting	1.1	19.5	7.0	1.2	22.4	8.9
Pit latrine with a slab without ventilation pipe	5.2	36.2	15.1	5.9	38.5	17.8
Composting toilet/ecological sanitation system	0.3	1.4	0.6	0.3	1.4	0.7
Unimproved sanitation	30.5	18.6	26.7	22.2	13.4	19.0
Shared facility[1]	26.9	11.9	22.1	19.4	7.2	14.9
Flush/pour flush to piped sewer system	19.3	1.8	13.7	14.0	0.7	9.1
Flush/pour flush to septic tank	0.5	0.7	0.6	0.4	0.2	0.3
Flush/pour flush to pit latrine	0.5	0.1	0.4	0.3	0.1	0.2
Ventilated improved pit (VIP) latrine	0.4	1.1	0.7	0.3	0.7	0.5
Pit latrine with ventilation pipe but no gauze mesh/netting	0.5	2.0	1.0	0.6	1.6	1.0
Pit latrine with a slab without ventilation pipe	4.2	6.1	4.8	2.8	3.8	3.2
Composting toilet/ecological sanitation system	0.6	0.0	0.4	0.4	0.0	0.3
Chemical toilet	0.9	0.1	0.6	0.6	0.0	0.4
Unimproved facility	2.5	1.3	2.2	2.1	1.3	1.8
Flush/pour flush not to sewer/septic tank/pit latrine	0.6	0.4	0.6	0.5	0.3	0.4
Bucket	1.9	0.9	1.6	1.6	0.9	1.4
Open defecation (no facility/bush/field)	1.0	5.4	2.4	0.7	4.9	2.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	7,542	3,541	11,083	23,656	13,549	37,205
Location of toilet facility						
In own dwelling	55.9	12.4	42.4	59.0	11.2	42.1
In own yard/plot	37.7	84.6	52.2	36.1	86.5	54.0
Elsewhere	6.5	3.1	5.4	4.9	2.3	4.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population with a toilet/latrine facility	7,468	3,351	10,819	23,486	12,885	36,371

[1] Facilities that would be considered improved if they were not shared by two or more households

Table 2.4 Household characteristics

Percent distribution of households and de jure population by housing characteristics, percentage using solid fuel for cooking, percentage using clean fuel for cooking, and percent distribution by frequency of smoking in the home, according to residence, South Africa DHS 2016

	Households			Population		
Housing characteristic	Urban	Non-urban	Total	Urban	Non-urban	Total
Electricity						
Yes	91.6	86.6	90.0	93.6	85.9	90.8
No	8.4	13.4	10.0	6.4	14.1	9.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Dwelling type						
Formal	78.5	76.3	77.8	81.6	75.7	79.5
Traditional	0.3	16.3	5.4	0.3	18.7	7.0
Informal	20.3	6.5	15.9	17.2	5.0	12.8
Other	0.8	1.0	0.9	0.8	0.5	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Flooring material						
Earth, sand	0.8	2.0	1.2	0.5	2.3	1.2
Dung	0.4	7.0	2.5	0.3	7.9	3.1
Wood/planks	1.9	0.4	1.4	1.6	0.3	1.2
Laminated or polished wood	2.5	0.7	2.0	2.5	0.4	1.8
Vinyl or asphalt strips	8.6	5.5	7.6	8.2	5.1	7.1
Ceramic tiles	39.5	17.8	32.6	44.5	19.3	35.3
Cement	31.1	54.9	38.7	29.2	54.2	38.3
Carpet	14.6	11.2	13.5	12.6	10.1	11.7
Other	0.6	0.5	0.5	0.5	0.2	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Wall material						
No walls	1.8	2.0	1.9	1.5	1.9	1.6
Dirt/mud	0.7	9.8	3.6	0.6	11.1	4.4
Plastic	0.7	0.1	0.5	0.6	0.2	0.4
Wattle and daub	0.1	0.3	0.1	0.1	0.4	0.2
Stone with mud	0.2	1.0	0.4	0.1	1.4	0.6
Mud with cement mix	0.7	4.2	1.8	0.7	4.5	2.1
Cardboard	1.0	0.3	0.8	0.7	0.2	0.5
Reused wood	0.8	0.2	0.6	0.7	0.2	0.5
Cement	23.3	37.0	27.7	24.6	37.2	29.2
Stone with lime/cement	3.4	3.3	3.4	3.5	3.4	3.4
Bricks	36.1	22.0	31.6	37.5	21.1	31.5
Cement block/concrete	13.6	12.8	13.4	14.1	13.1	13.8
Wood planks	1.0	0.2	0.7	1.0	0.2	0.7
Corrugated iron/zinc	15.9	5.6	12.6	13.6	4.2	10.1
Other	0.8	1.1	0.9	0.8	1.1	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Rooms used for sleeping						
One	38.3	28.4	35.2	25.5	16.7	22.3
Two	33.8	27.4	31.7	37.2	26.5	33.3
Three or more	27.9	44.3	33.1	37.3	56.8	44.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Place for cooking						
In the house	97.3	64.7	86.9	97.1	57.8	82.8
In a separate building	1.6	22.6	8.3	2.0	28.8	11.7
Outdoors	0.7	11.9	4.3	0.8	13.2	5.3
No food cooked in household	0.3	0.7	0.4	0.1	0.2	0.2
Other	0.0	0.1	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Cooking fuel						
Electricity from mains	85.2	58.3	76.6	86.1	52.7	73.9
Electricity from other sources	0.6	0.2	0.5	0.6	0.2	0.4
Gas	4.4	3.6	4.1	4.6	3.3	4.1
Paraffin	6.8	3.8	5.9	5.3	2.4	4.3
Coal	0.7	1.4	0.9	0.7	2.2	1.3
Wood	1.6	31.7	11.2	2.0	38.8	15.4
Agricultural crop	0.0	0.0	0.0	0.0	0.0	0.0
Animal dung	0.4	0.2	0.3	0.5	0.2	0.4
Other	0.1	0.0	0.1	0.0	0.0	0.0
No food cooked in household	0.3	0.7	0.4	0.1	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage using solid fuel for cooking[1]	2.6	33.4	12.5	3.2	41.2	17.0
Percentage using clean fuel for cooking[2]	90.2	62.0	81.2	91.3	56.1	78.5
Frequency of smoking in the home						
Daily	22.0	16.8	20.3	22.5	16.2	20.2
Weekly	2.3	2.5	2.3	2.2	2.5	2.3
Monthly	0.3	0.3	0.3	0.3	0.4	0.3
Less than once a month	0.8	0.9	0.9	0.8	1.0	0.9
Never	74.6	79.5	76.2	74.2	80.0	76.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	7,542	3,541	11,083	23,656	13,549	37,205

[1] Includes coal, wood, straw/shrubs/grass, agricultural crops, and animal dung
[2] Includes electricity and gas

Table 2.5 Household refuse disposal

Percent distribution of households by household refuse removal, according to background characteristics, South Africa DHS 2016

Characteristic	Removed at least once a week	Removed less than once a week	Communal refuse dump	Communal container/ central collection point	Own refuse dump	Own refuse burned	No rubbish disposal	Other	Total	Number of households
Residence										
Urban	78.3	4.9	4.6	2.2	4.5	4.4	0.9	0.2	100.0	7,542
Non-urban	12.1	1.1	4.0	0.9	25.1	53.7	2.7	0.4	100.0	3,541
Province										
Western Cape	89.0	1.1	2.0	4.8	1.6	1.0	0.4	0.1	100.0	1,206
Eastern Cape	35.5	2.2	3.3	2.3	18.8	34.7	3.1	0.1	100.0	1,301
Northern Cape	61.8	1.6	3.1	0.7	10.6	19.8	2.3	0.0	100.0	210
Free State	76.3	3.1	2.6	0.1	6.5	7.1	3.9	0.4	100.0	579
KwaZulu-Natal	50.5	2.5	1.4	1.5	14.0	28.6	0.9	0.5	100.0	1,968
North West	52.8	1.2	8.4	0.9	11.6	22.4	2.0	0.8	100.0	833
Gauteng	76.5	7.4	7.1	1.7	6.2	1.1	0.0	0.0	100.0	3,047
Mpumalanga	28.8	6.9	3.8	1.3	11.9	45.2	2.1	0.0	100.0	851
Limpopo	19.8	0.5	5.1	1.3	22.1	47.7	3.1	0.4	100.0	1,087
Total	57.1	3.7	4.4	1.8	11.1	20.1	1.4	0.3	100.0	11,083

Table 2.6 Household possessions

Percentage of households possessing various household effects, means of transportation, and livestock/farm animals by residence, South Africa DHS 2016

Possession	Residence		Total
	Urban	Non-urban	
Household effects			
Radio	63.1	55.9	60.8
Television	81.8	66.2	76.8
Cellphone	95.8	95.4	95.7
Computer	27.7	9.1	21.8
Non-mobile telephone	11.0	1.0	7.8
Refrigerator	77.9	67.8	74.7
Vacuum cleaner/floor polisher	17.4	4.2	13.2
Microwave oven	58.6	33.1	50.5
Electric/gas stove	88.2	74.0	83.7
Washing machine	44.0	17.2	35.4
A watch	52.5	30.2	45.4
Means of transport			
Bicycle	8.9	5.4	7.8
Animal-drawn cart	1.0	1.3	1.1
Motorcycle/scooter	3.1	0.9	2.4
Car/bakkie/van/truck	34.3	16.8	28.7
Boat with a motor	0.7	0.3	0.6
Ownership of farm animals[1]	4.5	38.2	15.2
Number	7,542	3,541	11,083

[1] Cattle, horses, donkeys, goats, sheep, pigs, chickens, or other poultry

Table 2.7 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles, and the Gini coefficient, according to residence and province, South Africa DHS 2016

Residence/province	Wealth quintile					Total	Number of persons	Gini coefficient[1]
	Lowest	Second	Middle	Fourth	Highest			
Residence								
Urban	9.6	11.5	19.5	28.7	30.7	100.0	23,656	0.14
Non-urban	38.2	34.8	20.9	4.7	1.3	100.0	13,549	0.23
Province								
Western Cape	2.7	7.5	11.8	32.1	45.8	100.0	4,071	0.14
Eastern Cape	42.4	16.8	14.8	17.0	9.0	100.0	4,728	0.31
Northern Cape	11.8	18.9	23.7	29.0	16.7	100.0	784	0.18
Free State	8.0	11.5	31.8	32.7	16.1	100.0	1,967	0.17
KwaZulu-Natal	25.5	22.6	20.6	15.8	15.4	100.0	6,939	0.28
North West	14.7	29.1	30.3	18.7	7.3	100.0	2,534	0.16
Gauteng	12.3	12.9	19.0	24.0	31.9	100.0	9,293	0.14
Mpumalanga	23.9	29.3	26.5	12.3	8.0	100.0	3,011	0.22
Limpopo	27.6	40.7	17.8	7.7	6.2	100.0	3,880	0.24
Total	20.0	20.0	20.0	20.0	20.0	100.0	37,205	0.20

[1] The Gini coefficient presented is based on household wealth, not income

Table 2.8 Handwashing

Percentage of households in which the place most often used for washing hands was observed by whether the location was fixed or mobile and total percentage of households in which the place for handwashing was observed, and among households in which the place for handwashing was observed, percent distribution by availability of water, soap, and other cleansing agents, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage of households in which place for washing hands was observed:			Number of households	Among households in which place for handwashing was observed, percentage with:							Number of households in which a place for hand-washing was observed
	And place for hand-washing was a fixed place	And place for hand-washing was mobile	Total		Soap and water[1]	Water and cleansing agent other than soap only[2]	Water only	Soap but no water[3]	Cleansing agent other than soap only[2]	No water, no soap, no other cleansing agent	Total	
Residence												
Urban	67.3	19.7	87.0	7,542	57.0	1.1	31.8	1.3	0.0	8.8	100.0	6,560
Non-urban	27.9	54.2	82.1	3,541	34.5	0.7	37.7	1.3	0.0	25.8	100.0	2,907
Province												
Western Cape	81.0	10.4	91.3	1,206	86.1	1.0	12.0	0.0	0.0	0.8	100.0	1,102
Eastern Cape	42.4	39.5	81.9	1,301	45.4	0.7	36.3	0.6	0.0	17.0	100.0	1,065
Northern Cape	67.5	22.9	90.3	210	54.2	0.6	33.5	1.2	0.0	10.6	100.0	190
Free State	64.5	22.1	86.6	579	38.1	0.3	47.9	0.9	0.0	12.7	100.0	502
KwaZulu-Natal	55.2	25.0	80.3	1,968	49.3	1.4	30.7	1.8	0.0	16.8	100.0	1,579
North West	47.3	48.2	95.5	833	35.5	0.1	45.7	1.4	0.1	17.1	100.0	796
Gauteng	61.2	18.6	79.8	3,047	49.2	2.0	36.3	1.6	0.0	10.9	100.0	2,431
Mpumalanga	47.9	42.6	90.5	851	35.2	0.1	39.4	1.8	0.0	23.5	100.0	771
Limpopo	24.6	70.2	94.8	1,087	47.0	0.1	31.4	1.5	0.0	19.9	100.0	1,031
Wealth quintile												
Lowest	17.0	51.4	68.4	2,187	23.0	0.7	37.4	2.0	0.0	36.9	100.0	1,495
Second	30.1	51.3	81.4	2,349	30.4	1.0	43.9	1.4	0.0	23.3	100.0	1,912
Middle	53.2	33.9	87.1	2,247	38.0	1.4	46.5	1.4	0.0	12.7	100.0	1,956
Fourth	82.5	11.9	94.4	2,043	61.6	1.1	32.1	1.5	0.0	3.7	100.0	1,929
Highest	93.2	3.1	96.4	2,257	86.7	0.8	11.7	0.4	0.0	0.4	100.0	2,175
Total	54.7	30.7	85.4	11,083	50.1	1.0	33.6	1.3	0.0	14.0	100.0	9,467

[1] Soap includes soap or detergent in bar, liquid, powder, or paste form. This column includes households with soap and water only as well as those that had soap and water and another cleansing agent.
[2] Cleansing agents other than soap include locally available materials such as ash, mud, or sand
[3] Includes households with soap only as well as those with soap and another cleansing agent

Table 2.9 Household population by age, sex, and residence

Percent distribution of the de facto household population by various age groups and percentage of the de facto household population age 10-19, according to sex and residence, South Africa DHS 2016

	Urban			Non-urban			Total		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	10.3	9.3	9.8	13.5	11.2	12.3	11.5	10.0	10.7
5-9	10.0	8.3	9.1	14.0	11.5	12.7	11.4	9.5	10.4
10-14	8.2	7.9	8.0	12.9	10.3	11.5	9.9	8.8	9.3
15-19	8.0	8.4	8.2	12.3	8.8	10.5	9.6	8.5	9.0
20-24	8.9	8.9	8.9	8.7	7.6	8.1	8.8	8.4	8.6
25-29	9.2	9.8	9.5	6.1	7.1	6.6	8.1	8.8	8.4
30-34	8.9	8.5	8.7	6.1	7.0	6.6	7.9	7.9	7.9
35-39	7.8	7.3	7.5	4.1	4.9	4.5	6.5	6.4	6.4
40-44	7.0	6.5	6.7	4.3	4.6	4.5	6.0	5.8	5.9
45-49	5.4	5.6	5.5	3.2	4.5	3.9	4.6	5.2	4.9
50-54	4.1	4.7	4.4	3.0	4.2	3.7	3.7	4.5	4.1
55-59	3.5	4.3	3.9	2.9	4.0	3.5	3.3	4.2	3.7
60-64	2.9	3.3	3.1	2.8	3.8	3.3	2.9	3.5	3.2
65-69	2.0	2.4	2.2	2.0	3.0	2.5	2.0	2.6	2.3
70-74	1.3	1.9	1.6	1.3	2.2	1.8	1.3	2.0	1.7
75-79	0.7	1.1	0.9	1.0	1.8	1.5	0.8	1.4	1.1
80+	0.9	1.6	1.3	0.8	2.8	1.9	0.8	2.1	1.5
Don't know	1.0	0.5	0.7	1.0	0.5	0.7	1.0	0.5	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dependency age groups									
0-14	28.5	25.4	26.9	40.5	33.0	36.5	32.8	28.2	30.4
15-64	65.7	67.1	66.4	53.4	56.7	55.2	61.3	63.2	62.3
65+	4.9	7.0	6.0	5.1	9.8	7.6	5.0	8.1	6.6
Don't know	1.0	0.5	0.7	1.0	0.5	0.7	1.0	0.5	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Child and adult populations									
0-17	33.2	30.2	31.6	48.1	38.5	43.0	38.5	33.3	35.8
18+	65.9	69.3	67.6	50.9	61.0	56.3	60.5	66.2	63.5
Don't know	1.0	0.5	0.7	1.0	0.5	0.7	1.0	0.5	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Adolescents 10-19	16.2	16.2	16.2	25.2	19.1	22.0	19.5	17.3	18.3
Number of persons	11,354	12,177	23,531	6,367	7,230	13,597	17,721	19,407	37,128

Table 2.10 Household composition

Percent distribution of households by sex of head of household and by household size, mean size of household, and percentage of households with orphans and foster children under age 18, according to residence, South Africa DHS 2016

Characteristic	Residence		Total
	Urban	Non-urban	
Household headship			
Male	61.9	47.7	57.4
Female	38.1	52.3	42.6
Total	100.0	100.0	100.0
Number of usual members			
0	0.2	0.1	0.2
1	24.9	21.5	23.8
2	21.2	16.3	19.6
3	17.1	15.6	16.7
4	15.7	13.2	14.9
5	9.4	10.4	9.7
6	5.0	8.2	6.0
7	2.8	5.4	3.6
8	1.5	3.7	2.2
9+	2.3	5.6	3.3
Total	100.0	100.0	100.0
Mean size of households	3.1	3.8	3.4
Percentage of households with orphans and foster children under age 18			
Double orphans	2.0	4.2	2.7
Single orphans[1]	8.5	16.2	10.9
Foster children[2]	11.3	31.2	17.7
Foster and/or orphan children	15.8	36.2	22.3
Number of households	7,542	3,541	11,083

Note: Table is based on de jure household members, i.e., usual residents.
[1] Includes children with one dead parent and an unknown survival status of the other parent
[2] Foster children are those under age 18 living in households with neither their mother nor their father present, and the mother and/or the father are alive

Table 2.11 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, percentage of children not living with a biological parent, and percentage of children with one or both parents dead, according to background characteristics, South Africa DHS 2016

Background characteristic	Living with both parents	Living with mother but not with father		Living with father but not with mother		Not living with either parent				Missing information on father/ mother	Total	Percentage not living with a biological parent	Percentage with one or both parents dead[1]	Percentage maternal orphans	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead						
Age															
0-4	33.1	45.1	2.5	2.0	0.1	12.8	0.5	0.7	0.4	2.8	100.0	14.3	4.4	1.2	3,966
<2	33.1	52.9	1.1	1.5	0.0	9.1	0.1	0.1	0.0	2.0	100.0	9.4	1.5	0.2	1,487
2-4	33.1	40.5	3.4	2.3	0.2	15.0	0.7	1.0	0.6	3.3	100.0	17.3	6.2	1.8	2,479
5-9	26.9	35.9	5.8	2.3	0.6	18.5	1.7	2.5	1.8	4.1	100.0	24.4	13.2	4.9	3,869
10-14	26.4	27.3	9.9	3.0	1.0	15.7	3.3	4.5	4.5	4.4	100.0	28.0	24.5	10.0	3,460
15-17	24.7	23.3	12.2	3.2	1.6	14.5	3.1	5.1	8.2	4.2	100.0	30.9	31.9	14.6	2,002
Sex															
Male	28.3	34.4	6.8	2.8	0.8	15.4	1.6	2.8	3.1	3.9	100.0	22.9	16.1	6.4	6,834
Female	28.2	34.6	6.9	2.2	0.6	15.6	2.3	2.9	2.9	3.7	100.0	23.7	16.6	6.7	6,463
Residence															
Urban	37.6	32.5	7.1	2.8	0.7	10.4	1.5	2.1	2.7	2.6	100.0	16.8	14.7	5.5	7,475
Non-urban	16.4	37.1	6.5	2.2	0.7	22.0	2.5	3.8	3.5	5.4	100.0	31.7	18.4	8.0	5,822
Province															
Western Cape	50.8	30.2	4.0	2.8	0.6	6.2	1.6	1.1	1.0	1.8	100.0	9.8	8.3	3.2	1,222
Eastern Cape	17.3	30.8	7.5	2.1	1.0	23.8	3.2	4.1	3.5	6.8	100.0	34.6	20.7	9.1	1,919
Northern Cape	32.0	35.5	5.3	1.7	1.1	14.7	1.7	1.9	2.5	3.8	100.0	20.7	13.6	6.2	291
Free State	25.6	31.7	10.3	2.4	1.2	12.5	3.6	3.4	5.2	4.0	100.0	24.7	25.0	11.1	734
KwaZulu-Natal	17.8	39.1	7.5	2.8	0.3	18.8	2.1	4.4	4.2	2.9	100.0	29.5	19.6	7.6	2,586
North West	26.6	40.2	5.2	2.5	1.7	12.3	1.6	1.6	3.8	4.5	100.0	19.3	15.8	9.1	909
Gauteng	42.5	30.8	7.8	3.0	0.5	8.0	1.0	2.2	2.1	1.9	100.0	13.3	14.1	4.0	2,821
Mpumalanga	27.5	36.1	7.4	3.5	0.3	15.9	2.1	2.3	2.3	2.5	100.0	22.6	15.4	5.6	1,174
Limpopo	18.5	37.8	4.8	1.0	0.8	23.3	1.5	2.5	2.7	7.0	100.0	30.1	13.7	6.3	1,641
Wealth quintile															
Lowest	18.5	35.3	8.0	1.8	0.6	19.8	2.7	4.5	3.6	5.2	100.0	30.5	20.4	7.9	3,131
Second	23.6	35.9	6.8	2.4	0.5	18.2	1.4	2.8	2.9	5.4	100.0	25.4	16.3	6.7	2,840
Middle	24.0	37.9	7.5	3.0	0.8	15.2	1.7	2.7	3.7	3.5	100.0	23.3	17.2	7.0	2,797
Fourth	31.8	34.2	6.7	2.7	1.1	13.3	2.2	2.4	3.1	2.5	100.0	21.0	16.0	6.9	2,510
Highest	51.7	27.0	4.5	2.9	0.4	8.0	1.5	1.3	1.4	1.3	100.0	12.2	9.2	3.5	2,020
Total <15	28.9	36.5	5.9	2.4	0.5	15.7	1.7	2.5	2.1	3.7	100.0	22.0	13.6	5.2	11,295
Total <18	28.3	34.5	6.9	2.5	0.7	15.5	1.9	2.9	3.0	3.8	100.0	23.3	16.4	6.6	13,297

Note: Table is based on de jure members, i.e., usual residents.
[1] Includes children with father dead, mother dead, both dead, and one parent dead but missing information on survival status of the other parent

Table 2.12.1 Educational attainment of the female household population

Percent distribution of the de facto female household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, South Africa DHS 2016

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary	Don't know	Total	Number	Median years completed
Age										
6-9	27.6	71.8	0.1	0.4	0.0	0.0	0.2	100.0	1,468	0.6
10-14	0.6	74.8	14.9	9.6	0.0	0.0	0.1	100.0	1,701	4.7
15-19	0.5	3.6	6.7	75.7	12.3	0.9	0.3	100.0	1,659	9.0
20-24	0.7	2.6	3.2	42.9	39.7	10.6	0.2	100.0	1,631	11.0
25-29	0.9	3.8	2.3	40.4	35.7	16.7	0.2	100.0	1,699	11.1
30-34	2.0	4.6	3.2	41.7	30.9	16.8	0.9	100.0	1,538	10.9
35-39	1.9	5.6	3.5	42.6	30.3	15.6	0.6	100.0	1,237	10.8
40-44	4.2	7.4	3.8	39.0	27.7	16.1	1.8	100.0	1,131	10.6
45-49	7.7	13.1	8.1	33.4	24.1	12.6	1.0	100.0	1,015	9.6
50-54	13.0	19.3	9.1	32.1	15.0	10.1	1.4	100.0	873	8.1
55-59	15.6	23.0	8.6	29.1	10.8	11.4	1.5	100.0	811	7.2
60-64	22.6	25.7	8.6	25.6	7.1	8.0	2.3	100.0	678	6.1
65+	33.7	24.7	6.0	19.8	7.3	7.0	1.5	100.0	1,564	4.4
Don't know	19.8	18.4	3.1	24.0	14.9	3.2	16.7	100.0	92	7.2
Residence										
Urban	6.6	17.9	5.4	34.3	23.1	11.9	0.8	100.0	10,837	9.6
Non-urban	13.6	29.5	6.3	32.9	12.1	4.6	1.0	100.0	6,262	7.0
Province										
Western Cape	6.1	17.4	4.7	35.4	20.5	14.8	1.1	100.0	1,996	9.5
Eastern Cape	9.9	29.0	8.0	33.3	12.0	7.2	0.7	100.0	2,176	7.4
Northern Cape	10.4	25.7	6.4	35.8	15.6	5.3	0.8	100.0	372	7.9
Free State	7.1	25.9	6.4	35.5	17.8	7.1	0.2	100.0	940	8.4
KwaZulu-Natal	11.0	23.7	5.4	31.2	20.5	7.3	0.9	100.0	3,317	8.7
North West	9.5	24.7	6.9	36.1	16.0	5.8	0.9	100.0	1,104	8.0
Gauteng	5.9	15.8	5.1	33.1	26.8	12.7	0.6	100.0	4,038	10.1
Mpumalanga	12.6	24.6	5.1	36.1	14.5	6.1	1.1	100.0	1,306	8.2
Limpopo	13.9	24.3	5.4	34.6	12.8	7.5	1.6	100.0	1,849	7.9
Wealth quintile										
Lowest	16.8	30.7	7.8	34.8	8.3	0.8	0.8	100.0	3,347	6.3
Second	11.0	26.8	5.8	38.3	14.3	2.9	1.0	100.0	3,283	7.9
Middle	8.1	22.6	6.7	36.7	19.9	5.4	0.6	100.0	3,303	8.8
Fourth	6.7	18.7	5.6	35.0	23.4	9.1	1.4	100.0	3,520	9.4
Highest	4.0	12.9	2.9	25.1	28.4	26.2	0.5	100.0	3,646	11.2
Total	9.2	22.1	5.7	33.8	19.1	9.2	0.9	100.0	17,099	8.8

[1] Completed 7th grade/standard 5/AET 3 at the primary level
[2] Completed 12th grade/standard 10/form 5/matric at the secondary level

Table 2.12.2 Educational attainment of the male household population

Percent distribution of the de facto male household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, South Africa DHS 2016

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary	Don't know	Total	Number	Median years completed
Age										
6-9	28.5	71.1	0.0	0.1	0.0	0.0	0.3	100.0	1,633	0.4
10-14	1.0	81.2	11.4	5.9	0.0	0.0	0.5	100.0	1,754	4.2
15-19	0.6	8.1	10.7	72.9	6.2	0.9	0.6	100.0	1,695	8.4
20-24	1.5	4.6	3.1	47.7	34.0	8.7	0.4	100.0	1,560	10.5
25-29	1.8	5.2	3.5	41.3	33.1	13.8	1.2	100.0	1,434	10.8
30-34	2.7	4.2	5.0	43.5	30.4	13.4	0.8	100.0	1,398	10.7
35-39	3.1	7.5	3.8	39.5	30.9	13.5	1.8	100.0	1,143	10.7
40-44	4.3	10.6	5.2	34.1	30.6	13.4	1.9	100.0	1,062	10.6
45-49	5.4	13.7	7.1	30.0	27.8	14.4	1.6	100.0	813	10.4
50-54	9.6	17.5	6.7	33.1	18.4	11.4	3.3	100.0	661	9.0
55-59	11.9	22.4	6.1	25.2	19.3	11.7	3.4	100.0	580	8.1
60-64	15.3	25.0	6.0	27.8	10.8	12.9	2.1	100.0	510	7.2
65+	27.0	18.9	6.1	21.1	10.5	13.3	3.1	100.0	880	6.4
Don't know	22.6	19.6	2.4	23.8	15.1	4.1	12.4	100.0	173	6.7
Residence										
Urban	6.4	20.1	5.0	33.3	22.6	11.1	1.5	100.0	9,962	9.4
Non-urban	10.4	33.9	7.1	32.9	11.2	3.2	1.2	100.0	5,335	6.7
Province										
Western Cape	4.8	19.5	6.6	32.4	19.7	15.7	1.3	100.0	1,683	9.3
Eastern Cape	8.5	34.2	6.1	32.2	12.3	5.6	1.0	100.0	1,906	7.1
Northern Cape	12.0	27.7	6.0	32.1	16.7	3.9	1.7	100.0	312	7.4
Free State	9.0	28.3	5.9	31.8	18.4	5.9	0.7	100.0	755	7.9
KwaZulu-Natal	9.0	26.1	6.1	32.5	19.5	6.0	0.7	100.0	2,719	8.3
North West	10.0	28.1	6.4	31.5	18.0	4.0	2.1	100.0	1,117	7.6
Gauteng	5.7	18.7	4.4	34.6	23.3	11.7	1.7	100.0	4,060	9.7
Mpumalanga	9.0	25.0	5.5	33.0	19.5	6.1	1.9	100.0	1,246	8.3
Limpopo	9.5	29.3	6.7	35.1	11.4	6.5	1.5	100.0	1,499	7.5
Wealth quintile										
Lowest	13.6	34.6	7.1	34.3	8.8	0.6	1.1	100.0	2,950	6.2
Second	8.1	28.5	7.2	38.8	13.8	2.0	1.5	100.0	3,129	7.6
Middle	7.7	25.6	5.9	34.4	19.0	5.8	1.6	100.0	3,115	8.4
Fourth	6.1	22.4	4.8	33.9	22.5	8.4	1.9	100.0	3,002	9.1
Highest	3.7	13.9	3.6	24.4	28.7	24.8	0.9	100.0	3,101	11.1
Total	7.8	24.9	5.7	33.2	18.6	8.4	1.4	100.0	15,296	8.5

[1] Completed 7th grade/standard 5/AET 3 at the primary level
[2] Completed 12th grade/standard 10/form 5/matric at the secondary level

Table 2.13 School attendance ratios

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household population by sex and level of schooling, and the gender parity index (GPI), according to background characteristics, South Africa DHS 2016

Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender parity index[3]	Male	Female	Total	Gender parity index[3]
				PRIMARY SCHOOL				
Residence								
Urban	89.5	86.7	88.2	0.97	115.0	108.4	111.8	0.94
Non-urban	89.8	87.1	88.5	0.97	115.8	109.9	113.0	0.95
Province								
Western Cape	84.4	88.0	86.2	1.04	102.1	105.8	103.9	1.04
Eastern Cape	91.9	87.8	89.9	0.96	116.3	103.4	109.9	0.89
Northern Cape	90.2	87.6	88.9	0.97	110.9	108.5	109.7	0.98
Free State	93.4	86.8	90.2	0.93	117.5	105.6	111.7	0.90
KwaZulu-Natal	87.6	83.3	85.6	0.95	113.6	111.9	112.8	0.98
North West	91.5	89.7	90.7	0.98	110.6	110.5	110.6	1.00
Gauteng	91.3	87.9	89.7	0.96	119.8	112.1	116.2	0.94
Mpumalanga	87.7	87.1	87.4	0.99	122.4	112.1	117.3	0.92
Limpopo	89.7	86.7	88.2	0.97	118.4	109.8	114.2	0.93
Wealth quintile								
Lowest	91.8	87.6	89.7	0.95	122.0	110.1	116.0	0.90
Second	89.3	88.3	88.8	0.99	115.6	111.6	113.7	0.96
Middle	89.9	86.5	88.4	0.96	117.3	111.0	114.4	0.95
Fourth	90.3	86.7	88.7	0.96	112.6	110.4	111.6	0.98
Highest	85.5	84.5	85.0	0.99	105.3	101.0	103.1	0.96
Total	89.6	86.9	88.3	0.97	115.3	109.1	112.3	0.95
				SECONDARY SCHOOL				
Residence								
Urban	76.3	73.7	74.9	0.97	99.6	101.9	100.8	1.02
Non-urban	78.2	79.6	78.8	1.02	118.3	121.5	119.7	1.03
Province								
Western Cape	64.8	76.2	70.9	1.18	88.2	94.6	91.6	1.07
Eastern Cape	74.3	75.5	74.9	1.02	97.9	117.9	107.0	1.20
Northern Cape	77.3	77.2	77.3	1.00	105.9	102.9	104.3	0.97
Free State	73.2	75.1	74.1	1.03	102.6	109.3	105.9	1.07
KwaZulu-Natal	80.4	74.2	77.4	0.92	117.6	112.5	115.1	0.96
North West	66.8	78.3	72.3	1.17	100.3	104.9	102.5	1.05
Gauteng	81.7	69.8	75.5	0.86	100.1	96.0	97.9	0.96
Mpumalanga	70.8	80.7	75.7	1.14	111.2	115.1	113.1	1.03
Limpopo	88.4	86.3	87.4	0.98	136.5	133.2	134.9	0.98
Wealth quintile								
Lowest	68.6	70.0	69.3	1.02	100.2	101.7	101.0	1.02
Second	80.8	78.3	79.6	0.97	126.5	115.2	121.1	0.91
Middle	77.6	75.1	76.5	0.97	106.9	113.9	110.2	1.07
Fourth	76.1	78.1	77.1	1.03	100.0	106.1	103.1	1.06
Highest	85.0	80.2	82.6	0.94	107.6	113.2	110.4	1.05
Total	77.2	76.0	76.6	0.98	108.1	109.5	108.8	1.01

[1] The NAR for primary school is the percentage of the primary school-age (7-13 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary school-age (14-18 years) population that is attending secondary school. By definition, the NAR cannot exceed 100.0.
[2] The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary school-age population. The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100.0.
[3] The gender parity index for primary school is the ratio of the primary school NAR (GAR) for females to the NAR (GAR) for males. The gender parity index for secondary school is the ratio of the secondary school NAR (GAR) for females to the NAR (GAR) for males.

Table 2.14 Disability by domain and age

Percent distribution of the de facto household population age 5 and over by the degree of difficulty in functioning according to domain, and percent distribution by the highest degree of difficulty in functioning in at least one domain by age, South Africa DHS 2016

	Degree of difficulty							
Domain and age	No difficulty	Some difficulty	A lot of difficulty	Cannot do at all	Don't know	Total	A lot of difficulty or cannot do at all	Number of persons
Domain								
Difficulty seeing	87.9	9.7	2.2	0.2	0.1	100.0	2.3	33,155
Difficulty hearing	95.2	3.7	1.0	0.1	0.1	100.0	1.1	33,155
Difficulty communicating	98.7	0.7	0.3	0.2	0.0	100.0	0.6	33,155
Difficulty remembering or concentrating	94.1	4.3	1.3	0.3	0.1	100.0	1.5	33,155
Difficulty walking or climbing steps	93.5	4.1	1.9	0.4	0.0	100.0	2.3	33,155
Difficulty washing all over or dressing	97.6	1.6	0.4	0.4	0.0	100.0	0.8	33,155
Difficulty in at least one domain[1]								
5-9	86.0	10.4	2.5	1.1	0.0	100.0	3.6	3,862
10-14	91.0	6.6	1.9	0.3	0.2	100.0	2.2	3,455
15-19	90.8	6.9	1.9	0.3	0.0	100.0	2.2	3,354
20-29	90.5	7.2	1.9	0.3	0.1	100.0	2.2	6,324
30-39	87.3	9.4	2.4	0.6	0.2	100.0	3.1	5,316
40-49	77.7	17.1	4.2	0.8	0.2	100.0	5.0	4,021
50-59	60.2	30.2	8.1	1.3	0.2	100.0	9.3	2,925
60+	40.9	35.6	19.4	3.8	0.2	100.0	23.3	3,634
Don't know	83.8	8.8	4.3	2.1	1.1	100.0	6.3	264
Age 15 and over	77.3	15.9	5.6	1.1	0.2	100.0	6.6	25,573
Total	79.8	14.2	4.8	1.0	0.2	100.0	5.8	33,155

[1] If a person was reported to have difficulty in more than one domain, only the highest level of difficulty is shown

Table 2.15 Disability among the household population according to background characteristics

Percentage of the de facto household population age 5 and over who have difficulty in functioning according to domain, and by the highest degree of difficulty in functioning in at least one domain, according to background characteristics, South Africa DHS 2016

		Domain						Difficulty in at least one domain[1]					
Background characteristic	No difficulty in any domain	Seeing	Hearing	Commu-nicating	Remem-bering or concen-trating	Walking or climbing steps	Washing all over or dressing	Some difficulty	A lot of difficulty	Cannot do at all	A lot of difficulty or cannot do at all	A lot of difficulty or cannot do at all in more than one domain	Number of persons
Sex													
Male	82.2	9.7	4.4	1.4	4.7	4.4	2.4	12.6	4.0	1.0	5.1	1.3	15,687
Female	77.7	14.1	5.1	1.1	6.8	8.2	2.4	15.6	5.5	1.0	6.5	1.9	17,468
Residence													
Urban	81.2	12.0	4.2	1.1	5.0	5.5	1.6	13.8	4.1	0.8	4.9	1.4	21,230
Non-urban	77.4	12.1	5.9	1.6	7.3	8.1	3.7	14.9	6.2	1.3	7.5	2.2	11,925
Province													
Western Cape	84.1	9.0	3.6	1.3	5.1	5.3	1.8	12.6	2.7	0.4	3.2	0.9	3,744
Eastern Cape	73.6	14.8	7.7	1.8	9.2	8.5	3.7	17.3	7.5	1.5	9.0	2.7	4,196
Northern Cape	74.9	14.3	6.2	1.5	9.7	9.8	2.0	19.1	4.5	1.2	5.7	1.9	699
Free State	77.9	14.0	4.7	1.1	6.6	6.9	1.9	13.2	7.6	1.1	8.8	2.6	1,731
KwaZulu-Natal	77.5	14.2	5.7	1.7	7.3	8.0	3.6	15.4	6.1	1.1	7.1	2.1	6,200
North West	80.6	10.7	4.6	1.5	7.8	6.1	2.9	14.7	3.7	0.8	4.5	1.5	2,269
Gauteng	81.9	12.6	3.8	0.9	3.4	4.0	0.9	13.9	3.3	0.8	4.0	1.0	8,269
Mpumalanga	84.6	8.5	3.1	0.7	4.0	5.6	1.0	10.2	3.7	1.3	5.0	1.4	2,618
Limpopo	79.9	8.9	4.2	1.1	4.7	7.9	3.8	12.9	5.5	1.2	6.8	1.8	3,430
Wealth quintile													
Lowest	77.1	11.8	6.2	1.9	7.2	8.0	3.8	14.9	6.4	1.3	7.8	2.1	6,495
Second	79.9	11.2	5.2	1.2	6.3	6.8	2.7	13.8	5.0	1.0	6.1	1.9	6,577
Middle	81.1	11.2	4.2	1.4	5.9	5.9	2.2	13.4	4.3	1.1	5.4	1.6	6,573
Fourth	80.1	12.9	4.0	1.1	5.4	5.8	1.6	14.0	4.7	0.9	5.7	1.5	6,644
Highest	80.9	13.1	4.3	0.8	4.4	5.6	1.5	14.7	3.7	0.6	4.3	1.2	6,865
Disability grant recipient[2]													
Yes	42.7	25.4	13.3	10.5	23.8	25.2	9.2	27.2	19.2	10.8	30.0	9.4	763
No	84.2	10.3	2.6	0.6	3.6	3.4	0.4	12.6	2.7	0.2	3.0	0.4	19,176
Total	79.8	12.0	4.8	1.3	5.8	6.4	2.4	14.2	4.8	1.0	5.8	1.7	33,155

[1] If a person was reported to have difficulty in more than one domain, only the highest level of difficulty is shown
[2] Restricted to the household population age 18-59

Table 2.16 Knowledge of where social grant forms may be obtained

Percentage of households that know where forms to apply for government social grants may be obtained, and among households that know where forms may be obtained, percentage that cite specific places, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage of households that know where forms to apply for government social grants may be obtained	Number of households	Among households that know where forms can be obtained, percentage that cite specific places: Post office	Bank	Magistrate's court	SASSA/ Department of Social Development/ social development office	Pay point	Other	Number of households that know where forms may be obtained
Residence									
Urban	67.6	7,542	1.2	0.2	0.8	96.6	3.0	2.1	5,101
Non-urban	78.0	3,541	0.4	0.0	1.0	96.6	2.6	3.3	2,762
Province									
Western Cape	69.7	1,206	0.7	0.5	1.6	95.0	7.6	3.7	841
Eastern Cape	73.3	1,301	0.4	0.0	0.5	94.2	2.0	6.2	953
Northern Cape	85.5	210	0.1	0.0	0.3	99.4	2.2	0.6	180
Free State	79.2	579	0.5	0.0	0.6	95.4	8.4	2.7	459
KwaZulu-Natal	79.9	1,968	0.6	0.2	1.0	98.5	2.4	1.3	1,573
North West	78.8	833	0.5	0.1	0.7	96.4	3.6	2.8	656
Gauteng	60.7	3,047	2.3	0.0	0.7	96.0	1.5	1.5	1,850
Mpumalanga	69.6	851	0.5	0.0	1.0	98.2	0.7	2.1	593
Limpopo	69.8	1,087	0.3	0.2	1.2	97.7	1.2	1.9	759
Wealth quintile									
Lowest	68.7	2,187	0.2	0.0	0.5	96.6	2.1	3.4	1,503
Second	69.8	2,349	0.9	0.1	0.5	97.2	2.4	2.3	1,638
Middle	75.5	2,247	1.2	0.0	1.3	96.3	3.0	2.4	1,697
Fourth	77.5	2,043	0.9	0.2	1.1	96.5	3.3	2.0	1,583
Highest	63.9	2,257	1.5	0.3	1.1	96.2	3.8	2.5	1,442
Total	70.9	11,083	0.9	0.1	0.9	96.6	2.9	2.5	7,863

SASSA = South African Social Security Agency

Table 2.17 Social grants

Percentage of the de facto household population by whether they are receiving a government social grant or pension, and percentage of the de facto population receiving specific grant types, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage receiving any grant	Percentage receiving specific grant types: Old age	Disability	Child support	Care dependency	Foster child	Other	Don't know	Number of persons
Age									
0-4	67.4	0.0	0.1	66.9	0.1	0.3	0.0	0.0	3,973
5-17	69.7	0.0	0.4	66.4	0.3	2.5	0.0	0.1	9,318
18-29	2.2	0.0	1.1	0.2	0.0	0.7	0.1	0.0	7,678
30-39	2.2	0.0	1.9	0.0	0.0	0.0	0.3	0.0	5,316
40-49	4.4	0.0	4.0	0.1	0.0	0.0	0.3	0.0	4,021
50-59	10.2	0.7	8.3	0.0	0.1	0.0	1.0	0.1	2,925
60+	77.1	76.0	0.3	0.0	0.0	0.0	0.6	0.1	3,634
Don't know	23.7	3.4	3.0	16.4	0.0	0.0	0.5	0.3	264
Sex									
Male	34.5	5.4	1.9	25.9	0.1	0.8	0.3	0.0	17,721
Female	34.5	9.5	1.6	22.2	0.1	0.8	0.2	0.1	19,407
Residence									
Urban	27.0	6.1	1.7	18.2	0.1	0.6	0.3	0.1	23,531
Non-urban	47.5	10.1	1.8	34.0	0.2	1.2	0.2	0.0	13,597
Province									
Western Cape	23.8	6.8	2.5	13.5	0.2	0.5	0.1	0.1	4,073
Eastern Cape	44.9	9.8	2.2	30.9	0.2	1.6	0.3	0.0	4,708
Northern Cape	43.4	10.3	3.6	27.7	0.3	0.9	0.4	0.0	774
Free State	38.9	7.3	2.3	26.2	0.3	1.9	0.9	0.0	1,921
KwaZulu-Natal	39.1	8.4	2.0	27.3	0.2	0.9	0.2	0.1	6,955
North West	34.6	7.5	1.3	24.3	0.1	1.1	0.2	0.1	2,563
Gauteng	23.1	5.3	1.0	16.3	0.0	0.2	0.2	0.1	9,235
Mpumalanga	38.0	5.8	1.6	29.8	0.0	0.7	0.1	0.0	2,993
Limpopo	44.9	10.2	1.5	32.3	0.1	0.8	0.1	0.0	3,906
Wealth quintile									
Lowest	46.5	8.6	1.8	34.5	0.2	1.1	0.2	0.0	7,424
Second	41.7	7.9	2.0	30.5	0.2	0.8	0.2	0.1	7,469
Middle	37.7	6.7	1.8	27.8	0.1	1.0	0.2	0.1	7,435
Fourth	31.5	7.6	2.0	20.7	0.0	0.8	0.3	0.0	7,377
Highest	14.9	6.7	1.1	6.5	0.1	0.3	0.2	0.0	7,422
Total	34.5	7.5	1.8	24.0	0.1	0.8	0.2	0.1	37,128

Table 2.18 Food security: Adults

Percent distribution of households by the frequency of problems satisfying food needs of de jure adults in the past 12 months, according to background characteristics, South Africa DHS 2016

Background characteristic	In the past 12 months, frequency of problems satisfying food needs of adults							Number of households
	Never	Seldom	Sometimes	Often	Always	Not applicable	Total	
Residence								
Urban	84.5	3.3	8.7	1.6	0.8	1.1	100.0	7,507
Non-urban	77.0	4.3	14.6	2.8	0.9	0.4	100.0	3,510
Province								
Western Cape	87.1	3.3	6.8	0.6	0.4	1.8	100.0	1,204
Eastern Cape	75.3	6.1	13.5	2.7	2.0	0.3	100.0	1,287
Northern Cape	79.7	7.7	7.8	1.6	1.0	2.2	100.0	209
Free State	78.0	6.1	9.1	4.2	2.0	0.6	100.0	578
KwaZulu-Natal	75.5	3.2	16.7	2.8	1.0	0.7	100.0	1,956
North West	81.4	5.0	10.1	2.9	0.2	0.3	100.0	830
Gauteng	88.3	2.8	6.5	0.7	0.6	1.2	100.0	3,035
Mpumalanga	81.8	2.4	12.0	2.4	0.8	0.5	100.0	847
Limpopo	82.6	1.9	12.0	2.3	0.4	0.8	100.0	1,070
Wealth quintile								
Lowest	66.8	5.7	20.6	4.2	2.0	0.6	100.0	2,162
Second	79.4	4.6	11.9	2.5	0.8	0.8	100.0	2,329
Middle	81.9	3.4	11.2	1.4	0.7	1.3	100.0	2,234
Fourth	85.7	3.4	8.0	1.3	0.6	1.0	100.0	2,041
Highest	96.6	1.0	1.2	0.2	0.1	0.8	100.0	2,251
Total	82.1	3.6	10.6	2.0	0.9	0.9	100.0	11,016

Table 2.19 Food security: Children

Percent distribution of households by the frequency of problems satisfying food needs of de jure children in the past 12 months, according to background characteristics, South Africa DHS 2016

Background characteristic	In the past 12 months, frequency of problems satisfying food needs of children							Number of households
	Never	Seldom	Sometimes	Often	Always	Not applicable	Total	
Residence								
Urban	83.4	3.0	8.5	1.7	0.8	2.7	100.0	3,688
Non-urban	74.4	4.3	15.2	3.2	0.9	2.0	100.0	2,236
Province								
Western Cape	85.0	4.0	9.0	0.4	0.3	1.4	100.0	657
Eastern Cape	74.3	6.4	12.1	2.2	1.5	3.5	100.0	777
Northern Cape	83.6	7.1	6.3	1.3	0.0	1.8	100.0	134
Free State	76.5	5.5	8.6	5.0	2.6	1.8	100.0	347
KwaZulu-Natal	68.9	3.2	18.8	4.1	1.1	3.8	100.0	1,011
North West	79.5	2.9	12.2	4.1	0.3	1.0	100.0	388
Gauteng	87.9	2.3	5.9	0.6	0.5	2.8	100.0	1,436
Mpumalanga	80.7	3.0	11.8	2.5	0.6	1.4	100.0	486
Limpopo	82.2	1.9	11.8	2.2	0.6	1.4	100.0	686
Wealth quintile								
Lowest	62.3	6.3	21.8	5.1	2.0	2.5	100.0	1,177
Second	77.0	3.4	13.1	3.1	0.9	2.5	100.0	1,208
Middle	81.1	3.8	10.9	1.5	0.7	2.0	100.0	1,230
Fourth	86.3	3.0	7.0	1.3	0.5	1.9	100.0	1,186
Highest	93.8	1.0	1.8	0.0	0.0	3.4	100.0	1,122
Total	80.0	3.5	11.0	2.2	0.8	2.4	100.0	5,923

CHARACTERISTICS OF RESPONDENTS 3

Key Findings

- ***Education:*** About 1 in 4 respondents (28% of women and 24% of men) have completed secondary school, and an additional 1 in 10 respondents have attended more than secondary school (12% of women and 11% of men).
- ***Literacy:*** 96% of women and 95% of men are literate.
- ***Exposure to media:*** 30% of women and 27% of men are exposed to three specified types of media (newspapers, television, and radio) weekly.
- ***Employment:*** Men are more likely to be currently employed than women (46% versus 34%).

This chapter presents information on the demographic and socioeconomic characteristics of the survey respondents such as age, education, place of residence, marital status, employment, and wealth status. This information is useful for understanding the factors that affect use of reproductive health services, contraceptive use, and other health behaviours.

3.1 BASIC CHARACTERISTICS OF SURVEY RESPONDENTS

A total of 8,514 women age 15-49 and 3,618 men age 15-59 were interviewed in the SADHS 2016 with the standard individual questionnaires. Among the respondents age 15-49, 33% of women and 39% of men were in the 15-24 age group, 33% of women and 30% of men were in the 25-34 age group, and 34% of women and 32% of men were in the 35-49 age group (**Table 3.1**). While men up to age 59 were interviewed, the body of tables in this report presents data for men age 15-49 so that this information is comparable with the data for women; data for men age 50-59 and age 15-59 are presented as separate rows in the tables.

Black African is the largest self-reported population group, making up 87% of female and 88% of male respondents, followed by the Coloured population group, which accounts for 9% of women and 7% of men. The next-largest segment is the White population group (3% each of women and men), reflecting considerable underrepresentation of this group in the survey. Two percent of women and men each reported belonging to the Indian/Asian population group.

Well over half of women (59%) and two-thirds of men (65%) have never been married. Women more often are married or living together with a partner (i.e., in a union) than men (36% and 31%, respectively). Women and men are equally likely to report that they are divorced or separated (3% and 4%, respectively). Two percent of women report that they are widowed, as compared with 1% of men.

The majority of respondents live in urban areas (67% of women and 69% of men). By province, the largest percentage of women and men live in Gauteng (27% of women and 31% of men), followed by KwaZulu-Natal (19% of women and 16% of men). Only 2% of female and male respondents live in Northern Cape.

3.2 EDUCATION AND LITERACY

Educational attainment is high in South Africa. About 1 in 4 respondents (28% of women and 24% of men) have completed secondary school, and an additional 1 in 10 respondents have attended more than secondary school (12% of women and 11% of men) (**Tables 3.2.1** and **3.2.2**). Forty-nine percent of women report that they attended some secondary school but did not complete it, as compared with 51% of men. Only 2% of respondents reported having no formal education (**Figure 3.1**). The median number of years of schooling completed by women and men age 15-49 is 10.4 and 10.0, respectively.

Literacy

Respondents who have attended higher than secondary school are assumed to be literate. All other respondents, shown a typed sentence to read aloud, are considered literate if they could read all or part of the sentence.

Sample: Women and men age 15-49

Ninety-six percent of women and 95% of men are literate (**Tables 3.3.1** and **3.3.2**). Four percent of women and 5% of men cannot read at all.

Comparison with the SADHS 1998: Among women, the median number of years of school completed has increased by 1.7 years, from 8.7 to 10.4. The percentage of women with no education decreased from 7% in 1998 to 2% in 2016.

Patterns by background characteristics

- Respondents from urban areas are more educated than their non-urban counterparts. For example, 14% of women in urban areas have attended more than secondary school, as compared with only 7% of women in non-urban areas. The median number of years of schooling completed is 10.8 years for urban women, compared with 9.7 years for non-urban women.
- Educational attainment varies by province. Gauteng has the highest percentage of women who have completed secondary school or higher and Eastern Cape has the lowest (51% versus 28%) (**Figure 3.2**).
- Educational attainment increases with increasing household wealth. Seventy-one percent of both women and men in the highest wealth quintile have completed secondary school or higher, as compared with 16% of women and 13% of men in the lowest wealth quintile (**Figure 3.3**).

Figure 3.1 **Education of survey respondents**

Percent distribution of women and men age 15-49 by highest level of schooling attended or completed

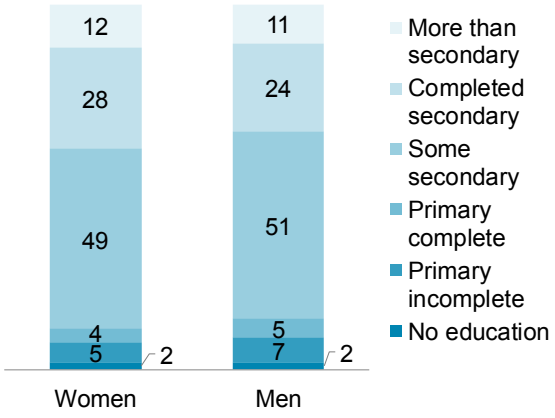
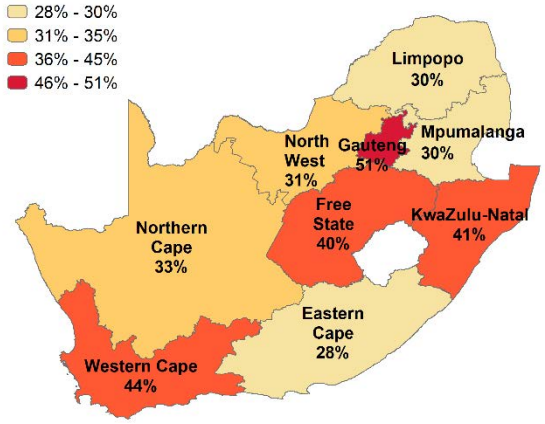


Figure 3.2 **Secondary education by province**

Percentage of women age 15-49 with secondary education complete or higher

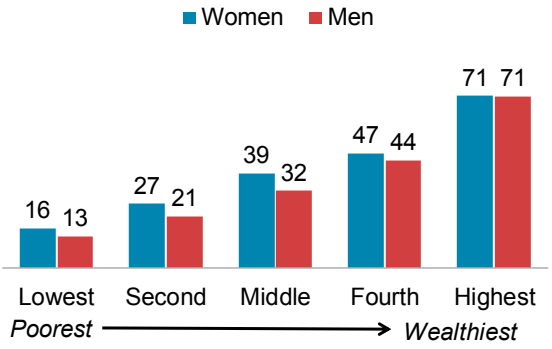


- Literacy generally decreases with age. Among women, literacy decreases from 98% among those age 15-19 to 93% among those age 40-49. Among men, literacy decreases from 97% among those age 15-19 to 92% among those age 40-44 (**Tables 3.3.1** and **3.3.2**).

- Literacy also increases with increasing wealth, rising from 91% among women in the lowest wealth quintile to 99% in the fourth quintile and from 88% among men in the lowest wealth quintile to nearly 100% in the highest quintile.

***Figure 3.3* Secondary education by household wealth**

Percentage of women and men age 15-49 with secondary education complete or higher



3.3 Mass Media Exposure and Internet Usage

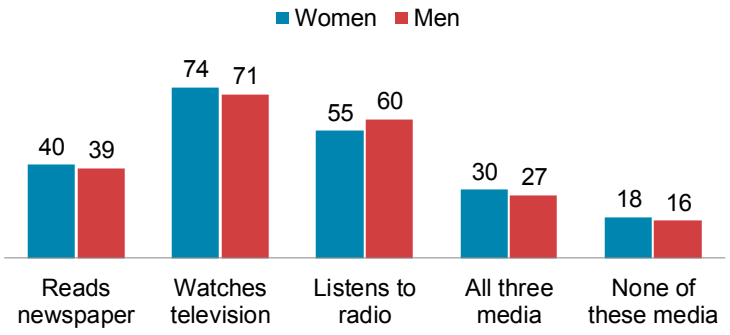
Exposure to mass media

Respondents were asked how often they read a newspaper, listened to the radio, or watched television. Those who responded *at least once a week* are considered regularly exposed to that form of media.

Sample: Women and men age 15-49

***Figure 3.4* Exposure to mass media**

Percentage of women and men age 15-49 who are exposed to media on a weekly basis



Data on women's and men's exposure to mass media are essential in the development of educational programmes and the dissemination of all types of information, particularly information about family planning, HIV/AIDS awareness, and other important health topics. Women are more likely than men to be exposed to newspapers and television, but not radio (**Figure 3.4**). Television is the most common form of media exposure for both women and men across nearly all subgroups (**Table 3.4.1** and **Table 3.4.2**). Thirty percent of women and 27% of men are exposed to all three types of media. Eighteen percent of women and 16% of men are not regularly exposed to any form of media.

The Internet is also a critical tool through which information is shared. Internet use includes accessing web pages, email, and social media. Approximately half of women and men accessed the Internet in the 12 months before the survey. Among those who had used the Internet in the past 12 months, 71% of women and 62% of men accessed it on a daily basis (**Tables 3.5.1** and **3.5.2**).

Patterns by background characteristics

- Non-urban women are twice as likely as their urban counterparts to have no regular exposure to any form of mass media (28% versus 13%). A similar pattern holds true for men (22% versus 13%).

- Women in KwaZulu-Natal (28%) and men in Eastern Cape (31%) are most likely to report no regular exposure to any of the three media. Women and men in Western Cape are least likely to report that they do not access the three media at least weekly (2% of women and 7% of men).
- Better-educated women and men have much greater exposure to mass media. Only 6% of both women and men with more than a secondary education lack regular exposure to any media, as compared with 45% of women and 40% of men with no education.
- Exposure to mass media generally increases with increasing wealth. Fifty-two percent of women and 38% of men in the highest wealth quintile access all three forms of mass media, compared with 8% each of women and men in the lowest quintile.
- Internet usage generally decreases with age among both women and men (**Tables 3.5.1** and **3.5.2**). For example, 61% of women age 20-24 used the Internet in the past 12 months, compared with 24% of women age 45-49.
- Women and men in urban areas (56% and 58%, respectively) are more likely than their non-urban counterparts (30% and 39%, respectively) to have used the Internet in the past 12 months.
- Internet usage increases with increasing wealth among both women and men; for example, 19% of women in the lowest wealth quintile accessed the Internet in the past 12 months, as compared with 81% in the highest quintile.

3.4 EMPLOYMENT

Currently employed
Respondents who were employed in the 7 days before the survey.
Sample: Women and men age 15-49

Among respondents age 15-49, men are more likely to be employed than women; 34% of women are currently employed, as compared with 46% of men (**Tables 3.6.1** and **3.6.2**). An additional 4% of women and 6% of men reported that they were not currently employed but had worked in the past 12 months.

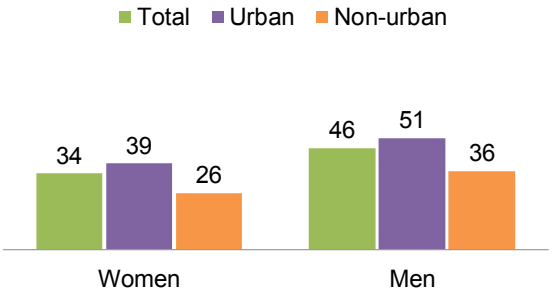
Comparison with the SADHS 1998: The percentage of women who report being currently employed has remained relatively unchanged since 1998 (32% in 1998 versus 34% in 2016).

Patterns by background characteristics

- Women and men who are in a union (married or living together with a partner as though married) or divorced/separated/widowed women and men are more likely to be employed than those who have never been married or lived with a partner as though married.
- A greater percentage of urban women and men are currently employed than their non-urban counterparts (**Figure 3.5**).
- Employment status varies widely by province. Women and men in Western Cape were most likely to be currently employed at the time of the survey, while women in KwaZulu-Natal and men in Free State were least likely to be employed (**Tables 3.6.1** and **3.6.2**).

Figure 3.5 **Employment status by residence**

Percentage of women and men age 15-49 who are currently employed



- For women, employment increases with increasing household wealth, rising from 22% in the lowest quintile to 53% in the highest quintile. For men, those in the highest quintile (60%) are more likely than those in other quintiles (41%-45%) to be currently employed.

3.5 OCCUPATION

Occupation

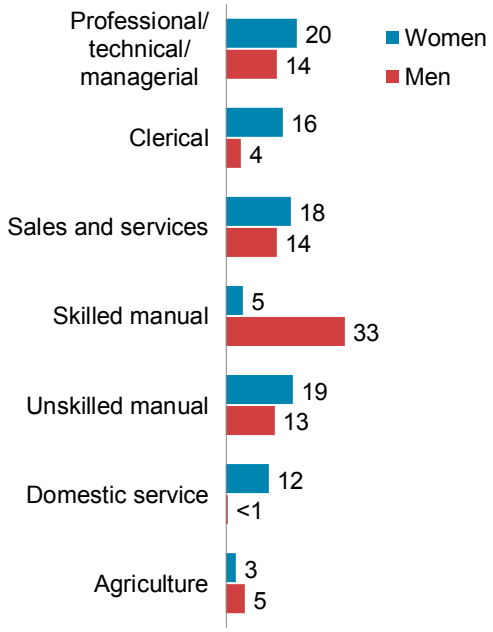
Categorised as professional/technical/managerial, clerical, sales and services, skilled manual, unskilled manual, domestic service, agriculture, and other

Sample: Women and men age 15-49 who were currently employed or had worked in the 12 months before the survey

Among those who are employed, 20% of women work in professional, technical, or managerial occupations; 19% work in unskilled manual occupations; 18% are engaged in sales and services; and 16% do clerical work (**Table 3.7.1** and **Figure 3.6**). One-third (33%) of men who are employed are engaged in skilled manual occupations; 14% work in professional, technical, or managerial occupations; 14% work in sales and services; and 13% are engaged in unskilled manual occupations (**Table 3.7.2** and **Figure 3.6**). Three percent of women and 5% of men work in agriculture.

***Figure 3.6* Occupation**

Percentage of women and men age 15-49 employed in the 12 months before the survey by occupation



The vast majority of women earn only cash for their work (94%), are employed by a non-family member (85%), and work all year (78%) (**Table 3.8**).

Patterns by background characteristics

- Urban women are most likely to be employed in the professional, technical, or managerial sector (22%), while urban men are most likely to be employed in skilled manual occupations (32%). In non-urban areas, however, the largest percentage of women work in unskilled manual occupations (26%), while again the largest percentage of men work in the skilled manual sector (38%) (**Table 3.7.1** and **Table 3.7.2**).

- Women and men with more than a secondary education are much more likely to work in professional, technical, and managerial occupations (49% of women and 44% of men) than other occupations. Women with no education are most likely to work in domestic service (25%); men with an incomplete primary education most often work in skilled manual occupations (48%).

- The proportion of women and men working in professional, technical, and managerial occupations increases with increasing wealth. For example, women in the highest quintile are 10 times more likely to work in a professional, technical, or managerial occupation than women in the lowest quintile (38% versus 3%).

3.6 ADULT HEALTH

Table 3.9 shows the weighted and unweighted numbers and the weighted percent distributions of women and men age 15 and older who were interviewed using the SADHS adult health module. A total of 6,126 women and 4,210 men age 15 and older were interviewed in the SADHS 2016 with the adult health module.

The characteristics of the respondents who completed the adult health module are generally similar to those presented in **Table 3.1**, except the age distribution differs because there was no upper age limit for eligibility. In addition, the percentages of women and men age 15 or older who had never been married or lived with a partner as though married (50% of women and 53% of men) were lower than the percentages for women and men age 15-49 (59% and 65%). Most strikingly, the percentage of respondents age 15 or older with no education is larger than for respondents age 15-49; 8% of women and 5% of men age 15 and older have no education, as compared with only 2% each of women and men age 15-49.

All women and men who were administered the adult health module were eligible for biomarker collection including anthropometry, blood pressure measurement, and testing for anaemia, HIV, and HbA1c. The adult health module results are presented in Chapters 15, 16, 17, and 18.

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Table 3.1 Background characteristics of respondents

Percent distribution of women and men age 15-49 by selected background characteristics, South Africa DHS 2016

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Age						
15-19	16.8	1,427	1,505	20.2	647	705
20-24	16.6	1,415	1,408	18.4	588	602
25-29	17.0	1,444	1,397	15.8	506	492
30-34	15.7	1,333	1,295	14.1	450	436
35-39	12.6	1,072	1,032	12.3	395	339
40-44	11.0	941	964	10.8	345	335
45-49	10.4	883	913	8.5	271	270
Population group						
Black African	86.8	7,388	7,359	87.9	2,815	2,807
White	3.1	265	214	3.2	104	81
Coloured	8.6	730	848	7.3	232	251
Indian/Asian	1.5	126	88	1.5	48	38
Other	0.1	6	5	0.1	2	2
Marital status						
Never married	58.6	4,992	5,134	64.7	2,073	2,161
Married	23.3	1,983	1,825	19.5	624	547
Living together	12.5	1,066	1,016	11.4	364	343
Divorced/separated	3.4	287	337	3.5	113	99
Widowed	2.2	185	202	0.9	28	29
Residence						
Urban	67.3	5,731	4,805	68.8	2,203	1,768
Non-urban	32.7	2,783	3,709	31.2	999	1,411
Province						
Western Cape	11.7	995	656	10.2	328	186
Eastern Cape	11.0	938	1,041	11.3	362	411
Northern Cape	2.0	173	718	1.9	61	251
Free State	5.2	442	854	5.0	159	295
KwaZulu-Natal	19.0	1,616	1,360	16.3	521	471
North West	6.7	570	863	7.4	237	379
Gauteng	26.8	2,284	863	30.7	984	371
Mpumalanga	7.9	671	1,054	8.2	263	413
Limpopo	9.7	824	1,105	9.0	288	402
Education						
No education	2.0	168	190	1.9	62	76
Primary incomplete	5.3	447	524	6.8	219	274
Primary complete	3.8	327	338	5.2	166	189
Secondary incomplete	49.3	4,195	4,409	51.1	1,637	1,628
Secondary complete	27.8	2,369	2,172	24.1	773	722
More than secondary	11.8	1,008	881	10.8	345	290
Wealth quintile						
Lowest	19.4	1,648	1,763	19.3	618	664
Second	20.1	1,715	1,865	21.3	682	772
Middle	21.2	1,805	1,956	22.3	715	755
Fourth	20.7	1,763	1,733	20.4	653	597
Highest	18.6	1,583	1,197	16.7	534	391
Total 15-49	100.0	8,514	8,514	100.0	3,202	3,179
50-59	na	na	na	na	416	439
Total 15-59	na	na	na	na	3,618	3,618

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.
na = Not applicable

Table 3.2.1 Educational attainment: Women

Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, South Africa DHS 2016

Background characteristic	Highest level of schooling						Total	Median years completed	Number of women
	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary			
Age									
15-24	0.3	2.5	4.1	63.1	22.5	7.4	100.0	9.9	2,842
15-19	0.2	2.8	4.9	81.0	9.6	1.4	100.0	9.1	1,427
20-24	0.4	2.3	3.2	45.0	35.6	13.5	100.0	11.0	1,415
25-29	0.4	3.9	2.5	41.6	36.6	14.9	100.0	11.0	1,444
30-34	1.8	3.9	3.0	45.1	31.8	14.4	100.0	10.8	1,333
35-39	2.2	5.7	3.4	44.5	29.9	14.4	100.0	10.7	1,072
40-44	4.3	8.5	3.4	42.3	27.4	14.1	100.0	10.4	941
45-49	7.5	14.2	7.6	36.8	22.4	11.5	100.0	9.4	883
Residence									
Urban	1.6	3.7	3.5	45.4	31.5	14.3	100.0	10.8	5,731
Non-urban	2.8	8.4	4.6	57.2	20.2	6.8	100.0	9.7	2,783
Province									
Western Cape	1.5	3.2	2.9	48.9	25.1	18.5	100.0	10.6	995
Eastern Cape	1.5	8.6	6.2	55.6	20.3	7.7	100.0	9.6	938
Northern Cape	2.7	7.0	4.5	52.8	24.6	8.4	100.0	9.8	173
Free State	1.1	5.4	3.5	50.6	29.9	9.6	100.0	10.4	442
KwaZulu-Natal	3.1	5.9	3.2	46.7	31.0	10.1	100.0	10.5	1,616
North West	2.7	8.5	4.3	53.3	23.6	7.6	100.0	9.9	570
Gauteng	1.6	3.0	4.2	40.5	36.0	14.7	100.0	11.0	2,284
Mpumalanga	3.0	6.2	4.1	57.0	20.1	9.6	100.0	10.0	671
Limpopo	1.2	5.4	2.1	61.3	19.4	10.6	100.0	10.1	824
Wealth quintile									
Lowest	4.7	11.7	7.7	59.6	14.8	1.5	100.0	9.0	1,648
Second	2.0	6.3	4.3	60.9	21.6	4.9	100.0	9.9	1,715
Middle	1.4	4.6	3.7	51.4	30.8	8.1	100.0	10.4	1,805
Fourth	1.1	3.0	3.0	45.8	35.0	12.1	100.0	10.8	1,763
Highest	0.9	0.6	0.3	27.4	36.7	34.1	100.0	11.5	1,583
Total	2.0	5.3	3.8	49.3	27.8	11.8	100.0	10.4	8,514

[1] Completed 7th grade/standard 5/AET 3 at the primary level
[2] Completed 12th grade/standard 10/form 5/matric at the secondary level

Table 3.2.2 Educational attainment: Men

Percent distribution of men age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, South Africa DHS 2016

Background characteristic	Highest level of schooling						Total	Median years completed	Number of men
	No education	Some primary	Completed primary[1]	Some secondary	Completed secondary[2]	More than secondary			
Age									
15-24	0.5	5.8	4.8	65.4	18.5	5.1	100.0	9.2	1,235
15-19	0.0	6.6	7.8	78.3	7.0	0.3	100.0	8.5	647
20-24	1.0	4.9	1.5	51.1	31.1	10.4	100.0	10.4	588
25-29	0.5	6.1	4.8	42.3	29.1	17.3	100.0	10.8	506
30-34	1.8	5.1	4.8	45.4	26.9	16.0	100.0	10.6	450
35-39	3.0	8.0	5.6	43.5	28.1	11.8	100.0	10.4	395
40-44	6.2	9.9	6.2	41.0	25.3	11.4	100.0	10.2	345
45-49	4.8	10.3	6.2	36.2	28.8	13.6	100.0	10.4	271
Residence									
Urban	1.7	4.8	4.2	48.0	27.9	13.4	100.0	10.4	2,203
Non-urban	2.6	11.4	7.4	57.9	15.8	5.0	100.0	9.1	999
Province									
Western Cape	0.6	4.5	2.4	48.2	31.9	12.4	100.0	10.5	328
Eastern Cape	1.9	11.1	7.0	58.0	14.2	7.9	100.0	9.0	362
Northern Cape	3.8	9.3	6.4	43.7	31.5	5.3	100.0	9.7	61
Free State	1.2	9.6	5.4	49.8	24.9	9.1	100.0	9.5	159
KwaZulu-Natal	3.4	5.2	8.0	51.7	24.1	7.5	100.0	9.7	521
North West	2.7	11.8	7.4	51.2	23.6	3.4	100.0	9.7	237
Gauteng	1.3	4.7	3.8	47.2	26.9	16.0	100.0	10.6	984
Mpumalanga	4.1	8.4	4.0	51.4	24.8	7.3	100.0	9.7	263
Limpopo	0.7	6.8	4.6	59.9	16.2	11.7	100.0	9.5	288
Wealth quintile									
Lowest	5.3	15.4	9.1	57.3	12.2	0.8	100.0	8.3	618
Second	1.8	9.0	8.3	59.6	18.0	3.3	100.0	9.4	682
Middle	1.9	6.0	4.4	56.0	23.8	7.9	100.0	10.0	715
Fourth	0.5	2.6	2.8	49.8	33.2	11.1	100.0	10.6	653
Highest	0.1	0.5	0.8	28.1	35.3	35.3	100.0	11.5	534
Total 15-49	1.9	6.8	5.2	51.1	24.1	10.8	100.0	10.0	3,202
50-59	10.9	27.9	3.2	30.5	14.7	12.9	100.0	7.7	416
Total 15-59	3.0	9.3	5.0	48.7	23.0	11.0	100.0	9.8	3,618

[1] Completed 7th grade/standard 5/AET 3 at the primary level
[2] Completed 12th grade/standard 10/form 5/matric at the secondary level

Table 3.3.1 Literacy: Women

Percent distribution of women age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, South Africa DHS 2016

Background characteristic	Higher than secondary schooling	No schooling, primary or secondary school					Total	Percentage literate[1]	Number of women
		Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/visually impaired			
Age									
15-24	7.4	83.4	6.8	2.3	0.0	0.0	100.0	97.7	2,842
15-19	1.4	90.0	6.7	1.9	0.0	0.0	100.0	98.1	1,427
20-24	13.5	76.8	6.9	2.7	0.1	0.0	100.0	97.2	1,415
25-29	14.9	75.1	7.7	2.1	0.1	0.0	100.0	97.8	1,444
30-34	14.4	75.0	7.3	2.8	0.2	0.3	100.0	96.7	1,333
35-39	14.4	73.6	8.3	3.4	0.0	0.3	100.0	96.2	1,072
40-44	14.1	67.2	11.9	6.7	0.1	0.0	100.0	93.2	941
45-49	11.5	69.6	11.3	7.4	0.0	0.2	100.0	92.5	883
Residence									
Urban	14.3	75.4	7.5	2.6	0.1	0.1	100.0	97.2	5,731
Non-urban	6.8	77.9	9.8	5.4	0.1	0.0	100.0	94.5	2,783
Province									
Western Cape	18.5	78.5	2.1	0.9	0.0	0.0	100.0	99.1	995
Eastern Cape	7.7	77.0	10.4	4.8	0.0	0.1	100.0	95.1	938
Northern Cape	8.4	77.0	11.0	3.3	0.0	0.3	100.0	96.4	173
Free State	9.6	83.9	5.1	1.4	0.0	0.0	100.0	98.6	442
KwaZulu-Natal	10.1	74.9	11.5	3.4	0.0	0.1	100.0	96.5	1,616
North West	7.6	79.4	6.8	5.7	0.4	0.0	100.0	93.8	570
Gauteng	14.7	72.1	9.2	3.7	0.1	0.2	100.0	96.0	2,284
Mpumalanga	9.6	80.2	5.0	5.0	0.2	0.0	100.0	94.8	671
Limpopo	10.6	77.2	8.9	2.9	0.0	0.3	100.0	96.8	824
Wealth quintile									
Lowest	1.5	75.0	14.6	8.9	0.0	0.0	100.0	91.0	1,648
Second	4.9	80.9	10.1	3.9	0.1	0.2	100.0	95.8	1,715
Middle	8.1	81.8	7.4	2.4	0.2	0.1	100.0	97.3	1,805
Fourth	12.1	82.0	5.0	0.8	0.1	0.0	100.0	99.1	1,763
Highest	34.1	59.8	4.3	1.6	0.0	0.3	100.0	98.2	1,583
Total	11.8	76.2	8.2	3.5	0.1	0.1	100.0	96.3	8,514

[1] Refers to women who attended schooling higher than the secondary level and women who can read a whole sentence or part of a sentence

Table 3.3.2 Literacy: Men

Percent distribution of men age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, South Africa DHS 2016

Background characteristic	Higher than secondary schooling	No schooling, primary or secondary school					Total	Percentage literate[1]	Number of men
		Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/visually impaired			
Age									
15-24	5.1	78.8	11.9	4.1	0.1	0.0	100.0	95.8	1,235
15-19	0.3	84.2	12.9	2.6	0.0	0.0	100.0	97.4	647
20-24	10.4	72.9	10.9	5.7	0.1	0.0	100.0	94.1	588
25-29	17.3	64.9	13.5	4.4	0.0	0.0	100.0	95.6	506
30-34	16.0	63.6	15.1	5.0	0.3	0.0	100.0	94.7	450
35-39	11.8	72.6	10.7	4.4	0.2	0.3	100.0	95.0	395
40-44	11.4	67.9	12.6	8.1	0.0	0.0	100.0	91.9	345
45-49	13.6	64.9	15.2	6.2	0.0	0.0	100.0	93.8	271
Residence									
Urban	13.4	71.0	12.0	3.5	0.0	0.1	100.0	96.4	2,203
Non-urban	5.0	72.2	14.5	8.1	0.2	0.0	100.0	91.6	999
Province									
Western Cape	12.4	72.2	12.3	2.7	0.0	0.4	100.0	96.9	328
Eastern Cape	7.9	74.9	11.1	5.5	0.6	0.0	100.0	93.9	362
Northern Cape	5.3	76.6	14.3	3.7	0.0	0.0	100.0	96.3	61
Free State	9.1	74.2	12.6	4.1	0.0	0.0	100.0	95.9	159
KwaZulu-Natal	7.5	71.0	18.5	3.0	0.0	0.0	100.0	97.0	521
North West	3.4	82.0	9.1	5.4	0.0	0.0	100.0	94.6	237
Gauteng	16.0	66.4	13.9	3.7	0.0	0.0	100.0	96.3	984
Mpumalanga	7.3	72.6	12.6	7.2	0.3	0.0	100.0	92.5	263
Limpopo	11.7	71.0	4.6	12.6	0.0	0.0	100.0	87.4	288
Wealth quintile									
Lowest	0.8	65.0	21.9	11.8	0.3	0.2	100.0	87.7	618
Second	3.3	75.3	14.9	6.3	0.1	0.0	100.0	93.6	682
Middle	7.9	73.7	14.0	4.3	0.0	0.0	100.0	95.7	715
Fourth	11.1	78.4	9.2	1.3	0.0	0.0	100.0	98.7	653
Highest	35.3	62.0	2.4	0.4	0.0	0.0	100.0	99.6	534
Total 15-49	10.8	71.4	12.8	4.9	0.1	0.0	100.0	94.9	3,202
50-59	12.9	48.0	22.3	16.4	0.0	0.4	100.0	83.2	416
Total 15-59	11.0	68.7	13.9	6.2	0.1	0.1	100.0	93.6	3,618

[1] Refers to men who attended schooling higher than the secondary level and men who can read a whole sentence or part of a sentence

Table 3.4.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, South Africa DHS 2016

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	37.1	71.8	47.3	25.1	20.2	1,427
20-24	40.2	72.1	53.6	27.7	18.0	1,415
25-29	41.3	73.8	55.4	30.2	16.7	1,444
30-34	43.8	75.8	57.8	34.0	16.7	1,333
35-39	40.3	75.1	59.1	31.2	16.4	1,072
40-44	40.4	73.9	55.8	30.6	18.2	941
45-49	38.7	72.9	58.2	28.9	17.7	883
Residence						
Urban	49.8	79.4	60.5	37.1	12.5	5,731
Non-urban	20.9	61.6	43.3	14.1	28.4	2,783
Province						
Western Cape	74.6	91.9	75.2	57.8	2.4	995
Eastern Cape	21.3	62.8	46.5	14.1	27.4	938
Northern Cape	46.1	80.9	53.4	31.8	12.2	173
Free State	46.7	78.1	68.0	37.3	12.1	442
KwaZulu-Natal	30.8	63.3	47.8	22.1	28.2	1,616
North West	33.2	80.3	59.8	25.2	12.3	570
Gauteng	52.2	77.3	60.1	39.5	13.0	2,284
Mpumalanga	27.0	68.0	42.9	15.1	20.3	671
Limpopo	17.4	69.5	39.5	10.4	23.5	824
Education						
No education	11.1	46.7	30.8	8.9	45.2	168
Primary incomplete	11.2	54.1	38.5	9.1	36.0	447
Primary complete	18.4	54.0	40.8	11.1	36.2	327
Secondary incomplete	34.4	71.1	50.6	24.3	20.1	4,195
Secondary complete	52.4	80.9	63.1	39.7	10.8	2,369
More than secondary	61.3	86.1	69.6	45.9	5.7	1,008
Wealth quintile						
Lowest	16.1	35.0	31.2	7.8	48.6	1,648
Second	26.2	70.4	48.8	16.7	19.1	1,715
Middle	43.3	83.9	57.2	31.8	9.9	1,805
Fourth	51.1	88.3	66.2	40.1	6.8	1,763
Highest	65.4	89.0	71.1	51.9	5.2	1,583
Total	40.3	73.6	54.9	29.6	17.7	8,514

Table 3.4.2 Exposure to mass media: Men

Percentage of men age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, South Africa DHS 2016

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of men
Age						
15-19	27.1	72.8	45.7	17.6	18.9	647
20-24	35.0	69.0	57.2	22.8	15.9	588
25-29	39.3	65.3	62.0	28.8	19.1	506
30-34	39.7	74.3	63.3	29.2	13.9	450
35-39	49.1	70.7	65.2	32.7	13.4	395
40-44	47.4	68.5	68.1	35.9	18.0	345
45-49	46.9	74.4	71.7	34.3	9.7	271
Residence						
Urban	43.5	75.1	62.2	31.3	13.4	2,203
Non-urban	28.6	60.6	54.9	18.1	22.2	999
Province						
Western Cape	43.3	86.8	64.8	32.0	6.7	328
Eastern Cape	23.8	47.9	35.6	10.0	31.2	362
Northern Cape	40.1	72.1	37.9	19.4	16.5	61
Free State	35.9	71.3	57.9	23.7	15.0	159
KwaZulu-Natal	25.5	67.3	57.8	17.4	18.8	521
North West	33.5	71.2	66.7	24.7	14.7	237
Gauteng	47.9	75.2	64.1	36.2	14.2	984
Mpumalanga	53.9	64.9	70.1	40.2	16.7	263
Limpopo	37.9	74.5	65.1	24.3	10.7	288
Education						
No education	6.5	42.9	52.4	2.6	40.1	62
Primary incomplete	16.7	49.8	47.7	8.2	32.4	219
Primary complete	25.0	62.7	56.4	13.3	19.9	166
Secondary incomplete	34.1	69.5	55.5	23.2	17.6	1,637
Secondary complete	53.1	76.9	67.4	38.9	10.0	773
More than secondary	55.7	83.4	74.9	43.3	6.2	345
Wealth quintile						
Lowest	23.4	37.3	44.4	8.0	36.4	618
Second	31.1	64.4	57.6	20.5	19.3	682
Middle	42.8	79.3	63.4	31.9	11.2	715
Fourth	50.5	85.8	66.8	38.5	6.8	653
Highest	46.9	86.4	67.6	37.9	6.6	534
Total 15-49	38.8	70.6	59.9	27.2	16.1	3,202
50-59	40.0	71.2	64.9	26.8	13.3	416
Total 15-59	39.0	70.6	60.5	27.2	15.8	3,618

Table 3.5.1 Internet usage: Women

Percentage of women age 15-49 who have ever used the Internet, and percentage who have used the Internet in the past 12 months; and among women who have used the Internet in the past 12 months, percent distribution by frequency of Internet use in the past month, according to background characteristics, South Africa DHS 2016

Background characteristic	Ever used the Internet	Used the Internet in the past 12 months	Number of women	Among women who have used the Internet in the past 12 months, percentage who, in the past month, used the Internet: Almost every day	At least once a week	Less than once a week	Not at all	Total	Number of women
Age									
15-19	61.0	58.4	1,427	63.6	25.1	9.2	2.1	100.0	833
20-24	63.4	60.7	1,415	73.0	18.4	7.0	1.6	100.0	858
25-29	58.1	55.7	1,444	75.7	15.5	7.7	1.1	100.0	803
30-34	49.9	47.5	1,333	73.4	17.5	8.5	0.6	100.0	634
35-39	40.1	38.0	1,072	71.7	18.2	9.4	0.7	100.0	407
40-44	32.4	31.0	941	71.3	22.7	4.8	1.2	100.0	291
45-49	24.9	24.0	883	70.0	20.6	7.6	1.8	100.0	212
Residence									
Urban	57.9	56.0	5,731	74.9	17.6	6.3	1.2	100.0	3,211
Non-urban	32.7	29.8	2,783	57.2	26.7	14.2	1.9	100.0	828
Province									
Western Cape	64.9	62.6	995	81.2	12.5	5.5	0.8	100.0	623
Eastern Cape	43.1	40.5	938	62.9	26.0	10.2	0.9	100.0	380
Northern Cape	43.9	40.9	173	61.9	21.5	10.2	6.4	100.0	71
Free State	47.0	45.3	442	61.8	21.8	15.6	0.8	100.0	200
KwaZulu-Natal	43.7	41.5	1,616	64.6	24.7	9.4	1.3	100.0	672
North West	43.5	41.4	570	62.6	19.1	17.8	0.6	100.0	236
Gauteng	59.1	57.1	2,284	79.8	15.9	3.1	1.3	100.0	1,305
Mpumalanga	42.4	39.1	671	62.4	25.9	7.8	3.9	100.0	263
Limpopo	37.1	35.2	824	61.6	22.4	14.8	1.2	100.0	290
Education									
No education	9.8	8.6	168	*	*	*	*	100.0	14
Primary incomplete	4.5	4.3	447	(45.2)	(36.1)	(13.8)	(4.9)	100.0	19
Primary complete	14.5	13.8	327	(59.2)	(27.9)	(8.2)	(4.6)	100.0	45
Secondary incomplete	39.0	36.4	4,195	62.8	24.4	10.9	1.9	100.0	1,527
Secondary complete	67.2	64.8	2,369	74.3	17.9	6.5	1.3	100.0	1,534
More than secondary	90.8	89.2	1,008	81.7	12.8	5.2	0.3	100.0	899
Wealth quintile									
Lowest	20.3	18.5	1,648	53.7	31.1	13.0	2.2	100.0	304
Second	36.4	33.1	1,715	57.8	27.1	12.8	2.3	100.0	567
Middle	48.4	46.1	1,805	68.8	18.8	11.3	1.1	100.0	832
Fourth	62.1	59.7	1,763	71.7	19.7	7.2	1.4	100.0	1,052
Highest	82.1	81.1	1,583	82.6	13.6	3.0	0.9	100.0	1,284
Total	49.7	47.4	8,514	71.2	19.5	7.9	1.3	100.0	4,040

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.5.2 Internet usage: Men

Percentage of men age 15-49 who have ever used the Internet, and percentage who have used the Internet in the past 12 months; and among men who have used the Internet in the past 12 months, percent distribution by frequency of Internet use in the past month, according to background characteristics, South Africa DHS 2016

Background characteristic	Ever used the Internet	Used the Internet in the past 12 months	Number of men	Among men who have used the Internet in the past 12 months, percentage who, in the past month, used the Internet: Almost every day	At least once a week	Less than once a week	Not at all	Total	Number of men
Age									
15-19	59.3	57.5	647	54.6	27.3	16.1	2.0	100.0	372
20-24	67.9	64.7	588	63.9	25.7	9.4	1.1	100.0	381
25-29	64.8	61.7	506	71.2	19.4	8.7	0.6	100.0	312
30-34	53.4	50.1	450	64.2	26.5	9.0	0.4	100.0	225
35-39	47.3	46.7	395	58.0	31.6	7.4	3.1	100.0	184
40-44	30.8	29.0	345	63.7	24.6	10.7	0.9	100.0	100
45-49	34.7	33.7	271	60.1	33.0	6.9	0.0	100.0	91
Residence									
Urban	59.7	58.0	2,203	67.1	23.1	8.8	1.0	100.0	1,279
Non-urban	42.5	38.7	999	46.8	35.5	15.6	2.1	100.0	387
Province									
Western Cape	62.8	61.7	328	67.0	25.9	5.4	1.6	100.0	202
Eastern Cape	40.4	37.6	362	65.6	25.2	7.8	1.4	100.0	136
Northern Cape	51.7	50.3	61	50.7	39.3	7.6	2.4	100.0	31
Free State	58.1	55.1	159	73.5	18.2	6.8	1.5	100.0	87
KwaZulu-Natal	44.6	40.8	521	53.7	24.8	19.6	1.9	100.0	213
North West	52.7	50.0	237	45.6	45.1	9.3	0.0	100.0	119
Gauteng	61.7	60.9	984	69.9	21.5	8.4	0.3	100.0	599
Mpumalanga	50.9	47.2	263	55.5	29.1	13.6	1.8	100.0	124
Limpopo	57.1	53.7	288	50.6	30.3	15.4	3.8	100.0	155
Education									
No education	2.9	2.9	62	*	*	*	*	100.0	2
Primary incomplete	8.5	5.4	219	*	*	*	*	100.0	12
Primary complete	20.3	19.2	166	(47.1)	(35.4)	(17.5)	(0.0)	100.0	32
Secondary incomplete	47.9	45.4	1,637	48.5	33.3	16.2	2.1	100.0	743
Secondary complete	74.8	72.2	773	68.4	23.9	6.7	1.0	100.0	558
More than secondary	93.4	92.5	345	86.7	11.0	2.3	0.0	100.0	319
Wealth quintile									
Lowest	27.0	25.0	618	47.1	41.1	11.0	0.8	100.0	154
Second	43.6	39.6	682	51.4	32.0	13.7	3.0	100.0	270
Middle	54.1	51.9	715	54.6	30.9	12.8	1.8	100.0	371
Fourth	65.6	63.8	653	65.9	22.8	10.6	0.7	100.0	417
Highest	85.9	84.9	534	77.2	16.1	6.2	0.5	100.0	454
Total 15-49	54.3	52.0	3,202	62.4	26.0	10.4	1.3	100.0	1,665
50-59	23.0	21.8	416	74.6	16.7	7.3	1.4	100.0	91
Total 15-59	50.7	48.5	3,618	63.0	25.5	10.2	1.3	100.0	1,756

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.6.1 Employment status: Women

Percent distribution of women age 15-49 by employment status, according to background characteristics, South Africa DHS 2016

Background characteristic	Employed in the 12 months preceding the survey: Currently employed[1]	Employed in the 12 months preceding the survey: Not currently employed	Not employed in the 12 months preceding the survey	Total	Number of women
Age					
15-19	2.5	0.9	96.6	100.0	1,427
20-24	19.2	5.3	75.5	100.0	1,415
25-29	37.0	6.2	56.9	100.0	1,444
30-34	45.7	5.2	49.2	100.0	1,333
35-39	47.8	4.7	47.5	100.0	1,072
40-44	52.4	2.2	45.4	100.0	941
45-49	54.0	3.6	42.4	100.0	883
Marital status					
Never married	27.2	3.8	69.0	100.0	4,992
Married or living together	42.8	4.4	52.7	100.0	3,050
Divorced/separated/widowed	56.6	4.9	38.5	100.0	472
Number of living children					
0	18.1	2.5	79.4	100.0	2,436
1-2	41.0	5.1	53.9	100.0	4,155
3-4	43.3	3.9	52.8	100.0	1,629
5+	28.6	4.2	67.2	100.0	294
Residence					
Urban	38.8	4.3	57.0	100.0	5,731
Non-urban	25.5	3.7	70.7	100.0	2,783
Province					
Western Cape	46.1	6.9	46.9	100.0	995
Eastern Cape	32.2	4.3	63.5	100.0	938
Northern Cape	29.2	5.9	64.9	100.0	173
Free State	29.0	4.4	66.6	100.0	442
KwaZulu-Natal	28.6	2.1	69.3	100.0	1,616
North West	34.2	5.1	60.7	100.0	570
Gauteng	39.0	3.6	57.4	100.0	2,284
Mpumalanga	31.4	4.1	64.5	100.0	671
Limpopo	28.3	4.5	67.2	100.0	824
Education					
No education	34.8	0.1	65.1	100.0	168
Primary incomplete	28.4	4.1	67.5	100.0	447
Primary complete	28.3	1.9	69.8	100.0	327
Secondary incomplete	23.6	3.4	73.0	100.0	4,195
Secondary complete	43.7	5.7	50.6	100.0	2,369
More than secondary	62.6	4.6	32.7	100.0	1,008
Wealth quintile					
Lowest	22.3	3.6	74.2	100.0	1,648
Second	28.4	4.3	67.2	100.0	1,715
Middle	33.6	3.4	63.0	100.0	1,805
Fourth	36.3	4.7	59.0	100.0	1,763
Highest	52.5	4.5	43.0	100.0	1,583
Total	34.4	4.1	61.5	100.0	8,514

[1] "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason. Currently employed is not the same as the official government employment rate.

Table 3.6.2 Employment status: Men

Percent distribution of men age 15-49 by employment status, according to background characteristics, South Africa DHS 2016

Background characteristic	Employed in the 12 months preceding the survey: Currently employed[1]	Employed in the 12 months preceding the survey: Not currently employed	Not employed in the 12 months preceding the survey	Total	Number of men
Age					
15-19	3.9	3.3	92.8	100.0	647
20-24	33.0	8.6	58.5	100.0	588
25-29	56.5	8.2	35.3	100.0	506
30-34	69.2	6.2	24.6	100.0	450
35-39	65.7	5.0	29.3	100.0	395
40-44	63.4	5.0	31.7	100.0	345
45-49	64.0	5.4	30.5	100.0	271
Marital status					
Never married	31.3	6.7	62.0	100.0	2,073
Married or living together	74.5	4.2	21.3	100.0	988
Divorced/separated/widowed	59.8	8.0	32.2	100.0	141
Number of living children					
0	27.5	5.9	66.6	100.0	1,644
1-2	62.1	6.5	31.3	100.0	1,017
3-4	72.6	5.1	22.3	100.0	414
5+	65.4	6.7	27.9	100.0	127
Residence					
Urban	50.5	5.6	44.0	100.0	2,203
Non-urban	35.6	7.0	57.4	100.0	999
Province					
Western Cape	59.6	9.2	31.2	100.0	328
Eastern Cape	36.2	8.4	55.5	100.0	362
Northern Cape	43.3	7.8	48.9	100.0	61
Free State	31.0	4.9	64.1	100.0	159
KwaZulu-Natal	41.9	5.5	52.7	100.0	521
North West	58.3	3.8	37.8	100.0	237
Gauteng	46.2	2.6	51.2	100.0	984
Mpumalanga	53.1	9.1	37.8	100.0	263
Limpopo	40.2	11.2	48.6	100.0	288
Education					
No education	48.3	6.0	45.6	100.0	62
Primary incomplete	39.4	6.2	54.4	100.0	219
Primary complete	40.3	6.2	53.6	100.0	166
Secondary incomplete	35.9	6.7	57.4	100.0	1,637
Secondary complete	57.5	6.2	36.3	100.0	773
More than secondary	73.3	1.9	24.8	100.0	345
Wealth quintile					
Lowest	41.2	6.6	52.2	100.0	618
Second	44.0	9.5	46.5	100.0	682
Middle	44.9	4.6	50.5	100.0	715
Fourth	41.4	6.1	52.5	100.0	653
Highest	60.2	2.7	37.1	100.0	534
Total 15-49	45.8	6.0	48.1	100.0	3,202
50-59	53.5	4.4	42.1	100.0	416
Total 15-59	46.7	5.8	47.4	100.0	3,618

[1] "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason. Currently employed is not the same as the official government employment rate.

Table 3.7.1 Occupation: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, South Africa DHS 2016

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Other/ missing	Total	Number of women
Age										
15-19	(27.3)	(31.9)	(12.1)	(3.7)	(14.0)	(9.4)	(0.6)	(1.0)	100.0	48
20-24	17.5	28.5	16.8	4.3	15.1	5.1	3.4	9.3	100.0	347
25-29	19.1	17.1	20.4	5.9	17.6	8.4	1.9	9.5	100.0	623
30-34	16.6	15.2	22.6	2.9	18.0	12.9	3.1	8.7	100.0	678
35-39	22.1	13.5	14.1	6.2	18.6	12.6	3.4	9.5	100.0	563
40-44	20.0	12.5	18.8	4.0	19.7	12.8	2.7	9.6	100.0	514
45-49	21.8	9.9	13.4	4.7	22.0	17.5	2.2	8.5	100.0	509
Marital status										
Never married	16.6	17.8	17.7	5.1	18.2	11.5	2.4	10.8	100.0	1,549
Married or living together	24.0	15.0	17.9	4.3	18.0	10.9	2.6	7.4	100.0	1,441
Divorced/separated/widowed	13.7	8.4	19.6	3.5	23.2	17.9	5.1	8.3	100.0	291
Number of living children										
0	25.9	22.8	18.1	3.3	12.9	6.8	1.9	8.4	100.0	502
1-2	20.3	16.0	19.3	5.5	16.8	10.8	2.0	9.1	100.0	1,914
3-4	15.6	11.4	14.5	3.0	24.8	16.9	4.7	9.1	100.0	768
5+	4.2	6.7	17.4	6.5	31.5	17.3	5.6	10.8	100.0	96
Residence										
Urban	22.1	17.4	18.4	4.7	16.1	11.3	1.5	8.4	100.0	2,466
Non-urban	12.0	10.5	16.4	4.4	25.8	13.4	6.6	10.9	100.0	814
Province										
Western Cape	24.0	18.3	15.0	2.8	16.4	11.0	2.1	10.5	100.0	528
Eastern Cape	16.2	13.7	17.0	4.1	25.8	15.4	2.1	5.7	100.0	342
Northern Cape	18.3	12.9	14.7	3.0	18.6	12.0	4.1	16.4	100.0	61
Free State	13.2	16.6	19.8	5.4	24.3	7.7	2.4	10.6	100.0	148
KwaZulu-Natal	24.7	12.8	16.1	6.0	15.5	11.3	3.8	9.8	100.0	496
North West	10.9	13.5	19.8	6.2	24.7	14.7	3.4	6.8	100.0	224
Gauteng	21.2	18.8	20.0	4.6	15.7	11.9	1.5	6.3	100.0	973
Mpumalanga	15.9	13.3	17.6	3.4	19.8	11.9	3.1	15.0	100.0	239
Limpopo	14.3	11.4	19.2	6.4	19.9	9.4	6.0	13.3	100.0	270
Education										
No education	9.0	5.6	14.3	1.1	17.3	25.2	18.1	9.4	100.0	59
Primary incomplete	0.9	0.5	14.3	5.6	33.2	24.5	12.5	8.7	100.0	145
Primary complete	2.7	7.2	7.7	5.4	35.8	30.0	3.2	8.0	100.0	99
Secondary incomplete	8.3	6.3	17.6	5.0	30.0	19.8	3.6	9.3	100.0	1,131
Secondary complete	17.6	22.8	23.4	5.4	12.5	6.9	1.3	10.1	100.0	1,170
More than secondary	49.2	24.6	11.6	2.5	4.4	0.5	0.2	7.1	100.0	678
Wealth quintile										
Lowest	3.4	3.5	18.2	6.2	28.5	21.8	12.0	6.5	100.0	426
Second	12.3	9.2	20.4	4.5	26.4	15.2	3.1	8.8	100.0	562
Middle	11.9	16.6	17.8	6.0	22.5	12.9	1.0	11.4	100.0	668
Fourth	19.5	18.8	18.3	4.0	18.5	11.4	1.5	7.9	100.0	722
Highest	37.6	22.3	16.0	3.5	6.1	4.6	0.3	9.6	100.0	902
Total	19.6	15.7	17.9	4.6	18.5	11.8	2.7	9.1	100.0	3,281

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 3.7.2 Occupation: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, South Africa DHS 2016

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Other/ missing	Total	Number of men
Age										
15-19	9.3	0.0	4.3	32.0	31.8	0.0	2.7	20.0	100.0	47
20-24	10.2	3.1	14.6	30.3	20.7	0.0	3.7	17.5	100.0	244
25-29	17.2	5.7	12.8	28.0	11.0	1.5	4.4	19.4	100.0	327
30-34	9.7	4.6	13.2	38.1	10.9	0.4	5.7	17.4	100.0	339
35-39	14.1	5.9	13.8	36.7	11.6	0.0	3.6	14.4	100.0	279
40-44	14.1	3.3	13.4	38.6	11.7	0.9	6.1	11.9	100.0	236
45-49	23.3	1.4	15.8	27.7	8.3	0.0	6.7	16.8	100.0	188
Marital status										
Never married	12.0	4.5	13.5	30.6	16.4	0.6	5.7	16.8	100.0	787
Married or living together	16.7	4.2	12.7	35.7	9.5	0.5	3.6	17.1	100.0	778
Divorced/separated/widowed	10.6	0.7	20.2	38.8	10.9	0.0	8.6	10.2	100.0	96
Number of living children										
0	14.9	3.6	12.9	27.9	16.6	0.7	5.6	17.8	100.0	549
1-2	13.4	5.6	14.9	34.6	10.3	0.5	4.8	15.9	100.0	698
3-4	13.6	2.7	13.5	39.4	11.6	0.2	2.0	17.1	100.0	321
5+	17.6	1.6	5.8	37.3	14.6	0.5	10.9	11.8	100.0	91
Residence										
Urban	16.0	4.5	15.2	31.9	11.9	0.3	3.7	16.4	100.0	1,235
Non-urban	8.7	3.1	8.6	38.1	15.6	1.1	8.1	16.8	100.0	426
Province										
Western Cape	17.8	3.7	13.2	26.7	16.2	0.0	4.8	17.6	100.0	226
Eastern Cape	13.3	5.0	8.7	31.1	20.3	2.7	3.4	15.6	100.0	161
Northern Cape	10.4	9.3	11.3	21.6	14.6	0.0	2.6	30.2	100.0	31
Free State	11.9	6.6	16.7	25.2	7.5	0.0	3.7	28.5	100.0	57
KwaZulu-Natal	11.6	5.0	17.9	32.4	14.2	1.2	7.9	9.9	100.0	247
North West	6.6	1.1	13.7	43.9	18.1	0.3	3.9	12.3	100.0	147
Gauteng	19.9	4.7	16.9	32.7	6.3	0.1	4.1	15.4	100.0	480
Mpumalanga	7.7	2.3	8.7	35.5	16.8	0.0	5.6	23.5	100.0	163
Limpopo	11.4	3.8	5.4	43.3	11.3	0.0	5.1	19.8	100.0	148
Education										
No education	(8.8)	(1.0)	(11.8)	(40.1)	(9.4)	(2.1)	(9.0)	(17.9)	100.0	34
Primary incomplete	4.6	0.0	4.0	47.7	16.4	2.5	12.6	12.3	100.0	100
Primary complete	4.7	0.9	9.0	36.8	15.9	1.2	18.2	13.2	100.0	77
Secondary incomplete	5.8	2.3	11.3	38.5	17.7	0.6	5.6	18.3	100.0	698
Secondary complete	14.1	5.8	20.0	30.8	10.2	0.0	2.0	17.2	100.0	492
More than secondary	43.9	9.0	12.4	17.6	3.4	0.0	0.8	12.9	100.0	259
Wealth quintile										
Lowest	3.5	2.8	9.4	43.1	17.1	0.7	10.2	13.1	100.0	295
Second	5.6	2.2	12.0	38.8	18.8	1.0	7.4	14.2	100.0	365
Middle	12.4	4.5	11.9	37.9	10.1	0.7	2.8	19.7	100.0	354
Fourth	21.4	6.5	13.4	26.5	10.6	0.2	2.6	18.8	100.0	310
Highest	27.8	4.8	20.5	20.9	7.7	0.0	1.7	16.6	100.0	336
Total 15-49	14.1	4.1	13.5	33.4	12.9	0.5	4.9	16.5	100.0	1,660
50-59	23.6	4.8	9.5	27.9	16.7	0.0	7.4	10.0	100.0	241
Total 15-59	15.3	4.2	13.0	32.8	13.4	0.4	5.2	15.7	100.0	1,901

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 3.8 Type of employment: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to residence, South Africa DHS 2016

Employment characteristic	Residence		
	Urban	Non-urban	Total
Type of earnings			
Cash only	94.3	92.3	93.8
Cash and in-kind	3.0	3.7	3.2
In-kind only	0.4	0.8	0.5
Not paid	2.2	3.2	2.5
Total	100.0	100.0	100.0
Type of employer			
Employed by family member	6.3	4.1	5.8
Employed by non-family member	84.5	84.7	84.6
Self-employed	9.2	11.3	9.7
Total	100.0	100.0	100.0
Continuity of employment			
All year	80.6	70.7	78.1
Seasonal	12.1	21.3	14.4
Occasional	7.4	8.0	7.5
Total	100.0	100.0	100.0
Number of women employed during the last 12 months	2,466	814	3,281

Table 3.9 Background characteristics of respondents who completed the adult health module

Percent distribution of women and men age 15 and older by selected background characteristics, South Africa DHS 2016

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Age						
15-24	23.3	1,429	1,416	29.5	1,241	1,307
15-19	11.8	721	730	15.5	651	705
20-24	11.6	708	686	14.0	591	602
25-34	22.7	1,391	1,334	22.9	962	928
35-44	16.7	1,022	989	17.7	744	674
45-54	14.1	866	878	11.7	492	495
55-64	11.4	701	720	9.6	406	413
65+	11.7	719	789	8.6	364	393
Population group						
Black African	84.4	5,170	5,179	83.9	3,534	3,573
White	5.2	320	258	6.1	257	193
Coloured	8.4	516	607	8.0	335	379
Indian/Asian	1.9	114	77	1.9	82	63
Other	0.1	6	5	0.1	2	2
Marital status						
Never married	50.4	3,085	3,076	52.5	2,209	2,293
Married	25.8	1,582	1,512	29.8	1,255	1,212
Living together	9.8	599	541	10.5	442	416
Divorced/separated	4.6	281	312	4.7	197	179
Widowed	9.5	580	685	2.5	107	110
Employment (past 12 months)						
Not employed	66.1	4,048	4,150	52.0	2,189	2,199
Employed for cash	25.5	1,560	1,448	45.1	1,897	1,884
Employed not for cash	8.5	518	528	2.9	124	127
Residence						
Urban	65.2	3,996	3,361	68.3	2,874	2,324
Non-urban	34.8	2,130	2,765	31.7	1,336	1,886
Province						
Western Cape	11.5	703	474	11.3	476	280
Eastern Cape	11.9	730	798	11.7	493	554
Northern Cape	2.1	127	529	2.0	84	353
Free State	5.3	325	647	4.9	207	384
KwaZulu-Natal	19.4	1,191	968	16.2	683	603
North West	6.5	398	581	7.4	310	504
Gauteng	25.0	1,534	561	29.6	1,245	470
Mpumalanga	7.7	473	705	7.8	326	515
Limpopo	10.5	646	863	9.2	386	547
Education						
No education	8.1	495	586	5.2	217	289
Primary incomplete	10.8	664	743	11.4	481	551
Primary complete	4.8	293	305	5.0	212	240
Secondary incomplete	44.0	2,695	2,718	45.8	1,930	1,913
Secondary complete	21.7	1,328	1,209	21.4	900	828
More than secondary	10.6	652	565	11.2	470	389
Wealth quintile						
Lowest	19.0	1,163	1,237	18.7	787	861
Second	18.8	1,152	1,271	19.9	839	956
Middle	20.3	1,242	1,366	21.2	894	971
Fourth	20.5	1,258	1,277	19.6	827	789
Highest	21.4	1,311	975	20.5	864	633
Total 15+	100.0	6,126	6,126	100.0	4,210	4,210
Total 15-49	na	4,300	4,193	na	3,220	3,179

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.
na = Not applicable

MARRIAGE AND SEXUAL ACTIVITY 4

Key Findings

- ***Marital status:*** Six in 10 women (59%) and two-thirds of men (65%) age 15-49 have never been in a union (never married or lived together with a partner as though married).
- ***Polygyny:*** 2% of in-union women report that their husband or partner has more than one wife. This represents a decline in polygyny relative to 1998, when 7% of in-union women reported their husband or partner had multiple wives.
- ***Age at first union:*** Neither women nor men in South Africa marry or live together with a partner early. Among women and men age 30-49, only 32% and 23%, respectively, were in a union by age 25.
- ***Sexual initiation:*** Median ages at first sexual intercourse among women and men age 20-49 are 18.1 years and 17.5 years, respectively. This indicates that, on average, men begin having sex earlier than women and that age at first sex does not correlate with age at first union.

Marriage and sexual activity help determine the extent to which women are exposed to the risk of pregnancy. Thus, they are important determinants of fertility levels. However, the timing and circumstances of marriage and sexual activity also have profound consequences for women's and men's lives.

4.1 MARITAL STATUS

In a union

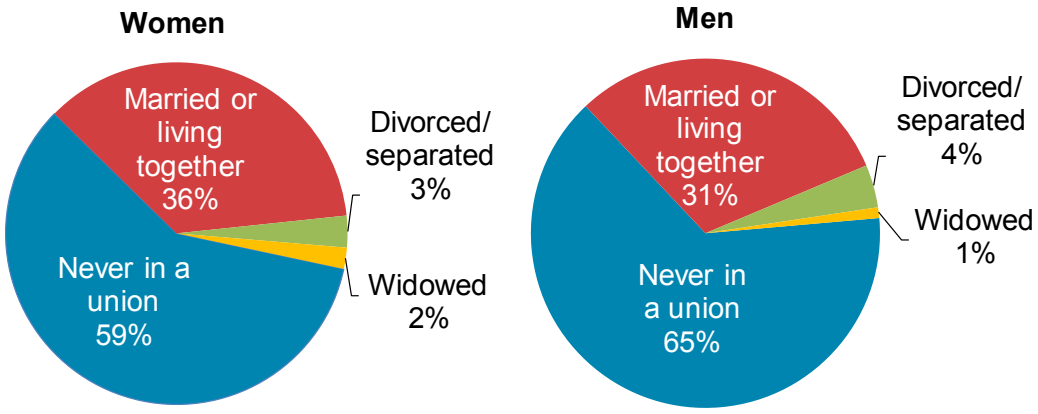
Women and men who report being married or living together with a partner as though married at the time of the survey

Sample: Women and men age 15-49

Thirty-six percent of women and 31% of men age 15-49 are in a union; that is, they are either married or living together with someone as if married (**Figure 4.1** and **Table 4.1**). Six in 10 women (59%) and two-thirds of men (65%) have never been in a union. Three percent of women and 4% of men are divorced or separated. Very few women (2%) or men (1%) are widowed.

Figure 4.1 Marital status

Percent distribution of women and men age 15-49



Comparison with the SADHS 1998: The percentage of women age 15-49 who are married or living together with someone as if married decreased from 43% in 1998 to 36% in 2016. The percentage of women who are divorced or separated dropped from 6% to 3%, while there was no change in the percentage who are widowed (2% in both 1998 and 2016).

4.2 POLYGYNY

Polygyny

Women who report that their husband or partner has other wives are considered to be in a polygynous union.

Sample: In-union women age 15-49

Two percent of women reported that their husbands or partners have other wives, and 4% do not know (**Table 4.2.1**). Among women who reported that their husband or partner had another wife, nearly all indicated that their husband had only one additional wife. Two percent of men reported having multiple wives (**Table 4.2.2**).

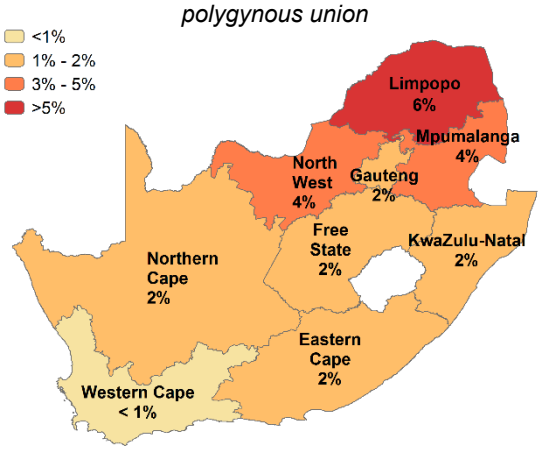
Comparison with the SADHS 1998: The percentage of women who reported that their husband or partner had other wives decreased from 7% in 1998 to 2% in 2016.

Patterns by background characteristics

- Older women are more likely than younger women to have co-wives. The percentage of women with co-wives peaks among women age 45-49 (5%) (**Table 4.2.1**).
- Women living in non-urban areas are more likely to report co-wives (4%) than their counterparts living in urban areas (2%).
- Women from Limpopo are most likely to report having co-wives. Six percent of women living in Limpopo report having co-wives, as compared with 0.4% of women living in Western Cape (**Figure 4.2**).

Figure 4.2 Polygyny by province

Percentage of in-union women age 15-49 in a polygynous union



4.3 AGE AT FIRST UNION

Median age at first union

Age by which half of respondents have been married or living together with a partner as if married.

Sample: Women age 20-49, 25-49, and 30-49 and men age 20-49, 25-49, 30-49, 20-59, 25-59, and 30-59

The SADHS 2016 results indicate that early unions (marriage or living together with a partner as though married) are rare in South Africa. Among women who are currently age 25-49, 2% were in a union by age 15, 7% by age 18, 13% by age 20, 20% by age 22, and 31% by age 25 (**Table 4.3**). Forty-four percent of women age 25-49 have never been in a union. The proportion of women who have been in a union by age 25 is so low that it is not possible to calculate a median age at first union for this age group (less than half of women began living with their spouse or partner before reaching age 25). Moreover, it is not possible to calculate a median age at first union among women age 30-49 because less than 50% of women are in a union by age 30. Median age at first union can be calculated only for women age 35-39, 40-44, and 45-49; in all cases, the median age at first union exceeds 30 years (30.7-31.9 years).

Early unions are also uncommon among men in South Africa. Among men currently age 25-49, 1% were in a union by age 15, 3% by age 18, 6% by age 20, 11% by age 22, and 21% by age 25. Forty-five percent of men age 25-49 have never been in a union. As with women, it is not possible to calculate a median age at first union for men age 25-49 or 30-49. Among men age 35-39, 40-44, and 45-49, the median age at first union ranges from 31.9-33.5 years.

Comparison with the SADHS 1998: The percentage of women age 25-49 who have never been in a union has increased since 1998, from 26% to 44%. In 1998, the median age at first union among women age 25-49 was 24.2 years; in 2016, the median age at first union among women age 30-49 could not be determined because it exceeded 30 years.

4.4 AGE AT FIRST SEXUAL INTERCOURSE

Median age at first sexual intercourse

Age by which half of respondents have had sexual intercourse.

Sample: Women age 20-49 and 25-49 and men age 20-49, 25-49, 20-59, and 25-59

In South Africa, the median age at first sexual intercourse among women age 20-49 is 18.1 years (**Table 4.4**). Seven percent of women first have sex before age 15 and 49% before age 18. By age 20, 76% of women have had sexual intercourse.

The median age at first intercourse among men age 20-49 is 17.5 years. Thirteen percent of men first have sex before age 15 and 58% do so before age 18. By age 20, 81% of men have engaged in sexual intercourse.

A comparison of **Table 4.3** and **Table 4.4** reveals that most women and men in South Africa initiate sexual intercourse many years before marrying or living together with a partner as though married.

Patterns by background characteristics

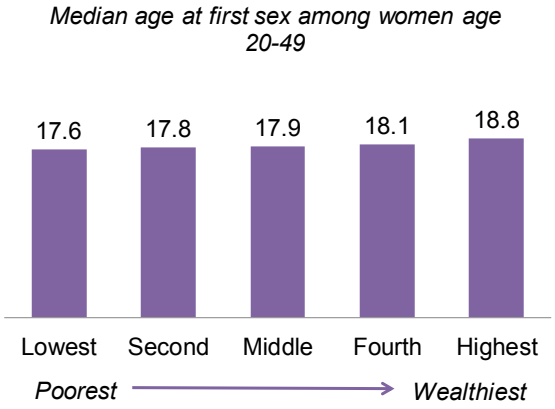
- Across nearly all background characteristics, men in South Africa initiate sexual intercourse at slightly younger ages than women (**Table 4.5**). An exception is that the median age at first sexual intercourse is lower among women with no education, a primary incomplete education, or a primary complete education than among men in the corresponding groups. For example, the median age at first sex

among women age 20-49 with no education is 17.5 years, as compared with 18.4 years among men age 20-59 with no education.

- Median age at first sexual intercourse varies by province. Among women age 20-49, the median age is lowest in Eastern Cape (17.4 years) and highest in KwaZulu-Natal (18.7 years). Differences are smaller among men age 20-59, with median ages ranging from 17.1 years in Eastern Cape, Free State, and Mpumalanga to 17.9 years in Western Cape and Limpopo.

- The median age at first sex among women age 20-49 in the lowest wealth quintile is 17.6 years, compared with 18.8 years among those in the highest quintile (**Figure 4.3**).

Figure 4.3 **Women's median age at first sex by household wealth**



Comparison with the SADHS 1998: The median age at first sexual intercourse among women age 20-49 has not changed since 1998 (18.2 years in 1998 versus 18.1 years in 2016).

4.5 Recent Sexual Activity

The survey also collected data on recent sexual activity. Fifty percent of women and 59% of men age 15-49 reported having sexual intercourse during the 4 weeks before the survey; an additional 27% of women and 23% of men had not had sex recently but had sex in the year before the survey. Twelve percent of women and 12% of men have never had sex (**Table 4.6.1** and **Table 4.6.2**).

Patterns by background characteristics

- Women age 30-39 are most likely to have had sex within the 4 weeks before the survey (62%-65%). Young women age 15-19 are least likely to have had sex recently (18%). Among men, recent sexual intercourse increases with age, from 19% among those age 15-19 to over 70% among those age 30-49.

- Women and men in urban areas are more likely to report recent sexual intercourse than those in non-urban areas. For example, 63% of men in urban areas reported having recent sexual intercourse, as compared with 49% of men in non-urban areas.

- The proportion of women and men who reported that they recently had sexual intercourse varies by province. Recent sexual intercourse is highest in Gauteng (62%) and lowest in Limpopo and KwaZulu-Natal (41% each) among women and highest in Gauteng (70%) and lowest in Limpopo (45%) among men.

List of Tables

For more information on marriage and sexual activity, see the following tables:

- **Table 4.1 Current marital status**
- **Table 4.2.1 Number of women's co-wives**
- **Table 4.2.2 Number of men's wives**
- **Table 4.3 Age at first union**
- **Table 4.4 Age at first sexual intercourse**
- **Table 4.5 Median age at first sexual intercourse by background characteristics**
- **Table 4.6.1 Recent sexual activity: Women**
- **Table 4.6.2 Recent sexual activity: Men**

Table 4.1 Current marital status

Percent distribution of women and men age 15-49 by current marital status, according to age, South Africa DHS 2016

Age	Marital status						Total	Percentage of respondents currently in a union	Number of respondents
	Never married or lived with a partner	Married	Living together with a partner	Divorced	Separated	Widowed			
				WOMEN					
15-19	96.7	1.3	1.8	0.0	0.2	0.0	100.0	3.1	1,427
20-24	79.7	7.1	12.1	0.3	0.8	0.1	100.0	19.2	1,415
25-29	61.4	17.9	17.8	0.2	2.4	0.4	100.0	35.6	1,444
30-34	42.5	33.6	18.0	1.5	2.9	1.5	100.0	51.6	1,333
35-39	39.4	38.5	15.2	1.1	2.7	3.0	100.0	53.7	1,072
40-44	35.3	42.0	11.9	2.4	4.6	3.8	100.0	53.9	941
45-49	31.3	39.9	11.1	3.9	3.6	10.2	100.0	51.0	883
Total 15-49	58.6	23.3	12.5	1.1	2.2	2.2	100.0	35.8	8,514
				MEN					
15-19	99.9	0.0	0.1	0.0	0.0	0.0	100.0	0.1	647
20-24	92.6	1.5	5.7	0.0	0.2	0.0	100.0	7.2	588
25-29	70.8	10.3	14.7	0.0	4.2	0.0	100.0	25.0	506
30-34	45.4	28.8	19.8	1.1	4.7	0.1	100.0	48.6	450
35-39	41.0	35.5	18.1	0.6	4.5	0.3	100.0	53.6	395
40-44	28.3	45.4	17.0	1.1	5.7	2.5	100.0	62.4	345
45-49	22.2	50.2	13.5	0.9	6.6	6.6	100.0	63.6	271
Total 15-49	64.7	19.5	11.4	0.4	3.1	0.9	100.0	30.9	3,202
50-59	16.7	59.1	10.1	6.4	4.3	3.4	100.0	69.2	416
Total 15-59	59.2	24.0	11.2	1.1	3.2	1.2	100.0	35.3	3,618

Table 4.2.1 Number of women's co-wives

Percent distribution of in-union women age 15-49 by number of co-wives, and percentage of in-union women with one or more co-wives, according to background characteristics, South Africa DHS 2016

Background characteristic	Number of co-wives				Total	Percentage with one or more co-wives[1]	Number of women
	0	1	2+	Don't know			
Age							
15-19	(93.9)	(5.2)	(0.0)	(0.9)	100.0	(5.2)	44
20-24	94.0	0.6	0.0	5.3	100.0	0.6	271
25-29	93.6	1.4	0.3	4.7	100.0	1.7	514
30-34	95.1	1.5	0.3	3.1	100.0	1.8	688
35-39	93.8	1.7	0.3	4.3	100.0	2.0	575
40-44	93.5	1.9	0.3	4.3	100.0	2.2	507
45-49	93.6	4.0	0.5	1.9	100.0	4.5	450
Residence							
Urban	94.9	1.5	0.1	3.5	100.0	1.6	2,259
Non-urban	91.5	3.1	0.9	4.5	100.0	4.0	790
Province							
Western Cape	98.0	0.4	0.0	1.6	100.0	0.4	454
Eastern Cape	94.0	0.7	0.9	4.4	100.0	1.5	275
Northern Cape	93.9	1.1	0.6	4.4	100.0	1.7	66
Free State	97.7	1.8	0.0	0.5	100.0	1.8	146
KwaZulu-Natal	96.0	1.6	0.3	2.1	100.0	1.9	361
North West	87.6	3.9	0.3	8.1	100.0	4.2	215
Gauteng	94.5	1.9	0.0	3.6	100.0	1.9	1,035
Mpumalanga	88.8	3.1	0.4	7.7	100.0	3.5	244
Limpopo	90.4	4.3	1.3	4.0	100.0	5.6	254
Education							
No education	90.7	6.0	0.0	3.2	100.0	6.0	83
Primary incomplete	87.3	3.2	0.9	8.7	100.0	4.0	185
Primary complete	96.7	0.3	1.5	1.5	100.0	1.8	142
Secondary incomplete	92.7	2.6	0.4	4.3	100.0	3.0	1,297
Secondary complete	96.4	1.0	0.0	2.6	100.0	1.0	875
More than secondary	95.6	1.1	0.0	3.3	100.0	1.1	469
Wealth quintile							
Lowest	92.4	2.0	0.7	4.9	100.0	2.7	505
Second	90.9	3.1	0.8	5.2	100.0	3.9	610
Middle	93.5	2.2	0.1	4.2	100.0	2.3	637
Fourth	95.3	1.8	0.0	2.9	100.0	1.8	569
Highest	97.3	0.7	0.0	2.0	100.0	0.7	729
Total	94.0	1.9	0.3	3.8	100.0	2.2	3,050

Notes: In-union women include women who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.

[1] Excludes women who responded "don't know" when asked if their husband or partner has other wives

Table 4.2.2 Number of men's wives

Percent distribution of in-union men age 15-49 by number of wives/partners, according to background characteristics, South Africa DHS 2016

Background characteristic	Number of wives/partners			Total	Number of men
	1	2+	Not asked[1]		
Age					
15-19	*	*	*	100.0	1
20-24	(98.3)	(1.7)	(0.0)	100.0	42
25-29	98.9	1.1	0.0	100.0	127
30-34	100.0	0.0	0.0	100.0	219
35-39	97.4	2.6	0.0	100.0	212
40-44	98.3	1.7	0.0	100.0	215
45-49	96.1	2.0	1.9	100.0	172
Residence					
Urban	98.4	1.2	0.4	100.0	765
Non-urban	97.5	2.5	0.0	100.0	223
Province					
Western Cape	97.6	0.0	2.4	100.0	136
Eastern Cape	100.0	0.0	0.0	100.0	69
Northern Cape	100.0	0.0	0.0	100.0	19
Free State	97.9	2.1	0.0	100.0	35
KwaZulu-Natal	94.6	5.4	0.0	100.0	96
North West	98.4	1.6	0.0	100.0	91
Gauteng	99.5	0.5	0.0	100.0	395
Mpumalanga	96.6	3.4	0.0	100.0	84
Limpopo	96.2	3.8	0.0	100.0	62
Education					
No education	(100.0)	(0.0)	(0.0)	100.0	36
Primary incomplete	98.6	1.4	0.0	100.0	86
Primary complete	95.1	4.9	0.0	100.0	50
Secondary incomplete	97.8	2.2	0.0	100.0	387
Secondary complete	99.7	0.3	0.0	100.0	282
More than secondary	96.7	1.1	2.2	100.0	146
Wealth quintile					
Lowest	97.6	2.4	0.0	100.0	175
Second	96.7	3.3	0.0	100.0	204
Middle	99.3	0.7	0.0	100.0	215
Fourth	98.8	1.2	0.0	100.0	177
Highest	98.5	0.0	1.5	100.0	217
Total 15-49	98.2	1.5	0.3	100.0	988
50-59	97.2	1.8	0.9	100.0	288
Total 15-59	98.0	1.6	0.5	100.0	1,276

Notes: In-union men include men who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Men who are in a union with a man and were not asked questions about polygyny

Table 4.3 Age at first union

Percentage of women and men age 15-49 who were first in a union by specific exact ages, and median age at first union, according to current age, South Africa DHS 2016

Current age	Percentage first in a union by exact age:					Percentage never in a union	Number of respondents	Median age at first union
	15	18	20	22	25			
				WOMEN				
15-19	0.4	na	na	na	na	96.7	1,427	a
20-24	0.9	3.6	8.4	na	na	79.7	1,415	a
25-29	1.1	5.5	10.7	16.8	28.9	61.4	1,444	a
30-34	2.1	7.0	12.0	17.7	31.0	42.5	1,333	a
35-39	1.7	5.4	11.6	20.6	30.1	39.4	1,072	31.1
40-44	2.2	8.9	14.8	22.1	33.2	35.3	941	31.9
45-49	2.2	10.7	17.9	26.0	36.0	31.3	883	30.7
20-49	1.6	6.5	12.1	na	na	51.0	7,087	a
25-49	1.8	7.2	13.0	20.0	31.4	43.8	5,672	a
30-49	2.0	7.8	13.8	21.1	32.3	37.8	4,229	a
				MEN				
15-19	0.0	na	na	na	na	99.9	647	a
20-24	0.4	0.6	3.2	na	na	92.6	588	a
25-29	0.6	1.9	5.3	9.9	20.8	70.8	506	a
30-34	1.1	3.1	6.4	10.8	18.7	45.4	450	a
35-39	1.3	1.9	3.3	8.3	22.3	41.0	395	33.5
40-44	0.3	4.9	7.1	12.5	22.6	28.3	345	33.2
45-49	2.7	3.8	8.5	15.5	20.9	22.2	271	31.9
20-49	0.9	2.4	5.3	na	na	55.9	2,555	a
25-49	1.1	3.0	5.9	11.0	20.9	44.9	1,967	a
30-49	1.4	3.6	7.0	13.2	23.2	31.6	1,877	a
20-59	1.0	2.7	6.0	na	na	50.4	2,971	a
25-59	1.2	3.2	6.6	12.5	22.7	39.9	2,383	a
30-59	1.4	3.6	7.0	13.2	23.2	31.6	1,877	a

Note: The age at first union is defined as the age at which the respondent began living with her/his first spouse/partner.
na = Not applicable due to censoring
a = Omitted because less than 50% of the women or men began living with their spouse or partner for the first time before reaching the beginning of the age group

Table 4.4 Age at first sexual intercourse

Percentage of women and men age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, South Africa DHS 2016

	Percentage who had first sexual intercourse by exact age:					Percentage who never had intercourse	Number of respondents	Median age at first intercourse
Current age	15	18	20	22	25			
				WOMEN				
15-19	5.7	na	na	na	na	56.7	1,427	a
20-24	6.5	50.5	78.7	na	na	9.2	1,415	18.0
25-29	5.7	47.9	77.1	90.8	94.6	2.2	1,444	18.1
30-34	8.3	49.5	75.3	86.3	93.3	1.1	1,333	18.0
35-39	6.4	50.3	78.8	89.8	94.1	0.5	1,072	18.0
40-44	6.1	46.5	73.8	86.6	91.6	1.0	941	18.2
45-49	8.7	47.0	72.2	83.6	90.1	0.9	883	18.2
20-49	6.9	48.8	76.3	na	na	2.8	7,087	18.1
25-49	7.0	48.4	75.7	87.7	93.0	1.2	5,672	18.1
15-24	6.1	na	na	na	na	33.0	2,842	a
				MEN				
15-19	14.5	na	na	na	na	49.1	647	a
20-24	14.7	66.9	87.5	na	na	8.2	588	17.0
25-29	14.0	63.1	83.9	90.2	93.6	3.9	506	17.3
30-34	11.5	53.6	75.0	87.7	93.6	0.5	450	17.7
35-39	15.6	59.6	81.5	88.2	94.9	0.6	395	17.4
40-44	9.5	49.5	82.0	91.6	96.0	0.8	345	18.0
45-49	8.0	44.2	73.0	85.7	92.1	1.6	271	18.3
20-49	12.7	57.9	81.4	na	na	3.1	2,555	17.5
25-49	12.1	55.2	79.5	88.9	94.1	1.6	1,967	17.6
15-24	14.6	na	na	na	na	29.6	1,235	a
20-59	12.0	55.4	79.4	na	na	2.8	2,971	17.6
25-59	11.3	52.6	77.3	87.8	93.3	1.5	2,383	17.8

na = Not applicable due to censoring
a = Omitted because less than 50% of the women or men had sexual intercourse for the first time before reaching the beginning of the age group

Table 4.5 Median age at first sexual intercourse by background characteristics

Median age at first sexual intercourse among women age 20-49 and age 25-49, and median age at first sexual intercourse among men age 20-59 and age 25-59, according to background characteristics, South Africa DHS 2016

Background characteristic	Women age		Men age	
	20-49	25-49	20-59	25-59
Residence				
Urban	18.1	18.2	17.6	17.8
Non-urban	17.9	17.9	17.7	18.0
Province				
Western Cape	18.6	18.8	17.9	17.9
Eastern Cape	17.4	17.5	17.1	17.5
Northern Cape	18.5	18.6	17.8	18.1
Free State	18.2	18.2	17.1	17.2
KwaZulu-Natal	18.7	18.6	17.7	17.8
North West	17.9	18.0	17.6	17.8
Gauteng	17.8	17.8	17.7	17.9
Mpumalanga	17.7	17.7	17.1	17.5
Limpopo	17.9	17.9	17.9	18.2
Education				
No education	17.5	17.6	18.4	18.4
Primary incomplete	16.9	17.0	18.0	18.1
Primary complete	17.0	17.0	17.9	18.0
Secondary incomplete	17.6	17.7	17.5	17.7
Secondary complete	18.5	18.5	17.6	17.9
More than secondary	19.2	19.1	17.4	17.7
Wealth quintile				
Lowest	17.6	17.7	17.9	18.1
Second	17.8	17.8	17.5	17.7
Middle	17.9	17.9	17.4	17.5
Fourth	18.1	18.2	17.5	17.8
Highest	18.8	18.8	18.0	18.1
Total	18.1	18.1	17.6	17.8

Table 4.6.1 Recent sexual activity: Women

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, South Africa DHS 2016

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of women
	Within the past 4 weeks	Within 1 year[1]	One or more years	Missing			
Age							
15-19	17.5	22.8	3.0	0.0	56.7	100.0	1,427
20-24	48.5	35.0	7.2	0.0	9.2	100.0	1,415
25-29	58.0	31.6	8.0	0.2	2.2	100.0	1,444
30-34	65.2	25.4	8.2	0.1	1.1	100.0	1,333
35-39	62.2	24.8	12.5	0.1	0.5	100.0	1,072
40-44	57.2	24.4	17.2	0.2	1.0	100.0	941
45-49	50.2	20.8	27.5	0.6	0.9	100.0	883
Marital status							
Never married	33.5	33.5	12.8	0.2	20.1	100.0	4,992
Married or living together	80.6	15.4	3.8	0.1	0.1	100.0	3,050
Divorced/separated/widowed	34.1	32.8	32.6	0.2	0.3	100.0	472
Marital duration[2]							
0-4 years	84.1	12.4	3.1	0.3	0.1	100.0	819
5-9 years	84.0	13.9	2.0	0.0	0.1	100.0	728
10-14 years	78.8	17.5	3.7	0.0	0.0	100.0	428
15-19 years	81.2	15.5	3.3	0.0	0.0	100.0	445
20-24 years	76.7	17.6	5.4	0.0	0.2	100.0	241
25+ years	65.2	25.3	9.6	0.0	0.0	100.0	220
Married more than once	76.9	15.4	6.3	0.0	1.4	100.0	170
Residence							
Urban	53.9	24.1	10.3	0.1	11.6	100.0	5,731
Non-urban	43.1	32.8	11.5	0.1	12.5	100.0	2,783
Province							
Western Cape	52.3	20.4	12.9	0.2	14.3	100.0	995
Eastern Cape	43.2	35.5	12.9	0.0	8.3	100.0	938
Northern Cape	46.9	28.1	13.3	0.0	11.7	100.0	173
Free State	44.9	28.1	13.5	0.0	13.5	100.0	442
KwaZulu-Natal	41.1	30.1	11.2	0.5	17.1	100.0	1,616
North West	56.7	24.1	11.9	0.0	7.2	100.0	570
Gauteng	61.5	22.4	7.0	0.0	9.1	100.0	2,284
Mpumalanga	52.7	28.3	9.5	0.1	9.3	100.0	671
Limpopo	41.1	31.7	12.6	0.1	14.5	100.0	824
Education							
No education	51.3	27.1	16.0	0.4	5.1	100.0	168
Primary incomplete	52.6	24.7	16.3	0.2	6.2	100.0	447
Primary complete	49.8	20.9	15.3	0.6	13.3	100.0	327
Secondary incomplete	44.6	28.1	9.8	0.1	17.4	100.0	4,195
Secondary complete	56.5	27.6	10.1	0.1	5.8	100.0	2,369
More than secondary	59.1	24.0	10.5	0.1	6.3	100.0	1,008
Wealth quintile							
Lowest	45.2	30.1	12.4	0.2	12.2	100.0	1,648
Second	52.0	29.7	9.2	0.1	9.1	100.0	1,715
Middle	52.0	27.3	10.8	0.0	9.8	100.0	1,805
Fourth	49.3	27.1	10.6	0.2	12.9	100.0	1,763
Highest	53.4	20.3	10.4	0.2	15.7	100.0	1,583
Total	50.4	27.0	10.7	0.1	11.8	100.0	8,514

[1] Excludes women who had sexual intercourse within the last 4 weeks
[2] Excludes women who are not in a union

Table 4.6.2 Recent sexual activity: Men

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, South Africa DHS 2016

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of men
	Within the past 4 weeks	Within 1 year[1]	One or more years	Missing			
Age							
15-19	18.7	25.8	6.5	0.0	49.1	100.0	647
20-24	52.9	32.1	6.7	0.0	8.2	100.0	588
25-29	67.3	21.4	7.2	0.3	3.9	100.0	506
30-34	74.4	19.1	5.6	0.4	0.5	100.0	450
35-39	79.0	17.9	2.1	0.4	0.6	100.0	395
40-44	74.7	18.7	5.9	0.0	0.8	100.0	345
45-49	74.8	14.0	9.6	0.0	1.6	100.0	271
Marital status							
Never married	45.2	27.2	8.4	0.2	19.1	100.0	2,073
Married or living together	86.2	12.8	0.6	0.1	0.2	100.0	988
Divorced/separated/widowed	63.9	23.0	13.1	0.0	0.0	100.0	141
Marital duration[2]							
0-4 years	88.2	10.9	0.4	0.5	0.0	100.0	260
5-9 years	87.0	12.7	0.2	0.0	0.0	100.0	245
10-14 years	88.1	10.1	1.7	0.0	0.0	100.0	143
15-19 years	82.0	17.6	0.4	0.0	0.0	100.0	133
20-24 years	79.0	19.8	1.2	0.0	0.0	100.0	62
25+ years	(77.2)	(17.3)	(0.0)	(0.0)	(5.5)	100.0	35
Married more than once	89.3	10.2	0.6	0.0	0.0	100.0	111
Residence							
Urban	63.1	20.9	5.7	0.2	10.1	100.0	2,203
Non-urban	49.1	26.3	7.2	0.0	17.5	100.0	999
Province							
Western Cape	58.1	18.7	8.4	1.4	13.4	100.0	328
Eastern Cape	57.9	24.4	5.3	0.0	12.5	100.0	362
Northern Cape	50.9	25.6	8.0	0.0	15.5	100.0	61
Free State	54.4	22.7	6.6	0.0	16.2	100.0	159
KwaZulu-Natal	47.1	27.6	6.9	0.0	18.4	100.0	521
North West	57.6	26.0	6.3	0.0	10.1	100.0	237
Gauteng	70.2	17.8	4.2	0.0	7.8	100.0	984
Mpumalanga	61.1	22.0	7.7	0.0	9.3	100.0	263
Limpopo	45.2	28.8	8.0	0.0	18.0	100.0	288
Education							
No education	59.1	32.8	5.9	0.0	2.2	100.0	62
Primary incomplete	53.7	18.3	10.0	0.7	17.3	100.0	219
Primary complete	52.4	21.2	6.5	0.0	19.9	100.0	166
Secondary incomplete	52.9	23.3	6.7	0.1	17.0	100.0	1,637
Secondary complete	68.0	22.0	4.8	0.0	5.2	100.0	773
More than secondary	71.6	22.1	4.0	0.4	2.0	100.0	345
Wealth quintile							
Lowest	56.4	24.4	5.9	0.3	13.0	100.0	618
Second	56.5	24.9	6.8	0.2	11.5	100.0	682
Middle	60.4	21.4	6.8	0.0	11.3	100.0	715
Fourth	58.6	23.3	5.6	0.0	12.5	100.0	653
Highest	61.9	18.2	5.5	0.3	14.1	100.0	534
Total 15-49	58.7	22.6	6.2	0.1	12.4	100.0	3,202
50-59	60.3	19.6	18.5	0.6	1.1	100.0	416
Total 15-59	58.9	22.2	7.6	0.2	11.1	100.0	3,618

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Excludes men who had sexual intercourse within the last 4 weeks
[2] Excludes men who are not in a union

FERTILITY 5

Key Findings

- ***Total fertility rate:*** The total fertility rate (TFR) is 2.6 children per woman, a decline from 2.9 in 1998.
- ***Patterns of fertility:*** The TFR declines with increasing household wealth, from 3.1 children among women in the lowest wealth quintile to 2.1 children among women in the highest wealth quintile.
- ***Birth intervals:*** The median birth interval is 55.3 months. One in 10 women (11%) had their second- or higher-order birth within 24 months of their previous birth.
- ***Age at first birth:*** The median age at first birth among women age 25-49 is 21.3 years. Eighteen percent of women gave birth by age 18.
- ***Teenage pregnancy:*** 9% of women age 15-17 and 16% of women age 15-19 have begun childbearing.

The number of children that a woman bears depends on many factors, including the age at which she begins childbearing, the intervals between her births, and her fecundity. Postponing first births and extending the interval between births have played a role in reducing fertility levels in many Southern African countries, including South Africa. These factors also have positive health consequences. In contrast, short birth intervals (of less than 24 months) can lead to harmful outcomes for both newborns and their mothers, such as preterm birth, low birth weight, and maternal or child death. Childbearing at a very young age is associated with an increased risk of complications during pregnancy and childbirth and higher rates of neonatal mortality.

This chapter describes the current level of fertility in South Africa and some of its proximate determinants. It presents information on the total fertility rate, birth intervals, insusceptibility to pregnancy (due to postpartum amenorrhoea, postpartum abstinence, or menopause), age at first birth, and teenage childbearing.

5.1 CURRENT FERTILITY

Total fertility rate (TFR)

The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates. Age-specific fertility rates are calculated for the 3 years before the survey, based on detailed birth histories provided by women.

Sample: Women age 15-49

The total fertility rate (TFR) is 2.4 children per woman in urban areas and 3.1 children per woman in non-urban areas, resulting in a national TFR of 2.6 children per woman (**Table 5.1**). Age-specific fertility rates (ASFRs) peak at age 25-29 among both urban and non-urban women (**Figure 5.1**). Four percent of women reported that they were pregnant at the time of the survey (**Table 5.2**).

Comparison with the SADHS 1998: The TFR declined from 2.9 children per woman in 1998 to 2.6 children per woman in 2016. The TFR among women in non-urban areas dropped from 3.9 in 1998 to 3.1 in 2016. In urban areas, the TFR increased marginally from 2.3 to 2.4 over the same period (**Figure 5.2**). Between 1998 and 2016, ASFRs for the 3-year period preceding the survey declined slightly across all age groups (**Table 5.3.2**).

Patterns by background characteristics

- TFRs vary by population group: Black African women have the highest TFR (2.7 children per woman), followed by Coloured (2.5 children), Indian/Asian (1.7 children), and White (1.5 children) women (**Table 5.2**).
- By province, the TFR ranges from a low of 2.1 children per woman in Western Cape to a high of 3.1 children in North West and Limpopo.
- With the exception of women with no schooling, the TFR falls with increasing education, from 3.6 among those with an incomplete primary education to 2.2 among those with more than a secondary education.
- The TFR also falls with increasing household wealth, from 3.1 children per woman among those living in the poorest 20% of households to 2.1 children per woman among those living in the wealthiest households (**Figure 5.3**).

Figure 5.1 Age-specific fertility rates

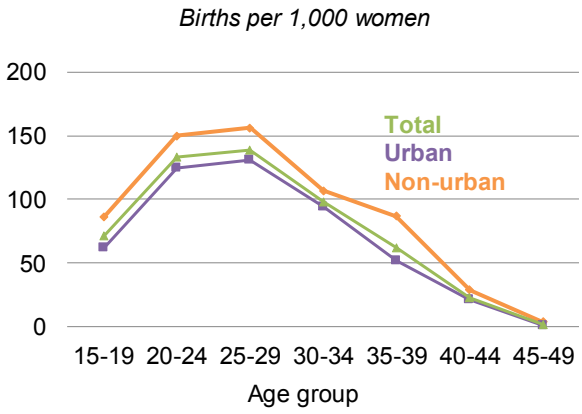


Figure 5.2 Comparison in fertility between the SADHS 1998 and SADHS 2016 by residence

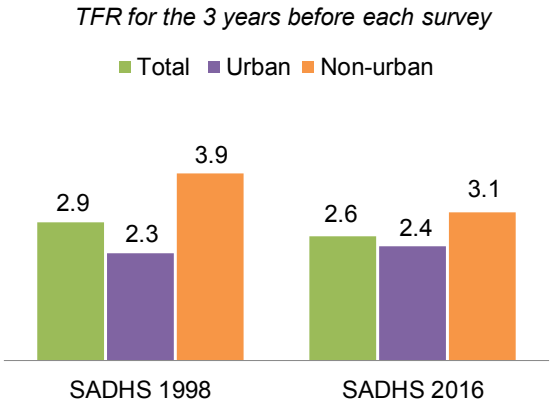
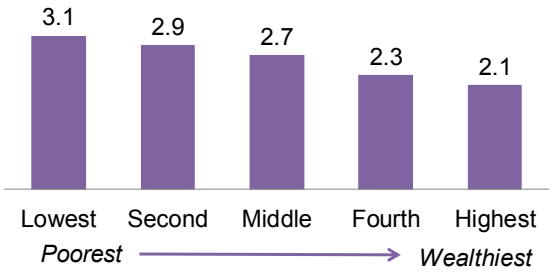


Figure 5.3 Fertility by household wealth



5.2 Children Ever Born and Living

By collecting complete live-birth histories, the SADHS allowed an estimation of the number of children ever born to women of reproductive age and living at the time of the survey. On average, women age 15-49 have given birth to 1.6 children, nearly all of whom are still alive (**Table 5.4**). In-union women age 15-49 have had an average of 2.4 children, of whom 2.2 were alive at the time of the survey.

Among women overall, the mean number of children ever born increases from 0.1 among those age 15-19 to 3.0 among those age 45-49. Among in-union women, the mean number of children rises from 1.1 among those age 20-24 to 3.2 among those age 45-49.

5.3 BIRTH INTERVALS

Median birth interval

Number of months since the preceding birth by which half of children are born

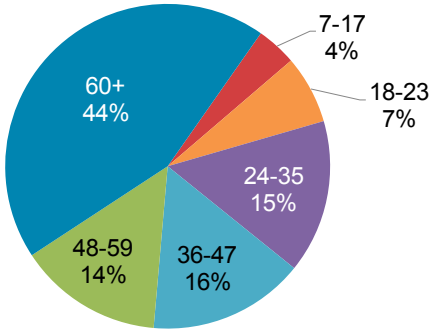
Sample: Non-first births in the 5 years before the survey

Birth intervals of less than 24 months are associated with increased health risks for both mothers and newborns. The SADHS results showed that the median birth interval is 55.3 months. About 1 in 10 women had their second- or higher-order birth within 24 months of their previous birth (**Table 5.5** and **Figure 5.4**).

Comparison with the SADHS 1998: The median birth interval increased between 1998 and 2016 (from 47.1 months to 55.3 months). The percentage of women who had birth intervals of less than 24 months decreased over that period, from 14% to 11%.

Figure 5.4 **Birth intervals**

Percent distribution of non-first births by number of months since the preceding birth



Patterns by background characteristics

- Birth intervals are virtually the same among women living in urban and non-urban areas (55.6 months versus 54.5 months).
- By province, the median birth interval ranges from a low of 51.4 months in Eastern Cape to a high of 63.6 months in Free State.
- The median birth interval rises with increasing household wealth, from 51.3 months for births to women in the lowest wealth quintile to 65.9 months for births to women in the highest quintile.

5.4 INSUSCEPTIBILITY TO PREGNANCY

Postpartum amenorrhoea

The period of time after the birth of a child and before the resumption of menstruation.

Postpartum abstinence

The period of time after the birth of a child and before the resumption of sexual intercourse.

Postpartum insusceptibility

The period of time during which a woman is considered not at risk of pregnancy because she is postpartum amenorrhoeic and/or abstaining from sexual intercourse postpartum.

Median duration of postpartum amenorrhoea

Calculated as the number of months after childbirth by which time half of women have begun menstruating.

Sample: Women who gave birth in the 3 years before the survey

Median duration of postpartum insusceptibility

Calculated as the number of months after childbirth by which time half of women are no longer protected against pregnancy by either postpartum amenorrhoea or abstinence from sexual intercourse.

Sample: Women who gave birth in the 3 years before the survey

At the time of the survey, mothers were insusceptible to pregnancy for 37% of births that occurred in the preceding 3 years because they were amenorrhoeic or abstaining (**Table 5.6**). Mothers were postpartum amenorrhoeic for 22% of the births and abstaining for 25% of the births.

The percentage of births for which the mother was insusceptible drops steadily by the number of months since birth. Mothers were insusceptible to pregnancy for 90% of births that occurred within 2 months of the date of the interview; in contrast, mothers were insusceptible to pregnancy for only 11% of births that occurred 32-35 months before the interview.

Since less than half of women were postpartum amenorrhoeic within the first 2 months of birth, a median duration of amenorrhoea could not be calculated. The median duration of abstinence for births in the 3 years preceding the survey is 4.7 months. Overall, women are insusceptible to pregnancy after childbirth for a median duration of 8.1 months.

Patterns by background characteristics

- Postpartum insusceptibility is almost identical among women age 15-29 and women age 30-49 (8.0 months and 8.4 months, respectively) (**Table 5.7**).
- The median duration of postpartum insusceptibility is about 4 months shorter among urban women (6.6 months) than among non-urban women (10.7 months).

Menopause

Women are considered to have reached menopause if they are neither pregnant nor postpartum amenorrhoeic and have not had a menstrual period in the 6 months before the survey, if they report being menopausal or having had a hysterectomy, or if they have never menstruated.

Sample: Women age 30-49

Sixteen percent of women age 30-49 are menopausal. The percentage of menopausal women increases with age, rising from 9% among women age 30-34 to 45% among women age 48-49 (**Table 5.8**). Note, however, that the methodology used in estimating the prevalence of menopause did not take into account the use of contraceptive methods that reduce the frequency of menstrual periods. Thus, **Table 5.8** may overestimate the prevalence of menopause.

5.5 Age at First Birth

Median age at first birth

Age by which half of women have had their first child.

Sample: Women age 20-49 and 25-49

The median age at first birth among women age 25-49 is 21.3 years (**Table 5.9**). Two in 10 (18%) women age 25-49 have given birth by age 18, 4 in 10 (38%) have given birth by age 20, and three-quarters (74%) have given birth by age 25. Nearly 1 in 10 (9%) women age 25-49 have never given birth.

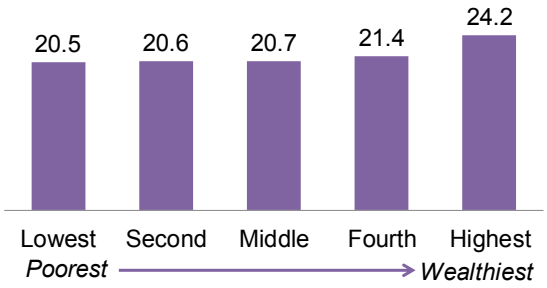
Comparison with the SADHS 1998: The median age at first birth among women age 25-49 has risen slightly since 1998, from 20.8 years to 21.3 years.

Patterns by background characteristics

- Women age 25-49 living in urban areas have their first birth about a year later than women living in non-urban areas (21.6 years versus 20.7 years) (**Table 5.10**).
- By province, the median age at first birth among women age 25-49 ranges from a low of 20.1 years in Mpumalanga to a high of 22.1 years in Western Cape.
- The median age at first birth rises from 20.5 years among women in the lowest wealth quintile to 24.2 years among women in the highest quintile (**Figure 5.5**).

Figure 5.5 **Median age at first birth by household wealth**

Median age at first birth among women age 25-49



5.6 TEENAGE CHILDBEARING

Teenage childbearing

Percentage of women age 15-19 who have given birth or are pregnant with their first child

Sample: Women age 15-19

Sixteen percent of women age 15-19 have begun childbearing; 12% have given birth, and additional 3% are pregnant with their first child (**Table 5.11**). Six percent of teenage girls and 15% of teenage boys had sexual intercourse before age 15; 0.6% of teenage girls gave birth before age 15, while no teenage boys reported having fathered a child before age 15 (**Table 5.12**).

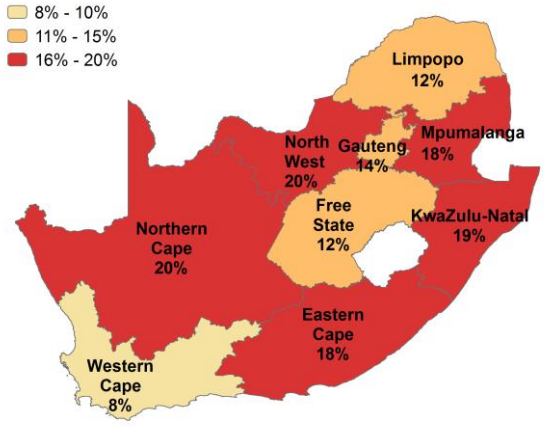
Comparison with the SADHS 1998: Overall, the percentage of women age 15-19 who have begun childbearing is unchanged relative to 1998 (16% in both 1998 and 2016). However, the proportion of women age 19 who have begun childbearing has decreased (35% in 1998 and 28% in 2016).

Patterns by background characteristics

- Urban women (14%) are less likely than non-urban women (19%) to begin childbearing in their teen years (**Table 15.11**).
- The percentage of women age 15-19 who have begun childbearing rises rapidly with age, from 4% among women age 15 to 28% among women age 19.
- By province, childbearing among teenagers ranges from a low of 8% in Western Cape to a high of 20% in both Northern Cape and North West (**Figure 5.6**).

Figure 5.6 **Teenage pregnancy and motherhood by province**

Percentage of women age 15-19 who have begun childbearing



- Teenage childbearing is most common among young women in the two lowest wealth quintiles (20% and 22%, respectively) and least common among young women in the highest wealth quintile (7%) (**Figure 5.7**).

Figure 5.7 **Teenage pregnancy and motherhood by household wealth**

Percentage of women age 15-19 who have begun childbearing

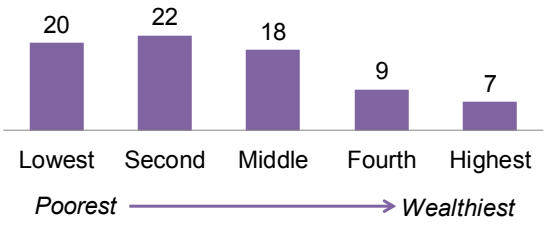


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Table 5.1 Current fertility

Age-specific and total fertility rates, general fertility rate, and crude birth rate for the 3 years preceding the survey, by residence, South Africa DHS 2016

	Residence		
Age group	Urban	Non-urban	Total
10-14	[0]	[3]	[1]
15-19	62	86	71
20-24	125	150	133
25-29	131	156	139
30-34	94	107	98
35-39	52	87	62
40-44	21	29	23
45-49	[1]	[4]	[2]
TFR (15-49)	2.4	3.1	2.6
GFR (15-44)	87	109	94
GFR (15-49)	80	101	87
CBR	21.9	23.1	22.3

Notes: Age-specific fertility rates are per 1,000 women. Rates for the 10-14 and 45-49 age groups may be slightly biased due to truncation and are therefore displayed in brackets. Rates are for the period 1-36 months prior to interview. Rates for the 10-14 age group are based on retrospective data from women age 15-17.
TFR: Total fertility rate, expressed per woman
GFR: General fertility rate, expressed per 1,000 women age 15-44 or per 1,000 women age 15-49
CBR: Crude birth rate, expressed per 1,000 population

Table 5.2 Fertility by background characteristics

Total fertility rate for the 3 years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49, according to background characteristics, South Africa DHS 2016

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Population group			
Black African	2.7	4.0	3.0
White	1.5	5.4	1.8
Coloured	2.5	2.9	2.8
Indian/Asian	1.7	0.0	(2.1)
Residence			
Urban	2.4	4.1	2.6
Non-urban	3.1	3.6	3.4
Province			
Western Cape	2.1	3.3	2.6
Eastern Cape	2.9	3.3	3.1
Northern Cape	2.7	3.1	2.6
Free State	2.4	2.5	2.8
KwaZulu-Natal	2.5	3.5	2.8
North West	3.1	3.7	3.0
Gauteng	2.6	5.5	2.6
Mpumalanga	3.0	4.1	3.4
Limpopo	3.1	2.6	3.2
Education			
No education	2.8	2.8	3.5
Primary incomplete	3.6	4.1	3.7
Primary complete	3.5	5.9	3.6
Secondary incomplete	2.8	3.8	3.0
Secondary complete	2.4	4.0	2.4
More than secondary	2.2	3.5	2.2
Wealth quintile			
Lowest	3.1	4.2	3.4
Second	2.9	5.1	3.4
Middle	2.7	4.3	3.1
Fourth	2.3	3.2	2.6
Highest	2.1	2.6	2.2
Total	2.6	3.9	2.9

Notes: Total fertility rates are for the period 1-36 months prior to the interview. Figures in parentheses are based on 25-49 unweighted cases.

Table 5.3.1 Trends in age-specific fertility rates

Age-specific fertility rates for 5-year periods preceding the survey, according to age group, South Africa DHS 2016

	Number of years preceding survey			
Age group	0-4	5-9	10-14	15-19
10-14	[1]	3	2	2
15-19	77	86	76	79
20-24	138	136	134	132
25-29	134	135	130	137
30-34	107	111	104	[109]
35-39	66	68	[83]	
40-44	24	[34]		
45-49	[3]			

Notes: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of interview. For the 0-4 year period, rates for the 10-14 age group are based on retrospective data from women age 15-19.

Table 5.3.2 Trends in age-specific and total fertility rates

Age-specific and total fertility rates (TFR) for the 3-year period preceding the SADHS 1998 and the SADHS 2016, according to mother's age at the time of the birth, South Africa DHS 2016

Mother's age at birth	SADHS 1998	SADHS 2016
15-19	76	71
20-24	139	133
25-29	143	139
30-34	109	98
35-39	74	62
40-44	29	23
45-49	[9]	[2]
TFR (15-49)	2.9	2.6

Notes: Age-specific fertility rates are per 1,000 women. Rates for the 45-49 age group may be slightly biased due to truncation and are therefore displayed in brackets.

Table 5.4 Children ever born and living

Percent distribution of all women and in-union women age 15-49 by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, South Africa DHS 2016

Age group	Number of children ever born											Total	Number of women	Mean number of children ever born	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	87.6	11.5	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,427	0.13	0.13
20-24	42.1	40.4	15.0	2.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,415	0.78	0.76
25-29	15.3	38.3	31.5	12.3	2.1	0.3	0.2	0.0	0.0	0.0	0.0	100.0	1,444	1.49	1.41
30-34	9.6	25.6	35.2	19.7	6.7	2.7	0.4	0.1	0.0	0.0	0.0	100.0	1,333	1.99	1.89
35-39	5.7	19.1	32.8	23.8	11.9	3.5	2.0	0.4	0.8	0.0	0.1	100.0	1,072	2.43	2.29
40-44	5.4	14.4	27.7	26.3	14.3	6.6	2.9	1.2	0.7	0.5	0.1	100.0	941	2.75	2.60
45-49	6.3	11.2	23.8	25.5	16.2	10.4	3.0	2.2	0.9	0.4	0.3	100.0	883	2.99	2.76
Total	27.7	24.3	23.2	14.1	6.2	2.7	1.0	0.4	0.3	0.1	0.1	100.0	8,514	1.64	1.55
IN-UNION WOMEN															
15-19	(53.3)	(40.3)	(6.4)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	44	(0.53)	(0.51)
20-24	20.7	51.6	23.0	4.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	100.0	271	1.12	1.09
25-29	8.8	31.1	37.1	17.5	4.3	0.7	0.6	0.0	0.0	0.0	0.0	100.0	514	1.82	1.73
30-34	7.3	19.1	40.3	20.9	8.3	3.5	0.5	0.1	0.0	0.0	0.0	100.0	688	2.17	2.06
35-39	4.3	15.0	33.5	25.0	14.9	3.5	1.9	0.3	1.4	0.1	0.1	100.0	575	2.61	2.47
40-44	3.3	12.9	27.6	27.4	16.0	6.9	2.6	1.3	1.1	0.7	0.1	100.0	507	2.90	2.74
45-49	4.5	8.1	21.8	30.2	16.0	9.7	4.3	2.9	1.5	0.2	0.6	100.0	450	3.22	2.99
Total	7.8	20.9	31.6	21.8	10.5	4.1	1.6	0.7	0.7	0.2	0.1	100.0	3,050	2.35	2.22

Notes: In-union women include women who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.

Table 5.5 Birth intervals

Percent distribution of non-first births in the 5 years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, South Africa DHS 2016

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
Mother's age									
15-19	*	*	*	*	*	*	100.0	11	*
20-29	5.1	10.2	21.2	19.8	16.7	27.0	100.0	920	44.5
30-39	3.4	4.5	11.6	13.7	13.2	53.5	100.0	1,100	63.6
40-49	2.6	2.5	8.7	8.8	11.4	66.0	100.0	260	86.3
Sex of preceding birth									
Male	3.6	6.6	15.6	15.9	13.9	44.3	100.0	1,222	55.1
Female	4.5	6.9	14.9	15.2	14.8	43.6	100.0	1,069	55.5
Survival of preceding birth									
Living	3.6	6.9	14.7	15.3	14.3	45.2	100.0	2,161	56.2
Dead	11.3	4.6	25.0	20.2	15.4	23.6	100.0	130	40.9
Birth order									
2-3	3.6	6.2	14.0	14.8	14.1	47.4	100.0	1,817	58.0
4-6	5.6	8.9	19.1	17.0	15.3	34.1	100.0	421	47.6
7+	6.0	11.5	27.5	30.4	16.9	7.7	100.0	53	40.9
Residence									
Urban	4.2	7.0	15.1	15.7	13.5	44.4	100.0	1,450	55.6
Non-urban	3.8	6.4	15.6	15.2	15.8	43.3	100.0	841	54.5
Province									
Western Cape	2.2	8.4	13.8	13.1	19.0	43.5	100.0	202	54.7
Eastern Cape	4.6	6.2	16.3	18.8	15.8	38.3	100.0	259	51.4
Northern Cape	1.7	4.2	11.5	17.3	17.8	47.5	100.0	43	58.1
Free State	4.9	2.0	14.8	13.6	11.1	53.5	100.0	101	63.6
KwaZulu-Natal	4.0	7.1	14.8	18.4	13.3	42.3	100.0	402	52.8
North West	2.5	5.7	12.7	19.1	14.9	45.1	100.0	192	55.0
Gauteng	4.8	8.6	17.5	12.5	10.9	45.8	100.0	651	56.5
Mpumalanga	6.1	5.5	14.3	17.9	18.1	38.1	100.0	213	53.8
Limpopo	2.0	4.9	14.2	13.0	17.2	48.7	100.0	229	59.1
Mother's education									
No education	(3.0)	(0.0)	(10.0)	(19.0)	(9.4)	(58.6)	100.0	46	(75.3)
Primary incomplete	3.0	5.2	25.1	18.7	15.0	33.0	100.0	152	45.7
Primary complete	11.3	3.8	22.1	19.4	11.6	31.8	100.0	102	42.0
Secondary incomplete	3.9	7.3	15.1	15.7	17.4	40.6	100.0	1,131	53.2
Secondary complete	3.8	8.1	13.2	12.0	10.6	52.2	100.0	652	61.9
More than secondary	2.4	4.1	13.3	20.8	11.7	47.7	100.0	208	59.3
Wealth quintile									
Lowest	4.2	4.2	18.4	19.0	16.7	37.3	100.0	528	51.3
Second	3.8	6.7	15.4	17.6	13.1	43.3	100.0	554	53.0
Middle	4.2	8.8	14.7	12.3	16.3	43.8	100.0	525	56.3
Fourth	3.3	8.0	12.8	13.0	15.6	47.3	100.0	414	57.8
Highest	4.7	6.1	14.0	14.7	6.6	53.9	100.0	270	65.9
Total	4.0	6.8	15.3	15.6	14.4	44.0	100.0	2,291	55.3

Notes: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.6 Postpartum amenorrhoea, abstinence, and insusceptibility

Percentage of births in the 3 years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, South Africa DHS 2016

	Percentage of births for which the mother is:			
Months since birth	Amenorrhoeic	Abstaining	Insusceptible[1]	Number of births
<2	45.5	87.3	90.1	116
2-3	46.0	65.8	78.5	123
4-5	42.5	44.0	64.7	132
6-7	25.2	31.6	44.7	126
8-9	28.9	31.0	49.6	91
10-11	28.6	24.8	47.0	111
12-13	22.8	17.7	33.3	112
14-15	23.4	20.4	36.3	126
16-17	18.7	17.3	32.0	135
18-19	13.3	10.6	21.5	128
20-21	16.4	24.3	32.4	85
22-23	6.3	10.6	14.7	111
24-25	13.4	8.4	20.4	109
26-27	18.0	11.6	25.9	103
28-29	13.3	17.0	25.0	127
30-31	14.9	9.7	20.8	107
32-33	5.8	6.5	11.3	128
34-35	5.8	5.4	11.1	99
Total	21.9	25.0	37.0	2,068
Median	a	4.7	8.1	na
Mean	8.8	9.9	14.2	na

Note: Estimates are based on status at the time of the survey.
na = Not applicable
a = Omitted because less than 50% of women were postpartum amenorrhoeic within the first 2 months of birth
[1] Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

Table 5.7 Median duration of amenorrhoea, postpartum abstinence, and postpartum insusceptibility

Median number of months of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility following births in the 3 years preceding the survey, according to background characteristics, South Africa DHS 2016

Background characteristic	Postpartum amenorrhoea	Postpartum abstinence	Postpartum insusceptibility[1]
Mother's age			
15-29	a	5.2	8.0
30-49	a	3.9	8.4
Residence			
Urban	a	3.9	6.6
Non-urban	1.9	6.2	10.7
Wealth quintile			
Lowest	6.3	6.6	11.5
Second	(1.7)	5.2	7.3
Middle	a	6.1	10.9
Fourth	*	3.8	6.2
Highest	a	*	(6.0)
Total	a	4.7	8.1

Notes: Medians are based on status at the time of the survey (current status). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
a = Omitted because less than 50% of women were postpartum amenorrhoeic within the first 2 months of birth
[1] Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

Table 5.8 Menopause

Percentage of women age 30-49 who are menopausal, according to age, South Africa DHS 2016

Age	Percentage menopausal[1]	Number of women
30-34	8.9	1,333
35-39	9.5	1,072
40-41	13.7	403
42-43	16.1	384
44-45	24.7	306
46-47	30.4	383
48-49	44.7	348
Total	16.2	4,229

[1] Percentage of women who (1) are not pregnant, and (2) have had a birth in the past 5 years and are not postpartum amenorrhoeic, and (3) for whom one of the following additional conditions applies: (a) their last menstrual period occurred 6 or more months preceding the survey, (b) they declared that they are in menopause or have had a hysterectomy, or (c) they have never menstruated

Table 5.9 Age at first birth

Percentage of women age 15-49 who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, South Africa DHS 2016

	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
Current age	15	18	20	22	25			
15-19	0.6	na	na	na	na	87.6	1,427	a
20-24	1.7	18.2	38.0	na	na	42.1	1,415	a
25-29	1.1	17.8	37.9	57.8	76.0	15.3	1,444	21.2
30-34	1.1	15.4	34.1	53.7	74.1	9.6	1,333	21.6
35-39	1.4	18.8	38.4	54.3	71.9	5.7	1,072	21.4
40-44	1.4	18.6	38.0	56.4	72.6	5.4	941	21.3
45-49	2.8	20.0	42.2	60.9	76.4	6.3	883	20.9
20-49	1.5	18.0	37.8	na	na	15.7	7,087	a
25-49	1.5	17.9	37.8	56.4	74.3	9.1	5,672	21.3

na = Not applicable due to censoring
a = Omitted because less than 50% of women had a birth before reaching the beginning of the age group

Table 5.10 Median age at first birth

Median age at first birth among women age 25-49, according to background characteristics, South Africa DHS 2016

Background characteristic	Women age 25-49
Residence	
Urban	21.6
Non-urban	20.7
Province	
Western Cape	22.1
Eastern Cape	21.4
Northern Cape	21.5
Free State	21.9
KwaZulu-Natal	21.3
North West	21.0
Gauteng	21.4
Mpumalanga	20.1
Limpopo	20.7
Education	
No education	20.9
Primary incomplete	19.4
Primary complete	19.4
Secondary incomplete	20.4
Secondary complete	22.3
Wealth quintile	
Lowest	20.5
Second	20.6
Middle	20.7
Fourth	21.4
Highest	24.2
Total	21.3

Table 5.11 Teenage pregnancy and motherhood

Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage of women age 15-19 who: Have had a live birth	Are pregnant with first child	Percentage who have begun childbearing	Number of women
Age				
15-17	5.8	3.2	9.0	857
15	2.4	1.4	3.8	239
16	3.5	3.8	7.3	307
17	10.8	4.0	14.8	311
18	20.0	2.6	22.6	270
19	24.5	3.3	27.8	299
Population group				
Black African	12.8	3.2	16.0	1,260
White	*	*	*	25
Coloured	8.7	3.3	11.9	128
Indian/Asian	*	*	*	13
Residence				
Urban	10.6	3.0	13.6	874
Non-urban	15.4	3.3	18.6	552
Province				
Western Cape	5.0	3.1	8.1	160
Eastern Cape	14.2	3.7	17.9	184
Northern Cape	17.3	3.0	20.3	31
Free State	9.6	2.4	12.1	71
KwaZulu-Natal	16.3	3.0	19.4	303
North West	17.8	2.3	20.1	81
Gauteng	9.8	4.3	14.1	311
Mpumalanga	15.3	2.8	18.2	118
Limpopo	11.1	1.3	12.4	167
Education				
No education	*	*	*	3
Primary incomplete	17.1	14.0	31.1	40
Primary complete	8.6	3.4	12.0	70
Secondary incomplete	12.7	2.7	15.4	1,156
Secondary complete	12.6	3.3	15.9	137
More than secondary	*	*	*	20
Wealth quintile				
Lowest	14.9	5.1	20.0	343
Second	18.2	3.5	21.7	271
Middle	15.6	2.7	18.3	277
Fourth	8.0	1.4	9.4	310
Highest	4.0	2.5	6.5	226
Total	12.4	3.1	15.6	1,427

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.12 Sexual and reproductive health behaviours before age 15

Among women and men age 15-19, percentage who initiated sexual intercourse, were married or living together with a partner as if married, and had a live birth/fathered a child before age 15, according to sex, South Africa DHS 2016

Sex	Had sexual intercourse before age 15	Married or living together with a partner as if married before age 15	Gave birth/ fathered a child before age 15	Number of respondents
Women	5.7	0.4	0.6	1,427
Men	14.5	0.0	0.0	647

FERTILITY PREFERENCES 6

Key Findings

- ***Desire for another child:*** 19% of in-union women age 15-49 want to have another child soon, 9% want to wait at least 2 years, 6% want another child but are undecided on the timing, and 5% are undecided about having more children.
- ***Desire to limit childbearing:*** Overall, 58% of in-union women and 45% of in-union men do not want another child.
- ***Ideal family size:*** Women currently want 2.6 children on average, while men want 3.2 children.
- ***Unwanted births:*** Of all births in the past 5 years and current pregnancies, 46% were wanted at the time of conception, 34% were mistimed, and 20% were unwanted.
- ***Wanted fertility rates:*** The wanted fertility rate in South Africa is 2.0 children, as compared with the actual total fertility rate of 2.6 children; thus, on average, women are having 0.6 more children than they want.

Information on fertility preferences can help family planning programme planners assess the desire for children, the extent of mistimed and unwanted pregnancies, and the demand for contraception to space or limit births. This information may suggest the direction that fertility patterns will take in the future.

This chapter presents information on whether and when women and men who are in a union (currently married or living together with a partner as if married) want more children, ideal family size, whether the last birth was wanted, and the theoretical fertility rate if all unwanted births were prevented.

6.1 DESIRE FOR ANOTHER CHILD

Desire for another child

Women and men were asked whether they wanted more children and, if so, how long they would prefer to wait before the birth of the next child. Women and men who are sterilised are assumed not to want any more children.

Sample: In-union women and men age 15-49

Most in-union women age 15-49 (58%) want no more children. Nineteen percent of in-union women want to have another child soon (within the next 2 years), and 9% want to wait at least 2 years before having another child. In addition, 6% of in-union women want another child but are undecided on the timing, and 5% are undecided about having more children (**Table 6.1**). In comparison, 45% of in-union men age 15-49 want no more children and 27% want to have another child soon.

Comparison with the SADHS 1998: The overall proportion of in-union women who want no more children (including women who are sterilised) has decreased slightly since 1998, from 62% to 58%.

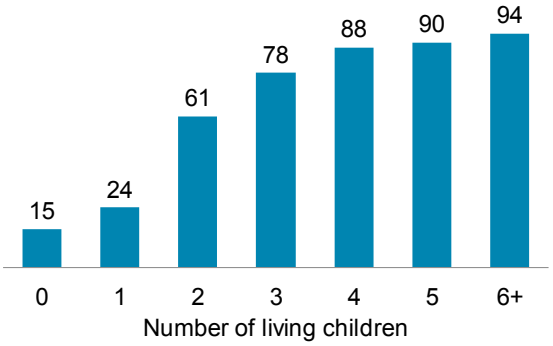
However, among women with no living children, the percentage who want no more children has nearly doubled, from 8% to 15%.

Patterns by background characteristics

- In-union women with no children are much more likely than women who have begun childbearing to want a child soon. Fifty percent of women with no children want to have a child within the next 2 years, as compared with 37% of women with one child and 13% of women with two children.
- Once they have begun childbearing, in-union men are more likely than women to want another child soon at every parity level. For example, 19% of men with four children want to have another child soon, compared with only 6% of women with four children.
- Desire to limit childbearing does not differ between urban and non-urban areas. Fifty-eight percent of urban women and 59% of non-urban women want no more children, while 45% of both urban men and non-urban men want no more children (**Table 6.2**). Larger differences, however, are seen by province. For example, 36% of men in Limpopo and North West want no more children, as compared with 58% of men in Western Cape.
- In-union women in the highest (67%) and lowest (62%) wealth quintiles are more likely to want no more children than women in the second, third, and fourth quintiles (52%-55%).
- The desire to limit childbearing increases as the number of living children increases. The percentage of in-union women who want no more children increases from 15% among those with no living children to 94% among those with six or more children (**Figure 6.1**).

Figure 6.1 **Desire to limit childbearing by number of living children**

Percentage of in-union women age 15-49 who want no more children



Note: In-union women include those who are currently married or living together with a partner as if married.

6.2 IDEAL FAMILY SIZE

Ideal family size

Respondents with no children were asked, "If you could choose exactly the number of children to have in your whole life, how many would that be?" Respondents who had children were asked, "If you could go back to the time when you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?"

Sample: Women and men age 15-49

If women could choose their family size, they would prefer to have 2.6 children on average, while men would choose to have 3.2 children. Ideal family size is slightly higher among women and men who are in a union (**Table 6.3** and **Figure 6.2**).

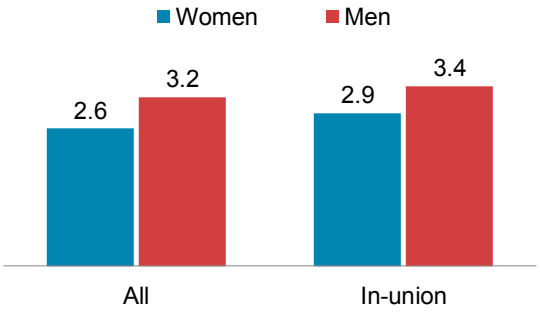
Comparison with the SADHS 1998: Ideal family size has fallen modestly since 1998, from 2.9 to 2.6 children among all women and from 3.3 to 2.9 children among in-union women.

Patterns by background characteristics

- The more children women and men already have, the more children they consider ideal. For example, women who have only one child consider 2.5 children to be ideal on average. In contrast, women who have six or more children consider 4.1 children to be ideal (**Figure 6.3**).
- Older women want larger families. Women age 45-49 report an ideal family size of 3.0 children on average, while women age 15-19 report an ideal family size of only 2.1 children (**Table 6.4**).
- Family size norms vary across provinces. Women in Limpopo want larger families of 3.3 children, while women in Free State want smaller families of 2.2 children.

Figure 6.2 **Ideal family size**

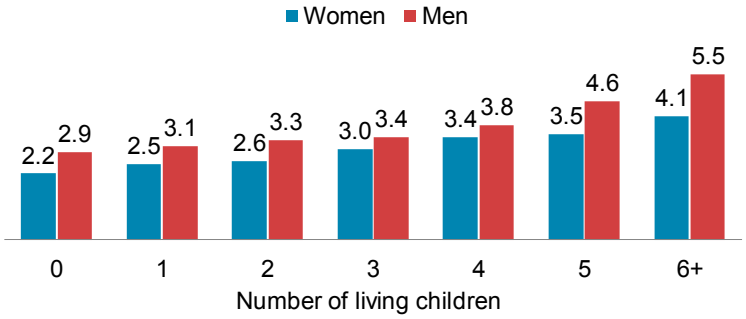
Mean ideal number of children among women and men age 15-49



Note: In-union women and men include those who are currently married or living together with a partner as if married.

Figure 6.3 **Ideal family size by number of living children**

Mean ideal number of children



- Women with no education want more children (3.3 on average) than women with any secondary education (2.5-2.6 on average).
- Women in the poorest households want more children. The ideal number of children is 2.8 among women in the second wealth quintile, as compared with 2.4 among women in the highest quintile.

6.3 Fertility Planning Status

Planning status of births/current pregnancies

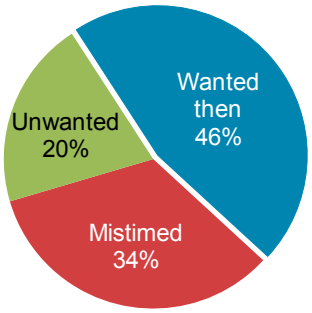
Women reported whether their births/pregnancies were wanted at the time (planned), at a later time (mistimed), or not at all (unwanted).

Sample: Current pregnancies and births in the 5 years before the survey to women age 15-49

According to mothers' reports, half of births were wanted at the time of conception (46%) and one-third (34%) were mistimed, that is, wanted at a later date. Twenty percent of births were not wanted at all (**Figure 6.4**).

Figure 6.4 Fertility planning status

Percent distribution of births to women age 15-49 in the 5 years before the survey (including current pregnancies) by planning status of births



Comparison with the SADHS 1998: There has been essentially no change since 1998 in the proportion of births that were wanted at the time of conception, mistimed, or not wanted at all. In 1998, 46% of births were wanted, 36% were mistimed, and 17% were not wanted.

Patterns by background characteristics

- The more children a woman has, the more likely it is that her last birth was unwanted. Eleven percent of first births were unwanted, as compared with 44% of fourth- or higher-order births (**Table 6.5**).
- Women less than age 20 are most likely to have mistimed births (64%) and least likely to have unwanted births (15%).

6.4 Wanted Fertility Rates

Unwanted birth

Any birth in excess of the number of children a woman reported as her ideal number.

Wanted birth

Any birth fewer than or equal to the number of children a woman reported as her ideal number.

Wanted fertility rate

The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates, excluding unwanted births.

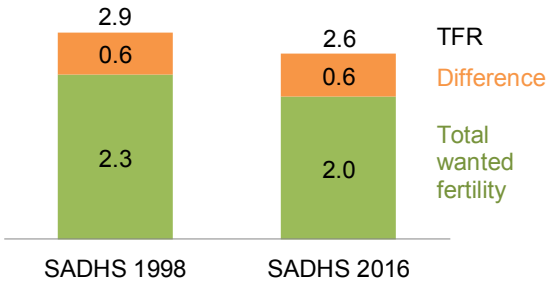
Sample: Women age 15-49

Wanted fertility rates reflect the level of fertility that would result if all unwanted births were prevented. The wanted fertility rate in South Africa is 2.0 children, as compared with the actual total fertility rate of 2.6 children (**Table 6.6**). Thus, while they are unlikely to report that their last birth was unwanted, women in South Africa are having 0.6 more children than they want on average.

Comparison with the SADHS 1998: The total wanted fertility rate in South Africa declined from 2.3 children in 1998 to 2.0 children in 2016. However, the gap between wanted and actual fertility (0.6 children) has remained constant over time (**Figure 6.5**).

***Figure 6.5* Comparison in wanted and actual fertility: 1998 and 2016**

Wanted and actual number of children per woman



Patterns by background characteristics

- The total wanted fertility rate is consistently lower than the actual total fertility rate, but the size of the gap varies by women's background characteristics (**Table 6.6**).
- The gap between wanted and actual fertility is largest among Black African and Coloured women (0.6 children each) and lowest among Indian/Asian women (0.1 children).
- The gap between wanted and actual fertility is slightly higher in non-urban areas (0.7 children) than in urban areas (0.5 children).
- Women in Eastern Cape have the largest gap between actual and wanted fertility (1.0 children). The gap is smallest in Gauteng (0.4 children).
- The gap between wanted and actual fertility rates generally narrows with increasing education and wealth. For example, the gap narrows from 0.8 children among women in the lowest wealth quintile to 0.3 children among women in the highest wealth quintile.

List of Tables

For more information on fertility preferences, see the following tables:

- **Table 6.1 Fertility preferences by number of living children**
- **Table 6.2 Desire to limit childbearing**
- **Table 6.3 Ideal number of children by number of living children**
- **Table 6.4 Mean ideal number of children**
- **Table 6.5 Fertility planning status**
- **Table 6.6 Wanted fertility rates**

Table 6.1 Fertility preferences by number of living children

Percent distribution of in-union women and in-union men age 15-49 by desire for children, according to number of living children, South Africa DHS 2016

Desire for children	Number of living children							Total 15-49	Total 15-59
	0	1	2	3	4	5	6+		
WOMEN[1]									
Have another soon[2]	49.9	37.4	13.1	11.3	6.0	1.4	0.8	19.2	na
Have another later[3]	14.3	17.3	10.6	3.6	1.8	0.0	0.0	9.2	na
Have another, undecided when	8.9	12.3	6.5	2.5	1.2	0.0	2.3	6.2	na
Undecided	2.5	6.2	6.8	3.1	2.2	6.9	1.5	4.9	na
Want no more	13.3	22.3	54.1	62.5	73.8	78.6	85.5	49.7	na
Sterilised[4]	2.1	1.7	6.8	15.6	14.5	11.8	8.4	8.3	na
Declared infecund	9.0	2.9	2.2	1.4	0.5	1.2	1.5	2.5	na
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	na
Number of women	221	664	995	673	319	110	68	3,050	na
MEN[5]									
Have another soon[2]	47.8	44.0	24.0	15.0	19.3	(5.4)	6.6	26.6	22.0
Have another later[3]	15.8	17.6	10.2	4.3	6.7	(4.8)	11.0	10.6	8.5
Have another, undecided when	5.6	8.1	13.7	4.6	6.2	(2.1)	7.0	8.4	6.7
Undecided	14.1	10.1	11.2	4.9	3.5	(1.4)	7.2	8.5	7.8
Want no more	11.1	18.9	40.1	68.9	63.4	(86.3)	68.1	44.3	52.1
Sterilised[4]	1.4	0.4	0.8	2.3	0.6	(0.0)	0.0	0.9	1.1
Declared infecund	0.9	0.5	0.0	0.1	0.4	(0.0)	0.0	0.3	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	99	201	296	163	129	46	53	988	1,276

Notes: In-union women and men include those who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable
[1] The number of living children includes the current pregnancy
[2] Wants next birth within 2 years
[3] Wants to delay next birth for 2 or more years
[4] Includes both female and male sterilisation
[5] The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife)

Table 6.2 Desire to limit childbearing

Percentage of in-union women age 15-49 who want no more children, by number of living children, and total percentage of in-union men age 15-49 who want no more children, according to background characteristics, South Africa DHS 2016

Background characteristic	Number of living children[1]							Total for women	Total for men
	0	1	2	3	4	5	6+		
Residence									
Urban	18.1	26.2	63.1	79.5	89.1	88.9	*	57.8	45.4
Non-urban	3.2	15.1	52.7	74.3	86.7	92.3	94.6	58.6	44.7
Province									
Western Cape	*	29.3	73.4	80.4	(95.3)	*	*	64.2	57.5
Eastern Cape	*	16.5	63.4	79.1	(91.8)	*	*	60.5	52.4
Northern Cape	(22.1)	(31.7)	74.9	87.0	*	*	*	68.1	40.4
Free State	*	33.0	56.1	98.3	*	*	*	59.4	44.8
KwaZulu-Natal	*	37.8	58.4	70.2	(92.6)	*	*	60.8	45.4
North West	*	18.9	53.6	89.2	(89.4)	*	*	56.8	36.2
Gauteng	(21.7)	22.9	62.3	76.1	(85.6)	*	*	54.9	43.4
Mpumalanga	(8.9)	15.6	56.6	78.1	(88.9)	(95.6)	*	55.5	45.9
Limpopo	*	(14.0)	40.1	67.3	76.1	*	*	52.4	35.7
Education									
No education	*	*	*	*	*	*	*	78.6	(50.2)
Primary incomplete	*	(24.4)	(55.6)	71.0	(89.0)	*	(88.8)	62.8	34.2
Primary complete	*	*	(41.7)	(63.9)	*	*	*	54.4	42.1
Secondary incomplete	7.5	26.5	56.8	77.2	90.1	88.9	*	59.5	44.1
Secondary complete	11.4	23.5	63.8	78.2	77.0	*	*	54.4	47.1
More than secondary	(22.8)	19.6	68.8	85.6	*	*	*	55.9	50.7
Wealth quintile									
Lowest	(17.2)	22.8	63.8	71.1	88.9	(93.6)	(95.2)	62.1	42.8
Second	(1.6)	24.8	48.9	71.9	86.8	(94.3)	*	53.4	38.1
Middle	7.2	12.5	51.4	78.3	80.8	(88.0)	*	51.5	39.1
Fourth	(18.3)	18.0	55.8	75.5	(92.7)	*	*	54.8	46.3
Highest	(25.1)	37.4	77.9	89.6	(100.0)	*	*	67.0	59.0
Total 15-49	15.4	24.0	60.8	78.1	88.2	90.4	93.9	58.0	45.2
50-59	na	na	na	na	na	na	na	na	80.5
Total 15-59	na	na	na	na	na	na	na	na	53.2

Notes: Women who have been sterilised are considered to want no more children. In-union women and men include those who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] The number of living children includes the current pregnancy

Table 6.3 Ideal number of children by number of living children

Percent distribution of women and men age 15-49 by ideal number of children, and mean ideal number of children for all respondents and for in-union respondents, according to number of living children, South Africa DHS 2016

Ideal number of children	Number of living children							Total
	0	1	2	3	4	5	6+	
				WOMEN[1]				
0	10.6	6.6	6.0	5.8	4.6	10.7	6.1	7.4
1	8.4	10.0	7.8	6.0	6.0	3.9	1.7	8.0
2	48.6	39.9	38.7	27.1	24.7	19.9	13.3	38.5
3	18.1	25.0	22.3	24.8	9.5	12.4	12.2	21.1
4	11.0	14.2	20.0	25.2	38.4	22.4	30.5	18.1
5	2.1	2.5	2.9	6.4	6.8	19.0	4.3	3.7
6+	0.9	1.8	2.1	4.3	9.6	10.6	29.5	3.0
Non-numeric responses	0.3	0.0	0.2	0.3	0.4	1.0	2.3	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,324	2,168	2,029	1,189	501	196	107	8,514
Mean ideal number of children for:[2]								
All women	2.2	2.5	2.6	3.0	3.4	3.5	4.1	2.6
Number of women	2,317	2,167	2,025	1,186	500	194	104	8,493
In-union women	2.4	2.6	2.7	3.0	3.5	3.7	4.1	2.9
Number of in-union women	220	664	993	670	317	109	66	3,040
				MEN[3]				
0	5.1	4.2	4.0	8.8	6.9	7.5	6.2	5.2
1	5.2	5.5	4.2	2.4	1.1	1.3	0.0	4.5
2	36.9	23.9	26.9	14.5	17.0	15.9	12.4	29.5
3	25.2	35.5	18.7	23.5	8.9	12.8	14.6	24.4
4	17.1	16.8	28.2	31.0	33.7	6.1	13.1	20.5
5	5.1	7.2	8.9	10.3	10.0	21.2	2.0	6.9
6+	4.7	6.3	7.4	8.1	19.4	32.0	44.0	7.8
Non-numeric responses	0.7	0.7	1.7	1.5	2.9	3.3	7.6	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	1,631	517	505	253	167	58	72	3,202
Mean ideal number of children for men age 15-49:[2]								
All	2.9	3.1	3.3	3.4	3.8	4.6	5.5	3.2
Number of men	1,619	513	496	249	162	56	66	3,162
In-union men	2.6	3.1	3.3	3.4	3.8	(4.7)	5.8	3.4
Number of in-union men	97	200	292	162	125	44	51	971
Mean ideal number of children for men age 15-59:[2]								
All men	2.9	3.1	3.3	3.4	3.9	4.7	5.6	3.2
Number of men	1,665	557	574	325	217	90	129	3,558
In-union men	2.7	3.0	3.2	3.4	4.0	4.8	5.2	3.5
Number of in-union men	115	231	339	225	167	71	99	1,247

Notes: In-union women and men include those who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.

[1] The number of living children includes the current pregnancy for women

[2] Means are calculated excluding respondents who gave non-numeric responses

[3] The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife)

Table 6.4 Mean ideal number of children

Mean ideal number of children for all women age 15-49 according to background characteristics, South Africa DHS 2016

Background characteristic	Mean	Number of women[1]
Age		
15-19	2.1	1,424
20-24	2.5	1,415
25-29	2.7	1,441
30-34	2.6	1,333
35-39	2.8	1,071
40-44	2.9	932
45-49	3.0	877
Residence		
Urban	2.5	5,720
Non-urban	2.8	2,772
Province		
Western Cape	2.3	995
Eastern Cape	2.3	934
Northern Cape	2.4	172
Free State	2.2	440
KwaZulu-Natal	2.5	1,612
North West	2.7	567
Gauteng	2.6	2,281
Mpumalanga	2.9	668
Limpopo	3.3	822
Education		
No education	3.3	165
Primary incomplete	3.0	445
Primary complete	2.8	326
Secondary incomplete	2.5	4,186
Secondary complete	2.6	2,366
More than secondary	2.6	1,004
Wealth quintile		
Lowest	2.7	1,645
Second	2.8	1,711
Middle	2.6	1,800
Fourth	2.5	1,755
Highest	2.4	1,582
Total	2.6	8,493

[1] Number of women who gave a numeric response

Table 6.5 Fertility planning status

Percent distribution of births to women age 15-49 in the 5 years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, South Africa DHS 2016

	Planning status of birth				
Birth order and mother's age at birth	Wanted then	Wanted later	Wanted no more	Total	Number of births
Birth order					
1	41.3	47.7	11.0	100.0	1,389
2	52.3	30.3	17.4	100.0	1,254
3	49.0	24.2	26.7	100.0	738
4+	39.3	17.0	43.8	100.0	523
Mother's age at birth					
<20	20.8	64.4	14.8	100.0	595
20-24	42.3	41.4	16.3	100.0	1,071
25-29	53.7	27.7	18.6	100.0	1,002
30-34	56.4	18.7	24.9	100.0	740
35-39	55.1	16.4	28.5	100.0	370
40-44	48.7	5.5	45.8	100.0	121
45-49	*	*	*	100.0	6
Total	46.0	33.6	20.4	100.0	3,904

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 6.6 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the 3 years preceding the survey, according to background characteristics, South Africa DHS 2016

Background characteristic	Total wanted fertility rate	Total fertility rate
Population group		
Black African	2.1	2.7
White	1.2	1.5
Coloured	1.9	2.5
Indian/Asian	1.6	1.7
Residence		
Urban	1.9	2.4
Non-urban	2.4	3.1
Province		
Western Cape	1.6	2.1
Eastern Cape	1.9	2.9
Northern Cape	1.9	2.7
Free State	1.7	2.4
KwaZulu-Natal	1.8	2.5
North West	2.5	3.1
Gauteng	2.2	2.6
Mpumalanga	2.2	3.0
Limpopo	2.6	3.1
Education		
No education	2.0	2.8
Primary incomplete	2.5	3.6
Primary complete	2.6	3.5
Secondary incomplete	2.1	2.8
Secondary complete	1.9	2.4
More than secondary	2.0	2.2
Wealth quintile		
Lowest	2.3	3.1
Second	2.2	2.9
Middle	2.0	2.7
Fourth	1.9	2.3
Highest	1.8	2.1
Total	2.0	2.6

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 5.2.

CONTRACEPTION 7

Key Findings

- ***Contraceptive knowledge:*** Nearly 100% of women and men have heard of at least one modern method of contraception.
- ***Contraceptive prevalence rate:*** 55% of in-union women and 60% of sexually active women are currently using a method of contraception.
- ***Use of modern contraceptives:*** Nearly all women (99%) who use a contraceptive use a modern method. Among sexually active women, the most commonly used methods are injectables (25%) and male condoms (16%); 18% of sexually active women use 3-month injectables and 7% use 2-month injectables.
- ***Knowledge of the fertile period:*** One-third (34%) of women and 10% of men know that a woman is most likely to conceive halfway between two periods.
- ***Source of modern methods:*** 80% of all modern contraceptive users obtain their methods from the public sector.
- ***Percentage of demand for contraception satisfied:*** Three-quarters (76%) of the demand for contraception among sexually active women is satisfied by use of modern methods.
- ***Unmet need for contraception:*** 19% of sexually active women have an unmet need for contraception.

Couples can use contraceptive methods to limit or space the number of children they have. This chapter presents information on the use and sources of contraceptive methods, informed choice of methods, and rates and reasons for discontinuing contraceptives. It also examines the potential demand for contraception among all women, in-union women, and sexually active women and how much contact nonusers have with family planning providers.

The 2001 South African National Contraception Policy Guidelines focused on clients' right to choose a method and placed emphasis on quality of care. These guidelines were updated in 2012 as the National Contraception and Fertility Planning Policy and Service Delivery Guidelines and the National Contraceptive Clinical Guidelines (NDoH 2013a). The updated guidelines highlight the fact that a range of contraceptive methods should be offered in a comprehensive, integrated manner with other relevant sexual and reproductive health services in the public sector and that contraceptive clients should have access to "accurate, unbiased information about all available methods in order to make an informed choice." Methods available in the public health sector at no cost to clients seeking contraception are progestogen-only injectables (3-month and 2-month), contraceptive pills, male and female condoms, intrauterine devices (IUDs), male and female sterilisation, emergency contraceptive pills, and, since 2014, implants.

Alongside the launch of the updated policy was a national campaign that promoted the concept of dual protection.

7.1 CONTRACEPTIVE KNOWLEDGE AND USE

Knowledge of contraceptives is universal in South Africa (**Table 7.1**). Nearly 100% of women and men age 15-49 have heard of at least one method of contraception.

On average, women and men have heard of eight and six methods of contraception, respectively. The most commonly known methods among both women and men are the male condom (98% of women and 99% of men), injectables (96% of women and 79% of men), contraceptive pills (94% of women and 79% of men), and the female condom (93% of women and 85% of men). Although not introduced until 2014, 84% of women and 50% of men have heard about implants.

Contraceptive prevalence rate

Percentage of women who use any contraceptive method

Sample: All women age 15-49, in-union women age 15-49, and sexually active women age 15-49

Table 7.2 shows the percent distribution of all women, in-union women, and sexually active women in South Africa by the contraceptive method they currently use. Overall, the contraceptive prevalence rate (CPR) is 60% among sexually active women and 55% among in-union women. The CPR among all women age 15-49 is 48%. Nearly all women (99%) who use a contraceptive method use a modern method.

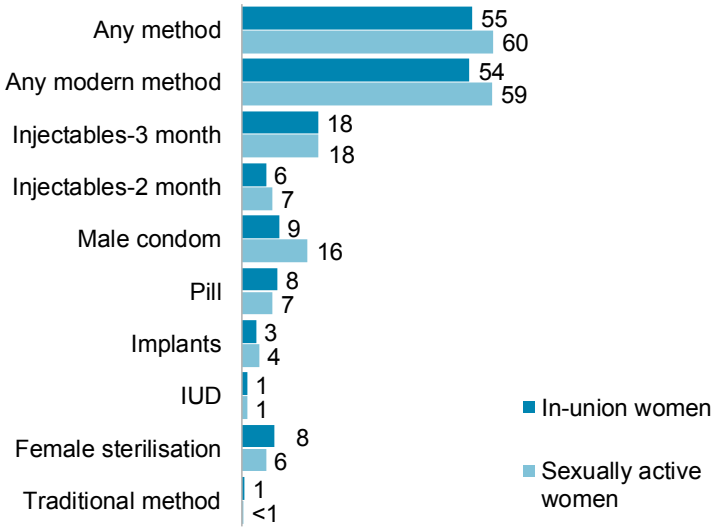
Modern methods

Include male and female sterilisation, injectables, intrauterine devices (IUDs), contraceptive pills, implants, male and female condoms, and emergency contraception

Among in-union women, the most popular methods are injectables (24%: 18% 3-month injectables and 6% 2-month injectables), the male condom (9%), contraceptive pills (8%), and female sterilisation (8%). Less than 5% use long-acting contraceptive methods (3% use implants and 1% use IUDs). Similarly, among sexually active women, the most commonly used methods are injectables (25%: 18% 3-month injectables and 7% 2-month injectables), male condoms (16%), contraceptive pills (7%), and female sterilisation (6%). Long-acting contraceptive methods are used by 5% (**Figure 7.1**). Less than 1% of in-union women or sexually active women use any traditional method.

Figure 7.1 **Contraceptive use**

Percentage of women age 15-49 currently using a contraceptive method



Note: In-union women include women who are currently married or living together with a partner as if married. Sexually active women are women who had sexual intercourse within the 4 weeks preceding the survey.

Comparison with the SADHS 1998: A comparison between 1998 and 2016 shows that modern contraceptive use among sexually active women has remained stable (61% versus 59%) (**Figure 7.2**). There have been, however, differences in the method mix. Declines are observed in the use of female sterilisation (12% in 1998 versus 6% in 2016), contraceptive pills (13% versus 7%), and injectables (30% versus 25%). In contrast, use of male condoms has increased dramatically (from 2% in 1998 to 16% in 2016). Implants, not available in 1998, are now used by 4% of sexually active women (**Table 7.3.1**). Use of traditional methods has remained extremely low (1% in 1998 versus 0.4% in 2016).

Patterns by background characteristics

- Sexually active non-urban and urban women are equally likely to use modern contraceptives (60% and 59%, respectively) (**Table 7.3.2**).
- Use of modern methods of contraception rises with increasing education, from 44% among sexually active women with no education to 62% among women with more than a secondary education.
- There is a notable difference in contraceptive use across provinces. Among sexually active women, modern contraceptive use ranges from a low of 51% in Free State to a high of 65% in KwaZulu-Natal (**Figure 7.3**).
- With the exception of the province of Limpopo, 3-month injectables are more widely used than 2-month injectables by sexually active women in all background characteristic categories.
- Use of injectables (of either type) decreases with increasing household wealth, from 31% among sexually active women in the lowest wealth quintile to 13% among those in the highest quintile (**Figure 7.4**).
- Use of female sterilisation increases with increasing household wealth, from 3% in the bottom two quintiles to 14% in the highest quintile. Among women who have been sterilised, the most common age at sterilisation is 30-34 years (39%). The median age at sterilisation is 32.5 years (**Table 7.4**).

Figure 7.2 Comparison in contraceptive use: 1998 and 2016

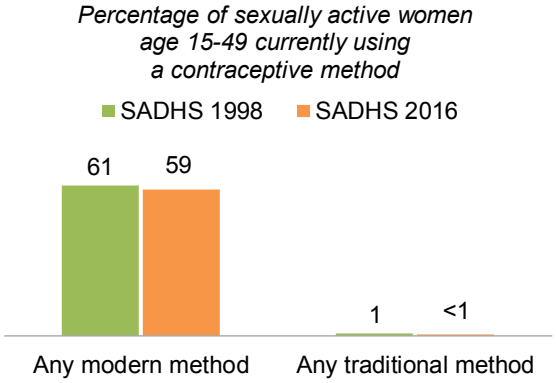


Figure 7.3 Modern contraceptive use by province

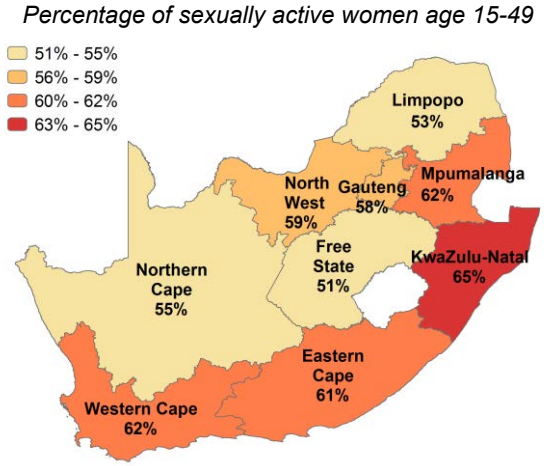
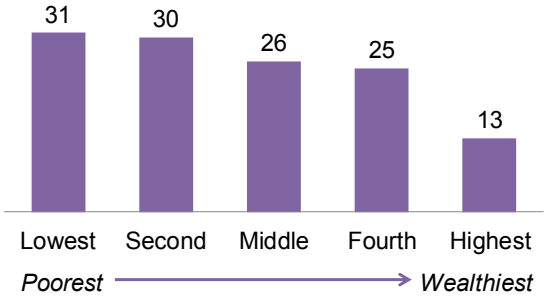


Figure 7.4 Use of injectables by household wealth



Knowledge of the Fertile Period

The survey also collected information on women and men's knowledge of the fertile period. One-third (34%) of women and 10% of men know that a woman is most likely to conceive halfway between two

periods (**Table 7.5**). Among women, correct knowledge of the fertile period is highest among those age 35-39 (39%) and lowest among those age 15-19 (27%) (**Table 7.6**).

7.2 Source of Modern Contraceptive Methods

Source of modern contraceptives

The place where the modern method currently being used was obtained the last time it was acquired

Sample: Women age 15-49 currently using a modern contraceptive method

Eighty percent of all modern contraceptive users obtain their methods from the public sector, 11% from the private medical sector, and 8% from other sources (**Table 7.7**). However, the importance of each source varies depending on the method.

- Injectables, implants, and pills: the vast majority of women obtain 3-month injectables (94%), 2-month injectables (95%), and implants (94%) from the public sector, especially government health clinics/community health centres. Over three-quarters of women obtain pills (77%) from the public sector.
- Male condoms: the predominant sources for male condoms are government health clinics/community health centres (51%), shops (26%), and chemists/pharmacies (12%).
- Female sterilisation: government hospitals (63%) and private hospitals (27%) are the most common sources for female sterilisation.

7.3 Informed Choice

Informed choice

Informed choice indicates that women were informed at the time they started the current episode of method use about the method's side effects, about what to do if they experience side effects, and about other methods they could use.

Sample: Women age 15-49 who are currently using selected modern contraceptive methods and who started the last episode of use within the 5 years before the survey

Fifty-six percent of women using modern contraceptives report that they were informed about side effects or other problems with the method they used, and 49% report that they were informed about what to do if they experienced side effects. A higher proportion of women (64%) report being informed of other methods they could use. Forty-four percent of women using modern contraceptives made a fully informed choice, meaning that they received all three pieces of information (**Table 7.8**). Although the number of IUD users is low and therefore the results should be interpreted with caution, women using IUDs (79%) were most likely to report that they were informed about all three aspects, followed by women using implants (54%) and women who are sterilised (51%).

7.4 Discontinuation of Contraceptives

Contraceptive discontinuation rate

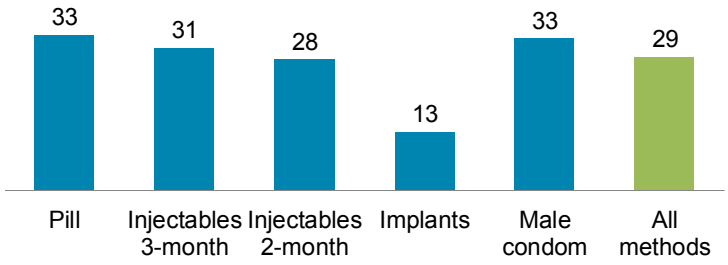
Percentage of contraceptive use episodes discontinued within 12 months

Sample: Continuous time periods or episodes of contraceptive use in the 5 years before the survey experienced by women who are currently age 15-49 (one woman may contribute more than one episode)

About 3 in 10 (29%) episodes of contraceptive use in the 5 years before the survey were discontinued within 12 months of commencing use. In 4% of episodes, women switched to another method. While discontinuation rates are similar for 3-month injectables (31%), 2-month injectables (28%), pills (33%), and male condoms (33%), the rate is lower for implants (13%) (**Table 7.9** and **Figure 7.5**).

***Figure 7.5* Contraceptive discontinuation rates**

Percentage of contraceptive episodes discontinued within 12 months by women age 15-49



Overall, the most common reason for discontinuing a method was method-related health concerns or side effects (28%), followed by the desire to become pregnant (19%) and the desire for a more effective method (11%). Other reasons reported by women were that they became pregnant while using the method (9%) and that they infrequently had sex (8%) (**Table 7.10**). Women were far more likely to cite method-related health concerns and side effects as a reason for discontinuing implants (74%) and injectables (40% for 3-month injectables and 39% for 2-month injectables) than for discontinuing pills (22%) or male condoms (7%).

7.5 Demand for Contraception

Unmet need for contraception

Proportion of women who (1) are not pregnant and not postpartum amenorrhoeic and are considered fecund and want to postpone their next birth for 2 or more years or stop childbearing altogether but are not using a contraceptive method, or (2) have a mistimed or unwanted current pregnancy, or (3) are postpartum amenorrhoeic and their most recent birth in the last 2 years was mistimed or unwanted.

Sample: All women age 15-49, in-union women age 15-49, and sexually active women age 15-49

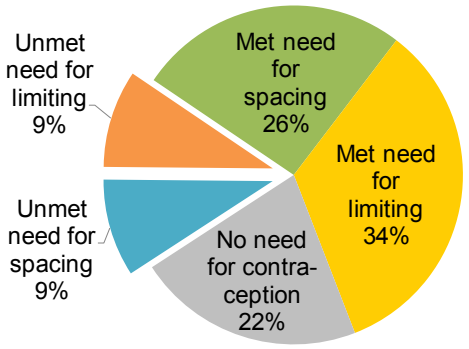
Demand for contraception:	Unmet need for contraception + current contraceptive use (any method)
Proportion of demand satisfied:	Current contraceptive use (any method) / Unmet need + current contraceptive use (any method)
Proportion of demand satisfied by modern methods:	Current contraceptive use (any modern method) / Unmet need + current contraceptive use (any method)

Regardless of the population examined, total demand for contraception among women in South Africa is high. Seventy percent of in-union women age 15-49 in South Africa have a demand for contraception; 24% want to space births, and 46% want to limit births (**Table 7.11.1**). At present, 79% of the potential demand for contraception is being met, almost entirely by modern methods. However, 15% of in-union women have an unmet need for contraception: they want to space or limit births but are not currently using contraception.

Nearly 8 in 10 (78%) sexually active women have a demand for contraception; 35% want to space births and 43% want to limit births (**Table 7.11.2** and **Figure 7.6**). Currently, 60% of sexually active women are using a contraceptive method, indicating that 76% of the demand is met—almost exclusively by modern contraceptive methods. Nineteen percent of sexually active women have an unmet need for contraception (9% for spacing and 9% for limiting).

Figure 7.6 Demand for contraception

Percent distribution of sexually active women age 15-49 by need for contraception



Comparison with the SADHS 1998: The proportion of in-union women with an unmet need for contraception has declined slightly since 1998, from 17% to 15%. Over the same period, the total demand for contraceptive methods among in-union women has decreased from 73% to 70%. The percentage of the demand for contraception satisfied with modern contraceptive methods has increased slightly, from 76% to 78%.

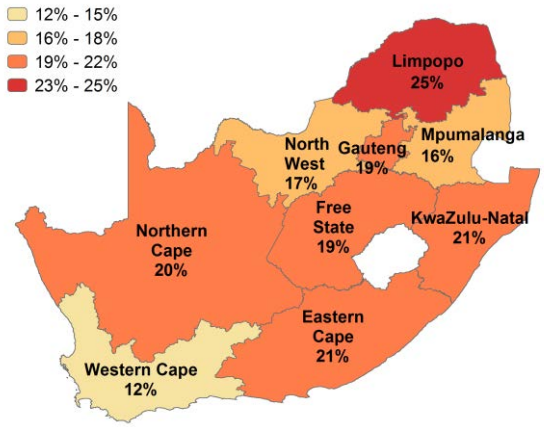
The proportion of sexually active women with an unmet need for contraception has increased slightly, from 16% to 19%. While the total demand for planning has not changed (78% in both 1998 and 2016), the percentage of demand satisfied with modern contraceptive methods has decreased slightly, from 78% to 76%.

Patterns by background characteristics

- Unmet need among sexually active women is higher in the 15-19 (31%) and 20-24 (28%) age groups than in other age groups (14%-18%).
- Unmet need is modestly higher among sexually active women in non-urban areas than among those in urban areas (21% versus 18%).
- Unmet need among sexually active women varies considerably by province, from 12% in Western Cape to 25% in Limpopo (**Figure 7.7**).

Figure 7.7 Unmet need by province

Percentage of sexually active women age 15-49 with unmet need for contraception



Decision Making about Contraception

Forty-seven percent of in-union women who are current users of contraception reported that they usually make the decision to use contraception jointly with their partner, 41% said that they usually make the decision themselves, and 11% said that their partner usually makes the decision. Among in-union women who are not using a contraception method, 42% reported that they usually make the decision to not use contraception jointly with their partner, 37% reported that they usually make the decision, and 18% reported that their partner usually makes the decision (**Table 7.12**).

Future Use of Contraception

The survey also collected information on nonusers' intent to use contraception in the future. Thirty-six percent of in-union women age 15-49 who are not currently using contraception intend to use a method at some future time, 6% are unsure, and 59% do not intend to use contraceptives. The percentage of in-union women who do not intend to use family planning in the future is highest among those with no children (71%), followed by those with four or more children (65%) (**Table 7.13**).

Exposure to Family Planning Messages

Table 7.14 provides information on exposure to family planning messages among women and men age 15-49. Thirty-six percent of women reported hearing a family planning message in the past 6 months on the radio, while 42% reported hearing a message on television. In addition, 35% of women read a family planning message in a newspaper or magazine, and 46% were exposed to a message by a community health worker. The proportion of women who were exposed to family planning messages exceeded that among men for each source. Overall, 35% of women and 46% of men were not exposed to family planning messages through any of these sources.

Life orientation, covering a broad range of life skills from the junior to senior school grades, has been part of the Department of Basic Education's National Curriculum since 2011 (DBE 2011). The National Adolescent Sexual and Reproductive Health and Rights (ASRH&R) Framework Strategy (2014-2019), established by the Department of Social Development as a call to action, prioritises a comprehensive sexuality education curriculum and the need to strengthen school-based programmes (DSD 2015). In the SADHS 2016, women and men age 15-24 who were currently attending school were asked whether they had heard about family planning at school in the past 6 months. Seven in 10 women (70%) and 6 in 10 men (61%) reported that they had heard about family planning at school in the preceding 6 months (**Table 7.15**). Among young women and young men age 15-19 who were attending school, 70% and 56%, respectively, reported having heard about family planning at school.

7.6 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

Contact of nonusers with family planning providers

Respondent discussed family planning in the 12 months before the survey during a visit to a health facility.

Sample: Women age 15-49 who are not currently using any contraceptive methods

All women age 15-49 who were not using contraceptives were asked if they had visited a health facility in the 12 months before the survey for their own care or that of their children and, if so, whether they had discussed family planning methods with a health care worker. Twenty-five percent of women reported discussing family planning with a provider during a health facility visit. However, 31% of nonusers had visited a health facility in the past 12 months without discussing family planning (**Table 17.16**). The remaining women did not report visiting a health facility in the 12 months before the survey and therefore did not have the opportunity to engage with health facility staff on the topic of family planning.

Patterns by background characteristics

- Women age 20-39 are more likely (31-32%) than younger women age 15-19 (11%) and older women age 40-49 (22-24%) to have discussed family planning during a health facility visit.
- Women living in North West are most likely to have discussed family planning during a health facility visit (34%), while women in Free State are least likely to have done so (19%).

LIST OF TABLES

For more information on contraception and family planning, see the following tables:

Table 7.1 Knowledge of contraceptive methods

Percentage of all respondents, in-union respondents, sexually active respondents, and respondents who have never had sex age 15-49 who have heard of any contraceptive method, according to specific method, South Africa DHS 2016

	Women				Men			
Method	All women	In-union women	Sexually active women[1]	Never had sex	All men	In-union men	Sexually active men[1]	Never had sex
Any method	99.7	99.9	99.9	98.0	99.8	99.9	100.0	98.6
Any modern method	99.7	99.9	99.9	98.0	99.8	99.9	100.0	98.6
Female sterilisation	64.1	73.5	70.1	45.1	41.7	51.6	46.0	25.0
Male sterilisation	43.4	51.7	48.1	33.2	32.9	41.5	36.4	21.4
Pill	94.4	96.7	96.4	82.6	78.7	83.4	81.6	64.4
IUD	63.9	71.6	69.0	41.4	24.6	30.6	26.8	15.5
Injectables	96.0	97.1	97.2	84.5	79.2	81.1	81.6	63.1
Implants	84.1	85.2	86.7	69.1	49.7	50.8	51.7	39.8
Male condom	97.7	97.8	98.3	93.3	99.4	99.4	99.5	98.4
Female condom	93.2	94.0	95.0	84.6	85.2	83.3	86.0	80.3
Emergency contraception	62.9	65.0	67.7	49.5	47.3	51.5	51.5	32.2
Other modern method	2.1	1.7	2.0	1.5	0.9	1.1	1.0	1.0
Any traditional method	59.5	65.4	66.2	37.6	58.3	61.4	61.7	37.6
Rhythm	37.9	41.7	42.3	27.5	26.2	30.8	27.9	16.4
Withdrawal	54.2	60.9	61.1	33.2	55.4	57.9	58.7	36.1
Other traditional method	2.3	2.8	2.6	0.9	1.2	1.8	1.5	0.3
Mean number of methods known by respondents 15-49	8.0	8.4	8.4	6.5	6.2	6.6	6.5	4.9
Number of respondents	8,514	3,050	4,364	1,009	3,202	988	1,889	397
Mean number of methods known by respondents 15-59	na	na	na	na	6.2	6.6	6.5	4.9
Number of respondents	na	na	na	na	3,618	1,276	2,140	401

Note: In-union women and men include those who are currently married or living together with a partner as if married.
na = Not applicable
[1] Had sexual intercourse within the 4 weeks preceding the survey

Table 7.2 Current use of contraception by age

Percent distribution of all women, in-union women, and sexually active women age 15-49 by contraceptive method currently used, according to age, South Africa DHS 2016

			Modern method												Traditional method				
Age	Any method	Any modern method	Female sterili-sation	Male sterili-sation	Pill	IUD	Injec-tables (3 month)	Injec-tables (2 month)	Implants	Male condom	Female condom	Emer-gency contra-ception	Other	Any tradi-tional method	Rhythm	With-drawal	Not currently using	Total	Number of women
ALL WOMEN																			
15-19	24.9	24.9	0.0	0.0	0.9	0.1	7.3	7.2	2.2	7.3	0.0	0.0	0.0	0.0	0.0	0.0	75.1	100.0	1,427
20-24	54.4	54.2	0.2	0.1	4.6	1.3	18.3	12.1	4.8	12.3	0.2	0.1	0.0	0.2	0.1	0.2	45.6	100.0	1,415
25-29	60.9	60.2	1.0	0.0	7.9	0.8	22.3	9.0	4.0	15.1	0.2	0.0	0.0	0.7	0.0	0.7	39.1	100.0	1,444
30-34	57.1	56.7	3.9	0.2	6.6	1.2	21.6	6.1	4.1	12.5	0.3	0.1	0.1	0.4	0.2	0.2	42.9	100.0	1,333
35-39	56.6	56.3	6.7	0.2	6.1	1.7	18.2	4.9	3.3	15.0	0.0	0.0	0.2	0.2	0.2	0.0	43.4	100.0	1,072
40-44	46.0	45.9	11.8	1.0	4.9	0.8	13.0	2.9	1.8	9.3	0.4	0.0	0.0	0.1	0.0	0.1	54.0	100.0	941
45-49	33.4	33.2	9.8	0.4	3.4	0.4	6.9	1.2	1.3	9.4	0.4	0.0	0.0	0.1	0.0	0.1	66.6	100.0	883
Total	48.2	47.9	4.0	0.2	5.0	0.9	15.9	6.7	3.2	11.7	0.2	0.0	0.0	0.3	0.1	0.2	51.8	100.0	8,514
IN-UNION WOMEN[1]																			
15-19	(36.7)	(36.7)	(0.0)	(0.0)	(11.0)	(0.0)	(17.7)	(1.1)	(2.2)	(4.7)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(63.3)	100.0	44
20-24	53.2	52.9	0.2	0.0	8.1	0.3	19.1	12.4	4.6	8.2	0.0	0.0	0.0	0.3	0.0	0.3	46.8	100.0	271
25-29	62.3	60.5	1.0	0.0	12.7	0.7	23.3	8.6	4.8	9.4	0.0	0.0	0.0	1.8	0.0	1.8	37.7	100.0	514
30-34	58.0	57.2	5.1	0.4	8.5	1.7	23.5	6.4	3.9	7.3	0.3	0.0	0.0	0.8	0.3	0.5	42.0	100.0	688
35-39	61.2	61.1	8.5	0.4	7.8	2.3	20.0	4.9	3.7	12.9	0.0	0.0	0.4	0.2	0.1	0.0	38.8	100.0	575
40-44	50.8	50.7	16.5	1.8	6.9	0.5	12.9	3.5	1.2	7.4	0.0	0.0	0.0	0.1	0.0	0.1	49.2	100.0	507
45-49	39.0	38.9	13.8	0.8	5.6	0.7	7.4	1.3	2.0	7.2	0.2	0.0	0.0	0.1	0.0	0.1	61.0	100.0	450
Total	54.6	54.0	7.7	0.6	8.4	1.2	18.2	5.7	3.3	8.8	0.1	0.0	0.1	0.6	0.1	0.5	45.4	100.0	3,050
SEXUALLY ACTIVE WOMEN[2]																			
15-19	60.4	60.4	0.0	0.0	4.2	0.0	15.9	11.0	5.1	24.3	0.0	0.0	0.0	0.0	0.0	0.0	39.6	100.0	264
20-24	61.3	61.0	0.3	0.3	6.0	1.8	19.1	12.5	5.7	15.0	0.0	0.2	0.0	0.3	0.0	0.3	38.7	100.0	695
25-29	67.5	66.4	1.2	0.0	9.9	0.9	21.3	10.6	4.5	18.0	0.0	0.0	0.0	1.1	0.0	1.1	32.5	100.0	854
30-34	60.7	60.4	4.2	0.3	8.1	1.3	21.4	6.9	4.7	12.9	0.4	0.2	0.0	0.4	0.0	0.4	39.3	100.0	879
35-39	63.4	63.3	8.7	0.3	8.4	1.4	18.2	4.3	3.4	18.3	0.0	0.0	0.3	0.1	0.1	0.0	36.6	100.0	677
40-44	52.1	52.1	15.3	1.7	5.6	1.0	12.5	2.6	2.1	11.0	0.2	0.0	0.1	0.0	0.0	0.0	47.9	100.0	548
45-49	42.9	42.9	12.7	0.9	4.7	0.7	6.7	1.3	2.3	13.2	0.4	0.0	0.0	0.0	0.0	0.0	57.1	100.0	447
Total	59.6	59.3	5.7	0.4	7.3	1.2	17.5	7.3	4.1	15.6	0.1	0.1	0.1	0.4	0.0	0.3	40.4	100.0	4,364

Notes: If more than one method is used, only the most effective method is considered in this tabulation. Figures in parentheses are based on 25-49 unweighted cases.
[1] In-union women include women who are currently married or living together with a partner as if married
[2] Women who have had sexual intercourse within the 4 weeks preceding the survey

Table 7.3.1 Trends in the current use of contraception

Percent distribution of sexually active women age 15-49 by contraceptive method currently used, according to the South Africa DHS 1998 and the South Africa DHS 2016

Method	1998	2016
Any method	62.1	59.6
Any modern method	61.2	59.3
Female sterilisation	12.0	5.7
Male sterilisation	1.7	0.4
IUD	1.9	1.2
Pill	13.2	7.3
Injectables	30.1	24.8
Implants	na	4.1
Male condom	2.3	15.6
Female condom	na	0.1
Other modern method	0.0	0.2
Any traditional method	1.0	0.4
Periodic abstinence/rhythm	0.3	0.0
Withdrawal	0.4	0.3
Herbs	0.2	na
Other	0.2	0.0
Not currently using	37.9	40.4
Total	100.0	100.0
Number of women	6,062	4,364

na = Not applicable

Table 7.3.2 Current use of contraception according to background characteristics

Percent distribution of sexually active women age 15-49 by contraceptive method currently used, according to background characteristics, South Africa DHS 2016

Background characteristic	Any method	Any modern method	Modern method											Any traditional method	Traditional method		Not currently using	Total	Number of women
			Female sterilisation	Male sterilisation	Pill	IUD	Injectables (3 month)	Injectables (2 month)	Implants	Male condom	Female condom	Emergency contraception	Other		Rhythm	Withdrawal			
Number of living children																			
0	47.5	47.0	0.6	0.0	4.2	0.8	7.1	6.2	3.2	24.5	0.1	0.4	0.0	0.5	0.0	0.5	52.5	100.0	772
1-2	61.1	60.7	2.9	0.6	8.7	1.2	19.7	8.6	4.2	14.4	0.2	0.0	0.1	0.4	0.0	0.4	38.9	100.0	2,441
3-4	66.2	66.0	15.9	0.4	6.6	1.4	20.8	5.4	3.4	11.9	0.1	0.0	0.0	0.3	0.1	0.2	33.8	100.0	992
5+	55.4	55.4	10.2	0.0	4.6	0.6	14.5	2.6	9.6	13.3	0.0	0.0	0.0	0.0	0.0	0.0	44.6	100.0	160
Residence																			
Urban	59.6	59.1	6.8	0.5	7.8	1.4	16.1	6.7	4.1	15.5	0.2	0.1	0.1	0.4	0.0	0.4	40.4	100.0	3,137
Non-urban	59.9	59.6	3.0	0.2	6.0	0.6	21.4	8.7	4.0	15.6	0.1	0.0	0.0	0.2	0.1	0.2	40.1	100.0	1,227
Province																			
Western Cape	62.7	62.4	11.3	2.4	4.4	2.5	15.4	5.6	7.0	13.8	0.0	0.0	0.0	0.3	0.0	0.3	37.3	100.0	525
Eastern Cape	61.0	61.0	6.4	0.5	3.4	1.0	22.8	10.4	4.9	11.5	0.0	0.0	0.0	0.0	0.0	0.0	39.0	100.0	410
Northern Cape	54.9	54.6	5.0	0.2	5.4	0.3	21.7	5.6	4.9	11.5	0.0	0.0	0.0	0.3	0.0	0.3	45.1	100.0	82
Free State	51.1	51.1	3.9	0.5	3.2	0.0	24.2	2.7	4.2	11.8	0.3	0.0	0.2	0.0	0.0	0.0	48.9	100.0	200
KwaZulu-Natal	65.0	64.7	6.2	0.4	6.3	1.3	19.8	3.4	4.8	22.1	0.0	0.4	0.0	0.3	0.0	0.3	35.0	100.0	685
North West	58.9	58.8	3.7	0.0	11.9	0.8	16.9	6.4	2.7	16.3	0.0	0.1	0.0	0.2	0.0	0.2	41.1	100.0	325
Gauteng	58.0	57.5	5.3	0.0	9.7	1.1	16.0	7.1	3.1	14.9	0.2	0.0	0.2	0.5	0.0	0.5	42.0	100.0	1,430
Mpumalanga	62.1	61.9	3.4	0.3	6.1	0.6	17.0	10.5	3.5	19.8	0.6	0.0	0.0	0.2	0.0	0.2	37.9	100.0	356
Limpopo	53.9	53.0	2.6	0.0	7.6	0.9	12.9	14.7	2.8	11.1	0.4	0.0	0.0	0.9	0.2	0.7	46.1	100.0	351
Education																			
No education	44.0	44.0	8.7	0.0	3.5	1.3	17.6	2.8	0.0	10.1	0.0	0.0	0.0	0.0	0.0	0.0	56.0	100.0	86
Primary incomplete	47.9	47.9	2.8	0.0	4.5	0.4	23.0	2.0	2.2	12.9	0.3	0.0	0.0	0.0	0.0	0.0	52.1	100.0	239
Primary complete	54.2	54.2	6.5	0.0	5.5	1.2	17.1	4.7	3.6	15.6	0.0	0.0	0.0	0.0	0.0	0.0	45.8	100.0	169
Secondary incomplete	60.5	60.1	4.7	0.3	5.2	0.7	20.4	8.5	5.0	15.2	0.1	0.0	0.0	0.4	0.0	0.4	39.5	100.0	1,913
Secondary complete	60.8	60.5	5.4	0.3	8.7	1.5	16.7	7.4	3.4	16.4	0.2	0.2	0.2	0.2	0.0	0.2	39.2	100.0	1,354
More than secondary	62.7	62.0	10.1	1.5	12.8	2.0	8.3	6.2	4.0	16.7	0.1	0.1	0.1	0.7	0.0	0.7	37.3	100.0	603
Wealth quintile																			
Lowest	60.0	59.4	2.7	0.0	5.9	0.3	24.3	6.5	3.2	16.5	0.0	0.0	0.0	0.6	0.0	0.6	40.0	100.0	758
Second	59.2	59.2	2.9	0.2	5.3	0.8	20.6	9.4	5.0	14.7	0.2	0.0	0.0	0.0	0.0	0.0	40.8	100.0	920
Middle	58.4	58.0	3.9	0.0	6.0	1.3	18.2	7.7	4.2	16.5	0.2	0.1	0.0	0.4	0.1	0.3	41.6	100.0	952
Fourth	62.3	61.9	5.2	0.4	7.3	1.2	16.2	8.5	4.6	18.3	0.1	0.1	0.0	0.5	0.0	0.5	37.7	100.0	882
Highest	58.5	58.0	13.9	1.7	12.0	2.1	8.9	3.8	3.2	11.7	0.3	0.2	0.3	0.5	0.0	0.5	41.5	100.0	852
Total	59.6	59.3	5.7	0.4	7.3	1.2	17.5	7.3	4.1	15.6	0.1	0.1	0.1	0.4	0.0	0.3	40.4	100.0	4,364

Notes: If more than one method is used, only the most effective method is considered in this tabulation. Sexually active women are defined as women who have had sexual intercourse within the 4 weeks preceding the survey.

Table 7.4 Timing of sterilisation

Percent distribution of sterilised women age 15-49 by age at the time of sterilisation and median age at sterilisation, according to the number of years since the operation, South Africa DHS 2016

Years since operation	Age at time of sterilisation						Total	Number of women	Median age[1]
	<25	25-29	30-34	35-39	40-44	45-49			
<2	1.9	22.0	40.8	10.6	20.2	4.5	100.0	64	32.6
2-3	(6.0)	(16.9)	(26.4)	(33.0)	(16.4)	(1.4)	100.0	58	(33.2)
4-5	(1.9)	(13.6)	(40.7)	(35.2)	(8.6)	(0.0)	100.0	46	(33.4)
6-7	(0.0)	(18.6)	(36.3)	(36.6)	(8.6)	(0.0)	100.0	37	(33.8)
8-9	(5.2)	(14.1)	(41.7)	(36.3)	(2.8)	(0.0)	100.0	41	(33.4)
10+	7.8	29.2	46.2	16.8	0.0	0.0	100.0	92	a
Total	4.4	20.6	39.4	25.5	9.1	1.1	100.0	338	32.5

Note: Figures in parentheses are based on 25-49 unweighted cases.
a = Not calculated due to censoring
[1] Median age at sterilisation is calculated only for women sterilised before age 40 to avoid problems of censoring

Table 7.5 Knowledge of fertile period

Percent distribution of women and men age 15-49 by knowledge of the fertile period during the ovulatory cycle, South Africa DHS 2016

Perceived fertile period	All women	All men
Just before her menstrual period begins	13.4	17.4
During her menstrual period	4.8	4.9
Right after her menstrual period has ended	17.6	19.3
Halfway between two menstrual periods	34.1	9.7
Other	0.1	0.0
No specific time	13.4	16.9
Don't know	16.6	31.8
Total	100.0	100.0
Number	8,514	3,202

Table 7.6 Knowledge of fertile period by age

Percentage of women age 15-49 with correct knowledge of the fertile period during the ovulatory cycle, according to age, South Africa DHS 2016

Age	Percentage with correct knowledge of the fertile period	Number of women
15-19	26.5	1,427
20-24	32.0	1,415
25-29	37.6	1,444
30-34	36.5	1,333
35-39	38.7	1,072
40-44	35.7	941
45-49	32.9	883
Total	34.1	8,514

Note: Correct knowledge of the fertile period is defined as "halfway between two menstrual periods."

Table 7.7 Source of modern contraception methods

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method, South Africa DHS 2016

Source	Female sterilisation	IUD	Injectables (3 month)	Injectables (2 month)	Implants	Pill	Male condom	Total
Public sector	72.0	65.3	93.9	94.5	94.2	77.1	56.2	80.3
Government hospital	63.0	18.6	11.4	4.5	22.8	4.7	3.8	13.1
Government health clinic/ community health centre	9.1	46.6	79.7	87.0	69.6	70.3	51.2	65.1
Mobile clinic	0.0	0.0	2.9	2.9	1.9	2.1	1.2	2.0
Other public sector	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Private medical sector	28.0	34.7	5.0	3.9	5.3	21.0	13.1	11.4
Private hospital/clinic	26.5	8.2	1.4	1.1	1.7	1.0	0.6	3.5
Chemist/pharmacy	0.0	0.9	1.1	1.5	0.8	15.0	12.3	5.4
Private doctor	1.5	25.6	2.6	1.4	2.8	4.9	0.3	2.4
Other private medical sector	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Other sources	0.0	0.0	0.7	0.7	0.5	1.1	28.9	7.5
Workplace/workplace clinic	0.0	0.0	0.5	0.7	0.2	0.6	1.1	0.6
Community centre, library, or other public place	0.0	0.0	0.0	0.0	0.3	0.0	1.7	0.4
Shop	0.0	0.0	0.0	0.0	0.0	0.4	25.9	6.4
Friend/relative	0.0	0.0	0.2	0.0	0.0	0.2	0.2	0.1
Other	0.0	0.0	0.1	0.2	0.0	0.8	1.8	0.6
Missing	0.0	0.0	0.3	0.6	0.0	0.0	0.0	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	338	75	1,351	574	277	423	994	4,076

Note: Total includes 20 users of male sterilisation, 17 users of female condoms, 4 users of emergency contraception, and 4 users of other modern methods who are too few in number to be shown separately.

Table 7.8 Informed choice

Among current users of modern methods age 15-49 who started the last episode of use within the 5 years preceding the survey, percentage who were informed about possible side effects or problems of that method, percentage who were informed about what to do if they experienced side effects, percentage who were informed about other methods they could use, and percentage who were informed of all three, according to method and initial source, South Africa DHS 2016

	Among women who started last episode of modern contraceptive method within 5 years preceding the survey:				
Method/source	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if they experienced side effects	Percentage who were informed by a health or family planning worker of other methods that could be used	Percentage who were informed of all three (Method Information Index)	Number of women
Method					
Female sterilisation	62.3	57.2	70.6	51.1	145
IUD	(85.0)	(83.3)	(87.6)	(79.3)	62
Injectables (3 month)	52.7	44.6	60.8	39.4	1,060
Injectables (2 month)	49.6	41.5	60.8	37.8	494
Implants	69.4	62.9	70.6	53.8	267
Pill	60.0	52.7	63.3	48.3	330
Initial source of method[1]					
Public sector	55.0	47.2	62.9	41.7	2,118
Government hospital	49.4	43.7	64.8	38.7	377
Government health clinic/community health centre	56.4	47.9	62.5	42.3	1,690
Mobile clinic	50.3	47.0	58.9	43.1	48
CHW	*	*	*	*	1
Private	71.1	67.1	72.6	63.8	215
Private hospital/clinic	84.4	79.7	79.3	74.9	84
Chemist/pharmacy	(57.6)	(52.7)	(60.6)	(52.7)	64
Private doctor	66.9	64.8	75.4	60.0	66
Other private medical sector	*	*	*	*	1
Other	*	*	*	*	18
Total	56.4	49.0	63.6	43.7	2,357

Notes: Table includes users of only the methods listed individually. Total includes 7 users for whom the initial source of the method is missing who are not shown separately. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
CHW = community health worker
[1] Source at start of current episode of use

Table 7.9 Twelve-month contraceptive discontinuation rates

Among episodes of contraceptive use experienced within the 5 years preceding the survey, percentage of episodes discontinued within 12 months, according to reason for discontinuation and specific method, South Africa DHS 2016

Method	Method failure	Desire to become pregnant	Other fertility-related reasons[2]	Side effects/ health concerns	Wanted more effective method	Other method-related reasons[3]	Other reasons	Any reason[4]	Switched to another method[5]	Number of episodes of use[6]
Injectables (3 month)	3.0	3.4	2.3	12.7	1.9	3.1	4.1	30.5	4.7	1,460
Injectables (2 month)	1.6	4.9	3.2	11.1	0.8	3.5	3.0	28.0	2.8	698
Implants	0.0	0.5	0.0	10.9	0.4	0.6	0.0	12.5	1.5	341
Pill	4.0	3.8	2.6	11.1	3.3	3.2	5.1	33.2	3.8	507
Male condom	4.4	6.9	3.3	2.0	5.6	2.6	7.7	32.5	5.7	1,178
Other[1]	(2.8)	(6.4)	(1.7)	(0.7)	(3.0)	(2.2)	(0.7)	(17.4)	(2.0)	316
All methods	3.0	4.6	2.5	8.5	2.8	2.8	4.4	28.5	4.1	4,500

Notes: Figures are based on life table calculations using information on episodes of use that occurred 3-62 months preceding the survey. Figures in parentheses are based on 125-249 unweighted cases.
[1] Includes male sterilisation, IUD, female condom, emergency contraception, rhythm, and withdrawal
[2] Includes infrequent sex/husband away, difficult to get pregnant/menopausal, and marital dissolution/separation
[3] Includes lack of access/too far, costs too much, and inconvenient to use
[4] Reasons for discontinuation are mutually exclusive and add to the total given in this column
[5] A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she gave "wanted a more effective method" as the reason for discontinuation and started another method within 2 months of discontinuation
[6] All episodes of use occurring within the 5 years preceding the survey are included. Episodes of use include both episodes of use that were discontinued during the period of observation and episodes of use that were not discontinued during the period of observation

Table 7.10 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the 5 years preceding the survey by main reason stated for discontinuation, according to specific method, South Africa DHS 2016

Reason	IUD	Injectables (3 month)	Injectables (2 month)	Implants	Pill	Male condom	Other[1]	All methods
Became pregnant while using	(29.4)	8.5	5.2	0.5	10.2	12.6	(7.8)	9.3
Wanted to become pregnant	(42.5)	13.6	18.9	13.7	25.0	22.2	(35.7)	19.3
Husband/partner disapproved	(0.0)	1.4	0.3	0.0	2.0	5.1	(0.0)	2.3
Wanted a more effective method	(1.4)	9.0	7.3	2.6	15.4	13.3	(24.8)	10.7
Side effects/health concerns	(16.1)	40.2	39.3	73.9	21.5	7.3	(1.7)	28.4
Lack of access/too far	(0.0)	2.8	4.3	0.0	0.5	0.9	(0.0)	2.0
Cost too much	(0.0)	0.6	0.0	0.0	0.2	0.6	(0.0)	0.4
Inconvenient to use	(4.4)	6.2	8.2	2.2	8.3	6.7	(18.1)	7.0
Up to God/fatalistic	(0.0)	0.8	0.4	0.0	1.5	1.4	(2.7)	1.0
Difficult to get pregnant/ menopausal	(0.0)	0.4	0.0	4.2	0.0	0.9	(0.0)	0.6
Infrequent sex/husband away	(0.0)	7.5	6.1	1.8	4.4	13.8	(4.9)	8.3
Marital dissolution/separation	(0.0)	0.2	1.1	0.0	0.9	1.2	(0.0)	0.7
Other	(6.1)	7.8	6.3	1.1	7.9	8.5	(0.0)	7.3
Don't know	(0.0)	1.1	2.5	0.0	2.3	5.6	(4.3)	2.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	30	710	366	89	284	625	33	2,136

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Male sterilisation, female condom, emergency contraception, rhythm, and withdrawal are included in the discontinuation rate for other methods

Table 7.11.1 Need and demand for contraception among in-union women

Percentage of in-union women age 15-49 with unmet need for contraception, percentage with met need for contraception, total demand for contraception, and percentage of the demand for contraception that is satisfied, according to background characteristics, South Africa DHS 2016

Background characteristic	Unmet need for contraception			Met need for contraception (currently using)			Total demand for contraception			Number of women	Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Age												
15-19	(16.7)	(7.0)	(23.6)	(19.4)	(17.3)	(36.7)	(36.1)	(24.3)	(60.4)	44	(60.9)	(60.9)
20-24	20.5	7.9	28.4	37.5	15.7	53.2	58.0	23.6	81.6	271	65.2	64.9
25-29	7.2	4.6	11.8	32.0	30.3	62.3	39.3	34.8	74.1	514	84.1	81.6
30-34	6.9	9.0	15.9	20.5	37.5	58.0	27.5	46.5	73.9	688	78.5	77.4
35-39	2.8	9.5	12.4	16.2	45.0	61.2	19.0	54.6	73.6	575	83.2	83.0
40-44	3.2	9.9	13.0	5.4	45.4	50.8	8.6	55.3	63.9	507	79.6	79.4
45-49	1.2	11.7	13.0	1.9	37.1	39.0	3.2	48.8	52.0	450	75.0	74.8
Residence												
Urban	6.1	8.1	14.2	18.2	37.0	55.2	24.3	45.1	69.4	2,259	79.5	78.6
Non-urban	6.0	10.7	16.7	17.0	35.9	52.9	23.0	46.6	69.6	790	76.0	75.4
Province												
Western Cape	4.1	6.0	10.1	18.2	41.1	59.3	22.3	47.1	69.4	454	85.4	84.9
Eastern Cape	6.1	10.1	16.2	14.1	39.8	53.9	20.1	50.0	70.1	275	76.9	76.9
Northern Cape	6.7	9.3	16.0	10.0	42.0	52.0	16.7	51.2	68.0	66	76.5	76.0
Free State	4.0	12.0	16.1	15.0	31.1	46.2	19.0	43.2	62.2	146	74.2	74.2
KwaZulu-Natal	6.4	11.7	18.1	18.1	33.2	51.3	24.5	44.9	69.4	361	73.9	73.1
North West	4.8	9.2	13.9	15.9	38.6	54.5	20.6	47.8	68.4	215	79.6	79.2
Gauteng	7.2	7.1	14.3	19.1	36.4	55.6	26.4	43.5	69.9	1,035	79.5	78.2
Mpumalanga	4.5	8.6	13.1	20.2	38.8	59.0	24.7	47.5	72.1	244	81.8	80.8
Limpopo	8.3	12.5	20.9	19.3	30.0	49.2	27.6	42.5	70.1	254	70.2	69.0
Education												
No education	1.9	21.7	23.6	7.5	22.1	29.6	9.4	43.8	53.2	83	55.6	55.6
Primary incomplete	6.0	13.5	19.6	7.8	32.0	39.9	13.9	45.6	59.4	185	67.1	67.1
Primary complete	9.9	10.7	20.6	12.4	32.4	44.8	22.3	43.2	65.5	142	68.5	68.5
Secondary incomplete	6.4	8.5	14.8	16.9	39.5	56.4	23.3	48.0	71.3	1,297	79.2	78.2
Secondary complete	5.0	8.1	13.1	20.7	35.2	55.9	25.7	43.3	69.0	875	81.0	80.5
More than secondary	6.9	6.1	13.0	22.9	37.6	60.5	29.8	43.7	73.5	469	82.3	80.7
Wealth quintile												
Lowest	5.1	10.4	15.4	13.6	40.8	54.4	18.7	51.2	69.9	505	77.9	76.7
Second	9.5	9.4	18.9	18.5	32.0	50.6	28.0	41.4	69.4	610	72.8	72.7
Middle	5.0	7.5	12.5	21.1	32.8	53.9	26.1	40.3	66.4	637	81.2	80.2
Fourth	6.1	7.4	13.6	21.5	36.9	58.4	27.6	44.3	71.9	569	81.1	80.4
Highest	4.9	9.2	14.1	14.7	41.1	55.8	19.6	50.3	70.0	729	79.8	78.7
Total	6.1	8.8	14.9	17.9	36.7	54.6	24.0	45.5	69.5	3,050	78.6	77.8

Notes: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012. In-union women include women who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.

[1] Total demand is the sum of unmet need and met need

[2] Percentage of demand satisfied is met need divided by total demand

[3] Modern methods include female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, and other modern methods

Table 7.11.2 Need and demand for contraception among all women and among sexually active women

Percentage of all women and sexually active women age 15-49 with unmet need for contraception, percentage with met need for contraception, total demand for contraception, and percentage of the demand for contraception that is satisfied, according to background characteristics, South Africa DHS 2016

Background characteristic	Unmet need for contraception			Met need for contraception (currently using)			Total demand for contraception[1]			Number of women	Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
ALL WOMEN												
Age												
15-19	6.6	1.4	8.0	19.0	5.9	24.9	25.6	7.3	32.9	1,427	75.7	75.6
20-24	11.7	4.3	16.0	34.7	19.7	54.4	46.4	24.0	70.4	1,415	77.2	76.9
25-29	6.9	3.9	10.8	33.3	27.6	60.9	40.2	31.6	71.8	1,444	84.9	83.9
30-34	6.9	7.9	14.8	22.1	35.0	57.1	29.1	42.9	72.0	1,333	79.4	78.8
35-39	3.2	7.4	10.6	14.4	42.2	56.6	17.6	49.6	67.2	1,072	84.2	83.9
40-44	2.2	9.7	11.9	5.2	40.7	46.0	7.5	50.4	57.9	941	79.4	79.3
45-49	0.7	9.9	10.6	1.3	32.1	33.4	2.0	42.0	44.0	883	75.9	75.6
Residence												
Urban	5.9	5.8	11.7	20.9	27.6	48.5	26.8	33.4	60.2	5,731	80.6	80.0
Non-urban	6.3	6.1	12.4	20.0	27.4	47.4	26.3	33.5	59.8	2,783	79.3	79.0
Province												
Western Cape	4.3	4.0	8.3	19.8	30.6	50.4	24.1	34.6	58.7	995	85.9	85.3
Eastern Cape	5.7	6.5	12.3	18.6	34.8	53.4	24.4	41.3	65.7	938	81.3	81.3
Northern Cape	6.7	5.6	12.3	15.9	31.2	47.1	22.6	36.8	59.4	173	79.2	79.0
Free State	5.2	6.2	11.4	18.0	23.6	41.6	23.2	29.8	53.0	442	78.4	78.4
KwaZulu-Natal	6.2	5.0	11.2	21.3	25.6	46.9	27.5	30.6	58.1	1,616	80.8	80.4
North West	5.5	6.9	12.3	20.8	30.5	51.4	26.3	37.4	63.7	570	80.6	80.5
Gauteng	6.8	6.6	13.4	21.2	26.7	47.9	28.0	33.3	61.3	2,284	78.1	77.4
Mpumalanga	5.4	5.9	11.3	23.7	28.2	51.9	29.1	34.1	63.2	671	82.1	81.5
Limpopo	7.2	6.5	13.7	20.2	20.7	40.9	27.4	27.2	54.6	824	75.0	74.1
Education												
No education	2.0	14.5	16.5	8.8	26.3	35.1	10.9	40.8	51.7	168	68.0	68.0
Primary incomplete	5.2	10.5	15.8	9.6	31.4	41.0	14.9	41.9	56.8	447	72.3	72.3
Primary complete	6.8	8.6	15.4	14.7	28.7	43.4	21.5	37.4	58.9	327	73.8	73.8
Secondary incomplete	5.6	5.8	11.4	19.2	26.8	46.0	24.8	32.6	57.4	4,195	80.2	79.8
Secondary complete	6.6	5.0	11.7	24.5	26.9	51.5	31.2	32.0	63.1	2,369	81.5	81.0
More than secondary	7.2	4.0	11.2	25.8	30.5	56.2	33.0	34.5	67.4	1,008	83.4	82.4
Wealth quintile												
Lowest	5.7	7.3	13.0	18.4	28.2	46.6	24.0	35.5	59.5	1,648	78.2	77.7
Second	7.2	6.0	13.2	22.2	27.5	49.8	29.4	33.6	63.0	1,715	79.0	78.9
Middle	5.1	6.2	11.4	23.9	26.4	50.3	29.0	32.6	61.7	1,805	81.6	81.1
Fourth	6.5	4.1	10.6	21.2	28.3	49.4	27.7	32.4	60.0	1,763	82.4	81.8
Highest	5.7	5.8	11.5	16.7	27.5	44.2	22.4	33.3	55.7	1,583	79.3	78.6
Total	6.0	5.9	11.9	20.6	27.6	48.2	26.6	33.5	60.1	8,514	80.2	79.7
SEXUALLY ACTIVE WOMEN[4]												
Age												
15-19	26.8	4.4	31.2	47.0	13.5	60.4	73.8	17.9	91.7	264	65.9	65.9
20-24	19.9	8.1	27.9	41.7	19.6	61.3	61.6	27.6	89.2	695	68.7	68.3
25-29	8.6	5.4	14.0	38.6	28.9	67.5	47.2	34.3	81.5	854	82.9	81.5
30-34	8.7	9.2	17.9	25.8	35.0	60.7	34.4	44.2	78.6	879	77.3	76.8
35-39	3.7	9.8	13.5	17.6	45.8	63.4	21.3	55.6	76.9	677	82.5	82.3
40-44	3.6	13.2	16.8	6.7	45.5	52.1	10.3	58.7	69.0	548	75.6	75.6
45-49	1.0	16.4	17.4	1.5	41.4	42.9	2.4	57.9	60.3	447	71.2	71.2
Residence												
Urban	8.8	8.9	17.7	25.3	34.3	59.6	34.1	43.1	77.3	3,137	77.1	76.5
Non-urban	10.6	10.4	21.0	27.6	32.3	59.9	38.2	42.7	80.9	1,227	74.0	73.7
Province												
Western Cape	6.2	5.6	11.8	24.9	37.8	62.7	31.1	43.4	74.5	525	84.2	83.8
Eastern Cape	8.9	11.9	20.8	21.3	39.7	61.0	30.2	51.6	81.8	410	74.6	74.6
Northern Cape	9.9	10.2	20.1	18.9	35.9	54.9	28.8	46.1	75.0	82	73.2	72.8
Free State	7.8	11.6	19.4	22.2	28.9	51.1	30.0	40.5	70.5	200	72.5	72.5
KwaZulu-Natal	12.0	8.7	20.7	32.1	32.8	65.0	44.2	41.5	85.7	685	75.8	75.5
North West	7.1	9.9	16.9	24.5	34.4	58.9	31.6	44.3	75.9	325	77.7	77.4
Gauteng	9.2	9.7	18.9	24.9	33.1	58.0	34.1	42.8	76.9	1,430	75.4	74.7
Mpumalanga	8.0	8.2	16.2	29.4	32.8	62.1	37.4	41.0	78.4	356	79.3	79.0
Limpopo	13.8	10.9	24.7	26.7	27.1	53.9	40.5	38.0	78.5	351	68.6	67.5

(Continued…)

Table 7.11.2—*Continued*

Background characteristic	Unmet need for contraception			Met need for contraception (currently using)			Total demand for contraception[1]			Number of women	Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
	SEXUALLY ACTIVE WOMEN[4]											
Education												
No education	2.8	19.5	22.3	14.5	29.5	44.0	17.2	49.1	66.3	86	66.4	66.4
Primary incomplete	6.2	15.5	21.7	14.5	33.4	47.9	20.7	48.9	69.6	239	68.8	68.8
Primary complete	11.6	10.9	22.5	15.6	38.7	54.2	27.2	49.6	76.8	169	70.6	70.6
Secondary incomplete	9.1	10.1	19.3	25.6	35.0	60.5	34.7	45.1	79.8	1,913	75.9	75.3
Secondary complete	10.0	7.9	17.9	29.8	31.0	60.8	39.8	38.9	78.7	1,354	77.2	76.9
More than secondary	10.0	5.6	15.6	27.5	35.1	62.7	37.5	40.7	78.2	603	80.1	79.2
Wealth quintile												
Lowest	9.1	12.9	22.0	25.7	34.3	60.0	34.8	47.2	82.0	758	73.2	72.5
Second	10.1	8.7	18.9	27.4	31.8	59.2	37.5	40.5	78.0	920	75.8	75.8
Middle	7.7	9.6	17.3	27.4	31.0	58.4	35.1	40.6	75.7	952	77.1	76.6
Fourth	11.2	6.5	17.7	27.2	35.1	62.3	38.3	41.6	80.0	882	77.9	77.3
Highest	8.6	9.4	18.0	21.7	36.8	58.5	30.3	46.2	76.4	852	76.5	75.9
Total	9.3	9.3	18.7	25.9	33.7	59.6	35.3	43.0	78.3	4,364	76.2	75.7

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012.
[1] Total demand is the sum of unmet need and met need
[2] Percentage of demand satisfied is met need divided by total demand
[3] Modern methods include female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, and other modern methods
[4] Women who have had sexual intercourse within the 4 weeks preceding the survey

Table 7.12 Decision making about contraception

Among in-union women age 15-49 who are current users of contraception, percent distribution by who makes the decision to use contraception, and among in-union women who are not currently using contraception, percent distribution by who makes the decision not to use contraception, according to background characteristics, South Africa DHS 2016

Background characteristic	Among in-union women who are current users of contraception						Among in-union women who are not currently using contraception					
	Mainly woman	Woman and partner jointly	Mainly partner	Other	Total	Number of women	Mainly woman	Woman and partner jointly	Mainly partner	Other	Total	Number of women
Age												
15-19	*	*	*	*	100.0	16	*	*	*	*	100.0	19
20-24	47.5	40.5	11.9	0.2	100.0	144	34.9	31.3	31.5	2.2	100.0	86
25-29	46.6	44.4	8.8	0.2	100.0	320	36.9	42.1	19.5	1.5	100.0	148
30-34	38.8	48.5	11.3	1.4	100.0	399	38.6	41.3	15.1	5.1	100.0	229
35-39	43.1	47.3	9.4	0.2	100.0	352	34.2	45.5	19.5	0.9	100.0	202
40-44	33.7	51.0	13.6	1.7	100.0	258	41.0	42.4	13.9	2.7	100.0	244
45-49	40.2	48.7	10.8	0.4	100.0	175	35.8	43.4	16.3	4.6	100.0	274
Number of living children												
0	33.9	53.4	9.4	3.3	100.0	72	31.7	49.4	15.5	3.5	100.0	149
1-2	41.0	47.4	11.1	0.5	100.0	912	37.5	41.1	17.3	4.1	100.0	644
3-4	42.1	46.8	10.2	1.0	100.0	592	37.0	40.7	20.5	1.7	100.0	328
5+	45.4	41.8	12.8	0.0	100.0	90	43.2	41.7	11.4	3.6	100.0	80
Residence												
Urban	42.4	47.6	9.3	0.7	100.0	1,248	35.7	43.0	18.0	3.3	100.0	862
Non-urban	38.1	45.7	15.4	0.8	100.0	418	40.4	39.7	16.4	3.5	100.0	339
Province												
Western Cape	42.4	52.7	4.0	0.9	100.0	269	37.1	45.0	13.0	4.9	100.0	163
Eastern Cape	44.6	43.2	10.9	1.3	100.0	148	46.6	42.2	6.9	4.3	100.0	116
Northern Cape	36.3	57.6	3.7	2.4	100.0	34	54.0	39.7	4.5	1.8	100.0	29
Free State	34.2	61.5	4.3	0.0	100.0	67	25.3	58.6	15.5	0.7	100.0	73
KwaZulu-Natal	29.3	59.3	10.6	0.7	100.0	185	26.3	47.5	23.3	2.9	100.0	156
North West	33.0	58.4	8.0	0.6	100.0	117	36.4	43.5	17.6	2.6	100.0	87
Gauteng	49.0	38.1	12.3	0.6	100.0	575	37.7	36.3	22.9	3.1	100.0	365
Mpumalanga	34.9	49.7	14.8	0.6	100.0	144	38.4	41.6	17.5	2.6	100.0	91
Limpopo	38.2	38.9	22.3	0.7	100.0	125	42.2	38.4	14.9	4.6	100.0	121
Education												
No education	(39.8)	(58.1)	(2.1)	(0.0)	100.0	25	37.3	42.7	16.9	3.2	100.0	54
Primary incomplete	50.0	36.3	11.9	1.8	100.0	74	44.2	33.0	20.2	2.6	100.0	103
Primary complete	46.6	46.4	6.9	0.0	100.0	63	44.1	35.2	19.6	1.0	100.0	68
Secondary incomplete	43.5	44.8	11.1	0.5	100.0	731	37.8	43.8	15.0	3.3	100.0	487
Secondary complete	43.1	44.3	11.7	0.9	100.0	489	35.5	43.1	19.2	2.2	100.0	325
More than secondary	29.3	59.8	9.8	1.1	100.0	284	30.2	43.2	19.5	7.0	100.0	163
Wealth quintile												
Lowest	42.7	42.3	12.5	2.5	100.0	275	45.8	37.9	10.6	5.7	100.0	197
Second	47.5	41.1	11.4	0.0	100.0	308	39.4	35.9	22.5	2.1	100.0	257
Middle	43.5	43.5	12.7	0.4	100.0	343	33.1	50.5	14.2	2.2	100.0	239
Fourth	41.3	51.0	7.5	0.2	100.0	332	39.7	39.2	19.1	2.0	100.0	209
Highest	34.0	54.8	10.3	0.8	100.0	407	30.6	45.4	19.4	4.7	100.0	298
Total	41.3	47.1	10.8	0.7	100.0	1,666	37.0	42.1	17.5	3.3	100.0	1,201

Notes: Table excludes women who are currently pregnant. In-union women include women who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 7.13 Future use of contraception

Percent distribution of in-union women age 15-49 who are not using a contraceptive method by intention to use in the future, according to number of living children, South Africa DHS 2016

	Number of living children[1]					
Intention to use in the future	0	1	2	3	4+	Total
Intends to use	26.5	40.0	37.3	39.3	29.3	36.0
Unsure	2.8	7.1	6.1	3.2	6.2	5.5
Does not intend to use	70.6	52.9	56.6	57.6	64.5	58.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	149	374	373	269	219	1,384

Note: In-union women include women who are currently married or living together with a partner as if married.
[1] Includes current pregnancy

Table 7.14 Exposure to family planning messages

Percentage of women and men age 15-49 who heard or saw a family planning message on radio, on television, in a newspaper or magazine, or from a community health worker in the past 6 months, according to background characteristics, South Africa DHS 2016

	Women						Men					
Background characteristic	Radio	Television	News-paper/ magazine	Com-munity health worker	None of these four sources	Number of women	Radio	Television	News-paper/ magazine	Com-munity health worker	None of these four sources	Number of men
Age												
15-19	24.5	34.1	27.0	32.2	45.4	1,427	22.0	32.3	19.7	9.5	54.8	647
20-24	34.9	44.4	35.4	47.7	34.4	1,415	30.3	32.9	28.2	16.1	47.0	588
25-29	41.0	47.9	38.9	53.3	29.8	1,444	35.6	35.8	30.5	18.5	45.6	506
30-34	36.6	42.9	33.3	47.7	33.5	1,333	43.3	40.8	33.0	20.4	41.2	450
35-39	39.3	42.6	38.4	47.5	34.2	1,072	40.4	41.9	36.5	11.9	40.8	395
40-44	38.9	41.2	36.0	46.8	35.7	941	42.8	41.9	35.2	16.0	42.0	345
45-49	40.0	43.7	37.0	48.0	32.0	883	41.5	43.8	32.7	18.7	44.0	271
Residence												
Urban	39.2	47.3	40.3	44.7	34.8	5,731	36.5	41.0	32.5	16.9	44.3	2,203
Non-urban	29.5	32.4	23.8	48.6	36.1	2,783	31.3	29.3	23.4	12.2	49.6	999
Province												
Western Cape	46.3	62.6	57.8	58.2	17.2	995	37.9	50.9	44.2	19.4	29.0	328
Eastern Cape	25.1	26.2	17.6	36.1	45.8	938	29.7	29.3	17.5	16.2	52.4	362
Northern Cape	33.4	40.1	37.2	43.9	37.7	173	21.5	30.5	24.8	14.2	53.3	61
Free State	48.2	49.8	41.7	56.2	23.4	442	36.6	27.7	22.2	9.2	52.7	159
KwaZulu-Natal	27.3	34.1	26.3	40.0	40.5	1,616	23.7	16.1	22.1	13.1	63.1	521
North West	41.8	47.9	37.6	59.8	25.8	570	22.3	26.6	21.4	3.2	60.1	237
Gauteng	38.6	43.8	38.6	37.7	43.4	2,284	37.9	46.8	32.1	15.1	44.5	984
Mpumalanga	36.9	41.0	26.9	42.4	35.6	671	69.6	59.6	48.9	25.8	17.4	263
Limpopo	34.9	42.9	33.7	65.1	23.9	824	28.3	33.5	28.0	19.5	40.1	288
Education												
No education	24.2	20.3	12.9	31.4	55.7	168	22.8	27.8	7.7	15.2	59.3	62
Primary incomplete	22.3	24.3	7.9	42.3	44.8	447	31.4	21.3	12.2	8.8	60.9	219
Primary complete	24.6	24.5	16.4	38.2	49.0	327	22.7	29.4	18.4	5.4	60.8	166
Secondary incomplete	32.3	38.3	30.2	43.5	38.5	4,195	29.7	32.5	23.7	12.8	51.8	1,637
Secondary complete	42.5	50.8	43.2	51.6	28.7	2,369	42.8	46.5	42.1	21.3	34.1	773
More than secondary	47.9	57.4	56.3	49.4	24.6	1,008	51.5	56.0	50.9	23.8	25.9	345
Wealth quintile												
Lowest	20.6	16.7	14.4	37.1	52.0	1,648	27.7	18.4	16.4	10.0	60.2	618
Second	31.1	36.7	26.5	46.6	37.4	1,715	33.2	34.6	25.4	14.7	48.1	682
Middle	39.1	48.4	37.5	51.2	28.9	1,805	35.1	38.4	30.6	13.6	46.9	715
Fourth	45.8	55.6	45.1	51.0	27.6	1,763	39.2	47.2	37.1	19.3	37.2	653
Highest	42.9	53.8	50.9	42.9	30.9	1,583	39.6	49.3	40.1	20.4	36.1	534
Total 15-49	36.0	42.4	34.9	46.0	35.2	8,514	34.9	37.3	29.7	15.4	46.0	3,202
50-59	na	na	na	na	na	na	37.1	38.4	30.8	20.6	42.7	416
Total 15-59	na	na	na	na	na	na	35.1	37.5	29.8	16.0	45.6	3,618

na = Not applicable

Table 7.15 Exposure to family planning messages at school

Percentage of women and men age 15-24 who are currently attending school and heard about family planning at school in the past 6 months, according to background characteristics, South Africa DHS 2016

Background characteristic	Women		Men	
	Heard about family planning at school	Number of women	Heard about family planning at school	Number of men
Age				
15-19	70.4	1,169	55.6	111
15	64.2	231	*	25
16	69.3	287	(59.8)	25
17	70.1	270	*	17
18	79.5	193	(63.8)	20
19	70.7	188	*	24
20-24	68.6	431	58.1	186
Residence				
Urban	70.8	986	61.4	387
Non-urban	68.4	614	60.8	342
Province				
Western Cape	71.3	151	(63.9)	54
Eastern Cape	71.2	206	40.0	111
Northern Cape	70.6	30	(65.2)	11
Free State	63.7	84	43.2	52
KwaZulu-Natal	62.0	349	62.9	150
North West	69.7	79	54.6	40
Gauteng	72.8	353	63.6	146
Mpumalanga	75.5	129	82.6	56
Limpopo	74.8	219	75.0	110
Education				
Primary incomplete	(53.5)	31	(42.2)	33
Primary complete	(56.5)	43	47.2	44
Secondary incomplete	70.6	1,191	64.8	552
Secondary complete	66.8	226	51.0	72
More than secondary	78.7	107	(58.3)	28
Wealth quintile				
Lowest	65.4	321	51.6	145
Second	69.7	313	66.0	159
Middle	74.1	303	56.7	157
Fourth	68.4	361	66.2	163
Highest	72.6	301	65.6	106
Total 15-24	69.9	1,600	61.1	729

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 7.16 Contact of nonusers with family planning providers

Among women age 15-49 who are not using contraception, percentage who during the past 12 months visited a health facility and discussed contraception and percentage who visited a health facility but did not discuss contraception, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage of women who visited a health facility in the past 12 months and who: Discussed contraception	Did not discuss contraception	Number of women
Age			
15-19	10.7	23.3	1,071
20-24	32.2	25.7	646
25-29	32.4	32.7	564
30-34	31.8	35.8	572
35-39	31.1	32.7	466
40-44	24.1	36.6	508
45-49	21.7	36.6	588
Residence			
Urban	23.7	31.5	2,951
Non-urban	26.1	29.2	1,463
Province			
Western Cape	26.4	29.9	493
Eastern Cape	19.7	45.3	437
Northern Cape	28.8	36.1	92
Free State	19.4	23.8	258
KwaZulu-Natal	23.6	24.1	858
North West	33.8	32.4	277
Gauteng	22.8	30.9	1,190
Mpumalanga	25.3	41.2	323
Limpopo	28.6	24.9	487
Education			
No education	18.8	29.8	109
Primary incomplete	26.9	29.3	264
Primary complete	23.7	33.1	185
Secondary incomplete	22.5	29.8	2,265
Secondary complete	27.4	29.5	1,150
More than secondary	27.6	39.2	441
Wealth quintile			
Lowest	19.7	31.8	881
Second	28.9	29.2	862
Middle	27.3	31.2	897
Fourth	25.9	30.4	892
Highest	20.9	31.1	883
Total	24.5	30.8	4,414

INFANT AND CHILD MORTALITY 8

Key Findings

- ***Current levels:*** During the 5-year period preceding the survey, the under-5 mortality rate was 42 deaths per 1,000 live births, and the infant mortality rate was 35 deaths per 1,000 live births. About 1 in 24 children do not reach their fifth birthday, and most (83%) of these children die within the first year of life.
- ***Comparison with the SADHS 1998:*** The under-5 mortality rate declined from 59 deaths per 1,000 live births in 1998 to 42 deaths per 1,000 live births in 2016, while the infant mortality rate declined from 45 deaths per 1,000 live births to 35 deaths per 1,000 live births.
- ***Differences by residence:*** Non-urban areas have higher under-5 mortality than urban areas (49 deaths per 1,000 live births versus 38 deaths per 1,000 live births).
- ***Perinatal mortality:*** The overall perinatal mortality rate is 29 deaths per 1,000 pregnancies of 7 or more months' duration. Perinatal mortality ranges from a low of 17 deaths per 1,000 pregnancies in KwaZulu-Natal to a high of 56 deaths per 1,000 pregnancies in Mpumalanga.
- ***High-risk birth category***: 31% of births in the 5-year period preceding the survey were in an avoidable high-risk category (mother's age less than 18 years, mother's age more than 34 years, birth interval less than 24 months, and birth order greater than three).

Information on infant and child mortality is relevant to a demographic assessment of a country's population and is an important indicator of the country's socioeconomic development and quality of life. It can also help identify children who may be at higher risk of death and lead to strategies to reduce this risk, such as promoting birth spacing.

This chapter presents information on levels, trends, and differentials in perinatal, neonatal, infant, and under-5 mortality rates. It also examines biodemographic factors and fertility behaviours that increase mortality risks for infants and children. The information was collected as part of a retrospective birth history in which female respondents listed all of the children to whom they had given birth along with each child's date of birth, survivorship status, and current age or age at death.

The quality of mortality estimates calculated from birth histories depends on the mother's ability to recall all of the children she has given birth to, as well as their birth dates and ages at death. Potential data quality problems include:

- The selective omission from birth histories of those births that did not survive, which can result in underestimation of childhood mortality.

- The displacement of birth dates, which may distort mortality trends. This can occur if an interviewer knowingly records a birth as occurring in a different year than the one in which it occurred. This may happen if an interviewer is trying to cut down on his or her overall workload, because live births occurring during the 5 years before the interview are the subject of a lengthy set of additional questions.

- The quality of reporting of age at death. Misreporting the child's age at death may distort the age pattern of mortality, especially if the net effect of the age misreporting is to transfer deaths from one age bracket to another.

- Any method of measuring childhood mortality that relies on mothers' reports (e.g., birth histories) assumes that female adult mortality is not high or, if it is high, that there is little or no correlation between the mortality of the mother and that of her children. These assumptions may not hold in countries such as South Africa with severe HIV epidemics (see Chapter 13), and the resulting childhood mortality rates will be underreported to some degree, particularly for the period 10-15 years prior to the survey, before the large-scale roll-out of antiretroviral treatment.

Selected indicators of the quality of the mortality data on which the estimates of mortality in this chapter are based are presented in Appendix C, **Tables C.3-C.6**.

8.1 INFANT AND CHILD MORTALITY

Neonatal mortality: The probability of dying within the first month of life.[1]

Postneonatal mortality: The probability of dying between the first month of life and the first birthday (computed as the difference between infant and neonatal mortality).

Infant mortality: The probability of dying between birth and the first birthday.

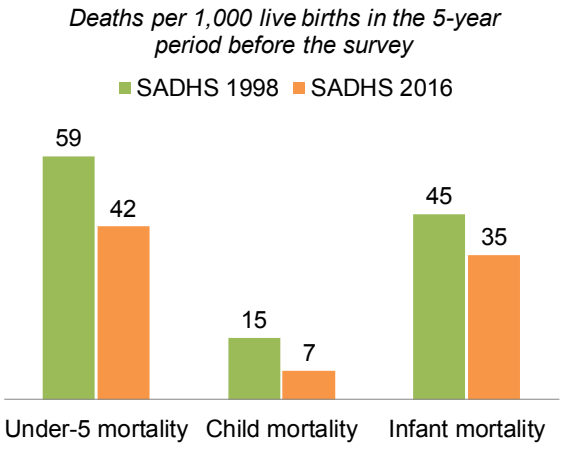
Child mortality: The probability of dying between the first and the fifth birthday.

Under-5 mortality: The probability of dying between birth and the fifth birthday.

[1] This differs from the WHO definition of neonatal death, which is when a death occurs during the first 28 days after birth (WHO 2011a).

During the 5 years immediately preceding the survey, the infant mortality rate was 35 deaths per 1,000 live births (**Table 8.1**). The child mortality rate was 7 deaths per 1,000 children who had survived to age 12 months. The overall under-5 mortality rate was 42 deaths per 1,000 live births. The neonatal mortality rate was 21 deaths per 1,000 live births; this figure is much higher than the estimate of 12 deaths per 1,000 live births for the year 2015 from the Rapid Mortality Surveillance Report 2015 (Dorrington et al. 2016) and may have resulted from the misclassification of stillbirths (see **Section 8.3** below). The neonatal mortality rate will therefore not be analysed further in this report.

***Figure 8.1* Comparison in early childhood mortality rates between the SADHS 1998 and SADHS 2016**



Comparison with the SADHS 1998: A comparison of childhood mortality between 1998 and 2016 shows a decrease in three child mortality indicators. Under-5 mortality declined from 59 to 42 deaths per 1,000 live births, child mortality declined from 15 to 7 deaths per 1,000 live births, and infant mortality fell from 45 to 35 deaths per 1,000 live births (**Figure 8.1**).

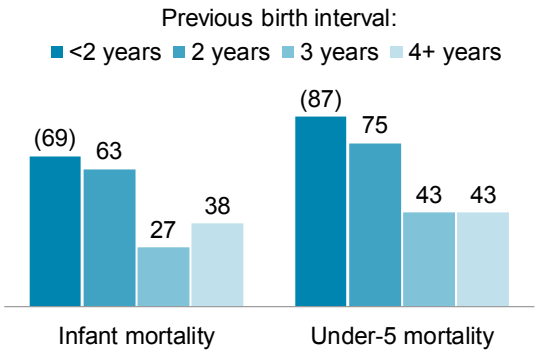
Patterns by background characteristics

- There are male/female differentials across all mortality rates. For example, infant mortality rates are 41 deaths per 1,000 live births among boys and 29 deaths per 1,000 live births among girls, and under-5 mortality rates are 49 deaths per 1,000 live births among boys and 35 deaths per 1,000 live births among girls (**Table 8.2**).

- Infant mortality and under-5 mortality are lower in urban areas than in non-urban areas. Infant mortality rates in urban and non-urban areas are 34 deaths per 1,000 live births and 39 deaths per 1,000 live births, respectively, while under-5 mortality rates are 38 deaths per 1,000 live births in urban areas and 49 deaths per 1,000 live births in non-urban areas.

Figure 8.2 **Childhood mortality by previous birth interval**

Deaths per 1,000 live births for the 10-year period before the survey



Note: Figures in parentheses are based on 250-499 unweighted person-years of exposure to the risk of death.

- A total of 151 deaths occurred among the 3,572 children reported to have been born since January 2011; according to mothers, 68% of these children died in a health facility, 28% died at home, and 4% died elsewhere (data not shown).

8.2 BIODEMOGRAPHIC RISK FACTORS

Researchers have identified multiple risk factors associated with infant/child mortality based on the characteristics of the mother and child and the circumstances of the birth. **Table 8.3** presents data on the relationship between some of these risk factors and child mortality for the 10-year period preceding the survey. A 10-year period was used to increase the reliability of the estimates calculated.

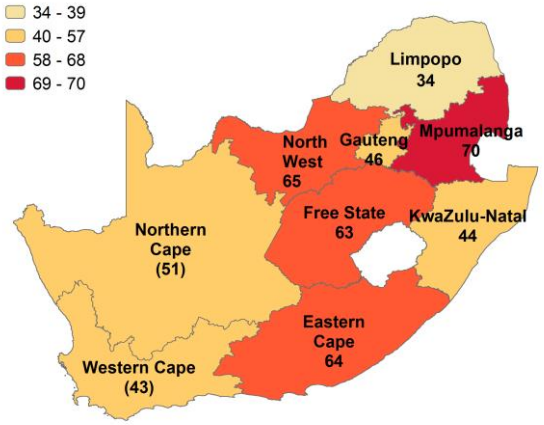
Patterns by background characteristics

- Mortality rates are higher among children born after short birth intervals (less than 2 years) than among children born after longer intervals (**Figure 8.2**). However, the number of births with short intervals is low, so these data should be interpreted with caution.

- Under-5 mortality varies greatly across provinces, from a low of 34 deaths per 1,000 live births in Limpopo to a high of 70 deaths per 1,000 live births in Mpumalanga (**Figure 8.3**).

Figure 8.3 **Under-5 mortality by province**

Deaths per 1,000 live births for the 10-year period before the survey

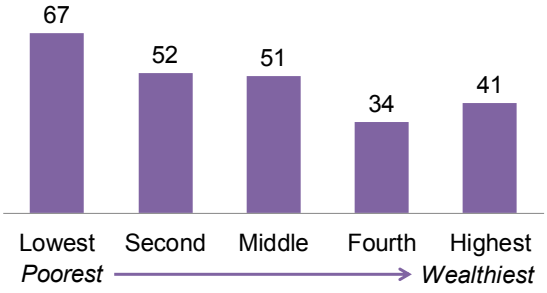


Note: Figures in parenthesis are based on 250-499 unweighted person-years of exposure to the risk of death.

- Under-5 mortality generally declines with increasing household wealth. Notably, however, the under-5 mortality rate in the highest wealth quintile exceeds that in the fourth quintile (**Figure 8.4**).

***Figure 8.4* Under-5 mortality by household wealth**

Deaths per 1,000 live births for the 10-year period before the survey



8.3 PERINATAL MORTALITY

Perinatal mortality rate

Perinatal deaths comprise stillbirths (pregnancy losses occurring after 7 months of gestation) and early neonatal deaths (deaths of live births within the first 7 days of life). The perinatal mortality rate is calculated as the number of perinatal deaths per 1,000 pregnancies of 7 or more months' duration.

Sample: Number of pregnancies of 7 or more months' duration to women age 15-49 in the 5 years before the survey

The causes of stillbirths and early neonatal deaths are closely linked. The perinatal mortality rate encompasses both stillbirths and early neonatal deaths and offers some reflection of the level of mortality and quality of service around the time of delivery. Thirty-seven stillbirths were recorded in the SADHS 2016, and there were 66 early neonatal deaths during the 5-year period preceding the survey. This yields a perinatal mortality rate of 29 deaths per 1,000 pregnancies of 7 or more months' duration (**Table 8.4**).

The perinatal mortality rate calculated in the SADHS 2016 is consistent with the rates reported by the District Health Information System (31 deaths per 1,000 deliveries for the period 2012-2016)[1] and the Perinatal Problem Identification Programme (24.8 deaths per 1,000 for deliveries weighing more than 500 g and 33.4 deaths per 1,000 for deliveries weighing more than 1,000 g in 2012-2013) (Pattinson and Rhoda 2014). However, it should be noted that both the District Health Information System and the Perinatal Problem Identification Programme consistently report a ratio of two stillbirths to every early neonatal death, while the SADHS 2016 results show two early neonatal deaths for every stillbirth. This difference may reflect misclassification of stillbirths as early neonatal deaths in the SADHS 2016.

Patterns by background characteristics

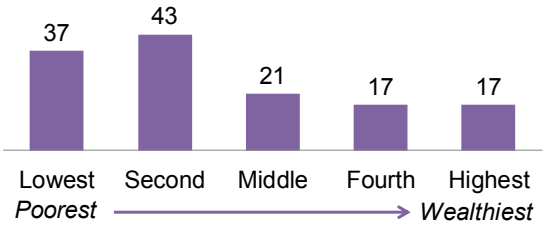
- By age, the perinatal mortality rate is highest among the oldest mothers, that is, women who gave birth in their 40s (52 deaths per 1,000 pregnancies).
- The perinatal mortality rate is similar in urban and non-urban areas (28 and 29 deaths per 1,000 pregnancies, respectively).
- Perinatal mortality ranges from a low of 17 deaths per 1,000 pregnancies in KwaZulu-Natal to a high of 56 deaths per 1,000 pregnancies in Mpumalanga.

[1] Personal communication from Dr. Lesley Bamford based on the Department of Health District Health Information System, accessed on 16 November 2017.

- Although there is no clear pattern of association with mother's education, perinatal mortality generally declines with increasing household wealth (**Figure 8.5**).

Figure 8.5 Perinatal mortality by household wealth

Deaths per 1,000 pregnancies of 7 or more months' duration in the 5-year period before the survey



8.4 HIGH-RISK FERTILITY BEHAVIOUR

The survival of infants and children depends in part on the demographic and biological characteristics of their mothers. Typically, the probability of dying in infancy is much greater among children born to mothers who are too young (under age 18) or too old (over age 34), children born after a short birth interval (less than 24 months after the preceding birth), and children born to mothers of high parity (more than three children). **Table 8.5** shows the percent distribution of children born in the 5 years preceding the survey by category of elevated risk of mortality, along with risk ratios. It also shows the percent distributions of in-union women and all women age 15-49 by their category of risk if they were to conceive a child at the time of the survey.

Forty percent of births in the 5 years preceding the survey were not in any high-risk category. Twenty-nine percent of births were in an unavoidable risk category, that is, first-order births to women between age 18 and age 34. Thirty-one percent of births in the 5 years preceding the survey were in an avoidable high-risk category; 24% of births were in a single high-risk category (mother's age less than 18 years, mother's age more than 34 years, birth interval less than 24 months, and birth order greater than three), and 8% of births were in multiple high-risk categories.

Risk ratios denote the relationship between risk factors and mortality. For example, the risk of dying for a child who falls into any of the avoidable high-risk categories is 1.34 times that for a child who does not fall in any high-risk category. Among children in a single avoidable high-risk category, those born at an interval of less than 24 months have the highest risk ratio (1.69); this means that a child born at an interval of less than 24 months is 1.69 times more likely to die than a child not in any high-risk category.

Sixty-two percent of in-union women age 15-49 would have been in an avoidable high-risk category if they had conceived at the time of the survey; 34% would have been in a single high-risk category, and 29% would have been in a multiple high-risk category. Although this general pattern is to be expected, restricting the results to in-union women does not offer a full picture of the situation in countries such as South Africa with high levels of non-marital fertility. Among all women age 15-49, 53% would have been in an avoidable high-risk category if they had conceived at the time of the survey, with 34% in a single-high risk category and 19% in a multiple high-risk category.

LIST OF TABLES

For more information on infant and child mortality, see the following tables:

- **Table 8.1 Early childhood mortality rates**
- **Table 8.2 Five-year early childhood mortality rates according to background characteristics**
- **Table 8.3 Ten-year early childhood mortality rates according to additional characteristics**
- **Table 8.4 Perinatal mortality**
- **Table 8.5 High-risk fertility behaviour**

Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates for 5-year periods preceding the survey, South Africa DHS 2016

Years preceding the survey	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
0-4	21	14	35	7	42
5-9	29	23	51	9	60
10-14	21	22	44	15	58

[1] Computed as the difference between the infant and neonatal mortality rates

Table 8.2 Five-year early childhood mortality rates according to background characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 5-year period preceding the survey, according to background characteristics, South Africa DHS 2016

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Child's sex					
Male	26	15	41	8	49
Female	16	13	29	5	35
Residence					
Urban	19	15	34	5	38
Non-urban	25	14	39	11	49
Total	21	14	35	7	42

[1] Computed as the difference between the infant and neonatal mortality rates

Table 8.3 Ten-year early childhood mortality rates according to additional characteristics

Infant, child, and under-5 mortality rates for the 10-year period preceding the survey, according to additional characteristics, South Africa DHS 2016

Characteristic	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Mother's age at birth			
<20	40	8	47
20-29	42	8	49
30-39	48	8	56
40-49	*	*	*
Birth order			
1	40	6	46
2-3	39	8	46
4-6	62	14	75
7+	*	*	*
Previous birth interval[1]			
<2 years	(69)	(19)	(87)
2 years	63	13	75
3 years	27	17	43
4+ years	38	5	43
Birth size[2]			
Small/very small	(83)	na	na
Average or larger	25	na	na
Province			
Western Cape	(39)	(4)	(43)
Eastern Cape	50	14	64
Northern Cape	43	(8)	(51)
Free State	53	11	63
KwaZulu-Natal	40	4	44
North West	55	11	65
Gauteng	42	4	46
Mpumalanga	53	18	70
Limpopo	24	10	34
Mother's education			
No education	*	*	*
Primary incomplete	(61)	28	(88)
Primary complete	(42)	(13)	(54)
Secondary incomplete	46	9	55
Secondary complete	35	3	38
More than secondary	43	2	45
Wealth quintile			
Lowest	54	14	67
Second	44	9	52
Middle	46	6	51
Fourth	27	8	34
Highest	40	2	41

Note: Figures in parentheses are based on 250-499 unweighted person-years of exposure to the risk of death. An asterisk indicates that a rate is based on fewer than 250 person-years of exposure to the risk of death and has been suppressed.
na = Not available
[1] Excludes first-order births
[2] Rates for the 5-year period before the survey

Table 8.4 Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the 5-year period preceding the survey, according to background characteristics, South Africa DHS 2016

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate[3]	Number of pregnancies of 7+ months' duration
Mother's age at birth				
<20	5	7	23	546
20-29	17	39	29	1,924
30-39	11	17	28	993
40-49	3	3	52	115
Previous pregnancy interval in months[4]				
First pregnancy	16	13	24	1,219
<15	1	8	38	244
15-26	3	5	24	309
27-38	3	14	53	326
39+	14	26	27	1,480
Residence				
Urban	26	39	28	2,287
Non-urban	11	27	29	1,290
Province				
Western Cape	7	2	26	319
Eastern Cape	1	8	23	397
Northern Cape	1	2	47	70
Free State	1	4	36	165
KwaZulu-Natal	3	8	17	651
North West	5	10	51	280
Gauteng	7	18	25	1,011
Mpumalanga	9	10	56	338
Limpopo	2	4	19	346
Mother's education				
No education	1	1	27	50
Primary incomplete	1	10	62	182
Primary complete	0	1	10	138
Secondary incomplete	19	49	39	1,764
Secondary complete	6	3	9	1,040
More than secondary	10	1	28	403
Wealth quintile				
Lowest	9	20	37	791
Second	10	27	43	862
Middle	8	9	21	790
Fourth	5	7	17	659
Highest	4	4	17	476
Total	37	66	29	3,577

[1] Stillbirths are foetal deaths in pregnancies lasting 7 or more months
[2] Early neonatal deaths are deaths at age 0-6 days among live-born children
[3] The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of 7 or more months' duration, expressed per 1,000
[4] Categories correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months

Table 8.5 High-risk fertility behaviour

Percent distribution of children born in the 5 years preceding the survey by category of elevated risk of mortality and the risk ratio, percent distribution of in-union women by category of risk if they were to conceive a child at the time of the survey, and percent distribution of all women by category of risk if they were to conceive a child at the time of the survey, South Africa DHS 2016

	Births in the 5 years preceding the survey			
Risk category	Percentage of births	Risk ratio	Percentage of in-union women[1]	Percentage of all women[1]
Not in any high-risk category	40.0	1.00	32.6[a]	28.8[a]
Unavoidable risk category				
First-order births between age 18 and age 34	28.9	0.97	5.4	18.5
In any avoidable high-risk category	31.2	1.34	62.0	52.7
Single high-risk category				
Mother's age <18 only	6.5	1.01	0.2	7.2
Mother's age >34 only	6.5	0.69	21.7	16.8
Birth interval <24 months only	4.7	1.69	5.4	6.2
Birth order >3 only	6.0	1.49	6.3	4.1
Subtotal	23.6	1.18	33.5	34.2
Multiple high-risk category				
Age <18 and birth interval <24 months[2]	0.1	*	0.0	0.2
Age >34 and birth interval <24 months	0.2	*	0.8	0.6
Age >34 and birth order >3	5.3	1.86	23.4	14.8
Age >34 and birth interval <24 months and birth order >3	0.5	*	1.6	1.0
Birth interval <24 months and birth order >3	1.4	(1.59)	2.8	1.9
Subtotal	7.6	1.83	28.5	18.5
Total	100.0	na	100.0	100.0
Subtotals by individual avoidable high-risk category				
Mother's age <18	6.6	1.12	0.2	7.4
Mother's age >34	12.6	1.22	47.4	33.2
Birth interval <24 months	6.9	1.71	10.5	9.9
Birth order >3	13.3	1.66	34.0	21.8
Number of births/women	3,572	na	3,050	8,514

Notes: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. In-union women include women who are currently married or living together with a partner as if married. Ratios in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a ratio is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher
[2] Includes the category age <18 and birth order >3
[a] Includes sterilised women

MATERNAL HEALTH CARE 9

Key Findings

- ***Antenatal care coverage:*** 94% of women age 15-49 who had a live birth in the 5 years before the survey received antenatal care from a skilled provider during the pregnancy of their most recent birth. Three in four women (76%) had at least four ANC visits; 47% had their first antenatal visit in the first trimester.
- ***Components of antenatal care:*** Almost all women who received antenatal care had their blood pressure measured (99%), a blood sample taken (99%), and a urine sample taken (99%). Nine in ten women were asked about use of tobacco and use of alcohol.
- ***Delivery services:*** Deliveries in a health facility increased from 83% in 1998 to 96% in 2016. A skilled provider assists in nearly all deliveries (97%); 68% of births are delivered by a nurse or midwife and 29% by a doctor.
- ***Caesarean section:*** Among births in the 5 years before the survey, 24% were delivered by caesarean section. In 1998, by contrast, only 16% of births were delivered by caesarean section.
- ***Postnatal checks:*** 84% of mothers and 86% of newborns had a postnatal check during the first 2 days after delivery.
- ***Content of postnatal care:*** Among most recent births born in the 2 years before the survey, 87% had their umbilical cord examined, 87% had their temperature measured, and 92% were weighed. However, mothers of only 77% of newborns received counselling on danger signs to look for in newborns, 82% were counselled about breastfeeding, and 78% were observed while breastfeeding.

Health care services during pregnancy and childbirth and after delivery are important for the survival and well-being of both the mother and the infant. Antenatal care (ANC) can reduce health risks for mothers and their babies by monitoring pregnancies and screening for complications. Delivery at a health facility, with skilled medical attention and hygienic conditions, reduces the risk of complications and infections during labour and delivery. Timely postnatal care can treat complications arising from delivery and teach the mother how to care for herself and her infant.

The first part of this chapter presents information on ANC providers, the number and timing of ANC visits, and various components of care. The second focuses on childbirth and provides information on the place of delivery, assistance during delivery, and caesarean deliveries. The last section focuses on postnatal care and presents information on postnatal health checks for mothers and newborns.

The 2015 National Maternity Care Guidelines for South Africa and South Africa's National Strategic Plan for a Campaign on Accelerated Reduction of Maternal and Child Mortality in Africa (CARMMA) provide the backdrop to the contents of this chapter (NDoH 2015a; NDoH 2012).

9.1 Antenatal Care Coverage and Content

Basic antenatal care—identification of risk factors, early diagnosis of pregnancy complications and appropriate management, and health education—is one of the pillars of safe motherhood in South Africa (NDoH 2015a).

9.1.1 Skilled Providers

Antenatal care (ANC) from a skilled provider

Pregnancy care received from skilled providers, such as doctors, nurses, or midwives.

Sample: Women age 15-49 who had a live birth in the 5 years before the survey

The vast majority (94%) of women age 15-49 who had a live birth in the 5 years before the survey received antenatal care from a skilled provider during the pregnancy of their most recent birth (**Table 9.1**). Most women (77%) received ANC from a nurse or midwife; 17% received care from a doctor.

Comparison with the SADHS 1998: While the percentage of women in 2016 receiving ANC from a skilled provider is unchanged relative to 1998 (94% and 95%, respectively), there have been changes in types of ANC providers. In 1998, 30% of women received ANC from a doctor and 65% from a nurse or midwife; in 2016, 17% of women received ANC from a doctor and 77% from a nurse or midwife.

Patterns by background characteristics

- While the percentage of women receiving ANC from a skilled provider changes little by women's age at birth, the percentage who obtain ANC from a doctor increases with age, ranging from 7% among women less than age 20 at the time of birth to 23% among women age 35-49.
- Women with higher-order births are marginally less likely to receive ANC. Ninety-two percent of women giving birth to their sixth or later child received ANC from a skilled provider, as compared with 95% of women giving birth to their first child.
- ANC coverage from a skilled provider is slightly lower in urban areas than non-urban areas (92% and 96%, respectively). Urban women are more likely than non-urban women to receive ANC from a doctor (20% versus 12%).
- By province, ANC coverage ranges from 90% in Gauteng to 99% in Eastern Cape. Women in Western Cape (32%) are more likely than women in other provinces to receive ANC from a doctor (11-19%).
- The higher a woman's educational level, the more likely it is that she will receive ANC services from a doctor. Fifty-one percent of women with more than a secondary education received ANC from a doctor, compared with 8% of women with a primary incomplete or primary complete education.
- Women in the highest wealth quintile are six times more likely to receive ANC from a doctor than those in the lowest quintile (44% versus 7%). Women in the lowest wealth quintile are almost twice as likely as those in the highest quintile to receive ANC from a nurse or midwife (87% versus 49%).

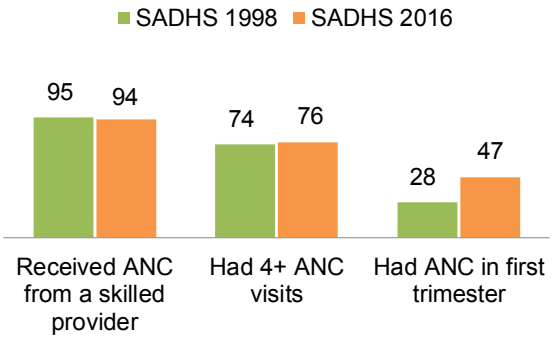
9.1.2 Timing and Number of ANC Visits

Seventy-six percent of women had at least four ANC visits during their last pregnancy resulting in a live birth, 13% of women had two to three ANC visits, and 2% had one visit (**Table 9.2**). Six percent of women had no ANC visits during their last pregnancy. Almost half (47%) of women had their first ANC visit during the first trimester. A further 32% first received ANC during the fourth or fifth month of pregnancy, and only 2% delayed care until the eighth month.

Comparison with the SADHS 1998: There has been little change since 1998 in the percentage of women with the recommended four or more ANC visits (74% in 1998 versus 76% in 2016). However, the percentage of women who had ANC in the first trimester increased from only 28% in 1998 to 47% in 2016 (**Figure 9.1**). The median number of months pregnant at the first ANC visit decreased from 5.2 to 4.0.

Figure 9.1 **Comparison of antenatal care coverage**

Percentage of women age 15-49 who had a live birth in the 5 years before the survey (for the most recent birth)

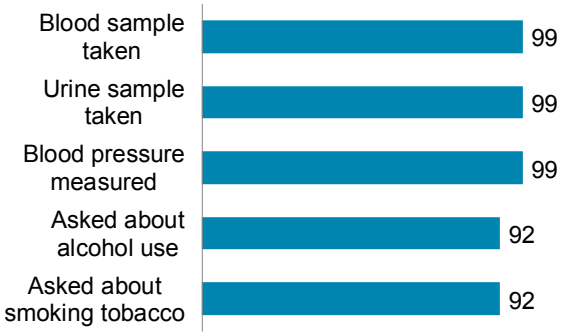


9.2 Components of ANC Visits

In terms of routine antenatal service components, there were no differences in the percentages of pregnant women who had their blood pressure measured (99%), a blood sample taken (99%), and a urine sample taken (99%). As part of their ANC, 9 in 10 women were asked about use of tobacco and use of alcohol (**Figure 9.2**).

Figure 9.2 **Components of antenatal care**

Among women who received ANC for their most recent birth, percentage with selected services



Other Components of ANC

The SADHS 2016 also collected data on whether or not women took iron tablets, another component of care important to maternal and newborn health outcomes. Overall, 90% of women took iron tablets during the pregnancy of their most recent live birth (**Table 9.3**).

9.3 Protection against Neonatal Tetanus

Protection against neonatal tetanus

The number of tetanus toxoid injections needed to protect a baby from neonatal tetanus depends on the mother's vaccinations. A birth is protected against neonatal tetanus if the mother has received any of the following:

- Two tetanus toxoid injections during the pregnancy
- Two or more injections, the last one within 3 years of the birth
- Three or more injections, the last one within 5 years of the birth
- Four or more injections, the last one within 10 years of the birth
- Five or more injections at any time prior to the birth

Sample: Last live births in the 5 years before the survey to women age 15-49

Tetanus toxoid injections are given during pregnancy to prevent neonatal tetanus, a major cause of early infant death in many developing countries, often due to failure to observe hygienic procedures during delivery. Depending on whether or when a pregnant woman has been vaccinated against tetanus before her most recent pregnancy, she may need as many as two tetanus toxoid injections during her pregnancy to protect her baby against neonatal tetanus.

Although the national policy of South Africa is that pregnant women should be vaccinated with tetanus toxoid to prevent neonatal tetanus, death from neonatal tetanus in South Africa is rare (Stats SA 2017a). Indeed, as reflected in the SADHS 2016 results, the province of Western Cape has not been implementing the national policy for years.

Table 9.4 shows that only 35% of women received sufficient doses of tetanus toxoid to protect their last birth against neonatal tetanus.

Comparison with the SADHS 1998: Tetanus toxoid injections during pregnancy were not measured the same way in the SADHS 1998 and the SADHS 2016, limiting the scope of comparisons. According to the SADHS 1998, 58% of women received at least a single dose of tetanus toxoid during pregnancy; in 2016, 60% of women received at least a single dose of tetanus toxoid during pregnancy (data not shown).

Patterns by background characteristics

- The percentage of women whose last birth was protected from tetanus is low across all background characteristics but shows the greatest degree of variability by province. Only 6% of women in Western Cape received the number of tetanus toxoid vaccinations recommended to protect their births from tetanus, as compared with 29%-41% in other provinces. This finding is in keeping with Western Cape's policy of not routinely providing tetanus toxoid vaccinations during antenatal care.

9.4 DELIVERY SERVICES

9.4.1 Institutional Deliveries

Institutional deliveries
Deliveries that occur in a health facility.
Sample: All live births in the 5 years before the survey

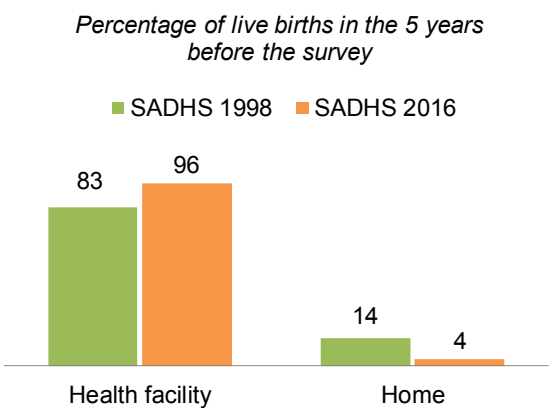
Almost all of the live births (96%) in the 5 years before the survey took place in a health facility; only 4% were delivered at home. The majority of institutional deliveries took place at public sector health facilities) (**Table 9.5**).

Comparison with the SADHS 1998: Deliveries in a health facility increased from 83% in 1998 to 96% in 2016. During the same time period, home deliveries decreased from 14% to 4% (**Figure 9.3**).

Patterns by background characteristics

- Higher-order births are much more likely to be home deliveries. Seventeen percent of sixth- or higher-order births occurred at home, as compared with only 2% of first births (**Table 9.5**).

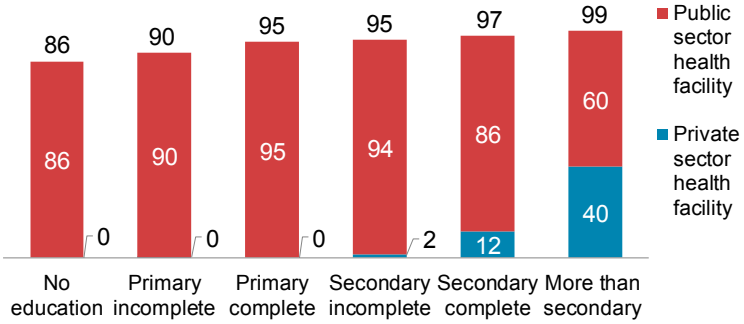
Figure 9.3 **Comparison of place of birth**



- Antenatal care has a small effect on the likelihood of an institutional delivery. Ninety-two percent of mothers with no ANC visits gave birth at a health facility, compared with 97% of mothers with four or more ANC visits.
- The percentage of births delivered in a health facility differs little by residence; however, deliveries in private facilities are almost three times more common in urban areas than non-urban areas (11% versus 4%).
- Deliveries in a health facility vary from a low of 91% in Eastern Cape to a high of 99% in Western Cape. The highest percentage of private sector deliveries takes place in Western Cape (14%), while the lowest percentage takes place in Mpumalanga and Limpopo (5% each).
- The percentage of births that take place in a health facility rises with education of the mother. Moreover, private institutional deliveries are much more common among births to women who have completed secondary school or higher levels of education than among births to women with lower levels of education (**Figure 9.4**). Delivery in private facilities also increases dramatically with increasing wealth.

***Figure 9.4* Health facility births by education**

Percentage of live births in the 5 years before the survey that were delivered in a health facility



Note: Percentages may not sum to total due to rounding.

9.4.2 Skilled Assistance during Delivery

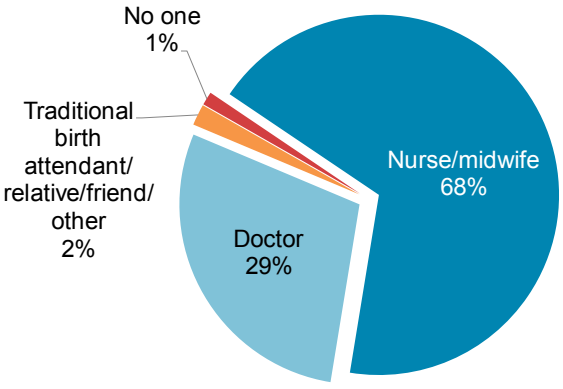
Skilled assistance during delivery
Births delivered with the assistance of doctors, nurses, or midwives.
Sample: All live births in the 5 years before the survey

In South Africa, nearly all births (97%) are assisted by a skilled provider, most often a nurse or midwife (68% of all deliveries); 29% of deliveries are assisted by a doctor. Two percent of births are assisted by unskilled persons such as traditional birth attendants, relatives, or friends, while 1% receive no assistance during delivery (**Figure 9.5**).

Comparison with the SADHS 1998: The percentage of births delivered by a skilled provider rose from 84% in 1998 to 97% in 2016. This improvement is entirely due to an increase in the percentage of births delivered by nurses or midwives (54% in 1998 versus 68% in 2016); there was little change in the percentage delivered by doctors (30% in 1998 versus 29% in 2016).

***Figure 9.5* Assistance during delivery**

Percent distribution of births in the 5 years before the survey



Patterns by background characteristics

- The percentage of births delivered by a skilled provider differs little by mother's age at birth, but there are differences in type of provider. Among those who were less than age 20 at birth, 98% of births were delivered by a skilled provider, with 24% delivered by a doctor and 74% delivered by a nurse or midwife. Among women who were age 35-49, 94% of births were delivered by a skilled provider, with 40% delivered by a doctor and 54% by a nurse or midwife (**Table 9.6**).

- Skilled assistance during delivery declines with birth order: 98% of first births have skilled assistance, as compared with 85% of sixth- or higher-order births (**Figure 9.6**).

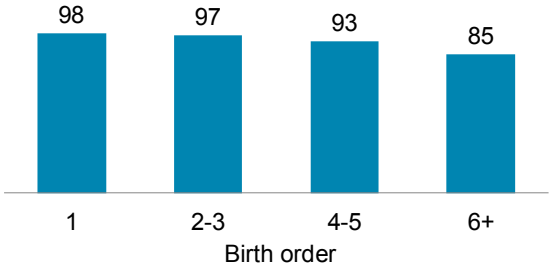
- Women with no antenatal visits are less likely to be assisted by a skilled provider than women with one or more visits (91% versus 96%-97%) (**Table 9.6**).

- Skilled providers assist at nearly 100% of deliveries in health facilities, compared with only 30% of deliveries that take place elsewhere.

- There is little difference between urban areas and non-urban areas in the percentage of births delivered by a skilled provider (98% versus 95%).

Figure 9.6 **Skilled assistance at delivery by birth order**

Percentage of live births in the 5 years before the survey that were delivered by a skilled provider



- By province, the percentage of births delivered by skilled providers is uniformly high (93%-99%). However, there are variations between provinces with regard to type of skilled provider: births in Western Cape are nearly equally likely to be delivered by a doctor (48%) or by a nurse or midwife (51%). Mpumalanga and Limpopo have the highest percentages of births assisted by a nurse or midwife (76% each) and the lowest assisted by a doctor (21% and 22%, respectively).

- The more education a woman has, the more likely it is that she will receive delivery assistance from a doctor rather than a nurse or midwife. Fifty-eight percent of births to women with more than a secondary education were delivered by a doctor, as compared with 18% of births to women with no education. Similar patterns are observed by wealth.

9.4.3 Delivery by Caesarean

Access to caesarean sections can reduce maternal and neonatal mortality and complications such as obstetric fistula. However, use of caesarean sections without a medical need can put women at risk of short- and long-term health problems. WHO advises that caesarean sections be done only when medically necessary but does not recommend a target rate for countries to achieve at the population level. Research conducted by WHO has shown that increases in countries' caesarean section rates up to 10% are associated with declines in maternal and neonatal mortality. On the other hand, increases in caesarean section rates beyond 10% are not associated with reductions in maternal and newborn mortality rates (WHO 2015). The SADHS 2016 results show that almost one in four births in the 5 years before the survey were delivered by caesarean section (24%). Two-thirds of these caesarean sections were elective, which includes those that were not medically indicated (**Table 9.7**).

Among women who had their most recent live birth in a health facility, 76% of those who gave birth by caesarean section spent 3 or more days at the facility after delivery, compared with 14% of those who had a vaginal birth (**Table 9.8**).

Comparison with the SADHS 1998: The proportion of births delivered by caesarean section rose from 16% in 1998 to 24% in 2016, a 50% increase.

Patterns by background characteristics

- More mothers age 35-49 at birth (29%) had caesarean section deliveries than those age 20-34 (23%) or less than age 20 (25%). Elective caesarean deliveries are most common among older mothers (21% of all deliveries to women age 35-49 at birth) (**Table 9.7**).
- Caesarean deliveries are more common among first- to third-order births (25%-26%) than among higher-order births (11%-14%).
- Six in 10 (61%) births delivered at private health facilities are caesarean births, as compared with 22% of births delivered at public health facilities.
- The caesarean delivery rate is modestly higher in urban areas than non-urban areas (26% versus 21%).
- Among provinces, caesarean rates range from a low of 17% in Limpopo a high of 30% in Western Cape.
- More educated women are more likely to undergo caesarean deliveries. The caesarean rate for births to women with more than a secondary education is 40%, compared with 15% for births to women with no education.
- The caesarean rate in the highest wealth quintile is more than double the rate in the lowest quintile (39% versus 17%).

9.5 Postnatal Care

According to the 2014 WHO Recommendations on the Postnatal Care of the Mother and Newborn, "If birth is in a health facility, mothers and newborns should receive postnatal care in the facility for at least 24 hours after birth" (WHO 2014a).

9.5.1 Postnatal Health Check for Mothers

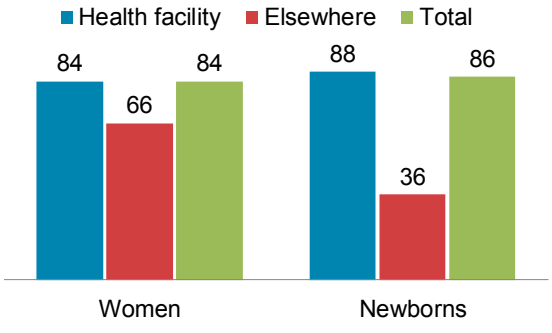
Safe motherhood programmes recommend that women receive a postnatal health check within 2 days after delivery. In South Africa, 87% of mothers received a postnatal check; 84% had this check within the first 2 days after the birth (**Table 9.9**). The majority of mothers had their first postnatal check within 4 hours (73%) and a further 8% between 4 and 23 hours. Seven percent of mothers did not have any postnatal health check, and 6% are unsure whether they had one or not.

Patterns by background characteristics

- Women who delivered in a health facility were much more likely to receive a postnatal health check during the first 2 days after birth than those who delivered elsewhere (84% versus 66%) (**Figure 9.7**). One in four women who delivered elsewhere had no postnatal check (25%) (**Table 9.9**).

Figure 9.7 **Postnatal care by place of delivery**

Percentage of last births in the 2 years before the survey for which women and newborns received a postnatal check during the first 2 days after birth



- Women who reside in urban areas are slightly more likely than those living in non-urban areas to receive a postnatal health check during the 2 days after birth (85% and 81%, respectively).

- By province, Western Cape and Free State have the highest percentage of women receiving a timely postnatal health check (91% each), while KwaZulu-Natal has the lowest percentage (80%).

- The percentage of women who received a timely postnatal check generally increases with increasing wealth, from 81% among those in the lowest wealth quintile to 87% among those in the highest quintile.

Type of Provider

The skills of the provider determine the provider's ability to diagnose problems and recommend appropriate treatment or referral. Twenty-one percent of women received a postnatal health check during the first 2 days after delivery from a doctor. Sixty-three percent received a postnatal check from a nurse or midwife. Less than 1% of women received a postnatal check from a community health worker or a traditional birth attendant (**Table 9.10**).

9.5.2 Postnatal Health Check for Newborns

Postnatal care services for newborns should start as soon as possible after birth because many neonatal deaths occur within the first 48 hours of life. The vast majority of newborns in South Africa (86%) received a postnatal check within 2 days after birth; most newborns (79%) received a postnatal check within 4 hours. An additional 7% of newborns received a postnatal check between 4 hours and 2 days after birth and another 2% within 3-6 days after birth. Six percent of newborns did not receive a postnatal health check (**Table 9.11**).

Patterns by background characteristics

- Newborns delivered in a health facility were much more likely to receive a postnatal health check during the first 2 days after birth than those delivered elsewhere (88% versus 36%). Eighty-two percent of newborns delivered in a health facility had their first postnatal check less than 4 hours after birth, as compared with 20% of those delivered elsewhere.

- There are variations by province in the likelihood of newborns receiving a postnatal health check during the first 2 days after birth. The percentage of newborns with a postnatal check was lowest in KwaZulu-Natal (82%) and highest in Western Cape (94%).

- There is a clear correlation between a mother's educational attainment and the likelihood of a timely postnatal health check for her newborn; 94% of newborns whose mothers have more than a secondary education received a postnatal check during the first 2 days after delivery, compared with 75% of newborns whose mothers have a primary incomplete education.

- The percentage of newborns who received a timely postnatal check correlates with household wealth, rising from 81% among newborns born to women in the lowest wealth quintile to 92% among those born to women in the highest quintile.

Type of Provider

One in every four (24%) newborns received a postnatal check during the first 2 days after delivery from a doctor, while 62% received a postnatal check from a nurse or midwife (**Table 9.12**).

9.5.3 Content of Postnatal Care for Newborns

Among most recent births born in the 2 years before the survey, 87% had their umbilical cord examined, 87% had their temperature measured, and 92% were weighed. However, mothers of only about three-fourths of newborns (77%) received counselling on danger signs to look for in newborns, 82% were counselled about breastfeeding, and 78% were observed while breastfeeding (**Table 9.13**). Overall, 90% of newborns had at least two signal functions performed during the first 2 days after birth and 85% had at least four signal functions performed.

Patterns by background characteristics

- The percentage of newborns for whom at least four signal functions were performed during the first 2 days after birth was much higher among those delivered in health facilities (85%) than among those delivered elsewhere (65%).

- Among provinces, the percentage of newborns with at least four signal functions performed in the first 2 days after birth ranged from a high of 96% in KwaZulu-Natal to a low of 70% in Mpumalanga.

9.5.4 Discharge Timing of Newborns and Mothers

Among most recent live births in the 5 years preceding the survey that took place in a facility, 94% were discharged at the same time as their mother, 1% were discharged before their mother, and 5% were discharged after their mother (**Table 9.14**).

List of Tables

For more information on maternal health care, see the following tables:

- **Table 9.1 Antenatal care**
- **Table 9.2 Number of antenatal care visits and timing of first visit**
- **Table 9.3 Components of antenatal care**
- **Table 9.4 Tetanus toxoid injections**
- **Table 9.5 Place of delivery**
- **Table 9.6 Assistance during delivery**
- **Table 9.7 Caesarean section**
- **Table 9.8 Duration of stay in health facility after birth**
- **Table 9.9 Timing of first postnatal check for the mother**
- **Table 9.10 Type of provider of first postnatal check for the mother**
- **Table 9.11 Timing of first postnatal check for the newborn**
- **Table 9.12 Type of provider of first postnatal check for the newborn**
- **Table 9.13 Content of postnatal care for newborns**
- **Table 9.14 Discharge timing**

Table 9.1 Antenatal care

Percent distribution of women age 15-49 who had a live birth in the 5 years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth and percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics, South Africa DHS 2016

Background characteristic	Antenatal care provider					No ANC	Total	Percentage receiving antenatal care from a skilled provider[1]	Number of women
	Doctor	Nurse/ midwife	Community health worker	Traditional birth attendant	Other				
Age at birth									
<20	7.0	87.7	0.7	0.0	0.0	4.6	100.0	94.7	432
20-34	18.0	75.5	0.6	0.0	0.0	5.9	100.0	93.5	2,200
35-49	22.5	70.9	0.5	0.0	0.2	5.9	100.0	93.4	404
Birth order									
1	16.0	79.0	0.5	0.0	0.0	4.5	100.0	95.0	1,040
2-3	18.7	74.1	0.7	0.0	0.0	6.5	100.0	92.8	1,586
4-5	14.1	80.1	0.0	0.0	0.0	5.8	100.0	94.2	326
6+	10.6	80.9	2.5	0.0	1.0	5.0	100.0	91.5	84
Residence									
Urban	20.1	72.4	0.8	0.0	0.0	6.8	100.0	92.4	1,942
Non-urban	11.8	84.1	0.2	0.0	0.1	3.8	100.0	95.9	1,094
Province									
Western Cape	32.3	62.0	0.9	0.0	0.0	4.8	100.0	94.3	276
Eastern Cape	12.0	86.5	0.0	0.0	0.0	1.5	100.0	98.5	335
Northern Cape	16.8	76.0	0.0	0.0	0.0	7.2	100.0	92.8	61
Free State	18.5	75.6	1.2	0.0	0.0	4.8	100.0	94.0	145
KwaZulu-Natal	14.9	79.5	2.2	0.0	0.0	3.3	100.0	94.5	555
North West	16.9	80.4	0.7	0.0	0.3	1.7	100.0	97.2	244
Gauteng	18.8	71.1	0.0	0.0	0.0	10.1	100.0	89.9	842
Mpumalanga	10.9	80.9	0.0	0.0	0.0	8.3	100.0	91.7	278
Limpopo	13.1	82.7	0.0	0.0	0.0	4.2	100.0	95.8	301
Education									
No education	(1.2)	(96.1)	(0.0)	(0.0)	(0.0)	(2.7)	100.0	(97.3)	42
Primary incomplete	8.0	85.7	0.0	0.0	0.0	6.3	100.0	93.7	141
Primary complete	8.1	82.3	1.0	0.0	0.0	8.6	100.0	90.4	108
Secondary incomplete	9.8	83.6	0.8	0.0	0.1	5.8	100.0	93.4	1,486
Secondary complete	18.9	74.6	0.5	0.0	0.0	6.0	100.0	93.5	908
More than secondary	51.3	44.6	0.2	0.0	0.0	3.9	100.0	95.8	351
Wealth quintile									
Lowest	6.9	86.7	0.2	0.0	0.1	6.0	100.0	93.7	650
Second	7.8	85.1	1.0	0.0	0.0	6.2	100.0	92.8	739
Middle	16.2	77.9	0.6	0.0	0.0	5.3	100.0	94.1	671
Fourth	22.2	73.1	0.6	0.0	0.0	4.2	100.0	95.3	557
Highest	43.8	48.5	0.6	0.0	0.0	7.0	100.0	92.4	418
Total	17.1	76.6	0.6	0.0	0.0	5.7	100.0	93.7	3,036

Notes: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation. Figures in parentheses are based on 25-49 unweighted cases.

[1] Skilled provider includes doctor and nurse/midwife

Table 9.2 Number of antenatal care visits and timing of first visit

Percent distribution of women age 15-49 who had a live birth in the 5 years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, South Africa DHS 2016

Number of ANC visits and timing of first visit	Residence		Total
	Urban	Non-urban	
Number of ANC visits			
None	6.8	3.8	5.7
1	2.1	2.0	2.1
2-3	14.4	11.7	13.4
4+	73.1	79.7	75.5
Don't know	3.6	2.8	3.3
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	6.8	3.8	5.7
<4	48.6	44.9	47.3
4-5	28.6	36.6	31.5
6-7	13.4	12.5	13.1
8+	2.0	1.6	1.9
Don't know	0.6	0.6	0.6
Total	100.0	100.0	100.0
Number of women	1,942	1,094	3,036
Median months pregnant at first visit (for those with ANC)	3.9	4.1	4.0
Number of women with ANC	1,811	1,052	2,863

Table 9.3 Components of antenatal care

Among women age 15-49 with a live birth in the 5 years preceding the survey, percentage who took iron tablets during the pregnancy of the most recent live birth, and among women receiving antenatal care (ANC) for the most recent live birth in the 5 years preceding the survey, percentage receiving specific antenatal services, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage of women who took iron tablets during the pregnancy of their most recent live birth	Number of women with a live birth in the past 5 years	Among women who received antenatal care for their most recent birth in the past 5 years, percentage with selected services					
			Blood pressure measured	Urine sample taken	Blood sample taken	Asked about use of alcohol	Asked about smoking tobacco	Number of women with ANC for their most recent birth
Age at birth								
<20	90.3	432	98.6	99.0	98.4	89.2	88.8	412
20-34	90.1	2,200	99.1	99.4	99.0	92.3	92.1	2,071
35-49	88.9	404	99.2	99.0	98.8	92.4	92.9	380
Birth order								
1	89.5	1,040	99.1	99.4	99.4	89.6	89.0	993
2-3	91.1	1,586	99.3	99.6	98.9	93.2	93.1	1,483
4-5	86.2	326	97.5	97.8	97.0	92.2	93.9	307
6+	90.3	84	99.3	99.3	99.3	92.6	93.2	80
Residence								
Urban	89.8	1,942	99.2	99.5	98.9	93.0	93.1	1,811
Non-urban	90.3	1,094	98.7	99.1	98.9	89.8	89.4	1,052
Province								
Western Cape	90.6	276	98.5	99.5	96.9	96.5	97.8	263
Eastern Cape	95.9	335	99.2	99.2	98.6	91.8	91.1	330
Northern Cape	92.6	61	98.9	100.0	97.9	89.1	89.3	56
Free State	86.8	145	99.3	99.3	98.9	92.0	91.6	138
KwaZulu-Natal	90.9	555	99.7	99.8	99.6	89.1	87.9	536
North West	92.7	244	99.8	99.0	97.8	92.0	91.7	240
Gauteng	87.7	842	99.0	99.4	99.4	91.7	92.2	757
Mpumalanga	91.3	278	100.0	99.5	99.5	93.3	92.9	255
Limpopo	85.3	301	96.9	98.1	98.8	92.1	92.5	288
Education								
No education	(84.1)	42	(100.0)	(100.0)	(100.0)	(94.7)	(94.7)	41
Primary incomplete	84.2	141	99.0	99.6	99.6	88.5	90.9	132
Primary complete	92.3	108	97.7	99.4	98.6	88.5	87.7	99
Secondary incomplete	90.2	1,486	99.1	99.5	98.9	91.3	91.1	1,400
Secondary complete	90.9	908	99.1	98.8	98.5	92.2	92.1	854
More than secondary	89.2	351	99.3	99.8	99.5	95.1	94.9	337
Wealth quintile								
Lowest	87.7	650	98.9	99.4	99.4	89.9	89.0	611
Second	90.9	739	98.3	98.5	97.7	89.6	91.1	694
Middle	90.5	671	99.4	99.5	99.1	91.3	89.8	635
Fourth	92.6	557	99.5	99.6	99.3	95.8	95.9	534
Highest	87.8	418	99.4	100.0	99.3	94.4	94.8	388
Total	90.0	3,036	99.1	99.3	98.9	91.8	91.7	2,863

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 9.4 Tetanus toxoid injections

Among mothers age 15-49 with a live birth in the 5 years preceding the survey, percentage receiving two or more tetanus toxoid injections during the pregnancy for the most recent live birth and percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage receiving two or more injections during the pregnancy for the last live birth	Percentage whose most recent live birth was protected against neonatal tetanus[1]	Number of mothers
Age at birth			
<20	31.3	39.8	432
20-34	29.0	34.3	2,200
35-49	25.5	35.0	404
Birth order			
1	29.6	35.4	1,040
2-3	28.3	34.5	1,586
4-5	27.2	34.5	326
6+	36.7	47.7	84
Residence			
Urban	29.1	34.6	1,942
Non-urban	28.4	36.2	1,094
Province			
Western Cape	4.9	6.1	276
Eastern Cape	23.4	29.2	335
Northern Cape	29.1	30.3	61
Free State	34.6	40.7	145
KwaZulu-Natal	28.2	41.1	555
North West	36.1	40.6	244
Gauteng	36.1	40.5	842
Mpumalanga	32.6	40.4	278
Limpopo	26.0	31.5	301
Education			
No education	(39.6)	(42.0)	42
Primary incomplete	28.4	35.8	141
Primary complete	23.7	31.8	108
Secondary incomplete	30.3	36.2	1,486
Secondary complete	28.5	35.1	908
More than secondary	24.4	30.8	351
Wealth quintile			
Lowest	27.5	35.4	650
Second	28.6	34.7	739
Middle	30.7	35.8	671
Fourth	33.5	37.3	557
Highest	22.4	31.7	418
Total	28.9	35.2	3,036

Note: Figures in parentheses are based on 25-49 unweighted cases.

[1] Includes mothers with two injections during the pregnancy of their most recent live birth, or two or more injections (the last within 3 years of the most recent live birth), or three or more injections (the last within 5 years of the most recent live birth), or four or more injections (the last within 10 years of the most recent live birth), or five or more injections at any time prior to the most recent birth

Table 9.5 Place of delivery

Percent distribution of live births in the 5 years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, South Africa DHS 2016

Background characteristic	Health facility		Home	Other	Total	Percentage delivered in a health facility	Number of births
	Public sector	Private sector					
Mother's age at birth							
<20	96.3	1.2	2.4	0.1	100.0	97.5	549
20-34	87.4	8.7	3.6	0.4	100.0	96.0	2,574
35-49	77.1	16.5	5.7	0.7	100.0	93.6	449
Birth order							
1	90.8	7.5	1.7	0.1	100.0	98.3	1,281
2-3	85.7	10.4	3.3	0.6	100.0	96.1	1,817
4-5	86.8	4.1	8.8	0.3	100.0	90.9	370
6+	78.5	3.2	16.7	1.6	100.0	81.7	104
Antenatal care visits[1]							
None	83.9	8.3	7.8	0.0	100.0	92.2	173
1-3	88.3	5.6	5.9	0.2	100.0	93.9	470
4+	87.4	9.5	2.6	0.4	100.0	96.9	2,292
Don't know number of visits	85.8	8.4	5.8	0.0	100.0	94.2	101
Residence							
Urban	85.9	11.1	2.7	0.2	100.0	97.1	2,281
Non-urban	90.1	3.8	5.3	0.8	100.0	93.9	1,291
Province							
Western Cape	84.6	14.3	1.2	0.0	100.0	98.8	313
Eastern Cape	83.6	7.7	7.0	1.7	100.0	91.3	398
Northern Cape	91.8	5.6	2.7	0.0	100.0	97.3	69
Free State	88.7	7.3	4.0	0.0	100.0	96.0	164
KwaZulu-Natal	87.8	7.6	4.3	0.2	100.0	95.4	654
North West	86.7	8.7	3.6	1.0	100.0	95.4	282
Gauteng	86.7	10.2	2.9	0.2	100.0	96.9	1,013
Mpumalanga	90.3	5.0	4.5	0.2	100.0	95.3	332
Limpopo	92.4	5.1	2.5	0.0	100.0	97.5	347
Mother's education							
No education	85.9	0.0	10.5	3.6	100.0	85.9	50
Primary incomplete	89.5	0.3	9.0	1.2	100.0	89.8	182
Primary complete	94.6	0.0	4.8	0.5	100.0	94.6	138
Secondary incomplete	94.0	1.5	4.3	0.3	100.0	95.4	1,762
Secondary complete	85.8	11.5	2.4	0.4	100.0	97.2	1,043
More than secondary	59.6	39.8	0.5	0.2	100.0	99.4	397
Wealth quintile							
Lowest	91.4	0.2	7.4	1.0	100.0	91.6	787
Second	94.3	0.9	4.6	0.2	100.0	95.2	865
Middle	94.8	3.4	1.5	0.3	100.0	98.2	788
Fourth	86.7	10.3	2.8	0.3	100.0	96.9	657
Highest	57.4	42.0	0.6	0.0	100.0	99.4	476
Total	87.4	8.5	3.7	0.4	100.0	95.9	3,572

[1] Includes only the most recent birth in the 5 years preceding the survey

Table 9.6 Assistance during delivery

Percent distribution of live births in the 5 years preceding the survey by person providing assistance during delivery, and percentage of births assisted by a skilled provider, according to background characteristics, South Africa DHS 2016

Background characteristic	Person providing assistance during delivery					Total	Percentage delivered by a skilled provider[1]	Number of births
	Doctor	Nurse/ midwife	Traditional birth attendant	Relative/ friend/other	No one			
Mother's age at birth								
<20	24.2	73.6	0.1	0.8	1.3	100.0	97.8	549
20-34	27.7	69.2	0.1	2.0	1.0	100.0	96.9	2,574
35-49	40.4	54.0	0.2	2.8	2.6	100.0	94.4	449
Birth order								
1	29.7	68.5	0.2	1.0	0.6	100.0	98.2	1,281
2-3	29.9	67.2	0.1	2.0	0.8	100.0	97.1	1,817
4-5	23.0	69.9	0.1	3.5	3.5	100.0	92.9	370
6+	15.8	68.7	0.0	7.2	8.3	100.0	84.5	104
Antenatal care visits[2]								
None	28.1	62.9	0.0	4.4	4.6	100.0	91.0	173
1-3	20.4	75.1	0.2	2.7	1.6	100.0	95.5	470
4+	31.1	66.3	0.2	1.5	0.9	100.0	97.4	2,292
Don't know number of visits	30.9	66.2	0.0	2.9	0.0	100.0	97.1	101
Place of delivery								
Health facility	29.9	69.7	0.1	0.1	0.3	100.0	99.5	3,427
Public facility	24.3	75.2	0.1	0.1	0.3	100.0	99.5	3,123
Private facility	87.6	12.1	0.0	0.0	0.3	100.0	99.7	304
Elsewhere	2.1	28.2	1.7	44.5	23.6	100.0	30.2	145
Residence								
Urban	31.5	66.4	0.0	0.8	1.3	100.0	97.9	2,281
Non-urban	23.9	70.8	0.3	3.8	1.2	100.0	94.6	1,291
Province								
Western Cape	48.0	51.2	0.0	0.5	0.3	100.0	99.2	313
Eastern Cape	28.6	64.2	0.0	5.3	2.0	100.0	92.7	398
Northern Cape	41.1	56.5	0.0	2.4	0.0	100.0	97.6	69
Free State	41.4	54.8	0.6	2.5	0.6	100.0	96.3	164
KwaZulu-Natal	31.7	64.7	0.3	2.1	1.1	100.0	96.4	654
North West	29.0	67.0	0.0	3.3	0.7	100.0	96.0	282
Gauteng	23.0	74.6	0.0	0.7	1.7	100.0	97.6	1,013
Mpumalanga	20.7	75.8	0.0	1.4	2.1	100.0	96.4	332
Limpopo	21.7	76.1	0.6	1.5	0.2	100.0	97.8	347
Mother's education								
No education	18.2	70.3	0.0	8.3	3.2	100.0	88.5	50
Primary incomplete	19.1	71.2	0.3	6.4	2.9	100.0	90.4	182
Primary complete	22.5	72.6	0.7	2.8	1.4	100.0	95.1	138
Secondary incomplete	21.9	74.2	0.2	2.2	1.5	100.0	96.1	1,762
Secondary complete	32.3	66.5	0.1	0.7	0.4	100.0	98.8	1,043
More than secondary	57.7	40.7	0.0	0.7	0.9	100.0	98.4	397
Wealth quintile								
Lowest	18.1	74.5	0.5	4.2	2.7	100.0	92.6	787
Second	22.5	73.9	0.0	2.1	1.6	100.0	96.3	865
Middle	23.8	74.6	0.1	0.6	0.8	100.0	98.4	788
Fourth	36.0	62.5	0.0	1.5	0.0	100.0	98.5	657
Highest	55.9	43.0	0.0	0.5	0.6	100.0	98.9	476
Total	28.7	68.0	0.1	1.9	1.2	100.0	96.7	3,572

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.

[1] Skilled provider includes doctor and nurse/midwife

[2] Includes only the most recent birth in the 5 years preceding the survey

Table 9.7 Caesarean section

Percentage of live births in the 5 years preceding the survey delivered by caesarean section (C-section), percentage delivered by C-section planned before the onset of labour pains, and percentage delivered by C-section decided on after the onset of labour pains, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage delivered by C-section	Timing of decision to conduct C-section		Number of births
		Planned before onset of labour pains	Decided on after onset of labour pains	
Mother's age at birth				
<20	24.8	13.0	11.8	549
20-34	23.3	15.7	7.6	2,574
35-49	28.8	21.0	7.8	449
Birth order				
1	25.1	14.1	11.0	1,281
2-3	26.4	19.0	7.5	1,817
4-5	14.2	9.8	4.4	370
6+	10.5	7.7	2.8	104
Antenatal care visits[1]				
None	22.3	16.6	5.7	173
1-3	20.5	12.2	8.3	470
4+	25.4	16.4	9.0	2,292
Don't know number of visits	27.5	16.3	11.2	101
Place of delivery				
Health facility	25.2	16.6	8.6	3,427
Public facility	21.7	13.1	8.7	3,123
Private facility	61.3	52.9	8.3	304
Residence				
Urban	25.9	17.8	8.1	2,281
Non-urban	21.2	12.6	8.5	1,291
Province				
Western Cape	29.5	17.7	11.8	313
Eastern Cape	22.7	13.1	9.6	398
Northern Cape	24.0	12.6	11.4	69
Free State	26.5	20.9	5.6	164
KwaZulu-Natal	29.1	22.3	6.8	654
North West	22.7	13.6	9.1	282
Gauteng	22.5	14.4	8.1	1,013
Mpumalanga	24.7	16.0	8.7	332
Limpopo	16.8	10.2	6.6	347
Mother's education				
No education	15.2	8.2	7.0	50
Primary incomplete	21.5	15.9	5.6	182
Primary complete	19.4	12.4	7.0	138
Secondary incomplete	20.7	12.2	8.5	1,762
Secondary complete	25.6	17.2	8.4	1,043
More than secondary	40.0	31.2	8.8	397
Wealth quintile				
Lowest	17.2	10.1	7.1	787
Second	19.7	11.3	8.4	865
Middle	20.8	13.8	7.0	788
Fourth	31.7	20.4	11.3	657
Highest	39.1	31.3	7.9	476
Total	24.2	15.9	8.3	3,572

Note: The question on C-section was asked only of women who delivered in a health facility. In this table, it is assumed that women who did not give birth in health facility did not receive a C-section.
[1] Includes only the most recent birth in the 5 years preceding the survey

Table 9.8 Duration of stay in health facility after birth

Among women with a birth in the 5 years preceding the survey who delivered their most recent live birth in a health facility, percent distribution by duration of stay in the health facility following their most recent live birth, according to type of delivery, South Africa DHS 2016

Type of delivery	<6 hours	6-11 hours	12-23 hours	1-2 days	3+ days	Don't know	Total	Number of women
Vaginal birth	12.3	13.3	10.5	49.6	14.0	0.3	100.0	2,172
Caesarean section	4.5	1.1	0.6	17.0	75.8	1.0	100.0	745

Table 9.9 Timing of first postnatal check for the mother

Among women age 15-49 giving birth in the 2 years preceding the survey, percent distribution of the mother's first postnatal check for the most recent live birth by time after delivery, and percentage of women with a live birth during the 2 years preceding the survey who received a postnatal check in the first 2 days after giving birth, according to background characteristics, South Africa DHS 2016

Background characteristic	Time after delivery of mother's first postnatal check[1]						No postnatal check[2]	Total	Percentage of women with a postnatal check during the first 2 days after birth[1]	Number of women
	Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know				
Age at birth										
<20	71.2	8.8	2.6	3.7	1.2	5.0	7.6	100.0	82.6	202
20-34	73.3	7.3	2.2	2.7	0.9	6.5	7.2	100.0	82.7	1,002
35-49	72.7	13.1	3.5	0.6	0.4	4.7	5.0	100.0	89.3	182
Birth order										
1	72.6	8.4	1.2	3.9	1.3	4.4	8.1	100.0	82.3	488
2-3	75.2	7.0	2.4	2.2	0.7	6.5	6.1	100.0	84.5	716
4-5	64.9	12.9	5.5	0.7	0.5	9.0	6.4	100.0	83.3	149
6+	(64.1)	(11.6)	(7.0)	(0.0)	(0.0)	(6.4)	(10.9)	100.0	(82.7)	33
Place of delivery										
Health facility	73.9	8.1	2.3	2.7	0.9	6.0	6.2	100.0	84.3	1,332
Elsewhere	47.5	12.2	6.4	0.0	1.5	7.8	24.6	100.0	66.0	54
Residence										
Urban	75.6	7.1	2.5	2.5	0.5	5.6	6.2	100.0	85.2	872
Non-urban	68.3	10.2	2.3	2.6	1.5	6.8	8.2	100.0	80.8	514
Province										
Western Cape	83.5	5.3	1.9	0.0	1.0	5.8	2.5	100.0	90.8	118
Eastern Cape	72.7	12.3	1.7	0.0	1.1	2.9	9.3	100.0	86.7	163
Northern Cape	69.3	9.4	3.6	3.3	1.0	2.7	10.7	100.0	82.3	27
Free State	81.3	5.5	4.1	5.7	0.0	1.8	1.7	100.0	90.8	60
KwaZulu-Natal	71.0	6.5	2.6	2.4	2.5	9.2	5.8	100.0	80.1	258
North West	74.3	7.8	2.4	4.3	1.0	7.3	2.9	100.0	84.5	106
Gauteng	73.6	5.3	1.9	2.9	0.3	5.8	10.2	100.0	80.8	385
Mpumalanga	65.4	10.7	4.4	3.3	0.6	8.2	7.5	100.0	80.5	127
Limpopo	68.8	16.1	2.2	3.5	0.0	4.3	5.1	100.0	87.1	144
Education										
No education	*	*	*	*	*	*	*	100.0	*	18
Primary incomplete	56.4	12.3	7.1	0.0	0.0	3.6	20.6	100.0	75.8	60
Primary complete	58.0	6.5	1.0	1.6	0.0	17.0	15.9	100.0	65.5	50
Secondary incomplete	74.4	8.5	2.3	2.7	0.7	5.6	5.8	100.0	85.2	706
Secondary complete	72.8	8.3	0.9	2.1	1.9	6.6	7.3	100.0	82.0	397
More than secondary	78.6	5.9	3.8	4.5	0.0	4.2	2.9	100.0	88.3	155
Wealth quintile										
Lowest	64.3	13.6	2.7	1.3	0.6	4.8	12.7	100.0	80.6	312
Second	71.3	6.5	2.6	2.9	0.4	8.4	7.9	100.0	80.4	326
Middle	78.4	6.5	2.2	2.3	2.4	6.2	2.1	100.0	87.1	291
Fourth	76.9	6.5	1.4	2.7	0.5	6.4	5.5	100.0	84.8	269
Highest	75.8	7.7	3.4	4.4	0.4	3.2	5.2	100.0	86.8	189
Total	72.9	8.2	2.4	2.6	0.9	6.0	6.9	100.0	83.6	1,386

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes women who received a check from a doctor, nurse/midwife, community health worker, or traditional birth attendant

[2] Includes women who received a check after 41 days

Table 9.10 Type of provider of first postnatal check for the mother

Among women age 15-49 giving birth in the 2 years preceding the survey, percent distribution by type of provider of the mother's first postnatal health check during the 2 days after the most recent live birth, according to background characteristics, South Africa DHS 2016

Background characteristic	Type of health provider of mother's first postnatal check				No postnatal check during the first 2 days after birth	Total	Number of women
	Doctor	Nurse/midwife	Community health worker	Traditional birth attendant			
Age at birth							
<20	15.8	66.8	0.0	0.0	17.4	100.0	202
20-34	19.7	62.9	0.2	0.0	17.3	100.0	1,002
35-49	31.8	55.6	0.0	1.9	10.7	100.0	182
Birth order							
1	17.6	64.7	0.0	0.0	17.7	100.0	488
2-3	22.6	61.2	0.3	0.5	15.5	100.0	716
4-5	19.2	63.9	0.3	0.0	16.7	100.0	149
6+	(30.9)	(51.8)	(0.0)	(0.0)	(17.3)	100.0	33
Place of delivery							
Health facility	20.9	63.1	0.0	0.3	15.7	100.0	1,332
Elsewhere	16.5	46.5	3.1	0.0	34.0	100.0	54
Residence							
Urban	21.4	63.2	0.2	0.4	14.8	100.0	872
Non-urban	19.5	61.2	0.1	0.0	19.2	100.0	514
Province							
Western Cape	23.8	67.0	0.0	0.0	9.2	100.0	118
Eastern Cape	16.2	70.4	0.0	0.0	13.3	100.0	163
Northern Cape	23.0	59.4	0.0	0.0	17.7	100.0	27
Free State	38.7	51.4	0.8	0.0	9.2	100.0	60
KwaZulu-Natal	18.3	61.3	0.5	0.0	19.9	100.0	258
North West	22.6	61.9	0.0	0.0	15.5	100.0	106
Gauteng	19.7	60.2	0.0	0.9	19.2	100.0	385
Mpumalanga	15.8	64.7	0.0	0.0	19.5	100.0	127
Limpopo	25.0	61.6	0.5	0.0	12.9	100.0	144
Education							
No education	*	*	*	*	*	100.0	18
Primary incomplete	12.3	62.7	0.8	0.0	24.2	100.0	60
Primary complete	20.4	45.1	0.0	0.0	34.5	100.0	50
Secondary incomplete	17.1	67.5	0.1	0.5	14.8	100.0	706
Secondary complete	21.2	60.5	0.3	0.0	18.0	100.0	397
More than secondary	35.8	52.5	0.0	0.0	11.7	100.0	155
Wealth quintile							
Lowest	15.1	65.3	0.1	0.0	19.4	100.0	312
Second	18.6	61.6	0.2	0.0	19.6	100.0	326
Middle	16.3	70.3	0.4	0.0	12.9	100.0	291
Fourth	23.6	60.0	0.0	1.3	15.2	100.0	269
Highest	36.1	50.8	0.0	0.0	13.2	100.0	189
Total	20.7	62.5	0.2	0.2	16.4	100.0	1,386

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 9.11 Timing of first postnatal check for the newborn

Percent distribution of most recent live births in the 2 years preceding the survey by time after birth of first postnatal check, and percentage of births with a postnatal check during the first 2 days after birth, according to background characteristics, South Africa DHS 2016

Background characteristic	Time after delivery of newborn's first postnatal check[1]						No postnatal check[2]	Total	Percentage of births with a postnatal check during the first 2 days after birth[1]	Number of births
	Less than 1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days	Don't know				
Mother's age at birth										
<20	54.1	23.4	7.8	1.6	3.8	5.1	4.2	100.0	86.8	202
20-34	46.7	32.7	4.5	1.7	2.2	6.1	6.0	100.0	85.6	1,002
35-49	53.2	28.4	4.2	3.2	0.9	5.2	4.9	100.0	88.9	182
Birth order										
1	50.0	29.6	5.8	1.6	3.4	5.8	3.9	100.0	86.9	488
2-3	49.6	32.3	3.8	1.4	1.1	5.3	6.4	100.0	87.1	716
4-5	42.5	27.6	7.0	4.1	4.0	8.1	6.7	100.0	81.2	149
6+	(32.8)	(33.1)	(8.0)	(6.3)	(4.1)	(7.2)	(8.5)	100.0	(80.2)	33
Place of delivery										
Health facility	50.5	31.4	4.9	1.6	1.7	5.8	4.2	100.0	88.3	1,332
Elsewhere	3.1	16.9	6.3	9.5	17.5	6.3	40.5	100.0	35.8	54
Residence										
Urban	51.6	31.7	3.5	1.4	2.3	5.5	4.0	100.0	88.2	872
Non-urban	43.5	29.3	7.5	2.6	2.3	6.4	8.3	100.0	83.0	514
Province										
Western Cape	42.5	43.7	3.4	4.3	1.4	3.3	1.4	100.0	93.8	118
Eastern Cape	49.4	29.1	7.4	2.0	2.1	1.6	8.5	100.0	87.8	163
Northern Cape	67.5	19.1	0.9	0.8	2.8	1.8	7.1	100.0	88.3	27
Free State	61.0	24.1	3.6	1.1	3.1	5.5	1.6	100.0	89.8	60
KwaZulu-Natal	40.2	34.0	5.2	2.5	0.5	10.0	7.6	100.0	81.9	258
North West	41.7	37.8	4.7	0.0	3.5	6.5	5.9	100.0	84.2	106
Gauteng	52.7	31.3	0.9	1.2	2.1	6.7	5.0	100.0	86.2	385
Mpumalanga	62.3	14.6	6.8	0.4	4.5	4.6	6.7	100.0	84.1	127
Limpopo	41.0	29.5	13.7	3.6	3.8	4.4	4.0	100.0	87.8	144
Mother's education										
No education	*	*	*	*	*	*	*	100.0	*	18
Primary incomplete	41.8	25.4	4.4	3.3	0.0	2.4	22.6	100.0	74.9	60
Primary complete	30.2	40.8	6.5	0.0	1.4	18.2	3.0	100.0	77.4	50
Secondary incomplete	49.5	29.4	6.3	1.4	2.0	6.2	5.1	100.0	86.6	706
Secondary complete	49.5	31.6	3.3	1.4	3.5	5.5	5.3	100.0	85.7	397
More than secondary	49.7	37.0	2.5	4.4	1.6	2.6	2.3	100.0	93.6	155
Wealth quintile										
Lowest	43.2	25.9	10.2	2.0	2.8	5.7	10.1	100.0	81.4	312
Second	52.3	25.9	4.6	2.2	1.0	8.1	5.8	100.0	85.1	326
Middle	44.9	35.6	3.4	1.5	3.7	5.6	5.4	100.0	85.3	291
Fourth	52.2	33.1	3.3	1.9	2.2	4.0	3.3	100.0	90.5	269
Highest	51.6	36.9	1.5	1.7	1.7	5.1	1.5	100.0	91.7	189
Total	48.6	30.8	5.0	1.9	2.3	5.8	5.6	100.0	86.2	1,386

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes newborns who received a check from a doctor, nurse/midwife, community health worker, or traditional birth attendant

[2] Includes newborns who received a check after the first week of life

Table 9.12 Type of provider of first postnatal check for the newborn

Percent distribution of most recent live births in the 2 years preceding the survey by type of provider of the newborn's first postnatal health check during the 2 days after the most recent live birth, according to background characteristics, South Africa DHS 2016

Background characteristic	Type of health provider of newborn's first postnatal check				No postnatal check during the first 2 days after birth	Total	Number of births
	Doctor/ paediatrician	Nurse/midwife	Community health worker	Traditional birth attendant			
Mother's age at birth							
<20	21.1	65.8	0.0	0.0	13.2	100.0	202
20-34	22.2	63.4	0.0	0.0	14.4	100.0	1,002
35-49	35.9	53.0	0.0	0.0	11.1	100.0	182
Birth order							
1	22.2	64.8	0.0	0.0	13.1	100.0	488
2-3	25.3	61.8	0.0	0.0	12.9	100.0	716
4-5	23.3	57.6	0.3	0.0	18.8	100.0	149
6+	(18.8)	(61.4)	(0.0)	(0.0)	(19.8)	100.0	33
Place of delivery							
Health facility	24.6	63.7	0.0	0.0	11.7	100.0	1,332
Elsewhere	4.6	30.3	0.9	0.0	64.2	100.0	54
Residence							
Urban	26.2	61.9	0.1	0.0	11.8	100.0	872
Non-urban	19.8	63.2	0.0	0.0	17.0	100.0	514
Province							
Western Cape	36.7	57.1	0.0	0.0	6.2	100.0	118
Eastern Cape	18.9	68.9	0.0	0.0	12.2	100.0	163
Northern Cape	30.5	57.8	0.0	0.0	11.7	100.0	27
Free State	35.0	54.0	0.8	0.0	10.2	100.0	60
KwaZulu-Natal	20.7	61.2	0.0	0.0	18.1	100.0	258
North West	26.8	57.3	0.0	0.0	15.8	100.0	106
Gauteng	22.5	63.7	0.0	0.0	13.8	100.0	385
Mpumalanga	23.3	60.8	0.0	0.0	15.9	100.0	127
Limpopo	20.2	67.6	0.0	0.0	12.2	100.0	144
Mother's education							
No education	*	*	*	*	*	100.0	18
Primary incomplete	12.0	62.2	0.8	0.0	25.1	100.0	60
Primary complete	16.5	60.9	0.0	0.0	22.6	100.0	50
Secondary incomplete	20.6	66.0	0.0	0.0	13.4	100.0	706
Secondary complete	24.3	61.4	0.0	0.0	14.3	100.0	397
More than secondary	41.6	52.0	0.0	0.0	6.4	100.0	155
Wealth quintile							
Lowest	13.7	67.5	0.1	0.0	18.6	100.0	312
Second	17.6	67.5	0.0	0.0	14.9	100.0	326
Middle	19.7	65.6	0.0	0.0	14.7	100.0	291
Fourth	32.7	57.8	0.0	0.0	9.5	100.0	269
Highest	44.9	46.8	0.0	0.0	8.3	100.0	189
Total	23.8	62.4	0.0	0.0	13.8	100.0	1,386

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 9.13 Content of postnatal care for newborns

Among most recent live births in the 2 years preceding the survey, percentage for whom selected functions were performed during the first 2 days after the birth and percentages with at least two or at least four signal functions performed during the first 2 days after the birth, according to background characteristics, South Africa DHS 2016

Background characteristic	Among most recent live births in the 2 years preceding the survey, percentage for whom the selected function was performed during the first 2 days after the birth:						Percentage with at least two signal functions performed during the first 2 days after birth	Percentage with at least four signal functions performed during the first 2 days after birth	Number of births
	Cord examined	Temperature measured	Counselling on danger signs	Counselling on breast-feeding	Observation of breast-feeding	Weighed[1]			
Mother's age at birth									
<20	90.5	88.6	75.6	82.9	78.9	88.1	92.3	85.5	202
20-34	86.3	86.8	76.4	81.1	77.2	92.2	89.6	83.6	1,002
35-49	85.5	85.8	79.8	86.9	77.1	93.1	91.4	88.1	182
Birth order									
1	89.6	89.5	76.0	82.7	77.9	90.7	92.6	85.0	488
2-3	86.6	86.5	78.1	83.0	78.3	93.0	89.8	85.5	716
4-5	80.3	81.1	72.1	76.0	71.4	90.6	84.6	78.7	149
6+	(80.7)	(86.1)	(79.1)	(83.3)	(79.3)	(82.3)	(87.9)	(83.3)	33
Place of delivery									
Health facility	87.6	87.8	77.5	83.0	78.1	92.3	91.0	85.3	1,332
Elsewhere	68.2	67.5	58.2	62.6	62.7	77.7	71.1	64.5	54
Residence									
Urban	85.8	85.5	75.6	79.7	75.4	91.6	88.5	82.8	872
Non-urban	88.6	89.5	78.7	86.3	81.0	91.8	93.0	87.4	514
Province									
Western Cape	91.6	91.6	78.5	85.5	86.9	95.9	96.2	84.9	118
Eastern Cape	84.8	86.2	66.4	85.6	81.8	95.3	93.0	85.1	163
Northern Cape	88.0	86.7	75.4	87.7	82.1	85.6	90.9	86.5	27
Free State	93.2	94.0	74.3	88.3	80.6	95.4	95.6	92.0	60
KwaZulu-Natal	95.4	95.2	93.1	91.7	87.6	92.6	98.7	95.6	258
North West	88.1	91.3	77.2	78.9	74.4	94.1	92.7	85.2	106
Gauteng	77.4	76.8	70.0	72.4	67.2	89.2	78.5	76.1	385
Mpumalanga	79.8	81.6	64.3	69.9	62.2	85.0	85.8	70.4	127
Limpopo	97.5	95.3	87.4	94.1	87.6	93.1	97.8	94.6	144
Mother's education									
No education	*	*	*	*	*	*	*	*	18
Primary incomplete	76.2	78.8	68.6	79.4	78.5	80.5	82.0	77.0	60
Primary complete	94.5	95.1	94.6	96.1	94.1	82.2	97.1	96.1	50
Secondary incomplete	87.4	87.2	76.3	82.0	77.6	89.5	90.3	84.3	706
Secondary complete	88.7	88.8	77.7	84.2	79.9	96.8	92.6	87.2	397
More than secondary	84.7	84.9	75.8	77.2	67.0	96.5	87.1	81.3	155
Wealth quintile									
Lowest	86.7	88.4	76.7	83.8	83.2	89.3	92.0	84.5	312
Second	85.8	86.0	76.7	82.4	77.6	89.0	88.9	84.2	326
Middle	87.0	86.4	80.1	79.2	74.9	92.2	89.5	85.6	291
Fourth	87.4	86.9	75.6	83.4	77.1	94.0	89.0	84.1	269
Highest	87.8	87.1	73.3	81.7	72.2	96.3	92.2	83.9	189
Total	86.8	87.0	76.7	82.2	77.5	91.7	90.2	84.5	1,386

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Captures newborns who were weighed "at birth." May exclude some newborns who were weighed during the 2 days after birth

Table 9.14 Discharge timing

Percentage of most recent live births in the 5 years preceding the survey that took place in a health facility in which the child and mother were discharged at the same time, percentage in which the child was discharged before the mother, and percentage in which the child was discharged after the mother, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage discharged at same time as mother	Percentage discharged before the mother	Percentage discharged after the mother	Number of births in a health facility
Age at birth				
<20	95.9	1.3	2.8	421
20-34	94.5	0.6	4.9	2,119
35-49	89.6	1.6	8.3	377
Birth order				
1	93.5	0.6	5.8	1,025
2-3	94.3	0.6	4.9	1,525
4-5	94.0	2.7	3.3	300
6+	97.6	0.0	2.4	67
Residence				
Urban	92.0	0.7	7.1	1,888
Non-urban	97.7	0.9	1.2	1,029
Province				
Western Cape	91.3	3.2	5.6	272
Eastern Cape	95.5	0.9	3.7	305
Northern Cape	95.5	1.0	3.0	59
Free State	93.5	0.5	4.6	139
KwaZulu-Natal	97.5	0.9	1.5	532
North West	95.9	0.4	3.3	232
Gauteng	89.8	0.0	10.2	818
Mpumalanga	94.3	1.2	4.2	265
Limpopo	99.0	0.8	0.3	295
Education				
No education	(100.0)	(0.0)	(0.0)	36
Primary incomplete	94.5	0.7	4.8	126
Primary complete	99.7	0.0	0.3	103
Secondary incomplete	94.8	1.0	4.1	1,423
Secondary complete	94.1	0.8	5.0	881
More than secondary	88.5	0.7	10.8	349
Wealth quintile				
Lowest	96.5	0.8	2.7	599
Second	95.8	1.2	3.0	703
Middle	95.0	0.9	4.0	661
Fourth	94.5	0.4	4.8	540
Highest	85.4	0.8	13.7	415
Total	94.0	0.8	5.0	2,917

Note: Figures in parentheses are based on 25-49 unweighted cases.

CHILD HEALTH 10

Key Findings

- ***Birth weight:*** Among births in the last 5 years with a reported birth weight, 15% had a low birth weight (less than 2.5 kg).
- ***Vaccinations:*** Overall, 61% of children age 12-23 months received all basic vaccinations, and 53% received all age-appropriate vaccinations. However, among the 66% of children in this age group whose vaccination card was seen, 89% received all basic vaccinations and 79% received all age-appropriate vaccinations.
- ***Symptoms of acute respiratory infection (ARI):*** 3% of children under age 5 had symptoms of ARI during the 2 weeks before the survey. Advice or treatment was sought for 88% of children with ARI symptoms; advice or treatment was sought for 31% of children the same day or the day after symptoms appeared.
- ***Fever:*** 20% of children under age 5 had a fever in the 2 weeks before the survey. Sixty-eight percent of these children were taken for advice or treatment; for 31% of children with a fever, advice or treatment was sought the same day or the day after the fever appeared.
- ***Diarrhoea:*** 10% of children under age 5 had diarrhoea in the 2 weeks before the survey, and advice or treatment was sought for 63% of these children. Eighty-three percent of children with diarrhoea received ORT. However, only 24% received ORT, continued feeding, and zinc, as recommended.

Information on child health and survival can help policymakers and programme managers assess the efficacy of current strategies, formulate appropriate interventions to prevent deaths from childhood illnesses, and improve the health of children in South Africa.

This chapter presents information on birth weight and vaccination status for young children. It also looks at the prevalence of, and treatment practices for, three common childhood illnesses: acute respiratory infection (ARI), fever, and diarrhoea.

10.1 BIRTH WEIGHT

Low birth weight

Percentage of births with a reported birth weight below 2.5 kilograms regardless of gestational age

Sample: Live births in the 5 years before the survey that have a reported birth weight, from either a written record or a mother's report

Birth weight is a major determinant of infant and child health and mortality. Children who weigh less than 2.5 kilograms (kg) at birth or who are reported to be very small or smaller than average are considered to have a higher than average risk of early childhood death. For births in the 5 years preceding the survey, birth weight was recorded in the questionnaire if available from either a written record or the mother's recall. Because birth weight may not be known for many babies, mothers' estimates of their baby's size at birth were also obtained. Although these estimates are subjective, they can be a useful proxy for birth weight.

Eighty-four percent of births were reported as average or larger than average, 8% as small, and 7% as very small. Of the 88% of births with a reported birth weight, 15% had a birth weight of less than 2.5 kg (**Table 10.1**).

Patterns by background characteristics

- Nineteen percent of births to older mothers (age 35-49) weighed less than 2.5 kg, as compared with 14% of births to mothers younger than age 35.
- Twenty-seven percent of births to women who smoke cigarettes or tobacco weighed less than 2.5 kg, compared with 14% of births to women who do not smoke.
- By province, the proportion of infants with a low birth weight was highest in Northern Cape (20%) and lowest in Limpopo (11%).
- Although infants born to wealthier and better educated mothers were generally more likely to have a reported birth weight, the prevalence of low birth weight did not appear to be correlated with household wealth or mother's education.

10.2 VACCINATION OF CHILDREN

Universal immunisation of children against common vaccine-preventable diseases is crucial to reducing infant and child morbidity and mortality. In South Africa, routine childhood vaccines protect against tuberculosis (BCG vaccine); diphtheria, tetanus, and pertussis (DTaP vaccine); polio (oral polio vaccine [OPV] or inactivated polio vaccine [IPV]); *Haemophilus influenzae* type b (Hib vaccine); hepatitis B (HepB vaccine); *Streptococcus pneumoniae* (pneumococcal conjugate vaccine [PCV]); rotavirus (rotavirus vaccine [RV]); and measles (measles vaccine). The SADHS 2016 collected information on coverage of all of these vaccines among children born in the 3 years preceding the survey.

Historically, an important measure of vaccination coverage has been the proportion of children receiving all "basic" vaccinations. Children are considered to have received all basic vaccinations if they have received the BCG vaccine, three doses each of the DTaP and polio vaccines, and a single dose of the measles vaccine. In South Africa, the BCG vaccine is usually given at birth or at first clinic contact, while the DTaP and polio

vaccines are given in combination with Hib (DTaP-IPV-Hib) at approximately age 6, 10, and 14 weeks.[1] A first measles vaccination should be given at or soon after age 9 months.[2]

All basic vaccinations coverage

Percentage of children who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report). To have received all basic vaccinations, a child must receive at least:

- One dose of BCG vaccine, which protects against tuberculosis
- Three doses of DTaP vaccine, which protects against diphtheria, tetanus, and pertussis (whooping cough)
- Three doses of polio vaccine
- One dose of measles vaccine

Sample: Living children age 12-23 months or age 24-35 months

Information on vaccination coverage was obtained in two ways in the SADHS 2016: from written vaccination records, including the Road-to-Health booklet and other vaccination or health cards, and from verbal reports. For each child born in the 3 years before the survey, mothers were asked to show the interviewer the Road-to-Health booklet or other document used for recording the child's immunisations. If the Road-to-Health booklet or other document was available, the interviewer copied the dates of each vaccination received. If a vaccination was not recorded in the Road-to-Health booklet or on the document as having been administered, the mother was asked to recall whether that particular vaccination had been given. If the mother was not able to present the Road-to-Health booklet or other document for a child, she was asked to recall whether the child had received the BCG, polio, DTaP-IPV-Hib, hepatitis B, pneumococcal, rotavirus, and measles vaccines. If she indicated that the child had received any of the multi-dose vaccines, she was asked the number of doses the child received.

Sixty-one percent of children age 12-23 months and 63% of children age 24-35 months received all basic vaccinations, with 58% of those age 12-23 months and 56% of those age 24-35 months having received all basic vaccinations by age 12 months (**Table 10.2**).

A second, more critical measure of vaccination coverage is the proportion of children age 12-23 months and 24-35 months who have received all age-appropriate vaccinations. The South African immunisation programme considers a child age 12-23 months to have received all age-appropriate vaccinations if the child has received all basic vaccinations, doses of OPV at birth and at 6 weeks, three doses of the HepB vaccine (given at age 6, 10, and 14 weeks), three doses of PCV (given at age 6 weeks, 14 weeks, and 9 months), and two doses of RV (given at age 6 and 14 weeks). Children age 24-35 months have received all age-appropriate vaccinations if they have received a fourth dose of DTaP-IPV-Hib and a second dose of the measles vaccine (both given at 18 months) in addition to all of the age-appropriate vaccinations relevant for a child age 12-23 months. Fifty-three percent of children age 12-23 months and 42% of children age 24-35 months have received all of the vaccines appropriate for their age. Forty-eight percent of children age 12-23 months and 35% of those age 24-35 months received the vaccines appropriate for their age by age 12 months and by age 24 months, respectively, as recommended.

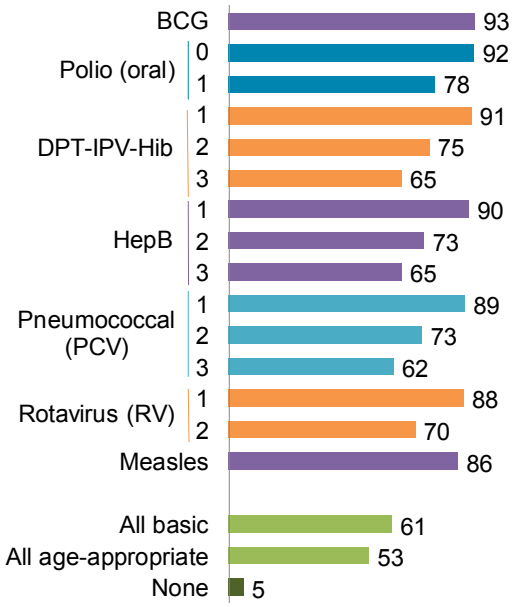
[1] Effective 1 December 2015, DTaP-IPV-Hib was replaced with DTaP-IPV-Hib-HepB.

[2] Effective 1 December 2015, the recommended schedule of childhood vaccinations changed, and children born after that date should receive the first dose of the measles vaccine at 6 months and the second dose at 12 months. However, given the timing of the SADHS fieldwork, children eligible for the new vaccination schedule would be too young to be part of the 12-23 or 24-35 month age cohorts for whom data are presented in this chapter.

Figure 10.1 shows coverage of all age-appropriate vaccinations among children age 12-23 months. Coverage was highest for the BCG vaccine (93%) and the birth dose of polio vaccine (92%). In the case of multi-dose vaccines such as DTaP-IPV-Hib, HepB, PCV, and RV, coverage is highest for the first dose and falls in subsequent doses. Coverage rates for the first doses of DTaP-IPV-Hib, HepB, PCV, and RV were 91%, 90%, 89%, and 88%, respectively. Sixty-five percent of children age 12-23 months received the third dose of DTaP-IPV-Hib, 65% received the third dose of HepB, 62% received the third dose of PCV, and 70% received the second dose of RV. The difference between the percentages of children receiving the first and third doses is 26 percentage points for DTaP-IPV-Hib, 25 percentage points for HepB, and 27 percentage points for PCV; the difference between the percentages of children receiving the first and second doses of RV is 18 percentage points.

***Figure 10.1* All age-appropriate childhood vaccinations**

Percentage of children age 12-23 months vaccinated at any time before the survey



A similar pattern is observed among children age 24-35 months, although coverage for first doses is slightly lower than that reported among children age 12-23 months. Coverage rates for the two vaccine doses given at age 18 months, namely, the fourth dose of DTaP-IPV-Hib and the second measles dose, are 48% and 59%, respectively (**Table 10.2**).

Overall, 5% of children age 12-23 months and 8% of those age 24-35 months were reported not to have received any vaccinations. No child whose vaccination card was seen was unimmunised.

Vaccination Card Ownership and Availability

Vaccination cards are a critical tool in ensuring that a child receives all recommended vaccinations on schedule. Among children age 12-23 months and 24-35 months whose mothers were interviewed, 98% and 99%, respectively, ever had a Road-to-Health card or other document on which their vaccinations were recorded. However, not all mothers were able to produce their child's vaccination card at the time of the interview. Only 66% of children age 12-23 months and 61% of children age 24-35 months had vaccination cards available at the time of the interview (**Table 10.3**). A majority of the cards that were not seen were reported to be with a relative, which was expected given that there were many instances in which the child was not a resident in the household; others were misplaced, lost, or destroyed (data not shown). Mothers' recall may not be as reliable as written vaccination records and, therefore, may result in an underestimate of vaccinations (Miles et al. 2013).

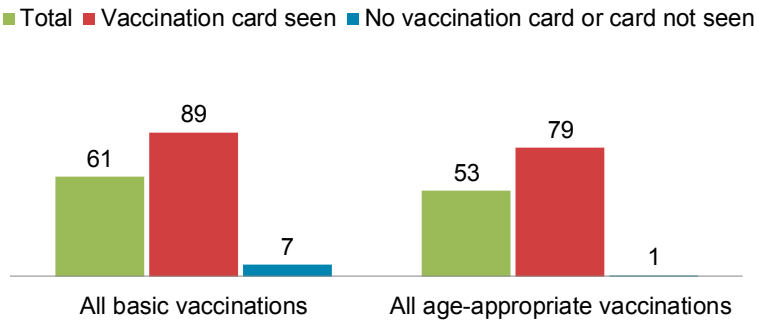
Comparison with the SADHS 1998: The percentage of children age 12-23 months in South Africa who had received all basic vaccinations decreased slightly from 63% in 1998 to 61% in 2016. The percentage who received all basic vaccinations by age 12 months increased slightly from 55% to 58%. In 1998, 2% of children were reported to have received no vaccinations, as compared with 5% in 2016. The percentages of children who had a vaccination card seen at the time of the interview were 75% in 1998 and 66% in 2016.

Patterns by background characteristics

- Eighty-nine percent of children age 12-23 months whose vaccination card was seen received all basic vaccinations, as compared with 7% of children whose vaccination card was not seen and whose information was based entirely on their mother's recall. Seventy-nine percent of children age 12-23 months with a vaccination card received all age-appropriate vaccinations, compared with less than 1% of children without a card or without a card seen (**Figure 10.2**).

Figure 10.2 Vaccination coverage by whether vaccination card was seen

Percentage of children age 12-23 months



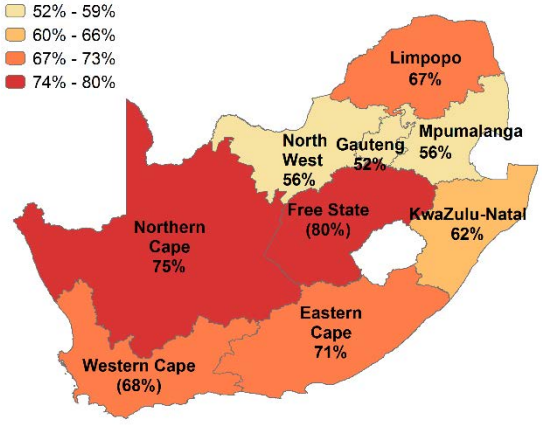
- A similar pattern was apparent among children age 24-35 months; 69% of children with a vaccination card received all age-appropriate vaccines, compared with 0.2% whose immunisation history was based entirely on their mother's recall (**Table 10.4**).

- Children age 12-23 months who reside in non-urban areas are somewhat more likely to receive all basic vaccinations than children residing in urban areas (65% versus 59%).

- Coverage rates for basic vaccinations among children age 12-23 months residing in North West (56%), Gauteng (52%), and Mpumalanga (56%) are lower than the national average (**Figure 10.3**).

Figure 10.3 Vaccination coverage by province

Percentage of children age 12-23 months who received all basic vaccines at any time before the survey



Note: Figures in parentheses are based on 25-49 unweighted cases

Vaccination Coverage according to Child's Residence and Caregiver's Questionnaire

The information on vaccination status presented in **Table 10.2**, **Table 10.3**, and **Table 10.4** was collected by interviewing the mother, even in those instances where the child did not reside with her. **Table 10.5** presents vaccination coverage according to children's residence with their mother. Coverage of each vaccine for which information was collected is higher among children who live with their mother than among those who live elsewhere. Among children age 12-23 months, 59% of those residing with their mother have received all age-appropriate vaccinations, as compared with only 8% of those who do not reside with their mother. Among children age 24-35 months, 49% of those residing with their mother have received all age-appropriate vaccinations, compared with only 3% of those living elsewhere. These findings may be explained by the fact that mothers whose children did not reside with them were much less likely to have a vaccination card that was seen, and therefore the vaccination data were collected via recall.

In an effort to collect higher quality information about vaccination coverage among children who do not reside with their mother, data on childhood vaccinations were captured by interviewing caregivers of children whose mothers are deceased or who do not live in the same household as their mother. Among children age 12-23 months whose vaccination information was collected through a caregiver, 72% ever had a vaccination card and 65% had a vaccination card that was seen at the time of the interview; similarly, 70%

of children age 24-35 months ever had a vaccination card and 62% had a vaccination card that was seen (**Table 10.6**). Thus, while the percentage of children who ever had a vaccination card was lower among those whose information was collected through interviews with caregivers than those whose information was collected through interviews with mothers, the percentage of vaccination cards seen was similar.

Table 10.5 also presents comparisons of vaccination coverage among children who reside with their mother and children whose vaccination information was collected through an interview with a caregiver. Among children age 12-23 months, 59% of those living with their mother and 51% of those living with a caregiver other than their mother received all age-appropriate vaccines; 4% of children living with their mother received no vaccinations, as compared with 14% of children living with a caregiver. Among children age 24-35 months, 49% of those living with their mother and 51% of those living with a caregiver received all age-appropriate vaccines.

Reasons Vaccinations Were Missed, Late, or Not Given

Among children age 12-35 months whose vaccination information was collected by interviewing their mother, 23% ever missed a vaccination, received a vaccination late, or did not receive any vaccinations at all (**Table 10.7**). For such children, mothers were asked why the child missed a vaccination, received it late, or did not get any vaccinations. The most commonly reported reason was that vaccines were out of stock at clinics (49%). Other reasons reported by mothers included that they were too busy (11%) or that the child was ill (10%). Less than 1% of mothers reported fear of a vaccine's side effects as a reason for delaying or skipping a vaccination.

10.3 SYMPTOMS OF ACUTE RESPIRATORY INFECTION

Acute respiratory infection (predominantly pneumonia) is a common cause of death in young children. Caregivers are advised that a young child with a cough and/or difficult breathing should be taken to a health facility promptly. Current guidelines advise a syndromic approach to the treatment of ARI whereby children with fast breathing and/or chest indrawing are treated with an antibiotic (WHO 2014b). However, in cases where the health professional is confident that the symptoms are related to a viral infection, it is reasonable not to prescribe antibiotics.

Treatment of symptoms of acute respiratory infection (ARI)

Children with symptoms of ARI for whom advice or treatment was sought. ARI symptoms consist of (1) short, rapid breathing that is chest-related and/or (2) difficult breathing that is chest-related.

Sample: Children under age 5 with symptoms of ARI in the 2 weeks before the survey

Mothers reported that 3% of children under age 5 had ARI symptoms in the 2 weeks before the survey (**Table 10.8**). Advice or treatment was sought for 88% of children with ARI symptoms; among approximately one-third (31%) of children with ARI symptoms, advice or treatment was sought the same day or the day after their symptoms appeared.

Advice or treatment was most commonly sought from public sector health facilities: half (50%) of all children with ARI symptoms were taken to a government clinic or health centre, and a further 6% were taken to a government hospital. In 34% of cases, advice or treatment was sought from the private sector, including a private doctor (9%), a private hospital/clinic (3%), or a chemist or pharmacy (23%) (**Table 10.9**). This latter finding is of concern, as children for whom advice or treatment is sought from a chemist or pharmacy are unlikely to receive antibiotics if they are indicated.

10.4 FEVER

Fever is a common symptom of a variety of illnesses in young children. In areas where malaria is prevalent, all children with fever should access health services as it is essential to exclude malaria as the cause of the fever. However, in non-malaria areas, home treatment of fever not associated with other symptoms (e.g., fast breathing) may be appropriate.

Treatment of fever
Children with fever for whom advice or treatment was sought.
Sample: Children under age 5 with a fever in the 2 weeks before the survey

Among children under age 5, 20% were reported to have had a fever in the 2 weeks before the survey. Sixty-eight percent of children with a fever were taken for advice or treatment, and 31% were taken for advice or treatment the same day as or the day after the fever's onset (**Table 10.10**). Thirty percent of children under age 5 with a fever received antibiotics; this proportion seems very high given that most episodes of fever in young children do not require antibiotics.

Patterns by background characteristics

- The prevalence of fever was lowest among children age 0-5 months (12%), peaked among children age 6-11 months (26%), and then gradually fell with increasing age.
- Although fever was common across all wealth quintiles, children in wealthier households were more likely than those in poorer households to access advice or treatment (73% of children in the highest wealth quintile versus 64% in the lowest quintile).
- Children from wealthier households were also the most likely to receive antibiotic drugs; 44% of children in the highest wealth quintile were given antibiotics. This means that about 1 in 11 children in this wealth quintile received antibiotics for fever in the preceding 2 weeks.

As shown in **Table 10.11**, for 41% of children with a fever, advice or treatment was sought from public sector health facilities; for 27%, advice or treatment was sought from the private medical sector. Among children with a fever for whom advice or treatment was sought, the most common provider of advice or treatment was a government clinic or health centre (54%), followed by a chemist or pharmacy (22%).

10.5 DIARRHOEAL DISEASE

Diarrhoeal disease remains an important cause of mortality and morbidity among young children in South Africa. Treatment of diarrhoea in children should include increased fluids, continued feeding, and a 5-day course of zinc. The increased fluids can be provided as increased feeds (especially increased breastfeeding), as clinic-recommended homemade fluids (RHF) consisting of a sugar-salt solution, or as fluid prepared from a packet of oral rehydration salts (ORS).

Provision of increased fluids reduces the risk of the child becoming dehydrated, and widespread use of oral rehydration therapy (ORT) has resulted in a decline in deaths of young children associated with dehydration and shock. Continued feeding is important, as repeated episodes or prolonged diarrhoea place a child at risk of developing acute malnutrition. As deaths from dehydration and shock have declined, a higher proportion of deaths associated with diarrhoea are now due to complications of acute malnutrition.

Zinc has been shown to reduce the severity and duration of diarrhoea, and it is recommended that all children with diarrhoea receive a 5-day course of zinc. This means that, unlike previously when home treatment of mild cases of diarrhoea with RHF and continued feeding was appropriate, all children with diarrhoea should now access care in order to receive zinc.

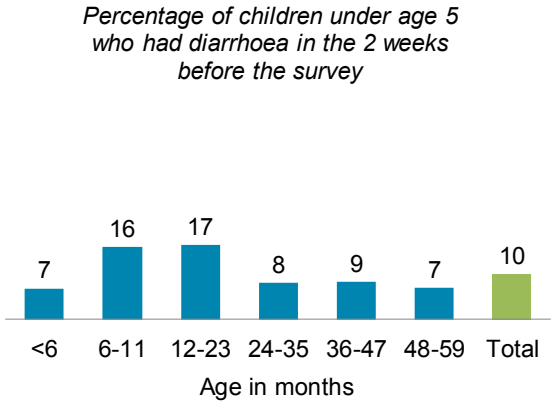
10.5.1 Prevalence of Diarrhoea and Treatment-Seeking Behaviour

Mothers reported that 10% of children under age 5 had a diarrhoeal episode in the 2 weeks before the survey (**Table 10.12**). Advice or treatment was sought for 63% of these children. It is important to note that treatment of diarrhoea in young children includes provision of zinc; thus, advice or treatment should be sought in all cases of diarrhoea in young children.

Patterns by background characteristics

- The prevalence of diarrhoea peaks among children age 6-23 months (16%-17%) (**Figure 10.4**). This corresponds to the time when children start losing protection from maternal antibodies through breastfeeding, begin to walk, and are at increased risk of contamination from the environment. Treatment was most commonly sought for children age 36-47 months (80%).
- Urban children with diarrhoea were more likely to be taken for advice or treatment than non-urban children (66% versus 60%).

Figure 10.4 **Diarrhoea prevalence by age**



- Advice or treatment was more likely to be sought for female children with diarrhoea than male children (67% versus 60%).
- The percentage of children under age 5 who had diarrhoea in the 2 weeks before the survey was highest in North West (16%) and KwaZulu-Natal (14%) and lowest in Western Cape (5%) and Free State (6%). However, because of the dearth of cases, it is not possible to compare treatment-seeking behaviour.
- Children from the lowest two wealth quintiles are more likely to have diarrhoea than those from higher wealth quintiles but are less likely to be taken for advice or treatment.

10.5.2 Feeding Practices during an Episode of Diarrhoea

Appropriate feeding practices

Children with diarrhoea are given more liquids than usual and as much food or more than usual.

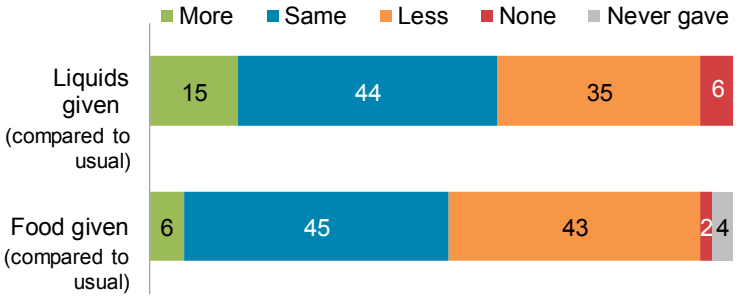
Sample: Children under age 5 with diarrhoea in the 2 weeks before the survey

To reduce dehydration and minimise the effects of diarrhoea on nutritional status, mothers are encouraged to continue normal feeding of children with diarrhoea and to increase the amount of fluids given.

Only 15% of children under age 5 with diarrhoea in the 2 weeks before the survey were given more liquids than usual, as recommended. Forty-four percent received the same amount of liquids. It is of concern that 35% of children were given a somewhat less or much less fluids than usual, and 6% were given no fluids at all (**Figure 10.5**). Children who were breastfeeding were more likely than nonbreastfeeding children to receive more or the same amount of fluid as usual (72% versus 55%) (**Table 10.13**).

***Figure 10.5* Feeding practices during diarrhoea**

Percentage of children under age 5 with diarrhoea in the 2 weeks before the survey



Just over half (51%) of children with diarrhoea were fed according to the recommended practice of giving the same or more food than usual. Forty-three percent of children were given much less or somewhat less food than usual, while 2% received no food during diarrhoea (**Figure 10.5**).

10.5.3 Oral Rehydration Therapy and Other Treatments

Oral rehydration therapy (ORT)

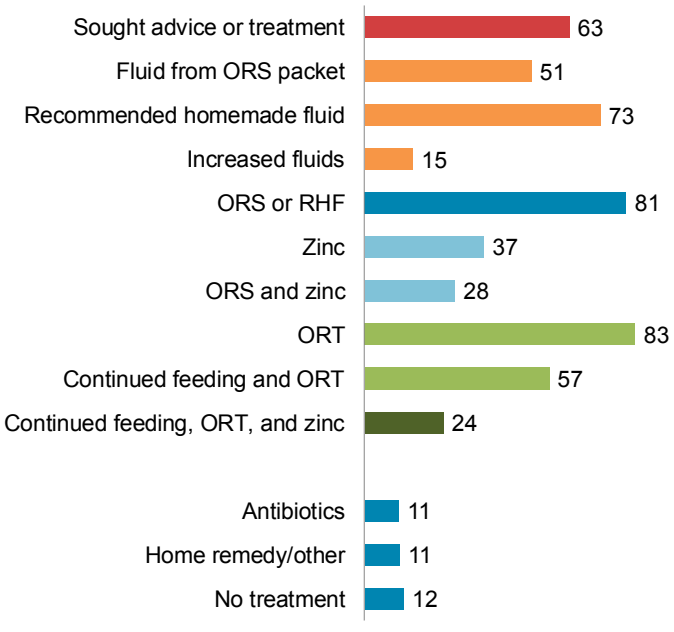
Children with diarrhoea are given increased fluids, a fluid made from a special packet of oral rehydration salts (ORS), or clinic-recommended homemade fluids (RHF).

Sample: Children under age 5 with diarrhoea in the 2 weeks before the survey

As noted previously, all children with diarrhoea should receive increased fluids, continued feeding, and oral zinc. Eighty-three percent of children received ORT, either as increased fluids (15%), ORS packets (51%), or recommended home fluids (73%) (**Table 10.13** and **Table 10.14**). Fifty-seven percent of children received ORT and continued feeding, and 37% of children received zinc. Overall, only 24% of children received all three interventions (i.e., ORT, continued feeding, and zinc) (**Figure 10.6**). It appears that while there is good awareness and use of ORT, more attention needs to be paid to ensuring that mothers and other caregivers are aware of the importance of continued feeding and provision of zinc during episodes of diarrhoea.

***Figure 10.6* Treatment of diarrhoea**

Percentage of children under age 5 with diarrhoea in the 2 weeks before the survey



Eleven percent of children with diarrhoea received antibiotics, and 2% received antimotility drugs. Antibiotics are generally not indicated for diarrhoea but may be prescribed in certain cases and for concomitant illnesses. Antimotility drugs are contraindicated in children and should not be given.

Comparison with the SADHS 1998: There has been little change since 1998 in the percentage of children with diarrhoea who received ORT (81% in 1998 and 83% in 2016).

Patterns by background characteristics

- Boys and girls with diarrhoea are equally likely to be given continued feeding, ORT, and zinc (24% and 25%, respectively).
- Overall, differences in the treatment of children from urban and non-urban areas are small. However, urban children are more likely than non-urban children to be given zinc (41% versus 32%), ORS and zinc (33% versus 22%), and continued feeding, ORT, and zinc (29% versus 18%).

Among children with diarrhoea for whom advice or treatment was sought, the most common source of advice or treatment was a government clinic or health centre (60%), followed by a private doctor (11%) and a chemist or pharmacy (9%) (**Table 10.15**).

10.5.4 Knowledge of ORS Packets and Clinic-Recommended Homemade Fluids

Among all women age 15-49, regardless of whether or not they have children, 62% know about ORS packets and 90% know about clinic-recommended homemade fluids (RHF) for the treatment of diarrhoea (**Table 10.16**).

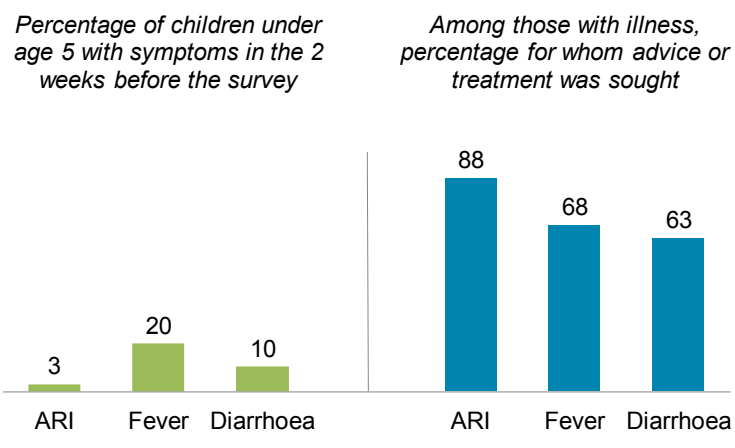
Patterns by background characteristics

- Knowledge of both ORS packets and RHF increases with age.
- Slightly more women in non-urban than urban areas know about RHF (93% versus 88%); in contrast, women in urban areas are more likely than women in non-urban areas to know about ORS packets (64% versus 58%).
- Only 83% of women in Gauteng know about RHF, as compared with more than 90% of women in the other provinces. Women in KwaZulu-Natal (79%) and Western Cape (72%) are most knowledgeable about ORS packets, while women in Limpopo (42%) and Mpumalanga (46%) are least knowledgeable.

10.6 Prevalence and Treatment of Childhood Illness—Summary

Fever and diarrhoea were more common than ARI symptoms, but children with ARI symptoms were more likely to be taken for advice or treatment. Advice or treatment was sought for 88% of children with ARI symptoms, 68% of children with a fever, and 63% of children with diarrhoea (**Figure 10.7**).

Figure 10.7 **Prevalence and treatment of childhood illness**



List of Tables

For more information on child health, see the following tables:

Table 10.1 Child's size and weight at birth

Percent distribution of live births in the 5 years preceding the survey by mother's estimate of baby's size at birth, percentage of live births in the 5 years preceding the survey that have a reported birth weight, and among live births in the 5 years preceding the survey with a reported birth weight, percentage less than 2.5 kg, according to background characteristics, South Africa DHS 2016

Background characteristic	Percent distribution of births by size of baby at birth					Percentage of births that have a reported birth weight[1]	Number of births	Among births with a reported birth weight[1]	
	Very small	Smaller than average	Average or larger	Don't know	Total			Percentage less than 2.5 kg	Number of births
Mother's age at birth									
<20	5.1	7.4	86.2	1.3	100.0	85.5	549	13.8	470
20-34	6.1	8.2	84.9	0.8	100.0	89.3	2,574	13.9	2,299
35-49	12.6	9.4	77.3	0.7	100.0	86.8	449	18.8	389
Birth order									
1	6.2	7.8	85.3	0.7	100.0	88.3	1,281	16.0	1,132
2-3	7.1	8.2	84.0	0.6	100.0	90.3	1,817	13.4	1,640
4-5	7.7	9.1	81.5	1.6	100.0	82.1	370	15.4	304
6+	3.8	8.1	82.1	6.0	100.0	79.3	104	12.8	82
Mother's smoking status[2]									
Smokes cigarettes/ tobacco	11.9	11.2	76.3	0.6	100.0	93.6	70	27.1	65
Does not smoke	6.1	8.7	84.4	0.9	100.0	87.6	1,738	14.2	1,523
Residence									
Urban	6.9	7.5	84.7	1.0	100.0	89.4	2,281	14.4	2,039
Non-urban	6.5	9.5	83.3	0.8	100.0	86.7	1,291	14.8	1,120
Province									
Western Cape	11.4	8.0	80.6	0.0	100.0	97.1	313	17.9	304
Eastern Cape	6.1	7.2	86.0	0.7	100.0	89.2	398	14.3	355
Northern Cape	4.1	7.0	85.7	3.1	100.0	85.3	69	19.8	59
Free State	6.4	11.5	81.2	0.9	100.0	89.2	164	17.0	146
KwaZulu-Natal	5.8	7.4	86.0	0.7	100.0	89.8	654	16.9	587
North West	7.6	13.7	78.7	0.0	100.0	87.7	282	15.6	248
Gauteng	6.4	5.0	87.1	1.6	100.0	86.0	1,013	12.0	871
Mpumalanga	7.2	9.2	82.5	1.1	100.0	82.6	332	14.2	275
Limpopo	5.8	13.5	80.3	0.4	100.0	90.5	347	11.4	314
Mother's education									
No education	4.3	10.6	83.7	1.4	100.0	67.5	50	(14.7)	34
Primary incomplete	8.4	9.9	80.3	1.4	100.0	75.4	182	13.8	137
Primary complete	3.5	7.3	85.6	3.5	100.0	81.2	138	17.1	112
Secondary incomplete	7.4	8.9	83.0	0.7	100.0	86.7	1,762	15.0	1,527
Secondary complete	6.0	7.1	86.2	0.7	100.0	92.5	1,043	13.6	965
More than secondary	6.6	7.3	85.3	0.8	100.0	96.4	397	14.6	383
Wealth quintile									
Lowest	6.3	9.8	82.6	1.2	100.0	86.2	787	14.9	678
Second	7.6	8.7	83.2	0.4	100.0	83.9	865	16.0	726
Middle	5.1	6.9	86.7	1.4	100.0	89.0	788	12.3	702
Fourth	7.9	8.5	83.0	0.6	100.0	92.4	657	14.1	607
Highest	7.2	6.2	85.8	0.8	100.0	93.9	476	15.6	447
Total	6.8	8.2	84.2	0.9	100.0	88.4	3,572	14.5	3,158

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Based on either a written record or the mother's recall
[2] Questions on smoking were asked in a subset of households

Table 10.2 Vaccinations by source of information

Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage who received specific vaccines by the appropriate age, South Africa DHS 2016

	Children age 12-23 months				Children age 24-35 months			
Vaccine	Vaccination card[1]	Mother's report	Either source	Vaccinated by appro-priate age[2,3]	Vaccination card[1]	Mother's report	Either source	Vaccinated by appro-priate age[3,4]
BCG	64.6	27.9	92.5	92.2	60.7	30.8	91.5	90.7
Polio (OPV)								
0 (birth dose)	65.5	26.8	92.3	92.3	58.9	29.4	88.3	87.5
1	65.8	11.8	77.6	77.5	58.1	13.4	71.5	70.3
DTaP-IPV-Hib								
1	66.3	24.8	91.2	90.1	60.9	26.6	87.5	86.8
2	64.8	10.6	75.4	75.0	60.9	10.9	71.8	69.9
3	62.2	2.8	65.0	64.6	59.0	5.9	64.9	62.4
4	na	na	na	na	47.7	0.4	48.1	42.9
HepB								
1	65.8	24.4	90.2	90.0	60.9	26.2	87.0	86.3
2	64.2	9.1	73.4	72.7	60.9	10.8	71.6	71.0
3	61.7	3.3	65.0	64.8	60.0	5.9	65.8	63.6
Pneumococcal (PCV)								
1	65.9	22.8	88.7	88.6	60.5	24.9	85.5	84.8
2	64.3	8.3	72.7	72.4	59.8	9.3	69.1	66.7
3	59.1	2.8	61.9	58.5	55.4	4.8	60.2	54.5
Rotavirus (RV)								
1	66.1	22.2	88.3	87.9	59.8	25.4	85.2	84.5
2	63.3	6.8	70.1	69.8	57.2	10.3	67.5	65.3
Measles								
1	62.3	23.9	86.1	82.0	58.6	25.8	84.4	77.4
2	na	na	na	na	48.5	10.7	59.2	56.7
All basic vaccinations[5]	58.8	2.4	61.3	57.7	57.3	5.4	62.7	56.3
All age-appropriate vaccinations[6]	52.5	0.2	52.7	47.9	41.8	0.1	41.8	34.7
No vaccinations	0.0	5.3	5.3	na	0.0	7.8	7.8	na
Number of children	449	228	677	677	402	258	660	660

na = Not applicable
BCG = Bacille Calmette-Guerin; OPV = Oral polio vaccine; DTaP = Diphtheria-tetanus-pertussis; IPV = Inactivated polio vaccine; Hib = *Haemophilus influenzae* type b; HepB = Hepatitis B; PCV = Pneumococcal conjugate vaccine; RV = Rotavirus vaccine
[1] Vaccination card, booklet, or other home-based record
[2] Received by age 12 months
[3] For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination.
[4] Received by age 12 months for all vaccines except DTaP-IPV-Hib 4 and measles 2, which should be received by age 24 months
[5] BCG, three doses of DTaP-IPV-Hib, and one dose of measles vaccine
[6] For children age 12-23 months: BCG, two doses of oral polio vaccine, three doses of DTaP-IPV-Hib, three doses of HepB, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of measles vaccine. For children age 24-35 months: BCG, two doses of oral polio vaccine, four doses of DTaP-IPV-Hib, three doses of HepB, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and two doses of measles vaccine.

Table 10.3 Possession and observation of vaccination cards, according to background characteristics

Percentage of children age 12-23 months and children age 24-35 months who ever had a vaccination card, and percentage with a vaccination card seen, according to background characteristics, South Africa DHS 2016

Background characteristic	Children age 12-23 months			Children age 24-35 months		
	Percentage who ever had a vaccination card[1]	Percentage with a vaccination card seen[1]	Number of children	Percentage who ever had a vaccination card[1]	Percentage with a vaccination card seen[1]	Number of children
Sex						
Male	98.1	67.2	358	98.7	62.9	346
Female	98.0	65.4	319	98.3	58.7	314
Birth order						
1	99.0	66.4	247	98.4	58.9	256
2-3	97.9	66.5	333	99.2	62.2	319
4-5	98.4	67.7	82	95.5	61.9	62
6+	*	*	15	(98.0)	(63.2)	24
Residence						
Urban	99.1	63.9	416	99.2	57.9	414
Non-urban	96.3	70.2	261	97.3	66.0	246
Province						
Western Cape	(100.0)	(76.0)	54	(100.0)	(56.2)	57
Eastern Cape	100.0	79.8	81	96.9	68.3	74
Northern Cape	100.0	75.4	12	100.0	64.0	12
Free State	(98.9)	(81.3)	25	97.7	65.5	30
KwaZulu-Natal	94.7	63.8	135	98.2	54.7	106
North West	100.0	65.7	59	100.0	65.1	58
Gauteng	99.5	55.1	180	99.7	56.9	185
Mpumalanga	98.1	63.5	61	100.0	69.6	63
Limpopo	94.5	73.2	69	94.1	63.2	74
Mother's education						
No education	*	*	3	*	*	7
Primary incomplete	(87.8)	(65.5)	29	(96.4)	(71.3)	36
Primary complete	(100.0)	(55.4)	23	(97.4)	(37.9)	31
Secondary incomplete	98.3	66.6	364	98.6	62.2	306
Secondary complete	98.6	69.7	183	99.2	66.6	193
More than secondary	98.9	58.9	75	98.0	47.5	88
Wealth quintile						
Lowest	96.1	73.0	162	98.1	66.8	130
Second	99.7	58.4	167	97.3	57.9	157
Middle	97.0	64.8	138	99.6	60.4	171
Fourth	98.2	74.0	121	98.5	67.8	98
Highest	100.0	61.2	88	99.0	52.7	104
Total	98.1	66.3	677	98.5	60.9	660

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Vaccination card, booklet, or other home-based record

Table 10.4 Vaccinations by background characteristics

Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), percentage with all basic vaccinations, and percentage with all age-appropriate vaccinations, by background characteristics, South Africa DHS 2016

	Children age 12-23 months																			Children age 24-35 months			
Background characteristic	BCG	Polio[1] (OPV) 0	Polio[1] (OPV) 1	DTaP-IPV-Hib 1	DTaP-IPV-Hib 2	DTaP-IPV-Hib 3	HepB 1	HepB 2	HepB 3	Pneumococcal (PCV) 1	Pneumococcal (PCV) 2	Pneumococcal (PCV) 3	Rotavirus (RV) 1	Rotavirus (RV) 2	Measles 1	All basic vaccinations[2]	All age-appropriate vaccinations[3]	No vaccinations	Number of children	DTaP-IPV-Hib 4	Measles 2	All age-appropriate vaccinations[4]	Number of children
Sex																							
Male	93.9	93.4	78.7	93.1	78.6	67.1	91.9	75.3	68.0	90.7	74.7	63.1	89.1	71.3	88.0	63.5	53.2	3.8	358	49.4	61.7	43.8	346
Female	90.9	91.0	76.4	89.0	71.7	62.6	88.3	71.2	61.6	86.4	70.4	60.6	87.4	68.8	84.1	58.7	52.3	6.9	319	46.6	56.5	39.7	314
Birth order																							
1	90.2	91.0	74.8	90.2	72.0	63.6	89.1	69.4	63.3	87.8	68.8	62.4	87.1	67.8	84.6	59.9	52.8	6.1	247	46.6	58.2	40.3	256
2-3	94.5	93.1	79.8	93.6	77.6	67.0	92.0	77.2	67.3	89.7	74.3	62.3	89.0	71.5	87.5	63.8	54.2	4.8	333	49.7	59.4	42.4	319
4-5	93.1	94.6	78.7	85.7	78.3	63.9	87.2	71.4	64.0	88.5	79.0	64.2	90.7	72.5	89.6	60.0	50.0	2.3	82	59.3	70.7	56.3	62
6+	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	15	(13.6)	(38.0)	(13.6)	24
Vaccination card																							
Seen	97.4	98.7	99.2	100.0	97.7	93.8	99.1	96.8	92.9	99.3	97.0	89.1	99.6	95.4	93.9	88.7	79.1	0.0	449	78.3	79.6	68.6	402
Not seen/none	82.9	79.6	35.0	73.7	31.4	8.3	72.6	27.1	9.9	67.8	24.7	8.3	65.9	20.2	70.9	7.2	0.7	15.6	228	1.1	27.4	0.2	258
Residence																							
Urban	92.7	93.3	76.9	90.4	75.2	62.9	89.7	71.6	62.9	88.2	72.0	60.5	88.7	68.9	86.1	59.1	51.7	5.3	416	45.5	57.7	39.3	414
Non-urban	92.1	90.6	78.7	92.4	75.6	68.4	91.0	76.3	68.4	89.5	73.7	64.2	87.6	72.1	86.1	64.6	54.4	5.2	261	52.5	61.7	46.0	246
Province																							
Western Cape	(91.4)	(88.1)	(91.4)	(89.6)	(78.7)	(70.0)	(86.4)	(73.0)	(64.3)	(84.0)	(70.0)	(60.4)	(91.9)	(66.6)	(77.6)	(67.7)	(49.0)	(6.2)	54	(54.4)	(70.5)	(43.5)	57
Eastern Cape	96.2	94.2	91.0	95.0	85.4	74.3	94.0	86.6	72.2	92.8	84.8	68.7	91.6	83.7	88.6	70.9	57.3	3.1	81	46.8	56.2	44.7	74
Northern Cape	95.8	90.3	84.5	95.8	87.3	80.6	91.6	81.1	78.3	90.8	83.5	75.7	84.1	77.0	84.9	75.4	64.9	4.2	12	56.1	62.8	46.4	12
Free State	(97.8)	(97.8)	(95.8)	(97.8)	(95.7)	(84.8)	(97.8)	(91.6)	(87.6)	(95.7)	(91.0)	(77.2)	(94.7)	(89.3)	(90.7)	(79.5)	(71.3)	(2.2)	25	57.8	73.4	54.5	30
KwaZulu-Natal	91.3	92.2	71.6	91.6	73.5	65.3	91.6	67.4	62.5	90.9	66.2	63.8	91.3	68.6	89.4	62.4	60.1	6.2	135	47.2	59.1	46.0	106
North West	94.5	98.6	74.4	99.2	72.4	65.0	97.0	81.3	64.0	89.7	70.1	51.7	90.6	65.4	85.0	55.7	43.7	0.0	59	46.1	68.1	31.9	58
Gauteng	92.6	91.5	68.5	87.9	69.5	53.6	87.9	68.6	58.7	86.5	71.4	57.4	84.8	67.1	87.7	51.9	45.7	6.6	180	44.8	50.1	36.3	185
Mpumalanga	85.7	87.1	79.7	80.9	74.0	62.9	80.0	69.6	67.6	80.0	68.7	58.8	78.0	65.6	75.0	56.4	50.5	10.4	61	47.4	57.9	42.5	63
Limpopo	92.9	93.4	79.5	94.7	74.0	71.1	92.1	70.9	66.3	93.1	73.3	66.9	90.2	67.7	88.7	66.7	54.9	2.9	69	51.0	64.1	46.5	74
Mother's education																							
No education	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3	*	*	*	7
Primary incomplete	(87.2)	(87.2)	(72.0)	(87.2)	(66.6)	(60.2)	(87.2)	(72.1)	(59.2)	(77.9)	(62.8)	(47.1)	(75.2)	(62.8)	(70.3)	(46.0)	(37.8)	(12.8)	29	(43.5)	(43.6)	(34.1)	36
Primary complete	(97.6)	(100.0)	(71.7)	(83.7)	(51.2)	(51.2)	(83.7)	(52.5)	(50.1)	(83.7)	(50.1)	(40.5)	(83.7)	(51.2)	(73.1)	(45.9)	(40.5)	(0.0)	23	(32.5)	(47.9)	(29.9)	31
Secondary incomplete	91.9	90.7	79.7	90.2	76.9	65.5	89.1	73.3	66.1	87.3	73.5	63.5	87.2	69.5	85.2	61.4	52.4	5.5	364	48.6	60.3	44.3	306
Secondary complete	94.7	95.3	79.9	94.2	78.3	67.9	93.2	78.5	67.8	92.8	77.5	64.2	93.0	76.0	90.6	66.0	56.3	3.0	183	55.3	68.3	46.8	193
More than secondary	90.1	91.7	64.8	91.7	70.2	59.8	90.9	66.7	57.9	90.9	66.0	59.1	87.9	65.8	89.3	57.6	52.7	8.3	75	37.0	44.6	28.2	88

(Continued…)

Table 10.4—*Continued*

Background characteristic	Children age 12-23 months																			Children age 24-35 months			
		Polio[1] (OPV)		DTaP-IPV-Hib			HepB			Pneumococcal (PCV)			Rotavirus (RV)										
	BCG	0	1	1	2	3	1	2	3	1	2	3	1	2	Measles 1	All basic vaccinations[2]	All age-appropriate vaccinations[3]	No vaccinations	Number of children	DTaP-IPV-Hib 4	Measles 2	All age-appropriate vaccinations[4]	Number of children
Wealth quintile																							
Lowest	89.1	87.6	83.6	90.1	80.4	72.0	89.1	76.7	71.0	88.2	76.6	68.2	89.0	74.1	85.1	66.5	57.0	6.5	162	42.7	53.7	37.4	130
Second	94.3	93.8	69.0	89.3	64.7	54.8	89.5	68.6	58.7	84.9	67.9	54.5	82.5	64.0	84.6	52.2	45.1	4.2	167	45.4	54.2	41.1	157
Middle	92.5	92.7	79.0	93.7	79.9	68.4	92.8	74.8	65.9	90.7	72.2	65.3	88.7	70.4	87.5	63.5	55.8	5.0	138	47.1	61.3	40.0	171
Fourth	96.6	96.3	88.2	93.2	84.2	67.8	90.4	78.9	67.0	92.2	79.3	61.1	94.7	76.6	87.0	64.9	51.8	3.0	121	66.4	75.3	60.7	98
Highest	89.7	91.6	66.2	89.9	67.0	62.2	89.0	66.5	61.5	89.0	65.9	60.3	88.4	65.0	87.6	60.2	55.9	8.4	88	43.4	55.0	33.7	104
Total	92.5	92.3	77.6	91.2	75.4	65.0	90.2	73.4	65.0	88.7	72.7	61.9	88.3	70.1	86.1	61.3	52.7	5.3	677	48.1	59.2	41.8	660

Notes: Children are considered to have received the vaccine if it was either written on the child's vaccination card or reported by the mother. For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

BCG = Bacille Calmette-Guerin; OPV = Oral polio vaccine; DTaP = Diphtheria-tetanus-pertussis; IPV = Inactivated polio vaccine; Hib = *Haemophilus influenzae* type b; HepB = Hepatitis B; PCV = Pneumococcal conjugate vaccine; RV = Rotavirus vaccine

[1] Polio 0 is the polio vaccination given at birth

[2] BCG, three doses of DTaP-IPV-Hib, and one dose of measles vaccine

[3] BCG, two doses of oral polio vaccine, three doses of DTaP-IPV-Hib, three doses of HepB, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of measles vaccine

[4] BCG, two doses of oral polio vaccine, four doses of DTaP-IPV-Hib, three doses of HepB, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and two doses of measles vaccine

Table 10.5 Vaccinations by child's residence with mother or other caregiver

Among children whose information was collected through the Woman's Questionnaire, percentage age 12-23 months and age 24-35 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), percentage with all basic vaccinations, and percentage with all age-appropriate vaccinations, by whether or not they live with their mother, and among children whose information was collected through the Caregiver's Questionnaire, percentage age 12-23 months and age 24-35 months who received specific vaccines at any time before the survey (according to a vaccination card or the caregiver's report), percentage with all basic vaccinations, and percentage with all age-appropriate vaccinations, South Africa DHS 2016

	Children age 12-23 months																			Children age 24-35 months			
Children's residence	BCG	Polio[1] (OPV) 0	Polio[1] (OPV) 1	DTaP-IPV-Hib 1	DTaP-IPV-Hib 2	DTaP-IPV-Hib 3	HepB 1	HepB 2	HepB 3	Pneumococcal (PCV) 1	Pneumococcal (PCV) 2	Pneumococcal (PCV) 3	Rotavirus (RV) 1	Rotavirus (RV) 2	Measles 1	All basic vaccinations[2]	All age-appropriate vaccinations[3]	No vaccinations	Number of children	DTaP-IPV-Hib 4	Measles 2	All age-appropriate vaccinations[4]	Number of children
CHILDREN WHOSE VACCINATION INFORMATION WAS COLLECTED BY INTERVIEW WITH MOTHER																							
Lives with mother	94.3	94.4	81.6	94.1	81.0	72.1	93.0	79.2	72.3	91.4	77.9	67.6	91.6	75.8	88.9	68.0	59.1	3.7	593	56.5	63.9	49.3	554
Doesn't live with mother	79.9	77.0	49.7	70.2	35.1	14.4	70.2	32.3	13.1	69.9	35.3	21.4	65.1	30.2	66.8	13.6	7.6	16.2	84	4.2	34.8	2.6	106
CHILDREN WHOSE VACCINATION INFORMATION WAS COLLECTED BY INTERVIEW WITH CAREGIVER																							
Lives with caregiver	85.1	84.4	72.5	78.5	67.4	60.5	82.5	69.6	65.2	78.4	66.4	59.4	81.5	66.1	77.0	53.9	51.1	14.0	126	55.8	59.3	51.1	129

Notes: Children are considered to have received the vaccine if it was either written on the child's vaccination card or reported by the mother or the caregiver. For children whose vaccination information is based on the mother's or caregiver's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination.
BCG = Bacille Calmette-Guerin; OPV = Oral polio vaccine; DTaP = Diphtheria-tetanus-pertussis; IPV = Inactivated polio vaccine; Hib = *Haemophilus influenzae* type b; HepB = Hepatitis B; PCV = Pneumococcal conjugate vaccine; RV = Rotavirus vaccine
[1] Polio 0 is the polio vaccination given at birth
[2] BCG, three doses of DTaP-IPV-Hib, and one dose of measles vaccine
[3] BCG, two doses of oral polio vaccine, three doses of DTaP-IPV-Hib, three doses of HepB, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of measles vaccine
[4] BCG, two doses of oral polio vaccine, four doses of DTaP-IPV-Hib, three doses of HepB, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and two doses of measles vaccine

Table 10.6 Possession and observation of vaccination cards during interview with a caregiver

Among children whose information was collected through the Caregiver's Questionnaire, percentage age 12-23 months and age 24-35 months who ever had a vaccination card and percentage with a vaccination card seen, South Africa DHS 2016

	Children age 12-23 months			Children age 24-35 months		
	Percentage who ever had a vaccination card[1]	Percentage with a vaccination card seen[1]	Number of children	Percentage who ever had a vaccination card[1]	Percentage with a vaccination card seen[1]	Number of children
Total	71.8	64.6	126	70.4	61.7	129

[1] Vaccination card, booklet, or other home-based record

Table 10.7 Reasons vaccinations were missed, late, or not given

Among all children age 12-35 months, percentage who ever missed a vaccination, received a vaccination late, or did not get any vaccinations, and among children age 12-35 months who ever missed a vaccination, received a vaccination late, or did not receive any vaccinations, reasons the vaccinations were missed, late, or not given, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage of children who ever missed a vaccination, received one late, or never received any vaccinations	Number of children	Among children who ever missed a vaccination, received a vaccination late, or did not receive any vaccinations, the reasons vaccinations were missed, late, or not given:										
			Clinic out of stock	Not aware of need for a vaccination	Fear of side effects	Did not know where to go	Too busy to take the child	No money for transport	Child was ill	Respondent was ill	Other	Don't know	Number of children
Age in months													
12-23	22.2	677	50.6	9.4	0.9	1.4	13.4	5.9	6.3	5.6	10.0	0.7	151
24-35	23.7	660	47.6	8.9	0.3	3.7	8.7	4.7	12.7	5.4	14.6	0.3	156
Sex													
Male	22.7	704	47.0	10.4	1.2	1.2	12.1	6.7	12.8	2.6	14.4	0.6	160
Female	23.2	633	51.3	7.8	0.0	4.0	9.9	3.7	6.0	8.7	10.2	0.4	147
Residence													
Urban	21.0	830	46.9	8.0	0.0	2.3	9.2	1.9	15.4	7.4	11.7	0.3	174
Non-urban	26.2	507	51.8	10.7	1.4	2.9	13.3	9.7	1.9	3.1	13.2	0.7	133
Province													
Western Cape	32.4	111	*	*	*	*	*	*	*	*	*	*	36
Eastern Cape	28.8	155	53.9	8.7	0.0	2.2	16.6	8.3	2.0	8.4	17.7	0.0	45
Northern Cape	19.1	24	*	*	*	*	*	*	*	*	*	*	5
Free State	12.5	56	*	*	*	*	*	*	*	*	*	*	7
KwaZulu-Natal	29.3	241	53.5	11.2	2.0	4.2	13.0	6.8	9.9	4.0	2.5	0.0	71
North West	26.6	117	(45.6)	(15.9)	(0.0)	(1.8)	(1.5)	(4.5)	(2.9)	(1.7)	(22.8)	(3.1)	31
Gauteng	15.1	365	*	*	*	*	*	*	*	*	*	*	55
Mpumalanga	19.5	124	(22.7)	(2.1)	(0.0)	(4.9)	(16.3)	(7.0)	(0.5)	(13.7)	(35.1)	(2.4)	24
Limpopo	23.1	143	(71.8)	(6.0)	(0.0)	(0.0)	(8.5)	(6.5)	(0.0)	(5.6)	(3.6)	(0.0)	33
Wealth quintile													
Lowest	29.0	292	49.5	13.6	0.0	0.0	10.0	13.7	1.0	10.7	10.7	0.5	85
Second	22.5	324	51.3	13.6	0.6	5.0	10.6	2.1	9.4	3.1	14.5	0.0	73
Middle	22.3	309	51.2	3.7	2.0	0.9	14.8	1.0	7.8	1.4	18.0	1.6	69
Fourth	16.9	220	(55.7)	(3.8)	(0.0)	(1.5)	(16.2)	(0.5)	(5.7)	(8.8)	(7.8)	(0.0)	37
Highest	22.3	192	(35.1)	(6.2)	(0.0)	(7.0)	(3.2)	(5.1)	(33.1)	(3.4)	(6.8)	(0.0)	43
Total	22.9	1,337	49.0	9.2	0.6	2.6	11.0	5.3	9.6	5.5	12.4	0.5	307

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 10.8 Prevalence and treatment of symptoms of ARI

Among children under age 5, percentage who had symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey, and among children with symptoms of ARI in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, South Africa DHS 2016

	Among children under age 5:		Among children under age 5 with symptoms of ARI:		
Background characteristic	Percentage with symptoms of ARI[1]	Number of children	Percentage for whom advice or treatment was sought[2]	Percentage for whom advice or treatment was sought same or next day	Number of children
Age in months					
<6	1.1	363	*	*	4
6-11	3.8	325	*	*	12
12-23	4.2	677	*	*	29
24-35	3.5	660	*	*	23
36-47	3.1	688	*	*	21
48-59	2.4	730	*	*	17
Sex					
Male	3.6	1,783	87.2	34.0	63
Female	2.6	1,661	(88.3)	(25.9)	44
Mother's smoking status[3]					
Smokes cigarettes/tobacco	4.8	67	*	*	3
Does not smoke	3.3	1,671	(87.1)	(31.2)	55
Residence					
Urban	3.3	2,204	87.6	28.8	73
Non-urban	2.7	1,240	(87.7)	(34.7)	34
Province					
Western Cape	3.9	306	*	*	12
Eastern Cape	4.1	382	*	*	16
Northern Cape	1.3	67	*	*	1
Free State	2.6	156	*	*	4
KwaZulu-Natal	3.2	636	*	*	20
North West	1.5	269	*	*	4
Gauteng	4.0	980	*	*	39
Mpumalanga	2.7	309	*	*	8
Limpopo	0.7	338	*	*	2
Mother's education					
No education	1.4	49	*	*	1
Primary incomplete	3.2	167	*	*	5
Primary complete	0.5	133	*	*	1
Secondary incomplete	3.6	1,680	91.6	32.5	61
Secondary complete	2.4	1,027	*	*	25
More than secondary	3.8	388	*	*	15
Wealth quintile					
Lowest	2.9	744	(81.2)	(37.5)	22
Second	2.5	822	*	*	20
Middle	2.4	766	*	*	19
Fourth	5.0	642	*	*	32
Highest	3.0	470	*	*	14
Total	3.1	3,444	87.6	30.7	107

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Symptoms of ARI consist of short, rapid breathing that is chest-related and/or difficult breathing that is chest-related

[2] Includes advice or treatment from the following sources: public sector, private medical sector, and supermarket. Excludes advice or treatment from a traditional health practitioner.

[3] Questions on smoking were asked of a subsample of women

Table 10.9 Source of advice or treatment for children with symptoms of ARI

Percentage of children under age 5 with symptoms of ARI in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with symptoms of ARI in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources, South Africa DHS 2016

	Percentage for whom advice or treatment was sought from each source:	
Source	Among children with symptoms of ARI[1]	Among children with symptoms of ARI for whom advice or treatment was sought
Public sector	55.7	63.5
Government hospital	5.8	6.6
Government clinic/government health centre	50.4	57.5
CHW	0.8	0.9
Private medical sector	34.0	38.8
Private hospital/clinic	2.5	2.9
Chemist/pharmacy	22.8	26.0
Private doctor	9.3	10.7
Other private sector	3.3	3.7
Supermarket/shop	3.3	3.7
Number of children	107	94

CHW = Community health worker
[1] Symptoms of ARI consist of short, rapid breathing that is chest-related and/or difficult breathing that is chest-related

Table 10.10 Prevalence and treatment of fever

Among children under age 5, percentage who had a fever in the 2 weeks preceding the survey, and among children with a fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought and percentage who received antibiotics as treatment, according to background characteristics, South Africa DHS 2016

	Among children under age 5:		Among children under age 5 with fever:			
Background characteristic	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought[1]	Percentage for whom treatment was sought same or next day	Percentage who took antibiotic drugs	Number of children with fever
Age in months						
<6	12.0	363	(66.3)	(23.8)	(25.0)	43
6-11	25.7	325	66.2	38.4	24.6	83
12-23	23.3	677	62.2	27.2	32.7	158
24-35	20.8	660	72.4	28.1	29.4	137
36-47	18.9	688	77.3	39.0	32.5	130
48-59	17.4	730	64.9	26.3	31.6	127
Sex						
Male	20.3	1,783	69.0	30.3	29.6	363
Female	19.0	1,661	67.7	31.0	31.2	316
Residence						
Urban	20.3	2,204	70.8	31.1	33.1	447
Non-urban	18.7	1,240	63.7	29.7	25.0	232
Province						
Western Cape	16.1	306	(76.6)	(38.4)	(44.0)	49
Eastern Cape	25.4	382	69.7	36.2	27.1	97
Northern Cape	10.8	67	(54.3)	(26.1)	(51.5)	7
Free State	14.7	156	(57.5)	(25.1)	(32.9)	23
KwaZulu-Natal	16.0	636	55.0	10.8	34.2	102
North West	25.7	269	58.6	31.9	17.4	69
Gauteng	21.3	980	76.4	33.0	26.5	209
Mpumalanga	20.3	309	73.3	26.1	37.3	63
Limpopo	17.5	338	66.7	46.8	35.1	59
Mother's education						
No education	22.5	49	*	*	*	11
Primary incomplete	16.0	167	(68.3)	(42.1)	(21.8)	27
Primary complete	10.1	133	*	*	*	13
Secondary incomplete	19.3	1,680	68.6	28.6	30.5	325
Secondary complete	20.9	1,027	68.2	32.4	29.3	215
More than secondary	22.7	388	67.2	29.9	34.9	88
Wealth quintile						
Lowest	13.3	744	64.0	22.8	25.5	99
Second	21.8	822	67.3	29.1	23.0	179
Middle	20.7	766	68.6	37.6	33.3	159
Fourth	22.7	642	69.3	24.2	30.6	146
Highest	20.4	470	73.3	39.7	43.6	96
Total	19.7	3,444	68.4	30.6	30.3	679

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes advice or treatment from the following sources: public sector, private medical sector, and supermarket. Excludes advice or treatment from a traditional health practitioner.

Table 10.11 Source of advice or treatment for children with fever

Percentage of children under age 5 with a fever in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with a fever in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources, South Africa DHS 2016

	Percentage for whom advice or treatment was sought from each source:	
Source	Among children with fever	Among children with fever for whom advice or treatment was sought
Public sector	40.9	59.7
Government hospital	2.5	3.6
Government clinic/government health centre	36.7	53.6
Mobile clinic	1.7	2.4
CHW	0.3	0.4
Other public sector	0.1	0.1
Private medical sector	27.0	39.5
Private hospital/clinic	2.8	4.0
Chemist/pharmacy	15.3	22.3
Private doctor	9.7	14.2
Other private sector	1.4	2.0
Supermarket/shop	1.3	1.9
Traditional health practitioner	0.1	0.1
Other	0.2	0.2
Number of children	679	465

CHW = Community health worker

Table 10.12 Prevalence and treatment of diarrhoea

Percentage of children under age 5 who had diarrhoea in the 2 weeks preceding the survey, and among children with diarrhoea in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage with diarrhoea	Number of children	Among children under age 5 with diarrhoea: Percentage for whom advice or treatment was sought[1]	Among children under age 5 with diarrhoea: Number of children with diarrhoea
Age in months				
<6	7.0	363	(36.9)	25
6-11	16.3	325	66.2	53
12-23	16.8	677	62.4	114
24-35	8.2	660	55.9	54
36-47	8.5	688	79.6	58
48-59	7.1	730	(63.0)	52
Sex				
Male	11.2	1,783	59.9	200
Female	9.4	1,661	67.1	157
Source of drinking water[2]				
Improved	10.2	3,111	62.9	318
Unimproved	11.4	333	(64.3)	38
Type of toilet facility[3]				
Improved sanitation	10.4	2,523	64.3	263
Unimproved sanitation	10.2	920	59.6	94
Shared facility[4]	10.6	724	60.7	77
Unimproved facility	9.1	73	*	7
Open defecation	8.3	123	*	10
Handwashing place				
Observed, fixed place	8.6	1,727	71.2	148
Observed, mobile place	13.5	1,177	52.5	159
Not observed	9.2	539	(72.8)	49
Residence				
Urban	9.0	2,204	65.5	199
Non-urban	12.7	1,240	60.0	157
Province				
Western Cape	5.4	306	*	16
Eastern Cape	9.4	382	(63.8)	36
Northern Cape	8.1	67	*	5
Free State	5.8	156	*	9
KwaZulu-Natal	13.7	636	56.4	87
North West	16.4	269	57.9	44
Gauteng	8.6	980	(73.2)	85
Mpumalanga	10.7	309	(69.3)	33
Limpopo	12.0	338	57.1	41
Mother's education				
No education	10.6	49	*	5
Primary incomplete	17.4	167	(61.6)	29
Primary complete	13.1	133	*	17
Secondary incomplete	10.3	1,680	58.5	173
Secondary complete	9.6	1,027	76.9	98
More than secondary	8.6	388	(49.1)	34
Wealth quintile				
Lowest	11.8	744	55.1	88
Second	13.8	822	53.7	114
Middle	8.7	766	80.3	67
Fourth	8.7	642	(65.6)	56
Highest	6.8	470	(77.8)	32
Total	10.3	3,444	63.0	356

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes advice or treatment from the following sources: public sector, private medical sector, and supermarket. Excludes advice or treatment from a traditional health practitioner.

[2] See Table 2.1 for definition of categories

[3] See Table 2.3 for definition of categories

[4] Facilities that would be considered improved if they were not shared by two or more households

Table 10.13 Feeding practices during diarrhoea

Percent distribution of children under age 5 who had diarrhoea in the 2 weeks preceding the survey by amount of liquids and food offered compared with normal practice, according to background characteristics, South Africa DHS 2016

Background characteristic	Amount of liquids given							Amount of food given								Number of children with diarrhoea
	More	Same as usual	Some-what less	Much less	None	Don't know	Total	More	Same as usual	Some-what less	Much less	None	Never gave food	Don't know	Total	
Age in months																
<6	(6.3)	(67.9)	(6.7)	(15.8)	(3.2)	(0.0)	100.0	(1.7)	(54.0)	(11.7)	(4.6)	(2.5)	(25.4)	(0.0)	100.0	25
6-11	19.7	50.5	12.1	14.5	3.2	0.0	100.0	12.3	50.3	9.6	21.4	0.0	6.5	0.0	100.0	53
12-23	15.1	43.4	18.9	17.2	4.7	0.7	100.0	6.8	46.3	21.9	21.6	1.3	2.1	0.0	100.0	114
24-35	12.7	38.7	11.0	28.0	7.2	2.4	100.0	3.8	48.5	14.8	26.5	3.2	0.8	2.4	100.0	54
36-47	28.1	31.9	10.3	26.0	2.4	1.3	100.0	6.2	39.7	20.3	29.7	4.0	0.0	0.0	100.0	58
48-59	(2.1)	(45.3)	(6.3)	(31.9)	(12.5)	(1.9)	100.0	(1.1)	(36.0)	(12.9)	(47.8)	(1.5)	(0.0)	(0.8)	100.0	52
Sex																
Male	14.4	44.1	13.6	23.2	3.1	1.5	100.0	5.1	44.4	15.2	28.5	2.3	3.7	0.9	100.0	200
Female	15.8	43.6	11.3	20.3	8.5	0.5	100.0	6.9	46.2	18.6	23.3	1.5	3.4	0.0	100.0	157
Breastfeeding status																
Breastfeeding	20.5	51.1	6.4	15.3	6.8	0.0	100.0	9.2	48.8	10.3	23.1	0.2	8.4	0.0	100.0	92
Not breastfeeding	13.2	41.4	14.7	24.2	5.1	1.4	100.0	4.7	44.0	18.9	27.3	2.6	1.9	0.6	100.0	265
Residence																
Urban	17.6	43.2	13.9	21.5	3.7	0.1	100.0	5.5	46.9	18.6	26.4	1.0	1.6	0.1	100.0	199
Non-urban	11.7	44.7	11.0	22.5	7.8	2.3	100.0	6.4	43.1	14.3	26.0	3.2	6.1	1.0	100.0	157
Wealth quintile																
Lowest	24.9	32.5	10.7	23.6	7.9	0.4	100.0	8.7	36.4	15.3	35.0	1.0	3.1	0.4	100.0	88
Second	5.1	55.2	7.4	23.0	7.0	2.3	100.0	2.2	47.7	10.3	30.4	3.1	5.9	0.5	100.0	114
Middle	13.0	40.0	16.2	27.6	2.4	0.9	100.0	6.1	45.0	26.3	15.0	2.5	4.3	0.9	100.0	67
Fourth	(23.4)	(43.6)	(11.6)	(15.7)	(5.3)	(0.3)	100.0	(8.3)	(53.1)	(16.4)	(19.4)	(1.6)	(0.8)	(0.3)	100.0	56
Highest	(12.9)	(43.5)	(30.8)	(12.8)	(0.0)	(0.0)	100.0	(6.7)	(47.2)	(24.0)	(22.1)	(0.0)	(0.0)	(0.0)	100.0	32
Total	15.0	43.9	12.6	21.9	5.5	1.1	100.0	5.9	45.2	16.7	26.2	2.0	3.6	0.5	100.0	356

Notes: It is recommended that children be given more liquids to drink during diarrhoea and that food not be reduced. Figures in parentheses are based on 25-49 unweighted cases.

Table 10.14 Oral rehydration therapy, zinc, and other treatments for diarrhoea

Among children under age 5 who had diarrhoea in the 2 weeks preceding the survey, percentage given fluid from an ORS packet; clinic-recommended homemade fluids (RHF); ORS or RHF; zinc; ORS and zinc; ORS or increased fluids; oral rehydration therapy (ORT); continued feeding and ORT; continued feeding, ORT, and zinc; and other treatments, and percentage given no treatment, according to background characteristics, South Africa DHS 2016

	Percentage of children with diarrhoea who were given:														
										Other treatments					
Background characteristic	Fluid from ORS packets	Clinic-recommended home-made fluids (RHF)	Either ORS or RHF	Zinc	ORS and zinc	ORS or increased fluids	ORT (ORS, RHF, or increased fluids)	Continued feeding and ORT[1]	Continued feeding, ORT, and zinc	Antibiotic drugs	Anti-motility drugs	Intra-venous solution	Home remedy/ other	Percentage given no treatment	Number of children with diarrhoea
Age in months															
<6	(27.3)	(24.4)	(43.7)	(15.9)	(12.6)	(33.6)	(50.0)	(35.6)	(14.3)	(0.0)	(0.0)	(0.0)	(0.9)	(49.1)	25
6-11	45.8	65.0	74.9	35.2	21.3	52.5	81.6	68.3	29.0	1.5	3.8	0.0	9.1	13.3	53
12-23	49.9	82.1	87.8	36.7	26.4	58.2	89.5	66.6	24.6	10.1	2.9	0.0	10.2	7.4	114
24-35	49.0	58.1	64.7	34.0	29.6	55.3	68.8	44.9	25.1	9.9	0.9	0.9	13.4	21.8	54
36-47	54.4	85.1	91.7	48.9	34.0	75.8	91.7	59.5	34.3	18.4	0.0	3.1	12.8	4.5	58
48-59	(71.6)	(83.8)	(92.2)	(37.9)	(36.8)	(73.7)	(93.3)	(43.3)	(11.4)	(18.5)	(1.2)	(0.0)	(14.1)	(0.9)	52
Sex															
Male	52.2	73.5	82.7	38.5	30.5	59.8	85.6	54.8	23.6	11.1	2.4	0.2	8.0	11.8	200
Female	50.5	71.4	77.7	34.6	24.6	60.9	80.4	59.4	25.1	10.0	1.0	1.2	14.5	12.4	157
Residence															
Urban	53.4	73.0	81.0	40.6	32.6	63.7	82.6	57.8	29.1	12.4	2.8	1.2	11.9	12.0	199
Non-urban	48.9	72.0	79.8	31.9	21.9	55.9	84.1	55.4	18.1	8.4	0.6	0.0	9.5	12.2	157
Wealth quintile															
Lowest	39.6	67.5	79.9	20.6	14.2	59.2	83.7	53.3	15.3	10.1	1.0	0.0	10.2	12.4	88
Second	48.9	80.3	83.4	35.7	25.8	52.4	85.1	50.9	15.9	8.9	0.0	0.4	4.7	11.7	114
Middle	54.8	73.9	78.2	46.9	38.8	61.2	81.6	64.8	37.4	15.2	3.3	0.0	11.7	13.6	67
Fourth	(63.3)	(78.3)	(83.4)	(50.9)	(37.8)	(69.8)	(83.4)	(64.1)	(37.3)	(8.6)	(0.0)	(3.2)	(17.0)	(8.3)	56
Highest	(65.3)	(45.8)	(71.3)	(39.2)	(33.1)	(72.8)	(78.9)	(57.7)	(28.5)	(12.6)	(10.5)	(0.0)	(21.7)	(16.1)	32
Total	51.4	72.5	80.5	36.8	27.9	60.3	83.3	56.8	24.3	10.6	1.8	0.6	10.8	12.1	356

Note: Figures in parentheses are based on 25-49 unweighted cases.
ORS = Oral rehydration salts
[1] Continued feeding includes children who were given more, the same as usual, or somewhat less food during the diarrhoea episode

Table 10.15 Source of advice or treatment for children with diarrhoea

Percentage of children under age 5 with diarrhoea in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources; among children under age 5 with diarrhoea in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources; among children with diarrhoea who received ORS, percentage for whom advice or treatment was sought from specific sources; and among children with diarrhoea who received clinic-recommended homemade fluids, percentage for whom advice or treatment was sought from specific sources, South Africa DHS 2016

	Percentage for whom advice or treatment was sought from each source:			
Source	Among children with diarrhoea	Among children with diarrhoea for whom advice or treatment was sought	Among children with diarrhoea who received ORS[1]	Among children with diarrhoea who received clinic-recommended homemade fluids
Public sector	46.4	72.9	63.6	54.9
Government hospital	4.5	7.1	5.3	6.0
Government clinic/government health centre	38.5	60.4	55.2	44.5
Mobile clinic	1.9	2.9	0.4	2.3
CHW	2.8	4.4	5.0	3.8
Private medical sector	16.1	25.3	19.9	14.0
Private hospital/clinic	3.6	5.7	4.7	2.9
Chemist/pharmacy	6.0	9.4	7.1	4.0
Private doctor	7.2	11.2	8.1	7.2
Other private sector	2.0	3.2	0.3	1.4
Supermarket/shop	1.4	2.3	0.3	0.8
Traditional health practitioner	0.6	0.9	0.0	0.6
Other	0.6	1.0	0.4	0.8
Number of children	356	227	183	258

ORS = Oral rehydration salts
CHW = Community health worker
[1] Fluids from ORS packet

Table 10.16 Knowledge of ORS packets and clinic-recommended homemade fluids

Percentage of women age 15-49 with a live birth in the 5 years preceding the survey who know about ORS packets and percentage who know about clinic-recommended homemade fluids for treatment of diarrhoea, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage of women who know about ORS packets	Percentage of women who know about clinic-recommended homemade fluids	Number of women
Age			
15-19	50.8	84.2	176
20-24	58.8	88.3	699
25-34	63.2	89.5	1,504
35-49	64.1	92.2	656
Residence			
Urban	63.7	87.8	1,942
Non-urban	58.0	92.6	1,094
Province			
Western Cape	71.8	94.4	276
Eastern Cape	54.1	91.0	335
Northern Cape	63.1	90.1	61
Free State	67.9	92.2	145
KwaZulu-Natal	79.4	92.1	555
North West	55.0	92.1	244
Gauteng	62.5	82.9	842
Mpumalanga	46.1	91.7	278
Limpopo	42.3	91.7	301
Education			
No education	(53.5)	(82.2)	42
Primary incomplete	53.2	90.8	141
Primary complete	49.1	82.2	108
Secondary incomplete	59.1	90.3	1,486
Secondary complete	65.3	90.7	908
More than secondary	71.2	85.8	351
Wealth quintile			
Lowest	56.5	88.6	650
Second	54.6	90.0	739
Middle	62.8	90.2	671
Fourth	67.2	92.3	557
Highest	72.9	85.3	418
Total	61.7	89.5	3,036

Note: Figures in parentheses are based on 25-49 unweighted cases.
ORS = Oral rehydration salts

NUTRITION OF CHILDREN 11

Key Findings

- ***Nutritional status:*** 27% of children under age 5 are stunted (short for their age), 3% are wasted (thin for their height), 6% are underweight (low weight for their age), and 13% are overweight (heavy for their height).
- ***Breastfeeding:*** Breastfeeding is initiated among two-thirds of children within 1 hour of birth. Thirty-two percent of infants under age 6 months are exclusively breastfed.
- ***Minimum acceptable diet:*** Only 23% of children age 6-23 months are fed a minimum acceptable diet.
- ***Consumption of unhealthy foods:*** 18% of children age 6-23 months consumed sugary drinks, 35% consumed sugary foods, and 44% consumed salty snacks during the day or night preceding the survey.
- ***Salt iodisation:*** Nearly all households tested have iodised salt (98%); 11% have inadequately iodised salt (<15 ppm) and 89% have adequately iodised salt (≥15 ppm) of which 11% (10% of all households tested) have excessively iodised salt (>80 ppm).

This chapter reports on the nutritional status and prevalence of anaemia among children. It also describes infant and young child feeding practices, including breastfeeding and feeding with solid/semisolid foods, dietary diversity, and frequency of feeding. In addition, information on supplementation, deworming, and household fortification of salt with iodine is presented. Relevant aspects of nutrition among women and men age 15 and older are addressed in Chapter 17.

11.1 NUTRITIONAL STATUS OF CHILDREN

Nutrition is foundational to both individual and national development. In 2012, the World Health Assembly set nutrition targets for reduction of stunting, wasting, and overweight in children. Nutritional status can be described by various means, such as clinical examination, dietary assessment, biochemical tests, and anthropometry (measurement of the body).

As stated in the WHO technical report on the use and interpretation of anthropometry, anthropometry is the most portable, universally applicable, inexpensive, and non-invasive technique for assessing the size, proportions, and composition of the human body. It reflects both health and nutritional status and predicts performance, health, and survival. As such, it is a valuable tool for guiding public health policy and clinical decisions (WHO 1995).

11.1.1 Measurement of Nutritional Status among Young Children

Children's height/length, weight, and age data were used to calculate three indices: height-for-age, weight-for-height, and weight-for-age.

As indicated in the box below, *stunting*, or low height-for-age, is a sign of chronic undernutrition that reflects failure to receive adequate nutrition over a long period. Stunting can also be affected by recurrent and chronic illness. *Wasting*, or low weight-for-height, is a measure of acute undernutrition and represents the failure to receive adequate nutrition in the period immediately before the survey. Wasting may result from inadequate food intake or from a recent episode of illness causing weight loss. The opposite of wasting is *overweight* (high weight-for-height), a measure of overnutrition. *Underweight*, or low weight-for-age, is a composite index of weight-for-height and height-for-age. Thus, it includes both acute (wasting) and chronic (stunting) undernutrition.

Stunting (assessed via height-for-age)

Height-for-age is a measure of linear growth retardation and cumulative growth deficits. Children whose height-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered short for their age (stunted), or chronically undernourished. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely stunted.

Sample: Children under age 5

Wasting (assessed via weight-for-height)

The weight-for-height index measures body mass in relation to body height or length and describes acute nutritional status. Children whose weight-for-height Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered thin (wasted), or acutely undernourished. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely wasted.

Sample: Children under age 5

Underweight (assessed via weight-for-age)

Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both acute and chronic undernutrition. Children whose weight-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are classified as underweight. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely underweight.

Sample: Children under age 5

Overweight (assessed via weight-for-height)

Children whose weight-for-height Z-score is more than two standard deviations (+2 SD) above the median of the reference population are considered overweight.

Sample: Children under age 5

The means of the Z-scores for height-for-age, weight-for-height, and weight-for-age are also calculated as summary statistics representing the nutritional status of children in a population. These mean scores describe the nutritional status of the entire population of children without the use of a cutoff point. A mean Z-score of less than 0 (i.e., a negative mean value for stunting, wasting, or underweight) suggests a downward shift in the entire sample population's nutritional status relative to the reference population. The farther away mean Z-scores are from 0, the higher the prevalence of undernutrition.

11.1.2 Data Collection

A total of 2,024 children under age 5 were eligible for height and weight measurements to assess their nutritional status. Children for whom data are missing, incomplete, or out of range to such a degree as to not be plausible, are not included in the analysis. Out-of-range data are defined in the WHO growth standards

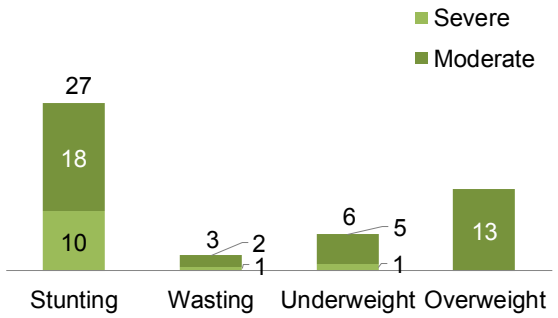
(WHO 2006). Valid height-for-age data are available for 73% of children, valid weight-for-height data are available for 72% of children, and valid weight-for-age data are available for 73% of children. The low percentages of valid data were mainly the result of missing or incomplete data; only 1%-2% of the data were out of range. **Table C.7** in Appendix C provides additional information on data completeness and quality for assessments of height, weight, and age among children. Based on this information, the anthropometry data should be interpreted with caution, especially among children in the provinces of Western Cape and Gauteng.

11.1.3 Levels of Child Malnutrition

The SADHS 2016 results show that 27% of children under age 5 are stunted, 3% are wasted, and 6% are underweight. Disconcertingly, 13% of children are overweight (**Figure 11.1**).

***Figure 11.1* Nutritional status of children**

Percentage of children under age 5 classified as malnourished



Note: Numbers may not sum to total due to rounding.

Patterns by background characteristics

- The prevalence of stunting generally increases with age from 8 months to 23 months before declining by the end of the third year of life (35 months). The proportions of stunting (43%) and severe stunting (20%) are highest among children age 18-23 months. Also, children in this age group are most likely to be underweight (10%) (**Table 11.1**).
- Stunting is higher among male children (30%) than among female children (25%).
- As shown in **Figure 11.2**, Gauteng and Free State have the highest stunting prevalence (34% each). However, the percentage of children with valid anthropometry data varies widely by province, potentially affecting the results (**Table C.7** in Appendix C).
- Stunting generally declines with increasing mother's education and household wealth. For example, 36% of children in the lowest wealth quintile are stunted, as compared with 13% of children in the highest wealth quintile (**Figure 11.3**).

***Figure 11.2* Stunting in children by province**

Percentage of children under age 5 who are stunted

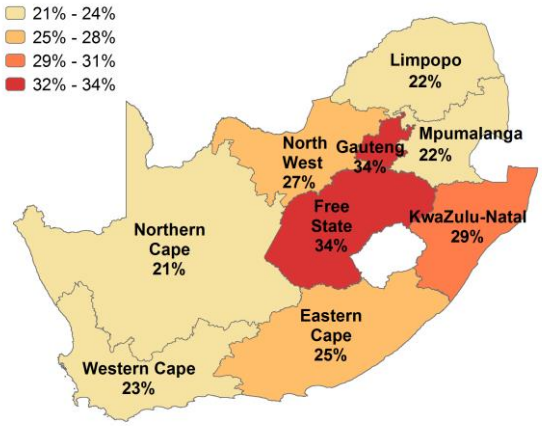
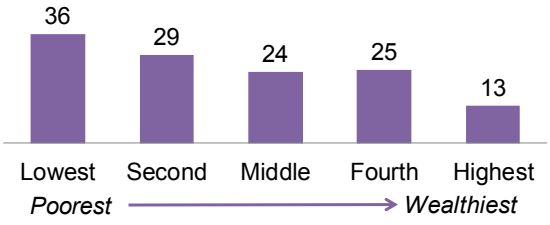


***Figure 11.3* Stunting in children by household wealth**

Percentage of children under age 5 who are stunted



11.2 Infant and Young Child Feeding Practices

Appropriate infant and young child feeding (IYCF) practices include early initiation of breastfeeding within the first hour of life, exclusive breastfeeding in the first 6 months of life, continued breastfeeding up to age 2 or beyond, introduction of a range of safe solid and semisolid foods at age 6 months, and gradual increases in the amount of food given and frequency of feeding as the child gets older. It is also important for children to receive a diverse diet (i.e., eating foods from different food groups to ensure that macro- and micronutrient requirements are met) (WHO 2008).

11.2.1 Initiation of Breastfeeding

Early initiation of breastfeeding within the first hour of life is important for both the mother and the child. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn. Early initiation of breastfeeding also encourages bonding between the mother and her newborn, facilitating the production of regular breast milk.

Early breastfeeding
Initiation of breastfeeding within 1 hour of birth
Sample: Last-born children who were born in the 2 years before the survey

Table 11.2 shows that 84% of last-born children who were born in the 2 years before the survey were breastfed at some point in their life. Two-thirds (67%) of infants were breastfed within 1 hour of birth and 80% within 1 day of birth. However, 16% of breastfed infants received a prelacteal feed.

Comparison with the SADHS 1998: The percentage of last-born children under age 2 who were ever breastfed decreased slightly from 87% in 1998 to 84% in 2016. However, over the same period, the percentage of children who received breast milk within 1 hour of birth increased from 39% to 67%.

Patterns by background characteristics

- While differences in breastfeeding practices according to urban and non-urban residence were minor, there were considerable variations by province. The percentage of children who had ever been breastfed was highest in Limpopo (94%) and lowest in KwaZulu-Natal (71%).
- Only 49% of children in North West were breastfed within 1 hour of birth, as compared with 56%-85% of children in other provinces.
- The percentage of children receiving a prelacteal feed was highest in Mpumalanga (32%) and Eastern Cape (21%) and lowest in North West (7%) and Northern Cape (10%).
- Children whose mothers had not completed a primary education (7%) were less likely than children whose mothers had completed higher levels of education (14%-19%) to receive a prelacteal feed.

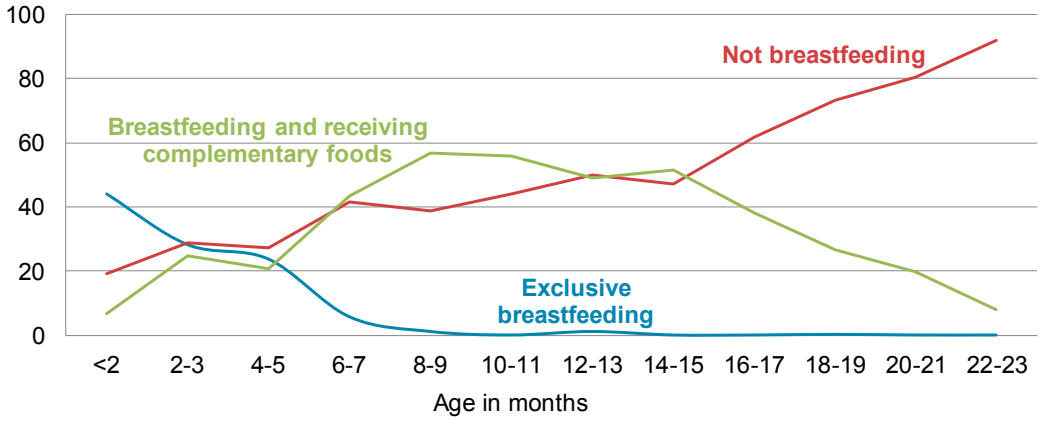
11.2.2 Exclusive and Continued Breastfeeding

Breast milk contains all of the nutrients needed by children in the first 6 months of life and is the best source of nutrition. It is recommended that children be exclusively breastfed in the first 6 months of their life; that is, they should be given nothing but breast milk. Exclusive breastfeeding to age 6 months prevents infections, such as diarrhoea and respiratory illnesses, and provides the nutrients and liquid an infant requires for optimal growth and development. Early initiation of complementary feeding reduces breast milk output because the production and release of breast milk is modulated by the frequency and intensity of suckling.

Tables 11.3 and **11.4** and **Figure 11.4** show breastfeeding practices by age. Thirty-two percent of infants under age 6 months are exclusively breastfed. Exclusive breastfeeding declines with age: 44% of infants age 0-1 month are exclusively breastfed, as compared with 24% of infants age 4-5 months.

Figure 11.4 **Breastfeeding practices by age**

Percentage of children under age 2



Contrary to the recommendation that infants under age 6 months be exclusively breastfed, many infants in South Africa consume other liquids in addition to breast milk, such as plain water (14%) and other types of milk (11%); 18% consume breast milk and complementary foods. One in four (25%) children under age 6 months are not breastfeeding at all.

Half of infants age 0-3 months and 45% of infants under age 6 months feed from a bottle with a nipple, a practice that is discouraged. More than half of children age 6-17 months feed from a bottle with a nipple. WHO recommends that children continue breastfeeding until at least age 2. Continued breastfeeding drops from 51% at 1 year to 13% at 2 years.

Comparison with the SADHS 1998: The proportion of infants under age 6 months who are exclusively breastfed increased from 7% in 1998 to 32% in 2016. The proportion of infants under age 6 months who are predominantly breastfed (those who receive only plain water or other non-milk liquids in addition to breast milk) increased from 23% to 46%. However, the proportion of children who are not breastfeeding has also increased since 1998, from 17% to 25% among those under age 6 months, from 29% to 40% among those age 6-9 months, and from 48% to 66% among those age 12-23 months.

11.2.3 Duration of Breastfeeding

Among children born in the 3 years preceding the survey, the median duration of any breastfeeding is 10.7 months, and the median duration of predominant breastfeeding is 1.9 months. The median duration of exclusive breastfeeding could not be determined because less than 50% of children were exclusively breastfeeding. The mean duration of any breastfeeding is 12.2 months, the mean duration of predominant breastfeeding is 3.8 months, and the mean duration of exclusive breastfeeding is 2.9 months (**Table 11.5**).

Comparison with the SADHS 1998: The mean duration of any breastfeeding decreased from 15.6 months in 1998 to 12.2 months in 2016. However, the mean duration of exclusive breastfeeding more than doubled, from 1.2 months to 2.9 months.

Patterns by background characteristics

- Girls were breastfed longer than boys (median durations of 12.2 months and 8.6 months, respectively).
- Children in non-urban areas were breastfed for 3 months longer than those in urban areas (median duration of 13.5 months versus 10.3 months).

Information on the duration of breastfeeding among children under age 5 who were breastfed in the past but have been weaned is presented in **Table 11.6**. The mean and median durations of breastfeeding for such children were 10.4 and 9.2 months, respectively.

11.2.4 Complementary Feeding

After the first 6 months, breast milk alone is no longer sufficient to meet the nutritional needs of the infant; at this time, appropriate complementary foods should be introduced. This transition from exclusive breastfeeding to family foods is the time at which children are most vulnerable to becoming undernourished. Complementary feeding should be *timely* (children should start receiving foods in addition to breast milk from 6 months onwards), *adequate* (with respect to amount, frequency, consistency, and variety), and *appropriate* (in terms of texture). Foods should include animal-source foods, fruits, and vegetables (WHO 1998).

In the SADHS 2016, women who had at least one child living with them who was born in 2014 or a later year were asked questions about the types of liquids and foods the child had consumed during the day or night before the interview. Mothers who had more than one child born in 2014 or a later year were asked questions about the youngest child living with them.

Eighty-three percent of children age 6-8 months received solid, semisolid, or soft foods (**Table 11.4**). **Table 11.7** shows that the types of foods and liquids received by children during the day and night preceding the survey depend on the child's age and breastfeeding status. Eighty percent of breastfeeding children and 87% of nonbreastfeeding children age 6-8 months received complementary foods. Regardless of breastfeeding status, more than 9 in 10 children age 6-23 months consumed complementary foods (any solid or semisolid food).

Patterns by background characteristics

- Eighty-five percent of breastfeeding children age 6-23 months consumed foods made from grains; 50% consumed fortified baby foods; 47% consumed fruits or vegetables rich in vitamin A; 46% consumed cheese, yoghurt, and other milk products; 41% consumed meat, fish, or poultry; 39% consumed food made from roots and tubers; and 38% consumed eggs.
- Eighty-four percent of nonbreastfeeding children age 6-23 months consumed foods made from grains; 45% consumed fortified baby foods; 56% consumed fruits or vegetables rich in vitamin A; 55% consumed cheese, yoghurt, and other milk products; 51% consumed meat, fish, or poultry; 45% consumed food made from roots and tubers; and 46% consumed eggs.

11.2.5 Minimum Acceptable Diet

Infants and young children should be fed a minimum acceptable diet to ensure appropriate growth and development. Without adequate diversity and meal frequency, infants and young children are vulnerable to undernutrition, especially stunting and micronutrient deficiencies, and to increased morbidity and mortality.

Dietary diversity is a proxy for adequate micronutrient density of foods. *Minimum dietary diversity* means feeding the child food from at least four food groups out of a standard seven groups. By consuming food from at least four food groups, the child has a high likelihood of consuming at least one animal source of food and at least one fruit or vegetable in addition to a staple food, such as grains, roots, or tubers (WHO 2008). The four groups should come from a list of seven food groups: grains, roots, and tubers; legumes and nuts; dairy products (milk, yoghurt, and cheese); flesh foods (meat, fish, poultry, and liver/organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables.

Minimum meal frequency is a proxy for a child reaching her or his energy requirements. For infants and young children, the indicator is based on how much energy the child needs and, if the child is breastfed, the

amount of energy needs not met by breast milk. Breastfed children are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least twice a day (for infants age 6-8 months) or at least three times a day (for children age 9-23 months). Nonbreastfed children age 6-23 months are considered to be fed with a *minimum meal frequency* if they receive solid, semisolid, or soft foods at least four times a day.

Minimum acceptable diet

Proportion of children age 6-23 months who receive a minimum acceptable diet. This indicator is a composite of the following two groups:

$$\frac{\text{Breastfed children age 6-23 months who had at least the minimum dietary diversity and the minimum meal frequency during the previous day}}{\text{Breastfed children age 6-23 months}}$$

and

$$\frac{\text{Nonbreastfed children age 6-23 months who received at least two milk feedings and had at least the minimum dietary diversity (not including milk feeds) and the minimum meal frequency during the previous day}}{\text{Nonbreastfed children age 6-23 months}}$$

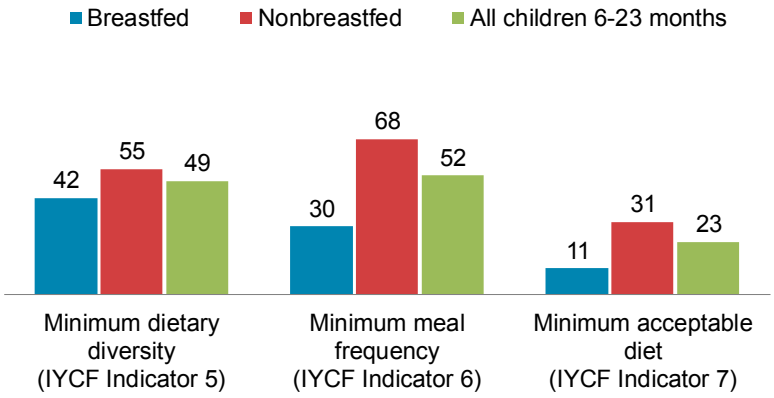
Sample: Youngest children age 6-23 months living with their mother

Minimum dietary diversity, minimum meal frequency, and appropriate milk feeds together constitute a child's minimum acceptable diet. Forty-nine percent of children age 6-23 months met the criteria for minimum dietary diversity and 52% met the criteria for minimum meal frequency. Only 23% of children age 6-23 months were fed a minimum acceptable diet (**Table 11.8**).

More nonbreastfed children (31%) than breastfed children (11%) were fed a minimum acceptable diet. Nonbreastfed children were more likely than breastfed children to meet the criteria for both minimum dietary diversity (55% versus 42%) and minimum meal frequency (68% versus 30%) (**Figure 11.5**).

Figure 11.5 **IYCF indicators on minimum acceptable diet**

Percentage of children age 6-23 months



Patterns by background characteristics

- The percentage of children consuming a minimum acceptable diet increased with increasing age, from 17% among those age 6-11 months to 31% among those age 18-23 months. This change was due to improvements with age in dietary diversity; 23% of children age 6-8 months met the criteria for minimum dietary diversity, as compared with 64% of children age 18-24 months.
- Twenty-six percent of children in urban areas were fed a minimum acceptable diet, compared with 19% of children in non-urban areas.
- High inter-provincial variability was observed. The percentage of children age 6-23 months with a minimum acceptable diet ranged from a low of 7% in Limpopo to a high of 42% in Free State.

- The proportion of children consuming a minimum acceptable diet generally increased with increasing mother's education.
- The percentage of children with a minimum acceptable diet increased with increasing household wealth, from 16% among children in the second wealth quintile to 39% among those in the highest quintile. Notably, differences in minimum acceptable diet were more apparent among nonbreastfed than breastfed children.

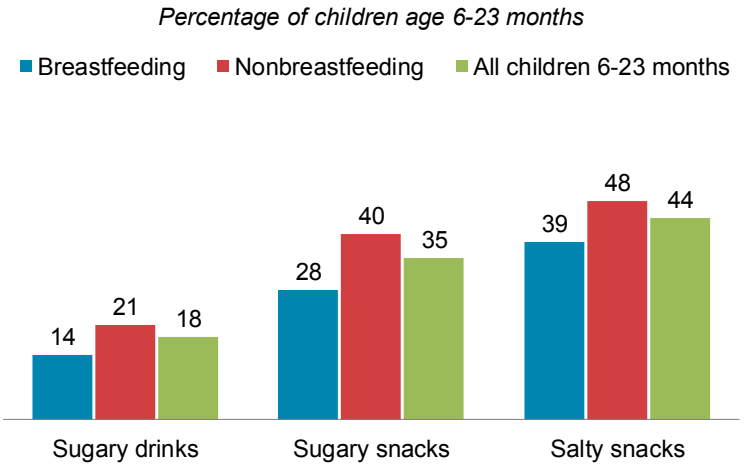
Consumption of Unhealthy Foods and Drinks

As part of mothers' recall of foods and liquids consumed by their youngest child under age 2, they were asked about the child's consumption of liquids and foods that can be unhealthy, including sugary drinks and foods, and salty snacks. Overall, 18% of children age 6-23 months consumed sugary drinks, 35% consumed sugary foods, and 44% consumed salty snacks during the day or night preceding the survey (**Table 11.9**).

Patterns by background characteristics

- Consumption of unhealthy foods and drinks increases with age. For example, 18% of children age 6-8 months consumed salty snacks and 4% consumed sugary drinks, as compared with 64% and 33%, respectively, of children age 18-23 months.
- Nonbreastfeeding children were much more likely than breastfeeding children to consume unhealthy foods and drinks (**Figure 11.6**).

Figure 11.6 **Consumption of unhealthy foods and drinks**



11.3 ANAEMIA PREVALENCE IN CHILDREN

Anaemia in children

Anaemia status	Haemoglobin level in grams/decilitre*
Anaemic	<11.0
Mildly anaemic	10.0-10.9
Moderately anaemic	7.0-9.9
Severely anaemic	<7.0
Not anaemic	11.0 or higher
*Haemoglobin levels are adjusted for altitude in enumeration areas that are above 1,000 metres.	

Sample: Children age 6-59 months

Anaemia is a condition that is marked by low levels of haemoglobin in the blood. Iron is a key component of haemoglobin, and iron deficiency is estimated to be responsible for approximately half of all anaemia globally. Other potential causes of anaemia include malaria, hookworm and other helminth infections, other nutritional deficiencies, chronic and acute infections, and genetic conditions. Anaemia is a serious concern for children because it can impair cognitive development, stunt growth, and increase morbidity from infectious diseases.

Haemoglobin testing was carried out among children age 6-59 months. Haemoglobin levels were measured for 62% of the children eligible for testing. The methodology used to measure haemoglobin is described in Chapter 1. Given the low response rates, the results should be interpreted with caution.

Overall, the prevalence of anaemia among children age 6-59 months is 61%, with 24% classified as mildly anaemic, 35% as moderately anaemic, and 2% as severely anaemic (**Table 11.10**).

The SADHS 2016 is the first DHS in South Africa to measure the prevalence of anaemia in children age 6-59 months. The anaemia prevalence observed in the SADHS 2016 is much higher than expected considering the results of other national studies (Shisana et al. 2014; Labadarios et al. 2007). Thus, as noted, the results should be interpreted with caution until they are further reviewed and analysed.

11.4 Presence of Iodised Salt in Households

Iodine is an essential micronutrient that is necessary for the synthesis of thyroid hormones. A wide range of physiological activities require thyroid hormones, which are critical for metabolism, initial growth, and organ development, specifically brain development. Even a mild iodine deficiency may seriously affect a child's intelligence and cognitive functioning. Ensuring adequate iodine nutrition is key to preventing iodine deficiency disorders, and iodisation of salt is the primary strategy used to achieve this aim in most populations.

In South Africa, iodisation of all food-grade salt with potassium iodate has been mandatory since 1995. Quantitative measurements of iodine in salt allow calculation of the percentage of households using iodised salt (>0 ppm iodine), adequately iodised salt (≥15 ppm iodine), or excessively iodised salt (>80 ppm iodine). Excess iodine can also result in poor health outcomes, such as iodine-induced thyroid dysfunction.

In the SADHS 2016, salt samples were taken and laboratory-based titration for iodine was performed in 88% of eligible households. The titration method is used worldwide as the preferred method for quantitatively determining the iodine content of iodised salt. It is also the method of choice for quality control and for managing national salt iodisation programmes (WHO/UNICEF/ICCIDD 2007). The SADHS results showed that nearly all of the households in which salt was tested had iodised salt (98%); 11% had inadequately iodised salt (<15 ppm), and 89% had adequately iodised salt (≥15 ppm) (**Table 11.11**).

Adequately iodised salt can be characterised as optimally iodised (≥15 to ≤40 ppm), highly iodised (>65 ppm), or excessively iodised (>80 ppm). Among South African households, 30% have optimally iodised salt, 18% have highly iodised salt, and 10% have excessively iodised salt.

Patterns by background characteristics

- Non-urban households are twice as likely as urban households to have inadequately iodised salt (18% versus 8%).
- By province, the proportion of households with inadequately iodised salt ranges from a low of 6% in Gauteng to a high of 31% in Limpopo.
- The percentage of households with inadequately iodised salt generally decreases with increasing household wealth.
- The proportion of households with excessively iodised salt is highest in Eastern Cape (14%) and lowest in Western Cape (7%).

11.5 Micronutrient Intake, Supplementation, and Deworming among Children

Micronutrient deficiencies are major contributors to childhood morbidity and mortality. Micronutrients are available in foods and can also be provided through food fortification and direct supplementation.

The information collected on food consumption among children age 6-23 months is useful in assessing the extent to which children are consuming foods rich in two key micronutrients—vitamin A and iron—in their daily diet. Iron is an essential micronutrient that plays an important role in numerous biological systems, and iron deficiency is one of the primary causes of anaemia. Iron deficiency anaemia leads to impaired motor and cognitive functioning, slower emotional development, and poor academic performance among children. Vitamin A is an essential micronutrient for the immune system and plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency (VAD) can cause eye damage and is the leading cause of childhood blindness. VAD also increases the severity of infections, such as measles and diarrhoeal disease, in children and slows recovery from illness. Fruits and vegetables rich in vitamin A should be part of the daily diet. Studies have shown that plant-based complementary foods by themselves are insufficient to meet the needs for certain micronutrients, especially iron. Therefore, WHO recommends that meat, poultry, fish, or eggs be part of the daily diet as well or eaten as often as possible (WHO 1998).

South Africa has a national food fortification programme, introduced in 2003, that supplies additional vitamin A and iron (and other nutrients) to children's diets. The national vitamin A supplementation programme was implemented in 2002.

Table 11.12 presents results on dietary intake of foods rich in vitamin A and iron (based on a single 24-hour recall), as well as vitamin A supplementation (VAS) and deworming medication received in the past 6 months. In the 24 hours before the survey, about 7 in 10 (73%) children age 6-23 months received foods rich in vitamin A, and 6 in 10 (61%) received foods rich in iron. Among all children age 6-59 months, 72% received VAS and 63% received deworming medication in the 6 months before the survey. One in four children age 6-11 months received deworming medication. This finding needs further review and analysis since preventive deworming is not recommended for this age group.

Patterns by background characteristics

- Consumption of vitamin A-rich and iron-rich foods increases with age.
- Vitamin A-rich and iron-rich food intakes are higher among urban children than non-urban children.
- Consumption of vitamin A-rich foods generally increases with increasing mother's education and increasing household wealth, but consumption of iron-rich foods generally does not differ according to education or wealth.
- Children whose mothers are age 15-19 (48%) are less likely than children of older mothers (63%-68%) to have been given deworming medication in the past 6 months.

Consumption of Liver

Consuming natural sources of vitamin A rarely results in vitamin A toxicity unless excessive amounts of liver are consumed. In the SADHS 2016, as part of the dietary recall, mothers were asked if their child age 12-23 months had ever eaten liver and, if so, how many times in the past 4 weeks. Liver consumption was assessed only among children age 12-23 months, which did not allow for meaningful evaluations by background characteristics. Overall, 41% of children age 12-23 months have ever eaten liver (**Table 11.13**). Among these children, 70% ate liver at least once during the past 4 weeks. The contribution of liver in the diet needs to be taken into account when designing micronutrient programs.

11.6 MICRONUTRIENT INTAKE AMONG MOTHERS

During pregnancy, women are at a higher risk of anaemia due to an increase in blood volume. Severe anaemia can place both the mother and the baby in danger through increased risk of blood loss during labour, preterm delivery, low birth weight, and perinatal mortality. In order to prevent anaemia, pregnant women are advised to take iron-folate supplements and to eat iron-rich foods.

Among women with a child born in the 5 years preceding the survey, only 51% took iron tablets for 90 days or more during their most recent pregnancy. Nine percent of women did not take any iron tablets during their most recent pregnancy, 19% took iron tablets for less than 60 days, and 5% took iron tables for 60-89 days. An additional 17% took iron tablets but were uncertain as to the number of days (**Table 11.14**).

List of Tables

For more information on nutrition of children, see the following tables:

- **Table 11.1 Nutritional status of children**
- **Table 11.2 Initial breastfeeding**
- **Table 11.3 Breastfeeding status by age**
- **Table 11.4 Infant and young child feeding (IYCF) indicators on breastfeeding status**
- **Table 11.5 Median duration of breastfeeding**
- **Table 11.6 Duration of past breastfeeding**
- **Table 11.7 Foods and liquids consumed by children in the day or night preceding the interview**
- **Table 11.8 Minimum acceptable diet**
- **Table 11.9 Consumption of sugary drinks and sugary or salty foods by children in the day or night preceding the interview**
- **Table 11.10 Prevalence of anaemia in children**
- **Table 11.11 Presence of iodised salt in household**
- **Table 11.12 Micronutrient intake and deworming medication among children**
- **Table 11.13 Consumption of liver**
- **Table 11.14 Micronutrient intake among mothers**

Table 11.1 Nutritional status of children

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, according to background characteristics, South Africa DHS 2016

Background characteristic	Height-for-age[1]				Weight-for-height					Weight-for-age				
	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Age in months														
<6	18.3	32.3	-1.1	127	0.6	3.3	28.9	1.0	121	2.2	6.7	6.5	-0.1	131
6-8	2.0	16.9	-0.9	50	1.7	1.7	28.6	1.1	52	2.4	4.5	7.0	0.2	53
9-11	8.4	18.3	-0.3	66	1.1	1.8	13.9	0.5	66	0.5	6.0	10.2	0.1	68
12-17	13.5	31.4	-1.0	165	1.5	2.8	12.6	0.5	154	0.7	3.1	7.8	0.1	163
18-23	19.9	42.6	-1.6	133	0.4	1.9	13.8	0.9	130	0.4	10.1	6.7	-0.0	132
24-35	10.4	32.9	-1.4	260	0.4	1.8	12.5	0.7	258	0.7	4.9	3.3	-0.2	265
36-47	6.4	27.5	-1.3	298	0.3	1.9	9.4	0.5	301	1.3	5.2	3.4	-0.4	298
48-59	4.4	15.6	-0.9	306	0.2	3.5	8.8	0.4	302	1.5	6.9	1.5	-0.4	306
Sex														
Male	12.6	29.8	-1.2	714	0.7	2.1	15.5	0.7	701	1.2	6.7	5.8	-0.1	721
Female	7.0	25.0	-1.1	691	0.4	2.8	11.0	0.5	683	1.0	5.1	3.3	-0.2	695
Birth interval in months[3]														
First birth[4]	6.5	24.0	-1.0	400	0.7	2.4	14.9	0.6	394	0.2	3.2	4.0	-0.1	406
<24	13.3	27.1	-1.2	70	0.0	1.2	3.1	0.5	69	0.0	2.3	0.2	-0.3	72
24-47	13.9	31.0	-1.3	217	0.3	2.2	12.6	0.7	207	0.8	4.4	4.5	-0.2	215
48+	10.9	26.6	-1.2	388	0.6	3.2	15.4	0.6	380	2.2	9.1	4.6	-0.2	390
Size at birth[3]														
Very small	9.7	29.1	-1.3	58	1.9	10.2	5.4	0.1	54	4.0	14.9	6.7	-0.5	60
Small	21.6	49.2	-1.8	94	0.8	7.5	7.0	0.2	91	1.2	23.5	1.5	-0.9	95
Average or larger	8.9	23.7	-1.1	917	0.4	1.6	15.1	0.7	899	0.8	2.9	4.2	-0.1	922
Don't know	*	*	*	6	*	*	*	*	6	*	*	*	*	6
Mother's interview status														
Interviewed	10.0	26.5	-1.2	1,075	0.6	2.6	13.8	0.6	1,050	1.1	5.5	4.1	-0.2	1,083
Not interviewed but in household	6.9	33.6	-1.3	81	2.5	5.7	5.7	0.3	77	4.8	14.0	5.1	-0.4	83
Not interviewed and not in the household[5]	9.9	29.3	-1.1	249	0.0	0.9	13.2	0.7	256	0.3	4.9	6.4	-0.1	250
Mother's nutritional status[6]														
Underweight (BMI <18.5)	(16.1)	(27.2)	(-1.5)	18	*	*	*	*	18	(0.0)	(10.9)	(0.0)	(-1.1)	19
Normal (BMI 18.5-24.9)	10.4	29.2	-1.2	306	0.8	3.0	12.0	0.5	307	1.2	7.4	1.5	-0.4	313
Overweight/obese (BMI ≥25)	8.9	25.4	-1.1	629	0.5	2.7	14.9	0.7	621	1.0	4.6	4.7	-0.0	635
Residence														
Urban	8.9	25.7	-1.1	713	0.6	2.4	13.2	0.6	698	1.2	5.8	4.3	-0.2	721
Non-urban	10.8	29.2	-1.2	691	0.6	2.5	13.4	0.7	686	1.1	6.0	4.8	-0.2	695

(Continued…)

Table 11.1—*Continued*

Background characteristic	Height-for-age[1]				Weight-for-height					Weight-for-age				
	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Province														
Western Cape	6.6	22.9	-1.0	64	(1.7)	(1.7)	(14.3)	(0.6)	63	3.7	11.9	1.8	-0.2	64
Eastern Cape	8.9	24.8	-1.0	210	0.4	1.5	20.4	0.9	210	0.7	3.4	8.6	0.0	211
Northern Cape	7.3	21.4	-1.0	25	2.1	2.1	4.6	0.1	24	3.9	8.4	6.5	-0.3	25
Free State	10.3	33.5	-1.5	72	1.5	4.6	17.0	0.7	70	2.9	8.0	3.5	-0.2	74
KwaZulu-Natal	13.3	28.5	-1.1	283	0.5	2.5	18.3	0.9	266	1.5	3.8	7.6	0.1	281
North West	5.6	27.4	-1.2	128	0.4	5.9	7.9	0.3	128	1.7	12.6	3.1	-0.5	130
Gauteng	14.4	34.2	-1.4	303	0.2	1.3	11.2	0.5	297	0.2	5.8	2.8	-0.4	304
Mpumalanga	4.6	21.5	-1.1	151	0.5	0.5	8.5	0.6	152	1.3	4.7	2.2	-0.2	154
Limpopo	6.2	21.9	-1.0	168	0.7	4.1	7.9	0.4	173	0.0	4.9	2.1	-0.3	173
Mother's education[7]														
No education	(5.4)	(49.5)	(-1.4)	22	(3.0)	(5.3)	(0.0)	(0.0)	24	(5.7)	(8.7)	(0.0)	(-0.9)	22
Primary incomplete	15.7	36.5	-1.5	72	2.3	3.9	22.5	0.9	70	4.9	5.9	3.6	-0.3	71
Primary complete	10.9	42.3	-1.9	38	(0.0)	(0.0)	(11.2)	(0.7)	36	0.0	5.7	1.3	-0.4	38
Secondary incomplete	11.8	31.7	-1.4	586	0.7	3.5	13.5	0.6	575	1.5	7.9	3.7	-0.3	594
Secondary complete	7.6	19.0	-0.8	326	0.4	2.2	13.4	0.6	313	0.6	4.6	5.8	0.1	328
More than secondary	2.6	9.8	-0.7	112	0.0	0.7	9.5	0.4	110	0.0	0.7	4.1	-0.0	112
Wealth quintile														
Lowest	14.5	36.3	-1.5	359	0.7	2.0	15.6	0.8	353	1.5	4.7	3.6	-0.3	358
Second	8.7	29.4	-1.2	340	0.5	4.1	13.3	0.5	337	1.2	8.5	5.4	-0.3	348
Middle	8.0	23.9	-1.1	341	0.8	2.6	11.3	0.5	339	1.2	5.6	2.9	-0.2	344
Fourth	11.1	24.5	-0.8	230	0.4	1.8	14.9	0.6	221	0.5	5.8	9.2	0.1	229
Highest	2.4	12.5	-0.7	135	0.1	0.1	9.3	0.5	133	0.9	3.2	1.3	-0.1	137
Total	9.8	27.4	-1.1	1,404	0.6	2.5	13.3	0.6	1,384	1.1	5.9	4.5	-0.2	1,416

Notes: Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Recumbent length is measured for children under age 2; standing height is measured for all other children

[2] Includes children who are below -3 standard deviations (SD) from the WHO Child Growth standards population median

[3] Excludes children whose mothers were not interviewed

[4] First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval

[5] Includes children whose mothers are deceased

[6] Excludes children whose mothers were not weighed and measured, children whose mothers were not interviewed, and children whose mothers are pregnant or gave birth within the preceding 2 months. Mother's nutritional status in terms of BMI (body mass index) is presented in Table 17.1.1.

[7] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire

Table 11.2 Initial breastfeeding

Among last-born children who were born in the 2 years preceding the survey, percentage who were ever breastfed and percentages who started breastfeeding within 1 hour and within 1 day of birth, and among last-born children born in the 2 years preceding the survey who were ever breastfed, percentage who received a prelacteal feed, according to background characteristics, South Africa DHS 2016

	Among last-born children born in the past 2 years:				Among last-born children born in the past 2 years who were ever breastfed:	
Background characteristic	Percentage ever breastfed	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth[1]	Number of last-born children	Percentage who received a prelacteal feed[2]	Number of last-born children ever breastfed
Sex						
Male	84.3	68.4	79.7	714	15.5	602
Female	83.7	66.1	80.7	672	15.9	563
Assistance at delivery						
Health personnel[3]	83.9	67.6	80.2	1,347	15.9	1,130
Traditional birth attendant	*	*	*	2	*	1
Other	(89.4)	(56.5)	(76.1)	24	(8.9)	22
No one	*	*	*	13	*	12
Place of delivery						
Health facility	83.9	67.5	80.1	1,332	16.0	1,117
At home	(87.2)	(64.8)	(81.9)	47	(9.7)	41
Other	*	*	*	7	*	6
Residence						
Urban	84.0	69.6	80.8	872	16.2	733
Non-urban	84.0	63.4	79.1	514	14.8	432
Province						
Western Cape	92.1	84.7	92.1	118	13.9	108
Eastern Cape	85.7	60.9	79.7	163	20.8	140
Northern Cape	89.8	65.8	84.6	27	9.9	25
Free State	79.9	66.2	78.3	60	17.1	48
KwaZulu-Natal	71.0	58.9	70.1	258	16.2	183
North West	82.4	48.6	72.5	106	7.4	87
Gauteng	89.1	75.1	85.5	385	12.2	343
Mpumalanga	75.9	55.6	66.6	127	32.2	96
Limpopo	94.2	79.2	92.3	144	14.0	136
Mother's education						
No education	*	*	*	18	*	16
Primary incomplete	81.9	66.6	80.6	60	6.7	49
Primary complete	93.8	79.3	90.2	50	14.3	47
Secondary incomplete	83.4	67.5	79.7	706	15.0	589
Secondary complete	84.5	65.9	79.7	397	18.7	335
More than secondary	82.4	65.7	79.8	155	16.1	128
Wealth quintile						
Lowest	88.2	67.4	85.2	312	11.4	275
Second	84.2	67.2	80.2	326	17.0	274
Middle	80.5	69.2	76.9	291	13.0	234
Fourth	80.5	64.2	77.6	269	15.8	216
Highest	87.1	68.8	80.7	189	24.4	164
Total	84.0	67.3	80.2	1,386	15.7	1,165

Notes: Table is based on last-born children born in the 2 years preceding the survey regardless of whether the children are living or dead at the time of the interview. Children who received breast milk are considered to have been breastfed regardless of the source of the breast milk. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes children who started breastfeeding within 1 hour of birth

[2] Children given something other than breast milk during the first 3 days of life

[3] Doctor or nurse/midwife

Table 11.3 Breastfeeding status by age

Percent distribution of youngest children under age 2 who are living with their mother by breastfeeding status and the percentage currently breastfeeding, and the percentage of all children under age 2 using a bottle with a nipple, according to age in months, South Africa DHS 2016

	Breastfeeding status										
Age in months	Not breast-feeding	Exclusively breastfed	Breast-feeding and consuming plain water only	Breast-feeding and consuming non-milk liquids[1]	Breast-feeding and consuming other milk	Breast-feeding and consuming comple-mentary foods	Total	Percentage currently breast-feeding	Number of youngest children under age 2 living with their mother	Percentage using a bottle with a nipple	Number of all children under age 2
0-1	19.2	44.0	14.0	1.2	14.9	6.7	100.0	80.8	110	47.3	115
2-3	28.9	28.2	6.7	0.4	11.0	24.9	100.0	71.1	110	52.2	120
4-5	27.2	23.7	19.5	0.4	8.5	20.8	100.0	72.8	125	35.4	128
6-8	40.8	4.9	0.7	1.3	5.1	47.2	100.0	59.2	146	55.0	165
9-11	42.5	0.0	0.0	0.0	2.1	55.4	100.0	57.5	143	52.2	160
12-17	53.3	0.4	0.3	0.0	0.1	46.0	100.0	46.7	311	50.0	360
18-23	81.5	0.1	0.0	0.0	0.0	18.4	100.0	18.5	267	38.5	317
0-3	24.0	36.1	10.3	0.8	13.0	15.8	100.0	76.0	221	49.8	235
0-5	25.2	31.6	13.6	0.6	11.4	17.6	100.0	74.8	345	44.7	363
6-9	40.4	3.7	0.6	0.9	5.3	49.1	100.0	59.6	194	55.3	215
12-15	48.6	0.6	0.4	0.0	0.2	50.3	100.0	51.4	201	55.7	231
12-23	66.4	0.2	0.1	0.0	0.1	33.2	100.0	33.6	578	44.6	677
20-23	87.0	0.0	0.0	0.0	0.0	13.0	100.0	13.0	161	43.4	189

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semisolids) are hierarchical and mutually exclusive, and their percentages add to 100%. Thus, children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.
[1] Non-milk liquids include juice, juice drinks, or other liquids

Table 11.4 Infant and young child feeding (IYCF) indicators on breastfeeding status

Percentage of children fed according to various IYCF practices, South Africa DHS 2016

Indicator	Percentage	Number of children
Exclusive breastfeeding under 6 months	31.6	345
Exclusive breastfeeding at 4-5 months	23.7	125
Continued breastfeeding at 1 year	51.4	201
Introduction of solid, semi-solid or soft foods (6-8 months)	82.5	146
Continued breastfeeding at 2 years	13.0	161
Age-appropriate breastfeeding (0-23 months)[1]	37.1	1,213
Predominant breastfeeding[2] (0-5 months)	45.9	345
Bottle feeding (0-23 months)	46.8	1,365

[1] For children age 0-5 months: exclusively breastfed, for children age 6-23 months: receive breast milk and complementary foods
[2] Either exclusively breastfed or received breast milk and plain water and/or non-milk liquids only

Table 11.5 Median duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the 3 years preceding the survey, according to background characteristics, South Africa DHS 2016

Background characteristic	Median duration (months) of breastfeeding among children born in the past 3 years[1]		
	Any breast-feeding	Exclusive breastfeeding	Predominant breast-feeding[2]
Sex			
Male	8.6	a	a
Female	12.2	a	2.6
Residence			
Urban	10.3	a	1.9
Non-urban	13.5	a	1.8
Wealth quintile			
Lowest	16.5	a	a
Second	7.9	(2.3)	(2.8)
Middle	11.7	a	(2.2)
Fourth	8.3	a	3.9
Highest	(4.3)	a	a
Total	10.7	a	1.9
Mean for all children	12.2	2.9	3.8

Notes: Median and mean durations are based on the breastfeeding status of the child at the time of the survey (current status). Includes living and deceased children. Figures in parentheses are based on 25-49 unweighted cases.
a = Omitted because less than 50% of the children in this group were exclusively or predominantly breastfeeding
[1] For last-born children under age 24 months who live with their mother and are breastfeeding, information to determine exclusive and predominant breastfeeding comes from a 24-hour dietary recall. Tabulations assume that last-born children age 24 months or older who live with their mother and are breastfeeding are neither exclusively nor predominantly breastfed. It is assumed that last-born children not currently living with their mother and all non-last-born children are not currently breastfeeding.
[2] Either exclusively breastfed or received breast milk and plain water and/or non-milk liquids only

Table 11.6 Duration of past breastfeeding

Among youngest children born in the 5 years before the survey who were ever breastfed but are not currently breastfeeding, the mean number of months breastfed and the median number of months breastfed, according to background characteristics, South Africa DHS 2016

Background characteristic	Mean duration of breastfeeding in months	Median duration of breastfeeding in months	Number of last-born children ever breastfed who are no longer breastfeeding
Age in months			
<6	(2.6)	(3.0)	52
6-8	(2.9)	(3.3)	44
9-11	(4.1)	(3.9)	55
12-17	7.0	6.8	153
18-23	9.5	8.7	208
24-35	11.5	12.3	446
36-47	11.5	11.7	434
48-59	12.3	12.5	423
Sex			
Male	10.2	9.1	929
Female	10.6	9.2	886
Residence			
Urban	9.9	8.2	1,154
Non-urban	11.2	12.2	661
Province			
Western Cape	7.0	5.9	162
Eastern Cape	9.6	6.7	203
Northern Cape	13.4	12.6	33
Free State	9.7	7.7	79
KwaZulu-Natal	9.6	8.7	311
North West	10.5	8.8	150
Gauteng	10.9	10.7	522
Mpumalanga	11.1	12.3	168
Limpopo	13.3	14.8	186
Mother's education			
No education	(9.6)	(6.7)	23
Primary incomplete	11.9	12.4	91
Primary complete	10.7	9.0	70
Secondary incomplete	11.5	12.2	827
Secondary complete	9.6	8.1	567
More than secondary	8.0	6.1	237
Wealth quintile			
Lowest	12.0	12.4	384
Second	11.4	12.4	476
Middle	10.4	9.9	380
Fourth	9.8	7.1	304
Highest	7.0	5.2	271
Total	10.4	9.2	1,815

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 11.7 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under age 2 who are living with their mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, South Africa DHS 2016

	Liquids			Solid or semisolid foods											
Age in months	Infant formula	Other milk[1]	Other liquids[2]	Fortified baby foods	Food made from grains[3]	Fruits and vegetables rich in vitamin A[4]	Other fruits and vege-tables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry	Food made with oil, fat, or butter	Eggs	Cheese, yoghurt, other milk products	Any solid or semisolid food	Number of children under age 2
BREASTFEEDING CHILDREN															
0-1	15.7	5.4	1.8	3.3	7.3	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.6	8.3	89
2-3	26.9	2.7	2.4	28.8	30.8	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.9	35.0	78
4-5	16.8	8.8	5.5	21.7	26.5	4.2	2.4	1.8	0.0	1.4	2.2	3.4	2.4	28.6	91
6-8	44.6	22.9	27.8	62.4	75.7	32.4	18.0	31.3	1.5	15.0	6.5	21.0	32.1	79.7	86
9-11	32.6	16.9	41.3	62.9	84.1	60.1	34.9	35.1	6.8	32.6	25.2	40.3	50.4	96.4	82
12-17	19.7	27.7	46.2	37.6	86.3	52.0	45.0	48.5	17.5	52.4	26.1	47.5	49.0	98.5	145
18-23	25.3	20.6	56.8	43.8	97.1	33.5	44.4	34.4	12.6	68.9	20.2	38.4	50.8	99.6	49
6-23	29.3	23.1	42.1	50.1	84.7	46.7	36.2	39.4	10.6	41.2	20.4	38.3	45.5	93.7	363
Total	25.2	15.9	26.0	36.5	58.3	27.9	21.5	23.4	6.2	24.3	12.3	22.9	27.2	64.5	622
NONBREASTFEEDING CHILDREN															
0-1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	21
2-3	(53.6)	(26.0)	(16.3)	(45.6)	(47.3)	(15.0)	(1.7)	(13.3)	(1.7)	(1.7)	(13.3)	(1.7)	(15.0)	(47.3)	32
4-5	(84.7)	(36.6)	(3.4)	(60.4)	(60.4)	(5.9)	(6.0)	(13.2)	(2.6)	(0.0)	(1.4)	(4.3)	(11.1)	(67.3)	34
6-8	78.5	32.1	37.8	58.3	71.8	43.4	30.0	29.9	3.9	21.7	13.8	24.0	29.7	86.5	60
9-11	74.9	55.0	46.1	62.1	83.4	62.3	41.3	40.7	15.0	41.3	24.1	38.1	55.6	95.8	61
12-17	51.1	46.7	56.9	52.4	82.1	54.6	39.9	47.9	19.2	48.4	32.0	47.9	53.1	93.4	166
18-23	29.8	26.9	54.3	32.0	89.2	58.6	60.6	48.6	17.8	63.9	42.2	52.7	63.8	97.5	218
6-23	48.0	37.4	52.2	45.4	84.1	55.9	47.9	45.2	16.3	51.1	33.3	46.0	55.2	94.7	504
Total	50.8	35.6	46.0	44.7	77.9	48.9	41.3	40.0	14.1	43.7	29.2	39.5	48.6	87.2	591

Notes: Breastfeeding status and food consumed refer to a "24-hour" period (yesterday and last night). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Other milk includes fresh, tinned, and powdered animal milk

[2] Does not include plain water. Includes juice, juice drinks, or other non-milk liquids

[3] Includes fortified baby food

[4] Includes pumpkin, carrots, squash, sweet potatoes that are yellow or orange inside, dark green leafy vegetables, ripe mangoes, ripe papayas, orange melons, and other locally grown fruits and vegetables that are rich in vitamin A

Table 11.8 Minimum acceptable diet

Percentage of youngest children age 6-23 months living with their mother who are fed a minimum acceptable diet based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, according to background characteristics, South Africa DHS 2016

Background characteristic	Among breastfed children 6-23 months, percentage fed:				Among nonbreastfed children 6-23 months, percentage fed:					Among all children 6-23 months, percentage fed:				
	Minimum dietary diversity[1]	Minimum meal frequency[2]	Minimum acceptable diet[3]	Number of breastfed children age 6-23 months	Milk or milk products[4]	Minimum dietary diversity[1]	Minimum meal frequency[5]	Minimum acceptable diet[6]	Number of nonbreastfed children 6-23 months	Breast milk, milk, or milk products[7]	Minimum dietary diversity[1]	Minimum meal frequency[8]	Minimum acceptable diet[9]	Number of all children age 6-23 months
Age in months														
6-8	20.5	46.2	14.9	86	80.2	27.3	73.5	19.5	60	91.9	23.3	57.3	16.8	146
9-11	46.9	25.8	7.4	82	80.0	49.3	78.9	29.3	61	91.5	47.9	48.3	16.7	143
12-17	50.1	21.4	9.5	145	75.9	49.7	73.8	32.4	166	87.2	49.9	49.3	21.7	311
18-23	46.6	31.2	16.4	49	56.2	67.5	59.1	34.4	218	64.3	63.7	53.9	31.1	267
Sex														
Male	35.1	26.4	10.5	181	67.0	56.9	66.7	32.7	271	80.2	48.2	50.6	23.8	452
Female	48.6	32.8	11.9	182	70.0	52.2	69.5	29.9	233	83.2	50.6	53.4	22.0	415
Residence														
Urban	46.8	28.1	11.5	224	77.0	57.4	75.3	36.5	298	86.9	52.9	55.1	25.8	522
Non-urban	33.9	32.1	10.9	139	55.9	50.9	57.4	24.0	206	73.7	44.0	47.2	18.7	345
Province														
Western Cape	(52.0)	(10.9)	(6.6)	38	*	*	*	*	36	100.0	65.9	54.5	40.2	74
Eastern Cape	30.2	20.8	9.2	45	67.3	56.7	67.6	26.3	62	81.1	45.5	47.8	19.1	107
Northern Cape	(34.4)	(28.4)	(14.2)	10	(68.1)	(57.9)	(67.4)	(25.2)	7	87.1	43.9	44.2	18.7	17
Free State	(59.4)	(46.2)	(33.7)	19	(75.3)	(63.2)	(80.3)	(52.0)	17	88.3	61.2	62.3	42.3	36
KwaZulu-Natal	(54.6)	(31.5)	(22.2)	46	71.0	47.7	65.6	28.9	118	79.1	49.7	56.1	27.0	164
North West	(23.1)	(35.2)	(13.9)	23	49.9	61.3	49.6	26.0	52	65.3	49.6	45.2	22.3	75
Gauteng	(46.2)	(29.5)	(7.4)	103	(75.8)	(49.1)	(72.6)	(30.0)	117	87.2	47.7	52.4	19.4	220
Mpumalanga	(53.0)	(26.1)	(10.4)	27	64.5	67.5	69.1	34.2	50	76.9	62.4	54.1	25.9	77
Limpopo	22.4	43.2	4.7	52	40.9	38.3	52.2	9.1	44	72.8	29.7	47.3	6.7	96
Mother's education														
No education	*	*	*	3	*	*	*	*	4	*	*	*	*	7
Primary incomplete	(34.0)	(11.4)	(0.0)	18	(54.6)	(33.7)	(57.9)	(26.1)	22	75.1	33.8	37.0	14.4	41
Primary complete	*	*	*	14	*	*	*	*	10	(78.6)	(34.7)	(39.3)	(17.0)	24
Secondary incomplete	37.8	30.4	10.1	192	60.9	49.8	60.8	23.0	261	77.5	44.7	47.9	17.5	453
Secondary complete	53.3	32.3	16.1	114	79.8	61.9	82.2	39.6	136	89.0	57.9	59.4	28.9	250
More than secondary	*	*	*	22	80.7	69.2	70.8	49.4	71	85.2	58.4	61.1	38.0	93
Wealth quintile														
Lowest	42.4	28.7	11.4	110	53.8	51.7	57.7	24.8	94	78.7	46.7	42.1	17.6	205
Second	36.8	34.5	9.7	67	57.0	47.1	57.7	19.3	132	71.5	43.6	49.9	16.0	199
Middle	41.8	25.1	10.4	79	73.0	47.3	68.8	33.4	103	84.7	44.9	49.8	23.4	182
Fourth	47.0	24.7	14.9	72	79.7	62.0	82.5	35.3	99	88.2	55.7	58.3	26.7	171
Highest	(39.6)	(43.4)	(8.0)	35	85.3	72.5	78.6	52.9	75	90.0	62.0	67.4	38.5	111
Total	41.9	29.6	11.2	363	68.4	54.7	68.0	31.4	504	81.6	49.3	51.9	22.9	867

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Children receive foods from four or more of the following food groups: a. infant formula, milk other than breast milk, cheese or yoghurt or other milk products; b. foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; c. vitamin A-rich fruits and vegetables; d. other fruits and vegetables; e. eggs; f. meat, poultry, fish, and shellfish (and organ meats); g. legumes and nuts

[2] For breastfed children, minimum meal frequency is receiving solid or semisolid food at least twice a day for infants 6-8 months and at least three times a day for children 9-23 months

[3] Breastfed children age 6-23 months are considered to be fed a minimum acceptable diet if they are fed the minimum dietary diversity as described in footnote 1 and the minimum meal frequency as defined in footnote 2

[4] Includes two or more feedings of commercial infant formula; fresh, tinned, and powdered animal milk; and yoghurt

[5] For nonbreastfed children age 6-23 months, minimum meal frequency is receiving solid or semisolid food or milk feeds at least four times a day

[6] Nonbreastfed children age 6-23 months are considered to be fed a minimum acceptable diet if they receive other milk or milk products at least twice a day, receive the minimum meal frequency as defined in footnote 5, and receive solid or semisolid foods from at least four food groups not including the milk or milk products food group

[7] Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula; fresh, tinned, and powdered animal milk; and yoghurt

[8] Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in footnotes 2 and 5

[9] Children age 6-23 months are considered to be fed a minimum acceptable diet if they receive breast milk, other milk, or milk products as described in footnote 7; are fed the minimum dietary diversity as described in footnote 1; and are fed the minimum meal frequency as described in footnotes 2 and 5

Table 11.9 Consumption of sugary drinks and sugary or salty foods by children in the day or night preceding the interview

Percentage of youngest children under age 2 who are living with their mother by specific foods consumed in the day or night preceding the interview, according to breastfeeding status and age, South Africa DHS 2016

	Liquids	Solid or semisolid foods		Number of all children under age 2
Age in months	Sugary drinks[1]	Sugary foods[2]	Salty snacks[3]	
BREASTFEEDING CHILDREN				
0-1	0.0	0.0	0.0	89
2-3	0.0	0.0	0.0	78
4-5	0.0	0.5	0.5	91
6-8	5.9	10.3	14.8	86
9-11	10.4	25.0	29.2	82
12-17	15.3	40.0	53.2	145
18-23	30.9	29.7	53.9	49
6-23	14.1	28.1	38.7	363
Total	8.2	16.5	22.7	622
NONBREASTFEEDING CHILDREN				
0-1	*	*	*	21
2-3	(13.3)	(13.3)	(15.0)	32
4-5	(10.3)	(0.0)	(0.0)	34
6-8	1.4	17.7	21.4	60
9-11	9.4	28.2	42.3	61
12-17	15.0	36.5	34.0	166
18-23	33.2	52.8	66.5	218
6-23	20.6	40.3	47.6	504
Total	18.9	35.1	41.4	591
TOTAL				
0-1	0.0	0.0	0.0	110
2-3	3.8	3.8	4.3	110
4-5	2.8	0.4	0.4	125
6-8	4.0	13.3	17.5	146
9-11	10.0	26.3	34.8	143
12-17	15.1	38.1	43.0	311
18-23	32.8	48.6	64.2	267
6-23	17.9	35.2	43.9	867
Total	13.4	25.6	31.8	1,213

Notes: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Sugary drinks such as Coke, Stoney, Dixi cola, or Jive

[2] Sugary foods include chocolates, sweets, candies, pastries, cakes, or biscuits

[3] Salty snacks include Nik Naks, Simba, Flings, or Spookies

Table 11.10 Prevalence of anaemia in children

Percentage of children age 6-59 months classified as having anaemia, according to background characteristics, South Africa DHS 2016

Background characteristic	Anaemia status by haemoglobin level				Number of children age 6-59 months
	Any anaemia (<11.0 g/dl)	Mild anaemia (10.0-10.9 g/dl)	Moderate anaemia (7.0-9.9 g/dl)	Severe anaemia (<7.0 g/dl)	
Age in months					
6-8	(45.9)	(12.2)	(30.6)	(3.1)	38
9-11	68.5	29.5	39.0	0.0	54
12-17	77.3	31.9	37.4	8.0	136
18-23	63.1	19.9	41.0	2.3	117
24-35	69.6	26.5	41.3	1.8	218
36-47	58.7	23.6	33.3	1.7	268
48-59	48.7	22.0	25.6	1.1	263
Sex					
Male	63.9	25.5	37.0	1.4	542
Female	58.7	23.1	32.3	3.3	552
Mother's interview status					
Interviewed	62.3	23.7	35.8	2.9	810
Not interviewed but in household	59.6	29.7	29.8	0.0	61
Not interviewed and not in the household[1]	58.0	25.3	31.6	1.2	223
Residence					
Urban	62.2	21.0	37.9	3.2	539
Non-urban	60.4	27.5	31.3	1.5	555
Province					
Western Cape	(61.3)	(31.4)	(27.4)	(2.4)	53
Eastern Cape	59.1	23.3	35.8	0.0	168
Northern Cape	48.4	32.1	16.3	0.0	13
Free State	53.6	25.2	25.0	3.4	66
KwaZulu-Natal	41.7	18.2	22.8	0.6	189
North West	68.4	30.6	34.0	3.7	114
Gauteng	74.0	19.0	50.3	4.8	249
Mpumalanga	70.1	25.7	40.6	3.8	115
Limpopo	59.4	34.1	24.6	0.7	128
Wealth quintile					
Lowest	63.6	25.1	35.2	3.4	307
Second	62.2	22.3	38.3	1.5	265
Middle	59.6	25.2	33.3	1.1	270
Fourth	60.3	18.9	38.3	3.0	168
Highest	57.6	35.6	17.7	4.2	85
Total	61.3	24.3	34.6	2.4	1,094

Notes: Table is based on children who stayed in the household on the night before the interview and who were tested for anaemia. Prevalence of anaemia, based on haemoglobin levels, is adjusted for altitude using formulas in CDC 1998. Haemoglobin is in grams per decilitre (g/dl). Figures in parentheses are based on 25-49 unweighted cases.

[1] Includes children whose mothers are deceased

Table 11.11 Presence of iodised salt in household

Among all eligible households, percentage with salt tested for iodine content, percentage with salt in the household but the salt was not tested, and percentage with no salt in the household; and among households with salt tested, percentages with salt with any iodisation, inadequately iodised salt, adequately iodised salt, optimally iodised salt, highly iodised salt, and excessively iodised salt, according to background characteristics, South Africa DHS 2016

	Among all eligible households, percentage				Among households in which salt was tested, percentage with						
Background characteristic	With salt tested	With salt, but salt not tested[1]	With no salt in the household	Number of households	Salt with any iodisation (>0 ppm)	Inade-quately iodised salt (<15 ppm)	Adequately iodised salt (≥15 ppm)	Optimally iodised salt (≥15 to ≤40 ppm)	Highly iodised salt (>65 ppm)	Exces-sively iodised salt (>80 ppm)	Number of households
Residence											
Urban	87.0	5.9	7.1	1,877	98.5	8.3	91.7	30.4	17.4	9.5	1,633
Non-urban	91.0	3.7	5.3	889	96.4	17.9	82.1	28.7	18.2	10.5	809
Province											
Western Cape	86.7	6.3	6.9	294	98.1	20.6	79.4	32.5	10.5	6.7	255
Eastern Cape	92.5	3.2	4.3	334	98.1	9.4	90.6	25.6	21.9	13.5	309
Northern Cape	77.1	13.1	9.8	55	95.9	14.5	85.5	31.7	16.6	8.9	42
Free State	86.0	6.9	7.1	149	99.2	9.4	90.6	35.4	19.1	10.7	128
KwaZulu-Natal	88.0	4.8	7.1	509	96.7	8.3	91.7	29.1	18.2	8.9	448
North West	94.0	2.1	4.0	206	99.7	8.1	91.9	32.9	19.2	10.3	194
Gauteng	87.2	6.6	6.2	748	98.6	6.1	93.9	31.0	18.6	10.3	652
Mpumalanga	80.0	5.6	14.4	206	98.6	6.5	93.5	37.5	18.6	11.0	165
Limpopo	94.0	2.8	3.2	265	94.6	30.8	69.2	20.0	14.2	7.6	250
Wealth quintile											
Lowest	86.3	4.7	9.0	561	95.6	20.2	79.8	32.9	16.3	8.7	484
Second	88.3	5.1	6.7	592	97.1	12.8	87.2	28.4	19.1	12.1	523
Middle	89.6	2.1	8.3	541	99.5	9.4	90.6	34.4	17.8	8.7	485
Fourth	90.2	5.6	4.2	520	99.6	6.8	93.2	26.8	18.5	9.4	469
Highest	87.3	8.7	4.0	552	97.4	7.8	92.2	26.6	16.7	10.1	482
Total	88.3	5.2	6.5	2,766	97.8	11.4	88.6	29.8	17.7	9.8	2,443

[1] Includes households in which salt could not be tested for technical or logistical reasons

Table 11.12 Micronutrient intake and deworming medication among children

Among youngest children age 6-23 months who are living with their mother, percentages who consumed vitamin A-rich and iron-rich foods in the 24 hours preceding the survey, and among all children age 6-59 months, percentages who were given vitamin A supplements and deworming medication in the 6 months preceding the survey, according to background characteristics, South Africa DHS 2016

	Among youngest children age 6-23 months living with their mother:			Among all children age 6-59 months:		
Background characteristic	Percentage who consumed foods rich in vitamin A in last 24 hours[1]	Percentage who consumed foods rich in iron in last 24 hours[2]	Number of children	Percentage given vitamin A supplements in past 6 months[3]	Percentage given deworming medication in past 6 months[4,5]	Number of children
Age in months						
6-8	45.8	26.7	146	66.5	19.1	165
9-11	72.7	53.9	143	74.4	34.2	160
12-17	77.2	66.3	311	80.0	63.1	360
18-23	83.9	77.7	267	77.1	70.6	317
24-35	na	na	na	75.2	66.9	660
36-47	na	na	na	69.2	69.8	688
48-59	na	na	na	67.5	63.6	730
Sex						
Male	70.0	59.2	452	71.5	59.8	1,596
Female	76.8	63.1	415	73.2	65.4	1,484
Breastfeeding status						
Breastfeeding	67.1	53.6	363	82.1	53.4	439
Not breastfeeding	77.7	66.5	504	70.6	64.0	2,642
Mother's age						
15-19	74.6	63.3	81	72.6	48.4	140
20-29	74.0	59.9	483	72.8	62.7	1,606
30-39	71.3	62.9	261	71.8	62.7	1,098
40-49	(74.1)	(59.7)	43	70.3	67.9	237
Residence						
Urban	78.6	64.1	522	71.9	63.9	1,970
Non-urban	65.2	56.6	345	72.9	59.9	1,110
Province						
Western Cape	81.6	65.7	74	78.6	71.5	277
Eastern Cape	67.7	57.3	107	78.5	70.9	341
Northern Cape	77.2	70.5	17	76.6	66.3	59
Free State	78.8	67.8	36	78.4	71.1	137
KwaZulu-Natal	70.8	64.3	164	78.1	66.7	560
North West	68.3	59.2	75	74.8	62.1	249
Gauteng	78.4	58.6	220	63.4	55.6	878
Mpumalanga	84.6	74.5	77	74.7	63.6	281
Limpopo	57.8	48.6	96	66.3	51.3	298
Mother's education						
No education	*	*	7	(74.3)	(58.0)	37
Primary incomplete	63.9	52.3	41	61.6	52.4	153
Primary complete	(69.6)	(54.7)	24	72.0	65.4	118
Secondary incomplete	71.3	61.7	453	73.5	62.3	1,499
Secondary complete	77.6	63.6	250	73.5	63.9	928
More than secondary	74.9	55.9	93	68.4	63.0	344
Wealth quintile						
Lowest	67.8	60.4	205	70.3	55.6	669
Second	69.0	60.2	199	73.3	62.9	745
Middle	70.8	59.8	182	73.3	65.7	682
Fourth	81.6	60.6	171	70.6	61.9	572
Highest	82.3	66.8	111	74.3	68.4	412
Total	73.3	61.1	867	72.3	62.5	3,080

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] Includes meat (and organ meat), fish, poultry, eggs, pumpkin, carrots, squash or sweet potatoes that are yellow or orange inside, dark green leafy vegetables, ripe mango, ripe papaya, orange melons, and other locally grown fruits and vegetables that are rich in vitamin A
[2] Includes meat (and organ meat), fish, poultry, and eggs
[3] Based on both mother's recall and the vaccination card (where available)
[4] Based on mother's recall
[5] Deworming for intestinal parasites is commonly done for helminths and schistosomiasis

Table 11.13 Consumption of liver

Percentage of youngest children age 12-23 months who are living with their mother by whether they have ever eaten liver, and among children who have ever eaten liver, percentage who ate liver in the past 4 weeks by number of times liver was consumed, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage of children who have ever eaten liver	Number of children age 12-23 months	Among children who have ever eaten liver, percentage who ate liver in the past 4 weeks by number of times consumed				Number of children age 12-23 months who ever ate liver
			0	1	2-3	4+	
Age in months							
12-17	35.1	311	24.2	38.8	20.0	15.0	109
18-23	46.8	267	32.5	25.1	38.0	3.5	125
Residence							
Urban	42.1	343	24.9	36.9	25.7	12.2	145
Non-urban	38.2	235	34.7	22.8	35.9	3.4	90
Wealth quintile							
Lowest	37.1	143	25.8	24.3	34.2	10.8	53
Second	44.1	131	28.7	29.3	41.2	0.0	58
Middle	39.6	119	(33.9)	(32.1)	(25.5)	(8.5)	47
Fourth	48.7	108	(33.3)	(31.3)	(18.4)	(16.6)	53
Highest	30.7	76	*	*	*	*	23
Total	40.5	578	28.6	31.5	29.6	8.8	234

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 11.14 Micronutrient intake among mothers

Among women age 15-49 with a child born in the 5 years preceding the survey, percent distribution by number of days they took iron tablets during the pregnancy of the last child, according to background characteristics, South Africa DHS 2016

Background characteristic	Among women with a child born in the past 5 years, number of days they took iron tablets during pregnancy of last birth						Number of women
	None	<60	60-89	90+	Don't know	Total	
Age							
15-19	8.8	16.8	5.2	53.1	16.1	100.0	176
20-29	8.6	20.5	4.8	50.1	16.1	100.0	1,555
30-39	9.2	16.3	5.1	51.4	17.9	100.0	1,063
40-49	9.1	18.8	9.3	48.0	14.8	100.0	242
Residence							
Urban	9.0	20.1	5.5	49.9	15.4	100.0	1,942
Non-urban	8.6	16.1	4.8	51.7	18.7	100.0	1,094
Province							
Western Cape	9.4	30.1	3.7	43.8	12.9	100.0	276
Eastern Cape	3.7	14.5	5.3	50.8	25.8	100.0	335
Northern Cape	7.0	8.7	4.3	74.5	5.5	100.0	61
Free State	11.5	27.0	4.0	50.8	6.7	100.0	145
KwaZulu-Natal	7.3	18.0	4.1	43.1	27.5	100.0	555
North West	6.1	3.1	3.5	80.7	6.5	100.0	244
Gauteng	10.7	20.7	7.9	42.3	18.4	100.0	842
Mpumalanga	7.5	13.0	4.2	62.7	12.7	100.0	278
Limpopo	14.4	24.7	4.9	52.4	3.5	100.0	301
Education							
No education	(5.7)	(7.2)	(9.0)	(53.3)	(24.8)	100.0	42
Primary incomplete	14.1	14.6	3.6	44.0	23.7	100.0	141
Primary complete	2.8	12.4	5.1	41.9	37.7	100.0	108
Secondary incomplete	8.9	19.7	5.2	50.1	16.2	100.0	1,486
Secondary complete	8.5	18.3	6.0	51.3	15.9	100.0	908
More than secondary	9.8	20.5	4.0	55.6	10.2	100.0	351
Wealth quintile							
Lowest	11.1	18.2	5.9	44.4	20.4	100.0	650
Second	7.9	17.7	5.6	51.7	17.0	100.0	739
Middle	8.2	20.4	5.3	49.5	16.7	100.0	671
Fourth	6.5	15.5	2.8	60.3	14.9	100.0	557
Highest	11.4	22.7	7.0	46.6	12.3	100.0	418
Total	8.9	18.7	5.3	50.5	16.6	100.0	3,036

Note: Figures in parentheses are based on 25-49 unweighted cases.

HIV/AIDS-RELATED KNOWLEDGE AND BEHAVIOUR

12

Key Findings

- ***Knowledge of prevention of mother-to-child transmission of HIV:*** Women are more aware than men that HIV can be transmitted during pregnancy (83% versus 68%), during delivery (78% versus 58%), and through breastfeeding (77% versus 60%).
- ***Sexual partners:*** 5% of women and 17% of men had two or more sexual partners in the year before the survey. Among these respondents, 58% of women and 65% of men reported that they used a condom during their most recent sexual intercourse. On average, women have had 3.9 lifetime sexual partners, while men have had 14.7.
- ***HIV tests:*** The vast majority of respondents (93% of women and 94% of men) know where to obtain an HIV test. Fifty-nine percent of women and 45% of men were tested for HIV in the past 12 months and received the results of their last test.
- ***Male circumcision:*** 57% of South African men age 15-49 are circumcised; 30% were circumcised by a health worker or professional, and 27% were circumcised by a traditional practitioner, family member, or friend.
- ***Sexually transmitted infections:*** Overall, 12% of women and 7% of men either had an STI or symptoms of an STI during the 12 months before the survey.

The prevention of HIV has been prioritised in the 4th National Strategic Plan for HIV, TB and STIs (SANAC 2017). Adopting the 90-90-90 strategy to end the spread of the epidemic, the plan has the target of 90% of all people living with HIV knowing their HIV status. Thereafter, 90% of all people with diagnosed HIV infection should receive sustained antiretroviral therapy, and 90% of people receiving antiretroviral therapy should be virally suppressed. This initiative is critically important, as South Africa continues to have the largest number of people living with HIV of any country in the world. In September 2016, the Universal Test and Treat guideline was implemented. Prevention of mother-to-child transmission (MTCT) of HIV continues to be a critical component of the HIV strategy as the country enters the "last mile" to achieve elimination of MTCT.

To facilitate comparisons between the sexes, findings in this chapter refer to the 15-49 age group unless otherwise noted. The chapter concludes with a discussion of findings among young people age 15-24.

12.1 KNOWLEDGE ABOUT MOTHER-TO-CHILD TRANSMISSION OF HIV

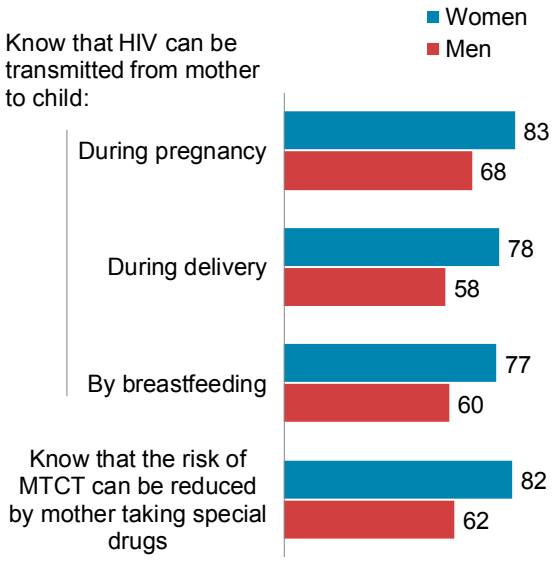
Increasing the level of general knowledge about transmission of HIV from mother to child and reducing the risk of transmission using antiretroviral drugs are critical in reducing mother-to-child transmission (MTCT) of HIV. To assess MTCT knowledge, respondents were asked whether HIV can be transmitted

from mother to child during pregnancy, during delivery, or through breastfeeding and whether a mother with HIV can reduce the risk of transmission to her baby by taking certain drugs.

Women are more aware than men that HIV can be transmitted during pregnancy (83% versus 68%), during delivery (78% versus 58%), and through breastfeeding (77% versus 60%). Overall, 69% of women and 49% of men know about all three modes of MTCT. Women are also more likely than men to be aware that a mother infected with HIV can reduce the risk of transmission to her baby by taking certain drugs (82% versus 62%) (**Figure 12.1** and **Table 12.1**).

***Figure 12.1* Knowledge of mother-to-child transmission (MTCT)**

Percentage of women and men age 15-49



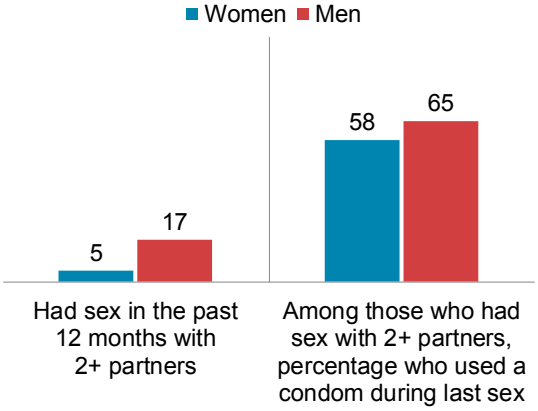
12.2 Multiple Sexual Partners

Given that most HIV infections in South Africa are contracted through heterosexual intercourse, information on sexual behaviour is important in designing and monitoring intervention programmes to control the spread of the epidemic. Survey respondents were asked questions on the number of sexual partners they had during the 12 months before the survey and over their lifetime. Information was also collected on use of condoms during respondents' most recent sexual intercourse with each of up to three partners.

Five percent of women and 17% of men reported that they had two or more sexual partners in the 12 months before the survey; among these individuals, 58% of women and 65% of men reported using a condom during their most recent sexual intercourse (**Figure 12.2**).

***Figure 12.2* Multiple sexual partners and condom use**

Percentage of women and men age 15-49



The proportion of women and men who had sexual intercourse in the 12 months before the survey with a person who neither was their spouse nor lived with them (45% of women and 55% of men) was much higher than the proportion who had two or more partners in the past 12 months; however, use of condoms at last sex with such a person was similar to use of condoms at most recent sex among those with two or more sexual partners in the 12 months before the survey (60% of women and 69% of men) (**Table 12.2.1** and **Table 12.2.2**). On average, women who have ever had sexual intercourse have had 3.9 lifetime sexual partners, while men have had 14.7.

Patterns by background characteristics

- The percentage of women and men with two or more partners in the 12 months before the survey who reported using a condom during their most recent sexual intercourse was higher among those in urban areas (61% and 67%, respectively) than among those in non-urban areas (50% and 62%, respectively).

- Among women who had ever had sexual intercourse, those who were divorced, separated, or widowed reported more lifetime partners on average (5.4 partners) than those who had never been married (4.1 partners) and those who were currently married or living together with someone as if married (3.4 partners). Similarly, divorced, separated, or widowed men reported more lifetime partners on average (24.7 partners) than men who were currently married or living together with someone (15.6 partners) and those who had never been married (13.3 partners).

- While women living in urban and non-urban areas reported comparable numbers of lifetime partners (4.0 and 3.5, respectively), men living in urban areas reported a much higher number of partners than those living in non-urban areas (17.0 and 9.2, respectively).

12.3 Paid Sex

The act of paying for sex introduces an uneven negotiating ground for safer sexual intercourse. Transactional sex is the exchange of money, favours, or gifts for sexual intercourse. This type of sexual intercourse is associated with a greater risk of contracting HIV and other sexually transmitted infections (STIs) because of compromised power relations and the likelihood of having multiple partners.

In the SADHS 2016, men were asked about payment for sexual intercourse and condom use at last paid sexual intercourse. Five percent of men have ever paid for sex and 3% have paid for sex in the last 12 months. Among men who paid for sex in the last 12 months, 83% reported using condoms during their most recent sexual intercourse (**Table 12.3**).

12.4 Coverage of HIV Testing Services

Knowledge of HIV status helps HIV-negative individuals make specific decisions to reduce risk and increase safer sex practices so that they can remain disease free. Among those who are living with HIV, knowledge of their status allows them to take action to protect their sexual partners, to access care, and to receive treatment.

In South Africa, a national campaign was launched in 2010 to provide HIV counselling and testing (HCT) and boost the number of people who know their HIV status. Testing continues to be freely available in the public sector and through nongovernmental organisations (NGOs).

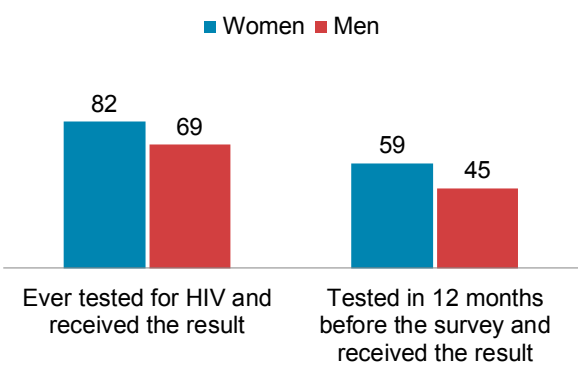
12.4.1 Awareness of HIV Testing Services and Experience with HIV Testing

To assess awareness and coverage of HIV testing services, survey respondents were asked whether they had ever been tested for HIV. If they said that they had, they were asked whether they had received the results of their last test and where they had been tested. If they had never been tested, they were asked whether they knew a place where they could go to be tested.

The vast majority of respondents (93% of women and 94% of men) know where to obtain an HIV test (**Tables 12.4.1** and **12.4.2**). Women are more likely than men to have ever been tested for HIV and to have received the results of their last test (82% and 69%, respectively). Similarly, a greater percentage of women than men had been tested for HIV in the 12 months before the survey and received the results of the last test (59% of women versus 45% of men) (**Figure 12.3**).

Figure 12.3 **HIV testing**

Percentage of women and men age 15-49



Patterns by background characteristics

- The proportion of women and men who have never been tested for HIV is greatest among those age 15-19 (50% and 54%, respectively) and those who have never had sex (65% for both women and men).

- By province, the percentage of women who have been recently tested for HIV and received the results of their last test is relatively uniform, ranging from 52% in Northern Cape to 63% in Limpopo. There is greater variation among men; the percentage of men recently tested is highest in Western Cape (56%) and lowest in Limpopo (35%).

12.4.2 HIV Testing of Pregnant Women

According to current guidelines for prevention of mother-to-child transmission of HIV, women should be tested for HIV at their first antenatal care (ANC) visit and thereafter provided with HCT every 3 months (NDoH 2015b).

Table 12.5 presents information on self-reported HIV testing during pregnancy and delivery among all women age 15-49 who gave birth in the 2 years before the survey. Seventy-eight percent of women received HIV counselling during ANC. Seventy-seven percent of women received counselling on HIV and were offered, accepted, and received the results of an HIV test during ANC. Overall, 95% of women had an HIV test during ANC or labour and received the results of the test. Across all provinces, more than 90% of women had an HIV test during either ANC or labour and received the results.

12.5 Male Circumcision

Voluntary medical male circumcision (VMMC) has been shown to be partially effective in reducing HIV infections among males. The government of South Africa introduced its policy and programme on VMMC in 2010. As recommended in the 2012-2016 National Strategic Plan on HIV, STIs, and TB (SANAC 2011), the government set a target of reaching 80% of HIV-negative men age 15-49 with VMMC by 2015 (1.6 million men).

In the SADHS 2016, men were asked whether or not they were circumcised and, if they were circumcised, who performed the circumcision. Overall, 57% of men are circumcised; 30% were circumcised by a health worker or professional, and 27% were circumcised by a traditional practitioner, family member, or friend (**Table 12.6**). In the context of this survey, circumcision by a health worker is considered a proxy for VMMC.

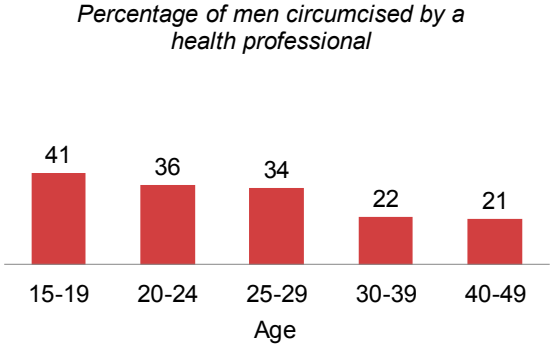
Patterns by background characteristics

- Younger men age 15-19 (41%) are twice as likely to be circumcised by a health worker or professional as older men age 40-49 (21%) (**Figure 12.4**).

- While the percentage of men who are circumcised does not vary by residence (57% of both urban and non-urban men), the percentage circumcised by a health worker is higher among urban men (32%) than non-urban men (25%).

- The prevalence of male circumcision varies markedly by province, from 35% in Northern Cape to 86% in Limpopo. The percentage of men circumcised by a health worker also varies, from 7% in Eastern Cape to 41% in Free State.

Figure 12.4 **Male circumcision by age**



- Men with no education are less likely to be circumcised than others. Thirty-eight percent of men with no education are circumcised compared with 49% of men with an incomplete primary education and 66% with more than a secondary education.

12.6 Self-reporting of Sexually Transmitted Infections

Sexually transmitted infections (STIs) and symptoms

Respondents who had ever had sex were asked whether they had an STI or symptoms of an STI (a bad-smelling, abnormal discharge from the vagina/penis or a genital sore or ulcer) in the 12 months before the survey.

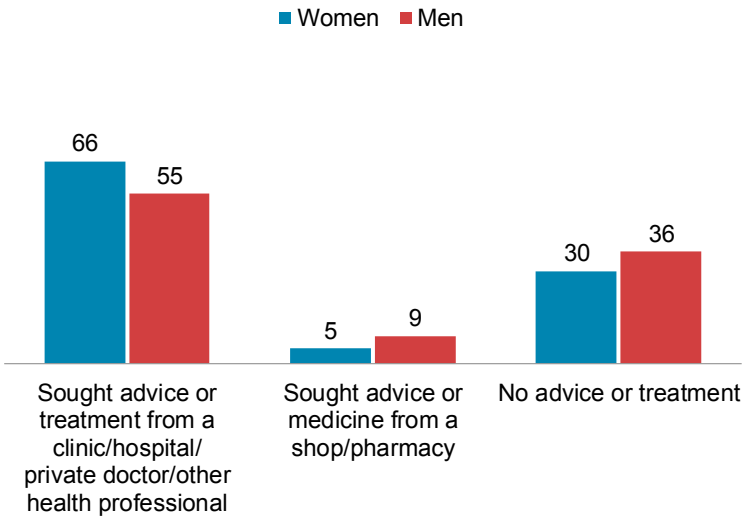
Sample: Women and men age 15-49 who have ever had sex

In the SADHS 2016, respondents who had ever had sex were asked whether they had had a sexually transmitted infection (STI) or symptoms of an STI in the 12 months before the survey. Women were more likely than men to report having had an STI or having experienced STI symptoms (**Table 12.7**). Among women age 15-49, 5% reported that they had an STI in the 12 months before the survey; 9% had a bad-smelling, abnormal discharge, and 4% had a genital sore or ulcer. Four percent of men reported that they had an STI; 4% reported a bad-smelling, abnormal discharge; and 2% reported a genital sore or ulcer.

Overall, 12% of women and 7% of men either had an STI or symptoms of an STI during the 12 months before the survey. Sixty-six percent of women and 55% of men who had an STI or STI symptoms sought advice or treatment from a clinic, hospital, private doctor, or other health professional (**Table 12.8** and **Figure 12.5**). Five percent of women and 9% of men sought advice or treatment from a shop or pharmacy. Thirty percent of women and 36% of men did not seek any treatment.

Figure 12.5 **STI advice- or treatment-seeking behaviour**

Percentage of women and men age 15-49 with an STI or STI symptoms



12.7 HIV/AIDS-related Behaviour among Young People

This section assesses the extent to which young people age 15-24 are engaged in behaviour that may place them at risk of contracting HIV.

12.7.1 First Sex

Young people who initiate sex at an early age are typically at higher risk of becoming pregnant or contracting an STI than young people who initiate sex later. Consistent condom use can reduce such risks.

Table 12.9 provides information on the percentage of young women and men who have had sexual intercourse before age 15 and age 18. Overall, a higher percentage of young men than young women age 15-24 reported having sex before age 15 (15% and 6%, respectively). A similar trend is observed among young people age 18-24 who have had sex before age 18. Fifty percent of young women reported having sex before age 18, as compared with 66% of young men.

Comparison with the SADHS 1998: The percentage of young women age 15-24 who have had sex before age 15 decreased slightly from 8% in 1998 to 6% in 2016. Similarly, the proportion of young women age 18-24 who have had sex before age 18 decreased modestly, from 55% to 50%. Although sexual debut data among young women may be more consistent than marriage and first birth data, Neal and Hosegood (2015) call for caution when inferring changes in sexual health trends based on self-reported sexual behaviours among young women in DHS surveys.

Patterns by background characteristics

- Young men in urban areas are slightly more likely to have initiated sex by age 15 or 18 than their non-urban counterparts. There is no clear pattern by residence among young women.
- The percentage of young women age 15-24 who had sexual intercourse before age 15 declines with increasing education, from 18% among those who did not complete a primary education to 4% among those who studied beyond the secondary level. A similar pattern is observed among young women age 18-24 who had sexual intercourse before age 18. In contrast, no such pattern is observed among young men.

12.7.2 Premarital Sex

The SADHS 2016 also collected information on patterns of sexual activity among women and men age 15-24 who had never been in a union (i.e., those who had never been married or lived with a partner as if married). Among those who have never been in a union, 37% women and 31% of men have never had sexual intercourse (**Table 12.10**).

Patterns by background characteristics

- The percentage of never-in-union women who have never had sexual intercourse decreases sharply with age, from 72% among those age 15-17 to 37% among those age 18-19 and 6% among those age 23-24. Similarly, the percentage of never-in-union men who have never had sexual intercourse decreases from 63% among those age 15-17 to 28% among those age 18-19 and 7% among those age 23-24.
- The percentage of women who have never had sexual intercourse is slightly higher in urban areas than in non-urban areas (38% versus 36%). The opposite pattern is observed among men; 34% of non-urban men and 28% of urban men have never had sexual intercourse.
- The percentage of women and men who have never had sex generally decreases with increasing education. For example, 59% of men with a primary incomplete education have never had sex, as compared with 2% of men with more than a secondary education.

12.7.3 Multiple Sexual Partners

Young men age 15-24 are more likely than their female counterparts to have had more than one sexual partner in the previous 12 months (21% versus 5%) (**Tables 12.11.1** and **12.11.2**). In addition, condom use is more common among young men; 73% of young men with more than one partner in the past 12 months reported using a condom during their most recent sexual intercourse, as compared with 61% of young women.

Young men are also more likely than young women to have had intercourse with a non-marital, non-cohabitating partner in the last 12 months (62% versus 52%). Sixty-two percent of young women and 76% of young men used a condom during their most recent sexual intercourse with a non-marital, non-cohabiting partner. However, underreporting of non-marital partners by single women (Nnko et al. 2004) or overreporting of sexual partners by men in certain circumstances (Houle et al. 2016) may have been a factor in these results.

Condom use at last sex with a non-marital, non-cohabitating partner is higher in urban areas than in non-urban areas among women but not men; 67% of women in urban areas used a condom during their last sexual intercourse with such a partner, as compared with 54% of women in non-urban areas.

12.7.4 Coverage of HIV Testing Services

Seeking an HIV test may be more difficult for young people than adults because many young people lack experience in accessing health services for themselves and because there are often barriers to young people obtaining services. **Table 12.12** provides information on sexually active young people age 15-24 who have been tested for HIV and received the results of the last test. Overall, 68% of young women and 49% of young men who have had sexual intercourse in the past 12 months have been tested for HIV and received the results of the last test.

Patterns by background characteristics

- The proportion of young people tested for HIV in the last 12 months increases with age, rising from 58% among women age 15-17 to 71% among those age 23-24 and from 27% among men age 15-17 to 55% among those age 23-24.

- Women who have ever been married or have lived together with a partner as if married are slightly more likely than women who have never been married to have been tested for HIV in the past 12 months and to have received the results of the last test (70% and 67%, respectively). Although a similar pattern is observed among men, the results should be interpreted with caution because of the small number of men age 15-24 who have ever been married or have lived together with a partner as if married.

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- **Table 12.3 Payment for sexual intercourse and condom use at last paid sexual intercourse**
- **Table 12.4.1 Coverage of prior HIV testing: Women**
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Table 12.1 Knowledge of prevention of mother-to-child transmission of HIV

Percentage of women and men age 15-49 who know that HIV can be transmitted from mother to child during pregnancy, during delivery, by breastfeeding, and by all three means, and percentage who know that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by the mother taking special drugs, according to age, South Africa DHS 2016

Age	Percentage who know that HIV can be transmitted from mother to child:				Percentage who know that the risk of MTCT can be reduced by mother taking special drugs	Number of respondents
	During pregnancy	During delivery	By breastfeeding	By all three means		
			WOMEN			
15-24	79.3	69.8	72.5	62.3	76.2	2,842
15-19	75.9	64.1	68.3	56.8	70.2	1,427
20-24	82.6	75.6	76.8	67.8	82.3	1,415
25-29	86.8	82.3	79.8	72.9	86.6	1,444
30-39	85.1	82.4	79.4	73.3	86.4	2,406
40-49	84.3	80.0	77.2	71.2	83.3	1,823
Total 15-49	83.3	77.7	76.7	69.1	82.4	8,514
			MEN			
15-24	63.9	50.0	55.1	39.4	55.4	1,235
15-19	62.1	46.4	51.7	37.1	50.8	647
20-24	65.8	54.0	58.7	42.0	60.4	588
25-29	72.8	59.6	61.9	50.0	68.3	506
30-39	68.9	65.1	62.2	56.2	63.3	845
40-49	70.5	64.3	64.0	55.9	66.5	616
Total 15-49	67.9	58.3	59.7	48.7	61.6	3,202
50-59	58.9	49.2	47.9	40.7	51.4	416
Total 15-59	66.8	57.2	58.4	47.8	60.5	3,618

Table 12.2.1 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Women

Among all women age 15-49, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them; among women having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; among women who had sexual intercourse in the past 12 months with a person who neither was their spouse nor lived with them, percentage who used a condom during last sexual intercourse with such a partner; and among women who ever had sexual intercourse, mean number of sexual partners during their lifetime, according to background characteristics, South Africa DHS 2016

	All women			Women who had 2+ partners in the past 12 months		Women who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them		Women who ever had sexual intercourse[1]	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them	Number of women	Percentage who reported using a condom during last sexual inter-course	Number of women	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of women	Mean number of sexual partners in lifetime	Number of women
Age									
15-24	4.6	52.1	2,842	61.4	132	62.3	1,479	2.9	1,874
15-19	2.7	37.9	1,427	54.8	38	63.8	541	1.9	618
20-24	6.6	66.3	1,415	64.0	94	61.5	938	3.4	1,256
25-29	6.9	58.4	1,444	63.3	99	58.1	843	4.0	1,360
30-39	4.9	40.5	2,406	51.5	118	58.5	975	4.8	2,276
40-49	2.0	27.2	1,823	(48.5)	37	59.7	496	3.7	1,696
Marital status									
Never married	5.5	66.8	4,992	62.9	276	60.4	3,333	4.1	3,826
Married or living together	2.6	6.0	3,050	37.0	80	48.1	182	3.4	2,948
Divorced/separated/ widowed	6.6	58.9	472	(63.9)	31	63.3	278	5.4	432
Residence									
Urban	4.6	42.1	5,731	61.2	263	63.5	2,411	4.0	4,847
Non-urban	4.4	49.7	2,783	50.1	123	54.0	1,382	3.5	2,359
Province									
Western Cape	2.5	30.7	995	*	25	49.8	306	3.2	829
Eastern Cape	6.2	51.6	938	54.6	58	54.2	484	3.8	843
Northern Cape	1.8	39.9	173	*	3	56.9	69	4.0	144
Free State	4.2	41.5	442	(47.4)	18	70.2	183	4.3	372
KwaZulu-Natal	5.2	50.8	1,616	57.8	84	60.2	822	3.0	1,289
North West	7.7	48.2	570	57.0	44	61.0	275	5.7	515
Gauteng	3.6	42.6	2,284	(61.6)	83	65.7	974	4.5	1,961
Mpumalanga	6.6	46.5	671	53.0	44	58.5	312	4.1	569
Limpopo	3.3	44.8	824	(60.8)	27	57.1	369	2.8	683
Education									
No education	3.6	34.9	168	*	6	42.6	59	4.5	152
Primary incomplete	3.0	37.7	447	*	13	50.4	168	3.6	394
Primary complete	4.2	34.4	327	*	14	50.7	113	3.8	268
Secondary incomplete	4.7	44.6	4,195	58.5	195	59.7	1,870	4.1	3,334
Secondary complete	4.6	49.6	2,369	69.7	108	62.5	1,175	3.5	2,155
More than secondary	4.9	40.5	1,008	33.5	50	63.7	408	3.9	902
Wealth quintile									
Lowest	4.2	46.9	1,648	47.5	69	49.4	773	3.7	1,407
Second	5.5	48.6	1,715	59.9	94	59.8	834	3.7	1,493
Middle	5.1	49.1	1,805	54.0	93	60.7	885	4.1	1,546
Fourth	5.3	46.9	1,763	65.4	93	67.1	828	4.3	1,483
Highest	2.4	29.9	1,583	(60.1)	38	64.5	473	3.5	1,276
Total	4.5	44.6	8,514	57.6	387	60.0	3,793	3.9	7,205

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Means are calculated excluding respondents who gave non-numeric responses

Table 12.2.2 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Men

Among all men age 15-49, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them; among men having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; among men who had sexual intercourse in the past 12 months with a person who neither was their spouse nor lived with them, percentage who used a condom during last sexual intercourse with such a partner; and among men who ever had sexual intercourse, mean number of sexual partners during their lifetime, according to background characteristics, South Africa DHS 2016

	All men			Men who had 2+ partners in the past 12 months		Men who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them		Men who ever had sexual intercourse[1]	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of men	Mean number of sexual partners in lifetime	Number of men
Age									
15-24	20.7	62.4	1,235	72.9	256	75.9	770	8.9	824
15-19	15.7	44.4	647	87.9	101	80.8	287	5.7	322
20-24	26.2	82.1	588	63.0	154	73.0	483	11.0	502
25-29	19.8	67.9	506	66.0	100	69.5	343	15.0	429
30-39	17.0	53.6	845	55.5	144	61.7	453	19.3	743
40-49	7.2	33.1	616	(51.4)	44	54.2	204	17.1	492
Marital status									
Never married	19.5	72.3	2,073	71.6	404	69.9	1,499	13.3	1,510
Married or living together	10.7	16.1	988	42.0	106	60.6	159	15.6	850
Divorced/separated/ widowed	23.9	79.6	141	(62.9)	34	61.3	112	24.7	128
Type of union									
In polygynous union	*	*	15	*	9	*	5	*	14
In non-polygynous union	10.0	16.0	970	41.6	97	61.9	155	15.4	835
Not currently in union	19.8	72.8	2,214	70.9	438	69.3	1,611	14.2	1,638
Not asked	*	*	3	nc	0	nc	0	*	2
Residence									
Urban	16.0	54.0	2,203	67.0	353	68.3	1,189	17.0	1,751
Non-urban	19.1	58.2	999	62.1	190	69.1	581	9.2	737
Province									
Western Cape	11.3	36.2	328	*	37	73.6	119	8.3	257
Eastern Cape	18.0	65.8	362	60.4	65	60.5	238	9.8	286
Northern Cape	8.5	51.4	61	*	5	71.8	31	9.8	42
Free State	22.6	59.2	159	71.4	36	74.0	94	16.5	115
KwaZulu-Natal	13.6	58.8	521	73.5	71	63.5	306	10.0	347
North West	18.4	54.0	237	52.9	44	83.4	128	12.1	199
Gauteng	17.3	54.6	984	67.8	170	66.7	537	23.5	794
Mpumalanga	18.1	57.1	263	67.8	48	72.3	150	12.9	236
Limpopo	23.7	57.9	288	57.4	68	73.1	167	8.2	212
Education									
No education	8.9	38.6	62	*	6	(66.5)	24	13.1	54
Primary incomplete	8.6	37.5	219	*	19	58.6	82	13.1	156
Primary complete	10.8	46.0	166	*	18	51.4	76	11.1	120
Secondary incomplete	18.6	58.3	1,637	65.9	305	70.2	954	14.8	1,236
Secondary complete	15.4	55.9	773	71.1	119	70.5	432	14.5	635
More than secondary	22.4	58.5	345	62.8	77	67.5	202	17.2	287
Wealth quintile									
Lowest	13.1	55.5	618	65.9	81	63.9	343	12.8	486
Second	18.3	57.6	682	62.0	125	66.0	393	12.4	532
Middle	19.4	58.7	715	64.5	138	68.4	420	18.5	565
Fourth	20.0	59.5	653	68.9	130	72.3	388	15.6	509
Highest	13.0	42.4	534	(65.3)	69	73.8	226	13.5	396
Total 15-49	17.0	55.3	3,202	65.3	544	68.5	1,770	14.7	2,488
50-59	4.6	20.2	416	(50.2)	19	56.2	84	12.9	312
Total 15-59	15.5	51.3	3,618	64.8	563	68.0	1,855	14.5	2,800

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases
[1] Means are calculated excluding respondents who gave non-numeric responses

Table 12.3 Payment for sexual intercourse and condom use at last paid sexual intercourse

Percentage of men age 15-49 who ever paid for sexual intercourse and percentage reporting payment for sexual intercourse in the past 12 months, and among them, percentage reporting that a condom was used the last time they paid for sexual intercourse, according to age, South Africa DHS 2016

	Among all men:			Among men who paid for sex in the past 12 months:	
Age	Percentage who ever paid for sexual intercourse	Percentage who paid for sexual intercourse in the past 12 months	Number of men	Percentage reporting condom use at last paid sexual intercourse	Number of men
15-24	2.0	1.0	1,235	*	13
15-19	0.1	0.1	647	*	1
20-24	4.1	2.0	588	*	12
25-29	6.8	4.2	506	*	21
30-39	7.8	4.6	845	(85.1)	39
40-49	3.9	3.2	616	*	19
Total 15-49	4.7	2.9	3,202	83.1	92
50-59	2.1	1.1	416	*	5
Total 15-59	4.4	2.7	3,618	83.9	97

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 12.4.1 Coverage of prior HIV testing: Women

Percentage of women age 15-49 who know where to get an HIV test, percent distribution of women by testing status and by whether they received the results of the last test, percentage of women ever tested, and percentage of women who were tested in the past 12 months and received the results of the last test, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of women by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women
		Ever tested and received results	Ever tested, did not receive results	Never tested[1]				
Age								
15-24	89.2	66.7	1.5	31.9	100.0	68.1	52.5	2,842
15-19	85.6	49.1	1.4	49.5	100.0	50.5	38.4	1,427
20-24	92.9	84.3	1.5	14.2	100.0	85.8	66.7	1,415
25-29	96.0	90.8	2.0	7.2	100.0	92.8	68.4	1,444
30-39	95.8	91.0	1.9	7.1	100.0	92.9	63.2	2,406
40-49	94.2	86.4	1.6	12.0	100.0	88.0	54.0	1,823
Marital status								
Never married	91.9	76.3	1.5	22.2	100.0	77.8	56.1	4,992
Ever had sex	94.9	86.9	1.8	11.4	100.0	88.6	64.3	3,989
Never had sex	80.3	34.1	0.7	65.2	100.0	34.8	23.4	1,003
Married or living together	95.0	89.7	1.9	8.4	100.0	91.6	62.2	3,050
Divorced/separated/ widowed	96.6	90.1	2.3	7.7	100.0	92.3	61.0	472
Residence								
Urban	93.5	82.2	1.7	16.1	100.0	83.9	57.1	5,731
Non-urban	92.9	81.1	1.7	17.1	100.0	82.9	61.5	2,783
Province								
Western Cape	93.3	82.4	2.3	15.3	100.0	84.7	62.0	995
Eastern Cape	97.4	86.4	1.6	12.1	100.0	87.9	59.3	938
Northern Cape	92.8	81.0	1.6	17.4	100.0	82.6	52.3	173
Free State	96.1	83.9	1.4	14.7	100.0	85.3	58.3	442
KwaZulu-Natal	91.0	80.8	0.7	18.5	100.0	81.5	58.3	1,616
North West	97.9	84.0	3.6	12.4	100.0	87.6	61.4	570
Gauteng	91.2	79.9	1.6	18.5	100.0	81.5	54.1	2,284
Mpumalanga	97.4	85.7	2.6	11.7	100.0	88.3	61.6	671
Limpopo	91.3	77.8	1.6	20.6	100.0	79.4	63.2	824
Education								
No education	91.2	77.6	0.3	22.1	100.0	77.9	52.5	168
Primary incomplete	89.6	76.3	3.2	20.5	100.0	79.5	53.9	447
Primary complete	90.4	76.0	1.8	22.2	100.0	77.8	50.9	327
Secondary incomplete	92.5	77.7	1.7	20.6	100.0	79.4	56.3	4,195
Secondary complete	94.8	87.6	1.6	10.8	100.0	89.2	63.2	2,369
More than secondary	96.4	90.5	1.6	7.9	100.0	92.1	62.3	1,008
Wealth quintile								
Lowest	90.8	78.9	1.6	19.4	100.0	80.6	60.7	1,648
Second	92.7	82.0	2.1	15.9	100.0	84.1	59.3	1,715
Middle	94.0	84.5	1.2	14.3	100.0	85.7	61.2	1,805
Fourth	95.2	84.0	1.9	14.1	100.0	85.9	58.3	1,763
Highest	93.7	79.3	1.8	19.0	100.0	81.0	52.7	1,583
Total	93.3	81.8	1.7	16.5	100.0	83.5	58.5	8,514

[1] Includes “don’t know”

Table 12.4.2 Coverage of prior HIV testing: Men

Percentage of men age 15-49 who know where to get an HIV test, percent distribution of men by testing status and by whether they received the results of the last test, percentage of men ever tested, and percentage of men who were tested in the past 12 months and received the results of the last test, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of men by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
		Ever tested and received results	Ever tested, did not receive results	Never tested[1]				
Age								
15-24	90.9	56.2	1.8	42.0	100.0	58.0	38.5	1,235
15-19	87.8	44.7	1.8	53.5	100.0	46.5	28.7	647
20-24	94.4	68.8	1.8	29.4	100.0	70.6	49.3	588
25-29	95.9	77.7	0.8	21.5	100.0	78.5	52.8	506
30-39	95.7	75.4	2.4	22.2	100.0	77.8	48.0	845
40-49	96.8	79.0	3.0	18.0	100.0	82.0	45.3	616
Marital status								
Never married	92.6	62.2	2.0	35.8	100.0	64.2	41.7	2,073
Ever had sex	94.9	69.1	2.1	28.9	100.0	71.1	47.3	1,678
Never had sex	82.6	33.1	1.8	65.1	100.0	34.9	18.1	395
Married or living together	96.7	80.9	2.3	16.8	100.0	83.2	49.9	988
Divorced/separated/ widowed	98.5	86.4	0.4	13.2	100.0	86.8	49.1	141
Residence								
Urban	95.2	72.0	1.8	26.3	100.0	73.7	46.6	2,203
Non-urban	91.8	62.6	2.6	34.8	100.0	65.2	40.2	999
Province								
Western Cape	92.5	73.7	1.6	24.6	100.0	75.4	55.7	328
Eastern Cape	96.1	62.5	2.4	35.0	100.0	65.0	45.6	362
Northern Cape	86.0	62.1	1.3	36.5	100.0	63.5	37.6	61
Free State	95.7	73.6	3.6	22.7	100.0	77.3	52.1	159
KwaZulu-Natal	92.6	72.8	1.8	25.4	100.0	74.6	44.9	521
North West	96.5	73.8	3.8	22.4	100.0	77.6	44.3	237
Gauteng	96.2	69.8	1.6	28.6	100.0	71.4	41.0	984
Mpumalanga	93.6	71.9	1.0	27.1	100.0	72.9	49.7	263
Limpopo	88.3	54.6	2.7	42.7	100.0	57.3	35.0	288
Education								
No education	92.9	77.4	1.2	21.4	100.0	78.6	47.7	62
Primary incomplete	84.8	52.1	7.0	40.9	100.0	59.1	30.7	219
Primary complete	89.4	55.9	3.4	40.7	100.0	59.3	34.4	166
Secondary incomplete	93.7	64.8	1.5	33.7	100.0	66.3	41.1	1,637
Secondary complete	96.3	79.7	1.1	19.3	100.0	80.7	52.5	773
More than secondary	99.3	80.9	3.0	16.1	100.0	83.9	56.5	345
Wealth quintile								
Lowest	91.6	61.2	1.4	37.4	100.0	62.6	40.1	618
Second	92.1	65.5	3.6	30.9	100.0	69.1	42.6	682
Middle	95.1	72.6	1.5	26.0	100.0	74.0	48.1	715
Fourth	96.1	73.7	2.4	23.9	100.0	76.1	50.4	653
Highest	95.7	72.2	1.1	26.7	100.0	73.3	40.4	534
Total 15-49	94.1	69.0	2.0	28.9	100.0	71.1	44.6	3,202
50-59	91.2	72.3	3.6	24.1	100.0	75.9	40.9	416
Total 15-59	93.8	69.4	2.2	28.4	100.0	71.6	44.1	3,618

[1] Includes “don’t know”

Table 12.5 Pregnant women counselled and tested for HIV

Among all women age 15-49 who gave birth in the 2 years preceding the survey, percentage who received counselling on HIV during antenatal care, percentage who received an HIV test during antenatal care for their most recent birth by whether they received their results and post-test counselling, and percentage who received an HIV test during ANC or labour for their most recent birth by whether they received their test results, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who received counselling on HIV during antenatal care[1]	Percentage who were tested for HIV during antenatal care and who:			Percentage who received counselling on HIV and an HIV test during ANC, and received the results	Percentage who had an HIV test during ANC or labour and who:[2]		Number of women who gave birth in the past 2 years[3]
		Received results and:						
		Received post-test counselling	Did not receive post-test counselling	Did not receive results		Received results	Did not receive results	
Age								
15-24	77.4	71.8	17.2	1.0	76.1	95.5	0.3	502
15-19	81.1	71.6	21.2	0.5	80.7	95.9	0.5	144
20-24	75.9	71.9	15.6	1.2	74.2	95.3	0.2	359
25-29	79.6	72.8	16.1	0.6	77.7	95.2	0.2	410
30-39	77.8	73.9	15.0	0.2	76.4	92.2	0.3	404
40-49	77.7	64.8	17.5	0.0	76.8	96.3	0.0	70
Marital status								
Never married	77.8	73.0	15.8	1.0	76.4	94.6	0.4	768
Married or living together	78.5	70.2	17.7	0.0	76.9	94.3	0.0	580
Divorced/separated/widowed	(81.6)	(90.9)	(4.5)	(2.1)	(79.5)	(95.4)	(2.5)	39
Residence								
Urban	75.1	70.1	16.4	0.7	73.7	94.2	0.3	872
Non-urban	83.4	76.2	15.9	0.5	81.8	95.0	0.2	514
Province								
Western Cape	72.0	74.5	19.9	0.0	72.0	97.8	0.0	118
Eastern Cape	83.8	77.2	19.3	0.0	83.8	98.4	0.0	163
Northern Cape	78.0	70.9	17.2	0.8	75.6	94.4	1.5	27
Free State	85.8	81.9	10.9	0.0	84.9	96.6	0.8	60
KwaZulu-Natal	80.9	77.6	14.7	0.3	79.7	94.2	0.1	258
North West	85.9	73.5	16.3	3.2	79.7	95.3	2.4	106
Gauteng	68.5	67.2	12.0	0.8	66.4	90.8	0.0	385
Mpumalanga	85.8	65.6	23.2	0.0	85.0	98.6	0.0	127
Limpopo	82.4	70.9	19.8	0.6	81.8	92.5	0.0	144
Education								
No education	*	*	*	*	*	*	*	18
Primary incomplete	65.7	67.0	4.8	2.1	64.3	91.8	2.1	60
Primary complete	72.5	60.8	11.6	0.0	72.5	79.8	0.4	50
Secondary incomplete	79.0	74.8	15.5	0.7	78.1	94.7	0.3	706
Secondary complete	79.9	73.0	15.6	0.1	77.2	95.1	0.1	397
More than secondary	75.3	64.7	27.6	1.1	73.5	98.0	0.0	155
Wealth quintile								
Lowest	76.6	72.9	14.4	0.3	76.3	92.8	0.1	312
Second	77.1	71.0	14.7	0.6	75.7	91.5	0.8	326
Middle	81.4	73.7	17.9	1.5	79.1	98.0	0.2	291
Fourth	80.3	77.7	14.9	0.1	78.6	96.5	0.1	269
Highest	74.6	64.1	21.4	0.5	72.7	94.1	0.0	189
Total	78.2	72.4	16.2	0.6	76.7	94.5	0.3	1,386

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] In this context, "counselling on HIV" means that someone talked with the respondent about all three of the following topics: (1) babies getting HIV from their mother, (2) preventing the virus, and (3) getting tested for HIV

[2] Women were asked whether they received an HIV test during labour only if they gave birth in a facility

[3] Denominator for percentages includes women who did not receive antenatal care for their last birth in the past 2 years

Table 12.6 Male circumcision

Percent distribution of men age 15-49 by circumcision status and provider of circumcision, and percentage of men circumcised, according to background characteristics, South Africa DHS 2016

Background characteristic	Circumcised by:			Not circumcised	Don't know circumcision status	Total	Percentage of men circumcised[1]	Number of men
	Health worker/ professional	Traditional practitioner/ family/friend	Other/ don't know					
Age								
15-24	38.6	21.1	0.1	40.0	0.2	100.0	59.8	1,235
15-19	41.2	16.0	0.1	42.3	0.3	100.0	57.4	647
20-24	35.8	26.7	0.0	37.5	0.0	100.0	62.5	588
25-29	34.4	28.2	0.2	37.0	0.2	100.0	62.8	506
30-39	21.5	30.2	0.1	47.8	0.4	100.0	51.8	845
40-49	20.5	33.0	0.0	46.4	0.0	100.0	53.6	616
Residence								
Urban	32.4	24.7	0.1	42.7	0.2	100.0	57.1	2,203
Non-urban	24.6	31.9	0.2	43.1	0.2	100.0	56.7	999
Province								
Western Cape	15.5	28.8	0.0	55.3	0.5	100.0	44.2	328
Eastern Cape	6.6	66.1	0.0	27.0	0.3	100.0	72.7	362
Northern Cape	23.6	11.3	0.0	65.1	0.0	100.0	34.9	61
Free State	41.0	14.5	0.3	44.2	0.0	100.0	55.8	159
KwaZulu-Natal	37.2	5.3	0.4	56.7	0.5	100.0	42.8	521
North West	27.0	21.6	0.2	51.1	0.0	100.0	48.9	237
Gauteng	37.9	21.9	0.0	40.2	0.0	100.0	59.8	984
Mpumalanga	31.8	18.2	0.0	49.6	0.5	100.0	49.9	263
Limpopo	31.4	54.5	0.0	14.2	0.0	100.0	85.8	288
Education								
No education	9.5	28.0	0.0	62.5	0.0	100.0	37.5	62
Primary incomplete	11.7	36.9	0.0	50.4	1.0	100.0	48.6	219
Primary complete	29.9	26.0	0.7	43.5	0.0	100.0	56.5	166
Secondary incomplete	29.9	26.3	0.0	43.5	0.3	100.0	56.2	1,637
Secondary complete	32.5	26.0	0.1	41.4	0.0	100.0	58.6	773
More than secondary	39.9	25.7	0.0	34.5	0.0	100.0	65.5	345
Population group								
Black African	30.8	30.3	0.1	38.7	0.2	100.0	61.1	2,815
White	33.8	0.0	0.0	66.2	0.0	100.0	33.8	104
Coloured	23.0	2.5	0.0	74.5	0.0	100.0	25.5	232
Indian/Asian	(7.4)	(3.3)	(0.0)	(86.5)	(2.9)	100.0	(10.6)	48
Other	*	*	*	*	*	100.0	*	2
Total 15-49	29.9	26.9	0.1	42.8	0.2	100.0	57.0	3,202
50-59	16.0	29.1	0.2	53.7	1.0	100.0	45.3	416
Total 15-59	28.3	27.2	0.1	44.1	0.3	100.0	55.6	3,618

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes all men who report they are circumcised, regardless of provider

Table 12.7 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

Among women and men age 15-49 who ever had sexual intercourse, percentage reporting having an STI and/or symptoms of an STI in the past 12 months, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage of women who reported having in the past 12 months:					Percentage of men who reported having in the past 12 months:				
	STI	Bad-smelling/ abnormal genital discharge	Genital sore or ulcer	STI/ genital discharge/ sore or ulcer	Number of women who ever had sexual intercourse	STI	Bad-smelling/ abnormal discharge from penis	Genital sore or ulcer	STI/ abnormal discharge from penis/ sore or ulcer	Number of men who ever had sexual intercourse
Age										
15-24	5.0	10.7	4.0	13.7	1,903	5.3	4.9	3.7	9.0	869
15-19	4.5	9.7	3.5	12.6	618	2.2	2.9	1.7	5.0	329
20-24	5.3	11.3	4.2	14.3	1,285	7.2	6.1	4.9	11.4	540
25-29	7.9	9.4	4.9	13.6	1,412	3.7	4.5	2.3	7.0	486
30-39	5.3	8.2	4.4	11.4	2,385	3.5	2.2	2.0	5.1	840
40-49	3.5	6.4	3.9	8.9	1,805	2.4	2.8	0.9	4.5	609
Marital status										
Never married	5.5	9.1	4.4	12.1	3,989	4.5	4.1	2.6	7.0	1,678
Married or living together	4.7	8.1	3.8	11.0	3,045	2.3	2.6	1.3	5.0	986
Divorced/separated/ widowed	7.1	7.9	6.1	14.7	471	7.0	3.4	6.2	10.7	141
Circumcised										
Yes[1]	na	na	na	na	na	3.8	4.0	2.1	6.7	1,661
No	na	na	na	na	na	3.9	2.9	2.6	6.3	1,141
Don't know	na	na	na	na	na	*	*	*	*	4
Residence										
Urban	5.1	7.9	3.4	10.7	5,069	2.9	2.8	1.9	5.1	1,980
Non-urban	5.8	10.1	6.1	14.0	2,437	6.2	5.4	3.2	9.8	825
Province										
Western Cape	2.9	7.3	2.2	8.6	853	4.0	5.6	5.3	10.8	284
Eastern Cape	9.9	12.8	3.7	16.3	860	6.7	8.0	2.0	9.9	317
Northern Cape	3.3	6.5	1.6	9.3	153	1.8	2.5	3.6	6.1	51
Free State	6.1	7.1	6.3	12.3	382	6.3	5.4	4.1	10.2	133
KwaZulu-Natal	5.8	9.1	4.1	10.9	1,340	5.0	3.2	3.3	6.0	425
North West	3.8	12.5	9.7	18.3	529	5.4	2.7	1.0	6.8	213
Gauteng	4.5	6.0	2.4	8.6	2,076	1.6	1.5	0.5	2.8	907
Mpumalanga	5.9	12.7	7.1	17.6	609	4.2	3.2	1.9	7.1	239
Limpopo	4.5	7.2	6.3	11.7	704	3.6	4.3	4.4	9.0	236
Education										
No education	3.2	8.3	3.6	10.0	160	0.6	0.4	2.2	3.2	61
Primary incomplete	8.3	11.4	7.4	15.2	419	5.4	6.1	3.3	9.3	181
Primary complete	4.9	9.4	4.5	10.8	284	5.8	3.9	5.2	9.6	133
Secondary incomplete	4.8	9.5	4.9	12.7	3,466	4.7	4.2	2.3	7.3	1,359
Secondary complete	6.1	7.5	3.4	10.8	2,232	2.8	2.6	1.9	4.6	733
More than secondary	4.2	6.7	2.8	10.1	945	1.8	2.2	1.3	5.1	338
Wealth quintile										
Lowest	6.2	9.7	5.1	13.1	1,448	4.4	5.8	2.4	7.2	538
Second	5.8	10.5	5.6	13.9	1,559	4.3	3.5	2.8	7.2	603
Middle	5.5	8.6	4.4	12.7	1,627	5.4	4.2	2.8	8.4	634
Fourth	6.0	8.8	3.9	11.1	1,537	3.9	2.5	2.4	6.2	572
Highest	2.6	5.1	2.2	7.6	1,335	0.3	1.6	0.8	2.4	459
Total 15-49	5.3	8.6	4.3	11.8	7,505	3.8	3.6	2.3	6.5	2,805
50-59	na	na	na	na	na	3.0	3.9	2.4	6.6	412
Total 15-59	na	na	na	na	na	3.7	3.6	2.3	6.5	3,217

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] Includes all men who report they are circumcised, regardless of provider

Table 12.8 Women and men seeking treatment for STIs

Percentage of women and men age 15-49 reporting an STI or symptoms of an STI in the past 12 months who sought advice or treatment, South Africa DHS 2016

Source of advice or treatment	Women	Men
Clinic/hospital/private doctor/other health professional	65.5	55.1
Advice or medicine from shop/pharmacy	4.8	8.8
Advice or treatment from any other source	0.1	0.2
No advice or treatment	29.9	36.3
Number with STI or symptoms of STI	885	182

Table 12.9 Age at first sexual intercourse among young people

Percentage of young women and young men age 15-24 who had sexual intercourse before age 15 and percentage of young women and young men age 18-24 who had sexual intercourse before age 18, according to background characteristics, South Africa DHS 2016

	Women age 15-24		Women age 18-24		Men age 15-24		Men age 18-24	
Background characteristic	Percentage who had sexual intercourse before age 15	Number of women	Percentage who had sexual intercourse before age 18	Number of women	Percentage who had sexual intercourse before age 15	Number of men	Percentage who had sexual intercourse before age 18	Number of men
Age								
15-19	5.7	1,427	na	na	14.5	647	na	na
15-17	6.6	857	na	na	13.9	387	na	na
18-19	4.4	569	49.7	569	15.4	259	64.6	259
20-24	6.5	1,415	50.5	1,415	14.7	588	66.9	588
20-22	6.5	836	50.9	836	13.7	367	68.0	367
23-24	6.4	579	50.0	579	16.5	222	65.2	222
Residence								
Urban	6.2	1,826	49.0	1,314	17.1	724	68.4	510
Non-urban	5.9	1,016	52.7	670	11.1	511	63.0	338
Education								
No education	*	9	*	7	*	6	*	6
Primary incomplete	18.2	72	(76.8)	36	13.2	72	(62.4)	36
Primary complete	14.5	116	70.2	64	17.9	60	(58.1)	19
Secondary incomplete	6.3	1,793	57.0	1,033	14.8	807	64.7	495
Secondary complete	3.6	640	43.1	634	12.7	228	67.8	228
More than secondary	3.5	211	27.7	210	15.7	63	77.5	63
Total	6.1	2,842	50.3	1,984	14.6	1,235	66.2	848

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable

Table 12.10 Premarital sexual intercourse among young people

Among never-in-union women and men age 15-24, percentage who have never had sexual intercourse, according to background characteristics, South Africa DHS 2016

Background characteristic	Women age 15-24		Men age 15-24	
	Percentage who have never had sexual intercourse	Number of never-in-union women	Percentage who have never had sexual intercourse	Number of never-in-union men
Age				
15-19	58.5	1,380	49.2	646
15-17	72.0	847	63.4	387
18-19	37.1	533	27.8	258
20-24	11.5	1,128	8.8	545
20-22	14.7	702	10.1	347
23-24	6.3	426	6.7	198
Residence				
Urban	38.4	1,579	28.2	694
Non-urban	35.6	929	34.2	497
Education				
No education	*	5	*	4
Primary incomplete	44.8	56	59.1	62
Primary complete	53.1	82	55.5	59
Secondary incomplete	44.4	1,620	33.2	787
Secondary complete	18.5	565	15.2	220
More than secondary	23.5	179	1.5	59
Total 15-24	37.4	2,508	30.7	1,191

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 12.11.1 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months among young people: Women

Among all young women age 15-24, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them; among young women having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; and among young women who had sexual intercourse in the past 12 months with a person who neither was their spouse nor lived with them, percentage who used a condom during last sexual intercourse with such a partner, according to background characteristics, South Africa DHS 2016

	Women age 15-24			Women age 15-24 who had 2+ partners in the past 12 months		Women age 15-24 who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them	Number of women	Percentage who reported using a condom during last sexual intercourse	Number of women	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of women
Age							
15-19	2.7	37.9	1,427	54.8	38	63.8	541
15-17	1.9	25.8	857	*	17	61.6	221
18-19	3.8	56.1	569	(59.5)	21	65.3	320
20-24	6.6	66.3	1,415	64.0	94	61.5	938
20-22	6.6	67.1	836	60.6	55	62.2	561
23-24	6.7	65.2	579	(69.0)	39	60.3	377
Marital status							
Never married	4.9	57.0	2,508	63.6	122	62.7	1,429
Ever married or living together	3.0	15.0	334	*	10	(49.9)	50
Residence							
Urban	4.2	51.1	1,826	62.2	77	67.2	932
Non-urban	5.4	53.8	1,016	60.3	55	53.9	547
Education							
No education	*	*	9	*	0	*	2
Primary incomplete	6.6	42.8	72	*	5	(32.7)	31
Primary complete	1.9	32.1	116	*	2	(52.6)	37
Secondary incomplete	3.9	46.6	1,793	62.8	71	60.8	835
Secondary complete	6.3	69.1	640	(61.1)	40	67.2	442
More than secondary	6.5	62.0	211	*	14	65.0	131
Total 15-24	4.6	52.1	2,842	61.4	132	62.3	1,479

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 12.11.2 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months among young people: Men

Among all young men age 15-24, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them; among young men having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; and among young men who had sexual intercourse in the past 12 months with a person who neither was their spouse nor lived with them, percentage who used a condom during last sexual intercourse with such a partner, according to background characteristics, South Africa DHS 2016

	Men age 15-24			Men age 15-24 who had 2+ partners in the past 12 months		Men age 15-24 who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Percentage who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Percentage who reported using a condom during last sexual intercourse with such a partner	Number of men
Age							
15-19	15.7	44.4	647	87.9	101	80.8	287
15-17	10.1	31.2	387	(88.3)	39	83.4	121
18-19	24.0	64.2	259	87.6	62	79.0	166
20-24	26.2	82.1	588	63.0	154	73.0	483
20-22	26.6	79.8	367	59.3	97	73.9	293
23-24	25.6	85.7	222	69.3	57	71.7	190
Marital status							
Never married	20.1	62.5	1,191	74.8	240	76.2	744
Ever married or living together	(36.1)	(58.8)	44	*	16	*	26
Residence							
Urban	22.3	65.5	724	76.0	161	76.8	474
Non-urban	18.4	57.9	511	67.6	94	74.5	296
Education							
No education	*	*	6	*	1	*	3
Primary incomplete	9.8	40.1	72	*	7	(74.7)	29
Primary complete	14.3	39.6	60	*	9	(41.9)	24
Secondary incomplete	19.9	58.7	807	77.2	161	78.8	474
Secondary complete	24.8	79.5	228	73.7	57	77.1	181
More than secondary	34.1	94.2	63	*	21	66.7	59
Total 15-24	20.7	62.4	1,235	72.9	256	75.9	770

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 12.12 Recent HIV tests among young people

Among young women and young men age 15-24 who have had sexual intercourse in the past 12 months, percentage who were tested for HIV in the past 12 months and received the results of the last test, according to background characteristics, South Africa DHS 2016

	Women age 15-24 who have had sexual intercourse in the past 12 months:		Men age 15-24 who have had sexual intercourse in the past 12 months:	
Background characteristic	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
Age				
15-19	62.6	575	40.5	287
15-17	57.6	230	26.9	121
18-19	65.8	346	50.5	166
20-24	70.2	1,182	53.6	500
20-22	69.6	672	52.5	301
23-24	71.1	510	55.2	200
Marital status				
Never married	67.1	1,431	48.4	744
Ever married or living together	70.4	326	(56.2)	44
Total 15-24	67.7	1,757	48.8	788

Note: Figures in parentheses are based on 25-49 unweighted cases.

HIV PREVALENCE 13

Key Findings

- ***HIV testing coverage rate:*** Overall, only 52% of women and men age 15 and older who were eligible for HIV testing were both interviewed and tested. The generalisability of the prevalence estimates is therefore unclear and these results should be interpreted with caution.
- ***HIV prevalence among adults age 15 and older:*** 19% of adults are HIV positive. HIV prevalence is higher among women (23%) than men (13%).
- ***HIV prevalence by province:*** Among women and men age 15-49 combined, HIV prevalence ranges from a low of 10% in Limpopo to a high of 30% in KwaZulu-Natal.
- ***HIV prevalence among young people:*** Overall, 7% of young women and men age 15-24 are HIV positive. HIV prevalence is four times higher among young women than young men (12% versus 3%).
- ***HIV prevalence among couples:*** Overall, 30% of couples have at least one partner infected with HIV. In 15% of couples, both partners are HIV positive. Sixteen percent of couples are discordant (that is, one partner is HIV positive and the other is HIV negative).

THe SADHS 2016 included HIV testing among survey respondents. In households selected for biomarkers, all women and men age 15 and older were eligible for testing. The methodology used to conduct HIV testing is described in detail in Chapter 1.

Although the inclusion of HIV testing in the survey allows an estimate of HIV prevalence to be generated for adults age 15 and older, the primary rationale for including HIV testing in the SADHS 2016 was to examine associations between HIV status and noncommunicable diseases. Such links are presented in Chapters 15 and 16.

This chapter provides information on HIV testing coverage rates among eligible survey respondents and the results of the testing by demographic and behavioural characteristics. Because women age 50 and older and men age 60 and older were not interviewed with the full individual questionnaires, many tables are restricted to women and men age 15-49 or men age 15-59. In addition, several tables focus on young people age 15-24.

13.1 COVERAGE RATES FOR HIV TESTING

HIV testing coverage rate

Percentage of women and men who are tested for HIV as part of the SADHS

Sample: Women and men who are in households selected for HIV testing and are within the eligible age range for HIV testing based on information collected in the Household Questionnaire

The HIV testing response rate is calculated as follows:

$$\frac{\text{Women and men age 15+ who were interviewed and whose blood sample underwent the complete HIV testing algorithm with a final result of positive, negative, or inconclusive}}{\text{All women and men age 15+ in households included in the subsample for HIV testing}}$$

Overall, only 52% of women and men age 15 and older who were eligible for HIV testing were both interviewed and successfully tested (**Table 13.1**). Nineteen percent of women and men who were eligible for an interview and HIV testing were not interviewed, 19% were interviewed and refused to provide a blood specimen for HIV testing, and 7% were interviewed and were unavailable for blood collection after repeated attempts to contact them. The coverage rate for HIV testing was greater among women than men (58% versus 44%).

Patterns by background characteristics

- Coverage of HIV testing is higher among respondents in non-urban areas than urban areas (62% and 44%, respectively). Seven in 10 women (68%) in non-urban areas were interviewed and tested, as compared with 5 in 10 women (50%) from urban areas. Over half of men (55%) in non-urban areas were interviewed and tested, compared with only 38% of men from urban areas.

- By province, coverage of HIV testing is highest among women and men in North West (72%) and lowest among women and men in Western Cape (31%), Gauteng (36%), and Northern Cape (39%).

- Coverage of HIV testing differs by age. Among women, coverage rates are modestly higher among those age 50 or older (60%-64%) than among those age 15-49 (53%-57%). Among men, coverage rates are highest among those in the youngest and oldest age groups; 55% of men age 15-19 and 56% of men age 65 or older were interviewed and tested, as compared with 35%-50% of men age 20-64 (**Table 13.2**).

- Among both women and men, coverage levels are highest among those with a primary incomplete education (69% and 55%, respectively) and lowest among those with more than a secondary education (43% and 34%, respectively).

- Coverage of HIV testing generally decreases with increasing household wealth among both women and men. Sixty-nine percent of women and 56% of men in the lowest wealth quintile were interviewed and tested, compared with 39% of women and 29% of men in the highest wealth quintile.

The remainder of the tables presented in this chapter are based on those individuals who were interviewed and successfully tested for HIV. While the sample of adults eligible for testing was designed to be representative for women and men in South Africa nationally, by urban and non-urban residence, and by province, the low coverage rates for HIV testing may mean this has not been achieved. This concern is especially true at the provincial level, for which coverage rates showed enormous variability but were as low as 23% (among men in Western Cape). The sample weighting procedures used in the SADHS correct for differential non-response, taking into account province, place of residence (urban or non-urban), and sex (the cross-classifications of these three variables form the non-response adjustment groups). This

procedure ensures that all of these adjustment groups are represented in the HIV prevalence estimate in their proper proportions despite differing levels of participation. Details on the calculation of the sample weights are provided in Appendix A. However, the non-response adjustment to the sample weights assumes that non-response to the HIV test is missing at random—that is, within each adjustment group, people who participated in the survey HIV test have the same probability of having HIV as those who did not participate—and this may not be the case. Therefore, with the high level of non-response to the HIV test in this survey, the generalisability of the prevalence estimates produced in the SADHS is unclear. All of the results presented in this chapter should be interpreted with extreme caution.

13.2 HIV PREVALENCE

13.2.1 HIV Prevalence by Age and Sex

HIV prevalence

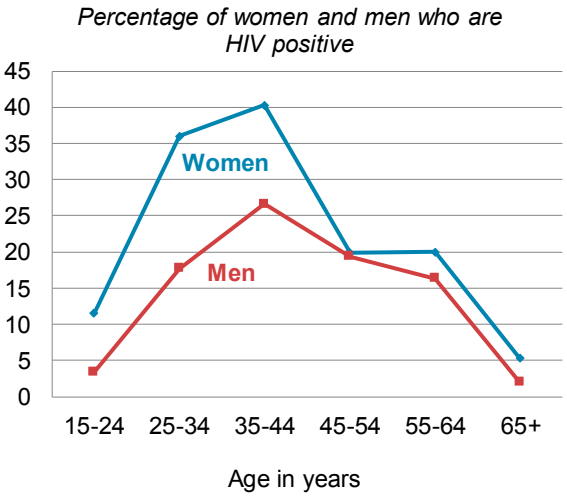
Percentage of women and men testing positive for HIV as part of the SADHS (see testing methodology in Chapter 1).

Sample: Women and men age 15-49 and women and men age 15+ tested for HIV as part of the survey

According to the SADHS 2016, 19% of adults age 15 and older in South Africa are HIV positive (**Table 13.3**). HIV prevalence is higher among women (23%) than men (13%). Among both women and men, HIV prevalence initially increases with age and then declines. Women have a higher HIV prevalence than men across all age groups. Among both women (40%) and men (27%), HIV prevalence peaks in the 35-44 age group (**Figure 13.1**).

The HIV prevalence among respondents age 15-49 is 21%, and the prevalence is higher among women (27%) than men (14%).

Figure 13.1 **HIV prevalence by age**



Patterns by socioeconomic characteristics among women and men age 15-49

- HIV prevalence is higher among those who are employed (30% of employed women and 17% of employed men) than those who are not employed (26% of women and 12% of men) (**Table 13.4**).

- Among women and men combined, differences in HIV prevalence by residence are small (22% in urban areas and 20% in non-urban areas). However, the combined prevalence varies widely by province, from a low of 10% in Limpopo to a high of 30% in KwaZulu-Natal (**Figure 13.2**).

- Among women and men combined, HIV prevalence decreases with increasing education, from 28% among those with no education to 12% among those with more than a secondary education (**Figure 13.3**).

The overall HIV prevalence among respondents age 50 and older is 13%, and the prevalence is slightly higher among women than men (14% and 10%, respectively). Patterns by sociodemographic characteristics are presented in **Table 13.5**.

Patterns by demographic characteristics among women and men age 15-49

- HIV prevalence varies by marital status and is highest among those who are widowed (44% of women and men combined) (**Figure 13.4**).

- Five percent of respondents who had never been married or lived with a partner and never had sexual intercourse were HIV positive, indicating that some women and men failed to report sexual activity or that there is some degree of nonsexual transmission of HIV, including mother-to-child transmission (**Table 13.6**).

- Women age 15-49 who slept away from home one or more times in the past 12 months had a higher HIV prevalence than those who did not (30-32% and 24%, respectively). This pattern was not observed among men.

Figure 13.2 HIV prevalence by province

Percentage of women and men age 15-49 who are HIV positive

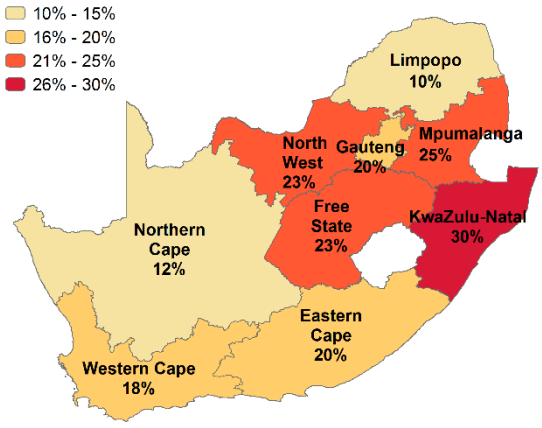


Figure 13.3 HIV prevalence by education

Percentage of women and men age 15-49 who are HIV positive

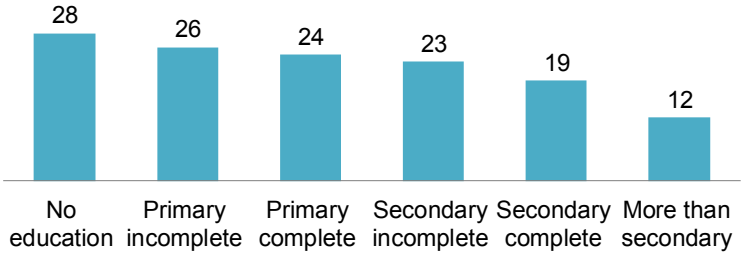
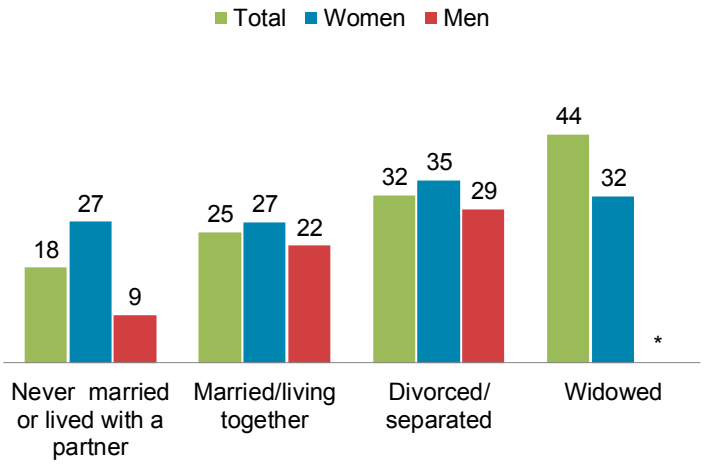


Figure 13.4 HIV prevalence by marital status

Percentage of women and men age 15-49 who are HIV positive



Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

- There was essentially no difference in HIV prevalence between women who were pregnant at the time of the survey (28%) and those who were not pregnant or not sure (27%). As a point of comparison,

HIV prevalence among antenatal care (ANC) clients in the public sector was estimated to be 30.8% in 2015 (NDoH 2017).

13.2.2 HIV Prevalence by Sexual Risk Behaviour

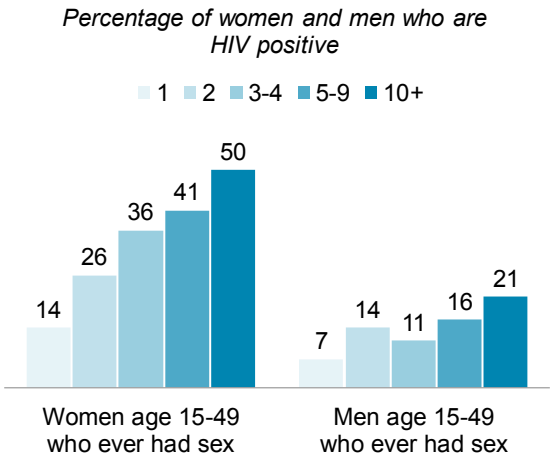
Table 13.7 presents information on HIV prevalence among respondents age 15-49 by sexual behaviour characteristics. In reviewing these results, it is important to keep in mind that social desirability or other biases may affect reports of sexual behaviour. Overall, among those who have ever had sex, HIV prevalence is almost twice as high among women as among men (30% versus 16%).

Patterns by sexual behaviour characteristics

- Among women, HIV prevalence is higher among those who reported first having sexual intercourse before age 16 (36%-37%) than those who first had sex at age 16 or older (27%-30%). Men who reported that they first had sexual intercourse at age 20 or older were more likely to be HIV positive (22%) than men who first had sexual intercourse at younger ages (12%-19%).

- Respondents were asked how many different partners they have had sexual intercourse with in their lifetime. HIV prevalence among women increases with number of lifetime partners, from 14% among those with one lifetime partner to 50% among those with 10 or more partners (**Figure 13.5**). The pattern among men is generally similar.

Figure 13.5 **HIV prevalence by number of lifetime partners**



- **Table 13.7** also presents information on the relationship between condom use at last sexual intercourse and HIV status, although it is worth noting that, in reports on condom use, it is not possible to know the sequence of events (e.g., whether any reported condom use occurred before or after HIV transmission). No differences in HIV prevalence according to condom use at last sexual intercourse were observed among men. However, women who used a condom during their most recent sexual intercourse in the 12-month period before the survey were more likely to be HIV positive than those who did not use a condom (39% and 22%, respectively). One possible explanation for this finding is that HIV-positive respondents were more likely to use condoms because they either knew or suspected that they were infected with HIV and used condoms to prevent transmission.

In summary, the results presented in **Table 13.7** do not demonstrate consistent relationships between sexual behaviour and HIV prevalence. A more detailed analysis is necessary to understand these relationships because they are often confounded by other factors associated with both behavioural measures and HIV prevalence, such as age and residence.

13.2.3 HIV Prevalence among Young People

Table 13.8 presents HIV prevalence among young people age 15-24 according to background characteristics. Overall, 7% of young women and men age 15-24 are HIV positive. HIV prevalence is four times higher among young women than young men (12% versus 3%).

Patterns by background characteristics

- Among young women, HIV prevalence increases with age, rising steadily from 4% among those age 15-17 to 19% among those age 23-24. Among young men, HIV prevalence decreases from 5% among those age 15-17 to 2% among those age 20-22 before increasing slightly to 4% among those age 23-24.
- HIV prevalence is higher among young men in urban areas (5%) than young men in non-urban areas (2%). HIV prevalence among young women is identical in urban and non-urban areas (12% each).
- Overall, HIV prevalence among young women and men combined is lowest in Limpopo (2%) and highest in KwaZulu-Natal (13%).
- Among young women and men combined, HIV prevalence decreases with increasing household wealth, from 11% among those in the lowest wealth quintile to 4% among those in the highest quintile.

Table 13.9 shows HIV prevalence among young people age 15-24 according to sexual behaviour. HIV prevalence is 8% among young people who have ever had sex; 15% of young women and 3% of young men who have ever had sex are HIV positive.

Patterns by sexual behaviour characteristics

- Among both young women and young men, HIV prevalence increases with the number of sexual partners in the past 12 months; the trend is much more extreme among young women. Twelve percent of young women with no sexual partners in the past 12 months are HIV positive, 14% of those with one partner are HIV positive, and 21% with two or more partners are HIV positive.
- Among young men, HIV prevalence is lower among those who used a condom during their most recent sexual intercourse in the past 12 months (2%) or who did not have sexual intercourse in the past 12 months (2%) than among those who had sexual intercourse but did not use a condom (5%). Among young women, differences according to condom use at last sexual intercourse are minor.

13.2.4 HIV Prevalence by Other Characteristics Related to HIV Risk

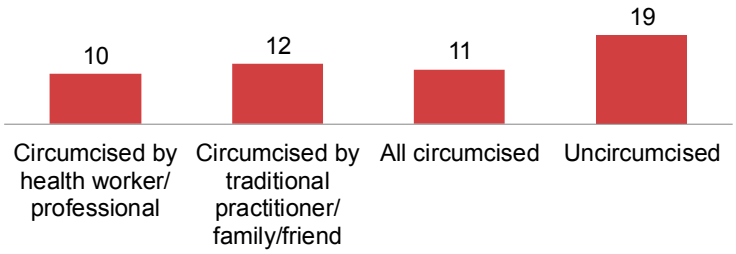
The SADHS 2016 also explored HIV prevalence by other characteristics related to HIV risk among women and men age 15-49 who have ever had sex. As expected, HIV prevalence is higher among women and men who reported having a sexually transmitted infection (STI) or symptoms of an STI in the 12 months before the survey than among those who had neither an STI nor symptoms (31% versus 22%). Individuals who had been tested for HIV previously were twice as likely to be HIV positive as those who had never been tested (25% versus 13%) (**Table 13.10**).

Information on the relationship between prior HIV testing and the current HIV status of respondents age 15-49 is presented in **Table 13.11**. The results show that the majority of individuals who are HIV positive have been tested previously and received the result of their last test. Among respondents age 15-49 living with HIV, 87% reported that they had been tested for HIV and received the results of their most recent test, including 90% of HIV-positive women and 81% of HIV-positive men. Fifty-four percent of HIV-positive women and men received the results of their most recent test in the past 12 months. Thirteen percent of HIV-positive respondents have never been tested for HIV or were tested but did not receive the results of their last test and, therefore, cannot be aware of their status.

Male circumcision has been shown to reduce the risk of HIV infection. In the SADHS 2016, men were asked whether or not they had been circumcised and by whom. HIV prevalence is lower among men age 15-49 who have been circumcised than those who have not been circumcised (11% versus 19%) (**Figure 13.6**). HIV prevalence is slightly higher among men who were circumcised by a traditional practitioner, family member, or friend than by a health worker or health professional (12% versus 10%). Information on HIV prevalence and male circumcision by background characteristics is presented in **Table 13.12**.

***Figure 13.6* HIV prevalence by circumcision status**

Percentage of men age 15-49 who are HIV positive

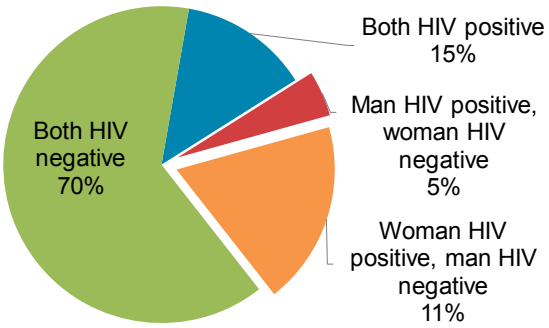


13.2.5 HIV Prevalence among Couples

Among the women and men interviewed and tested for HIV in the SADHS 2016, there were 419 cohabitating couples. In 70% of cohabiting couples, both partners tested negative for HIV (**Table 13.13**). Both partners are HIV positive in 15% of cohabitating couples, while an additional 16% of couples are discordant; that is, one partner is HIV positive and the other is HIV negative. In 5% of couples the man is HIV positive and the woman is HIV negative, and in 11% of couples the woman is HIV positive and the man is not (**Figure 13.7**).

***Figure 13.7* HIV prevalence among couples**

Percent distribution of couples by HIV status



Note: Percentages do not sum to 100% due to rounding.

LIST OF TABLES

For more information on HIV prevalence, see the following tables:

- **Table 13.1 Coverage of HIV testing by residence and province**
- **Table 13.2 Coverage of HIV testing according to selected background characteristics**
- **Table 13.3 HIV prevalence by age**
- **Table 13.4 HIV prevalence by sociodemographic characteristics: Women and men age 15-49**
- **Table 13.5 HIV prevalence by sociodemographic characteristics: Women and men age 50 and older**
- **Table 13.6 HIV prevalence by demographic characteristics**
- **Table 13.7 HIV prevalence by sexual behaviour**
- **Table 13.8 HIV prevalence among young people by background characteristics**
- **Table 13.9 HIV prevalence among young people by sexual behaviour**
- **Table 13.10 HIV prevalence by other characteristics**
- **Table 13.11 Prior HIV testing by current HIV status**
- **Table 13.12 HIV prevalence by male circumcision**
- **Table 13.13 HIV prevalence among couples**

Table 13.1 Coverage of HIV testing by residence and province

Percent distribution of women and men age 15 and older eligible for HIV testing by testing status, according to residence and province (unweighted), South Africa DHS 2016

	Testing status									
	DBS tested[1]		Refused to provide blood		Absent at the time of blood collection		Other/missing[2]			
Residence and province	Inter-viewed	Not inter-viewed	Inter-viewed	Not inter-viewed	Inter-viewed	Not inter-viewed	Inter-viewed	Not inter-viewed	Total	Number
					WOMEN 15+					
Residence										
Urban	49.8	1.5	22.4	7.2	7.1	7.3	3.2	1.4	100.0	4,075
Non-urban	68.4	1.4	15.6	1.7	5.3	3.5	3.6	0.5	100.0	2,979
Province										
Western Cape	38.3	1.5	23.5	13.4	8.2	10.5	2.9	1.7	100.0	650
Eastern Cape	69.3	1.2	11.4	3.3	5.7	5.4	2.7	1.0	100.0	896
Northern Cape	44.7	1.4	28.5	6.8	3.9	5.3	8.0	1.4	100.0	622
Free State	67.8	1.5	11.3	1.8	8.3	7.3	1.9	0.0	100.0	724
KwaZulu-Natal	57.8	1.2	20.2	2.6	9.8	5.0	3.2	0.2	100.0	1,064
North West	77.9	2.2	8.0	3.1	3.1	3.6	0.8	1.4	100.0	647
Gauteng	40.2	1.0	26.3	9.6	6.7	8.3	4.0	3.9	100.0	726
Mpumalanga	64.2	2.7	15.4	4.5	3.5	4.6	4.5	0.6	100.0	805
Limpopo	54.3	0.8	30.7	2.2	6.2	3.0	2.6	0.2	100.0	920
Total 15+	57.7	1.5	19.5	4.9	6.3	5.7	3.3	1.1	100.0	7,054
					MEN 15+					
Residence										
Urban	37.7	2.4	20.6	11.4	7.0	14.6	3.4	3.0	100.0	3,388
Non-urban	54.5	1.4	17.2	4.1	6.8	9.9	4.3	1.6	100.0	2,275
Province										
Western Cape	22.9	2.7	20.8	16.1	7.4	24.6	1.9	3.6	100.0	528
Eastern Cape	53.0	1.6	13.1	6.3	5.2	14.4	4.2	2.2	100.0	734
Northern Cape	31.1	1.0	27.4	13.5	5.5	10.8	8.2	2.5	100.0	489
Free State	52.5	5.4	8.9	6.7	7.1	15.8	1.1	2.5	100.0	552
KwaZulu-Natal	48.3	1.3	18.6	5.4	11.3	11.2	3.0	0.9	100.0	743
North West	65.5	1.4	12.1	3.4	5.5	6.5	3.1	2.6	100.0	585
Gauteng	31.8	0.7	27.0	12.6	5.2	12.9	4.2	5.4	100.0	688
Mpumalanga	48.7	3.0	19.2	9.0	3.6	10.0	5.7	0.9	100.0	668
Limpopo	41.3	1.6	26.2	5.9	10.7	9.8	2.8	1.8	100.0	676
Total 15+	44.4	2.0	19.2	8.5	6.9	12.7	3.8	2.4	100.0	5,663
					TOTAL (WOMEN AND MEN 15+)					
Residence										
Urban	44.3	1.9	21.6	9.1	7.0	10.6	3.3	2.1	100.0	7,463
Non-urban	62.4	1.4	16.3	2.8	5.9	6.3	3.9	1.0	100.0	5,254
Province										
Western Cape	31.4	2.0	22.3	14.6	7.8	16.8	2.5	2.5	100.0	1,178
Eastern Cape	62.0	1.4	12.1	4.7	5.5	9.4	3.4	1.5	100.0	1,630
Northern Cape	38.7	1.3	28.0	9.7	4.6	7.7	8.1	1.9	100.0	1,111
Free State	61.2	3.2	10.3	3.9	7.8	11.0	1.6	1.1	100.0	1,276
KwaZulu-Natal	53.9	1.3	19.5	3.8	10.4	7.5	3.1	0.5	100.0	1,807
North West	72.0	1.8	10.0	3.2	4.2	5.0	1.9	1.9	100.0	1,232
Gauteng	36.1	0.8	26.7	11.1	6.0	10.5	4.1	4.6	100.0	1,414
Mpumalanga	57.2	2.9	17.1	6.5	3.5	7.1	5.0	0.7	100.0	1,473
Limpopo	48.8	1.1	28.8	3.8	8.1	5.9	2.7	0.9	100.0	1,596
Total 15+	51.8	1.7	19.4	6.5	6.6	8.8	3.5	1.7	100.0	12,717

[1] Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a final result, i.e., positive, negative, or inconclusive
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4) lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

Table 13.2 Coverage of HIV testing according to selected background characteristics

Percent distribution of women and men age 15 and older eligible for HIV testing by testing status, according to selected background characteristics (unweighted), South Africa DHS 2016

Background characteristic	Testing status: DBS tested[1] Inter-viewed	DBS tested[1] Not inter-viewed	Refused to provide blood Inter-viewed	Refused to provide blood Not inter-viewed	Absent at the time of blood collection Inter-viewed	Absent at the time of blood collection Not inter-viewed	Other/missing[2] Inter-viewed	Other/missing[2] Not inter-viewed	Total	Number
WOMEN 15+										
Age										
15-19	55.8	2.1	18.7	4.6	8.9	6.3	2.8	0.8	100.0	846
20-24	57.0	1.1	19.7	5.3	5.7	7.6	2.1	1.5	100.0	811
25-29	57.3	1.6	17.8	5.1	8.5	7.2	1.7	1.0	100.0	838
30-34	55.8	1.2	18.4	5.1	7.9	6.9	3.7	1.0	100.0	724
35-39	52.7	0.8	22.2	6.4	5.9	7.4	3.4	1.1	100.0	622
40-44	53.1	1.8	22.2	6.5	5.1	7.2	3.8	0.4	100.0	554
45-49	55.3	2.1	20.1	4.8	8.3	4.3	4.1	1.0	100.0	517
50-54	62.0	1.3	18.5	4.6	4.4	4.4	3.8	1.1	100.0	476
55-59	62.3	0.9	17.3	3.9	8.0	4.8	2.0	0.9	100.0	440
60-64	60.4	1.6	19.9	5.4	4.0	4.0	3.8	0.8	100.0	371
65+	64.1	1.5	20.5	2.8	2.1	1.5	5.7	1.8	100.0	855
Education										
No education	62.4	2.8	17.8	3.7	3.7	1.8	6.0	1.8	100.0	652
Primary incomplete	68.9	1.5	15.0	2.2	3.8	3.2	4.2	1.1	100.0	808
Primary complete	67.7	2.3	15.1	4.7	2.9	3.8	2.9	0.6	100.0	344
Secondary incomplete	60.3	1.3	19.2	3.7	7.1	4.8	3.1	0.6	100.0	3,030
Secondary complete	50.1	1.1	23.0	6.2	7.7	8.3	2.2	1.5	100.0	1,458
More than secondary	42.5	1.2	23.5	10.1	7.2	10.7	3.5	1.2	100.0	736
Missing	0.0	7.7	0.0	50.0	0.0	30.8	0.0	11.5	100.0	26
Wealth quintile										
Lowest	69.2	1.5	13.9	1.9	5.9	4.0	3.1	0.4	100.0	1,343
Second	61.6	1.4	19.6	2.8	6.2	4.0	3.7	0.7	100.0	1,395
Middle	63.5	1.7	17.4	3.1	5.9	4.0	3.6	0.9	100.0	1,511
Fourth	54.3	1.5	21.1	5.9	5.9	6.7	3.0	1.7	100.0	1,516
Highest	38.5	1.4	25.9	11.2	7.9	10.2	3.3	1.6	100.0	1,289
Total 15+	57.7	1.5	19.5	4.9	6.3	5.7	3.3	1.1	100.0	7,054
Total 15-49	55.5	1.5	19.6	5.4	7.3	6.8	3.0	1.0	100.0	4,912
MEN 15+										
Age										
15-19	54.5	2.0	15.8	6.2	7.1	9.3	3.3	1.7	100.0	871
20-24	47.6	2.3	18.4	6.3	9.0	13.4	1.3	1.8	100.0	790
25-29	39.6	2.3	20.9	9.1	7.9	15.6	2.6	2.0	100.0	694
30-34	35.1	2.0	21.8	9.9	7.1	18.0	3.4	2.6	100.0	646
35-39	36.9	1.6	20.2	10.9	6.9	14.3	4.4	4.8	100.0	496
40-44	38.1	2.1	21.6	8.7	5.7	14.2	5.5	4.0	100.0	472
45-49	39.0	1.1	20.9	12.0	6.1	12.0	5.9	2.9	100.0	374
50-54	41.3	3.5	20.0	8.9	6.7	13.0	3.8	2.9	100.0	315
55-59	48.8	1.7	15.4	10.9	5.5	12.3	3.1	2.4	100.0	293
60-64	49.8	1.6	17.8	6.7	5.1	10.7	6.3	2.0	100.0	253
65+	55.8	2.0	19.0	7.2	5.0	4.6	5.9	0.7	100.0	459
Education										
No education	51.7	2.5	15.8	6.9	4.2	6.1	8.6	4.2	100.0	360
Primary incomplete	55.0	2.4	17.6	4.3	4.7	10.2	4.1	1.6	100.0	676
Primary complete	48.9	1.3	16.5	8.7	7.4	11.0	4.9	1.3	100.0	309
Secondary incomplete	46.3	1.8	19.5	7.7	7.1	11.6	3.9	2.2	100.0	2,493
Secondary complete	37.9	2.3	20.5	9.3	8.0	16.5	2.7	2.7	100.0	1,198
More than secondary	34.4	1.9	22.2	12.9	8.4	15.1	1.9	3.3	100.0	582
Missing	0.0	6.7	0.0	44.4	0.0	44.4	0.0	4.4	100.0	45
Wealth quintile										
Lowest	55.5	1.0	17.2	5.1	5.1	9.7	5.0	1.3	100.0	1,039
Second	47.9	2.5	20.7	6.1	7.3	10.7	3.2	1.7	100.0	1,210
Middle	49.3	2.0	19.1	6.0	7.2	10.3	4.1	2.1	100.0	1,218
Fourth	39.6	2.4	17.9	10.2	7.1	15.1	4.0	3.7	100.0	1,150
Highest	29.3	2.2	21.1	15.7	7.6	18.2	2.5	3.4	100.0	1,046
Total 15+	44.4	2.0	19.2	8.5	6.9	12.7	3.8	2.4	100.0	5,663
Total 15-49	42.9	2.0	19.5	8.5	7.3	13.7	3.4	2.6	100.0	4,343

[1] Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a final result, i.e., positive, negative, or inconclusive
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

Table 13.3 HIV prevalence by age

Among de facto women and men age 15 and older who were interviewed and tested, percentage HIV positive, according to age, South Africa DHS 2016

	Women		Men		Total	
Age	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
15-24	11.6	832	3.4	924	7.3	1,755
15-19	5.9	393	4.1	516	4.9	909
20-24	16.7	439	2.6	407	9.9	846
25-34	36.0	813	17.7	618	28.1	1,431
35-44	40.3	598	26.6	486	34.2	1,084
45-54	19.9	487	19.4	331	19.7	818
55-64	20.0	433	16.3	340	18.4	773
65+	5.3	438	2.0	285	4.0	722
Total 15+	23.3	3,600	13.3	2,984	18.7	6,584
Total 15-49	27.3	2,485	14.4	2,199	21.2	4,685

Table 13.4 HIV prevalence by sociodemographic characteristics: Women and men age 15-49

Percentage HIV positive among women and men age 15-49 who were tested, according to sociodemographic characteristics, South Africa DHS 2016

	Women		Men		Total	
Background characteristic	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Population group						
Black African	29.9	2,229	16.0	1,938	23.4	4,167
White	(<0.1)	61	(2.9)	92	1.7	154
Coloured	6.2	169	3.2	140	4.8	309
Indian/Asian	*	26	*	28	(3.0)	54
Other	nc	0	nc	0	nc	0
Employment (past 12 months)						
Not employed	25.7	1,588	12.2	1,140	20.0	2,727
Employed	30.3	898	16.7	1,060	22.9	1,957
Residence						
Urban	27.4	1,667	15.4	1,508	21.7	3,176
Non-urban	27.2	818	12.3	691	20.4	1,509
Province						
Western Cape	18.2	249	17.3	206	17.8	454
Eastern Cape	30.2	264	8.2	247	19.6	512
Northern Cape	13.5	49	10.4	42	12.1	92
Free State	28.1	123	17.2	109	23.0	232
KwaZulu-Natal	37.3	486	19.2	363	29.6	850
North West	29.6	161	15.5	165	22.5	326
Gauteng	25.3	690	14.9	675	20.2	1,365
Mpumalanga	34.0	211	15.7	193	25.3	404
Limpopo	14.5	250	5.3	199	10.4	450
Education						
No education	37.4	48	(17.3)	40	28.3	88
Primary incomplete	37.4	150	14.6	163	25.6	313
Primary complete	34.7	105	15.5	128	24.2	233
Secondary incomplete	30.1	1,281	14.8	1,149	22.9	2,430
Secondary complete	22.4	652	15.0	487	19.2	1,139
More than secondary	14.6	249	9.7	233	12.2	482
Wealth quintile						
Lowest	30.4	563	16.3	447	24.1	1,010
Second	32.2	478	17.4	457	24.9	935
Middle	29.0	564	16.3	476	23.2	1,040
Fourth	26.9	484	9.2	467	18.2	951
Highest	15.1	395	12.3	353	13.8	748
Total 15-49	27.3	2,485	14.4	2,199	21.2	4,685

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases

Table 13.5 HIV prevalence by sociodemographic characteristics: Women and men age 50 and older

Percentage HIV positive among women and men age 50 and older who were tested, according to sociodemographic characteristics, South Africa DHS 2016

Background characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Population group						
Black African	17.9	877	14.1	553	16.5	1,430
White	<0.1	97	<0.1	119	<0.1	216
Coloured	0.8	114	2.2	96	1.4	210
Indian/Asian	*	24	*	17	*	41
Other	nc	0	nc	0	nc	0
Marital status						
Never married	22.8	308	6.6	92	19.1	400
Married or living together	8.2	430	9.3	572	8.8	1,002
Divorced/separated/widowed	14.0	377	17.6	121	14.9	497
Employment (past 12 months)						
Not employed	11.8	831	11.7	510	11.7	1,341
Employed	21.3	284	7.5	275	14.5	559
Residence						
Urban	15.0	686	9.9	533	12.8	1,219
Non-urban	12.9	429	11.0	252	12.2	680
Province						
Western Cape	5.4	165	(1.9)	135	3.9	299
Eastern Cape	10.3	165	9.9	103	10.1	268
Northern Cape	10.8	26	(8.5)	17	9.9	43
Free State	16.7	68	17.2	38	16.9	106
KwaZulu-Natal	17.9	214	12.2	122	15.8	336
North West	14.7	67	15.5	48	15.0	114
Gauteng	21.3	215	12.0	208	16.7	423
Mpumalanga	17.2	67	20.4	39	18.4	106
Limpopo	9.8	129	5.7	75	8.3	204
Education						
No education	13.1	261	10.9	123	12.4	384
Primary incomplete	17.9	276	12.9	232	15.6	508
Primary complete	21.1	91	(15.6)	36	19.5	127
Secondary incomplete	13.8	332	11.4	212	12.9	544
Secondary complete	9.4	68	6.5	87	7.8	155
More than secondary	3.7	87	1.5	95	2.6	182
Wealth quintile						
Lowest	17.3	196	20.8	125	18.7	320
Second	17.0	193	8.4	108	13.9	300
Middle	20.5	196	9.2	139	15.8	335
Fourth	10.6	246	16.0	153	12.7	399
Highest	8.9	284	3.1	261	6.1	545
Total 50+	14.2	1,115	10.2	785	12.6	1,899

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases

Table 13.6 HIV prevalence by demographic characteristics

Percentage HIV positive among women and men age 15-49 who were tested, according to demographic characteristics, South Africa DHS 2016

Demographic characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Marital status						
Never married	27.0	1,508	9.2	1,451	18.2	2,958
Ever had sexual intercourse	31.3	1,263	10.2	1,163	21.2	2,426
Never had sexual intercourse	4.7	245	5.2	288	5.0	532
Married or living together	26.9	844	22.4	640	25.0	1,484
Divorced or separated	34.9	89	29.4	93	32.1	182
Widowed	31.9	44	*	16	43.7	60
Type of union						
In polygynous union	(53.9)	19	*	11	(56.8)	30
In non-polygynous union	25.9	796	21.1	624	23.8	1,420
Not currently in union	27.5	1,641	11.1	1,559	19.5	3,200
Don't know or not asked[1]	(35.7)	29	*	5	(45.6)	34
Times slept away from home in past 12 months						
None	24.3	1,331	14.6	1,294	19.5	2,625
1-2	29.5	550	12.4	310	23.4	860
3-4	31.6	263	20.4	224	26.4	487
5+	32.2	341	11.7	371	21.5	712
Time away in past 12 months						
Away for more than 1 month at a time	30.1	283	17.1	255	23.9	538
Away only for less than 1 month at a time	31.0	871	12.9	651	23.3	1,522
Not away	24.3	1,331	14.6	1,294	19.5	2,625
Currently pregnant						
Pregnant	28.0	97	na	na	na	na
Not pregnant or not sure	27.3	2,389	na	na	na	na
ANC for last birth in the last 3 years						
ANC provided by the public sector	27.0	533	na	na	na	na
ANC provided by other than the public sector	(10.5)	33	na	na	na	na
No ANC/no birth in last 3 years	27.7	1,919	na	na	na	na
Total 15-49	27.3	2,485	14.4	2,199	21.2	4,685

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] Respondents in same-sex unions were not asked the question on polygyny

Table 13.7 HIV prevalence by sexual behaviour

Percentage HIV positive among women and men age 15-49 who ever had sex and were tested for HIV, according to sexual behaviour characteristics, South Africa DHS 2016

Sexual behaviour characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Age at first sexual intercourse						
<14	36.9	66	12.2	146	20.0	212
14-15	35.7	352	15.5	428	24.6	780
16-17	29.8	796	11.6	625	21.8	1,421
18-19	26.7	576	18.6	425	23.2	1,000
20+	26.9	392	22.0	276	24.9	668
Number of lifetime partners						
1	13.7	567	6.5	169	12.1	737
2	25.8	446	13.8	172	22.5	618
3-4	36.1	731	10.8	413	27.0	1,144
5-9	40.7	327	15.6	432	26.4	759
10+	50.1	93	20.9	556	25.1	649
Don't know	41.2	75	23.0	165	28.6	240
Multiple sexual partners in past 12 months						
0	31.6	252	15.4	160	25.3	413
1	29.2	1,880	17.2	1,336	24.3	3,216
2+	35.4	106	11.3	412	16.3	519
Non-marital, non-cohabiting partners in past 12 months[1]						
0	28.0	1,023	21.8	708	25.4	1,730
1	30.9	1,138	14.4	849	23.8	1,987
2+	38.5	79	7.0	352	12.8	430
Condom use at last sexual intercourse in past 12 months						
Used condom	38.5	903	15.9	933	27.0	1,837
Did not use condom	22.1	1,083	15.7	815	19.4	1,898
No sexual intercourse in past 12 months	31.6	252	15.4	160	25.3	413
Condom use at last sexual intercourse with a non-marital, non-cohabiting partner in past 12 months[1]						
Used condom	35.9	705	10.3	838	22.0	1,543
Did not use condom	25.1	512	16.8	362	21.6	874
No sexual intercourse with any non-marital, non-cohabiting partners in past 12 months[1]	28.0	1,023	21.8	708	25.4	1,730
Total 15-49	29.8	2,239	15.8	1,908	23.4	4,147

Note: Total includes 57 women and 9 men whose information on age at first sexual intercourse is missing and who are not shown separately.
[1] Any partner who was not a spouse and did not live with the respondent

Table 13.8 HIV prevalence among young people by background characteristics

Percentage HIV positive among women and men age 15-24 who were tested for HIV, according to background characteristics, South Africa DHS 2016

Background characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Age						
15-19	5.9	393	4.1	516	4.9	909
15-17	4.3	218	4.8	301	4.6	519
18-19	7.9	175	3.2	215	5.3	390
20-24	16.7	439	2.6	407	9.9	846
20-22	15.0	271	1.7	266	8.4	537
23-24	19.4	168	4.2	142	12.4	310
Marital status						
Never married	10.0	718	3.4	888	6.4	1,606
Ever had sex	12.8	486	2.5	622	7.0	1,107
Never had sex	4.2	232	5.6	267	4.9	499
Married or living together	22.2	109	(2.7)	34	17.6	143
Divorced/separated/widowed	*	4	*	1	*	6
Currently pregnant						
Pregnant	(15.9)	43	na	na	na	na
Not pregnant or not sure	11.4	788	na	na	na	na
Residence						
Urban	11.6	530	4.7	530	8.1	1,060
Non-urban	11.6	301	1.8	394	6.1	696
Province						
Western Cape	(6.7)	51	(<0.1)	86	2.5	137
Eastern Cape	15.6	96	3.7	130	8.8	226
Northern Cape	5.7	17	(1.8)	18	3.6	35
Free State	13.3	42	5.9	51	9.2	92
KwaZulu-Natal	21.9	181	3.7	191	12.6	372
North West	8.9	48	1.1	61	4.5	109
Gauteng	4.2	222	(6.3)	188	5.2	410
Mpumalanga	19.9	79	3.6	79	11.7	158
Limpopo	2.8	96	0.9	120	1.8	216
Education						
No education	*	4	*	5	*	8
Primary incomplete	(26.1)	27	<0.1	62	7.8	88
Primary complete	(13.7)	34	1.0	47	6.3	82
Secondary incomplete	11.5	536	4.6	620	7.8	1,156
Secondary complete	10.8	165	1.7	149	6.5	314
More than secondary	8.7	66	(<0.1)	42	5.4	108
Wealth quintile						
Lowest	15.1	226	6.3	215	10.8	441
Second	14.7	166	1.1	174	7.8	340
Middle	9.3	181	5.8	198	7.5	379
Fourth	8.6	151	1.8	226	4.5	377
Highest	7.8	108	0.8	111	4.3	219
Total 15-24	11.6	832	3.4	924	7.3	1,755

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable

Table 13.9 HIV prevalence among young people by sexual behaviour

Percentage HIV positive among women and men age 15-24 who have ever had sex and were tested for HIV, according to sexual behaviour, South Africa DHS 2016

Sexual behaviour characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Multiple sexual partners in past 12 months						
0	12.3	42	1.7	72	5.6	113
1	14.2	515	2.6	394	9.1	909
2+	20.9	43	2.9	191	6.2	234
Non-marital, non-cohabiting partners in past 12 months[1]						
0	21.3	135	1.3	90	13.4	225
1	11.6	427	2.6	383	7.4	810
2+	22.8	37	3.0	184	6.3	221
Condom use at last sexual intercourse in past 12 months						
Used condom at last sex	15.1	280	1.8	439	7.0	718
Did not use condom	14.2	278	5.3	146	11.1	424
No sexual intercourse in past 12 months	12.3	42	1.7	72	5.6	113
Total 15-24	14.5	599	2.6	657	8.3	1,256

[1] Any partner who was not a spouse and did not live with the respondent

Table 13.10 HIV prevalence by other characteristics

Percentage HIV positive among women and men age 15-49 who have ever had sex and were tested for HIV, according to whether they had an STI in the past 12 months and prior testing for HIV, South Africa DHS 2016

Characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Sexually transmitted infection in past 12 months						
Had STI or STI symptoms	37.7	258	19.2	136	31.3	393
No STI, no symptoms	28.4	1,971	15.5	1,761	22.3	3,732
Don't know	*	10	*	12	*	22
Prior HIV testing						
Ever tested	30.6	2,023	18.0	1,479	25.3	3,502
Received results	30.7	1,989	17.8	1,434	25.3	3,423
Did not receive results	(22.7)	34	(26.8)	45	25.1	79
Never tested	22.8	216	8.1	429	13.0	645
Total 15-49	29.8	2,239	15.8	1,908	23.4	4,147

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.11 Prior HIV testing by current HIV status

Percent distribution of women and men age 15-49 who tested HIV positive and who tested HIV negative according to HIV testing status prior to the survey, South Africa DHS 2016

HIV testing prior to the survey	Women		Men		Total	
	HIV positive	HIV negative	HIV positive	HIV negative	HIV positive	HIV negative
Ever tested for HIV and received the result of the most recent test	89.8	80.5	81.0	67.6	87.0	73.9
Tested in the past 12 months and received the result[1]	59.2	59.2	44.1	45.0	54.4	51.9
Tested 12 or more months ago and received the result[1]	30.7	21.3	36.9	22.6	32.7	22.0
Ever tested for HIV and did not receive the result of the most recent test	2.0	1.8	3.9	2.0	2.6	1.9
Not previously tested	8.2	17.6	15.1	30.5	10.4	24.2
Total 15-49	100.0	100.0	100.0	100.0	100.0	100.0
Number	679	1,806	316	1,883	995	3,689

[1] Of the most recent HIV test

Table 13.12 HIV prevalence by male circumcision

Among men age 15-49 who were tested for HIV, percentage HIV positive by circumcision status, according to background characteristics, South Africa DHS 2016

Background characteristic	Circumcised by health worker/professional		Circumcised by traditional practitioner/family/friend		All circumcised[1]		Uncircumcised	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Age								
15-19	6.8	209	1.4	87	5.2	295	2.7	218
20-24	0.4	154	1.1	111	0.7	265	6.0	142
25-29	1.3	112	15.6	110	8.3	223	12.9	113
30-34	(37.2)	68	14.3	78	25.0	146	28.7	135
35-39	(39.7)	42	14.4	88	22.5	130	22.2	137
40-44	(9.2)	53	23.9	68	17.5	121	49.6	98
45-49	*	25	(25.2)	58	24.1	84	28.6	88
Residence								
Urban	12.8	485	14.1	381	13.4	866	18.1	640
Non-urban	3.5	178	9.5	218	6.8	398	19.4	291
Province								
Western Cape	*	24	*	48	(36.2)	72	(7.2)	134
Eastern Cape	*	11	8.9	165	8.3	177	6.4	69
Northern Cape	(3.9)	10	*	5	(10.5)	16	10.3	27
Free State	5.5	44	(32.6)	17	12.9	61	22.6	48
KwaZulu-Natal	6.8	126	*	17	8.1	144	26.8	218
North West	7.6	43	25.4	36	15.7	79	15.3	86
Gauteng	16.5	268	(2.7)	171	11.1	439	22.1	236
Mpumalanga	6.7	67	(15.3)	37	9.8	104	22.7	88
Limpopo	3.6	70	7.0	103	5.6	173	(3.5)	26
Education								
No education	*	0	*	11	*	12	(20.3)	28
Primary incomplete	*	15	6.3	67	6.7	82	22.9	80
Primary complete	(2.1)	44	(19.9)	35	9.9	80	24.9	48
Secondary incomplete	12.2	341	13.1	306	12.6	647	17.5	499
Secondary complete	9.3	159	12.6	131	10.7	291	21.2	195
More than secondary	9.5	103	(11.1)	49	10.0	152	(9.0)	81
Wealth quintile								
Lowest	10.9	70	12.7	192	12.2	262	22.0	185
Second	11.0	117	11.0	170	10.9	288	28.5	168
Middle	14.1	159	13.3	101	13.8	259	19.1	214
Fourth	6.6	186	9.9	81	7.6	267	11.3	199
Highest	10.2	132	*	55	12.4	187	12.3	166
Total 15-49	10.3	663	12.4	600	11.3	1,264	18.5	932
50-59	(5.6)	50	13.8	96	11.0	146	17.8	193
Total 15-59	10.0	712	12.6	695	11.3	1,410	18.4	1,125

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes all men who report they are circumcised, including men circumcised by medical or traditional practitioners. Also includes those circumcised by other practitioners, those who don't know what type of practitioner performed their circumcision, and those who did not report a practitioner (not shown separately).

Table 13.13 HIV prevalence among couples

Percent distribution of couples living in the same household, both of whom were tested for HIV, by HIV status, according to background characteristics, South Africa DHS 2016

Background characteristic	Both HIV positive	Man HIV positive, woman HIV negative	Woman HIV positive, man HIV negative	Both HIV negative	Total	Number
Woman's age						
15-19	*	*	*	*	100.0	12
20-29	11.2	11.3	13.6	64.0	100.0	113
30-39	13.8	2.9	13.0	70.4	100.0	180
40-49	20.9	2.8	5.0	71.2	100.0	115
Man's age						
15-19	nc	nc	nc	nc	nc	0
20-29	(1.0)	(6.9)	(12.2)	(79.8)	100.0	64
30-39	17.9	5.8	14.4	61.9	100.0	158
40-49	16.6	4.6	6.5	72.2	100.0	134
50-59	16.2	2.3	8.0	73.5	100.0	63
Age difference between partners						
Woman older	(12.7)	(1.9)	(23.9)	(61.4)	100.0	46
Same age/man older by 0-4 years	9.4	9.5	8.1	73.0	100.0	157
Man older by 5-9 years	17.5	1.4	7.3	73.9	100.0	153
Man older by 10-14 years	(13.5)	(5.6)	(8.3)	(72.6)	100.0	41
Man older by 15+ years	*	*	*	*	100.0	22
Multiple partners in past 12 months[1]						
Both no	15.8	4.4	10.9	68.9	100.0	369
Man yes, woman no	(5.8)	(12.0)	(2.5)	(79.7)	100.0	42
Woman yes, man no	*	*	*	*	100.0	5
Both yes	*	*	*	*	100.0	4
Residence						
Urban	13.4	5.3	10.1	71.2	100.0	316
Non-urban	18.4	4.4	12.1	65.2	100.0	103
Wealth quintile						
Lowest	11.0	5.7	21.0	62.3	100.0	75
Second	15.6	16.1	13.0	55.3	100.0	79
Middle	19.4	4.2	14.6	61.8	100.0	89
Fourth	17.9	0.8	6.0	75.3	100.0	66
Highest	10.7	<0.1	1.4	88.0	100.0	110
Total couples	14.6	5.1	10.6	69.7	100.0	419

Notes: The table is based on heterosexual couples for which a valid test result (positive or negative) is available for both partners. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases
[1] A respondent is considered to have had multiple sexual partners in the past 12 months if he or she had sexual intercourse with two or more people during this time period. (Respondents with multiple partners include polygynous men who had sexual intercourse with two or more wives.)

ADULT AND PREGNANCY-RELATED MORTALITY 14

Key Findings

- ***Adult mortality:*** The probability of a 15-year-old dying before age 50 ($_{35}q_{15}$) is 21% among females and 23% among males. Thus, 213 of every 1,000 women age 15 would be expected to die before age 50, and 234 of every 1,000 men age 15 would be expected to die before age 50.
- ***Pregnancy-related mortality ratio:*** The pregnancy-related mortality ratio during the 7-year period before the SADHS 2016 was 536 pregnancy-related deaths per 100,000 live births.

Adult and maternal mortality indicators are useful for assessing the health status of adult populations. The maternal mortality ratio is one of 26 indicators used to assess progress towards SDG 3: ensuring healthy lives and promoting well-being for all at all ages. Reducing maternal mortality is one of the government's targets. The 2030 vision of the National Development Plan is to reduce the maternal mortality ratio to less than 100 per 100,000 live births (South African Government 2011). In 1998, the National Committee on Confidential Enquiries into Maternal Deaths (NCCEMD) was established, and the committee set up a system to monitor deaths that occur in health facilities during pregnancy, birth, or the puerperium (Theron 2000). The Campaign on Accelerated Reduction of Maternal and Child Mortality in Africa (CARMMA), launched in South Africa in 2012, has highlighted the components of a comprehensive strategy to reduce maternal and child mortality (NDoH 2012). The Rapid Mortality Surveillance Report (Bradshaw et al. 2012) introduced a measure of maternal mortality for monitoring trends that was based on an adjustment to the number of deaths caused by direct and indirect maternal causes from vital statistics. This approach has been used in the country's SDG Indicator Baseline Report (Stats SA 2017b).

Two methods are generally used to estimate maternal mortality in developing countries from household surveys: the indirect sisterhood method (Graham et al. 1989) and a direct variant of the sisterhood method (Rutenberg and Sullivan 1991; Stanton et al. 1997). In the SADHS 2016, the direct variant of the sisterhood method was employed to estimate both adult and maternal mortality from the reports of adult women on the survival status of their siblings.

14.1 DATA

To obtain a sibling history, each female respondent age 15-49 was first asked to provide the total number of her mother's live births. The respondent was then asked to provide a list of all brothers and sisters born to her mother, beginning with the first born, and to identify whether each sibling was alive at the time of the survey. The current age was reported for living siblings. For deceased siblings, the age at death and number of years since death were recorded. Approximate quantitative answers were acceptable if precise information on age, age at death, or years since death was not known.

Data capture via CAPI may have aided the completeness of data on siblings because in the CAPI system, interviewers are required to populate all relevant fields in order to progress through the interview, whereas interviewers may skip over asking questions or recording responses and still continue the interview when data capture is done on paper questionnaires. Completeness of data on survival status, current age, age at death, and years since death is reported for all siblings in **Table C.8** in Appendix C. Current age is unreported

for 0% of siblings, as compared with 5% of siblings in the 1998 survey. Similarly but more markedly, both age at death and years since death among deceased siblings are unreported for 0% of siblings in the current survey, while each measure was missing for 16% of deceased siblings in the 1998 survey.

For sisters who had died and were age 12 or older at the time of death, questions were asked to determine whether the death was maternity-related: "Was [NAME OF SISTER] pregnant when she died?" and, if not, "Did she die during childbirth?" and, if not, "Did she die within 2 months after the end of a pregnancy or childbirth?" For every sister and brother who had died, the respondent was asked "Was [NAME]'s death due to an accident or violence?" Estimates of maternal mortality are refined by excluding deaths due to accidents or violence; however, other incidental deaths, such as HIV-related deaths, are not identified and are therefore not excluded.

14.2 Direct Estimates of Adult Mortality

Adult mortality rate

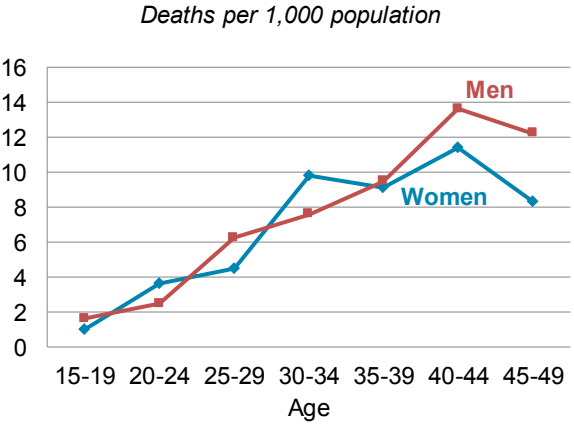
The number of adult deaths per 1,000 population age 15-49. Adult mortality rates by 5-year age groups are calculated by dividing the number of deaths to siblings of respondents in each age group by the number of person-years of exposure to the risk of dying in that age group during the 7 years preceding the survey and then multiplying by 1,000. The number of deaths is the number of siblings (brothers or sisters) reported as having died within the 7 years preceding the survey. The person-years of exposure in each age group are calculated for both surviving and dead siblings based on their current age (living siblings) or age at death and years since death (dead siblings).

Age-adjusted rate: The rate for the 15-49 age group has been standardised so that siblings reflect the SADHS population structure.

Sample: Siblings (both living and dead) who were age 15-49 in the 7 years preceding the survey, by sex and 5-year age groups

Estimates of mortality for the 7 years preceding the survey among women and men age 15-49 are shown in **Table 14.1**. Mortality is slightly lower among women (6.3 deaths per 1,000 population) than among men (6.9 deaths per 1,000 population). Mortality rates generally rise with increasing age from age 15-19 to age 40-44 (**Figure 14.1**).

Figure 14.1 **Adult mortality rates by age**



14.3 Trends in Adult Mortality

Table 14.2 shows the probability of a woman or man age 15 dying by age 50 ($_{35}q_{15}$) if the person experienced the age-specific death rates shown in **Table 14.1**—that is, the death rates observed in 2009-2016 (the 7 years preceding the survey). Probabilities are expressed per 1,000 persons at age 15. Thus, 213 of every 1,000 women age 15 would be expected to die before age 50, and 234 of every 1,000 men age 15 would be expected to die before age 50. If women and men experienced probabilities of dying that were estimated as existing in 1991-1998 (the 7 years preceding the SADHS 1998), 103 of every 1,000 women and 213 of every 1,000 men age 15 would be expected to die before age 50. The probability of dying doubled among women from the period 1991-1998 to the period 2009-2016, while the probability increased only marginally among men. Comparisons with estimates from other sources of mortality data in the country and analyses of the cause of death data available in the country's vital registration system may shed more light on the pattern shown here.

14.4 Direct Estimates of Maternal Mortality

Maternal mortality rate

The number of maternal deaths per 1,000 women age 15-49. Maternal mortality rates by 5-year age groups are calculated by dividing the number of maternal deaths to female siblings of respondents in each age group by the total person-years of exposure of the sisters to the risk of dying in that age group during the 7 years preceding the survey and then multiplying by 1,000. The number of deaths is the number of sisters reported as having died in the 7 years preceding the survey during pregnancy or delivery, or in the 2 months following the delivery or end of pregnancy, by their age group at the time of death; deaths due to accidents or violence are excluded.* The person-years of exposure in each age group are calculated for both surviving and dead sisters based on their reported current age (living sisters) or age at death and years since death (dead sisters).

Sample: Sisters (both living and dead) age 15-49 in the 7 years preceding the survey, by 5-year age groups

*This differs from the WHO definition of a maternal death, which is "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes" (WHO 2012:98).

Maternal mortality ratio

The number of maternal deaths per 100,000 live births. The maternal mortality ratio (MMR) is calculated by dividing the age-standardised maternal mortality rate for women age 15-49 in the 7 years preceding the survey by the general fertility rate (GFR) for the same time period times 100,000.

Out of the 394 deaths of female siblings reported for the 7 years preceding the survey, 27 were reported to have occurred during pregnancy or within 2 months of delivery or termination of the pregnancy from any cause other than accidents or violence (data not shown). These deaths accounted for 7% of all deaths among women age 15-49 and are considered too imprecise for estimating maternal mortality indictors, which require the distinction between maternal causes and incidental causes of death that happened to occur during pregnancy. The remainder of this chapter will focus on estimates of pregnancy-related mortality indicators.

14.5 Direct Estimates and Trends in Pregnancy-related Mortality

Pregnancy-related mortality rate

The number of pregnancy-related deaths per 1,000 women age 15-49. Pregnancy-related mortality rates by 5-year age groups are calculated by dividing the number of pregnancy-related deaths to female siblings of respondents in each age group by the total person-years of exposure of the sisters to the risk of dying in that age group during the 7 years preceding the survey and then multiplying by 1,000. The number of deaths is the number of sisters reported as having died in the 7 years preceding the survey during pregnancy or delivery, or in the 2 months following the delivery or end of pregnancy, by their age group at the time of death. The person-years of exposure in each age group are calculated for both surviving and dead sisters based on their reported current age (living sisters) or age at death and years since death (dead sisters).

Sample: Sisters (both living and dead) age 15-49 in the 7 years preceding the survey, by 5-year age groups

Pregnancy-related mortality ratio (PRMR)

The number of pregnancy-related deaths per 100,000 live births. The pregnancy-related mortality ratio is calculated by dividing the age-standardised pregnancy-related mortality rate for women age 15-49 in the 7 years preceding the survey by the general fertility rate (GFR) for the same time period times 100,000.

Lifetime risk of pregnancy-related death

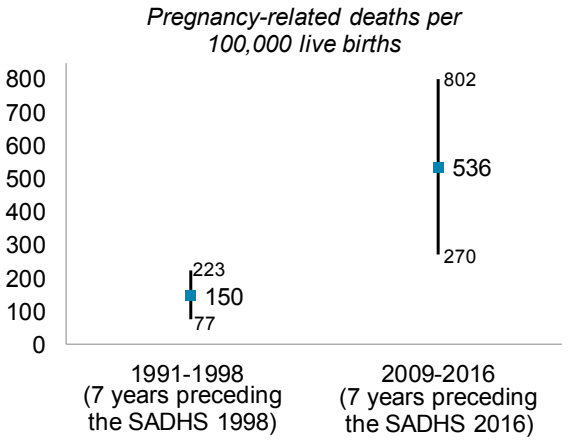
This is calculated as $1-(1-PRMR)^{TFR}$, where PRMR represents the pregnancy-related mortality ratio and TFR represents the total fertility rate for the 7 years preceding the survey.

The SADHS 2016 defines a pregnancy-related death as the death of a woman while pregnant or within 2 months of delivery or termination of pregnancy, irrespective of the cause of death. Estimates of pregnancy-related mortality are therefore based solely on the timing of the death in relationship to the pregnancy, which differs from the WHO definition of a pregnancy-related death (which limits the window to 42 days).

- The pregnancy-related mortality rate among women age 15-49 is 0.47 pregnancy-related deaths per 1,000 woman-years of exposure (**Table 14.3**).
- The pregnancy-related mortality rate is highest among women age 40-44 (1.22). Any patterns in age-specific pregnancy-related mortality should be interpreted with caution, as there were only 31 pregnancy-related deaths in the 7 years preceding the survey.
- Pregnancy-related deaths accounted for 8% of all deaths among women age 15-49.
- The pregnancy-related mortality ratio (PRMR) during the 7 years preceding the SADHS 2016 is estimated as 536 deaths per 100,000 live births (**Table 14.4**). For every 1,000 live births, about five women died during pregnancy or within 2 months after childbirth.
- At the fertility and mortality rates prevailing in 2009-2016, 1.5% of women would be expected to die from pregnancy-related causes during their reproductive lifetime (i.e., a lifetime risk of 1 in 67).

What the SADHS 2016 defines as a pregnancy-related death was labelled a maternal death in the SADHS 1998. It should be noted that although the SADHS 1998 included a question asking whether female deaths were due to complications of pregnancy or childbirth, responses were not used to identify whether a death was or was not a maternal death. Thus, it is possible to compare the PRMR estimates from the SADHS 2016 and SADHS 1998.

Figure 14.2 **Comparison of the pregnancy-related mortality ratio (PRMR) with confidence intervals between the SADHS 1998 and the SADHS 2016**



The SADHS 2016 PRMR estimate for the period 2009-2016 (536 deaths per 100,000 live births) is significantly higher than the SADHS 1998 estimate of 150 deaths per 100,000 live births in 1991-1998 (**Figure 14.2** and **Table 14.4**). As shown in **Figure 14.2**, there is no overlap between the confidence intervals surrounding the SADHS 2016 and SADHS 1998 PRMR estimates. The difference between the 2016 and 1998 estimates is statistically significant and not likely to be due to sampling error. Therefore, it can be concluded that the PRMR increased between the 1998 and 2016 surveys.

The SADHS 2016 PRMR estimate of 536 deaths per 100,000 live births for the period approximately centred at 2013 is slightly lower than the figure of 580 deaths derived from household deaths in the 2011 Population Census (Stats SA 2012), which referred to the year preceding the census (i.e., 10 October 2010 to 9 October 2011). However, the decline is not statistically significant (data not shown).

LIST OF TABLES

For more information on adult and maternal mortality, see the following tables:

- **Table 14.1 Adult mortality rates**
- **Table 14.2 Adult mortality probabilities**
- **Table 14.3 Pregnancy-related mortality**
- **Table 14.4 Pregnancy-related mortality trends**
- **Table C.8 Completeness of information on siblings (see Appendix C)**
- **Table C.9 Sibship size and sex ratio of siblings (see Appendix C)**

Table 14.1 Adult mortality rates

Direct estimates of female and male mortality rates for the 7 years preceding the survey, by 5-year age groups, South Africa DHS 2016

Age	Deaths	Exposure years	Mortality rate[1]
	FEMALE		
15-19	9	9,179	1.02
20-24	43	11,875	3.65
25-29	55	12,297	4.48
30-34	108	11,034	9.82
35-39	78	8,555	9.13
40-44	68	5,930	11.39
45-49	32	3,899	8.32
Total 15-49	394[a]	62,768[a]	6.34[b]
	MALE		
15-19	14	8,774	1.60
20-24	28	11,306	2.46
25-29	74	11,814	6.24
30-34	78	10,305	7.60
35-39	79	8,277	9.49
40-44	77	5,616	13.64
45-49	44	3,580	12.23
Total 15-49	393[a]	59,673[a]	6.90[b]

[1] Expressed per 1,000 population
[a] Small discrepancies in totals can result from rounding
[b] Age-adjusted rate

Table 14.2 Adult mortality probabilities

The probability of dying between age 15 and age 50 among women and men during the 7 years preceding the survey, South Africa

Survey	Women $_{35}q_{15}$[1]	Men $_{35}q_{15}$[1]
SADHS 2016	213	234
SADHS 1998	103	213

[1] The probability of dying between exact ages 15 and 50, expressed per 1,000 persons at age 15

Table 14.3 Pregnancy-related mortality

Direct estimates of pregnancy-related mortality rates for the 7 years preceding the survey, by 5-year age groups, South Africa DHS 2016

Age	Percentage of female deaths that are pregnancy-related	Pregnancy-related deaths[1]	Exposure years	Pregnancy-related mortality rate[2]
15-19	0.0	0	9,179	0.00
20-24	9.8	4	11,875	0.36
25-29	13.0	7	12,297	0.58
30-34	4.7	5	11,034	0.46
35-39	8.3	6	8,555	0.76
40-44	10.7	7	5,930	1.22
45-49	1.3	0	3,899	0.11
Total 15-49	7.8	31[a]	62,768[a]	0.47[b]

[1] Pregnancy-related mortality is defined as the death of a woman while pregnant or within 2 months of termination of pregnancy from any cause, including accidents or violence
[2] Expressed per 1,000 woman-years of exposure
[a] Small discrepancies in totals can result from rounding
[b] Age-adjusted rate

Table 14.4 Pregnancy-related mortality trends

Direct estimates of pregnancy-related mortality rates for the 7 years preceding each survey, by 5-year age groups, South Africa DHS 2016

	Pregnancy-related mortality rates[1,2]	
Age	2009-2016	1991-1998
15-19	0.00	0.09
20-24	0.36	0.25
25-29	0.58	0.21
30-34	0.46	0.19
35-39	0.76	0.11
40-44	1.22	0.07
45-49	0.11	0.00
Total 15-49[a]	0.47	0.15
Total fertility rate (TFR)	2.8	3.1
General fertility rate (GFR)[3]	88	97
Pregnancy-related mortality ratio (PRMR)[4]	536	150
Confidence interval	270-802	77-223
Lifetime risk of pregnancy-related death[5]	0.015	0.005

[1] Pregnancy-related mortality is defined as the death of a woman while pregnant or within 2 months of termination of pregnancy from any cause, including accidents or violence
[2] Expressed per 1,000 woman-years of exposure
[3] Age-adjusted rate expressed per 1,000 women age 15-49
[4] Expressed per 100,000 live births; calculated as the age-adjusted pregnancy-related mortality rate times 100 divided by the age-adjusted general fertility rate
[5] Calculated as $1-(1-PRMR)^{TFR}$ where TFR represents the total fertility rate for the 7 years preceding the survey
[a] Age-adjusted rate

USE OF HEALTH SERVICES AND PRESCRIBED MEDICATIONS 15

Key Findings

- ***Health insurance coverage:*** 16% of women and 17% of men age 15 and older have health insurance coverage.
- ***Utilisation of outpatient health care services:*** In the month before the survey, 12% of women and 11% of men age 15 and older received health, medical, or dental care as an outpatient. Overall, 55% of respondents who had an outpatient visit received care from a government clinic or community health centre, 15% received care from a government hospital, and 26% received care from a private hospital or clinic.
- ***Pap smear:*** 37% of women age 15 and older have had a Pap smear exam; among those who have ever had a Pap smear, 64% had one within the 3 years before the survey.
- ***Problems in accessing health care:*** 38% of women age 15 and older have at least one problem in accessing health care.
- ***Prescribed medications:*** Overall, 31% of women and 19% of men age 15 and older reported that they are taking prescribed medications daily or regularly. Seventy-one percent of adults age 15 and older have their prescribed medications paid for by the public sector.

Health service utilisation provides information that reflects a combination of need for care and access to care. This chapter describes access to health insurance and utilisation of ambulatory health services among respondents to the adult health module. In addition, women were asked about their experience with Pap smear exams and about barriers they face when seeking health care. The chapter also includes information about prescribed medications used daily or regularly by adults for chronic conditions. Such information will contribute towards monitoring the performance of the health system and planning for the implementation of National Health Insurance (NHI).

15.1 HEALTH INSURANCE COVERAGE

Sixteen percent of women and 17% of men age 15 and older have access to some form of medical aid, medical benefit scheme, provident scheme, or hospital plan that helps them pay for health care or drug services (**Table 15.1**).

Patterns by background characteristics

- As expected, health insurance coverage is associated with age. Among women, health insurance coverage is lower among those age 15-34 (10%-13%) than among older women age 35 or older (18%-20%). Among men, health insurance coverage rises from a low of 10% among those age 15-24 to a high of 27% among those age 65 or older.

- There is a large disparity in health insurance coverage by population group. Seventy-four percent of women and 77% of men who are White have health insurance coverage, whereas only 10% of women and 11% of men who are Black African have coverage.
- Women and men in urban areas are more than twice as likely as those in non-urban areas to have health insurance coverage.
- The proportion of adults with health insurance coverage is markedly higher in Western Cape than other provinces. Thirty percent of women and 36% of men in Western Cape have health insurance coverage, as compared with 9%-17% of women and 11%-17% of men in other provinces.
- Among both women and men, health insurance coverage is positively associated with increasing education and household wealth.

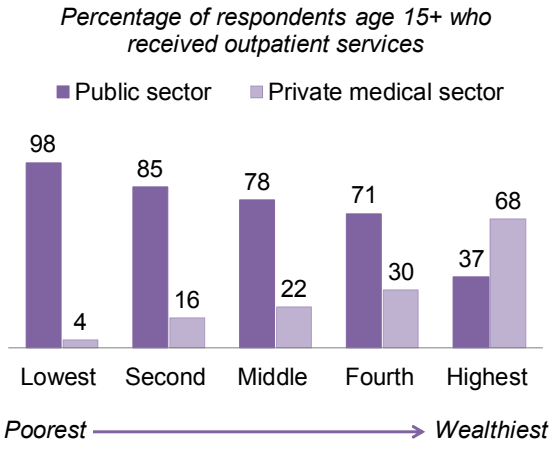
15.2 USE OF OUTPATIENT HEALTH CARE SERVICES

Respondents were asked about outpatient health care services they had received in the month before the survey. Five percent of women and 1% of men age 15 and older had at least one visit by a home- or community-based caregiver in the month before the survey, and 12% of women and 11% of men received health, medical, or dental care as an outpatient (**Table 15.2**).

Patterns by background characteristics

- The percentage of women and men who received outpatient health services during the month before the survey generally increases with age. Nine percent of women and 6% of men age 15-24 received outpatient services, as compared with 18% of women and 22% of men age 65 or older.
- HIV-positive men (16%) were slightly more likely to receive outpatient health care services than those who were HIV negative (11%) or whose status was not known because they were not tested in the SADHS (10%). Among women, 12%-13% received outpatient health care services regardless of their HIV status.
- Both women and men were more likely to receive outpatient health care services if they had health insurance. Among those who received outpatient services, women and men with health insurance were much more likely than those without insurance to use private sector sources. Still, 10% of those without health insurance visited a private hospital, clinic, or private doctor (**Table 15.3**).
- Respondents from non-urban areas were less likely than those from urban areas to have visited a private hospital, clinic, or private doctor (17% versus 32%).
- Use of public sector health services decreases with increasing household wealth (**Figure 15.1**).

Figure 15.1 **Source of outpatient health care services by household wealth**



15.3 WOMEN'S ACCESS TO CARE

15.3.1 Experience with a Pap Smear

The SADHS 2016 included questions on cervical cancer screening. The Pap smear exam checks for changes in the cells of the cervix that indicate cervical cancer or conditions that may develop into cervical cancer. The South African Policy on Cervical Cancer and Control recommends cytology-based screening, particularly via Pap smear, as the method of choice in the short term. The policy further recommends screening all women age 30-50 at 10-year intervals.

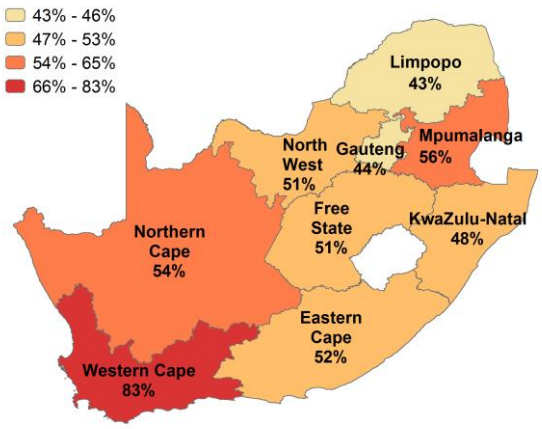
Women age 15 and older were asked whether they ever had a Pap smear and, if so, how long ago they had their most recent Pap smear and whether they received the result. Overall, 37% of women age 15 and older have ever had a Pap smear (**Table 15.4)**. Among those who ever had a Pap smear, 64% reported having had a Pap smear within the 3 years before the survey, 15% had the exam 4-5 years ago, 8% had the exam 6-10 years ago, and 10% had the exam more than 10 years ago. The vast majority of women who have ever had a Pap smear received the result of their most recent test (86%).

Patterns by background characteristics

- Women age 30-59 (52%) were more likely than younger women age 15-29 (16%) and older women age 60 or older (41%) to have ever had a Pap smear. Two-thirds (67%) of women age 30-59 who have ever had a Pap smear had the exam within the 3 years before the survey.
- By population group, women who are White (78%), Coloured (62%), or Indian/Asian (60%) were more likely than Black African women (32%) to have ever had a Pap smear.
- HIV-positive women (43%) were more likely to have ever had a Pap smear than HIV-negative women (33%) or women whose status is unknown because they were not tested in the SADHS (40%). Among those who ever had a Pap smear, women who are HIV positive were also more likely to have had one in the 3 years before the survey (78%) than HIV-negative women (59%) and women who were not tested in the survey (65%). However, HIV-positive women (77%) were somewhat less likely than other women (86%-89%) to have received the results of their last Pap smear.
- Six in 10 women (63%) with health insurance have ever had a Pap smear, as compared with 3 in 10 women (33%) without insurance.
- Women's likelihood of ever having had a Pap smear generally increases with increasing education and household wealth.
- The proportion of women age 30-59 who had a Pap smear is higher in Western Cape (83%) than other provinces (43%-56%) (**Table 15.5** and **Figure 15.2**).

Figure 15.2 **Experience with a Pap smear by province**

Percentage of women age 30-59 who ever had a Pap smear



15.3.2 Problems in Accessing Health Care among Women

Problems in accessing health care

Women were asked whether each of the following factors is a big problem in seeking medical advice or treatment for themselves when they are sick:

- Getting permission to go to the doctor
- Getting money for advice or treatment
- Distance to a health facility
- Not wanting to go alone

Sample: Women age 15+

Thirty-eight percent of women age 15 and older report at least one problem accessing health care for themselves when they are sick (**Table 15.6**). The most commonly reported problem is getting money for treatment (28%), followed by distance from the health service (25%). Fifteen percent of women reported not wanting to go alone and needing permission to go as problems.

Patterns by background characteristics

- Women age 65 and older are more likely than women in all of the other age groups to experience each of the four specified problems in accessing health care. Overall, 49% of women age 65 and older reported at least one problem in accessing care.
- White women (8%) are less likely than Black African (41%), Coloured (29%), or Indian/Asian (33%) women to report at least one problem in accessing health care.
- Women who are divorced, separated, or widowed (48%) are more likely than women who are married or living together with a partner (35%) and women who have never been married or lived with a partner (38%) to have at least one problem in accessing health care.
- The proportion of women who report at least one problem in accessing health care is much higher in non-urban areas (53%) than urban areas (30%).
- Women in Western Cape (23%) are least likely to report any problems in accessing health care, while women in Eastern Cape (49%) are most likely to report problems (**Figure 15.3**). In all provinces except KwaZulu-Natal and Mpumalanga, the most common problem in accessing health care is getting money for treatment.
- The percentage of women who report having a problem in accessing health care steadily decreases with increasing household wealth (**Figure 15.4**).

Figure 15.3 **Problems in accessing health care by province**

Percentage of women age 15-49 reporting at least one problem

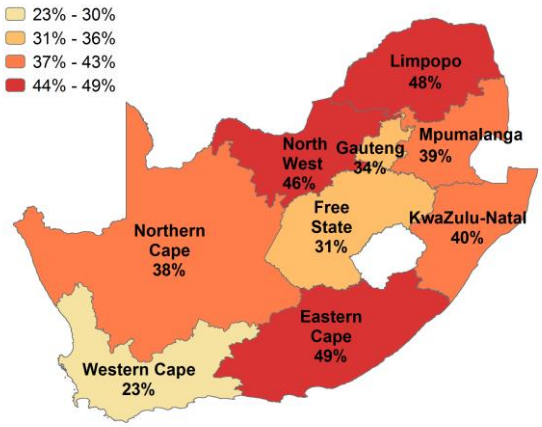
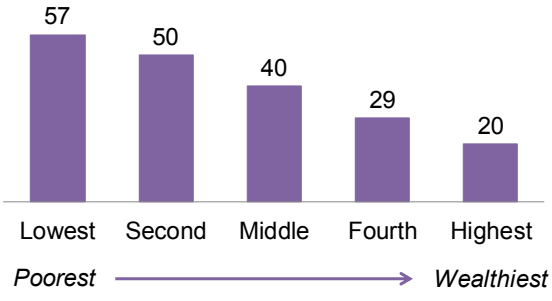


Figure 15.4 **Problems in accessing health care by household wealth**

Percentage of women age 15+ with at least one problem



15.4 PRESCRIBED MEDICATIONS

15.4.1 Self-reported Use of Prescribed Medications

Table 15.7 presents data on women's and men's self-reported use of prescribed medications. Overall, 26% of respondents age 15 and older reported that they are taking prescribed medication daily or regularly. More women report taking prescribed medications than men (31% versus 19%). Among respondents who are taking prescribed medications, 44% are taking a single medication, 39% are taking two to three medications, and 17% are taking four or more medications.

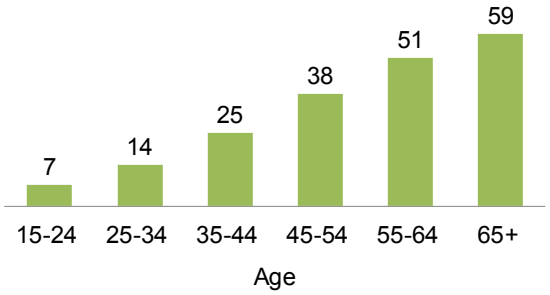
Comparison with the SADHS 1998: The percentage of women age 15 and older taking prescribed medications increased from 18% in 1998 to 31% in 2016; the percentage among men increased from 13% to 19%.

Patterns by background characteristics

- The percentage of respondents daily or regularly taking at least one prescribed medication increases with age, from 7% among those age 15-24 to 59% among those age 65 and older (**Figure 15.5**). Older respondents also take a greater number of medications than younger respondents.

***Figure 15.5* Prescribed medication by age**

Percentage of women and men taking prescribed medication daily or regularly



- White respondents were more likely to report taking prescribed medications (55%) than respondents from other population groups, especially Black African respondents (23%).
- The proportion of respondents taking at least one medication declines from 45% among those with no education to 20% among those who have completed a secondary education before increasing to 29% among those with more than a secondary education.
- The percentage of women and men taking at least one prescribed medication increases with increasing household wealth, from 20% among those in the lowest wealth quintile to 36% among those in the highest quintile.

15.4.2 Payment for Prescribed Medications

Respondents who take prescribed medications on a regular basis were asked about their source of payment. Overall, 71% of adults age 15 and older report that most of their medications are provided by the public sector. Sixteen percent of adults report that their prescribed medications are paid for through medical aid, and 11% pay for their medications out of pocket (**Table 15.8**).

Among respondents whose medications are provided by a public clinic or hospital, 20% report that they were sent away from the clinic at least once in the past 12 months without medication because of stockouts.

Comparison with the SADHS 1998: Provision of prescribed medications by the public sector increased from 39% in 1998 to 75% in 2016 among women and from 34% to 61% among men. Medical aid provision of prescribed medications decreased among both women (from 26% to 14%) and men (from 29% to 20%). The proportion of respondents who pay out of pocket for their daily or regularly prescribed

medications has also decreased since 1998, from 28% to 9% among women and from 31% to 16% among men.

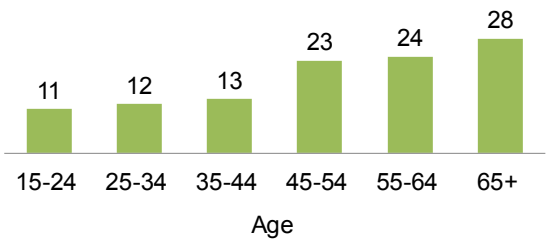
Patterns by background characteristics

- While use of medical aid to pay for prescribed medications increases with age, the proportion of respondents relying on public sector payments is similar across age groups.

- Among respondents whose prescribed medications are paid for by the public sector, the percentage who have been sent away from a clinic in the past 12 months because a medication was not in stock rises from 11% among those age 15-24 to 28% among those age 65 and older (**Figure 15.6**).

Figure 15.6 Experience of medication stockouts by age

Percentage of women and men age who are taking prescribed medications and experienced a stockout in the past 12 months



- A majority of Black African (82%) and Coloured (67%) respondents have their prescribed medications paid for by the public sector, whereas most White respondents have their medications paid for by medical aid (64%).

- Those who are employed, whether for cash (18%) or not (13%), are more likely than those who are not employed (8%) to pay for their prescribed medications out of pocket. Those who are not employed (78%) are more likely than those who are employed for cash (59%) or employed but not for cash (55%) to have their prescribed medications paid for by the public sector.

- In general, the percentage of respondents whose prescribed medications are paid for by medical aid increases with increasing education; only 4% of respondents with no education have their prescribed medications paid for by medical aid, as compared with 53% of those with more than a secondary education. Out-of-pocket payments also generally increase with increasing education, while public sector payments decrease.

- Ninety-four percent of respondents in the lowest wealth quintile had their prescribed medications paid for by the public sector, compared with 31% of respondents in the highest wealth quintile.

15.5 Prescribed Medications for Chronic Conditions

Of the 10,336 respondents age 15 and older who completed the adult health module, 8,067 consented to be interviewed with the Biomarker Questionnaire by a nurse. As part of this interview, respondents who use prescribed medications daily or regularly were requested to show the medications to the nurse, who then recorded the names of the medications.

Overall, 18% of respondents age 15 and older reported taking a prescribed medication for at least one chronic condition. The most frequently treated condition is hypertension (13%), followed by HIV (5%), heart and stroke-related conditions (2%), diabetes (2%), and high cholesterol or triglycerides (2%). Three percent of respondents did not disclose their medications (**Table 15.9**).

Women are more likely than men to be using prescribed medications for a chronic condition (21% versus 14%). However, differences in the use of medications for specific conditions between women and men are generally small. Use of anti-hypertensive medications is somewhat more common among women (14%) than men (9%), as is use of medications for HIV (6% of women and 3% of men).

Comparison with the SADHS 1998: Use of anti-hypertensive medications increased from 6% in 1998 to 13% in 2016.

List of Tables

For more information on use of health services and prescribed medication, see the following tables:

- **Table 15.1 Health insurance coverage**
- **Table 15.2 Outpatient health care services received**
- **Table 15.3 Source of outpatient health care services received**
- **Table 15.4 Experience with a Pap smear exam**
- **Table 15.5 Experience with a Pap smear exam by province**
- **Table 15.6 Problems in accessing health care**
- **Table 15.7 Prescribed medications**
- **Table 15.8 Source of payment of prescribed medications**
- **Table 15.9 Use of prescribed medication for common chronic conditions**

Table 15.1 Health insurance coverage

Percentage of women and men age 15 and older covered by medical aid, a medical benefit scheme, a provident scheme, or a hospital plan, according to background characteristics, South Africa DHS 2016

Background characteristic	Women		Men	
	Percentage covered by medical aid or other scheme or plan	Number of women	Percentage covered by medical aid or other scheme or plan	Number of men
Age				
15-24	10.1	1,429	10.3	1,241
25-34	13.3	1,391	12.8	962
35-44	19.6	1,022	16.1	744
45-54	18.9	866	25.9	492
55-64	17.8	701	24.8	406
65+	18.6	719	27.1	364
Population group				
Black African	10.3	5,170	10.5	3,534
White	73.8	320	76.8	257
Coloured	25.2	516	26.9	335
Indian/Asian	43.7	114	46.5	82
Other	*	6	*	2
Marital status				
Never married	11.4	3,085	9.6	2,209
Married	27.8	1,582	29.8	1,255
Living together	8.6	599	14.0	442
Divorced/separated	15.7	281	14.5	197
Widowed	11.3	580	18.4	107
Residence				
Urban	19.8	3,996	20.7	2,874
Non-urban	7.6	2,130	7.7	1,336
Province				
Western Cape	30.1	703	36.3	476
Eastern Cape	12.8	730	11.9	493
Northern Cape	12.5	127	12.5	84
Free State	12.6	325	12.1	207
KwaZulu-Natal	12.8	1,191	11.3	683
North West	14.9	398	15.7	310
Gauteng	17.4	1,534	17.4	1,245
Mpumalanga	9.3	473	11.2	326
Limpopo	10.5	646	13.4	386
Education				
No education	4.7	495	4.8	217
Primary incomplete	3.7	664	4.3	481
Primary complete	2.6	293	6.6	212
Secondary incomplete	8.9	2,695	9.3	1,930
Secondary complete	23.7	1,328	26.5	900
More than secondary	52.7	652	49.9	470
Wealth quintile				
Lowest	2.2	1,163	2.0	787
Second	2.8	1,152	4.6	839
Middle	6.9	1,242	8.7	894
Fourth	15.2	1,258	16.4	827
Highest	47.1	1,311	49.8	864
Total 15+	15.5	6,126	16.6	4,210
Total 15-49	14.5	4,300	13.5	3,220

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 15.2 Outpatient health care services received

Percentage of women and men age 15 and older who have had any visits by a home- or community-based caregiver during the past month, and percentage who have received health, medical, or dental care without staying overnight during the past month, according to background characteristics, South Africa DHS 2016

	Women			Men		
Background characteristic	Percentage who had any visits by a home- or community-based caregiver during the past month	Percentage who received health, medical, or dental care without staying overnight during the past month	Number of women	Percentage who had any visits by a home- or community-based caregiver during the past month	Percentage who received health, medical, or dental care without staying overnight during the past month	Number of men
Age						
15-24	2.7	9.4	1,429	1.6	5.8	1,241
25-34	5.8	10.6	1,391	0.7	8.6	962
35-44	4.4	12.4	1,022	0.3	9.8	744
45-54	4.4	14.5	866	2.3	13.2	492
55-64	6.1	14.3	701	1.7	20.0	406
65+	7.6	17.8	719	1.4	22.4	364
Population group						
Black African	5.3	12.0	5,170	1.2	10.3	3,534
White	1.4	15.1	320	1.4	19.1	257
Coloured	3.6	13.4	516	1.4	8.8	335
Indian/Asian	1.8	21.7	114	0.0	14.5	82
Other	*	*	6	*	*	2
HIV status						
HIV positive	5.7	12.3	898	1.3	15.6	311
HIV negative[1]	5.1	13.1	2,894	1.1	10.5	2,017
Not tested in survey	4.2	11.6	2,334	1.3	10.3	1,882
Health insurance[2]						
Has insurance	2.7	19.4	952	1.1	19.5	698
Does not have insurance	5.3	11.2	5,174	1.3	9.1	3,512
Residence						
Urban	3.7	11.6	3,996	1.1	9.5	2,874
Non-urban	7.0	13.9	2,130	1.6	13.6	1,336
Province						
Western Cape	3.1	13.8	703	1.3	10.5	476
Eastern Cape	2.8	18.2	730	2.0	6.4	493
Northern Cape	5.9	19.2	127	2.6	8.6	84
Free State	7.1	7.0	325	1.2	2.6	207
KwaZulu-Natal	5.8	9.4	1,191	0.6	13.2	683
North West	10.5	16.0	398	0.8	12.4	310
Gauteng	2.3	8.7	1,534	0.8	9.4	1,245
Mpumalanga	5.1	10.8	473	1.9	16.4	326
Limpopo	8.5	19.5	646	2.5	16.0	386
Education						
No education	7.1	14.0	495	1.7	14.6	217
Primary incomplete	6.3	13.1	664	1.6	11.1	481
Primary complete	6.4	14.9	293	1.3	11.1	212
Secondary incomplete	4.4	10.9	2,695	1.6	9.5	1,930
Secondary complete	5.2	11.9	1,328	0.8	9.6	900
More than secondary	2.5	16.9	652	0.0	16.2	470
Wealth quintile						
Lowest	4.8	13.2	1,163	1.8	8.4	787
Second	5.8	11.6	1,152	1.9	10.3	839
Middle	6.2	10.4	1,242	0.9	10.9	894
Fourth	6.4	11.6	1,258	1.3	9.6	827
Highest	1.3	15.2	1,311	0.5	14.5	864
Total	4.9	12.4	6,126	1.2	10.8	4,210

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes a few cases with inconclusive results as per the SADHS HIV testing algorithm shown in Chapter 1, Figure 1.2
[2] Health insurance includes medical aid, a medical benefit scheme, a provident scheme, or a hospital plan that helps pay for health care or drug services

Table 15.3 Source of outpatient health care services received

Among respondents age 15 and older who have received outpatient health care services during the past month, percentage who received care from specific sources, according to background characteristics, South Africa DHS 2016

Background characteristic	Public sector			Private sector				Other source	Number of respondents
	Government hospital	Government clinic/ community health centre	Other public sector	Private hospital/ clinic/private doctor	Chemist/ pharmacy	Dentist/oral hygienist/ dental therapist	Other private medical sector		
Age									
15-24	12.9	61.2	0.0	20.1	2.3	4.2	0.0	0.8	206
25-34	11.3	51.2	2.3	32.9	0.6	2.8	0.0	0.8	230
35-44	17.7	53.0	0.0	27.0	0.7	3.1	0.0	0.5	200
45-54	12.9	55.4	0.0	24.2	3.7	5.5	0.0	1.5	191
55-64	24.0	50.0	0.0	27.6	2.2	2.5	0.8	0.9	181
65+	14.0	58.9	0.4	23.6	1.3	3.1	0.6	0.3	209
Population group									
Black African	14.3	63.3	0.6	19.7	1.1	1.8	0.1	0.8	985
White	10.1	5.9	0.0	73.6	6.3	10.8	0.4	0.0	98
Coloured	27.6	36.1	0.0	33.8	4.5	7.2	0.0	2.0	99
Indian/Asian	(19.9)	(11.5)	(0.0)	(48.4)	(0.0)	(21.0)	(4.2)	(0.0)	36
Other	nc	nc	nc	nc	nc	nc	nc	nc	0
Sex									
Male	21.4	45.1	0.0	30.8	2.7	2.2	0.1	1.9	455
Female	11.6	60.9	0.8	23.1	1.2	4.3	0.3	0.1	762
Health insurance[1]									
Has insurance	6.6	11.5	0.0	71.4	4.9	7.5	0.8	1.8	321
Does not have insurance	18.3	70.5	0.7	9.8	0.6	2.1	0.0	0.4	897
Residence									
Urban	16.2	46.3	0.6	32.2	2.2	4.6	0.3	1.0	739
Non-urban	13.7	68.4	0.3	16.5	0.9	1.9	0.2	0.4	478
Province									
Western Cape	29.9	19.7	0.0	43.6	5.9	6.3	1.0	1.1	147
Eastern Cape	11.2	66.8	0.4	19.2	1.1	4.9	0.0	0.0	164
Northern Cape	15.0	66.3	0.0	13.8	0.0	4.1	0.0	1.7	32
Free State	16.7	41.9	0.0	32.2	5.8	3.4	1.4	1.9	28
KwaZulu-Natal	17.7	62.8	0.0	17.6	0.0	3.8	0.0	0.0	202
North West	9.9	51.0	0.0	35.7	0.0	3.2	0.0	1.3	102
Gauteng	11.9	51.7	1.8	31.4	1.8	3.6	0.0	0.8	250
Mpumalanga	8.8	69.5	0.0	20.3	0.7	2.7	0.0	1.0	105
Limpopo	15.3	62.4	0.4	19.0	2.0	0.2	0.4	1.3	187
Education									
No education	18.5	76.3	0.8	4.6	0.0	2.0	0.0	0.7	101
Primary incomplete	17.7	78.8	0.0	4.7	0.0	0.0	0.0	1.2	140
Primary complete	10.4	78.6	0.0	10.0	1.1	0.0	0.0	0.8	67
Secondary incomplete	17.7	63.4	0.2	17.6	1.7	0.7	0.5	0.2	478
Secondary complete	15.9	37.3	1.9	36.9	2.5	7.6	0.2	0.5	245
More than secondary	6.2	18.7	0.0	66.6	3.4	10.3	0.0	2.4	186
Wealth quintile									
Lowest	12.4	85.3	0.3	3.7	0.4	0.0	0.0	1.0	220
Second	13.7	69.0	2.4	12.6	1.6	1.4	0.0	0.3	220
Middle	20.6	57.4	0.0	18.3	0.5	2.9	0.0	1.0	226
Fourth	17.2	53.7	0.0	27.3	1.0	1.7	0.3	0.3	225
Highest	13.1	24.2	0.0	54.6	4.0	9.0	0.6	1.1	325
Total 15+	15.2	55.0	0.5	26.0	1.7	3.5	0.2	0.8	1,217

Notes: Percentages may add to more than 100.0 because multiple responses were allowed. Figures in parentheses are based on 25-49 unweighted cases.
nc = No cases
[1] Health insurance includes medical aid, a medical benefit scheme, a provident scheme, or a hospital plan that helps pay for health care or drug services

Table 15.4 Experience with a Pap smear exam

Percentage of women age 15 and older who have ever had a Pap smear, and among women who have had a Pap smear, the timing of the last Pap smear and percentage who got the results of their last exam, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who have ever had a Pap smear	Number of women	Among women who have ever had a Pap smear exam, percentage who had the exam: Within the last 3 years	4-5 years ago	6-10 years ago	More than 10 years ago	Don't know/don't remember	Percentage who got the results of their last exam	Number of women
Age									
15-29	15.6	2,183	83.2	10.4	2.5	1.3	2.7	79.8	340
30-59	52.2	2,918	67.1	16.8	8.5	5.8	1.8	85.8	1,524
60+	40.8	1,025	39.3	13.7	11.5	31.6	4.0	89.1	418
Population group									
Black African	31.7	5,170	69.6	15.7	7.0	5.7	2.1	82.9	1,640
White	77.7	320	52.3	12.7	9.4	23.4	2.3	94.0	249
Coloured	62.0	516	51.3	13.7	12.4	20.4	2.2	90.7	320
Indian/Asian	60.0	114	(48.1)	(22.2)	(12.6)	(8.5)	(8.6)	(92.1)	68
Other	*	6	*	*	*	*	*	*	4
Employment (past 12 months)									
Not employed	30.4	4,048	60.1	15.0	8.0	13.6	3.2	84.5	1,230
Employed for cash	47.7	1,560	73.3	15.3	7.6	2.7	1.1	86.7	744
Employed not for cash	59.4	518	60.1	16.2	10.0	12.2	1.5	86.3	308
HIV status									
HIV positive	42.7	898	77.9	14.0	5.3	1.9	0.9	77.4	384
HIV negative[1]	33.1	2,894	58.6	16.9	9.7	11.8	3.0	85.6	959
Not tested in survey	40.2	2,334	64.9	14.1	7.8	11.1	2.1	88.7	939
Health insurance[2]									
Has insurance	63.2	952	65.4	15.2	8.0	10.3	1.1	94.0	601
Does not have insurance	32.5	5,174	64.1	15.3	8.2	9.7	2.8	82.4	1,680
Residence									
Urban	42.9	3,996	63.2	14.8	8.5	11.0	2.5	87.4	1,716
Non-urban	26.6	2,130	68.0	16.8	7.0	6.3	1.9	79.8	566
Province									
Western Cape	66.7	703	57.0	12.8	9.1	19.1	2.0	91.8	469
Eastern Cape	37.0	730	59.5	14.1	8.8	14.6	2.9	81.8	270
Northern Cape	36.7	127	59.3	8.3	15.1	10.4	6.9	88.2	47
Free State	37.3	325	59.8	17.9	9.2	8.8	4.3	82.7	121
KwaZulu-Natal	32.7	1,191	62.4	14.6	10.8	8.2	4.0	87.8	390
North West	38.8	398	70.2	19.6	5.2	5.0	0.0	76.2	154
Gauteng	32.7	1,534	70.7	16.0	6.6	5.6	1.1	86.5	501
Mpumalanga	34.1	473	67.7	19.8	5.5	4.1	2.9	77.7	161
Limpopo	26.0	646	75.3	15.3	5.4	3.6	0.5	82.8	168
Education									
No education	24.6	495	57.1	8.1	11.7	17.5	5.7	81.8	122
Primary incomplete	32.4	664	58.2	14.5	7.5	17.5	2.3	78.2	215
Primary complete	37.7	293	53.7	18.0	12.9	13.9	1.5	77.5	110
Secondary incomplete	33.1	2,695	65.8	14.6	8.7	9.1	1.9	82.0	891
Secondary complete	41.7	1,328	65.8	16.7	7.6	7.6	2.3	91.7	554
More than secondary	59.8	652	68.0	16.7	5.6	7.1	2.5	92.2	390
Wealth quintile									
Lowest	22.4	1,163	76.0	11.3	5.0	5.3	2.3	74.6	261
Second	26.5	1,152	70.0	18.2	5.1	5.1	1.7	75.7	305
Middle	32.5	1,242	66.7	16.8	7.9	7.2	1.3	84.3	404
Fourth	42.7	1,258	60.0	13.5	10.5	12.7	3.3	87.6	537
Highest	59.1	1,311	60.2	15.9	8.9	12.7	2.4	92.2	775
Total 15+	37.2	6,126	64.4	15.3	8.1	9.9	2.3	85.5	2,282

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes a few cases with inconclusive results as per the SADHS HIV testing algorithm shown in Chapter 1, Figure 1.2

[2] Health insurance includes medical aid, a medical benefit scheme, a provident scheme, or a hospital plan that helps pay for health care or drug services

Table 15.5 Experience with a Pap smear exam by province

Percentage of women age 30-59 who have ever had a Pap smear, according to province, South Africa DHS 2016

Province	Percentage who have ever had a Pap smear	Number of women
Western Cape	82.8	359
Eastern Cape	52.2	333
Northern Cape	53.9	62
Free State	51.1	161
KwaZulu-Natal	47.7	565
North West	50.7	198
Gauteng	43.8	748
Mpumalanga	56.0	212
Limpopo	43.3	279
Total 30-59	52.2	2,918

Table 15.6 Problems in accessing health care

Percentage of women age 15 and older who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, South Africa DHS 2016

Background characteristic	Problems in accessing health care					Number of women
	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Not wanting to go alone	At least one problem accessing health care	
Age						
15-24	12.3	24.0	22.4	14.1	35.4	1,429
15-19	13.0	24.8	24.8	16.4	37.2	721
20-24	11.6	23.1	19.9	11.8	33.6	708
25-34	13.6	26.8	21.9	12.5	36.5	1,391
35-44	13.3	26.7	23.7	11.8	37.0	1,022
45-54	13.8	27.9	23.1	10.5	35.1	866
55-64	16.9	33.0	25.7	14.1	44.0	701
65+	23.6	37.0	35.1	28.2	48.7	719
Population group						
Black African	16.2	30.5	26.9	15.4	41.3	5,170
White	2.6	5.5	3.2	2.6	8.4	320
Coloured	9.8	21.4	14.9	11.2	29.4	516
Indian/Asian	11.5	21.3	20.0	21.9	33.4	114
Other	*	*	*	*	*	6
Number of living children[1]						
0	12.5	21.3	21.9	14.1	34.5	1,179
1-2	13.6	25.9	21.7	12.6	35.4	2,123
3-4	11.0	30.0	23.7	9.9	37.8	831
5+	12.5	33.4	30.3	12.6	46.5	166
Marital status						
Never married	16.2	27.8	24.4	15.3	38.0	3,085
Married or living together	11.9	25.5	21.5	12.3	35.3	2,180
Divorced/separated/widowed	17.3	36.2	32.2	17.5	47.8	860
Employed last 12 months						
Not employed	16.8	31.3	26.9	16.5	41.3	4,512
Employed for cash	8.8	18.7	17.8	9.1	29.5	1,560
Employed not for cash	20.1	40.2	12.2	7.4	51.4	54
Residence						
Urban	9.9	22.0	15.6	9.3	30.4	3,996
Non-urban	24.1	39.8	41.1	24.4	53.4	2,130
Province						
Western Cape	7.2	16.0	11.3	8.6	23.3	703
Eastern Cape	14.2	37.0	34.2	19.7	49.4	730
Northern Cape	15.8	28.0	23.7	10.0	38.0	127
Free State	10.9	25.5	16.8	9.8	31.4	325
KwaZulu-Natal	23.9	27.8	29.7	24.6	39.6	1,191
North West	10.6	32.9	31.8	17.4	46.3	398
Gauteng	10.1	26.1	16.2	6.6	34.4	1,534
Mpumalanga	14.6	25.7	30.1	11.6	38.9	473
Limpopo	22.8	37.5	33.1	18.8	48.1	646
Education						
No education	28.0	43.8	43.6	31.3	57.3	495
Primary incomplete	19.3	39.7	31.9	19.5	50.0	664
Primary complete	21.5	38.8	32.3	17.8	46.3	293
Secondary incomplete	14.9	30.4	25.6	14.5	40.7	2,695
Secondary complete	9.9	19.3	16.0	8.7	28.1	1,328
More than secondary	7.0	9.0	11.5	7.1	20.0	652
Wealth quintile						
Lowest	25.6	46.9	42.9	24.9	57.2	1,163
Second	18.8	37.1	33.0	18.3	50.1	1,152
Middle	12.5	28.5	23.1	11.0	39.5	1,242
Fourth	11.2	19.5	15.4	10.3	28.7	1,258
Highest	7.4	11.8	10.7	9.3	19.8	1,311
Total 15+	14.8	28.2	24.5	14.5	38.4	6,126
Total 15-49	12.8	25.8	22.5	12.5	36.1	4,300

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Restricted to women age 15-49

Table 15.7 Prescribed medications

Percentage of respondents age 15 and older who report taking prescribed medications daily or regularly, and among women and men who are taking prescribed medications regularly, the number of medications taken, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who report taking prescribed medications daily or regularly	Number of respondents	Among respondents who report taking prescribed medications daily or regularly, the number of medications taken			
			1	2-3	4 or more	Number of respondents
Age						
15-24	7.3	2,670	58.5	32.0	9.5	194
25-34	14.0	2,353	67.1	26.4	6.5	330
35-44	25.1	1,766	57.2	33.9	8.9	443
45-54	38.3	1,358	43.8	39.6	16.6	519
55-64	50.6	1,106	36.6	41.1	22.4	560
65+	58.9	1,083	27.1	47.5	25.4	638
Population group						
Black African	23.0	8,704	47.9	38.5	13.6	1,999
White	54.5	577	34.4	39.0	26.6	315
Coloured	34.6	851	35.3	37.9	26.8	295
Indian/Asian	35.7	196	(27.3)	(47.5)	(25.2)	70
Other	*	9	*	*	*	5
Sex						
Male	19.0	4,210	38.9	38.8	22.3	800
Female	30.7	6,126	46.8	38.6	14.6	1,883
Employment (past 12 months)						
Not employed	27.1	6,237	41.1	39.1	19.8	1,688
Employed for cash	19.1	3,457	57.2	32.8	10.0	662
Employed not for cash	51.9	642	35.9	48.4	15.7	333
Health insurance[1]						
Has insurance	36.4	1,650	36.0	42.3	21.6	601
Does not have insurance	24.0	8,686	46.9	37.6	15.5	2,083
Residence						
Urban	27.0	6,870	41.6	39.4	19.0	1,852
Non-urban	24.0	3,466	50.7	37.2	12.1	831
Province						
Western Cape	37.7	1,178	33.9	40.9	25.2	445
Eastern Cape	25.9	1,223	50.3	36.8	12.9	317
Northern Cape	29.6	212	49.1	41.1	9.7	63
Free State	30.2	532	42.8	39.5	17.8	160
KwaZulu-Natal	26.9	1,874	46.3	37.5	16.2	503
North West	20.3	708	53.4	37.5	9.1	143
Gauteng	22.9	2,779	38.9	40.4	20.8	635
Mpumalanga	26.8	799	57.2	34.0	8.8	214
Limpopo	19.7	1,032	51.3	38.9	9.8	203
Education						
No education	44.5	712	40.7	45.4	13.9	317
Primary incomplete	36.9	1,145	40.1	39.4	20.5	422
Primary complete	30.0	504	43.9	39.6	16.5	151
Secondary incomplete	22.2	4,625	47.7	36.7	15.6	1,026
Secondary complete	20.0	2,228	44.3	36.7	19.0	445
More than secondary	28.7	1,122	43.9	39.9	16.2	322
Wealth quintile						
Lowest	20.0	1,950	52.4	37.4	10.2	389
Second	22.4	1,991	54.4	36.3	9.3	446
Middle	23.4	2,136	48.9	31.6	19.4	499
Fourth	27.5	2,085	43.6	41.3	15.1	574
Highest	35.6	2,175	32.5	43.4	24.2	775
Total 15+	26.0	10,336	44.4	38.7	16.9	2,684

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Health insurance includes medical aid, a medical benefit scheme, a provident scheme, or a hospital plan that helps pay for health care or drug services

Table 15.8 Source of payment for prescribed medications

Among respondents age 15 and older who take prescribed medications regularly, the source of payment for most medications that are prescribed, and among respondents whose medications are paid for by a public clinic or hospital, percentage sent away from the clinic in the past 12 months because a medication was not in stock, according to background characteristics, South Africa DHS 2016

	Source of payment for most medications that are prescribed						Among respondents whose medications are paid for by a public clinic or hospital	
Background characteristic	Respondent	Family/ friend	Medical Aid	Public clinic or hospital	Other	Number of respon-dents	Percentage sent away from the clinic in the last 12 months because medication was not in stock	Number of respondents
Age								
15-24	7.4	18.8	7.0	66.8	0.0	194	10.8	129
25-34	11.6	2.9	7.4	77.8	0.2	330	11.9	257
35-44	9.9	0.8	14.9	74.4	0.0	443	13.1	329
45-54	13.9	0.6	16.9	67.5	1.1	519	22.6	351
55-64	10.5	0.4	17.3	71.1	0.7	560	23.6	398
65+	9.8	1.9	21.3	66.9	0.0	638	28.0	427
Population group								
Black African	7.9	2.1	7.3	82.3	0.5	1,999	20.1	1,645
White	26.2	3.2	64.1	6.6	0.0	315	*	21
Coloured	10.3	2.7	20.0	66.7	0.4	295	18.3	196
Indian/Asian	(26.4)	(7.6)	(27.1)	(38.8)	(0.0)	70	*	27
Other	*	*	*	*	*	5	*	2
Sex								
Male	15.5	3.5	19.8	60.7	0.4	800	20.0	486
Female	8.8	2.1	14.1	74.6	0.4	1,883	20.2	1,405
Employment (past 12 months)								
Not employed	7.7	2.9	11.3	78.0	0.1	1,688	21.6	1,317
Employed for cash	17.9	2.4	19.8	59.1	0.8	662	12.0	391
Employed not for cash	12.5	0.7	31.0	54.8	1.1	333	26.6	183
Health insurance[1]								
Has insurance	16.4	2.3	69.0	11.2	1.1	601	22.3	67
Does not have insurance	9.2	2.5	0.5	87.5	0.2	2,083	20.0	1,823
Residence								
Urban	12.6	2.6	20.5	63.9	0.4	1,852	19.1	1,183
Non-urban	6.9	2.4	5.3	85.1	0.2	831	21.8	708
Province								
Western Cape	13.7	3.4	26.9	55.8	0.2	445	15.9	248
Eastern Cape	13.2	1.3	15.1	70.4	0.0	317	19.5	223
Northern Cape	4.0	1.5	7.9	86.2	0.3	63	14.7	54
Free State	11.7	0.5	10.9	76.6	0.3	160	23.7	123
KwaZulu-Natal	7.0	2.1	11.1	79.1	0.6	503	17.4	398
North West	12.9	9.2	7.4	69.4	1.0	143	28.1	100
Gauteng	12.6	2.5	20.4	63.9	0.6	635	24.1	406
Mpumalanga	5.6	1.2	7.8	85.5	0.0	214	16.2	183
Limpopo	10.4	1.8	11.0	76.8	0.0	203	22.9	156
Education								
No education	7.5	1.7	3.9	86.8	0.2	317	21.1	275
Primary incomplete	4.4	0.3	1.7	93.5	0.1	422	22.5	394
Primary complete	5.6	2.0	4.2	87.6	0.6	151	20.3	133
Secondary incomplete	7.4	2.2	8.9	81.4	0.0	1,026	19.4	835
Secondary complete	20.1	3.3	30.8	44.4	1.4	445	19.3	198
More than secondary	23.1	6.0	53.0	17.3	0.6	322	11.5	56
Wealth quintile								
Lowest	4.7	0.4	0.9	94.0	0.0	389	16.7	366
Second	4.7	3.0	1.2	91.0	0.2	446	17.4	406
Middle	8.1	1.7	2.9	87.2	0.1	499	22.1	435
Fourth	9.5	3.8	9.3	76.9	0.6	574	18.2	442
Highest	20.2	2.9	45.0	31.2	0.7	775	29.8	242
Total 15+	10.8	2.5	15.8	70.5	0.4	2,684	20.1	1,891

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Health insurance includes medical aid, a medical benefit scheme, a provident scheme, or a hospital plan that helps pay for health care or drug services

Table 15.9 Use of prescribed medication for common chronic conditions

The number and percentage of men and women using prescribed medication regularly and the number and percentage of all regularly used prescribed medications for tuberculosis, asthma and chronic bronchitis, diabetes, high cholesterol or triglycerides, hypertension, heart or stroke-related conditions, arthritis, osteoporosis, epilepsy, HIV, pain, and psychiatric conditions, using Anatomical Therapeutic Chemical Classification (ATC) codes, South Africa DHS 2016

		Women		Men		Total	
Chronic condition	ATC code	Number	Percentage	Number	Percentage	Number	Percentage
Tuberculosis	J04A	14	0.3	7	0.2	21	0.3
Asthma and chronic bronchitis	R03/R05	45	0.9	23	0.7	68	0.8
Diabetes	A10	107	2.2	65	2.0	172	2.1
High cholesterol or triglycerides	C10A	85	1.7	62	2.0	147	1.8
Hypertension	C02/C03/C07/C08/C09	706	14.4	298	9.4	1,004	12.5
Heart and stroke-related conditions	B01AC/C01A/C01B/C01DA	122	2.5	48	1.5	170	2.1
Arthritis	M01A/M01B/M01C, M04	56	1.2	28	0.9	84	1.0
Osteoporosis	A12, M05B	14	0.3	4	0.1	17	0.2
Epilepsy	N03	29	0.6	18	0.6	47	0.6
HIV	J05AE/J05AF/J05AG/J05AR	272	5.6	105	3.3	377	4.7
Pain	M03, NO2	53	1.1	30	1.0	84	1.0
Psychiatric conditions	N04AB/N05/N06	42	0.9	23	0.7	64	0.8
Other chronic conditions		60	1.2	16	0.5	75	0.9
Undisclosed/refused		144	2.9	116	3.7	260	3.2
Any condition		1,023	20.9	456	14.4	1,480	18.3
Number of respondents		4,899		3,168		8,067	

ADULT MORBIDITY 16

Key Findings

- ***Self-reported health status:*** 12% of women and 8% of men reported that they are in "poor" health. The proportion of respondents self-reporting poor health increases with age, from 4% among women and 3% among men age 15-24 to 28% among women and 21% among men age 65 and older.
- ***Self-reported prevalence of common chronic conditions:*** High blood pressure was the most common condition reported among both women (23%) and men (13%).
- ***Pain:*** Over a quarter of adults (29% of women and 26% of men) report being troubled by pain either all of the time or on and off; 20% of women and 16% of men report experiencing chronic pain. Chronic pain is most commonly experienced in either the arms, hands, hips, legs, or feet (46% of women and 40% of men) or the back (31% of women and 30% of men).
- ***Hypertension:*** The prevalence of hypertension (measured) has nearly doubled since 1998, from 25% to 46% among women and from 23% to 44% among men.
- ***Breathing difficulties:*** 22% of women and 27% of men report that they woke up with breathing difficulties and/or a coughing attack in the previous 12 months.
- ***Symptoms of asthma:*** The prevalence of asthma symptoms is 3%-4% among adults.
- ***Symptoms of chronic obstructive pulmonary disease (COPD):*** The prevalence of COPD symptoms among women and men is less than 2%.
- ***Diabetes:*** 13% of women and 8% of men age 15 and older have an adjusted HbA1c level of 6.5% or above, indicating that they are diabetic. Very high proportions of women (64%) and men (66%) are pre-diabetic (adjusted HbA1c level of 5.7%-6.4%).
- ***Anaemia:*** Prevalence of anaemia is 31% among women and 17% among men.

Population-based information on nonfatal health outcomes such as disease prevalence estimates is scarce. The SADHS 1998 introduced an adult health module to fill this gap, particularly for noncommunicable diseases. These chronic conditions, including cardiovascular diseases, chronic respiratory diseases, cancers, and diabetes, are major contributors to mortality in South Africa, as well as ongoing morbidity.

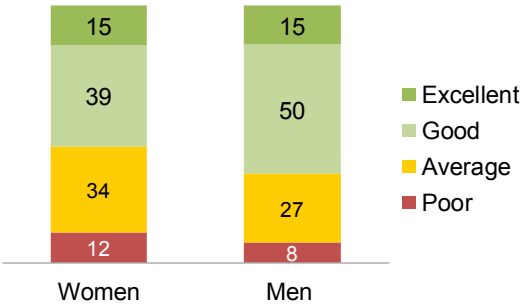
This chapter presents prevalence estimates for common chronic conditions, respiratory conditions, and pain based on self-reported information among respondents age 15 and older who completed the adult health module. In addition, data on hypertension, anaemia, and diabetes prevalence are presented.

16.1 Self-assessment of Health

Self-reported health status is considered to be a useful index of overall health. Respondents were asked to assess their health in broad categories: excellent, good, average, or poor. A majority of women reported that they were in excellent (15%), good (39%), or average (34%) health; 12% reported that they were in poor health (**Figure 16.1** and **Table 16.1.1**). Most men also self-reported excellent (15%), good (50%), or average (27%) health; 8% reported that they were in poor health (**Figure 16.1** and **Table 16.1.2**).

***Figure 16.1* Self-reported health status**

Percent distribution of self-reported health status among adults age 15+

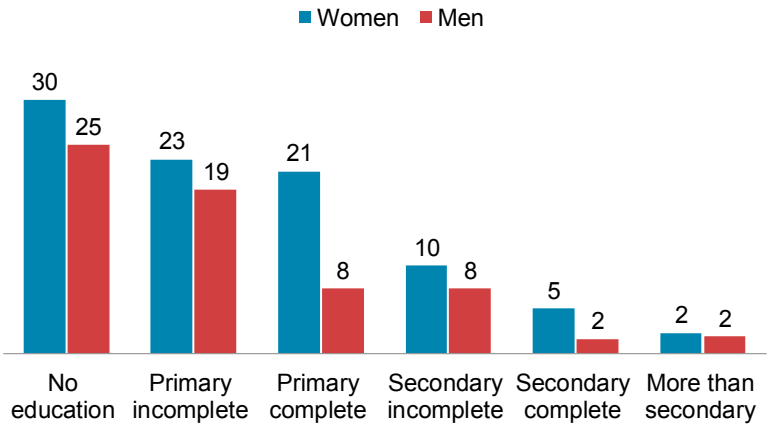


Patterns by background characteristics

- The proportion of respondents self-reporting poor health increases with age, from 4% among women and 3% among men age 15-24 to 28% among women and 21% among men age 65 and older. Conversely, the proportion who report excellent health declines steadily with increasing age.
- Black African women (13%) and men (9%) are more likely to report poor health than women (3%-8%) and men (2%-7%) from other population groups.
- Reports of poor health are more common among women and men who are HIV positive (17% and 15%, respectively) than among women and men who are HIV negative (12% and 9%, respectively) and those whose HIV status is unknown because they were not tested in the SADHS (10% and 6%, respectively).
- The percentage of women who report poor health varies from a low of 8% in Gauteng, North West, Northern Cape, and Western Cape to a high of 20% in Mpumalanga. The percentage of men who report poor health ranges from 3% in Western Cape to 14% in Eastern Cape.
- Self-reported poor health decreases with increasing education and wealth among both women and men, and the pattern according to education is especially striking (**Figure 16.2**).

***Figure 16.2* Self-reported poor health by education**

Percentage of adults age 15+ with self-reported poor health status



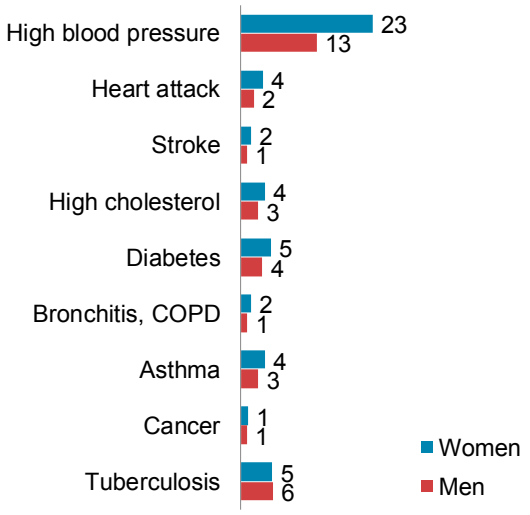
16.2 Self-reported Prevalence of Common Chronic Conditions

To ascertain the prevalence of chronic conditions, respondents were asked if a doctor, nurse, or other health worker had informed them that they had selected conditions. Those who had been diagnosed with a specific condition were asked whether they received treatment at the time of the diagnosis. **Figure 16.3** presents the self-reported prevalence of nine chronic conditions. It should be noted that chronic conditions are frequently under-reported or incorrectly reported by patients, and therefore the results should be interpreted with caution.

High blood pressure is the most common chronic condition reported among both women and men (23% and 13%, respectively) (**Figure 16.3**). Most but not all respondents (83% of women and 86% of men) reported that they received treatment for their high blood pressure at the time of diagnosis (**Table 16.2**). Other chronic conditions were reported by 6% or fewer respondents.

***Figure 16.3* Chronic conditions based on self-reports**

Percentage of women and men age 15+ with self-reported chronic conditions



Comparison with the SADHS 1998:

- Self-reported high blood pressure has increased since 1998, from 19% to 23% among women and from 8% to 13% among men.
- Self-reported tuberculosis has increased from 2% to 5% among women and from 3% to 6% among men.
- Self-reported high cholesterol among women has increased from 1% to 4%.
- Self-reported bronchitis, emphysema, or chronic obstructive pulmonary disease (COPD) has decreased from 5% to 2% among women and from 4% to 1% among men.

16.3 Experience with Pain

Limited data about the prevalence of chronic pain experienced by the general population tend to make the burden of pain invisible, despite the considerable impact on individuals, their families, health services, and the economy. Nonetheless, burden of disease estimates show that lower back pain, neck pain, and migraines are among the leading causes of years of life lost due to disability globally (GBD 2016). Goldberg and McGee (2011) advocate for the need to consider chronic pain not only as a medical issue, but from a public health perspective as well. They describe the multi-faceted nature of chronic pain, which often involves interactions among the physical, psychological, and social determinants of health, including mental and physical stress at work, socioeconomic status, rurality, occupational status, neighbourhood, race, and education.

The International Association for the Study of Pain (IASP) defines pain as "an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage" (IASP 1994). Furthermore, pain providing no obvious biological value that has persisted beyond the normal tissue healing process (usually taken to be 3 months) is classified as chronic pain.

16.3.1 Prevalence of Pain

The SADHS 2016 is the first national survey to gather information on pain for South Africa. Respondents were asked if they were troubled by pain or discomfort all of the time or on and off. Those who responded in the affirmative were asked if they had experienced the pain or discomfort for more than 3 months and the site of the pain or discomfort.

Pain prevalence

Experience pain or discomfort all of the time or on and off

Chronic pain prevalence

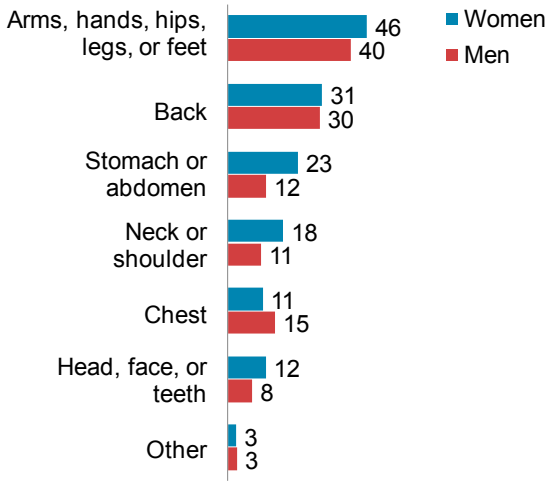
Experience pain or discomfort all of the time or on and off for more than 3 months

Sample: Women and men age 15+

Over a quarter of adults (29% of women and 26% of men) report being troubled by pain either all of the time or on and off; 20% of women and 16% of men report experiencing chronic pain (**Table 16.3**). Chronic pain is most commonly experienced in either the arms, hands, hips, legs, or feet (46% of women and 40% of men) or the back (31% of women and 30% of men) (**Figure 16.4**).

Figure 16.4 **Site of chronic pain**

Percentage of women and men age 15+

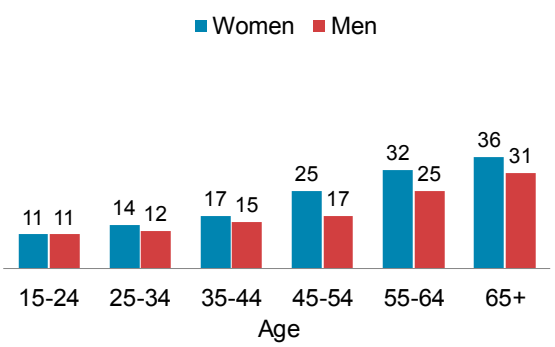


Patterns by background characteristics

- As expected, the prevalence of chronic pain increases with age (**Figure 16.5**). One in 10 (11%) respondents age 15-24 experience chronic pain, as compared with one in three (31%-36%) respondents age 65 and older. The most common site of pain among the youngest women (age 15-24) is the stomach or abdomen (41%), while the most common site among the youngest men is the back (31%). The most common sites of pain among those age 65 and older are the arms, hands, hips, legs, and/or feet (68% of women and 51% of men) (**Table 16.4**).

Figure 16.5 **Chronic pain by age**

Percentage of women and men



- The prevalence of chronic pain varies by province. The highest prevalence is in Northern Cape (27%), followed by Eastern Cape (24%) and Mpumalanga (24%). The lowest prevalence is in Free State (12%) and KwaZulu-Natal (13%) (**Table 16.3**).

- The prevalence of pain decreases steadily with increasing education. The percentage of respondents experiencing pain or discomfort all of the time or on and off drops from 43% among those with no education to 21% among those with more than a secondary education. Similarly, the prevalence of chronic pain falls steadily from 31% among respondents with no education to 12% among those with more than a secondary education.

16.3.2 Tooth and Mouth Pain

Tooth and mouth pain prevalence
Experience tooth or mouth pain or discomfort in the past 12 months
Sample: Women and men age 15+

Respondents were asked whether their teeth or mouth had caused pain or discomfort in the past 12 months and, if so, whether they got treatment the last time they had the problem and from whom.

The prevalence of tooth or mouth pain in the past 12 months was 11%, and 57% of those with pain received treatment the last time they had a problem. Two-thirds of respondents who received treatment received it from a dentist, oral hygienist, or dental therapist (**Table 16.5**). The main reason cited for not seeking treatment was that the problem went away (57% of women and 69% of men). However, 11% of women and 7% of men who did not receive treatment reported that treatment was too expensive, and 7% of women and men reported that no service was available or that it was too far (**Table 16.6**).

Patterns by background characteristics

- The prevalence of tooth or mouth pain ranges from 9% to 15% across all background characteristics shown in **Table 16.5**.
- People experiencing teeth or mouth pain are more likely to seek treatment if they have health insurance (76%) than if they do not (53%).
- White respondents (89%) are more likely than Coloured (52%) and Black African (54%) respondents to receive treatment for their tooth or mouth pain.

16.4 HYPERTENSION

Elevated blood pressure is a major risk factor for cardiovascular diseases such as stroke and ischaemic heart disease, which were the second and fourth leading causes of mortality, respectively, in South Africa in 2012 (Pillay-van Wyk et al. 2016). Hypertension frequently goes undiagnosed due to an absence of symptoms, particularly in the early stages of the disease (WHO 2013). Furthermore, it is often poorly controlled despite the availability of cost-effective and efficacious blood pressure lowering medications.

Among respondents who were interviewed with the adult health module, 82% of women and 77% of men had their blood pressure measured as part of the SADHS 2016. By province, this percentage ranged from 63% in Western Cape to 92% in North West among women and from 54% in Western Cape to 87% in North West among men (data not shown).

Hypertension

Three blood pressure measurements were taken, and the average* of the second and third measurements was used to classify respondents according to internationally recommended categories (WHO 1999). Respondents were classified as having hypertension if they had a systolic blood pressure level of 140 mmHg or above or a diastolic blood pressure level of 90 mmHg or above at the time of the survey or were currently taking antihypertensive medication to control their blood pressure.

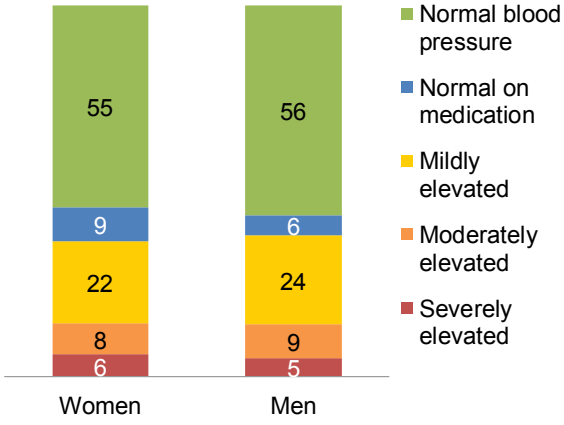
Blood pressure category	Systolic (mmHg)		Diastolic (mmHg)
Optimal	<120	AND	<80
Normal	120-129	OR	80-84
High normal	130-139	OR	85-89
Level of hypertension			
Grade 1, mildly elevated	140-159	OR	90-99
Grade 2, moderately elevated	160-179	OR	100-109
Grade 3, severely elevated	180+	OR	110+

Note: Respondents whose blood pressure would fall in two different rows based on their systolic and diastolic levels are classified according to the highest blood pressure row they fall in on either of the two measures.
*If only two measurements were available, the second measurement was used to classify the respondent as having hypertension; if only one measurement was available, it was used to classify the respondent.

The SADHS 2016 measurements show that 46% of women and 44% of men have hypertension. These findings include 9% of women and 6% of men who have blood pressure in the normal range but are taking medication to control their blood pressure (**Figure 16.6**). The prevalence of combined moderate and severe hypertension (systolic ≥160 mmHg or diastolic ≥100 mmHg) is substantial among both women (15%) and men (14%). Mean systolic and diastolic blood pressures are similar among women (systolic, 129 mmHg; diastolic, 84 mmHg) and men (systolic, 132 mmHg; diastolic, 85 mmHg) (**Table 16.7.1** and **Table 16.7.2**).

Figure 16.6 **Blood pressure status**

Percent distribution of women and men age 15+



The percentage of respondents who self-reported that they have been diagnosed with high blood pressure (23% of women and 13% of men) (**Table 16.2**) is much lower than the hypertension prevalence as measured in the survey. Among those with hypertension, only 20% of women and 13% of men have it under control (**Table 16.7.1** and **Table 16.7.2**).

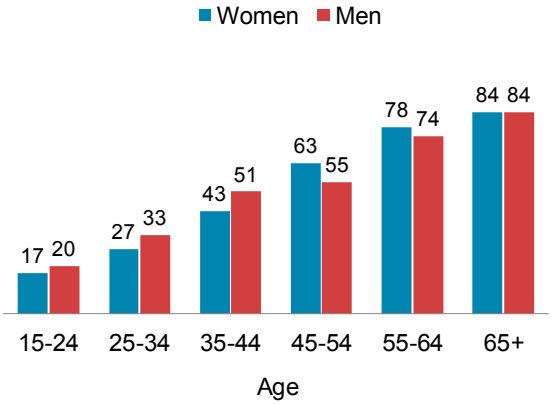
Comparison with the SADHS 1998: Since 1998, national mean systolic and diastolic blood pressure levels among women and men have risen by 4-11 mmHg across all ages. Over the same period, the prevalence of hypertension has nearly doubled, from 25% to 46% among women and from 23% to 44% among men. It should be noted, however, that different instruments were used to measure blood pressure in the two surveys (Omron M1 in 1998 and Omron 1300 in 2016).

Patterns by background characteristics

- The prevalence of hypertension rises steadily with increasing age, peaking at 84% among women and men age 65 and older (**Figure 16.7**).
- White women and men have the highest prevalence of hypertension (60% and 66%, respectively), and Black African women and men have the lowest (44% and 41%, respectively).
- By province, the prevalence of hypertension among women is highest in Free State (54%), while the prevalence among men is highest in Western Cape (59%). The prevalence among both women (34%) and men (29%) is lowest in Limpopo.

***Figure 16.7* Hypertension by age**

Percentage of women and men with hypertension

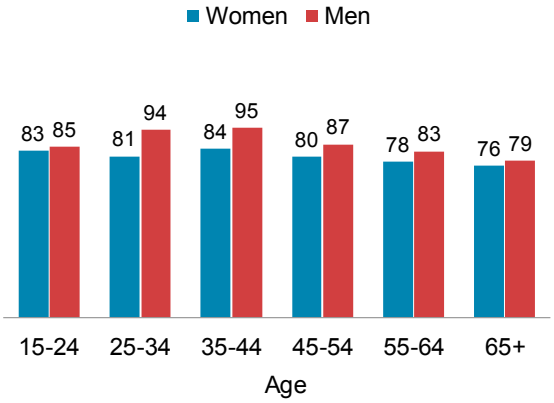


- The prevalence of hypertension falls from a high of 76% among women and 66% among men with no education to a low of 35% among women with a secondary complete education and to 37% among men with a secondary incomplete education. There is no clear trend according to wealth, and the prevalence does not vary to the extent it does by education, especially among women.
- Data on the prevalence of hypertension by health status measures are presented in **Table 16.8.1** and **Table 16.8.2**. Twenty-nine percent of women and 34% of men have hypertension but were never told by a doctor or a nurse that they had hypertension.

Tables 16.9.1 and **16.9.2** present information on blood pressure status and treatment. Twenty-two percent of women and 15% of men report that they are taking medication to lower their blood pressure. Overall, 9% of women are taking medication to control their blood pressure and have a normal blood pressure level, while 13% of women are taking medication to control their blood pressure but are still hypertensive. Among men, 6% are taking medication to control their blood pressure and have normal blood pressure, and 9% are taking medication to control their blood pressure but are still hypertensive. In total, among those with hypertension, 80% of women and 87% of men have uncontrolled hypertension. Among both women and men, levels of uncontrolled hypertension are high across all ages (**Figure 16.8**) but generally decrease with increasing household wealth.

***Figure 16.8* Uncontrolled hypertension by age**

Among women and men with hypertension, percentage with uncontrolled hypertension



16.5 Chronic Respiratory Disease

Chronic respiratory diseases are diseases of the airways and other structures of the lung that affect the essential functions of breathing. Chronic obstructive pulmonary disease (COPD), a preventable but incurable disorder of the airways, was a leading cause of global mortality in 2015 (WHO 2017). The main cause of COPD is tobacco smoking, but in South Africa additional risk factors include biomass fuel exposure/household pollution, tuberculosis, HIV, and mining exposure (Viviers and van-Zyl Smit 2015).

Asthma, which results from inflammation and narrowing of the air passages of the lungs and leads to attacks of breathlessness and wheezing, is also a common chronic respiratory disease.

A diagnosis of COPD is not straightforward, and the disease may be misdiagnosed as asthma. Furthermore, a correct clinical diagnosis requires the use of spirometry (Viviers and van-Zyl Smit 2015), which is generally not available in local clinic settings and was not undertaken in the SADHS 2016. Instead, a series of questions related to difficulties with breathing were used to identify the prevalence of COPD and asthma symptoms.

Shortness of breath

- Respondents have less breath when exerting themselves compared with others their age.
- In the past 12 months, respondents have woken up with a feeling of tightness in their chest, an attack of shortness of breath, or an attack of coughing.

Asthma symptoms

In the past 12 months, respondents have experienced wheezing and shortness of breath.

COPD symptoms

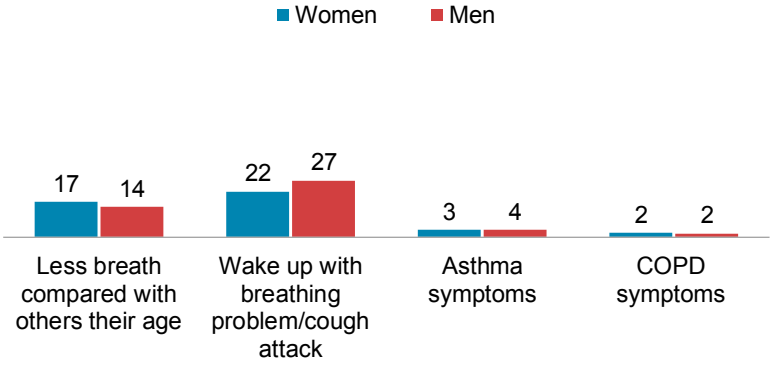
Respondents have experienced coughing with phlegm on most days for ≥3 months.

Sample: Women and men age 15+

Seventeen percent of women and 14% of men report experiencing less breath compared with others their age. The proportions of women and men who woke up with breathing difficulties and/or a coughing attack in the 12 months before the survey are 22% and 27%, respectively. The proportions of respondents with asthma symptoms are lower (3% among women and 4% among men). Less than 2% of women and men have symptoms of COPD (**Figure 16.9**).

Figure 16.9 **Self-reported symptoms of respiratory disease**

Percentage of women and men age 15+



Comparison with the SADHS 1998: The prevalence of asthma symptoms and the prevalence of COPD symptoms were both estimated in 1998; however, the questions used to produce the estimates were not the same as in 2016. Still, the prevalence of asthma symptoms appears to have declined from 9% to 3% among women and from 7% to 4% among men. The prevalence of COPD symptoms continues to be low among both women (3% in 1998 and 2% in 2016) and men (2% in both years).

Patterns by background characteristics

- The prevalence of all breathing difficulties generally increases with age (**Tables 16.10.1** and **16.10.2**).
- By population group, the percentage of respondents who report having less breath when exerting themselves compared with others their age is highest among Indian/Asian women (25%) and men (27%). Black African women (23%) and men (29%) are most likely to wake up with breathing difficulties and/or a coughing attack.

- The prevalence of COPD symptoms among men declines with increasing education, from 4% among those with no education or a primary incomplete education to 0.2% among those with more than a secondary education.

16.6 DIABETES

Diabetes mellitus is a metabolic disorder characterised by chronic hyperglycaemia (raised blood sugar levels) that occurs because of defects in insulin secretion, insulin action, or both (Expert Committee on the Diagnosis and Classification of Diabetes Mellitus 1997). Prolonged elevated blood sugar levels, found in poorly controlled diabetes, can result in damage to the nerves, eyes, kidneys, and heart. According to WHO (2011b), different tests can be used for diagnosing diabetes: a fasting plasma glucose test, a 2-hour glucose tolerance test, and the glycated haemoglobin (HbA1c) test. An advantage of HbA1c testing is that it does not require fasting. It should be noted that these tests do not necessarily result in the same individuals being classified as diabetic (ADA 2018).

Diabetes measurement using adjusted HbA1c

An HbA1c value of ≥6.5% is used to classify an individual as having impaired glucose homeostasis, an indicator of diabetes (International Expert Committee 2009). An HbA1c value between 5.7% and 6.4% classifies an individual as being pre-diabetic, as defined by the American Diabetes Association (ADA 2010).

Calibration

HbA1c is usually measured using venous or capillary blood samples. In the SADHS 2016, HbA1c was measured using dried blood spot (DBS) specimens. To adjust HbA1c measurements for this difference in specimen type, the following equation was used: venous = (DBS-0.228)/0.9866. This equation was developed by Affan et al. 2014 and is based on a review and meta-analysis of immunoturbidimetry studies.

Cautions:

- There is no validated calibration factor for adjusting HbA1c results based on DBS specimen test results.
- The calibration equation used for the SADHS was not developed specifically for the South African population.
- Some diabetics who have good glucose control could have HbA1c values below 6.5%.

In the SADHS 2016, HbA1c testing of dried blood spot (DBS) specimens was used to estimate diabetes prevalence. Among respondents who were interviewed with the adult health module, 66% of women and 59% of men age 15 and older successfully had their HbA1c measured (data not shown). The methodology used to conduct HbA1c testing is described in Chapter 1.

Standard HbA1c measurement is usually based on blood samples rather than DBS specimens. To account for this difference in specimen type, a calibration factor was applied (see box above). However, the calibration factor used has not been validated, and therefore caution must be applied in interpreting the results of the HbA1c testing. Unadjusted HbA1c results are presented in **Table 16.11.1** and **Table 16.11.2** but are not described in the text.

Adjusted HbA1c results are presented in **Table 16.12.1** and **Table 16.12.2**. Thirteen percent of women and 8% of men have an adjusted HbA1c level of 6.5% or above, indicating that they are diabetic. Most women (64%) and men (66%) have an adjusted HbA1c measurement between 5.7% and 6.4% and are therefore classified as pre-diabetic.

The prevalence of diabetes in women and men based on self-reports (5% and 4%, respectively) presented in **Table 16.2** is lower than the prevalence indicated by HbA1c testing. Among those who have never been

diagnosed with diabetes, 10% of women and 6% of men have adjusted HbA1c levels indicating that they are diabetic; 67% of both women and men who reported that they were never diagnosed with diabetes have adjusted HbA1c levels indicating that they are pre-diabetic. Thus, a large proportion of adults are either not aware of their condition or not aware that they are at risk for diabetes.

Patterns by background characteristics

- The prevalence of diabetes (adjusted HbA1c level ≥6.5%) generally increases with age (**Figure 16.10**), reaching a peak of 30% among women age 65 or older and 23% among men age 55-64.

- The prevalence of diabetes (adjusted HbA1c level ≥6.5%) increases with increasing body mass index (BMI) (**Figure 16.11**), peaking at 23% among obese women and 24% among obese men.

- Among women who reported that they were on diabetes medication, 85% have an adjusted HbA1c level of 6.5% or above, indicating that their diabetes is not controlled. Similar results are observed for men.

- By province, women in Eastern Cape have the highest prevalence (18%) of diabetes (adjusted HbA1c level ≥6.5%) and women in North West and Gauteng have the lowest (9%). Among men, the prevalence is highest in Western Cape (13%) and lowest in North West (4%).

Figure 16.10 **Diabetes by age**

Percentage of women and men with diabetes (adjusted HbA1c ≥6.5%)

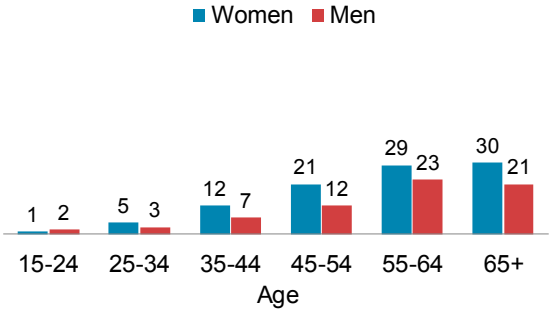
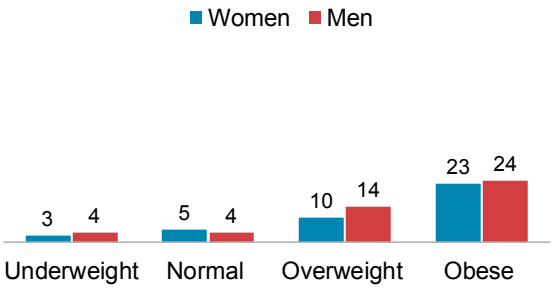


Figure 16.11 **Diabetes by nutritional status**

Percentage of women and men age 15+ with diabetes (adjusted HbA1c ≥6.5%)



- Women with no education (29%) have a higher prevalence of diabetes (adjusted HbA1c level ≥6.5%) than women in the other education categories (9%-21%). Among men, the prevalence of diabetes displays a U-shaped pattern: the prevalence is higher among men with no education or a primary incomplete education (11%-12%) and those with more than a secondary education (16%) than among men in the other education categories (6%-7%).

- While there is no discernible pattern among women, the prevalence of diabetes (adjusted HbA1c level ≥6.5%) generally increases with increasing wealth among men.

16.7 ANAEMIA

Anaemia prevalence

Anaemia is defined as a blood haemoglobin level of less than 11.0 g/dl in pregnant women, less than 12.0 g/dl in non-pregnant women, and less than 13.0 g/dl in men. Haemoglobin levels are adjusted for altitude in primary sampling units (PSUs) above 1,000 metres and for cigarette smoking among women and men.

Sample: Women and men age 15+

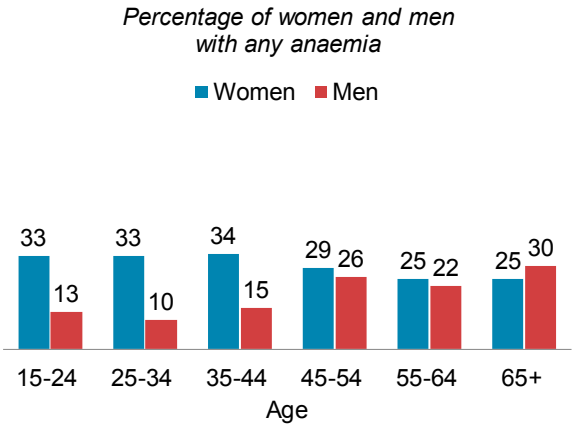
Anaemia is a condition that is marked by low levels of haemoglobin in the blood. It may arise from iron deficiency, malaria, chronic infections, hookworm and other helminths, other nutritional deficiencies, and genetic conditions. Haemoglobin levels were measured for 72% of women and 66% of men who were

interviewed with the adult health module and were eligible for biomarkers. Observed haemoglobin levels, adjusted for altitude and smoking status, indicate that the prevalence of anaemia is 31% among women and 17% among men age 15 and older (**Table 16.13.1** and **Table 16.13.2**). Most women who are anaemic are mildly anaemic.

Patterns by background characteristics

- The proportion of women with any anaemia is higher in the reproductive age group than among older women; specifically, 33% of women age 15-49 are anaemic, as compared with 25% of women age 55 or older**.**
- In contrast with women, older men are more likely to be anaemic than younger men; 26% of men age 45-54, 22% of men age 55-64, and 30% of men age 65 and older are anaemic, compared with 10%-15% of men age 15-44 (**Figure 16.12**).
- By population group, the prevalence of anaemia is highest among Black African women (32%) and lowest among White women (11%) (**Table 16.13.1**)

Figure 16.12 **Prevalence of anaemia in adults by age**



- Twenty-two percent of pregnant women are moderately anaemic.
- Anaemia prevalence generally declines with increasing education among men but not women.

List of Tables

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- **Table 16.3 Experience with pain**
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Table 16.1.1 Self-assessment of health: Women

Percent distribution of women age 15 and older by their self-assessment of their health status, according to background characteristics, South Africa DHS 2016

Background characteristic	Health status self-assessment				Total	Number of women
	Poor	Average	Good	Excellent		
Age						
15-24	3.9	24.5	44.5	27.0	100.0	1,429
25-34	5.3	28.5	49.5	16.7	100.0	1,391
35-44	11.4	34.7	38.9	15.0	100.0	1,022
45-54	14.5	37.2	37.7	10.6	100.0	866
55-64	21.9	45.6	26.0	6.5	100.0	701
65+	27.7	43.4	24.3	4.6	100.0	719
Population group						
Black African	12.8	34.0	37.8	15.4	100.0	5,170
White	3.4	22.9	54.1	19.6	100.0	320
Coloured	8.0	32.5	47.1	12.3	100.0	516
Indian/Asian	7.0	48.0	26.0	18.9	100.0	114
Other	*	*	*	*	100.0	6
HIV status						
HIV positive	16.5	37.6	34.2	11.7	100.0	898
HIV negative[1]	11.7	34.4	38.6	15.3	100.0	2,894
Not tested in survey	10.1	31.0	42.0	16.9	100.0	2,334
Residence						
Urban	10.4	32.6	39.9	17.2	100.0	3,996
Non-urban	14.5	35.4	38.0	12.0	100.0	2,130
Province						
Western Cape	8.2	29.0	49.5	13.3	100.0	703
Eastern Cape	19.1	37.0	32.9	11.0	100.0	730
Northern Cape	8.1	33.4	46.7	11.8	100.0	127
Free State	14.8	39.3	35.9	10.0	100.0	325
KwaZulu-Natal	14.3	37.8	26.6	21.4	100.0	1,191
North West	7.7	32.5	49.1	10.8	100.0	398
Gauteng	7.5	34.1	39.3	19.2	100.0	1,534
Mpumalanga	19.5	30.6	39.7	10.2	100.0	473
Limpopo	9.6	25.7	52.4	12.4	100.0	646
Education						
No education	29.8	46.9	19.7	3.6	100.0	495
Primary incomplete	22.8	42.9	27.2	7.1	100.0	664
Primary complete	21.4	40.0	30.1	8.6	100.0	293
Secondary incomplete	10.3	32.8	40.3	16.6	100.0	2,695
Secondary complete	5.3	27.1	47.0	20.6	100.0	1,328
More than secondary	2.4	27.4	50.4	19.9	100.0	652
Wealth quintile						
Lowest	16.2	37.0	34.8	12.0	100.0	1,163
Second	13.9	34.1	40.2	11.9	100.0	1,152
Middle	12.4	34.0	38.7	14.9	100.0	1,242
Fourth	11.6	32.4	35.8	20.2	100.0	1,258
Highest	5.8	30.8	46.2	17.2	100.0	1,311
Total 15+	11.8	33.6	39.2	15.4	100.0	6,126

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes a few cases with inconclusive results as per the SADHS HIV testing algorithm shown in Chapter 1, Figure 1.2

Table 16.1.2 Self-assessment of health: Men

Percent distribution of men age 15 and older by their self-assessment of their health status, according to background characteristics, South Africa DHS 2016

Background characteristic	Health status self-assessment				Total	Number of men
	Poor	Average	Good	Excellent		
Age						
15-24	3.1	21.0	52.2	23.7	100.0	1,241
25-34	4.3	23.5	56.8	15.4	100.0	962
35-44	4.2	27.9	57.0	10.9	100.0	744
45-54	14.6	28.3	46.0	11.1	100.0	492
55-64	18.4	36.9	36.8	7.8	100.0	406
65+	20.7	38.9	32.7	7.6	100.0	364
Population group						
Black African	8.7	26.9	49.6	14.8	100.0	3,534
White	2.1	20.8	58.6	18.5	100.0	257
Coloured	3.4	27.5	54.3	14.8	100.0	335
Indian/Asian	6.8	34.5	36.8	21.9	100.0	82
Other	*	*	*	*	100.0	2
HIV status						
HIV positive	15.3	33.4	45.0	6.3	100.0	311
HIV negative[1]	8.8	26.1	50.2	14.9	100.0	2,017
Not tested in survey	5.8	26.3	51.1	16.8	100.0	1,882
Residence						
Urban	6.5	27.0	53.1	13.4	100.0	2,874
Non-urban	11.0	26.2	44.0	18.8	100.0	1,336
Province						
Western Cape	2.7	22.4	60.5	14.4	100.0	476
Eastern Cape	13.6	16.8	48.0	21.6	100.0	493
Northern Cape	8.2	35.9	44.6	11.3	100.0	84
Free State	5.0	41.5	44.9	8.6	100.0	207
KwaZulu-Natal	10.4	38.8	42.0	8.9	100.0	683
North West	5.9	33.6	46.4	14.1	100.0	310
Gauteng	6.2	25.9	56.4	11.6	100.0	1,245
Mpumalanga	7.7	12.2	60.0	20.2	100.0	326
Limpopo	11.8	23.0	34.1	31.1	100.0	386
Education						
No education	24.5	35.7	33.7	6.1	100.0	217
Primary incomplete	19.2	36.0	37.8	7.0	100.0	481
Primary complete	7.6	30.4	52.6	9.4	100.0	212
Secondary incomplete	7.6	23.7	53.1	15.6	100.0	1,930
Secondary complete	1.7	28.4	52.7	17.2	100.0	900
More than secondary	2.0	20.8	53.1	24.1	100.0	470
Wealth quintile						
Lowest	13.2	24.5	52.7	9.7	100.0	787
Second	9.3	23.9	49.4	17.3	100.0	839
Middle	8.6	29.3	48.6	13.6	100.0	894
Fourth	6.0	27.1	50.8	16.1	100.0	827
Highest	3.0	28.6	49.8	18.6	100.0	864
Total 15+	7.9	26.7	50.2	15.1	100.0	4,210

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes a few cases with inconclusive results as per the SADHS HIV testing algorithm shown in Chapter 1, Figure 1.2

Table 16.2 Diagnosis and treatment of various health conditions and diseases

Percentage of women and men age 15 and older who have been diagnosed with specific health conditions or diseases, and among those diagnosed with each condition, percentage who received treatment at the time of diagnosis, South Africa DHS 2016

	Women			Men		
Health condition/disease	Percentage who have been told by a doctor, nurse, or health worker that they had the specific condition/ disease	Among those diagnosed with the condition, percentage who received treatment at time of diagnosis	Number of women with diagnosis	Percentage who have been told by a doctor, nurse, or health worker that they had the specific condition/ disease	Among those diagnosed with the condition, percentage who received treatment at time of diagnosis	Number of men with diagnosis
Tuberculosis	5.4	94.0	330	5.5	95.0	233
High blood pressure	22.9	82.7	1,405	13.0	86.4	547
Heart attack/angina/chest pain	3.8	67.8	234	2.2	69.2	94
Cancer	1.2	90.8	75	1.0	(57.9)	41
Stroke	1.7	78.0	104	1.0	(62.3)	42
High blood cholesterol/fats in blood	4.1	79.9	250	2.9	73.8	123
Diabetes/blood sugar	5.1	86.9	310	3.7	89.9	154
Chronic bronchitis, emphysema, or COPD	1.7	76.9	103	1.1	(74.9)	47
Asthma	4.1	87.9	249	3.0	76.8	124
More than one condition	11.9	na	na	7.3	na	na
Number of respondents	6,126	na	na	4,210	na	na

Note: Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable

Table 16.3 Experience with pain

Percentage of respondents age 15 and older who experience pain or discomfort all of the time or on and off, percentage who have had pain for more than 3 months, and among those who have had pain for more than 3 months, percentage who report specific sites where they experience pain, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage experiencing pain or discomfort all of the time or on and off	Percentage experiencing pain or discomfort all of the time or on and off for more than 3 months	Number of respon-dents	Among respondents who have had pain or discomfort for 3 or more months, percentage who report specific sites where they feel pain:							
				Back	Neck or shoulder	Head, face, or teeth (dental)	Stomach or abdomen	Arms, hands, hips, legs, or feet	Chest	Other	Number of respon-dents
Age											
15-24	18.3	11.3	2,670	23.2	10.9	14.2	29.3	20.4	14.3	3.3	303
25-34	22.7	13.2	2,353	28.3	9.4	14.0	22.9	23.6	11.6	7.2	310
35-44	23.3	16.2	1,766	27.0	12.0	10.9	20.6	39.4	16.3	1.3	286
45-54	33.1	22.0	1,358	37.8	13.0	10.9	18.0	49.5	11.5	0.6	299
55-64	41.1	29.2	1,106	30.6	19.2	6.7	16.0	60.3	9.4	1.5	323
65+	46.5	34.4	1,083	35.1	26.1	8.4	10.9	63.2	13.5	2.0	373
Population group											
Black African	28.3	18.5	8,704	29.4	15.6	11.3	20.4	41.4	13.0	2.8	1,613
White	22.0	15.3	577	45.5	8.5	5.5	8.7	49.1	7.2	1.2	88
Coloured	24.7	19.3	851	34.5	18.2	7.8	14.4	60.9	11.7	2.5	164
Indian/Asian	21.8	13.5	196	*	*	*	*	*	*	*	26
Other	*	*	9	nc	nc	nc	nc	nc	nc	nc	0
Sex											
Male	25.5	15.8	4,210	30.0	10.7	7.8	12.4	40.2	15.3	2.8	664
Female	28.8	20.1	6,126	30.8	18.1	12.3	22.9	45.5	11.3	2.6	1,229
Health insurance[1]											
Has insurance	24.3	15.0	1,650	31.2	16.0	9.6	10.6	50.3	10.1	2.9	248
Does not have insurance	28.1	18.9	8,686	30.4	15.5	10.9	20.5	42.6	13.1	2.6	1,645
Employment (past 12 months)											
Not employed	27.6	19.4	6,237	29.7	16.5	11.6	20.1	45.6	13.1	2.8	1,212
Employed for cash	24.4	14.4	3,457	32.1	12.0	10.1	19.1	35.4	14.4	3.3	498
Employed not for cash	42.5	28.5	642	31.6	19.0	7.0	14.1	53.2	5.7	0.3	183
Residence											
Urban	26.0	17.3	6,870	31.7	14.5	10.1	18.2	41.6	12.5	2.6	1,186
Non-urban	30.4	20.4	3,466	28.6	17.3	11.7	21.0	47.0	13.1	2.8	707
Province											
Western Cape	23.2	16.2	1,178	32.2	16.4	13.1	11.3	57.5	11.6	1.4	191
Eastern Cape	36.8	24.2	1,223	28.5	18.7	14.3	12.5	52.9	9.5	5.1	296
Northern Cape	32.3	26.5	212	24.4	22.4	9.3	21.5	43.5	24.0	3.7	56
Free State	19.9	12.2	532	41.1	22.7	8.5	17.8	59.6	25.4	3.6	65
KwaZulu-Natal	20.3	13.1	1,874	32.5	11.7	12.5	19.7	52.4	10.2	1.7	246
North West	32.7	21.5	708	37.1	19.1	4.6	19.4	27.8	19.0	0.7	152
Gauteng	26.2	18.0	2,779	32.7	11.7	8.5	20.9	28.4	11.5	3.5	501
Mpumalanga	37.4	24.1	799	21.0	16.8	12.8	36.2	45.2	13.6	1.4	193
Limpopo	29.8	18.6	1,032	26.2	16.1	10.2	15.4	49.5	11.8	1.2	192
Education											
No education	43.0	31.1	712	32.5	25.1	10.6	16.2	62.8	13.3	0.4	221
Primary incomplete	39.3	28.5	1,145	26.3	18.2	10.7	17.9	53.3	17.8	2.0	327
Primary complete	32.0	23.0	504	33.1	18.9	17.6	17.4	57.9	10.9	0.6	116
Secondary incomplete	25.4	16.5	4,625	27.9	16.1	10.5	21.2	39.3	11.7	3.7	765
Secondary complete	22.8	14.7	2,228	37.0	7.7	8.0	15.8	32.6	9.3	3.9	327
More than secondary	21.4	12.1	1,122	34.4	6.3	13.0	26.6	28.1	15.2	0.9	136
Wealth quintile											
Lowest	29.8	20.9	1,950	25.2	17.1	9.4	19.1	46.5	12.0	3.3	408
Second	30.2	18.9	1,991	32.3	13.6	10.8	22.0	41.7	13.3	1.9	376
Middle	28.1	18.6	2,136	27.5	14.1	9.9	22.9	40.3	14.8	4.7	397
Fourth	26.4	17.7	2,085	31.0	16.3	13.8	16.7	43.2	15.3	1.3	369
Highest	23.4	15.7	2,175	38.0	16.6	9.9	14.9	46.6	7.8	1.9	342
Total 15+	27.5	18.3	10,336	30.5	15.5	10.7	19.2	43.6	12.7	2.6	1,893

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases
[1] Health insurance includes medical aid, a medical benefit scheme, a provident scheme, or a hospital plan that helps pay for health care or drug services

Table 16.4 Experience with pain by age and sex

Percentage of respondents age 15 and older who experience pain or discomfort all of the time or on and off, percentage who have had pain for more than 3 months, and among those who have had pain for more than 3 months, percentage who report specific sites they experience pain, according to age, South Africa DHS 2016

Age	Percentage experiencing pain or discomfort all of the time or on and off	Percentage experiencing pain or discomfort all of the time or on and off for more than 3 months	Number of respon-dents	Among respondents who have had pain or discomfort for 3 or more months, percentage who report specific sites they feel pain:							
				Back	Neck or shoulder	Head, face, or teeth (dental)	Stomach or abdomen	Arms, hands, hips, legs, or feet	Chest	Other	Number of respon-dents
						WOMEN					
15-24	17.7	11.4	1,429	17.1	10.7	17.0	40.6	18.4	12.2	3.7	163
25-34	22.7	13.8	1,391	33.0	10.2	14.4	32.9	14.6	9.4	7.0	192
35-44	24.0	17.4	1,022	22.6	16.4	13.4	26.3	40.2	13.7	1.2	178
45-54	35.5	24.7	866	36.7	16.2	13.0	16.5	52.9	12.9	0.4	214
55-64	43.2	31.6	701	32.1	21.3	8.1	18.6	62.4	8.3	1.6	222
65+	47.7	36.2	719	37.5	28.8	9.9	11.2	68.3	11.8	2.1	260
Total 15+	28.8	20.1	6,126	30.8	18.1	12.3	22.9	45.5	11.3	2.6	1,229
						MEN					
15-24	19.1	11.2	1,241	30.5	11.1	11.0	16.0	22.7	16.8	2.9	139
25-34	22.7	12.2	962	20.7	8.1	13.4	6.5	38.2	15.2	7.4	118
35-44	22.4	14.5	744	34.2	4.7	6.8	11.3	38.0	20.6	1.4	108
45-54	28.7	17.3	492	40.6	4.9	5.5	21.7	41.0	7.8	1.0	85
55-64	37.5	25.0	406	27.3	14.7	3.5	10.3	55.9	12.0	1.2	101
65+	43.9	30.8	364	29.5	19.6	4.8	10.1	51.3	17.4	2.0	112
Total 15+	25.5	15.8	4,210	30.0	10.7	7.8	12.4	40.2	15.3	2.8	664

Table 16.5 Experience with tooth or mouth pain

Percentage of respondents age 15 and older whose teeth or mouth caused pain or discomfort in the past 12 months; among those who experienced tooth or mouth pain, percentage who got treatment the last time they had the problem; and among those who have had pain or discomfort in their teeth and mouth and got treatment, percentage who report specific persons they saw for treatment, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage experiencing pain or discomfort in their teeth or mouth during the past 12 months	Number of respondents	Among respondents who experienced tooth or mouth pain in the past 12 months: Percentage who got treatment the last time they had problem	Number of respondents	Among respondents who have had pain or discomfort in their teeth or mouth and got treatment, percentage who report specific persons who they saw for treatment: Public sector: Dentist/ oral hygienist/ dental therapist	Public sector: Medical doctor/ nurse	Private sector: Dentist/ oral hygienist/ dental therapist	Private sector: Medical doctor/ nurse	Other source: Traditional health practitioner	Other source: Other	Number of respondents
Age											
15-24	10.2	2,670	50.4	273	45.0	21.5	20.3	9.1	1.5	5.0	138
25-34	10.2	2,353	49.1	240	54.7	12.8	24.9	6.1	0.3	1.2	118
35-44	10.0	1,766	65.5	176	44.2	25.9	21.0	7.0	0.0	5.6	116
45-54	11.7	1,358	65.5	159	39.8	35.6	17.2	5.8	0.6	1.8	104
55-64	13.2	1,106	46.0	146	36.5	29.3	26.1	6.6	0.0	6.7	67
65+	14.2	1,083	69.0	154	41.7	22.7	27.2	4.2	1.8	4.0	106
Population group											
Black African	11.0	8,704	53.9	955	49.3	27.2	15.3	5.2	0.9	4.3	515
White	12.0	577	89.4	69	(15.4)	(2.5)	(72.6)	(9.6)	(0.0)	(0.0)	62
Coloured	11.3	851	51.6	96	(39.4)	(21.2)	(24.1)	(12.2)	(0.0)	(5.7)	50
Indian/Asian	13.9	196	*	27	*	*	*	*	*	*	22
Other	*	9	nc	0	nc	nc	nc	nc	nc	nc	0
Sex											
Male	10.9	4,210	57.5	459	50.9	15.3	23.3	7.5	1.1	3.2	264
Female	11.3	6,126	55.8	689	39.9	30.0	21.9	6.0	0.5	4.4	385
Employment (past 12 months)											
Not employed	10.2	6,237	53.8	634	47.7	24.7	18.2	5.3	1.3	3.9	341
Employed for cash	12.1	3,457	58.9	419	44.6	19.9	26.5	8.5	0.1	2.8	247
Employed not for cash	14.8	642	64.4	95	24.7	36.6	30.0	6.0	0.0	8.3	61
Health insurance[1]											
Has insurance	12.0	1,650	75.9	198	23.8	9.2	57.6	10.9	0.0	1.4	150
Does not have insurance	10.9	8,686	52.5	950	50.6	28.4	11.9	5.3	1.0	4.6	498
Residence											
Urban	10.5	6,870	60.1	718	43.6	19.8	27.7	7.2	0.4	2.9	432
Non-urban	12.4	3,466	50.5	430	45.8	32.4	12.1	5.3	1.4	5.9	217
Province											
Western Cape	10.8	1,178	57.9	127	(30.4)	(16.5)	(45.1)	(5.8)	(0.0)	(3.8)	74
Eastern Cape	12.3	1,223	57.4	151	40.0	30.6	16.8	8.0	0.0	6.4	87
Northern Cape	14.1	212	46.9	30	33.7	31.8	18.8	14.0	0.0	1.7	14
Free State	10.3	532	53.1	55	52.1	16.0	15.1	10.7	0.0	9.3	29
KwaZulu-Natal	10.6	1,874	62.2	198	52.3	23.2	18.3	7.9	2.6	0.0	123
North West	14.0	708	42.8	99	39.9	41.3	13.7	2.5	0.0	5.2	42
Gauteng	9.3	2,779	62.8	258	53.4	17.2	26.8	3.6	0.2	0.0	162
Mpumalanga	11.2	799	55.6	89	45.1	24.9	15.6	5.4	2.6	7.6	50
Limpopo	13.7	1,032	48.3	141	30.3	31.7	16.9	10.7	0.0	11.6	68
Education											
No education	14.3	712	50.9	102	51.1	31.6	5.0	4.1	3.6	5.7	52
Primary incomplete	13.6	1,145	54.2	156	60.2	29.3	6.1	2.9	0.0	6.2	85
Primary complete	12.0	504	53.8	60	(58.2)	(40.0)	(0.0)	(2.9)	(1.8)	(0.0)	32
Secondary incomplete	10.4	4,625	53.0	479	41.2	30.2	15.6	8.9	0.8	5.6	254
Secondary complete	10.0	2,228	64.7	222	44.9	11.7	37.2	5.1	0.2	0.8	144
More than secondary	11.5	1,122	63.9	129	27.2	9.7	54.6	8.9	0.0	1.9	82
Wealth quintile											
Lowest	11.6	1,950	50.9	226	54.3	29.6	4.4	3.1	2.9	7.0	115
Second	11.9	1,991	49.3	237	42.4	38.9	8.1	7.9	0.0	6.0	117
Middle	10.6	2,136	53.8	226	51.8	26.3	16.4	5.3	1.0	3.3	122
Fourth	10.6	2,085	60.2	220	55.4	22.4	16.9	3.9	0.0	2.4	132
Highest	11.0	2,175	68.0	239	24.2	8.9	54.8	11.2	0.2	1.8	163
Total 15+	11.1	10,336	56.5	1,148	44.4	24.0	22.5	6.6	0.8	3.9	649

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases
[1] Health insurance includes medical aid, a medical benefit scheme, a provident scheme, or a hospital plan that helps pay for health care or drug services

Table 16.6 Main reason treatment for tooth or mouth pain was not sought

Among women and men age 15 and older who experienced pain in their teeth or mouth in the past 12 months but did not seek treatment, percentage who cited specific reasons for not seeking treatment, South Africa DHS 2016

	Percentage of respondents who cited specific reason	
Reason treatment not sought	Women	Men
No oral health service available	2.1	1.6
Oral health services too far	4.9	5.6
Oral health services too expensive/ could not afford	11.3	6.7
Problem went away	57.0	68.8
Other	24.7	17.4
Total	100.0	100.0
Number of respondents	305	195

Table 16.7.1 Blood pressure status: Women

Among women age 15 and older, prevalence of hypertension, percent distribution of blood pressure values, percentage having normal blood pressure and taking medication, and average systolic and diastolic blood pressure, and among women with hypertension, percentage with hypertension controlled, according to background characteristics, South Africa DHS 2016

		Classification of blood pressure											
		Normal			Elevated								
Background characteristic	Prevalence of hypertension[1]	Optimal <120/ <80 mmHg	Normal 120-129/ 80-84 mmHg	High normal 130-139/ 85-89 mmHg	Mildly elevated (Grade 1) 140-159/ 90-99 mmHg	Moderately elevated (Grade 2) 160-179/ 100-109 mmHg	Severely elevated (Grade 3) 180+/ 110+ mmHg	Total	Normal blood pressure and taking medication	Average systolic blood pressure	Average diastolic blood pressure	Number of women	Among women with hypertension, percentage with hyper-tension controlled[2]
Age													
15-24	17.0	54.6	18.9	12.3	10.7	2.7	0.8	100.0	2.8	116.4	77.5	1,080	16.6
25-34	26.6	40.9	22.1	15.5	16.7	3.3	1.5	100.0	5.1	118.7	81.3	1,063	19.3
35-44	42.7	22.9	19.9	21.1	26.0	5.9	4.2	100.0	6.7	126.6	86.5	788	15.6
45-54	62.5	14.9	15.2	19.6	27.0	12.2	11.0	100.0	12.2	137.2	89.5	681	19.6
55-64	77.6	12.3	11.7	15.6	29.8	18.0	12.7	100.0	17.2	143.3	89.7	557	22.1
65+	84.3	9.3	11.8	14.8	31.9	17.7	14.4	100.0	20.3	148.8	86.2	606	24.0
Population group													
Black African	43.8	31.4	17.7	15.8	21.0	8.1	6.0	100.0	8.7	128.0	83.8	4,163	19.8
White	60.4	24.7	12.8	17.8	30.4	7.6	6.7	100.0	15.7	133.4	83.6	194	26.0
Coloured	57.4	19.6	15.3	20.1	25.4	12.0	7.6	100.0	12.3	134.9	86.6	326	21.5
Indian/Asian	46.4	13.6	28.2	19.6	26.1	7.2	5.3	100.0	7.8	134.0	86.2	89	16.9
Other	*	*	*	*	*	*	*	100.0	*	*	*	3	*
Employment (past 12 months)													
Not employed	46.3	29.8	18.1	15.6	21.7	8.5	6.3	100.0	9.7	129.5	83.6	3,250	21.0
Employed for cash	35.0	35.8	17.4	17.4	20.3	5.8	3.3	100.0	5.6	123.1	83.7	1,102	15.9
Employed not for cash	66.7	16.5	13.4	17.9	26.1	14.4	11.7	100.0	14.5	138.7	88.9	422	21.8
Residence													
Urban	46.5	29.0	17.6	16.9	22.8	7.9	5.8	100.0	10.0	128.8	84.4	2,938	21.5
Non-urban	43.9	31.6	17.4	15.1	20.1	9.2	6.6	100.0	7.9	128.9	83.6	1,837	18.1
Province													
Western Cape	51.6	25.9	13.7	20.2	23.5	11.3	5.4	100.0	11.4	132.6	84.6	433	22.1
Eastern Cape	49.8	26.4	14.0	17.1	21.4	12.3	8.8	100.0	7.3	133.4	85.6	641	14.7
Northern Cape	52.9	22.9	15.1	16.5	22.6	14.8	8.2	100.0	7.3	133.1	86.0	108	13.8
Free State	54.4	23.9	16.3	17.5	19.4	13.2	9.8	100.0	12.1	132.7	87.1	271	22.2
KwaZulu-Natal	48.1	20.9	20.6	18.4	26.1	7.8	6.2	100.0	7.9	130.6	85.7	960	16.5
North West	40.0	38.5	17.0	16.1	17.8	5.4	5.1	100.0	11.7	125.5	81.6	366	29.2
Gauteng	42.3	37.1	18.6	13.0	20.2	6.2	4.9	100.0	11.1	125.3	83.0	1,073	26.2
Mpumalanga	45.8	23.0	19.6	16.1	26.0	9.1	6.2	100.0	4.5	128.7	86.3	399	9.9
Limpopo	34.1	43.8	17.1	13.7	16.9	4.8	3.7	100.0	8.8	123.4	79.1	524	25.7
Education													
No education	75.8	12.0	12.6	12.7	30.2	17.8	14.8	100.0	13.1	145.0	88.5	430	17.3
Primary incomplete	65.6	16.5	14.5	17.2	27.2	13.4	11.3	100.0	13.8	139.1	87.5	582	21.0
Primary complete	53.5	24.0	15.1	21.3	21.0	7.6	11.0	100.0	13.9	132.9	86.3	242	25.9
Secondary incomplete	38.9	34.1	18.1	16.6	19.7	7.1	4.4	100.0	7.6	125.8	83.1	2,092	19.6
Secondary complete	35.2	37.4	20.1	14.8	19.5	4.8	3.3	100.0	7.5	123.0	82.2	974	21.4
More than secondary	39.2	32.8	19.2	16.8	21.7	7.5	2.0	100.0	8.0	124.7	82.7	454	20.4

(Continued…)

Table 16.7.1—*Continued*

Background characteristic	Prevalence of hypertension[1]	Classification of blood pressure: Normal: Optimal <120/ <80 mmHg	Normal: Normal 120-129/ 80-84 mmHg	Normal: High normal 130-139/ 85-89 mmHg	Elevated: Mildly elevated (Grade 1) 140-159/ 90-99 mmHg	Elevated: Moderately elevated (Grade 2) 160-179/ 100-109 mmHg	Elevated: Severely elevated (Grade 3) 180+/ 110+ mmHg	Total	Normal blood pressure and taking medication	Average systolic blood pressure	Average diastolic blood pressure	Number of women	Among women with hypertension, percentage with hypertension controlled[2]
Wealth quintile													
Lowest	42.3	30.0	16.1	17.7	21.7	8.1	6.4	100.0	6.1	128.1	84.8	988	14.4
Second	41.1	33.5	18.9	13.8	20.7	7.5	5.6	100.0	7.2	127.4	83.0	923	17.6
Middle	46.1	29.8	18.8	14.4	21.2	8.8	6.9	100.0	9.1	129.1	84.6	1,028	19.8
Fourth	49.6	27.0	15.7	18.8	22.4	9.7	6.4	100.0	11.1	130.4	84.8	954	22.3
Highest	48.6	29.8	18.1	16.3	23.0	7.8	4.9	100.0	12.8	129.1	83.0	881	26.3
Total 15+	45.5	30.0	17.5	16.2	21.8	8.4	6.1	100.0	9.2	128.8	84.1	4,774	20.2

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] A respondent was classified as having hypertension if she had a systolic blood pressure level of 140 mmHg or above or a diastolic blood pressure level of 90 mmHg or above at the time of the survey or was currently taking antihypertensive medication to control her blood pressure. The term hypertension as used in this table is not meant to represent a clinical diagnosis of the disease; rather, it provides an indication of the disease burden in the population at the time of the survey.
[2] Percentage with hypertension controlled = normal blood pressure and taking medication/prevalence of hypertension

Table 16.7.2 Blood pressure status: Men

Among men age 15 and older, prevalence of hypertension, percent distribution of blood pressure values, percentage having normal blood pressure and taking medication, and average systolic and diastolic blood pressure, and among men with hypertension, percentage with hypertension controlled, according to background characteristics, South Africa DHS 2016

Background characteristic	Prevalence of hypertension[1]	Classification of blood pressure							Normal blood pressure and taking medication	Average systolic blood pressure	Average diastolic blood pressure	Number of men	Among men with hypertension, percentage with hyper-tension controlled[2]
		Normal			Elevated								
		Optimal <120/ <80 mmHg	Normal 120-129/ 80-84 mmHg	High normal 130-139/ 85-89 mmHg	Mildly elevated (Grade 1) 140-159/ 90-99 mmHg	Moderately elevated (Grade 2) 160-179/ 100-109 mmHg	Severely elevated (Grade 3) 180+/ 110+ mmHg	Total					
Age													
15-24	20.1	35.2	28.9	18.6	13.5	3.0	0.8	100.0	2.9	123.6	77.0	918	14.6
25-34	33.2	18.7	23.3	26.8	23.7	5.5	2.0	100.0	2.0	128.2	84.3	690	5.9
35-44	50.8	16.8	17.1	17.8	27.8	13.1	7.4	100.0	2.5	131.7	89.3	528	4.9
45-54	55.4	10.4	16.6	24.9	28.6	13.0	6.6	100.0	7.3	135.4	89.9	334	13.2
55-64	73.6	10.2	9.4	19.1	36.5	14.7	10.1	100.0	12.4	141.8	90.5	318	16.8
65+	83.7	7.0	10.2	16.9	33.5	18.0	14.3	100.0	17.9	149.0	88.1	293	21.4
Population group													
Black African	40.9	21.7	21.2	21.0	22.9	8.6	4.7	100.0	4.8	130.7	84.2	2,638	11.7
White	65.9	8.7	18.1	19.7	36.0	14.4	3.2	100.0	12.3	136.4	86.0	176	18.7
Coloured	57.8	16.9	15.4	18.7	28.4	9.3	11.3	100.0	8.8	137.5	87.6	207	15.2
Indian/Asian	(52.6)	(10.0)	(16.0)	(27.5)	(30.6)	(9.2)	(6.7)	100.0	(6.1)	(136.1)	(87.8)	60	(11.6)
Other	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	nc	0	nc
Employment (past 12 months)													
Not employed	42.5	24.1	20.3	19.7	21.9	8.6	5.4	100.0	6.6	131.5	83.1	1,650	15.5
Employed for cash	43.1	16.6	21.4	22.4	26.1	9.3	4.3	100.0	3.4	130.9	86.1	1,347	7.9
Employed not for cash	78.0	10.1	10.5	20.0	35.9	13.1	10.4	100.0	18.7	143.4	88.8	84	23.9
Residence													
Urban	45.4	18.7	20.1	21.8	24.8	9.5	5.1	100.0	6.0	131.8	85.4	2,002	13.2
Non-urban	40.5	23.6	21.3	19.2	22.9	8.1	5.0	100.0	4.6	131.2	83.1	1,080	11.3
Province													
Western Cape	58.7	17.6	15.6	16.0	36.0	8.4	6.5	100.0	7.8	135.5	85.6	259	13.3
Eastern Cape	47.3	16.1	20.4	21.1	27.3	8.7	6.3	100.0	4.9	134.0	84.9	414	10.4
Northern Cape	52.3	16.2	16.7	21.3	27.3	12.5	5.9	100.0	6.5	135.4	85.7	68	12.5
Free State	48.2	17.3	20.1	21.0	25.3	11.0	5.3	100.0	6.6	133.5	85.9	178	13.6
KwaZulu-Natal	47.5	18.4	20.4	19.2	26.4	9.7	5.9	100.0	5.5	131.6	85.5	532	11.5
North West	37.0	26.5	19.8	24.4	19.5	7.1	2.8	100.0	7.6	129.3	81.8	271	20.6
Gauteng	39.5	20.5	22.1	23.0	19.5	9.9	5.0	100.0	5.1	130.4	85.3	830	12.9
Mpumalanga	46.1	16.6	20.0	20.5	28.4	10.6	3.9	100.0	3.2	132.8	86.3	260	7.0
Limpopo	28.8	34.1	23.5	18.6	16.6	4.0	3.3	100.0	4.9	126.6	79.0	269	17.1
Education													
No education	65.6	13.8	9.3	22.5	26.2	16.2	11.9	100.0	11.3	140.7	88.6	170	17.2
Primary incomplete	56.6	17.1	16.8	19.5	25.7	11.7	9.2	100.0	10.0	136.8	87.2	401	17.6
Primary complete	40.9	20.2	20.4	21.5	18.5	13.5	5.9	100.0	3.0	133.4	85.0	166	7.2
Secondary incomplete	36.9	24.0	22.6	21.1	21.7	7.0	3.6	100.0	4.6	129.2	82.8	1,420	12.6
Secondary complete	41.8	20.1	20.3	21.1	26.0	9.2	3.3	100.0	3.2	129.8	84.9	614	7.7
More than secondary	51.5	12.7	22.5	19.8	31.6	8.0	5.4	100.0	6.5	133.3	86.4	310	12.7

(Continued…)

Table 16.7.2—*Continued*

Background characteristic	Prevalence of hypertension[1]	Classification of blood pressure: Normal: Optimal <120/ <80 mmHg	Normal: Normal 120-129/ 80-84 mmHg	Normal: High normal 130-139/ 85-89 mmHg	Elevated: Mildly elevated (Grade 1) 140-159/ 90-99 mmHg	Elevated: Moderately elevated (Grade 2) 160-179/ 100-109 mmHg	Elevated: Severely elevated (Grade 3) 180+/ 110+ mmHg	Total	Normal blood pressure and taking medication	Average systolic blood pressure	Average diastolic blood pressure	Number of men	Among men with hypertension, percentage with hyper-tension controlled[2]
Wealth quintile													
Lowest	43.3	22.1	16.6	21.5	22.5	11.1	6.3	100.0	3.5	132.7	85.4	625	8.1
Second	38.8	21.9	21.2	22.6	22.8	6.8	4.6	100.0	4.6	130.3	83.4	645	11.7
Middle	39.9	19.8	24.7	21.6	22.2	8.4	3.4	100.0	6.0	129.7	83.6	667	15.1
Fourth	42.9	22.8	20.9	18.0	22.9	10.0	5.3	100.0	4.7	131.2	84.9	590	10.9
Highest	55.3	14.9	18.7	20.4	31.2	8.9	6.0	100.0	9.2	134.4	86.0	556	16.6
Total 15+	43.7	20.4	20.5	20.9	24.1	9.0	5.1	100.0	5.5	131.6	84.6	3,082	12.6

Note: Figures in parentheses are based on 25-49 unweighted cases.
nc = No cases
[1] A respondent was classified as having hypertension if he had a systolic blood pressure level of 140 mmHg or above or a diastolic blood pressure level of 90 mmHg or above at the time of the survey or was currently taking antihypertensive medication to control his blood pressure. The term hypertension as used in this table is not meant to represent a clinical diagnosis of the disease; rather, it provides an indication of the disease burden in the population at the time of the survey.
[2] Percentage with hypertension controlled = normal blood pressure and taking medication/prevalence of hypertension

Table 16.8.1 Blood pressure status by health status measures: Women

Among women age 15 and older, prevalence of hypertension, percent distribution of blood pressure values, percentage having normal blood pressure and taking medication, and among women with hypertension, percentage with hypertension controlled, according to health status measures, South Africa DHS 2016

		Classification of blood pressure									
		Normal			Elevated						
Health status measure	Prevalence of hypertension[1]	Optimal <120/ <80 mmHg	Normal 120-129/ 80-84 mmHg	High normal 130-139/ 85-89 mmHg	Mildly elevated (Grade 1) 140-159/ 90-99 mmHg	Moderately elevated (Grade 2) 160-179/ 100-109 mmHg	Severely elevated (Grade 3) 180+/ 110+ mmHg	Total	Normal blood pressure and taking medication	Number of women	Among women with hypertension, percentage with hypertension controlled[2]
Use of tobacco products											
Uses tobacco products	59.1	20.0	17.4	16.1	25.7	9.0	11.8	100.0	12.7	491	21.4
Does not use tobacco products	43.9	31.1	17.5	16.2	21.3	8.3	5.4	100.0	8.8	4,284	20.0
Use of alcohol											
Drank alcohol in last 12 months	41.7	33.7	16.7	15.0	20.1	7.8	6.7	100.0	7.1	835	17.0
Drank alcohol in last 7 days	45.7	29.4	15.6	16.5	20.4	9.6	8.5	100.0	7.3	444	15.9
Did not drink alcohol in last 7 days	37.2	38.5	17.9	13.3	19.8	5.7	4.7	100.0	6.9	391	18.5
Did not drink alcohol in last 12 months	51.4	29.0	15.7	14.6	23.9	8.6	8.1	100.0	10.8	336	21.0
Has never drunk alcohol	45.8	29.2	17.9	16.6	22.0	8.5	5.7	100.0	9.5	3,603	20.8
Consumption of salty snacks											
Every day	32.0	44.8	16.2	12.8	16.1	6.3	3.8	100.0	5.9	654	18.4
At least once a week	38.1	32.8	18.6	17.1	19.1	8.2	4.2	100.0	6.6	1,410	17.2
Occasionally	49.9	26.1	18.0	16.8	24.4	7.6	7.0	100.0	10.9	2,293	21.7
Never	66.9	18.7	13.4	15.1	25.4	16.4	10.9	100.0	14.2	417	21.2
History of hypertension											
Told had high blood pressure by a doctor or a nurse	86.8	13.4	12.2	15.6	29.0	15.8	14.1	100.0	28.0	1,368	32.2
Never told had high blood pressure	28.9	36.7	19.7	16.4	18.9	5.5	2.9	100.0	1.6	3,407	5.7
Nutritional status											
Underweight (BMI <18.5)	32.8	46.6	15.5	12.1	18.6	4.9	2.3	100.0	7.1	116	21.6
Normal (BMI 18.5-24.9)	33.1	41.4	18.0	13.9	16.5	5.6	4.7	100.0	6.3	1,349	19.1
Overweight (BMI 25.0-29.9)	42.7	31.8	17.4	14.9	19.9	9.5	6.6	100.0	6.7	1,210	15.8
Obese (BMI ≥30.0)	58.4	18.0	17.1	19.5	27.7	10.1	7.5	100.0	13.0	1,871	22.2
Not eligible (pregnant or recent birth)	24.0	52.4	18.8	12.2	11.0	4.3	1.3	100.0	7.5	169	31.1
Total 15+	45.5	30.0	17.5	16.2	21.8	8.4	6.1	100.0	9.2	4,774	20.2

Note: Total includes 59 women for whom nutritional status information was out of range or missing.
BMI = Body mass index
[1] A respondent was classified as having hypertension if she had a systolic blood pressure level of 140 mmHg or above or a diastolic blood pressure level of 90 mmHg or above at the time of the survey or was currently taking antihypertensive medication to control her blood pressure. The term hypertension as used in this table is not meant to represent a clinical diagnosis of the disease; rather, it provides an indication of the disease burden in the population at the time of the survey.
[2] Percentage with hypertension controlled = normal blood pressure and taking medication/prevalence of hypertension

Table 16.8.2 Blood pressure status by health status measures: Men

Among men age 15 and older, prevalence of hypertension, percent distribution of blood pressure values, percentage having normal blood pressure and taking medication, and percentage with hypertension controlled, according to health status measures, South Africa DHS 2016

		Classification of blood pressure									
		Normal			Elevated						
Health status measure	Prevalence of hypertension[1]	Optimal <120/ <80 mmHg	Normal 120-129/ 80-84 mmHg	High normal 130-139/ 85-89 mmHg	Mildly elevated (Grade 1) 140-159/ 90-99 mmHg	Moderately elevated (Grade 2) 160-179/ 100-109 mmHg	Severely elevated (Grade 3) 180+/ 110+ mmHg	Total	Normal blood pressure and taking medication	Number of men	Among men with hypertension, percentage with hypertension controlled[2]
Use of tobacco products											
Uses tobacco products	45.4	18.6	18.0	23.7	22.8	10.0	6.9	100.0	5.8	961	12.8
Does not use tobacco products	42.9	21.2	21.7	19.6	24.8	8.5	4.2	100.0	5.4	2,120	12.6
Use of alcohol											
Drank alcohol in last 12 months	43.5	18.3	19.8	23.0	23.3	9.5	6.0	100.0	4.6	1,693	10.7
Drank alcohol in last 7 days	49.9	14.9	17.8	22.7	25.5	11.7	7.5	100.0	5.2	1,157	10.5
Did not drink alcohol in last 7 days	29.8	25.8	24.1	23.7	18.7	4.9	2.8	100.0	3.4	536	11.3
Did not drink alcohol in last 12 months	41.8	26.9	18.8	19.5	22.6	8.6	3.5	100.0	7.0	240	16.8
Has never drunk alcohol	44.4	22.1	21.9	18.0	25.7	8.3	4.0	100.0	6.5	1,149	14.6
Consumption of salty snacks											
Every day	26.7	32.7	25.6	18.1	18.0	4.7	0.9	100.0	3.1	318	11.8
At least once a week	38.6	24.4	21.8	20.0	23.8	8.1	1.9	100.0	4.8	794	12.5
Occasionally	45.1	17.1	20.5	23.0	23.9	8.7	6.8	100.0	5.7	1,595	12.7
Never	63.1	15.6	13.4	16.0	31.1	16.0	7.8	100.0	8.2	375	12.9
History of hypertension											
Told had high blood pressure by a doctor or a nurse	87.0	7.5	11.3	17.7	34.0	17.2	12.3	100.0	23.4	588	26.9
Never told had high blood pressure	33.5	23.5	22.7	21.6	21.8	7.1	3.3	100.0	1.3	2,494	3.9
Nutritional status											
Underweight (BMI <18.5)	32.4	37.8	19.9	15.6	17.2	6.9	2.6	100.0	5.8	289	17.8
Normal (BMI 18.5-24.9)	35.3	23.2	24.2	20.8	20.7	7.6	3.6	100.0	3.4	1,804	9.7
Overweight (BMI 25.0-29.9)	59.8	11.8	14.0	21.6	32.8	11.0	8.8	100.0	7.2	619	12.0
Obese (BMI ≥30.0)	67.8	5.4	15.2	24.6	32.3	14.5	8.0	100.0	13.0	327	19.2
Total 15+	43.7	20.4	20.5	20.9	24.1	9.0	5.1	100.0	5.5	3,082	12.6

Note: Total includes 43 men for whom nutritional status information was out of range or missing.
BMI = Body mass index
[1] A respondent was classified as having hypertension if he had a systolic blood pressure level of 140 mmHg or above or a diastolic blood pressure level of 90 mmHg or above at the time of the survey or was currently taking antihypertensive medication to control his blood pressure. The term hypertension as used in this table is not meant to represent a clinical diagnosis of the disease; rather, it provides an indication of the disease burden in the population at the time of the survey.
[2] Percentage with hypertension controlled = normal blood pressure and taking medication/prevalence of hypertension

Table 16.9.1 Blood pressure status and treatment: Women

Among women age 15 and older, prevalence of hypertension, prevalence of elevated blood pressure, percentage taking medication to lower blood pressure, percentage having normal blood pressure and taking medication, percentage hypertensive and taking medication, and among women with hypertension, percentage with uncontrolled hypertension, according to background characteristics, South Africa DHS 2016

Background characteristic	Prevalence of hypertension[1]	Prevalence of elevated blood pressure (≥140/ ≥90 mmHg)	Percentage taking medication to lower blood pressure	Percentage with normal blood pressure and taking medication	Percentage hypertensive and taking medication	Number of women	Among women with hypertension, percentage with uncontrolled hypertension[2]
Age							
15-24	17.0	14.2	3.9	2.8	1.1	1,080	83.4
25-34	26.6	21.4	7.1	5.1	2.0	1,063	80.7
35-44	42.7	36.1	15.1	6.7	8.5	788	84.4
45-54	62.5	50.2	31.8	12.2	19.5	681	80.4
55-64	77.6	60.5	46.5	17.2	29.3	557	77.9
65+	84.3	64.0	58.0	20.3	37.7	606	76.0
Population group							
Black African	43.8	35.1	20.6	8.7	11.9	4,163	80.2
White	60.4	44.7	36.5	15.7	20.8	194	74.0
Coloured	57.4	45.0	33.7	12.3	21.3	326	78.5
Indian/Asian	46.4	38.6	25.6	7.8	17.8	89	83.1
Other	*	*	*	*	*	3	*
Residence							
Urban	46.5	36.5	23.3	10.0	13.3	2,938	78.5
Non-urban	43.9	35.9	20.7	7.9	12.8	1,837	81.9
Province							
Western Cape	51.6	40.2	32.1	11.4	20.6	433	77.9
Eastern Cape	49.8	42.5	24.4	7.3	17.1	641	85.3
Northern Cape	52.9	45.6	22.5	7.3	15.2	108	86.2
Free State	54.4	42.3	27.7	12.1	15.6	271	77.8
KwaZulu-Natal	48.1	40.1	22.8	7.9	14.8	960	83.5
North West	40.0	28.4	23.7	11.7	12.0	366	70.8
Gauteng	42.3	31.2	21.8	11.1	10.8	1,073	73.8
Mpumalanga	45.8	41.3	13.7	4.5	9.1	399	90.1
Limpopo	34.1	25.3	14.2	8.8	5.4	524	74.3
Education							
No education	75.8	62.7	45.9	13.1	32.8	430	82.7
Primary incomplete	65.6	51.8	37.5	13.8	23.7	582	79.0
Primary complete	53.5	39.6	33.1	13.9	19.3	242	74.1
Secondary incomplete	38.9	31.3	17.3	7.6	9.7	2,092	80.4
Secondary complete	35.2	27.7	13.7	7.5	6.1	974	78.6
More than secondary	39.2	31.2	15.8	8.0	7.8	454	79.6
Wealth quintile							
Lowest	42.3	36.2	17.2	6.1	11.1	988	85.6
Second	41.1	33.8	18.9	7.2	11.7	923	82.4
Middle	46.1	36.9	23.0	9.1	13.8	1,028	80.2
Fourth	49.6	38.5	25.1	11.1	14.0	954	77.7
Highest	48.6	35.8	27.6	12.8	14.8	881	73.7
Total 15+	45.5	36.3	22.3	9.2	13.1	4,774	79.8

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] A respondent was classified as having hypertension if she had a systolic blood pressure level of 140 mmHg or above or a diastolic blood pressure level of 90 mmHg or above at the time of the survey or was currently taking antihypertensive medication to control her blood pressure. The term hypertension as used in this table is not meant to represent a clinical diagnosis of the disease; rather, it provides an indication of the disease burden in the population at the time of the survey.

[2] Percentage with hypertension uncontrolled = prevalence of elevated blood pressure/prevalence of hypertension

Table 16.9.2 Blood pressure status and treatment: Men

Among men age 15 and older, prevalence of hypertension, prevalence of elevated blood pressure, percentage taking medication to lower blood pressure, percentage having normal blood pressure and taking medication, percentage hypertensive and taking medication, and among men with hypertension, percentage with uncontrolled hypertension, according to background characteristics, South Africa DHS 2016

Background characteristic	Prevalence of hypertension[1]	Prevalence of elevated blood pressure (≥140/ ≥90 mmHg)	Percentage taking prescribed medicine to lower blood pressure	Percentage with normal blood pressure and taking medication	Percentage hypertensive and taking medication	Number of men	Among men with hypertension, percentage with uncontrolled hypertension[2]
Age							
15-24	20.1	17.2	3.8	2.9	0.9	918	85.4
25-34	33.2	31.2	3.5	2.0	1.6	690	94.1
35-44	50.8	48.3	10.9	2.5	8.4	528	95.1
45-54	55.4	48.1	21.4	7.3	14.1	334	86.8
55-64	73.6	61.3	37.4	12.4	25.1	318	83.2
65+	83.7	65.8	50.0	17.9	32.1	293	78.6
Population group							
Black African	40.9	36.1	11.9	4.8	7.1	2,638	88.3
White	65.9	53.6	38.9	12.3	26.6	176	81.3
Coloured	57.8	49.0	28.1	8.8	19.4	207	84.8
Indian/Asian	(52.6)	(46.4)	(24.0)	(6.1)	(17.9)	60	(88.4)
Other	nc	nc	nc	nc	nc	0	nc
Residence							
Urban	45.4	39.4	16.6	6.0	10.6	2,002	86.8
Non-urban	40.5	35.9	11.3	4.6	6.7	1,080	88.7
Province							
Western Cape	58.7	50.9	28.3	7.8	20.5	259	86.7
Eastern Cape	47.3	42.4	13.2	4.9	8.3	414	89.6
Northern Cape	52.3	45.8	16.0	6.5	9.5	68	87.5
Free State	48.2	41.6	14.9	6.6	8.3	178	86.4
KwaZulu-Natal	47.5	42.0	15.1	5.5	9.7	532	88.5
North West	37.0	29.4	14.6	7.6	7.0	271	79.4
Gauteng	39.5	34.4	14.8	5.1	9.7	830	87.1
Mpumalanga	46.1	42.9	8.5	3.2	5.3	260	93.0
Limpopo	28.8	23.9	8.9	4.9	3.9	269	82.9
Education							
No education	65.6	54.4	25.9	11.3	14.6	170	82.8
Primary incomplete	56.6	46.6	24.0	10.0	14.0	401	82.4
Primary complete	40.9	37.9	15.7	3.0	12.8	166	92.8
Secondary incomplete	36.9	32.3	10.6	4.6	6.0	1,420	87.4
Secondary complete	41.8	38.6	11.6	3.2	8.4	614	92.3
More than secondary	51.5	44.9	21.1	6.5	14.5	310	87.3
Wealth quintile							
Lowest	43.3	39.8	9.3	3.5	5.8	625	91.9
Second	38.8	34.3	10.2	4.6	5.7	645	88.3
Middle	39.9	33.9	13.9	6.0	7.9	667	84.9
Fourth	42.9	38.2	15.9	4.7	11.2	590	89.1
Highest	55.3	46.1	25.9	9.2	16.7	556	83.4
Total 15+	43.7	38.2	14.7	5.5	9.2	3,082	87.4

Note: Figures in parentheses are based on 25-49 unweighted cases.
nc = No cases
[1] A respondent was classified as having hypertension if he had a systolic blood pressure level of 140 mmHg or above or a diastolic blood pressure level of 90 mmHg or above at the time of the survey or was currently taking antihypertensive medication to control his blood pressure. The term hypertension as used in this table is not meant to represent a clinical diagnosis of the disease; rather, it provides an indication of the disease burden in the population at the time of the survey.
[2] Percentage with hypertension uncontrolled = prevalence of elevated blood pressure/prevalence of hypertension

Table 16.10.1 Asthma and chronic obstructive pulmonary disease symptoms: Women

Percentage of women age 15 and older with less breath when exerting themselves compared with others their age; percentage who have woken with breathing difficulties, shortness of breath, and/or a coughing attack in the past 12 months; percentage with symptoms of asthma (wheezing and shortness of breath) in the past 12 months; and percentage who have symptoms of chronic obstructive pulmonary disease (COPD), according to background characteristics, South Africa DHS 2016

	Percentage of women				
Background characteristic	With less breath when exerting themselves compared with others their age	Who have woken up with breathing difficulties, shortness of breath, and/or a coughing attack in past 12 months[1]	With symptoms of asthma (wheezing and shortness of breath) in the past 12 months	With symptoms of COPD[2]	Number of women
Age					
15-24	9.5	18.6	1.6	1.0	1,429
25-34	11.5	18.9	2.2	0.6	1,391
35-44	13.8	19.9	3.3	2.1	1,022
45-54	18.8	24.1	3.5	2.4	866
55-64	27.3	27.2	6.5	3.3	701
65+	31.1	28.6	5.5	4.2	719
Population group					
Black African	16.0	22.7	3.2	1.7	5,170
White	14.1	12.6	2.5	2.0	320
Coloured	21.6	19.8	4.5	4.1	516
Indian/Asian	24.5	16.2	6.9	1.3	114
Other	*	*	*	*	6
Tobacco smoking					
Daily smoker	20.9	23.3	5.0	5.2	387
Occasional smoker	20.7	32.2	2.3	7.5	94
Ex-smoker	31.6	36.4	7.7	0.7	111
Never smoked	15.9	21.2	3.1	1.6	5,534
Residence					
Urban	16.4	22.3	3.6	2.1	3,996
Non-urban	16.9	20.9	2.8	1.6	2,130
Province					
Western Cape	20.3	17.6	4.2	4.4	703
Eastern Cape	22.5	24.1	3.5	3.4	730
Northern Cape	21.3	19.0	6.1	3.4	127
Free State	19.2	23.1	3.3	0.8	325
KwaZulu-Natal	16.7	15.2	5.4	1.1	1,191
North West	13.7	30.9	2.5	1.5	398
Gauteng	13.5	26.4	1.7	1.3	1,534
Mpumalanga	18.5	22.6	4.1	2.5	473
Limpopo	10.9	18.8	1.5	0.8	646
Education					
No education	29.4	25.2	5.0	4.6	495
Primary incomplete	23.6	26.8	5.6	2.7	664
Primary complete	22.9	27.3	5.5	4.1	293
Secondary incomplete	14.9	21.4	3.1	1.8	2,695
Secondary complete	10.6	19.5	2.2	0.7	1,328
More than secondary	15.7	18.2	1.9	1.2	652
Wealth quintile					
Lowest	16.1	19.1	3.1	2.1	1,163
Second	16.2	25.4	2.8	2.0	1,152
Middle	15.0	21.0	3.1	1.5	1,242
Fourth	18.1	22.8	5.4	2.4	1,258
Highest	17.1	20.8	2.2	1.7	1,311
Total 15+	16.6	21.8	3.3	1.9	6,126

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Difficulty breathing refers to tightness of chest and/or shortness of breath
[2] Coughing with phlegm on most days for ≥3 months

Table 16.10.2 Asthma and chronic obstructive pulmonary disease symptoms: Men

Percentage of men age 15 and older with less breath when exerting themselves compared with others their age; percentage who have woken with breathing difficulties, shortness of breath, and/or a coughing attack in the past 12 months; percentage with symptoms of asthma (wheezing and shortness of breath) in the past 12 months; and percentage who have symptoms of chronic obstructive pulmonary disease (COPD), according to background characteristics, South Africa DHS 2016

	Percentage of men				
Background characteristic	With less breath when exerting themselves compared with others their age	Who have woken up with breathing difficulties, shortness of breath, and/or a coughing attack in past 12 months[1]	With symptoms of asthma (wheezing and shortness of breath) in the past 12 months	With symptoms of COPD[2]	Number of men
Age					
15-24	11.9	27.7	2.8	1.6	1,241
25-34	12.4	24.3	3.3	0.3	962
35-44	11.7	24.1	2.8	1.3	744
45-54	16.3	27.6	3.2	2.2	492
55-64	21.9	31.2	5.4	2.1	406
65+	21.7	33.0	5.7	5.1	364
Population group					
Black African	13.0	28.5	3.4	1.7	3,534
White	22.0	14.7	3.1	0.0	257
Coloured	18.6	22.9	4.6	2.2	335
Indian/Asian	27.0	19.7	3.2	2.9	82
Other	*	*	*	*	2
Tobacco smoking					
Daily smoker	16.8	31.1	5.0	2.6	1,281
Occasional smoker	13.6	29.7	7.1	0.9	290
Ex-smoker	18.9	30.0	2.2	0.8	324
Never smoked	12.3	24.1	2.3	1.4	2,315
Residence					
Urban	13.5	25.2	2.6	1.2	2,874
Non-urban	16.0	31.0	5.3	2.7	1,336
Province					
Western Cape	19.2	19.8	4.3	1.3	476
Eastern Cape	14.3	33.6	3.2	1.6	493
Northern Cape	21.2	31.1	5.3	3.0	84
Free State	9.8	30.6	0.9	3.0	207
KwaZulu-Natal	19.9	23.2	4.0	1.7	683
North West	6.5	16.4	3.6	3.1	310
Gauteng	9.4	26.0	0.5	0.9	1,245
Mpumalanga	16.5	40.0	14.2	2.7	326
Limpopo	19.2	32.8	3.1	1.7	386
Education					
No education	21.2	33.9	11.5	4.0	217
Primary incomplete	15.6	34.2	4.9	3.8	481
Primary complete	11.7	29.4	2.9	3.0	212
Secondary incomplete	13.2	28.3	3.2	1.3	1,930
Secondary complete	15.1	21.0	2.2	1.2	900
More than secondary	13.9	22.4	2.2	0.2	470
Wealth quintile					
Lowest	15.8	35.5	7.5	2.7	787
Second	13.1	28.2	2.3	2.0	839
Middle	12.0	30.7	4.4	2.3	894
Fourth	15.6	23.3	1.2	1.1	827
Highest	15.2	18.0	2.1	0.4	864
Total 15+	14.3	27.1	3.5	1.7	4,210

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Difficulty breathing refers to tightness of chest and/or shortness of breath
[2] Coughing with phlegm on most days for ≥3 months

Table 16.11.1 Unadjusted glycated haemoglobin levels: Women

Percentage of women age 15 and older by unadjusted glycated haemoglobin level (HbA1c), according to background characteristics, South Africa DHS 2016

Background characteristic	Unadjusted HbA1c level			Number of women
	<5.7%	5.7-6.4%	≥6.5%	
Age				
15-24	16.9	75.9	7.2	885
25-34	15.9	73.5	10.6	846
35-44	9.6	66.5	23.9	613
45-54	6.9	58.1	35.0	529
55-64	4.6	53.7	41.7	457
65+	1.8	50.3	47.9	474
Currently pregnant[1]				
Pregnant	31.4	61.7	6.9	100
Not pregnant or not sure	13.4	71.6	15.0	2,517
HIV status				
HIV positive	10.8	70.5	18.6	873
HIV negative[2]	10.8	64.4	24.8	2,807
Not tested in survey	9.3	55.5	35.1	124
Anaemia status				
Anaemic[3]	9.7	67.6	22.7	1,136
Not anaemic	11.3	64.6	24.1	2,632
Nutritional status				
Underweight (BMI <18.5)	18.3	68.2	13.5	97
Normal (BMI 18.5-24.9)	14.4	71.7	13.9	1,062
Overweight (BMI 25.0-29.9)	9.7	70.7	19.6	981
Obese (BMI ≥30.0)	6.6	57.8	35.6	1,483
Not eligible (pregnant or recent birth)	29.5	64.8	5.7	142
Past diabetes diagnosis				
Diabetes diagnosed	0.6	17.5	82.0	202
Treatment received	0.7	12.3	87.0	173
No treatment received	(0.0)	(48.1)	(51.9)	28
Diabetes not diagnosed	11.4	68.3	20.4	3,590
Don't know	*	*	*	11
Current medication				
On diabetes medication	0.0	10.8	89.2	90
On undisclosed medication	7.3	60.1	32.6	817
Not on medication	12.1	68.7	19.2	2,896
Population group				
Black African	10.4	65.9	23.7	3,351
White	16.1	69.1	14.8	142
Coloured	13.9	60.7	25.4	263
Indian/Asian	(0.0)	(56.5)	(43.5)	44
Other	*	*	*	3
Residence				
Urban	12.1	67.1	20.8	2,252
Non-urban	8.8	63.2	28.0	1,551
Province				
Western Cape	12.3	63.9	23.8	370
Eastern Cape	8.8	60.4	30.8	504
Northern Cape	18.9	61.6	19.6	70
Free State	3.4	69.5	27.2	250
KwaZulu-Natal	6.8	67.0	26.2	729
North West	12.0	69.3	18.7	332
Gauteng	15.6	68.2	16.2	810
Mpumalanga	11.4	64.4	24.2	357
Limpopo	10.9	61.3	27.9	381
Education				
No education	5.0	50.5	44.5	347
Primary incomplete	7.1	56.0	36.9	491
Primary complete	8.0	59.6	32.4	214
Secondary incomplete	11.0	70.1	18.9	1,680
Secondary complete	15.5	68.3	16.2	741
More than secondary	12.0	69.8	18.2	330
Wealth quintile				
Lowest	10.3	66.8	22.9	849
Second	11.5	65.8	22.7	744
Middle	9.7	65.2	25.1	849
Fourth	9.9	65.2	25.0	736
Highest	13.0	64.4	22.6	624
Total 15+	10.8	65.5	23.7	3,803

Notes: Excludes cases in which DBS specimens took 60 or more days to get from the field to the laboratory freezer. An HbA1c level of 6.5% or above is classified as diabetes; an HbA1c level between 5.7% and 6.4% is considered pre-diabetic (ADA 2010). Total includes 38 women for whom information on nutritional status is missing and 25 women for whom information on anaemia is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
BMI = Body mass index
[1] Restricted to women age 15-49
[2] Includes a few cases with inconclusive results as per the SADHS HIV testing algorithm shown in Chapter 1, Figure 1.2
[3] Haemoglobin level <12.0 g/dl among non-pregnant women and <11.0 g/dl among pregnant women

Table 16.11.2 Unadjusted glycated haemoglobin levels: Men

Percentage of men age 15 and older by unadjusted glycated haemoglobin level (HbA1c), according to background characteristics, South Africa DHS 2016

Background characteristic	Unadjusted HbA1c level			Number of men
	<5.7%	5.7-6.4%	≥6.5%	
Age				
15-24	16.1	74.6	8.4	735
25-34	15.6	73.5	10.7	480
35-44	13.0	70.7	15.9	378
45-54	6.5	70.4	22.7	248
55-64	7.6	57.9	34.3	259
65+	2.6	65.6	31.2	219
HIV status				
HIV positive	9.1	72.7	18.0	305
HIV negative[1]	12.8	70.9	15.9	1,938
Not tested in survey	11.5	54.1	31.3	76
Anaemia status				
Anaemic[2]	8.6	72.2	19.2	184
Not anaemic	12.5	70.6	16.3	2,115
Nutritional status				
Underweight (BMI <18.5)	19.6	70.3	9.6	220
Normal (BMI 18.5-24.9)	13.6	74.9	10.8	1,341
Overweight (BMI 25.0-29.9)	9.9	65.6	24.5	461
Obese (BMI ≥30.0)	3.8	57.8	38.4	263
Past diabetes diagnosis				
Diabetes diagnosed	0.0	19.4	80.6	84
Treatment received	0.0	19.1	80.9	75
No treatment received	*	*	*	8
Diabetes not diagnosed	12.8	72.4	14.3	2,212
Don't know	*	*	*	23
Current medication				
On diabetes medication	(0.0)	(10.0)	(90.0)	46
On undisclosed medication	5.5	71.1	23.0	333
Not on medication	13.7	71.9	13.9	1,939
Population group				
Black African	12.0	71.7	15.9	1,998
White	18.5	61.4	19.2	140
Coloured	11.2	65.7	22.7	150
Indian/Asian	*	*	*	31
Other	nc	nc	nc	0
Residence				
Urban	12.3	71.1	15.9	1,430
Non-urban	12.1	69.8	17.9	889
Province				
Western Cape	17.2	63.3	19.5	206
Eastern Cape	7.7	73.7	18.0	300
Northern Cape	26.5	58.8	14.7	37
Free State	4.3	78.4	16.9	160
KwaZulu-Natal	9.2	72.2	18.0	393
North West	17.2	70.3	12.5	230
Gauteng	12.8	70.6	15.6	576
Mpumalanga	17.5	69.6	12.4	216
Limpopo	10.5	67.8	21.8	202
Education				
No education	8.9	68.2	22.9	146
Primary incomplete	8.5	66.7	24.3	321
Primary complete	7.4	78.4	14.1	133
Secondary incomplete	12.1	73.1	14.2	1,062
Secondary complete	16.6	70.3	13.0	430
More than secondary	14.9	62.1	21.9	227
Wealth quintile				
Lowest	11.7	71.4	15.5	481
Second	10.8	73.5	15.4	483
Middle	12.2	72.7	15.0	504
Fourth	14.2	72.3	13.2	441
Highest	12.6	61.7	25.4	410
Total 15+	12.2	70.6	16.7	2,319

Notes: Excludes cases in which DBS specimens took 60 or more days to get from the field to the laboratory freezer. An HbA1c level of 6.5% or above is classified as diabetes; an HbA1c level between 5.7% and 6.4% is considered pre-diabetic (ADA 2010). Total includes 33 men for whom information on nutritional status is missing and 20 men for whom information on anaemia is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
BMI = Body mass index
nc = No cases
[1] Includes a few cases with inconclusive results as per the SADHS HIV testing algorithm shown in Chapter 1, Figure 1.2
[2] Haemoglobin level <13.0 g/dl

Table 16.12.1 Adjusted glycated haemoglobin levels: Women

Percentage of women age 15 and older by adjusted glycated haemoglobin level (HbA1c), according to background characteristics, South Africa DHS 2016

Background characteristic	Adjusted HbA1c level <5.7%	5.7-6.4%	≥6.5%	Number of women
Age				
15-24	36.1	63.0	0.9	885
25-34	31.3	64.2	4.5	846
35-44	21.3	66.9	11.8	613
45-54	14.4	64.9	20.8	529
55-64	8.1	63.2	28.7	457
65+	5.9	64.0	30.1	474
Currently pregnant[1]				
Pregnant	46.6	50.0	3.4	100
Not pregnant or not sure	28.6	65.0	6.4	2,517
HIV status				
HIV positive	22.5	69.1	8.4	873
HIV negative[2]	22.8	63.1	14.1	2,807
Not tested in survey	14.9	58.4	26.7	124
Anaemia status				
Anaemic[3]	21.0	67.3	11.7	1,136
Not anaemic	23.3	62.9	13.8	2,632
Nutritional status				
Underweight (BMI <18.5)	35.8	61.6	2.6	97
Normal (BMI 18.5-24.9)	31.0	64.1	4.9	1,062
Overweight (BMI 25.0-29.9)	20.7	69.6	9.7	981
Obese (BMI ≥30.0)	14.0	63.1	22.9	1,483
Not eligible (pregnant or recent birth)	48.4	49.0	2.6	142
Past diabetes diagnosis				
Diabetes diagnosed	1.7	25.0	73.4	202
Treatment received	1.6	20.8	77.5	173
No treatment received	(1.9)	(49.5)	(48.6)	28
Diabetes not diagnosed	23.7	66.5	9.8	3,590
Don't know	*	*	*	11
Current medication				
On diabetes medication	1.4	13.6	85.0	90
On undisclosed medication	14.5	67.1	18.4	817
Not on medication	25.4	65.1	9.5	2,896
Population group				
Black African	22.0	65.0	13.1	3,351
White	31.0	63.4	5.6	142
Coloured	28.3	56.9	14.9	263
Indian/Asian	(0.0)	(64.0)	(36.0)	44
Other	*	*	*	3
Residence				
Urban	24.8	63.7	11.5	2,252
Non-urban	19.1	65.2	15.7	1,551
Province				
Western Cape	24.1	63.7	12.2	370
Eastern Cape	17.2	65.3	17.5	504
Northern Cape	35.7	52.7	11.7	70
Free State	11.4	74.9	13.8	250
KwaZulu-Natal	17.8	65.1	17.1	729
North West	26.5	64.8	8.6	332
Gauteng	28.6	62.1	9.3	810
Mpumalanga	27.2	61.3	11.5	357
Limpopo	20.8	64.4	14.8	381
Education				
No education	10.3	60.4	29.4	347
Primary incomplete	11.9	66.6	21.4	491
Primary complete	16.5	62.3	21.1	214
Secondary incomplete	23.8	67.5	8.6	1,680
Secondary complete	31.1	59.6	9.3	741
More than secondary	28.8	60.6	10.6	330
Wealth quintile				
Lowest	22.6	64.8	12.5	849
Second	21.2	65.6	3.2	744
Middle	21.9	65.4	12.7	849
Fourth	22.4	64.3	13.2	736
Highest	24.6	60.6	14.8	624
Total 15+	22.5	64.3	13.2	3,803

Notes: Excludes cases in which DBS specimens took 60 or more days to get from the field to the laboratory freezer. Results were adjusted based on Affan et al. 2014. An HbA1c level of 6.5% or above is classified as diabetes; an HbA1c level between 5.7% and 6.4% is considered pre-diabetic (ADA 2010). Total includes 38 women for whom information on nutritional status is missing and 25 women for whom information on anaemia is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
BMI= Body mass index
[1] Restricted to women age 15-49
[2] Includes a few cases with inconclusive results as per the SADHS HIV testing algorithm shown in Chapter 1, Figure 1.2
[3] Haemoglobin level <12.0 g/dl among non-pregnant women and <11.0 g/dl among pregnant women

Table 16.12.2 Adjusted glycated haemoglobin levels: Men

Percentage of men age 15 and older by adjusted glycated haemoglobin level (HbA1c), according to background characteristics, South Africa DHS 2016

Background characteristic	Adjusted HbA1c level			Number of men
	<5.7%	5.7-6.4%	≥6.5%	
Age				
15-24	32.0	65.1	2.0	735
25-34	31.9	64.6	3.4	480
35-44	26.1	66.9	6.6	378
45-54	13.7	74.2	11.7	248
55-64	15.4	61.4	23.0	259
65+	14.7	63.6	21.1	219
HIV status				
HIV positive	18.6	74.2	6.9	305
HIV negative[1]	27.0	64.5	8.0	1,938
Not tested in survey	15.8	62.9	18.2	76
Anaemia status				
Anaemic[2]	15.9	76.0	8.1	184
Not anaemic	26.4	64.9	8.2	2,115
Nutritional status				
Underweight (BMI <18.5)	33.8	61.9	3.7	220
Normal (BMI 18.5-24.9)	28.5	67.1	3.8	1,341
Overweight (BMI 25.0-29.9)	20.6	65.6	13.8	461
Obese (BMI ≥30.0)	14.0	61.9	24.1	263
Past diabetes diagnosis				
Diabetes diagnosed	1.6	20.2	78.2	84
Treatment received	0.9	20.8	78.3	75
No treatment received	*	*	*	8
Diabetes not diagnosed	26.5	67.3	5.6	2,212
Don't know	*	*	*	23
Current medication				
On diabetes medication	(0.0)	(11.4)	(88.6)	46
On undisclosed medication	18.0	70.7	11.0	333
Not on medication	27.5	66.2	5.8	1,939
Population group				
Black African	25.6	67.0	7.0	1,998
White	36.8	47.3	15.1	140
Coloured	19.3	64.5	15.8	150
Indian/Asian	*	*	*	31
Other	nc	nc	nc	0
Residence				
Urban	25.9	65.3	8.1	1,430
Non-urban	25.0	66.4	8.4	889
Province				
Western Cape	27.3	59.6	13.2	206
Eastern Cape	18.4	71.2	9.8	300
Northern Cape	43.7	49.1	7.2	37
Free State	16.6	74.7	8.3	160
KwaZulu-Natal	20.2	69.8	9.4	393
North West	39.8	56.1	4.1	230
Gauteng	27.2	65.2	6.6	576
Mpumalanga	31.6	61.3	6.5	216
Limpopo	21.2	69.1	9.7	202
Education				
No education	15.2	72.6	12.3	146
Primary incomplete	19.6	68.6	11.3	321
Primary complete	22.8	71.3	5.9	133
Secondary incomplete	24.9	68.7	5.8	1,062
Secondary complete	31.0	61.5	7.3	430
More than secondary	35.2	48.1	15.6	227
Wealth quintile				
Lowest	24.7	69.8	4.1	481
Second	23.2	68.8	7.6	483
Middle	25.1	68.2	6.6	504
Fourth	26.5	66.5	6.5	441
Highest	28.7	53.3	17.6	410
Total 15+	25.6	65.7	8.2	2,319

Notes: Excludes cases in which DBS specimens took 60 or more days to get from the field to the laboratory freezer. Results were adjusted based on Affan et al. 2014. An HbA1c level of 6.5% or above is classified as diabetes; an HbA1c level between 5.7% and 6.4% is considered pre-diabetic (ADA 2010). Total includes 33 men for whom information on nutritional status is missing and 20 men for whom information on anaemia is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
BMI= Body mass index
nc = No cases
[1] Includes a few cases with inconclusive results as per the SADHS HIV testing algorithm shown in Chapter 1, Figure 1.2
[2] Haemoglobin level <13.0 g/dl

Table 16.13.1 Prevalence of anaemia in women

Percentage of women age 15 and older with anaemia, according to background characteristics, South Africa DHS 2016

Background characteristic	Non-pregnant / Pregnant	Anaemia status by haemoglobin level: Any	Mild	Moderate	Severe	Number of women
			<12.0 g/dl / <11.0 g/dl	10.0-11.9 g/dl / 10.0-10.9 g/dl	7.0-9.9 g/dl / 7.0-9.9 g/dl	<7.0 g/dl / <7.0 g/dl	
Age						
15-24		33.0	24.2	8.4	0.5	975
15-19		34.0	24.1	9.7	0.2	475
20-24		32.1	24.2	7.1	0.8	500
25-34		33.0	24.3	8.1	0.7	946
35-44		33.8	24.1	8.4	1.4	702
45-54		29.0	19.4	8.6	1.0	588
55-64		24.9	20.5	4.3	0.2	497
65+		24.9	20.5	4.1	0.3	536
Population group						
Black African		32.2	23.6	7.8	0.7	3,753
White		10.8	10.5	0.3	0.0	157
Coloured		21.6	16.6	5.0	0.0	288
Indian/Asian		(29.2)	(22.3)	(7.0)	(0.0)	44
Other		*	*	*	*	3
Number of children ever born[1]						
0		35.5	25.0	9.8	0.7	734
1		33.8	25.3	7.5	1.0	771
2-3		31.7	23.0	7.9	0.8	1,066
4-5		33.3	24.0	8.6	0.7	285
6+		28.2	18.9	9.3	0.0	71
Maternity status[1]						
Pregnant		39.1	16.9	22.2	0.0	109
Breastfeeding		28.9	24.8	3.8	0.4	241
Neither		33.4	24.4	8.2	0.9	2,576
Cigarette use[2]						
Smokes cigarettes		19.4	15.4	4.0	0.0	261
Does not smoke cigarettes		31.4	23.1	7.5	0.7	3,983
Residence						
Urban		29.8	23.0	6.2	0.5	2,584
Non-urban		32.0	22.1	9.0	0.9	1,660
Province						
Western Cape		23.9	18.6	5.3	0.0	421
Eastern Cape		29.7	22.1	7.1	0.6	598
Northern Cape		25.7	21.4	4.3	0.0	78
Free State		27.7	21.2	5.6	1.0	261
KwaZulu-Natal		28.9	22.5	5.1	1.2	747
North West		38.3	25.8	12.6	0.0	342
Gauteng		31.6	24.7	6.2	0.7	968
Mpumalanga		38.5	22.6	14.9	1.0	383
Limpopo		29.0	21.7	6.7	0.6	445
Education						
No education		29.6	24.5	4.6	0.5	371
Primary incomplete		28.0	18.6	9.1	0.3	539
Primary complete		31.2	22.9	6.8	1.4	229
Secondary incomplete		31.9	23.7	7.4	0.8	1,890
Secondary complete		31.3	23.2	7.7	0.4	838
More than secondary		26.9	19.7	6.5	0.7	377
Wealth quintile						
Lowest		28.5	19.9	7.6	0.9	935
Second		35.1	24.8	9.2	1.1	816
Middle		32.8	23.8	8.1	0.9	918
Fourth		31.3	24.9	6.2	0.2	834
Highest		24.9	19.7	5.1	0.1	741
Total 15+		30.6	22.6	7.3	0.7	4,244
Total 15-49		33.3	24.1	8.4	0.8	2,927

Notes: Prevalence is adjusted for altitude and for smoking status, if known, using formulas in CDC 1998. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Restricted to women age 15-49

[2] Includes manufactured cigarettes and hand-rolled cigarettes

Table 16.13.2 Prevalence of anaemia in men

Percentage of men age 15 and older with anaemia, according to background characteristics, South Africa DHS 2016

Background characteristic	Any anaemia <13.0 g/dl	Number of men
Age		
15-24	13.3	796
15-19	17.2	438
20-24	8.4	357
25-34	10.4	557
35-44	14.6	434
45-54	25.6	288
55-64	22.4	285
65+	29.7	246
Population group		
Black African	18.0	2,240
White	7.8	151
Coloured	12.0	184
Indian/Asian	*	31
Other	nc	0
Cigarette use[1]		
Smokes cigarettes	13.6	937
Does not smoke cigarettes	18.6	1,669
Residence		
Urban	16.2	1,661
Non-urban	17.9	945
Province		
Western Cape	8.9	238
Eastern Cape	18.2	372
Northern Cape	19.8	46
Free State	25.6	168
KwaZulu-Natal	15.9	395
North West	17.5	242
Gauteng	17.2	683
Mpumalanga	18.1	233
Limpopo	13.9	226
Education		
No education	25.3	154
Primary incomplete	26.6	359
Primary complete	18.3	142
Secondary incomplete	15.8	1,189
Secondary complete	13.4	499
More than secondary	8.5	264
Wealth quintile		
Lowest	17.9	550
Second	19.0	537
Middle	19.1	558
Fourth	17.0	495
Highest	9.9	466
Total 15+	16.8	2,606
Total 15-49	13.7	1,941

Note: Prevalence is adjusted for altitude and for smoking status, if known, using formulas in CDC 1998. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases
[1] Includes manufactured cigarettes and hand-rolled cigarettes

ADULT NUTRITION 17

Key Findings

- ***Nutritional status of women:*** Approximately one-third (30%) of women have a BMI in the normal range, 3% are underweight, 27% are overweight (BMI of 25.0-29.9), and 41% are obese (BMI of 30 or above). Twenty percent of women are severely obese (BMI of 35 or above), a subgroup of the obese category.
- ***Nutritional status of men:*** The majority of men (59%) have a BMI in the normal range; 10% are underweight, 20% are overweight (BMI of 25.0-29.9), and 11% are obese (BMI of 30 or above). Three percent of men are severely obese (BMI of 35 or above).
- ***Consumption of fruit and vegetables:*** 59% of adults reported that they consumed vegetables (excluding potatoes) during the day or night before the survey; 49% reported that they consumed fruit.
- ***Consumption of sugar-sweetened beverages:*** 36% of adults indicated that they consumed sugar-sweetened beverages during the day or night before the survey; the average quantity consumed was 607 ml.
- ***Consumption of fried foods, fast foods, salty snacks, and processed meats:*** On a daily basis, 10% of respondents eat fried foods, 2% eat fast food, 13% eat salty snacks, and 14% consume processed meats. Daily consumption of each of the specified foods decreases with age, is higher among respondents in urban than non-urban areas, and generally increases with increasing household wealth.
- ***Interest in lowering salt consumption:*** One in three adults (32%) are not interested in lowering their salt consumption, 9% are interested in lowering their salt consumption within the next 6 months, 6% are interested in lowering their salt consumption within the next month, and 48% indicate that they have started lowering their salt consumption.

The Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2013-2017 was developed by the NDoH to guide initiatives to control risk factors for selected chronic conditions (NDoH 2013b). One of the objectives of the strategic plan is to reduce the prevalence of obesity in the country. Obese (BMI ≥30 kg/m^2) and severely obese (BMI ≥35 kg/m^2) persons are at elevated risk for heart disease, diabetes, and other conditions relative to those who are not overweight or obese. The plan promotes physical activity and consumption of a balanced diet and highlights the need to reduce sugar intake. During 2016, the National Treasury released a policy paper recommending that a sugar tax be implemented (National Treasury 2016).

In terms of unhealthy diets, another specific objective outlined in the plan is to reduce salt intake. Regulations to reduce the sodium content of selected processed foods using a population-wide approach have been published, and these regulations outline a phased introduction of lower salt content in selected foods (NDoH 2016). Aimed at reducing the prevalence of hypertension and anticipating an impact on cardiovascular disease and stroke, such an approach has been recommended by WHO as cost-effective. The Salt Watch, a multisectoral coalition led by the Heart and Stroke Foundation of South Africa and supported by the NDoH, implemented a national awareness campaign during 2016 to increase knowledge about salt intake and address people's salt-related behaviours (Webster et al. 2016). Results from the SADHS 2016 provide baseline information about individuals' intention to change their salt-related behaviours and basic dietary information about salt intake that can be used for monitoring and evaluation.

This chapter reports on anthropometric measurements, including height, weight, body mass index (BMI), waist circumference, and the waist-to-height ratio (WtHR), as well as consumption of various foods and drinks and interest in lowering salt consumption among respondents age 15 and older who completed the adult health module.

17.1 Body Mass Index of Adults and Short Stature of Women

Body mass index (BMI)

BMI is calculated by dividing weight in kilograms by height in metres squared (kg/m^2).

Status	BMI
Underweight	<18.5
Normal	18.5-24.9
Overweight	25.0-29.9
Obese	≥30.0
Severely obese	≥35.0

Sample: Women age 15+ who are not pregnant and who have not had a birth in the 2 months before the survey and men age 15+

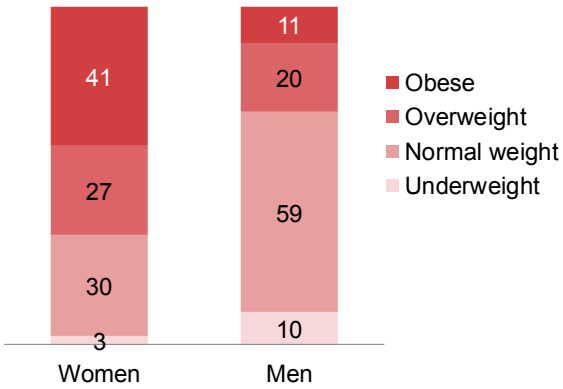
Anthropometric data on height and weight were collected for all women and men age 15 and older who consented to measurements (82% of women and 78% of men). These data were used to calculate the body mass index (BMI).

The mean BMI is 29.2 for women and 23.6 for men. Based on BMI cutoffs, two-thirds (68%) of women are overweight or obese, 3% are underweight, and 30% are in the normal range (**Table 17.1.1** and **Figure 17.1**). In contrast, just under one-third of men (31%) are overweight or obese, 10% are underweight, and the majority (59%) have a BMI in the normal range (**Table 17.1.2** and **Figure 17.1**).

Among women age 15-49, 2% were of short stature (height below 145 cm), which could put them at risk of difficult deliveries and poor birth outcomes.

Figure 17.1 **Nutritional status of women and men**

Percent distribution of women and men age 15+



Note: Due to rounding, percentages may not sum to 100%.

Comparison with the SADHS 1998: The mean BMI among women age 15 and older increased from 27.3 in 1998 to 29.2 in 2016. Over the same period, the prevalence of overweight or obesity among women rose from 56% to 68%, while the prevalence of underweight decreased from 6% to 3%. There was little change

in the mean BMI among men age 15 and older (23.4 in 1998 and 23.6 in 2016). The prevalence of overweight or obesity among men was 29% in 1998 and 31% in 2016, while the prevalence of underweight was 13% and 10%, respectively.

Patterns by background characteristics

- The prevalence of overweight or obesity was highest among women age 45-64 (81%-82%) and men age 65 or older (54%).
- There was little variation by population group in the prevalence of overweight or obesity among women (67%-70%). Among men, the prevalence of overweight or obesity was highest among Whites (75%) and lowest among Black Africans (27%).
- Among women who perceive themselves as underweight or normal, 44% and 65%, respectively, are overweight or obese. Among men who perceive themselves as underweight or normal, 10% and 29%, respectively, are overweight or obese.
- While the prevalence of overweight or obesity is similar among urban and non-urban women (68% and 66%, respectively), the prevalence is modestly higher among men in urban areas than among those in non-urban areas (34% and 26%, respectively).
- Among both women and men, the prevalence of overweight or obesity is highest in Western Cape (73% and 44%, respectively) **(Figure 17.2** and **Figure 17.3**).
- One in five women (20%) are in the severely obese category; only 3% of men are severely obese (**Table 17.2**).
- Severe obesity increases with increasing wealth among both men and women (**Figure 17.4**).
- Indian/Asian women are more likely to be of short stature (12%) than women in the other population groups (0%-4%) (**Table 17.1.1**).

Figure 17.2 Overweight or obesity by province: Women

Percentage of women age 15+ with a BMI ≥25

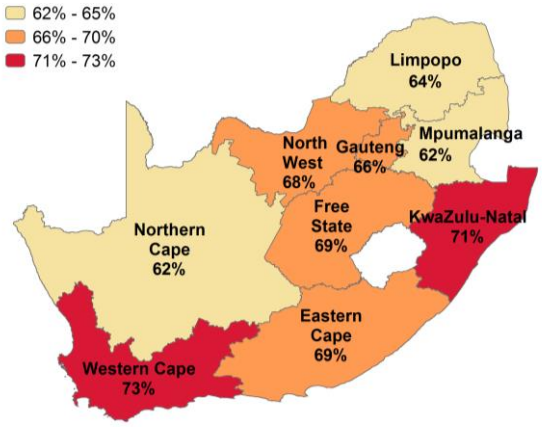


Figure 17.3 Overweight or obesity by province: Men

Percentage of men age 15+ with a BMI ≥25

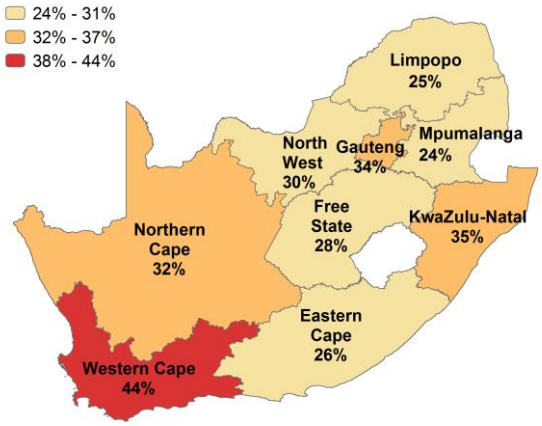
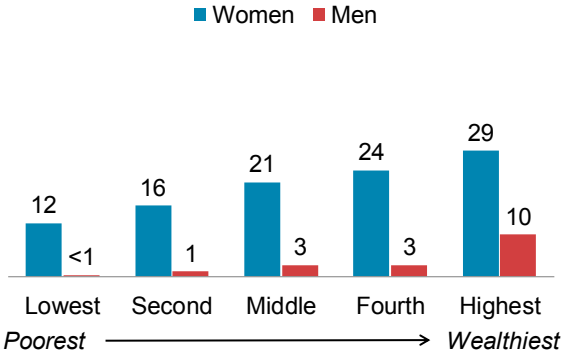


Figure 17.4 Severe obesity in adults by household wealth

Percentage of women and men age 15+ who have a BMI ≥35



17.2 Waist Circumference and Waist-to-Height Ratio

Waist circumference

Cut-off values for assessing risk of metabolic complications are based on waist circumference.

Respondents	Risk category	
	Increased risk of metabolic complications	Substantially increased risk of metabolic complications
Women	≥80 cm and <88 cm	≥88 cm
Men	≥94 cm and <102 cm	≥102 cm

Waist-to-height ratio (WtHR)

WtHR is calculated by dividing waist circumference by height. Women and men with a WtHR ≥0.5 are at risk for metabolic complications.

Sample: Women and men age 15+; excludes pregnant women and women with a birth in the 2 months preceding the survey

The presence of excess fat in the abdomen, irrespective of total body fat, is an independent predictor of cardiovascular risk and morbidity. Waist circumference provides an estimate of abdominal or visceral obesity, and both waist circumference and the waist-to-height ratio (WtHR) can be used to assess the risk of cardiovascular and coronary heart disease (Ashwell et al. 2012).

The mean waist circumference among women age 15 and older is 87.4 cm. Thirty-five percent of women have a waist circumference below 80 cm, 19% have a waist circumference between 80 cm and less than 88 cm, and 45% have a waist circumference of 88 cm or above. The mean WtHR among women is 0.55; 67% of women have a WtHR greater than or equal to 0.50 (**Table 17.3.1**). By either measure, a majority of women in South Africa are at elevated risk for metabolic complications.

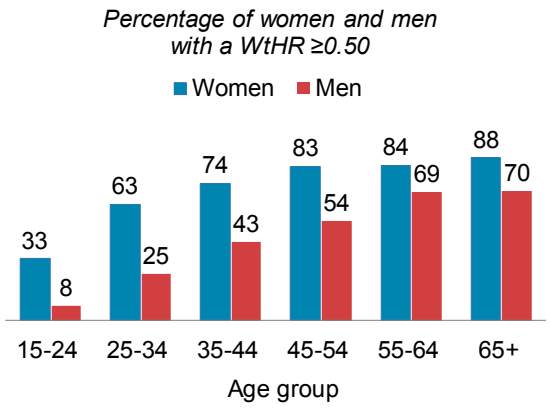
The mean waist circumference among men age 15 and older is 82.4 cm. Eighty-one percent of men have a waist circumference below 94 cm, 9% have a waist circumference between 94 cm and less than 102 cm, and 10% have a waist circumference of 102 cm or above. The mean WtHR among men is 0.49, and 35% of men have a WtHR greater than or equal to 0.50 (**Table 17.3.2**).

Comparison with the SADHS 1998: Mean waist circumference among women has increased since 1998, from 85.8 cm to 87.4 cm; in accordance with this change, the proportion of women with a waist circumference of 88 cm or above has increased from 41% to 45%. There has been little or no change in mean waist circumference among men (82.1 cm in 1998 versus 82.4 cm in 2016). The percentage of men with a waist circumference of 102 cm or above has also held steady (9% versus 10%).

Patterns by background characteristics

- The proportion of both women and men with a WtHR of 0.50 or above increases with age (**Figure 17.5**).
- By population group, Coloured women and White men are most likely to have a WtHR of 0.50 or above (76% and 74%, respectively) (**Table 17.3.1** and **Table 17.3.2**).
- The percentage of women with a waist circumference of 88 cm or above is higher in Western Cape (59%) than in other provinces (34%-55%). Similarly, although the proportions

Figure 17.5 **Waist-to-height ratio (WtHR) among adults by age**



are much lower overall, men in Western Cape (17%) are more likely than those in other provinces (6%-14%) to have a waist circumference of 102 cm or above.

- The proportion of women with a waist circumference of 88 cm or above and the proportion of men with a waist circumference of 102 cm or above increase with increasing household wealth. The proportion of women and men with a WtHR of 0.50 or above also generally rises with household wealth, with the increase more marked among men.

17.3 Consumption of Fruit, Vegetables, Sugar-sweetened Beverages, and Fruit Juice

Respondents were asked about their previous day's intake of fruit, vegetables, sugar-sweetened beverages, and fruit juice using show-cards to clarify types of fruit and vegetables and types and standard quantities of drinks. For each type of drink consumed, the respondent was asked to specify the number of standard units consumed. Five in 10 respondents (49%) consumed fruit and 6 in 10 (59%) consumed vegetables (excluding potatoes) during the day or night before the survey (**Table 17.4**). Thirty-six percent of respondents reported drinking any sugar-sweetened beverage, and 14% reported drinking fruit juice (**Table 17.5**). Among respondents who drank sugar-sweetened beverages or fruit juice, the average quantities consumed were 607 ml and 304 ml, respectively.

Patterns by background characteristics

- Fruit, vegetable, and fruit juice intake was similar across all age groups. However, the proportion of respondents who consumed sugar-sweetened beverages peaks among those age 20-24 (44%) and gradually declines to 19% among those age 65 and older.

- By population group, fruit and vegetable consumption was highest among Whites (71% and 84%, respectively) and lowest among Black Africans (46% and 57%, respectively). Whites (24%) were more likely to drink fruit juice than those in other groups (13%-20%); Coloured women and men were most likely to consume sugar-sweetened beverages (38%), closely followed by Black Africans (36%).

- Women were more likely than men to consume fruit (51% versus 45%), vegetables (64% versus 52%), and fruit juice (15% versus 13%), while men were more likely to consume sugar-sweetened beverages (40% versus 33%).

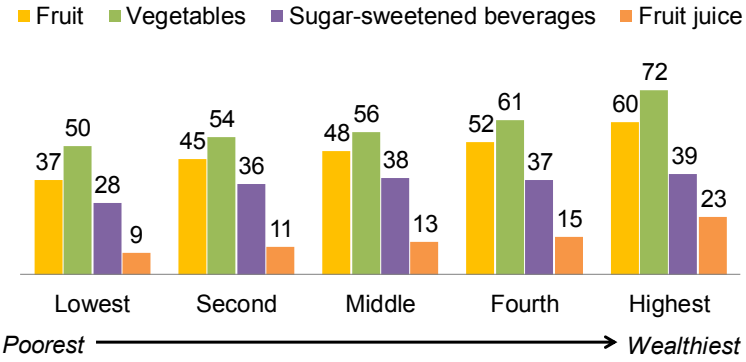
- The proportion of respondents consuming fruit, vegetables, sugar-sweetened beverages, and fruit juice is higher in urban areas than non-urban areas.

- Fruit and vegetable consumption is highest in Western Cape (64% and 69%, respectively) and lowest in Northern Cape (32% and 46%, respectively). Respondents in North West were most likely to drink sugar-sweetened beverages (45%), and those in Eastern Cape were least likely to do so (29%). Among respondents who consumed sugar-sweetened beverages, those in Free State consumed much larger quantities (1,360 ml on average) than those in other provinces (391-700 ml). The proportion of respondents who consumed fruit juice was highest in Western Cape (19%) and lowest in Limpopo and Free State (11% each).

- The proportion of respondents who consumed fruit, vegetables, sugar-sweetened beverages, and fruit juice generally increases with increasing household wealth (**Figure 17.6**). A similar trend is observed with respect to education.

***Figure 17.6* Consumption of various foods and beverages by household wealth**

Percentage of women and men age 15+ who consumed the item in the day or night before the survey



17.4 Consumption of Fried Foods, Fast Foods, Salty Snacks, and Processed Meats

Respondents were asked how often they eat fried foods, fast foods, salty snacks, and processed meats. As shown in **Table 17.6**, 10% of respondents eat fried foods on a daily basis, and 37% consume them at least once a week (but not daily); 2% of respondents eat fast food on a daily basis, and 18% do so at least once a week (but not daily); 13% of respondents eat salty snacks on a daily basis, with 29% consuming them at least once a week (but not daily); and 14% of respondents consume processed meats on a daily basis, with 29% consuming them at least once a week (but not daily).

Patterns by background characteristics

- Daily consumption of each of the specified foods generally decreases with age. For example, 32% of respondents age 15-19 consume salty snacks on a daily basis, as compared with 4% of those age 65 and older.
- Daily consumption of each of the specified foods is higher among respondents in urban than non-urban areas. For example, 17% of respondents in urban areas consume processed meats on a daily basis, compared with 9% in non-urban areas.
- Consumption of the specified foods varies by province, especially with regard to salty snacks and processed meats. For example, 20% of respondents in Western Cape and 9% in KwaZulu-Natal consume salty snacks on a daily basis, while 20% of respondents in Gauteng and 6% in Northern Cape consume processed meats daily.
- Daily consumption of each of the specified foods generally increases with increasing education. Daily consumption also generally rises with increasing wealth with the exception of the highest wealth quintile.

17.5 Interest in Lowering Salt Consumption

Reducing salt consumption is recommended to reduce deaths from hypertension and cardiovascular diseases, particularly stroke. Respondents were asked which of five statements best described their approach towards salt consumption. As shown in **Table 17.7**, one in three adults (32%) are not interested in lowering their salt consumption, 9% are interested in lowering their salt consumption within the next 6 months, 6% are interested in lowering their salt consumption within the next month, and 48% indicate that they have started lowering their salt consumption (10% within the last 6 months and 38% for 6 months or longer).

Patterns by background characteristics

- The proportion of respondents who have already lowered their salt consumption for 6 months or longer increases with increasing age, from 28% among those age 15-24 to 58% among those age 65 or older. Conversely, the proportion of respondents who are not interested in lowering their salt consumption decreases with age, from 40% among those age 15-24 to 21% among those age 65 and older.

- By population group, Indians/Asians are least interested in lowering their salt consumption (45% versus 24%-33% in other groups).

- A greater proportion of men than women are not interested in lowering their salt consumption (43% versus 25%), and a smaller proportion of men than women have lowered their salt consumption for longer than 6 months (30% versus 45%).

- Respondents with elevated blood pressure as measured in the SADHS (see Chapter 16) are more likely than others to indicate that they have already lowered their salt consumption for longer than 6 months (45% versus 35%-37%).

List of Tables

For more information on adult nutritional status and dietary intake, see the following tables:

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Table 17.1.1 Body mass index and short stature of women

Among women age 15 and older, percentage with height under 145 cm, mean body mass index (BMI), and percentage with specific BMI levels, according to background characteristics, South Africa DHS 2016

	Height		Body mass index[1]								
				Normal	Underweight			Obese			
Background characteristic	Percent-age below 145 cm	Number of women	Mean body mass index (BMI)	18.5-24.9 (total normal)	<18.5 (total under-weight)	17.0-18.4 (mild thinness)	<17 (moderate and severe thinness)	≥25.0 (total over-weight or obese)	25.0-29.9 (over-weight)	≥30.0 (obese)	Number of women
Age											
15-24	1.6	1,111	24.8	54.3	5.9	4.9	0.9	39.8	24.4	15.5	1,032
15-19	2.1	544	23.7	66.5	6.7	5.6	1.2	26.8	15.8	11.0	517
20-24	1.1	567	25.9	42.1	5.0	4.3	0.6	52.9	32.9	20.0	515
25-34	1.5	1,081	29.0	31.4	2.1	1.8	0.4	66.4	29.1	37.3	1,009
35-44	1.5	802	30.8	20.8	1.8	1.4	0.4	77.4	24.8	52.6	780
45-54	2.4	678	31.7	17.4	0.7	0.7	0.0	81.9	24.9	57.0	676
55-64	1.6	553	31.5	16.5	2.2	1.0	1.2	81.3	26.7	54.5	553
65+	7.9	594	30.4	23.1	1.5	1.2	0.3	75.4	29.6	45.8	592
Population group											
Black African	2.3	4,209	29.2	30.0	2.6	2.1	0.5	67.4	26.4	40.9	4,047
White	0.0	193	28.3	28.9	1.7	1.7	0.0	69.4	38.8	30.6	188
Coloured	3.5	327	30.1	27.9	4.3	3.2	1.1	67.8	21.8	46.0	317
Indian/Asian	11.8	87	29.7	30.0	0.0	0.0	0.0	70.0	20.8	49.2	87
Other	*	3	*	*	*	*	*	*	*	*	3
Perceived weight											
Underweight	3.4	429	25.7	47.0	9.2	7.2	2.0	43.9	20.3	23.5	419
Normal	2.6	3,680	28.3	32.8	2.3	1.9	0.4	64.9	29.6	35.3	3,532
Overweight	1.0	633	36.6	2.8	0.3	0.2	0.1	96.9	14.6	82.4	615
Obese	(1.6)	34	(38.9)	(1.7)	(0.0)	(0.0)	(0.0)	(98.3)	(13.2)	(85.1)	34
Don't know	0.5	43	31.1	25.6	2.9	1.4	1.5	71.4	13.3	58.2	43
Waist circumference											
<80 cm	2.8	1,646	22.8	69.7	7.0	5.6	1.4	23.3	19.9	3.4	1,646
80-<88 cm	2.1	891	27.6	21.1	0.4	0.4	0.0	78.4	56.4	22.0	891
≥88 cm	2.5	2,095	35.0	2.1	0.0	0.0	0.0	97.9	19.1	78.8	2,091
Residence											
Urban	2.2	2,988	29.6	29.4	2.2	1.9	0.3	68.4	26.3	42.2	2,869
Non-urban	2.9	1,831	28.6	30.5	3.3	2.4	0.9	66.1	26.9	39.2	1,773
Province											
Western Cape	3.1	435	30.6	24.3	2.3	1.9	0.4	73.3	25.9	47.5	415
Eastern Cape	2.5	646	29.5	28.5	2.3	2.0	0.3	69.2	28.5	40.6	623
Northern Cape	5.4	109	27.9	30.0	8.2	5.6	2.6	61.8	26.8	35.0	106
Free State	2.4	271	29.4	28.1	3.4	2.6	0.8	68.5	24.0	44.5	265
KwaZulu-Natal	3.2	948	29.9	28.0	1.3	1.2	0.1	70.6	24.9	45.7	919
North West	2.6	367	28.6	27.7	4.6	3.1	1.4	67.8	24.8	43.0	353
Gauteng	1.8	1,116	29.2	33.0	1.5	1.5	0.0	65.6	26.7	38.9	1,065
Mpumalanga	1.0	411	28.0	34.2	3.8	3.1	0.7	62.0	28.5	33.5	393
Limpopo	2.3	518	28.1	31.6	4.2	2.9	1.3	64.2	28.0	36.1	503
Education											
No education	5.6	421	29.7	28.7	2.5	1.6	0.9	68.8	25.3	43.5	417
Primary incomplete	4.6	580	30.0	21.8	2.5	1.9	0.7	75.6	26.9	48.7	571
Primary complete	1.8	245	29.3	29.8	3.3	2.8	0.5	66.9	26.7	40.2	229
Secondary incomplete	2.5	2,125	28.9	33.4	2.8	2.2	0.6	63.8	24.8	39.0	2,046
Secondary complete	1.0	987	29.1	29.0	2.3	2.0	0.3	68.7	28.9	39.8	937
More than secondary	0.3	460	29.4	26.6	2.3	2.1	0.2	71.1	29.8	41.3	443
Wealth quintile											
Lowest	3.1	987	27.4	39.7	3.0	2.4	0.6	57.3	27.6	29.7	946
Second	2.4	942	28.5	30.9	3.0	2.1	0.9	66.0	28.3	37.8	908
Middle	1.6	1,035	29.6	26.4	3.5	2.8	0.7	70.1	26.2	43.9	997
Fourth	2.8	970	30.1	27.0	1.9	1.5	0.4	71.1	25.8	45.3	931
Highest	2.5	885	30.7	24.9	1.6	1.5	0.0	73.5	24.6	48.9	861
Total 15+	2.5	4,819	29.2	29.8	2.6	2.1	0.5	67.5	26.5	41.0	4,642
Total 15-49	1.5	3,334	28.3	34.8	3.1	2.6	0.5	62.1	26.3	35.9	3,159

Notes: The body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in metres (kg/m^2). Total includes 14 women for whom information on waist circumference is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Excludes pregnant women and women with a birth in the preceding 2 months

Table 17.1.2 Body mass index of men

Among men age 15 and older, mean body mass index (BMI) and the percentage with specific BMI levels, according to background characteristics, South Africa DHS 2016

	Body mass index								
		Normal	Underweight			Obese			
Background characteristic	Mean body mass index (BMI)	18.5-24.9 (total normal)	<18.5 (total under-weight)	17.0-18.4 (mild thinness)	<17 (moderate and severe thinness)	≥25.0 (total over-weight or obese)	25.0-29.9 (over-weight)	≥30.0 (obese)	Number of men
Age									
15-24	21.3	73.0	15.8	12.0	3.8	11.2	8.9	2.3	927
15-19	20.9	70.7	20.7	14.9	5.8	8.6	6.1	2.5	499
20-24	21.8	75.7	10.2	8.6	1.6	14.2	12.2	2.0	428
25-34	23.3	66.0	5.9	4.7	1.2	28.1	20.5	7.7	700
35-44	24.6	56.5	5.4	4.2	1.1	38.1	23.3	14.8	540
45-54	25.0	49.7	7.6	6.0	1.5	42.8	25.7	17.0	340
55-64	25.8	36.7	10.1	8.9	1.2	53.2	34.2	19.0	313
65+	26.0	38.7	6.9	4.9	2.0	54.4	29.8	24.5	286
Population group									
Black African	23.2	62.8	9.8	7.8	2.0	27.4	18.7	8.7	2,663
White	29.1	24.1	1.2	0.3	0.9	74.7	35.3	39.3	175
Coloured	24.2	48.0	11.6	8.3	3.3	40.4	26.7	13.7	207
Indian/Asian	(25.9)	(41.8)	(9.7)	(4.5)	(5.2)	(48.5)	(26.5)	(22.0)	60
Other	nc	nc	nc	nc	nc	nc	nc	nc	0
Perceived weight									
Underweight	21.2	70.2	19.7	15.0	4.7	10.1	6.8	3.2	310
Normal	23.2	61.7	9.1	7.1	2.0	29.3	21.5	7.8	2,528
Overweight	30.9	17.8	0.2	0.2	0.0	82.0	27.9	54.1	225
Obese	*	*	*	*	*	*	*	*	10
Don't know	(24.3)	(63.1)	(4.2)	(4.2)	(0.0)	(32.7)	(14.9)	(17.8)	32
Waist circumference									
<94 cm	22.0	71.8	10.9	8.6	2.3	17.2	15.7	1.6	2,471
94-<102 cm	28.2	8.7	1.0	1.0	0.0	90.3	66.4	23.9	284
≥102 cm	33.2	1.6	1.1	0.5	0.6	97.3	18.5	78.8	297
Residence									
Urban	23.9	56.7	9.1	7.2	1.9	34.2	20.9	13.3	2,025
Non-urban	23.0	63.8	10.1	7.7	2.5	26.1	19.3	6.8	1,080
Province									
Western Cape	24.8	49.3	7.0	5.8	1.2	43.7	29.8	13.9	261
Eastern Cape	23.3	67.6	6.8	4.6	2.1	25.6	15.8	9.9	413
Northern Cape	23.3	49.2	19.2	13.2	6.0	31.5	16.7	14.8	68
Free State	22.7	57.8	14.7	11.9	2.8	27.5	18.5	9.0	177
KwaZulu-Natal	24.2	57.3	7.5	5.8	1.7	35.2	22.6	12.6	520
North West	23.2	56.7	13.3	9.1	4.2	30.0	22.3	7.8	271
Gauteng	23.8	58.1	8.4	7.3	1.1	33.5	20.7	12.8	848
Mpumalanga	23.0	65.2	10.7	9.2	1.5	24.1	14.6	9.5	273
Limpopo	22.8	62.8	12.1	8.3	3.8	25.1	18.7	6.5	276
Education									
No education	23.7	54.8	12.2	9.4	2.8	33.0	17.3	15.7	169
Primary incomplete	23.3	62.7	10.8	8.7	2.1	26.6	18.4	8.1	398
Primary complete	22.8	63.4	10.2	7.5	2.7	26.4	18.9	7.5	163
Secondary incomplete	22.7	64.8	11.5	9.2	2.4	23.7	17.3	6.4	1,437
Secondary complete	24.6	54.7	6.1	4.0	2.1	39.2	23.8	15.5	624
More than secondary	26.8	38.1	3.1	3.0	0.1	58.8	32.3	26.4	313
Wealth quintile									
Lowest	22.1	72.7	9.9	7.0	2.9	17.4	14.1	3.3	630
Second	22.6	65.8	10.1	7.9	2.2	24.1	18.8	5.3	649
Middle	23.5	59.6	9.3	7.5	1.7	31.2	21.8	9.3	677
Fourth	23.7	57.7	10.9	8.6	2.3	31.4	19.3	12.1	595
Highest	26.7	37.3	6.9	5.6	1.3	55.8	28.4	27.4	554
Total 15+	23.6	59.2	9.5	7.4	2.1	31.3	20.3	11.0	3,105
Total 15-49	23.0	65.3	9.6	7.4	2.2	25.1	17.2	7.9	2,353

Notes: The body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in metres (kg/m^2). Total includes 52 men for whom information on waist circumference is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases

Table 17.2 Severe obesity among women and men

Percentage of women and men age 15 and older with a body mass index (BMI) ≥35 (Class II and III obesity), according to background characteristics, South Africa DHS 2016

Background characteristic	Women		Men	
	Body mass index (BMI) ≥35.0	Number	Body mass index (BMI) ≥35.0	Number
Age				
15-24	5.8	1,032	0.7	927
15-19	4.5	517	1.0	499
20-24	7.1	515	0.3	428
25-34	17.4	1,009	2.3	700
35-44	26.5	780	5.0	540
45-54	29.0	676	4.8	340
55-64	29.9	553	6.2	313
65+	23.8	592	4.0	286
Population group				
Black African	20.3	4,047	2.1	2,663
White	14.5	188	14.1	175
Coloured	25.7	317	6.6	207
Indian/Asian	18.0	87	(5.4)	60
Other	*	3	nc	0
Perceived weight				
Underweight	9.5	419	0.1	310
Normal	15.0	3,532	1.6	2,528
Overweight	54.4	615	21.5	225
Obese	(71.8)	34	*	10
Don't know	39.3	43	(8.1)	32
Waist circumference				
Women: <80 cm; men: <94 cm	0.4	1,646	0.4	2,471
Women: 80-<88 cm; men: 94-<102 cm	3.3	891	0.8	284
Women: ≥88 cm; men: ≥102 cm	43.3	2,091	28.0	297
Residence				
Urban	22.4	2,869	3.6	2,025
Non-urban	17.0	1,773	2.2	1,080
Province				
Western Cape	26.3	415	4.7	261
Eastern Cape	20.1	623	2.3	413
Northern Cape	15.4	106	4.5	68
Free State	21.3	265	2.0	177
KwaZulu-Natal	22.6	919	5.0	520
North West	14.4	353	1.9	271
Gauteng	22.2	1,065	3.4	848
Mpumalanga	15.3	393	0.8	273
Limpopo	16.3	503	2.2	276
Education				
No education	22.8	417	3.8	169
Primary incomplete	21.3	571	1.1	398
Primary complete	18.1	229	3.2	163
Secondary incomplete	20.6	2,046	1.7	1,437
Secondary complete	18.1	937	4.8	624
More than secondary	21.6	443	8.3	313
Wealth quintile				
Lowest	12.1	946	0.4	630
Second	16.1	908	1.2	649
Middle	21.4	997	2.6	677
Fourth	24.2	931	2.6	595
Highest	28.6	861	9.5	554
Total 15+	20.4	4,642	3.1	3,105
Total 15-49	16.8	3,159	2.4	2,353

Notes: Table excludes pregnant women and women with a birth in the preceding 2 months. Total includes 14 women and 52 men for whom information on waist circumference is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases

Table 17.3.1 Waist circumference: Women

Among women age 15 and older, mean waist circumference, percentage with a waist circumference less than 80 centimetres (cm), percentage with a waist circumference between 80 cm and 88 cm, percentage with a waist circumference greater than or equal to 88 cm, mean waist-to-height ratio, and percentage with a waist-to-height ratio greater than or equal to 0.50, according to background characteristics, South Africa DHS 2016

	Waist circumference[1]					Waist-to-height ratio (WtHR)		
Background characteristic	Mean (cm)	<80 cm	80-<88	≥88 cm	Number of women	Mean WtHR	Percentage with a WtHR ≥0.50	Number of women
Age								
15-24	75.8	70.5	14.9	14.6	1,033	0.48	33.4	1,033
25-34	85.6	39.0	21.8	39.1	1,011	0.54	62.8	1,010
35-44	90.5	26.9	20.9	52.2	784	0.57	74.1	784
45-54	93.1	17.1	21.3	61.6	681	0.59	83.4	680
55-64	93.9	18.4	18.7	62.9	557	0.60	83.9	557
65+	93.9	16.7	18.5	64.8	598	0.61	87.9	597
Population group								
Black African	87.2	36.1	19.3	44.6	4,067	0.55	66.4	4,062
White	87.3	33.8	20.6	45.6	189	0.54	62.9	189
Coloured	91.4	26.9	16.2	56.8	316	0.58	75.5	316
Indian/Asian	83.7	39.2	26.0	34.8	90	0.54	69.9	90
Other	*	*	*	*	3	*	*	3
Perceived weight								
Underweight	82.1	51.0	16.4	32.5	418	0.52	51.3	418
Normal	85.4	38.7	21.6	39.6	3,546	0.54	64.0	3,543
Overweight	101.3	8.5	8.6	82.9	624	0.64	91.6	624
Obese	(105.5)	(1.7)	(11.6)	(86.7)	34	(0.65)	(98.3)	34
Don't know	91.2	28.2	12.1	59.7	43	0.58	78.8	41
Residence								
Urban	87.6	35.9	18.8	45.3	2,873	0.56	66.7	2,872
Non-urban	87.1	34.7	20.0	45.4	1,792	0.55	67.4	1,788
Province								
Western Cape	91.2	26.4	14.6	59.0	416	0.58	77.1	416
Eastern Cape	90.8	27.6	17.2	55.2	622	0.58	75.3	622
Northern Cape	88.1	33.6	17.7	48.7	101	0.57	70.3	101
Free State	88.7	34.1	14.4	51.5	265	0.57	69.7	265
KwaZulu-Natal	87.2	36.4	21.0	42.6	946	0.55	65.8	945
North West	87.2	32.9	19.3	47.8	353	0.55	70.3	353
Gauteng	86.2	38.8	21.0	40.2	1,065	0.54	63.4	1,065
Mpumalanga	83.2	46.9	18.9	34.2	393	0.53	55.3	392
Limpopo	85.8	37.5	21.8	40.6	502	0.54	62.5	500
Education								
No education	91.3	26.4	17.8	55.8	423	0.59	79.0	420
Primary incomplete	91.3	22.6	21.3	56.1	575	0.59	80.2	575
Primary complete	89.8	28.6	23.8	47.6	229	0.57	74.4	228
Secondary incomplete	85.8	40.4	17.8	41.8	2,049	0.54	62.4	2,047
Secondary complete	86.2	39.3	19.3	41.4	946	0.54	61.8	946
More than secondary	87.6	33.0	22.3	44.7	444	0.55	66.4	444
Wealth quintile								
Lowest	84.6	43.1	20.9	36.0	960	0.54	60.9	959
Second	86.3	37.3	19.9	42.7	906	0.55	65.6	905
Middle	87.9	33.2	20.2	46.5	1,001	0.56	69.2	999
Fourth	88.9	32.2	18.3	49.5	934	0.56	69.8	934
Highest	89.6	31.0	16.6	52.4	863	0.57	69.4	863
Total 15+	87.4	35.4	19.2	45.3	4,664	0.55	66.9	4,660

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Excludes pregnant women and women with a birth in the preceding 2 months

Table 17.3.2 Waist circumference: Men

Among men age 15 and older, mean waist circumference, percentage with a waist circumference less than 94 centimetres (cm), percentage with a waist circumference between 94 cm and 102 cm, percentage with a waist circumference greater than or equal to 102 cm, mean waist-to-height ratio, and percentage with a waist-to-height ratio greater than or equal to 0.50, according to background characteristics, South Africa DHS 2016

	Waist circumference					Waist-to-height ratio (WtHR)		
Background characteristic	Mean (cm)	<94 cm	94-<102	≥102 cm	Number of men	Mean WtHR	Percentage with a WtHR ≥0.50	Number of men
Age								
15-24	73.8	97.7	0.9	1.4	896	0.44	7.9	895
25-34	80.2	88.2	7.9	3.9	698	0.47	25.2	698
35-44	84.7	78.1	11.1	10.8	542	0.50	42.6	540
45-54	88.0	70.5	13.3	16.1	338	0.52	53.7	338
55-64	91.9	58.9	18.4	22.7	317	0.54	69.3	316
65+	93.0	51.9	21.2	26.9	286	0.55	69.9	286
Population group								
Black African	80.8	84.7	8.1	7.2	2,633	0.48	31.0	2,629
White	99.3	37.8	21.5	40.7	175	0.56	73.6	175
Coloured	86.8	69.0	13.9	17.2	209	0.51	49.5	209
Indian/Asian	(85.2)	(76.8)	(12.0)	(11.2)	60	(0.50)	(50.0)	60
Other	nc	nc	nc	nc	0	nc	nc	0
Perceived weight								
Underweight	78.0	92.6	4.5	3.0	306	0.46	20.8	305
Normal	81.3	83.5	9.2	7.3	2,504	0.48	32.8	2,502
Overweight	99.7	37.2	15.6	47.2	225	0.58	76.8	224
Obese	*	*	*	*	10	*	*	10
Don't know	(83.6)	(84.0)	(12.3)	(3.7)	32	(0.50)	(42.9)	32
Residence								
Urban	83.2	78.7	9.7	11.7	2,012	0.49	36.9	2,011
Non-urban	80.8	85.0	8.7	6.4	1,064	0.48	31.6	1,062
Province								
Western Cape	87.4	68.5	14.2	17.4	264	0.51	48.5	264
Eastern Cape	82.1	81.0	8.6	10.4	408	0.49	32.8	408
Northern Cape	82.5	76.0	10.3	13.7	66	0.49	37.3	66
Free State	80.8	81.0	12.3	6.7	174	0.48	32.1	174
KwaZulu-Natal	81.7	83.5	9.1	7.4	529	0.49	37.2	529
North West	81.1	82.6	7.9	9.5	270	0.48	34.5	270
Gauteng	83.3	80.2	9.1	10.7	849	0.49	34.9	848
Mpumalanga	79.1	86.3	5.4	8.3	271	0.47	26.9	270
Limpopo	81.8	83.8	10.2	6.0	247	0.48	31.6	245
Education								
No education	85.2	74.7	11.2	14.1	171	0.51	44.9	171
Primary incomplete	83.8	78.5	9.7	11.9	398	0.50	40.1	397
Primary complete	80.3	86.2	8.3	5.5	165	0.48	33.2	164
Secondary incomplete	79.1	88.1	6.4	5.5	1,415	0.47	26.8	1,414
Secondary complete	84.0	76.5	12.6	10.9	615	0.49	38.4	615
More than secondary	91.7	60.2	15.0	24.8	313	0.53	55.3	312
Wealth quintile								
Lowest	78.0	92.7	3.9	3.4	628	0.47	24.6	626
Second	79.6	87.8	6.9	5.3	644	0.47	26.3	643
Middle	81.9	83.4	10.8	5.8	660	0.48	36.5	659
Fourth	82.5	79.0	10.3	10.6	594	0.49	33.6	593
Highest	91.1	58.1	15.5	26.4	551	0.53	57.1	551
Total 15+	82.4	80.8	9.3	9.8	3,076	0.49	35.1	3,073

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases

Table 17.4 Consumption of fruit and vegetables

Percentage of respondents age 15 and older by type of foods consumed the day or night before the survey, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who ate any fruit	Percentage who ate any vegetables[1]	Number of respondents
Age			
15-24	47.7	55.0	2,670
15-19	47.2	53.1	1,371
20-24	48.2	56.9	1,299
25-34	49.6	60.1	2,353
35-44	50.6	57.7	1,766
45-54	49.1	61.6	1,358
55-64	47.7	62.2	1,106
65+	47.1	61.1	1,083
Population group			
Black African	46.2	56.8	8,704
White	71.4	83.5	577
Coloured	56.4	62.0	851
Indian/Asian	61.6	66.7	196
Other	*	*	9
Sex			
Male	45.2	51.8	4,210
Female	51.2	63.8	6,126
Employment (past 12 months)			
Not employed	45.0	57.2	6,237
Employed for cash	54.5	59.9	3,457
Employed not for cash	54.8	69.7	642
Body mass index			
Underweight (BMI <18.5)	40.2	44.5	415
Normal (BMI 18.5-24.9)	45.3	55.2	3,223
Overweight (BMI 25.0-29.9)	49.1	59.7	1,862
Obese (BMI ≥30.0)	51.8	66.2	2,247
Not eligible (pregnant or recent birth)	55.6	61.6	215
Not measured in survey	51.3	58.5	2,374
Residence			
Urban	50.5	60.8	6,870
Non-urban	45.4	55.0	3,466
Province			
Western Cape	63.9	69.2	1,178
Eastern Cape	44.3	62.5	1,223
Northern Cape	32.3	46.4	212
Free State	47.3	56.7	532
KwaZulu-Natal	50.1	58.0	1,874
North West	44.8	51.8	708
Gauteng	44.4	59.7	2,779
Mpumalanga	47.8	52.7	799
Limpopo	53.8	55.6	1,032
Education			
No education	34.9	53.7	712
Primary incomplete	35.9	50.7	1,145
Primary complete	44.0	54.4	504
Secondary incomplete	47.4	55.9	4,625
Secondary complete	54.5	63.7	2,228
More than secondary	66.9	75.2	1,122
Wealth quintile			
Lowest	37.0	50.4	1,950
Second	45.2	53.9	1,991
Middle	48.4	56.0	2,136
Fourth	52.0	60.6	2,085
Highest	59.8	72.3	2,175
Total 15+	48.8	58.9	10,336

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Excludes potatoes

Table 17.5 Consumption of sugar-sweetened beverages and fruit juice

Percentage of respondents age 15 and older who drank any sugar-sweetened beverage (SSB) the day preceding the survey, and among respondents who drank any SSB, the average quantity consumed; and percentage of respondents who drank any fruit juice the day preceding the survey, and among respondents who drank fruit juice, the average quantity consumed, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who drank any SSB[1]	Number of respondents	Among respondents who drank any SSB[1]: Average quantity consumed (ml)	Among respondents who drank any SSB[1]: Number of respondents	Percentage who drank any fruit juice	Number of respondents	Among respondents who drank fruit juice: Average quantity consumed (ml)	Among respondents who drank fruit juice: Number of respondents
Age								
15-24	42.1	2,670	581.7	1,124	13.9	2,670	305.8	370
15-19	39.8	1,371	494.5	546	14.0	1,371	328.0	191
20-24	44.4	1,299	664.2	577	13.8	1,299	281.9	179
25-34	42.5	2,353	681.2	1,001	16.4	2,353	311.6	386
35-44	36.5	1,766	668.7	645	12.5	1,766	329.0	221
45-54	31.0	1,358	551.1	421	14.6	1,358	283.0	198
55-64	26.9	1,106	522.8	297	12.3	1,106	285.7	136
65+	18.8	1,083	428.3	204	13.0	1,083	285.3	141
Population group								
Black African	36.1	8,704	607.2	3,142	12.9	8,704	303.5	1,120
White	29.0	577	489.4	167	24.4	577	288.2	141
Coloured	37.7	851	693.0	321	17.7	851	302.9	151
Indian/Asian	30.2	196	(484.0)	59	20.1	196	(377.1)	39
Other	*	9	*	3	*	9	*	1
Sex								
Male	39.9	4,210	659.1	1,678	12.5	4,210	319.5	527
Female	32.9	6,126	563.8	2,014	15.1	6,126	295.0	925
Employment (past 12 months)								
Not employed	30.9	6,237	579.4	1,928	12.7	6,237	308.3	790
Employed for cash	45.0	3,457	629.7	1,555	16.4	3,457	303.1	566
Employed not for cash	32.6	642	695.8	209	14.9	642	271.5	96
Body mass index								
Underweight (BMI <18.5)	34.9	415	791.7	145	11.9	415	483.6	49
Normal (BMI 18.5-24.9)	36.2	3,223	587.7	1,166	12.9	3,223	286.1	417
Overweight (BMI 25.0-29.9)	34.7	1,862	635.9	646	12.9	1,862	302.4	240
Obese (BMI ≥30.0)	33.0	2,247	611.6	740	15.5	2,247	308.7	349
Not eligible (pregnant or recent birth)	40.0	215	363.6	86	21.4	215	(276.2)	46
Not measured in survey	38.3	2,374	601.7	909	14.8	2,374	299.6	351
Residence								
Urban	37.1	6,870	656.6	2,548	15.7	6,870	301.6	1,076
Non-urban	33.0	3,466	497.0	1,144	10.9	3,466	310.2	376
Province								
Western Cape	37.0	1,178	646.6	436	18.9	1,178	279.4	222
Eastern Cape	29.1	1,223	622.2	356	14.0	1,223	336.2	172
Northern Cape	37.3	212	700.3	79	13.6	212	344.9	29
Free State	29.8	532	1,359.9	159	11.1	532	379.8	59
KwaZulu-Natal	31.5	1,874	472.7	589	14.0	1,874	319.8	263
North West	45.3	708	573.1	321	12.6	708	301.2	90
Gauteng	36.7	2,779	625.3	1,021	14.3	2,779	294.4	398
Mpumalanga	41.7	799	632.5	333	13.9	799	282.9	111
Limpopo	38.6	1,032	391.2	398	10.5	1,032	270.7	109
Education								
No education	20.5	712	502.0	146	4.5	712	(294.1)	32
Primary incomplete	27.0	1,145	555.1	310	9.0	1,145	308.1	103
Primary complete	31.6	504	698.1	160	8.5	504	271.6	43
Secondary incomplete	36.5	4,625	625.4	1,686	13.0	4,625	306.7	599
Secondary complete	40.8	2,228	611.5	909	17.0	2,228	308.3	380
More than secondary	43.0	1,122	570.4	482	26.3	1,122	296.8	295
Wealth quintile								
Lowest	28.0	1,950	551.2	545	8.7	1,950	313.4	169
Second	35.5	1,991	642.3	707	10.8	1,991	314.8	215
Middle	38.0	2,136	571.1	812	12.7	2,136	288.4	271
Fourth	37.0	2,085	620.2	772	14.7	2,085	289.8	307
Highest	39.3	2,175	636.3	856	22.5	2,175	313.2	489
Total 15+	35.7	10,336	607.2	3,692	14.0	10,336	303.9	1,452

Note: Figures in parentheses are based on 25-49 unweighted cases An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Sugar-sweetened beverages (SSB) include fizzy drinks such as sodas or drinks such as Squash where water is added, but not diet or unsweetened cold drinks

Table 17.6 Consumption of fried and processed foods

Percentage of respondents age 15 and older who consume fried foods, fast foods, salty snacks, or processed meats every day or at least once a week, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who consume fried foods:		Percentage who consume fast foods:		Percentage who consume salty snacks:		Percentage who consume processed meats:		Number of respondents
	Every day	At least once a week[1]	Every day	At least once a week[1]	Every day	At least once a week[1]	Every day	At least once a week[1]	
Age									
15-24	14.9	39.3	2.9	21.0	25.2	32.7	20.4	30.5	2,670
15-19	15.3	39.3	2.4	18.9	31.6	31.1	22.3	30.0	1,371
20-24	14.5	39.2	3.4	23.3	18.6	34.3	18.3	30.9	1,299
25-34	11.1	41.0	2.9	24.4	14.1	33.6	18.2	32.3	2,353
35-44	9.4	38.3	2.1	20.1	8.7	31.4	14.6	31.3	1,766
45-54	8.7	35.3	2.4	14.8	5.7	25.5	10.2	27.6	1,358
55-64	4.9	28.7	1.7	10.2	4.6	18.5	5.6	23.8	1,106
65+	4.4	26.8	1.3	8.3	3.5	16.9	5.4	19.1	1,083
Population group									
Black African	10.1	35.4	2.3	17.6	12.6	27.9	14.5	28.3	8,704
White	8.0	42.9	3.0	23.1	6.4	33.3	11.5	23.9	577
Coloured	12.6	40.1	3.1	18.9	20.3	29.8	15.8	36.0	851
Indian/Asian	7.2	53.9	2.3	34.8	8.7	39.5	12.4	33.6	196
Other	*	*	*	*	*	*	*	*	9
Sex									
Male	11.9	39.9	2.5	17.7	11.0	26.4	15.3	29.5	4,210
Female	8.9	34.2	2.4	18.8	14.0	30.0	13.7	28.3	6,126
Employment (past 12 months)									
Not employed	9.6	33.3	2.1	16.1	13.6	26.8	13.4	27.4	6,237
Employed for cash	11.9	42.8	3.3	23.4	12.7	32.3	17.4	31.7	3,457
Employed not for cash	5.8	34.8	1.1	12.8	6.0	25.0	8.1	26.2	642
Body mass index									
Underweight (BMI <18.5)	11.5	39.5	2.7	11.3	18.5	25.9	12.9	24.4	415
Normal (BMI 18.5-24.9)	10.8	36.2	2.4	16.5	13.6	27.9	12.7	28.6	3,223
Overweight (BMI 25.0-29.9)	8.6	33.0	1.9	18.2	10.3	28.4	13.1	28.2	1,862
Obese (BMI ≥30.0)	8.5	36.4	2.6	18.6	10.5	28.9	13.6	28.7	2,247
Not eligible (pregnant or recent birth)	6.4	40.1	0.7	23.9	21.9	30.4	18.6	36.3	215
Not measured in survey	12.1	39.1	2.7	21.4	14.1	29.5	18.4	29.5	2,374
Residence									
Urban	11.5	38.9	2.9	21.0	14.1	29.4	17.3	30.1	6,870
Non-urban	7.3	31.9	1.5	13.2	10.3	26.9	8.6	26.0	3,466
Province									
Western Cape	12.0	39.3	3.1	16.6	20.0	29.7	16.9	32.9	1,178
Eastern Cape	8.8	24.9	1.5	12.2	11.3	23.1	9.6	24.2	1,223
Northern Cape	6.7	38.2	1.3	18.1	13.3	25.0	6.2	35.5	212
Free State	9.6	38.6	2.4	18.5	13.2	30.8	12.8	29.8	532
KwaZulu-Natal	10.6	38.1	2.5	22.0	9.0	29.8	15.4	32.2	1,874
North West	6.8	40.6	1.2	16.0	15.7	35.6	11.5	33.4	708
Gauteng	11.6	38.9	3.6	22.2	13.4	27.7	19.7	26.2	2,779
Mpumalanga	12.4	41.3	2.1	23.0	13.0	34.5	12.5	37.4	799
Limpopo	6.1	30.1	0.5	8.6	9.5	24.0	7.1	18.2	1,032
Education									
No education	4.2	22.0	2.3	7.3	4.3	16.0	4.0	17.7	712
Primary incomplete	6.5	26.1	1.5	9.3	4.8	19.0	5.5	20.3	1,145
Primary complete	5.8	35.4	1.4	11.6	9.2	24.4	8.6	25.8	504
Secondary incomplete	11.6	35.7	2.0	17.1	16.0	28.5	15.2	30.1	4,625
Secondary complete	11.5	43.3	3.1	24.5	13.7	33.8	19.4	32.9	2,228
More than secondary	10.9	47.0	4.0	30.7	13.1	38.0	19.3	32.1	1,122
Wealth quintile									
Lowest	6.3	26.7	1.0	10.3	8.3	20.9	5.0	20.0	1,950
Second	10.0	32.9	1.8	14.7	11.1	29.0	9.9	29.7	1,991
Middle	11.7	37.5	2.2	18.6	14.6	29.0	16.2	28.4	2,136
Fourth	12.7	39.6	4.1	19.1	18.0	29.1	22.3	32.6	2,085
Highest	9.6	44.9	2.9	28.0	11.7	34.0	17.5	32.3	2,175
Total 15+	10.1	36.5	2.4	18.3	12.8	28.5	14.4	28.8	10,336

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Excludes respondents who reported daily consumption

Table 17.7 Approach to salt consumption

Percentage of respondents age 15 and older who are not interested in lowering their salt consumption, percentage who are interested in lowering their salt consumption in the next 6 months, percentage who are interested in lowering their salt consumption in the next month, percentage who started lowering their salt consumption in the last 6 months, and percentage who have already lowered their salt consumption for longer than 6 months, according to background characteristics, South Africa DHS 2016

Background characteristic	Not interested in lowering salt consumption	Interested in lowering salt consumption within the next 6 months	Interested in lowering salt consumption within the next month	Have started lowering salt consumption within the last 6 months	Have already lowered salt consumption for longer than 6 months	Number of respondents
Age						
15-24	39.6	9.1	6.4	9.0	28.0	2,670
25-34	35.2	10.3	7.2	8.6	34.7	2,353
35-44	30.7	10.9	7.5	9.0	36.3	1,766
45-54	27.9	6.2	5.9	9.4	46.7	1,358
55-64	24.7	7.3	6.1	11.3	46.1	1,106
65+	20.7	4.9	3.0	11.4	57.7	1,083
Population group						
Black African	32.5	8.9	6.2	9.5	37.5	8,704
White	31.1	6.7	4.8	8.3	47.3	577
Coloured	24.3	8.2	8.6	9.9	43.8	851
Indian/Asian	45.2	7.2	4.2	9.6	32.8	196
Other	*	*	*	*	*	9
Sex						
Male	42.8	7.3	5.7	6.8	29.5	4,210
Female	24.5	9.6	6.7	11.3	44.6	6,126
Crisps and salty snacks						
Never	28.4	4.2	5.3	7.5	47.5	1,070
Occasionally	30.1	7.8	6.0	10.6	40.6	4,991
Weekly	34.3	10.8	6.3	10.1	34.4	2,950
Daily	36.9	10.9	8.5	5.6	32.0	1,324
Blood pressure status						
Optimal	33.0	10.5	6.9	9.2	35.0	2,061
Normal	33.5	9.2	5.5	9.5	37.1	2,886
Elevated	29.2	7.7	5.8	9.0	44.6	2,909
Not measured in survey	32.5	7.6	7.3	10.2	35.6	2,480
Residence						
Urban	30.8	10.1	6.7	9.4	37.6	6,870
Non-urban	34.2	5.9	5.4	9.6	40.2	3,466
Province						
Western Cape	21.8	5.5	8.4	13.8	48.6	1,178
Eastern Cape	44.3	7.7	5.7	11.8	29.9	1,223
Northern Cape	33.5	6.8	8.7	6.2	24.7	212
Free State	34.8	8.8	9.0	12.3	34.1	532
KwaZulu-Natal	41.8	7.8	4.1	11.2	30.0	1,874
North West	32.2	7.5	8.6	6.4	42.6	708
Gauteng	25.3	13.8	7.0	7.9	36.3	2,779
Mpumalanga	36.6	3.0	4.9	2.4	50.2	799
Limpopo	23.8	6.4	4.5	9.8	51.3	1,032
Education						
No education	26.4	4.1	4.5	9.4	49.4	712
Primary incomplete	32.0	6.0	3.6	8.5	44.0	1,145
Primary complete	31.9	5.6	8.4	9.3	39.4	504
Secondary incomplete	32.5	8.8	7.2	9.7	35.8	4,625
Secondary complete	33.3	11.0	6.5	9.7	35.8	2,228
More than secondary	30.7	10.6	5.3	9.1	41.7	1,122
Wealth quintile						
Lowest	35.4	5.4	6.0	10.2	36.4	1,950
Second	33.1	9.1	5.4	8.8	39.0	1,991
Middle	34.5	10.0	6.5	6.9	36.0	2,136
Fourth	28.4	8.7	6.9	10.4	40.9	2,085
Highest	28.8	9.9	6.7	11.2	39.9	2,175
Total 15+	32.0	8.7	6.3	9.5	38.4	10,336

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

TOBACCO, ALCOHOL, AND CODEINE USE AMONG ADULTS

18

Key Findings

- ***Tobacco use:*** Among respondents age 15 and older, men are more likely than women to smoke tobacco products daily or occasionally (37% versus 8%).
- ***Smokeless tobacco use:*** Use of smokeless tobacco products is more common among women than men (6% versus 1%).
- ***Alcohol use:*** Men are much more likely than women to have ever consumed alcohol (61% versus 26%). Twenty-eight percent of men and 5% of women exhibited risky drinking; that is, they consumed five or more drinks on a single occasion in the 30 days before the survey.
- ***Codeine-containing medications:*** Similar proportions of women and men reported using (14% and 13%, respectively) and misusing (2% each) codeine-containing medications in the past 12 months.

Tobacco and alcohol use contribute substantially to the burden of disease in South Africa by placing people at increased risk for cardiovascular disease, respiratory disease, and cancer; also, alcohol use contributes to the additional burden of accidents and violence. The National Department of Health's National Strategic Plan for Non-Communicable Diseases has set targets to reduce tobacco smoking and alcohol use (NDoH 2013b).

The misuse of prescription medications, particularly opioids, is also a growing health concern. Among the numerous misused opioids, codeine is most commonly consumed worldwide (Van Hout 2012). In South Africa, the use and/or misuse of codeine-containing medications has been understudied, and there is no system of recording or monitoring either over-the-counter or prescription medications purchased at pharmacies and retail stores (Kramer 2010). The only recorded data come from specialised substance abuse treatment centres; however, treatment centre data do not provide information on patterns of use and/or misuse of codeine-containing medications in the general population. Therefore, the SADHS 2016 included questions on the use and misuse of codeine-containing medications in the adult health module administered to respondents age 15 and older.

18.1 Tobacco Use among Adults

18.1.1 Prevalence of Tobacco Smoking

Tobacco smoking is more common among men than women, with 8% of women and 37% of men age 15 and older currently smoking tobacco products either daily or occasionally (**Tables 18.1.1** and **18.1.2**). The majority of smokers are daily smokers; 6% of women and 30% of men smoke every day, and most smoke cigarettes. Among those who smoke cigarettes every day, the majority (75% of women and 64% of men) smoke between one and nine cigarettes each day, while a sizeable minority (12% of women and 18% of men) smoke 15 or more cigarettes per day (**Table 18.2.1** and **18.2.2**).

Comparison with the SADHS 1998: The prevalence of daily or occasional tobacco smoking has decreased since 1998, from 11% to 8% among women and from 42% to 37% among men (**Figure 18.1**).

Patterns by background characteristics

- The prevalence of daily or occasional smoking increases with age, peaking at 11% among women age 45-64 and 45% among men age 45-54 (**Table 18.1.1** and **Table 18.1.2**).
- Forty percent of Coloured women smoke daily or occasionally, more than double the prevalence of any other population group and higher than any other percentage in a background characteristic category (**Table 18.1.1**). One-third to one-half of men smoke daily or occasionally across all population groups (ranging from 32% among White men to 51% among Coloured men).
- The prevalence of daily or occasional smoking is higher among urban women and men (11% and 40%, respectively) than among their non-urban counterparts (2% and 33%, respectively).
- Among women, the prevalence of daily or occasional smoking is highest in Northern Cape and Western Cape and lowest in Limpopo and KwaZulu-Natal. Among men, the prevalence is also highest in Northern Cape and Western Cape and is lowest in Limpopo (**Figure 18.2.1** and **Figure 18.2.2**).
- While the prevalence of daily or occasional smoking is much lower among women than men, there is a pattern of decreasing prevalence with increasing education among women (women with a primary complete education are the only outlier in terms of this trend). The prevalence among men varies from 33% to 40%, with no clear pattern across educational levels.
- Among women, the prevalence of daily or occasional smoking generally increases with increasing wealth, from 5% among those in the lowest wealth quintile to 11% among those in the highest two quintiles. The prevalence by wealth among men varies from 36% to 41% with no clear pattern.

Figure 18.1 Comparison of tobacco smoking in the SADHS 1998 and SADHS 2016

Percentage of women and men age 15+ who smoke tobacco daily or occasionally

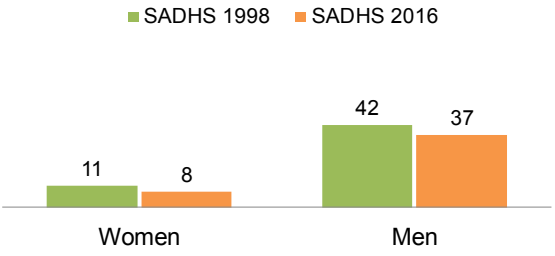


Figure 18.2.1 Prevalence of smoking by province: Women

Percentage of women age 15+ who smoke tobacco daily or occasionally

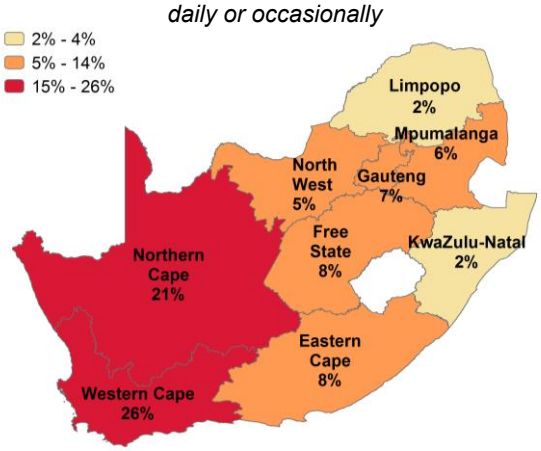
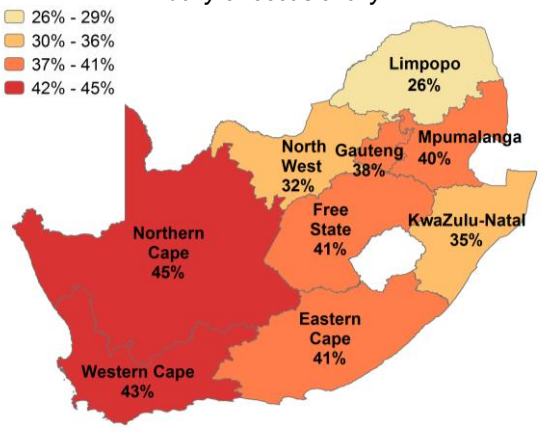


Figure 18.2.2 Prevalence of smoking by province: Men

Percentage of men age 15+ who smoke tobacco daily or occasionally



18.1.2 Smokeless Tobacco Use and E-cigarette Use

Men rarely use smokeless tobacco products such as snuff, chewing tobacco, or other types of smokeless tobacco (1%) (**Table 18.3**). In contrast, the percentage of women who use smokeless tobacco products (6%) approaches that of women who smoke cigarettes (7%). Among women, the most commonly used smokeless tobacco product is snuff taken by the nose (5%).

E-cigarette use is uncommon. Two percent of women and 3% of men age 15 and older use e-cigarettes daily or occasionally (**Table 18.4**).

18.1.3 Tobacco Use during Pregnancy

Using tobacco during pregnancy increases the risk of premature birth and delivery of low birth weight babies. Three percent of women age 15-49 who had a live birth in the past 5 years reported that they smoked tobacco during the pregnancy of their last birth, and 1% reported that they had used smokeless tobacco (**Table 18.5**).

Patterns by background characteristics

- Women in Western Cape were most likely to use tobacco while they were pregnant; 17% smoked tobacco and 3% used smokeless tobacco during their last pregnancy. Women in Northern Cape had the second highest prevalence (8% and 4%, respectively).

18.2 Alcohol Use among Adults

18.2.1 Alcohol Consumption, Risky Drinking, and Problem Drinking

Risky drinking

Drinking 5 or more standard measures of alcohol on a single occasion in the 30 days prior to the survey.

Sample: Women and men age 15+

CAGE test

The CAGE (Concern/Cut-down, Anger, Guilt, and Eye-Opener) test is used to screen for problem drinking and alcoholism. Two "yes" responses to the following questions indicate the possibility of problem drinking:

- Have you ever felt you should cut down your drinking?
- Have people annoyed you by criticizing your drinking?
- Have you ever felt bad or guilty about your drinking?
- Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (eye opener)?

Sample: Women and men age 15+

Alcohol consumption is more common among men than women (**Table 18.6.1** and **Table 18.6.2**): 61% of men and 26% of women age 15 and older have ever consumed alcohol, and 37% of men and 10% of women drank alcohol within the 7 days before the survey. Additionally, men (28%) are more likely than women (5%) to engage in risky drinking. One in six men (16%) and 3% of women show signs of problem drinking as assessed through the CAGE test.

Comparison with the SADHS 1998: The prevalence of men who have ever consumed alcohol increased slightly from 58% in 1998 to 61% in 2016, while the prevalence among women remained unchanged (26% in both 1998 and 2016).

Patterns by background characteristics

- By age, the prevalence of risky and problem drinking peaks among women age 20-24 (9% and 4%, respectively) and men age 25-34 (36% and 22%, respectively).
- By population group, the prevalence of alcohol use in the past 7 days is highest among White women (36%) and White men (58%). However, the prevalence of risky and problem drinking is highest among Coloured women (10% and 6%, respectively) and Black African men (28% and 17%, respectively).
- By province, the prevalence of risky drinking among women ranges from a high of 11% in Northern Cape to a low of 1% in KwaZulu-Natal (**Figure 18.3.1**). Among men, the prevalence of risky drinking is substantial across all provinces and ranges from a high of 35% in Gauteng to a low of 21% in Limpopo (**Figure 18.3.2**).
- Among women, the prevalence of risky drinking and problem drinking ranges from 1% to 8% across educational levels and wealth quintiles. Among men, the prevalence of risky drinking (23%-35%) and problem drinking (11%-18%) is high across all educational levels and wealth quintiles.

Figure 18.3.1 **Prevalence of risky drinking by province: Women**

Percentage of women age 15+ who consumed 5 or more drinks on one occasion in 30 days before the survey

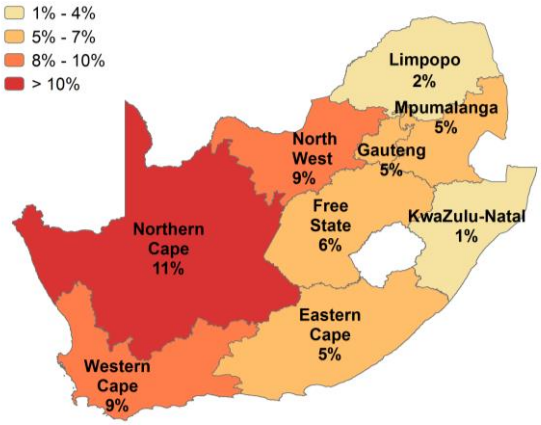
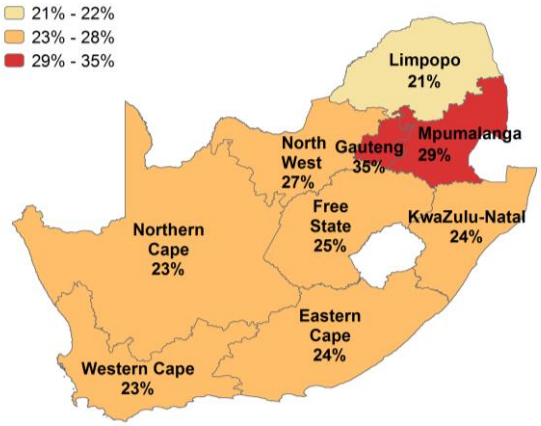


Figure 18.3.2 **Prevalence of risky drinking by province: Men**

Percentage of men age 15+ who consumed 5 or more drinks on one occasion in 30 days before the survey



18.2.2 Alcohol Use during Pregnancy

Only 3% of women age 15-49 who had a live birth in the past 5 years report that they consumed alcohol during the pregnancy of their last birth (**Table 18.7**).

Patterns by background characteristics

- Women in Western Cape (7%), Eastern Cape (6%), and Northern Cape (6%) were most likely to consume alcohol during pregnancy.

18.3 Use and Misuse of Codeine-Containing Medications

Misuse of codeine-containing medicines

Use of codeine-containing medications in the past 12 months for the experience or feeling rather than their medicinal effect

Sample: Women and men age 15+

Similar proportions of women and men age 15 and older reported using (14% and 13%, respectively) and misusing (2% each) codeine-containing medications in the 12 months before the survey (**Table 18.8.1** and **Table 18.8.2**).

Among women and men who reported misuse of codeine-containing medications in the past 12 months, 19% and 16%, respectively, received treatment for problems related to use of medicines for non-medical purposes.

Patterns by background characteristics

- Indian/Asian women were more likely than women in other population groups to have used (30% versus 12%-14%) and misused (5% versus 0.3%-4%) codeine-containing medications in the past 12 months. Coloured men (21%) and Indian/Asian men (20%) were more likely than men in other population groups to have used codeine-containing medications, and Coloured men were most likely to have misused them (3% versus 0%-1%).

- By residence, the proportion of women who used codeine-containing medications is higher among those in urban areas than among those in non-urban areas (17% and 9%, respectively), while the proportion among men is similar in urban and non-urban areas (14% and 11%, respectively).

- North West has the highest proportion of women who used and misused codeine-containing medications (25% and 5%, respectively), followed by Gauteng (23% and 4%, respectively). While only 10% of women in Western Cape report using codeine-containing medications, the level of misuse among these women is similar to that among women in North West and Gauteng (4%). Among men, those from Northern Cape (32%) are most likely to use codeine-containing medications and those from Mpumalanga are most likely to misuse them (5%).

- Among women, use of codeine-containing medications increases with increasing household wealth, from 7% to 19%; misuse of codeine-containing medications generally increases as well, peaking at 4% among those in the fourth quintile. Among men, use of codeine-containing medications also generally increases with increasing household wealth, peaking at 18% among those in the fourth wealth quintile; however, there is no clear pattern by wealth in misuse of codeine-containing medications.

List of Tables

For more information on tobacco, alcohol, and codeine use, see the following tables:

- **Table 18.1.1 Tobacco smoking: Women**
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- **Table 18.2.1 Average number of cigarettes smoked daily: Women**
- **Table 18.2.2 Average number of cigarettes smoked daily: Men**
- **Table 18.3 Smokeless tobacco use and any tobacco use**
- **Table 18.4 E-cigarette use**
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- **Table 18.6.1 Alcohol consumption and risky drinking: Women**
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- **Table 18.8.1 Use and misuse of codeine-containing medications: Women**
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Table 18.1.1 Tobacco smoking: Women

Percentage of women age 15 and older who smoke various tobacco products, percent distribution of women by smoking frequency, and percentage who smoke daily or occasionally, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who smoke:[1]			Smoking frequency				Total	Percentage who smoke daily or occasionally	Number of women
				Current smoker		Non-smoker				
	Cigarettes[2]	Other type of tobacco[3]	Any type of tobacco	Daily smoker	Occasional smoker[4]	Ex-smoker	Never smoked			
Age										
15-24	4.1	1.0	4.4	2.9	2.1	1.8	93.3	100.0	4.9	1,429
15-19	3.5	1.3	4.0	2.9	1.2	1.2	94.7	100.0	4.1	721
20-24	4.8	0.8	4.9	2.8	3.0	2.4	91.8	100.0	5.8	708
25-34	7.1	1.0	7.1	6.5	1.3	0.9	91.3	100.0	7.8	1,391
35-44	5.8	0.3	5.8	5.9	1.1	1.4	91.6	100.0	7.0	1,022
45-54	8.5	0.7	9.1	9.4	1.6	1.6	87.4	100.0	11.0	866
55-64	9.9	1.2	10.1	10.2	1.1	2.8	85.9	100.0	11.3	701
65+	6.3	0.2	6.5	5.8	2.0	3.4	88.8	100.0	7.8	719
Population group										
Black African	3.0	0.6	3.1	2.9	1.2	1.2	94.7	100.0	4.1	5,170
White	15.0	0.8	15.0	14.4	2.5	6.6	76.5	100.0	16.8	320
Coloured	38.1	2.1	38.7	35.3	4.3	4.8	55.6	100.0	39.6	516
Indian/Asian	3.1	2.6	5.7	5.7	1.3	3.4	89.6	100.0	7.0	114
Other	*	*	*	*	*	*	*	100.0	*	6
Residence										
Urban	9.3	1.1	9.6	8.7	2.1	2.2	87.0	100.0	10.8	3,996
Non-urban	1.6	0.3	1.7	1.8	0.5	1.1	96.6	100.0	2.3	2,130
Province										
Western Cape	25.1	1.1	25.3	23.5	2.9	3.2	70.4	100.0	26.4	703
Eastern Cape	6.8	0.7	6.9	5.6	1.9	2.0	90.4	100.0	7.5	730
Northern Cape	17.8	2.3	19.4	18.1	3.3	3.5	75.1	100.0	21.4	127
Free State	5.5	0.3	5.7	7.0	1.0	1.7	90.3	100.0	8.0	325
KwaZulu-Natal	1.9	0.5	2.1	1.8	0.4	0.5	97.2	100.0	2.3	1,191
North West	3.5	0.4	3.8	3.5	1.2	2.0	93.4	100.0	4.6	398
Gauteng	4.5	1.3	4.8	4.7	1.8	2.0	91.5	100.0	6.5	1,534
Mpumalanga	5.2	0.4	5.2	3.9	2.2	3.0	91.0	100.0	6.0	473
Limpopo	1.3	0.4	1.3	1.3	0.7	0.8	97.2	100.0	2.0	646
Education										
No education	7.9	1.4	8.3	9.3	1.3	2.1	87.2	100.0	10.6	495
Primary incomplete	7.7	0.3	7.7	6.8	3.0	2.6	87.7	100.0	9.7	664
Primary complete	4.8	0.1	4.9	4.3	0.8	0.1	94.7	100.0	5.1	293
Secondary incomplete	6.8	0.9	7.2	6.6	1.6	1.5	90.2	100.0	8.2	2,695
Secondary complete	6.2	1.0	6.2	5.7	0.9	1.5	91.9	100.0	6.6	1,328
More than secondary	5.3	0.3	5.3	4.5	1.5	3.2	90.7	100.0	6.0	652
Wealth quintile										
Lowest	3.3	0.4	3.4	3.0	1.9	0.6	94.6	100.0	4.9	1,163
Second	2.7	0.5	2.7	2.6	1.4	0.9	95.1	100.0	4.1	1,152
Middle	6.7	0.6	6.8	6.1	1.7	1.8	90.4	100.0	7.8	1,242
Fourth	10.0	1.0	10.1	9.3	1.4	2.4	86.9	100.0	10.7	1,258
Highest	9.7	1.4	10.3	9.9	1.2	3.2	85.7	100.0	11.1	1,311
Total 15+	6.6	0.8	6.8	6.3	1.5	1.8	90.3	100.0	7.8	6,126
Total 15-49	5.7	0.8	5.9	5.2	1.6	1.4	91.9	100.0	6.7	4,300

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes daily and occasional (less than daily) use
[2] Includes manufactured cigarettes and hand-rolled cigarettes
[3] Includes pipes, cigars, cigarillos, hookah/hubbly-bubbly/water pipes, and other tobacco products
[4] Occasional refers to less often than daily use

Table 18.1.2 Tobacco smoking: Men

Percentage of men age 15 and older who smoke various tobacco products, percent distribution of men by smoking frequency, and percentage who smoke daily or occasionally, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who smoke:[1]			Smoking frequency				Total	Percentage who smoke daily or occasionally	Number of men
				Current smoker		Non-smoker				
	Cigarettes[2]	Other type of tobacco[3]	Any type of tobacco	Daily smoker	Occasional smoker[4]	Ex-smoker	Never smoked			
Age										
15-24	28.4	6.5	28.7	20.8	8.2	4.1	66.9	100.0	28.9	1,241
15-19	17.7	3.7	18.1	10.7	7.6	4.3	77.5	100.0	18.2	651
20-24	40.1	9.6	40.4	31.8	8.9	4.0	55.3	100.0	40.7	591
25-34	42.8	5.9	43.2	36.8	6.7	5.7	50.8	100.0	43.5	962
35-44	43.3	3.1	43.7	36.1	7.8	6.7	49.3	100.0	43.9	744
45-54	44.2	4.8	44.7	38.7	6.3	9.6	45.4	100.0	45.0	492
55-64	35.9	3.0	37.3	32.8	4.9	15.3	46.9	100.0	37.8	406
65+	22.9	4.2	24.7	21.0	4.0	16.2	58.9	100.0	24.9	364
Population group										
Black African	35.5	4.9	36.1	29.2	7.1	7.5	56.2	100.0	36.3	3,534
White	31.3	2.5	31.8	26.1	6.1	12.2	55.6	100.0	32.2	257
Coloured	49.3	9.4	50.5	45.3	5.5	8.1	41.1	100.0	50.8	335
Indian/Asian	39.0	0.0	39.0	34.6	6.1	2.7	56.7	100.0	40.6	82
Other	*	*	*	*	*	*	*	100.0	*	2
Residence										
Urban	38.9	4.9	39.2	32.5	7.0	6.8	53.8	100.0	39.5	2,874
Non-urban	31.0	5.4	32.5	26.0	6.6	9.7	57.6	100.0	32.6	1,336
Province										
Western Cape	42.5	7.0	42.9	36.0	7.2	9.6	47.3	100.0	43.2	476
Eastern Cape	39.4	3.9	40.1	29.4	11.6	11.1	47.8	100.0	41.0	493
Northern Cape	44.2	3.6	44.9	41.0	3.9	2.4	52.7	100.0	44.9	84
Free State	39.7	11.2	40.4	35.0	5.8	2.2	57.0	100.0	40.9	207
KwaZulu-Natal	34.6	5.1	34.9	29.1	6.1	5.6	59.1	100.0	35.2	683
North West	31.6	3.0	31.7	29.4	2.6	10.0	58.0	100.0	32.0	310
Gauteng	37.6	3.1	37.6	30.8	6.8	6.4	56.0	100.0	37.6	1,245
Mpumalanga	36.3	8.9	39.9	35.0	5.1	3.8	56.1	100.0	40.2	326
Limpopo	25.0	5.4	26.4	18.1	8.3	14.5	59.1	100.0	26.4	386
Education										
No education	31.3	6.5	34.7	30.0	5.1	12.3	52.7	100.0	35.0	217
Primary incomplete	38.8	5.7	39.9	35.3	4.8	9.5	50.5	100.0	40.0	481
Primary complete	35.6	3.9	36.4	30.8	5.6	12.2	51.4	100.0	36.4	212
Secondary incomplete	38.6	5.9	39.0	31.7	7.7	6.3	54.2	100.0	39.4	1,930
Secondary complete	34.2	4.0	34.5	27.7	6.9	4.9	60.5	100.0	34.6	900
More than secondary	32.0	2.8	32.5	25.4	7.1	12.7	54.8	100.0	32.5	470
Wealth quintile										
Lowest	39.5	5.7	40.7	32.6	8.3	6.9	52.2	100.0	40.9	787
Second	35.6	4.8	36.3	30.3	6.5	7.6	55.6	100.0	36.8	839
Middle	35.1	5.7	35.6	28.7	7.1	7.7	56.4	100.0	35.8	894
Fourth	37.0	6.0	37.5	30.8	6.8	6.8	55.6	100.0	37.7	827
Highest	35.1	3.1	35.5	29.9	5.7	9.4	54.9	100.0	35.6	864
Total 15+	36.4	5.0	37.0	30.4	6.9	7.7	55.0	100.0	37.3	4,210
Total 15-49	37.1	5.4	37.5	30.4	7.4	5.9	56.3	100.0	37.8	3,220

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes daily and occasional (less than daily) use
[2] Includes manufactured cigarettes and hand-rolled cigarettes
[3] Includes pipes, cigars, cigarillos, hookah/hubbly-bubbly/water pipes, and other tobacco products
[4] Occasional refers to less often than daily use

Table 18.2.1 Average number of cigarettes smoked daily: Women

Among women age 15 and older who smoke cigarettes daily, percent distribution by average number of cigarettes smoked per day, according to background characteristics, South Africa DHS 2016

Background characteristic	Average number of cigarettes smoked per day[1]				Total	Number of women who smoke cigarettes daily[1]
	<5	5-9	10-14	15+		
Age						
15-24	(39.6)	(41.8)	(11.5)	(7.0)	100.0	35
15-19	*	*	*	*	100.0	17
20-24	*	*	*	*	100.0	18
25-34	51.1	24.1	18.5	6.3	100.0	84
35-44	45.6	29.4	17.7	7.3	100.0	52
45-54	47.1	15.5	15.1	22.3	100.0	66
55-64	57.0	25.6	6.7	10.6	100.0	62
65+	(26.0)	(46.9)	(9.9)	(17.2)	100.0	32
Population group						
Black African	58.3	35.6	5.2	0.9	100.0	105
White	(29.1)	(7.0)	(8.9)	(55.0)	100.0	42
Coloured	45.7	27.4	19.1	7.8	100.0	178
Indian/Asian	*	*	*	*	100.0	4
Other	*	*	*	*	100.0	1
Residence						
Urban	46.4	27.7	14.6	11.3	100.0	307
Non-urban	(52.9)	(26.5)	(5.5)	(15.1)	100.0	24
Wealth quintile						
Lowest	(42.9)	(45.2)	(11.9)	(0.0)	100.0	23
Second	(49.1)	(34.5)	(9.6)	(6.8)	100.0	18
Middle	51.3	31.6	9.9	7.2	100.0	64
Fourth	50.1	25.7	15.0	9.3	100.0	109
Highest	42.1	22.6	16.2	19.2	100.0	117
Total 15+	46.9	27.6	13.9	11.6	100.0	331
Total 15-49	47.7	26.2	17.3	8.7	100.0	198

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes manufactured cigarettes and hand-rolled cigarettes

Table 18.2.2 Average number of cigarettes smoked daily: Men

Among men age 15 and older who smoke cigarettes daily, percent distribution by average number of cigarettes smoked per day, according to background characteristics, South Africa DHS 2016

Background characteristic	Average number of cigarettes smoked per day[1]					Total	Number of men who smoke cigarettes daily[1]
	<5	5-9	10-14	15-24	≥25		
Age							
15-24	37.9	40.0	10.6	8.0	3.5	100.0	246
15-19	44.4	34.0	6.7	10.7	4.3	100.0	65
20-24	35.5	42.1	12.0	7.1	3.2	100.0	181
25-34	26.2	37.9	20.1	13.5	2.3	100.0	348
35-44	28.5	28.9	20.1	20.3	2.3	100.0	263
45-54	27.5	34.0	23.1	11.8	3.6	100.0	182
55-64	24.2	34.9	18.3	17.4	5.2	100.0	126
65+	23.1	29.4	21.4	22.8	3.4	100.0	69
Population group							
Black African	30.8	38.5	17.2	11.6	1.9	100.0	993
White	(13.5)	(7.5)	(21.4)	(46.9)	(10.8)	100.0	65
Coloured	25.6	23.6	25.2	20.6	5.0	100.0	149
Indian/Asian	*	*	*	*	*	100.0	28
Other	nc	nc	nc	nc	nc	nc	0
Residence							
Urban	27.1	32.6	21.0	16.0	3.4	100.0	909
Non-urban	33.7	41.8	11.8	10.6	2.2	100.0	325
Province							
Western Cape	23.4	23.2	26.9	21.9	4.6	100.0	167
Eastern Cape	24.4	33.6	19.8	16.4	5.7	100.0	140
Northern Cape	28.3	42.7	16.9	10.3	1.9	100.0	34
Free State	44.7	35.9	9.7	7.2	2.5	100.0	69
KwaZulu-Natal	21.6	46.6	18.3	8.6	5.0	100.0	187
North West	39.8	38.8	10.6	7.5	3.3	100.0	89
Gauteng	26.4	33.6	20.4	18.4	1.2	100.0	380
Mpumalanga	42.9	27.4	19.2	9.9	0.5	100.0	104
Limpopo	32.2	45.7	4.7	13.4	4.0	100.0	65
Education							
No education	49.9	31.9	9.6	4.5	4.1	100.0	56
Primary incomplete	39.2	39.0	9.1	10.8	1.9	100.0	161
Primary complete	13.9	25.1	37.7	18.3	5.0	100.0	63
Secondary incomplete	26.8	38.7	18.0	13.7	2.8	100.0	596
Secondary complete	28.2	27.4	21.3	19.7	3.3	100.0	239
More than secondary	24.0	33.7	22.3	16.1	3.9	100.0	118
Wealth quintile							
Lowest	29.2	38.4	15.4	13.8	3.2	100.0	244
Second	32.3	39.1	14.8	11.3	2.6	100.0	240
Middle	25.6	40.0	20.7	11.9	1.9	100.0	248
Fourth	35.7	30.8	20.5	10.1	3.0	100.0	245
Highest	21.7	27.3	21.1	25.1	4.7	100.0	257
Total 15+	28.8	35.0	18.5	14.5	3.1	100.0	1,234
Total 15-49	30.4	34.8	18.4	13.6	2.9	100.0	951

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases
[1] Includes manufactured cigarettes and hand-rolled cigarettes

Table 18.3 Smokeless tobacco use and any tobacco use

Percentage of women and men age 15 and older who currently use smokeless tobacco, according to type of tobacco product, and percentage who use any type of tobacco, South Africa DHS 2016

	Women	Men
Tobacco product		
Snuff, by mouth	2.3	0.7
Snuff, by nose	4.8	1.0
Chewing tobacco	0.3	0.2
Other type of smokeless tobacco	0.0	0.1
Any type of smokeless tobacco[1]	5.7	1.1
Any type of tobacco[2]	12.6	38.1
Number	6,126	4,210

Note: Table includes women and men who use smokeless tobacco daily or occasionally (less than daily).
[1] Includes snuff by mouth, snuff by nose, chewing tobacco, and other types of smokeless tobacco
[2] Includes all types of smokeless tobacco shown in this table plus cigarettes, pipes, cigars, cheroots, cigarillos, hookah/hubbly-bubbly/water pipes, and other tobacco products

Table 18.4 E-cigarette use

Percentage of women and men age 15 and older who use e-cigarettes by frequency of use, according to background characteristics, South Africa DHS 2016

Background characteristic	Women				Men			
	Daily	Occasionally	Not at all	Number	Daily	Occasionally	Not at all	Number
Age								
15-24	0.4	2.1	97.5	1,429	0.4	2.4	97.2	1,241
15-19	0.6	2.9	96.5	721	0.0	2.0	98.0	651
20-24	0.1	1.3	98.5	708	0.8	2.9	96.3	591
25-34	1.0	1.5	97.5	1,391	1.5	1.7	96.9	962
35-44	0.2	1.9	97.8	1,022	0.6	1.3	98.1	744
45-54	0.1	0.7	99.2	866	1.9	1.7	96.4	492
55-64	0.9	2.0	97.1	701	0.4	1.6	98.0	406
65+	0.1	1.9	98.0	719	0.8	1.0	98.2	364
Population group								
Black African	0.2	1.8	98.0	5,170	0.5	1.8	97.7	3,534
White	1.5	1.8	96.8	320	2.4	0.3	97.3	257
Coloured	2.4	0.6	97.0	516	4.1	2.1	93.8	335
Indian/Asian	2.6	2.3	95.1	114	0.0	1.6	98.4	82
Other	*	*	*	6	*	*	*	2
Residence								
Urban	0.7	1.7	97.6	3,996	1.1	1.9	97.1	2,874
Non-urban	0.1	1.7	98.2	2,130	0.4	1.6	98.0	1,336
Province								
Western Cape	1.9	0.4	97.7	703	4.3	2.4	93.3	476
Eastern Cape	0.0	0.8	99.2	730	0.9	0.7	98.4	493
Northern Cape	0.0	0.7	99.3	127	0.4	0.6	99.1	84
Free State	0.3	2.6	97.1	325	0.0	1.4	98.6	207
KwaZulu-Natal	0.4	2.1	97.5	1,191	0.1	1.5	98.4	683
North West	0.0	0.8	99.2	398	0.6	0.7	98.8	310
Gauteng	0.3	2.2	97.5	1,534	0.2	1.9	97.9	1,245
Mpumalanga	0.8	1.6	97.6	473	0.6	1.7	97.7	326
Limpopo	0.3	2.6	97.2	646	1.3	3.8	94.9	386
Education								
No education	0.0	1.6	98.4	495	1.2	2.1	96.7	217
Primary incomplete	0.1	1.4	98.5	664	0.7	1.0	98.3	481
Primary complete	0.0	1.5	98.5	293	1.6	0.6	97.7	212
Secondary incomplete	0.7	1.9	97.4	2,695	0.9	2.1	97.0	1,930
Secondary complete	0.7	2.2	97.1	1,328	0.7	2.3	97.1	900
More than secondary	0.1	0.5	99.4	652	1.0	0.5	98.5	470
Wealth quintile								
Lowest	0.0	1.0	99.0	1,163	0.3	1.0	98.8	787
Second	0.0	2.2	97.8	1,152	1.2	2.5	96.3	839
Middle	0.2	1.8	98.0	1,242	0.8	2.0	97.2	894
Fourth	0.8	1.4	97.8	1,258	1.1	2.1	96.8	827
Highest	1.2	2.1	96.7	1,311	1.0	1.2	97.8	864
Total 15+	0.5	1.7	97.8	6,126	0.9	1.8	97.4	4,210

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 18.5 Tobacco use during pregnancy

Among women age 15-49 who had a live birth in the past 5 years, percentage who reported that they smoked tobacco during their most recent pregnancy and percentage who reported that they used smokeless tobacco during their most recent pregnancy, by frequency of use, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who smoked tobacco			Percentage who used smokeless tobacco			Number of women
	Not at all	Daily	Occasionally	Not at all	Daily	Occasionally	
Age							
15-19	97.7	0.8	1.5	100.0	0.0	0.0	100
20-34	97.8	1.5	0.7	98.9	0.8	0.3	1,151
35-49	96.0	2.1	1.9	97.8	2.0	0.2	323
ANC service[1]							
Asked about smoking tobacco	97.2	1.8	1.0	98.9	1.0	0.1	1,372
Not asked about smoking tobacco	98.0	0.0	2.0	98.9	0.9	0.2	112
Residence							
Urban	96.3	2.3	1.4	98.9	0.7	0.4	1,021
Non-urban	99.5	0.3	0.2	98.5	1.5	0.0	552
Province							
Western Cape	83.0	10.1	6.9	97.1	2.9	0.0	129
Eastern Cape	95.9	2.9	1.2	98.0	2.0	0.0	165
Northern Cape	92.3	5.2	2.5	95.7	2.1	2.1	31
Free State	97.7	0.0	2.3	97.1	1.5	1.4	69
KwaZulu-Natal	99.5	0.5	0.0	100.0	0.0	0.0	291
North West	97.3	1.6	1.1	96.8	3.2	0.0	125
Gauteng	100.0	0.0	0.0	99.4	0.0	0.6	453
Mpumalanga	97.6	1.6	0.8	98.3	1.7	0.0	150
Limpopo	100.0	0.0	0.0	100.0	0.0	0.0	161
Education							
No education	*	*	*	*	*	*	22
Primary incomplete	94.1	3.9	2.0	92.5	6.8	0.7	75
Primary complete	95.4	1.3	3.3	99.6	0.4	0.0	63
Secondary incomplete	96.7	2.1	1.2	98.7	0.9	0.5	778
Secondary complete	98.8	0.9	0.2	99.7	0.3	0.0	474
More than secondary	99.0	0.0	1.0	99.9	0.0	0.1	161
Wealth quintile							
Lowest	98.4	1.1	0.4	98.3	1.6	0.1	342
Second	98.7	0.2	1.1	99.2	0.8	0.0	370
Middle	95.7	2.4	1.9	98.4	0.6	1.0	358
Fourth	95.8	3.7	0.5	98.1	1.6	0.3	277
Highest	98.4	0.5	1.1	100.0	0.0	0.0	227
Total 15-49	97.4	1.6	1.0	98.8	1.0	0.3	1,574

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Excludes women who did not receive ANC

Table 18.6.1 Alcohol consumption and risky drinking: Women

Percentage of women age 15 and older who ever drank alcohol, who drank alcohol in the past 12 months, who drank alcohol in the past 7 days, who consumed 5 or more drinks on at least one occasion in the past 30 days, and who show signs of problem drinking as assessed by the CAGE test, according to background characteristics, South Africa 2016

Background characteristic	Ever drank alcohol	Drank alcohol in past 12 months	Drank alcohol in past 7 days	Consumed 5 or more drinks on at least one occasion in past 30 days[1]	Show signs of problem drinking by the CAGE test[2]	Number of women
Age						
15-24	29.3	20.9	8.3	5.1	3.1	1,429
15-19	23.4	16.3	5.3	1.6	2.4	721
20-24	35.2	25.6	11.3	8.6	3.9	708
25-34	29.2	22.6	11.3	6.1	3.3	1,391
35-44	25.1	17.0	9.5	6.0	3.1	1,022
45-54	22.1	15.5	10.5	4.4	2.2	866
55-64	21.3	16.0	11.2	3.7	2.7	701
65+	20.8	13.1	9.2	2.0	1.1	719
Population group						
Black African	22.2	15.7	7.7	4.5	2.6	5,170
White	58.2	48.9	36.1	4.2	1.6	320
Coloured	42.9	28.6	17.6	10.2	5.6	516
Indian/Asian	13.2	9.0	1.1	0.0	0.0	114
Other	*	*	*	*	*	6
Employment (past 12 months)						
Not employed	22.9	15.9	8.3	4.4	2.9	4,048
Employed for cash	31.5	24.1	12.9	6.0	2.7	1,560
Employed not for cash	29.2	20.9	13.7	4.4	1.3	518
Residence						
Urban	30.8	22.4	12.3	6.0	3.2	3,996
Non-urban	16.0	11.0	5.5	2.6	2.0	2,130
Province						
Western Cape	38.1	27.3	18.0	9.0	4.8	703
Eastern Cape	27.7	19.9	10.1	4.9	3.3	730
Northern Cape	40.3	27.4	13.6	10.9	6.8	127
Free State	29.3	22.2	12.1	6.0	4.6	325
KwaZulu-Natal	12.8	10.1	4.8	1.4	1.0	1,191
North West	26.9	20.6	12.5	8.7	6.6	398
Gauteng	30.8	22.0	12.0	5.2	2.0	1,534
Mpumalanga	30.7	19.1	7.2	4.7	2.6	473
Limpopo	12.2	8.1	4.0	1.5	1.0	646
Education						
No education	19.4	13.5	10.2	6.9	2.7	495
Primary incomplete	16.4	10.3	5.4	2.3	2.6	664
Primary complete	19.1	9.9	6.0	1.7	0.9	293
Secondary incomplete	24.6	17.3	8.2	5.2	3.5	2,695
Secondary complete	28.8	21.7	12.2	5.6	1.8	1,328
More than secondary	40.9	32.3	18.6	4.2	2.4	652
Wealth quintile						
Lowest	16.5	11.7	5.2	3.7	1.9	1,163
Second	20.3	14.3	6.9	3.7	3.6	1,152
Middle	24.7	17.6	8.8	5.5	3.5	1,242
Fourth	30.1	21.3	11.9	8.0	3.5	1,258
Highest	35.1	25.9	15.9	3.2	1.3	1,311
Total 15+	25.7	18.4	9.9	4.8	2.7	6,126

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Respondents who consumed 0-1 drinks in the 7 days before the interview and who reported drinking 3 or fewer days per month over the past 12 months were assumed not to have consumed 5 or more drinks in the past 30 days
[2] The CAGE (Concern/Cut-down, Anger, Guilt, and Eye-Opener) test is used to screen for problem drinking and alcoholism. Two "yes" responses indicate the possibility of alcoholism and should be investigated further.

Table 18.6.2 Alcohol consumption and risky drinking: Men

Percentage of men age 15 and older who ever drank alcohol, who drank alcohol in the past 12 months, who drank alcohol in the past 7 days, who consumed 5 or more drinks on at least one occasion in the past 30 days, and who show signs of problem drinking as assessed by the CAGE test, according to background characteristics, South Africa 2016

Background characteristic	Ever drank alcohol	Drank alcohol in past 12 months	Drank alcohol in past 7 days	Consumed 5 or more drinks on at least one occasion in past 30 days[1]	Show signs of problem drinking by the CAGE test[2]	Number of men
Age						
15-24	56.4	49.3	26.3	20.7	13.0	1,241
15-19	45.6	38.8	16.6	11.8	5.8	651
20-24	68.4	60.8	37.0	30.5	20.8	591
25-34	65.5	60.5	43.4	36.1	21.5	962
35-44	68.3	60.1	40.2	31.8	18.4	744
45-54	53.9	47.5	36.7	27.8	15.5	492
55-64	64.9	54.3	45.1	25.7	14.4	406
65+	59.0	46.8	39.5	20.9	8.8	364
Population group						
Black African	61.5	53.9	36.0	28.3	16.7	3,534
White	77.2	71.0	57.7	25.7	8.2	257
Coloured	52.4	46.0	34.9	25.6	15.9	335
Indian/Asian	39.8	27.0	12.9	6.2	7.8	82
Other	*	*	*	*	*	2
Employment (past 12 months)						
Not employed	57.4	49.9	33.0	23.7	13.6	2,189
Employed for cash	65.7	58.3	40.5	32.1	19.3	1,897
Employed not for cash	65.7	55.5	48.0	23.8	6.7	124
Residence						
Urban	59.8	54.1	37.9	29.0	16.0	2,874
Non-urban	64.6	53.2	34.5	24.2	15.8	1,336
Province						
Western Cape	53.3	49.1	38.0	22.8	14.2	476
Eastern Cape	61.9	50.8	40.7	23.9	18.5	493
Northern Cape	57.8	47.1	29.0	23.3	10.7	84
Free State	45.5	42.3	30.6	25.4	23.0	207
KwaZulu-Natal	57.5	46.0	28.7	23.8	13.8	683
North West	79.0	64.4	32.1	27.2	13.0	310
Gauteng	63.6	60.9	44.3	35.3	16.8	1,245
Mpumalanga	60.5	55.0	31.1	28.8	17.4	326
Limpopo	65.9	52.4	34.7	20.5	14.5	386
Education						
No education	54.0	42.7	30.5	22.7	14.3	217
Primary incomplete	57.8	45.8	35.6	22.9	14.3	481
Primary complete	54.6	45.8	32.8	23.1	10.5	212
Secondary incomplete	60.6	53.1	34.8	27.4	16.7	1,930
Secondary complete	62.3	56.8	38.2	28.5	16.7	900
More than secondary	72.6	67.7	48.5	35.1	16.3	470
Wealth quintile						
Lowest	60.1	50.2	37.3	25.8	16.0	787
Second	60.5	51.7	32.0	25.5	14.6	839
Middle	61.3	54.4	35.3	28.6	17.0	894
Fourth	62.2	55.6	38.2	32.0	18.3	827
Highest	62.5	56.8	41.4	25.6	13.9	864
Total 15+	61.3	53.8	36.8	27.5	15.9	4,210

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Respondents who consumed 0-1 drinks in the 7 days before the interview and who reported drinking 3 or fewer days per month over the past 12 months were assumed not to have consumed 5 or more drinks in the past 30 days
[2] The CAGE (Concern/Cut-down, Anger, Guilt, and Eye-Opener) test is used to screen for problem drinking and alcoholism. Two "yes" responses indicate the possibility of alcoholism and should be investigated further.

Table 18.7 Alcohol consumption during pregnancy

Percentage of women age 15-49 with a live birth in the past 5 years who reported that they drank alcohol every day, some days, or not at all during the pregnancy of their last birth, according to background characteristics, South Africa DHS 2016

Background characteristic	Alcohol consumption during pregnancy of last birth in the past 5 years			Number of women
	Every day	Some days	Not at all	
Age				
15-19	2.3	0.5	97.3	100
20-34	0.1	2.8	97.1	1,151
35-49	0.1	3.8	96.1	323
ANC service[1]				
Asked about use of alcohol	0.2	2.8	97.0	1,376
Not asked about use of alcohol	0.7	5.5	93.8	109
Residence				
Urban	0.3	3.5	96.3	1,021
Non-urban	0.2	1.7	98.1	552
Province				
Western Cape	0.0	6.7	93.3	129
Eastern Cape	0.5	5.9	93.6	165
Northern Cape	1.3	4.7	94.0	31
Free State	0.0	5.1	94.9	69
KwaZulu-Natal	0.0	1.6	98.4	291
North West	0.4	2.8	96.8	125
Gauteng	0.5	1.9	97.6	453
Mpumalanga	0.0	2.6	97.4	150
Limpopo	0.0	0.4	99.6	161
Education				
No education	*	*	*	22
Primary incomplete	1.8	3.8	94.4	75
Primary complete	0.0	0.3	99.7	63
Secondary incomplete	0.3	3.6	96.1	778
Secondary complete	0.0	2.3	97.7	474
More than secondary	0.0	0.8	99.2	161
Wealth quintile				
Lowest	0.4	2.1	97.5	342
Second	0.0	2.2	97.8	370
Middle	0.7	3.0	96.3	358
Fourth	0.0	5.2	94.8	277
Highest	0.0	1.9	98.1	227
Total 15-49	0.3	2.8	96.9	1,574

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Excludes women who did not receive ANC

Table 18.8.1 Use and misuse of codeine-containing medications: Women

Percentage of women age 15 and older who used codeine-containing medications in the past 12 months, percentage who used codeine-containing medications in the past 12 months for the experience or feeling rather than the medicinal effect, and among women who used codeine-containing medications in the past 12 months for the experience or feeling rather than the medicinal effect, percentage who received treatment for problems related to their use for non-medical purposes, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who used codeine-containing medications in the past 12 months	Percentage who used codeine-containing medications in the past 12 months for the experience or feeling rather than medicinal effect	Number of women	Among women who used codeine-containing medications in the past 12 months for the experience or feeling: Percentage who received treatment for problems related to use of medicines for non-medical purposes	Among women who used codeine-containing medications in the past 12 months for the experience or feeling: Number of women
Age					
15-24	10.6	1.7	1,429	*	24
15-19	8.3	1.0	721	*	8
20-24	13.0	2.3	708	*	16
25-34	14.5	2.5	1,391	*	34
35-44	16.3	3.1	1,022	*	32
45-54	15.3	1.9	866	*	16
55-64	17.2	1.8	701	*	12
65+	12.0	3.0	719	*	22
Population group					
Black African	13.9	2.2	5,170	20.6	114
White	11.9	0.3	320	*	1
Coloured	12.4	3.9	516	*	20
Indian/Asian	29.5	4.5	114	*	5
Other	*	*	6	nc	0
Residence					
Urban	16.6	2.9	3,996	14.2	116
Non-urban	9.2	1.2	2,130	(43.0)	25
Province					
Western Cape	10.4	4.0	703	*	28
Eastern Cape	10.2	1.0	730	*	8
Northern Cape	10.9	0.6	127	*	1
Free State	8.1	1.1	325	*	4
KwaZulu-Natal	11.0	0.9	1,191	*	11
North West	24.9	4.9	398	(85.6)	20
Gauteng	23.1	4.1	1,534	*	63
Mpumalanga	12.2	0.5	473	*	2
Limpopo	4.5	0.6	646	*	4
Education					
No education	9.1	1.1	495	*	5
Primary incomplete	11.5	1.5	664	*	10
Primary complete	8.6	2.7	293	*	8
Secondary incomplete	12.9	2.1	2,695	(24.7)	56
Secondary complete	17.2	3.6	1,328	(16.9)	48
More than secondary	21.1	2.0	652	*	13
Wealth quintile					
Lowest	7.2	1.1	1,163	*	12
Second	11.3	1.3	1,152	*	15
Middle	13.8	2.0	1,242	*	25
Fourth	17.7	4.2	1,258	(18.9)	53
Highest	19.2	2.7	1,311	*	35
Total 15+	14.0	2.3	6,126	19.3	140

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases

Table 18.8.2 Use and misuse of codeine-containing medications: Men

Percentage of men age 15 and older who used codeine-containing medications in the past 12 months, percentage who used codeine-containing medications in the past 12 months for the experience or feeling rather than the medicinal effect, and among men who used codeine-containing medications in the past 12 months for the experience or feeling rather than the medicinal effect, percentage who received treatment for problems related to their use for non-medical purposes, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who used codeine-containing medications in the past 12 months	Percentage who used codeine-containing medications in the past 12 months for the experience or feeling rather than medicinal effect	Number of men	Among men who used codeine-containing medications in the past 12 months for the experience or feeling: Percentage who received treatment for problems related to use of medicines for non-medical purposes	Among men who used codeine-containing medications in the past 12 months for the experience or feeling: Number of men
Age					
15-24	12.0	1.9	1,241	*	23
15-19	11.0	1.6	651	*	10
20-24	13.1	2.2	591	*	13
25-34	12.6	1.2	962	*	12
35-44	11.8	2.1	744	*	16
45-54	16.0	0.8	492	*	4
55-64	14.4	1.7	406	*	7
65+	13.2	0.3	364	*	1
Population group					
Black African	12.3	1.4	3,534	10.9	50
White	9.1	1.1	257	*	3
Coloured	20.7	2.9	335	*	10
Indian/Asian	19.6	0.0	82	nc	0
Other	*	*	2	nc	0
Residence					
Urban	13.6	1.6	2,874	(18.3)	45
Non-urban	11.4	1.3	1,336	(11.2)	18
Province					
Western Cape	17.4	2.7	476	*	13
Eastern Cape	11.4	0.8	493	*	4
Northern Cape	31.8	0.2	84	nc	0
Free State	5.0	0.8	207	*	2
KwaZulu-Natal	15.8	0.8	683	*	6
North West	11.5	1.0	310	*	3
Gauteng	10.8	1.4	1,245	*	18
Mpumalanga	15.8	4.6	326	*	15
Limpopo	9.8	0.6	386	*	2
Education					
No education	9.6	0.5	217	*	1
Primary incomplete	12.4	1.1	481	*	5
Primary complete	7.8	1.0	212	*	2
Secondary incomplete	11.1	0.9	1,930	*	18
Secondary complete	16.4	2.7	900	*	24
More than secondary	18.2	2.5	470	*	12
Wealth quintile					
Lowest	7.3	0.9	787	*	7
Second	10.9	1.9	839	*	16
Middle	11.6	0.7	894	*	7
Fourth	18.1	2.1	827	*	18
Highest	16.4	1.7	864	*	15
Total 15+	12.9	1.5	4,210	16.3	62

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases

WOMEN'S EMPOWERMENT 19

Key Findings

- ***Employment and earnings:*** About half of in-union women (47%) and 79% of in-union men age 15-49 were employed in the 12 months before the survey. Almost all employed women (97%) and men (more than 99%) received cash earnings. Similar proportions of in-union women (95%) and men (93%) who had cash earnings decided solely or jointly with their spouse on the use of their own cash earnings.
- ***Ownership of house:*** 28% of women and 19% of men age 15-49 own a house. About half of women (56%) and men (49%) who own a house have their name on the title or deed.
- ***Other assets:*** Over half of women (54%) and men (57%) have a bank account they use. About 9 in 10 women and men own a cellphone.
- ***Participation in decision making:*** 87% of in-union women participate either alone or jointly with their partners in decisions about their own health care, visits to their family, and major household purchases. Two in five women (41%) make decisions alone about their own health care.
- ***Attitudes towards wife beating:*** 6% of women and 9% of men believe that a husband is justified in beating his wife in at least one of five specified circumstances.
- ***Negotiating sexual relations:*** 72% of in-union women age 15-49 report that they can say no to their partners if they do not want to have sexual intercourse, and 77% say that they can ask their partners to use a condom.
- ***Child discipline:*** About 4 in 10 women (41%) and 1 in 4 men (26%) with co-resident children physically disciplined their children with a hand or implement in the 12 months preceding the survey.

This chapter explores women's empowerment in terms of employment, earnings, control over earnings, and magnitude of earnings relative to those of their partners. While the chapter focuses on women, data on specific indicators are also presented for men. (Note that in-union women and men include both those who say they are married and those who say they are living with a partner as if married.) Comparisons of indicators among men and women help to identify gender disparities and provide a context for women's empowerment. The chapter also provides information on child discipline.

19.1 IN-UNION WOMEN'S AND MEN'S EMPLOYMENT

Employment

Respondents are considered to be employed if they have done any work other than their housework in the 12 months before the survey.

Sample: In-union women and men age 15-49

Earning cash for employment

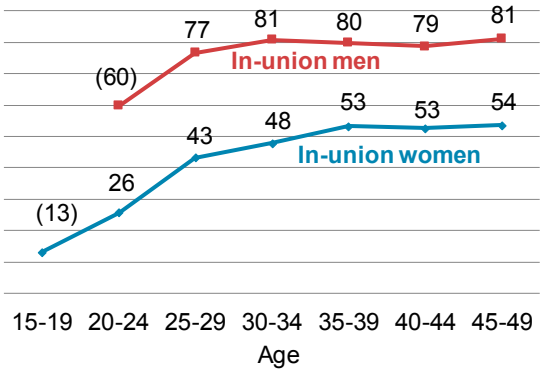
Respondents are asked if they are paid for their labour in cash or in-kind. Only those who receive payment in cash only or in cash and in-kind are considered to earn cash for their employment.

Sample: In-union women and men age 15-49 employed in the 12 months before the survey

A higher proportion of in-union men (79%) were employed than in-union women (47%) (**Table 19.1**). In-union women and men who were employed predominantly received cash earnings (97% of women and more than 99% of men). Less than 1% of employed men and 2% of employed women were not paid. Among both in-union women and men, the percentage employed generally rises with age (**Figure 19.1**).

Figure 19.1 **Employment by age**

Percentage of in-union women and men who were employed at any time in the 12 months before the survey



Notes: In-union women and men include those who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.

19.2 CONTROL OVER WOMEN'S EARNINGS

Control over one's own cash earnings

Respondents are considered to have control over their own earnings if they participate in decisions alone or jointly with their spouse about how their own earnings will be used.

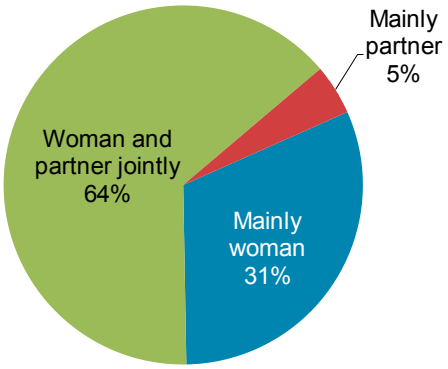
Sample: In-union women and men age 15-49 who received cash earnings for employment during the 12 months before the survey

To assess women's autonomy, in-union women who earned cash for their work in the 12 months before the survey were asked who the main decision maker was with regard to the use of their earnings. About two-thirds (64%) of in-union women who earn cash decide with their partners how they use their earnings, and about one-third (31%) independently make decisions about the use of their earnings. Only 5% reported that their partners mainly decide on the use of their cash earnings (**Table 19.2.1** and **Figure 19.2**).

Over half of in-union women who are employed earn less than their partners (53%), 20% earn more than their partners, and 15% earn about the same as their partners. One in 10 (9%) women who have cash earnings are in a union with a partner who has no earnings.

***Figure 19.2* Control over women's earnings**

Percent distribution of in-union women with cash earnings in the 12 months before the survey



Note: In-union women include those who are currently married or living together with a partner as if married.

Patterns by background characteristics

- Women living in urban and non-urban areas were equally likely to have control over the use of their own earnings (95% each). However, urban women were less likely than non-urban women to make these decisions alone (29% versus 38%).
- By province, women's control of their own cash earnings ranged from a low of 89% in Mpumalanga to a high of 99% in Northern Cape.
- There were slight differences in women's control over their cash earnings by education and household wealth. Generally, however, less educated women and women in the lower wealth quintiles reported more independent control over the use of their earnings, while better educated women and women in the higher quintiles were more likely to report making joint decisions with their partners.
- Women in the lowest wealth quintile (62%) and women in North West, Mpumalanga, and Limpopo (65%-68%) were most likely to earn less than their partners, and women with five or more children (34%) and those with no children (29%) were most likely to earn more than their partners.

19.3 Control over Men's Earnings

Overall, 93% of in-union men who receive cash earnings report having decision-making control over the use of their earnings; one in five men (21%) said they make independent decisions about the use of their cash earnings, while 72% said they make these decisions jointly with their partners. Seven percent of men said that their earnings are mainly controlled by their partner (**Table 19.2.2**).

In-union women whose partners have earnings were also asked who decides how their partners' earnings are used; the proportion of women who reported that this decision was made jointly was the same as among men (72%). However, a smaller proportion of women (13%) than men (21%) reported that it was mainly the man who made the decision, and a higher proportion of women (14%) than men (7%) said that the woman mainly controlled her partner's earnings.

Employed women were more likely to control their own earnings independently if they earned more than their partner (38%) or their partner did not work or earn cash (40%). Similarly, women who earned more than their partner were more likely to control their partner's earnings without the partner's involvement. Women who earned about the same as their partner were most likely to jointly decide on the use of their

own earnings and those of their partner. Women who did not work were least likely to have control over their partner's earnings (**Table 19.3**).

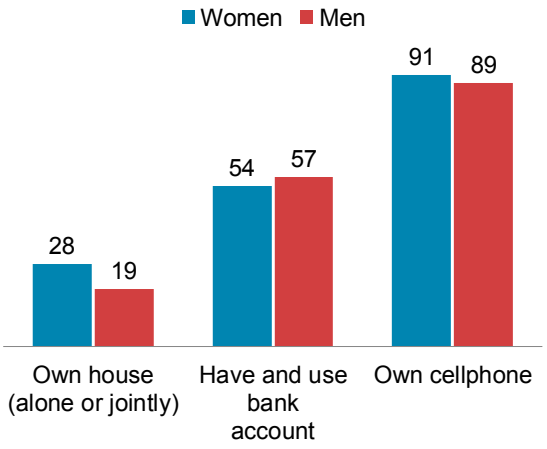
19.4 WOMEN'S AND MEN'S OWNERSHIP OF ASSETS

Ownership of a house
Respondents who own a house, whether alone or jointly with someone else
Sample: Women and men age 15-49

A higher proportion of women age 15-49 (28%) than men age 15-49 (19%) own a house alone or jointly with someone else (**Figure 19.3**). Sole house ownership is also more common among women (20%) than among men (14%) (**Table 19.4.1** and **Table 19.4.2**).

***Figure 19.3* Ownership of assets**

Percentage of women and men age 15-49 by ownership of specific items



Among those who own a house, whether alone or jointly with someone else, 56% of women and 49% of men report that their name is on the house title or deed, while 5% of women and 2% of men say their name is not on the title or deed. A higher proportion of men than women who own a house report that they do not have a title or deed for the house (46% versus 36%) (**Table 19.5.1** and **Table 19.5.2**).

Over half of women (54%) and men (57%) have an account in a bank or other financial institution that they themselves use. Approximately 9 in 10 women (91%) and men (89%) own a cellphone. About a third of women (33%) and men (37%) who own a cellphone use it for financial transactions (**Table 19.6.1** and **Table 19.6.2**).

Patterns by background characteristics

- House ownership increases with age, from 5% among women and 2% among men age 15-19 to 63% among women and 54% among men age 45-49 (**Table 19.4.1** and **Table 19.4.2**).
- The relationship of house ownership with education and wealth is nonlinear. For example, women with no education (42%), those with a primary incomplete education (46%), and those with more than a secondary education (35%) are more likely than women in the other education categories (23-30%) to own a house.
- House ownership does not differ by residence among either women or men. However, 60% of women in urban areas who own a house report that the house has a title or deed and their name is on it, as compared with 49% of women in non-urban areas. The opposite is true among men; 44% of men in urban areas who own a house report that the house has a title or deed and their name is on it, compared with 61% of men in non-urban areas (**Table 19.5.1** and **Table 19.5.2**).
- Although house ownership does not vary greatly according to province, there are variations by province in the proportion of women and men who own a house and report that the house has a title or deed and their name is on it. For example, the proportion of women who own a house and report that the house has a title or deed and their name is on it ranges from 47% each in Limpopo, Eastern Cape, and North West to 73% in Western Cape. Among men, the proportion ranges from 28% in Eastern Cape to 90% in North West.

- Use of a bank account rises rapidly with age among both women and men, peaking at age 35-39. Only 17% of women and 15% of men age 15-19 have a bank account they use, as compared with 68% of women and 75% of men age 35-39 (**Table 19.6.1** and **Table 19.6.2**).
- Women and men living in urban areas are more likely to have bank accounts (60% and 65%, respectively) than those living in non-urban areas (41% and 39%, respectively).
- Possession and use of a bank account, ownership of a cellphone, and use of a cellphone for financial transactions all generally increase with increasing education and wealth.

19.5 Participation in Decision Making

Participation in major household decisions

Women are considered to participate in household decisions if they make decisions alone or jointly with their husband/partner in all three of the following areas: (1) their own health care, (2) major household purchases, and (3) visits to their family or relatives.

Sample: In-union women age 15-49

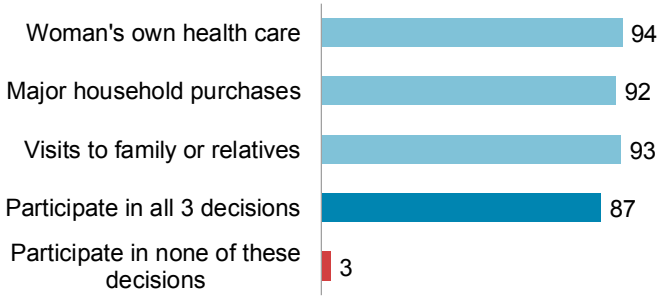
Men are considered to participate in household decisions if they make decisions alone or jointly with their wife/partner in both of the following areas: (1) their own health care and (2) major household purchases.

Sample: In-union men age 15-49

A majority (87%) of in-union women age 15-49 participate in all three specified household decisions, either alone or jointly with their partners. Women are about equally likely to participate in each of the three decisions (92%-94% each) (**Table 19.7** and **Table 19.8.1**). Forty-one percent of women make decisions about their own health care alone, 27% make independent decisions about visits to family or relatives, and 19% make independent decisions about major household purchases. Only 3% of in-union women do not participate in any of the three decisions (**Table 19.8.1** and **Figure 19.4**).

***Figure 19.4* Women's participation in decision making**

Percentage of in-union women age 15-49 participating in specific decisions



Note: In-union women include those who are currently married or living together with a partner as if married.

Similarly, 85% of in-union men age 15-49 participate in both of the decisions they were asked about; 92% participate in decisions about their own health care and 88% in decisions about major household purchases. Five percent of in-union men do not participate in either decision (**Table 19.8.2**).

Patterns by background characteristics

- In-union women's participation in all three decisions tends to increase with age and number of children. For example, 82% of women with no children participate in all three decisions, as compared with 87%-90% of women with any children (**Table 19.8.1**).
- In-union women's participation in decisions varies by residence; 89% of women in urban areas participate in all three decisions, compared with 82% of women in non-urban areas. Similarly, in-

union men in urban areas are more likely to participate in both specified decisions than those in non-urban areas (88% and 73%, respectively) (**Table 19.8.2**).

- Women's and men's participation in household decisions varies greatly by province. The proportion of women who participate in all three decisions ranges from 72% in Limpopo to 92% each in Free State and Northern Cape, while the proportion of men participating in both specified decisions ranges from 75% in Free State to 93% each in Western Cape and Mpumalanga.

19.6 Attitudes toward Wife Beating

Attitudes toward wife beating

Respondents are asked if they agree that a husband is justified in hitting or beating his wife under each of the following five circumstances: she burns the food, she argues with him, she goes out without telling him, she neglects the children, and she refuses to have sex with him. If respondents answer "yes" in at least one circumstance, they are considered to have attitudes justifying wife beating.

Sample: Women and men age 15-49

The SADHS 2016 collected information on women's and men's attitudes toward wife beating in five separate circumstances to gain more insight into the extent to which domestic abuse is accepted.

Overall, 6% of women and 9% of men age 15-49 agree that a husband is justified in beating his wife in at least one of the five specified circumstances. Among both women and men, neglecting the children is the most acceptable reason for wife beating; 4% of women and 6% of men believe that a husband is justified in beating his wife if she neglects the children (**Table 19.9.1** and **Table 19.9.2**).

Patterns by background characteristics

- Wife beating is more acceptable in non-urban areas than urban areas; 8% of women and 15% of men in non-urban areas agree that wife beating is justified in at least one of the five specified circumstances, as compared with 4% of women and 7% of men in urban areas.

- Acceptance of wife beating among women varies widely across provinces. One in 10 women in Northern Cape (12%), Eastern Cape (11%), and Limpopo (10%) agree that wife beating is justified in at least one of the five specified circumstances, compared with 3% each of women in KwaZulu-Natal and Gauteng.

- Acceptance of wife beating generally decreases with increasing wealth; women and men in the highest wealth quintile are less likely than those in the other wealth quintiles to agree that a husband is justified in beating his wife in at least one of the five specified circumstances.

19.7 Negotiating Sexual Relations

To assess women's ability to negotiate safer sexual relations with their partners, women were asked whether they could say no to their partners if they do not want to have sexual intercourse and whether they could ask their partners to use a condom.

In South Africa, 72% of in-union women age 15-49 report that they can say no to their partners if they do not want to have sexual intercourse, and 77% report that they can ask their partners to use a condom (**Table 19.10**).

19.8 CHILD DISCIPLINE

Child discipline

Respondents living with one or more of their children less than age 18 are asked if they have done the following in the past 12 months to discipline or punish their children: hit or slapped them with a hand or hit or beat them using a belt, spoon, stick, shoe, or any other implement.

Sample: Women and men age 15-49 who have one or more children (age 0-17) living with them

Corporal punishment is outlawed in public life in South Africa, that is, in schools (South African Schools Act 84 of 1996); alternative care settings, including foster care settings; and early childhood development centres. However, corporal punishment is still not prohibited in the home. Under common law, parents have the power "to inflict moderate and reasonable chastisement on a child."[1]

Forty-one percent of women and 26% of men age 15-49 with one or more children less than age 18 living with them physically disciplined or punished their children, either with a hand or with another implement, during the 12 months preceding the survey (**Table 19.11.1** and **Table 19.11.2**). Women and men were slightly more likely to hit or slap their children (32% and 21%, respectively) than to hit or beat them using a belt, spoon, stick, shoe, or other implement (30% and 19%, respectively).

Patterns by background characteristics

- Women who reside in non-urban areas are more likely than their urban counterparts to punish their children with either a hand or another implement (45% versus 38%). The difference between non-urban and urban men in use of corporal punishment to discipline children is small (28% and 26%, respectively).
- The percentage of women who use either a hand or another implement to punish their children ranges from 29% in Limpopo to 53% in Eastern Cape.
- There is no clear relationship between corporal punishment and education or wealth among either women or men.

[1] A 2017 High Court decision held that the common law defence of "moderate and reasonable chastisement" was unconstitutional; this is still to be confirmed in legislation, however, and the judgment has been appealed (Global Initiative to End Corporal Punishment of Children 2017).

List of Tables

For more information on women's empowerment, see the following tables:

Table 19.1 Employment and cash earnings of in-union women and men

Percentage of in-union women and men age 15-49 who were employed at any time in the past 12 months and percent distribution of in-union women and men employed in the past 12 months by type of earnings, according to age, South Africa DHS 2016

	Among in-union respondents:		Percent distribution of in-union respondents employed in the past 12 months, by type of earnings					
Age	Percentage employed in past 12 months	Number of respondents	Cash only	Cash and in-kind	In-kind only	Not paid	Total	Number of respondents
				WOMEN				
15-19	(13.1)	44	*	*	*	*	100.0	6
20-24	25.7	271	96.9	0.8	1.4	0.9	100.0	70
25-29	43.2	514	95.6	1.5	0.5	2.4	100.0	222
30-34	47.9	688	96.1	2.3	0.0	1.5	100.0	329
35-39	53.2	575	93.2	3.1	0.2	3.5	100.0	306
40-44	52.6	507	93.6	4.0	0.1	2.3	100.0	267
45-49	53.6	450	94.1	2.8	0.0	3.1	100.0	241
Total 15-49	47.3	3,050	94.7	2.7	0.2	2.4	100.0	1,441
				MEN				
15-19	*	1	nc	nc	nc	nc	nc	0
20-24	(59.8)	42	*	*	*	*	100.0	25
25-29	76.6	127	99.8	0.2	0.0	0.0	100.0	97
30-34	80.8	219	99.6	0.0	0.4	0.0	100.0	177
35-39	79.9	212	98.9	0.9	0.0	0.2	100.0	169
40-44	78.7	215	96.4	3.6	0.0	0.0	100.0	170
45-49	81.1	172	97.1	2.1	0.0	0.8	100.0	140
Total 15-49	78.7	988	97.8	1.9	0.1	0.2	100.0	778
50-59	64.1	288	96.7	1.7	0.2	1.4	100.0	185
Total 15-59	75.4	1,276	97.6	1.9	0.1	0.4	100.0	962

Notes: In-union women and men include those who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases

Table 19.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings

Percent distribution of in-union women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how the woman's cash earnings are used and by whether she earned more or less than her partner, according to background characteristics, South Africa DHS 2016

	Person who decides how the woman's cash earnings are used:					Woman's cash earnings compared with partner's cash earnings:							
Background characteristic	Mainly woman	Woman and partner jointly	Mainly partner	Not asked[1]	Total	More	Less	About the same	Partner has no earnings	Don't know	Not asked[1]	Total	Number of women
Age													
15-19	*	*	*	*	100.0	*	*	*	*	*	*	100.0	6
20-24	35.5	59.5	4.6	0.3	100.0	19.3	48.7	20.5	11.1	0.0	0.3	100.0	68
25-29	25.3	68.8	6.0	0.0	100.0	23.4	52.6	13.6	8.7	1.7	0.0	100.0	216
30-34	27.4	66.3	4.7	1.7	100.0	21.6	56.6	14.5	4.4	1.1	1.7	100.0	324
35-39	29.4	66.0	4.4	0.2	100.0	16.3	57.3	14.4	8.6	3.3	0.2	100.0	295
40-44	28.7	66.4	4.9	0.0	100.0	18.6	50.3	18.5	9.9	2.7	0.0	100.0	260
45-49	45.0	52.4	2.3	0.4	100.0	20.8	47.4	13.5	14.0	4.0	0.4	100.0	234
Number of living children													
0	27.3	60.5	7.0	5.2	100.0	28.9	38.3	18.7	8.9	0.0	5.2	100.0	107
1-2	27.5	68.1	4.3	0.2	100.0	19.5	54.9	14.9	7.9	2.6	0.2	100.0	815
3-4	37.0	58.8	4.2	0.0	100.0	17.9	53.4	16.1	10.2	2.4	0.0	100.0	436
5+	52.9	40.7	6.4	0.0	100.0	33.9	46.7	1.4	13.8	4.3	0.0	100.0	45
Residence													
Urban	29.3	65.7	4.3	0.6	100.0	20.9	52.0	16.2	8.0	2.3	0.6	100.0	1,108
Non-urban	38.3	56.3	5.4	0.0	100.0	17.6	56.2	11.4	12.1	2.8	0.0	100.0	295
Province													
Western Cape	21.2	72.6	4.5	1.7	100.0	19.0	48.7	22.1	8.5	0.0	1.7	100.0	280
Eastern Cape	39.0	55.0	5.4	0.5	100.0	20.9	50.3	13.3	11.4	3.5	0.5	100.0	129
Northern Cape	29.6	68.9	0.5	0.9	100.0	12.7	53.3	22.6	6.3	4.2	0.9	100.0	25
Free State	15.5	80.2	4.3	0.0	100.0	10.2	50.0	24.8	13.1	1.8	0.0	100.0	59
KwaZulu-Natal	29.6	61.5	8.9	0.0	100.0	22.4	48.9	17.2	9.6	1.9	0.0	100.0	129
North West	29.0	67.8	2.5	0.7	100.0	10.1	65.4	8.1	13.7	2.1	0.7	100.0	98
Gauteng	34.7	62.9	2.4	0.0	100.0	25.7	48.8	14.7	7.0	3.8	0.0	100.0	485
Mpumalanga	32.8	56.0	11.2	0.0	100.0	16.6	67.5	4.1	8.7	3.0	0.0	100.0	100
Limpopo	44.9	49.3	5.0	0.8	100.0	14.1	68.0	7.9	8.4	0.8	0.8	100.0	99
Education													
No education	*	*	*	*	100.0	*	*	*	*	*	*	100.0	19
Primary incomplete	54.4	42.6	3.0	0.0	100.0	21.6	53.0	4.5	15.7	5.2	0.0	100.0	57
Primary complete	(53.7)	(41.7)	(4.7)	(0.0)	100.0	(14.5)	(46.5)	(11.2)	(14.9)	(12.9)	(0.0)	100.0	49
Secondary incomplete	32.3	62.0	5.6	0.0	100.0	16.5	58.8	10.0	11.6	3.0	0.0	100.0	446
Secondary complete	29.6	65.4	4.9	0.0	100.0	21.7	52.9	15.8	8.4	1.2	0.0	100.0	480
More than secondary	23.8	71.3	3.0	2.0	100.0	23.7	46.1	23.5	3.3	1.4	2.0	100.0	352
Wealth quintile													
Lowest	41.4	52.9	5.8	0.0	100.0	14.8	61.5	6.5	15.2	2.1	0.0	100.0	140
Second	38.4	55.2	6.4	0.0	100.0	19.9	51.5	13.5	11.4	3.6	0.0	100.0	220
Middle	41.9	54.3	3.8	0.0	100.0	20.6	52.0	15.1	9.1	3.2	0.0	100.0	278
Fourth	30.6	64.8	4.1	0.5	100.0	24.2	51.2	13.5	7.7	2.9	0.5	100.0	285
Highest	19.1	75.6	4.0	1.2	100.0	19.2	52.6	19.4	6.4	1.2	1.2	100.0	480
Total	31.2	63.7	4.5	0.5	100.0	20.2	52.9	15.1	8.9	2.4	0.5	100.0	1,403

Notes: In-union women include women who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Question not asked because respondents are in same-sex unions

Table 19.2.2 Control over men's cash earnings

Percent distributions of in-union men age 15-49 who receive cash earnings and of in-union women age 15-49 whose partners receive cash earnings, by person who decides how the man's cash earnings are used, according to background characteristics, South Africa DHS 2016

	Men							Women						
	Person who decides how the man's cash earnings are used:							Person who decides how the man's cash earnings are used:						
Background characteristic	Mainly partner	Man and partner jointly	Mainly man	Other	Not asked[1]	Total	Number of men	Mainly woman	Woman and partner jointly	Mainly partner	Other	Not asked[1]	Total	Number of women
Age														
15-19	nc	nc	nc	nc	nc	nc	0	(14.0)	(59.9)	(26.1)	(0.0)	(0.0)	100.0	41
20-24	*	*	*	*	*	100.0	25	14.8	63.8	21.0	0.3	0.1	100.0	252
25-29	4.2	70.3	25.6	0.0	0.0	100.0	97	13.3	74.2	12.5	0.0	0.0	100.0	480
30-34	5.7	76.4	17.7	0.2	0.0	100.0	176	14.3	73.0	11.3	0.0	1.3	100.0	661
35-39	6.2	71.6	22.2	0.0	0.0	100.0	169	12.5	75.0	12.3	0.0	0.3	100.0	542
40-44	8.0	67.9	24.1	0.0	0.0	100.0	170	13.9	74.0	12.1	0.0	0.0	100.0	465
45-49	8.3	73.6	15.8	0.0	2.4	100.0	139	18.4	68.5	12.1	0.6	0.4	100.0	403
Number of living children														
0	3.2	63.1	30.1	0.0	3.6	100.0	92	13.5	68.7	14.7	0.0	3.1	100.0	243
1-2	4.5	75.5	19.8	0.1	0.0	100.0	374	12.3	73.6	13.7	0.0	0.3	100.0	1,566
3-4	9.7	70.5	19.8	0.0	0.0	100.0	235	17.6	70.3	11.9	0.2	0.0	100.0	877
5+	11.7	69.7	18.7	0.0	0.0	100.0	75	17.8	72.2	9.4	0.7	0.0	100.0	156
Residence														
Urban	6.2	73.1	20.1	0.0	0.5	100.0	597	13.5	74.2	11.5	0.1	0.6	100.0	2,131
Non-urban	7.9	68.1	23.7	0.2	0.0	100.0	179	16.7	65.8	17.4	0.1	0.0	100.0	712
Province														
Western Cape	5.2	76.1	15.9	0.0	2.8	100.0	119	12.4	78.2	7.0	0.6	1.7	100.0	421
Eastern Cape	9.7	70.7	19.6	0.0	0.0	100.0	60	23.6	60.7	15.1	0.0	0.6	100.0	253
Northern Cape	4.2	81.0	14.8	0.0	0.0	100.0	15	16.5	73.4	9.8	0.0	0.4	100.0	59
Free State	(8.4)	(68.6)	(23.0)	(0.0)	(0.0)	100.0	22	10.2	84.0	5.8	0.0	0.0	100.0	137
KwaZulu-Natal	14.3	63.5	22.1	0.0	0.0	100.0	74	15.6	71.5	12.9	0.0	0.0	100.0	335
North West	3.6	63.7	32.2	0.5	0.0	100.0	83	9.3	76.8	13.1	0.0	0.8	100.0	197
Gauteng	5.9	75.5	18.6	0.0	0.0	100.0	278	14.2	73.6	12.2	0.0	0.0	100.0	995
Mpumalanga	4.4	76.1	19.5	0.0	0.0	100.0	70	10.8	65.1	24.1	0.0	0.0	100.0	215
Limpopo	7.3	63.7	29.0	0.0	0.0	100.0	54	15.9	63.2	19.9	0.3	0.7	100.0	231
Education														
No education	(5.7)	(67.1)	(27.2)	(0.0)	(0.0)	100.0	20	28.3	62.0	9.7	0.0	0.0	100.0	74
Primary incomplete	12.5	67.6	19.9	0.0	0.0	100.0	51	20.9	57.3	21.7	0.0	0.0	100.0	165
Primary complete	(17.7)	(57.1)	(25.2)	(0.0)	(0.0)	100.0	35	22.2	64.2	12.6	0.9	0.0	100.0	127
Secondary incomplete	6.3	74.5	19.1	0.1	0.0	100.0	293	12.6	72.4	14.6	0.2	0.2	100.0	1,191
Secondary complete	4.2	73.4	22.3	0.0	0.0	100.0	242	14.8	75.6	9.5	0.0	0.0	100.0	831
More than secondary	6.7	70.3	20.6	0.0	2.4	100.0	135	11.3	74.2	12.6	0.0	2.0	100.0	455
Wealth quintile														
Lowest	10.6	69.2	20.2	0.0	0.0	100.0	118	20.8	63.8	15.4	0.0	0.0	100.0	444
Second	7.8	65.8	26.1	0.3	0.0	100.0	159	13.7	69.3	16.9	0.1	0.0	100.0	570
Middle	3.7	77.2	19.2	0.0	0.0	100.0	165	15.6	70.7	13.4	0.2	0.1	100.0	596
Fourth	6.1	70.8	23.0	0.0	0.0	100.0	145	14.8	74.3	10.3	0.2	0.4	100.0	536
Highest	6.1	75.2	16.9	0.0	1.7	100.0	189	9.4	79.3	10.0	0.0	1.3	100.0	697
Total 15-49	6.6	72.0	20.9	0.1	0.4	100.0	775	14.3	72.1	13.0	0.1	0.4	100.0	2,843
50-59	9.0	71.3	19.7	0.0	0.0	100.0	182	na	na	na	na	na	na	na
Total 15-59	7.1	71.8	20.7	0.0	0.3	100.0	957	na	na	na	na	na	na	na

Notes: In-union women and men include those who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases
na = Not applicable
[1] Question not asked because respondents are in same-sex unions

Table 19.3 Women's control over their own earnings and over those of their partners

Percent distribution of in-union women age 15-49 with cash earnings in the last 12 months by person who decides how the woman's cash earnings are used and percent distribution of in-union women age 15-49 whose partners have cash earnings by person who decides how the man's cash earnings are used, according to the relation between woman's and man's cash earnings, South Africa DHS 2016

	Person who decides how the woman's cash earnings are used:						Person who decides how the man's cash earnings are used:						
Women's earnings relative to partner's earnings	Mainly woman	Woman and partner jointly	Mainly man	Not asked[1]	Total	Number of women	Mainly woman	Man and partner jointly	Mainly man	Other	Not asked[1]	Total	Number of women
More than partner	38.2	58.6	3.2	0.0	100.0	283	28.6	65.4	6.0	0.0	0.0	100.0	283
Less than partner	31.4	63.8	4.8	0.0	100.0	742	12.4	77.6	10.0	0.0	0.0	100.0	742
Same as partner	14.4	81.1	4.5	0.0	100.0	213	7.9	87.2	4.9	0.0	0.0	100.0	213
Partner has no cash earnings or did not work	40.2	56.5	3.3	0.0	100.0	123	na	na	na	na	na	na	0
Woman worked but has no cash earnings	na	na	na	na	na	0	(25.6)	(68.4)	(5.9)	(0.0)	(0.0)	100.0	37
Woman did not work	na	na	na	na	na	0	12.6	69.9	17.1	0.2	0.3	100.0	1,527
Total[2]	31.2	63.7	4.5	0.5	100.0	1,403	14.3	72.1	13.0	0.1	0.4	100.0	2,843

Notes: In-union women include women who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable
[1] Question not asked because respondents are in same-sex unions
[2] Includes cases where a woman does not know whether she earned more or less than her partner and cases where a woman was not asked about her partner's earnings because she is in a same-sex union

Table 19.4.1 Ownership of assets: Women

Percent distribution of women age 15-49 by ownership of housing, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who own a house: Alone	Jointly	Alone and jointly	Percentage who do not own a house	Total	Number of women
Age						
15-19	1.3	1.5	1.8	95.5	100.0	1,427
20-24	3.3	2.1	3.2	91.5	100.0	1,415
25-29	5.1	5.7	5.7	83.5	100.0	1,444
30-34	9.2	9.6	11.6	69.7	100.0	1,333
35-39	15.0	13.8	12.3	58.9	100.0	1,072
40-44	25.0	14.1	17.8	43.2	100.0	941
45-49	28.6	15.8	18.6	37.0	100.0	883
Residence						
Urban	10.8	7.9	9.1	72.3	100.0	5,731
Non-urban	10.5	8.2	9.1	72.2	100.0	2,783
Province						
Western Cape	10.4	7.7	13.0	68.9	100.0	995
Eastern Cape	8.0	8.2	5.2	78.5	100.0	938
Northern Cape	10.2	12.7	4.3	72.7	100.0	173
Free State	10.3	11.1	9.1	69.5	100.0	442
KwaZulu-Natal	12.9	3.6	11.1	72.4	100.0	1,616
North West	9.5	11.4	4.8	74.3	100.0	570
Gauteng	11.1	9.3	10.3	69.3	100.0	2,284
Mpumalanga	9.8	10.8	5.1	74.2	100.0	671
Limpopo	10.1	5.9	8.4	75.6	100.0	824
Education						
No education	21.3	9.3	11.2	58.3	100.0	168
Primary incomplete	20.5	12.1	13.4	54.1	100.0	447
Primary complete	12.6	8.2	9.2	70.0	100.0	327
Secondary incomplete	9.3	6.1	7.4	77.3	100.0	4,195
Secondary complete	10.0	9.2	9.3	71.5	100.0	2,369
More than secondary	11.1	11.1	13.2	64.6	100.0	1,008
Wealth quintile						
Lowest	14.3	6.3	7.7	71.7	100.0	1,648
Second	10.1	6.8	8.8	74.3	100.0	1,715
Middle	10.1	7.7	7.2	75.0	100.0	1,805
Fourth	9.9	7.5	7.3	75.3	100.0	1,763
Highest	9.0	12.0	14.8	64.2	100.0	1,583
Total	10.7	8.0	9.1	72.3	100.0	8,514

Table 19.4.2 Ownership of assets: Men

Percent distribution of men age 15-49 by ownership of housing, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who own a house: Alone	Jointly	Alone and jointly	Percentage who do not own a house	Total	Number of men
Age						
15-19	0.6	1.2	0.0	98.3	100.0	647
20-24	4.7	1.5	0.8	93.0	100.0	588
25-29	7.8	2.5	1.3	88.4	100.0	506
30-34	13.3	5.6	2.9	78.1	100.0	450
35-39	17.1	10.2	5.5	67.2	100.0	395
40-44	22.5	10.9	6.1	60.5	100.0	345
45-49	33.8	13.2	7.3	45.7	100.0	271
Residence						
Urban	11.9	5.0	3.1	80.0	100.0	2,203
Non-urban	10.6	5.7	2.0	81.7	100.0	999
Province						
Western Cape	17.3	4.1	2.5	76.1	100.0	328
Eastern Cape	7.6	3.8	1.9	86.7	100.0	362
Northern Cape	13.9	6.9	5.9	73.3	100.0	61
Free State	7.2	3.9	6.3	82.6	100.0	159
KwaZulu-Natal	10.1	2.7	3.4	83.7	100.0	521
North West	12.2	6.7	3.4	77.6	100.0	237
Gauteng	10.8	6.8	2.2	80.3	100.0	984
Mpumalanga	12.4	6.2	2.4	79.0	100.0	263
Limpopo	14.8	5.9	1.8	77.5	100.0	288
Education						
No education	25.8	3.0	5.7	65.6	100.0	62
Primary incomplete	11.8	8.4	2.6	77.2	100.0	219
Primary complete	13.2	4.1	1.8	81.0	100.0	166
Secondary incomplete	9.9	3.8	1.7	84.6	100.0	1,637
Secondary complete	12.3	5.7	3.1	78.8	100.0	773
More than secondary	13.4	10.0	6.5	70.1	100.0	345
Wealth quintile						
Lowest	13.2	3.7	1.6	81.6	100.0	618
Second	10.0	5.3	2.4	82.3	100.0	682
Middle	13.6	4.6	1.8	80.0	100.0	715
Fourth	9.6	3.9	2.5	84.0	100.0	653
Highest	10.8	9.3	6.0	73.8	100.0	534
Total 15-49	11.5	5.2	2.7	80.6	100.0	3,202
50-59	34.2	19.5	12.6	33.7	100.0	416
Total 15-59	14.1	6.9	3.8	75.2	100.0	3,618

Table 19.5.1 Ownership of title or deed for house: Women

Among women age 15-49 who own a house, percent distribution by whether the house owned has a title or deed and whether or not the woman's name appears on the title or deed, according to background characteristics, South Africa DHS 2016

Background characteristic	House has a title or deed and:		Does not have a title/deed	Don't know[1]	Total	Number of women who own a house[2]
	Woman's name is on title/deed	Woman's name is not on title/deed				
Age						
15-19	59.5	1.4	37.8	1.3	100.0	64
20-24	53.4	3.0	41.5	2.2	100.0	120
25-29	36.3	4.9	53.5	5.3	100.0	239
30-34	46.8	7.2	42.5	3.5	100.0	404
35-39	53.6	5.8	37.0	3.6	100.0	440
40-44	62.0	3.1	31.3	3.6	100.0	535
45-49	67.2	3.3	27.4	2.1	100.0	556
Residence						
Urban	59.5	2.8	35.4	2.3	100.0	1,587
Non-urban	48.6	8.1	38.1	5.2	100.0	772
Province						
Western Cape	72.5	1.8	23.4	2.4	100.0	309
Eastern Cape	47.2	3.8	44.0	5.0	100.0	201
Northern Cape	60.3	11.8	25.0	2.8	100.0	47
Free State	57.8	2.9	38.6	0.7	100.0	135
KwaZulu-Natal	51.8	2.3	40.6	5.4	100.0	446
North West	47.4	21.0	28.1	3.5	100.0	146
Gauteng	56.7	2.9	37.9	2.6	100.0	701
Mpumalanga	60.0	6.5	30.6	2.8	100.0	173
Limpopo	46.7	5.5	45.3	2.6	100.0	201
Education						
No education	60.7	4.9	32.7	1.7	100.0	70
Primary incomplete	52.8	2.8	38.3	6.1	100.0	205
Primary complete	47.2	2.3	43.3	7.1	100.0	98
Secondary incomplete	54.9	3.9	37.7	3.5	100.0	954
Secondary complete	58.1	5.1	34.3	2.5	100.0	675
More than secondary	58.0	6.4	34.0	1.6	100.0	357
Wealth quintile						
Lowest	39.4	3.4	53.6	3.6	100.0	467
Second	51.9	4.7	40.3	3.1	100.0	440
Middle	54.6	7.8	33.4	4.2	100.0	450
Fourth	61.6	4.4	30.4	3.6	100.0	435
Highest	69.5	2.8	25.7	2.1	100.0	567
Total	56.0	4.5	36.3	3.3	100.0	2,359

[1] Includes women whose house has a title/deed, but they do not know if their name is on it, and women who do not know if the house has a title/deed
[2] Includes alone, joint, or alone and joint ownership

Table 19.5.2 Ownership of title or deed for house: Men

Among men age 15-49 who own a house, percent distribution by whether the house owned has a title or deed and whether or not the man's name appears on the title or deed, according to background characteristics, South Africa DHS 2016

Background characteristic	House has a title or deed and:		Does not have a title/deed	Don't know[1]	Total	Number of men who own a house[2]
	Man's name is on title/deed	Man's name is not on title/deed				
Age						
15-19	*	*	*	*	100.0	11
20-24	(36.7)	(9.7)	(49.7)	(3.9)	100.0	41
25-29	45.3	0.0	52.9	1.8	100.0	58
30-34	55.0	1.7	37.3	6.0	100.0	99
35-39	52.3	0.7	46.4	0.5	100.0	129
40-44	44.1	4.1	51.7	0.1	100.0	136
45-49	54.1	1.8	40.1	4.0	100.0	147
Residence						
Urban	44.0	2.7	50.4	2.9	100.0	440
Non-urban	60.9	1.6	36.2	1.4	100.0	182
Province						
Western Cape	(68.1)	(2.2)	(25.6)	(4.1)	100.0	78
Eastern Cape	27.8	2.1	65.1	5.0	100.0	48
Northern Cape	69.3	4.1	26.7	0.0	100.0	16
Free State	52.5	2.1	43.5	1.9	100.0	28
KwaZulu-Natal	33.9	2.1	63.2	0.8	100.0	85
North West	90.1	0.0	9.9	0.0	100.0	53
Gauteng	30.5	3.3	62.4	3.8	100.0	194
Mpumalanga	86.9	0.0	13.1	0.0	100.0	55
Limpopo	43.9	4.0	50.4	1.6	100.0	65
Education						
No education	*	*	*	*	100.0	21
Primary incomplete	44.0	1.6	52.8	1.5	100.0	50
Primary complete	(33.6)	(9.2)	(47.6)	(9.6)	100.0	32
Secondary incomplete	49.7	0.4	48.0	1.9	100.0	252
Secondary complete	51.1	3.9	41.4	3.7	100.0	163
More than secondary	52.5	3.5	43.3	0.7	100.0	103
Wealth quintile						
Lowest	34.1	0.8	62.0	3.2	100.0	114
Second	53.2	0.9	44.2	1.7	100.0	121
Middle	47.0	2.7	47.8	2.5	100.0	143
Fourth	57.1	3.5	33.7	5.7	100.0	105
Highest	53.4	3.8	42.9	0.0	100.0	140
Total 15-49	49.0	2.4	46.2	2.5	100.0	622
50-59	64.1	2.3	31.6	2.0	100.0	276
Total 15-59	53.6	2.4	41.7	2.3	100.0	898

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes men whose house has a title/deed, but they do not know if their name is on it, and men who do not know if the house has a title/deed
[2] Includes alone, joint, or alone and joint ownership

Table 19.6.1 Ownership and use of bank accounts and cellphones: Women

Percentage of women age 15-49 who have and use an account in a bank or other financial institution and percentage who own a cellphone, and among women who own a cellphone, percentage who use it for financial transactions, according to background characteristics, South Africa DHS 2016

Background characteristic	Have and use a bank account	Own a cellphone	Number of women	Use cellphone for financial transactions	Number of women who own a cellphone
Age					
15-19	17.3	76.7	1,427	12.2	1,094
20-24	49.7	92.9	1,415	30.9	1,315
25-29	62.2	96.1	1,444	36.9	1,387
30-34	65.3	94.7	1,333	40.4	1,262
35-39	67.8	94.4	1,072	40.8	1,012
40-44	62.2	92.6	941	33.9	871
45-49	63.2	93.5	883	30.6	825
Residence					
Urban	60.2	92.3	5,731	35.9	5,289
Non-urban	41.0	89.0	2,783	25.0	2,476
Province					
Western Cape	65.9	87.9	995	36.8	875
Eastern Cape	50.3	91.1	938	28.3	854
Northern Cape	47.3	82.7	173	29.3	143
Free State	52.2	90.4	442	33.1	400
KwaZulu-Natal	43.1	89.6	1,616	32.2	1,448
North West	51.7	89.7	570	26.9	512
Gauteng	62.0	94.7	2,284	35.7	2,163
Mpumalanga	52.8	94.4	671	31.6	633
Limpopo	46.8	89.6	824	28.0	739
Education					
No education	21.6	79.8	168	11.9	134
Primary incomplete	29.9	80.2	447	10.8	358
Primary complete	25.8	80.4	327	11.6	263
Secondary incomplete	39.1	88.0	4,195	21.1	3,689
Secondary complete	74.3	98.0	2,369	43.8	2,322
More than secondary	92.6	99.0	1,008	64.4	998
Wealth quintile					
Lowest	28.8	83.3	1,648	15.3	1,373
Second	45.8	91.6	1,715	25.4	1,572
Middle	54.2	90.8	1,805	32.7	1,639
Fourth	62.0	92.3	1,763	34.5	1,628
Highest	79.6	98.1	1,583	52.5	1,553
Total	53.9	91.2	8,514	32.5	7,765

Table 19.6.2 Ownership and use of bank accounts and cellphones: Men

Percentage of men age 15-49 who have and use an account in a bank or other financial institution and percentage who own a cellphone, and among men who own a cellphone, percentage who use it for financial transactions, according to background characteristics, South Africa DHS 2016

Background characteristic	Have and use a bank account	Own a cellphone	Number of men	Use cellphone for financial transactions	Number of men who own a cellphone
Age					
15-19	15.1	74.6	647	10.1	483
20-24	53.8	89.1	588	31.6	524
25-29	67.9	91.4	506	46.8	462
30-34	72.0	94.7	450	49.1	426
35-39	75.0	93.4	395	46.9	369
40-44	71.8	92.8	345	42.3	320
45-49	73.0	92.5	271	43.1	251
Residence					
Urban	65.0	90.3	2,203	43.0	1,990
Non-urban	39.3	84.6	999	23.8	845
Province					
Western Cape	67.5	84.4	328	40.9	277
Eastern Cape	42.4	80.6	362	27.5	292
Northern Cape	59.2	78.5	61	29.8	48
Free State	34.9	86.5	159	23.8	137
KwaZulu-Natal	44.2	84.5	521	26.5	441
North West	65.6	91.7	237	22.3	217
Gauteng	68.3	92.7	984	48.1	912
Mpumalanga	64.2	95.5	263	55.6	251
Limpopo	45.7	90.5	288	28.1	261
Education					
No education	55.6	89.5	62	23.4	56
Primary incomplete	30.4	77.9	219	15.0	171
Primary complete	42.7	80.5	166	23.4	134
Secondary incomplete	42.7	84.7	1,637	26.2	1,387
Secondary complete	82.7	96.4	773	53.5	745
More than secondary	91.0	99.4	345	65.5	343
Wealth quintile					
Lowest	38.9	84.4	618	26.3	522
Second	50.0	86.6	682	27.6	591
Middle	56.8	86.8	715	38.9	620
Fourth	60.9	89.7	653	42.0	586
Highest	82.2	96.8	534	52.2	517
Total 15-49	57.0	88.5	3,202	37.3	2,835
50-59	61.0	87.9	416	27.5	366
Total 15-59	57.4	88.5	3,618	36.2	3,201

Table 19.7 Participation in decision making

Percent distribution of in-union women and in-union men age 15-49 by person who usually makes decisions about various issues, South Africa DHS 2016

Decision	Mainly woman	Woman and man jointly	Mainly man	Someone else	Other	Not asked[1]	Total	Number of respon-dents
			WOMEN					
Own health care	41.1	52.8	5.4	0.1	0.2	0.4	100.0	3,050
Major household purchases	18.7	73.2	7.4	0.2	0.1	0.4	100.0	3,050
Visits to her family or relatives	26.7	66.7	5.7	0.3	0.2	0.4	100.0	3,050
			MEN					
Own health care	7.2	64.1	28.0	0.3	0.1	0.3	100.0	988
Major household purchases	11.1	73.3	14.5	0.8	0.0	0.3	100.0	988

Note: In-union women and men include those who are currently married or living together with a partner as if married.
[1] Question not asked because respondents are in same-sex unions

Table 19.8.1 Women's participation in decision making by background characteristics

Percentage of in-union women age 15-49 who usually make specific decisions either by themselves or jointly with their partner, by background characteristics, South Africa DHS 2016

Background characteristic	Specific decisions			All three decisions	None of the three decisions	Number of women
	Woman's own health care	Making major household purchases	Visits to her family or relatives			
Age						
15-19	(86.1)	(85.2)	(82.7)	(80.9)	(12.1)	44
20-24	89.1	85.5	90.8	80.2	4.9	271
25-29	94.0	92.0	92.8	86.6	3.2	514
30-34	93.7	91.1	92.4	86.9	4.0	688
35-39	94.0	93.1	94.7	88.1	2.1	575
40-44	96.0	94.2	94.9	90.3	1.8	507
45-49	95.0	93.1	95.3	88.5	1.7	450
Employment (past 12 months)						
Not employed	91.9	89.6	91.9	84.3	4.1	1,608
Employed for cash	96.1	94.5	95.5	90.7	1.7	1,403
Employed not for cash	(96.4)	(91.4)	(81.3)	(79.4)	(2.4)	38
Number of living children						
0	89.8	86.5	86.9	82.0	8.5	262
1-2	93.5	91.9	93.2	87.3	3.3	1,667
3-4	95.4	93.0	95.6	88.0	1.2	947
5+	95.4	93.8	94.1	89.5	1.4	174
Residence						
Urban	95.1	92.5	94.1	89.0	3.0	2,259
Non-urban	90.5	90.2	91.4	82.1	3.0	790
Province						
Western Cape	95.1	93.3	95.2	90.3	2.5	454
Eastern Cape	91.9	87.4	91.6	80.6	2.9	275
Northern Cape	94.7	95.3	96.2	91.6	1.9	66
Free State	95.8	95.7	95.1	92.2	2.2	146
KwaZulu-Natal	94.7	92.0	92.5	88.0	3.0	361
North West	95.5	95.0	94.9	90.2	2.0	215
Gauteng	96.6	93.6	94.9	90.7	2.4	1,035
Mpumalanga	89.0	87.5	88.6	81.7	6.9	244
Limpopo	83.6	85.6	89.3	72.4	4.0	254
Education						
No education	96.8	94.2	96.0	88.9	0.5	83
Primary incomplete	84.8	86.1	88.6	78.0	7.3	185
Primary complete	97.5	93.8	95.9	91.1	1.0	142
Secondary incomplete	93.4	91.8	93.2	86.3	2.7	1,297
Secondary complete	95.1	93.0	94.0	88.9	2.5	875
More than secondary	94.9	91.2	93.7	88.8	4.0	469
Wealth quintile						
Lowest	92.5	90.3	93.1	85.2	3.2	505
Second	92.2	90.0	91.8	82.6	2.7	610
Middle	94.3	93.6	93.9	89.5	2.9	637
Fourth	95.0	92.9	94.9	89.1	2.4	569
Highest	94.9	92.3	93.5	89.0	3.6	729
Total	93.9	91.9	93.4	87.2	3.0	3,050

Notes: In-union women include women who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.

Table 19.8.2 Men's participation in decision making by background characteristics

Percentage of in-union men age 15-49 who usually make specific decisions either alone or jointly with their partner, by background characteristics, South Africa DHS 2016

Background characteristic	Specific decisions		Both decisions	Neither of the two decisions	Number of men
	Man's own health	Making major household purchases			
Age					
15-19	*	*	*	*	1
20-24	(82.1)	(75.0)	(73.3)	(16.2)	42
25-29	86.8	85.0	78.9	7.1	127
30-34	93.3	91.6	89.4	4.5	219
35-39	96.3	89.5	87.0	1.2	212
40-44	92.7	88.1	84.7	3.8	215
45-49	91.7	85.7	83.8	6.4	172
Employment (past 12 months)					
Not employed	90.3	89.9	87.2	7.0	210
Employed for cash	92.6	87.2	84.1	4.2	775
Employed not for cash	*	*	*	*	2
Number of living children					
0	92.8	86.5	85.1	5.7	112
1-2	91.8	87.4	84.5	5.3	493
3-4	91.3	89.7	85.4	4.4	286
5+	95.5	85.9	84.1	2.6	96
Residence					
Urban	93.3	91.1	88.1	3.7	765
Non-urban	88.2	76.6	73.4	8.6	223
Province					
Western Cape	94.5	94.6	93.3	4.1	136
Eastern Cape	90.7	79.1	78.4	8.7	69
Northern Cape	98.8	80.0	80.0	1.2	19
Free State	81.1	79.1	74.8	14.5	35
KwaZulu-Natal	89.7	87.1	83.7	6.9	96
North West	87.7	68.4	62.4	6.4	91
Gauteng	92.7	93.1	89.1	3.4	395
Mpumalanga	94.1	94.3	92.8	4.4	84
Limpopo	97.0	77.5	76.3	1.9	62
Education					
No education	(82.7)	(93.4)	(81.6)	(5.6)	36
Primary incomplete	77.8	73.7	73.1	21.6	86
Primary complete	94.3	81.0	77.7	2.4	50
Secondary incomplete	94.0	88.6	86.2	3.5	387
Secondary complete	94.8	90.3	87.2	2.1	282
More than secondary	92.1	90.2	86.5	4.2	146
Wealth quintile					
Lowest	84.7	84.5	80.1	10.8	175
Second	89.6	86.0	80.7	5.1	204
Middle	95.8	85.5	84.7	3.3	215
Fourth	96.9	90.5	90.2	2.8	177
Highest	92.8	92.4	88.1	2.9	217
Total 15-49	92.1	87.8	84.8	4.8	988
50-59	86.3	81.2	78.0	10.6	288
Total 15-59	90.8	86.3	83.3	6.1	1,276

Notes: In-union men include men who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 19.9.1 Attitude toward wife beating: Women

Percentage of all women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, South Africa DHS 2016

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number of women
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
Age							
15-19	1.4	2.8	2.6	5.2	0.7	7.2	1,427
20-24	0.9	2.5	1.8	4.2	1.4	5.6	1,415
25-29	1.4	2.5	2.4	3.8	1.0	6.0	1,444
30-34	0.6	1.6	1.7	3.0	0.5	4.1	1,333
35-39	0.5	1.5	1.6	2.9	0.5	4.2	1,072
40-44	0.7	2.2	2.7	4.1	1.7	6.5	941
45-49	0.9	1.9	1.8	3.3	1.1	4.6	883
Employment (past 12 months)							
Not employed	1.2	2.4	2.1	4.2	1.1	5.8	5,233
Employed for cash	0.6	1.9	2.1	3.1	0.8	5.0	3,183
Employed not for cash	1.1	2.1	2.7	8.6	0.7	8.8	98
Number of living children							
0	1.0	2.2	2.2	4.0	0.9	5.7	2,436
1-2	0.9	2.3	2.2	3.8	0.9	5.5	4,155
3-4	0.9	2.0	1.8	3.4	0.9	4.8	1,629
5+	1.6	2.5	2.2	5.4	2.5	8.1	294
Marital status							
Never married	1.0	2.2	1.8	4.0	0.8	5.6	4,992
Married or living together	0.9	2.0	2.4	3.3	1.0	5.2	3,050
Divorced/separated/widowed	0.9	3.1	2.8	5.7	1.9	6.8	472
Residence							
Urban	0.7	1.4	1.6	3.0	0.7	4.2	5,731
Non-urban	1.4	3.9	3.2	5.5	1.5	8.2	2,783
Province							
Western Cape	0.9	1.9	2.3	3.8	1.2	5.7	995
Eastern Cape	2.4	4.9	5.3	9.0	1.9	11.1	938
Northern Cape	1.6	3.6	3.4	8.7	2.3	11.6	173
Free State	0.9	1.7	2.2	3.9	0.6	5.5	442
KwaZulu-Natal	0.5	1.7	1.5	1.8	0.6	3.0	1,616
North West	0.5	2.6	1.6	4.4	1.5	6.2	570
Gauteng	0.8	0.8	0.9	1.7	0.4	2.6	2,284
Mpumalanga	0.4	2.1	1.8	4.2	0.3	5.8	671
Limpopo	1.3	4.1	3.1	6.3	2.2	10.0	824
Education							
No education	1.6	2.9	2.2	2.8	2.2	6.8	168
Primary incomplete	2.4	4.4	4.9	6.9	1.9	11.1	447
Primary complete	2.4	4.0	4.7	6.9	1.9	8.2	327
Secondary incomplete	1.0	2.7	2.8	4.9	1.2	6.7	4,195
Secondary complete	0.7	1.4	0.7	2.5	0.6	3.7	2,369
More than secondary	0.2	0.5	0.3	0.6	0.1	1.1	1,008
Wealth quintile							
Lowest	1.9	4.0	3.2	5.6	1.9	8.0	1,648
Second	1.0	2.5	2.8	4.8	0.9	6.9	1,715
Middle	0.6	1.8	1.7	3.4	0.4	4.9	1,805
Fourth	0.6	1.9	1.8	3.9	1.1	4.9	1,763
Highest	0.7	0.7	1.0	1.6	0.5	2.8	1,583
Total	1.0	2.2	2.1	3.8	1.0	5.5	8,514

Table 19.9.2 Attitude toward wife beating: Men

Percentage of all men age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, South Africa DHS 2016

Background characteristic	Husband is justified in hitting or beating his wife if she:					Percentage who agree with at least one specified reason	Number of men
	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him		
Age							
15-19	2.2	6.6	3.2	8.9	1.5	14.0	647
20-24	2.4	4.2	3.2	11.0	2.7	12.9	588
25-29	1.3	3.3	4.0	5.9	1.0	8.7	506
30-34	1.1	3.1	2.9	2.9	0.7	6.1	450
35-39	2.2	3.3	6.3	2.8	2.6	8.1	395
40-44	1.4	1.9	4.4	3.4	1.6	5.1	345
45-49	0.4	0.5	2.2	2.2	0.4	3.1	271
Employment (past 12 months)							
Not employed	1.7	5.1	4.4	7.9	1.6	11.4	1,541
Employed for cash	1.7	2.4	3.1	4.3	1.6	7.2	1,652
Employed not for cash	*	*	*	*	*	*	8
Number of living children							
0	2.4	5.0	3.5	8.0	1.8	11.9	1,644
1-2	1.2	2.4	3.7	4.9	1.3	7.2	1,017
3-4	0.2	2.9	4.0	2.4	1.6	4.7	414
5+	1.3	0.9	5.8	2.6	0.9	5.8	127
Marital status							
Never married	2.2	4.6	3.9	7.5	2.0	11.4	2,073
Married or living together	0.8	2.0	3.4	2.8	0.8	4.7	988
Divorced/separated/widowed	1.2	3.5	4.0	6.7	0.7	8.8	141
Residence							
Urban	1.2	2.2	2.7	4.2	1.1	6.6	2,203
Non-urban	2.7	7.1	6.0	10.1	2.6	14.9	999
Province							
Western Cape	0.5	0.6	1.4	2.9	1.4	5.0	328
Eastern Cape	0.9	4.6	5.5	7.2	1.2	10.6	362
Northern Cape	0.7	2.6	2.6	7.6	0.9	9.8	61
Free State	1.4	3.7	3.2	10.3	1.0	13.0	159
KwaZulu-Natal	3.6	7.7	5.2	7.4	2.2	13.3	521
North West	2.6	5.4	5.8	8.3	3.0	11.4	237
Gauteng	0.8	1.5	2.9	3.4	1.0	5.7	984
Mpumalanga	0.7	0.9	1.6	0.9	0.1	2.8	263
Limpopo	3.9	7.9	4.8	14.9	3.7	19.0	288
Education							
No education	3.8	6.3	4.5	8.2	1.1	10.6	62
Primary incomplete	3.3	7.1	6.9	9.1	3.6	12.1	219
Primary complete	3.0	5.4	4.0	5.4	1.0	9.6	166
Secondary incomplete	1.8	4.7	4.6	7.5	2.1	11.6	1,637
Secondary complete	0.8	1.6	1.8	3.3	0.5	4.8	773
More than secondary	1.2	0.7	1.7	3.2	0.7	5.8	345
Wealth quintile							
Lowest	2.3	7.5	6.4	9.7	1.8	14.6	618
Second	3.5	5.0	5.8	8.4	3.3	12.7	682
Middle	1.1	2.4	2.0	4.6	0.7	7.6	715
Fourth	0.9	2.8	2.8	6.0	1.6	7.7	653
Highest	0.3	0.5	1.4	0.8	0.4	2.5	534
Total 15-49	1.7	3.7	3.7	6.1	1.6	9.2	3,202
50-59	0.1	2.7	3.1	3.4	0.5	6.0	416
Total 15-59	1.5	3.6	3.6	5.7	1.5	8.9	3,618

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 19.10 Ability to negotiate sexual relations with partner

Percentage of in-union women age 15-49 who can say no to their partner if they do not want to have sexual intercourse, and percentage who can ask their partner to use a condom, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who can say no to their partner if they do not want to have sexual intercourse	Percentage who can ask their partner to use a condom	Number of women
Age			
15-24	76.5	80.0	315
15-19	(71.4)	(74.0)	44
20-24	77.3	81.0	271
25-29	69.1	77.8	514
30-39	72.4	76.4	1,263
40-49	72.6	75.2	957
Residence			
Urban	72.7	78.0	2,259
Non-urban	71.1	72.8	790
Province			
Western Cape	78.3	80.7	454
Eastern Cape	80.5	79.2	275
Northern Cape	78.4	80.7	66
Free State	76.4	83.2	146
KwaZulu-Natal	73.9	74.9	361
North West	77.2	74.1	215
Gauteng	65.1	73.6	1,035
Mpumalanga	76.2	78.3	244
Limpopo	68.4	77.0	254
Education			
No education	60.8	66.6	83
Primary incomplete	69.3	66.3	185
Primary complete	75.0	78.7	142
Secondary incomplete	73.4	75.7	1,297
Secondary complete	73.4	79.6	875
More than secondary	69.9	78.9	469
Wealth quintile			
Lowest	69.0	71.3	505
Second	72.1	75.5	610
Middle	73.2	78.7	637
Fourth	75.9	79.3	569
Highest	71.2	77.4	729
Total	72.3	76.6	3,050

Notes: In-union women include women who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.

Table 19.11.1 Child discipline: Women

Percentage of women age 15-49 with one or more children less than age 18 living with them who have physically disciplined or punished their children, according to background characteristics, South Africa DHS 2016

Background characteristic	In the past 12 months: Hit or slapped child with hand	Hit or beat child with an implement[1]	Hit, slapped, or beat child with either a hand or an implement[1]	Number of women with one or more children less than age 18 living with them
Age				
15-19	20.6	16.1	26.4	148
20-24	28.8	25.2	37.0	647
25-29	36.6	34.5	45.9	963
30-34	35.9	33.8	45.1	937
35-39	32.5	30.0	41.9	802
40-44	29.7	27.5	36.2	664
45-49	24.2	26.3	34.2	452
Employment (past 12 months)				
Not employed	31.1	30.7	39.7	2,636
Employed for cash	33.0	28.4	41.6	1,922
Employed not for cash	33.6	41.1	47.6	55
Number of living children				
1-2	31.0	26.9	38.8	3,017
3-4	34.7	35.6	44.5	1,346
5+	28.5	35.4	41.5	250
Residence				
Urban	31.0	25.9	38.4	2,994
Non-urban	33.7	37.2	44.6	1,619
Province				
Western Cape	40.3	16.9	42.6	541
Eastern Cape	44.1	33.6	53.4	512
Northern Cape	26.5	25.7	36.6	105
Free State	30.3	26.4	33.9	248
KwaZulu-Natal	30.7	47.3	51.0	801
North West	36.8	30.8	41.5	335
Gauteng	27.1	22.7	31.5	1,207
Mpumalanga	34.8	42.7	47.1	384
Limpopo	20.3	21.4	28.8	482
Education				
No education	39.1	41.1	49.3	94
Primary incomplete	35.3	38.6	44.5	282
Primary complete	31.0	35.9	46.4	172
Secondary incomplete	29.8	29.1	38.8	2,128
Secondary complete	32.2	28.8	39.7	1,355
More than secondary	36.6	27.3	44.2	582
Wealth quintile				
Lowest	32.8	35.9	43.8	887
Second	31.8	33.2	41.4	948
Middle	29.2	31.1	38.7	1,012
Fourth	35.9	28.9	45.4	942
Highest	30.0	19.3	33.2	824
Total	31.9	29.9	40.6	4,613

[1] Implements include belt, spoon, stick, or shoe

Table 19.11.2 Child discipline: Men

Percentage of men age 15-49 with one or more children less than age 18 living with them who have physically disciplined or punished their children, according to background characteristics, South Africa DHS 2016

Background characteristic	In the past 12 months: Hit or slapped child with hand	Hit or beat child with an implement[1]	Hit, slapped, or beat child with either a hand or an implement[1]	Number of men with one or more children less than 18 living with them
Age				
15-19	*	*	*	3
20-24	*	*	*	17
25-29	26.5	17.6	30.3	79
30-34	17.5	16.2	19.5	142
35-39	17.9	17.0	25.3	133
40-44	24.9	23.7	29.8	123
45-49	17.7	19.1	27.0	100
Employment (past 12 months)				
Not employed	22.8	12.9	24.6	133
Employed for cash	20.1	20.3	26.7	463
Employed not for cash	*	*	*	1
Number of living children				
1-2	22.0	18.8	28.2	325
3-4	18.4	15.4	21.1	210
5+	21.4	28.2	32.9	63
Residence				
Urban	21.9	17.4	25.5	446
Non-urban	17.1	22.3	28.1	152
Province				
Western Cape	31.2	21.0	34.9	102
Eastern Cape	13.1	21.1	31.4	48
Northern Cape	10.6	8.3	14.1	13
Free State	(10.7)	(6.7)	(15.4)	25
KwaZulu-Natal	21.7	21.4	26.5	80
North West	12.1	11.7	22.6	45
Gauteng	20.1	16.1	22.8	195
Mpumalanga	17.1	20.0	20.0	56
Limpopo	(29.0)	(35.5)	(39.1)	33
Education				
No education	*	*	*	21
Primary incomplete	(23.9)	(12.0)	(30.0)	50
Primary complete	(29.8)	(28.9)	(29.8)	27
Secondary incomplete	11.0	13.5	18.4	221
Secondary complete	24.5	23.6	30.8	187
More than secondary	28.6	19.1	30.7	91
Wealth quintile				
Lowest	20.9	26.6	29.0	100
Second	20.4	16.8	28.1	117
Middle	13.8	14.0	20.5	116
Fourth	23.1	13.9	26.5	109
Highest	24.1	21.6	27.1	157
Total 15-49	20.7	18.6	26.2	598
50-59	18.8	18.5	23.6	109
Total 15-59	20.4	18.6	25.8	707

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Implements include belt, spoon, stick, or shoe

DOMESTIC VIOLENCE 20

Key Findings

- ***Partner violence:*** One in four (26%) ever-partnered women age 18 or older have experienced physical, sexual, or emotional violence committed by a partner in their lifetime. The most common form of violence experienced by women is physical violence (21%); 17% of women have experienced emotional violence, and 6% have experienced sexual violence.
- ***Controlling behaviours:*** 19% of ever-partnered women report that their current or most recent partner has displayed three or more controlling behaviours.
- ***Injuries due to partner violence:*** 37% of ever-partnered women who have experienced physical or sexual violence by their current or most recent partner have had injuries as a result.

Gender-based violence, defined by the United Nations as any act of violence that results in physical, sexual, or psychological harm or suffering to women, girls, men, and boys, as well as threats of such acts, coercion, or the arbitrary deprivation of liberty, is acknowledged worldwide as a violation of basic human rights. Increasing research has highlighted the health burdens, intergenerational effects, and demographic consequences of such violence (United Nations 2006). Despite many constitutional protections, gender-based violence remains persistent and widespread in South Africa (DWCPD 2014). Violence against women occurs across groups defined by socioeconomic status, race, age, and religion. In South Africa, research on this pandemic by academia, government, and nongovernmental organisations continues to provide substantive information about the nature, scope, and dimensions of the problem. Data on violence against women in South Africa are generally based on police reports or obtained through victimisation surveys, both of which are often considered to be under-reported.

This chapter focuses on domestic or intimate partner violence, a form of gender-based violence. In South Africa, intimate partner violence is a persistent societal problem that has its roots in a highly patriarchal culture that asserts male dominance. Additional factors shown to be associated with the experience and/or perpetration of domestic violence include witnessing of parental violence, experiences of child abuse, poverty, and relationship-level factors such as conflicts. Among women, the health effects of experiences of intimate partner violence include increased risk of HIV/AIDS and other sexually transmitted infections, injuries, depression, suicidality, and posttraumatic stress disorder.

Prevention of and reductions in levels of domestic violence have been placed on the national transformation agenda as one of the country's priorities. Legal frameworks such as the 1998 Domestic Violence Act No. 116 were formulated to curb the problem. This legislation protects women from domestic violence by providing accessible legal instruments aiming to prevent further incidents of abuse within domestic relationships.

The SADHS implemented the domestic violence module[1] in all households. One woman age 18 or older per household was selected at random to be eligible for the module. If the selected woman was age 18-49, the module was implemented as part of the full Woman's Questionnaire or the full Woman's Questionnaire and the adult health module. If the selected woman was age 50 or older, the module was implemented in conjunction with background sections of the Woman's Questionnaire and the adult health module; for these older women, some information (e.g., birth history, information on sexual activity, and information on women's empowerment) was not collected. In estimating indicators, specially constructed weights were applied to adjust for the selection of only one woman per household. The use of these weights ensures that the subsample of women who were interviewed with the domestic violence module is representative nationally, for urban and non-urban areas, and at the provincial level.

Overall, 8,720 women age 18 and older were selected for the domestic violence module. Of these women, 7,759 were interviewed with the Woman's Questionnaire and/or the adult health module. Privacy must be obtained before the domestic violence module can be administered. Overall, privacy was obtained and the interview with the module was completed for 6,620 women, including 5,865 (weighted) ever-partnered women. The overall response rate for the domestic violence module was 76% (data not shown). Among women who agreed to be interviewed, 85% completed the module.

20.1 Measurement of Intimate Partner Violence

Violence committed by a current partner (among currently partnered women) or the most recent partner (among formerly partnered women) was measured by asking all ever-partnered women if their partner ever did the following to them[2]:

Physical violence: push you, shake you, or throw something at you; kick you, drag you, or beat you up; try to choke you or burn you on purpose; or threaten or attack you with a knife, gun, or any other weapon

Sexual violence: physically force you to have sexual intercourse with him even when you did not want to, physically force you to perform any other sexual acts you did not want to, or force you with threats or in any other way to perform sexual acts you did not want to

Emotional violence: say or do something to humiliate you in front of others, threaten to hurt or harm you or someone close to you, or insult you or make you feel bad about yourself

In this chapter, partnered women include women who are in a union (those who are married or living with a man as if married) and women who said they have a boyfriend, partner, or fiancé.

20.2 Women's Experience of Physical, Sexual, or Emotional Violence by Any Partner

Physical violence by any partner

Percentage of women who have ever experienced any physical violence (committed by any partner).

Sample: Ever-partnered women age 18 and older

[1] The domestic violence module was referred to as the household relations module in the SADHS Woman's Questionnaire.

[2] The domestic violence module was designed with the intention of capturing violence against women by current and past partners and persons other than partners. However, due to a skip error in the CAPI program, data on non-partner violence are not available.

Sexual violence by any partner

Percentage of women who have ever experienced any sexual violence (committed by any partner).

Sample: Ever-partnered women age 18 and older

Emotional violence by any partner

Percentage of women who have ever experienced any emotional violence (committed by any partner).

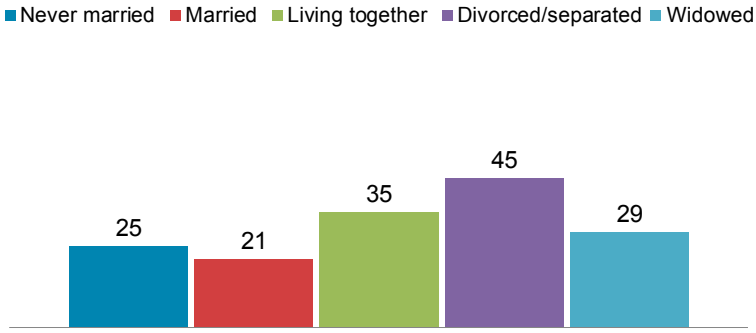
Sample: Ever-partnered women age 18 and older

One in five (21%) ever-partnered women age 18 and older have ever experienced physical violence by any partner, 6% have ever experienced sexual violence by any partner, and 17% have ever experienced emotional violence by any partner (**Table 20.1**). Overall, 26% of ever-partnered women have experienced physical, sexual, or emotional violence by a partner.

Patterns by background characteristics

- Women age 25-64 are more likely to have experienced physical, sexual, or emotional violence from any partner than younger women (age 18-24) or women age 65 and older.

Figure 20.1 **Experience of physical, sexual, or emotional violence among ever-partnered women age 18+ by marital status**



- Women who are divorced or separated (45%) are more likely than women in any other marital status group (21%-35%) to have experienced any form of violence by a partner (**Figure 20.1**). Notably, however, women who are living together with a partner are more than twice as likely as married women to have ever experienced physical violence (31% versus 14%) or sexual violence (10% versus 4%).

- The percentage of women who have experienced physical, sexual, or emotional violence by a partner does not vary by residence but does vary by province, from 19% in KwaZulu-Natal to 38% in Eastern Cape.

- Although the relationship is not linear, women's likelihood of having experienced physical, sexual, or emotional violence by any partner tends to decline with increasing education and household wealth.

Information on experiences with physical violence only and sexual violence only is presented in **Table 20.2**.

20.2.1 Age at first experience of sexual violence by any partner

Among ever-partnered women age 18 and older, 0.3% experienced sexual violence from a partner by age 15, 1% by age 18, and 3% by age 22. Ninety-four percent of ever-partnered women have not experienced sexual violence by a partner (**Table 20.3**).

20.3 Women's Experience of Violence by Any Partner in the Past 12 Months

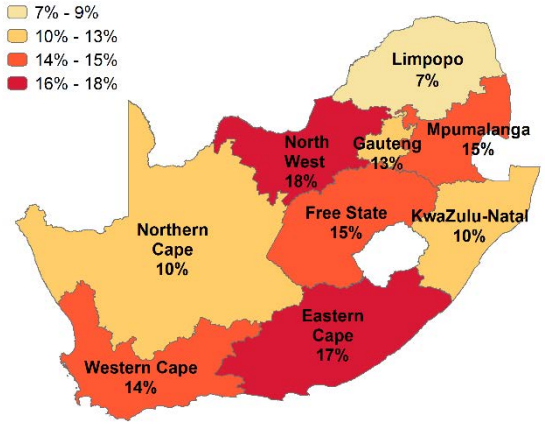
In the 12 months before the survey, 9% of ever-partnered women age 18 and older experienced emotional violence, 8% experienced physical violence, and 2% experienced sexual violence. Overall, 13% of women experienced emotional, physical, or sexual violence by a partner in the past year (**Table 20.4**).

Patterns by background characteristics

- Women's recent experience of physical, sexual, or emotional violence tends to decline with age, from 15%-17% among women age 18-44 to 4% among women age 65 and over.
- By province, the proportion of women recently experiencing physical, sexual, or emotional violence by a partner ranged from 7% in Limpopo to 18% in North West (**Figure 20.2**).

Figure 20.2 **Partner violence by province**

Percentage of ever-partnered women age 18 and older who have experienced physical, sexual, or emotional violence committed by any partner in the past 12 months



20.4 Controlling Behaviours by Most Recent Partner

Controlling behaviours

Percentage of women whose current partner (if currently partnered) or most recent partner (if formerly partnered) demonstrates at least one of the following controlling behaviours: is jealous or angry if she talks to other men, frequently accuses her of being unfaithful, does not permit her to meet her female friends, tries to limit her contact with her family, and insists on knowing where she is at all times.

Sample: Ever-partnered women age 18 and older

Attempts by male partners to closely control and monitor their female partners' behaviour are important warning signs and correlates of violence in a relationship. A series of questions were included in the SADHS 2016 to elicit the degree of controlling behaviours exercised by respondents' partners. Because the concentration of behaviours is more significant than the display of any single behaviour, the proportion of women whose partners display at least three of the specified behaviours is also discussed.

Forty percent of ever-partnered women age 18 and older report that their current (or most recent) partner is jealous or angry if they talk to other men, and 31% report that he insists on knowing where they are at all times. Twenty-one percent report that their partners frequently accuse them of being unfaithful, 15% say that he does not permit them to meet their female friends, and 8% report that he tries to limit their contact with their families. Overall, 19% of ever-partnered women report that their current (or most recent) partner has displayed three or more of the behaviours described above, while half (51%) report that their partner has not displayed any controlling behaviours (**Table 20.5**).

Patterns by background characteristics

- Controlling behaviours are more common in the youngest age group: 24% of women age 18-24 report that their partners demonstrate three or more controlling behaviours, as compared with 15%-16% of women age 45-64 and 11% of women age 65 and older.

- Women's reports of their partners' controlling behaviours vary by province. Overall, the percentage of ever-partnered women whose partner displays at least three of the specified behaviours ranges from 15% each in Limpopo and Western Cape to 28% in Free State.
- Married women (12%) are much less likely than never-married women (23%), women who are living together with their partner (25%), and divorced or separated women (28%) to report that their current or most recent partner displays at least three of the specified behaviours.
- The percentage of women with a partner who displays three or more controlling behaviours declines with increasing wealth, from 22% each among those in the lowest and second wealth quintiles to 12% among those in the highest wealth quintile.
- Women's reports of controlling behaviours by their partner vary greatly by whether or not they are afraid of their partner. Fourteen percent of women who say that they are never afraid of their partner report at least three controlling behaviours, as compared with 60% of women who say that they are afraid of their partner most of the time.

20.5 Prevalence of Violence by Most Recent Partner

Violence by current or most recent partner

Percentage of women who have experienced any of the specified acts of physical, sexual, or emotional violence committed by their current partner (if currently partnered) or most recent partner (if formerly partnered), ever and in the 12 months preceding the survey.

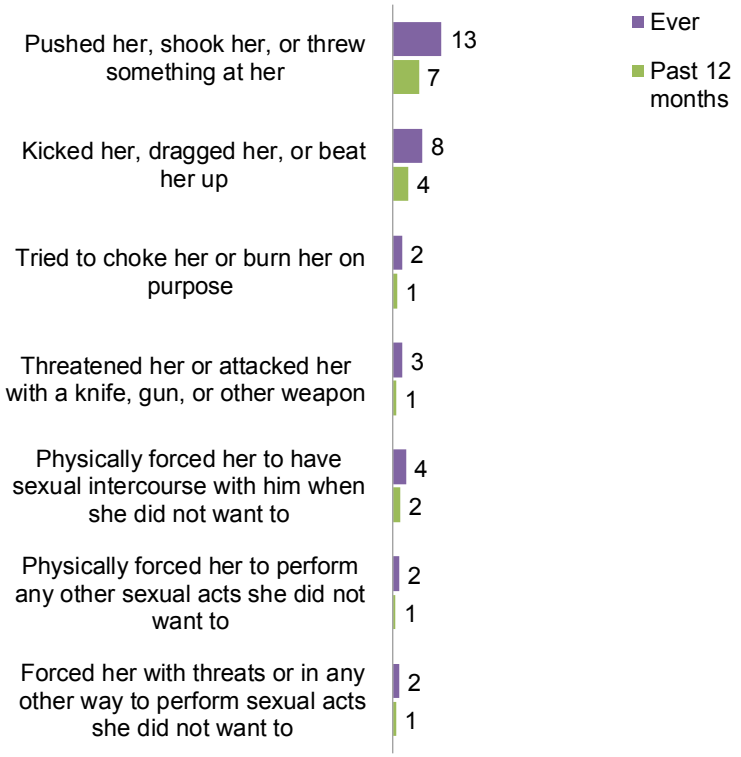
Sample: Ever-partnered women age 18 and older

One in five (21%) ever-partnered women have experienced physical, sexual, or emotional violence committed by their current or most recent partner (**Table 20.6**). Thirteen percent of women reported experiencing physical, sexual, or emotional violence in the 12 months preceding the survey.

Fourteen percent of ever-partnered women reported physical violence by their current (or most recent) partner, and a similar proportion reported emotional violence. Sexual violence was reported by 4% of women. Data on specific acts of physical and sexual violence experienced by women ever and in the past 12 months are shown in **Figure 20.3**.

***Figure 20.3* Forms of violence**

Percentage of ever-partnered women age 18 and older who have ever experienced specfic acts of violence by their partner



Patterns by background characteristics of ever-partnered women

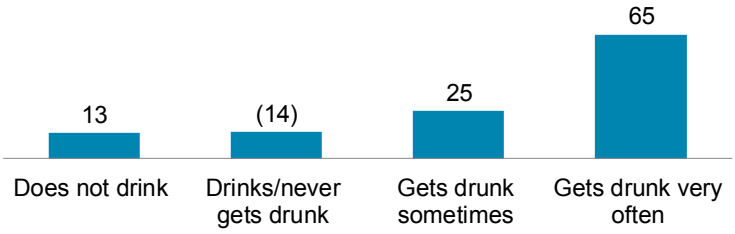
- Women age 55-64 (24%) were somewhat more likely than women in the other age groups (17%-22%) to report having ever experienced physical, sexual, or emotional violence by their current or most recent partner (**Table 20.7**).
- The prevalence of physical, sexual, or emotional violence by a current or most recent partner increases with number of living children, from 15% among women with no children to 32% among women with five or more children.
- The percentage of women who have ever experienced physical, sexual, or emotional violence by their current or most recent partner increases from 24% among those with no education to 31% among those with a primary complete education before declining sharply to 13% among those with more than a secondary education.
- Experience of physical, sexual, or emotional violence is most common among women in the lowest wealth quintile (27%) and least common among women in the highest quintile (14%).

Patterns by partner's characteristics and empowerment indicators of ever-in-union women

- In-union women whose husbands/partners had more than a secondary education were less likely to report physical, sexual, or emotional violence than in-union women whose husbands had less or no education (10% versus 15%-25%) (**Table 20.8**).

Figure 20.4 **Violence by partner's alcohol consumption**

Percentage of ever-in-union women age 18 and older who have ever experienced physical, sexual, or emotional violence by their current or most recent husband/partner



Note: Figures in parentheses are based on 25-49 unweighted cases.

- Ever-in-union women's experience of physical, sexual, or emotional violence varies greatly with their husbands'/ partners' alcohol consumption, from 13% among women whose husbands/partners do not drink alcohol to 25% among women whose husbands/partners sometimes drink alcohol and 65% among those whose husbands/partners are often drunk (**Figure 20.4**).
- The prevalence of physical, sexual, or emotional violence increases with the number of controlling behaviours displayed by a woman's husband/partner, from 7% among women whose husband/partner displays no controlling behaviours to 78% among those whose husband/partner displays all five controlling behaviours.
- Women who said that their mother was abused by their father or their mother's boyfriend (39%) were more likely than those who said that their mother did not suffer such abuse (18%) to report physical, sexual, or emotional violence committed by their own husband/partner.
- Women's experience of physical, sexual, or emotional violence by their husband/partner varies greatly according to their fear of their husband/partner, from 14% among those who are never afraid of their husband/partner to 77% among those who are afraid of him most of the time.

20.6 Injuries to Women due to Partner Violence

Injuries due to partner violence

Percentage of women who have the following types of injuries from partner violence: cuts, bruises, or aches; eye injuries, sprains, dislocations, or burns; or deep wounds, broken bones, broken teeth, or any other serious injury

Sample: Ever-partnered women age 18 and older who have experienced physical or sexual violence committed by their current partner (if currently partnered) or most recent partner (if formerly partnered)

Women who experience violence perpetrated by partners suffer different physical health effects that include injuries. Thirty-seven percent of ever-partnered women who have ever experienced physical or sexual violence by their current or most recent partner reported having had injuries as a result (**Table 20.9**).

Cuts, bruises, or aches are the most common types of injuries (34%) reported by women who have ever experienced spousal physical or sexual violence. Nonetheless, a significant proportion of women who have experienced partner violence also report having eye injuries, sprains, dislocations, or burns (18%) and injuries such as deep wounds, broken bones, and broken teeth (11%).

20.7 Violence Initiated by Women against Partners

Initiation of physical violence by women

Percentage of women who have ever hit, slapped, kicked, or done anything else to physically hurt their current (if currently partnered) or most recent (if formerly partnered) partner at times when he was not already beating or physically hurting them.

Sample: Ever-partnered women age 18 and older

Four percent of ever-partnered women age 18 and older reported that they hit, slapped, kicked, or did something else to physically hurt their current or most recent partner when he was not already beating or physically hurting them. Three percent of women had engaged in such violence in the 12 months before the survey (**Table 20.10**). Findings are comparable among ever-in-union women (**Table 20.11**).

Patterns by background characteristics of ever-partnered women

- Women's perpetration of violence is closely associated with their own experience of physical violence by their partner: 20% of women who had ever experienced violence by their partner and 23% who experienced violence in the past 12 months had initiated violence against their current (or most recent) partner, as compared with 2% of women who had not experienced physical violence by their partner (**Table 20.10**).
- Women from Western Cape (8%) were more likely to have ever initiated physical violence against their current or most recent partner than women from other provinces (2%-6%).
- Women living together with their partner were more likely than women in the other marital status categories to have ever initiated physical violence against their partner (9% versus 3%-5%).

Patterns by partner's characteristics and empowerment indicators of ever-in-union women

- Women whose husband/partner is often drunk are more likely than those whose husband/partner does not drink to have initiated physical violence (**Table 20.11**).

- The percentage of women who initiate violence against their husband/partner varies with the number of controlling behaviours he displays; 1% of women whose husband/partner displays no controlling behaviours have ever initiated physical violence, as compared with 19% of women whose husband/partner displays all five controlling behaviours.

- Initiation of violence is more common among women who report that their father or mother's boyfriend beat their mother (10%) than among those with no such history (3%).

- Women who are afraid of their husband/partner most of the time are much more likely than those who are never afraid of their husband/partner to have ever initiated physical violence.

List of Tables

For more information on domestic violence, see the following tables:

- **Table 20.1 Experience of physical, sexual, or emotional violence by any partner**
- **Table 20.2 Experience of different forms of violence**
- **Table 20.3 Age at first experience of sexual violence**
- **Table 20.4 Violence by any partner in the last 12 months**
- **Table 20.5 Control exercised by partners**
- **Table 20.6 Forms of partner violence**
- **Table 20.7 Partner violence by background characteristics**
- **Table 20.8 Spousal violence by husband's characteristics and empowerment indicators**
- **Table 20.9 Injuries to women due to violence by partner**
- **Table 20.10 Violence by women against their partner by women's background characteristics**
- **Table 20.11 Violence by women against their husband/partner by husband's/partner's characteristics and empowerment indicators**

Table 20.1 Experience of physical, sexual, or emotional violence by any partner

Percentage of ever-partnered women age 18 and older who have ever experienced any physical, sexual, or emotional violence committed by any partner, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage who have ever experienced physical violence by any partner	Percentage who have experienced sexual violence by any partner	Percentage who have experienced emotional violence by any partner	Percentage who have experienced physical or sexual violence by any partner	Percentage who have experienced emotional, physical, or sexual violence by any partner	Number of ever-partnered women
Age						
18-24	17.6	5.2	14.1	18.3	23.4	1,041
25-34	22.2	6.7	19.2	23.3	29.3	1,569
35-44	21.7	7.0	17.6	22.8	27.2	1,116
45-54	21.4	5.6	18.3	22.1	27.4	771
55-64	21.8	6.8	19.3	22.5	27.1	667
65+	16.7	5.6	13.0	16.9	20.0	701
Residence						
Urban	20.2	6.3	16.4	20.9	25.5	3,829
Non-urban	20.9	6.1	18.5	22.0	27.7	2,035
Province						
Western Cape	21.3	4.0	19.6	21.3	26.0	671
Eastern Cape	31.4	6.5	24.0	31.8	37.9	743
Northern Cape	18.7	4.5	16.0	19.8	23.3	126
Free State	21.4	7.5	20.7	22.0	28.0	326
KwaZulu-Natal	13.7	3.1	13.0	14.1	19.3	1,078
North West	29.5	11.8	27.5	31.5	37.3	409
Gauteng	17.7	8.0	12.5	18.8	22.6	1,464
Mpumalanga	26.4	7.0	21.3	27.9	33.4	443
Limpopo	14.2	5.1	12.8	15.3	20.3	605
Marital status						
Never married	18.4	4.8	15.8	19.1	24.7	2,243
Married	14.3	4.1	13.7	15.5	20.7	1,894
Living together	31.3	10.1	22.8	32.1	34.8	689
Divorced/separated	39.7	16.4	34.4	40.3	45.1	338
Widowed	23.8	8.0	16.7	24.3	28.8	701
Number of living children[1]						
0	15.7	4.0	10.9	16.7	20.1	771
1-2	21.4	6.7	18.4	22.2	28.0	2,339
3-4	20.2	6.2	18.3	21.5	27.2	911
5+	35.0	9.7	21.0	35.7	38.5	149
Employment						
Employed for cash	22.1	7.4	17.5	23.2	27.0	1,798
Employed not for cash	17.8	12.9	18.2	22.9	29.4	61
Not employed	19.8	5.6	17.0	20.4	25.8	4,005
Education						
No education	21.4	4.7	15.3	21.9	26.0	497
Primary incomplete	23.8	7.3	18.2	24.7	28.5	614
Primary complete	30.8	5.2	23.8	32.0	37.2	256
Secondary incomplete	23.0	7.5	19.8	24.0	29.7	2,289
Secondary complete	17.3	6.1	14.1	18.0	22.3	1,464
More than secondary	12.1	3.2	13.1	12.4	17.7	745
Wealth quintile						
Lowest	26.4	7.4	21.1	27.7	32.2	1,096
Second	21.2	6.0	17.4	22.1	27.9	1,202
Middle	21.1	6.3	18.4	21.9	26.8	1,181
Fourth	21.5	6.0	16.5	21.8	26.8	1,162
Highest	12.8	5.7	12.8	13.7	18.3	1,223
Total 18+	20.5	6.2	17.1	21.3	26.2	5,865
Total 18-49	20.6	6.2	17.1	21.5	26.8	4,169

[1] Available for women age 18-49 only

Table 20.2 Experience of different forms of violence

Percentage of women age 18 and older who have ever experienced different forms of violence by any partner according to current age, South Africa DHS 2016

Age	Physical violence only	Sexual violence only	Physical and sexual violence	Physical or sexual violence	Number of women
18-24	13.0	0.7	4.6	18.3	1,041
25-34	16.6	1.1	5.6	23.3	1,569
35-44	15.8	1.0	5.9	22.8	1,116
45-54	16.6	0.8	4.8	22.1	771
55-64	15.6	0.7	6.2	22.5	667
65+	11.3	0.2	5.4	16.9	701
Total 18+	15.0	0.8	5.4	21.3	5,865

Table 20.3 Age at first experience of sexual violence

Percentage of women age 18 and older who experienced sexual violence by any partner by specific exact ages, according to current age and current marital status, South Africa DHS 2016

Background characteristic	Percentage who first experienced sexual violence by any partner by exact age:					Percentage who have not experienced sexual violence	Number of women
	10	12	15	18	22		
Age							
18-24	0.0	0.0	0.0	1.6	na	94.8	1,041
25-34	0.7	0.7	1.1	2.0	3.0	93.3	1,569
35-44	0.0	0.0	0.0	0.8	2.0	93.0	1,116
45-54	0.1	0.1	0.1	0.4	1.4	94.4	771
55-64	0.0	0.0	0.0	0.0	0.9	93.2	667
65+	0.0	0.0	0.1	1.1	1.6	94.4	701
Marital status							
Never married	0.4	0.4	0.4	1.2	2.3	95.2	2,243
Married	0.1	0.1	0.3	1.0	1.8	95.9	1,894
Living together	0.1	0.2	0.7	2.1	4.9	89.9	689
Divorced/separated	0.0	0.0	0.1	0.5	4.8	83.6	338
Widowed	0.0	0.0	0.1	0.7	2.0	92.0	701
Total 18+	0.2	0.2	0.3	1.1	2.5	93.8	5,865

na = Not applicable

Table 20.4 Violence by any partner in the last 12 months

Percentage of ever-partnered women age 18 and older who have experienced emotional, physical, or sexual violence by any partner in the past 12 months, according to background characteristics, South Africa DHS 2016

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-partnered women
Age								
18-24	8.8	10.3	3.2	2.0	0.9	11.6	15.1	1,041
25-34	11.7	9.8	3.1	2.1	1.7	10.8	16.7	1,569
35-44	10.4	8.6	2.7	0.9	0.9	10.4	15.0	1,116
45-54	9.7	5.8	1.9	1.4	1.3	6.3	11.6	771
55-64	7.2	6.1	1.0	0.7	0.6	6.4	8.8	667
65+	3.1	1.6	0.3	0.2	0.1	1.6	4.3	701
Residence								
Urban	8.9	8.0	2.2	1.4	1.1	8.8	12.9	3,829
Non-urban	9.5	7.3	2.5	1.4	1.0	8.5	13.3	2,035
Province								
Western Cape	10.7	8.6	0.7	0.7	0.6	8.6	13.6	671
Eastern Cape	11.6	12.6	2.2	1.9	0.9	13.0	17.2	743
Northern Cape	7.3	5.1	1.9	1.1	0.7	5.8	10.2	126
Free State	11.1	9.1	1.9	1.4	1.2	9.6	14.5	326
KwaZulu-Natal	7.4	5.7	1.9	1.1	0.8	6.5	10.0	1,078
North West	12.8	7.3	4.9	1.3	1.3	10.9	18.3	409
Gauteng	8.2	8.2	3.0	1.9	1.5	9.3	13.2	1,464
Mpumalanga	10.2	7.8	2.7	1.2	1.0	9.3	15.0	443
Limpopo	5.5	3.5	1.5	0.8	0.7	4.1	7.1	605
Marital status								
Never married	9.4	8.9	2.2	1.5	1.0	9.6	14.1	2,243
Married	8.6	5.3	1.9	0.8	0.7	6.5	11.4	1,894
Living together	15.5	15.3	4.8	3.3	2.4	16.8	21.5	689
Divorced/separated	8.2	7.7	3.6	1.6	1.3	9.7	12.9	338
Widowed	3.8	3.0	0.8	0.5	0.5	3.3	5.6	701
Education								
No education	5.5	4.5	1.1	0.6	0.6	4.9	8.2	497
Primary incomplete	8.9	8.1	2.8	1.3	1.0	9.5	12.1	614
Primary complete	12.2	12.2	1.1	0.5	0.3	12.7	16.8	256
Secondary incomplete	11.1	9.6	3.0	1.8	1.3	10.7	16.1	2,289
Secondary complete	8.6	7.7	2.7	1.7	1.3	8.7	12.8	1,464
More than secondary	5.7	2.5	0.4	0.2	0.2	2.7	6.7	745
Wealth quintile								
Lowest	12.9	13.4	3.5	2.8	2.1	14.0	18.7	1,096
Second	9.7	7.8	2.9	1.4	0.9	9.3	14.3	1,202
Middle	9.6	8.0	2.3	1.6	1.3	8.8	12.6	1,181
Fourth	6.2	6.7	1.7	0.8	0.6	7.6	10.7	1,162
Highest	7.5	3.3	1.3	0.4	0.4	4.2	9.4	1,223
Total 18+	9.1	7.7	2.3	1.4	1.0	8.7	13.0	5,865
Total 18-49	10.2	9.1	2.9	1.7	1.2	10.3	15.0	4,169

Note: Any partner includes all current, most recent, and former partners.

Table 20.5 Control exercised by partners

Percentage of ever-partnered women age 18 and older whose partners have ever demonstrated specific types of controlling behaviours, according to background characteristics, South Africa DHS 2016

Background characteristic	Percentage of women whose partner:							Number of ever-partnered women
	Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Displays 3 or more of the specific behaviours	Displays none of the specific behaviours	
Age								
18-24	52.5	27.8	15.8	6.9	38.3	23.9	38.9	1,041
25-34	43.4	23.0	16.6	6.6	34.4	21.7	45.6	1,569
35-44	44.5	21.6	17.7	9.3	32.7	22.0	46.4	1,116
45-54	31.2	18.6	11.9	8.2	26.4	15.6	58.8	771
55-64	32.3	17.3	13.0	8.6	26.6	15.4	59.6	667
65+	21.9	13.7	8.5	6.1	18.5	11.0	70.9	701
Residence								
Urban	38.9	21.3	14.6	7.4	30.2	19.3	52.6	3,829
Non-urban	41.4	21.2	14.8	7.8	32.3	19.5	47.8	2,035
Province								
Western Cape	26.5	17.2	10.4	8.8	20.9	15.2	65.4	671
Eastern Cape	44.7	31.7	15.0	8.9	35.5	23.7	44.0	743
Northern Cape	24.5	17.7	13.1	9.4	23.6	16.5	65.9	126
Free State	42.1	30.3	20.1	12.2	38.1	27.7	48.6	326
KwaZulu-Natal	43.3	15.6	16.7	5.3	33.0	17.8	48.2	1,078
North West	45.0	23.5	17.3	5.8	39.7	20.3	40.0	409
Gauteng	39.7	20.6	14.7	6.7	29.3	19.9	52.5	1,464
Mpumalanga	45.5	23.4	15.0	8.5	32.1	19.4	45.9	443
Limpopo	36.6	17.5	10.4	7.9	27.5	15.2	53.5	605
Marital status								
Never married	46.8	26.5	15.3	6.7	35.0	22.6	43.9	2,243
Married	29.9	13.2	10.8	6.0	23.7	12.3	60.5	1,894
Living together	50.1	22.8	20.1	9.1	36.9	24.8	40.5	689
Divorced/separated	46.0	30.1	21.8	15.5	38.0	27.8	45.7	338
Widowed	30.7	20.4	14.1	9.0	28.1	18.4	60.1	701
Number of living children[1]								
0	46.0	25.4	13.3	6.8	31.2	18.9	45.5	771
1-2	45.1	23.1	16.7	6.6	35.4	22.2	44.7	2,339
3-4	43.4	23.4	16.7	9.9	34.1	22.9	47.1	911
5+	48.0	24.7	15.9	11.8	30.4	21.6	45.1	149
Employment								
Employed for cash	43.3	22.4	15.5	6.9	33.0	21.2	47.9	1,798
Employed not for cash	51.3	32.4	28.5	15.6	50.5	36.7	25.2	61
Not employed	38.0	20.5	14.1	7.7	29.7	18.2	52.6	4,005
Education								
No education	26.3	12.9	10.1	6.8	20.4	12.2	65.0	497
Primary incomplete	36.3	19.6	13.2	8.7	27.2	17.4	55.3	614
Primary complete	45.1	28.9	19.2	9.7	35.0	25.0	47.0	256
Secondary incomplete	43.8	24.9	16.5	9.0	35.8	22.8	46.2	2,289
Secondary complete	42.6	22.5	14.9	5.9	31.8	20.6	48.5	1,464
More than secondary	31.9	11.9	11.1	4.8	22.8	10.6	58.4	745
Wealth quintile								
Lowest	45.3	26.7	16.7	11.1	32.7	22.2	45.3	1,096
Second	42.7	22.1	16.3	8.1	33.2	22.4	47.9	1,202
Middle	43.6	22.8	15.3	6.3	33.5	20.3	46.2	1,181
Fourth	42.2	23.5	14.1	6.9	32.8	19.7	48.4	1,162
Highest	25.9	11.9	11.0	5.6	22.8	12.4	65.8	1,223
Woman afraid of husband/partner								
Afraid most of the time	77.4	62.8	46.6	30.9	72.1	60.2	10.2	298
Sometimes afraid	57.0	35.5	26.7	16.5	45.4	35.1	35.1	826
Never afraid	34.4	16.2	10.5	4.5	25.8	14.0	56.2	4,741
Total 18+	39.8	21.3	14.7	7.5	30.9	19.3	50.9	5,865
Total 18-49	45.0	23.6	16.0	7.5	34.2	21.7	45.4	4,169

Note: Partner refers to the current partner for currently partnered women and the most recent partner for previously partnered women.
[1] Available for ever-partnered women age 18-49 only

Table 20.6 Forms of partner violence

Percentage of ever-partnered women age 18 and older who have experienced various forms of violence ever or in the 12 months preceding the survey committed by their current or most recent partners, South Africa DHS 2016

Type of violence experienced	Ever experienced	Experienced in the past 12 months	Frequency in the past 12 months	
			Often	Sometimes
Physical violence				
Any physical violence	13.9	7.6	1.6	5.9
Pushed her, shook her, or threw something at her	13.0	6.9	1.4	5.6
Kicked her, dragged her, or beat her up	7.9	4.2	1.1	3.0
Tried to choke her or burn her on purpose	2.4	1.1	0.4	0.7
Threatened her or attacked her with a knife, gun, or other weapon	2.5	0.9	0.2	0.7
Sexual violence				
Any sexual violence	4.0	2.3	0.6	1.7
Physically forced her to have sexual intercourse with him when she did not want to	3.5	2.0	0.5	1.5
Physically forced her to perform any other sexual acts she did not want to	1.7	0.7	0.3	0.5
Forced her with threats or in any other way to perform sexual acts she did not want to	1.7	0.8	0.3	0.6
Emotional violence				
Any emotional violence	14.1	9.1	2.1	7.0
Said or did something to humiliate her in front of others	8.6	5.5	1.3	4.2
Threatened to hurt or harm her or someone she cared about	5.7	3.3	0.8	2.5
Insulted her or made her feel bad about herself	9.5	6.3	1.4	5.0
Any form of physical and/or sexual violence	14.9	8.5	1.9	6.6
Any form of emotional or physical or sexual violence	20.5	12.9	3.1	9.8
Number of ever-partnered women age 18+	5,865	5,865	5,865	5,865

Note: Includes current partner for currently partnered women and most recent partner for previously partnered women.

Table 20.7 Partner violence by background characteristics

Percentage of ever-partnered women age 18 and older who have ever experienced emotional, physical, or sexual violence committed by their current or most recent partner, according to background characteristics, South Africa DHS 2016

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-partnered women
Age								
18-24	10.6	12.3	3.2	2.5	1.3	13.1	17.4	1,041
25-34	14.4	13.2	3.9	2.9	2.3	14.2	21.5	1,569
35-44	14.4	13.1	3.7	2.0	1.9	14.7	20.1	1,116
45-54	16.0	14.4	3.7	3.0	2.8	15.1	21.4	771
55-64	17.9	18.6	4.9	4.0	3.0	19.5	24.4	667
65+	12.2	14.2	4.9	4.6	3.6	14.5	18.5	701
Residence								
Urban	13.7	13.8	3.8	3.0	2.3	14.6	20.1	3,829
Non-urban	14.8	14.2	4.3	3.1	2.4	15.4	21.2	2,035
Province								
Western Cape	17.6	15.5	2.5	2.5	2.1	15.5	22.4	671
Eastern Cape	21.4	24.2	4.5	4.0	3.1	24.7	31.4	743
Northern Cape	12.1	13.2	3.7	2.7	1.8	14.3	18.2	126
Free State	17.4	15.2	4.4	3.5	3.0	16.1	22.6	326
KwaZulu-Natal	10.7	9.3	2.3	1.9	1.1	9.8	15.0	1,078
North West	18.0	14.5	7.2	4.4	4.3	17.4	24.6	409
Gauteng	10.5	12.8	4.8	3.7	2.6	13.9	18.3	1,464
Mpumalanga	15.4	15.0	3.9	2.3	2.2	16.5	22.9	443
Limpopo	10.7	8.8	3.5	2.3	1.9	10.0	14.9	605
Marital status								
Never married	12.6	12.0	3.0	2.3	1.6	12.6	18.6	2,243
Married	12.0	10.3	2.7	1.6	1.5	11.4	16.9	1,894
Living together	17.5	20.6	5.4	4.6	3.6	21.4	25.9	689
Divorced/separated	26.3	24.0	10.2	7.5	6.8	26.7	32.8	338
Widowed	15.2	18.6	6.1	5.3	3.6	19.4	24.9	701
Number of living children[1]								
0	8.6	10.7	2.6	1.5	0.3	11.7	15.4	771
1-2	13.5	13.1	3.3	2.3	1.7	14.1	20.0	2,339
3-4	16.1	12.5	4.3	3.2	3.1	13.6	21.4	911
5+	19.4	26.4	8.0	5.8	5.7	28.6	32.3	149
Employment								
Employed for cash	12.6	12.2	4.0	2.5	1.8	13.7	18.5	1,798
Employed not for cash	4.5	14.7	7.4	2.3	2.3	19.8	21.2	61
Not employed	14.9	14.7	3.9	3.3	2.6	15.3	21.3	4,005
Education								
No education	14.3	17.6	3.5	2.9	2.5	18.2	23.6	497
Primary incomplete	16.2	19.7	5.8	4.6	4.0	20.8	24.6	614
Primary complete	20.8	24.3	3.9	2.6	1.6	25.7	31.4	256
Secondary incomplete	15.6	14.6	4.9	3.7	2.8	15.8	22.2	2,289
Secondary complete	11.7	11.0	3.4	2.6	2.1	11.8	16.6	1,464
More than secondary	10.0	6.8	1.0	0.6	0.2	7.2	13.4	745
Wealth quintile								
Lowest	18.4	20.5	5.5	4.4	3.7	21.6	26.5	1,096
Second	13.2	13.6	3.9	2.9	1.9	14.7	20.3	1,202
Middle	14.8	14.0	4.2	3.3	2.9	14.9	20.6	1,181
Fourth	13.7	14.4	2.9	2.2	1.8	15.1	21.3	1,162
Highest	10.7	7.8	3.4	2.4	1.6	8.8	14.4	1,223
Total 18+	14.1	13.9	4.0	3.0	2.3	14.9	20.5	5,865
Total 18-49	13.4	13.0	3.6	2.5	1.9	14.1	19.9	4,169

Note: Partner refers to the current partner for currently partnered women and the most recent partner for previously partnered women.
[1] Available for ever-partnered women age 18-49 only

Table 20.8 Spousal violence by husband's characteristics and empowerment indicators

Percentage of ever-in-union women age 18 and older who have ever experienced emotional, physical, or sexual violence committed by their current or most recent husband/partner, according to the husband/partner's characteristics and women's empowerment indicators, South Africa DHS 2016

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-in-union women
Husband's/partner's education[1]								
No education	17.3	13.5	3.0	2.5	2.3	14.0	20.1	244
Primary incomplete	16.9	16.4	2.3	2.3	2.1	16.4	22.7	276
Primary complete	8.8	10.3	0.9	0.5	0.5	10.8	14.8	107
Secondary incomplete	16.9	18.1	6.1	4.7	3.8	19.5	25.0	866
Secondary complete	10.2	9.5	2.5	0.8	0.8	11.3	15.7	622
More than secondary	7.9	4.3	0.3	0.1	0.1	4.5	9.7	395
Don't know	13.3	19.6	5.2	4.5	4.0	20.3	24.7	72
Husband's/partner's alcohol consumption								
Does not drink alcohol	9.1	8.3	2.2	1.5	1.4	9.1	13.2	2,154
Drinks alcohol but is never drunk	(13.9)	(3.1)	(0.0)	(0.0)	(0.0)	(3.1)	(13.9)	37
Is sometimes drunk	16.7	16.5	4.4	2.9	2.6	17.9	24.7	1,072
Is often drunk	45.9	53.8	20.0	17.3	12.4	56.6	64.9	354
Don't know	*	*	*	*	*	*	*	5
Husband's/partner's drug usage								
Does not use drugs	13.9	13.9	4.0	2.8	2.3	15.0	20.3	3,502
Sometimes uses drugs	(21.1)	(23.9)	(9.3)	(9.3)	(3.7)	(23.9)	(29.8)	42
Often uses drugs	58.5	68.1	23.9	23.2	17.2	68.9	76.1	53
Don't know	(77.0)	(66.3)	(44.1)	(40.1)	(40.1)	(70.3)	(82.0)	24
Spousal education difference[1]								
Husband better educated	12.7	12.6	2.9	2.1	1.9	13.5	18.1	783
Wife better educated	14.7	16.2	4.3	3.4	2.5	17.1	22.0	858
Both equally educated	12.1	9.1	2.6	1.3	1.2	10.5	16.5	755
Neither educated	19.0	13.6	3.9	3.6	3.6	13.8	22.6	116
Don't know	13.3	19.6	5.2	4.5	4.0	20.3	24.7	72
Spousal age difference[1]								
Wife older	12.4	16.5	3.4	3.1	3.1	16.7	19.2	294
Wife is same age	13.7	18.2	3.3	1.6	0.2	19.8	24.1	168
Wife 1-4 years younger	12.8	12.5	3.7	2.7	2.1	13.6	19.0	934
Wife 5-9 years younger	12.2	10.0	3.0	1.4	1.3	11.6	16.9	729
Wife 10 or more years younger	17.4	14.8	3.6	3.3	3.2	15.1	22.0	456
Number of marital control behaviours displayed by husband/partner[2]								
0	3.8	4.4	1.1	0.5	0.3	5.0	6.8	2,001
1-2	16.0	17.8	2.4	1.6	1.4	18.7	25.5	993
3-4	43.8	39.0	14.9	11.0	8.6	42.9	58.1	477
5	66.5	64.9	32.7	31.4	26.4	66.2	77.9	151
Number of decisions in which women participate[3]								
0	7.1	7.4	0.0	0.0	0.0	7.4	8.4	46
1-2	21.4	20.4	7.3	6.5	3.2	21.2	29.4	174
3	12.2	12.9	3.2	1.9	1.8	14.2	19.3	1,589
Number of reasons for which wife beating is justified[4]								
0	13.2	13.1	3.5	2.5	2.1	14.0	19.3	1,981
1-2	35.5	36.5	13.5	4.5	4.5	45.4	59.8	85
3-4	(32.0)	(16.6)	(25.0)	(0.0)	(0.0)	(41.6)	(59.8)	24
5	*	*	*	*	*	*	*	12
Father/mother's boyfriend beat mother								
Yes	27.4	29.4	9.7	8.0	5.4	31.1	39.3	507
No	12.6	12.1	3.8	2.7	2.4	13.2	18.1	2,929
Don't know	19.5	23.3	3.2	2.4	1.9	24.1	29.9	186
Woman afraid of husband/partner								
Afraid most of the time	58.5	66.2	31.7	27.5	24.4	70.4	77.0	205
Sometimes afraid	31.6	31.5	11.9	8.2	6.2	35.2	43.7	526
Never afraid	8.9	8.5	1.3	0.9	0.6	9.0	13.7	2,891
Total 18+	15.0	15.1	4.6	3.4	2.8	16.3	21.7	3,622

Note: Husband/partner refers to the current husband/partner for women currently in a union and the most recent husband/partner for divorced, separated, or widowed women. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes only women who are currently in a union

[2] According to the wife's report. See Table 20.5 for list of behaviours

[3] According to the wife's report. Restricted to women age 18-49 who are currently in a union. See Table 19.8.1 for list of decisions.

[4] According to the wife's report. Restricted to women age 18-49. See Table 19.9.1 for list of reasons.

Table 20.9 Injuries to women due to violence by partner

Percentage of ever-partnered women age 18 and older who have experienced specific types of violence committed by their current or most recent partner by types of injuries resulting from the violence, according to the type of violence, South Africa DHS 2016

Type of violence experienced	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	Number of ever-partnered women who have experienced physical or sexual violence
Physical violence[1]					
Ever[2]	35.9	19.3	11.7	39.4	816
Past 12 months	35.2	16.2	9.4	38.2	443
Sexual violence					
Ever[2]	44.1	28.2	15.2	47.2	232
Past 12 months	28.4	17.7	8.8	29.7	136
Physical or sexual violence[1]					
Ever[2]	33.7	18.1	11.1	37.1	872
Past 12 months	31.7	14.7	9.0	34.5	500

Note: Partner refers to the current partner for currently partnered women and the most recent partner for previously partnered women.
[1] Excludes women who reported violence only in response to a direct question on violence during pregnancy
[2] Includes in the past 12 months

Table 20.10 Violence by women against their partner by women's background characteristics

Percentage of ever-partnered women who have committed physical violence against their current or most recent partner when he was not already beating or physically hurting them, ever and in the past 12 months, according to women's own experience of spousal violence and background characteristics, South Africa DHS 2016

Background characteristic	Percentage who committed physical violence against their partner		Number of ever-partnered women
	Ever[1]	Past 12 months	
Woman's experience of partner physical violence			
Ever	19.6	14.4	816
In the past 12 months	23.1	21.2	443
Never	1.8	1.4	5,048
Age			
18-24	4.6	4.6	1,041
25-34	5.6	4.1	1,569
35-44	5.3	3.7	1,116
45-54	2.4	1.7	771
55-64	3.1	2.1	667
65+	2.2	0.8	701
Residence			
Urban	5.0	3.7	3,829
Non-urban	2.9	2.1	2,035
Province			
Western Cape	7.5	5.7	671
Eastern Cape	4.4	2.9	743
Northern Cape	3.9	3.4	126
Free State	4.2	2.7	326
KwaZulu-Natal	2.8	2.0	1,078
North West	5.8	4.2	409
Gauteng	4.3	3.3	1,464
Mpumalanga	4.3	3.5	443
Limpopo	1.9	1.8	605
Marital status			
Never married	4.5	3.5	2,243
Married	2.7	1.9	1,894
Living together	8.5	7.1	689
Divorced/separated	5.2	3.9	338
Widowed	2.9	1.4	701
Number of living children[2]			
0	4.8	3.8	771
1-2	5.2	4.2	2,339
3-4	4.2	3.0	911
5+	4.4	3.5	149
Employment			
Employed for cash	4.7	3.3	1,798
Employed not for cash	14.3	8.9	61
Not employed	3.9	3.0	4,005
Education			
No education	3.2	2.3	497
Primary incomplete	3.8	3.0	614
Primary complete	4.6	2.7	256
Secondary incomplete	4.7	3.9	2,289
Secondary complete	5.1	3.6	1,464
More than secondary	2.3	0.9	745
Wealth quintile			
Lowest	3.4	2.6	1,096
Second	5.4	3.9	1,202
Middle	3.8	2.6	1,181
Fourth	3.9	3.1	1,162
Highest	4.6	3.5	1,223
Total 18+	4.2	3.2	5,865
Total 18-49	4.9	3.8	4,169

Note: Partner refers to the current partner for currently partnered women and the most recent partner for previously partnered women.
[1] Includes in the past 12 months
[2] Available for ever-partnered women age 18-49 only

Table 20.11 Violence by women against their husband/partner by husband's/partner's characteristics and empowerment indicators

Percentage of ever-in-union women who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them, ever and in the past 12 months, according to husband's/partner's characteristics and women's empowerment indicators, South Africa DHS 2016

Background characteristic	Percentage who committed physical violence against their husband/partner		Number of ever-in-union women
	Ever[1]	Past 12 months	
Husband's/partner's education[2]			
No education	6.2	5.4	244
Primary incomplete	2.8	2.0	276
Primary complete	1.3	1.3	107
Secondary incomplete	5.9	4.7	866
Secondary complete	4.8	3.5	622
More than secondary	1.1	0.3	395
Don't know	0.6	0.6	72
Husband's/partner's alcohol consumption			
Does not drink alcohol	2.0	1.3	2,154
Drinks alcohol but is never drunk	(0.0)	(0.0)	37
Is sometimes drunk	5.4	4.4	1,072
Is often drunk	13.2	8.8	354
Don't know	*	*	5
Husband's/partner's drug usage			
Does not use drugs	3.9	2.8	3,502
Sometimes uses drugs	(2.7)	(2.7)	42
Often uses drugs	17.3	11.1	53
Don't know	(3.5)	(3.5)	24
Spousal education difference[2]			
Husband better educated	4.1	3.5	783
Wife better educated	5.0	3.8	858
Both equally educated	4.0	2.8	755
Neither educated	3.7	2.1	116
Don't know	0.6	0.6	72
Spousal age difference[2]			
Wife older	5.2	4.3	294
Wife is same age	2.6	2.3	168
Wife 1-4 years younger	5.1	4.5	934
Wife 5-9 years younger	3.5	2.0	729
Wife 10 or more years younger	3.7	2.4	456
Number of controlling behaviours displayed by husband/partner[3]			
0	1.3	1.2	2,001
1-2	4.3	3.0	993
3-4	10.4	6.9	477
5	18.5	14.1	151
Number of decisions in which women participate[4]			
0	1.6	1.6	46
1-2	9.9	7.8	174
3	4.6	3.4	1,589
Number of reasons for which wife beating is justified[5]			
0	4.6	3.5	1,981
1-2	13.0	12.4	85
3-4	(5.0)	(5.0)	24
5	*	*	12
Father/mother's boyfriend beat mother			
Yes	10.1	6.0	507
No	3.1	2.5	2,929
Don't know	2.9	1.5	186
Woman afraid of husband/partner			
Afraid most of the time	15.8	13.4	205
Sometimes afraid	8.5	7.3	526
Never afraid	2.4	1.4	2,891
Total 18+	4.1	3.0	3,622

Note: Husband/partner refers to the current husband/partner for in-union women and the most recent husband/partner for divorced, separated, or widowed women. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes in the past 12 months

[2] Includes only women who are currently in a union

[3] According to the wife's report. See Table 20.5 for list of behaviours.

[4] According to the wife's report. Restricted to women age 18-49 who are currently in a union. See Table 19.8.1 for list of decisions.

[5] According to the wife's report. Restricted to women age 18-49. See Table 19.9.1 for list of reasons.

REFERENCES

Affan, E.T., D. Praveen, C.K. Chow, and B.C. Neal. 2014. Comparability of HbA1c and lipids measured with dried blood spot versus venous samples: a systematic review and meta-analysis. *BMC Clinical Pathology* 14:21.

American Diabetes Association (ADA). 2010. Diagnosis and classification of diabetes mellitus. *Diabetes Care* 33(Suppl. 1):S62-S69.

American Diabetes Association (ADA). 2018. 2. Classification and diagnosis of diabetes: Standards of Medical Care in Diabetes—2018. *Diabetes Care* 41(Suppl. 1):S13-S27.

Ashwell, M., P. Gunn, and S. Gibson. 2012. Waist-to-height ratio is a better screening tool than waist circumference and BMI for adult cardiometabolic risk factors: systematic review and meta-analysis. *Obesity Reviews* 13(3):275-286.

Bradley, S.E.K., T.N. Croft, J.D. Fishel, and C.F. Westoff. 2012. *Revising Unmet Need for Family Planning.* DHS Analytical Studies No. 25. Calverton, Maryland, USA: ICF International.

Bradshaw, D., R.E. Dorrington, and R. Laubscher. 2012. *Rapid Mortality Surveillance Report 2011*. Cape Town: South African Medical Research Council.

Centers for Disease Control and Prevention (CDC). 1998. Recommendations to prevent and control iron deficiency in the United States. *Morbidity and Mortality Weekly Report* 47(RR-3):1-29.

DeMaeyer, E.M., F.W. Lowenstein, and C.H. Thilly. 1979. *The Control of Endemic Goitre.* Geneva: World Health Organization.

Department of Basic Education (DBE). 2011. *Curriculum and Policy Statement Grades 10-12.* Pretoria: DBE.

Department of Health (NDoH). 2012. *South Africa's National Strategic Plan for a Campaign on Accelerated Reduction of Maternal and Child Mortality in Africa (CARMMA)*. Pretoria: NDoH.

Department of Health (NDoH). 2013a. *National Contraception and Fertility Planning Policy and Service Delivery Guidelines.* Pretoria: NDoH.

Department of Health (NDoH). 2013b. *Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2013-2017.* Pretoria: NDoH.

Department of Health (NDoH). 2015a. *Guidelines for Maternity Care in South Africa: A Manual for Clinics, Community Health Centres and District Hospitals.* Pretoria: Department of Health.

Department of Health (NDoH). 2015b. *National Consolidated Guidelines for the Prevention of Mother-to-Child Transmission of HIV (PMTCT) and the Management of HIV in Children, Adolescents and Adults.* Pretoria: NDoH.

Department of Health (NDoH). 2016. Regulations relating to the reduction of sodium in certain foodstuffs and related matters: amendment. *Government Gazette* No. 40252. Pretoria: South African Government.

Department of Health (NDoH). 2017. *The 2015 National Antenatal Sentinel HIV & Syphilis Survey, South Africa.* Pretoria: NDoH.

Department of Health, Medical Research Council, Measure DHS+. 2002. *South Africa Demographic and Health Survey 1998*. Pretoria: Department of Health.

Department of Social Development (DSD). 2015. *The National Adolescent Sexual and Reproductive Health and Rights (ASRH&R) Framework Strategy (2014-2019).* Pretoria: DSD.

Department of Women, Children and People with Disabilities (DWCPD). 2014. *Stop Violence against Women in South Africa*. Pretoria: DWCPD and United Nations Population Fund.

Dorrington, R.E., D. Bradshaw, R. Laubscher, and N. Nannan. 2016. *Rapid Mortality Surveillance Report 2015.* Cape Town: South African Medical Research Council.

Expert Committee on the Diagnosis and Classification of Diabetes Mellitus. 1997. Report of the Expert Committee on the Diagnosis and Classification of Diabetes Mellitus. *Diabetes Care* 20:1183-1197.

GBD 2016 Disease and Injury Incidence and Prevalence Collaborators. 2017. Global, regional, and national incidence, prevalence, and years lived with disability for 328 diseases and injuries for 195 countries, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet* 390:1211-1259.

Global Initiative to End Corporal Punishment of Children. 2017. Corporal punishment of children in South Africa. http://www.endcorporalpunishment.org/assets/pdfs/states-reports/SouthAfrica.pdf

Goldberg, D.S., and S.J. McGee. 2011. Pain as a global public health priority. *BMC Public Health* 11:770.

Graham, W., W. Brass, and R.W. Snow. 1989. Indirect estimation of maternal mortality: the sisterhood method. *Studies in Family Planning* 20(3):125-135.

Houle, B., N. Angotti, S.J. Clark, et al. 2016. Let's talk about sex, maybe: interviewers, respondents, and sexual behavior reporting in rural South Africa. *Field Methods* 28(2):112-132.

International Association for the Study of Pain (IASP). 1994. Pain terms. In: Merskey, H., and N. Bogduk, eds. *Classification of Chronic Pain* (2nd ed.). Seattle: IASP Press:209-214.

International Expert Committee. 2009. International Expert Committee report on the role of the A1C assay in the diagnosis of diabetes. *Diabetes Care* 32:1327-1334.

Jooste, P.L., and E. Strydom. 2010. Methods for determination of iodine in urine and salt. *Best Practice & Research Clinical Endocrinology & Metabolism* 24(1):77-88.

Kramer, L. 2010. *The Nature and Extent of Over-the-counter and Prescription Drug Abuse in Cape Town.* MSc thesis, University of Cape Town.

Labadarios, D. et al 2007. *National Food Consumption Survey: Fortification Baseline South Africa, 2005.* Pretoria: Department of Health.

Miles, M., T.K. Ryman, V. Dietz, E. Zell, and E.T. Luman. 2013. Validity of vaccination cards and parental recall to estimate vaccination coverage: a systematic review of the literature. *Vaccine* 31(12):1560-1568.

National Treasury. 2016. Taxation of sugar sweetened beverages: policy paper. http://www.treasury.gov.za/public comments/default.aspx

Neal, S.E., and V. Hosegood. 2015. How reliable are reports of early adolescent reproductive and sexual health events in demographic and health surveys? *International Perspectives on Sexual and Reproductive Health* 41(4):210-217.

Nnko, S., J.T. Boerma, M. Urassa, G. Mwaluko, and B. Zaba. 2004. Secretive females or swaggering males? An assessment of the quality of sexual partnership reporting in rural Tanzania. *Social Science & Medicine* 59(2):299-310.

Pattinson, R., and N. Rhoda. 2014. *Saving Babies 2012-2013: Ninth Report on Perinatal Care in South Africa.* Pretoria: Tshepesa Press.

Pillay-van Wyk, V., W. Msemburi, R. Laubscher, et al. 2016. Mortality trends and differentials in South Africa from 1997 to 2012: second National Burden of Disease Study. *Lancet Global Health* 4(9):e642-e653.

Rutenberg, N., and J. Sullivan. 1991. Direct and indirect estimates of maternal mortality from the sisterhood method. In *Proceedings of the Demographic and Health Surveys World Conference* 3:1669-1696. Columbia, Maryland, USA: IRD/Macro International Inc.

Rutstein, S.O., and G. Rojas. 2006. *Guide to DHS Statistics*. Calverton, Maryland, USA: ORC Macro.

Shisana, O., D. Labadarios, T. Rehle, et al. 2014. *South African National Health and Nutrition Examination Survey, 2012 (SANHANES-1): 2014 Edition.* Cape Town: HSRC Press.

South African Government. 2011. *National Development Plan Vision 2030.* Pretoria: Government Printer.

South African National AIDS Council (SANAC). 2011. *National Strategic Plan on HIV, STIs and TB 2012-2016.* Pretoria: SANAC.

South African National AIDS Council (SANAC). 2017. *South Africa's National Strategic Plan for HIV, TB and STIs 2017-2022: Let Our Actions Count.* Pretoria: SANAC.

Stanton, C., N. Abderrahim, and K. Hill. 1997. *DHS Maternal Mortality Indicators: An Assessment of Data Quality and Implications for Data Use*. DHS Analytical Reports No. 4. Calverton, Maryland, USA: Macro International Inc.

Statistics South Africa (Stats SA). 2012. *2011 Statistical Release P0301.4*. Pretoria: Stats SA.

Statistics South Africa (Stats SA). 2017a. *Mortality and Causes of Death in South Africa, 2015: Findings from Death Notification.* Pretoria: Stats SA.

Statistics South Africa (Stats SA). 2017b. *Sustainable Development Goals: Baseline Report.* Pretoria: Stats SA.

Theron, G.B. 2000. Saving mothers: report on the confidential enquiries into maternal deaths in South Africa. *South African Family Practice* 22(7):5-7.

United Nations. 2006. *Secretary-General's In-depth Study on All Forms of Violence against Women.* New York: United Nations.

Van Hout, M.C. 2012. A respectable addiction: over-the-counter codeine use, misuse and dependence. https://www.researchgate.net/publication/259580882_A_RESPECTABLE_ADDICTION_OVER_THE_COUNTER_CODEINE_USE_MISUSE_AND_DEPENDENCE.

Viviers, P.J., and R.N. van Zyl-Smit. 2015. Chronic obstructive pulmonary disease—diagnosis and classification of severity. *South African Medical Journal* 105(9):786-788.

Webster, J., C. Crickmore, K. Charlton, K. Steyn, E. Wentzel-Viljoen, and P. Naidoo. 2016. South Africa's salt reduction strategy: are we on track, and what lies ahead? *South African Medical Journal* 107(1):20-21.

World Health Organization (WHO). 1995. *Physical Status: The Use and Interpretation of Anthropometry*. WHO Technical Report Series 854. Geneva: WHO.

World Health Organization (WHO). 1998. *Complementary Feeding of Young Children in Developing Countries: A Review of Current Scientific Knowledge*. Geneva: WHO.

World Health Organization (WHO). 1999. WHO-International Society of Hypertension guidelines for the management of hypertension. *Journal of Hypertension* 17(2):151-185.

World Health Organization (WHO). 2006. *Standards for Maternal and Neonatal Care.* Geneva: WHO.

World Health Organization (WHO). 2008. *Indicators for Assessing Infant and Young Child Feeding Practices. Part I: Definitions. Conclusions of a Consensus Meeting Held 6-8 November 2007 in Washington, DC, USA*. http://whqlibdoc.who.int/publications/2008/9789241596664_eng.pdf

World Health Organization (WHO). 2011a. *ICD-10: International Statistical Classification of Diseases and Related Health Problems—10th Revision. 2010 Edition.* Geneva: WHO.

World Health Organization (WHO). 2011b. Use of glycated haemoglobin (HbA1c) in the diagnosis of diabetes mellitus. http://apps.who.int/iris/bitstream/10665/70523/1/WHO_NMH_CHP_CPM_11.1_eng.pdf

World Health Organization (WHO). 2012. *The WHO Application of ICD-10 to Deaths during Pregnancy, Childbirth and Puerperium: ICD MM.* Geneva: WHO.

World Health Organization (WHO). 2013. *A Global Brief on Hypertension: World Health Day 2013.* Geneva: WHO.

World Health Organization (WHO). 2014a. *WHO Recommendations on the Postnatal Care of the Mother and Newborn*. Geneva: WHO.

World Health Organization (WHO). 2014b. *Revised WHO Classification and Treatment of Pneumonia in Children at Health Facilities: Evidence Summaries.* Geneva: WHO.

World Health Organization (WHO). 2015. *WHO Statement on Caesarean Section Rates.* Geneva: WHO.

World Health Organization (WHO). 2017. The top 10 causes of death. http://www.who.int/mediacentre/factsheets/fs310/en/.

World Health Organization (WHO) Multicentre Growth Reference Study Group. 2006. *WHO Child Growth Standards: Length/Height-for-Age, Weight-for-Age, Weight-for-Length, Weight-for-Height and Body Mass Index-for-Age: Methods and Development*. Geneva: WHO.

World Health Organization/United Nations Children's Fund/International Council for Control of Iodine Deficiency Disorders (WHO/UNICEF/ICCIDD). 2007. *Assessment of the Iodine Deficiency Disorders and Monitoring Their Elimination. A Guide for Programme Managers.* 3rd ed. WHO/NDH/01.1. Geneva: WHO.

SAMPLE DESIGN

Appendix A

A.1 INTRODUCTION

The South Africa Demographic and Health Survey 2016 (SADHS 2016) is the third DHS conducted in South Africa and follows surveys carried out in 1998 and 2003. The SADHS 2016 was designed to provide up-to-date information on key indicators needed to track progress in South Africa's health programmes. These indicators include fertility and childhood mortality levels, pregnancy-related mortality, fertility preferences and contraceptive use, utilisation of maternal and child health services, children's nutritional status and child feeding practices, behaviour towards the risk of HIV infection, and measures of physical and sexual violence against women. In addition, among adults age 15 and older, use of tobacco and alcohol; the prevalence of malnutrition, hypertension, anaemia, diabetes, and HIV; and other indicators relevant to adult health were assessed.

To obtain these data, a nationally representative sample of 15,000 dwelling units (DUs) was selected; all residential households in the selected DUs were eligible to be included in the survey. In all sampled households, all women age 15-49 who are usual members of the households or who stayed in the households on the night before the interview were eligible for interviews. In addition, in a subsample of the DUs (every second DU), all men age 15-59 who are usual members of the households or who stayed in the households on the night before the interview were eligible for interviews. In this same subsample, all women and men age 15 and older who are usual members of the selected households and those who spent the night before the survey in the selected households were eligible to complete a module on adult health and to have biomarker measurements and tests. Finally, in all households in selected DUs, one woman age 18 or older was randomly selected for a module on domestic violence. Also, for each child age 0-5 whose biological mother did not live in the household, a guardian was eligible to complete the Caregiver's Questionnaire.

The survey was designed to provide representative estimates for main demographic and health indicators for the country as a whole, for urban and non-urban areas separately, and for each of the nine provinces in South Africa: Western Cape, Eastern Cape, Northern Cape, Free State, KwaZulu-Natal, North West, Gauteng, Mpumalanga, and Limpopo.

A.2 SAMPLE FRAME

The sampling frame used for the SADHS 2016 is the Master Sample Frame (MSF) prepared by Statistics South Africa (Stats SA); the MSF was compiled from the Census 2011 frame. The latter is a list of 103,576 enumeration areas (EAs) that cover the whole country. An EA is a geographic area consisting of a convenient number of DUs that serve as counting units for the census. The MSF is a list of 71,241 primary sampling units (PSUs). For each PSU, the MSF contains information about location (province, district, and municipality), type of residence (urban, traditional, or farm), and estimated number of residential households.

An MSF PSU can be an EA, a group of small EAs, or part of an EA. In preparation for the MSF, out-of-scope EAs were removed from the frame. These out-of-scope areas were defined as institutional EAs and EAs that had zero DU counts at the time of the Census 2011. Furthermore, EAs with a very small number of households were excluded from the frame, which has been adjusted for during the sampling weight adjustment for under-coverage. Households in the excluded EAs accounted for less than 1% of households in the population. Moreover, all of the identified large EAs were conceptually split into one or more PSUs of equal size depending on the number of DUs in the EA. Finally, small EAs with DU counts of between

20 and 99 were pooled with neighbouring EAs that had the same geographical characteristics to form a new PSU.

Administratively, South Africa is divided into nine provinces; each province is subdivided into districts, and each district is subdivided into municipalities. Based on the MSF, **Table A.1** shows the household distribution by province and by type of residence. In South Africa, about 68.3% of households are in urban areas and 31.7% in non-urban areas. Provinces such as Western Cape and Gauteng are predominantly urban (92.9% and 97.6% of households in these provinces, respectively, are in urban areas). The percentage of urban households declines to 20.1% in Limpopo. The share of households in a province relative to the overall number of households in South Africa varies from 2.1% in Northern Cape to 27.7% in Gauteng.

Table A.1 Household distribution

Distribution of residential households in the master sample frame (MSF) by province and type of residence, percentage that each province contributes to the total household number, and percentage of each province that is urban, South Africa DHS 2016

Province	Household distribution				Percentage province contributes to the total number of households	Percentage of province that is urban
	Urban	Traditional	Farm	Total		
Western Cape	1,573,327	0	121,125	1,694,452	11.3	92.9
Eastern Cape	898,926	787,414	46,669	1,733,009	11.6	51.9
Northern Cape	221,798	51,190	36,417	309,405	2.1	71.7
Free State	706,846	74,017	55,377	836,240	5.6	84.5
KwaZulu-Natal	1,462,527	965,339	193,573	2,621,439	17.5	55.8
North West	507,582	485,114	99,404	1,092,100	7.3	46.5
Gauteng	4,052,302	38,851	61,416	4,152,569	27.7	97.6
Mpumalanga	509,360	494,865	93,350	1,097,575	7.3	46.4
Limpopo	289,194	1,058,781	91,998	1,439,973	9.6	20.1
South Africa	10,221,862	3,955,571	799,329	14,976,762	100.0	68.3

Source: MSF list prepared by Stats SA.

Table A.2 indicates the distribution of the MSF PSUs and their average size (number of households) by province and by type of residence. There are a total of 71,241 PSUs in the MSF, 45,651 in urban areas, 22,214 in traditional areas, and 3,376 in farms. The average PSU size is 210 households; urban and farm PSUs are larger in size (averages of 224 and 237 households, respectively), whereas traditional PSUs have a smaller size (an average of 178 households).

Table A.2 PSUs and households

Distribution of primary sampling units (PSUs) and households in the master sample frame (MSF) by province and residence, South Africa DHS 2016

Province	Number of PSUs				Average number of households per PSU			
	Urban	Traditional	Farm	Total	Urban	Traditional	Farm	Total
Western Cape	7,251	0	368	7,619	217	na	329	222
Eastern Cape	4,626	4,636	247	9,509	194	170	189	182
Northern Cape	1,209	283	284	1,776	183	181	128	174
Free State	3,707	453	361	4,521	191	163	153	185
KwaZulu-Natal	6,482	4,917	760	12,159	226	196	255	216
North West	2,434	2,471	305	5,210	209	196	326	210
Gauteng	16,177	220	234	16,631	250	177	262	250
Mpumalanga	2,451	2,849	385	5,685	208	174	242	193
Limpopo	1,314	6,385	432	8,131	220	166	213	177
South Africa	45,651	22,214	3,376	71,241	224	178	237	210

Source: The MSF list, prepared by Stats SA.
na = Not applicable

A.3 SAMPLE DESIGN AND IMPLEMENTATION

The sample for the SADHS 2016 is a stratified sample selected in two stages from the MSF. Stratification was achieved by separating each province into urban, traditional, and farm areas. In total, 26 sampling

strata were created (since there are no traditional areas in Western Cape). Samples were selected independently in each sampling stratum by a two-stage selection. Implicit stratification and proportional allocation were achieved at each of the lower administrative levels within a given sampling stratum by sorting the sampling frame according to administrative units at different levels in each stratum and using probability proportional to size selection at the first stage of sampling.

In the first stage, 750 PSUs were selected (468 in urban areas, 224 in traditional areas, and 58 in farm areas) with probability proportional to PSU size and with independent selection in each sampling stratum; the sample allocation is shown in **Table A.3**. A listing operation was carried out in all of the selected PSUs, and the resulting lists of DUs served as a sampling frame for the selection of DUs in the second stage. Before the listing activities, informal or congested PSUs were identified so that a segmentation process could be administered. These PSUs were divided into segments of about 20 DUs each, with only one segment selected at random for the survey. Therefore, a cluster in the SADHS 2016 was either a PSU or a segment of a PSU.

In the second stage of selection, a fixed number of 20 DUs per cluster was selected with an equal probability systematic selection from the newly created household listing. In segmented PSUs, if the segment contained 20 DUs or fewer, all DUs in the selected segment were eligible for the survey. In segments with more than 20 DUs, 20 DUs were randomly selected and were eligible for the survey. The survey interviewer interviewed only the households in the pre-selected DUs. No replacements and no changes of the pre-selected DUs were allowed in the implementing stages in order to prevent bias.

Table A.3 shows the allocation of clusters and households according to province and place of residence, and **Table A.4** shows the expected number of completed women's and men's interviews according to province and place of residence. To ensure that the survey precision is comparable across provinces, a power allocation was used to allocate between provinces and between different types of residence within each province. The survey was expected to be conducted in about 15,000 residential households, 9,360 in urban areas, 4,480 in traditional areas, and 1,160 in farms. The sample was expected to result in about 10,335 completed interviews with women age 15-49 and about 4,573 completed interviews with men age 15-59.

Table A.3 Sample allocation of clusters and households

Sample allocation of clusters and households by province, according to residence, South Africa DHS 2016

	Allocation of clusters				Allocation of households			
Province	Urban	Traditional	Farm	Total	Urban	Traditional	Farm	Total
Western Cape	78	0	6	84	1,560	0	120	1,680
Eastern Cape	42	38	4	84	840	760	80	1,680
Northern Cape	50	12	8	70	1,000	240	160	1,400
Free State	68	6	6	80	1,360	120	120	1,600
KwaZulu-Natal	52	34	8	94	1,040	680	160	1,880
North West	36	36	8	80	720	720	160	1,600
Gauteng	90	4	4	98	1,800	80	80	1,960
Mpumalanga	36	36	8	80	720	720	160	1,600
Limpopo	16	58	6	80	320	1,160	120	1,600
South Africa	468	224	58	750	9,360	4,480	1,160	15,000

Table A.4 Sample allocation of completed interviews with women and men

Sample allocation of expected number of completed interviews with women and men by province, according to residence, South Africa DHS 2016

	Women age 15-49				Men age 15-59			
Province	Urban	Traditional	Farm	Total	Urban	Traditional	Farm	Total
Western Cape	1,075	0	82	1,157	476	0	36	512
Eastern Cape	579	524	56	1,159	256	232	25	513
Northern Cape	690	165	110	965	305	73	48	426
Free State	937	82	82	1,101	415	36	36	487
KwaZulu-Natal	716	469	110	1,295	317	207	48	572
North West	496	496	110	1,102	220	220	48	488
Gauteng	1,240	56	56	1,352	549	25	25	599
Mpumalanga	496	496	110	1,102	220	220	48	488
Limpopo	221	799	82	1,102	98	354	36	488
South Africa	6,450	3,087	798	10,335	2,856	1,367	350	4,573

The sample allocations in **Table A.4** were derived using information obtained from the SADHS 2003; the average number of women age 15-49 per household was 1.03, the average number of men age 15-59 per household was 1.01, the household completion rate was 75.9%, the women's individual completion rate was 88.4%, and the men's individual completion rate was 79.3%.

Table A.5 and **Table A.6** present the interview response rates in the SADHS 2016 for women and men, respectively, by urban and non-urban residence and province. Overall, the number of completed interviews was lower than the expected number for both women and men. **Tables A.7**, **A.8**, **A.9**, and **A.10** present response rates for HIV testing by background characteristics.

A.4 SAMPLE PROBABILITIES AND SAMPLING WEIGHTS

Due to the nonproportional allocation of the sample to the different survey domains and to their urban and non-urban areas, sampling weights will be required for any analysis using the SADHS 2016 data to ensure the actual representativeness of the survey results at the national level and as well as the domain level. Since the SADHS 2016 sample is a two-stage stratified cluster sample, sampling weights were based on sampling probabilities calculated separately for each sampling stage and for each cluster, where:

P_{1hi}: first-stage sampling probability of the i^{th} cluster in stratum h
P_{2hi}: second-stage sampling probability within the i^{th} cluster (household selection)

The following describes the calculation of these probabilities:

Let a_h be the number of clusters selected in stratum h, M_{hi} the number of households according to the MSF in the i^{th} cluster, and $\sum_h M_{hi}$ the total number of households in stratum h. The probability of selecting the i^{th} cluster in stratum h in the SADHS 2016 sample is calculated as follows:

$$\frac{a_h M_{hi}}{\sum_h M_{hi}}$$

If the PSU is segmented, let $b_{hi} = 1/S_{hi}$ where S_{hi} is the number of created segments in PSU i; otherwise, $b_{hi} = 1$. Then the probability of selecting cluster i in the sample is:

$$P_{1hi} = \frac{a_h M_{hi}}{\sum M_{hi}} \times b_{hi}$$

Let L_{hi} be the number of households listed in the household listing operation in cluster *i* in stratum *h*, and let g_{hi} be the number of households selected in that cluster. The second stage's selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{g_{hi}}{L_{hi}}$$

The overall selection probability for each household in cluster *i* of stratum *h* in the SADHS 2016 is therefore the product of the two stages' selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

The design weight for each household in cluster *i* of stratum *h* is the inverse of its overall selection probability:

$$W_{hi} = 1 / P_{hi}$$

Since the men's survey was conducted in half of the households, the design weight for the men's survey was calculated by multiplying the full sample design weight W_{hi} by 2. Design weights were adjusted for household nonresponse and individual nonresponse to obtain the sampling weights for households and for women age 15-49 and men age 15-59, respectively. The nonresponse adjustment was done using stratum-level adjustment factors. The differences of the household sampling weight and the individual sampling weights are introduced by individual nonresponse. For the household sampling weight, the household design weight is multiplied by the inverse of the household response rate by stratum. For the women's individual sampling weight, the household sampling weight is multiplied by the inverse of the women's individual response rate by stratum. Finally, for the men's individual sampling weight, the household sampling weight for the male subsample is multiplied by the inverse of the men's individual response rate by stratum.

In addition to the standard weights for women age 15-49 and men age 15-59, separate weights were calculated for the adult health module that accounted for nonresponse among women age 15 and older and men age 15 and older. Moreover, a special weight was calculated for the domestic violence module to account for within-household selection and for nonresponse to the module. Special weights were also calculated for HIV and HbA1c tests to account for nonresponse with respect to these tests. The final sampling weights are normalised in order to give a total number of weighted cases that equals the total number of unweighted cases at the national level. Normalisation is done by multiplying the sampling weight by the estimated total sampling fraction obtained from the survey for the household weight, the individual woman's weight, the individual man's weight, and the other weights mentioned above except for the sampling weights for HIV testing. In the case of the latter, the weights are normalised at the national level for women and men together so that HIV prevalence estimates calculated for women and men together are valid. The normalised weights are relative weights that are valid for estimating means, proportions, and ratios but not valid for estimating population totals or pooled data.

Table A.5 Sample implementation: Women

Percent distribution of households and eligible women age 15-49 by results of the household and individual interviews, and household, eligible women, and overall women response rates, according to residence and province (unweighted), South Africa DHS 2016

	Residence		Province									
Result	Urban	Non-urban	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North West	Gauteng	Mpuma-langa	Limpopo	Total
Selected households												
Completed (C)	68.7	78.8	56.9	80.7	65.4	70.2	78.9	75.4	64.3	76.1	83.6	72.5
Household present but no competent respondent at home (HP)	8.7	2.5	12.9	2.7	5.7	11.1	5.4	2.3	9.5	4.5	3.2	6.4
Postponed (P)	0.8	0.2	1.9	0.8	0.4	0.4	0.3	0.5	0.3	0.5	0.2	0.6
Refused (R)	9.3	2.5	13.0	3.4	8.0	6.5	6.9	4.0	10.2	5.2	2.7	6.7
Dwelling not found (DNF)	0.5	1.1	1.0	0.1	0.4	0.4	0.8	0.7	1.4	1.2	0.4	0.7
Household absent (HA)	3.8	4.0	2.2	4.6	7.7	2.4	3.1	6.4	3.6	4.2	1.5	3.9
Dwelling vacant/address not a dwelling (DV)	5.9	8.7	8.4	6.8	10.0	6.4	3.3	8.3	6.7	6.5	7.3	6.9
Dwelling destroyed (DD)	0.4	0.9	0.6	0.7	0.9	0.5	0.9	1.1	0.7	0.1	0.1	0.6
Other (O)	1.9	1.3	3.2	0.2	1.6	2.2	0.6	1.2	3.4	1.6	0.9	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	9,547	5,745	1,703	1,747	1,396	1,606	1,968	1,631	1,947	1,652	1,642	15,292
Household response rate (HRR)[1]	78.1	92.6	66.4	92.0	81.9	79.2	85.6	90.9	75.1	87.0	92.7	83.4
Eligible women												
Completed (EWC)	82.0	92.3	69.9	87.8	82.2	85.5	91.8	90.6	78.7	90.6	93.0	86.2
Not at home (EWNH)	9.8	4.1	18.2	8.0	5.0	10.3	5.2	3.5	10.8	4.6	3.9	7.5
Postponed (EWP)	0.8	0.2	1.9	0.5	0.1	0.6	0.2	0.8	0.3	0.1	0.7	0.5
Refused (EWR)	6.1	2.5	8.8	2.1	10.3	2.0	2.0	4.4	9.6	3.6	1.9	4.6
Partly completed (EWPC)	0.1	0.0	0.1	0.0	0.2	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Incapacitated (EWI)	0.9	0.6	0.7	1.3	1.8	1.0	0.5	0.4	0.6	0.7	0.4	0.8
Other (EWO)	0.2	0.2	0.3	0.3	0.2	0.5	0.3	0.2	0.0	0.3	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	5,858	4,020	939	1,185	873	999	1,482	953	1,096	1,163	1,188	9,878
Eligible women response rate (EWRR)[2]	82.0	92.3	69.9	87.8	82.2	85.5	91.8	90.6	78.7	90.6	93.0	86.2
Overall women response rate (OWRR)[3]	64.0	85.4	46.4	80.8	67.3	67.7	78.6	82.3	59.1	78.8	86.2	71.9

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] The eligible women response rate (EWRR) is equivalent to the percentage of interviews completed (EWC)
[3] The overall women response rate (OWRR) is calculated as:

$$OWRR = HRR * EWRR/100$$

Table A.6 Sample implementation: Men

Percent distribution of households and eligible men age 15-59 by results of the household and individual interviews, and household, eligible men, and overall men response rates, according to residence and province (unweighted), South Africa DHS 2016

	Residence		Province									
Result	Urban	Non-urban	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North West	Gauteng	Mpuma-langa	Limpopo	Total
Selected households												
Completed (C)	68.2	77.9	56.5	79.8	64.7	68.4	77.0	73.7	64.7	76.6	84.3	71.8
Household present but no competent respondent at home (HP)	8.6	2.6	11.7	2.8	6.4	11.1	5.7	2.6	9.2	5.0	2.7	6.4
Postponed (P)	0.8	0.2	2.2	0.9	0.3	0.2	0.2	0.9	0.2	0.2	0.1	0.6
Refused (R)	9.5	2.5	14.8	2.8	7.9	6.8	7.3	3.7	9.9	4.5	3.5	6.9
Dwelling not found (DNF)	0.5	1.3	1.1	0.0	0.7	0.7	0.8	0.6	1.2	1.3	0.4	0.8
Household absent (HA)	4.0	3.9	1.9	5.1	6.9	2.4	3.5	7.1	3.9	3.9	1.5	4.0
Dwelling vacant/address not a dwelling (DV)	6.1	9.2	8.5	7.8	11.0	7.2	3.4	9.1	6.8	6.9	6.4	7.3
Dwelling destroyed (DD)	0.4	1.0	0.5	0.6	0.3	0.7	1.1	1.1	0.8	0.1	0.1	0.6
Other (O)	1.9	1.4	2.8	0.2	1.7	2.4	0.9	1.2	3.2	1.6	1.0	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	4,751	2,872	849	863	692	803	988	814	969	828	817	7,623
Household response rate (HRR)[1]	77.8	92.2	65.5	92.5	80.9	78.3	84.6	90.5	75.9	87.4	92.6	83.1
Eligible men												
Completed (EMC)	67.5	81.6	49.5	74.7	69.9	68.3	80.7	85.1	67.8	76.6	78.6	73.1
Not at home (EMNH)	19.0	10.8	31.1	16.5	10.3	23.4	14.3	6.8	17.4	11.4	13.1	15.8
Postponed (EMP)	1.2	0.5	3.6	1.6	0.0	0.8	0.3	1.8	0.0	0.2	0.9	0.9
Refused (EMR)	10.2	4.9	15.1	4.1	17.8	3.7	3.4	5.2	12.5	10.0	4.8	8.1
Partly completed (EMPC)	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.0	0.2	0.1
Incapacitated (EMI)	1.6	1.6	0.7	3.0	1.9	2.4	0.9	1.0	1.6	1.3	1.7	1.6
Other (EMO)	0.4	0.5	0.0	0.2	0.2	1.4	0.2	0.2	0.5	0.5	0.7	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	2,996	1,956	444	636	428	492	649	503	614	607	579	4,952
Eligible men response rate (EMRR)[2]	67.5	81.6	49.5	74.7	69.9	68.3	80.7	85.1	67.8	76.6	78.6	73.1
Overall men response rate (OMRR)[3]	52.5	75.3	32.4	69.1	56.5	53.5	68.3	77.0	51.4	67.0	72.8	60.7

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[2] The eligible men response rate (EMRR) is equivalent to the percentage of interviews completed (EMC)

[3] The overall men response rate (OMRR) is calculated as:

$$OMRR = HRR * EMRR/100$$

Table A.7 Coverage of HIV testing by social and demographic characteristics: Women

Percent distribution of interviewed women age 15-49 by HIV testing status, according to social and demographic characteristics (unweighted), South Africa DHS 2016

Characteristic	HIV test status				Total	Number of women
	DBS tested[1]	Refused to provide blood	Absent at the time of blood collection	Other/missing[2]		
Marital status						
Never married	66.1	22.0	8.9	2.9	100.0	2,573
Ever had sexual intercourse	67.9	21.0	8.3	2.7	100.0	2,081
Never had sexual intercourse	58.5	26.2	11.6	3.7	100.0	492
Married/living together	63.3	25.1	7.5	4.2	100.0	1,361
Divorced or separated	66.9	16.6	9.8	6.7	100.0	163
Widowed	56.3	31.3	10.4	2.1	100.0	96
Type of union						
In polygynous union	70.3	24.3	0.0	5.4	100.0	37
In non-polygynous union	62.3	25.6	7.8	4.2	100.0	1,264
Not currently in union	65.9	22.0	9.0	3.1	100.0	2,832
Don't know	78.3	13.3	5.0	3.3	100.0	60
Ever had sexual intercourse						
Yes	65.9	22.6	8.1	3.4	100.0	3,699
No	58.5	26.3	11.5	3.6	100.0	494
Currently pregnant						
Pregnant	71.9	20.9	4.3	2.9	100.0	139
Not pregnant or not sure	64.8	23.1	8.7	3.5	100.0	4,054
Times slept away from home in past 12 months						
None	66.2	22.0	8.0	3.8	100.0	2,232
1-2	65.6	23.4	7.8	3.2	100.0	895
3-4	62.6	23.6	10.2	3.6	100.0	420
5+	61.8	25.5	10.2	2.5	100.0	646
Time away in past 12 months						
Away for more than 1 month at a time	62.4	25.4	8.9	3.2	100.0	503
Away only for less than 1 month at a time	64.1	23.7	9.2	3.0	100.0	1,458
Not away	66.2	22.0	8.0	3.8	100.0	2,232
Population group						
Black African	67.9	21.0	8.1	3.1	100.0	3,651
White	43.1	38.2	11.8	6.9	100.0	102
Coloured	48.2	33.5	11.9	6.3	100.0	394
Indian/Asian	31.8	59.1	6.8	2.3	100.0	44
Total 15-49	65.0	23.0	8.5	3.5	100.0	4,193

[1] Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a final result, i.e., positive, negative, or inconclusive
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

Table A.8 Coverage of HIV testing by social and demographic characteristics: Men

Percent distribution of interviewed men age 15-49 by HIV testing status, according to social and demographic characteristics (unweighted), South Africa DHS 2016

	HIV test status					
Characteristic	DBS tested[1]	Refused to provide blood	Absent at the time of blood collection	Other/missing[2]	Total	Number of men
Marital status						
Never married	60.3	25.5	10.4	3.8	100.0	2,161
Ever had sexual intercourse	60.1	25.1	11.0	3.7	100.0	1,736
Never had sexual intercourse	61.2	26.8	8.0	4.0	100.0	425
Married/living together	53.6	30.1	9.7	6.6	100.0	890
Divorced or separated	65.7	23.2	6.1	5.1	100.0	99
Widowed	58.6	27.6	3.4	10.3	100.0	29
Type of union						
In polygynous union	70.6	11.8	5.9	11.8	100.0	17
In non-polygynous union	53.2	30.5	9.8	6.5	100.0	871
Not currently in union	60.6	25.4	10.1	3.9	100.0	2,289
Don't know	100.0	0.0	0.0	0.0	100.0	2
Ever had sexual intercourse						
Yes	58.2	26.7	10.3	4.8	100.0	2,753
No	61.3	26.8	8.0	4.0	100.0	426
Circumcised						
Yes	58.5	25.7	11.1	4.6	100.0	1,787
No	58.8	27.9	8.6	4.8	100.0	1,385
Don't know	42.9	42.9	14.3	0.0	100.0	7
Times slept away from home in past 12 months						
None	56.7	28.0	10.3	5.0	100.0	1,853
1-2	60.4	22.1	12.3	5.2	100.0	439
3-4	60.7	26.6	9.5	3.2	100.0	252
5+	62.0	26.1	7.7	4.1	100.0	635
Time away in past 12 months						
Away for more than 1 month at a time	59.1	29.0	7.3	4.6	100.0	411
Away only for less than 1 month at a time	62.2	23.1	10.6	4.2	100.0	915
Not away	56.7	28.0	10.3	5.0	100.0	1,853
Population group						
Black African	60.3	25.2	9.8	4.7	100.0	2,807
White	60.5	29.6	7.4	2.5	100.0	81
Coloured	41.0	39.0	13.9	6.0	100.0	251
Indian/Asian	42.1	50.0	7.9	0.0	100.0	38
Total 15-49	58.6	26.7	10.0	4.7	100.0	3,178
50-59	62.2	24.6	8.4	4.8	100.0	439
Total 15-59	59.0	26.5	9.8	4.7	100.0	3,618

[1] Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a final result, i.e., positive, negative, or inconclusive
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

Table A.9 Coverage of HIV testing by sexual behaviour characteristics: Women

Percent distribution of interviewed women age 15-49 who ever had sexual intercourse by HIV test status, according to sexual behaviour characteristics (unweighted), South Africa DHS 2016

Sexual behaviour characteristic	HIV test status				Total	Number of women
	DBS tested[1]	Refused to provide blood	Absent at the time of blood collection	Other/missing[2]		
Age at first sexual intercourse						
<14	66.4	20.8	8.8	4.0	100.0	125
14-15	68.1	20.1	8.3	3.4	100.0	551
16-17	66.6	22.4	7.9	3.1	100.0	1,308
18-19	64.7	23.5	8.2	3.6	100.0	974
20+	64.4	24.9	7.3	3.3	100.0	627
Missing	64.9	17.5	12.3	5.3	100.0	114
Number of lifetime partners						
1	63.7	24.8	8.2	3.3	100.0	947
2	65.5	23.5	8.4	2.7	100.0	754
3-4	68.1	21.1	7.8	3.0	100.0	1,187
5-9	66.4	20.3	8.6	4.8	100.0	547
10+	74.8	18.3	3.8	3.1	100.0	131
Don't know	53.4	28.6	10.5	7.5	100.0	133
Multiple sexual partners in past 12 months						
0	63.9	24.4	8.0	3.7	100.0	488
1	66.0	22.5	8.0	3.5	100.0	3,018
2+	68.4	18.7	10.9	2.1	100.0	193
Non-marital, non-cohabiting partners in past 12 months[3]						
0	62.9	25.4	7.5	4.2	100.0	1,749
1	68.7	20.1	8.4	2.8	100.0	1,792
2+	67.1	19.0	11.4	2.5	100.0	158
Condom use at last sexual intercourse in past 12 months						
Used condom	66.3	21.2	9.4	3.0	100.0	1,453
Did not use condom	66.0	23.2	7.1	3.7	100.0	1,758
No sexual intercourse in past 12 months	63.9	24.4	8.0	3.7	100.0	488
Condom use at last sexual intercourse with a non-marital, non-cohabiting partner in past 12 months[3]						
Used condom	67.1	20.5	9.6	2.8	100.0	1,133
Did not use condom	70.6	19.5	7.2	2.7	100.0	817
No sexual intercourse with any non-marital, non-cohabiting partners in past 12 months	62.9	25.4	7.5	4.2	100.0	1,749
Prior HIV testing						
Ever tested	66.4	22.0	8.2	3.4	100.0	3,327
Received results	66.4	21.9	8.2	3.5	100.0	3,269
Did not receive results	67.2	25.9	6.9	0.0	100.0	58
Never tested	61.3	27.7	7.3	3.8	100.0	372
Total 15-49	65.9	22.6	8.1	3.4	100.0	3,699

[1] Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a result, i.e., positive, negative, or inconclusive.
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.
[3] Any partner who was not a spouse and did not live with the respondent

Table A.10 Coverage of HIV testing by sexual behaviour characteristics: Men

Percent distribution of interviewed men age 15-49 who ever had sexual intercourse by HIV test status, according to sexual behaviour characteristics (unweighted), South Africa DHS 2016

Sexual behaviour characteristic	HIV test status				Total	Number of men
	DBS tested[1]	Refused to provide blood	Absent at the time of blood collection	Other/missing[2]		
Age at first sexual intercourse						
<14	61.3	27.9	7.9	2.9	100.0	240
14-15	58.7	26.9	10.0	4.4	100.0	588
16-17	57.5	26.7	10.6	5.1	100.0	972
18-19	59.1	25.4	10.2	5.3	100.0	599
20+	55.5	27.8	11.6	5.1	100.0	335
Missing	57.9	26.3	15.8	0.0	100.0	19
Number of lifetime partners						
1	62.7	24.1	8.5	4.7	100.0	212
2	56.4	28.9	8.8	5.9	100.0	273
3-4	62.2	23.2	11.3	3.2	100.0	564
5-9	56.7	26.3	11.2	5.8	100.0	654
10+	60.7	24.6	9.8	4.8	100.0	764
Don't know	45.1	39.9	10.5	4.5	100.0	286
Multiple sexual partners in past 12 months						
0	58.8	28.5	7.2	5.4	100.0	221
1	56.3	27.8	10.8	5.0	100.0	1,997
2+	65.0	21.5	9.7	3.7	100.0	534
Don't know	0.0	100.0	0.0	0.0	100.0	1
Non-marital, non-cohabiting partners in past 12 months[3]						
0	54.4	30.0	9.3	6.3	100.0	967
1	58.9	25.8	11.1	4.2	100.0	1,329
2+	64.1	22.3	10.3	3.3	100.0	457
Condom use at last sexual intercourse in past 12 months						
Used condom	60.0	25.2	10.8	4.0	100.0	1,422
Did not use condom	55.8	28.3	10.3	5.7	100.0	1,110
No sexual intercourse in past 12 months	58.8	28.5	7.2	5.4	100.0	221
Condom use at last sexual intercourse with a non-marital, non-cohabiting partner in past 12 months[3]						
Used condom	61.0	24.6	10.5	3.8	100.0	1,247
Did not use condom	58.4	25.6	11.7	4.3	100.0	539
No sexual intercourse with any non-marital, non-cohabiting partners in past 12 months	54.4	30.0	9.3	6.3	100.0	967
Paid for sexual intercourse in past 12 months						
Yes	58.8	35.0	3.8	2.5	100.0	80
Used condom	57.4	35.3	4.4	2.9	100.0	68
Did not use condom	66.7	33.3	0.0	0.0	100.0	12
No (no paid sexual intercourse/no sexual intercourse in last 12 months)	58.2	26.4	10.5	4.9	100.0	2,673
Prior HIV testing						
Ever tested	58.9	25.5	10.9	4.7	100.0	2,086
Received results	58.8	25.6	10.9	4.6	100.0	2,029
Did not receive results	61.4	19.3	8.8	10.5	100.0	57
Never tested	55.9	30.6	8.5	4.9	100.0	667
Total 15-49	58.2	26.7	10.3	4.8	100.0	2,752
50-59	62.3	24.8	8.3	4.6	100.0	432
Total 15-59	58.7	26.4	10.0	4.8	100.0	3,185

[1] Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a result, i.e., positive, negative, or inconclusive
[2] Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.
[3] Any partner who was not a spouse and did not live with the respondent

ESTIMATES OF SAMPLING ERRORS

Appendix B

The estimates from a sample survey are affected by two types of errors: nonsampling errors and sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the SADHS 2016 to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the SADHS 2016 is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability among all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

Sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95% of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the SADHS 2016 sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulas. Sampling errors are computed in SAS, using programs developed by ICF. These programs use the Taylor linearization method to estimate variances for survey estimates that are means, proportions, or ratios. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y, and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1-f}{x^2}\sum_{h=1}^{H}\left[\frac{m_h}{m_h-1}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}\text{, and } z_h = y_h - rx_h$$

where h represents the stratum which varies from 1 to H,
m_h is the total number of clusters selected in the h^{th} stratum,
y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the h^{th} stratum,
x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the h^{th} stratum, and
f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the SADHS 2016 there were 746 non-empty clusters. Hence, 746 replications were created. The variance of a rate *r* is calculated as follows:

$$SE^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where r is the estimate computed from the full sample of 746 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 745 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, the design effect (DEFT) for each estimate is also calculated. The design effect is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. Relative standard errors and confidence limits for the estimates are also calculated.

Sampling errors for the SADHS 2016 are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and non-urban areas, and for each of the 9 provinces. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in **Table B.1**. **Tables B.2** through **B.14** present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95% confidence limits (R±2SE), for each selected variable. The DEFT is considered undefined when the standard error considering a simple random sample is zero (when the estimate is close to 0 or 1).

The confidence interval (e.g., as calculated for ideal number of children) can be interpreted as follows: the overall average from the national sample is 2.596 and its standard error is 0.024. Therefore, to obtain the 95% confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., 2.596 ± 2 × 0.024. There is a high probability (95%) that the true ideal number of children is between 2.548 and 2.644.

For the total sample, the value of the DEFT, averaged over all variables, is 1.56. This means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.56 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, South Africa DHS 2016

Variable	Estimate	Base population
	POPULATION	
Population using safely managed drinking water services	Proportion	de jure population
Population using safely managed sanitation services	Proportion	de jure population
Population with access to electricity	Proportion	de jure population
Population with primary reliance on clean fuels	Proportion	de jure population
	WOMEN	
Urban residence	Proportion	Women 15-49
Literacy	Proportion	Women 15-49
No education	Proportion	Women 15-49
Secondary or higher education	Proportion	Women 15-49
Never-in-union (never married or lived with a partner)	Proportion	Women 15-49
In-union (married or living with a partner)	Proportion	Women 15-49
In a union before age 15 (women 20-24)	Proportion	Women 20-24
In a union before age 18 (women 20-24)	Proportion	Women 20-24
In a union before age 18 (women 20-49)	Proportion	Women 20-49
Had sexual intercourse before age 18	Proportion	Women 20-49
Currently pregnant	Proportion	Women 15-49
Currently using any method	Proportion	Sexually active women 15-49
Currently using a modern method	Proportion	Sexually active women 15-49
Currently using pill	Proportion	Sexually active women 15-49
Currently using condoms	Proportion	Sexually active women 15-49
Currently using injectables - 3 months	Proportion	Sexually active women 15-49
Currently using injectables - 2 months	Proportion	Sexually active women 15-49
Currently using implants	Proportion	Sexually active women 15-49
Currently using female sterilisation	Proportion	Sexually active women 15-49
Currently using withdrawal	Proportion	Sexually active women 15-49
Currently using IUD	Proportion	Sexually active women 15-49
Using public sector source	Proportion	Current users of modern method
Demand satisfied by modern methods	Proportion	In-union women 15-49
Want no more children	Proportion	In-union women 15-49
Want to delay next birth at least 2 years	Proportion	In-union women 15-49
Ideal number of children	Mean	Women 15-49
Mothers protected against tetanus for last birth	Proportion	Women with a live birth in last 5 years
Births with skilled attendant at delivery	Proportion	Births occurring 1-59 months before survey
Had diarrhoea in the last 2 weeks	Proportion	Children under 5
Treated with ORS	Proportion	Children under 5 with diarrhoea in past 2 weeks
Treated with clinic-recommended homemade fluid (RHF)	Proportion	Children under 5 with diarrhoea in past 2 weeks
Sought treatment for diarrhoea	Proportion	Children under 5 with diarrhoea in past 2 weeks
Ever had vaccination card	Proportion	Children 12-23 months
Vaccination card seen	Proportion	Children 12-23 months
Received BCG vaccination	Proportion	Children 12-23 months
Received DTaP-IPV-Hib vaccination (3 doses)	Proportion	Children 12-23 months
Received HepB vaccination (3 doses)	Proportion	Children 12-23 months
Received birth dose polio 0 vaccination	Proportion	Children 12-23 months
Received oral polio vaccination (non-birth dose)	Proportion	Children 12-23 months
Received pneumococcal vaccination (3 doses)	Proportion	Children 12-23 months
Received rotavirus vaccination (2 doses)	Proportion	Children 12-23 months
Received measles vaccination	Proportion	Children 12-23 months
Received all basic vaccinations	Proportion	Children 12-23 months
Received all age appropriate vaccinations (12-23 months)	Proportion	Children 12-23 months
Received DTaP-IPV-Hib vaccination 4 (children 24-35)	Proportion	Children 24-35 months
Received measles 2 vaccination (children 24-35)	Proportion	Children 24-35 months
Received all age appropriate vaccinations (24-35 months)	Proportion	Children 24-35 months
Height-for-age (-2SD)	Proportion	Children under 5 who are measured
Weight-for-height (-2SD)	Proportion	Children under 5 who are measured
Weight-for-age (+2SD)	Proportion	Children under 5 who are measured
Weight-for-age (-2SD)	Proportion	Children under 5 who are measured
Body Mass Index (BMI) <18.5	Proportion	Women 15+ who were measured
Body Mass Index (BMI) ≥25	Proportion	Women 15+ who were measured
Body Mass Index (BMI) ≥35	Proportion	Women 15+ who were measured
Waist ≥88 cm	Proportion	Women 15+ who were measured
Waist for height ratio ≥0.5	Proportion	Women 15+ who were measured
Prevalence of anaemia (children 6-59 months)	Proportion	Children 6-59 months who were tested
Prevalence of anaemia (women 15+)	Proportion	Women 15+ who were measured
Had 2+ sexual partners in past 12 months	Proportion	Women 15-49
Condom use at last sex	Proportion	Women 15-49 with non-marital, non-cohabiting partner in past 12 months
Abstinence among never-in-union youth (never had sex)	Proportion	Never-in-union women 15-24
Had an HIV test and received results in past 12 months	Proportion	Women 15-49
Cervical cancer screening	Proportion	Women 30-59 years
Asthma symptoms	Proportion	Women 15+
COPD symptoms	Proportion	Women 15+
Hypertension (>140/90 or taking hypertensive medication)	Proportion	Women 15+ who were measured
Current smoking (daily or occassional)	Proportion	Women 15+
Drank alcohol in past 12 months	Proportion	Women 15+
Risky alcohol intake (>5 or more drinks)	Proportion	Women 15+
Show signs of problem drinking by the CAGE test	Proportion	Women 15+
Codeine-containing medication misuse	Proportion	Women 15+

(Continued…)

Table B.1—*Continued*

Variable	Estimate	Base population
	WOMEN	
Physical, sexual, or emotional violence by a partner in the previous 12 months	Proportion	Ever-partnered women 18+
Physical violence by a current or former partner in the previous 12 months	Proportion	Ever-partnered women 18+
Sexual violence by a current or former partner in the previous 12 months	Proportion	Ever-partnered women 18+
Emotional violence by a current or former partner in the previous 12 months	Proportion	Ever-partnered women 18+
Mobile phone ownership	Proportion	Women 15-49
Bank account ownership	Proportion	Women 15-49
Internet use in past 12 months	Proportion	Women 15-49
Total fertility rate (last 3 years)	Rate	Women-years of exposure to childbearing
Neonatal mortality rate[1]	Rate	Children exposed to the risk of mortality
Post-neonatal mortality rate[1]	Rate	Children exposed to the risk of mortality
Infant mortality rate[1]	Rate	Children exposed to the risk of mortality
Child mortality rate[1]	Rate	Children exposed to the risk of mortality
Under-5 mortality rate[1]	Rate	Children exposed to the risk of mortality
HIV prevalence among women 15-49	Proportion	Interviewed women with Dried Blood Spot (DBS) specimen tested at the lab
HIV prevalence among pregnant women 15-49	Proportion	Interviewed pregnant women 15-49 with DBS tested at the lab
HIV prevalence among young women 15-24	Proportion	Interviewed women 15-24 with DBS tested at the lab
HIV prevalence among women 15+	Proportion	Interviewed women 15+ with DBS tested at the lab
	MEN	
Urban residence	Proportion	Men 15-49
Literacy	Proportion	Men 15-49
No education	Proportion	Men 15-49
Secondary or higher education	Proportion	Men 15-49
Never-in-union (never married or lived with a partner)	Proportion	Men 15-49
In-union (married or living with a partner)	Proportion	Men 15-49
Had first sexual intercourse before age 18	Proportion	Men 20-49
Want no more children	Proportion	In-union men 15-49
Want to delay birth at least 2 years	Proportion	In-union men 15-49
Ideal number of children	Mean	Men 15-49
Body Mass Index (BMI) <18.5	Proportion	Men 15+ who were measured
Body Mass Index (BMI) ≥25	Proportion	Men 15+ who were measured
Body Mass Index (BMI) ≥30	Proportion	Men 15+ who were measured
Waist ≥102 cm	Proportion	Men 15+ who were measured
Waist for height ratio ≥0.5	Proportion	Men 15+ who were measured
Current smoking (daily or occassional)	Proportion	Men 15+
Drank alcohol in past 12 months	Proportion	Men 15+
Risky alcohol intake (>5 or more drinks)	Proportion	Men 15+
Show signs of problem drinking by the CAGE test	Proportion	Men 15+
Codeine-containing medication misuse	Proportion	Men 15+
Prevalence of anaemia	Proportion	Men 15+ who were measured
Had 2+ sexual partners in past 12 months	Proportion	Men 15-49
Condom use at last sex	Proportion	Men 15-49 with non-marital, non-cohabiting partners in past 12 months
Abstinence among never-in-union youth (never had sex)	Proportion	Never-in-union men 15-24
Had paid sex in past 12 months	Proportion	Men 15-49
Had HIV test and received results in past 12 months	Proportion	Men 15-49
Circumcised	Proportion	Men 15-49
Asthma symptoms	Proportion	Men 15+
COPD symptoms	Proportion	Men 15+
Hypertension (>140/90 or taking hypertensive medication)	Proportion	Men 15+ who were measured
Mobile phone ownership	Proportion	Men 15-49
Bank account ownership	Proportion	Men 15-49
Internet use in past 12 months	Proportion	Men 15-49
HIV prevalence among men 15-49	Proportion	Interviewed men with Dried Blood Spot (DBS) specimen tested at the lab
HIV prevalence among young men 15-24	Proportion	Interviewed men 15-24 with DBS tested at the lab
HIV prevalence among men 15+	Proportion	Interviewed men 15+ with DBS tested at the lab
	WOMEN and MEN	
HIV prevalence among respondents 15-49	Proportion	Interviewed women and men 15-49 with DBS tested at the lab
HIV prevalence among respondents 15-24	Proportion	Interviewed women and men 15-24 with DBS tested at the lab
HIV prevalence among respondents 15+	Proportion	Interviewed women and men 15+ with DBS tested at the lab

[1] The mortality rates are calculated for 5 years before the survey for the national, urban, and non-urban samples and for 10 years before the survey for the provincial samples

Table B.2 Sampling errors: National sample, South Africa DHS 2016

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
POPULATION								
Population using safely managed drinking water services	0.904	0.008	37925	37205	2.274	0.009	0.888	0.921
Population using safely managed sanitation services	0.810	0.011	37925	37205	2.617	0.013	0.789	0.831
Population with access to electricity	0.908	0.011	37925	37205	3.379	0.013	0.885	0.931
Population with primary reliance on clean fuels	0.785	0.012	37925	37205	2.429	0.016	0.760	0.810
WOMEN								
Urban residence	0.673	0.011	8514	8514	2.261	0.017	0.650	0.696
Literacy	0.963	0.003	8514	8514	1.612	0.003	0.957	0.970
No education	0.020	0.002	8514	8514	1.383	0.106	0.016	0.024
Secondary or higher education	0.889	0.006	8514	8514	1.707	0.007	0.878	0.901
Never-in-union (never married or lived with a partner)	0.586	0.008	8514	8514	1.542	0.014	0.570	0.603
In-union (married or living with a partner)	0.358	0.008	8514	8514	1.560	0.023	0.342	0.374
In a union before age 15 (women 20-24)	0.009	0.004	1408	1415	1.520	0.416	0.002	0.017
In a union before age 18 (women 20-24)	0.036	0.007	1408	1415	1.473	0.204	0.021	0.050
In a union before age 18 (women 20-49)	0.065	0.004	7009	7087	1.396	0.063	0.056	0.073
Had sexual intercourse before age 18	0.488	0.009	7009	7087	1.548	0.019	0.469	0.506
Currently pregnant	0.039	0.003	8514	8514	1.457	0.078	0.033	0.045
Currently using any method	0.596	0.010	4116	4364	1.317	0.017	0.576	0.617
Currently using a modern method	0.593	0.010	4116	4364	1.307	0.017	0.573	0.613
Currently using pill	0.073	0.006	4116	4364	1.482	0.083	0.061	0.085
Currently using condoms	0.156	0.009	4116	4364	1.562	0.057	0.138	0.173
Currently using injectables - 3 months	0.175	0.008	4116	4364	1.290	0.044	0.160	0.191
Currently using injectables - 2 months	0.073	0.005	4116	4364	1.330	0.074	0.062	0.083
Currently using implants	0.041	0.004	4116	4364	1.290	0.098	0.033	0.049
Currently using female sterilisation	0.057	0.005	4116	4364	1.481	0.094	0.046	0.068
Currently using withdrawal	0.003	0.001	4116	4364	1.417	0.377	0.001	0.006
Currently using IUD	0.012	0.002	4116	4364	1.495	0.216	0.007	0.016
Using public sector source	0.803	0.011	4004	4076	1.749	0.014	0.781	0.825
Demand satisfied by modern methods	0.797	0.008	5033	5115	1.438	0.010	0.781	0.813
Want no more children	0.580	0.013	2841	3050	1.367	0.022	0.554	0.605
Want to delay next birth at least 2 years	0.092	0.007	2841	3050	1.303	0.077	0.078	0.106
Ideal number of children	2.596	0.024	8485	8493	1.562	0.009	2.548	2.644
Mothers protected against tetanus for last birth	0.352	0.014	3036	3036	1.579	0.039	0.324	0.379
Births with skilled attendant at delivery	0.967	0.004	3548	3572	1.193	0.004	0.959	0.975
Had diarrhoea in the last 2 weeks	0.103	0.007	3413	3444	1.374	0.069	0.089	0.118
Treated with ORS	0.514	0.034	350	356	1.263	0.066	0.446	0.582
Treated with clinic-recommended homemade fluid (RHF)	0.725	0.030	350	356	1.280	0.042	0.665	0.786
Sought treatment for diarrhoea	0.630	0.034	350	356	1.287	0.053	0.563	0.698
Ever had vaccination card	0.981	0.006	670	677	1.013	0.006	0.969	0.992
Vaccination card seen	0.663	0.026	670	677	1.400	0.039	0.612	0.715
Received BCG vaccination	0.925	0.012	670	677	1.219	0.013	0.900	0.950
Received DTaP-IPV-Hib vaccination (3 doses)	0.649	0.025	670	677	1.360	0.039	0.598	0.700
Received HepB vaccination (3 doses)	0.650	0.024	670	677	1.295	0.037	0.602	0.698
Received birth dose polio 0 vaccination	0.923	0.014	670	677	1.320	0.015	0.896	0.950
Received oral polio vaccination (non-birth dose)	0.776	0.022	670	677	1.324	0.028	0.733	0.819
Received pneumococcal vaccination (3 doses)	0.619	0.027	670	677	1.433	0.044	0.565	0.673
Received rotavirus vaccination (2 doses)	0.701	0.024	670	677	1.362	0.035	0.653	0.750
Received measles vaccination	0.861	0.017	670	677	1.246	0.019	0.828	0.895
Received all basic vaccinations	0.612	0.025	670	677	1.315	0.041	0.562	0.662
Received all age appropriate vaccinations (12-23 months)	0.526	0.027	670	677	1.359	0.050	0.473	0.579
Received DTaP-IPV-Hib vaccination 4 (children 24-35)	0.481	0.027	676	660	1.355	0.055	0.428	0.534
Received measles 2 vaccination (children 24-35)	0.592	0.026	676	660	1.331	0.043	0.541	0.644
Received all age appropriate vaccinations (24-35 months)	0.418	0.027	676	660	1.371	0.063	0.365	0.471
Height-for-age (-2SD)	0.274	0.016	1468	1404	1.280	0.059	0.242	0.307
Weight-for-height (-2SD)	0.025	0.005	1449	1384	1.154	0.197	0.015	0.034
Weight-for-height (+2SD)	0.133	0.011	1449	1384	1.160	0.082	0.111	0.155
Weight-for-age (-2SD)	0.059	0.009	1479	1416	1.393	0.147	0.042	0.076
Body Mass Index (BMI) <18.5	0.026	0.003	4844	4642	1.075	0.096	0.021	0.031
Body Mass Index (BMI) ≥25	0.675	0.010	4844	4642	1.391	0.014	0.656	0.695
Body Mass Index (BMI) ≥35	0.204	0.009	4844	4642	1.501	0.044	0.186	0.221
Waist ≥88 cm	0.453	0.011	4852	4664	1.522	0.024	0.431	0.475
Waist for height ratio ≥0.5	0.669	0.010	4846	4660	1.484	0.015	0.649	0.689
Prevalence of anaemia (children 6-59 months)	0.613	0.021	1137	1094	1.365	0.035	0.570	0.656
Prevalence of anaemia (women 15+)	0.306	0.011	4431	4244	1.513	0.035	0.285	0.328
Had 2+ sexual partners in past 12 months	0.045	0.003	8514	8514	1.229	0.061	0.040	0.051
Condom use at last sex	0.576	0.032	394	387	1.279	0.055	0.513	0.640
Abstinence among never-in-union youth (never had sex)	0.374	0.012	2621	2508	1.300	0.033	0.349	0.398
Had an HIV test and received results in past 12 months	0.585	0.008	8514	8514	1.469	0.013	0.570	0.601
Cervical cancer screening	0.522	0.015	2880	2918	1.568	0.028	0.493	0.551
Asthma symptoms	0.033	0.003	6126	6126	1.418	0.098	0.027	0.040
COPD symptoms	0.019	0.002	6126	6126	1.305	0.119	0.015	0.024
Hypertension (>140/90 or taking hypertensive medication)	0.455	0.011	5003	4774	1.530	0.024	0.433	0.476
Current smoking (daily or occassional)	0.078	0.006	6126	6126	1.655	0.073	0.067	0.090
Drank alcohol in past 12 months	0.184	0.007	6126	6126	1.459	0.039	0.170	0.199
Risky alcohol intake (>5 or more drinks)	0.048	0.004	6126	6126	1.412	0.080	0.041	0.056

(Continued…)

Table B.2—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
			WOMEN					
Show signs of problem drinking by the CAGE test	0.027	0.002	6126	6126	1.176	0.089	0.023	0.032
Codeine-containing medication misuse	0.023	0.003	6126	6126	1.723	0.144	0.016	0.030
Physical, sexual, or emotional violence by a partner in the previous 12 months	0.130	0.007	5925	5865	1.683	0.057	0.115	0.145
Physical violence by a current or former partner in the previous 12 months	0.077	0.005	5925	5865	1.554	0.070	0.067	0.088
Sexual violence by a current or former partner in the previous 12 months	0.023	0.003	5925	5865	1.479	0.125	0.017	0.029
Emotional violence by a current or former partner in the previous 12 months	0.091	0.005	5925	5865	1.436	0.059	0.080	0.102
Mobile phone ownership	0.912	0.005	8514	8514	1.530	0.005	0.903	0.921
Bank account ownership	0.539	0.010	8514	8514	1.872	0.019	0.519	0.559
Internet use in past 12 months	0.474	0.011	8514	8514	2.035	0.023	0.452	0.496
Total fertility rate (last 3 years)	2.643	0.067	24188	24284	1.227	0.025	2.509	2.777
Neonatal mortality (last 0-4 years)	21.029	3.808	3552	3577	1.443	0.181	13.412	28.645
Post-neonatal mortality (last 0-4 years)	14.443	2.538	3542	3580	1.284	0.176	9.366	19.520
Infant mortality (last 0-4 years)	35.472	4.506	3558	3584	1.381	0.127	26.459	44.484
Child mortality (last 0-4 years)	6.827	1.421	3572	3587	1.087	0.208	3.986	9.669
Under-five mortality (last 0-4 years)	42.057	4.645	3571	3596	1.313	0.110	32.766	51.347
HIV prevalence among women 15-49	0.273	0.013	2726	2485	1.488	0.047	0.248	0.299
HIV prevalence among pregnant women 15-49	0.280	0.069	100	97	1.526	0.248	0.141	0.419
HIV prevalence among young women 15-24	0.116	0.015	935	832	1.407	0.127	0.087	0.146
HIV prevalence among women 15+	0.233	0.010	4067	3600	1.515	0.043	0.212	0.253
			MEN					
Urban residence	0.688	0.013	3179	3202	1.599	0.019	0.662	0.714
Literacy	0.949	0.006	3179	3202	1.469	0.006	0.938	0.961
No education	0.019	0.003	3179	3202	1.276	0.161	0.013	0.026
Secondary or higher education	0.860	0.008	3179	3202	1.378	0.010	0.843	0.877
Never-in-union (never married or lived with a partner)	0.647	0.013	3179	3202	1.591	0.021	0.620	0.674
In-union (married or living with a partner)	0.309	0.013	3179	3202	1.533	0.041	0.283	0.334
Had first sexual intercourse before age 18	0.579	0.015	2474	2555	1.557	0.027	0.548	0.610
Want no more children	0.452	0.024	890	988	1.456	0.054	0.404	0.501
Want to delay birth at least 2 years	0.106	0.014	890	988	1.390	0.135	0.078	0.135
Ideal number of children	3.165	0.053	3145	3162	1.527	0.017	3.059	3.270
Body Mass Index (BMI) <18.5	0.095	0.007	3275	3105	1.244	0.069	0.082	0.108
Body Mass Index (BMI) ≥25	0.313	0.013	3275	3105	1.555	0.041	0.288	0.339
Body Mass Index (BMI) ≥35	0.031	0.005	3275	3105	1.522	0.153	0.022	0.040
Waist ≥102 cm	0.098	0.008	3224	3076	1.547	0.083	0.082	0.115
Waist for height ratio ≥0.5	0.351	0.013	3219	3073	1.538	0.037	0.325	0.377
Current smoking (daily or occassional)	0.373	0.011	4210	4210	1.414	0.028	0.352	0.394
Drank alcohol in past 12 months	0.538	0.012	4210	4210	1.556	0.022	0.514	0.562
Risky alcohol intake (>5 or more drinks)	0.275	0.011	4210	4210	1.599	0.040	0.253	0.297
Show signs of problem drinking by the CAGE test	0.159	0.009	4210	4210	1.581	0.056	0.142	0.177
Codeine-containing medication misuse	0.015	0.003	4210	4210	1.392	0.175	0.010	0.020
Prevalence of anaemia	0.168	0.010	2769	2606	1.297	0.057	0.149	0.187
Had 2+ sexual partners in past 12 months	0.170	0.010	3179	3202	1.466	0.058	0.150	0.189
Condom use at last sex	0.653	0.027	535	544	1.310	0.041	0.599	0.707
Abstinence among never-in-union youth (never had sex)	0.307	0.019	1268	1191	1.432	0.060	0.270	0.344
Had paid sex in past 12 months	0.029	0.004	3179	3202	1.303	0.134	0.021	0.037
Had HIV test and received results in past 12 months	0.446	0.014	3179	3202	1.610	0.032	0.417	0.474
Circumcised	0.570	0.015	3179	3202	1.722	0.027	0.539	0.600
Asthma symptoms	0.035	0.004	4210	4210	1.257	0.102	0.028	0.042
COPD symptoms	0.017	0.003	4210	4210	1.263	0.149	0.012	0.022
Hypertension (>140/90 or taking hypertensive medication)	0.437	0.013	3253	3082	1.461	0.029	0.412	0.463
Mobile phone ownership	0.885	0.008	3179	3202	1.497	0.010	0.868	0.902
Bank account ownership	0.570	0.013	3179	3202	1.529	0.024	0.543	0.596
Internet use in past 12 months	0.520	0.015	3179	3202	1.692	0.029	0.490	0.550
HIV prevalence among men 15-49	0.144	0.014	1863	2199	1.777	0.101	0.115	0.173
HIV prevalence among young men 15-24	0.034	0.010	852	924	1.608	0.292	0.014	0.055
HIV prevalence among men 15+	0.133	0.011	2517	2984	1.669	0.085	0.110	0.155
			WOMEN and MEN					
HIV prevalence among respondents 15-49	0.212	0.010	4589	4685	1.685	0.048	0.192	0.233
HIV prevalence among respondents 15-24	0.073	0.009	1787	1755	1.435	0.121	0.055	0.091
HIV prevalence among respondents 15+	0.187	0.008	6584	6584	1.709	0.044	0.171	0.204

Table B.3 Sampling errors: Urban sample, South Africa DHS 2017

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
POPULATION								
Population using safely managed drinking water services	0.985	0.004	21206	23656	2.701	0.004	0.977	0.994
Population using safely managed sanitation services	0.778	0.016	21206	23656	2.811	0.020	0.747	0.810
Population with access to electricity	0.936	0.013	21206	23656	3.970	0.014	0.910	0.963
Population with primary reliance on clean fuels	0.913	0.013	21206	23656	3.025	0.014	0.887	0.939
WOMEN								
Urban residence	1	0	4805	5731	na	0	1	1
Literacy	0.972	0.004	4805	5731	1.816	0.004	0.963	0.981
No education	0.016	0.002	4805	5731	1.371	0.155	0.011	0.021
Secondary or higher education	0.912	0.007	4805	5731	1.826	0.008	0.897	0.927
Never-in-union (never married or lived with a partner)	0.553	0.011	4805	5731	1.510	0.020	0.531	0.574
In-union (married or living with a partner)	0.394	0.011	4805	5731	1.545	0.028	0.372	0.416
In a union before age 15 (women 20-24)	0.012	0.006	801	951	1.483	0.478	0.001	0.023
In a union before age 18 (women 20-24)	0.032	0.009	801	951	1.505	0.292	0.013	0.051
In a union before age 18 (women 20-49)	0.058	0.005	4036	4856	1.389	0.088	0.048	0.068
Had sexual intercourse before age 18	0.476	0.012	4036	4856	1.525	0.025	0.452	0.500
Currently pregnant	0.041	0.004	4805	5731	1.471	0.103	0.032	0.049
Currently using any method	0.596	0.013	2464	3137	1.319	0.022	0.570	0.622
Currently using a modern method	0.591	0.013	2464	3137	1.307	0.022	0.566	0.617
Currently using pill	0.078	0.008	2464	3137	1.407	0.098	0.063	0.093
Currently using condoms	0.155	0.012	2464	3137	1.577	0.074	0.132	0.178
Currently using injectables - 3 months	0.161	0.009	2464	3137	1.264	0.058	0.142	0.179
Currently using injectables - 2 months	0.067	0.007	2464	3137	1.337	0.101	0.053	0.080
Currently using implants	0.041	0.005	2464	3137	1.263	0.123	0.031	0.051
Currently using female sterilisation	0.068	0.007	2464	3137	1.408	0.105	0.053	0.082
Currently using withdrawal	0.004	0.002	2464	3137	1.363	0.426	0.001	0.008
Currently using IUD	0.014	0.003	2464	3137	1.429	0.245	0.007	0.020
Using public sector source	0.766	0.016	2270	2761	1.777	0.021	0.735	0.798
Demand satisfied by modern methods	0.800	0.011	2826	3450	1.446	0.014	0.779	0.822
Want no more children	0.578	0.016	1774	2259	1.360	0.028	0.546	0.610
Want to delay next birth at least 2 years	0.097	0.009	1774	2259	1.268	0.092	0.079	0.115
Ideal number of children	2.480	0.032	4791	5720	1.590	0.013	2.416	2.543
Mothers protected against tetanus for last birth	0.346	0.020	1607	1942	1.667	0.057	0.306	0.385
Births with skilled attendant at delivery	0.979	0.005	1863	2281	1.282	0.005	0.970	0.988
Had diarrhoea in the last 2 weeks	0.090	0.009	1797	2204	1.352	0.100	0.072	0.109
Treated with ORS	0.534	0.051	156	199	1.286	0.095	0.433	0.636
Treated with clinic-recommended homemade fluid (RHF)	0.730	0.042	156	199	1.228	0.057	0.646	0.813
Sought treatment for diarrhoea	0.655	0.049	156	199	1.287	0.074	0.557	0.752
Ever had vaccination card	0.991	0.005	344	416	0.944	0.005	0.982	1.001
Vaccination card seen	0.639	0.036	344	416	1.369	0.056	0.568	0.711
Received BCG vaccination	0.927	0.018	344	416	1.285	0.019	0.892	0.963
Received DTaP-IPV-Hib vaccination (3 doses)	0.627	0.034	344	416	1.308	0.055	0.558	0.696
Received HepB vaccination (3 doses)	0.629	0.033	344	416	1.243	0.052	0.563	0.694
Received birth dose polio 0 vaccination	0.933	0.019	344	416	1.388	0.020	0.896	0.971
Received oral polio vaccination (non-birth dose)	0.769	0.029	344	416	1.264	0.038	0.711	0.827
Received pneumococcal vaccination (3 doses)	0.605	0.035	344	416	1.335	0.059	0.534	0.676
Received rotavirus vaccination (2 doses)	0.689	0.034	344	416	1.363	0.050	0.620	0.757
Received measles vaccination	0.861	0.024	344	416	1.251	0.027	0.814	0.909
Received all basic vaccinations	0.590	0.034	344	416	1.272	0.058	0.522	0.658
Received all age appropriate vaccinations (12-23 months)	0.515	0.035	344	416	1.296	0.069	0.445	0.586
Received DTaP-IPV-Hib vaccination 4 (children 24-35)	0.455	0.038	345	414	1.420	0.084	0.378	0.532
Received measles 2 vaccination (children 24-35)	0.577	0.036	345	414	1.358	0.063	0.505	0.650
Received all age appropriate vaccinations (24-35 months)	0.393	0.037	345	414	1.411	0.095	0.319	0.468
Height-for-age (-2SD)	0.257	0.027	642	713	1.480	0.105	0.203	0.312
Weight-for-height (-2SD)	0.024	0.007	626	698	1.100	0.286	0.010	0.037
Weight-for-height (+2SD)	0.132	0.017	626	698	1.181	0.128	0.098	0.166
Weight-for-age (-2SD)	0.058	0.012	652	721	1.254	0.200	0.035	0.081
Body Mass Index (BMI) <18.5	0.022	0.003	2536	2869	1.093	0.149	0.015	0.028
Body Mass Index (BMI) ≥25	0.684	0.013	2536	2869	1.359	0.019	0.658	0.710
Body Mass Index (BMI) ≥35	0.224	0.013	2536	2869	1.482	0.056	0.199	0.249
Waist ≥88 cm	0.453	0.015	2525	2873	1.535	0.034	0.422	0.483
Waist for height ratio ≥0.5	0.667	0.014	2524	2872	1.492	0.021	0.639	0.695
Prevalence of anaemia (children 6-59 months)	0.622	0.036	464	539	1.534	0.059	0.549	0.695
Prevalence of anaemia (women 15+)	0.298	0.014	2240	2584	1.421	0.047	0.270	0.325
Had 2+ sexual partners in past 12 months	0.046	0.004	4805	5731	1.174	0.077	0.039	0.053
Condom use at last sex	0.612	0.041	229	263	1.283	0.068	0.529	0.694
Abstinence among never-in-union youth (never had sex)	0.384	0.017	1393	1579	1.293	0.044	0.350	0.418
Had an HIV test and received results in past 12 months	0.571	0.010	4805	5731	1.468	0.018	0.550	0.592
Cervical cancer screening	0.577	0.020	1665	1973	1.655	0.035	0.537	0.617
Asthma symptoms	0.036	0.005	3361	3996	1.407	0.126	0.027	0.045
COPD symptoms	0.021	0.003	3361	3996	1.313	0.155	0.014	0.027
Hypertension (>140/90 or taking hypertensive medication)	0.465	0.015	2601	2938	1.513	0.032	0.435	0.494
Current smoking (daily or occassional)	0.108	0.008	3361	3996	1.581	0.078	0.091	0.125
Drank alcohol in past 12 months	0.224	0.010	3361	3996	1.432	0.046	0.203	0.244

(Continued…)

Table B.3—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Risky alcohol intake (>5 or more drinks)	0.060	0.005	3361	3996	1.327	0.090	0.049	0.071
Show signs of problem drinking by the CAGE test	0.032	0.003	3361	3996	1.138	0.109	0.025	0.038
Codeine-containing medication misuse	0.029	0.005	3361	3996	1.671	0.167	0.019	0.039
Physical, sexual, or emotional violence by a partner in the previous 12 months	0.129	0.010	3302	3829	1.648	0.075	0.109	0.148
Physical violence by a current or former partner in the previous 12 months	0.080	0.007	3302	3829	1.585	0.094	0.065	0.095
Sexual violence by a current or former partner in the previous 12 months	0.022	0.004	3302	3829	1.383	0.161	0.015	0.029
Emotional violence by a current or former partner in the previous 12 months	0.089	0.007	3302	3829	1.409	0.078	0.075	0.103
Mobile phone ownership	0.923	0.006	4805	5731	1.586	0.007	0.911	0.935
Bank account ownership	0.602	0.014	4805	5731	1.932	0.023	0.575	0.629
Internet use in past 12 months	0.560	0.015	4805	5731	2.064	0.026	0.531	0.590
Total fertility rate (last 3 years)	2.432	0.084	13745	16446	1.213	0.034	2.264	2.600
Neonatal mortality (last 0-4 years)	18.780	5.397	1871	2289	1.528	0.287	7.986	29.574
Post-neonatal mortality (last 0-4 years)	14.941	3.638	1865	2295	1.323	0.243	7.665	22.216
Infant mortality (last 0-4 years)	33.720	6.460	1873	2294	1.464	0.192	20.801	46.640
Child mortality (last 0-4 years)	4.520	1.475	1879	2301	1.223	0.326	1.571	7.469
Under-five mortality (last 0-4 years)	38.088	6.462	1878	2301	1.404	0.170	25.164	51.011
HIV prevalence among women 15-49	0.274	0.018	1390	1667	1.496	0.065	0.238	0.309
HIV prevalence among young women 15-24	0.116	0.021	449	530	1.406	0.183	0.074	0.159
HIV prevalence among women 15+	0.238	0.014	2029	2353	1.516	0.060	0.209	0.266
MEN								
Urban residence	1	0	1768	2203	na	0	1	1
Literacy	0.964	0.007	1768	2203	1.544	0.007	0.951	0.978
No education	0.017	0.004	1768	2203	1.327	0.244	0.008	0.025
Secondary or higher education	0.894	0.010	1768	2203	1.403	0.012	0.873	0.914
Never-in-union (never married or lived with a partner)	0.603	0.018	1768	2203	1.561	0.030	0.567	0.639
In-union (married or living with a partner)	0.347	0.017	1768	2203	1.481	0.048	0.314	0.381
Had first sexual intercourse before age 18	0.581	0.020	1464	1854	1.566	0.035	0.540	0.621
Want no more children	0.454	0.029	564	765	1.388	0.064	0.395	0.512
Want to delay birth at least 2 years	0.094	0.017	564	765	1.395	0.183	0.060	0.128
Ideal number of children	3.084	0.071	1742	2168	1.559	0.023	2.942	3.226
Body Mass Index (BMI) <18.5	0.091	0.009	1742	2025	1.257	0.098	0.073	0.109
Body Mass Index (BMI) ≥25	0.342	0.018	1742	2025	1.567	0.054	0.305	0.378
Body Mass Index (BMI) ≥35	0.036	0.007	1742	2025	1.437	0.184	0.023	0.049
Waist ≥102 cm	0.117	0.012	1718	2012	1.531	0.102	0.093	0.140
Waist for height ratio ≥0.5	0.369	0.018	1716	2011	1.576	0.050	0.332	0.406
Current smoking (daily or occassional)	0.395	0.014	2324	2874	1.373	0.035	0.367	0.423
Drank alcohol in past 12 months	0.541	0.015	2324	2874	1.421	0.027	0.511	0.570
Risky alcohol intake (>5 or more drinks)	0.290	0.015	2324	2874	1.569	0.051	0.261	0.320
Show signs of problem drinking by the CAGE test	0.160	0.012	2324	2874	1.562	0.074	0.136	0.184
Codeine-containing medication misuse	0.016	0.004	2324	2874	1.363	0.225	0.009	0.023
Prevalence of anaemia	0.162	0.013	1426	1661	1.318	0.082	0.135	0.188
Had 2+ sexual partners in past 12 months	0.160	0.013	1768	2203	1.443	0.079	0.135	0.185
Condom use at last sex	0.670	0.036	268	353	1.266	0.054	0.597	0.743
Abstinence among never-in-union youth (never had sex)	0.282	0.028	594	694	1.504	0.099	0.226	0.338
Had paid sex in past 12 months	0.033	0.005	1768	2203	1.251	0.162	0.022	0.043
Had HIV test and received results in past 12 months	0.466	0.019	1768	2203	1.614	0.041	0.427	0.504
Circumcised	0.571	0.020	1768	2203	1.688	0.035	0.531	0.611
Asthma symptoms	0.026	0.004	2324	2874	1.196	0.151	0.018	0.034
COPD symptoms	0.012	0.003	2324	2874	1.147	0.214	0.007	0.017
Hypertension (>140/90 or taking hypertensive medication)	0.454	0.017	1728	2002	1.456	0.038	0.419	0.489
Mobile phone ownership	0.903	0.011	1768	2203	1.563	0.012	0.882	0.925
Bank account ownership	0.650	0.018	1768	2203	1.614	0.028	0.613	0.686
Internet use in past 12 months	0.580	0.020	1768	2203	1.700	0.034	0.541	0.620
HIV prevalence among men 15-49	0.154	0.020	953	1508	1.728	0.132	0.113	0.194
HIV prevalence among young men 15-24	0.047	0.017	358	530	1.511	0.362	0.013	0.080
HIV prevalence among men 15+	0.139	0.016	1276	2042	1.619	0.113	0.108	0.171
WOMEN and MEN								
HIV prevalence among respondents 15-49	0.217	0.014	2343	3176	1.681	0.066	0.188	0.245
HIV prevalence among respondents 15-24	0.081	0.014	807	1060	1.419	0.168	0.054	0.109
HIV prevalence among respondents 15+	0.192	0.012	3305	4395	1.710	0.061	0.168	0.215

na = Not applicable

Table B.4 Sampling errors: Non-urban sample, South Africa DHS 2017

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
POPULATION								
Population using safely managed drinking water services	0.763	0.021	16719	13549	2.628	0.027	0.721	0.805
Population using safely managed sanitation services	0.866	0.010	16719	13549	1.760	0.011	0.846	0.885
Population with access to electricity	0.859	0.021	16719	13549	3.257	0.025	0.816	0.901
Population with primary reliance on clean fuels	0.561	0.023	16719	13549	2.534	0.041	0.515	0.608
WOMEN								
Urban residence	0	0	3709	2783	na	na	0	0
Literacy	0.945	0.005	3709	2783	1.248	0.005	0.936	0.954
No education	0.028	0.004	3709	2783	1.434	0.140	0.020	0.035
Secondary or higher education	0.842	0.009	3709	2783	1.483	0.011	0.824	0.860
Never-in-union (never married or lived with a partner)	0.656	0.013	3709	2783	1.642	0.020	0.630	0.681
In-union (married or living with a partner)	0.284	0.012	3709	2783	1.614	0.042	0.260	0.308
In a union before age 15 (women 20-24)	0.004	0.003	607	464	0.948	0.582	0	0.009
In a union before age 18 (women 20-24)	0.043	0.011	607	464	1.323	0.255	0.021	0.064
In a union before age 18 (women 20-49)	0.079	0.007	2973	2231	1.320	0.083	0.066	0.092
Had sexual intercourse before age 18	0.514	0.014	2973	2231	1.476	0.026	0.487	0.541
Currently pregnant	0.036	0.004	3709	2783	1.183	0.101	0.028	0.043
Currently using any method	0.599	0.013	1652	1227	1.086	0.022	0.572	0.625
Currently using a modern method	0.596	0.013	1652	1227	1.080	0.022	0.570	0.622
Currently using pill	0.060	0.009	1652	1227	1.599	0.156	0.041	0.078
Currently using condoms	0.156	0.011	1652	1227	1.220	0.070	0.134	0.178
Currently using injectables - 3 months	0.214	0.013	1652	1227	1.267	0.060	0.188	0.239
Currently using injectables - 2 months	0.087	0.009	1652	1227	1.246	0.099	0.070	0.104
Currently using implants	0.040	0.006	1652	1227	1.192	0.144	0.028	0.051
Currently using female sterilisation	0.030	0.005	1652	1227	1.181	0.165	0.020	0.040
Currently using withdrawal	0.002	0.001	1652	1227	0.830	0.510	0	0.003
Currently using IUD	0.006	0.002	1652	1227	1.216	0.381	0.001	0.011
Using public sector source	0.880	0.011	1734	1315	1.399	0.012	0.858	0.902
Demand satisfied by modern methods	0.790	0.011	2207	1665	1.278	0.014	0.767	0.812
Want no more children	0.586	0.018	1067	790	1.160	0.030	0.551	0.621
Want to delay next birth at least 2 years	0.079	0.010	1067	790	1.265	0.132	0.058	0.100
Ideal number of children	2.836	0.035	3694	2772	1.453	0.012	2.766	2.907
Mothers protected against tetanus for last birth	0.362	0.015	1429	1094	1.178	0.041	0.333	0.392
Births with skilled attendant at delivery	0.946	0.006	1685	1291	1.118	0.007	0.933	0.959
Had diarrhoea in the last 2 weeks	0.127	0.011	1616	1240	1.336	0.086	0.105	0.149
Treated with ORS	0.489	0.042	194	157	1.194	0.085	0.405	0.572
Treated with clinic-recommended homemade fluid (RHF)	0.720	0.044	194	157	1.393	0.062	0.631	0.809
Sought treatment for diarrhoea	0.600	0.043	194	157	1.249	0.072	0.514	0.686
Ever had vaccination card	0.963	0.013	326	261	1.176	0.013	0.938	0.988
Vaccination card seen	0.702	0.035	326	261	1.420	0.051	0.631	0.773
Received BCG vaccination	0.921	0.015	326	261	1.009	0.016	0.892	0.950
Received DTaP-IPV-Hib vaccination (3 doses)	0.684	0.036	326	261	1.424	0.053	0.612	0.756
Received HepB vaccination (3 doses)	0.684	0.035	326	261	1.371	0.051	0.614	0.754
Received birth dose polio 0 vaccination	0.906	0.019	326	261	1.220	0.021	0.868	0.945
Received oral polio vaccination (non-birth dose)	0.787	0.032	326	261	1.419	0.040	0.724	0.851
Received pneumococcal vaccination (3 doses)	0.642	0.042	326	261	1.622	0.066	0.557	0.726
Received rotavirus vaccination (2 doses)	0.721	0.032	326	261	1.297	0.044	0.658	0.785
Received measles vaccination	0.861	0.022	326	261	1.170	0.025	0.818	0.905
Received all basic vaccinations	0.646	0.035	326	261	1.360	0.055	0.575	0.717
Received all age appropriate vaccinations (12-23 months)	0.544	0.040	326	261	1.469	0.073	0.464	0.624
Received DTaP-IPV-Hib vaccination 4 (children 24-35)	0.525	0.029	331	246	1.055	0.056	0.466	0.584
Received measles 2 vaccination (children 24-35)	0.617	0.031	331	246	1.150	0.050	0.555	0.679
Received all age appropriate vaccinations (24-35 months)	0.460	0.033	331	246	1.202	0.072	0.394	0.527
Height-for-age (-2SD)	0.292	0.018	826	691	1.068	0.061	0.256	0.327
Weight-for-height (-2SD)	0.025	0.007	823	686	1.272	0.271	0.012	0.039
Weight-for-height (+2SD)	0.134	0.014	823	686	1.176	0.104	0.106	0.161
Weight-for-age (-2SD)	0.060	0.013	827	695	1.622	0.214	0.034	0.086
Body Mass Index (BMI) <18.5	0.033	0.004	2308	1773	1.076	0.121	0.025	0.041
Body Mass Index (BMI) ≥25	0.661	0.014	2308	1773	1.426	0.021	0.633	0.689
Body Mass Index (BMI) ≥35	0.170	0.011	2308	1773	1.358	0.063	0.149	0.192
Waist ≥88 cm	0.454	0.014	2327	1792	1.391	0.032	0.425	0.482
Waist for height ratio ≥0.5	0.674	0.013	2322	1788	1.360	0.020	0.648	0.700
Prevalence of anaemia (children 6-59 months)	0.604	0.023	673	555	1.161	0.037	0.559	0.649
Prevalence of anaemia (women 15+)	0.320	0.016	2191	1660	1.639	0.052	0.287	0.353
Had 2+ sexual partners in past 12 months	0.044	0.004	3709	2783	1.283	0.098	0.036	0.053
Condom use at last sex	0.501	0.046	165	123	1.167	0.091	0.410	0.592
Abstinence among never-in-union youth (never had sex)	0.356	0.017	1228	929	1.242	0.048	0.322	0.390
Had an HIV test and received results in past 12 months	0.615	0.010	3709	2783	1.307	0.017	0.594	0.636
Cervical cancer screening	0.408	0.018	1215	945	1.249	0.043	0.373	0.443
Asthma symptoms	0.028	0.004	2765	2130	1.244	0.139	0.020	0.036
COPD symptoms	0.016	0.003	2765	2130	1.063	0.156	0.011	0.022
Hypertension (>140/90 or taking hypertensive medication)	0.439	0.015	2402	1837	1.459	0.034	0.409	0.468
Current smoking (daily or occassional)	0.023	0.003	2765	2130	1.071	0.133	0.017	0.029
Drank alcohol in past 12 months	0.110	0.007	2765	2130	1.253	0.068	0.095	0.125

(Continued…)

Table B.4—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Risky alcohol intake (>5 or more drinks)	0.026	0.005	2765	2130	1.494	0.173	0.017	0.035
Show signs of problem drinking by the CAGE test	0.020	0.003	2765	2130	1.107	0.148	0.014	0.026
Codeine-containing medication misuse	0.012	0.002	2765	2130	1.176	0.206	0.007	0.017
Physical, sexual, or emotional violence by a partner in the previous 12 months	0.133	0.011	2623	2035	1.663	0.083	0.111	0.155
Physical violence by a current or former partner in the previous 12 months	0.073	0.007	2623	2035	1.298	0.090	0.060	0.086
Sexual violence by a current or former partner in the previous 12 months	0.025	0.005	2623	2035	1.622	0.196	0.015	0.035
Emotional violence by a current or former partner in the previous 12 months	0.095	0.008	2623	2035	1.415	0.085	0.079	0.111
Mobile phone ownership	0.890	0.007	3709	2783	1.374	0.008	0.876	0.904
Bank account ownership	0.410	0.013	3709	2783	1.625	0.032	0.383	0.436
Internet use in past 12 months	0.298	0.012	3709	2783	1.608	0.041	0.273	0.322
Total fertility rate (last 3 years)	3.098	0.101	10443	7838	1.123	0.033	2.896	3.300
Neonatal mortality (last 0-4 years)	25.034	4.531	1681	1288	1.126	0.181	15.973	34.096
Post-neonatal mortality (last 0-4 years)	13.571	2.854	1677	1285	1.025	0.210	7.864	19.279
Infant mortality (last 0-4 years)	38.606	5.097	1685	1290	1.045	0.132	28.412	48.799
Child mortality (last 0-4 years)	11.123	2.988	1693	1286	0.982	0.269	5.147	17.100
Under-five mortality (last 0-4 years)	49.300	5.989	1693	1296	1.040	0.121	37.321	61.278
HIV prevalence among women 15-49	0.272	0.013	1336	818	1.033	0.046	0.247	0.297
HIV prevalence among young women 15-24	0.116	0.016	486	301	1.094	0.137	0.084	0.148
HIV prevalence among women 15+	0.223	0.010	2038	1247	1.101	0.046	0.203	0.243
MEN								
Urban residence	0	0	1411	999	na	na	0	0
Literacy	0.916	0.011	1411	999	1.435	0.012	0.895	0.938
No education	0.026	0.005	1411	999	1.104	0.180	0.017	0.035
Secondary or higher education	0.786	0.015	1411	999	1.388	0.019	0.756	0.817
Never-in-union (never married or lived with a partner)	0.746	0.018	1411	999	1.561	0.024	0.709	0.782
In-union (married or living with a partner)	0.223	0.018	1411	999	1.638	0.081	0.187	0.259
Had first sexual intercourse before age 18	0.575	0.018	1010	701	1.147	0.031	0.540	0.611
Want no more children	0.447	0.040	326	223	1.449	0.090	0.367	0.527
Want to delay birth at least 2 years	0.149	0.026	326	223	1.296	0.172	0.098	0.200
Ideal number of children	3.340	0.062	1403	994	1.172	0.019	3.216	3.465
Body Mass Index (BMI) <18.5	0.101	0.009	1533	1080	1.106	0.084	0.084	0.118
Body Mass Index (BMI) ≥25	0.261	0.015	1533	1080	1.374	0.059	0.230	0.292
Body Mass Index (BMI) ≥35	0.022	0.006	1533	1080	1.495	0.257	0.011	0.033
Waist ≥102 cm	0.064	0.008	1506	1064	1.209	0.120	0.048	0.079
Waist for height ratio ≥0.5	0.316	0.015	1503	1062	1.269	0.048	0.286	0.347
Current smoking (daily or occassional)	0.326	0.014	1886	1336	1.313	0.043	0.298	0.355
Drank alcohol in past 12 months	0.532	0.021	1886	1336	1.790	0.039	0.491	0.573
Risky alcohol intake (>5 or more drinks)	0.242	0.013	1886	1336	1.313	0.054	0.216	0.268
Show signs of problem drinking by the CAGE test	0.158	0.012	1886	1336	1.391	0.074	0.135	0.181
Codeine-containing medication misuse	0.013	0.003	1886	1336	1.203	0.240	0.007	0.019
Prevalence of anaemia	0.179	0.012	1343	945	1.150	0.067	0.155	0.203
Had 2+ sexual partners in past 12 months	0.191	0.014	1411	999	1.339	0.073	0.163	0.219
Condom use at last sex	0.621	0.036	267	190	1.200	0.058	0.549	0.692
Abstinence among never-in-union youth (never had sex)	0.342	0.021	674	497	1.139	0.061	0.300	0.384
Had paid sex in past 12 months	0.020	0.004	1411	999	1.073	0.199	0.012	0.028
Had HIV test and received results in past 12 months	0.402	0.017	1411	999	1.302	0.042	0.368	0.436
Circumcised	0.567	0.021	1411	999	1.558	0.036	0.525	0.608
Asthma symptoms	0.053	0.007	1886	1336	1.403	0.137	0.038	0.067
COPD symptoms	0.027	0.005	1886	1336	1.456	0.202	0.016	0.038
Hypertension (>140/90 or taking hypertensive medication)	0.405	0.016	1525	1080	1.302	0.040	0.372	0.438
Mobile phone ownership	0.846	0.013	1411	999	1.298	0.015	0.821	0.871
Bank account ownership	0.393	0.017	1411	999	1.273	0.042	0.360	0.426
Internet use in past 12 months	0.387	0.024	1411	999	1.849	0.062	0.339	0.435
HIV prevalence among men 15-49	0.123	0.012	910	691	1.149	0.102	0.098	0.148
HIV prevalence among young men 15-24	0.018	0.006	494	394	1.044	0.347	0.006	0.031
HIV prevalence among men 15+	0.119	0.011	1241	943	1.176	0.091	0.098	0.141
WOMEN and MEN								
HIV prevalence among respondents 15-49	0.204	0.009	2246	1509	1.091	0.046	0.185	0.222
HIV prevalence among respondents 15-24	0.061	0.008	980	696	1.070	0.135	0.044	0.077
HIV prevalence among respondents 15+	0.178	0.007	3279	2189	1.102	0.041	0.163	0.193

na = Not applicable

Table B.5 Sampling errors: Western Cape sample, South Africa DHS 2017

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
POPULATION								
Population using safely managed drinking water services	0.993	0.003	3294	4071	1.146	0.003	0.987	1
Population using safely managed sanitation services	0.824	0.026	3294	4071	1.999	0.032	0.772	0.877
Population with access to electricity	0.991	0.004	3294	4071	1.141	0.004	0.984	0.999
Population with primary reliance on clean fuels	0.989	0.004	3294	4071	1.057	0.004	0.982	0.996
WOMEN								
Urban residence	0.978	0.006	656	995	1.125	0.007	0.965	0.991
Literacy	0.991	0.003	656	995	0.910	0.003	0.984	0.998
No education	0.015	0.005	656	995	1.072	0.341	0.005	0.025
Secondary or higher education	0.924	0.014	656	995	1.356	0.015	0.896	0.952
Never-in-union (never married or lived with a partner)	0.491	0.022	656	995	1.141	0.045	0.446	0.536
In-union (married or living with a partner)	0.456	0.022	656	995	1.142	0.049	0.412	0.501
In a union before age 15 (women 20-24)	0.009	0.009	91	136	0.906	0.978	0	0.028
In a union before age 18 (women 20-24)	0.046	0.022	91	136	0.999	0.479	0.002	0.090
In a union before age 18 (women 20-49)	0.041	0.009	550	835	1.103	0.229	0.022	0.059
Had sexual intercourse before age 18	0.389	0.026	550	835	1.270	0.068	0.336	0.441
Currently pregnant	0.033	0.008	656	995	1.095	0.232	0.018	0.048
Currently using any method	0.627	0.030	342	525	1.162	0.049	0.566	0.688
Currently using a modern method	0.624	0.030	342	525	1.153	0.048	0.564	0.685
Currently using pill	0.044	0.010	342	525	0.943	0.238	0.023	0.065
Currently using condoms	0.138	0.021	342	525	1.150	0.156	0.095	0.181
Currently using injectables - 3 months	0.154	0.023	342	525	1.173	0.149	0.108	0.200
Currently using injectables - 2 months	0.056	0.015	342	525	1.219	0.271	0.026	0.087
Currently using implants	0.070	0.014	342	525	0.998	0.198	0.042	0.097
Currently using female sterilisation	0.113	0.016	342	525	0.946	0.143	0.081	0.146
Currently using withdrawal	0.003	0.003	342	525	1.026	0.999	0	0.009
Currently using IUD	0.025	0.010	342	525	1.164	0.397	0.005	0.044
Using public sector source	0.780	0.037	321	499	1.575	0.047	0.707	0.853
Demand satisfied by modern methods	0.853	0.019	379	584	1.045	0.022	0.815	0.891
Want no more children	0.642	0.029	295	454	1.043	0.045	0.583	0.700
Want to delay next birth at least 2 years	0.118	0.019	295	454	1.001	0.159	0.081	0.156
Ideal number of children	2.322	0.069	656	995	1.314	0.030	2.184	2.460
Mothers protected against tetanus for last birth	0.061	0.018	182	276	1.006	0.292	0.025	0.096
Births with skilled attendant at delivery	0.992	0.006	206	313	0.929	0.006	0.980	1.003
Had diarrhoea in the last 2 weeks	0.054	0.016	202	306	1.032	0.301	0.021	0.086
Ever had vaccination card	1	0	36	54	na	0	1	1
Vaccination card seen	0.760	0.067	36	54	0.943	0.088	0.626	0.894
Received BCG vaccination	0.914	0.044	36	54	0.942	0.048	0.826	1.002
Received DTaP-IPV-Hib vaccination (3 doses)	0.700	0.077	36	54	1.012	0.110	0.545	0.854
Received HepB vaccination (3 doses)	0.643	0.081	36	54	1.019	0.126	0.480	0.805
Received birth dose polio 0 vaccination	0.881	0.065	36	54	1.210	0.074	0.750	1.011
Received oral polio vaccination (non-birth dose)	0.914	0.044	36	54	0.942	0.048	0.826	1.002
Received pneumococcal vaccination (3 doses)	0.604	0.076	36	54	0.937	0.126	0.451	0.756
Received rotavirus vaccination (2 doses)	0.666	0.082	36	54	1.048	0.124	0.501	0.830
Received measles vaccination	0.776	0.058	36	54	0.841	0.075	0.660	0.893
Received all basic vaccinations	0.677	0.079	36	54	1.018	0.117	0.518	0.835
Received all age appropriate vaccinations (12-23 months)	0.490	0.080	36	54	0.957	0.162	0.331	0.649
Received DTaP-IPV-Hib vaccination 4 (children 24-35)	0.544	0.087	37	57	1.078	0.161	0.369	0.718
Received measles 2 vaccination (children 24-35)	0.705	0.079	37	57	1.071	0.113	0.547	0.864
Received all age appropriate vaccinations (24-35 months)	0.435	0.095	37	57	1.184	0.219	0.244	0.626
Height-for-age (-2SD)	0.229	0.062	50	64	0.946	0.272	0.104	0.354
Weight-for-height (-2SD)	0.017	0.017	49	63	0.927	0.991	0	0.051
Weight-for-height (+2SD)	0.143	0.047	49	63	0.974	0.331	0.049	0.238
Weight-for-age (-2SD)	0.119	0.042	50	64	0.951	0.355	0.035	0.204
Body Mass Index (BMI) <18.5	0.023	0.008	284	415	0.901	0.351	0.007	0.039
Body Mass Index (BMI) ≥25	0.733	0.029	284	415	1.082	0.039	0.676	0.791
Body Mass Index (BMI) ≥35	0.263	0.025	284	415	0.936	0.094	0.213	0.312
Waist ≥88 cm	0.590	0.033	285	416	1.115	0.055	0.525	0.655
Waist for height ratio ≥0.5	0.771	0.026	285	416	1.045	0.034	0.719	0.823
Prevalence of anaemia (children 6-59 months)	0.613	0.069	42	53	0.937	0.112	0.476	0.750
Prevalence of anaemia (women 15+)	0.239	0.030	288	421	1.180	0.125	0.179	0.299
Had 2+ sexual partners in past 12 months	0.025	0.005	656	995	0.905	0.222	0.014	0.036
Had an HIV test and received results in past 12 months	0.620	0.018	656	995	0.963	0.029	0.584	0.657
Cervical cancer screening	0.828	0.029	246	359	1.203	0.035	0.770	0.886
Asthma symptoms	0.042	0.011	474	703	1.167	0.257	0.020	0.063
COPD symptoms	0.044	0.010	474	703	1.034	0.222	0.024	0.063
Hypertension (>140/90 or taking hypertensive medication)	0.516	0.035	297	433	1.195	0.067	0.447	0.586
Current smoking (daily or occassional)	0.264	0.029	474	703	1.453	0.112	0.205	0.323
Drank alcohol in past 12 months	0.273	0.023	474	703	1.113	0.084	0.227	0.318
Risky alcohol intake (>5 or more drinks)	0.090	0.014	474	703	1.077	0.157	0.062	0.118
Show signs of problem drinking by the CAGE test	0.048	0.010	474	703	1.022	0.210	0.028	0.068
Codeine-containing medication misuse	0.040	0.010	474	703	1.060	0.238	0.021	0.059
Physical, sexual, or emotional violence by a partner in the previous 12 months	0.136	0.019	475	671	1.221	0.142	0.097	0.174

(Continued…)

Table B.5—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
	WOMEN							
Physical violence by a current or former partner in the previous 12 months	0.086	0.017	475	671	1.294	0.194	0.052	0.119
Sexual violence by a current or former partner in the previous 12 months	0.007	0.004	475	671	0.903	0.480	0	0.015
Emotional violence by a current or former partner in the previous 12 months	0.107	0.016	475	671	1.121	0.149	0.075	0.139
Mobile phone ownership	0.879	0.020	656	995	1.576	0.023	0.839	0.919
Bank account ownership	0.659	0.024	656	995	1.283	0.036	0.612	0.707
Internet use in past 12 months	0.626	0.030	656	995	1.563	0.047	0.567	0.685
Total fertility rate (last 3 years)	2.088	0.191	1874	2848	1.088	0.091	1.706	2.469
Infant mortality (last 0-9 years)	38.956	18.716	432	649	1.349	0.480	1.524	76.387
Child mortality (last 0-9 years)	4.190	2.937	426	643	0.920	0.701	0	10.065
Under-five mortality (last 0-9 years)	42.983	18.570	432	649	1.314	0.432	5.842	80.124
HIV prevalence among women 15-49	0.182	0.038	150	249	1.192	0.207	0.107	0.258
HIV prevalence among young women 15-24	0.067	0.046	31	51	1.015	0.694	0	0.159
HIV prevalence among women 15+	0.131	0.028	249	413	1.299	0.212	0.076	0.187
	MEN							
Urban residence	0.946	0.022	186	328	1.306	0.023	0.903	0.990
Literacy	0.969	0.014	186	328	1.087	0.014	0.942	0.997
No education	0.006	0.006	186	328	1.020	0.996	0	0.017
Secondary or higher education	0.925	0.021	186	328	1.088	0.023	0.883	0.967
Never-in-union (never married or lived with a partner)	0.533	0.035	186	328	0.968	0.067	0.462	0.603
In-union (married or living with a partner)	0.415	0.034	186	328	0.937	0.082	0.348	0.483
Had first sexual intercourse before age 18	0.542	0.039	159	279	0.976	0.071	0.464	0.619
Want no more children	0.575	0.065	76	136	1.134	0.113	0.445	0.705
Want to delay birth at least 2 years	0.023	0.016	76	136	0.941	0.711	0	0.055
Ideal number of children	2.610	0.135	185	327	1.284	0.052	2.340	2.880
Body Mass Index (BMI) <18.5	0.070	0.031	152	261	1.501	0.443	0.008	0.132
Body Mass Index (BMI) ≥25	0.437	0.056	152	261	1.395	0.128	0.325	0.549
Body Mass Index (BMI) ≥35	0.047	0.021	152	261	1.238	0.452	0.005	0.089
Waist ≥102 cm	0.174	0.040	154	264	1.291	0.228	0.094	0.253
Waist for height ratio ≥0.5	0.485	0.056	154	264	1.379	0.115	0.373	0.597
Current smoking (daily or occassional)	0.432	0.035	280	476	1.177	0.081	0.362	0.502
Drank alcohol in past 12 months	0.491	0.042	280	476	1.393	0.085	0.408	0.575
Risky alcohol intake (>5 or more drinks)	0.228	0.030	280	476	1.177	0.130	0.169	0.287
Show signs of problem drinking by the CAGE test	0.142	0.024	280	476	1.127	0.166	0.095	0.189
Codeine-containing medication misuse	0.027	0.012	280	476	1.226	0.441	0.003	0.051
Prevalence of anaemia	0.089	0.025	140	238	1.053	0.284	0.039	0.140
Had 2+ sexual partners in past 12 months	0.113	0.031	186	328	1.346	0.278	0.050	0.176
Had paid sex in past 12 months	0.004	0.004	186	328	0.896	0.997	0	0.013
Had HIV test and received results in past 12 months	0.557	0.046	186	328	1.266	0.083	0.464	0.649
Circumcised	0.442	0.050	186	328	1.378	0.114	0.342	0.543
Asthma symptoms	0.043	0.013	280	476	1.056	0.299	0.017	0.069
COPD symptoms	0.013	0.006	280	476	0.918	0.471	0.001	0.026
Hypertension (>140/90 or taking hypertensive medication)	0.587	0.053	151	259	1.321	0.091	0.481	0.694
Mobile phone ownership	0.844	0.032	186	328	1.196	0.038	0.780	0.908
Bank account ownership	0.675	0.045	186	328	1.295	0.066	0.585	0.764
Internet use in past 12 months	0.617	0.049	186	328	1.358	0.079	0.520	0.715
HIV prevalence among men 15-49	0.173	0.070	74	206	1.574	0.407	0.032	0.314
HIV prevalence among young men 15-24	0	0	32	86	na	na	0	0
HIV prevalence among men 15+	0.112	0.045	121	340	1.549	0.400	0.023	0.202
	WOMEN and MEN							
HIV prevalence among respondents 15-49	0.178	0.042	224	454	1.648	0.238	0.094	0.263
HIV prevalence among respondents 15-24	0.025	0.017	63	137	0.885	0.704	0	0.060
HIV prevalence among respondents 15+	0.123	0.029	370	754	1.718	0.240	0.064	0.182

na = Not applicable

Table B.6 Sampling errors: Eastern Cape sample, South Africa DHS 2017

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
POPULATION								
Population using safely managed drinking water services	0.713	0.040	5108	4728	2.640	0.056	0.633	0.792
Population using safely managed sanitation services	0.850	0.022	5108	4728	2.215	0.026	0.806	0.895
Population with access to electricity	0.800	0.045	5108	4728	3.336	0.056	0.711	0.889
Population with primary reliance on clean fuels	0.677	0.036	5108	4728	2.316	0.053	0.605	0.749
WOMEN								
Urban residence	0.519	0.027	1041	938	1.715	0.051	0.466	0.572
Literacy	0.951	0.009	1041	938	1.303	0.009	0.933	0.968
No education	0.015	0.004	1041	938	1.038	0.264	0.007	0.022
Secondary or higher education	0.837	0.019	1041	938	1.653	0.023	0.799	0.875
Never-in-union (never married or lived with a partner)	0.636	0.019	1041	938	1.250	0.029	0.599	0.673
In-union (married or living with a partner)	0.293	0.017	1041	938	1.185	0.057	0.259	0.326
In a union before age 15 (women 20-24)	0.003	0.003	180	161	0.786	1.007	0	0.010
In a union before age 18 (women 20-24)	0.034	0.014	180	161	1.052	0.422	0.005	0.062
In a union before age 18 (women 20-49)	0.057	0.008	839	754	1.013	0.143	0.040	0.073
Had sexual intercourse before age 18	0.586	0.020	839	754	1.146	0.033	0.547	0.625
Currently pregnant	0.033	0.008	1041	938	1.476	0.246	0.017	0.050
Currently using any method	0.610	0.022	461	410	0.955	0.036	0.567	0.654
Currently using a modern method	0.610	0.022	461	410	0.955	0.036	0.567	0.654
Currently using pill	0.034	0.008	461	410	0.890	0.220	0.019	0.050
Currently using condoms	0.115	0.017	461	410	1.158	0.150	0.081	0.150
Currently using injectables - 3 months	0.228	0.019	461	410	0.953	0.082	0.191	0.266
Currently using injectables - 2 months	0.104	0.014	461	410	0.960	0.131	0.077	0.131
Currently using implants	0.049	0.011	461	410	1.075	0.222	0.027	0.070
Currently using female sterilisation	0.064	0.012	461	410	1.023	0.182	0.041	0.088
Currently using withdrawal	0	0	461	410	na	na	0	0
Currently using IUD	0.010	0.004	461	410	0.935	0.430	0.001	0.019
Using public sector source	0.876	0.018	560	501	1.260	0.020	0.841	0.911
Demand satisfied by modern methods	0.813	0.017	687	616	1.121	0.021	0.780	0.847
Want no more children	0.605	0.029	309	275	1.042	0.048	0.547	0.663
Want to delay next birth at least 2 years	0.070	0.016	309	275	1.069	0.222	0.039	0.101
Ideal number of children	2.288	0.052	1037	934	1.217	0.023	2.183	2.392
Mothers protected against tetanus for last birth	0.292	0.024	377	335	1.029	0.083	0.243	0.340
Births with skilled attendant at delivery	0.927	0.014	450	398	1.163	0.016	0.899	0.956
Had diarrhoea in the last 2 weeks	0.094	0.014	432	382	1.012	0.151	0.065	0.122
Sought treatment for diarrhoea	0.638	0.080	40	36	1.046	0.125	0.479	0.798
Ever had vaccination card	1	0	90	81	na	0	1	1
Vaccination card seen	0.798	0.054	90	81	1.267	0.068	0.690	0.905
Received BCG vaccination	0.962	0.019	90	81	0.928	0.019	0.925	0.999
Received DTaP-IPV-Hib vaccination (3 doses)	0.743	0.057	90	81	1.221	0.076	0.630	0.856
Received HepB vaccination (3 doses)	0.722	0.061	90	81	1.274	0.084	0.601	0.843
Received birth dose polio 0 vaccination	0.942	0.026	90	81	1.069	0.028	0.889	0.995
Received oral polio vaccination (non-birth dose)	0.910	0.029	90	81	0.972	0.032	0.851	0.969
Received pneumococcal vaccination (3 doses)	0.687	0.057	90	81	1.152	0.082	0.574	0.801
Received rotavirus vaccination (2 doses)	0.837	0.037	90	81	0.943	0.044	0.763	0.911
Received measles vaccination	0.886	0.037	90	81	1.102	0.042	0.812	0.960
Received all basic vaccinations	0.709	0.054	90	81	1.117	0.076	0.602	0.817
Received all age appropriate vaccinations (12-23 months)	0.573	0.054	90	81	1.020	0.094	0.466	0.681
Received DTaP-IPV-Hib vaccination 4 (children 24-35)	0.468	0.058	86	74	1.061	0.125	0.351	0.584
Received measles 2 vaccination (children 24-35)	0.562	0.057	86	74	1.041	0.101	0.449	0.676
Received all age appropriate vaccinations (24-35 months)	0.447	0.058	86	74	1.065	0.130	0.331	0.564
Height-for-age (-2SD)	0.248	0.036	225	210	1.119	0.146	0.175	0.320
Weight-for-height (-2SD)	0.015	0.007	225	210	0.925	0.497	0	0.030
Weight-for-height (+2SD)	0.204	0.026	225	210	0.961	0.128	0.152	0.256
Weight-for-age (-2SD)	0.034	0.016	226	211	1.239	0.483	0.001	0.066
Body Mass Index (BMI) <18.5	0.023	0.006	682	623	1.033	0.256	0.011	0.035
Body Mass Index (BMI) ≥25	0.692	0.025	682	623	1.409	0.036	0.642	0.742
Body Mass Index (BMI) ≥35	0.201	0.020	682	623	1.315	0.100	0.161	0.242
Waist ≥88 cm	0.552	0.025	681	622	1.298	0.045	0.502	0.601
Waist for height ratio ≥0.5	0.753	0.021	681	622	1.254	0.028	0.711	0.794
Prevalence of anaemia (children 6-59 months)	0.591	0.045	179	168	1.091	0.076	0.502	0.681
Prevalence of anaemia (women 15+)	0.297	0.021	653	598	1.191	0.072	0.254	0.339
Had 2+ sexual partners in past 12 months	0.062	0.010	1041	938	1.289	0.156	0.042	0.081
Condom use at last sex	0.546	0.075	65	58	1.199	0.137	0.396	0.695
Had an HIV test and received results in past 12 months	0.593	0.017	1041	938	1.142	0.029	0.558	0.628
Cervical cancer screening	0.522	0.031	367	333	1.169	0.058	0.461	0.584
Asthma symptoms	0.035	0.007	798	730	1.009	0.187	0.022	0.048
COPD symptoms	0.034	0.007	798	730	1.064	0.202	0.020	0.047
Hypertension (>140/90 or taking hypertensive medication)	0.498	0.022	701	641	1.143	0.043	0.455	0.542
Current smoking (daily or occassional)	0.075	0.015	798	730	1.558	0.194	0.046	0.104
Drank alcohol in past 12 months	0.199	0.020	798	730	1.439	0.102	0.158	0.240
Risky alcohol intake (>5 or more drinks)	0.049	0.007	798	730	0.948	0.148	0.034	0.063
Show signs of problem drinking by the CAGE test	0.033	0.007	798	730	1.163	0.221	0.019	0.048
Codeine-containing medication misuse	0.010	0.003	798	730	0.970	0.337	0.003	0.017

(Continued…)

Table B.6—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
	WOMEN							
Physical, sexual, or emotional violence by a partner in the previous 12 months	0.172	0.019	803	743	1.440	0.112	0.134	0.211
Physical violence by a current or former partner in the previous 12 months	0.126	0.016	803	743	1.326	0.123	0.095	0.157
Sexual violence by a current or former partner in the previous 12 months	0.022	0.008	803	743	1.499	0.353	0.007	0.038
Emotional violence by a current or former partner in the previous 12 months	0.116	0.015	803	743	1.367	0.133	0.085	0.147
Mobile phone ownership	0.911	0.012	1041	938	1.331	0.013	0.887	0.934
Bank account ownership	0.503	0.021	1041	938	1.348	0.042	0.461	0.545
Internet use in past 12 months	0.405	0.024	1041	938	1.605	0.060	0.356	0.454
Total fertility rate (last 3 years)	2.916	0.164	2958	2664	0.978	0.056	2.588	3.244
Infant mortality (last 0-9 years)	50.251	7.410	896	796	0.980	0.147	35.430	65.072
Child mortality (last 0-9 years)	14.076	4.230	881	781	0.974	0.301	5.615	22.537
Under-five mortality (last 0-9 years)	63.620	8.965	898	797	1.039	0.141	45.689	81.550
HIV prevalence among women 15-49	0.302	0.027	384	264	1.129	0.088	0.249	0.355
HIV prevalence among young women 15-24	0.156	0.036	139	96	1.166	0.231	0.084	0.228
HIV prevalence among women 15+	0.226	0.020	621	429	1.192	0.089	0.186	0.266
	MEN							
Urban residence	0.471	0.026	411	362	1.043	0.055	0.419	0.522
Literacy	0.939	0.017	411	362	1.402	0.018	0.906	0.972
No education	0.019	0.008	411	362	1.226	0.439	0.002	0.035
Secondary or higher education	0.801	0.027	411	362	1.353	0.033	0.747	0.854
Never-in-union (never married or lived with a partner)	0.789	0.021	411	362	1.050	0.027	0.747	0.831
In-union (married or living with a partner)	0.192	0.021	411	362	1.057	0.107	0.151	0.233
Had first sexual intercourse before age 18	0.626	0.029	289	255	1.022	0.047	0.568	0.685
Want no more children	0.524	0.054	77	69	0.938	0.102	0.417	0.631
Want to delay birth at least 2 years	0.108	0.035	77	69	0.981	0.324	0.038	0.177
Ideal number of children	3.119	0.092	410	361	1.102	0.029	2.936	3.303
Body Mass Index (BMI) <18.5	0.068	0.014	466	413	1.217	0.210	0.039	0.096
Body Mass Index (BMI) ≥25	0.256	0.024	466	413	1.158	0.092	0.209	0.303
Body Mass Index (BMI) ≥35	0.023	0.007	466	413	1.029	0.314	0.008	0.037
Waist ≥102 cm	0.104	0.015	462	408	1.028	0.140	0.075	0.133
Waist for height ratio ≥0.5	0.328	0.024	462	408	1.088	0.072	0.281	0.376
Current smoking (daily or occassional)	0.410	0.021	554	493	1.027	0.052	0.367	0.453
Drank alcohol in past 12 months	0.508	0.027	554	493	1.281	0.054	0.454	0.563
Risky alcohol intake (>5 or more drinks)	0.239	0.022	554	493	1.216	0.092	0.195	0.283
Show signs of problem drinking by the CAGE test	0.185	0.026	554	493	1.584	0.142	0.132	0.237
Codeine-containing medication misuse	0.008	0.004	554	493	0.954	0.446	0.001	0.016
Prevalence of anaemia	0.182	0.023	421	372	1.196	0.124	0.136	0.227
Had 2+ sexual partners in past 12 months	0.180	0.021	411	362	1.110	0.117	0.138	0.222
Condom use at last sex	0.604	0.057	76	65	1.001	0.094	0.491	0.717
Had paid sex in past 12 months	0.017	0.006	411	362	1.006	0.373	0.004	0.030
Had HIV test and received results in past 12 months	0.456	0.030	411	362	1.210	0.065	0.397	0.516
Circumcised	0.727	0.029	411	362	1.312	0.040	0.669	0.785
Asthma symptoms	0.032	0.006	554	493	0.857	0.199	0.020	0.045
COPD symptoms	0.016	0.005	554	493	0.969	0.320	0.006	0.027
Hypertension (>140/90 or taking hypertensive medication)	0.473	0.031	467	414	1.352	0.066	0.410	0.535
Mobile phone ownership	0.806	0.021	411	362	1.058	0.026	0.765	0.847
Bank account ownership	0.424	0.027	411	362	1.095	0.063	0.370	0.477
Internet use in past 12 months	0.376	0.032	411	362	1.333	0.085	0.312	0.439
HIV prevalence among men 15-49	0.082	0.018	274	247	1.061	0.215	0.047	0.117
HIV prevalence among young men 15-24	0.037	0.016	146	130	1.019	0.431	0.005	0.069
HIV prevalence among men 15+	0.087	0.015	389	350	1.030	0.170	0.057	0.116
	WOMEN and MEN							
HIV prevalence among respondents 15-49	0.196	0.018	658	512	1.147	0.091	0.160	0.231
HIV prevalence among respondents 15-24	0.088	0.017	285	226	1.037	0.198	0.053	0.123
HIV prevalence among respondents 15+	0.163	0.014	1010	779	1.203	0.086	0.135	0.191

na = Not applicable

Table B.7 Sampling errors: Northern Cape sample, South Africa DHS 2017

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
POPULATION								
Population using safely managed drinking water services	0.995	0.002	3346	784	0.931	0.002	0.991	0.999
Population using safely managed sanitation services	0.880	0.026	3346	784	2.219	0.029	0.828	0.931
Population with access to electricity	0.928	0.018	3346	784	2.057	0.020	0.892	0.965
Population with primary reliance on clean fuels	0.874	0.026	3346	784	1.952	0.030	0.821	0.926
WOMEN								
Urban residence	0.718	0.026	718	173	1.557	0.037	0.665	0.770
Literacy	0.964	0.007	718	173	1.038	0.007	0.950	0.979
No education	0.027	0.007	718	173	1.077	0.241	0.014	0.040
Secondary or higher education	0.858	0.020	718	173	1.500	0.023	0.819	0.897
Never-in-union (never married or lived with a partner)	0.554	0.026	718	173	1.422	0.048	0.502	0.607
In-union (married or living with a partner)	0.379	0.026	718	173	1.458	0.070	0.326	0.432
In a union before age 15 (women 20-24)	0	0	99	23	na	na	0	0
In a union before age 18 (women 20-24)	0.029	0.016	99	23	0.920	0.535	0	0.061
In a union before age 18 (women 20-49)	0.073	0.012	591	142	1.108	0.163	0.049	0.096
Had sexual intercourse before age 18	0.416	0.024	591	142	1.202	0.059	0.367	0.464
Currently pregnant	0.031	0.006	718	173	0.971	0.204	0.018	0.043
Currently using any method	0.549	0.030	339	82	1.110	0.055	0.489	0.609
Currently using a modern method	0.546	0.030	339	82	1.112	0.055	0.486	0.606
Currently using pill	0.054	0.014	339	82	1.119	0.254	0.027	0.082
Currently using condoms	0.115	0.019	339	82	1.102	0.167	0.076	0.153
Currently using injectables - 3 months	0.217	0.021	339	82	0.956	0.099	0.174	0.260
Currently using injectables - 2 months	0.056	0.013	339	82	1.052	0.235	0.030	0.082
Currently using implants	0.049	0.011	339	82	0.941	0.226	0.027	0.071
Currently using female sterilisation	0.050	0.013	339	82	1.077	0.256	0.024	0.075
Currently using withdrawal	0.003	0.003	339	82	0.946	1.005	0	0.008
Currently using IUD	0.003	0.003	339	82	1.043	1.003	0	0.010
Using public sector source	0.879	0.018	331	81	0.985	0.020	0.844	0.915
Demand satisfied by modern methods	0.790	0.021	422	103	1.077	0.027	0.747	0.833
Want no more children	0.681	0.031	268	66	1.073	0.045	0.620	0.743
Want to delay next birth at least 2 years	0.067	0.016	268	66	1.027	0.235	0.035	0.098
Ideal number of children	2.423	0.075	714	172	1.316	0.031	2.273	2.572
Mothers protected against tetanus for last birth	0.303	0.033	253	61	1.150	0.110	0.237	0.370
Births with skilled attendant at delivery	0.976	0.009	286	69	1.003	0.009	0.958	0.994
Had diarrhoea in the last 2 weeks	0.081	0.019	278	67	1.130	0.235	0.043	0.119
Ever had vaccination card	1	0	51	12	na	0	1	1
Vaccination card seen	0.754	0.067	51	12	1.110	0.089	0.619	0.888
Received BCG vaccination	0.958	0.029	51	12	1.040	0.031	0.899	1.017
Received DTaP-IPV-Hib vaccination (3 doses)	0.806	0.062	51	12	1.111	0.077	0.683	0.930
Received HepB vaccination (3 doses)	0.783	0.061	51	12	1.051	0.078	0.661	0.905
Received birth dose polio 0 vaccination	0.903	0.040	51	12	0.971	0.045	0.823	0.984
Received oral polio vaccination (non-birth dose)	0.845	0.057	51	12	1.127	0.068	0.730	0.960
Received pneumococcal vaccination (3 doses)	0.757	0.062	51	12	1.020	0.081	0.633	0.880
Received rotavirus vaccination (2 doses)	0.770	0.063	51	12	1.064	0.082	0.644	0.896
Received measles vaccination	0.849	0.051	51	12	1.021	0.061	0.746	0.952
Received all basic vaccinations	0.754	0.066	51	12	1.085	0.087	0.622	0.885
Received all age appropriate vaccinations (12-23 months)	0.649	0.073	51	12	1.088	0.113	0.502	0.795
Received DTaP-IPV-Hib vaccination 4 (children 24-35)	0.561	0.060	53	12	0.850	0.108	0.440	0.682
Received measles 2 vaccination (children 24-35)	0.628	0.056	53	12	0.809	0.090	0.515	0.741
Received all age appropriate vaccinations (24-35 months)	0.464	0.072	53	12	1.009	0.155	0.320	0.607
Height-for-age (-2SD)	0.214	0.042	104	25	1.063	0.195	0.131	0.298
Weight-for-height (-2SD)	0.021	0.014	100	24	1.021	0.689	0	0.050
Weight-for-height (+2SD)	0.046	0.021	100	24	1.019	0.455	0.004	0.088
Weight-for-age (-2SD)	0.084	0.032	104	25	1.210	0.380	0.020	0.147
Body Mass Index (BMI) <18.5	0.082	0.012	435	106	0.939	0.151	0.057	0.106
Body Mass Index (BMI) ≥25	0.618	0.024	435	106	1.015	0.038	0.571	0.666
Body Mass Index (BMI) ≥35	0.154	0.017	435	106	0.993	0.111	0.120	0.189
Waist ≥88 cm	0.487	0.026	417	101	1.075	0.054	0.435	0.540
Waist for height ratio ≥0.5	0.703	0.021	417	101	0.934	0.030	0.662	0.745
Prevalence of anaemia (children 6-59 months)	0.484	0.082	51	13	1.229	0.169	0.321	0.647
Prevalence of anaemia (women 15+)	0.257	0.038	312	78	1.572	0.149	0.181	0.334
Had 2+ sexual partners in past 12 months	0.018	0.005	718	173	1.064	0.293	0.008	0.029
Had an HIV test and received results in past 12 months	0.523	0.025	718	173	1.361	0.049	0.473	0.574
Cervical cancer screening	0.539	0.033	263	62	1.073	0.061	0.473	0.605
Asthma symptoms	0.061	0.011	529	127	1.061	0.181	0.039	0.083
COPD symptoms	0.034	0.008	529	127	1.052	0.245	0.017	0.050
Hypertension (>140/90 or taking hypertensive medication)	0.529	0.028	444	108	1.197	0.054	0.472	0.585
Current smoking (daily or occassional)	0.214	0.025	529	127	1.422	0.119	0.163	0.265
Drank alcohol in past 12 months	0.274	0.028	529	127	1.428	0.101	0.219	0.330
Risky alcohol intake (>5 or more drinks)	0.109	0.016	529	127	1.190	0.148	0.077	0.141
Show signs of problem drinking by the CAGE test	0.068	0.012	529	127	1.135	0.183	0.043	0.093
Codeine-containing medication misuse	0.006	0.003	529	127	0.993	0.541	0	0.013
Physical, sexual, or emotional violence by a partner in the previous 12 months	0.102	0.014	552	126	1.058	0.134	0.075	0.129
Physical violence by a current or former partner in the previous 12 months	0.051	0.011	552	126	1.223	0.226	0.028	0.073

(Continued…)

Table B.7—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Sexual violence by a current or former partner in the previous 12 months	0.019	0.011	552	126	1.841	0.572	0	0.040
Emotional violence by a current or former partner in the previous 12 months	0.073	0.011	552	126	0.988	0.149	0.052	0.095
Mobile phone ownership	0.827	0.021	718	173	1.492	0.026	0.784	0.869
Bank account ownership	0.473	0.028	718	173	1.514	0.060	0.416	0.529
Internet use in past 12 months	0.409	0.030	718	173	1.636	0.073	0.349	0.469
Total fertility rate (last 3 years)	2.656	0.199	2030	488	1.107	0.075	2.258	3.054
Infant mortality (last 0-9 years)	43.194	10.459	593	144	1.100	0.242	22.275	64.112
Child mortality (last 0-9 years)	8.032	3.554	574	140	0.931	0.442	0.924	15.139
Under-five mortality (last 0-9 years)	50.879	11.513	595	145	1.085	0.226	27.852	73.905
HIV prevalence among women 15-49	0.135	0.026	183	49	1.023	0.192	0.083	0.187
HIV prevalence among young women 15-24	0.057	0.033	61	17	1.106	0.584	0	0.123
HIV prevalence among women 15+	0.126	0.022	278	75	1.084	0.172	0.083	0.169
MEN								
Urban residence	0.729	0.032	251	61	1.128	0.043	0.666	0.793
Literacy	0.963	0.011	251	61	0.899	0.011	0.941	0.984
No education	0.038	0.012	251	61	1.023	0.327	0.013	0.062
Secondary or higher education	0.805	0.032	251	61	1.291	0.040	0.740	0.869
Never-in-union (never married or lived with a partner)	0.663	0.037	251	61	1.223	0.055	0.590	0.736
In-union (married or living with a partner)	0.316	0.035	251	61	1.193	0.111	0.245	0.386
Had first sexual intercourse before age 18	0.585	0.042	207	50	1.219	0.072	0.501	0.669
Want no more children	0.404	0.062	79	19	1.113	0.153	0.280	0.528
Want to delay birth at least 2 years	0.097	0.038	79	19	1.118	0.386	0.022	0.172
Ideal number of children	2.831	0.090	245	59	0.951	0.032	2.652	3.011
Body Mass Index (BMI) <18.5	0.192	0.027	284	68	1.148	0.140	0.139	0.246
Body Mass Index (BMI) ≥25	0.315	0.027	284	68	0.983	0.086	0.261	0.370
Body Mass Index (BMI) ≥35	0.045	0.013	284	68	1.080	0.295	0.019	0.072
Waist ≥102 cm	0.137	0.026	274	66	1.239	0.188	0.086	0.189
Waist for height ratio ≥0.5	0.373	0.036	274	66	1.222	0.096	0.301	0.444
Current smoking (daily or occassional)	0.449	0.031	353	84	1.177	0.070	0.387	0.511
Drank alcohol in past 12 months	0.471	0.036	353	84	1.347	0.076	0.399	0.542
Risky alcohol intake (>5 or more drinks)	0.233	0.031	353	84	1.377	0.133	0.171	0.295
Show signs of problem drinking by the CAGE test	0.107	0.024	353	84	1.464	0.226	0.059	0.155
Codeine-containing medication misuse	0.002	0.002	353	84	0.870	1.006	0	0.006
Prevalence of anaemia	0.198	0.032	187	46	1.115	0.161	0.134	0.262
Had 2+ sexual partners in past 12 months	0.085	0.017	251	61	0.977	0.203	0.050	0.119
Had paid sex in past 12 months	0.031	0.012	251	61	1.132	0.400	0.006	0.056
Had HIV test and received results in past 12 months	0.376	0.047	251	61	1.542	0.126	0.281	0.471
Circumcised	0.349	0.047	251	61	1.557	0.135	0.254	0.443
Asthma symptoms	0.053	0.013	353	84	1.125	0.254	0.026	0.080
COPD symptoms	0.030	0.009	353	84	1.046	0.318	0.011	0.049
Hypertension (>140/90 or taking hypertensive medication)	0.523	0.040	287	68	1.344	0.076	0.444	0.603
Mobile phone ownership	0.785	0.026	251	61	0.989	0.033	0.733	0.836
Bank account ownership	0.592	0.037	251	61	1.174	0.062	0.519	0.665
Internet use in past 12 months	0.503	0.042	251	61	1.320	0.083	0.419	0.586
HIV prevalence among men 15-49	0.104	0.033	108	42	1.110	0.316	0.038	0.169
HIV prevalence among young men 15-24	0.018	0.019	46	18	0.954	1.055	0	0.055
HIV prevalence among men 15+	0.098	0.031	152	60	1.269	0.313	0.037	0.160
WOMEN and MEN								
HIV prevalence among respondents 15-49	0.121	0.026	291	92	1.351	0.214	0.069	0.172
HIV prevalence among respondents 15-24	0.036	0.022	107	35	1.185	0.595	0	0.079
HIV prevalence among respondents 15+	0.114	0.022	430	135	1.465	0.198	0.069	0.159

na = Not applicable

Table B.8 Sampling errors: Free State sample, South Africa DHS 2017

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
POPULATION								
Population using safely managed drinking water services	0.972	0.012	3813	1967	2.040	0.012	0.948	0.996
Population using safely managed sanitation services	0.864	0.021	3813	1967	1.836	0.024	0.822	0.907
Population with access to electricity	0.943	0.018	3813	1967	2.229	0.019	0.907	0.978
Population with primary reliance on clean fuels	0.916	0.017	3813	1967	1.682	0.018	0.883	0.949
WOMEN								
Urban residence	0.863	0.015	854	442	1.283	0.018	0.833	0.893
Literacy	0.986	0.005	854	442	1.204	0.005	0.976	0.996
No education	0.011	0.005	854	442	1.343	0.443	0.001	0.020
Secondary or higher education	0.901	0.016	854	442	1.592	0.018	0.868	0.933
Never-in-union (never married or lived with a partner)	0.565	0.019	854	442	1.137	0.034	0.527	0.604
In-union (married or living with a partner)	0.330	0.018	854	442	1.148	0.056	0.293	0.367
In a union before age 15 (women 20-24)	0.010	0.009	147	76	1.173	0.992	0	0.028
In a union before age 18 (women 20-24)	0.010	0.009	147	76	1.173	0.992	0	0.028
In a union before age 18 (women 20-49)	0.068	0.011	715	371	1.142	0.159	0.046	0.089
Had sexual intercourse before age 18	0.474	0.024	715	371	1.258	0.050	0.427	0.521
Currently pregnant	0.025	0.006	854	442	1.156	0.248	0.013	0.037
Currently using any method	0.511	0.035	384	200	1.368	0.068	0.441	0.581
Currently using a modern method	0.511	0.035	384	200	1.368	0.068	0.441	0.581
Currently using pill	0.032	0.009	384	200	0.973	0.273	0.015	0.050
Currently using condoms	0.118	0.021	384	200	1.263	0.176	0.076	0.160
Currently using injectables - 3 months	0.242	0.024	384	200	1.086	0.098	0.195	0.290
Currently using injectables - 2 months	0.027	0.008	384	200	0.933	0.285	0.012	0.043
Currently using implants	0.042	0.010	384	200	0.971	0.236	0.022	0.062
Currently using female sterilisation	0.039	0.011	384	200	1.148	0.291	0.016	0.062
Currently using withdrawal	0	0	384	200	na	na	0	0
Currently using IUD	0	0	384	200	na	na	0	0
Using public sector source	0.867	0.019	351	184	1.042	0.022	0.829	0.904
Demand satisfied by modern methods	0.784	0.023	449	234	1.175	0.029	0.739	0.830
Want no more children	0.594	0.030	278	146	1.019	0.051	0.534	0.654
Want to delay next birth at least 2 years	0.062	0.017	278	146	1.153	0.270	0.028	0.095
Ideal number of children	2.202	0.047	850	440	1.043	0.022	2.108	2.297
Mothers protected against tetanus for last birth	0.407	0.036	279	145	1.229	0.089	0.335	0.480
Births with skilled attendant at delivery	0.963	0.013	318	164	1.072	0.013	0.937	0.988
Had diarrhoea in the last 2 weeks	0.058	0.014	303	156	1.045	0.242	0.030	0.086
Ever had vaccination card	0.989	0.011	49	25	0.736	0.011	0.967	1.011
Vaccination card seen	0.813	0.056	49	25	1.008	0.069	0.701	0.925
Received BCG vaccination	0.978	0.022	49	25	1.053	0.023	0.934	1.022
Received DTaP-IPV-Hib vaccination (3 doses)	0.848	0.052	49	25	1.021	0.062	0.743	0.953
Received HepB vaccination (3 doses)	0.876	0.048	49	25	1.017	0.055	0.780	0.972
Received birth dose polio 0 vaccination	0.978	0.022	49	25	1.053	0.023	0.934	1.022
Received oral polio vaccination (non-birth dose)	0.958	0.030	49	25	1.039	0.031	0.898	1.018
Received pneumococcal vaccination (3 doses)	0.772	0.057	49	25	0.946	0.074	0.658	0.885
Received rotavirus vaccination (2 doses)	0.893	0.043	49	25	0.979	0.049	0.806	0.980
Received measles vaccination	0.907	0.041	49	25	0.988	0.045	0.824	0.989
Received all basic vaccinations	0.795	0.058	49	25	1.006	0.073	0.679	0.911
Received all age appropriate vaccinations (12-23 months)	0.713	0.063	49	25	0.975	0.088	0.587	0.839
Received DTaP-IPV-Hib vaccination 4 (children 24-35)	0.578	0.073	59	30	1.102	0.127	0.431	0.724
Received measles 2 vaccination (children 24-35)	0.734	0.064	59	30	1.060	0.087	0.606	0.863
Received all age appropriate vaccinations (24-35 months)	0.545	0.075	59	30	1.114	0.137	0.396	0.695
Height-for-age (-2SD)	0.335	0.039	142	72	0.955	0.116	0.257	0.413
Weight-for-height (-2SD)	0.046	0.018	137	70	1.009	0.393	0.010	0.081
Weight-for-height (+2SD)	0.170	0.034	137	70	1.043	0.200	0.102	0.238
Weight-for-age (-2SD)	0.080	0.025	145	74	1.132	0.317	0.029	0.131
Body Mass Index (BMI) <18.5	0.034	0.008	523	265	0.963	0.224	0.019	0.049
Body Mass Index (BMI) ≥25	0.685	0.023	523	265	1.144	0.034	0.639	0.732
Body Mass Index (BMI) ≥35	0.213	0.018	523	265	1.017	0.085	0.177	0.249
Waist ≥88 cm	0.515	0.025	524	265	1.131	0.048	0.465	0.564
Waist for height ratio ≥0.5	0.697	0.023	523	265	1.144	0.033	0.651	0.743
Prevalence of anaemia (children 6-59 months)	0.536	0.054	130	66	1.210	0.101	0.427	0.644
Prevalence of anaemia (women 15+)	0.277	0.021	515	261	1.056	0.075	0.236	0.318
Had 2+ sexual partners in past 12 months	0.042	0.007	854	442	1.052	0.173	0.027	0.056
Condom use at last sex	0.474	0.082	34	18	0.945	0.173	0.310	0.638
Had an HIV test and received results in past 12 months	0.583	0.019	854	442	1.118	0.032	0.545	0.621
Cervical cancer screening	0.511	0.031	320	161	1.094	0.060	0.449	0.572
Asthma symptoms	0.033	0.010	647	325	1.362	0.291	0.014	0.052
COPD symptoms	0.008	0.003	647	325	0.918	0.402	0.002	0.014
Hypertension (>140/90 or taking hypertensive medication)	0.544	0.019	536	271	0.901	0.036	0.506	0.583
Current smoking (daily or occassional)	0.080	0.015	647	325	1.389	0.185	0.050	0.110
Drank alcohol in past 12 months	0.222	0.021	647	325	1.275	0.094	0.180	0.264
Risky alcohol intake (>5 or more drinks)	0.060	0.010	647	325	1.097	0.171	0.040	0.081
Show signs of problem drinking by the CAGE test	0.046	0.009	647	325	1.080	0.194	0.028	0.063
Codeine-containing medication misuse	0.011	0.004	647	325	1.039	0.383	0.003	0.020
Physical, sexual, or emotional violence by a partner in the previous 12 months	0.145	0.017	616	326	1.165	0.114	0.112	0.178

(Continued…)

Table B.8—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
	WOMEN							
Physical violence by a current or former partner in the previous 12 months	0.091	0.012	616	326	1.044	0.133	0.067	0.115
Sexual violence by a current or former partner in the previous 12 months	0.019	0.005	616	326	0.977	0.280	0.009	0.030
Emotional violence by a current or former partner in the previous 12 months	0.111	0.014	616	326	1.075	0.123	0.084	0.138
Mobile phone ownership	0.904	0.012	854	442	1.227	0.014	0.879	0.929
Bank account ownership	0.522	0.025	854	442	1.443	0.047	0.473	0.571
Internet use in past 12 months	0.453	0.023	854	442	1.323	0.050	0.408	0.498
Total fertility rate (last 3 years)	2.375	0.191	2423	1255	1.095	0.080	1.994	2.757
Infant mortality (last 0-9 years)	52.649	10.125	623	327	1.066	0.192	32.398	72.900
Child mortality (last 0-9 years)	11.338	4.869	629	330	1.124	0.429	1.601	21.075
Under-five mortality (last 0-9 years)	63.390	10.614	626	329	1.047	0.167	42.161	84.619
HIV prevalence among women 15-49	0.281	0.029	315	123	1.128	0.102	0.224	0.339
HIV prevalence among young women 15-24	0.133	0.033	103	42	0.979	0.248	0.067	0.198
HIV prevalence among women 15+	0.241	0.022	491	191	1.124	0.090	0.197	0.284
	MEN							
Urban residence	0.885	0.020	295	159	1.085	0.023	0.845	0.926
Literacy	0.959	0.013	295	159	1.127	0.014	0.933	0.985
No education	0.012	0.006	295	159	0.956	0.511	0	0.024
Secondary or higher education	0.838	0.025	295	159	1.144	0.029	0.789	0.887
Never-in-union (never married or lived with a partner)	0.720	0.026	295	159	0.979	0.036	0.669	0.771
In-union (married or living with a partner)	0.220	0.024	295	159	0.986	0.108	0.172	0.267
Had first sexual intercourse before age 18	0.640	0.037	210	112	1.108	0.057	0.567	0.714
Want no more children	0.448	0.059	68	35	0.972	0.132	0.329	0.566
Want to delay birth at least 2 years	0.063	0.038	68	35	1.273	0.602	0	0.139
Ideal number of children	2.637	0.084	294	158	1.040	0.032	2.468	2.806
Body Mass Index (BMI) <18.5	0.147	0.020	328	177	1.018	0.135	0.107	0.187
Body Mass Index (BMI) ≥25	0.275	0.026	328	177	1.057	0.095	0.223	0.327
Body Mass Index (BMI) ≥35	0.020	0.009	328	177	1.105	0.429	0.003	0.037
Waist ≥102 cm	0.067	0.016	322	174	1.110	0.231	0.036	0.098
Waist for height ratio ≥0.5	0.321	0.029	321	174	1.097	0.089	0.264	0.378
Current smoking (daily or occassional)	0.409	0.033	384	207	1.294	0.080	0.344	0.474
Drank alcohol in past 12 months	0.423	0.038	384	207	1.510	0.090	0.347	0.499
Risky alcohol intake (>5 or more drinks)	0.254	0.024	384	207	1.065	0.093	0.207	0.302
Show signs of problem drinking by the CAGE test	0.230	0.025	384	207	1.141	0.107	0.181	0.279
Codeine-containing medication misuse	0.008	0.004	384	207	0.972	0.565	0	0.016
Prevalence of anaemia	0.256	0.034	311	168	1.357	0.131	0.188	0.323
Had 2+ sexual partners in past 12 months	0.226	0.037	295	159	1.529	0.166	0.151	0.301
Condom use at last sex	0.714	0.061	65	36	1.082	0.086	0.592	0.837
Had paid sex in past 12 months	0.049	0.013	295	159	1.054	0.272	0.022	0.075
Had HIV test and received results in past 12 months	0.521	0.031	295	159	1.077	0.060	0.458	0.584
Circumcised	0.558	0.030	295	159	1.025	0.053	0.499	0.618
Asthma symptoms	0.009	0.005	384	207	1.041	0.574	0	0.018
COPD symptoms	0.030	0.009	384	207	1.027	0.300	0.012	0.047
Hypertension (>140/90 or taking hypertensive medication)	0.482	0.030	330	178	1.086	0.062	0.422	0.542
Mobile phone ownership	0.865	0.017	295	159	0.864	0.02	0.831	0.900
Bank account ownership	0.349	0.032	295	159	1.139	0.091	0.286	0.413
Internet use in past 12 months	0.551	0.034	295	159	1.181	0.062	0.482	0.619
HIV prevalence among men 15-49	0.172	0.030	216	109	1.149	0.172	0.113	0.232
HIV prevalence among young men 15-24	0.059	0.023	98	51	0.963	0.392	0.013	0.105
HIV prevalence among men 15+	0.172	0.024	290	147	1.090	0.141	0.124	0.221
	WOMEN and MEN							
HIV prevalence among respondents 15-49	0.230	0.022	531	232	1.222	0.097	0.185	0.275
HIV prevalence among respondents 15-24	0.092	0.020	201	92	0.976	0.217	0.052	0.132
HIV prevalence among respondents 15+	0.211	0.017	781	338	1.195	0.083	0.176	0.246

na = Not applicable

Table B.9 Sampling errors: KwaZulu-Natal sample, South Africa DHS 2017

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
POPULATION								
Population using safely managed drinking water services	0.860	0.025	5476	6939	1.984	0.029	0.811	0.909
Population using safely managed sanitation services	0.856	0.022	5476	6939	2.210	0.025	0.812	0.899
Population with access to electricity	0.893	0.028	5476	6939	2.619	0.031	0.837	0.948
Population with primary reliance on clean fuels	0.762	0.032	5476	6939	2.106	0.042	0.698	0.827
WOMEN								
Urban residence	0.520	0.029	1360	1616	2.125	0.055	0.462	0.578
Literacy	0.965	0.006	1360	1616	1.149	0.006	0.954	0.976
No education	0.031	0.006	1360	1616	1.363	0.208	0.018	0.043
Secondary or higher education	0.878	0.012	1360	1616	1.376	0.014	0.854	0.903
Never-in-union (never married or lived with a partner)	0.757	0.020	1360	1616	1.677	0.026	0.718	0.796
In-union (married or living with a partner)	0.223	0.019	1360	1616	1.705	0.086	0.185	0.262
In a union before age 15 (women 20-24)	0	0	260	306	na	na	0	0
In a union before age 18 (women 20-24)	0.004	0.004	260	306	1.051	0.980	0	0.013
In a union before age 18 (women 20-49)	0.031	0.006	1088	1313	1.224	0.206	0.018	0.044
Had sexual intercourse before age 18	0.384	0.021	1088	1313	1.435	0.055	0.342	0.427
Currently pregnant	0.035	0.005	1360	1616	1.022	0.146	0.025	0.045
Currently using any method	0.650	0.020	552	685	0.967	0.030	0.610	0.689
Currently using a modern method	0.647	0.020	552	685	0.974	0.031	0.607	0.687
Currently using pill	0.063	0.012	552	685	1.112	0.182	0.040	0.087
Currently using condoms	0.221	0.030	552	685	1.683	0.135	0.161	0.280
Currently using injectables - 3 months	0.198	0.023	552	685	1.361	0.117	0.152	0.244
Currently using injectables - 2 months	0.034	0.008	552	685	1.031	0.235	0.018	0.050
Currently using implants	0.048	0.009	552	685	0.957	0.182	0.030	0.065
Currently using female sterilisation	0.062	0.016	552	685	1.542	0.255	0.031	0.094
Currently using withdrawal	0.003	0.003	552	685	1.226	0.980	0	0.008
Currently using IUD	0.013	0.005	552	685	0.998	0.374	0.003	0.022
Using public sector source	0.802	0.023	615	755	1.405	0.028	0.757	0.848
Demand satisfied by modern methods	0.804	0.014	772	940	0.951	0.017	0.777	0.831
Want no more children	0.608	0.035	288	361	1.211	0.058	0.538	0.677
Want to delay next birth at least 2 years	0.057	0.015	288	361	1.078	0.258	0.028	0.087
Ideal number of children	2.474	0.051	1357	1612	1.252	0.021	2.371	2.576
Mothers protected against tetanus for last birth	0.411	0.026	467	555	1.129	0.063	0.359	0.463
Births with skilled attendant at delivery	0.964	0.009	555	654	1.007	0.009	0.947	0.982
Had diarrhoea in the last 2 weeks	0.137	0.018	538	636	1.188	0.132	0.101	0.173
Sought treatment for diarrhoea	0.564	0.064	67	87	1.053	0.113	0.436	0.692
Ever had vaccination card	0.947	0.021	117	135	0.996	0.022	0.905	0.989
Vaccination card seen	0.638	0.058	117	135	1.261	0.091	0.522	0.754
Received BCG vaccination	0.913	0.026	117	135	0.972	0.028	0.861	0.965
Received DTaP-IPV-Hib vaccination (3 doses)	0.653	0.059	117	135	1.298	0.090	0.535	0.771
Received HepB vaccination (3 doses)	0.625	0.059	117	135	1.263	0.094	0.507	0.742
Received birth dose polio 0 vaccination	0.922	0.025	117	135	0.998	0.028	0.871	0.973
Received oral polio vaccination (non-birth dose)	0.716	0.051	117	135	1.186	0.071	0.614	0.818
Received pneumococcal vaccination (3 doses)	0.638	0.058	117	135	1.261	0.091	0.522	0.754
Received rotavirus vaccination (2 doses)	0.686	0.052	117	135	1.163	0.075	0.582	0.789
Received measles vaccination	0.894	0.033	117	135	1.118	0.036	0.829	0.960
Received all basic vaccinations	0.624	0.060	117	135	1.292	0.096	0.505	0.744
Received all age appropriate vaccinations (12-23 months)	0.601	0.060	117	135	1.280	0.101	0.480	0.721
Received DTaP-IPV-Hib vaccination 4 (children 24-35)	0.472	0.051	91	106	0.955	0.109	0.370	0.575
Received measles 2 vaccination (children 24-35)	0.591	0.055	91	106	1.034	0.092	0.482	0.701
Received all age appropriate vaccinations (24-35 months)	0.460	0.053	91	106	0.979	0.114	0.355	0.565
Height-for-age (-2SD)	0.285	0.031	227	283	0.917	0.107	0.224	0.346
Weight-for-height (-2SD)	0.025	0.011	208	266	1.003	0.431	0.003	0.047
Weight-for-height (+2SD)	0.183	0.028	208	266	1.029	0.154	0.126	0.239
Weight-for-age (-2SD)	0.038	0.016	219	281	1.269	0.418	0.006	0.070
Body Mass Index (BMI) <18.5	0.013	0.004	749	919	0.921	0.291	0.006	0.021
Body Mass Index (BMI) ≥25	0.706	0.021	749	919	1.264	0.030	0.664	0.749
Body Mass Index (BMI) ≥35	0.226	0.017	749	919	1.113	0.075	0.192	0.260
Waist ≥88 cm	0.426	0.025	778	946	1.404	0.058	0.376	0.476
Waist for height ratio ≥0.5	0.658	0.022	777	945	1.277	0.033	0.614	0.701
Prevalence of anaemia (children 6-59 months)	0.417	0.052	161	189	1.159	0.125	0.312	0.521
Prevalence of anaemia (women 15+)	0.289	0.020	637	747	1.109	0.071	0.248	0.329
Had 2+ sexual partners in past 12 months	0.052	0.007	1360	1616	1.198	0.139	0.038	0.067
Condom use at last sex	0.578	0.068	67	84	1.109	0.117	0.443	0.713
Had an HIV test and received results in past 12 months	0.583	0.016	1360	1616	1.229	0.028	0.550	0.616
Cervical cancer screening	0.477	0.028	450	565	1.193	0.059	0.421	0.533
Asthma symptoms	0.054	0.011	968	1191	1.573	0.212	0.031	0.077
COPD symptoms	0.011	0.004	968	1191	1.220	0.378	0.003	0.019
Hypertension (>140/90 or taking hypertensive medication)	0.481	0.019	794	960	1.044	0.039	0.444	0.518
Current smoking (daily or occassional)	0.023	0.006	968	1191	1.308	0.277	0.010	0.035
Drank alcohol in past 12 months	0.101	0.013	968	1191	1.318	0.126	0.076	0.127
Risky alcohol intake (>5 or more drinks)	0.014	0.004	968	1191	1.086	0.288	0.006	0.023
Show signs of problem drinking by the CAGE test	0.010	0.003	968	1191	0.966	0.315	0.004	0.016
Codeine-containing medication misuse	0.009	0.004	968	1191	1.147	0.379	0.002	0.017

(Continued…)

Table B.9—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
	WOMEN							
Physical, sexual, or emotional violence by a partner in the previous 12 months	0.100	0.013	786	1078	1.210	0.130	0.074	0.126
Physical violence by a current or former partner in the previous 12 months	0.057	0.010	786	1078	1.219	0.177	0.037	0.077
Sexual violence by a current or former partner in the previous 12 months	0.019	0.005	786	1078	1.014	0.259	0.009	0.029
Emotional violence by a current or former partner in the previous 12 months	0.074	0.011	786	1078	1.149	0.145	0.053	0.096
Mobile phone ownership	0.896	0.010	1360	1616	1.198	0.011	0.876	0.915
Bank account ownership	0.431	0.024	1360	1616	1.792	0.056	0.383	0.479
Internet use in past 12 months	0.415	0.029	1360	1616	2.175	0.070	0.357	0.474
Total fertility rate (last 3 years)	2.484	0.154	3844	4587	1.065	0.062	2.175	2.793
Infant mortality (last 0-9 years)	40.331	7.039	1085	1293	1.080	0.175	26.252	54.409
Child mortality (last 0-9 years)	3.660	1.906	1068	1270	0.978	0.521	0	7.472
Under-five mortality (last 0-9 years)	43.843	6.960	1086	1294	1.037	0.159	29.922	57.764
HIV prevalence among women 15-49	0.373	0.032	428	486	1.354	0.085	0.310	0.437
HIV prevalence among young women 15-24	0.219	0.035	159	181	1.069	0.161	0.149	0.290
HIV prevalence among women 15+	0.314	0.025	615	700	1.347	0.080	0.264	0.365
	MEN							
Urban residence	0.524	0.035	471	521	1.523	0.067	0.453	0.594
Literacy	0.970	0.008	471	521	1.026	0.008	0.953	0.986
No education	0.034	0.009	471	521	1.092	0.267	0.016	0.053
Secondary or higher education	0.834	0.023	471	521	1.315	0.027	0.788	0.879
Never-in-union (never married or lived with a partner)	0.794	0.021	471	521	1.120	0.026	0.752	0.836
In-union (married or living with a partner)	0.185	0.021	471	521	1.157	0.112	0.143	0.226
Had first sexual intercourse before age 18	0.578	0.031	353	389	1.161	0.053	0.517	0.639
Want no more children	0.454	0.059	93	96	1.126	0.129	0.337	0.571
Want to delay birth at least 2 years	0.149	0.038	93	96	1.033	0.258	0.072	0.225
Ideal number of children	3.602	0.132	456	505	1.234	0.037	3.338	3.866
Body Mass Index (BMI) <18.5	0.075	0.012	464	520	0.956	0.157	0.051	0.098
Body Mass Index (BMI) ≥25	0.352	0.031	464	520	1.404	0.089	0.289	0.415
Body Mass Index (BMI) ≥35	0.050	0.015	464	520	1.452	0.297	0.020	0.079
Waist ≥102 cm	0.074	0.015	475	529	1.258	0.204	0.044	0.105
Waist for height ratio ≥0.5	0.372	0.030	475	529	1.334	0.080	0.313	0.431
Current smoking (daily or occassional)	0.352	0.026	603	683	1.349	0.075	0.300	0.405
Drank alcohol in past 12 months	0.460	0.028	603	683	1.363	0.060	0.404	0.515
Risky alcohol intake (>5 or more drinks)	0.238	0.019	603	683	1.113	0.081	0.200	0.277
Show signs of problem drinking by the CAGE test	0.138	0.019	603	683	1.379	0.140	0.100	0.177
Codeine-containing medication misuse	0.008	0.004	603	683	0.997	0.444	0.001	0.016
Prevalence of anaemia	0.159	0.020	371	395	1.026	0.127	0.119	0.199
Had 2+ sexual partners in past 12 months	0.136	0.019	471	521	1.208	0.140	0.098	0.175
Condom use at last sex	0.735	0.065	66	71	1.190	0.089	0.604	0.866
Had paid sex in past 12 months	0.022	0.006	471	521	0.955	0.293	0.009	0.035
Had HIV test and received results in past 12 months	0.449	0.029	471	521	1.251	0.064	0.391	0.506
Circumcised	0.428	0.035	471	521	1.512	0.081	0.359	0.497
Asthma symptoms	0.040	0.009	603	683	1.092	0.217	0.023	0.058
COPD symptoms	0.017	0.008	603	683	1.452	0.456	0.001	0.032
Hypertension (>140/90 or taking hypertensive medication)	0.475	0.025	479	532	1.076	0.052	0.426	0.524
Mobile phone ownership	0.845	0.021	471	521	1.257	0.025	0.803	0.887
Bank account ownership	0.442	0.029	471	521	1.250	0.065	0.384	0.499
Internet use in past 12 months	0.408	0.032	471	521	1.407	0.078	0.344	0.472
HIV prevalence among men 15-49	0.192	0.025	274	363	1.057	0.131	0.142	0.243
HIV prevalence among young men 15-24	0.037	0.016	141	191	1.021	0.439	0.005	0.070
HIV prevalence among men 15+	0.175	0.021	359	485	1.050	0.121	0.133	0.217
	WOMEN and MEN							
HIV prevalence among respondents 15-49	0.296	0.026	702	850	1.514	0.088	0.244	0.348
HIV prevalence among respondents 15-24	0.126	0.021	300	372	1.088	0.166	0.084	0.168
HIV prevalence among respondents 15+	0.257	0.021	974	1186	1.470	0.080	0.216	0.298

na = Not applicable

Table B.10 Sampling errors: North West sample, South Africa DHS 2017

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
POPULATION								
Population using safely managed drinking water services	0.959	0.010	3712	2534	1.525	0.010	0.940	0.978
Population using safely managed sanitation services	0.771	0.029	3712	2534	2.091	0.037	0.713	0.828
Population with access to electricity	0.926	0.017	3712	2534	1.925	0.018	0.893	0.960
Population with primary reliance on clean fuels	0.816	0.037	3712	2534	2.471	0.046	0.742	0.891
WOMEN								
Urban residence	0.443	0.063	863	570	3.716	0.143	0.317	0.570
Literacy	0.938	0.008	863	570	0.981	0.009	0.922	0.955
No education	0.027	0.007	863	570	1.272	0.261	0.013	0.041
Secondary or higher education	0.846	0.019	863	570	1.527	0.022	0.808	0.883
Never-in-union (never married or lived with a partner)	0.552	0.030	863	570	1.754	0.054	0.493	0.612
In-union (married or living with a partner)	0.377	0.032	863	570	1.931	0.085	0.313	0.441
In a union before age 15 (women 20-24)	0.008	0.008	119	83	1.013	1.025	0	0.025
In a union before age 18 (women 20-24)	0.110	0.041	119	83	1.429	0.377	0.027	0.192
In a union before age 18 (women 20-49)	0.078	0.016	730	489	1.624	0.207	0.045	0.110
Had sexual intercourse before age 18	0.512	0.025	730	489	1.373	0.050	0.461	0.563
Currently pregnant	0.037	0.008	863	570	1.284	0.223	0.020	0.053
Currently using any method	0.589	0.024	466	325	1.073	0.042	0.540	0.638
Currently using a modern method	0.588	0.024	466	325	1.070	0.042	0.539	0.636
Currently using pill	0.119	0.020	466	325	1.362	0.172	0.078	0.160
Currently using condoms	0.163	0.019	466	325	1.086	0.114	0.126	0.200
Currently using injectables - 3 months	0.169	0.018	466	325	1.024	0.105	0.133	0.204
Currently using injectables - 2 months	0.064	0.016	466	325	1.429	0.253	0.032	0.097
Currently using implants	0.027	0.008	466	325	1.104	0.308	0.010	0.043
Currently using female sterilisation	0.037	0.012	466	325	1.356	0.323	0.013	0.060
Currently using withdrawal	0.002	0.002	466	325	0.905	1.015	0	0.005
Currently using IUD	0.008	0.004	466	325	1.045	0.534	0	0.017
Using public sector source	0.778	0.023	423	292	1.140	0.030	0.732	0.824
Demand satisfied by modern methods	0.805	0.030	528	363	1.731	0.037	0.745	0.865
Want no more children	0.568	0.031	307	215	1.083	0.054	0.507	0.629
Want to delay next birth at least 2 years	0.092	0.025	307	215	1.535	0.276	0.041	0.143
Ideal number of children	2.700	0.058	858	567	1.253	0.022	2.583	2.816
Mothers protected against tetanus for last birth	0.406	0.028	344	244	1.103	0.070	0.349	0.463
Births with skilled attendant at delivery	0.960	0.011	395	282	1.108	0.011	0.939	0.981
Had diarrhoea in the last 2 weeks	0.164	0.023	378	269	1.247	0.138	0.119	0.209
Sought treatment for diarrhoea	0.579	0.089	56	44	1.446	0.154	0.401	0.758
Ever had vaccination card	1	0	73	59	na	0	1	1
Vaccination card seen	0.657	0.067	73	59	1.314	0.102	0.522	0.791
Received BCG vaccination	0.945	0.032	73	59	1.297	0.034	0.881	1.009
Received DTaP-IPV-Hib vaccination (3 doses)	0.650	0.066	73	59	1.286	0.101	0.518	0.782
Received HepB vaccination (3 doses)	0.640	0.065	73	59	1.252	0.101	0.511	0.769
Received birth dose polio 0 vaccination	0.986	0.015	73	59	1.144	0.015	0.956	1.015
Received oral polio vaccination (non-birth dose)	0.744	0.079	73	59	1.680	0.106	0.586	0.902
Received pneumococcal vaccination (3 doses)	0.517	0.092	73	59	1.716	0.179	0.332	0.701
Received rotavirus vaccination (2 doses)	0.654	0.066	73	59	1.288	0.101	0.522	0.786
Received measles vaccination	0.850	0.039	73	59	1.013	0.046	0.773	0.928
Received all basic vaccinations	0.557	0.047	73	59	0.873	0.084	0.464	0.650
Received all age appropriate vaccinations (12-23 months)	0.437	0.070	73	59	1.317	0.161	0.297	0.578
Received DTaP-IPV-Hib vaccination 4 (children 24-35)	0.461	0.057	85	58	1.057	0.125	0.346	0.576
Received measles 2 vaccination (children 24-35)	0.681	0.068	85	58	1.337	0.099	0.546	0.816
Received all age appropriate vaccinations (24-35 months)	0.319	0.070	85	58	1.369	0.220	0.179	0.459
Height-for-age (-2SD)	0.274	0.029	165	128	0.809	0.105	0.217	0.332
Weight-for-height (-2SD)	0.059	0.022	166	128	1.273	0.381	0.014	0.103
Weight-for-height (+2SD)	0.079	0.025	166	128	1.299	0.316	0.029	0.129
Weight-for-age (-2SD)	0.126	0.039	169	130	1.728	0.308	0.048	0.204
Body Mass Index (BMI) <18.5	0.046	0.012	517	353	1.320	0.266	0.021	0.070
Body Mass Index (BMI) ≥25	0.678	0.030	517	353	1.460	0.044	0.617	0.738
Body Mass Index (BMI) ≥35	0.144	0.027	517	353	1.711	0.184	0.091	0.197
Waist ≥88 cm	0.478	0.030	516	353	1.353	0.062	0.418	0.538
Waist for height ratio ≥0.5	0.703	0.026	516	353	1.276	0.037	0.652	0.755
Prevalence of anaemia (children 6-59 months)	0.684	0.036	141	114	1.014	0.052	0.612	0.755
Prevalence of anaemia (women 15+)	0.383	0.055	499	342	2.518	0.144	0.273	0.494
Had 2+ sexual partners in past 12 months	0.077	0.009	863	570	1.042	0.123	0.058	0.096
Condom use at last sex	0.570	0.066	59	44	1.020	0.116	0.437	0.702
Had an HIV test and received results in past 12 months	0.614	0.015	863	570	0.932	0.025	0.583	0.645
Cervical cancer screening	0.507	0.037	283	198	1.238	0.073	0.433	0.581
Asthma symptoms	0.025	0.009	581	398	1.315	0.338	0.008	0.043
COPD symptoms	0.015	0.006	581	398	1.234	0.414	0.003	0.028
Hypertension (>140/90 or taking hypertensive medication)	0.400	0.049	537	366	2.322	0.123	0.302	0.499
Current smoking (daily or occassional)	0.046	0.011	581	398	1.301	0.245	0.024	0.069
Drank alcohol in past 12 months	0.206	0.017	581	398	1.014	0.083	0.172	0.240
Risky alcohol intake (>5 or more drinks)	0.087	0.014	581	398	1.209	0.163	0.058	0.115
Show signs of problem drinking by the CAGE test	0.066	0.009	581	398	0.916	0.143	0.047	0.085

(Continued…)

Table B.10—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
	WOMEN							
Codeine-containing medication misuse	0.049	0.012	581	398	1.349	0.246	0.025	0.073
Physical, sexual, or emotional violence by a partner in the previous 12 months	0.183	0.034	589	409	2.099	0.184	0.116	0.250
Physical violence by a current or former partner in the previous 12 months	0.073	0.010	589	409	0.938	0.138	0.053	0.093
Sexual violence by a current or former partner in the previous 12 months	0.049	0.017	589	409	1.916	0.349	0.015	0.083
Emotional violence by a current or former partner in the previous 12 months	0.128	0.021	589	409	1.521	0.164	0.086	0.170
Mobile phone ownership	0.897	0.020	863	570	1.955	0.023	0.857	0.938
Bank account ownership	0.517	0.027	863	570	1.601	0.053	0.462	0.572
Internet use in past 12 months	0.414	0.026	863	570	1.545	0.063	0.362	0.466
Total fertility rate (last 3 years)	3.069	0.238	2473	1643	1.402	0.078	2.592	3.545
Infant mortality (last 0-9 years)	55.010	7.887	789	530	0.904	0.143	39.237	70.784
Child mortality (last 0-9 years)	11.042	4.069	791	533	1.080	0.369	2.904	19.181
Under-five mortality (last 0-9 years)	65.445	8.142	790	531	0.880	0.124	49.161	81.729
HIV prevalence among women 15-49	0.296	0.029	339	161	1.167	0.098	0.238	0.354
HIV prevalence among young women 15-24	0.089	0.030	104	48	1.086	0.343	0.028	0.150
HIV prevalence among women 15+	0.252	0.026	504	228	1.351	0.104	0.200	0.305
	MEN							
Urban residence	0.416	0.063	379	237	2.458	0.151	0.290	0.541
Literacy	0.946	0.017	379	237	1.422	0.018	0.913	0.979
No education	0.027	0.010	379	237	1.196	0.369	0.007	0.047
Secondary or higher education	0.782	0.028	379	237	1.304	0.035	0.726	0.837
Never-in-union (never married or lived with a partner)	0.540	0.036	379	237	1.410	0.067	0.467	0.612
In-union (married or living with a partner)	0.385	0.047	379	237	1.879	0.123	0.291	0.479
Had first sexual intercourse before age 18	0.626	0.026	322	201	0.974	0.042	0.573	0.678
Want no more children	0.362	0.055	133	91	1.316	0.152	0.252	0.472
Want to delay birth at least 2 years	0.078	0.030	133	91	1.270	0.380	0.019	0.138
Ideal number of children	3.262	0.111	378	237	1.524	0.034	3.041	3.483
Body Mass Index (BMI) <18.5	0.133	0.017	435	271	1.042	0.127	0.099	0.167
Body Mass Index (BMI) ≥25	0.300	0.024	435	271	1.086	0.079	0.253	0.348
Body Mass Index (BMI) ≥35	0.019	0.006	435	271	0.976	0.336	0.006	0.032
Waist ≥102 cm	0.095	0.014	434	270	0.975	0.145	0.067	0.122
Waist for height ratio ≥0.5	0.345	0.029	434	270	1.288	0.085	0.286	0.404
Current smoking (daily or occassional)	0.320	0.026	504	310	1.266	0.082	0.267	0.372
Drank alcohol in past 12 months	0.644	0.054	504	310	2.532	0.084	0.535	0.753
Risky alcohol intake (>5 or more drinks)	0.272	0.025	504	310	1.244	0.091	0.223	0.321
Show signs of problem drinking by the CAGE test	0.130	0.019	504	310	1.258	0.145	0.092	0.168
Codeine-containing medication misuse	0.010	0.008	504	310	1.841	0.830	0	0.026
Prevalence of anaemia	0.175	0.020	385	242	1.047	0.115	0.135	0.215
Had 2+ sexual partners in past 12 months	0.184	0.037	379	237	1.870	0.203	0.109	0.259
Condom use at last sex	0.529	0.080	55	44	1.169	0.151	0.370	0.688
Had paid sex in past 12 months	0.011	0.006	379	237	1.135	0.553	0	0.023
Had HIV test and received results in past 12 months	0.443	0.033	379	237	1.309	0.075	0.376	0.510
Circumcised	0.489	0.047	379	237	1.835	0.097	0.394	0.583
Asthma symptoms	0.036	0.011	504	310	1.343	0.310	0.014	0.058
COPD symptoms	0.031	0.013	504	310	1.650	0.412	0.005	0.057
Hypertension (>140/90 or taking hypertensive medication)	0.370	0.029	436	271	1.257	0.079	0.312	0.429
Mobile phone ownership	0.917	0.014	379	237	0.954	0.015	0.890	0.944
Bank account ownership	0.656	0.028	379	237	1.158	0.043	0.599	0.712
Internet use in past 12 months	0.500	0.063	379	237	2.443	0.126	0.374	0.627
HIV prevalence among men 15-49	0.155	0.028	290	165	1.324	0.182	0.098	0.211
HIV prevalence among young men 15-24	0.011	0.008	107	61	0.788	0.724	0	0.027
HIV prevalence among men 15+	0.155	0.026	383	212	1.416	0.169	0.103	0.208
	WOMEN and MEN							
HIV prevalence among respondents 15-49	0.225	0.017	629	326	1.022	0.076	0.191	0.259
HIV prevalence among respondents 15-24	0.045	0.015	211	109	1.041	0.330	0.015	0.075
HIV prevalence among respondents 15+	0.205	0.015	887	440	1.117	0.074	0.175	0.236

na = Not applicable

Table B.11 Sampling errors: Gauteng sample, South Africa DHS 2017

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
POPULATION								
Population using safely managed drinking water services	0.988	0.009	3791	9293	2.999	0.009	0.971	1.005
Population using safely managed sanitation services	0.714	0.033	3791	9293	2.339	0.046	0.647	0.780
Population with access to electricity	0.917	0.029	3791	9293	3.556	0.032	0.859	0.975
Population with primary reliance on clean fuels	0.913	0.026	3791	9293	3.076	0.028	0.862	0.965
WOMEN								
Urban residence	0.979	0.005	863	2284	0.930	0.005	0.970	0.988
Literacy	0.96	0.010	863	2284	1.508	0.011	0.940	0.980
No education	0.016	0.005	863	2284	1.158	0.314	0.006	0.025
Secondary or higher education	0.912	0.015	863	2284	1.551	0.016	0.883	0.942
Never-in-union (never married or lived with a partner)	0.499	0.020	863	2284	1.155	0.039	0.460	0.539
In-union (married or living with a partner)	0.453	0.020	863	2284	1.204	0.045	0.412	0.494
In a union before age 15 (women 20-24)	0.019	0.013	151	377	1.199	0.706	0	0.046
In a union before age 18 (women 20-24)	0.041	0.021	151	377	1.311	0.520	0	0.083
In a union before age 18 (women 20-49)	0.074	0.011	754	1973	1.133	0.146	0.052	0.096
Had sexual intercourse before age 18	0.537	0.023	754	1973	1.240	0.042	0.492	0.582
Currently pregnant	0.055	0.009	863	2284	1.182	0.167	0.036	0.073
Currently using any method	0.580	0.023	553	1430	1.097	0.040	0.534	0.626
Currently using a modern method	0.575	0.023	553	1430	1.085	0.040	0.529	0.620
Currently using pill	0.097	0.015	553	1430	1.177	0.153	0.067	0.127
Currently using condoms	0.149	0.019	553	1430	1.244	0.127	0.111	0.186
Currently using injectables - 3 months	0.160	0.016	553	1430	1.027	0.100	0.128	0.192
Currently using injectables - 2 months	0.071	0.012	553	1430	1.144	0.177	0.046	0.096
Currently using implants	0.031	0.009	553	1430	1.165	0.276	0.014	0.049
Currently using female sterilisation	0.053	0.012	553	1430	1.215	0.219	0.030	0.076
Currently using withdrawal	0.005	0.003	553	1430	1.080	0.634	0	0.012
Currently using IUD	0.011	0.006	553	1430	1.316	0.523	0	0.023
Using public sector source	0.750	0.032	409	1085	1.486	0.043	0.686	0.814
Demand satisfied by modern methods	0.774	0.023	532	1400	1.266	0.030	0.729	0.820
Want no more children	0.549	0.029	395	1035	1.164	0.053	0.491	0.608
Want to delay next birth at least 2 years	0.098	0.016	395	1035	1.064	0.162	0.066	0.130
Ideal number of children	2.642	0.064	861	2281	1.414	0.024	2.514	2.770
Mothers protected against tetanus for last birth	0.405	0.041	310	842	1.472	0.101	0.324	0.487
Births with skilled attendant at delivery	0.976	0.009	370	1013	0.992	0.009	0.958	0.994
Had diarrhoea in the last 2 weeks	0.086	0.016	358	980	1.128	0.188	0.054	0.119
Sought treatment for diarrhoea	0.732	0.087	34	85	1.107	0.119	0.557	0.906
Ever had vaccination card	0.995	0.005	66	180	0.560	0.005	0.986	1.005
Vaccination card seen	0.551	0.069	66	180	1.119	0.125	0.414	0.689
Received BCG vaccination	0.926	0.034	66	180	1.053	0.036	0.859	0.993
Received DTaP-IPV-Hib vaccination (3 doses)	0.536	0.064	66	180	1.043	0.120	0.407	0.665
Received HepB vaccination (3 doses)	0.587	0.058	66	180	0.958	0.099	0.471	0.704
Received birth dose polio 0 vaccination	0.915	0.037	66	180	1.088	0.041	0.841	0.989
Received oral polio vaccination (non-birth dose)	0.685	0.057	66	180	0.990	0.082	0.572	0.798
Received pneumococcal vaccination (3 doses)	0.574	0.068	66	180	1.116	0.119	0.437	0.710
Received rotavirus vaccination (2 doses)	0.671	0.065	66	180	1.132	0.098	0.540	0.801
Received measles vaccination	0.877	0.043	66	180	1.069	0.049	0.792	0.963
Received all basic vaccinations	0.519	0.065	66	180	1.042	0.124	0.390	0.649
Received all age appropriate vaccinations (12-23 months)	0.457	0.068	66	180	1.087	0.148	0.322	0.592
Received DTaP-IPV-Hib vaccination 4 (children 24-35)	0.448	0.072	69	185	1.204	0.161	0.304	0.592
Received measles 2 vaccination (children 24-35)	0.501	0.068	69	185	1.128	0.136	0.365	0.637
Received all age appropriate vaccinations (24-35 months)	0.363	0.069	69	185	1.197	0.191	0.225	0.502
Height-for-age (-2SD)	0.342	0.056	114	303	1.331	0.165	0.229	0.455
Weight-for-height (-2SD)	0.013	0.011	114	297	1.100	0.862	0	0.035
Weight-for-height (+2SD)	0.112	0.032	114	297	1.022	0.284	0.049	0.176
Weight-for-age (-2SD)	0.058	0.023	115	304	1.102	0.391	0.013	0.104
Body Mass Index (BMI) <18.5	0.015	0.006	397	1065	1.048	0.435	0.002	0.027
Body Mass Index (BMI) ≥25	0.656	0.026	397	1065	1.090	0.040	0.603	0.708
Body Mass Index (BMI) ≥35	0.222	0.028	397	1065	1.333	0.127	0.166	0.278
Waist ≥88 cm	0.402	0.032	397	1065	1.314	0.081	0.338	0.467
Waist for height ratio ≥0.5	0.634	0.030	397	1065	1.244	0.048	0.573	0.694
Prevalence of anaemia (children 6-59 months)	0.740	0.062	93	249	1.419	0.084	0.616	0.864
Prevalence of anaemia (women 15+)	0.316	0.029	364	968	1.159	0.091	0.258	0.373
Had 2+ sexual partners in past 12 months	0.036	0.006	863	2284	0.955	0.168	0.024	0.048
Condom use at last sex	0.616	0.098	31	83	1.102	0.159	0.420	0.812
Had an HIV test and received results in past 12 months	0.541	0.022	863	2284	1.289	0.040	0.497	0.585
Cervical cancer screening	0.438	0.043	277	748	1.437	0.098	0.352	0.524
Asthma symptoms	0.017	0.005	561	1534	0.963	0.308	0.007	0.028
COPD symptoms	0.013	0.006	561	1534	1.197	0.437	0.002	0.025
Hypertension (>140/90 or taking hypertensive medication)	0.423	0.032	402	1073	1.283	0.075	0.360	0.487
Current smoking (daily or occassional)	0.065	0.012	561	1534	1.190	0.191	0.040	0.090
Drank alcohol in past 12 months	0.220	0.021	561	1534	1.183	0.094	0.179	0.262
Risky alcohol intake (>5 or more drinks)	0.052	0.011	561	1534	1.181	0.212	0.030	0.075
Show signs of problem drinking by the CAGE test	0.020	0.006	561	1534	1.025	0.306	0.008	0.032

(Continued…)

Table B.11 —*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Codeine-containing medication misuse	0.041	0.011	561	1534	1.326	0.271	0.019	0.063
Physical, sexual, or emotional violence by a partner in the previous 12 months	0.132	0.020	574	1464	1.431	0.154	0.091	0.172
Physical violence by a current or former partner in the previous 12 months	0.082	0.015	574	1464	1.348	0.189	0.051	0.112
Sexual violence by a current or former partner in the previous 12 months	0.03	0.008	574	1464	1.077	0.255	0.015	0.046
Emotional violence by a current or former partner in the previous 12 months	0.082	0.014	574	1464	1.210	0.169	0.054	0.110
Mobile phone ownership	0.947	0.010	863	2284	1.301	0.011	0.927	0.967
Bank account ownership	0.620	0.028	863	2284	1.684	0.045	0.565	0.676
Internet use in past 12 months	0.571	0.028	863	2284	1.678	0.050	0.515	0.628
Total fertility rate (last 3 years)	2.584	0.167	2491	6574	0.989	0.065	2.250	2.919
Infant mortality (last 0-9 years)	41.661	2.489	677	1847	0.993	0.275	18.787	64.535
Child mortality (last 0-9 years)	4.078	11.561	693	1884	1.279	0.610	0	9.055
Under-five mortality (last 0-9 years)	45.569	5.571	694	1886	1.025	0.254	22.448	68.691
HIV prevalence among women 15-49	0.253	0.030	217	690	1.019	0.119	0.193	0.313
HIV prevalence among young women 15-24	0.042	0.028	66	222	1.120	0.661	0	0.098
HIV prevalence among women 15+	0.244	0.026	292	905	1.022	0.106	0.192	0.295
MEN								
Urban residence	0.983	0.004	371	984	0.594	0.004	0.974	0.991
Literacy	0.963	0.013	371	984	1.309	0.013	0.938	0.989
No education	0.013	0.007	371	984	1.149	0.529	0	0.026
Secondary or higher education	0.902	0.019	371	984	1.223	0.021	0.864	0.940
Never-in-union (never married or lived with a partner)	0.541	0.035	371	984	1.363	0.065	0.470	0.612
In-union (married or living with a partner)	0.402	0.032	371	984	1.247	0.079	0.338	0.466
Had first sexual intercourse before age 18	0.559	0.039	321	851	1.399	0.070	0.482	0.637
Want no more children	0.434	0.049	150	395	1.215	0.114	0.335	0.532
Want to delay birth at least 2 years	0.112	0.031	150	395	1.199	0.277	0.050	0.174
Ideal number of children	3.198	0.130	365	967	1.316	0.041	2.937	3.459
Body Mass Index (BMI) <18.5	0.084	0.016	329	848	1.042	0.193	0.051	0.116
Body Mass Index (BMI) ≥25	0.335	0.035	329	848	1.339	0.106	0.265	0.406
Body Mass Index (BMI) ≥35	0.034	0.012	329	848	1.199	0.357	0.010	0.059
Waist ≥102 cm	0.107	0.022	330	849	1.308	0.208	0.063	0.152
Waist for height ratio ≥0.5	0.349	0.034	329	848	1.305	0.099	0.280	0.417
Current smoking (daily or occassional)	0.376	0.025	470	1245	1.107	0.066	0.326	0.425
Drank alcohol in past 12 months	0.609	0.023	470	1245	1.043	0.039	0.563	0.656
Risky alcohol intake (>5 or more drinks)	0.353	0.028	470	1245	1.284	0.080	0.296	0.410
Show signs of problem drinking by the CAGE test	0.168	0.022	470	1245	1.295	0.133	0.123	0.212
Codeine-containing medication misuse	0.014	0.006	470	1245	1.058	0.406	0.003	0.026
Prevalence of anaemia	0.172	0.026	267	683	1.122	0.153	0.119	0.225
Had 2+ sexual partners in past 12 months	0.173	0.023	371	984	1.151	0.131	0.128	0.218
Condom use at last sex	0.678	0.063	67	170	1.088	0.093	0.552	0.803
Had paid sex in past 12 months	0.046	0.011	371	984	0.974	0.232	0.024	0.067
Had HIV test and received results in past 12 months	0.410	0.036	371	984	1.415	0.088	0.338	0.483
Circumcised	0.598	0.036	371	984	1.415	0.060	0.526	0.670
Asthma symptoms	0.005	0.003	470	1245	0.901	0.591	0	0.011
COPD symptoms	0.009	0.005	470	1245	1.050	0.503	0	0.018
Hypertension (>140/90 or taking hypertensive medication)	0.395	0.033	319	830	1.196	0.083	0.329	0.460
Mobile phone ownership	0.927	0.020	371	984	1.483	0.022	0.887	0.967
Bank account ownership	0.683	0.035	371	984	1.438	0.051	0.613	0.753
Internet use in past 12 months	0.609	0.036	371	984	1.435	0.060	0.536	0.682
HIV prevalence among men 15-49	0.149	0.037	163	675	1.304	0.245	0.076	0.223
HIV prevalence among young men 15-24	0.063	0.043	48	188	1.218	0.687	0	0.150
HIV prevalence among men 15+	0.142	0.029	219	883	1.225	0.204	0.084	0.201
WOMEN and MEN								
HIV prevalence among respondents 15-49	0.202	0.024	380	1365	1.151	0.118	0.154	0.249
HIV prevalence among respondents 15-24	0.052	0.025	114	410	1.181	0.475	0.003	0.101
HIV prevalence among respondents 15+	0.194	0.020	511	1788	1.167	0.105	0.153	0.235

Table B.12 Sampling errors: Mpumalanga sample, South Africa DHS 2017

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
POPULATION								
Population using safely managed drinking water services	0.901	0.026	4509	3011	2.516	0.029	0.848	0.954
Population using safely managed sanitation services	0.790	0.022	4509	3011	1.764	0.028	0.747	0.834
Population with access to electricity	0.834	0.043	4509	3011	3.360	0.052	0.748	0.920
Population with primary reliance on clean fuels	0.642	0.049	4509	3011	2.846	0.076	0.545	0.740
WOMEN								
Urban residence	0.422	0.038	1054	671	2.508	0.091	0.345	0.498
Literacy	0.948	0.008	1054	671	1.105	0.008	0.933	0.963
No education	0.030	0.006	1054	671	1.171	0.204	0.018	0.043
Secondary or higher education	0.867	0.015	1054	671	1.471	0.018	0.836	0.897
Never-in-union (never married or lived with a partner)	0.565	0.020	1054	671	1.315	0.036	0.525	0.605
In-union (married or living with a partner)	0.364	0.022	1054	671	1.474	0.060	0.320	0.408
In a union before age 15 (women 20-24)	0.019	0.011	178	114	1.107	0.592	0	0.042
In a union before age 18 (women 20-24)	0.048	0.016	178	114	1.003	0.336	0.016	0.080
In a union before age 18 (women 20-49)	0.095	0.010	861	553	1.016	0.107	0.075	0.115
Had sexual intercourse before age 18	0.556	0.019	861	553	1.144	0.035	0.517	0.594
Currently pregnant	0.041	0.006	1054	671	1.059	0.158	0.028	0.054
Currently using any method	0.621	0.031	553	356	1.505	0.050	0.559	0.684
Currently using a modern method	0.619	0.031	553	356	1.496	0.050	0.558	0.681
Currently using pill	0.061	0.011	553	356	1.112	0.185	0.039	0.084
Currently using condoms	0.198	0.023	553	356	1.338	0.114	0.153	0.244
Currently using injectables - 3 months	0.170	0.019	553	356	1.206	0.113	0.132	0.209
Currently using injectables - 2 months	0.105	0.017	553	356	1.273	0.158	0.072	0.138
Currently using implants	0.035	0.010	553	356	1.233	0.275	0.016	0.054
Currently using female sterilisation	0.034	0.010	553	356	1.341	0.304	0.013	0.055
Currently using withdrawal	0.002	0.002	553	356	1.050	1.007	0	0.006
Currently using IUD	0.006	0.003	553	356	0.976	0.550	0	0.012
Using public sector source	0.793	0.021	546	346	1.234	0.027	0.751	0.836
Demand satisfied by modern methods	0.815	0.017	666	424	1.158	0.021	0.781	0.850
Want no more children	0.555	0.027	366	244	1.045	0.049	0.501	0.609
Want to delay next birth at least 2 years	0.097	0.017	366	244	1.066	0.170	0.064	0.130
Ideal number of children	2.921	0.053	1049	668	1.208	0.018	2.814	3.028
Mothers protected against tetanus for last birth	0.404	0.029	421	278	1.228	0.072	0.346	0.462
Births with skilled attendant at delivery	0.964	0.010	501	332	1.096	0.010	0.945	0.984
Had diarrhoea in the last 2 weeks	0.107	0.018	469	309	1.258	0.168	0.071	0.142
Sought treatment for diarrhoea	0.693	0.065	47	33	0.998	0.095	0.562	0.824
Ever had vaccination card	0.981	0.014	94	61	0.967	0.014	0.954	1.008
Vaccination card seen	0.635	0.063	94	61	1.238	0.099	0.510	0.761
Received BCG vaccination	0.857	0.037	94	61	1.027	0.043	0.783	0.931
Received DTaP-IPV-Hib vaccination (3 doses)	0.619	0.062	94	61	1.223	0.101	0.494	0.744
Received HepB vaccination (3 doses)	0.676	0.061	94	61	1.229	0.090	0.554	0.798
Received birth dose polio 0 vaccination	0.871	0.036	94	61	1.041	0.041	0.799	0.943
Received oral polio vaccination (non-birth dose)	0.797	0.047	94	61	1.073	0.059	0.704	0.891
Received pneumococcal vaccination (3 doses)	0.588	0.068	94	61	1.312	0.115	0.453	0.724
Received rotavirus vaccination (2 doses)	0.656	0.061	94	61	1.210	0.092	0.535	0.778
Received measles vaccination	0.750	0.052	94	61	1.111	0.069	0.647	0.853
Received all basic vaccinations	0.555	0.065	94	61	1.258	0.118	0.424	0.686
Received all age appropriate vaccinations (12-23 months)	0.495	0.067	94	61	1.293	0.136	0.361	0.630
Received DTaP-IPV-Hib vaccination 4 (children 24-35)	0.474	0.073	96	63	1.420	0.155	0.327	0.620
Received measles 2 vaccination (children 24-35)	0.579	0.060	96	63	1.174	0.103	0.460	0.699
Received all age appropriate vaccinations (24-35 months)	0.425	0.070	96	63	1.375	0.165	0.285	0.566
Height-for-age (-2SD)	0.215	0.028	232	151	0.927	0.128	0.160	0.270
Weight-for-height (-2SD)	0.005	0.005	235	152	0.930	0.837	0	0.015
Weight-for-height (+2SD)	0.085	0.015	235	152	0.848	0.182	0.054	0.116
Weight-for-age (-2SD)	0.047	0.014	237	154	1.022	0.299	0.019	0.075
Body Mass Index (BMI) <18.5	0.038	0.008	587	393	1.050	0.218	0.021	0.055
Body Mass Index (BMI) ≥25	0.620	0.026	587	393	1.297	0.042	0.568	0.672
Body Mass Index (BMI) ≥35	0.153	0.015	587	393	0.986	0.096	0.124	0.183
Waist ≥88 cm	0.342	0.019	586	393	0.965	0.055	0.304	0.380
Waist for height ratio ≥0.5	0.553	0.025	585	392	1.195	0.045	0.503	0.602
Prevalence of anaemia (children 6-59 months)	0.701	0.045	180	115	1.139	0.064	0.611	0.791
Prevalence of anaemia (women 15+)	0.385	0.027	571	383	1.345	0.071	0.330	0.440
Had 2+ sexual partners in past 12 months	0.066	0.009	1054	671	1.129	0.131	0.049	0.083
Condom use at last sex	0.530	0.056	72	44	0.951	0.106	0.418	0.643
Had an HIV test and received results in past 12 months	0.616	0.018	1054	671	1.191	0.029	0.580	0.652
Cervical cancer screening	0.560	0.032	307	212	1.128	0.057	0.496	0.624
Asthma symptoms	0.041	0.010	705	473	1.336	0.244	0.021	0.061
COPD symptoms	0.025	0.007	705	473	1.125	0.266	0.012	0.038
Hypertension (>140/90 or taking hypertensive medication)	0.458	0.031	594	399	1.537	0.069	0.395	0.521
Current smoking (daily or occassional)	0.060	0.015	705	473	1.709	0.255	0.030	0.091
Drank alcohol in past 12 months	0.191	0.017	705	473	1.133	0.088	0.158	0.225
Risky alcohol intake (>5 or more drinks)	0.047	0.010	705	473	1.233	0.208	0.028	0.067
Show signs of problem drinking by the CAGE test	0.026	0.006	705	473	1.013	0.233	0.014	0.038

(Continued…)

Table B.12—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Codeine-containing medication misuse	0.005	0.003	705	473	0.926	0.484	0	0.010
Physical, sexual, or emotional violence by a partner in the previous 12 months	0.150	0.017	649	443	1.241	0.116	0.115	0.185
Physical violence by a current or former partner in the previous 12 months	0.078	0.014	649	443	1.364	0.184	0.050	0.107
Sexual violence by a current or former partner in the previous 12 months	0.027	0.007	649	443	1.061	0.251	0.013	0.040
Emotional violence by a current or former partner in the previous 12 months	0.102	0.013	649	443	1.103	0.128	0.076	0.129
Mobile phone ownership	0.944	0.008	1054	671	1.173	0.009	0.927	0.960
Bank account ownership	0.528	0.023	1054	671	1.502	0.044	0.482	0.575
Internet use in past 12 months	0.391	0.027	1054	671	1.764	0.068	0.338	0.445
Total fertility rate (last 3 years)	2.979	0.170	2986	1910	0.952	0.057	2.640	3.318
Infant mortality (last 0-9 years)	53.473	8.093	948	620	1.014	0.151	37.287	69.659
Child mortality (last 0-9 years)	17.790	5.163	925	606	0.933	0.290	7.465	28.116
Under-five mortality (last 0-9 years)	70.312	9.399	951	622	1.016	0.134	51.514	89.111
HIV prevalence among women 15-49	0.340	0.035	383	211	1.431	0.102	0.271	0.410
HIV prevalence among young women 15-24	0.199	0.062	147	79	1.863	0.312	0.075	0.323
HIV prevalence among women 15+	0.300	0.030	517	278	1.480	0.100	0.240	0.360
MEN								
Urban residence	0.521	0.037	413	263	1.519	0.072	0.446	0.596
Literacy	0.925	0.017	413	263	1.318	0.019	0.891	0.959
No education	0.041	0.013	413	263	1.345	0.320	0.015	0.068
Secondary or higher education	0.835	0.021	413	263	1.127	0.025	0.793	0.876
Never-in-union (never married or lived with a partner)	0.638	0.029	413	263	1.215	0.045	0.581	0.696
In-union (married or living with a partner)	0.319	0.030	413	263	1.300	0.094	0.259	0.379
Had first sexual intercourse before age 18	0.614	0.034	325	211	1.248	0.055	0.546	0.681
Want no more children	0.459	0.037	125	84	0.837	0.082	0.384	0.534
Want to delay birth at least 2 years	0.124	0.028	125	84	0.959	0.229	0.067	0.180
Ideal number of children	2.754	0.155	413	263	1.433	0.056	2.444	3.065
Body Mass Index (BMI) <18.5	0.107	0.016	429	273	1.044	0.146	0.076	0.138
Body Mass Index (BMI) ≥25	0.241	0.022	429	273	1.051	0.090	0.198	0.284
Body Mass Index (BMI) ≥35	0.008	0.004	429	273	0.894	0.490	0	0.015
Waist ≥102 cm	0.083	0.019	425	271	1.388	0.224	0.046	0.120
Waist for height ratio ≥0.5	0.269	0.026	424	270	1.225	0.098	0.216	0.321
Current smoking (daily or occassional)	0.402	0.028	515	326	1.301	0.070	0.345	0.458
Drank alcohol in past 12 months	0.550	0.034	515	326	1.534	0.061	0.482	0.617
Risky alcohol intake (>5 or more drinks)	0.288	0.029	515	326	1.450	0.101	0.230	0.346
Show signs of problem drinking by the CAGE test	0.174	0.022	515	326	1.339	0.129	0.129	0.219
Codeine-containing medication misuse	0.046	0.012	515	326	1.313	0.265	0.021	0.070
Prevalence of anaemia	0.181	0.026	368	233	1.279	0.142	0.130	0.233
Had 2+ sexual partners in past 12 months	0.181	0.028	413	263	1.498	0.157	0.124	0.238
Condom use at last sex	0.678	0.076	70	48	1.349	0.113	0.526	0.831
Had paid sex in past 12 months	0.027	0.009	413	263	1.063	0.312	0.010	0.045
Had HIV test and received results in past 12 months	0.497	0.029	413	263	1.166	0.058	0.440	0.555
Circumcised	0.499	0.038	413	263	1.530	0.076	0.424	0.575
Asthma symptoms	0.142	0.028	515	326	1.819	0.198	0.086	0.198
COPD symptoms	0.027	0.008	515	326	1.116	0.295	0.011	0.043
Hypertension (>140/90 or taking hypertensive medication)	0.461	0.033	405	260	1.326	0.071	0.395	0.527
Mobile phone ownership	0.955	0.012	413	263	1.204	0.013	0.930	0.979
Bank account ownership	0.642	0.026	413	263	1.113	0.041	0.589	0.694
Internet use in past 12 months	0.472	0.036	413	263	1.444	0.075	0.401	0.543
HIV prevalence among men 15-49	0.157	0.026	263	193	1.176	0.169	0.104	0.210
HIV prevalence among young men 15-24	0.036	0.017	116	79	1.000	0.480	0.001	0.071
HIV prevalence among men 15+	0.165	0.024	325	232	1.154	0.144	0.117	0.212
WOMEN and MEN								
HIV prevalence among respondents 15-49	0.253	0.021	646	404	1.247	0.084	0.210	0.295
HIV prevalence among respondents 15-24	0.117	0.038	263	158	1.901	0.324	0.041	0.193
HIV prevalence among respondents 15+	0.238	0.018	842	510	1.253	0.077	0.202	0.275

Table B.13 Sampling errors: Limpopo sample, South Africa DHS 2017

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weight-ed (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
POPULATION								
Population using safely managed drinking water services	0.838	0.030	4876	3880	2.417	0.036	0.777	0.899
Population using safely managed sanitation services	0.895	0.013	4876	3880	1.568	0.015	0.868	0.922
Population with access to electricity	0.982	0.005	4876	3880	1.163	0.005	0.973	0.992
Population with primary reliance on clean fuels	0.440	0.033	4876	3880	2.087	0.075	0.374	0.506
WOMEN								
Urban residence	0.183	0.027	1105	824	2.309	0.147	0.129	0.237
Literacy	0.968	0.006	1105	824	1.055	0.006	0.957	0.979
No education	0.012	0.004	1105	824	1.094	0.304	0.005	0.019
Secondary or higher education	0.913	0.012	1105	824	1.458	0.014	0.889	0.938
Never-in-union (never married or lived with a partner)	0.610	0.022	1105	824	1.488	0.036	0.566	0.653
In-union (married or living with a partner)	0.309	0.017	1105	824	1.188	0.054	0.276	0.342
In a union before age 15 (women 20-24)	0.005	0.005	183	137	0.992	0.997	0	0.016
In a union before age 18 (women 20-24)	0.043	0.016	183	137	1.085	0.378	0.011	0.076
In a union before age 18 (women 20-49)	0.105	0.013	881	657	1.233	0.122	0.079	0.130
Had sexual intercourse before age 18	0.509	0.019	881	657	1.146	0.038	0.471	0.548
Currently pregnant	0.026	0.005	1105	824	0.987	0.181	0.017	0.036
Currently using any method	0.539	0.027	466	351	1.168	0.050	0.485	0.593
Currently using a modern method	0.530	0.027	466	351	1.152	0.050	0.476	0.583
Currently using pill	0.076	0.014	466	351	1.125	0.182	0.048	0.103
Currently using condoms	0.111	0.017	466	351	1.157	0.152	0.077	0.145
Currently using injectables - 3 months	0.129	0.019	466	351	1.190	0.144	0.092	0.166
Currently using injectables - 2 months	0.147	0.016	466	351	0.998	0.111	0.115	0.180
Currently using implants	0.028	0.009	466	351	1.232	0.338	0.009	0.047
Currently using female sterilisation	0.026	0.008	466	351	1.098	0.314	0.010	0.042
Currently using withdrawal	0.007	0.004	466	351	1.034	0.575	0	0.015
Currently using IUD	0.009	0.005	466	351	1.034	0.496	0	0.018
Using public sector source	0.879	0.019	448	333	1.252	0.022	0.841	0.918
Demand satisfied by modern methods	0.741	0.022	598	450	1.223	0.030	0.697	0.785
Want no more children	0.524	0.033	335	254	1.193	0.062	0.459	0.589
Want to delay next birth at least 2 years	0.115	0.020	335	254	1.172	0.178	0.074	0.156
Ideal number of children	3.300	0.050	1103	822	1.220	0.015	3.200	3.401
Mothers protected against tetanus for last birth	0.315	0.026	403	301	1.140	0.084	0.263	0.368
Births with skilled attendant at delivery	0.978	0.007	467	347	0.978	0.007	0.963	0.992
Had diarrhoea in the last 2 weeks	0.120	0.017	455	338	1.117	0.144	0.086	0.155
Sought treatment for diarrhoea	0.571	0.070	56	41	1.014	0.122	0.431	0.710
Ever had vaccination card	0.945	0.031	94	69	1.135	0.033	0.883	1.007
Vaccination card seen	0.732	0.054	94	69	1.127	0.074	0.624	0.841
Received BCG vaccination	0.929	0.025	94	69	0.952	0.027	0.878	0.980
Received DTaP-IPV-Hib vaccination (3 doses)	0.711	0.061	94	69	1.236	0.085	0.589	0.832
Received HepB vaccination (3 doses)	0.663	0.061	94	69	1.204	0.092	0.540	0.785
Received birth dose polio 0 vaccination	0.934	0.025	94	69	0.955	0.026	0.885	0.984
Received oral polio vaccination (non-birth dose)	0.795	0.046	94	69	1.025	0.058	0.704	0.887
Received pneumococcal vaccination (3 doses)	0.669	0.063	94	69	1.239	0.094	0.543	0.794
Received rotavirus vaccination (2 doses)	0.677	0.059	94	69	1.179	0.088	0.559	0.796
Received measles vaccination	0.887	0.044	94	69	1.338	0.049	0.799	0.974
Received all basic vaccinations	0.667	0.060	94	69	1.184	0.090	0.547	0.787
Received all age appropriate vaccinations (12-23 months)	0.549	0.064	94	69	1.214	0.117	0.420	0.677
Received DTaP-IPV-Hib vaccination 4 (children 24-35)	0.510	0.055	100	74	1.103	0.108	0.400	0.621
Received measles 2 vaccination (children 24-35)	0.641	0.053	100	74	1.101	0.083	0.535	0.747
Received all age appropriate vaccinations (24-35 months)	0.465	0.054	100	74	1.083	0.116	0.357	0.573
Height-for-age (-2SD)	0.219	0.034	209	168	1.123	0.153	0.152	0.287
Weight-for-height (-2SD)	0.041	0.014	215	173	1.063	0.340	0.013	0.069
Weight-for-height (+2SD)	0.079	0.019	215	173	0.984	0.239	0.041	0.117
Weight-for-age (-2SD)	0.049	0.016	214	173	1.116	0.320	0.018	0.080
Body Mass Index (BMI) <18.5	0.042	0.009	670	503	1.121	0.207	0.024	0.059
Body Mass Index (BMI) ≥25	0.642	0.022	670	503	1.184	0.034	0.598	0.686
Body Mass Index (BMI) ≥35	0.163	0.017	670	503	1.159	0.101	0.130	0.196
Waist ≥88 cm	0.406	0.020	668	502	1.045	0.049	0.366	0.446
Waist for height ratio ≥0.5	0.625	0.021	665	500	1.093	0.033	0.584	0.666
Prevalence of anaemia (children 6-59 months)	0.594	0.042	160	128	1.097	0.071	0.509	0.679
Prevalence of anaemia (women 15+)	0.290	0.021	592	445	1.143	0.073	0.247	0.332
Had 2+ sexual partners in past 12 months	0.033	0.006	1105	824	1.058	0.171	0.022	0.045
Condom use at last sex	0.608	0.102	35	27	1.206	0.167	0.404	0.811
Had an HIV test and received results in past 12 months	0.632	0.019	1105	824	1.332	0.031	0.593	0.670
Cervical cancer screening	0.433	0.030	367	279	1.158	0.069	0.373	0.493
Asthma symptoms	0.015	0.005	863	646	1.128	0.311	0.006	0.024
COPD symptoms	0.008	0.003	863	646	1.007	0.373	0.002	0.015
Hypertension (>140/90 or taking hypertensive medication)	0.341	0.020	698	524	1.129	0.059	0.300	0.381
Current smoking (daily or occassional)	0.020	0.006	863	646	1.206	0.286	0.009	0.032
Drank alcohol in past 12 months	0.081	0.013	863	646	1.362	0.156	0.056	0.106
Risky alcohol intake (>5 or more drinks)	0.015	0.006	863	646	1.372	0.382	0.003	0.026
Show signs of problem drinking by the CAGE test	0.010	0.004	863	646	1.082	0.372	0.002	0.017

(Continued…)

Table B.13—*Continued*

Variable	Value (R)	Standard error (SE)	Number of cases: Un-weighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence limits: R-2SE	Confidence limits: R+2SE
WOMEN								
Codeine-containing medication misuse	0.006	0.003	863	646	0.980	0.432	0.001	0.011
Physical, sexual, or emotional violence by a partner in the previous 12 months	0.071	0.010	881	605	1.102	0.134	0.052	0.090
Physical violence by a current or former partner in the previous 12 months	0.035	0.007	881	605	1.180	0.209	0.020	0.049
Sexual violence by a current or former partner in the previous 12 months	0.015	0.004	881	605	0.965	0.268	0.007	0.022
Emotional violence by a current or former partner in the previous 12 months	0.055	0.009	881	605	1.110	0.155	0.038	0.072
Mobile phone ownership	0.896	0.010	1105	824	1.065	0.011	0.877	0.916
Bank account ownership	0.468	0.024	1105	824	1.564	0.050	0.421	0.515
Internet use in past 12 months	0.352	0.018	1105	824	1.271	0.052	0.316	0.389
Total fertility rate (last 3 years)	3.099	0.133	3108	2314	0.841	0.043	2.833	3.364
Infant mortality (last 0-9 years)	23.678	5.051	928	684	0.996	0.213	13.575	33.781
Child mortality (last 0-9 years)	10.462	4.005	904	669	1.017	0.383	2.452	18.471
Under-five mortality (last 0-9 years)	33.892	7.356	930	685	1.103	0.217	19.180	48.603
HIV prevalence among women 15-49	0.145	0.021	327	250	1.102	0.148	0.102	0.188
HIV prevalence among young women 15-24	0.028	0.015	125	96	0.988	0.522	0	0.057
HIV prevalence among women 15+	0.129	0.016	500	380	1.078	0.125	0.097	0.161
MEN								
Urban residence	0.218	0.034	402	288	1.665	0.158	0.149	0.286
Literacy	0.874	0.026	402	288	1.560	0.030	0.822	0.926
No education	0.007	0.004	402	288	0.972	0.575	0	0.015
Secondary or higher education	0.879	0.018	402	288	1.082	0.020	0.843	0.914
Never-in-union (never married or lived with a partner)	0.753	0.023	402	288	1.064	0.030	0.707	0.799
In-union (married or living with a partner)	0.214	0.020	402	288	0.978	0.094	0.174	0.254
Had first sexual intercourse before age 18	0.540	0.036	288	207	1.210	0.066	0.469	0.611
Want no more children	0.357	0.053	89	62	1.030	0.147	0.252	0.462
Want to delay birth at least 2 years	0.230	0.048	89	62	1.069	0.208	0.134	0.326
Ideal number of children	3.631	0.113	399	286	0.987	0.031	3.404	3.857
Body Mass Index (BMI) <18.5	0.121	0.021	388	276	1.257	0.172	0.079	0.163
Body Mass Index (BMI) ≥25	0.251	0.021	388	276	0.970	0.085	0.209	0.294
Body Mass Index (BMI) ≥35	0.022	0.009	388	276	1.172	0.398	0.004	0.039
Waist ≥102 cm	0.060	0.013	348	247	1.058	0.225	0.033	0.087
Waist for height ratio ≥0.5	0.316	0.026	346	245	1.023	0.081	0.265	0.367
Current smoking (daily or occassional)	0.264	0.023	547	386	1.198	0.086	0.219	0.309
Drank alcohol in past 12 months	0.524	0.023	547	386	1.076	0.044	0.478	0.570
Risky alcohol intake (>5 or more drinks)	0.205	0.021	547	386	1.240	0.105	0.162	0.248
Show signs of problem drinking by the CAGE test	0.145	0.019	547	386	1.232	0.128	0.108	0.182
Codeine-containing medication misuse	0.006	0.003	547	386	0.901	0.496	0	0.012
Prevalence of anaemia	0.139	0.019	319	226	0.966	0.134	0.102	0.177
Had 2+ sexual partners in past 12 months	0.237	0.022	402	288	1.053	0.095	0.192	0.281
Condom use at last sex	0.574	0.048	94	68	0.929	0.083	0.478	0.669
Had paid sex in past 12 months	0.030	0.011	402	288	1.278	0.362	0.008	0.052
Had HIV test and received results in past 12 months	0.350	0.026	402	288	1.085	0.074	0.298	0.402
Circumcised	0.858	0.019	402	288	1.085	0.022	0.821	0.896
Asthma symptoms	0.031	0.008	547	386	1.091	0.260	0.015	0.048
COPD symptoms	0.017	0.006	547	386	1.162	0.376	0.004	0.030
Hypertension (>140/90 or taking hypertensive medication)	0.288	0.024	379	269	1.017	0.082	0.240	0.335
Mobile phone ownership	0.905	0.017	402	288	1.143	0.018	0.872	0.939
Bank account ownership	0.457	0.027	402	288	1.068	0.058	0.404	0.510
Internet use in past 12 months	0.537	0.034	402	288	1.348	0.063	0.470	0.604
HIV prevalence among men 15-49	0.053	0.022	201	199	1.352	0.404	0.010	0.096
HIV prevalence among young men 15-24	0.009	0.009	118	120	1.012	0.973	0	0.027
HIV prevalence among men 15+	0.054	0.018	279	274	1.340	0.336	0.018	0.091
WOMEN and MEN								
HIV prevalence among respondents 15-49	0.104	0.015	528	450	1.095	0.140	0.075	0.133
HIV prevalence among respondents 15-24	0.018	0.008	243	216	0.918	0.441	0.002	0.033
HIV prevalence among respondents 15+	0.098	0.012	779	654	1.115	0.121	0.074	0.121

Table B.14 Sampling errors for adult and pregnancy-related mortality rates, South Africa DHS 2016

Variable	Value (R)	Standard Error (SE)	Number of cases		Design Effect (DEFT)	Relative Error (SE/R)	Confidence limits	
			Un-weighted (N)	Weighted (NW)			Lower (R-2SE)	Upper (R+2SE)
WOMEN								
Adult mortality rates								
15-19	1.02	0.40	9284	9179	1.19	0.39	0.23	1.81
20-24	3.65	0.94	11882	11875	1.66	0.26	1.78	5.52
25-29	4.48	0.77	12466	12297	1.25	0.17	2.93	6.03
30-34	9.82	1.37	10962	11034	1.44	0.14	7.08	12.55
35-39	9.13	1.42	8749	8555	1.34	0.16	6.30	11.96
40-44	11.39	1.92	6121	5930	1.37	0.17	7.55	15.23
45-49	8.32	1.70	4060	3899	1.17	0.20	4.92	11.72
15-49 (age-adjusted)	6.34	0.46	63523	62768	1.35	0.07	5.42	7.27
Adult mortality probabilities								
$_{35}q_{15}$ 2016	212.79	14.29	63523	62768	1.79	0.07	184.21	241.37
$_{35}q_{15}$ 1998	102.93	7.24	123738	122701	1.54	0.07	88.45	117.40
Pregnancy-related mortality rates								
15-19	0.00	0.00	9284	9179	na	na	0.00	0.00
20-24	0.36	0.19	11882	11875	1.09	0.53	0.00	0.74
25-29	0.58	0.29	12466	12297	1.33	0.50	0.00	1.16
30-34	0.46	0.21	10962	11034	1.01	0.45	0.05	0.88
35-39	0.76	0.46	8749	8555	1.54	0.61	0.00	1.67
40-44	1.22	0.71	6121	5930	1.56	0.58	0.00	2.63
45-49	0.11	0.11	4060	3899	0.66	1.00	0.00	0.33
15-49 (age-adjusted)	0.47	0.12	63523	62768	1.37	0.25	0.24	0.71
Pregnancy-related mortality ratio (PRMR) 2016	536.29	133.08	63523	62768	1.37	0.25	270.12	802.46
Pregnancy-related mortality ratio (PRMR) 1998	150.34	36.55	123738	122701	1.03	0.24	77.24	223.45
MEN								
Adult mortality rates								
15-19	1.60	0.46	8991	8774	1.07	0.29	0.69	2.52
20-24	2.46	0.53	11469	11306	1.15	0.22	1.39	3.53
25-29	6.24	1.02	12044	11814	1.34	0.16	4.20	8.29
30-34	7.60	1.13	10689	10305	1.31	0.15	5.33	9.86
35-39	9.49	1.43	8280	8277	1.33	0.15	6.63	12.35
40-44	13.64	1.94	5601	5616	1.21	0.14	9.75	17.52
45-49	12.23	2.13	3768	3580	1.16	0.17	7.98	16.49
15-49 (age-adjusted)	6.90	0.51	60841	59673	1.24	0.08	5.87	7.92
Adult mortality probabilities								
$_{35}q_{15}$ 2016	234.04	15.92	60841	59673	1.49	0.07	202.21	265.87
$_{35}q_{15}$ 1998	212.56	11.70	118032	116590	1.75	0.06	189.17	235.95

na = Not applicable

DATA QUALITY TABLES

Appendix C

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), South Africa DHS 2016

	Female		Male			Female		Male	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
0	351	1.8	356	2.0	37	228	1.2	236	1.3
1	375	1.9	419	2.4	38	233	1.2	232	1.3
2	355	1.8	410	2.3	39	234	1.2	193	1.1
3	435	2.2	401	2.3	40	223	1.2	237	1.3
4	423	2.2	448	2.5	41	270	1.4	236	1.3
5	370	1.9	391	2.2	42	221	1.1	190	1.1
6	399	2.1	422	2.4	43	230	1.2	197	1.1
7	339	1.7	398	2.2	44	187	1.0	202	1.1
8	360	1.9	408	2.3	45	181	0.9	196	1.1
9	370	1.9	405	2.3	46	224	1.2	186	1.0
10	343	1.8	397	2.2	47	221	1.1	131	0.7
11	354	1.8	386	2.2	48	208	1.1	169	1.0
12	353	1.8	348	2.0	49	181	0.9	132	0.7
13	329	1.7	296	1.7	50	195	1.0	137	0.8
14	322	1.7	328	1.8	51	156	0.8	153	0.9
15	293	1.5	303	1.7	52	194	1.0	120	0.7
16	357	1.8	368	2.1	53	164	0.8	152	0.9
17	333	1.7	345	1.9	54	164	0.8	100	0.6
18	331	1.7	350	2.0	55	157	0.8	122	0.7
19	345	1.8	329	1.9	56	177	0.9	133	0.8
20	316	1.6	332	1.9	57	178	0.9	113	0.6
21	322	1.7	291	1.6	58	156	0.8	112	0.6
22	342	1.8	367	2.1	59	143	0.7	100	0.6
23	309	1.6	300	1.7	60	120	0.6	114	0.6
24	343	1.8	270	1.5	61	155	0.8	101	0.6
25	326	1.7	303	1.7	62	132	0.7	105	0.6
26	358	1.8	273	1.5	63	137	0.7	96	0.5
27	340	1.8	260	1.5	64	134	0.7	94	0.5
28	318	1.6	296	1.7	65	100	0.5	66	0.4
29	357	1.8	302	1.7	66	126	0.7	81	0.5
30	303	1.6	321	1.8	67	95	0.5	75	0.4
31	310	1.6	276	1.6	68	99	0.5	72	0.4
32	306	1.6	301	1.7	69	83	0.4	59	0.3
33	310	1.6	282	1.6	70+	1,060	5.5	528	3.0
34	308	1.6	218	1.2	Don't know	92	0.5	172	1.0
35	279	1.4	236	1.3					
36	264	1.4	246	1.4	Total	19,407	100.0	17,721	100.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table C.2.1 Age distribution of eligible and interviewed women

De facto household population of women age 10-54, number and percent distribution of interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), by 5-year age groups, South Africa DHS 2016

Age group	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
		Number	Percentage	
10-14	1,701	na	na	na
15-19	1,659	1,429	17.1	86.1
20-24	1,631	1,390	16.6	85.2
25-29	1,699	1,428	17.1	84.0
30-34	1,538	1,297	15.5	84.3
35-39	1,237	1,037	12.4	83.8
40-44	1,131	919	11.0	81.3
45-49	1,015	861	10.3	84.9
50-54	873	na	na	na
15-49	9,911	8,362	100.0	84.4

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of women and interviewed women are household weights. Age is based on the Household Questionnaire.
na = Not applicable

Table C.2.2 Age distribution of eligible and interviewed men

De facto household population of men age 10-64, number and percent distribution of interviewed men age 15-59, and percentage of eligible men who were interviewed (weighted), by 5-year age groups, South Africa DHS 2016

Age group	Household population of men age 10-64	Interviewed men age 15-59		Percentage of eligible men interviewed
		Number	Percentage	
10-14	902	na	na	na
15-19	834	669	18.6	80.3
20-24	789	590	16.4	74.7
25-29	732	500	13.9	68.3
30-34	678	449	12.5	66.3
35-39	549	379	10.5	69.0
40-44	496	347	9.6	70.0
45-49	369	260	7.2	70.4
50-54	306	212	5.9	69.3
55-59	294	199	5.5	67.6
60-64	262	na	na	na
15-59	5,047	3,605	100.0	71.4

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of men and interviewed men are household weights. Age is based on the Household Questionnaire.
na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), South Africa DHS 2016

Subject	Reference group	Percentage with information missing	Number of cases
Birth date	Births in the 15 years preceding the survey		
Day only		0.37	9,577
Day and month		0.82	9,577
Day, month, and year		0.29	9,577
Age at death	Deceased children born in the 15 years preceding the survey	0.00	489
Age/date at first union[1]	Ever-in-union women age 15-49	0.03	3,522
	Ever-in-union men age 15-59	0.07	1,475
Respondent's education	Women age 15-49	0.00	8,514
	Men age 15-59	0.00	3,618
Diarrhoea in past 2 weeks	Living children age 0-59 months	6.02	3,444
Anthropometry of children	Living children age 0-59 months (from the Biomarker Questionnaire)		
Height		28.48	2,007
Weight		28.44	2,007
Height or weight		29.04	2,007
Anthropometry of women	Women age 15+ (from the Biomarker Questionnaire)		
Height		30.58	6,986
Weight		30.90	6,986
Height or weight		31.03	6,986
Anthropometry of men	Men age 15+ (from the Biomarker Questionnaire)		
Height		43.08	5,791
Weight		43.43	5,791
Height or weight		43.46	5,791
Anaemia			
Children	Living children age 6-59 months (from the Biomarker Questionnaire)	40.8	1,848
Women	Women age 15+ (from the Biomarker Questionnaire)	39.33	6,986
Men	Men age 15+ (from the Biomarker Questionnaire)	52.84	5,791

[1] Both year and age missing

Table C.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living, dead, and total children (weighted), South Africa DHS 2016

Calendar year	Number of births			Percentage with year and month of birth given			Sex ratio at birth[1]			Calendar year ratio[2]		
	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total
2016	462	16	478	100.0	100.0	100.0	108.1	84.8	107.2	na	na	na
2015	688	27	714	100.0	100.0	100.0	100.8	80.1	99.9	na	na	na
2014	666	18	683	100.0	93.9	99.8	111.7	268.8	114.1	97.4	63.4	96.1
2013	679	29	708	99.4	94.0	99.2	96.8	216.7	99.9	99.4	115.1	100.0
2012	700	33	733	100.0	91.0	99.6	109.8	186.1	112.4	103.0	112.3	103.4
2011	681	29	711	99.8	96.1	99.6	110.0	210.6	112.9	100.4	83.0	99.5
2010	657	38	695	99.2	80.6	98.2	124.7	86.3	122.2	101.2	100.0	101.1
2009	618	47	664	99.8	87.1	98.9	108.3	210.2	113.2	96.5	112.3	97.5
2008	623	45	668	99.1	81.2	97.9	125.9	174.2	128.6	105.8	115.0	106.4
2007	560	32	591	99.3	79.1	98.2	101.9	118.7	102.7	89.9	66.1	88.2
2012-2016	3,195	122	3,316	99.9	95.2	99.7	105.1	150.2	106.5	na	na	na
2007-2011	3,138	191	3,329	99.4	84.5	98.6	114.0	151.6	115.9	na	na	na
2002-2006	2,606	167	2,774	99.2	84.8	98.4	110.1	114.7	110.3	na	na	na
1997-2001	1,926	102	2,028	99.3	80.1	98.3	109.0	166.6	111.3	na	na	na
<1997	2,297	193	2,489	96.6	82.1	95.5	103.1	120.4	104.3	na	na	na
All	13,162	775	13,936	99.0	85.1	98.2	108.4	136.1	109.7	na	na	na

na = Not applicable

[1] $(B_m/B_f)x100$, where B_m and B_f are the numbers of male and female births, respectively

[2] $[2B_x/(B_{x-1}+B_{x+1})]x100$, where B_x is the number of births in calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under age 1 month by age at death in days and percentage of neonatal deaths reported to occur at age 0-6 days, for 5-year periods of birth preceding the survey (weighted), South Africa DHS 2016

	Number of years preceding the survey				Total
Age at death (days)	0-4	5-9	10-14	15-19	0-19
<1	47	54	46	13	159
1	11	5	5	3	24
2	3	2	0	2	7
3	4	3	0	3	10
4	1	6	1	0	8
5	1	4	0	3	8
6	0	3	0	0	3
7	3	1	0	1	5
8	0	0	0	1	1
9	0	0	0	0	0
10	0	2	0	0	2
11	0	1	0	0	1
12	0	0	0	0	0
13	0	0	0	0	0
14	6	5	4	1	17
15	0	1	0	4	5
16	0	0	0	0	0
17	0	0	0	0	0
18	0	1	1	0	2
19	1	0	0	1	1
20	0	2	0	0	2
21	1	3	1	0	5
22	0	0	0	0	0
23	0	0	0	0	0
24	0	0	0	0	0
25	0	0	0	0	0
26	0	0	0	0	0
27	0	0	0	0	0
28	0	0	0	0	0
29	0	0	0	0	0
30	0	0	0	0	0
Total 0-30	78	92	59	31	261
Percentage early neonatal[1]	85.4	82.5	89.3	75.3	84.1

[1] ≤6 days/≤30 days

Table C.6 Reporting of age at death in months

Distribution of reported deaths under age 2 years by age at death in months and percentage of infant deaths reported to occur at less than age 1 month, for 5-year periods of birth preceding the survey (weighted), South Africa DHS 2016

	Number of years preceding the survey				Total
Age at death (months)	0-4	5-9	10-14	15-19	0-19
<1[a]	78	92	59	31	261
1	2	8	8	4	23
2	6	4	4	6	20
3	12	9	13	1	36
4	9	3	10	2	23
5	3	6	6	3	18
6	2	18	5	3	27
7	0	7	3	3	13
8	3	13	3	4	23
9	2	7	4	2	14
10	1	1	1	1	4
11	2	2	0	1	6
12	4	8	8	8	27
13	0	0	2	0	2
14	1	2	0	0	3
15	0	1	0	0	1
16	1	0	0	0	1
17	0	0	1	0	1
18	1	1	1	3	6
19	0	0	0	0	0
20	0	0	0	1	1
21	0	0	0	0	0
22	0	0	0	0	0
23	0	4	0	0	4
Total 0-11	121	171	117	59	468
Percentage neonatal[1]	64.5	54.2	50.8	52.0	55.7

[a] Includes deaths under 1 month reported in days
[1] <1 month/<1 year

Table C.7 Height and weight data completeness and quality for children

Among children under age 5 (age 0-59 months) who were eligible for anthropometry, percentage with incomplete or missing height and/or weight measurements and/or date of birth; percentage with out-of-range height-for-age, and/or weight-for-height, and/or weight-for-age data; and percentage with valid data, according to background characteristics (unweighted), South Africa DHS 2016

Background characteristic	Percentage with data missing or incomplete:			Percentage with out-of-range data for[4]:			Percentage with valid data for[8]:			Number of children
	Height[1]	Weight[2]	Age in months[3]	Height-for-age[5]	Weight-for-height[6]	Weight-for-age[7]	Height-for-age	Weight-for-height	Weight-for-age	
Age in months										
<6	23.3	22.7	0.0	2.8	5.1	2.3	73.9	71.0	75.0	176
6-8	35.2	34.1	0.0	4.4	4.4	2.2	60.4	60.4	63.7	91
9-11	21.3	21.3	2.2	1.1	1.1	0.0	76.4	76.4	77.5	89
12-17	23.6	25.0	0.5	1.0	3.8	1.0	75.0	70.7	73.6	208
18-23	26.1	26.7	0.0	1.1	3.3	1.1	72.8	69.4	72.2	180
24-35	27.1	25.9	1.5	1.2	1.0	0.2	71.2	71.5	73.4	410
36-47	26.8	27.2	2.3	0.2	0.5	0.0	71.4	72.1	71.2	437
48-59	23.3	23.8	1.6	0.7	1.8	0.0	74.8	74.1	75.1	433
Sex										
Male	26.5	26.5	1.2	1.5	2.1	0.7	71.4	70.5	72.2	1,027
Female	24.6	24.7	1.4	0.8	2.0	0.4	73.7	72.7	74.0	997
Mother's interview status										
Interviewed	22.5	22.7	0.1	1.1	2.4	0.5	76.3	74.2	76.7	1,447
Not interviewed but in household	60.4	59.0	2.8	0.5	1.4	0.5	38.2	38.2	39.6	217
Not interviewed and not in the household[9]	16.7	16.9	5.3	1.7	1.1	0.8	78.1	81.4	78.6	360
Residence										
Urban	35.2	34.6	0.4	1.0	2.5	0.6	63.8	62.2	64.8	1,006
Non-urban	16.0	16.7	2.2	1.3	1.7	0.5	81.1	80.8	81.2	1,018
Province										
Western Cape	56.1	56.1	0.9	0.0	0.9	0.0	43.9	43.0	43.9	114
Eastern Cape	18.6	18.9	0.7	0.7	0.7	0.0	80.4	80.4	80.7	280
Northern Cape	30.7	30.1	0.0	1.3	3.9	2.0	68.0	65.4	68.0	153
Free State	22.0	22.0	0.5	1.6	4.3	0.0	76.3	73.7	78.0	186
KwaZulu-Natal	19.2	23.4	1.7	2.4	4.5	1.0	78.0	71.5	75.3	291
North West	18.0	17.1	0.5	1.5	1.0	0.5	80.5	81.0	82.4	205
Gauteng	41.5	41.0	1.0	0.5	1.5	0.5	57.0	57.0	57.5	200
Mpumalanga	20.1	18.7	1.7	1.0	1.3	0.7	77.6	78.6	79.3	299
Limpopo	26.0	24.7	3.0	0.7	1.0	0.3	70.6	72.6	72.3	296
Mother's education										
No education	12.1	12.1	3.0	3.0	0.0	0.0	81.8	87.9	84.8	33
Primary incomplete	14.3	14.3	1.1	1.1	3.3	2.2	84.6	82.4	83.5	91
Primary complete	22.7	22.7	0.0	0.0	3.0	0.0	77.3	74.2	77.3	66
Secondary incomplete	25.2	25.5	0.5	1.2	1.9	0.1	73.5	71.8	74.3	844
Secondary complete	30.3	29.6	0.2	0.9	3.2	0.9	68.6	66.1	69.2	439
More than secondary	41.1	41.6	0.0	0.5	1.6	0.5	58.4	56.3	57.9	190
Missing	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1
Total	25.5	25.6	1.3	1.1	2.1	0.5	72.5	71.6	73.1	2,024

[1] Child's height in centimetres is missing, child was not present, child refused, and "other" result codes
[2] Child's weight in kilograms is missing, child was not present, child refused, and "other" result codes
[3] Incomplete date of birth; a complete date of birth is month/day/year or month/year
[4] Cases with missing or incomplete data are not considered to be out-of-range cases
[5] Out-of-range cases for height-for-age are defined as more than 6 standard deviations (SD) above or below the standard population median (Z-scores) based on the WHO Child Growth Standards
[6] Out-of-range cases for weight-for-height are defined as more than 5 SD above or below the standard population median (Z-scores) based on the WHO Child Growth Standards
[7] Out-of-range cases for weight-for-age are defined as more than 6 SD below or 5 SD above the standard population median (Z-scores) based on the WHO Child Growth Standards
[8] No missing data, incomplete data, or out of range data
[9] Includes children whose mothers are deceased

Table C.8 Completeness of information on siblings

Completeness of data on survival status of sisters and brothers reported by interviewed women, age of living siblings, and age at death (AD) and years since death (YSD) of dead siblings (unweighted), South Africa DHS 2016

	Sisters		Brothers		All siblings	
	Number	Percent	Number	Percent	Number	Percent
All siblings	13,135	100.0	12,929	100.0	26,064	100.0
Living	11,585	88.2	11,033	85.3	22,618	86.8
Dead	1,486	11.3	1,814	14.0	3,300	12.7
Survival status unknown	64	0.5	82	0.6	146	0.6
Living siblings	11,585	100.0	11,033	100.0	22,618	100.0
Age reported	11,581	100.0	11,028	100.0	22,609	100.0
Age missing	4	0.0	5	0.0	9	0.0
Dead siblings	1,486	100.0	1,814	100.0	3,300	100.0
AD and YSD reported	1,486	100.0	1,813	99.9	3,299	100.0
Missing only AD	0	0.0	0	0.0	0	0.0
Missing only YSD	0	0.0	0	0.0	0	0.0
Missing AD and YSD	0	0.0	1	0.1	1	0.0

Table C.9 Sibship size and sex ratio of siblings

Mean sibship size and sex ratio of siblings at birth, South Africa DHS 2016

Age of respondents	Mean sibship size[1]	Sex ratio of siblings at birth[2]
15-19	3.5	104.6
20-24	3.7	94.7
25-29	4.0	92.9
30-34	4.1	96.5
35-39	4.2	100.3
40-44	4.1	105.5
45-49	4.4	97.4
Total	4.0	98.3

[1] Includes the respondent
[2] Excludes the respondent

PERSONS INVOLVED IN THE SOUTH AFRICA DEMOGRAPHIC AND HEALTH SURVEY 2016

APPENDIX D

SURVEY DESIGN, MANAGEMENT, AND TECHNICAL INPUT

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Veronica Mashapha
Kefiloe Masiteng
Herman Matlala
Sthembiso Mkhize
Ngoako Mokgerepi
Thabo Molebatsi (previously NDOH)
Paddy Motlolane
Sello Motsamai
Letjeka Mphela
Zanele Mtsweni
Antoine Muanza
Stephen Mudau
Maemu Netshidzate
Mosidi Nhlapo
Babalwa Nyangintsimbi
Letia Poto
Michael Segage
Sibongile Segeri
Enos Sello
Nthabiseng Selomo
Mercy Shoko
Moses Sidindi
Mirriam Sikhosana
Maletela Tuoane-Nkhasi

ICF

Peter Aka
Sarah Balian
Jean de Dieu Bizimana
Trevor Croft
Trinadh Dontamsetti
Greg Edmonson
Mahmoud Elkasabi
Tom Fish
Joy Fishel
Julia Fleuret
Dean Garrett
Chris Gramer
Girum Haile
Nancy Johnson
Sunita Kishor
Joanna Lowell
Sorrel Namaste
Erica Nybro
Tom Pullum
Keith Purvis
Christian Reed
Kia Reinis
Ruilin Ren
Guillermo Rojas
Gulnara Semenov
Natalie Shattuck
Joan Wardell
Bridgette Wellington

Advisors
Naeemah Abrahams
Mags Beksinska
Rob Dorrington
Dinky Levitt
Tom Moultrie
Catriona Towriss
Eric Udjo

FIELDWORK

Western Cape
Mzoxolo Soyikwa
(Coordinator)
Mogammad Abass
Cherelene Alexander
Johanna Bantom
Yumna Beukes
Zimkhitha Bistoli
Eric Buso
Hakeem Fakier
Ncumisa Gamadala
Phillip Henecke
Noluvo Hlwele
Ayanda Kuka
Juleiga Larney-Abrahams
Roseanne Love
Christelene Matiwane
Nokuthula Mayila
Unathi Mpila
Wendy Neer
Nonhlanhla Silindana
Lebogang Sizani
Clive Sprout
Thembisile Zuma

Eastern Cape
Obed Shigadhla
(Coordinator)
Christina Dintsi
Pumla Dunjua
Kholeka Fana
Nosiphelo Fihlani
Andiswa Keti
Nosiphiwo Khakhalala
Yongama Lutye
Makaziwe Maposa
Andiswa Mashalaba
Tandiswa Matetu
Kholekile Maweni
Pumla Mdane
Zimkita Mrawuli
Batandwa Ncombo
Sinegugu Ngamnteni
Vuyani Ngqoleka
Nomakorinte Ngwentle
Nwabisa Nombekela
Noxolo Nombewu
Phatheka Nonyongo
Bongani Rwairwai
Nozuko Scott
Shirley Sigabi
Tembukazi Siganga
Zolisa Sigangala
Zwelinjani Siyali
Asiphe Siyotula
Prudence Sohuma
Dalikhaya Zilimbola

Northern Cape
Ronald Kemsley
(Coordinator)
Mariana Andreas
Andre Balie
Dorcas Beregho
Olorato Bosiame
Tshadinyana Bosiame
John Farao
Neoetsile Mabihi
Dolly Majola
Betty Manong
Kabelo Mogodie
Mmabatho Molema
Iris Mpata
Thembeka Ndimba
Lemogang Ngcobo
Bernardus Philipo
Tshepo Seonyane
Mallita Simon
Asavela Tayi
Lillian Titus
Caroline Tlaki
Afikile Twenani

Free State
Olvin Chakela
(Coorindator)
Nomhle Adoons
Kehilwe Balada (Deceased)
Patrick Fobo
Puleng Legoana
Nthabeleng Lekhethe
Pheello Mabaso
Mmateboho Mabesele
Amanda Makhasane
Ruth Marumo
Motshabi Mlozana
Jonas Mokoena
Sarah Mokoena
Thonkha Mophuleng
Manthiuoa Morobane
Ntlenyana Motaung
Belina Motlatla
Phathutshedzo Nemukula
Khoboso Pitso
Nthabiseng Sere
Thamsanqa Solange
Lydia Tsobo

KwaZulu-Natal
Nomthandazo Madonsela
(Coordinator)
Nosipho Dlamini
Yolene Govender
Gugu Gumede
Sibusiso Hadebe
Nomthandazo Khanyile
Ndumiso Khumalo
Thembela Kubheka
Busisiwe Kunene
Lindiwe Mabizela
Zakithi Majola
Vusumuzi Malunga
Phumzile Mayisela
Prudence Mchunu
Idah Mvelase
Cindy Ndlovu
Linda Ngcobo
Khanyisani Ngobese
Nomvula Ngwenya
Lungile Nkosi
Mandlenkosi Ntanzi
Thembela Ntlauzana
Stanley Nzama
Dimakatso Phoswa
Zanele Shamase
Mandlenkosi Shozi
Sbongile Sithole
Bongani Sithole
Sandile Zungu

North West
Shirley Rhenoster
(Coordinator)
Dithaga Dikoko
Kristina Eilers
Evodia Legalammitlwa
Trevor Maditsi
Phemelo Makaba
Tshepo Maroga
Nomathemba Mdane
Stophel Metsing
Ntsikelelo Mhlongo
Esther Modiselle
Bolelang Mokonyane
Thalitha Moroane
Mosimane Mosebetsi
Rekaone Motshwariemang
Puleng Ntokoane
Mamasedi Phera
Gladys Rammekwa
Olefile Rapoo
Desmond Seleka
Matsiliso Sontaha
Fikile Thongwane

Gauteng
Tshwarelo Mokoena
(Coordinator)
Sekobetlane Lethuba
Given Mabunda
Motlagomang Malebo
Ricks Maripanye
Julia Mmeseletsi
Julia Mohlala
Jynet Mohlala
Anna Mokoena
Moratehi Mokone
Codlycia Mokwele
Dorah Mokwena
Fundiswa Mokwena
Portia Mokwena
Zanele Molife
Paseka Molo
Lufuno Mudau
Tshifaro Netshivhera
David Ngwenya
Sylvia Ntshingila
Khutso Phaladi
Ritah Phiri
Magdeline Phuthi

Mpumalanga
Louis Masilela
(Coordinator)
Samkele Fakude
Nqobile Langa
Dimakatso Mabena
Phumzile Mahamba
Bonginkosi Mahlangu
Sihle Mahlangu
Thabo Mahlangu
Sesi Mako
Confidence Matea
Lungisani Mbatha
Vuyisile Mokoena
Ntombimpela Mthembu
Fortunate Ndlakude
Xolile Ngomane
Noxolo Ngwenyama
Lucky Nkosi
Evah Nonyane
Victoria Phahlamohlaka
Cindy Shongwe
Thembisa Sibanyoni
Lazaruse Thankge

Limpopo
Fulufhelo Mabannda
(Coordinator)
Boitumelo Mailula
Elsie Maponya
Lethabo Matlou
Isaiah Mkhavele
Moloko Mohale
Neria Mothoa
Lucy Muditambi
Pfanani Mulamuli
Phillip Phasha
Margaret Phohu
Happiness Sambo
Lerato Seloana

Gauteng (continued)
Tsholofelo Raphala
Kabelo Sefoka
Thapelo Sekabate
Stephen Shabe
Mathilda Tladi
Prudence Tshukudu

QUESTIONNAIRES

Appendix **E**

FORMATTING DATE: 10 May 2016
ENGLISH LANGUAGE: 23 March 2016

2016 SOUTH AFRICA DEMOGRAPHIC AND HEALTH SURVEY
HOUSEHOLD QUESTIONNAIRE

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . | | | | |

PSU NUMBER . . . . . | | | | |

DWELLING UNIT NUMBER . . . . . | | | | |

HOUSEHOLD NUMBER . . . . . | | | | |

HOUSEHOLD SELECTED FOR MALE SURVEY AND BIOMARKERS? (YES = 1; NO = 2) . . . . . | |

HOUSEHOLD SELECTED FOR SALT SAMPLE COLLECTION? (YES = 1; NO = 2) . . . . . | |

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY
				MONTH
				YEAR 2 0 1
INTERVIEWER'S NAME				INT. NO.
RESULT*				RESULT*
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

*RESULT CODES:

1 COMPLETED
2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME
4 POSTPONED
5 REFUSED
6 DWELLING VACANT OR ADDRESS NOT A DWELLING
7 DWELLING DESTROYED
8 DWELLING NOT FOUND
9 OTHER _____ (SPECIFY)

TOTAL PERSONS IN HOUSEHOLD | |

TOTAL ELIGIBLE WOMEN | |

TOTAL ELIGIBLE MEN | |

TOTAL CHILDREN ELIGIBLE FOR CAREGIVER'S QUEST. | |

LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE | |

LANGUAGE OF QUESTIONNAIRE** 0 1 | LANGUAGE OF INTERVIEW** | | HOME LANGUAGE OF RESPONDENT** | | TRANSLATOR USED (YES = 1, NO = 2) |

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:

01 ENGLISH	05 seSOTHO	09 tshiVENDA
02 AFRIKAANS	06 seTSWANA	10 xiTSONGA
03 isiXHOSA	07 sePEDI	11 isiNDEBELE
04 isiZULU	08 siSWATI	12 OTHER

SUPERVISOR

NAME _____ NUMBER | | | | |

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INTRODUCTION

Hello. My name is _____. I am working with Statistics South Africa. We are conducting a survey about health and other topics all over South Africa. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. In case you need more information about the survey, you may contact the person listed on this card.

GIVE CARD WITH CONTACT INFORMATION

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES TO BE INTERVIEWED . . 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 → END

100	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐

HOUSEHOLD SCHEDULE

								IF AGE 15 OR OLDER
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		DATE OF BIRTH	AGE	MARITAL STATUS
1	2	3	4	5	6	6A	7	8
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP, SEX RESIDENCE AND AGE FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 8-27 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female? M F 1 2	Does (NAME) usually live here? Y N 1 2	Did (NAME) stay here last night? Y N 1 2	What is (NAME)'s date of birth? On what day, month, and year was (NAME) born? IF DON'T KNOW DAY, RECORD '98'. IF DON'T KNOW MONTH, RECORD '98'. IF DON'T KNOW YEAR, RECORD '9998.' DAY MONTH YEAR	How old is (NAME)? IF 95 OR MORE, RECORD '95'. COMPARE AND CORRECT 6A AND/OR 7 IF INCON-SISTENT. IN YEARS	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER
01			1 2	1 2	1 2			
02			1 2	1 2	1 2			
03			1 2	1 2	1 2			
04			1 2	1 2	1 2			
05			1 2	1 2	1 2			
06			1 2	1 2	1 2			
07			1 2	1 2	1 2			

TICK HERE IF CONTINUATION SHEET USED ☐

7A) Just to make sure that I have a complete listing: are there any other people such as small children or infants that we have not listed?	YES ☐ → ADD TO TABLE	NO ☐
7B) Are there any other people who may not be members of your family, such as domestic workers, lodgers, or friends who usually live here?	YES ☐ → ADD TO TABLE	NO ☐
7C) Are there any guests or temporary visitors staying here, or anyone else who stayed here last night, who have not been listed?	YES ☐ → ADD TO TABLE	NO ☐

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE/HUSBAND/PARTNER
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = OTHER RELATIVE
10 = ADOPTED
11 = FOSTER
12 = STEPCHILD
13 = NOT RELATED
98 = DON'T KNOW

					IF AGE 0-17 YEARS				IF AGE 0-5		IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS	
LINE NO.	ELIGIBILITY				SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				ELIGIBILITY		EVER ATTENDED SCHOOL		CURRENT/RECENT SCHOOL ATTENDANCE	
	9	9A	10	11	12	13	14	15	15A	15B	16	17	18	19
	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49 OR, IF HOUSE-HOLD SELEC-TED FOR MALE SURVEY BIO-MARKERS, CIRCLE LINE NUMBER OF ALL WOMEN AGE 15 AND OLDER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 18 AND OLDER	**IF HOUSE-HOLD SELECTED FOR MALE SURVEY AND BIO-MARKERS** CIRCLE LINE NUMBER OF ALL MEN AGE 15 AND OLDER	**IF HOUSE-HOLD SELECTED FOR MALE SURVEY AND BIO-MARKERS** CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5	Is (NAME)'s biological mother alive?	Does (NAME)'s biological mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s biological father alive?	Does (NAME)'s biological father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	CHECK 13: IF MOTHER LIVES IN HOUSE-HOLD, SKIP TO 16. IF MOTHER HAS DIED OR DOES NOT LIVE IN THE HOUSE-HOLD, CIRCLE LINE NUMBER OF CHILD.	Who is the primary caregiver of (NAME)? RECORD CARE-GIVER'S LINE NUMBER.	Has (NAME) ever attended an educational institution?	What is the highest level of education that (NAME) has attended? What is the highest grade (NAME) completed at that level? SEE CODES BELOW.	Did (NAME) attend an educational institution at any time during the 2016 academic year?	During [this/that] academic year, what level and grade [is/was] (NAME) attending? SEE CODES BELOW.
01	01	01	01	01	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 15A		01	LINE NO.	Y N 1 2 GO TO 20		Y N 1 2 GO TO 20	
02	02	02	02	02	1 2 8 GO TO 14		1 2 8 GO TO 15A		02		1 2 GO TO 20		1 2 GO TO 20	
03	03	03	03	03	1 2 8 GO TO 14		1 2 8 GO TO 15A		03		1 2 GO TO 20		1 2 GO TO 20	
04	04	04	04	04	1 2 8 GO TO 14		1 2 8 GO TO 15A		04		1 2 GO TO 20		1 2 GO TO 20	
05	05	05	05	05	1 2 8 GO TO 14		1 2 8 GO TO 15A		05		1 2 GO TO 20		1 2 GO TO 20	
06	06	06	05	06	1 2 8 GO TO 14		1 2 8 GO TO 15A		06		1 2 GO TO 20		1 2 GO TO 20	
07	07	07	07	07	1 2 8 GO TO 14		1 2 8 GO TO 15A		07		1 2 GO TO 20		1 2 GO TO 20	

CODES FOR Qs. 17 AND 19: EDUCATION

PRE-PRIMARY SCHOOL
00 = LESS THAN 1 YEAR PRE-PRIMARY COMPLETED
(USE '00' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 19.)
01=GRADE R/GRADE 0/RECEPTION

PRIMARY SCHOOL
10=LESS THAN 1 YEAR PRIMARY SCHOOL COMPLETED
(USE '10' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 19.)
11=GRADE 1/SUB A/CLASS 1
12=GRADE 2/SUB B/CLASS 2
13=GRADE 3/STANDARD 1/AET 1 (KHA RI GUDE, SANLI)
14=GRADE 4/STANDARD 2
15=GRADE 5/STANDARD 3/AET 2
16=GRADE 6 /STANDARD 4
17=GRADE 7/STANDARD 5/AET 3

SECONDARY SCHOOL
20=LESS THAN 1 YEAR SECONDARY SCHOOL COMPLETED
(USE '20' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 19.)
21=GRADE 8/STANDARD 6/FORM 1/NTC 1/N1/NC (V) LEVEL 2
22=GRADE 9/STANDARD 7/FORM 2/AET 4/NTC 2/N2/NC (V) LEVEL 3
23=GRADE 10/STANDARD 8/FORM 3/NTC 3/N3/NC (V) LEVEL 4
24=GRADE 11/STANDARD 9/FORM 4
25=CERTIFICATE OR DIPLOMA WITH LESS THAN GRADE 12/ STANDARD 10 COMPLETED
26=GRADE 12/STANDARD 10/FORM 5/MATRIC
27=N4/NTC4
28=N5/NTC5
29=N6/NTC6

HIGHER EDUCATION
30=FURTHER STUDIES INCOMPLETE OR ONGOING
31=CERTIFICATE OR DIPLOMA WITH GRADE 12/ STANDARD 10 COMPLETED
32=HIGHER DIPLOMA (TECHNIKON/ UNIVERSITY OF TECHNOLOGY)
33=POST HIGHER DIPLOMA (TECHNIKON/ UNIVERSITY OF TECHNOLOGY MASTERS, DOCTORAL)
34=BACHELORS DEGREE/BACHELORS DEGREE AND POST GRADUATE DIPLOMA
35=HONOURS DEGREE
36=HIGHER DEGREE (MASTERS, DOCTORATE)

98 = DON'T KNOW

	IF AGE 5 YEARS OR OLDER													
LINE NO.	PROBLEM OF VISION		PROBLEM OF HEARING		PROBLEM OF WALKING		PROBLEM OF REMEMBERING		PROBLEM WITH SELF-CARE		PROBLEM OF COMMUNICATING		GOVERNMENT GRANTS	
	20		21		22		23		24		25		26	27
	Does (NAME) have difficulty seeing, even if wearing glasses? IF NO, CIRCLE "0". IF YES, PROBE: With some difficulty, with a lot of difficulty, or cannot see at all? IF WITH SOME DIFFICULTY, CIRCLE "1". IF WITH A LOT OF DIFFICULTY, CIRCLE "2". IF CANNOT SEE AT ALL, CIRCLE "3". IF DON'T KNOW CIRCLE "8".		Does (NAME) have difficulty hearing, even if wearing a hearing aid? IF NO, CIRCLE "0". IF YES, PROBE: With some difficulty, with a lot of difficulty, or cannot hear at all? IF WITH SOME DIFFICULTY, CIRCLE "1". IF WITH A LOT OF DIFFICULTY, CIRCLE "2". IF CANNOT HEAR AT ALL, CIRCLE "3". IF DON'T KNOW CIRCLE "8".		Does (NAME) have difficulty walking a kilometre or climbing a flight of steps? IF NO, CIRCLE "0". IF YES, PROBE: With some difficulty, with a lot of difficulty, or cannot walk or climb steps at all? IF WITH SOME DIFFICULTY, CIRCLE "1". IF WITH A LOT OF DIFFICULTY, CIRCLE "2". IF CANNOT WALK OR CLIMB AT ALL, CIRCLE "3". IF DON'T KNOW CIRCLE "8".		Does (NAME) have difficulty remembering or concentrating? IF NO, CIRCLE "0". IF YES, PROBE: With some difficulty, with a lot of difficulty, or cannot remember or concentrate at all? IF WITH SOME DIFFICULTY, CIRCLE "1". IF WITH A LOT OF DIFFICULTY, CIRCLE "2". IF CANNOT REMEMBER OR CONCENTRATE AT ALL, CIRCLE "3". IF DON'T KNOW CIRCLE "8".		Does (NAME) have difficulty with self-care such as washing all over or dressing? IF NO, CIRCLE "0". IF YES, PROBE: With some difficulty, with a lot of difficulty, or cannot do at all? IF WITH SOME DIFFICULTY, CIRCLE "1". IF WITH A LOT OF DIFFICULTY, CIRCLE "2". IF CANNOT DO AT ALL, CIRCLE "3". IF DON'T KNOW CIRCLE "8".		Does (NAME) have difficulty communicating in (his/her) usual language? For example, understanding others or others understanding (him/her)? IF NO, CIRCLE "0". IF YES, PROBE: With some difficulty, with a lot of difficulty, or cannot communicate at all? IF WITH SOME DIFFICULTY, CIRCLE "1". IF WITH A LOT OF DIFFICULTY, CIRCLE "2". IF CANNOT COMMUNICATE AT ALL, CIRCLE "3". IF DON'T KNOW CIRCLE "8".		Does (NAME) receive any social grant, old age grant, or social relief assistance from the government ?	What type of government grant does (NAME) receive?
	N YS YA YT DK		N YS YA YT DK		N YS YA YT DK		N YS YA YT DK		N YS YA YT DK		N YS YA YT DK		Y N	
01	0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		1 2 ↓ NEXT LINE	
02	0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		1 2 ↓ NEXT LINE	
03	0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		1 2 ↓ NEXT LINE	
04	0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		1 2 ↓ NEXT LINE	
05	0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		1 2 ↓ NEXT LINE	
06	0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		1 2 ↓ NEXT LINE	
07	0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		0 1 2 3 8		1 2 ↓ NEXT LINE	

CODES FOR Q. 27 : GOVT GRANTS

01 = OLD AGE (60-74; R1500; 75+; R1520)
02 = DISABILITY (18-59; R1500)
03 = CHILD SUPPORT (0-17; R350)
04 = CARE DEPENDENCY (0-17; R1500)
05 = FOSTER CHILD (<22; R890)
06 = WAR VETERAN (60+; R1520)
07 = IN-AID + OLD AGE (60-74; R1850; 75+; R1870)
08 = IN-AID + DISABILITY (18-59; R1850)
09 = IN-AID + WAR VETERAN (60+; R1870)
10 = SOCIAL RELIEF OF DISTRESS
98 = DON'T KNOW

TABLE FOR SELECTION OF WOMEN FOR THE HOUSEHOLD RELATIONS QUESTIONS

LOOK AT THE LAST DIGIT OF THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD GO TO. CHECK THE TOTAL NUMBER OF ELIGIBLE WOMEN IN COLUMN 9A OF THE HOUSEHOLD SCHEDULE. THIS IS THE COLUMN NUMBER YOU SHOULD GO TO. FOLLOW THE SELECTED ROW AND COLUMN TO THE CELL WHERE THEY MEET AND CIRCLE THE NUMBER IN THE CELL. THIS IS THE NUMBER OF THE WOMAN SELECTED FOR THE HOUSEHOLD RELATIONS QUESTIONS FROM THE LIST OF ELIGIBLE WOMEN IN COLUMN 9A OF THE HOUSEHOLD SCHEDULE. WRITE THE NAME AND LINE NUMBER OF THE SELECTED WOMAN IN THE SPACE BELOW THE TABLE.

EXAMPLE: THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER IS '716' AND THE HOUSEHOLD SCHEDULE COLUMN 9A SHOWS THAT THERE ARE THREE ELIGIBLE WOMEN IN THE HOUSEHOLD (LINE NUMBERS 02, 04, AND 05). SINCE THE LAST DIGIT OF THE HOUSEHOLD SERIAL NUMBER IS '6' GO TO ROW '6' AND SINCE THERE ARE THREE ELIGIBLE WOMEN IN THE HOUSEHOLD, GO TO COLUMN '3'. FOLLOW THE ROW AND COLUMN AND FIND THE NUMBER IN THE CELL WHERE THEY MEET ('2') AND CIRCLE THE NUMBER. NOW GO TO THE HOUSEHOLD SCHEDULE AND FIND THE SECOND WOMAN WHO IS ELIGIBLE FOR THE WOMAN'S INTERVIEW (LINE NUMBER '04' IN THIS EXAMPLE). WRITE HER NAME AND LINE NUMBER IN THE SPACE BELOW THE TABLE.

LAST DIGIT OF THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER	TOTAL NUMBER OF ELIGIBLE WOMEN IN HOUSEHOLD SCHEDULE COLUMN 9A							
	1	2	3	4	5	6	7	8
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

NAME OF SELECTED WOMAN _____

HOUSEHOLD LINE NUMBER OF SELECTED WOMAN . . ☐☐

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	What is the main source of drinking water for members of your household?	**PIPED WATER** PIPED INTO DWELLING/HOUSE . . . . . 11 PIPED TO YARD/PLOT . . . . . 12 PIPED TO NEIGHBOUR . . . . . 13 PUBLIC/COMMUNAL TAP . . . . . 14 BOREHOLE . . . . . 21 **DUG WELL** PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 **WATER FROM SPRING** PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 WATER-CARRIER/TANKER TRUCK . . . . . 61 CART WITH SMALL TANK/WATER VENDOR . . 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 81 BOTTLED WATER . . . . . 91 OTHER _____ 96 (SPECIFY)	→ 106 → 103 → 103
102	What is the main source of water used by your household for other purposes such as cooking and handwashing?	**PIPED WATER** PIPED INTO DWELLING/HOUSE . . . . . 11 PIPED TO YARD/PLOT . . . . . 12 PIPED TO NEIGHBOUR . . . . . 13 PUBLIC/COMMUNAL TAP . . . . . 14 BOREHOLE . . . . . 21 **DUG WELL** PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 **WATER FROM SPRING** PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 WATER-CARRIER/TANKER TRUCK . . . . . 61 CART WITH SMALL TANK/WATER VENDOR . . 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 81 OTHER _____ 96 (SPECIFY)	→ 106
103	Where is that water source located?	IN OWN DWELLING . . . . . 1 IN OWN YARD/PLOT . . . . . 2 ELSEWHERE/OUTSIDE YARD 3	→ 105
104	How long does it take to go there, get water, and come back?	MINUTES . . . . . ☐☐☐ DON'T KNOW 998	
105	CHECK 101 AND 102: CODE '14' OR '21' CIRCLED? YES ☐ ↓ NO ☐ →		→ 107
106	In the past two weeks, was the water from this source not available for at least one full day?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
107	Do you do anything to the water to make it safer to drink?	YES, ALWAYS . . . . . 1 YES, SOMETIMES . . . . . 2 NO . . . . . 3 DON'T KNOW 8	→ 109

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
108	What do you usually do to make the water safer to drink? Anything else? RECORD ALL MENTIONED.	BOIL . . . . . A ADD BLEACH/CHLORINE/JIK . . . . . B STRAIN THROUGH A CLOTH . . . . . C USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC) . . . . . D SOLAR DISINFECTION . . . . . E LET IT STAND AND SETTLE . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
109	What kind of toilet facility do members of your household usually use? IF NOT POSSIBLE TO DETERMINE, ASK PERMISSION TO OBSERVE THE FACILITY.	**FLUSH OR POUR FLUSH TOILET** FLUSH TO PIPED SEWER SYSTEM . . . . . 11 FLUSH TO SEPTIC TANK . . . . . 12 FLUSH TO PIT LATRINE . . . . . 13 FLUSH TO SOMEWHERE ELSE . . . . . 14 FLUSH, DON'T KNOW WHERE . . . . . 15 **PIT LATRINE** VENTILATED IMPROVED PIT LATRINE . . . . . 21 PIT LATRINE WTH VENTILATION PIPE BUT NO GAUZE MESH/NETTING . . . . . 22 PIT LATRINE WTHOUT VENTILATION PIPE 23 COMPOSTING TOILET/ ECOLOGICAL SANITATION SYSTEM . . . . . 31 CHEMICAL TOILET . . . . . 41 BUCKET TOILET . . . . . 51 NO FACILITY/BUSH/FIELD . . . . . 61 OTHER _____ 96 (SPECIFY)	→ 113
110	Do you share this toilet facility with other households?	YES . . . . . 1 NO 2	→ 112
111	Including your own household, how many households use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 . . . . . 0 [ ] 10 OR MORE HOUSEHOLDS . . . . . 95 DON'T KNOW 98	
112	Where is this toilet facility located?	IN OWN DWELLING . . . . . 1 IN OWN YARD/PLOT . . . . . 2 ELSEWHERE/OUTSIDE YARD 3	
113	What type of energy/fuel does your household mainly use for cooking?	ELECTRICITY FROM MAINS . . . . . 01 ELECTRICITY FROM GENERATOR . . . . . 02 ELECTRICITY FROM OTHER SOURCE . . . . . 03 SOLAR ENERGY . . . . . 04 GAS . . . . . 05 PARAFFIN . . . . . 06 COAL . . . . . 07 WOOD . . . . . 08 STRAW/SHRUBS/GRASS . . . . . 09 AGRICULTURAL CROP . . . . . 10 ANIMAL DUNG . . . . . 11 NO FOOD COOKED IN HOUSEHOLD . . . . . 95 OTHER _____ 96 (SPECIFY)	→ 116
114	Is the cooking usually done in the house, in a separate building, or outdoors?	IN THE HOUSE . . . . . 1 IN A SEPARATE BUILDING . . . . . 2 OUTDOORS . . . . . 3 OTHER _____ 6 (SPECIFY)	→ 116
115	Do you have a separate room which is used as a kitchen?	YES . . . . . 1 NO 2	
116	How many rooms in this household are used for sleeping?	ROOMS . . . . . [ ]	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
116A	What type of energy/fuel does your household mainly use for heating/warming?	ELECTRICITY FROM MAINS . . . . . 01 ELECTRICITY FROM GENERATOR . . . . . 02 ELECTRICITY FROM OTHER SOURCE . . . . . 03 SOLAR ENERGY . . . . . 04 GAS . . . . . 05 PARAFFIN . . . . . 06 COAL . . . . . 07 WOOD . . . . . 08 STRAW/SHRUBS/GRASS . . . . . 09 AGRICULTURAL CROP . . . . . 10 ANIMAL DUNG . . . . . 11 NO HEATING/WARMING IN HOUSEHOLD . . . . . 95 OTHER _____ 96 (SPECIFY)	
117	Does this household own any livestock, herds, other farm animals, or poultry?	YES . . . . . 1 NO 2	→ 120
118	How many of the following animals does this household own? IF NONE, RECORD '00'. IF 95 OR MORE, RECORD '95'. IF UNKNOWN, RECORD '98'. a) Cattle? b) Horses, donkeys, or mules? c) Goats? d) Sheep? e) Pigs? f) Chickens or other poultry?	a) CATTLE . . . . . [ ][ ] b) HORSES/DONKEYS/MULES . . . . . [ ][ ] c) GOATS . . . . . [ ][ ] d) SHEEP . . . . . [ ][ ] e) PIGS . . . . . [ ][ ] f) CHICKENS/POULTRY . . . . . [ ][ ]	
120	CHECK 113 AND 116A: CODE '01' CIRCLED IN EITHER? NO ↓ YES → 121		
121A	Does your household have electricity that is connected to the mains?	YES . . . . . 1 NO 2	
121	Does your household have any of the following in working condition:	YES NO b) RADIO . . . . . 1 2 c) TELEVISION . . . . . 1 2 d) LANDLINE TELEPHONE . . 1 2 e) COMPUTER . . . . . 1 2 f) REFRIGERATOR . . . . . 1 2 g) VACUUM CLEANER . . . . . 1 2 h) MICROWAVE OVEN . . . . . 1 2 i) STOVE . . . . . 1 2 k) WASHING MACHINE . . . . . 1 2 b) A radio? c) A television? d) A landline telephone? e) A desktop or laptop computer? f) A refrigerator? g) A vacuum cleaner or floor polisher? h) A microwave oven? i) An electric or gas stove? j) A washing machine?	
122	Does any member of this household own any of the following in working condition:	YES NO a) WATCH . . . . . 1 2 b) CELL PHONE . . . . . 1 2 c) BICYCLE . . . . . 1 2 d) MOTORCYCLE/SCOOTER . . . . . 1 2 e) ANIMAL-DRAWN CART . . . . . 1 2 f) CAR/BAKKIE/VAN/TRUCK . . 1 2 g) BOAT WITH MOTOR . . . . . 1 2 a) A watch? b) A cell phone? c) A bicycle? d) A motorcycle or motor scooter? e) An animal-drawn cart? f) A car, bakkie, van or truck? g) A boat with a motor?	
124	How often does anyone smoke inside your house? Would you say daily, weekly, monthly, less often than once a month, or never?	DAILY . . . . . 1 WEEKLY . . . . . 2 MONTHLY . . . . . 3 LESS OFTEN THAN ONCE A MONTH . . . . . 4 NEVER 5	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
124A	How is the refuse or rubbish in this household mainly collected or removed? PROBE: How often is it removed?	REMOVED BY LOCAL AUTHORITY/PRIVATE COMPANY AT LEAST ONCE A WEEK ..... 01 REMOVED BY LOCAL AUTHORITY/PRIVATE COMPANY LESS OFTEN THAN ONCE A WEEK 02 REMOVED BY COMMUNITY MEMBERS, CONTRACTED BY THE MUNICIPALITY AT LEAST ONCE A WEEK ..... 03 REMOVED BY COMMUNITY MEMBERS, CONTRACTED BY THE MUNICIPALITY LESS OFTEN THAN ONCE A WEEK ..... 04 REMOVED BY COMMUNITY MEMBERS AT LEAST ONCE A WEEK ..... 05 REMOVED BY COMMUNITY MEMBERS LESS OFTEN THAN ONCE A WEEK ..... 06 COMMUNAL REFUSE DUMP ..... 07 COMMUNAL CONTAINER/CENTRAL COLLECTION POINT ..... 08 OWN REFUSE DUMP ..... 09 OWN REFUSE BURNED ..... 10 NO RUBBISH DISPOSAL/DUMP OR LEAVE ANYWHERE ..... 11 OTHER _____ 96 (SPECIFY)	
124B	Do you know where you can get forms to apply for a government grant such as a child or old-age grant?	YES ..... 1 NO 2	→ 124D
124C	Where can you obtain forms? RECORD ALL MENTIONED.	POST OFFICE ..... A BANK ..... B MAGISTRATE'S COURT ..... C SASSA/DEPARTMENT OF WELFARE/SOCIAL DEVELOPMENT OFFICE ..... D PAY POINT ..... E OTHER _____ X (SPECIFY) DON'T KNOW/UNSURE ..... Z	
124D	In the past 12 months, did any adult (18 years and above) in this household go hungry because there wasn't enough food?	NEVER ..... 1 SELDOM ..... 2 SOMETIMES ..... 3 OFTEN ..... 4 ALWAYS ..... 5 NOT APPLICABLE/NO ADULTS IN HOUSEHOLD 6	
124E	In the past 12 months, did any child (17 years or younger) in this household go hungry because there wasn't enough food?	NEVER ..... 1 SELDOM ..... 2 SOMETIMES ..... 3 OFTEN ..... 4 ALWAYS ..... 5 NOT APPLICABLE/NO CHILDREN IN HOUSEHOLD 6	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
139	We would like to learn about the places that households use to wash their hands. Can you please show me where members of your household most often wash their hands?	OBSERVED, FIXED PLACE . . . . . 1 OBSERVED, MOBILE . . . . . 2 NOT OBSERVED, NOT IN DWELLING/YARD/PLOT 3 NOT OBSERVED, NO PERMISSION TO SEE . . 4 NOT OBSERVED, OTHER REASON 5	→ 141A
140	OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING. RECORD OBSERVATION.	WATER IS AVAILABLE . . . . . 1 WATER IS NOT AVAILABLE 2	
141	OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT AT THE PLACE FOR HANDWASHING. RECORD OBSERVATION.	SOAP OR DETERGENT (BAR, LIQUID, POWDER, PASTE) . . . . . A ASH, MUD, SAND . . . . . B NONE . . . . . Y	
141A	OBSERVE TYPE OF DWELLING RECORD OBSERVATION.	DWELLING/HOUSE OR BRICK/CONCRETE BLOCK STRUCTURE ON A SEPARATE STAND/YARD/FARM . . . . . 01 TRADITIONAL DWELLING/HUT STRUCTURE MADE OF TRADITIONAL MATERIALS . . . . . 02 FLAT OR APARTMENT IN BLOCK OF FLATS . . 03 CLUSTER HOUSE IN COMPLEX . . . . . 04 TOWN HOUSE/SEMI-DETACHED HOUSE IN COMPLEX . . . . . 05 SEMI-DETACHED HOUSE . . . . . 06 DWELLING/HOUSE/FLAT/ROOM IN BACKYARD 07 INFORMAL DWELLING/SHACK IN BACKYARD . . 08 INFORMAL DWELLING/SHACK NOT IN BACKYARD (E.G., IN AN INFORMAL/SQUATTER SETTLEMENT OR ON FARM) . . . . . 09 ROOM/FLATLET ON A PROPERTY OR LARGER DWELLING/SERVANTS' QUARTERS/GRANNY FLAT . . . . . 10 CARAVAN OR TENT . . . . . 11 OTHER _____ 96 (SPECIFY)	
142	OBSERVE MAIN MATERIAL OF THE FLOOR OF THE DWELLING. RECORD OBSERVATION.	**NATURAL FLOOR** EARTH/SAND . . . . . 11 DUNG . . . . . 12 **RUDIMENTARY FLOOR** WOOD PLANKS . . . . . 21 **FINISHED FLOOR** LAMINATED OR POLISHED WOOD . . . . . 31 VINYL/ASPHALT STRIPS . . . . . 32 CERAMIC TILES . . . . . 33 CEMENT . . . . . 34 CARPET . . . . . 35 OTHER _____ 96 (SPECIFY)	
143	OBSERVE MAIN MATERIAL OF THE ROOF OF THE DWELLING. RECORD OBSERVATION.	**NATURAL ROOFING** NO ROOF . . . . . 11 THATCHING/GRASS . . . . . 12 MUD/SOD . . . . . 13 **RUDIMENTARY ROOFING** PLASTIC . . . . . 21 WATTLE AND DAUB . . . . . 22 MUD WITH CEMENT MIX . . . . . 23 BRICKS . . . . . 24 WOOD PLANKS . . . . . 25 CARDBOARD . . . . . 26 **FINISHED ROOFING** CORRUGATED IRON/ZINC . . . . . 31 WOOD . . . . . 32 ASBESTOS . . . . . 33 TILES . . . . . 34 CEMENT . . . . . 35 OTHER _____ 96 (SPECIFY)	

ADDITIONAL HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
144	OBSERVE MAIN MATERIAL OF THE EXTERIOR WALLS OF THE DWELLING. RECORD OBSERVATION.	**NATURAL WALLS** NO WALLS . . . . . 11 DIRT/MUD . . . . . 13 **RUDIMENTARY WALLS** PLASTIC . . . . . 21 WATTLE AND DAUB . . . . . 22 STONE WITH MUD . . . . . 23 MUD WITH CEMENT MIX . . . . . 24 CARDBOARD . . . . . 25 REUSED WOOD . . . . . 26 **FINISHED WALLS** CEMENT . . . . . 31 STONE WITH LIME/CEMENT . . . . . 32 BRICKS . . . . . 33 CEMENT BLOCK/CONCRETE . . . . . 34 WOOD PLANKS . . . . . 36 CORRUGATED IRON/ZINC . . . . . 37 OTHER _____ 96 (SPECIFY)	
144A	CHECK COVER PAGE: HOUSEHOLD SELECTED FOR SALT COLLECTION? YES ☐ ↓ NO ☐ → 146		
145	We would like to check whether the salt used in your household is adequately iodised. May I have a sample of the salt used to cook meals in your household? RECORD BAR CODE NUMBER FROM FIRST BAR CODE LABEL IN BOXES. PLACE THE 1ST BAR CODE LABEL ON THE SALT SAMPLE AND THE 2ND ON THE TRANSMITTAL FORM.	BARCODE NUMBER ☐☐☐☐☐ NO SALT IN HOUSEHOLD . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	
146	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

FORMATTING DATE: 1 May 2016
ENGLISH LANGUAGE: 24 April 2015

2016 SOUTH AFRICA DEMOGRAPHIC AND HEALTH SURVEY
BIOMARKER QUESTIONNAIRE

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . | | | | |

HOUSEHOLD NUMBER . . . . . | | | | |

HOUSEHOLD SELECTED FOR MALE SURVEY AND BIOMARKERS? (YES = 1; NO = 2) 1

FIELDWORKER VISITS

	1	2	3	FINAL VISIT
DATE				DAY
FIELDWORKER'S NAME				MONTH YEAR 2 0 1
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

NOTES:

TOTAL ELIGIBLE WOMEN

TOTAL ELIGIBLE MEN

TOTAL ELIGIBLE CHILDREN

LANGUAGE OF QUESTIONNAIRE** 0 1 | LANGUAGE OF INTERVIEW** | | HOME LANGUAGE OF RESPONDENT** | | TRANSLATOR USED (YES = 1, NO = 2)

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:

01 ENGLISH	05 seSOTHO	09 tshiVENDA
02 AFRIKAANS	06 seTSWANA	10 xiTSONGA
03 isiXHOSA	07 sePEDI	11 isiNDEBELE
04 isiZULU	08 siSWATI	12 OTHER

SUPERVISOR

NAME _____ NUMBER | | | | |

101	FROM THE LIST OF PERSONS ELIGIBLE FOR BIOMARKERS, RECORD THE LINE NUMBER AND NAME OF ELIGIBLE CHILDREN AGE 0-5 IN THE SAME ORDER THEY APPEAR. IF THERE ARE MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
102	CHECK LIST OF CHILDREN ELIGIBLE FOR BIOMARKERS: RECORD LINE NUMBER AND NAME.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
103	What is (NAME)'s date of birth?	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐
104	CHECK 103: CHILD BORN BETWEEN 2011-2016?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114) ←
104A	RECORD NAME OF PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD.	NAME_____	NAME_____	NAME_____
104B	ASK CONSENT FOR ANTHROPOMETRY FROM PARENT/OTHER ADULT.	PROVIDE PARENT/RESPONSIBLE ADULT WITH PARENTAL CONSENT FORM.		
104C	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 _____ ← (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3	GRANTED . . . . . 1 _____ ← (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3	GRANTED . . . . . 1 _____ ← (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3
105	WEIGHT IN KILOGRAMS.	KG. . . ☐☐.☐0 NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. . . ☐☐.☐0 NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. . . ☐☐.☐0 NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
106	HEIGHT IN CENTIMETRES.	CM. . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108) ←	CM. . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108) ←	CM. . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108) ←
107	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2
108	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER
109	CHECK 103: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (SKIP TO 114) ← OLDER 2	0-5 MONTHS . . . . . 1 (SKIP TO 114) ← OLDER 2	0-5 MONTHS . . . . . 1 (SKIP TO 114) ← OLDER 2
111	ASK CONSENT FOR ANAEMIA TEST FROM PARENT/OTHER ADULT.	PROVIDE PARENT/RESPONSIBLE ADULT WITH PARENTAL CONSENT FORM.		
112	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 _____ ← (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3	GRANTED . . . . . 1 _____ ← (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3	GRANTED . . . . . 1 _____ ← (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3
113	RECORD HAEMOGLOBIN LEVEL HERE AND IN THE CHILD HEALTH INFORMATIONAL BROCHURE.	G/DL . . . . ☐☐.☐ NOT PRESENT 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . ☐☐.☐ NOT PRESENT 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . ☐☐.☐ NOT PRESENT 994 REFUSED . . . . . 995 OTHER 996
114	GO BACK TO 103 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 201.			

		CHILD 4	CHILD 5	CHILD 6
102	CHECK LIST OF CHILDREN ELIGIBLE FOR BIOMARKERS: RECORD LINE NUMBER AND NAME.	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____	LINE NUMBER . . . . . ☐☐ NAME _____
103	What is (NAME)'s date of birth?	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐	DAY . . . . . ☐☐ MONTH . . . . . ☐☐ YEAR . . . ☐☐☐☐
104	CHECK 103: CHILD BORN BETWEEN 2011-2016?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114) ←	YES . . . . . 1 NO . . . . . 2 (SKIP TO 114) ←
104A	RECORD NAME OF PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD.	NAME _____	NAME _____	NAME _____
104B	ASK CONSENT FOR ANTHROPOMETRY FROM PARENT/OTHER ADULT.	PROVIDE PARENT/RESPONSIBLE ADULT WITH PARENTAL CONSENT FORM.		
104C	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 _____ ← (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3	GRANTED . . . . . 1 _____ ← (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3	GRANTED . . . . . 1 _____ ← (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3
105	WEIGHT IN KILOGRAMS.	KG. . . . ☐☐.☐0 NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. . . . ☐☐.☐0 NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. . . . ☐☐.☐0 NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
106	HEIGHT IN CENTIMETRES.	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108) ←	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108) ←	CM. . . . ☐☐☐.☐ NOT PRESENT . . . . 9994 REFUSED . . . . . 9995 OTHER . . . . . 9996 (SKIP TO 108) ←
107	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2	LYING DOWN . . . . . 1 STANDING UP 2
108	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER
109	CHECK 103: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (SKIP TO 114) ← OLDER 2	0-5 MONTHS . . . . . 1 (SKIP TO 114) ← OLDER 2	0-5 MONTHS . . . . . 1 (SKIP TO 114) ← OLDER 2
111	ASK CONSENT FOR ANAEMIA TEST FROM PARENT/OTHER ADULT.	PROVIDE PARENT/RESPONSIBLE ADULT WITH PARENTAL CONSENT FORM.		
112	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 _____ ← (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3	GRANTED . . . . . 1 _____ ← (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3	GRANTED . . . . . 1 _____ ← (SIGN) REFUSED . . . . . 2 NOT PRESENT/OTHER . 3
113	RECORD HAEMOGLOBIN LEVEL HERE AND IN THE CHILD HEALTH INFORMATIONAL BROCHURE.	G/DL . . . . ☐☐.☐ NOT PRESENT 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . ☐☐.☐ NOT PRESENT 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . ☐☐.☐ NOT PRESENT 994 REFUSED . . . . . 995 OTHER 996
114	GO BACK TO 103 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE CHILDREN, GO TO 201.			

201	FROM THE LIST OF PERSONS ELIGIBLE FOR BIOMARKERS, RECORD THE LINE NUMBER, NAME, AGE, AND MARITAL STATUS FOR ALL ELIGIBLE WOMEN IN 202. WRITE THE NAME OF EACH WOMAN AT THE TOP OF THE FOLLOWING PAGES. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		WOMAN 1	WOMAN 2	WOMAN 3
202	CHECK LIST OF WOMEN ELIGIBLE FOR BIOMARKERS: RECORD LINE NUMBER, NAME, AND AGE. RECORD MARITAL STATUS.	LINE NUMBER . . . . [ ][ ] NAME ______ AGE . . . . [ ][ ] NEVER IN UNION . . . . 1 OTHER 2	LINE NUMBER . . . . [ ][ ] NAME ______ AGE . . . . [ ][ ] NEVER IN UNION . . . . 1 OTHER 2	LINE NUMBER . . . . [ ][ ] NAME ______ AGE . . . . [ ][ ] NEVER IN UNION . . . . 1 OTHER 2

202A	CHECK 202: AGE	15-17 YEARS . . . . 1 18-95 YEARS . . . . 2 (SKIP TO 202C)	15-17 YEARS . . . . 1 18-95 YEARS . . . . 2 (SKIP TO 202C)	15-17 YEARS . . . . 1 18-95 YEARS . . . . 2 (SKIP TO 202C)
202B	CHECK 202: MARITAL STATUS	NEVER IN UNION . . . . 1 (SKIP TO 202E) OTHER 2	NEVER IN UNION . . . . 1 (SKIP TO 202E) OTHER 2	NEVER IN UNION . . . . 1 (SKIP TO 202E) OTHER 2

ADULT RESPONDENT CONSENT FOR ANTHROPOMETRY

ADULT RESP CONSENT

202C	ASK CONSENT FOR ANTHROPOMETRY.	PROVIDE ADULT RESPONDENT WITH CONSENT FORM.		
202D	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ______ (SIGN AND SKIP TO 205) NOT PRESENT/OTHER . . . 3 (SKIP TO 205)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ______ (SIGN AND SKIP TO 205) NOT PRESENT/OTHER . . . 3 (SKIP TO 205)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ______ (SIGN AND SKIP TO 205) NOT PRESENT/OTHER . . . 3 (SKIP TO 205)

202E	RECORD NAME OF PARENT/ADULT RESPONSIBLE FOR MINOR.	NAME ______	NAME ______	NAME ______

PARENTAL/RESPONSIBLE ADULT CONSENT FOR ANTHROPOMETRY

PARENT/RESP ADULT CONSENT

202F	ASK CONSENT FOR ANTHROPOMETRY.	PROVIDE PARENT/RESPONSIBLE ADULT WITH PARENTAL CONSENT FORM.		
202G	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 205) NOT PRESENT/OTHER . . . 3 (SKIP TO 205)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 205) NOT PRESENT/OTHER . . . 3 (SKIP TO 205)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 205) NOT PRESENT/OTHER . . . 3 (SKIP TO 205)

MINOR RESPONDENT CONSENT FOR ANTHROPOMETRY

MINOR RESP CONSENT

202H	ASK CONSENT FOR ANTHROPOMETRY.	PROVIDE MINOR RESPONDENT WITH CONSENT FORM.		
202I	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) NOT PRESENT/OTHER . . . 3	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) NOT PRESENT/OTHER . . . 3	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) NOT PRESENT/OTHER . . . 3

WEIGHT, HEIGHT, WAIST, BLOOD PRESSURE, HAEMOGLOBIN MEASUREMENT, BLOOD COLLECTION FOR HBA1C AND HIV TESTING, AND RECORDING OF MEDICINES FOR WOMEN AGE 15-95

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM LIST.	NAME _____	NAME _____	NAME _____
205	WEIGHT IN KILOGRAMS.	KG. . . . ☐☐☐.☐0 NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. . . . ☐☐☐.☐0 NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. . . . ☐☐☐.☐0 NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996
206	HEIGHT IN CENTIMETRES.	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
206A	WAIST CIRCUMFERENCE IN CENTIMETRES.	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. . . . . ☐☐☐.☐ NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
207	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER	☐☐☐☐ FIELDWORKER NUMBER
208	CHECK 202: AGE	15-17 YEARS . . . . . 1 18-95 YEARS . . . . . 2 (SKIP TO 210)	15-17 YEARS . . . . . 1 18-95 YEARS . . . . . 2 (SKIP TO 210)	15-17 YEARS . . . . . 1 18-95 YEARS . . . . . 2 (SKIP TO 210)
209	CHECK 202: MARITAL STATUS	NEVER IN UNION . . . . . 1 (SKIP TO 213) OTHER 2	NEVER IN UNION . . . . . 1 (SKIP TO 213) OTHER 2	NEVER IN UNION . . . . . 1 (SKIP TO 213) OTHER 2

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM LIST.	NAME ______	NAME ______	NAME ______

ADULT RESPONDENT CONSENT FOR BLOOD PRESSURE MEASUREMENT

		WOMAN 1	WOMAN 2	WOMAN 3
210	ASK CONSENT FOR BLOOD PRESSURE MEASUREMENT.	PROVIDE ADULT RESPONDENT WITH CONSENT FORM.		
211	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ______ (SIGN) (IF GRANTED, SKIP TO 217; IF REFUSED, SKIP TO 247) NOT PRESENT/OTHER . . . 3 (SKIP TO 247)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ______ (SIGN) (IF GRANTED, SKIP TO 217; IF REFUSED, SKIP TO 247) NOT PRESENT/OTHER . . . 3 (SKIP TO 247)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ______ (SIGN) (IF GRANTED, SKIP TO 217; IF REFUSED, SKIP TO 247) NOT PRESENT/OTHER . . . 3 (SKIP TO 247)

PARENTAL/RESPONSIBLE ADULT CONSENT FOR BLOOD PRESSURE MEASUREMENT

		WOMAN 1	WOMAN 2	WOMAN 3
213	ASK CONSENT FOR BLOOD PRESSURE MEASUREMENT.	PROVIDE PARENT/RESPONSIBLE ADULT WITH PARENTAL CONSENT FORM.		
214	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 255) NOT PRESENT/OTHER . . . 3 (SKIP TO 255)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 255) NOT PRESENT/OTHER . . . 3 (SKIP TO 255)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 255) NOT PRESENT/OTHER . . . 3 (SKIP TO 255)

MINOR RESPONDENT CONSENT FOR BLOOD PRESSURE MEASUREMENT

		WOMAN 1	WOMAN 2	WOMAN 3
215	ASK CONSENT FOR BLOOD PRESSURE MEASUREMENT.	PROVIDE MINOR RESPONDENT WITH CONSENT FORM.		
216	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 255) NOT PRESENT/OTHER . . . 3 (SKIP TO 255)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 255) NOT PRESENT/OTHER . . . 3 (SKIP TO 255)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 255) NOT PRESENT/OTHER . . . 3 (SKIP TO 255)

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM LIST.	NAME ______	NAME ______	NAME ______
217	Before taking your blood pressure, I would like to ask a few questions about things that may affect these measurements. Have you done any of the following within the past 30 minutes:	YES NO	YES NO	YES NO
a)	Eaten anything?	EATEN 1 2	EATEN 1 2	EATEN 1 2
b)	Had coffee, tea, cola or other drink that has caffeine?	HAD CAFFEINATED DRINK 1 2	HAD CAFFEINATED DRINK 1 2	HAD CAFFEINATED DRINK 1 2
c)	Smoked any tobacco product?	SMOKED 1 2	SMOKED 1 2	SMOKED 1 2
d)	Used any other type of tobacco such as chewing tobacco or snuff?	OTHER TOBACCO 1 2	OTHER TOBACCO 1 2	OTHER TOBACCO 1 2
218	May I begin the process of measuring your blood pressure? I will begin by measuring the circumference of your arm to make sure that I use the right equipment.	MEASURE THE CIRCUMFERENCE OF THE RESPONDENT'S ARM MIDWAY BETWEEN THE ELBOW AND THE SHOULDER. RECORD THE MEASUREMENT IN CENTIMETRES. ARM CIRCUMFERENCE (IN CENTIMETRES). [ ][ ]	MEASURE THE CIRCUMFERENCE OF THE RESPONDENT'S ARM MIDWAY BETWEEN THE ELBOW AND THE SHOULDER. RECORD THE MEASUREMENT IN CENTIMETRES. ARM CIRCUMFERENCE (IN CENTIMETRES). [ ][ ]	MEASURE THE CIRCUMFERENCE OF THE RESPONDENT'S ARM MIDWAY BETWEEN THE ELBOW AND THE SHOULDER. RECORD THE MEASUREMENT IN CENTIMETRES. ARM CIRCUMFERENCE (IN CENTIMETRES). [ ][ ]
219	USE THE ARM CIRCUMFERENCE MEASUREMENT TO SELECT THE APPROPRIATE BLOOD PRESSURE MONITOR CUFF SIZE. CIRCLE THE CODE FOR THE CUFF SIZE.	SMALL: 17 CM – 22 CM . . . . . 1 MEDIUM: 23 CM – 31 CM . . . . . 2 LARGE: 32 CM – 42 CM . . . . . 3 EXTRA LARGE: ≥43 CM 4	SMALL: 17 CM – 22 CM . . . . . 1 MEDIUM: 23 CM – 31 CM . . . . . 2 LARGE: 32 CM – 42 CM . . . . . 3 EXTRA LARGE: ≥43 CM 4	SMALL: 17 CM – 22 CM . . . . . 1 MEDIUM: 23 CM – 31 CM . . . . . 2 LARGE: 32 CM – 42 CM . . . . . 3 EXTRA LARGE: ≥43 CM 4
220	RECORD TIME OF FIRST BP READING	HOURS [ ][ ] : MINUTES [ ][ ]	HOURS [ ][ ] : MINUTES [ ][ ]	HOURS [ ][ ] : MINUTES [ ][ ]
221	TAKE THE FIRST BLOOD PRESSURE READING. RECORD THE SYSTOLIC AND DIASTOLIC PRESSURE AND PULSE (HEART RATE).	**FIRST BP MEASURE** SYSTOLIC . . . . [ ][ ][ ] DIASTOLIC . . . . . . [ ][ ][ ] PULSE . . . . [ ][ ][ ] TECHNICAL PROBLEMS . 994 REFUSED . . . . 995 OTHER . . . . 996 (IF NOT MEASURED, GO TO 245)	**FIRST BP MEASURE** SYSTOLIC . . . . [ ][ ][ ] DIASTOLIC . . . . . . [ ][ ][ ] PULSE . . . . [ ][ ][ ] TECHNICAL PROBLEMS . 994 REFUSED . . . . 995 OTHER . . . . 996 (IF NOT MEASURED, GO TO 245)	**FIRST BP MEASURE** SYSTOLIC . . . . [ ][ ][ ] DIASTOLIC . . . . . . [ ][ ][ ] PULSE . . . . [ ][ ][ ] TECHNICAL PROBLEMS . 994 REFUSED . . . . 995 OTHER . . . . 996 (IF NOT MEASURED, GO TO 245)

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM LIST.	NAME ____________	NAME ____________	NAME ____________
222	Before this survey, has your blood pressure ever been checked?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
223	Were you told on two or more different occasions by a doctor or other health professional that you had hypertension or high blood pressure?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
224	To lower your blood pressure, are you now taking a prescribed medicine?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
225	**CHECK THAT IT HAS BEEN AT LEAST 3 MINUTES BEFORE TAKING THE SECOND BLOOD PRESSURE MEASUREMENT**			
226	May I take your blood pressure at this time?	YES . . . . . 1 NO . . . . . 2 (GO TO 243)	YES . . . . . 1 NO . . . . . 2 (GO TO 243)	YES . . . . . 1 NO . . . . . 2 (GO TO 243)
227	RECORD TIME OF SECOND BP READING.	HOURS MINUTES [ ][ ] : [ ][ ]	HOURS MINUTES [ ][ ] : [ ][ ]	HOURS MINUTES [ ][ ] : [ ][ ]
228	TAKE THE SECOND BLOOD PRESSURE READING. RECORD THE SYSTOLIC AND DIASTOLIC PRESSURE AND PULSE (HEART RATE).	**SECOND BP MEASURE** SYSTOLIC . . . . . [ ][ ][ ] DIASTOLIC . . . . . [ ][ ][ ] PULSE . . . . . [ ][ ][ ] TECHNICAL PROBLEMS . 994 REFUSED . . . . . 995 OTHER . . . . . 996 (IF NOT MEASURED, GO TO 243)	**SECOND BP MEASURE** SYSTOLIC . . . . . [ ][ ][ ] DIASTOLIC . . . . . [ ][ ][ ] PULSE . . . . . [ ][ ][ ] TECHNICAL PROBLEMS . 994 REFUSED . . . . . 995 OTHER . . . . . 996 (IF NOT MEASURED, GO TO 243)	**SECOND BP MEASURE** SYSTOLIC . . . . . [ ][ ][ ] DIASTOLIC . . . . . [ ][ ][ ] PULSE . . . . . [ ][ ][ ] TECHNICAL PROBLEMS . 994 REFUSED . . . . . 995 OTHER . . . . . 996 (IF NOT MEASURED, GO TO 243)

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM LIST.	NAME ________	NAME ________	NAME ________
229	**CHECK THAT IT HAS BEEN AT LEAST 3 MINUTES BEFORE TAKING THE THIRD BLOOD PRESSURE MEASUREMENT**			
230	May I take your blood pressure at this time?	YES . . . . 1 NO . . . . 2 (GO TO 243)	YES . . . . 1 NO . . . . 2 (GO TO 243)	YES . . . . 1 NO . . . . 2 (GO TO 243)
231	RECORD TIME OF THIRD BP READING	HOURS : MINUTES	HOURS : MINUTES	HOURS : MINUTES
232	TAKE THE THIRD BLOOD PRESSURE READING. RECORD THE SYSTOLIC AND DIASTOLIC PRESSURE AND PULSE (HEART RATE).	**THIRD BP MEASURE** SYSTOLIC . . . . . . DIASTOLIC . . . . . . PULSE . . . . TECHNICAL PROBLEMS . 994 REFUSED . . . . 995 OTHER 996	**THIRD BP MEASURE** SYSTOLIC . . . . . . DIASTOLIC . . . . . . PULSE . . . . TECHNICAL PROBLEMS . 994 REFUSED . . . . 995 OTHER 996	**THIRD BP MEASURE** SYSTOLIC . . . . . . DIASTOLIC . . . . . . PULSE . . . . TECHNICAL PROBLEMS . 994 REFUSED . . . . 995 OTHER 996

243 CIRCLE THE SINGLE NUMBER WHERE THE FINAL READING OF THE DIASTOLIC AND SYSTOLIC MEASURES MEET.

FINAL SYSTOLIC	**FINAL DIASTOLIC** (WOMAN 1) <80	<85	85-89	90-99	100-109	≥110	**FINAL DIASTOLIC** (WOMAN 2) <80	<85	85-89	90-99	100-109	≥110	**FINAL DIASTOLIC** (WOMAN 3) <80	<85	85-89	90-99	100-109	≥110
<120	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
<130	2	2	3	4	5	6	2	2	3	4	5	6	2	2	3	4	5	6
130-139	3	3	3	4	5	6	3	3	3	4	5	6	3	3	3	4	5	6
140-159	4	4	4	4	5	6	4	4	4	4	5	6	4	4	4	4	5	6
160-179	5	5	5	5	5	6	5	5	5	5	5	6	5	5	5	5	5	6
≥180	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

244 LOCATE THE NUMBER YOU CIRCLED IN 243 IN THE CHART BELOW. THEN USE THE INSTRUCTIONS TO THE RIGHT OF THAT NUMBER TO COMPLETE A BLOOD PRESSURE REPORT AND REFERRAL FORM FOR THE RESPONDENT. GIVE THE FORM TO THE RESPONDENT AND ANSWER ANY QUESTIONS.

NUMBER CIRCLED IN 243	RESPONDENT'S BLOOD PRESSURE CATEGORY	CONSULT HEALTH PROVIDER TO CHECK BLOOD PRESSURE WITHIN:
1	NORMAL (OPTIMAL)	1 YEAR
2	NORMAL (MILDLY HIGH)	1 YEAR
3	NORMAL (MODERATELY HIGH)	2 MONTHS
4	ABNORMAL (MILDLY ELEVATED)	1 MONTH
5	ABNORMAL (MODERATELY ELEVATED)	1 DAY/IMMEDIATELY
6	ABNORMAL (SEVERELY ELEVATED)	IMMEDIATELY

		WOMAN 1	WOMAN 2	WOMAN 3
245	CHECK 202: AGE	15-17 YEARS . . . . 1 18-95 YEARS . . . . 2 (SKIP TO 247)	15-17 YEARS . . . . 1 18-95 YEARS . . . . 2 (SKIP TO 247)	15-17 YEARS . . . . 1 18-95 YEARS . . . . 2 (SKIP TO 247)
246	CHECK 202: MARITAL STATUS	NEVER IN UNION . . . . 1 (SKIP TO 255) OTHER 2	NEVER IN UNION . . . . 1 (SKIP TO 255) OTHER 2	NEVER IN UNION . . . . 1 (SKIP TO 255) OTHER 2

WEIGHT, HEIGHT, WAIST, BLOOD PRESSURE, HAEMOGLOBIN MEASUREMENT, BLOOD COLLECTION FOR HBA1C AND HIV TESTING, AND RECORDING OF MEDICINES FOR WOMEN AGE 15-95

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM LIST.	NAME ____________	NAME ____________	NAME ____________

ADULT RESPONDENT CONSENT FOR ANAEMIA TEST

ADULT RESP CONSENT

		WOMAN 1	WOMAN 2	WOMAN 3
247	ASK CONSENT FOR ANAEMIA TEST.	PROVIDE ADULT RESPONDENT WITH CONSENT FORM.		
248	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 249) NOT PRESENT/OTHER . . . 3 (SKIP TO 249)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 249) NOT PRESENT/OTHER . . . 3 (SKIP TO 249)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 249) NOT PRESENT/OTHER . . . 3 (SKIP TO 249)
248A	CHECK 202: AGE	15-49 YEARS . . . . 1 50-95 YEARS . . . . 2 (SKIP TO 249)	15-49 YEARS . . . . 1 50-95 YEARS . . . . 2 (SKIP TO 249)	15-49 YEARS . . . . 1 50-95 YEARS . . . . 2 (SKIP TO 249)
248B	Are you pregnant?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8

ADULT RESPONDENT CONSENT FOR HBA1C TESTING

ADULT RESP CONSENT

		WOMAN 1	WOMAN 2	WOMAN 3
249	ASK CONSENT FOR HBA1C TESTING.	PROVIDE ADULT RESPONDENT WITH CONSENT FORM.		
250	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ SIGN NOT PRESENT/OTHER . . . 3 (SKIP TO 271)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ SIGN NOT PRESENT/OTHER . . . 3 (SKIP TO 271)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ SIGN NOT PRESENT/OTHER . . . 3 (SKIP TO 271)

ADULT RESPONDENT CONSENT FOR HIV TESTING

ADULT RESP CONSENT

		WOMAN 1	WOMAN 2	WOMAN 3
251	ASK CONSENT FOR HIV TESTING.	PROVIDE ADULT RESPONDENT WITH CONSENT FORM.		
252	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 271)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 271)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 271)

ADULT RESPONDENT CONSENT FOR ADDITIONAL TESTING

ADULT RESP CONSENT

		WOMAN 1	WOMAN 2	WOMAN 3
253	ASK CONSENT FOR ADDITIONAL TESTING.	PROVIDE ADULT RESPONDENT WITH CONSENT FORM.		
254	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN AND SKIP TO 271)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN AND SKIP TO 271)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN AND SKIP TO 271)

WEIGHT, HEIGHT, WAIST, BLOOD PRESSURE, HAEMOGLOBIN MEASUREMENT, BLOOD COLLECTION FOR HBA1C AND HIV TESTING, AND RECORDING OF MEDICINES FOR WOMEN AGE 15-95

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM LIST.	NAME ____________	NAME ____________	NAME ____________
PARENTAL/RESPONSIBLE ADULT CONSENT FOR ANAEMIA TEST				
255	ASK CONSENT FOR ANAEMIA TEST FROM PARENT/ADULT.	PROVIDE PARENT/RESPONSIBLE ADULT WITH CONSENT FORM.		
256	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 259) NOT PRESENT/OTHER . . . 3 (SKIP TO 259)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 259) NOT PRESENT/OTHER . . . 3 (SKIP TO 259)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 259) NOT PRESENT/OTHER . . . 3 (SKIP TO 259)
MINOR RESPONDENT CONSENT FOR ANAEMIA TEST				
257	ASK CONSENT FOR ANAEMIA TEST FROM MINOR RESPONDENT.	PROVIDE MINOR RESPONDENT WITH CONSENT FORM.		
258	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 259) NOT PRESENT/OTHER . . . 3 (SKIP TO 259)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 259) NOT PRESENT/OTHER . . . 3 (SKIP TO 259)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 259) NOT PRESENT/OTHER . . . 3 (SKIP TO 259)
258A	Are you pregnant?	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8	YES . . . . 1 NO . . . . 2 DON'T KNOW 8
PARENTAL/RESPONSIBLE ADULT CONSENT FOR HBA1C TESTING				
259	ASK CONSENT FOR HBA1C TESTING FROM PARENT/ADULT.	PROVIDE PARENT/RESPONSIBLE ADULT WITH CONSENT FORM.		
260	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 263) NOT PRESENT/OTHER . . . 3 (SKIP TO 271)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 263) NOT PRESENT/OTHER . . . 3 (SKIP TO 271)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 263) NOT PRESENT/OTHER . . . 3 (SKIP TO 271)
MINOR RESPONDENT CONSENT FOR HBA1C TESTING				
261	ASK CONSENT FOR HBA1C TESTING FROM MINOR RESPONDENT.	PROVIDE MINOR RESPONDENT WITH CONSENT FORM.		
262	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ____________ (SIGN) NOT PRESENT/OTHER . . . 3 (SKIP TO 271)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ____________ (SIGN) NOT PRESENT/OTHER . . . 3 (SKIP TO 271)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ____________ (SIGN) NOT PRESENT/OTHER . . . 3 (SKIP TO 271)

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM LIST.	NAME ______	NAME ______	NAME ______

PARENTAL/RESPONSIBLE ADULT CONSENT FOR HIV TESTING

PARENT/RESP ADULT CONSENT

		WOMAN 1	WOMAN 2	WOMAN 3
263	ASK CONSENT FOR HIV TESTING FROM PARENT/ADULT.	PROVIDE PARENT/RESPONSIBLE ADULT WITH CONSENT FORM.		
264	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 271)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 271)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 271)

MINOR RESPONDENT CONSENT FOR HIV TESTING

MINOR RESP CONSENT

		WOMAN 1	WOMAN 2	WOMAN 3
265	ASK CONSENT FOR HIV TESTING FROM MINOR RESPONDENT.	PROVIDE MINOR RESPONDENT WITH CONSENT FORM.		
266	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 271)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 271)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 271)

PARENTAL/RESPONSIBLE ADULT CONSENT FOR ADDITIONAL TESTING

PARENT/RESP ADULT CONSENT

		WOMAN 1	WOMAN 2	WOMAN 3
267	ASK CONSENT FOR ADDITIONAL TESTING FROM PARENT/ADULT.	PROVIDE PARENT/RESPONSIBLE ADULT WITH CONSENT FORM.		
268	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 271)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 271)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 271)

MINOR RESPONDENT CONSENT FOR ADDITIONAL TESTING

MINOR RESP CONSENT

		WOMAN 1	WOMAN 2	WOMAN 3
269	ASK CONSENT FOR ADDITIONAL TESTING FROM MINOR RESPONDENT.	PROVIDE MINOR RESPONDENT WITH CONSENT FORM.		
270	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN)

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM LIST.	NAME ___________	NAME ___________	NAME ___________
271	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
272	ADDITIONAL TESTS.	IF ADULT RESPONDENT, CHECK 254; IF MINOR RESPONDENT, CHECK 268 AND 270. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER.	IF ADULT RESPONDENT, CHECK 254; IF MINOR RESPONDENT, CHECK 268 AND 270. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER.	IF ADULT RESPONDENT, CHECK 254; IF MINOR RESPONDENT, CHECK 268 AND 270. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER.
273	RECORD HAEMOGLOBIN LEVEL HERE AND IN THE ADULT HEALTH INFORMATIONAL BROCHURE.	G/DL . . . . [ ][ ].[ ] NOT PRESENT . . . . 994 REFUSED . . . . 995 OTHER 996	G/DL . . . . [ ][ ].[ ] NOT PRESENT . . . . 994 REFUSED . . . . 995 OTHER 996	G/DL . . . . [ ][ ].[ ] NOT PRESENT . . . . 994 REFUSED . . . . 995 OTHER 996
274	HBA1C TESTING: PLACE BAR CODE LABEL.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER 99996	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER 99996	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER 99996
275	HIV TESTING: PLACE BAR CODE LABEL.	PUT THE 2ND BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER 99996	PUT THE 2ND BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER 99996	PUT THE 2ND BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER 99996
275A	OFFER HIV SELF-TEST KIT TO RESPONDENT WHO CONSENTED TO HIV TESTING.	TEST KIT ACCEPTED . . . . . 1 TEST KIT REFUSED . . . . . . 2 TEST KIT NOT OFFERRED 3 NOT PRESENT . . . . 4 OTHER 6	TEST KIT ACCEPTED . . . . . 1 TEST KIT REFUSED . . . . . . 2 TEST KIT NOT OFFERRED 3 NOT PRESENT . . . . 3 OTHER 6	TEST KIT ACCEPTED . . . . . 1 TEST KIT REFUSED . . . . . . 2 TEST KIT NOT OFFERRED 3 NOT PRESENT . . . . 3 OTHER 6
276	CHECK 274 AND 275: AT LEAST ONE BAR CODE LABEL PRESENT?	IF CONSENT GRANTED FOR EITHER TEST, PUT 3RD BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER CARD AND THE 4TH BAR CODE ON THE TRANSMITTAL FORM.	IF CONSENT GRANTED FOR EITHER TEST, PUT 3RD BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER CARD AND THE 4TH BAR CODE ON THE TRANSMITTAL FORM.	IF CONSENT GRANTED FOR EITHER TEST, PUT 3RD BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER CARD AND THE 4TH BAR CODE ON THE TRANSMITTAL FORM.

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM LIST.	NAME ________	NAME ________	NAME ________
277	Please show me all the prescribed medicines that you take regularly or daily. RECORD ALL MEDICATION/DRUG NAMES.	MEDICINES SEEN ...... 1 NONE .... 2 NOT PRESENT .... 3 REFUSED .... 4 OTHER 6	MEDICINES SEEN ...... 1 NONE .... 2 NOT PRESENT .... 3 REFUSED .... 4 OTHER 6	MEDICINES SEEN ...... 1 NONE .... 2 NOT PRESENT .... 3 REFUSED .... 4 OTHER 6
		DRUG NAME________	DRUG NAME________	DRUG NAME________
		DRUG NAME________	DRUG NAME________	DRUG NAME________
		DRUG NAME________	DRUG NAME________	DRUG NAME________
		DRUG NAME________	DRUG NAME________	DRUG NAME________
		DRUG NAME________	DRUG NAME________	DRUG NAME________
		DRUG NAME________	DRUG NAME________	DRUG NAME________
		DRUG NAME________	DRUG NAME________	DRUG NAME________
		DRUG NAME________	DRUG NAME________	DRUG NAME________
		DRUG NAME________	DRUG NAME________	DRUG NAME________
		DRUG NAME________	DRUG NAME________	DRUG NAME________
		DRUG NAME________	DRUG NAME________	DRUG NAME________
		DRUG NAME________	DRUG NAME________	DRUG NAME________
278	GO BACK TO 202 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, GO TO 301.			

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301	FROM THE LIST OF PERSONS ELIGIBLE FOR BIOMARKERS, RECORD THE LINE NUMBER, NAME, AGE, AND MARITAL STATUS FOR ALL ELIGIBLE MEN IN 302. WRITE THE NAME OF EACH MAN AT THE TOP OF THE FOLLOWING PAGES. IF THERE ARE MORE THAN THREE MEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		MAN 1	MAN 2	MAN 3
302	CHECK LIST OF MEN ELIGIBLE FOR BIOMARKERS: RECORD LINE NUMBER, NAME, AND AGE. RECORD MARITAL STATUS.	LINE NUMBER . . . . [ ][ ] NAME ____________ AGE . . . . [ ][ ] NEVER IN UNION . . . . 1 OTHER 2	LINE NUMBER . . . . [ ][ ] NAME ____________ AGE . . . . [ ][ ] NEVER IN UNION . . . . 1 OTHER 2	LINE NUMBER . . . . [ ][ ] NAME ____________ AGE . . . . [ ][ ] NEVER IN UNION . . . . 1 OTHER 2
302A	CHECK 302: AGE	15-17 YEARS . . . . 1 18-95 YEARS . . . . 2 (SKIP TO 302C)	15-17 YEARS . . . . 1 18-95 YEARS . . . . 2 (SKIP TO 302C)	15-17 YEARS . . . . 1 18-95 YEARS . . . . 2 (SKIP TO 302C)
302B	CHECK 302: MARITAL STATUS	NEVER IN UNION . . . . 1 (SKIP TO 302E) OTHER 2	NEVER IN UNION . . . . 1 (SKIP TO 302E) OTHER 2	NEVER IN UNION . . . . 1 (SKIP TO 302E) OTHER 2
	ADULT RESPONDENT CONSENT FOR ANTHROPOMETRY			
ADULT RESP CONSENT 302C	ASK CONSENT FOR ANTHROPOMETRY.	PROVIDE ADULT RESPONDENT WITH CONSENT FORM.		
302D	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN AND SKIP TO 305) NOT PRESENT/OTHER . . . 3 (SKIP TO 305)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN AND SKIP TO 305) NOT PRESENT/OTHER . . . 3 (SKIP TO 305)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ____________ (SIGN AND SKIP TO 305) NOT PRESENT/OTHER . . . 3 (SKIP TO 305)
302E	RECORD NAME OF PARENT/ADULT RESPONSIBLE FOR MINOR.	NAME ____________	NAME ____________	NAME ____________
	PARENTAL/RESPONSIBLE ADULT CONSENT FOR ANTHROPOMETRY			
PARENT/RESP ADULT CONSENT 302F	ASK CONSENT FOR ANTHROPOMETRY.	PROVIDE PARENT/RESPONSIBLE ADULT WITH PARENTAL CONSENT FORM.		
302G	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 305) NOT PRESENT/OTHER . . . 3 (SKIP TO 305)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 305) NOT PRESENT/OTHER . . . 3 (SKIP TO 305)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . 2 ____________ (SIGN) (IF REFUSED, SKIP TO 305) NOT PRESENT/OTHER . . . 3 (SKIP TO 305)
	MINOR RESPONDENT CONSENT FOR ANTHROPOMETRY			
MINOR RESP CONSENT 302H	ASK CONSENT FOR ANTHROPOMETRY.	PROVIDE MINOR RESPONDENT WITH CONSENT FORM.		
302I	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ____________ (SIGN) NOT PRESENT/OTHER . . . 3	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ____________ (SIGN) NOT PRESENT/OTHER . . . 3	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ____________ (SIGN) NOT PRESENT/OTHER . . . 3

WEIGHT, HEIGHT, WAIST, BLOOD PRESSURE, HAEMOGLOBIN MEASUREMENT, BLOOD COLLECTION FOR HBA1C AND HIV TESTING, AND RECORDING OF MEDICINES FOR MEN AGE 15-95

		MAN 1	MAN 2	MAN 3
	NAME FROM LIST.	NAME _____	NAME _____	NAME _____
305	WEIGHT IN KILOGRAMS.	KG. . . . [ ][ ][ ].[ ][0] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. . . . [ ][ ][ ].[ ][0] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. . . . [ ][ ][ ].[ ][0] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996
306	HEIGHT IN CENTIMETRES.	CM. . . . . [ ][ ][ ].[ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. . . . . [ ][ ][ ].[ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. . . . . [ ][ ][ ].[ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
306A	WAIST CIRCUMFERENCE IN CENTIMETRES.	CM. . . . . [ ][ ][ ].[ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. . . . . [ ][ ][ ].[ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. . . . . [ ][ ][ ].[ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
307	MEASURER: ENTER YOUR FIELDWORKER NUMBER.	[ ][ ][ ][ ] FIELDWORKER NUMBER	[ ][ ][ ][ ] FIELDWORKER NUMBER	[ ][ ][ ][ ] FIELDWORKER NUMBER
308	CHECK 302: AGE	15-17 YEARS . . . . . 1 18-95 YEARS . . . . . 2 (SKIP TO 310) ←	15-17 YEARS . . . . . 1 18-95 YEARS . . . . . 2 (SKIP TO 310) ←	15-17 YEARS . . . . . 1 18-95 YEARS . . . . . 2 (SKIP TO 310) ←
309	CHECK 302: MARITAL STATUS	NEVER IN UNION . . . . . 1 (SKIP TO 313) ← OTHER 2	NEVER IN UNION . . . . . 1 (SKIP TO 313) ← OTHER 2	NEVER IN UNION . . . . . 1 (SKIP TO 313) ← OTHER 2

		MAN 1	MAN 2	MAN 3
	NAME FROM LIST.	NAME ______	NAME ______	NAME ______

ADULT RESPONDENT CONSENT FOR BLOOD PRESSURE MEASUREMENT

		MAN 1	MAN 2	MAN 3
310	ASK CONSENT FOR BLOOD PRESSURE MEASUREMENT.	PROVIDE ADULT RESPONDENT WITH CONSENT FORM.		
311	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ______ (SIGN) (IF GRANTED, SKIP TO 317; IF REFUSED, SKIP TO 347) NOT PRESENT/OTHER . . . 3 (SKIP TO 347)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ______ (SIGN) (IF GRANTED, SKIP TO 317; IF REFUSED, SKIP TO 347) NOT PRESENT/OTHER . . . 3 (SKIP TO 347)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ______ (SIGN) (IF GRANTED, SKIP TO 317; IF REFUSED, SKIP TO 347) NOT PRESENT/OTHER . . . 3 (SKIP TO 347)

PARENTAL/RESPONSIBLE ADULT CONSENT FOR BLOOD PRESSURE MEASUREMENT

		MAN 1	MAN 2	MAN 3
313	ASK CONSENT FOR BLOOD PRESSURE MEASUREMENT.	PROVIDE PARENT/RESPONSIBLE ADULT WITH PARENTAL CONSENT FORM.		
314	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 355) NOT PRESENT/OTHER . . . 3 (SKIP TO 355)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 355) NOT PRESENT/OTHER . . . 3 (SKIP TO 355)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 355) NOT PRESENT/OTHER . . . 3 (SKIP TO 355)

MINOR RESPONDENT CONSENT FOR BLOOD PRESSURE MEASUREMENT

		MAN 1	MAN 2	MAN 3
315	ASK CONSENT FOR BLOOD PRESSURE MEASUREMENT.	PROVIDE MINOR RESPONDENT WITH CONSENT FORM.		
316	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 355) NOT PRESENT . . . . 3 (SKIP TO 355)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 355) NOT PRESENT . . . . 3 (SKIP TO 355)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 355) NOT PRESENT . . . . 3 (SKIP TO 355)

		MAN 1	MAN 2	MAN 3
	NAME FROM LIST.	NAME ______	NAME ______	NAME ______
317	Before taking your blood pressure, I would like to ask a few questions about things that may affect these measurements. Have you done any of the following within the past 30 minutes:	YES NO	YES NO	YES NO
a)	Eaten anything?	EATEN 1 2	EATEN 1 2	EATEN 1 2
b)	Had coffee, tea, cola or other drink that has caffeine?	HAD CAFFEINATED DRINK 1 2	HAD CAFFEINATED DRINK 1 2	HAD CAFFEINATED DRINK 1 2
c)	Smoked any tobacco product?	SMOKED 1 2	SMOKED 1 2	SMOKED 1 2
d)	Used any other type of tobacco such as chewing tobacco or snuff?	OTHER TOBACCO 1 2	OTHER TOBACCO 1 2	OTHER TOBACCO 1 2
318	May I begin the process of measuring your blood pressure? I will begin by measuring the circumference of your arm to make sure that I use the right equipment.	MEASURE THE CIRCUMFERENCE OF THE RESPONDENT'S ARM MIDWAY BETWEEN THE ELBOW AND THE SHOULDER. RECORD THE MEASUREMENT IN CENTIMETRES. ARM CIRCUMFERENCE (IN CENTIMETRES). [ ][ ]	MEASURE THE CIRCUMFERENCE OF THE RESPONDENT'S ARM MIDWAY BETWEEN THE ELBOW AND THE SHOULDER. RECORD THE MEASUREMENT IN CENTIMETRES. ARM CIRCUMFERENCE (IN CENTIMETRES). [ ][ ]	MEASURE THE CIRCUMFERENCE OF THE RESPONDENT'S ARM MIDWAY BETWEEN THE ELBOW AND THE SHOULDER. RECORD THE MEASUREMENT IN CENTIMETRES. ARM CIRCUMFERENCE (IN CENTIMETRES). [ ][ ]
319	USE THE ARM CIRCUMFERENCE MEASUREMENT TO SELECT THE APPROPRIATE BLOOD PRESSURE MONITOR CUFF SIZE. CIRCLE THE CODE FOR THE CUFF SIZE.	SMALL: 17 CM – 22 CM . . . . . 1 MEDIUM: 23 CM – 31 CM . . . . . 2 LARGE: 32 CM – 42 CM . . . . . 3 EXTRA LARGE: ≥43 CM 4	SMALL: 17 CM – 22 CM . . . . 1 MEDIUM: 23 CM – 31 CM . . . . 2 LARGE: 32 CM – 42 CM . . . . 3 EXTRA LARGE: ≥43 CM 4	SMALL: 17 CM – 22 CM . . . . 1 MEDIUM: 23 CM – 31 CM . . . . 2 LARGE: 32 CM – 42 CM . . . . 3 EXTRA LARGE: ≥43 CM 4
320	RECORD TIME OF FIRST BP READING	HOURS MINUTES [ ][ ] : [ ][ ]	HOURS MINUTES [ ][ ] : [ ][ ]	HOURS MINUTES [ ][ ] : [ ][ ]
321	TAKE THE FIRST BLOOD PRESSURE READING. RECORD THE SYSTOLIC AND DIASTOLIC PRESSURE AND PULSE (HEART RATE).	**FIRST BP MEASURE** SYSTOLIC. . . . . [ ][ ][ ] DIASTOLIC . . . . . . [ ][ ][ ] PULSE . . . . [ ][ ][ ] TECHNICAL PROBLEMS . 994 REFUSED . . . . 995 OTHER . . . . 996 (IF NOT MEASURED, GO TO 345)	**FIRST BP MEASURE** SYSTOLIC. . . . . [ ][ ][ ] DIASTOLIC . . . . . . [ ][ ][ ] PULSE . . . . [ ][ ][ ] TECHNICAL PROBLEMS . 994 REFUSED . . . . 995 OTHER . . . . 996 (IF NOT MEASURED, GO TO 345)	**FIRST BP MEASURE** SYSTOLIC. . . . . [ ][ ][ ] DIASTOLIC . . . . . . [ ][ ][ ] PULSE . . . . [ ][ ][ ] TECHNICAL PROBLEMS . 994 REFUSED . . . . 995 OTHER . . . . 996 (IF NOT MEASURED, GO TO 345)

		MAN 1	MAN 2	MAN 3
	NAME FROM LIST.	NAME ______	NAME ______	NAME ______
322	Before this survey, has your blood pressure ever been checked?	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2
323	Were you told on two or more different occasions by a doctor or other health professional that you had hypertension or high blood pressure?	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2
324	To lower your blood pressure, are you now taking a prescribed medicine?	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2
325	**CHECK THAT IT HAS BEEN AT LEAST 3 MINUTES BEFORE TAKING THE SECOND BLOOD PRESSURE MEASUREMENT**			
326	May I take your blood pressure at this time?	YES . . . 1 NO . . . 2 (GO TO 343)	YES . . . 1 NO . . . 2 (GO TO 343)	YES . . . 1 NO . . . 2 (GO TO 343)
327	RECORD TIME OF SECOND BP READING.	HOURS MINUTES [ ][ ] : [ ][ ]	HOURS MINUTES [ ][ ] : [ ][ ]	HOURS MINUTES [ ][ ] : [ ][ ]
328	TAKE THE SECOND BLOOD PRESSURE READING. RECORD THE SYSTOLIC AND DIASTOLIC PRESSURE AND PULSE (HEART RATE).	**SECOND BP MEASURE** SYSTOLIC . . . [ ][ ][ ] DIASTOLIC . . . [ ][ ][ ] PULSE . . . [ ][ ][ ] TECHNICAL PROBLEMS . 994 REFUSED . . . 995 OTHER . . . 996 (IF NOT MEASURED, GO TO 343)	**SECOND BP MEASURE** SYSTOLIC . . . [ ][ ][ ] DIASTOLIC . . . [ ][ ][ ] PULSE . . . [ ][ ][ ] TECHNICAL PROBLEMS . 994 REFUSED . . . 995 OTHER . . . 996 (IF NOT MEASURED, GO TO 343)	**SECOND BP MEASURE** SYSTOLIC . . . [ ][ ][ ] DIASTOLIC . . . [ ][ ][ ] PULSE . . . [ ][ ][ ] TECHNICAL PROBLEMS . 994 REFUSED . . . 995 OTHER . . . 996 (IF NOT MEASURED, GO TO 343)

		MAN 1	MAN 2	MAN 3
	NAME FROM LIST.	NAME ______	NAME ______	NAME ______
329	**CHECK THAT IT HAS BEEN AT LEAST 3 MINUTES BEFORE TAKING THE THIRD BLOOD PRESSURE MEASUREMENT**			
330	May I take your blood pressure at this time?	YES . . . 1 NO . . . 2 (GO TO 343)	YES . . . 1 NO . . . 2 (GO TO 343)	YES . . . 1 NO . . . 2 (GO TO 343)
331	RECORD TIME OF THIRD BP READING	HOURS [ ][ ] : MINUTES [ ][ ]	HOURS [ ][ ] : MINUTES [ ][ ]	HOURS [ ][ ] : MINUTES [ ][ ]
332	TAKE THE THIRD BLOOD PRESSURE READING. RECORD THE SYSTOLIC AND DIASTOLIC PRESSURE AND PULSE (HEART RATE).	**THIRD BP MEASURE** SYSTOLIC . . . [ ][ ][ ] DIASTOLIC . . . [ ][ ][ ] PULSE . . . [ ][ ][ ] TECHNICAL PROBLEMS . 994 REFUSED . . . 995 OTHER . . . 996	**THIRD BP MEASURE** SYSTOLIC . . . [ ][ ][ ] DIASTOLIC . . . [ ][ ][ ] PULSE . . . [ ][ ][ ] TECHNICAL PROBLEMS . 994 REFUSED . . . 995 OTHER . . . 996	**THIRD BP MEASURE** SYSTOLIC . . . [ ][ ][ ] DIASTOLIC . . . [ ][ ][ ] PULSE . . . [ ][ ][ ] TECHNICAL PROBLEMS . 994 REFUSED . . . 995 OTHER . . . 996

343 CIRCLE THE SINGLE NUMBER WHERE THE FINAL READING OF THE DIASTOLIC AND SYSTOLIC MEASURES MEET.

FINAL DIASTOLIC (MAN 1 / MAN 2 / MAN 3)

FINAL SYSTOLIC	<80	<85	85-89	90-99	100-109	≥110	<80	<85	85-89	90-99	100-109	≥110	<80	<85	85-89	90-99	100-109	≥110
<120	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
<130	2	2	3	4	5	6	2	2	3	4	5	6	2	2	3	4	5	6
130-139	3	3	3	4	5	6	3	3	3	4	5	6	3	3	3	4	5	6
140-159	4	4	4	4	5	6	4	4	4	4	5	6	4	4	4	4	5	6
160-179	5	5	5	5	5	6	5	5	5	5	5	6	5	5	5	5	5	6
≥180	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6

344 LOCATE THE NUMBER YOU CIRCLED IN 343 IN THE CHART BELOW. THEN USE THE INSTRUCTIONS TO THE RIGHT OF THAT NUMBER TO COMPLETE A BLOOD PRESSURE REPORT AND REFERRAL FORM FOR THE RESPONDENT. GIVE THE FORM TO THE RESPONDENT AND ANSWER ANY QUESTIONS.

NUMBER CIRCLED IN 343	**RESPONDENT'S BLOOD PRESSURE CATEGORY**	**CONSULT HEALTH PROVIDER TO CHECK BLOOD PRESSURE WITHIN:**
1	**NORMAL (OPTIMAL)**	**1 YEAR**
2	**NORMAL (MILDLY HIGH)**	**1 YEAR**
3	**NORMAL (MODERATELY HIGH)**	**2 MONTHS**
4	**ABNORMAL (MILDLY ELEVATED)**	**1 MONTH**
5	**ABNORMAL (MODERATELY ELEVATED)**	**1 DAY/IMMEDIATELY**
6	**ABNORMAL (SEVERELY ELEVATED)**	**IMMEDIATELY**

		MAN 1	MAN 2	MAN 3
345	CHECK 302: AGE	15-17 YEARS . . . 1 18-95 YEARS . . . 2 (SKIP TO 347)	15-17 YEARS . . . 1 18-95 YEARS . . . 2 (SKIP TO 347)	15-17 YEARS . . . 1 18-95 YEARS . . . 2 (SKIP TO 347)
346	CHECK 302: MARITAL STATUS	NEVER IN UNION . . . 1 (SKIP TO 355) OTHER . . . 2	NEVER IN UNION . . . 1 (SKIP TO 355) OTHER . . . 2	NEVER IN UNION . . . 1 (SKIP TO 355) OTHER . . . 2

		MAN 1	MAN 2	MAN 3
	NAME FROM LIST.	NAME ________	NAME ________	NAME ________

ADULT RESPONDENT CONSENT FOR ANAEMIA TEST

347	ASK CONSENT FOR ANAEMIA TEST.	PROVIDE ADULT RESPONDENT WITH CONSENT FORM.		
348	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ________ (SIGN) (IF REFUSED, SKIP TO 349) NOT PRESENT/OTHER . . . 3	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ________ (SIGN) (IF REFUSED, SKIP TO 349) NOT PRESENT/OTHER . . . 3	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ________ (SIGN) (IF REFUSED, SKIP TO 349) NOT PRESENT/OTHER . . . 3

ADULT RESPONDENT CONSENT FOR HBA1C TESTING

349	ASK CONSENT FOR HBA1C TESTING.	PROVIDE ADULT RESPONDENT WITH CONSENT FORM.		
350	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ________ SIGN NOT PRESENT/OTHER . . . 3 (SKIP TO 371)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ________ SIGN NOT PRESENT/OTHER . . . 3 (SKIP TO 371)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ________ SIGN NOT PRESENT/OTHER . . . 3 (SKIP TO 371)

ADULT RESPONDENT CONSENT FOR HIV TESTING

351	ASK CONSENT FOR HIV TESTING.	PROVIDE ADULT RESPONDENT WITH CONSENT FORM.		
352	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ________ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 371)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ________ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 371)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ________ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 371)

ADULT RESPONDENT CONSENT FOR ADDITIONAL TESTING

353	ASK CONSENT FOR ADDITIONAL TESTING.	PROVIDE ADULT RESPONDENT WITH CONSENT FORM.		
354	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ________ (SIGN AND SKIP TO 371)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ________ (SIGN AND SKIP TO 371)	GRANTED . . . . 1 RESPONDENT REFUSED . . . 2 ________ (SIGN AND SKIP TO 371)

		MAN 1	MAN 2	MAN 3
	NAME FROM LIST.	NAME ______	NAME ______	NAME ______

PARENTAL/RESPONSIBLE ADULT CONSENT FOR ANAEMIA TEST (PARENT/RESP ADULT CONSENT)

		MAN 1	MAN 2	MAN 3
355	ASK CONSENT FOR ANAEMIA TEST FROM PARENT/ADULT.	PROVIDE PARENT/RESPONSIBLE ADULT WITH CONSENT FORM.		
356	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 359) NOT PRESENT/OTHER . . . 3 (SKIP TO 359)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 359) NOT PRESENT/OTHER . . . 3 (SKIP TO 359)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 359) NOT PRESENT/OTHER . . . 3 (SKIP TO 359)

MINOR RESPONDENT CONSENT FOR ANAEMIA TEST (MINOR RESP CONSENT)

		MAN 1	MAN 2	MAN 3
357	ASK CONSENT FOR ANAEMIA TEST FROM MINOR RESPONDENT.	PROVIDE MINOR RESPONDENT WITH CONSENT FORM.		
358	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 359) NOT PRESENT/OTHER . . . 3	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 359) NOT PRESENT/OTHER . . . 3	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 359) NOT PRESENT/OTHER . . . 3

PARENTAL/RESPONSIBLE ADULT CONSENT FOR HBA1C TESTING (PARENT/RESP ADULT CONSENT)

		MAN 1	MAN 2	MAN 3
359	ASK CONSENT FOR HBA1C TESTING FROM PARENT/ADULT.	PROVIDE PARENT/RESPONSIBLE ADULT WITH CONSENT FORM.		
360	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 363) NOT PRESENT/OTHER . . . 3 (SKIP TO 371)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 363) NOT PRESENT/OTHER . . . 3 (SKIP TO 371)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 363) NOT PRESENT/OTHER . . . 3 (SKIP TO 371)

MINOR RESPONDENT CONSENT FOR HBA1C TESTING (MINOR RESP CONSENT)

		MAN 1	MAN 2	MAN 3
361	ASK CONSENT FOR HBA1C TESTING FROM MINOR RESPONDENT.	PROVIDE MINOR RESPONDENT WITH CONSENT FORM.		
362	CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER.	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) NOT PRESENT/OTHER . . . 3 (SKIP TO 371)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) NOT PRESENT/OTHER . . . 3 (SKIP TO 371)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) NOT PRESENT/OTHER . . . 3 (SKIP TO 371)

WEIGHT, HEIGHT, WAIST, BLOOD PRESSURE, HAEMOGLOBIN MEASUREMENT, BLOOD COLLECTION FOR HBA1C AND HIV TESTING, AND RECORDING OF MEDICINES FOR MEN AGE 15-95

		MAN 1	MAN 2	MAN 3
	NAME FROM LIST.	NAME ______	NAME ______	NAME ______

PARENTAL/RESPONSIBLE ADULT CONSENT FOR HIV TESTING (PARENT—RESP ADULT CONSENT)

		MAN 1	MAN 2	MAN 3
363	ASK CONSENT FOR HIV TESTING FROM PARENT/ADULT.	PROVIDE PARENT/RESPONSIBLE ADULT WITH CONSENT FORM.		
364	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 371)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 371)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN AND ENTER YOUR FIELDWORKER NUMBER) [ ][ ][ ][ ] (IF REFUSED, SKIP TO 371)

MINOR RESPONDENT CONSENT FOR HIV TESTING (MINOR RESP CONSENT)

		MAN 1	MAN 2	MAN 3
365	ASK CONSENT FOR HIV TESTING FROM MINOR RESPONDENT.	PROVIDE MINOR RESPONDENT WITH CONSENT FORM.		
366	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 371)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 371)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 371)

PARENTAL/RESPONSIBLE ADULT CONSENT FOR ADDITIONAL TESTING (PARENT—RESP ADULT CONSENT)

		MAN 1	MAN 2	MAN 3
367	ASK CONSENT FOR ADDITIONAL TESTING FROM PARENT/ADULT.	PROVIDE PARENT/RESPONSIBLE ADULT WITH CONSENT FORM.		
368	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 371)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 371)	GRANTED . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . . 2 ______ (SIGN) (IF REFUSED, SKIP TO 371)

MINOR RESPONDENT CONSENT FOR ADDITIONAL TESTING (MINOR RESP CONSENT)

		MAN 1	MAN 2	MAN 3
369	ASK CONSENT FOR ADDITIONAL TESTING FROM MINOR RESPONDENT.	PROVIDE MINOR RESPONDENT WITH CONSENT FORM.		
370	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN)	GRANTED . . . . 1 MINOR RESPONDENT REFUSED . . . . 2 ______ (SIGN)

		MAN 1	MAN 2	MAN 3
	NAME FROM LIST.	NAME ____________	NAME ____________	NAME ____________
371	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
372	ADDITIONAL TESTS.	IF ADULT RESPONDENT, CHECK 354; IF MINOR RESPONDENT, CHECK 368 AND 370. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER.	IF ADULT RESPONDENT, CHECK 354; IF MINOR RESPONDENT, CHECK 368 AND 370. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER.	IF ADULT RESPONDENT, CHECK 354; IF MINOR RESPONDENT, CHECK 368 AND 370. IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER.
373	RECORD HAEMOGLOBIN LEVEL HERE AND IN THE ADULT HEALTH INFORMATIONAL BROCHURE.	G/DL . . . . [ ][ ].[ ] NOT PRESENT . . . . 994 REFUSED . . . . 995 OTHER 996	G/DL . . . . [ ][ ].[ ] NOT PRESENT . . . . 994 REFUSED . . . . 995 OTHER 996	G/DL . . . . [ ][ ].[ ] NOT PRESENT . . . . 994 REFUSED . . . . 995 OTHER 996
374	HBA1C TESTING: PLACE BAR CODE LABEL.	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER 99996	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER 99996	PUT THE 1ST BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER 99996
375	HIV TESTING: PLACE BAR CODE LABEL.	PUT THE 2ND BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER 99996	PUT THE 2ND BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER 99996	PUT THE 2ND BAR CODE LABEL HERE. NOT PRESENT . . . . . . 99994 REFUSED . . . . 99995 OTHER 99996
375A	OFFER HIV SELF-TEST KIT TO RESPONDENT WHO CONSENTED TO HIV TESTING.	TEST KIT ACCEPTED . . . . 1 TEST KIT REFUSED . . . . . . 2 TEST KIT NOT OFFERRED 3 NOT PRESENT . . . . 4 OTHER 6	TEST KIT ACCEPTED . . . . 1 TEST KIT REFUSED . . . . . . 2 TEST KIT NOT OFFERRED 3 NOT PRESENT . . . . 3 OTHER 6	TEST KIT ACCEPTED . . . . 1 TEST KIT REFUSED . . . . . . 2 TEST KIT NOT OFFERRED 3 NOT PRESENT . . . . 3 OTHER 6
376	CHECK 374 AND 375: AT LEAST ONE BAR CODE LABEL PRESENT?	IF CONSENT GRANTED FOR EITHER TEST, PUT 3RD BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER CARD AND THE 4TH BAR CODE ON THE TRANSMITTAL FORM.	IF CONSENT GRANTED FOR EITHER TEST, PUT 3RD BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER CARD AND THE 4TH BAR CODE ON THE TRANSMITTAL FORM.	IF CONSENT GRANTED FOR EITHER TEST, PUT 3RD BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER CARD AND THE 4TH BAR CODE ON THE TRANSMITTAL FORM.

		MAN 1	MAN 2	MAN 3
	NAME FROM LIST.	NAME ______	NAME ______	NAME ______
377	Please show me all the prescribed medicines that you take regularly or daily.	MEDICINES SEEN ...... 1 NONE .... 2 NOT PRESENT .... 3 REFUSED .... 4 OTHER 6	MEDICINES SEEN ...... 1 NONE .... 2 NOT PRESENT .... 3 REFUSED .... 4 OTHER 6	MEDICINES SEEN ...... 1 NONE .... 2 NOT PRESENT .... 3 REFUSED .... 4 OTHER 6
		DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]
	RECORD ALL MEDICATION/DRUG NAMES.	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]
		DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]
		DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]
		DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]
		DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]
		DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]
		DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]
		DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]
		DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]
		DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]
		DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]	DRUG NAME______ [ ][ ][ ][ ][ ][ ][ ]
378	GO BACK TO 302 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE MEN, END INTERVIEW.			

FIELDWORKER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING BIOMARKERS

SUPERVISOR'S OBSERVATIONS

FORMATTING DATE: 5 June 2016
ENGLISH LANGUAGE: 22 April 2016

2016 SOUTH AFRICA DEMOGRAPHIC AND HEALTH SURVEY
WOMAN'S QUESTIONNAIRE

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . [ ][ ][ ][ ]

HOUSEHOLD NUMBER . . . . . [ ][ ][ ][ ]

NAME AND LINE NUMBER OF WOMAN _____ [ ][ ]

HOUSEHOLD SELECTED FOR MALE SURVEY AND FULL BIOMARKERS? (YES = 1; NO = 2) . . . . . [ ]

RESPONDENT SELECTED FOR THE HOUSEHOLD RELATIONS MODULE? (YES = 1; NO = 2) . . . . . [ ]

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY [ ][ ]
				MONTH [ ][ ]
				YEAR 2 0 1 [ ]
INTERVIEWER'S NAME	_____	_____	_____	INT. NO. [ ][ ][ ][ ]
RESULT*	_____	_____	_____	RESULT* [ ]
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS [ ]
TIME	_____	_____		

*RESULT CODES: 1 COMPLETED; 2 NOT AT HOME; 3 POSTPONED; 4 REFUSED; 5 PARTLY COMPLETED; 6 INCAPACITATED; 7 OTHER _____ (SPECIFY)

LANGUAGE OF QUESTIONNAIRE** 0 1 | LANGUAGE OF INTERVIEW** [ ][ ] | HOME LANGUAGE OF RESPONDENT** [ ][ ] | TRANSLATOR USED (YES = 1, NO = 2) [ ]

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:

01 ENGLISH	05 seSOTHO	09 tshiVENDA
02 AFRIKAANS	06 seTSWANA	10 xiTSONGA
03 isiXHOSA	07 sePEDI	11 isiNDEBELE
04 isiZULU	08 siSWATI	12 OTHER

SUPERVISOR

NAME _____ NUMBER [ ][ ][ ][ ]

100A	CHECK RESPONDENT'S AGE AND MARITAL STATUS IN HOUSEHOLD QUESTIONNAIRE. AGE 15-17 AND NEVER IN UNION → ↓ AGE 18 AND ABOVE OR AGE 15-17 AND EVER IN UNION →	→ 100C

INTRODUCTION AND CONSENT (PARENT/GUARDIAN)

100B
Hello. My name is _____. I am working with Statistics South Africa. We are conducting a survey about health and other topics all over South Africa. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to talk to (NAME OF MINOR) about her health and well-being. The questions usually take about 45 to 60 minutes. All of the answers (NAME OF MINOR) gives will be confidential and will not be shared with anyone other than members of our survey team. (NAME OF MINOR) doesn't have to be in the survey, but we hope you will agree to allow (NAME OF MINOR) to answer the questions since (NAME OF MINOR)'s views are important.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview with (NAME OF MINOR) now?

SIGNATURE OF INTERVIEWER _____ DATE _____

PARENT/GUARDIAN AGREES MINOR MAY BE INTERVIEWED . . 1 ↓

PARENT/GUARDIAN DOES NOT AGREE TO ALLOW MINOR TO BE INTERVIEWED . . 2 → END

INTRODUCTION AND CONSENT (RESPONDENT)

100C
Hello. My name is _____. I am working with Statistics South Africa. We are conducting a survey about health and other topics all over South Africa. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 45 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on this information sheet.

GIVE INFORMATION SHEET.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES TO BE INTERVIEWED . . 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 → END

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐	
102	How long have you been living continuously in (NAME OF CURRENT CITY, TOWN OR VILLAGE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS . . . . . ☐☐ ALWAYS . . . . . 95 VISITOR 96	→ 105
103	Just before you moved here, where did you live? PROBE: Is that a city, a town, a rural area, a farm, a tribal area, or an informal settlement?	CITY . . . . . 1 TOWN . . . . . 2 RURAL AREA . . . . . 3 FARM . . . . . 4 TRIBAL AREA . . . . . 5 INFORMAL SETTLEMENT 6	
104	Before you moved here, which province did you live in?	WESTERN CAPE . . . . . 01 EASTERN CAPE . . . . . 02 NORTHERN CAPE . . . . . 03 FREE STATE . . . . . 04 KWAZULU-NATAL . . . . . 05 NORTH WEST . . . . . 06 GAUTENG . . . . . 07 MPUMALANGA . . . . . 08 LIMPOPO . . . . . 09 SADC COUNTRY . . . . . 16 OTHER COUNTRY 26	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
105	On what day, month, and year were you born?	DAY . . . . . ☐☐ DON'T KNOW DAY . . . . . 98 MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT. IF AGE 95 OR OLDER, RECORD 95.	AGE IN COMPLETED YEARS . . . . . ☐☐	
106A	Which population group do you consider yourself: black, white, coloured, Indian or something else?	BLACK/AFRICAN . . . . . 1 WHITE . . . . . 2 COLOURED . . . . . 3 INDIAN/ASIAN . . . . . 4 OTHER _____ 6 (SPECIFY)	
107	Have you ever attended an educational institution?	YES . . . . . 1 NO 2	→ 111
108	What is the highest level you attended: primary, secondary, or higher than secondary?	PRIMARY . . . . . 1 SECONDARY . . . . . 2 HIGHER THAN SECONDARY 3	
109	What is the highest grade or form you completed at that level?	**PRIMARY SCHOOL** LESS THAN 1 YEAR COMPLETED . . . . . 00 GRADE 1/SUB A/CLASS 1 . . . . . 11 GRADE 2/SUB B/CLASS 2 . . . . . 12 GRADE 3/STANDARD 1/ AET 1 (KHA RI GUDE, SANLI) . . . . . 13 GRADE 4/STANDARD 2 . . . . . 14 GRADE 5/STANDARD 3/AET 2 . . . . . 15 GRADE 6 /STANDARD 4 . . . . . 16 GRADE 7/STANDARD 5/AET 3 . . . . . 17 **SECONDARY SCHOOL** LESS THAN 1 YEAR COMPLETED . . . . . 20 GRADE 8/STANDARD 6/FORM 1/NTC 1/ N1/NC (V) LEVEL 2 . . . . . 21 GRADE 9/STANDARD 7/FORM 2/AET 4/NTC 2/ N2/NC (V) LEVEL 3 . . . . . 22 GRADE 10/STANDARD 8/FORM 3/NTC 3/ N3/NC (V) LEVEL 4 . . . . . 23 GRADE 11/STANDARD 9/FORM 4 . . . . . 24 CERTIFICATE OR DIPLOMA WITH LESS THAN GRADE 12/STANDARD 10 COMPLETED . . 25 GRADE 12/STANDARD 10/FORM 5/MATRIC . . 26 N4/NTC4 . . . . . 27 N5/NTC5 . . . . . 28 N6/NTC6 . . . . . 29 **HIGHER EDUCATION** FURTHER STUDIES INCOMPLETE OR ONGOII 30 CERTIFICATE OR DIPLOMA WITH GRADE 12/ STANDARD 10 COMPLETED . . . . . 31 HIGHER DIPLOMA (TECHNIKON/ U. OF TECHNOLOGY) . . . . . 32 POST HIGHER DIPLOMA (TECHNIKON/ U. TECHNOLOGY MASTERS, DOCTORAL) 33 BACHELORS DEGREE/BACHELORS DEGREE AND POST GRADUATE DIPLOMA . . . . . 34 HONOURS DEGREE . . . . . 35 HIGHER DEGREE (MASTERS, DOCTORATE . . 36	
110	CHECK 108: PRIMARY OR SECONDARY ☐ ↓ HIGHER ☐		→ 113

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
111	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PART OF THE SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE . . . . . 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
112	CHECK 111: CODE '2', '3' OR '4' CIRCLED CODE '1' OR '5' CIRCLED		→ 114
113	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
114	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
115	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
116	Do you own a cell phone?	YES . . . . . 1 NO 2	→ 118
117	Do you use your cell phone for any financial transactions?	YES . . . . . 1 NO 2	
118	Do you have an account in a bank or other financial institution that you yourself use?	YES . . . . . 1 NO 2	
119	Have you ever used the internet?	YES . . . . . 1 NO 2	→ 124
120	In the last 12 months, have you used the internet? IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES . . . . . 1 NO 2	→ 124
121	During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
124	In the last 12 months, how many times have you been away from home for one or more nights?	NUMBER OF TIMES . . . . . ☐☐ NONE 00	→ 126
125	In the last 12 months, have you been away from home for more than one month at a time?	YES . . . . . 1 NO 2	
126	CHECK 106: AGE OF RESPONDENT AGE 15-49 AGE 50 AND ABOVE		→ 701

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES . . . . . 1 NO 2	→ 206
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	a) How many sons live with you? b) And how many daughters live with you? IF NONE, RECORD '00'.	a) SONS AT HOME . . . . . [ ][ ] b) DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	a) How many sons are alive but do not live with you? b) And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	a) SONS ELSEWHERE . . . . . [ ][ ] b) DAUGHTERS ELSEWHERE . . . . . [ ][ ]	
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?	YES . . . . . 1 NO 2	→ 208
207	a) How many boys have died? b) And how many girls have died? IF NONE, RECORD '00'.	a) BOYS DEAD . . . . . [ ][ ] b) GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL BIRTHS . . . . . [ ][ ]	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct? YES NO → PROBE AND CORRECT 201-208 AS NECESSARY.		
210	CHECK 208: ONE OR MORE BIRTHS NO BIRTHS → 226		

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.
RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE ROWS. IF THERE ARE MORE THAN 6 BIRTHS, USE AN ADDITIONAL QUESTIONNAIRE, STARTING WITH THE SECOND ROW.

212 What name was given to your (first/ next) baby? RECORD NAME. BIRTH HISTORY NUMBER.	213 Is (NAME) a boy or a girl?	214 Were any of these births twins?	215 On what day, month, and year was (NAME) born?	215A IF BIRTH SINCE JANUARY 2011: How many months were you pregnant before the birth of (NAME)? ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. PLACE A 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF THE PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.) **C**	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at (NAME)'s last birthday? RECORD AGE IN COMP-LETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD. RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD.	220 IF DEAD: How old was (NAME) when (he/she) died? IF '12 MONTHS' OR '1 YR', ASK: Did (NAME) have (his/her) first birthday? THEN ASK: Exactly how many months old was (NAME) when (he/she) died? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	220A IF DEAD: IF BIRTH SINCE JANUARY 2011: Where did (NAME) die? At a health facility, at home, or somewhere else?	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
01	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	MONTHS ☐☐	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (NEXT BIRTH)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	HEALTH FACILITY . . . 1 HOME . . . . . 2 ELSEWHERE . 3	
02	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	MONTHS ☐☐	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	HEALTH FACILITY . . . 1 HOME . . . . . 2 ELSEWHERE . 3	YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH)
03	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	MONTHS ☐☐	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	HEALTH FACILITY . . . 1 HOME . . . . . 2 ELSEWHERE . 3	YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH)
04	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	MONTHS ☐☐	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	HEALTH FACILITY . . . 1 HOME . . . . . 2 ELSEWHERE . 3	YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH)
05	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	MONTHS ☐☐	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	HEALTH FACILITY . . . 1 HOME . . . . . 2 ELSEWHERE . 3	YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH)
06	BOY 1 GIRL 2	SING 1 MULT 2	DAY ☐☐ MONTH ☐☐ ☐☐☐☐ YEAR	MONTHS ☐☐	YES 1 NO 2 → (SKIP TO 220)	AGE IN YEARS ☐☐	YES 1 NO 2	HOUSEHOLD LINE NUMBER ☐☐ → (SKIP TO 221)	DAYS 1 ☐☐ MONTHS 2 ☐☐ YEARS 3 ☐☐	HEALTH FACILITY . . . 1 HOME . . . . . 2 ELSEWHERE . 3	YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH)

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
222	Have you had any live births since the birth of (NAME OF LAST BIRTH)?	YES . . . . . 1 (RECORD BIRTH(S) IN TABLE) NO 2	
223	COMPARE 208 WITH NUMBER OF BIRTHS IN BIRTH HISTORY NUMBERS ARE SAME ☐ NUMBERS ARE DIFFERENT ☐ (PROBE AND RECONCILE)		
224	CHECK 215: ENTER THE NUMBER OF BIRTHS IN 2011-2016	NUMBER OF BIRTHS . . . . . ☐☐ NONE 0	
226	Are you pregnant now?	YES . . . . . 1 NO . . . . . 2 UNSURE 8	→ 230
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. **C** ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS . . . . . ☐☐	
228	When you got pregnant, did you want to get pregnant at that time?	YES . . . . . 1 NO 2	→ 230
229	CHECK 208: TOTAL NUMBER OF BIRTHS ONE OR MORE ☐ → a) Did you want to have a baby later on or did you not want any more children? NONE ☐ → b) Did you want to have a baby later on or did you not want any children?	LATER . . . . . 1 NO MORE/NONE 2	
230	Have you ever had a pregnancy that miscarried, was terminated, or ended in a stillbirth?	YES . . . . . 1 NO 2	→ 239
231	When did the last such pregnancy end?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
232	CHECK 231: LAST PREGNANCY ENDED IN 2011-2016 ☐		→ 233A
	LAST PREGNANCY ENDED IN 2010 OR EARLIER ☐		→ 239

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP
LINE NO.	233 In what month and year did the preceding such pregnancy end?	233A Did that pregnancy end in a spontaneous miscarriage, an induced abortion, or a stillbirth?	234 How many months pregnant were you when that pregnancy ended?	235 Since January 2011, have you had any other pregnancies that did not result in a live birth?	
01		MISCARRIAGE 1 ABORTION 2 STILLBIRTH 3	MONTHS	YES 1 NO 2	→ NEXT LINE → 236
02	MONTH YEAR	MISCARRIAGE 1 ABORTION 2 STILLBIRTH 3	MONTHS	YES 1 NO 2	→ NEXT LINE → 236
03	MONTH YEAR	MISCARRIAGE 1 ABORTION 2 STILLBIRTH 3	MONTHS	YES 1 NO 2	→ NEXT LINE → 236
04	MONTH YEAR	MISCARRIAGE 1 ABORTION 2 STILLBIRTH 3	MONTHS	YES 1 NO 2	→ 236
236	**C** FOR EACH PREGNANCY THAT DID NOT END IN A LIVE BIRTH IN 2011-2016 OR LATER, ENTER 'C' FOR MISCARRIAGE, 'A' FOR INDUCED ABORTION, OR 'S' FOR STILLBIRTH IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS OF PREGNANCY.IF THERE ARE MORE THAN FOUR PREGNANCIES THAT DID NOT END IN A LIVE BIRTH, USE AN ADDITIONAL QUESTIONNAIRE STARTING ON THE SECOND LINE.				
236A	CHECK 233A: HAD INDUCED ABORTION SINCE JANUARY 2011? YES ↓ NO → 237				
236B	The most recent time you had an induced abortion, what method was used?	SURGICAL ABORTION . . . . . 11 MEDICAL ABORTION . . . . . 21 SURGICAL AND MEDICAL . . . . . 31 SELF-INDUCED . . . . . 41 DON'T KNOW 98			→ 236D → 236E
236C	Where was the procedure done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVT. HOSPITAL . . . . . 11 GOVT. CLINIC/COMMUNITY HEALTH CENTRE 12 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 MARIE STOPES CLINIC . . . . . 22 PRIVATE DOCTOR . . . . . 23 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** BACKSTREET ABORTION . . . . . 31 OTHER _____ 96 (SPECIFY)			→ 236E

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
236D	Where did you get the drug? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVT. HOSPITAL . . . . . 11 GOVT. CLINIC/COMMUNITY HEALTH CENTRE 12 COMMUNITY HEALTH WORKER . . . . . 13 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 CHEMIST/PHARMACY . . . . . 22 PRIVATE DOCTOR . . . . . 23 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** BACKSTREET ABORTION . . . . . 31 TRADITIONAL HEALER . . . . . 32 OTHER _____ 96 (SPECIFY)	
236E	We have spoken about pregnancy losses that occurred since 2011. Did you have any miscarriages, terminations, or stillbirths that ended before 2011?	YES . . . . . 1 NO 2	→ 238 → 239
237	Did you have any miscarriages, terminations or stillbirths that ended before 2011?	YES . . . . . 1 NO 2	→ 239
238	When did the last such pregnancy that terminated before 2011 end?	MONTH . . . . . [ ][ ] YEAR . . . . . [ ][ ][ ][ ]	
239	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ] IN MENOPAUSE/ HAS HAD HYSTERECTOMY . . . . . 994 BEFORE LAST BIRTH . . . . . 995 NEVER MENSTRUATED 996	
240	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 242
241	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	
242	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Which ways or methods have you heard about? MARK ALL METHODS DECLARED BY THE RESPONDENT. FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)?	
01	Female Sterilisation/Tubal Ligation/Tubes Cut/Tubes Binded. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
02	Male Sterilisation/Vasectomy/Tubes Cut/Tubes Binded. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
03	IUD. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
04	Injectables/Depo. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2
05	Implants/Norplant/Jadelle. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
06	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2
07	Male Condom. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2
08	Female Condom. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2
09	Emergency Contraception. PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2
10	Rhythm Method. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES . . . . . 1 NO 2
11	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2
12	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES, MODERN METHOD _____ A (SPECIFY) YES, TRADITIONAL METHOD _____ B (SPECIFY) NO . . . . . Y

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	CHECK 226: NOT PREGNANT OR UNSURE ☐	PREGNANT ☐	→ 312
303	Are you or your partner currently doing something or using any method to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 312
304	Which method are you using? RECORD ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.	FEMALE STERILISATION . . . . . A MALE STERILISATION . . . . . B IUD . . . . . C INJECTABLES - 3 MONTH DEPO . . . . . D INJECTABLES - 2 MONTH NUR-ISTERATE . . E IMPLANTS . . . . . F PILL . . . . . G MALE CONDOM . . . . . H FEMALE CONDOM . . . . . I EMERGENCY CONTRACEPTION . . . . . J RHYTHM METHOD . . . . . K WITHDRAWAL . . . . . L OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . . . Y	→ 309
307	In what facility did the sterilisation take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVT. HOSPITAL . . . . . 11 GOVT. HEALTH CLINIC/COMMUNITY HEALTH CENTRE . . . . . 12 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 PRIVATE DOCTOR'S ROOM . . . . . 22 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
308	In what month and year was the sterilisation performed?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	→ 310
309	Since what month and year have you been using (CURRENT METHOD) without stopping? PROBE: For how long have you been using (CURRENT METHOD) now without stopping?	MONTH . . . . . ☐☐ YEAR . . . . . ☐☐☐☐	
310	CHECK 308 AND 309, 215 AND 231: ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 308 OR 309 NO ☐ YES ☐ GO BACK TO 308 OR 309, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).		

SECTION 3. CONTRACEPTION

311	CHECK 308 AND 309: YEAR IS 2011-2016 **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING. THEN CONTINUE YEAR IS 2010 OR EARLIER **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2011. THEN (SKIP TO 324)
312	I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years. **C** USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2011. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS.

		COLUMN 1	COLUMN 2	COLUMN 3
312A	MONTH AND YEAR OF START OF INTERVAL OF USE OR NON-USE.	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐
312B	Between (EVENT) in (MONTH/YEAR) and (EVENT) in (MONTH/YEAR), did you or your partner use any method of contraception?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 312I)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 312I)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 312I)
312C	Which method was that?	METHOD CODE . . ☐☐	METHOD CODE . . ☐☐	METHOD CODE . . ☐☐
312D	How many months after (EVENT) in (MONTH/YEAR) did you start to use (METHOD)? CIRCLE '95' IF RESPONDENT GIVES THE DATE OF STARTING TO USE THE METHOD.	IMMEDIATELY . . . . . 00 MONTHS . . ☐☐ (SKIP TO 312F) DATE GIVEN 95	IMMEDIATELY . . . . . 00 MONTHS . . ☐☐ (SKIP TO 312F) DATE GIVEN 95	IMMEDIATELY . . . . . 00 MONTHS . . ☐☐ (SKIP TO 312F) DATE GIVEN 95
312E	RECORD MONTH AND YEAR RESPONDENT STARTED USING METHOD.	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐
312F	For how many months did you use (METHOD)? CIRCLE '95' IF RESPONDENT GIVES THE DATE OF TERMINATION OF USE.	MONTHS . . ☐☐ (SKIP TO 312H) DATE GIVEN 95	MONTHS . . ☐☐ (SKIP TO 312H) DATE GIVEN 95	MONTHS . . ☐☐ (SKIP TO 312H) DATE GIVEN 95
312G	RECORD MONTH AND YEAR RESPONDENT STOPPED USING METHOD.	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐	MONTH ☐☐ YEAR ☐☐☐☐
312H	Why did you stop using (METHOD)?	REASON STOPPED . . . . . ☐☐	REASON STOPPED . . . . . ☐☐	REASON STOPPED . . . . . ☐☐
312I		GO BACK TO 312A IN NEXT COLUMN; OR, IF NO MORE GAPS, GO TO 313.	GO BACK TO 312A IN NEXT COLUMN; OR, IF NO MORE GAPS, GO TO 313.	GO BACK TO 312A IN NEW QUESTIONNAIRE; OR, IF NO MORE GAPS, GO TO 313.

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
313	CHECK THE CALENDAR FOR USE OF ANY CONTRACEPTIVE METHOD IN ANY MONTH NO METHOD USED ☐ ↓	ANY METHOD USED ☐	→ 315
314	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 326
315	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED . . . . . 00 FEMALE STERILISATION . . . . . 01 MALE STERILISATION . . . . . 02 IUD . . . . . 03 INJECTABLES - 3 MONTH DEPO . . . . . 04 INJECTABLES - 2 MONTH NUR-ISTERATE . . 05 IMPLANTS . . . . . 06 PILL . . . . . 07 MALE CONDOM . . . . . 08 FEMALE CONDOM . . . . . 09 EMERGENCY CONTRACEPTION . . . . . 10 RHYTHM METHOD . . . . . 11 WITHDRAWAL . . . . . 12 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD 96	→ 326 → 319 → 329 → 323
316	You first started using (CURRENT METHOD) in (DATE FROM 309). Where did you get it at that time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVT. HOSPITAL . . . . . 11 GOVT. CLINIC/COMMUNITY HEALTH CENTRE 12 MOBILE CLINIC . . . . . 13 COMMUNITY HEALTH WORKER . . . . . 14 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 CHEMIST/PHARMACY . . . . . 22 PRIVATE DOCTOR . . . . . 23 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** WORKPLACE/WORKPLACE CLINIC . . . . . 31 COMMUNITY CENTER, LIBRARY OR OTHER PUBLIC PLACE . . . . . 32 SHOP . . . . . 33 CHURCH . . . . . 34 FRIEND/RELATIVE . . . . . 35 OTHER _____ 96 (SPECIFY)	
317	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	IUD . . . . . 03 INJECTABLES - 3 MONTH DEPO . . . . . 04 INJECTABLES - 2 MONTH NUR-ISTERATE . . 05 IMPLANTS . . . . . 06 PILL . . . . . 07 MALE CONDOM . . . . . 08 FEMALE CONDOM . . . . . 09 EMERGENCY CONTRACEPTION . . . . . 10 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD 96	→ 323 → 322 → 323

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
318	At that time, were you told about side effects or problems you might have with the method?	YES . . . 1 NO . . . 2	→ 321 → 320
319	When you got sterilized, were you told about side effects or problems you might have with the method?	YES . . . 1 NO . . . 2	→ 321
320	Were you ever told by a nurse or health care worker about side effects or problems you might have with the method?	YES . . . 1 NO . . . 2	→ 322
321	Were you told what to do if you experienced side effects or problems?	YES . . . 1 NO . . . 2	
322	CHECK 318 AND 319: ANY YES' → a) At that time, were you told about other methods of family planning that you could use? OTHER → b) When you obtained (CURRENT METHOD FROM 315) from (SOURCE OF METHOD FROM 307 OR 316), were you told about other methods of family planning that you could use?	YES . . . 1 NO . . . 2	→ 324
323	Were you ever told by a nurse or health care worker about other methods of family planning that you could use?	YES . . . 1 NO . . . 2	
324	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILISATION . . . 01 MALE STERILISATION . . . 02 IUD . . . 03 INJECTABLES - 3 MONTH DEPO . . . 04 INJECTABLES - 2 MONTH NUR-ISTERATE . . 05 IMPLANTS . . . 06 PILL . . . 07 MALE CONDOM . . . 08 FEMALE CONDOM . . . 09 EMERGENCY CONTRACEPTION . . . 10 RHYTHM METHOD . . . 11 WITHDRAWAL . . . 12 OTHER MODERN METHOD . . . 95 OTHER TRADITIONAL METHOD . . . 96	→ 329 → 329 → 329

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
325	Where did you obtain (CURRENT METHOD) the last time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVT. HOSPITAL . . . . . 11 GOVT. HEALTH CLINIC/COMMUNITY HEALTH CENTRE . . . . . 12 MOBILE CLINIC . . . . . 13 CHW . . . . . 14 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 CHEMIST/PHARMACY . . . . . 22 PRIVATE DOCTOR . . . . . 23 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** WORKPLACE/WORKPLACE CLINIC . . . . . 31 COMMUNITY CENTER, LIBRARY OR OTHER PUBLIC PLACE . . . . . 32 SHOP . . . . . 33 CHURCH . . . . . 34 FRIEND/RELATIVE . . . . . 35 OTHER _____ 96 (SPECIFY)	→ 329
326	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	
329	CHECK 202: LIVING CHILDREN YES ↓ a) In the last 12 months, have you visited a health facility for care for yourself or your children? NO ↓ b) In the last 12 months, have you visited a health facility for care for yourself?	YES . . . . . 1 NO 2	→ 401
330	Did any staff member at the health facility speak to you about family planning methods?	YES . . . . . 1 NO 2	

401	CHECK 224: ONE OR MORE BIRTHS IN 2011-2016 ☐ ↓ NO BIRTHS IN 2011-2016 ☐ → 648		
402	CHECK 215: RECORD THE BIRTH HISTORY NUMBER IN 403 AND THE NAME AND SURVIVAL STATUS IN 404 FOR EACH BIRTH IN 2011-2016. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S). Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately.)		
403	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	LAST BIRTH BIRTH HISTORY NUMBER . . . . . ☐☐	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER . . . . . ☐☐
404	FROM 212 AND 216:	NAME _____ LIVING ☐ ↓ DEAD ☐ ↓	NAME _____ LIVING ☐ ↓ DEAD ☐ ↓
405	When you got pregnant with (NAME), did you want to get pregnant at that time?	YES . . . . . 1 (SKIP TO 408) ← NO 2	YES . . . . . 1 (SKIP TO 426) ← NO 2
406	CHECK 208: ONLY ONE BIRTH ☐ ↓ a) Did you want to have a baby later on, or did you not want any children? MORE THAN ONE BIRTH ☐ ↓ b) Did you want to have a baby later on, or did you not want any more children?	LATER . . . . . 1 NO MORE/NONE . . . . . 2 (SKIP TO 408) ←	LATER . . . . . 1 NO MORE/NONE . . . . . 2 (SKIP TO 426) ←
407	How much longer did you want to wait?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ DON'T KNOW 998	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ DON'T KNOW 998
408	Did you see anyone for antenatal care for this pregnancy?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 414) ←	
409	Whom did you see? Anyone else? PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	**HEALTH PERSONNEL** DOCTOR/GYNAECOLOGIST A NURSE/MIDWIFE . . . . . B **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . C COMMUNITY HEALTH WORKER . . . . . D OTHER _____ X (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
410	Where did you receive antenatal care for this pregnancy? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S).	**HOME** HER HOME . . . . . A OTHER HOME . . . . . B **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . C GOVERNMENT CLINIC/ COMM. HEALTH CENTRE D MOBILE CLINIC . . . . . E OTHER PUBLIC SECTOR _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/DOCTOR G OTHER PRIVATE MEDICAL SECTOR _____ H (SPECIFY) OTHER _____ X (SPECIFY)	
411	How many months pregnant were you when you first received antenatal care for this pregnancy?	MONTHS . . . . . ☐☐ DON'T KNOW 98	
412	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES . . . . . ☐☐ DON'T KNOW 98	
413	As part of your antenatal care during this pregnancy, were any of the following done at least once: a) Was your blood pressure measured? b) Did you give a urine sample? c) Did you give a blood sample? d) Were you asked about the use of alcohol? e) Were you asked about smoking tobacco?	YES NO a) BP . . . . . 1 2 b) URINE . . . . . 1 2 c) BLOOD . . . . . 1 2 d) ALCOHOL . . . . . 1 2 e) SMOKING 1 2	
414	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth or lockjaw?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 417) DON'T KNOW 8	
415	During this pregnancy, how many times did you get a tetanus injection?	TIMES . . . . . ☐ DON'T KNOW 8	
416	CHECK 415: TETANUS INJECTIONS	2 OR MORE TIMES ☐ → (SKIP TO 420) OTHER ☐ ↓	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
417	At any time before this pregnancy, did you receive any tetanus injections?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 420) DON'T KNOW 8	
418	Before this pregnancy, how many times did you receive a tetanus injection? IF 7 OR MORE TIMES, RECORD '7'.	TIMES . . . . . ☐ DON'T KNOW 8	
419	CHECK 418: ONLY ONE TIME / MORE THAN ONE TIME a) How many years ago did you receive that tetanus injection? b) How many years ago did you receive the last tetanus injection prior to this pregnancy?	YEARS AGO . . . . . ☐☐	
420	During this pregnancy, were you given or did you buy any iron tablets? SHOW TABLETS.	YES . . . . . 1 NO . . . . . 2 (SKIP TO 426) DON'T KNOW 8	
421	During the whole pregnancy, for how many days did you take the tablets? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS . . . . . ☐☐☐ DON'T KNOW 998	
426	When (NAME) was born, was (NAME) very large, larger than average, average, smaller than average, or very small?	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8
427	Was (NAME) weighed at birth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 429) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 429) DON'T KNOW 8

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
428	How much did (NAME) weigh? RECORD WEIGHT IN KILOGRAMS FROM ROAD TO HEALTH BOOKLET OR OTHER HEALTH CARD, IF AVAILABLE.	KG FROM BOOKLET/CARD 1 ☐☐.☐☐☐ KG FROM RECALL 2 ☐☐.☐☐☐ DON'T KNOW 99998	KG FROM BOOKLET/CARD 1 ☐☐.☐☐☐ KG FROM RECALL 2 ☐☐.☐☐☐ DON'T KNOW 99998
429	Who assisted with the delivery of (NAME)? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	**HEALTH PERSONNEL** DOCTOR/GYNAECOLOGIST A NURSE/MIDWIFE . . . . . B **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . C RELATIVE/FRIEND . . . . . D OTHER _____ X (SPECIFY) NO ONE ASSISTED . . . . . Y	**HEALTH PERSONNEL** DOCTOR/GYNAECOLOGIST A NURSE/MIDWIFE . . . . . B **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . C RELATIVE/FRIEND . . . . . D OTHER _____ X (SPECIFY) NO ONE ASSISTED . . . . . Y
430	Where did you give birth to (NAME)? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE.	**HOME** HER HOME . . . . . 11 (SKIP TO 434) OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT CLINIC/ COMM. HEALTH CENTRE 22 MOBILE CLINIC . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/DOCTOR 31 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 434)	**HOME** HER HOME . . . . . 11 (SKIP TO 434) OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT CLINIC/ COMM. HEALTH CENTRE 22 MOBILE CLINIC . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/DOCTOR 31 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 434)
431	How long after (NAME) was delivered did you stay there? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
431A	Was (NAME) discharged at the same time as you?	YES . . . . . 1 (SKIP TO 432) NO 2	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
431B	How long after (NAME) was delivered did (NAME) stay at the facility? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
432	Was (NAME) delivered by caesarean, that is, did they cut your belly open to take the baby out?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 434)	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 434)
433	When was the decision made to have the caesarean section? Was it before or after your labor pains started?	BEFORE . . . . . 1 AFTER 2	BEFORE . . . . . 1 AFTER 2
434	Immediately after the birth, was (NAME) put on your chest?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 434B) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 434B) DON'T KNOW 8
434A	Was (NAME)'s bare skin touching your bare skin?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
434B	CHECK 430: PLACE OF DELIVERY	CODE 11, 12, OR 96 CIRCLED ☐ → (SKIP TO 449) OTHER ☐	
435	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health while you were still in the facility?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 438)	
436	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
437	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR/GYNAECOLOGIST 11 NURSE/MIDWIFE . . . . . 12 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . 21 COMMUNITY HEALTH WORKER . . . . . 22 OTHER _____ 96 (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
438	Now I would like to talk to you about checks on (NAME)'s health after delivery – for example, someone examining (NAME), checking the cord, or seeing if (NAME) is OK. Did anyone check on (NAME)'s health while you were still in the facility?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 441) DON'T KNOW 8	
439	How long after delivery was (NAME)'s health first checked? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
440	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR/PAEDIATRICIAN 11 NURSE/MIDWIFE . . . . . 12 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . 21 COMMUNITY HEALTH WORKER . . . . . 22 OTHER _____ 96 (SPECIFY)	
441	Now I want to talk to you about what happened after you left the facility. Did anyone check on your health after you left the facility?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 445)	
442	How long after delivery did that check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
443	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR/GYNAECOLOGIST 11 NURSE/MIDWIFE . . . . . 12 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . 21 COMMUNITY HEALTH WORKER . . . . . 22 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
444	Where did the check take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE.	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT CLINIC/ COMM. HEALTH CENTRE 22 MOBILE CLINIC . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/DOCTOR 31 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY)	
445	I would like to talk to you about checks on (NAME)'s health after you left (FACILITY IN 430). Did any health care provider check on (NAME)'s health in the two months after you left (FACILITY IN 430)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 457) ← DON'T KNOW 8	
446	How many hours, days or weeks after the birth of (NAME) did that check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
447	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR/PAEDIATRICIAN 11 NURSE/MIDWIFE . . . . . 12 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . 21 COMMUNITY HEALTH WORKER . . . . . 22 OTHER _____ 96 (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
448	Where did this check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE.	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT CLINIC/ COMM. HEALTH CENTRE 22 MOBILE CLINIC . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/DOCTOR 31 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 457)	
449	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health after you gave birth to (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 453)	
450	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐ WEEKS . . . . . 3 ☐☐ DON'T KNOW 998	
451	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR/GYNAECOLOGIST 11 NURSE/MIDWIFE . . . . . 12 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . 21 COMMUNITY HEALTH WORKER . . . . . 22 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
452	Where did this first check take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE.	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT CLINIC/ COMM. HEALTH CENTRE 22 MOBILE CLINIC . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/DOCTOR 31 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY)	
453	I would like to talk to you about checks on (NAME)'s health after delivery – for example, someone examining (NAME), checking the cord, or seeing if (NAME) is OK. In the two months after (NAME) was born, did any health care provider or a traditional birth attendant check on (NAME)'s health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 457) ← DON'T KNOW 8	
454	How many hours, days or weeks after the birth of (NAME) did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS AFTER BIRTH . . . . . 1 DAYS AFTER BIRTH . . . . . 2 WEEKS AFTER BIRTH . . . . . 3 DON'T KNOW 998	
455	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	**HEALTH PERSONNEL** DOCTOR/PAEDIATRICIAN 11 NURSE/MIDWIFE . . . . . 12 **OTHER PERSON** TRADITIONAL BIRTH ATTENDANT . . . . . 21 COMMUNITY HEALTH WORKER . . . . . 22 OTHER _____ 96 (SPECIFY)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
456	Where did this first check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE.	**HOME** HER HOME . . . . . 11 OTHER HOME . . . . . 12 **PUBLIC SECTOR** GOVERNMENT HOSPITAL . . 21 GOVERNMENT CLINIC/ COMM. HEALTH CENTRE 22 MOBILE CLINIC . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/DOCTOR 31 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY)	
457	During the first two days after (NAME)'s birth, did any health care provider do the following: a) Examine the cord? b) Measure (NAME)'s temperature? c) Counsel you on danger signs for newborns? d) Counsel you on breastfeeding? e) Observe (NAME) breastfeeding?	YES NO DK a) CORD . . . . . 1 2 8 b) TEMP. . . . . 1 2 8 c) SIGNS . . . . . 1 2 8 d) COUNSEL BREAST-FEED 1 2 8 e) OBSERVE BREAST-FEED 1 2 8	
458	Has your menstrual period returned since the birth of (NAME)?	YES . . . . . 1 → (SKIP TO 460) NO . . . . . 2 → (SKIP TO 461)	
459	Did your period return between the birth of (NAME) and your next pregnancy?		YES . . . . . 1 NO . . . . . 2 → (SKIP TO 463)
460	For how many months after the birth of (NAME) did you not have a period?	MONTHS . . . . . ☐☐ DON'T KNOW 98	MONTHS . . . . . ☐☐ DON'T KNOW 98
461	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREGNANT ↓ PREGNANT OR UNSURE → (SKIP TO 463)	

SECTION 4. PREGNANCY AND POSTNATAL CARE

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
462	Have you had sexual intercourse since the birth of (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 464)	
463	For how many months after the birth of (NAME) did you not have sexual intercourse?	MONTHS . . . . . ☐☐ DON'T KNOW 98	MONTHS . . . . . ☐☐ DON'T KNOW 98
464	Did you ever breastfeed (NAME)?	YES . . . . . 1 (SKIP TO 466) NO 2	YES . . . . . 1 NO 2
465	CHECK 404: IS CHILD LIVING?	LIVING ☐ (SKIP TO 470) DEAD ☐ (SKIP TO 471)	
466	How long after birth did you first put (NAME) to the breast for feeding? IF LESS THAN 1 HOUR, RECORD '00' HOURS; IF LESS THAN 24 HOURS, RECORD HOURS; OTHERWISE, RECORD DAYS.	IMMEDIATELY . . . . . 000 HOURS . . . . . 1 ☐☐ DAYS . . . . . 2 ☐☐	
467	In the first three days after delivery, was (NAME) given anything to drink other than breast milk?	YES . . . . . 1 NO 2	
468	CHECK 404: IS CHILD LIVING?	LIVING ☐ DEAD ☐ (SKIP TO 471)	LIVING ☐ DEAD ☐ (SKIP TO 471)
469	Are you still breastfeeding (NAME)?	YES . . . . . 1 (SKIP TO 470) NO 2	
469A	For how many months did you breastfeed (NAME)?	MONTHS . . . . . ☐☐ DON'T KNOW 98	
470	Did (NAME) drink anything from a bottle with a teat yesterday or last night?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
471		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501A.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501A.

SECTION 5A. CHILD IMMUNISATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501A	CHECK 215 IN THE BIRTH HISTORY: ANY BIRTHS IN 2013-2016? ONE OR MORE BIRTHS IN 2013-2016 ☐	NO BIRTHS IN 2013-2016 ☐	→ 601
502A	RECORD THE NAME AND BIRTH HISTORY NUMBER FROM 212 OF THE LAST CHILD BORN IN 2013-2016. NAME OF LAST BIRTH _____	BIRTH HISTORY NUMBER . . . . . ☐☐	
503A	CHECK 216 FOR CHILD: LIVING ☐	DEAD ☐	→ 501B
504A	Do you have a Road to Health booklet/card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A BOOKLET . . . . . 1 YES, HAS ONLY ANOTHER DOCUMENT . . . . . 2 YES, HAS BOOKLET AND OTHER DOCUMENT 3 NO, NO BOOKLET AND NO OTHER DOCUMENT 4	→ 507A → 507A
505A	Did you ever have a Road to Health booklet for (NAME)?	YES . . . . . 1 NO 2	 → 505A2
505A1	What happened to (NAME)'s Road to Health booklet?	BOOKLET WITH RELATIVE . . . . . 1 BOOKLET MISPLACED OR LOST . . . . . 2 BOOKLET STOLEN . . . . . 3 BOOKLET HELD AS COLLATERAL/RANSOM . . 4 BOOKLET DESTROYED . . . . . 5 OTHER _____ 6 (SPECIFY)	→ 506A
505A2	Why don't you have a Road to Health booklet for (NAME)?	NONE AVAILABLE AT HEALTH FACILITY . . . . . 1 FOREIGNERS NOT GIVEN ONE . . . . . 2 REQUIRED TO PAY FOR IT . . . . . 3 TOO BUSY TO GET ONE . . . . . 4 OTHER _____ 6 (SPECIFY)	
506A	CHECK 504A: CODE '2' CIRCLED ☐	CODE '4' CIRCLED ☐	→ 511A
506A1	May I see the document where (NAME)'s vaccinations are written down?	YES, OTHER DOCUMENT SEEN . . . . . 1 NO DOCUMENT SEEN 2	→ 508A → 511A
507A	May I see the Road to Health booklet or other document where (NAME)'s vaccinations are written down?	YES, ONLY BOOKLET SEEN . . . . . 1 YES, ONLY OTHER DOCUMENT SEEN . . . . . 2 YES, BOOKLET AND OTHER DOCUMENT SEEN 3 NO BOOKLET AND NO OTHER DOCUMENT SEEN 4	→ 508A → 508A
507A1	Where is (NAME)'s Road to Health booklet?	BOOKLET WITH RELATIVE . . . . . 1 BOOKLET MISPLACED OR LOST . . . . . 2 BOOKLET STOLEN . . . . . 3 BOOKLET HELD AS COLLATERAL/RANSOM . . 4 BOOKLET AT HEALTH FACILITY . . . . . 5 OTHER _____ 6 (SPECIFY)	
507A2	CHECK 507A: CODE '2' CIRCLED ☐	CODE '4' CIRCLED ☐	→ 511A

508A PHOTOGRAPH VACCINATION PAGE OF BOOKLET OR OTHER DOCUMENT WHERE VACCINATIONS ARE WRITTEN.
COPY DATES FROM THE BOOKLET.
WRITE '44' IN 'DAY' COLUMN IF BOOKLET SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.

	DAY		MONTH		YEAR			
BCG								
ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE)								
ORAL POLIO VACCINE (OPV) 1								
ROTAVIRUS (RV) 1								
DTAP-IPV-HIB 1								
HEPATITIS B (HEP B) 1								
PNEUMOCOCCAL CONJUGATE VACCINE (PCV) 1								
DTAP-IPV-HIB 2								
HEPATITIS B (HEP B) 2								
DTAP-IPV-HIB 3								
HEPATITIS B (HEP B) 3								
PNEUMOCOCCAL CONJUGATE VACCINE (PCV) 2								
ROTAVIRUS (RV) 2								
MEASLES 1								
PNEUMOCOCCAL CONJUGATE VACCINE (PCV) 3								
DTAP-IPV-HIB 4								
MEASLES 2								
VITAMIN A (MOST RECENT)								

509A CHECK 508A: 'BCG' TO 'MEASLES 2' ALL RECORDED?

NO ↓

YES → 525A

510A In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in immunisation campaigns?

RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508A THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.

YES 1
(PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 508A THEN WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN)
(THEN SKIP TO 525A)

NO 2
DON'T KNOW 8
(WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN)
(THEN SKIP TO 525A)

SECTION 5A. CHILD IMMUNISATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LAST BIRTH _____	BIRTH HISTORY NUMBER	
511A	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in immunisation campaigns?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 526A → 501B
512A	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
514A	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 517A
515A	Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later?	FIRST TWO WEEKS . . . . . 1 LATER 2	
516A	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES	
517A	Has (NAME) ever received a DTP-combination vaccination, also known as a pentavalent vaccination? That is, an injection given in the left thigh or left arm to prevent diphtheria, tetanus, and whooping cough?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 518A1
518A	How many times did (NAME) receive the DTP-combination vaccine?	NUMBER OF TIMES	
518A1	Has (NAME) ever received a hepatitis B vaccination, that is, an injection given in the right thigh to prevent hepatitis B?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 519A
518A2	How many times did (NAME) receive the hepatitis B vaccine?	NUMBER OF TIMES	
519A	Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the right thigh to prevent pneumonia?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 521A
520A	How many times did (NAME) receive the pneumococcal vaccine?	NUMBER OF TIMES	
521A	Has (NAME) ever received a rotavirus vaccination, that is, syrup in the mouth to prevent diarrhoea?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 523A
522A	How many times did (NAME) receive the rotavirus vaccine?	NUMBER OF TIMES	
523A	Has (NAME) ever received a measles vaccination, that is, an injection in the left thigh or right arm to prevent measles?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 525A
524A	How many times did (NAME) receive the measles vaccine?	NUMBER OF TIMES	
525A	Did (NAME) ever miss getting a vaccination or get a vaccination late?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 501B
526A	CHECK 508A AND 511A: CHILD RECEIVED AT LEAST ONE VACCINATION → a) What was the reason for (NAME) missing the vaccination or getting it late? PROBE: Any other reason? CHILD RECEIVED RECEIVED NO VACCINATIONS → b) What is the reason (NAME) has not received any vaccinations? PROBE: Any other reason?	CLINIC OUT OF STOCK . . . . . A NOT AWARE OF NEED FOR A VACCINATION B FEAR OF SIDE EFFECTS . . . . . C DID NOT KNOW WHERE TO GO . . . . . D TOO BUSY TO TAKE CHILD . . . . . E NO MONEY FOR TRANSPORT . . . . . F CHILD WAS ILL . . . . . G RESPONDENT WAS ILL . . . . . H OTHER _____ (SPECIFY) X DON'T KNOW . . . . . Z	

SECTION 5B. CHILD IMMUNISATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501B	CHECK 215 IN THE BIRTH HISTORY: ANY MORE BIRTHS IN 2013-2016? MORE BIRTHS IN 2013-2016 ☐↓ NO MORE BIRTHS IN 2013-2016 ☐		→ 601
502B	RECORD THE NAME AND BIRTH HISTORY NUMBER FROM 212 OF THE NEXT-TO-LAST CHILD BORN IN 2013-2016. NAME OF NEXT-TO-LAST BIRTH _____ BIRTH HISTORY NUMBER . . . . . ☐☐		
503B	CHECK 216 FOR CHILD: LIVING ☐↓ DEAD ☐		→ 527B
504B	Do you have a Road to Health booklet/card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A BOOKLET . . . . . 1 YES, HAS ONLY ANOTHER DOCUMENT . . . . . 2 YES, HAS BOOKLET AND OTHER DOCUMENT 3 NO, NO BOOKLET AND NO OTHER DOCUMENT 4	→ 507B → 507B
505B	Did you ever have a Road to Health booklet for (NAME)?	YES . . . . . 1 NO 2	 → 505B2
505B1	What happened to (NAME)'s Road to Health booklet?	BOOKLET WITH RELATIVE . . . . . 1 BOOKLET MISPLACED OR LOST . . . . . 2 BOOKLET STOLEN . . . . . 3 BOOKLET HELD AS COLLATERAL/RANSOM . . 4 BOOKLET DESTROYED . . . . . 5 OTHER _____ 6 (SPECIFY)	→ 506B
505B2	Why don't you have a Road to Health booklet for (NAME)?	NONE AVAILABLE AT HEALTH FACILITY . . . . . 1 FOREIGNERS NOT GIVEN ONE . . . . . 2 REQUIRED TO PAY FOR IT . . . . . 3 TOO BUSY TO GET ONE . . . . . 4 OTHER _____ 6 (SPECIFY)	
506B	CHECK 504B: CODE '2' CIRCLED ☐↓ CODE '4' CIRCLED ☐		→ 511B
506B1	May I see the document where (NAME)'s vaccinations are written down?	YES, OTHER DOCUMENT SEEN . . . . . 1 NO DOCUMENT SEEN 2	→ 508B → 511B
507B	May I see the Road to Health booklet or other document where (NAME)'s vaccinations are written down?	YES, ONLY BOOKLET SEEN . . . . . 1 YES, ONLY OTHER DOCUMENT SEEN . . . . . 2 YES, BOOKLET AND OTHER DOCUMENT SEEN 3 NO BOOKLET AND NO OTHER DOCUMENT SEEN 4	→ 508B → 508B
507B1	Where is (NAME)'s Road to Health booklet?	BOOKLET WITH RELATIVE . . . . . 1 BOOKLET MISPLACED OR LOST . . . . . 2 BOOKLET STOLEN . . . . . 3 BOOKLET HELD AS COLLATERAL/RANSOM . . 4 BOOKLET AT HEALTH FACILITY . . . . . 5 OTHER _____ 6 (SPECIFY)	
507B2	CHECK 507B: CODE '2' CIRCLED ☐↓ CODE '4' CIRCLED ☐		→ 511B

508B PHOTOGRAPH VACCINATION PAGE OF BOOKLET OR OTHER DOCUMENT WHERE VACCINATIONS ARE WRITTEN.
COPY DATES FROM THE BOOKLET.
WRITE '44' IN 'DAY' COLUMN IF BOOKLET SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.

	DAY		MONTH		YEAR			
BCG								
ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE)								
ORAL POLIO VACCINE (OPV) 1								
ROTAVIRUS (RV) 1								
DTAP-IPV-HIB 1								
HEPATITIS B (HEP B) 1								
PNEUMOCOCCAL CONJUGATE VACCINE (PCV) 1								
DTAP-IPV-HIB 2								
HEPATITIS B (HEP B) 2								
DTAP-IPV-HIB 3								
HEPATITIS B (HEP B) 3								
PNEUMOCOCCAL CONJUGATE VACCINE (PCV) 2								
ROTAVIRUS (RV) 2								
MEASLES 1								
PNEUMOCOCCAL CONJUGATE VACCINE (PCV) 3								
DTAP-IPV-HIB 4								
MEASLES 2								
VITAMIN A (MOST RECENT)								

509B CHECK 508B: 'BCG' TO 'MEASLES 2' ALL RECORDED?

NO ☐ ↓

YES ☐ → 525B

510B In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in immunisation campaigns?

RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508B THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.

YES 1
(PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 508B THEN WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN)
(THEN SKIP TO 525B)

NO 2
DON'T KNOW 8
(WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN)
(THEN SKIP TO 525B)

SECTION 5B. CHILD IMMUNISATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF NEXT-TO-LAST BIRTH _____	BIRTH HISTORY NUMBER . . . . . [ ][ ]	
511B	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in immunisation campaigns?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 526B → 527B
512B	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
514B	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 517B
515B	Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later?	FIRST TWO WEEKS . . . . . 1 LATER 2	
516B	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES . . . . . [ ]	
517B	Has (NAME) ever received a DTP-combination vaccination, also known as a pentavalent vaccination? That is, an injection given in the left thigh or left arm to prevent diphtheria, tetanus, and whooping cough?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 518B1
518B	How many times did (NAME) receive the DTP-combination vaccine?	NUMBER OF TIMES . . . . . [ ]	
518B1	Has (NAME) ever received a hepatitis B vaccination, that is, an injection given in the right thigh to prevent hepatitis B?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 519B
518B2	How many times did (NAME) receive the hepatitis B vaccine?	NUMBER OF TIMES . . . . . [ ]	
519B	Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the right thigh to prevent pneumonia?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 521B
520B	How many times did (NAME) receive the pneumococcal vaccine?	NUMBER OF TIMES . . . . . [ ]	
521B	Has (NAME) ever received a rotavirus vaccination, that is, syrup in the mouth to prevent diarrhoea?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 523B
522B	How many times did (NAME) receive the rotavirus vaccine?	NUMBER OF TIMES . . . . . [ ]	
523B	Has (NAME) ever received a measles vaccination, that is, an injection in the left thigh or right arm to prevent measles?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 525B
524B	How many times did (NAME) receive the measles vaccine?	NUMBER OF TIMES . . . . . [ ]	

SECTION 5B. CHILD IMMUNISATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF NEXT-TO-LAST BIRTH _____	BIRTH HISTORY NUMBER	
525B	Did (NAME) ever miss getting a vaccination or get a vaccination late?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 526B
526B	CHECK 508B AND 511B: CHILD RECEIVED AT LEAST ONE VACCINATION ☐ ↓ a) What was the reason for (NAME) missing the vaccination or getting it late? PROBE: Any other reason? CHILD RECEIVED RECEIVED NO VACCINATIONS ☐ ↓ b) What is the reason (NAME) has not received any vaccinations? PROBE: Any other reason?	CLINIC OUT OF STOCK . . . . . A NOT AWARE OF NEED FOR A VACCINATION B FEAR OF SIDE EFFECTS . . . . . C DID NOT KNOW WHERE TO GO . . . . . D TOO BUSY TO TAKE CHILD . . . . . E NO MONEY FOR TRANSPORT . . . . . F CHILD WAS ILL . . . . . G RESPONDENT WAS ILL . . . . . H OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
527B	CHECK 215 IN BIRTH HISTORY: ANY MORE BIRTHS IN 2013-2016? MORE BIRTHS IN 2013-2016 ☐ ↓ (GO TO 502B IN AN ADDITIONAL QUESTIONNAIRE) NO MORE BIRTHS IN 2013-2016 ☐ →		601

601	CHECK 224: ONE OR MORE BIRTHS IN 2011-2016 ☐ ↓ NO BIRTHS IN 2011-2016 ☐ → 648		
602	CHECK 215: RECORD THE BIRTH HISTORY NUMBER IN 603 AND THE NAME AND SURVIVAL STATUS IN 604 FOR EACH BIRTH IN 2011-2016. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S). Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately.)		
603	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	LAST BIRTH BIRTH HISTORY NUMBER . . . . . ☐☐	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER . . . . . ☐☐
604	FROM 212 AND 216:	NAME _____ LIVING ↓ DEAD ☐ → (SKIP TO 646)	NAME _____ LIVING ↓ DEAD ☐ → (SKIP TO 646)
605	In the last six months, was (NAME) given a vitamin A dose like [this/any of these]? SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
607	Was (NAME) given any drug for intestinal worms in the last six months? IF RESPONDENT SAYS NO, CHECK ROAD TO HEALTH BOOKLET.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
608	Has (NAME) had diarrhoea/loose stools in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 618) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 618) DON'T KNOW 8
609	CHECK 469: CURRENTLY BREASTFEEDING? YES ↓ a) Now I would like to know how much (NAME) was given to drink during the diarrhoea including breastmilk. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less? NO ↓ b) Now I would like to know how much (NAME) was given to drink during the diarrhoea. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 NOTHING TO DRINK . . . . . 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 NOTHING TO DRINK . . . . . 5 DON'T KNOW 8

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
610	When (NAME) had diarrhoea, was (NAME) given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was (NAME) given much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 STOPPED FOOD . . . . . 5 NEVER GAVE FOOD . . . . . 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 STOPPED FOOD . . . . . 5 NEVER GAVE FOOD . . . . . 6 DON'T KNOW 8
611	Did you seek advice or treatment for the diarrhoea from any source?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 615)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 615)
612	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S).	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . A GOVERNMENT CLINIC/ COMM. HEALTH CENTRE B MOBILE CLINIC . . . . . C COMM. HEALTH WORKER . . D OTHER PUBLIC SECTOR _____ E (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC F CHEMIST/PHARMACY . . . . . G PRIVATE DOCTOR . . . . . H OTHER PRIVATE MEDICAL SECTOR _____ I (SPECIFY) **OTHER SOURCE** SUPERMARKET/SHOP . . . . . J TRADITIONAL HEALER . . . . . K MARKET . . . . . L OTHER _____ X (SPECIFY)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . A GOVERNMENT CLINIC/ COMM. HEALTH CENTRE B MOBILE CLINIC . . . . . C COMM. HEALTH WORKER . . D OTHER PUBLIC SECTOR _____ E (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC F CHEMIST/PHARMACY . . . . . G PRIVATE DOCTOR . . . . . H OTHER PRIVATE MEDICAL SECTOR _____ I (SPECIFY) **OTHER SOURCE** SUPERMARKET/SHOP . . . . . J TRADITIONAL HEALER . . . . . K MARKET . . . . . L OTHER _____ X (SPECIFY)
613	CHECK 612:	TWO OR MORE CODES CIRCLED ONLY ONE CODE CIRCLED (SKIP TO 615)	TWO OR MORE CODES CIRCLED ONLY ONE CODE CIRCLED (SKIP TO 615)
614	Where did you first seek advice or treatment? USE LETTER CODE FROM 612.	FIRST PLACE	FIRST PLACE . . . . .

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
615	Was (NAME) given any of the following at any time since (NAME) started having the diarrhoea: a) A fluid made from a special packet called Sorol or Rehidrat? b) A clinic-recommended sugar-salt solution? c) Zinc tablets or syrup?	YES NO DK a) FLUID FROM ORS PACKET . . 1 2 8 b) HOMEMADE FLUID . . . . . 1 2 8 c) ZINC 1 2 8	YES NO DK a) FLUID FROM ORS PACKET . . 1 2 8 b) HOMEMADE FLUID . . . . . 1 2 8 c) ZINC 1 2 8
616	CHECK 615: ANY 'YES' → a) Was anything else given to treat the diarrhoea? ALL 'NO' OR 'DK' → b) Was anything given to treat the diarrhoea?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 618) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 618) DON'T KNOW 8
617	CHECK 615: ANY 'YES' → a) What else was given to treat the diarrhoea? Anything else? ALL 'NO' OR 'DK' → b) What was given to treat the diarrhoea? Anything else? RECORD ALL TREATMENTS GIVEN.	**PILL OR SYRUP** ANTIBIOTIC . . . . . A ANTIMOTILITY . . . . . B OTHER (NOT ANTIBIOTIC OR ANTIMOTILITY) . . . . . C UNKNOWN PILL OR SYRUP . . . . . D **INJECTION** ANTIBIOTIC . . . . . E NON-ANTIBIOTIC . . . . . F UNKNOWN INJECTION . . . . . G (IV) INTRAVENOUS . . . . . H HOME REMEDY/ HERBAL MEDICINE . . . . . I OTHER _____ (SPECIFY) X	**PILL OR SYRUP** ANTIBIOTIC . . . . . A ANTIMOTILITY . . . . . B OTHER (NOT ANTIBIOTIC OR ANTIMOTILITY) . . . . . C UNKNOWN PILL OR SYRUP . . . . . D **INJECTION** ANTIBIOTIC . . . . . E NON-ANTIBIOTIC . . . . . F UNKNOWN INJECTION . . . . . G (IV) INTRAVENOUS . . . . . H HOME REMEDY/ HERBAL MEDICINE . . . . . I OTHER _____ (SPECIFY) X
618	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
620	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
621	Has (NAME) had fast, short, rapid breaths or difficulty breathing at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 623) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 → (SKIP TO 623) DON'T KNOW 8
622	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY . . . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ (SPECIFY) 6 DON'T KNOW . . . . . 8 → (SKIP TO 624)	CHEST ONLY . . . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ (SPECIFY) 6 DON'T KNOW . . . . . 8 → (SKIP TO 624)
623	CHECK 618: HAD FEVER?	YES → NO OR DK → (SKIP TO 646)	YES → NO OR DK → (SKIP TO 646)

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
624	Did you seek advice or treatment for the illness from any source?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 629)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 629)
625	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S).	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . A GOVERNMENT CLINIC/ COMM. HEALTH CENTRE B MOBILE CLINIC . . . . . C COMM. HEALTH WORKER . . D OTHER PUBLIC SECTOR _____ E (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC F CHEMIST/PHARMACY . . . . . G PRIVATE DOCTOR . . . . . H OTHER PRIVATE MEDICAL SECTOR _____ I (SPECIFY) **OTHER SOURCE** SUPERMARKET/SHOP . . . . . J TRADITIONAL HEALER . . . . . K MARKET . . . . . L OTHER _____ X (SPECIFY)	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . A GOVERNMENT CLINIC/ COMM. HEALTH CENTRE B MOBILE CLINIC . . . . . C COMM. HEALTH WORKER . . D OTHER PUBLIC SECTOR _____ E (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC F CHEMIST/PHARMACY . . . . . G PRIVATE DOCTOR . . . . . H OTHER PRIVATE MEDICAL SECTOR _____ I (SPECIFY) **OTHER SOURCE** SUPERMARKET/SHOP . . . . . J TRADITIONAL HEALER . . . . . K MARKET . . . . . L OTHER _____ X (SPECIFY)
626	CHECK 625:	TWO OR MORE CODES CIRCLED ↓ ONLY ONE CODE CIRCLED → (SKIP TO 628)	TWO OR MORE CODES CIRCLED ↓ ONLY ONE CODE CIRCLED → (SKIP TO 628)
627	Where did you first seek advice or treatment? USE LETTER CODE FROM 625.	FIRST PLACE . . . . . ☐	FIRST PLACE . . . . . ☐
628	How many days after the illness began did you first seek advice or treatment for (NAME)? IF THE SAME DAY RECORD '00'.	DAYS . . . . . ☐☐	DAYS . . . . . ☐☐
629	At any time during the illness, did (NAME) take any drugs for the illness?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 646) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 646) DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____
630	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED.	**ANTIMALARIAL DRUGS** COARTEM/ARTEMISININ COMBINATION THERAPY (ACT) . . . . . A OTHER ANTIMALARIAL _____ B (SPECIFY) **ANTIBIOTIC DRUGS** PILL/SYRUP . . . . . C INJECTION/IV . . . . . D **OTHER DRUGS** ASPIRIN . . . . . E PARACETAMOL/PANADO . . F BRUFEN . . . . . G PONSTAN . . . . . H OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	**ANTIMALARIAL DRUGS** COARTEM/ARTEMISININ COMBINATION THERAPY (ACT) . . . . . A OTHER ANTIMALARIAL _____ B (SPECIFY) **ANTIBIOTIC DRUGS** PILL/SYRUP . . . . . C INJECTION/IV . . . . . D **OTHER DRUGS** ASPIRIN . . . . . E PARACETAMOL/PANADO . . F BRUFEN . . . . . G PONSTAN . . . . . H OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z
646		GO BACK TO 604 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 647.	GO TO 604 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 647.

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
647	CHECK 615(a), ALL COLUMNS: NO CHILD RECEIVED FLUID FROM ORS PACKET ☐ ↓ ANY CHILD RECEIVED FLUID FROM ORS PACKET ☐ →		648B
648	Have you ever heard of a special product called Sorol or Rehidrat that you can get for the treatment of diarrhoea?	YES . . . . . 1 NO 2	
648A	CHECK 224: ONE OR MORE BIRTHS IN 2011-2016 ☐ ↓ NO BIRTHS IN 2011-2016 ☐ →		648C
648B	CHECK 615(b), ALL COLUMNS: NO CHILD RECEIVED CLINIC RECOMMENDED SUGAR-SALT SOLUTION ☐ ↓ ANY CHILD RECEIVED CLINIC RECOMMENDED SUGAR-SALT SOLUTION ☐ →		649
648C	Have you ever heard from a health care worker about a sugar-salt solution that can be made at home for the treatment of diarrhoea?	YES . . . . . 1 NO 2	
649	CHECK 215 AND 218, ALL ROWS: NUMBER OF CHILDREN BORN IN 2014-2016 LIVING WITH THE RESPONDENT ONE OR MORE ☐ ↓ NONE ☐ →		701
	_____ (NAME OF YOUNGEST CHILD LIVING WITH HER) ↓		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
650	Now I would like to ask you about liquids or foods that (NAME FROM 649) had yesterday during the day or at night. I am interested in whether your child had the item I mention even if it was combined with other foods. Did (NAME FROM 649) drink or eat:	YES NO DK	
	a) Plain water?	a) 1 2 8	
	b) Fruit juice or squashes?	b) 1 2 8	
	d) Milk such as tinned, powdered, or fresh animal milk? IF YES: How many times did (NAME) drink milk? IF 7 OR MORE TIMES, RECORD '7'.	d) . . . . . 1 2 8 NUMBER OF TIMES DRANK MILK ☐	
	e) Infant formula? IF YES: How many times did (NAME) drink infant formula? IF 7 OR MORE TIMES, RECORD '7'.	e) . . . . . 1 2 8 NUMBER OF TIMES DRANK FORMULA ☐	
	eb) Coke, Stoney, Dixi Cola, Jive or other sugary drinks?	eb) 1 2 8	
	f) Any other liquids?	f) 1 2 8	
	g) Yogurt, amasi, maas or custard? IF YES: How many times did (NAME) eat yogurt, amasi, maas or custard? IF 7 OR MORE TIMES, RECORD '7'.	g) . . . . . 1 2 8 NUMBER OF TIMES ATE YOGURT ☐	
	h) Any Purity, Cerelac, Ace or other commercially fortified baby cereal or porridge?	h) 1 2 8	
	i) Porridge, pap, bread, rice, noodles, Morvite or other foods made from grains?	i) 1 2 8	
	j) Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside?	j) 1 2 8	
	k) White potatoes, white sweet potatoes, white yams, or any other foods made from roots?	k) 1 2 8	
	l) Any dark green, leafy vegetables?	l) 1 2 8	
	m) Ripe mangoes, ripe papayas, or orange melon?	m) 1 2 8	
	n) Any other fruits or vegetables such as oranges, apples, bananas, guava, green melon, pineapples, avocados, or mushrooms?	n) 1 2 8	
	o) Liver, kidney, heart, or other organ meats?	o) 1 2 8	
	p) Any meat, such as beef, pork, lamb, goat, chicken, or duck?	p) 1 2 8	
	q) Eggs?	q) 1 2 8	
	r) Fresh, dried or tinned fish or shellfish?	r) 1 2 8	
	s) Any foods made from beans, peas, lentils, or nuts?	s) 1 2 8	
	t) Cheese or other food made from milk?	t) 1 2 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	u) Any oils, fats, butter, or foods made with any of these?	u) 1 2 8	
	v) Any sugary foods such as chocolates, sweets, candies, pastries, cakes or biscuits?	v) 1 2 8	
	va) Any salty snacks such as Nik Naks, Simba, Flings, or Spookies?	va) 1 2 8	
	w) Any other solid, semi-solid, or soft food?	w) 1 2 8	
651	CHECK 650 (CATEGORIES 'g' THROUGH 'w'): NOT A SINGLE 'YES' ☐ ↓ AT LEAST ONE 'YES' ☐ →		653
652	Did (NAME FROM 649) eat any solid, semi-solid, or soft foods yesterday during the day or at night? IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME) eat?	YES . . . . . 1 ☐ (GO BACK TO 650 TO RECORD FOOD EATEN YESTERDAY) ← (THEN CONTINUE TO 653) ← NO 2	→ 653A
653	How many times did (NAME FROM 649) eat solid, semi-solid, or soft foods yesterday during the day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES . . . . . ☐ DON'T KNOW 8	
653A	CHECK 215: CHILD AGE 6 MONTHS OR OLDER? YES ☐ ↓ NO ☐ →		654
653B	Has (NAME FROM 649) ever eaten liver?	YES . . . . . 1 NO 2	→ 654
653C	In the last four weeks, how many times has (NAME FROM 649) eaten liver?	NUMBER OF TIMES ☐☐ DON'T KNOW 98	
654	The last time (NAME FROM 649) passed stools, what was done to dispose of the stools?	CHILD USED TOILET OR LATRINE . . . . . 01 PUT/RINSED INTO TOILET OR LATRINE . . . . . 02 PUT/RINSED INTO DRAIN, DITCH, RIVER OR STREAM 03 THROWN INTO GARBAGE . . . . . 04 BURIED . . . . . 05 LEFT IN THE OPEN . . . . . 06 OTHER _____ 96 (SPECIFY)	

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Are you currently married or living together with someone as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A PARTNER . . . . . 2 NO 3	→ 701B
701A	Do you have a regular boyfriend/partner or fiancé?	YES . . . . . 1 NO 2	→ 702
701B	Is this person a man or a woman?	MAN . . . . . 1 WOMAN . . . . . 2 INTERSEX OR TRANSGENDERED 3	
701C	CHECK 701: RESPONDENT'S CURRENT MARITAL STATUS 701 = 3 ☐ ↓ 701 = 1 OR 2 ☐ →		703A
702	Have you ever been married or lived together with someone as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A PARTNER . . . . . 2 NO 3	→ 703A
703	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	
703A	CHECK 106: AGE OF RESPONDENT AGE 15-49 ☐ ↓ AGE 50 AND ABOVE ☐ →		901
703B	CHECK 701 AND 702: EVER MARRIED OR LIVED WITH A PARTNER? 702 = 1 OR 2 ☐ → 701 = 1 OR 2 ☐ ↓ 701 = 3 AND 702 = 3 ☐ →		709 713
704	Is your (spouse/partner) living with you now or is he/she staying elsewhere?	LIVING WITH HER . . . . . 1 STAYING ELSEWHERE 2	
705	RECORD THE SPOUSE'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE/SHE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO. . . . . ☐☐	
705A	CHECK 701B: SEX OF SPOUSE/PARTNER SPOUSE/PARTNER IS MALE (701B = 1) ☐ ↓ SPOUSE/PARTNER IS FEMALE OR INTERSEX (701B = 2 OR 3) ☐ →		709
706	Does your (husband/partner) have other wives or does he live with other women as if married?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 709
707	Including yourself, in total, how many wives or live-in partners does he have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS . . . . . ☐☐ DON'T KNOW 98	
708	Are you the first, second, … wife?	RANK . . . . . ☐☐	

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
709	Have you been married or lived with someone only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	
710	CHECK 709: MARRIED/LIVED WITH A PARTNER ONLY ONCE → a) In what month and year did you start living with your (spouse/partner)? MARRIED/ LIVED WITH A PARTNER MORE THAN ONCE → b) Now I would like to ask about your first (spouse/partner). In what month and year did you start living with your first (spouse/partner)?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	→ 712
711	How old were you when you first started living together?	AGE . . . . . [ ][ ]	
712	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.**		
713	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . 00 AGE IN YEARS . . . . . [ ][ ]	→ 731
714	I would like to ask you about your recent sexual activity. When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ]	→ 716 → 727

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
715	When was the last time you had sexual intercourse with this person?		DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ]	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ]
716	The last time you had sexual intercourse with this person, was a condom used?	YES . . . . 1 NO . . . . 2 (SKIP TO 718)	YES . . . . 1 NO . . . . 2 (SKIP TO 718)	YES . . . . 1 NO . . . . 2 (SKIP TO 718)
717	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2
718	What was your relationship to this person with whom you had sexual intercourse? IF BOYFRIEND/GIRLFRIEND: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	SPOUSE . . . . 1 LIVE-IN PARTNER . . . . . 2 BOYFRIEND/GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER ______ 6 (SPECIFY)	SPOUSE . . . . 1 LIVE-IN PARTNER . . . . . 2 BOYFRIEND/GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER ______ 6 (SPECIFY)	SPOUSE . . . . 1 LIVE-IN PARTNER . . . . . 2 BOYFRIEND/GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER ______ 6 (SPECIFY)
719	How long ago did you first have sexual intercourse with this person?	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ] YEARS AGO . . 4 [ ][ ]	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ] YEARS AGO . . 4 [ ][ ]	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ] YEARS AGO . . 4 [ ][ ]
720	How many times during the last 12 months did you have sexual intercourse with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, RECORD '95'.	NUMBER OF TIMES . . . . . [ ][ ]	NUMBER OF TIMES . . . . . [ ][ ]	NUMBER OF TIMES . . . . . [ ][ ]
721	How old is this person?	AGE OF PARTNER [ ][ ] DON'T KNOW 98	AGE OF PARTNER [ ][ ] DON'T KNOW 98	AGE OF PARTNER [ ][ ] DON'T KNOW 98
722	Apart from this person, have you had sexual intercourse with any other person in the last 12 months?	YES . . . . 1 (GO BACK TO 715 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 724)	YES . . . . 1 (GO BACK TO 715 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 724)	
723	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.			NUMBER OF PARTNERS LAST 12 MONTHS . . [ ][ ] DON'T KNOW 98

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
724	CHECK 106: AGE 15-24 ☐ ↓ AGE 25-49 ☐ → 727		
725	CHECK 701: NOT CURRENTLY MARRIED/ LIVING WITH A SPOUSE ☐ ↓ CURRENTLY MARRIED/ LIVING WITH A SPOUSE ☐ → 727		
726	In the past 12 months have you had sex or been sexually involved with anyone because he gave you or told you he would give you gifts, cash, or anything else?	YES . . . . . 1 NO 2	
727	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.	NUMBER OF PARTNERS IN LIFETIME . . . . . ☐☐ DON'T KNOW 98	
731	PRESENCE OF OTHERS DURING THIS SECTION.	YES NO CHILDREN <10 . . . . . 1 2 MALE ADULTS . . . . . 1 2 FEMALE ADULTS 1 2	

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 304: NEITHER STERILISED ☐ ↓ HE OR SHE STERILISED ☐ →		813
802	CHECK 226: PREGNANT ☐ ↓ NOT PREGNANT OR UNSURE ☐ →		804
803	Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 805 → 812
804	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS SHE CAN'T GET PREGNANT . . . . . 3 UNDECIDED/DON'T KNOW 8	→ 807 → 813 → 811
805	CHECK 226: NOT PREGNANT OR UNSURE ☐ ↓ a) How long would you like to wait from now before the birth of (a/another) child? PREGNANT ☐ ↓ b) After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 SAYS SHE CAN'T GET PREGNANT . . . . . 994 AFTER MARRIAGE . . . . . 995 OTHER _____ (SPECIFY) 996 DON'T KNOW 998	→ 811 → 813 → 811
806	CHECK 226: NOT PREGNANT OR UNSURE ☐ ↓ PREGNANT ☐ →		812
807	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT CURRENTLY USING ☐ ↓ CURRENTLY USING ☐ →		813
808	CHECK 805: '24' OR MORE MONTHS OR '02' OR MORE YEARS ☐ ↓ NOT ASKED ☐ ↓ '00-23' MONTHS OR '00-01' YEAR ☐ →		812
809	CHECK 714: DAYS, WEEKS OR MONTHS AGO ☐ ↓ YEARS AGO ☐ → NOT ASKED ☐ →		811 811

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
810	CHECK 804: WANTS TO HAVE A/ANOTHER CHILD ↓ a) You have said that you do not want (a/another) child soon. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? WANTS NO MORE/ NONE ↓ b) You have said that you do not want any (more) children. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? RECORD ALL REASONS MENTIONED.	NOT MARRIED . . . . . A **FERTILITY-RELATED REASONS** NOT HAVING SEX . . . . . B INFREQUENT SEX . . . . . C MENOPAUSAL/HYSTERECTOMY . . . . . D CAN'T GET PREGNANT . . . . . E NOT MENSTRUATED SINCE LAST BIRTH . . . . . F BREASTFEEDING . . . . . G UP TO GOD/FATALISTIC . . . . . H **OPPOSITION TO USE** RESPONDENT OPPOSED . . . . . I HUSBAND/PARTNER OPPOSED . . . . . J OTHERS OPPOSED . . . . . K RELIGIOUS PROHIBITION . . . . . L **LACK OF KNOWLEDGE** KNOWS NO METHOD . . . . . M KNOWS NO SOURCE . . . . . N **METHOD-RELATED REASONS** SIDE EFFECTS/HEALTH CONCERNS . . . . . O LACK OF ACCESS/TOO FAR . . . . . P COSTS TOO MUCH . . . . . Q PREFERRED METHOD NOT AVAILABLE . . . . . R NO METHOD AVAILABLE . . . . . S INCONVENIENT TO USE . . . . . T INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . U **OTHER** PARTNER IS A WOMAN . . . . . V OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
811	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT ASKED ↓ NO, NOT CURRENTLY USING ↓ YES, CURRENTLY USING →		813
812	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
813	CHECK 216: HAS LIVING CHILDREN ↓ a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ↓ b) If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 NUMBER . . . . . ☐☐ OTHER _____ 96 (SPECIFY)	→ 815 → 815

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
814	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER . . [ ][ ] [ ][ ] [ ][ ] OTHER _____ 96 (SPECIFY)	
815	In the last six months have you: a) Heard about family planning on the radio? b) Seen anything about family planning on the television? c) Read about family planning in a newspaper or magazine? d) Heard about family planning from a community health worker?	YES NO a) RADIO . . . . . 1 2 b) TELEVISION . . . . . 1 2 c) NEWSPAPER OR MAGAZINE . . . . . 1 2 d) COMMUNITY HEALTH WORKER 1 2	
815A	CHECK Q18 IN HOUSEHOLD QUESTIONNAIRE: YES, CURRENTLY ATTENDING SCHOOL ☐ NO, NOT CURRENTLY ATTENDING SCHOOL ☐ → 817		
815	e) Heard about family planning at school?	YES NO e) SCHOOL 1 2	
817	CHECK 701, 701A AND 701B: YES, CURRENTLY MARRIED TO A MAN ☐ YES, LIVING WITH A MAN ☐ YES, HAS REGULAR MALE PARTNER/BOYFRIEND ☐ NO, NOT IN A UNION OR, IN UNION, BUT NOT WITH A MAN ☐ → 901		
818	CHECK 303: USING A CONTRACEPTIVE METHOD? CURRENTLY USING ☐ NOT CURRENTLY USING ☐ → 820 NOT ASKED ☐ → 822		
819	Would you say that using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?	MAINLY RESPONDENT . . . . . 1 MAINLY HUSBAND/PARTNER . . . . . 2 JOINT DECISION . . . . . 3 OTHER _____ 6 (SPECIFY)	→ 821
820	Would you say that not using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?	MAINLY RESPONDENT . . . . . 1 MAINLY HUSBAND/PARTNER . . . . . 2 JOINT DECISION . . . . . 3 OTHER _____ 6 (SPECIFY)	
821	CHECK 304: NEITHER ARE STERILISED ☐ HE OR SHE ARE STERILISED ☐ → 901		
822	Does your (husband/partner) want the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER . . . . . 1 MORE CHILDREN . . . . . 2 FEWER CHILDREN . . . . . 3 DON'T KNOW 8	

SECTION 9. SPOUSE'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	CHECK 701 AND 701A: CURRENTLY MARRIED/ LIVING WITH SOMEONE OR HAS A REGULAR PARTNER/BOYFRIEND ☐ ↓ NOT IN UNION OR NO REGULAR PARTNER/BOYFRIEND ☐ →		909
902	How old was your (spouse/partner) on his/her last birthday?	AGE IN COMPLETED YEARS . . . . . ☐☐	
903	Did your (spouse/partner) ever attend an educational institution?	YES . . . . . 1 NO 2	→ 906
904	What was the highest level he/she attended: primary, secondary, or higher than secondary?	PRIMARY . . . . . 1 SECONDARY . . . . . 2 HIGHER THAN SECONDARY . . . . . 3 DON'T KNOW 8	→ 906
905	What was the highest grade or form he/she completed at that level?	**PRIMARY SCHOOL** LESS THAN 1 YEAR COMPLETED . . . . . 00 GRADE 1/SUB A/CLASS 1 . . . . . 11 GRADE 2/SUB B/CLASS 2 . . . . . 12 GRADE 3/STANDARD 1/ AET 1 (KHA RI GUDE, SANLI) . . . . . 13 GRADE 4/STANDARD 2 . . . . . 14 GRADE 5/STANDARD 3/AET 2 . . . . . 15 GRADE 6 /STANDARD 4 . . . . . 16 GRADE 7/STANDARD 5/AET 3 . . . . . 17 **SECONDARY SCHOOL** LESS THAN 1 YEAR COMPLETED . . . . . 20 GRADE 8/STANDARD 6/FORM 1/NTC 1/ N1/NC (V) LEVEL 2 . . . . . 21 GRADE 9/STANDARD 7/FORM 2/AET 4/NTC 2/ N2/NC (V) LEVEL 3 . . . . . 22 GRADE 10/STANDARD 8/FORM 3/NTC 3/ N3/NC (V) LEVEL 4 . . . . . 23 GRADE 11/STANDARD 9/FORM 4 . . . . . 24 CERTIFICATE OR DIPLOMA WITH LESS THAN GRADE 12/STANDARD 10 COMPLETED . . 25 GRADE 12/STANDARD 10/FORM 5/MATRIC . . 26 N4/NTC4 . . . . . 27 N5/NTC5 . . . . . 28 N6/NTC6 . . . . . 29 **HIGHER EDUCATION** FURTHER STUDIES INCOMPLETE OR ONGOING . . . . . 30 CERTIFICATE OR DIPLOMA WITH GRADE 12/ STANDARD 10 COMPLETED . . . . . 31 HIGHER DIPLOMA (TECHNIKON/ U. OF TECHNOLOGY) . . . . . 32 POST HIGHER DIPLOMA (TECHNIKON/ U. TECHNOLOGY MASTERS, DOCTORAL) 33 BACHELORS DEGREE/BACHELORS DEGREE AND POST GRADUATE DIPLOMA . . 34 HONOURS DEGREE . . . . . 35 HIGHER DEGREE (MASTERS, DOCTORATE) 36 DON'T KNOW 98	
906	Has your (spouse/partner) done any work in the last 7 days?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 908
907	Has your (spouse/partner) done any work in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 909
908	What is your (spouse's/partner's) occupation? That is, what kind of work does he/she mainly do?	_____ _____ ☐☐☐☐	
909	Aside from your own housework, have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 913

SECTION 9. SPOUSE'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
910	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES . . . . . 1 NO 2	→ 913
911	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason?	YES . . . . . 1 NO 2	→ 913
912	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 913A
913	What is your occupation? That is, what kind of work do you mainly do?	_____ _____ ☐☐☐☐	
913A	CHECK 106: AGE OF RESPONDENT AGE 15-49 ↓ ; AGE 50 AND ABOVE → 1202		
913B	CHECK 909, 910, 911, AND 912: ANY YES? YES ↓ ; NO → 917		
914	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER . . . . . 1 FOR SOMEONE ELSE . . . . . 2 SELF-EMPLOYED 3	
915	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR . . . . . 2 ONCE IN A WHILE 3	
916	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
917	CHECK 701, 701A AND 701B: CURRENTLY MARRIED/ LIVING WITH A MAN, OR HAS REGULAR MALE PARTNER/BOYFRIEND ↓ ; NOT IN UNION OR NOT IN UNION WITH A MAN → 925		
918	CHECK 916: CODE '1' OR '2' CIRCLED ↓ ; OTHER → 921		
919	Who usually decides how the money you earn will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 OTHER _____ 6 (SPECIFY)	
920	Would you say that the money that you earn is more than what your (husband/partner) earns, less than what he earns, or about the same?	MORE THAN HIM . . . . . 1 LESS THAN HIM . . . . . 2 ABOUT THE SAME . . . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 DON'T KNOW 8	→ 922
921	Who usually decides how your (husband's/partner's) earnings will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 OTHER _____ 6 (SPECIFY)	

SECTION 9. SPOUSE'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
922	Who usually makes decisions about health care for yourself: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
923	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
924	Who usually makes decisions about visits to your family or relatives?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
925	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	→ 931
926	Do you have a title deed or documents for any house you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 931
927	Is your name on the title deed or documents?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
931	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	PRES./ LISTEN. / PRES./ NOT LISTEN. / NOT PRES. CHILDREN < 10 . . . . . 1 2 3 HUSBAND . . . . . 1 2 3 OTHER MALES . . . . . 1 2 3 OTHER FEMALES 1 2 3	
932	In your opinion, is a husband justified in hitting or beating his wife in the following situations: a) If she goes out without telling him? b) If she neglects the children? c) If she argues with him? d) If she refuses to have sex with him? e) If she burns the food?	YES / NO / DK a) GOES OUT . . . . . 1 2 8 b) NEGLECTS CHILDREN . . 1 2 8 c) ARGUES . . . . . 1 2 8 d) REFUSES SEX . . . . . 1 2 8 e) BURNS FOOD 1 2 8	
933	CHECK 217 AND 218: ONE OR MORE CHILDREN LESS THAN AGE 18 LIVING WITH HER ↓ NO CHILDREN OR NO CHILDREN LESS THAN AGE 18 LIVING WITH HER →		1001
934	Now I would like to ask you questions about how you discipline or punish your (child/children). In the past 12 months, have you ever: a) Hit or slapped your (child/children) with your hand to punish or discipline the child? b) Hit or beat your (child/children) using a belt, spoon, stick, shoe or any other implement to punish or discipline the child?	YES / NO a) HIT WITH HAND . . . . . 1 2 b) HIT WITH IMPLEMENT 1 2	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	Now I would like to talk about something else. Have you ever heard of HIV or AIDS?	YES . . . . . 1 NO 2	→ 1042
1008	Can HIV be transmitted from a mother to her baby: a) During pregnancy? b) During delivery? c) By breastfeeding?	YES NO DK a) DURING PREGNANCY . . 1 2 8 b) DURING DELIVERY . . . . . 1 2 8 c) BREASTFEEDING 1 2 8	
1009	CHECK 1008: AT LEAST ONE 'YES' ↓ OTHER →		1011
1010	Are there any special drugs that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1011	CHECK 208 AND 215: LAST BIRTH IN 2014-2016 ↓ NO BIRTHS →		1027
	LAST BIRTH IN 2013 OR EARLIER →		1027
1012	CHECK 408 FOR LAST BIRTH: HAD ANTENATAL CARE ↓ NO ANTENATAL CARE →		1020
1013	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.**		
1014	During any of the antenatal visits for your last birth were you given any information about: a) Babies getting HIV from their mother? b) Things that you can do to prevent getting HIV? c) Getting tested for HIV?	YES NO DK a) HIV FROM MOTHER . . 1 2 8 b) THINGS TO DO . . . . . 1 2 8 c) TESTED FOR HIV 1 2 8	
1015	Were you offered a test for HIV as part of your antenatal care?	YES . . . . . 1 NO 2	
1016	I don't want to know the results, but were you tested for HIV as part of your antenatal care?	YES . . . . . 1 NO 2	→ 1020

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1017	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT CLINIC/COMMUNITY HEALTH CENTRE . . . . . 12 MOBILE/TEMPORARY HCT SERVICES . . . . . 13 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . 21 NEW START TESTING SITE . . . . . 22 CHEMIST/PHARMACY . . . . . 23 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** HOME . . . . . 31 WORKPLACE . . . . . 32 CORRECTIONAL FACILITY . . . . . 33 OTHER _____ 96 (SPECIFY)	
1018	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	→ 1020
1019	All women are supposed to receive counselling after being tested. After you were tested, did you receive counselling?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1020	CHECK 430 FOR LAST BIRTH: ANY CODE '21-36' CIRCLED ☐ ↓ OTHER ☐		→ 1024
1021	Between the time you went for delivery but before the baby was born, were you offered an HIV test?	YES . . . . . 1 NO 2	
1022	I don't want to know the results, but were you tested for HIV at that time?	YES . . . . . 1 NO 2	→ 1024
1023	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	→ 1025
1024	CHECK 1016: YES ☐ ↓ NO OR NOT ASKED ☐		→ 1027
1025	Have you been tested for HIV since that time you were tested during your pregnancy?	YES . . . . . 1 NO 2	→ 1028
1026	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . ☐☐ TWO OR MORE YEARS 95	→ 1033

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1027	I don't want to know the results, but have you ever been tested for HIV?	YES . . . . . 1 NO 2	→ 1031
1028	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . [ ][ ] TWO OR MORE YEARS 95	
1029	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	
1030	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT CLINIC/COMMUNITY HEALTH CENTRE . . . . . 12 MOBILE/TEMPORARY HCT SERVICES . . . . . 13 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . 21 NEW START TESTING SITE . . . . . 22 CHEMIST/PHARMACY . . . . . 23 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** HOME . . . . . 31 WORKPLACE . . . . . 32 CORRECTIONAL FACILITY . . . . . 33 OTHER _____ 96 (SPECIFY)	→ 1033
1031	Do you know of a place where people can go to get an HIV test?	YES . . . . . 1 NO 2	→ 1033
1032	Where is that? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S).	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT CLINIC/COMMUNITY HEALTH CENTRE . . . . . B MOBILE/TEMPORARY HCT SERVICES . . . . . C OTHER PUBLIC SECTOR _____ D (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . E NEW START TESTING SITE . . . . . F CHEMIST/PHARMACY . . . . . G OTHER PRIVATE MEDICAL SECTOR _____ H (SPECIFY) OTHER _____ X (SPECIFY)	

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1033	Have you heard of test kits people can use to test themselves for HIV?	YES . . . . . 1 NO 2	→ 1042
1034	Have you ever tested yourself for HIV using a self-test kit?	YES . . . . . 1 NO 2	
1042	CHECK 1001: HEARD ABOUT HIV OR AIDS ☐ ↓ a) Apart from HIV, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT HIV OR AIDS ☐ ↓ b) Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	
1043	CHECK 713: HAS HAD SEXUAL INTERCOURSE ☐ ↓ NEVER HAD SEXUAL INTERCOURSE ☐ →		1101
1044	CHECK 1042: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES ☐ ↓ NO ☐ →		1046
1045	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1046	Sometimes women experience a bad-smelling abnormal genital discharge. During the last 12 months, have you had a bad-smelling abnormal genital discharge?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1047	Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1048	CHECK 1045, 1046, AND 1047: HAS HAD AN INFECTION (ANY 'YES') ☐ ↓ HAS NOT HAD AN INFECTION OR DOES NOT KNOW ☐ →		1053
1049	The last time you had (PROBLEM FROM 1045/1046/1047), did you seek any kind of advice or treatment?	YES . . . . . 1 NO 2	→ 1053

SECTION 10. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1050	Where did you go? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S).	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT CLINIC/COMMUNITY HEALTH CENTRE . . . . . B MOBILE/TEMPORARY HCT SERVICES . . . . . C OTHER PUBLIC SECTOR _____ D (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . E NEW START TESTING SITE . . . . . F CHEMIST/PHARMACY . . . . . G OTHER PRIVATE MEDICAL SECTOR _____ H (SPECIFY) **OTHER SOURCE** SHOP . . . . . I TRADITIONAL HERBALIST . . . . . J TRADITIONAL HEALER . . . . . K OTHER _____ X (SPECIFY)	
1053	CHECK 701, 701A AND 701B: CURRENTLY MARRIED/ LIVING WITH A MAN OR HAS REGULAR PARTNER/BOYFRIEND ☐ NOT IN UNION OR NO REGULAR PARTNER/BOYFRIEND OR NOT IN UNION/PARTNERED WITH A MAN ☐ →		1101
1054	Can you say no to your (husband/partner) if you do not want to have sexual intercourse?	YES . . . . . 1 NO . . . . . 2 DEPENDS/NOT SURE 8	
1055	Could you ask your (husband/partner) to use a condom if you wanted him to?	YES . . . . . 1 NO . . . . . 2 DEPENDS/NOT SURE 8	

SECTION11. MATERNAL MORTALITY

NO.		CODING CATEGORIES	SKIP
1101	Now I would like to ask you some questions about your brothers and sisters, that is, all of the children born to your biological mother, including those who are living with you, those living elsewhere and those who have died. How many children did your mother give birth to, including you?	NUMBER OF BIRTHS TO BIOLOGICAL MOTHER . . . . . ☐☐	
1102	CHECK 1101: TWO OR MORE BIRTHS ↓ ☐ ONLY ONE BIRTH (RESPONDENT ONLY) ☐ → 1201		
1103	How many births did your mother have before you were born?	NUMBER OF PRECEDING BIRTHS . . . . . ☐☐	

1104	What was the name given to your oldest (next oldest) brother or sister?	(1) _____	(2) _____	(3) _____	(4) _____	(5) _____	(6) _____
1105	Is (NAME) male or female?	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2	MALE 1 FEMALE 2
1106	Is (NAME) still alive?	YES . . . 1 NO . . . 2 → GO TO 1108 DK . . . 8 → GO TO (2)	YES . . . 1 NO . . . 2 → GO TO 1108 DK . . . 8 → GO TO (3)	YES . . . 1 NO . . . 2 → GO TO 1108 DK . . . 8 → GO TO (4)	YES . . . 1 NO . . . 2 → GO TO 1108 DK . . . 8 → GO TO (5)	YES . . . 1 NO . . . 2 → GO TO 1108 DK . . . 8 → GO TO (6)	YES . . . 1 NO . . . 2 → GO TO 1108 DK . . . 8 → GO TO (7)
1107	How old is (NAME)?	☐☐ GO TO (2)	☐☐ GO TO (3)	☐☐ GO TO (4)	☐☐ GO TO (5)	☐☐ GO TO (6)	☐☐ GO TO (7)
1108	How many years ago did (NAME) die?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐
1109	How old was (NAME) when he/she died? IF DON'T KNOW, PROBE TO GET AN ESTIMATE.	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO 1114	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO 1114	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO 1114	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO 1114	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO 1114	☐☐ IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO 1114
1110	Was (NAME) pregnant when she died?	YES . . . 1 → GO TO 1113 NO . . . 2	YES . . . 1 → GO TO 1113 NO . . . 2	YES . . . 1 → GO TO 1113 NO . . . 2	YES . . . 1 → GO TO 1113 NO . . . 2	YES . . . 1 → GO TO 1113 NO . . . 2	YES . . . 1 → GO TO 1113 NO . . . 2
1111	Did (NAME) die during childbirth?	YES . . . 1 → GO TO 1113 NO . . . 2	YES . . . 1 → GO TO 1113 NO . . . 2	YES . . . 1 → GO TO 1113 NO . . . 2	YES . . . 1 → GO TO 1113 NO . . . 2	YES . . . 1 → GO TO 1113 NO . . . 2	YES . . . 1 → GO TO 1113 NO . . . 2
1112	Did (NAME) die within two months after the end of a pregnancy or childbirth?	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2
1113	How many live born children did (NAME) give birth to during her lifetime?	☐☐	☐☐	☐☐	☐☐	☐☐	☐☐
1114	Was (NAME)'s death due to an accident or violence?	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2	YES . . . 1 NO . . . 2

IF NO MORE BROTHERS OR SISTERS, GO TO NEXT SECTION.

SECTION 12. TOBACCO AND ALCOHOL

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1201	CHECK COVER SHEET: IS HOUSEHOLD SELECTED FOR MALE SURVEY AND BIOMARKERS OR IS RESPONDENT AGE 50 OR OLDER AND SELECTED FOR HOUSEHOLD RELATIONS MODULE? YES ↓ NO → 1501		
1202	Would you say your health is poor, average, good, or excellent?	POOR . . . . . 1 AVERAGE . . . . . 2 GOOD . . . . . 3 EXCELLENT 4	
1203	Do you personally think you are underweight, normal weight, overweight, or obese?	UNDERWEIGHT . . . . . 1 NORMAL WEIGHT . . . . . 2 OVERWEIGHT . . . . . 3 OBESE . . . . . 4 DON'T KNOW 8	
1204	Do you currently smoke tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 1207 → 1206
1205	In the past, have you smoked tobacco every day?	YES . . . . . 1 NO 2	→ 1208
1206	In the past, have you ever smoked tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 1209
1207	On average, how many of the following products do you currently smoke each day? Also, let me know if you use the product, but not every day. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Manufactured cigarettes? b) Hand-rolled cigarettes? c) Pipes full of tobacco? d) Cigars or cigarillos? e) Number of hookah, hubbly-bubbly or water pipe sessions? f) Any others? _____ (SPECIFY)	NUMBER DAILY a) MANUFACT. CIGARETTES ☐☐☐ b) HAND-ROLLED CIGARETTES ☐☐☐ c) PIPES FULL OF TOBACCO ☐☐☐ d) CIGARS OR CIGARILLOS ☐☐☐ e) WATER PIPE SESSIONS ☐☐☐ f) OTHERS . . . . . ☐☐☐	→ 1209

SECTION 12. TOBACCO AND ALCOHOL

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1208	On average, how many of the following products do you currently smoke each week? Also, let me know if you use the product, but not every week. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Manufactured cigarettes? b) Hand-rolled cigarettes? c) Pipes full of tobacco? d) Cigars or cigarillos? e) Number of hookah, hubbly-bubbly or water pipe sessions? f) Any others? _____ (SPECIFY)	NUMBER WEEKLY a) MANUFACT. CIGARETTES ☐☐☐ b) HAND-ROLLED CIGARETTES ☐☐☐ c) PIPES FULL OF TOBACCO ☐☐☐ d) CIGARS OR CIGARILLOS ☐☐☐ e) WATER PIPE SESSIONS ☐☐☐ f) OTHERS . . . . . ☐☐☐	
1209	Do you currently use snuff, chewing tobacco or other smokeless tobacco products every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 1211 → 1212
1210	In the past, have you used snuff, chewing tobacco or other smokeless tobacco products every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 1213
1211	On average, how many times a day do you use the following products? Also, let me know if you use the product, but not every day. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Snuff, by mouth? b) Snuff, by nose? c) Chewing tobacco? d) Any others? _____ (SPECIFY)	TIMES DAILY a) SNUFF, BY MOUTH . . . . . ☐☐☐ b) SNUFF, BY NOSE . . . . . ☐☐☐ c) CHEWING TOBACCO . . . . . ☐☐☐ d) ANY OTHERS . . . . . ☐☐☐	→ 1213
1212	On average, how many times a week do you use the following products? Also, let me know if you use the product, but not every week. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Snuff, by mouth? b) Snuff, by nose? c) Chewing tobacco? d) Any others? _____ (SPECIFY)	TIMES WEEKLY a) SNUFF, BY MOUTH . . . . . ☐☐☐ b) SNUFF, BY NOSE . . . . . ☐☐☐ c) CHEWING TOBACCO . . . . . ☐☐☐ d) ANY OTHERS . . . . . ☐☐☐	

SECTION 12. TOBACCO AND ALCOHOL

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1213	CHECK 106: AGE OF RESPONDENT AGE 15-49 ☐ ↓ AGE 50 AND ABOVE ☐ →		1220
1214	CHECK 224: LIVE BIRTH SINCE JANUARY 2011? YES ☐ ↓ NO ☐ →		1220
1215	CHECK 212 AND 215: _____ (NAME OF YOUNGEST CHILD) ↓		
1216	CHECK 1204 AND 1206: CURRENTLY SMOKES TOBACCO OR SMOKED IN THE PAST? YES ☐ ↓ NO ☐ →		1218
1217	During your pregnancy with (NAME) how often did you smoke tobacco: every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	
1218	CHECK 1209 AND 1210: CURRENTLY USES SMOKELESS TOBACCO OR USED IN THE PAST? YES ☐ ↓ NO ☐ →		1220
1219	During your pregnancy with (NAME) how often did you use smokeless tobacco: every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	
1220	Do you currently work in a job where other people smoke tobacco around you?	YES . . . . . 1 NO . . . . . 2 NOT CURRENTLY WORKING 3	
1221	Have you ever worked in a job where you were regularly exposed to smoke, dust, fumes or strong smells?	YES . . . . . 1 NO . . . . . 2 →	1223
1222	How many years did you work at a job where you were regularly exposed to smoke, dust, fumes or strong smells? IF LESS THAN 1 YEAR, RECORD '00'.	YEARS . . . . . ☐☐	
1223	Do you currently use e-cigarettes every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	
1224	Have you ever consumed a drink that contains alcohol such as beer, wine, ciders, spirits, or sorghum beer? PROBE: Even one drink?	YES . . . . . 1 NO . . . . . 2 →	1301
1225	Was this within the last 12 months?	YES . . . . . 1 NO . . . . . 2 →	1233
1226	In the last 12 months, how frequently have you had at least one drink? PROBE: Five or more days a week, 1-4 days a week, 1-3 days a month, or less often than once a month?	5 OR MORE DAYS A WEEK . . . . . 1 1-4 DAYS PER WEEK . . . . . 2 1-3 DAYS A MONTH . . . . . 3 LESS OFTEN THAN ONCE A MONTH 4	

SECTION 12. TOBACCO AND ALCOHOL

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1227	During each of the last 7 days, how many standard drinks did you have? USE SHOWCARD. RECORD TOTAL NUMBER OF DRINKS CONSUMED EACH DAY STARTING WITH THE DAY BEFORE THE DAY OF THE INTERVIEW AND PROCEEDING BACKWARDS. IF NONE, RECORD '00'.	MONDAY . . . . . ☐☐ TUESDAY . . . . . ☐☐ WEDNESDAY . . . . . ☐☐ THURSDAY . . . . . ☐☐ FRIDAY . . . . . ☐☐ SATURDAY . . . . . ☐☐ SUNDAY . . . . . ☐☐	
1227H	During the last 7 days, how many standard home-made beers or other homemade alcohol did you have? USE SHOWCARD.	NUMBER OF HOME-MADE BEERS . . ☐☐	
1227I	CHECK 1226 AND 1227: CODE 3 OR 4 RECORDED IN 1226 AND CONSUMED 0-1 DRINKS IN THE LAST 7 DAYS IN 1227? NO ☐ YES ☐ →		1233
1228	Have you ever felt that you should cut down on your drinking?	YES . . . . . 1 NO 2	
1229	Have people annoyed you by criticizing your drinking?	YES . . . . . 1 NO 2	
1230	Have you ever felt bad or guilty about your drinking?	YES . . . . . 1 NO 2	
1231	Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover?	YES . . . . . 1 NO 2	
1231A	CHECK 1227: FIVE OR MORE DRINKS IN ONE DAY DURING LAST 7 DAYS? NO ☐ YES ☐ →		1233
1232	In the past 30 days, have you consumed five or more standard drinks on at least one occasion?	YES . . . . . 1 NO 2	
1233	CHECK 106: AGE OF RESPONDENT AGE 15-49 ☐ AGE 50 AND ABOVE ☐ →		1301
1234	CHECK 224: LIVE BIRTH SINCE JANUARY 2011? YES ☐ NO ☐ →		1301
1235	CHECK 212 AND 215: _____ (NAME OF YOUNGEST CHILD)		
1236	During your pregnancy with (NAME) how often did you drink alcohol: every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	

SECTION 13. FAT, SALT, SUGAR, FRUIT AND VEGETABLE CONSUMPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1301	Now I would like to ask you some questions about the foods that you eat. There are no right or wrong answers. USE SHOWCARD.		
1304	How often do you usually eat fried foods such as hot chips, fried fish, fried chicken, fried meat, vetkoek or doughnuts?	EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 OCCASIONALLY . . . . . 3 NEVER 4	
1305	How often do you eat fast-foods or take-away foods from places like Chicken Licken, KFC, Captain DoRego's, Steers, Nando's, McDonalds, pizza delivery, etc?	EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 OCCASIONALLY . . . . . 3 NEVER 4	
1306	How often do you eat chips such as a packet of crispy chips or similar salty snacks such as Doritos, cheese curls, salted nuts, salty biscuits, etc?	EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 OCCASIONALLY . . . . . 3 NEVER 4	
1307	How often do you eat processed meat such as polony, viennas, meat pies, or sausage rolls?	EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 OCCASIONALLY . . . . . 3 NEVER 4	
1308	Which of the following statements best describes your approach towards salt consumption: 1) I am not interested in lowering salt in my food. 2) I am interested in lowering salt in my food within the next six months. 3) I am interested in lowering salt in my food within the next month. 4) I have started lowering salt within the last six months. 5) I have already lowered my salt intake for longer than six months.	NO INTENTION TO LOWER SALT . . . . . 1 INTERESTED WITHIN NEXT SIX MONTHS . . . . . 2 INTERESTED WITHIN NEXT MONTH . . . . . 3 STARTED IN LAST SIX MONTHS . . . . . 4 ALREADY LOWERED LONGER THAN SIX MONTHS 5 DON'T KNOW 8	
1309	Yesterday, how many types of fruit did you eat? USE SHOWCARD. IF NONE, RECORD '00'.	TYPES OF FRUIT	
1310	Yesterday, how many types of vegetables, excluding potatoes, did you eat? USE SHOWCARD. IF NONE, RECORD '00'.	TYPES OF VEGETABLES	
1311	Yesterday, did you drink any sugar-sweetened drinks? Sugar-sweetened drinks include fizzy drinks like Coke or drinks like Squash where water is added, but not diet or unsweetened cold drinks.	YES . . . . . 1 NO 2	→ 1312
1311A	How many and what size sugar-sweetened drinks did you drink? PROBE FOR BEVERAGE NUMBER AND SIZE.	200 ML GLASS . . . . . A 330 ML CAN OR BOTTLE . . . . . B 500 ML BOTTLE . . . . . C 1 L BOTTLE . . . . . D 2 L BOTTLE . . . . . E	
1312	Yesterday, did you drink any fruit juice?	YES . . . . . 1 NO 2	→ 1401
1312A	How many and what size fruit juices did you drink? PROBE FOR BEVERAGE NUMBER AND SIZE.	200 ML JUICE CARTON . . . . . A 200 ML GLASS . . . . . B	

SECTION14. HEALTH CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1401	Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not a big problem: a) Getting permission to go to the doctor? b) Getting money needed for advice or treatment? c) The distance to the health facility? d) Not wanting to go alone?	BIG PROBLEM / NOT A BIG PROBLEM a) PERMISSION TO GO ..... 1 2 b) GETTING MONEY ..... 1 2 c) DISTANCE ..... 1 2 d) GO ALONE 1 2	
1402	Are you covered by Medical Aid, Medical Benefit Scheme, Provident Scheme, or Hospital Plan that helps you pay for health care or drug services?	YES ..... 1 NO 2	
1404	During the last month, have you received health, medical, or dental care without staying overnight?	YES ..... 1 NO 2	→ 1406
1405	Where have you received health, medical, or dental care? PROBE: Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S).	**PUBLIC SECTOR** GOVERNMENT HOSPITAL ..... A GOVERNMENT CLINIC/COMMUNITY HEALTH CENTRE ..... B OTHER PUBLIC SECTOR _____ C (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR ..... D CHEMIST/PHARMACY ..... E DENTIST/ORAL HYGIENIST/ DENTAL THERAPIST ..... F OTHER PRIVATE MEDICAL SECTOR _____ G (SPECIFY) **OTHER SOURCE** WORKPLACE HEALTH SERVICE ..... H TRADITIONAL HEALER ..... I TRADITIONAL HERBALIST ..... J FAITH HEALER ..... K OTHER _____ X (SPECIFY)	
1406	During the last month, have you had any visits by a home-based care giver or a community-based care giver?	YES ..... 1 NO ..... 2 DON'T KNOW 8	
1407	Have you ever had a Pap smear? PROBE: When visiting a doctor or nurse, have you ever been asked to lie on your back with your legs apart so they could use a stick to take a sample from your vagina? The sample would have been sent to a laboratory for testing.	YES ..... 1 NO ..... 2 DON'T KNOW 8	→ 1410

SECTION14. HEALTH CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1408	How many years ago was your last Pap smear?	WITHIN THE LAST 3 YEARS . . . . . 1 4-5 YEARS AGO . . . . . 2 6-10 YEARS AGO . . . . . 3 MORE THAN 10 YEARS AGO . . . . . 4 DON'T KNOW/DON'T REMEMBER 8	
1409	The last time you had a Pap smear, did you get the result of the test?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1410	Has a doctor, nurse or health worker ever told you that you have TB?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1413
1411	When was the last time you were told you had TB?	IN THE LAST 12 MONTHS . . . . . 1 MORE THAN 12 MONTHS AGO 2	
1412	Did you get medical treatment the last time you had TB?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1413	Has a doctor, nurse or health worker told you that you have or have had any of the following conditions: a) High blood pressure? b) Heart attack or angina/chest pains? c) Cancer? d) Stroke? e) High blood cholesterol or fats in the blood? f) Diabetes or blood sugar? g) Chronic bronchitis, emphysema, or COPD? h) Asthma?	YES NO DK a) HIGH BLOOD PRESS. 1 2 8 b) HEART ATTACK 1 2 8 c) CANCER 1 2 8 d) STROKE 1 2 8 e) HIGH BLOOD CHOLEST 1 2 8 f) DIABETES 1 2 8 g) CHRONIC BRONCHITIS 1 2 8 h) ASTHMA 1 2 8	
1414	CHECK 1413: ANY QUESTION a-h = YES?	YES ↓ NO →	→ 1432
1415	CHECK 1413a: RESPONDENT HAS HAD HIGH BLOOD PRESSURE.	1413a = YES ↓ 1413a = NO OR DK →	→ 1417
1416	Did you receive medical treatment for high blood pressure at the time of the diagnosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1417	CHECK 1413b: RESPONDENT HAS HAD HEART ATTACK OR ANGINA.	1413b = YES ↓ 1413b = NO OR DK →	→ 1419
1418	Did you receive medical treatment for the heart attack, angina/chest pains at the time of the diagnosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1419	CHECK 1413c: RESPONDENT HAS HAD CANCER.	1413c = YES ↓ 1413c = NO OR DK →	→ 1421
1420	Did you receive medical treatment for the cancer at the time of the diagnosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1421	CHECK 1413d: RESPONDENT HAS HAD STROKE.	1413d = YES ↓ 1413d = NO OR DK →	→ 1423
1422	Did you receive medical treatment for the stroke at the time of the diagnosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	

SECTION14. HEALTH CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1423	CHECK 1413e: RESPONDENT HAS HAD HIGH BLOOD CHOLESTEROL.	1413e = YES 1413e = NO OR DK	→ 1425
1424	Did you receive medical treatment for high blood cholesterol or fats in the blood at the time of the diagnosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1425	CHECK 1413f: RESPONDENT HAS HAD DIABETES.	1413f = YES 1413f = NO OR DK	→ 1427
1426	Did you receive medical treatment for the diabetes or blood sugar at the time of the diagnosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1427	CHECK 1413g: RESPONDENT HAS HAD CHRONIC BRONCHITIS.	1413g = YES 1413g = NO OR DK	→ 1429
1428	Did you receive medical treatment for chronic bronchitis, emphysema, or COPD at the time of the diagnosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1429	CHECK 1413h: RESPONDENT HAS HAD ASTHMA.	1413h = YES 1413h = NO OR DK	→ 1432
1430	Did you receive medical treatment for asthma at the time of the diagnosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1432	Compared with other people your age, do you feel you have less breath when exerting yourself? PROBE: By exercising or moving a lot?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1433	During the last 12 months, have you had wheezing when you breathe?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1436
1434	Were you also short of breath when the wheezing noise was present?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1435	Have you had the wheezing when you did not have a cold?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1436	Have you woken up with a feeling of tightness in your chest at any time in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1437	Have you been woken by an attack of shortness of breath at any time in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1438	Have you been woken by an attack of coughing at any time in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1439	Do you usually cough on most days?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1443

SECTION14. HEALTH CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1440	When you cough, do you usually bring up phlegm from your chest?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1443
1441	Have you brought up phlegm every day for at least three months during the last year?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1443
1442	For how many years have you brought up phlegm in this way? IF LESS THAN 1 YEAR, RECORD '00'.	YEARS	
1443	Are you currently troubled by pain or discomfort, either all the time or on and off?	YES . . . . . 1 NO 2	→ 1446
1444	Have you had this pain or discomfort for more than 3 months?	YES . . . . . 1 NO 2	→ 1446
1445	Where do you feel this pain or discomfort? RECORD ALL MENTIONED.	BACK PAIN . . . . . A NECK OR SHOULDER PAIN . . . . . B HEADACHE, FACIAL OR DENTAL PAIN . . . . . C STOMACH ACHE OR ABDOMINAL PAIN . . . . . D PAIN IN ARMS, HANDS, HIPS, LEGS OR FEET E CHEST PAIN . . . . . F OTHER _____ X (SPECIFY)	
1446	In the last 12 months, did your teeth or your mouth cause you any pain or discomfort?	YES . . . . . 1 NO 2	→ 1450
1447	Did you get treatment the last time that you had the problem?	YES . . . . . 1 NO 2	→ 1449
1448	Who did you see for treatment? RECORD ALL MENTIONED.	**PUBLIC SECTOR** DENTIST/ORAL HYGIENIST/DENTAL THERAPIST . . . . . A MEDICAL DOCTOR/NURSE . . . . . B **PRIVATE MEDICAL SECTOR** DENTIST/ORAL HYGIENIST/DENTAL THERAPIST . . . . . C MEDICAL DOCTOR/NURSE . . . . . D **OTHER SOURCE** TRADITIONAL HEALER . . . . . E OTHER X	→ 1450
1449	What was the main reason that you did not get treatment?	NO ORAL HEALTH SERVICE AVAILABLE . . . . . 1 ORAL HEALTH SERVICES TOO FAR . . . . . 2 ORAL HEALTH SERVICES TOO EXPENSIVE/ COULD NOT AFFORD . . . . . 3 PROBLEM WENT AWAY . . . . . 4 OTHER 6	
1450	Now I would like to ask you about any medication you take. Do you use any medication daily or regularly that has been prescribed by a doctor or nurse?	YES . . . . . 1 NO 2	→ 1455
1451	How many different prescribed medications do you use daily or regularly?	NUMBER OF MEDICINES	

SECTION14. HEALTH CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1452	Who pays for most of these medications?	RESPONDENT . . . . . 1 FAMILY/FRIENDS . . . . . 2 MEDICAL AID . . . . . 3 EMPLOYER . . . . . 4 PROVIDED BY PUBLIC CLINIC OR HOSPITAL . . 5 OTHER 6	→ 1455 → 1455
1453	In the last 12 months, have you ever been sent away from the clinic without a medication because they did not have stock?	YES . . . . . 1 NO 2	→ 1455
1454	How many times has this happened to you in the last 12 months? PROBE FOR ESTIMATE OF NUMBER OF TIMES.	NUMBER OF TIMES	
1455	In the last 12 months, have you used any medications containing codeine to treat a medical condition? USE THE SHOWCARD.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1500
1457	In the last 12 months, have you used any of these medications for the experience or feeling it gave you rather than for their medicinal effect?	YES . . . . . 1 NO 2	→ 1500
1458	In the last 12 months, which codeine-containing medications have you used for the experience or feeling rather than for their medical effect? RECORD ALL MENTIONED.	BRONCLEER/LENAZINE FORTE . . . . . A ACTIFED DRY COUGH . . . . . B BENYLIN SYRUP WITH CODEINE . . . . . C LENADOL/ADCO-DOL PAIN TABLETS . . . . . D NUROFEN PLUS . . . . . E MYPRODOL . . . . . F STILPANE . . . . . G SYNDOL . . . . . H OTHER _____ X (SPECIFY)	
1459	In the last 12 months, have you received treatment for your problems related to the use of codeine-containing medications for non-medical purposes?	YES . . . . . 1 NO 2	

SECTION 15: HOUSEHOLD RELATIONS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1500	CHECK COVER PAGE AND 106: WOMAN SELECTED FOR THIS SECTION AND AT LEAST 18 YEARS OLD ↓ WOMAN NOT SELECTED OR SELECTED BUT AGE 15-17 →		1533
1501	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL PRIVACY IS ENSURED. PRIVACY OBTAINED . . . . . 1 ↓ PRIVACY NOT POSSIBLE . . . . . 2 →		1532
1501A	READ TO THE RESPONDENT: Now I would like to ask you questions about some other important aspects of a woman's life. You may find some of these questions very personal. However, your answers are crucial for helping to understand the condition of women in South Africa. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else in your household will know that you were asked these questions. If I ask you any question you don't want to answer, just let me know and I will go on to the next question.		
1502	CHECK 701, 701A, 701B AND 702: CURRENTLY MARRIED/LIVING WITH A MAN OR HAS REGULAR MALE PARTNER/BOYFRIEND → NEVER IN UNION WITH A MAN ↓ FORMERLY MARRIED/LIVED WITH A MAN (READ IN PAST TENSE AND USE 'LAST' WITH 'HUSBAND/PARTNER') →		1503 1503
1502A	Do you have a boyfriend or have you had one in the past?	YES, CURRENTLY HAS BOYFRIEND 1 YES, HAD BOYFRIEND IN PAST . . . 2 NO 3	→ 1516
1503	First, I am going to ask you about some situations which happen to some women. Please tell me if these apply to your relationship with your (last) (husband/partner/boyfriend)?		

	YES	NO	DK
a) He (is/was) jealous or angry if you (talk/talked) to other men? JEALOUS	1	2	8
b) He frequently (accuses/accused) you of being unfaithful? ACCUSES	1	2	8
c) He (does/did) not permit you to meet your female friends? NOT MEET FRIENDS	1	2	8
d) He (tries/tried) to limit your contact with your family? NO FAMILY	1	2	8
e) He (insists/insisted) on knowing where you (are/were) at all times? WHERE YOU ARE .	1	2	8

1504 Now I need to ask some more questions about your relationship with your most recent partner.

	A Did your (last) partner ever:		B How often did this happen during the last 12 months: often, only sometimes, or not at all?		
		EVER	OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
a)	say or do something to humiliate you in front of others?	YES 1 NO 2 ↓	→ 1	2	3
b)	threaten to hurt or harm you or someone you care about?	YES 1 NO 2 ↓	→ 1	2	3
c)	insult you or make you feel bad about yourself?	YES 1 NO 2 ↓	→ 1	2	3
d)	refuse to give you enough money for household expenses or contribute towards household expenses when he has the money to do so?	YES 1 NO OR N/A 2 ↓	→ 1	2	3

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1505	A Did your (last) partner ever do any of the following things to you: B How often did this happen during the last 12 months: often, only sometimes, or not at all?	EVER / OFTEN / SOME-TIMES / NOT IN LAST 12 MONTHS	
	a) slap you, push you, shake you, or throw something at you?	YES 1 → OFTEN 1 / SOMETIMES 2 / NOT IN LAST 12 MONTHS 3 NO 2 ↓	
	e) kick you, drag you, or beat you up?	YES 1 → 1 / 2 / 3 NO 2 ↓	
	f) try to choke you or burn you on purpose?	YES 1 → 1 / 2 / 3 NO 2 ↓	
	g) threaten or attack you with a knife, gun, or other weapon?	YES 1 → 1 / 2 / 3 NO 2 ↓	
	h) physically force you to have sexual intercourse with him when you did not want to?	YES 1 → 1 / 2 / 3 NO 2 ↓	
	i) physically force you to perform any other sexual acts you did not want to?	YES 1 → 1 / 2 / 3 NO 2 ↓	
	j) force you with threats or in any other way to perform sexual acts you did not want to?	YES 1 → 1 / 2 / 3 NO 2 ↓	
1506	CHECK 1505A (a-j): AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐ →		1511
1508	Did the following ever happen as a result of what your (last) partner did to you:		
	a) You had cuts, bruises, or aches?	YES . . . 1 NO . . . 2	
	b) You had eye injuries, sprains, dislocations, or burns?	YES . . . 1 NO . . . 2	
	c) You had deep wounds, broken bones, broken teeth, or any other serious injury?	YES . . . 1 NO . . . 2	
1511	Does (did) your (last) partner drink alcohol?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	→ 1512A
1512	How often does (did) he get drunk: often, only sometimes, or never?	OFTEN . . . 1 SOMETIMES . . . 2 NEVER . . . 3	
1512A	Does (did) your (last) partner take drugs?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	→ 1512C
1512B	How often does (did) he take drugs: often, only sometimes, or never?	OFTEN . . . 1 SOMETIMES . . . 2 NEVER . . . 3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1512C	Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) partner at times when he was not already beating or physically hurting you?	YES . . . . . 1 NO 2	→ 1513
1512D	In the last 12 months, how often have you done this to your (last) partner: often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1513	Are (Were) you afraid of your (last) partner: most of the time, sometimes, or never?	MOST OF THE TIME AFRAID . . . . . 1 SOMETIMES AFRAID . . . . . 2 NEVER AFRAID 3	
1514	CHECK 709: OTHER OR NOT ASKED ☐ ↓ MARRIED OR LIVED WITH A MAN MORE THAN ONCE ☐ →		→ 1515
1514A	So far we have been talking about the behaviour of your (current/last) partner. Now I want to ask you about the behaviour of any previous partner. Have you had a previous partner?	YES . . . . . 1 NO 2	→ 1515Aa → 1516A
1515	A So far we have been talking about the behaviour of your (current/last) partner. Now I want to ask you about the behaviour of any previous partner.	B How long ago did this last happen?	

	EVER	0 - 11 MONTHS AGO	12+ MONTHS AGO	DON'T REMEMBER
a) Did any previous partner ever hit, slap, kick, or do anything else to hurt you physically?	YES 1 NO 2 ↓	→ 1	2	3
b) Did any previous partner physically force you to have sexual intercourse against your will?	YES 1 NO 2 ↓	→ 1	2	3
c) Did any previous partner physically force you to perform any other sexual acts against your will?	YES 1 NO 2 ↓	→ 1	2	3
d) Did any previous partner humiliate, threaten, belittle, insult or try to exert excessive control over you in any way?	YES 1 NO 2 ↓	→ 1	2	3
e) Did any previous partner refuse to give you enough money for household expenses or contribute towards household expenses?	YES 1 NO OR N/A 2 ↓	→ 1	2	3

1516A	CHECK 1505A (h-j) and 1515A(b, c) AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐ →		→ 1516
1516B	How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts by (your/any) partner?	AGE IN COMPLETED YEARS ☐☐ DON'T KNOW 98	
1516	CHECK 701, 701A, 701B, 702 AND 1502A: EVER IN UNION OR HAD A BOYFRIEND ☐ ↓ a) From the time you were 15 years old has anyone other than (your/any) partner hit you, slapped you, kicked you, or done anything else to hurt you physically? NEVER IN UNION OR HAD A BOYFRIEND ☐ ↓ b) From the time you were 15 years old has anyone hit you, slapped you, kicked you, or done anything else to hurt you physically?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1518A

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1517	Who has hurt you in this way? Anyone else? RECORD ALL MENTIONED.	MOTHER/STEP-MOTHER . . . . . A FATHER/STEP-FATHER . . . . . B SISTER/BROTHER . . . . . C DAUGHTER/SON . . . . . D OTHER RELATIVE . . . . . E MOTHER-IN-LAW . . . . . F FATHER-IN-LAW . . . . . G OTHER IN-LAW . . . . . H TEACHER . . . . . I EMPLOYER/SOMEONE AT WORK . J POLICE/SOLDIER . . . . . K NEIGHBOUR . . . . . L OTHER _____ X (SPECIFY)	
1518	In the last 12 months, how often has (this person/have these persons) physically hurt you: often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1518A	CHECK 106: AGE OF RESPONDENT AGE 18-49 ☐ ↓ ; AGE 50 AND ABOVE ☐ → 1522		
1519	CHECK 201, 226, AND 230: EVER BEEN PREGNANT (YES ON 201 OR 226 OR 230) ☐ ↓ ; NEVER BEEN PREGNANT ☐ → 1522		
1519A	CHECK 701, 701A, 701B, 702 AND 15O2A: EVER IN UNION OR HAD A BOYFRIEND ☐ ↓ ; NEVER IN UNION OR HAD A BOYFRIEND ☐ → 1520A		
1520	Has a partner ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES . . . . . 1 NO 2	
1520A	Has any one else ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES . . . . . 1 NO 2	
1521A	CHECK 1520 AND 1520A: EITHER 1520 OR 1520A = YES ☐ ↓ ; NEITHER 1520 NOR 1520A = YES ☐ → 1522		
1521	Who has done any of these things to physically hurt you while you were pregnant? Anyone else? RECORD ALL MENTIONED.	CURRENT HUSBAND/PARTNER . . . A MOTHER/STEP-MOTHER . . . . . B FATHER/STEP-FATHER . . . . . C SISTER/BROTHER . . . . . D DAUGHTER/SON . . . . . E OTHER RELATIVE . . . . . F FORMER HUSBAND/PARTNER . . . G CURRENT BOYFRIEND . . . . . H FORMER BOYFRIEND . . . . . I MOTHER-IN-LAW . . . . . J FATHER-IN-LAW . . . . . K OTHER IN-LAW . . . . . L TEACHER . . . . . M EMPLOYER/SOMEONE AT WORK . N POLICE/SOLDIER . . . . . O NEIGHBOUR . . . . . P OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1522	CHECK 701, 701A, 701B, 702 AND 1502A: EVER IN UNION OR HAD A BOYFRIEND ☐ → a) NEVER IN UNION OR HAD A BOYFRIEND ☐ → b) a) Now I want to ask you about things that may have been done to you by someone other than (your/any) partner. At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse when you did not want to? b) At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse when you did not want to?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1522C
1522A	How old were you the first time this happened?	AGE IN COMPLETED YEARS ☐☐ DON'T KNOW 98	
1522B	Who was the person who was forcing you the very first time this happened?	FATHER/STEP-FATHER . . . . . 04 BROTHER/STEP-BROTHER . . . . . 05 OTHER RELATIVE . . . . . 06 IN-LAW . . . . . 07 OWN FRIEND/ACQUAINTANCE . . . 08 FAMILY FRIEND . . . . . 09 TEACHER . . . . . 10 EMPLOYER/SOMEONE AT WORK . I1 POLICE/SOLDIER . . . . . 12 PRIEST/RELIGIOUS LEADER . . . . . 13 STRANGER . . . . . 14 NEIGHBOUR . . . . . 15 OTHER _____ 96 (SPECIFY)	
1522C	At any time in your life, as a child or as an adult, has anyone (other than any partner) ever forced you in any way to perform any other sexual acts when you did not want to?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1526
1522D	How old were you the first time this happened?	AGE IN COMPLETED YEARS ☐☐ DON'T KNOW 98	
1523	Who was the person who was forcing you the very first time this happened?	FATHER/STEP-FATHER . . . . . 04 BROTHER/STEP-BROTHER . . . . . 05 OTHER RELATIVE . . . . . 06 IN-LAW . . . . . 07 OWN FRIEND/ACQUAINTANCE . . . 08 FAMILY FRIEND . . . . . 09 TEACHER . . . . . 10 EMPLOYER/SOMEONE AT WORK . I1 POLICE/SOLDIER . . . . . 12 PRIEST/RELIGIOUS LEADER . . . . . 13 STRANGER . . . . . 14 NEIGHBOUR . . . . . 15 OTHER _____ 96 (SPECIFY)	
1523A	CHECK 1522: EVER FORCED TO HAVE SEXUAL INTERCOURSE? YES ☐ →	NO ☐ →	1526

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1524	CHECK 701, 701A, 701B, 702 AND 1502A: EVER IN UNION OR HAD A BOYFRIEND ☐ ↓ a) In the last 12 months, has anyone other than (your/any) partner physically forced you to have sexual intercourse when you did not want to? NEVER IN UNION OR HAD A BOYFRIEND ☐ ↓ b) In the last 12 months has anyone physically forced you to have sexual intercourse when you did not want to?	YES . . . . . 1 NO 2	
1526	CHECK 1505A (a-j), 1515A (a, b, c), 1516, 1520, 1520A, 1522, 1522C AND 1524: AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐ →		1530
1527	Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help?	YES . . . . . 1 NO 2	→ 1529
1528	From whom have you sought help? Anyone else? RECORD ALL MENTIONED.	OWN FAMILY . . . . . A HUSBAND'S/PARTNER'S FAMILY . B CURRENT/FORMER HUSBAND/PARTNER . . . . . C CURRENT/FORMER BOYFRIEND . D FRIEND . . . . . E NEIGHBOUR . . . . . F RELIGIOUS LEADER . . . . . G DOCTOR/MEDICAL PERSONNEL . H POLICE . . . . . I LAWYER . . . . . J SOCIAL SERVICE ORGANISATION . K COLLEAGUE . . . . . L HELPLINE . . . . . M OTHER _____ X (SPECIFY)	→ 1530
1529	Have you ever told any one about this?	YES . . . . . 1 NO 2	
1530	As far as you know, did your father or any other husband or boyfriend your mother had ever hit or beat her?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE HOUSEHOLD RELATIONS MODULE ONLY.

1531	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?		YES ONCE	YES, MORE THAN ONCE	NO
		HUSBAND/PARTNER .	1	2	3
		OTHER MALE ADULT .	1	2	3
		FEMALE ADULT	1	2	3
1532	INTERVIEWER'S COMMENTS / EXPLANATION FOR NOT COMPLETING THE HOUSEHOLD RELATIONS MODULE _____ _____ _____				
1533	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐			

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

INSTRUCTIONS:

ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
COLUMN 1 REQUIRES A CODE IN EVERY MONTH.

INFORMATION TO BE CODED FOR EACH COLUMN

COLUMN 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE

- B BIRTHS
- P PREGNANCIES
- C MISCARRIAGES
- A INDUCED ABORTIONS
- S STILLBIRTHS

- 0 NO METHOD

- 1 FEMALE STERILISATION
- 2 MALE STERILISATION
- 3 IUD
- 4 INJECTABLES - 3 MONTH DEPO
- 5 INJECTABLES - 2 MONTH NUR-ISTERATE
- 6 IMPLANTS
- 7 PILL
- 8 MALE CONDOM
- 9 FEMALE CONDOM
- E EMERGENCY CONTRACEPTION

- L RHYTHM METHOD
- M WITHDRAWAL
- X OTHER MODERN METHOD
- Y OTHER TRADITIONAL METHOD

COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE

- 0 INFREQUENT SEX/HUSBAND AWAY
- 1 BECAME PREGNANT WHILE USING
- 2 WANTED TO BECOME PREGNANT
- 3 HUSBAND/PARTNER DISAPPROVED

- 4 WANTED MORE EFFECTIVE METHOD
- 5 SIDE EFFECTS/HEALTH CONCERNS
- 6 LACK OF ACCESS/TOO FAR
- 7 COSTS TOO MUCH
- 8 INCONVENIENT TO USE
- F UP TO GOD/FATALISTIC
- A DIFFICULT TO GET PREGNANT/MENOPAUSAL
- D MARITAL DISSOLUTION/SEPARATION
- X OTHER

_____
(SPECIFY)

- Z DON'T KNOW

				COL. 1	COL. 2	
	12	DEC	01			
	11	NOV	02			
	10	OCT	03			
	09	SEP	04			
2	08	AUG	05			2
0	07	JUL	06			0
1	06	JUN	07			1
6	05	MAY	08			6
	04	APR	09			
	03	MAR	10			
	02	FEB	11			
	01	JAN	12			
	12	DEC	13			
	11	NOV	14			
	10	OCT	15			
	09	SEP	16			
2	08	AUG	17			2
0	07	JUL	18			0
1	06	JUN	19			1
5	05	MAY	20			5
	04	APR	21			
	03	MAR	22			
	02	FEB	23			
	01	JAN	24			
	12	DEC	25			
	11	NOV	26			
	10	OCT	27			
	09	SEP	28			
2	08	AUG	29			2
0	07	JUL	30			0
1	06	JUN	31			1
4	05	MAY	32			4
	04	APR	33			
	03	MAR	34			
	02	FEB	35			
	01	JAN	36			
	12	DEC	37			
	11	NOV	38			
	10	OCT	39			
	09	SEP	40			
2	08	AUG	41			2
0	07	JUL	42			0
1	06	JUN	43			1
3	05	MAY	44			3
	04	APR	45			
	03	MAR	46			
	02	FEB	47			
	01	JAN	48			
	12	DEC	49			
	11	NOV	50			
	10	OCT	51			
	09	SEP	52			
2	08	AUG	53			2
0	07	JUL	54			0
1	06	JUN	55			1
2	05	MAY	56			2
	04	APR	57			
	03	MAR	58			
	02	FEB	59			
	01	JAN	60			
	12	DEC	61			
	11	NOV	62			
	10	OCT	63			
	09	SEP	64			
2	08	AUG	65			2
0	07	JUL	66			0
1	06	JUN	67			1
1	05	MAY	68			1
	04	APR	69			
	03	MAR	70			
	02	FEB	71			
	01	JAN	72			

FORMATTING DATE: 5 June 2016
ENGLISH LANGUAGE: 22 April 2016

2016 SOUTH AFRICA DEMOGRAPHIC AND HEALTH SURVEY
MAN'S QUESTIONNAIRE

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . | | | | |

HOUSEHOLD NUMBER . . . . . | | | | |

NAME AND LINE NUMBER OF MAN _____ | | |

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY
				MONTH
				YEAR 2 0 1
INTERVIEWER'S NAME				INT. NO.
RESULT*				RESULT*
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

*RESULT CODES: 1 COMPLETED; 2 NOT AT HOME; 3 POSTPONED; 4 REFUSED; 5 PARTLY COMPLETED; 6 INCAPACITATED; 7 OTHER _____ SPECIFY

LANGUAGE OF QUESTIONNAIRE** 0 1 | LANGUAGE OF INTERVIEW** | | HOME LANGUAGE OF RESPONDENT** | | TRANSLATOR USED (YES = 1, NO = 2) |

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:

01 ENGLISH	05 seSOTHO	09 tshiVENDA
02 AFRIKAANS	06 seTSWANA	10 xiTSONGA
03 isiXHOSA	07 sePEDI	11 isiNDEBELE
04 isiZULU	08 siSWATI	12 OTHER

SUPERVISOR

NAME _____ NUMBER | | | | |

100A	CHECK RESPONDENT'S AGE AND MARITAL STATUS IN HOUSEHOLD QUESTIONNAIRE. AGE 15-17 AND NEVER IN UNION →	AGE 18 AND ABOVE OR AGE 15-17 AND EVER IN UNION → 100C

INTRODUCTION AND CONSENT (PARENT/GUARDIAN)

100B

Hello. My name is _____. I am working with Statistics South Africa, We are conducting a survey about health and other topics all over South Africa. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to talk to (NAME OF MINOR) about his health and well-being. The questions usually take about 30 to 40 minutes. All of the answers (NAME OF MINOR) gives will be confidential and will not be shared with anyone other than members of our survey team. (NAME OF MINOR) doesn't have to be in the survey, but we hope you will agree to allow (NAME OF MINOR) to answer the questions since (NAME OF MINOR)'s views are important.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview with (NAME OF MINOR) now?

SIGNATURE OF INTERVIEWER _____ DATE _____

PARENT/GUARDIAN AGREES MINOR MAY BE INTERVIEWED . . 1 ↓

PARENT/GUARDIAN DOES NOT AGREE TO ALLOW MINOR TO BE INTERVIEWED . . 2 → END

INTRODUCTION AND CONSENT (RESPONDENT)

100C

Hello. My name is _____. I am working with Statistics South Africa. We are conducting a survey about health and other topics all over South Africa. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 30 to 40 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on this information sheet.

GIVE INFORMATION SHEET.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES TO BE INTERVIEWED . . 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 → END

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐	
102	How long have you been living continuously in (NAME OF CURRENT CITY, TOWN OR VILLAGE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS . . . . . ☐☐ ALWAYS . . . . . 95 VISITOR 96	→ 105
103	Just before you moved here, where did you live? PROBE: Is that a city, a town, a rural area, a farm, a tribal area, or an informal settlement?	CITY . . . . . 1 TOWN . . . . . 2 RURAL AREA . . . . . 3 FARM . . . . . 4 TRIBAL AREA . . . . . 5 INFORMAL SETTLEMENT 6	
104	Before you moved here, which province did you live in?	WESTERN CAPE . . . . . 01 EASTERN CAPE . . . . . 02 NORTHERN CAPE . . . . . 03 FREE STATE . . . . . 04 KWAZULU-NATAL . . . . . 05 NORTH WEST . . . . . 06 GAUTENG . . . . . 07 MPUMALANGA . . . . . 08 LIMPOPO . . . . . 09 SADC COUNTRY . . . . . 16 OTHER COUNTRY 26	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
105	On what day, month, and year were you born?	DAY . . . . . ☐☐ DON'T KNOW DAY . . . . . 98 MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT. IF AGE 95 OR OLDER, RECORD 95.	AGE IN COMPLETED YEARS . . . . . ☐☐	
106A	Which population group do you consider yourself: black, white, coloured, Indian or something else?	BLACK/AFRICAN . . . . . 1 WHITE . . . . . 2 COLOURED . . . . . 3 INDIAN/ASIAN . . . . . 4 OTHER _____ 6 (SPECIFY)	
107	Have you ever attended an educational institution?	YES . . . . . 1 NO 2	→ 111
108	What is the highest level you attended: primary, secondary, or higher than secondary?	PRIMARY . . . . . 1 SECONDARY . . . . . 2 HIGHER THAN SECONDARY 3	
109	What is the highest grade or form you completed at that level?	**PRIMARY SCHOOL** LESS THAN 1 YEAR COMPLETED . . . . . 00 GRADE 1/SUB A/CLASS 1 . . . . . 11 GRADE 2/SUB B/CLASS 2 . . . . . 12 GRADE 3/STANDARD 1/ AET 1 (KHA RI GUDE, SANLI) . . . . . 13 GRADE 4/STANDARD 2 . . . . . 14 GRADE 5/STANDARD 3/AET 2 . . . . . 15 GRADE 6 /STANDARD 4 . . . . . 16 GRADE 7/STANDARD 5/AET 3 . . . . . 17 **SECONDARY SCHOOL** LESS THAN 1 YEAR COMPLETED . . . . . 20 GRADE 8/STANDARD 6/FORM 1/NTC 1/ N1/NC (V) LEVEL 2 . . . . . 21 GRADE 9/STANDARD 7/FORM 2/AET 4/NTC 2/ N2/NC (V) LEVEL 3 . . . . . 22 GRADE 10/STANDARD 8/FORM 3/NTC 3/ N3/NC (V) LEVEL 4 . . . . . 23 GRADE 11/STANDARD 9/FORM 4 . . . . . 24 CERTIFICATE OR DIPLOMA WITH LESS THAN GRADE 12/STANDARD 10 COMPLETED . . 25 GRADE 12/STANDARD 10/FORM 5/MATRIC . . 26 N4/NTC4 . . . . . 27 N5/NTC5 . . . . . 28 N6/NTC6 . . . . . 29 **HIGHER EDUCATION** FURTHER STUDIES INCOMPLETE OR ONGOIN 30 CERTIFICATE OR DIPLOMA WITH GRADE 12/ STANDARD 10 COMPLETED . . . . . 31 HIGHER DIPLOMA (TECHNIKON/ U. OF TECHNOLOGY) . . . . . 32 POST HIGHER DIPLOMA (TECHNIKON/ U. TECHNOLOGY MASTERS, DOCTORAL) 33 BACHELORS DEGREE/BACHELORS DEGREE AND POST GRADUATE DIPLOMA . . . . . 34 HONOURS DEGREE . . . . . 35 HIGHER DEGREE (MASTERS, DOCTORATE . . 36	
110	CHECK 108: PRIMARY OR SECONDARY ☐ ↓ HIGHER ☐		→ 113

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
111	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL . . . . . 1 ABLE TO READ ONLY PART OF THE SENTENCE . . . . . 2 ABLE TO READ WHOLE SENTENCE . . . . . 3 NO CARD WITH REQUIRED LANGUAGE _____ 4 (SPECIFY LANGUAGE) BLIND/VISUALLY IMPAIRED 5	
112	CHECK 111: CODE '2', '3' OR '4' CIRCLED CODE '1' OR '5' CIRCLED		→ 114
113	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
114	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
115	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
116	Do you own a cell phone?	YES . . . . . 1 NO 2	→ 118
117	Do you use your cell phone for any financial transactions?	YES . . . . . 1 NO 2	
118	Do you have an account in a bank or other financial institution that you yourself use?	YES . . . . . 1 NO 2	
119	Have you ever used the internet?	YES . . . . . 1 NO 2	→ 124
120	In the last 12 months, have you used the internet? IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES . . . . . 1 NO 2	→ 124
121	During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
124	In the last 12 months, how many times have you been away from home for one or more nights?	NUMBER OF TIMES . . . . . ☐☐ NONE 00	→ 126
125	In the last 12 months, have you been away from home for more than one month at a time?	YES . . . . . 1 NO 2	
126	CHECK 106: AGE OF RESPONDENT AGE 15-59 AGE 60 AND ABOVE		→ 401

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about any children you have had during your life. I am interested in all of the children that are biologically yours, even if they are not legally yours or do not have your last name. Have you ever fathered any children with any woman?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 206
202	Do you have any sons or daughters that you have fathered who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	a) How many sons live with you? b) And how many daughters live with you? IF NONE, RECORD '00'.	a) SONS AT HOME . . . . . [ ][ ] b) DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters that you have fathered who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	a) How many sons are alive but do not live with you? b) And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	a) SONS ELSEWHERE . . . . . [ ][ ] b) DAUGHTERS ELSEWHERE . . . . . [ ][ ]	
206	Have you ever fathered a son or a daughter who was born alive but later died? IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 208
207	a) How many boys have died? b) And how many girls have died? IF NONE, RECORD '00'.	a) BOYS DEAD . . . . . [ ][ ] b) GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL CHILDREN . . . . . [ ][ ]	
209	CHECK 208: HAS HAD MORE THAN ONE CHILD ↓ HAS HAD ONLY ONE CHILD → 211 HAS NOT HAD ANY CHILDREN → 301		
210	Did all of the children you have fathered have the same biological mother?	YES . . . . . 1 NO 2	
211	CHECK 208: HAS HAD MORE THAN ONE CHILD ↓ a) How old were you when your first child was born? HAS HAD ONLY ONE CHILD ↓ b) How old were you when your child was born?	AGE IN YEARS . . . . . [ ][ ]	
212	CHECK 203 AND 205: AT LEAST ONE LIVING CHILD ↓ NO LIVING CHILDREN → 301		

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
213	CHECK 203 AND 205: MORE THAN ONE LIVING CHILD ☐ → a) How old is your youngest child? ONLY ONE LIVING CHILD ☐ → b) How old is your child?	AGE IN YEARS . . . . . ☐☐	
214	CHECK 213: (YOUNGEST) CHILD IS AGE 0-2 YEARS ☐ ↓ (YOUNGEST) CHILD IS AGE 3 YEARS OR OLDER ☐ →		220
215	CHECK 203 AND 205: MORE THAN ONE LIVING CHILD ☐ → a) What is the name of your youngest child? ONLY ONE LIVING CHILD ☐ → b) What is the name of your child?	_____ (NAME OF (YOUNGEST) CHILD)	
216	When (NAME)'s mother was pregnant with (NAME), did she have any antenatal check-ups?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	☐ → 218
217	Were you ever present during any of those antenatal check-ups?	PRESENT . . . . . 1 NOT PRESENT 2	
218	Was (NAME) born in a hospital or health facility?	HOSPITAL/HEALTH FACILITY . . . . . 1 OTHER 2	
219	When a child has diarrhea, how much should he or she be given to drink: more than usual, about the same as usual, less than usual, or nothing to drink at all?	MORE THAN USUAL . . . . . 1 ABOUT THE SAME . . . . . 2 LESS THAN USUAL . . . . . 3 NOTHING TO DRINK . . . . . 4 DON'T KNOW 8	
220	CHECK 203: AT LEAST ONE CHILD LIVING WITH HIM ☐ ↓ NO CHILDREN LIVING WITH HIM ☐ →		301
221	Do you have at least one child who is biologically yours and is less than age 18 who lives with you?	YES . . . . . 1 NO 2	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Which ways or methods have you heard about? MARK ALL METHODS DECLARED BY THE RESPONDENT. FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)?	
01	Female Sterilisation/Tubal Ligation/Tubes Cut/Tubes Binded. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
02	Male Sterilisation/Vasectomy/Tubes Cut/Tubes Binded. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2
03	IUD. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
04	Injectables/Depo. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2
05	Implants/Norplant/Jadelle. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2
06	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2
07	Male Condom. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2
08	Female Condom. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2
09	Emergency Contraception. PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2
10	Rhythm Method. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES . . . . . 1 NO 2
11	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2
12	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES, MODERN METHOD _____ A (SPECIFY) YES, TRADITIONAL METHOD _____ B (SPECIFY) NO . . . . . Y

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	In the last six months have you:	YES NO	
	a) Heard about family planning on the radio?	a) RADIO 1 2	
	b) Seen anything about family planning on the television?	b) TELEVISION 1 2	
	c) Read about family planning in a newspaper or magazine?	c) NEWSPAPER OR MAGAZINE 1 2	
	d) Heard about family planning from a community health worker?	d) COMMUNITY HEALTH WORKER . . 1 2	
302A	CHECK Q18 IN HOUSEHOLD QUESTIONNAIRE: YES, CURRENTLY ATTENDING SCHOOL ↓ NO, NOT CURRENTLY ATTENDING SCHOOL →		303
302	e) Heard about family planning at school?	YES NO e) SCHOOL 1 2	
303	In the last few months, have you discussed family planning with a health worker or health professional?	YES . . . . . 1 NO 2	
304	Now I would like to ask you about a woman's risk of pregnancy. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant when she has sexual relations?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 306
305	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	
306	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
307	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one.	AGREE / DISAGREE / DK	
	a) Contraception is a woman's concern and a man should not have to worry about it.	a) CONTRACEPTION WOMAN'S CONCERN 1 2 8	
	b) Women who use contraception may become promiscuous.	b) WOMEN MAY BECOME PROMISCUOUS 1 2 8	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	Are you currently married or living together with someone as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A PARTNER . . . . . 2 NO 3	→ 401B
401A	Do you have a regular girlfriend/partner or fiancée?	YES . . . . . 1 NO 2	→ 402
401B	Is this person a woman or a man?	WOMAN . . . . . 1 MAN . . . . . 2 INTERSEX OR TRANSGENDERED 3	
401C	CHECK 401: RESPONDENT'S CURRENT MARITAL STATUS 401 = 3 ↓ ; 401 = 1 OR 2 →		403A
402	Have you ever been married or lived together with a someone as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A PARTNER . . . . . 2 NO 3	→ 403A
403	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	
403A	CHECK 106: AGE OF RESPONDENT AGE 15-59 ↓ ; AGE 60 AND ABOVE →		601
403B	CHECK 401 AND 402: 401 = 1 OR 2 ↓ 402 = 1 OR 2 →		410
	401 = 3 AND 402 = 3 →		413
404	Is your (spouse/partner) living with you now or is she/he staying elsewhere?	LIVING WITH HIM . . . . . 1 STAYING ELSEWHERE 2	
404A	CHECK 401B: SEX OF SPOUSE/PARTNER SPOUSE/PARTNER IS MALE OR INTERSEX (401b = 2 OR 3) ↓ ; SPOUSE/PARTNER IS FEMALE (401B = 1) →		405
404B	RECORD THE SPOUSE'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO.	→ 410
405	Do you have other wives or do you live with other women as if married?	YES (MORE THAN ONE WIFE) . . . . . 1 NO (ONLY ONE WIFE) 2	→ 407
406	Altogether, how many wives or live-in partners do you have?	TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS	
407	CHECK 405: ONE WIFE/ PARTNER ↓ ; MORE THAN ONE WIFE/ PARTNER ↓ a) Please tell me the name of (your wife/the woman you are living with as if married). b) Please tell me the name of each of your wives or each woman you are living with as if married. RECORD THE NAME AND THE LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE FOR EACH WIFE AND LIVE-IN PARTNER. IF A WOMAN IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME / LINE NUMBER _____ / ☐☐ _____ / ☐☐ _____ / ☐☐	408 How old was (NAME) on her last birthday? AGE ☐☐ ☐☐ ☐☐
408	ASK 408 FOR EACH PERSON.		

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
409	CHECK 405: ONE WIFE/ PARTNER (405 = 2) ↓ MORE THAN ONE WIFE/ PARTNER (405 = 1) → 411b		
410	Have you been married or lived with someone only once or more than once?	MORE THAN ONCE . . . . . 1 ONLY ONCE 2	
411	CHECK 405 AND 410: 405 ≠ 1 and 410 = 2 ↓ a) In what month and year did you start living with your (spouse/partner)? OTHER ↓ b) Now I would like to ask about your first (spouse/partner). In what month and year did you start living with your first (spouse/partner)?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	→ 413
412	How old were you when you first started living together?	AGE . . . . . ☐☐	
413	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.**		
414	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . 00 AGE IN YEARS . . . . . ☐☐	→ 501
415	I would like to ask you about your recent sexual activity. When was the last time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 ☐☐ WEEKS AGO . . . . . 2 ☐☐ MONTHS AGO . . . . . 3 ☐☐ YEARS AGO . . . . . 4 ☐☐	→ 417 → 427

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
416	When was the last time you had sexual intercourse with this person?		DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ]	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ]
417	The last time you had sexual intercourse with this person, was a condom used?	YES . . . . 1 NO . . . . 2 (SKIP TO 419)	YES . . . . 1 NO . . . . 2 (SKIP TO 419)	YES . . . . 1 NO . . . . 2 (SKIP TO 419)
418	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES . . . . 1 NO 2	YES . . . . 1 NO 2	YES . . . . 1 NO 2
419	What was your relationship to this person with whom you had sexual intercourse? IF GIRLFRIEND/BOYFRIEND: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	SPOUSE . . . . 1 LIVE-IN PARTNER . . . . . 2 GIRLFRIEND/BOYFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER ______ 6 (SPECIFY)	SPOUSE . . . . 1 LIVE-IN PARTNER . . . . . 2 GIRLFRIEND/BOYFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER ______ 6 (SPECIFY)	SPOUSE . . . . 1 LIVE-IN PARTNER . . . . . 2 GIRLFRIEND/BOYFRIEND NOT LIVING WITH RESPONDENT . . . . . 3 CASUAL ACQUAINTANCE . . 4 CLIENT/SEX WORKER . . 5 OTHER ______ 6 (SPECIFY)
420	How long ago did you first have sexual intercourse with this person?	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ] YEARS AGO . . 4 [ ][ ]	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ] YEARS AGO . . 4 [ ][ ]	DAYS AGO . . 1 [ ][ ] WEEKS AGO . . 2 [ ][ ] MONTHS AGO . . 3 [ ][ ] YEARS AGO . . 4 [ ][ ]
421	How many times during the last 12 months did you have sexual intercourse with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, RECORD '95'.	NUMBER OF TIMES . . . . . [ ][ ]	NUMBER OF TIMES . . . . . [ ][ ]	NUMBER OF TIMES . . . . . [ ][ ]
422	How old is this person?	AGE OF PARTNER [ ][ ] DON'T KNOW 98	AGE OF PARTNER [ ][ ] DON'T KNOW 98	AGE OF PARTNER [ ][ ] DON'T KNOW 98
423	Apart from this person, have you had sexual intercourse with any other person in the last 12 months?	YES . . . . 1 (GO BACK TO 416 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 425)	YES . . . . 1 (GO BACK TO 416 IN NEXT COLUMN) NO . . . . 2 (SKIP TO 425)	
424	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.			NUMBER OF PARTNERS LAST 12 MONTHS . . [ ][ ] DON'T KNOW 98

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
425	CHECK 419 (ALL COLUMNS): AT LEAST ONE PARTNER IS A SEX WORKER ☐ ↓ NO PARTNERS ARE SEX WORKERS ☐ →		427
426	CHECK 419 AND 417 (ALL COLUMNS): CONDOM USED WITH EVERY SEX WORKER ☐ →		430
	OTHER ☐ →		431
427	In the last 12 months, did you pay anyone in exchange for having sexual intercourse?	YES . . . . . 1 NO 2	→ 429
428	Have you ever paid anyone in exchange for having sexual intercourse?	YES . . . . . 1 NO 2	→ 431
429	The last time you paid someone in exchange for having sexual intercourse, was a condom used?	YES . . . . . 1 NO 2	→ 431
430	Was a condom used during sexual intercourse every time you paid someone in exchange for having sexual intercourse in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
431	In the past 12 months have you given any gifts or other goods in order to have sex or to become sexually involved with anyone?	YES . . . . . 1 NO 2	→ 433
432	Have you ever given any gifts or other goods in order to have sex or to become sexually involved with anyone?	YES . . . . . 1 NO 2	
433	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'.	NUMBER OF PARTNERS IN LIFETIME . . . . . ☐☐ DON'T KNOW 98	
434	CHECK 417: MOST RECENT PARTNER (FIRST COLUMN) NOT ASKED ☐ →		438
	CONDOM USED ☐ ↓ NO CONDOM USED ☐ →		438
437	The last time you had sex did you or your partner use any method other than a condom to avoid or prevent a pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 439 → 440
438	The last time you had sex did you or your partner use any method to avoid or prevent a pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 440
439	What method did you or your partner use? PROBE: Did you or your partner use any other method to prevent pregnancy? RECORD ALL MENTIONED.	FEMALE STERILISATION . . . . . A MALE STERILISATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H EMERGENCY CONTRACEPTION . . . . . I RHYTHM METHOD . . . . . J WITHDRAWAL . . . . . K OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . . . Y	→ 501
440	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	CHECK 401, 401A AND 401B: CURRENTLY MARRIED OR LIVING WITH A WOMAN OR HAS REGULAR FEMALE PARTNER/GIRLFRIEND ☐ NOT IN UNION WITH A WOMAN ☐		→ 514
502	CHECK 439: MAN NOT STERILISED ☐ MAN STERILISED ☐		→ 514
503	CHECK 407: ONE WIFE/ PARTNER ☐ MORE THAN ONE WIFE/ PARTNER ☐		→ 509
504	Is your (wife/partner) currently pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 507
505	Now I have some questions about the future. After the child you and your (wife/partner) are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 514
506	After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 514
507	CHECK 208: HAS FATHERED CHILDREN ☐ a) Now I have some questions about the future. Would you like to have another child, or would you prefer not to have any more children? HAS NOT FATHERED CHILDREN ☐ b) Now I have some questions about the future. Would you like to have a child, or would you prefer not to have any children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS COUPLE CAN'T GET PREGNANT 3 WIFE/PARTNER STERILIZED . . . . . 4 UNDECIDED/DON'T KNOW 8	→ 514
508	CHECK 208: HAS FATHERED CHILDREN ☐ a) How long would you like to wait from now before the birth of another child? HAS NOT FATHERED CHILDREN ☐ b) How long would you like to wait from now before the birth of a child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 SAYS COUPLE CAN'T GET PREGNANT . . . . . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 514
509	Are any of your (wives/partners) currently pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 512

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
510	Now I have some questions about the future. After the (child/children) you and your (wives/partners) are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 514
511	After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 514
512	CHECK 208: HAS FATHERED CHILDREN ☐↓ a) Now I have some questions about the future. Would you like to have another child, or would you prefer not to have any more children? HAS NOT FATHERED CHILDREN ☐↓ b) Now I have some questions about the future. Would you like to have a child, or would you prefer not to have any children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS COUPLE CAN'T GET PREGNANT . . . . . 3 WIFE (WIVES)/PARTNER(S) STERILIZED . . . . . 4 UNDECIDED/DON'T KNOW 8	→ 514
513	CHECK 208: HAS FATHERED CHILDREN ☐↓ a) How long would you like to wait from now before the birth of another child? HAS NOT FATHERED CHILDREN ☐↓ b) How long would you like to wait from now before the birth of a child?	MONTHS . . . . . 1 ☐☐ YEARS . . . . . 2 ☐☐ SOON/NOW . . . . . 993 SAYS COUPLE CAN'T GET PREGNANT . . . . . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	
514	CHECK 203 AND 205: HAS LIVING CHILDREN ☐↓ a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐↓ b) If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 → 601 NUMBER . . . . . ☐☐ OTHER _____ 96 → 601 (SPECIFY)	
515	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER . . ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 604
602	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason?	YES . . . . . 1 NO 2	→ 604
603	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 604A
604	What is your occupation? That is, what kind of work do you mainly do?	_____ _____ ☐☐☐☐	
604A	CHECK 106: AGE OF RESPONDENT AGE 15-59 ☐↓ AGE 60 AND ABOVE ☐ →		901
604B	CHECK 601, 602, 603: ANY YES? YES ☐↓ NO ☐ →		607
605	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR . . . . . 2 ONCE IN A WHILE 3	
606	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
607	CHECK 401, 401A AND 401B: CURRENTLY MARRIED OR LIVING WITH A WOMAN OR HAS REGULAR FEMALE PARTNER/GIRLFRIEND ☐↓ NOT IN UNION OR IN UNION, BUT NOT WITH A WOMAN ☐ →		612
608	CHECK 606: CODE '1' OR '2' CIRCLED ☐↓ OTHER ☐ →		610
609	Who usually decides how the money you earn will be used: you, your (wife/partner), or you and your (wife/partner) jointly?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . . 3 OTHER _____ 6 (SPECIFY)	
610	Who usually makes decisions about health care for yourself: you, your (wife/partner), you and your (wife/partner) jointly, or someone else?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
611	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
612	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	→ 618
613	Do you have a title deed or documents for any house you own?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 618
614	Is your name on the title deed or documents?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
618	In your opinion, is a husband justified in hitting or beating his wife in the following situations: a) If she goes out without telling him? b) If she neglects the children? c) If she argues with him? d) If she refuses to have sex with him? e) If she burns the food?	YES NO DK a) GOES OUT . . . . . 1 2 8 b) NEGLECTS CHILDREN . . 1 2 8 c) ARGUES . . . . . 1 2 8 d) REFUSES SEX . . . . . 1 2 8 e) BURNS FOOD 1 2 8	
619	CHECK 203 AND 221: ONE OR MORE CHILDREN LESS THAN AGE 18 LIVING WITH HIM ↓ NO CHILDREN OR NO CHILDREN LESS THAN AGE 18 LIVING WITH HIM →		701
620	Now I would like to ask you questions about how you discipline or punish your (child/children). In the past 12 months, have you ever: a) Hit or slapped your (child/children) with your hand to punish or discipline the child? b) Hit or beat your (child/children) using a belt, spoon, stick, shoe or any other implement to punish or discipline the child?	YES NO a) HIT WITH HAND . . . . . 1 2 b) HIT WITH IMPLEMENT 1 2	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Now I would like to talk about something else. Have you ever heard of HIV or AIDS?	YES . . . . . 1 NO 2	→ 727
708	Can HIV be transmitted from a mother to her baby: a) During pregnancy? b) During delivery? c) By breastfeeding?	YES NO DK a) DURING PREGNANCY . . 1 2 8 b) DURING DELIVERY . . . . . 1 2 8 c) BREASTFEEDING 1 2 8	
709	CHECK 708: AT LEAST ONE 'YES' ☐ ↓ OTHER ☐		→ 711
710	Are there any special drugs that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
711	**CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.**		
712	I don't want to know the results, but have you ever been tested for HIV?	YES . . . . . 1 NO 2	→ 716
713	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . ☐☐ TWO OR MORE YEARS 95	
714	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	
715	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE.	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . 11 GOVERNMENT CLINIC/COMMUNITY HEALTH CENTRE . . . . . 12 MOBILE/TEMPORARY HCT SERVICES . . . . . 13 OTHER PUBLIC SECTOR _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . 21 NEW START TESTING SITE . . . . . 22 CHEMIST/PHARMACY . . . . . 23 OTHER PRIVATE MEDICAL SECTOR _____ 26 (SPECIFY) **OTHER SOURCE** HOME . . . . . 31 WORKPLACE . . . . . 32 CORRECTIONAL FACILITY . . . . . 33 OTHER _____ 96 (SPECIFY)	→ 718

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
716	Do you know of a place where people can go to get an HIV test?	YES . . . . . 1 NO 2	→ 718
717	Where is that? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S).	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT CLINIC/COMMUNITY HEALTH CENTRE . . . . . B MOBILE/TEMPORARY HCT SERVICES . . . . . C OTHER PUBLIC SECTOR _____ D (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . E NEW START TESTING SITE . . . . . F CHEMIST/PHARMACY . . . . . G OTHER PRIVATE MEDICAL SECTOR _____ H (SPECIFY) OTHER _____ X (SPECIFY)	
718	Have you heard of test kits people can use to test themselves for HIV?	YES . . . . . 1 NO 2	→ 727
719	Have you ever tested yourself for HIV using a self-test kit?	YES . . . . . 1 NO 2	
727	CHECK 701: HEARD ABOUT HIV OR AIDS ↓ a) Apart from HIV, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT HIV OR AIDS ↓ b) Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	
728	CHECK 414: HAS HAD SEXUAL INTERCOURSE ↓ NEVER HAD SEXUAL INTERCOURSE →		→ 738
729	CHECK 727: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES ↓ NO →		→ 731
730	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
731	Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
732	Sometimes men have a sore or ulcer on or near their penis. During the last 12 months, have you had a sore or ulcer on or near your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
733	CHECK 730, 731 AND 732: HAS HAD AN INFECTION (ANY 'YES') ↓ HAS NOT HAD AN INFECTION OR DOES NOT KNOW → 738		
734	The last time you had (PROBLEM FROM 730/731/732), did you seek any kind of advice or treatment?	YES . . . . . 1 NO . . . . . 2 → 738	
735	Where did you go? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S).	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT CLINIC/COMMUNITY HEALTH CENTRE . . . . . B MOBILE/TEMPORARY HCT SERVICES . . . . . C OTHER PUBLIC SECTOR _____ D (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . E NEW START TESTING SITE . . . . . F CHEMIST/PHARMACY . . . . . G OTHER PRIVATE MEDICAL SECTOR _____ H (SPECIFY) **OTHER SOURCE** SHOP . . . . . I TRADITIONAL HERBALIST . . . . . J TRADITIONAL HEALER . . . . . K OTHER _____ X (SPECIFY)	
738	Some men are circumcised, that is, the foreskin is completely removed from the penis. Are you circumcised?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 → 901	
739	How old were you when you got circumcised?	AGE IN COMPLETED YEARS . . . . . [ ][ ] DURING CHILDHOOD (<5 YEARS) . . . . . 95 DON'T KNOW 98	
740	Who did the circumcision?	TRADITIONAL PRACTITIONER/FAMILY/FRIEND 1 HEALTH WORKER/PROFESSIONAL . . . . . 2 OTHER . . . . . 6 DON'T KNOW 8	

SECTION 9. TOBACCO AND ALCOHOL

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	Would you say your health is poor, average, good, or excellent?	POOR . . . . . 1 AVERAGE . . . . . 2 GOOD . . . . . 3 EXCELLENT 4	
902	Do you personally think you are underweight, normal weight, overweight, or obese?	UNDERWEIGHT . . . . . 1 NORMAL WEIGHT . . . . . 2 OVERWEIGHT . . . . . 3 OBESE . . . . . 4 DON'T KNOW 8	
903	Do you currently smoke tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 906 → 905
904	In the past, have you smoked tobacco every day?	YES . . . . . 1 NO 2	→ 907
905	In the past, have you ever smoked tobacco every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 908
906	On average, how many of the following products do you currently smoke each day? Also, let me know if you use the product, but not every day. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Manufactured cigarettes? b) Hand-rolled cigarettes? c) Pipes full of tobacco? d) Cigars or cigarillos? e) Number of hookah, hubbly-bubbly or water pipe sessions? f) Any others? _____ (SPECIFY)	NUMBER DAILY a) MANUFACT. CIGARETTES [ ][ ][ ] b) HAND-ROLLED CIGARETTES [ ][ ][ ] c) PIPES FULL OF TOBACCO [ ][ ][ ] d) CIGARS OR CIGARILLOS [ ][ ][ ] e) WATER PIPE SESSIONS [ ][ ][ ] f) OTHERS . . . . . [ ][ ][ ]	→ 908
907	On average, how many of the following products do you currently smoke each week? Also, let me know if you use the product, but not every week. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Manufactured cigarettes? b) Hand-rolled cigarettes? c) Pipes full of tobacco? d) Cigars or cigarillos? e) Number of hookah, hubbly-bubbly or water pipe sessions? f) Any others? _____ (SPECIFY)	NUMBER WEEKLY a) MANUFACT. CIGARETTES [ ][ ][ ] b) HAND-ROLLED CIGARETTES [ ][ ][ ] c) PIPES FULL OF TOBACCO [ ][ ][ ] d) CIGARS OR CIGARILLOS [ ][ ][ ] e) WATER PIPE SESSIONS [ ][ ][ ] f) OTHERS . . . . . [ ][ ][ ]	

SECTION 9. TOBACCO AND ALCOHOL

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
908	Do you currently use snuff, chewing tobacco, or other smokeless tobacco product every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 910 → 911
909	In the past, have you used snuff, chewing tobacco or other smokeless tobacco products every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	→ 912
910	On average, how many times a day do you use the following products? Also, let me know if you use the product, but not every day. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Snuff, by mouth? b) Snuff, by nose? c) Chewing tobacco? d) Any others? _____ (SPECIFY)	TIMES DAILY a) SNUFF, BY MOUTH . . . . . [ ][ ][ ] b) SNUFF, BY NOSE . . . . . [ ][ ][ ] c) CHEWING TOBACCO . . . . . [ ][ ][ ] d) ANY OTHERS . . . . . [ ][ ][ ]	→ 912
911	On average, how many times a week do you use the following products? Also, let me know if you use the product, but not every week. IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. a) Snuff, by mouth? b) Snuff, by nose? c) Chewing tobacco? d) Any others? _____ (SPECIFY)	TIMES WEEKLY a) SNUFF, BY MOUTH . . . . . [ ][ ][ ] b) SNUFF, BY NOSE . . . . . [ ][ ][ ] c) CHEWING TOBACCO . . . . . [ ][ ][ ] d) ANY OTHERS . . . . . [ ][ ][ ]	
912	Do you currently work in a job where other people smoke around you?	YES . . . . . 1 NO . . . . . 2 NOT CURRENTLY WORKING 3	
913	Have you ever worked in a job where you were regularly exposed to smoke, dust, fumes or strong smells?	YES . . . . . 1 NO 2	→ 915
914	How many years did you work at a job where you were regularly exposed to smoke, dust, fumes or strong smells? IF LESS THAN 1 YEAR, RECORD '00'.	YEARS . . . . . [ ][ ]	
915	Do you currently use e-cigarettes every day, some days, or not at all?	EVERY DAY . . . . . 1 SOME DAYS . . . . . 2 NOT AT ALL 3	
916	Have you ever consumed a drink that contains alcohol such as beer, wine, ciders, spirits, or sorghum beer? PROBE: Even one drink?	YES . . . . . 1 NO 2	→ 1001

SECTION 9. TOBACCO AND ALCOHOL

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
917	Was this within the last 12 months?	YES . . . . . 1 NO 2	→ 1001
918	In the last 12 months, how frequently have you had at least one drink? PROBE: Five or more days a week, 1-4 days a week, 1-3 days a month, or less often than once a month?	5 OR MORE DAYS A WEEK . . . . . 1 1-4 DAYS PER WEEK . . . . . 2 1-3 DAYS A MONTH . . . . . 3 LESS OFTEN THAN ONCE A MONTH 4	
919	During each of the last 7 days, how many standard drinks did you have? USE SHOWCARD. RECORD TOTAL NUMBER OF DRINKS CONSUMED EACH DAY STARTING WITH THE DAY BEFORE THE DAY OF THE INTERVIEW AND PROCEEDING BACKWARDS. IF NONE, RECORD '00'.	MONDAY . . . . . ☐☐ TUESDAY . . . . . ☐☐ WEDNESDAY . . . . . ☐☐ THURSDAY . . . . . ☐☐ FRIDAY . . . . . ☐☐ SATURDAY . . . . . ☐☐ SUNDAY . . . . . ☐☐	
919H	During the last 7 days, how many standard home-made beers or other homemade alcohol did you have? USE SHOWCARD.	NUMBER OF HOME-MADE BEERS . . ☐☐	
919I	CHECK 918 AND 919: CODE 3 OR 4 RECORDED IN 918 AND CONSUMED 0-1 DRINKS IN THE LAST 7 DAYS IN 919? NO ☐ ↓ YES ☐ →		1001
920	Have you ever felt that you should cut down on your drinking?	YES . . . . . 1 NO 2	
921	Have people annoyed you by criticizing your drinking?	YES . . . . . 1 NO 2	
922	Have you ever felt bad or guilty about your drinking?	YES . . . . . 1 NO 2	
923	Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover?	YES . . . . . 1 NO 2	
923A	CHECK 919: FIVE OR MORE DRINKS IN ONE DAY DURING LAST 7 DAYS? NO ☐ ↓ YES ☐ →		1001
924	In the past 30 days, have you consumed five or more standard drinks on at least one occasion?	YES . . . . . 1 NO 2	

SECTION 10. FAT, SALT, SUGAR, FRUIT AND VEGETABLE CONSUMPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	Now I would like to ask you some questions about the foods that you eat. There are no right or wrong answers. USE SHOWCARD.		
1004	How often do you usually eat fried foods such as hot chips, fried fish, fried chicken, fried meat, vetkoek or doughnuts?	EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 OCCASIONALLY . . . . . 3 NEVER 4	
1005	How often do you eat fast-foods or take-away foods from places like Chicken Licken, KFC, Captain DoRego's, Steers, Nando's, McDonalds, pizza delivery, etc?	EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 OCCASIONALLY . . . . . 3 NEVER 4	
1006	How often do you eat chips such as a packet of crispy chips or similar salty snacks such as Doritos, cheese curls, salted nuts, salty biscuits, etc?	EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 OCCASIONALLY . . . . . 3 NEVER 4	
1007	How often do you eat processed meat such as polony, viennas, meat pies, or sausage rolls?	EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 OCCASIONALLY . . . . . 3 NEVER 4	
1008	Which of the following statements best describes your approach towards salt consumption: 1) I am not interested in lowering salt in my food. 2) I am interested in lowering salt in my food within the next six months. 3) I am interested in lowering salt in my food within the next month. 4) I have started lowering salt within the last six months. 5) I have already lowered my salt intake for longer than six months.	NO INTENTION TO LOWER SALT . . . . . 1 INTERESTED WITHIN NEXT SIX MONTHS . . . . . 2 INTERESTED WITHIN NEXT MONTH . . . . . 3 STARTED IN LAST SIX MONTHS . . . . . 4 ALREADY LOWERED LONGER THAN SIX MONTHS 5 DON'T KNOW 8	
1009	Yesterday, how many types of fruit did you eat? USE SHOWCARD. IF NONE, RECORD '00'.	TYPES OF FRUIT	
1010	Yesterday, how many types of vegetables, excluding potatoes, did you eat? USE SHOWCARD. IF NONE, RECORD '00'.	TYPES OF VEGETABLES	
1011	Yesterday, did you drink any sugar-sweetened drinks? Sugar-sweetened drinks include fizzy drinks like Coke or drinks like Squash where water is added, but not diet or unsweetened cold drinks.	YES . . . . . 1 NO 2	→ 1012
1011A	How many and what size sugar-sweetened drinks did you drink? PROBE FOR BEVERAGE NUMBER AND SIZE.	200 ML GLASS . . . . . A 330 ML CAN OR BOTTLE . . . . . B 500 ML BOTTLE . . . . . C 1 L BOTTLE . . . . . D 2 L BOTTLE . . . . . E	
1012	Yesterday, did you drink any fruit juice?	YES . . . . . 1 NO 2	→ 1101
1012A	How many and what size fruit juices did you drink? PROBE FOR BEVERAGE NUMBER AND SIZE.	200 ML JUICE CARTON . . . . . A 200 ML GLASS . . . . . B	

SECTION 11. HEALTH CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1101	Are you covered by Medical Aid, Medical Benefit Scheme, Provident Scheme, or Hospital Plan that helps you pay for health care or drug services?	YES . . . . . 1 NO 2	
1102	During the last month, have you received health, medical, or dental care without staying overnight?	YES . . . . . 1 NO 2	→ 1104
1103	Where have you received health, medical, or dental care? PROBE: Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S).	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT CLINIC/COMMUNITY HEALTH CENTRE . . . . . B OTHER PUBLIC SECTOR _____ C (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR . . . . . D CHEMIST/PHARMACY . . . . . E DENTIST/ORAL HYGIENIST/ DENTAL THERAPIST . . . . . F OTHER PRIVATE MEDICAL SECTOR _____ G (SPECIFY) **OTHER SOURCE** WORKPLACE HEALTH SERVICE . . . . . H TRADITIONAL HEALER . . . . . I TRADITIONAL HERBALIST . . . . . J FAITH HEALER . . . . . K OTHER _____ X (SPECIFY)	
1104	During the last month, have you had any visits by a home-based care giver or a community-based care giver?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1105	Has a doctor, nurse or other health worker ever told you that you have TB?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1108
1106	When was the last time you were told you had TB?	IN THE LAST 12 MONTHS . . . . . 1 MORE THAN 12 MONTHS AGO 2	
1107	Did you get medical treatment the last time you had TB?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1108	Has a doctor, nurse or other health worker told you that you have or have had any of the following conditions: a) High blood pressure? b) Heart attack or angina/chest pains? c) Cancer? d) Stroke? e) High blood cholesterol or fats in the blood? f) Diabetes or blood sugar? g) Chronic bronchitis, emphysema, or COPD? h) Asthma?	YES NO DK a) HIGH BLOOD PRESS. 1 2 8 b) HEART ATTACK 1 2 8 c) CANCER 1 2 8 d) STROKE 1 2 8 e) HIGH BLOOD CHOLEST 1 2 8 f) DIABETES 1 2 8 g) CHRONIC BRONCHITIS 1 2 8 h) ASTHMA 1 2 8	
1109	CHECK 1108: ANY QUESTION a-h = YES?	YES ☐ NO ☐	→ 1127

SECTION 11. HEALTH CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1110	CHECK 1108a: RESPONDENT HAS HAD HIGH BLOOD PRESSURE.	1108a = YES ☐ 1108a = NO OR DK ☐	→ 1112
1111	Did you receive medical treatment for high blood pressure at the time of the diagnosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1112	CHECK 1108b: RESPONDENT HAS HAD HEART ATTACK OR ANGINA.	1108b = YES ☐ 1108b = NO OR DK ☐	→ 1114
1113	Did you receive medical treatment for the heart attack, angina/chest pains at the time of the diagnosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1114	CHECK 1108c: RESPONDENT HAS HAD CANCER.	1108c = YES ☐ 1108c = NO OR DK ☐	→ 1116
1115	Did you receive medical treatment for the cancer at the time of the diagnosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1116	CHECK 1108d: RESPONDENT HAS HAD STROKE.	1108d = YES ☐ 1108d = NO OR DK ☐	→ 1118
1117	Did you receive medical treatment for the stroke at the time of the diagnosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1118	CHECK 1108e: RESPONDENT HAS HAD HIGH BLOOD CHOLESTEROL.	1108e = YES ☐ 1108e = NO OR DK ☐	→ 1120
1119	Did you receive medical treatment for high blood cholesterol or fats in the blood at the time of the diagnosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1120	CHECK 1108f: RESPONDENT HAS HAD DIABETES.	1108f = YES ☐ 1108f = NO OR DK ☐	→ 1122
1121	Did you receive medical treatment for the diabetes or blood sugar at the time of the diagnosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1122	CHECK 1108g: RESPONDENT HAS HAD CHRONIC BRONCHITIS.	1108g = YES ☐ 1108g = NO OR DK ☐	→ 1124
1123	Did you receive medical treatment for chronic bronchitis, emphysema, or COPD at the time of the diagnosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1124	CHECK 1108h: RESPONDENT HAS HAD ASTHMA.	1108h = YES ☐ 1108h = NO OR DK ☐	→ 1127
1125	Did you receive medical treatment for asthma at the time of the diagnosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER 8	
1127	Compared with other people your age, do you feel you have less breath when exerting yourself? PROBE: By exercising or moving a lot?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1128	During the last 12 months, have you had wheezing when you breathe?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1131

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1129	Were you also short of breath when the wheezing noise was present?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1130	Have you had the wheezing when you did not have a cold?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1131	Have you woken up with a feeling of tightness in your chest at any time in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1132	Have you been woken by an attack of shortness of breath at any time in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1133	Have you been woken by an attack of coughing at any time in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1134	Do you usually cough on most days?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1138
1135	When you cough, do you usually bring up phlegm from your chest?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1138
1136	Have you brought up phlegm every day for at least three months during the last year?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1138
1137	For how many years have you brought up phlegm in this way? IF LESS THAN 1 YEAR, RECORD '00'.	YEARS . . . . . ☐☐	
1138	Are you currently troubled by pain or discomfort, either all the time or on and off?	YES . . . . . 1 NO 2	→ 1141
1139	Have you had this pain or discomfort for more than 3 months?	YES . . . . . 1 NO 2	→ 1141
1140	Where do you feel this pain or discomfort? RECORD ALL MENTIONED.	BACK PAIN . . . . . A NECK OR SHOULDER PAIN . . . . . B HEADACHE, FACIAL OR DENTAL PAIN . . . . . C STOMACH ACHE OR ABDOMINAL PAIN . . . . . D PAIN IN ARMS, HANDS, HIPS, LEGS OR FEET . . E CHEST PAIN . . . . . F OTHER _____ X (SPECIFY)	
1141	In the last 12 months, did your teeth or your mouth cause you any pain or discomfort?	YES . . . . . 1 NO 2	→ 1145
1142	Did you get treatment the last time that you had the problem?	YES . . . . . 1 NO 2	→ 1144
1143	Who did you see for treatment? RECORD ALL MENTIONED.	**PUBLIC SECTOR** DENTIST/ORAL HYGIENIST/DENTAL THERAPIST . . . . . A MEDICAL DOCTOR/NURSE . . . . . B **PRIVATE MEDICAL SECTOR** DENTIST/ORAL HYGIENIST/DENTAL THERAPIST . . . . . C MEDICAL DOCTOR/NURSE . . . . . D **OTHER SOURCE** TRADITIONAL HEALER . . . . . E OTHER X	→ 1145

SECTION 11. HEALTH CARE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1144	What was the main reason that you did not get treatment?	NO ORAL HEALTH SERVICE AVAILABLE . . . . . 1 ORAL HEALTH SERVICES TOO FAR . . . . . 2 ORAL HEALTH SERVICES TOO EXPENSIVE/ COULD NOT AFFORD . . . . . 3 PROBLEM WENT AWAY . . . . . 4 OTHER 6	
1145	Now I would like to ask you about any medication you take. Do you use any medicine daily or regularly that has been prescribed by a doctor or nurse?	YES . . . . . 1 NO 2	→ 1150
1146	How many different prescribed medications do you use daily or regularly?	NUMBER OF MEDICINES	
1147	Who pays for most of these medications?	RESPONDENT . . . . . 1 FAMILY/FRIENDS . . . . . 2 MEDICAL AID . . . . . 3 EMPLOYER . . . . . 4 PROVIDED BY PUBLIC CLINIC OR HOSPITAL . . 5 OTHER 6	→ 1150 → 1150
1148	In the last 12 months, have you ever been sent away from the clinic without a medication because they did not have stock?	YES . . . . . 1 NO 2	→ 1150
1149	How many times has this happened to you in the last 12 months? PROBE FOR ESTIMATE OF NUMBER OF TIMES.	NUMBER OF TIMES	
1150	In the last 12 months, have you used any medications containing codeine to treat a medical condition? USE THE SHOWCARD.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 1155
1152	In the last 12 months, have you used any of these medications for the experience or feeling it gave you rather than for their medicinal effect?	YES . . . . . 1 NO 2	→ 1155
1153	In the last 12 months, which codeine-containing medications have you used for the experience or feeling rather than for their medical effect? RECORD ALL MENTIONED.	BRONCLEER/LENAZINE FORTE . . . . . A ACTIFED DRY COUGH . . . . . B BENYLIN SYRUP WITH CODEINE . . . . . C LENADOL/ADCO-DOL PAIN TABLETS . . . . . D NUROFEN PLUS . . . . . E MYPRODOL . . . . . F STILPANE . . . . . G SYNDOL . . . . . H OTHER _____ X (SPECIFY)	
1154	In the last 12 months, have you received treatment for your problems related to the use of codeine-containing medications for non-medical purposes?	YES . . . . . 1 NO 2	
1155	RECORD THE TIME.	HOURS . . . . . MINUTES	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

2016 SOUTH AFRICA DEMOGRAPHIC AND HEALTH SURVEY
CAREGIVER'S QUESTIONNAIRE FOR CHILD WHOSE BIOLOGICAL MOTHER DOES NOT LIVE IN THE HOUSEHOLD

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . | | | | |

HOUSEHOLD NUMBER . . . . . | | | | |

NAME AND LINE NUMBER OF CHILD _____ | | |

NAME AND LINE NUMBER OF GUARDIAN/FOSTER PARENT/OTHER _____ | | |

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY / MONTH / YEAR (2 0 1)
INTERVIEWER'S NAME				INT. NO.
RESULT*				RESULT*
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

*RESULT CODES: 1 COMPLETED; 2 NOT AT HOME; 3 POSTPONED; 4 REFUSED; 5 PARTLY COMPLETED; 6 INCAPACITATED; 7 OTHER _____ SPECIFY

LANGUAGE OF QUESTIONNAIRE** 0 1 | LANGUAGE OF INTERVIEW** | | HOME LANGUAGE OF RESPONDENT** | | TRANSLATOR USED (YES = 1, NO = 2) |

LANGUAGE OF QUESTIONNAIRE** **ENGLISH**

**LANGUAGE CODES:

01 ENGLISH	05 seSOTHO	09 tshiVENDA
02 AFRIKAANS	06 seTSWANA	10 xiTSONGA
03 isiXHOSA	07 sePEDI	11 isiNDEBELE
04 isiZULU	08 siSWATI	12 OTHER

SUPERVISOR

NAME _____ NUMBER | | | | |

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with Statistics South Africa. We are conducting a survey about health and other topics all over South Africa. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to talk to you about (CHILD'S NAME FROM COVERSHEET)'s health and well-being. The questions usually take about 10-15 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER _____ DATE _____

RESPONDENT AGREES TO BE INTERVIEWED . . 1 ↓

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 → END

SECTION 1.CHILD'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐	
102	RECORD NAME AND LINE NUMBER OF CHILD.	NAME _____ LINE NUMBER . . . . . ☐☐	
103	Is (NAME) a boy or a girl?	BOY . . . . . 1 GIRL 2	
104	On what day, month, and year was (NAME FROM 102) born? PROBE: What is (NAME)'s birthday?	DAY . . . . . ☐☐ DON'T KNOW DAY . . . . . 98 MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐	
105	How old was (NAME) at (NAME)'s last birthday? COMPARE AND CORRECT 104 AND/OR 105 IF INCONSISTENT.	AGE IN COMPLETED YEARS . . . . . ☐☐	
106	Which population group does (NAME) belong to: black, white, coloured, Indian or something else?	BLACK/AFRICAN . . . . . 1 WHITE . . . . . 2 COLOURED . . . . . 3 INDIAN/ASIAN . . . . . 4 OTHER _____ 6 (SPECIFY)	

SECTION 1.CHILD'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
107	What is your relationship to (NAME)?	BIOLOGICAL FATHER . . . . . 11 ADOPTIVE PARENT . . . . . 12 FOSTER PARENT . . . . . 13 STEP PARENT . . . . . 14 GRANDPARENT . . . . . 15 BROTHER/SISTER . . . . . 16 OTHER RELATIVE . . . . . 17 UNRELATED GUARDIAN/CAREGIVER . . . . . 18 OTHER _____ 96 (SPECIFY)	
108	Why is (NAME)'s biological mother not living with (NAME)?	MOTHER DIED . . . . . 1 MOTHER WORKS ELSEWHERE/ SEEKS EMPLOYMENT ELSEWHERE . . . . . 2 MOTHER SENT CHILD HERE FOR CARE . . . . . 3 MOTHER IN HOSPITAL . . . . . 4 OTHER _____ 6 (SPECIFY)	

SECTION 2. CHILD IMMUNISATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501A	CHECK 104: BORN IN 2013-2016? YES ☐ ↓ NO ☐ →		602
504A	Do you have a Road to Health booklet/card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A BOOKLET . . . . . 1 YES, HAS ONLY ANOTHER DOCUMENT . . . . . 2 YES, HAS BOOKLET AND OTHER DOCUMENT 3 NO, NO BOOKLET AND NO OTHER DOCUMENT 4	→ 507A → 507A
505A	Did you ever have a Road to Health booklet for (NAME)?	YES . . . . . 1 NO 2	→ 505A2
505A1	What happened to (NAME)'s Road to Health booklet?	BOOKLET WITH RELATIVE/CHILD'S MOTHER 1 BOOKLET MISPLACED OR LOST . . . . . 2 BOOKLET STOLEN . . . . . 3 BOOKLET HELD AS COLLATERAL/RANSOM . . 4 BOOKLET DESTROYED . . . . . 5 OTHER _____ 6 (SPECIFY)	→ 506A
505A2	Why don't you have a Road to Health booklet for (NAME)?	NONE AVAILABLE AT HEALTH FACILITY . . . . . 1 FOREIGNERS NOT GIVEN ONE . . . . . 2 REQUIRED TO PAY FOR IT . . . . . 3 TOO BUSY TO GET ONE . . . . . 4 BOOKLET WITH RELATIVE/CHILD'S MOTHER . . 5 OTHER _____ 6 (SPECIFY)	
506A	CHECK 504A: CODE '2' CIRCLED ☐ ↓ CODE '4' CIRCLED ☐ →		511A
506A1	May I see the document where (NAME)'s vaccinations are written down?	YES, OTHER DOCUMENT SEEN . . . . . 1 NO DOCUMENT SEEN 2	→ 508A → 511A
507A	May I see the Road to Health booklet or other document where (NAME)'s vaccinations are written down?	YES, ONLY BOOKLET SEEN . . . . . 1 YES, ONLY OTHER DOCUMENT SEEN . . . . . 2 YES, BOOKLET AND OTHER DOCUMENT SEEN 3 NO BOOKLET AND NO OTHER DOCUMENT SEEN 4	→ 508A → 508A
507A1	Where is (NAME)'s Road to Health booklet?	BOOKLET WITH RELATIVE/CHILD'S MOTHER 1 BOOKLET MISPLACED OR LOST . . . . . 2 BOOKLET STOLEN . . . . . 3 BOOKLET HELD AS COLLATERAL/RANSOM . . 4 BOOKLET AT HEALTH FACILITY . . . . . 5 OTHER _____ 6 (SPECIFY)	
507A2	CHECK 507A: CODE '2' CIRCLED ☐ ↓ CODE '4' CIRCLED ☐ →		511A

508A

PHOTOGRAPH VACCINATION PAGE OF BOOKLET OR OTHER DOCUMENT WHERE VACCINATIONS ARE WRITTEN.

COPY DATES FROM THE BOOKLET.
WRITE '44' IN 'DAY' COLUMN IF BOOKLET SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.

	DAY		MONTH		YEAR			
BCG								
ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE)								
ORAL POLIO VACCINE (OPV) 1								
ROTAVIRUS (RV) 1								
DTAP-IPV-HIB 1								
HEPATITIS B (HEP B) 1								
PNEUMOCOCCAL CONJUGATE VACCINE (PCV) 1								
DTAP-IPV-HIB 2								
HEPATITIS B (HEP B) 2								
DTAP-IPV-HIB 3								
HEPATITIS B (HEP B) 3								
PNEUMOCOCCAL CONJUGATE VACCINE (PCV) 2								
ROTAVIRUS (RV) 2								
MEASLES 1								
PNEUMOCOCCAL CONJUGATE VACCINE (PCV) 3								
DTAP-IPV-HIB 4								
MEASLES 2								
VITAMIN A (MOST RECENT)								

509A CHECK 508A: 'BCG' TO 'MEASLES 2' ALL RECORDED?

NO ☐↓

YES ☐ → 525A

510A In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in immunisation campaigns?

RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508A THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.

YES 1
(PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 508A THEN WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN)
(THEN SKIP TO 525A)

NO 2
DON'T KNOW 8
(WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT GIVEN)
(THEN SKIP TO 525A)

SECTION 2. CHILD IMMUNISATION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
511A	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in immunisation campaigns?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	→ 526A → 602
512A	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	
514A	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	→ 517A
515A	Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later?	FIRST TWO WEEKS . . . 1 LATER . . . 2	
516A	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES . . . ☐	
517A	Has (NAME) ever received a DTP-combination vaccination, also known as a pentavalent vaccination? That is, an injection given in the left thigh or left arm to prevent diphtheria, tetanus, and whooping cough?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	→ 518A1
518A	How many times did (NAME) receive the DTP-combination vaccine?	NUMBER OF TIMES . . . ☐	
518A1	Has (NAME) ever received a hepatitis B vaccination, that is, an injection given in the right thigh to prevent hepatitis B?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	→ 519A
518A2	How many times did (NAME) receive the hepatitis B vaccine?	NUMBER OF TIMES . . . ☐	
519A	Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the right thigh to prevent pneumonia?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	→ 521A
520A	How many times did (NAME) receive the pneumococcal vaccine?	NUMBER OF TIMES . . . ☐	
521A	Has (NAME) ever received a rotavirus vaccination, that is, syrup in the mouth to prevent diarrhoea?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	→ 523A
522A	How many times did (NAME) receive the rotavirus vaccine?	NUMBER OF TIMES . . . ☐	
523A	Has (NAME) ever received a measles vaccination, that is, an injection in the left thigh or right arm to prevent measles?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	→ 525A
524A	How many times did (NAME) receive the measles vaccine?	NUMBER OF TIMES . . . ☐	
525A	Did (NAME) ever miss getting a vaccination or get a vaccination late?	YES . . . 1 NO . . . 2 DON'T KNOW . . . 8	→ 602
526A	CHECK 508A AND 511A: CHILD RECEIVED AT LEAST ONE VACCINATION → a) What was the reason for (NAME) missing the vaccination or getting it late? PROBE: Any other reason? CHILD RECEIVED RECEIVED NO VACCINATIONS → b) What is the reason (NAME) has not received any vaccinations? PROBE: Any other reason?	CLINIC OUT OF STOCK . . . A NOT AWARE OF NEED FOR A VACCINATION . . . B FEAR OF SIDE EFFECTS . . . C DID NOT KNOW WHERE TO GO . . . D TOO BUSY TO TAKE CHILD . . . E NO MONEY FOR TRANSPORT . . . F CHILD WAS ILL . . . G RESPONDENT WAS ILL . . . H OTHER _____ (SPECIFY) . . . X DON'T KNOW . . . Z	

SECTION 3. CHILD HEALTH

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
602	Now I would like to ask some questions about (NAME)'s health.		
605	In the last six months, was (NAME) given a vitamin A dose like [this/any of these]? SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
607	Was (NAME) given any drug for intestinal worms in the last six months? IF RESPONDENT SAYS NO, CHECK ROAD TO HEALTH BOOKLET.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
608	Has (NAME) had diarrhoea/loose stools in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 618
609	Now I would like to know how much (NAME) was given to drink during the diarrhoea. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 NOTHING TO DRINK . . . . . 5 DON'T KNOW 8	
610	When (NAME) had diarrhoea, was (NAME) given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was (NAME) given much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS . . . . . 2 ABOUT THE SAME . . . . . 3 MORE . . . . . 4 STOPPED FOOD . . . . . 5 NEVER GAVE FOOD . . . . . 6 DON'T KNOW 8	
611	Did you seek advice or treatment for the diarrhoea from any source?	YES . . . . . 1 NO 2	→ 615

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
612	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S).	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT CLINIC/COMM. HEALTH CENTRE B MOBILE CLINIC . . . . . C COMMUNITY HEALTH WORKER . . . . . D OTHER PUBLIC SECTOR _____ E (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . F CHEMIST/PHARMACY . . . . . G PRIVATE DOCTOR . . . . . H OTHER PRIVATE MEDICAL SECTOR _____ I (SPECIFY) **OTHER SOURCE** SUPERMARKET/SHOP . . . . . J TRADITIONAL HEALER . . . . . K MARKET . . . . . L OTHER _____ X (SPECIFY)	
613	CHECK 612: TWO OR MORE CODES CIRCLED ↓	ONLY ONE CODE CIRCLED →	615
614	Where did you first seek advice or treatment? USE LETTER CODE FROM 612.	FIRST PLACE . . . . . ☐	
615	Was (NAME) given any of the following at any time since (NAME) started having the diarrhoea: a) A fluid made from a special packet called Sorol or Rehidrat? b) A clinic-recommended sugar-salt solution? c) Zinc tablets or syrup?	YES NO DK a) FLUID FROM ORS PACKET . . 1 2 8 b) CLINIC RECOMMENDED FLUID 1 2 8 c) ZINC 1 2 8	
616	CHECK 615 ANY 'YES' ↓ a) Was anything else given to treat the diarrhoea? ALL 'NO' OR 'DK' ↓ b) Was anything given to treat the diarrhoea?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 618
617	CHECK 615 ANY 'YES' ↓ a) What else was given to treat the diarrhoea? Anything else? ALL 'NO' OR 'DK' ↓ b) What was given to treat the diarrhoea? Anything else? RECORD ALL TREATMENTS GIVEN.	**PILL OR SYRUP** ANTIBIOTIC . . . . . A ANTIMOTILITY . . . . . B OTHER (NOT ANTIBIOTIC OR ANTIMOTILITY) C UNKNOWN PILL OR SYRUP . . . . . D **INJECTION** ANTIBIOTIC . . . . . E NON-ANTIBIOTIC . . . . . F UNKNOWN INJECTION . . . . . G (IV) INTRAVENOUS . . . . . H HOME REMEDY/HERBAL MEDICINE . . . . . I OTHER _____ X (SPECIFY)	
618	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 3. CHILD HEALTH

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
620	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
621	Has (NAME) had fast, short, rapid breaths or difficulty breathing at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 623
622	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY . . . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	→ 624
623	CHECK 618: HAD FEVER YES ☐ ↓ NO OR DON'T KNOW ☐		→ 631
624	Did you seek advice or treatment for the illness from any source?	YES . . . . . 1 NO 2	→ 631
625	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S).	**PUBLIC SECTOR** GOVERNMENT HOSPITAL . . . . . A GOVERNMENT CLINIC/COMM. HEALTH CENTRE B MOBILE CLINIC . . . . . C COMMUNITY HEALTH WORKER . . . . . D OTHER PUBLIC SECTOR _____ E (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . F CHEMIST/PHARMACY . . . . . G PRIVATE DOCTOR . . . . . H OTHER PRIVATE MEDICAL SECTOR _____ I (SPECIFY) **OTHER SOURCE** SUPERMARKET/SHOP . . . . . J TRADITIONAL HEALER . . . . . K MARKET . . . . . L OTHER _____ X (SPECIFY)	
626	CHECK 625: TWO OR MORE CODES CIRCLED ☐ ↓ ONLY ONE CODE CIRCLED ☐		→ 628
627	Where did you first seek advice or treatment? USE LETTER CODE FROM 625.	FIRST PLACE . . . . . ☐	
628	How many days after the illness began did you first seek advice or treatment for (NAME)? IF THE SAME DAY RECORD '00'.	DAYS . . . . . ☐☐	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
629	At any time during the illness, did (NAME) take any drugs for the illness?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 631
630	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED.	**ANTIMALARIAL DRUGS** COARTEM/ARTEMISININ COMBINATION THERAPY (ACT) . . . . . A OTHER ANTIMALARIAL _____ (SPECIFY) B **ANTIBIOTIC DRUGS** PILL/SYRUP . . . . . C INJECTION/IV . . . . . D **OTHER DRUGS** ASPIRIN . . . . . E PARACETAMOL/PANADO . . . . . F BRUFEN . . . . . G PONSTAN . . . . . H OTHER _____ (SPECIFY) X DON'T KNOW . . . . . Z	
631	CHECK 104: CHILD BORN IN 2014-2016?	YES →	NO → 655
654	The last time (NAME) passed stools, what was done to dispose of the stools?	CHILD USED TOILET OR LATRINE . . . . . 01 PUT/RINSED INTO TOILET OR LATRINE . . . . . 02 PUT/RINSED INTO DRAIN, DITCH RIVER OR STREAM . . . . . 03 THROWN INTO GARBAGE . . . . . 04 BURIED . . . . . 05 LEFT IN THE OPEN . . . . . 06 OTHER _____ (SPECIFY) 96	
655	I do not want to know if (NAME) has HIV, I just want to know if you know (NAME)'s HIV status. Do you know (NAME)'s HIV status?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
656	RECORD THE TIME.	HOURS . . . . . ☐☐ MINUTES . . . . . ☐☐	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING BIOMARKERS

SUPERVISOR'S OBSERVATIONS

2016 SOUTH AFRICA DEMOGRAPHIC AND HEALTH SURVEY
FIELDWORKER QUESTIONNAIRE

STATS SA
SA MRC

LANGUAGE OF QUESTIONNAIRE ENGLISH

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
100	What is your name?	NAME _____	
101	RECORD FIELDWORKER NUMBER	NUMBER . . . . . [ ][ ][ ][ ]	

INSTRUCTIONS

We are collecting information on the SADHS field staff. Please fill in the information below. The information will be part of the survey data files. Your name will not be in the data files; your information will remain anonymous. If there is any question you do not want to answer you may skip it and go to the next question.

AGREE . . . . . 1 ↓ DO NOT AGREE . . . . . 2 → END

102	In what province do you live?	WESTERN CAPE . . . . . 01 EASTERN CAPE . . . . . 02 NORTHERN CAPE . . . . . 03 FREE STATE . . . . . 04 KWAZULU-NATAL . . . . . 05 NORTH WEST . . . . . 06 GAUTENG . . . . . 07 MPUMALANGA . . . . . 08 LIMPOPO 09	
103	Do you live in a city, town, or rural area, a farm, a tribal area, or an informal settlement?	CITY . . . . . 1 TOWN . . . . . 2 RURAL AREA . . . . . 3 FARM . . . . . 4 TRIBAL AREA . . . . . 5 INFORMAL SETTLEMENT 6	
104	How old are you? RECORD AGE IN COMPLETED YEARS.	AGE . . . . . [ ][ ]	
105	Are you male or female?	MALE . . . . . 1 FEMALE 2	
106	What is your current marital status?	CURRENTLY MARRIED . . . . . 1 LIVING WITH A MAN/WOMAN . . . . . 2 WIDOWED . . . . . 3 DIVORCED . . . . . 4 SEPARATED . . . . . 5 NEVER MARRIED OR LIVED WITH A MAN/WOMAN 6	
107	How many living children do you have? INCLUDE ONLY CHILDREN WHO ARE YOUR BIOLOGICAL CHILDREN.	LIVING CHILDREN . . . . . [ ][ ]	
108	Have you ever had a child who died?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
109	What is the highest level of school you attended: primary, secondary, or higher than secondary?	PRIMARY . . . . . 1 SECONDARY . . . . . 2 HIGHER THAN SECONDARY 3	
110	What is the highest grade or form you completed at that level?	**PRIMARY SCHOOL** LESS THAN 1 YEAR COMPLETED . . . . . 00 GRADE 1/SUB A/CLASS 1 . . . . . 11 GRADE 2/SUB B/CLASS 2 . . . . . 12 GRADE 3/STANDARD 1/ AET 1 (KHA RI GUDE, SANLI) . . . . . 13 GRADE 4/STANDARD 2 . . . . . 14 GRADE 5/STANDARD 3/AET 2 . . . . . 15 GRADE 6 /STANDARD 4 . . . . . 16 GRADE 7/STANDARD 5/AET 3 . . . . . 17 **SECONDARY SCHOOL** LESS THAN 1 YEAR COMPLETED . . . . . 20 GRADE 8/STANDARD 6/FORM 1/NTC 1/ N1/NC (V) LEVEL 2 . . . . . 21 GRADE 9/STANDARD 7/FORM 2/AET 4/NTC 2/ N2/NC (V) LEVEL 3 . . . . . 22 GRADE 10/STANDARD 8/FORM 3/NTC 3/ N3/NC (V) LEVEL 4 . . . . . 23 GRADE 11/STANDARD 9/FORM 4 . . . . . 24 CERTIFICATE OR DIPLOMA WITH LESS THAN GRADE 12/STANDARD 10 COMPLETED . . 25 GRADE 12/STANDARD 10/FORM 5/MATRIC . . 26 N4/NTC4 . . . . . 27 N5/NTC5 . . . . . 28 N6/NTC6 . . . . . 29 **HIGHER EDUCATION** FURTHER STUDIES INCOMPLETE OR ONGOII 30 CERTIFICATE OR DIPLOMA WITH GRADE 12/ STANDARD 10 COMPLETED . . . . . 31 HIGHER DIPLOMA (TECHNIKON/ U. OF TECHNOLOGY) . . . . . 32 POST HIGHER DIPLOMA (TECHNIKON/ U. TECHNOLOGY MASTERS, DOCTORAL) 33 BACHELORS DEGREE/BACHELORS DEGREE AND POST GRADUATE DIPLOMA . . . . . 34 HONOURS DEGREE . . . . . 35 HIGHER DEGREE (MASTERS, DOCTORATE) 36	
112	Which population group do you consider yourself: black, white, coloured, Indian or something else?	BLACK/AFRICAN . . . . . 1 WHITE . . . . . 2 COLOURED . . . . . 3 INDIAN/ASIAN . . . . . 4 OTHER _____ 6 (SPECIFY)	
113	What languages can you speak? RECORD ALL LANGUAGES YOU CAN SPEAK.	ENGLISH . . . . . A AFRIKAANS . . . . . B ISIXHOSA . . . . . C ISIZULU . . . . . D SESOTHO . . . . . E SETSWANA . . . . . F SEPEDI . . . . . G SISWATI . . . . . H TSHIVENDA . . . . . I XITSONGA . . . . . J ISINDEBELE . . . . . K OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
114	What is your mother tongue/native language (language spoken at home growing up)?	ENGLISH . . . . . 01 AFRIKAANS . . . . . 02 ISIXHOSA . . . . . 03 ISIZULU . . . . . 04 SESOTHO . . . . . 05 SETSWANA . . . . . 06 SEPEDI . . . . . 07 SISWATI . . . . . 08 TSHIVENDA . . . . . 09 XITSONGA . . . . . 10 ISINDEBELE . . . . . 11 OTHER _____ 96 (SPECIFY)	
115	Have you ever worked on a SADHS survey prior to this one?	YES . . . . . 1 NO 2	
116	Have you ever worked on any other survey prior to this one (not a SADHS)?	YES . . . . . 1 NO 2	
117	Were you already working for STATS SA or SA MRC at the time you were employed to work on this SADHS?	YES, STATS SA . . . . . 1 YES, SA MRC . . . . . 2 NO 3	→ 119
118	Are you a permanent or temporary employee of STATS SA or SA MRC?	PERMANENT . . . . . 1 TEMPORARY 2	
119	If you have comments, please write them here.		

ADDITIONAL DHS PROGRAM RESOURCES

The DHS Program Website – Download free DHS reports, standard documentation, key indicator data, and training tools, and view announcements.	DHSprogram.com	
STATcompiler – Build custom tables, graphs, and maps with data from 90 countries and thousands of indicators.	Statcompiler.com	
DHS Program Mobile App – Access key DHS indicators for 90 countries on your mobile device (Apple, Android, or Windows).	Search DHS Program in your iTunes or Google Play store	
DHS Program User Forum – Post questions about DHS data, and search our archive of FAQs.	userforum.DHSprogram.com	
Tutorial Videos – Watch interviews with experts and learn DHS basics, such as sampling and weighting, downloading datasets, and how to read DHS tables.	www.youtube.com/DHSProgram	
Datasets – Download DHS datasets for analysis.	DHSprogram.com/Data	
Spatial Data Repository – Download geographically-linked health and demographic data for mapping in a geographic information system (GIS).	spatialdata.DHSprogram.com	

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