# Armenia



ved 👔 ed en ennee 👔 ed en en an 👔 ed en ennee 👔 ed en en ennee 👔 ed en ennee 👔 ed en ennee 🖬 ed en ennee 🖬 ed en

## Demographic and Health Survey

# 2015-16

## Armenia Demographic and Health Survey 2015-16

National Statistical Service Yerevan, Armenia

> Ministry of Health Yerevan, Armenia

The DHS Program ICF Rockville, Maryland USA

August 2017







The 2015-16 Armenia Demographic and Health Survey (2015-16 ADHS) was implemented by the National Statistical Service and the Ministry of Health from December 8, 2015, to April 5, 2016. The funding for the ADHS was provided by the United States Agency for International Development (USAID), the United Nations Population Fund (UNFPA), the Joint United Nations Programme on HIV/AIDS (UNAIDS), and the United Nations Children's Fund (UNICEF). ICF provided technical assistance through The DHS Program, a USAID-funded project providing support and technical assistance in the implementation of population and health surveys in countries worldwide.

Additional information about the 2015-16 ADHS may be obtained from the National Statistical Service of the Republic of Armenia, Republic Avenue, 3 Government House, 0010, Yerevan, Republic of Armenia; Telephone: 374-11-524-213; Fax: 374-11-521-921; E-mail: info@armstat.am; Internet: http://www.armstat.am.

Information about The DHS Program may be obtained from ICF, 530 Gaither Road, Suite 500, Rockville, MD 20850, USA; Telephone: +1-301-407-6500; Fax: +1-301-407-6501; E-mail: info@DHSprogram.com; Internet: www.DHSprogram.com.

Recommended citation:

National Statistical Service [Armenia], Ministry of Health [Armenia], and ICF. 2017. Armenia Demographic and Health Survey 2015-16. Rockville, Maryland, USA: National Statistical Service, Ministry of Health, and ICF.

## CONTENTS

		D FIGURESix
		XV
		DGEMENTS
		M DEVELOPMENT GOAL INDICATORS
		LE DEVELOPMENT GOAL INDICATORS
IVIAI		
1	INTR	ODUCTION AND SURVEY METHODOLOGY1
	1.1	Geography and Population1
		1.1.1 Geography
		1.1.2 Population
	1.2	Systems for Collecting Demographic and Health Data2
	1.3	Health Care System Updates in Armenia2
	1.4	Objectives and Organization of the Survey
	1.5	Sample Design and Implementation
	1.6	Questionnaires
	1.7	Anthropometry and Anemia Testing
	1.8	Pretest
	1.9	Training of Field Staff
	1.10	Fieldwork and Data Processing
	1.11	Response Rates
2	<b>HOU</b> S 2.1	SING CHARACTERISTICS AND HOUSEHOLD POPULATION
	2.2	Secondhand Smoke Exposure
	2.3	Household Possessions
	2.4	Wealth Quintiles
	2.5	Hand Washing
	2.6	Household Population by Age and Sex
	2.7	Household Size and Composition
	2.8	Children's Living Arrangements and Orphanhood
	2.9	Educational Attainment of Household Members
	2.10	Child Protection
		2.10.1 Birth Registration
	0.11	2.10.2 Child Discipline
	2.11	Poverty Benefits
3	<b>BACH</b> 3.1	XGROUND CHARACTERISTICS OF RESPONDENTS         31           Background Characteristics of Respondents         31
	3.1	Educational Attainment of Respondents
	3.2	Exposure to Mass Media and Internet
	5.5	3.3.1 Mass Media and methet 35
		3.3.2 Internet Usage
	3.4	Employment
	-	

	3.5	Occupation	41
	3.6	Women's Employment Characteristics	
	3.7	Employment Abroad	
4	MAR	RIAGE AND SEXUAL ACTIVITY	
	4.1	Marital Status	
	4.2	Age at First Marriage and Sexual Intercourse	
	4.2	Age at First Sexual Intercourse	
	4.3	Recent Sexual Activity	
5	FERT	FILITY	
	5.1	Current Fertility	
	5.2	Fertility Differentials by Background Characteristics	
	5.3	Fertility Trends	
		5.3.1 Retrospective Data	
		5.3.2 Comparison with Prior ADHS Surveys	
	5.4	Children Ever Born and Living	
	5.5	Birth Intervals	
	5.6	Postpartum Amenorrhea, Abstinence, and Insusceptibility	61
	5.7	Menopause	61
	5.8	Age at First Birth	
	5.9	Teenage Pregnancy and Motherhood	
6	FERT	FILITY PREFERENCES	
	6.1	Fertility Preferences	
	6.2	Ideal Number of Children	
	6.3	Fertility Planning	
	6.4	Wanted and Unwanted Fertility	
7	CON	TRACEPTION	
	7.1	Knowledge of Contraceptive Methods	
	7.2	Current Use of Contraception	
	7.3	Current Use by Background Characteristics	
	7.4	Source of Family Planning	
	7.5	Informed Choice	
	7.6	Discontinuation within 12 Months of Use	
	7.7	Knowledge of the Fertile Period	
	7.8	Need for Family Planning	
	7.9	Future Use of Contraception	
	7.10	Exposure to Family Planning Messages in the Mass Media	
	7.11	Contact of Nonusers with Family Planning Providers	
	7.12	Exposure to Reproductive Health Messages	
8.	ABOI	RTION	
	8.1	Pregnancy Outcomes	
	8.2	Lifetime Experience with Induced Abortion	94
	8.3	Rates of Induced Abortion	
	8.4	Trends in Induced Abortion	
	8.5	Use of Contraceptive Methods before Abortion	
	8.6	Reasons for Abortion	

	REPR	ODUCTIVE HEALTH	
	9.1	Antenatal Care	10
		9.1.1 Antenatal Care Provider	10
		9.1.2 Number and Timing of ANC Visits	
		9.1.3 Folate and Iron Supplements	
		9.1.4 Antenatal Care Content	
		9.1.5 Ultrasound Tests	
	9.2	Assistance and Medical Care at Delivery	
		9.2.1 Place of Delivery	10
		9.2.2 Assistance at Delivery	
		9.2.3 Caesarian Deliveries	
		9.2.4 Payment for Delivery	
	9.3	Postnatal Care for the Mother	
		9.3.1 Timing of Postnatal Checkups for the Mother	11
		9.3.2 Type of Provider of Postnatal Checkups for the Mother	
	9.4	Postnatal Care for the Newborn	
		9.4.1 Timing of Postnatal Care for Newborns	
		9.4.2 Type of Provider of Postnatal Care for Newborns	
		9.4.3 Content of Postnatal Care for Newborns	
	9.5	Problems in Accessing Health Care	
	9.6	Travel to Nearest Health Clinic	
10		.TH INSURANCE, USE OF TOBACCO, KNOWLEDGE AND FUDES ABOUT TUBERCULOSIS	11(
	ATTT 10.1	Health Insurance	
	10.1	Use of Tobacco	
	10.2	Tuberculosis	
	10.5		
		10.3.1 Knowledge and Attitudes about Tuberculosis	
		10.3.2 Knowledge of Tuberculosis Symptoms	
		10.3.3 Knowledge of Organs Affected by Tuberculosis	
		10.3.4 Misconceptions about How Tuberculosis is Spread	132
	CHIL	D HEALTH	126
11			
11	11.1	Child's Weight and Size at Birth	
1	11.1 11.2	Child's Weight and Size at Birth Vaccination Coverage	
1			
11	11.2	Vaccination Coverage	
11	11.2 11.3	Vaccination Coverage Trends in Vaccination Coverage	
11	11.2 11.3 11.4	Vaccination Coverage Trends in Vaccination Coverage Acute Respiratory Infection	13: 13 14 14 14 14
.1	11.2 11.3 11.4 11.5	Vaccination Coverage Trends in Vaccination Coverage Acute Respiratory Infection Fever	
11	11.2 11.3 11.4 11.5 11.6	Vaccination Coverage Trends in Vaccination Coverage Acute Respiratory Infection Fever Diarrhea	135 137 141 142 142 143 143
11	11.2 11.3 11.4 11.5 11.6 11.7	Vaccination Coverage Trends in Vaccination Coverage Acute Respiratory Infection Fever Diarrhea Knowledge of ORS Packets	134 137 141 142 142 142 142 144 146
	11.2 11.3 11.4 11.5 11.6 11.7 11.8 11.9	Vaccination Coverage Trends in Vaccination Coverage Acute Respiratory Infection Fever Diarrhea Knowledge of ORS Packets Disposal of Children's Stools Childhood Mortality	
	11.2 11.3 11.4 11.5 11.6 11.7 11.8 11.9	Vaccination Coverage Trends in Vaccination Coverage Acute Respiratory Infection Fever Diarrhea Knowledge of ORS Packets Disposal of Children's Stools	
	11.2 11.3 11.4 11.5 11.6 11.7 11.8 11.9 NUTR	Vaccination Coverage Trends in Vaccination Coverage Acute Respiratory Infection Fever Diarrhea Knowledge of ORS Packets Disposal of Children's Stools Childhood Mortality RITION Nutritional Status of Children	13: 13' 14' 14' 14' 14' 14' 14' 14' 14
11	11.2 11.3 11.4 11.5 11.6 11.7 11.8 11.9 NUTR	Vaccination Coverage Trends in Vaccination Coverage Acute Respiratory Infection Fever Diarrhea Knowledge of ORS Packets Disposal of Children's Stools Childhood Mortality RITION Nutritional Status of Children 12.1.1 Measurement of Nutritional Status among Young Children	13: 13' 14' 14' 14' 14' 14' 14' 14' 14
	11.2 11.3 11.4 11.5 11.6 11.7 11.8 11.9 NUTR	Vaccination Coverage Trends in Vaccination Coverage Acute Respiratory Infection Fever Diarrhea Knowledge of ORS Packets Disposal of Children's Stools Childhood Mortality RITION Nutritional Status of Children 12.1.1 Measurement of Nutritional Status among Young Children 12.1.2 Levels of Child Malnutrition	
	11.2 11.3 11.4 11.5 11.6 11.7 11.8 11.9 <b>NUTR</b> 12.1	Vaccination Coverage Trends in Vaccination Coverage Acute Respiratory Infection Fever Diarrhea Knowledge of ORS Packets Disposal of Children's Stools Childhood Mortality RITION Nutritional Status of Children 12.1.1 Measurement of Nutritional Status among Young Children 12.1.2 Levels of Child Malnutrition 12.1.3 Trends in Children's Nutritional Status	13: 13' 14' 14' 14' 14' 14' 14' 14' 14
	11.2 11.3 11.4 11.5 11.6 11.7 11.8 11.9 NUTR	Vaccination Coverage Trends in Vaccination Coverage Acute Respiratory Infection Fever Diarrhea Knowledge of ORS Packets Disposal of Children's Stools Childhood Mortality RITION Nutritional Status of Children. 12.1.1 Measurement of Nutritional Status among Young Children 12.1.2 Levels of Child Malnutrition 12.1.3 Trends in Children's Nutritional Status Breastfeeding and Supplementation	135 137 141 142 142 142 142 142 144 147 146 147 146 147 146 147 147 146 150 150 150 150
	11.2 11.3 11.4 11.5 11.6 11.7 11.8 11.9 <b>NUTR</b> 12.1	Vaccination Coverage Trends in Vaccination Coverage Acute Respiratory Infection Fever Diarrhea Knowledge of ORS Packets Disposal of Children's Stools Childhood Mortality <b>RITION</b> Nutritional Status of Children 12.1.1 Measurement of Nutritional Status among Young Children 12.1.2 Levels of Child Malnutrition 12.1.3 Trends in Children's Nutritional Status Breastfeeding and Supplementation 12.2.1 Initiation of Breastfeeding	135 137 141 142 142 142 142 142 142 142
	11.2 11.3 11.4 11.5 11.6 11.7 11.8 11.9 <b>NUTR</b> 12.1	Vaccination Coverage Trends in Vaccination Coverage Acute Respiratory Infection Fever Diarrhea Knowledge of ORS Packets Disposal of Children's Stools Childhood Mortality RITION Nutritional Status of Children. 12.1.1 Measurement of Nutritional Status among Young Children 12.1.2 Levels of Child Malnutrition 12.1.3 Trends in Children's Nutritional Status Breastfeeding and Supplementation	135 137 141 142 142 142 142 142 142 144 146 146 147 149 150 150 157 157 157 157

	12.3	Infant and Young Child Feeding (IYCF) Practices	163
	12.4	Household Iodized Salt Consumption	166
	12.5	Micronutrient Intake in Children	167
	12.6	Nutritional Status of Women	169
	12.7	Micronutrient Intake among Mothers	171
	12.8	Anemia	173
		12.8.1 Anemia Prevalence in Women	174
		12.8.2 Anemia Prevalence in Children	176
		12.8.3 Knowledge about Anemia	178
12	<b>TTTX</b> 7/A	AIDS AND SEXUALLY TRANSMITTED INFECTIONS	100
13	HIV/A 13.1	Knowledge of HIV/AIDS and Methods of HIV Prevention	
	13.1	Misconceptions about HIV Transmission and Comprehensive Knowledge	190
	13.2	of AIDS	102
	13.3	Knowledge of Prevention of Mother-to-Child Transmission of HIV	
	13.3	Discriminatory Attitudes towards People Living with HIV	
	13.4	Higher-Risk Sex	
	15.5	13.5.1 Multiple Partners and Higher-Risk Sexual Intercourse	
		13.5.2 Transactional Sex	
	13.6	Coverage of Prior HIV Testing	
	13.7	Self-Reported Sexually Transmitted Infections.	
	13.8	Prevalence of Medical Injections	
	13.9	HIV/AIDS-Related Knowledge and Behavior among Youth	
	15.7	13.9.1 HIV/AIDS-Related Knowledge among Young Adults	
		13.9.2 Age at First Sex among Youth	
		13.9.3 Abstinence and Premarital Sex	
		13.9.4 Multiple Sexual Partners and Condom Use among Young People	
		13.9.5 Recent HIV Tests among Youth	
14	ром	ESTIC VIOLENCE	211
17	14.1	Measurement of Violence	
	1	14.1.1 Use of Valid Measures of Violence	
		14.1.2 Ethical Considerations	
	14.2	Experience of Physical Violence	
	14.3	Experience of Sexual Violence	
	14.4	Experience of Different Forms of Violence	
	14.5	Violence during Pregnancy	
	14.6	Marital Control by Spouse	
	14.7	Forms of Spousal Violence	
	14.8	Spousal Violence by Background Characteristics	
	14.9	Violence by Spousal Characteristics and Women's Empowerment Indicators	
	14.10		
	14.10	Recent Spousal Violence by Any Husband	
	14.10	Recent Spousal Violence by Any Husband Onset of Spousal Violence	
			224
	14.11	Onset of Spousal Violence	224 224
	14.11 14.12	Onset of Spousal Violence Physical Consequences of Spousal Violence	224 224 225
15	14.11 14.12 14.13 14.14 <b>WOM</b>	Onset of Spousal Violence Physical Consequences of Spousal Violence Violence by Women against Their Husband Help-seeking Behavior by Women Who Experience Violence EN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH	224 224 225 227
15	14.11 14.12 14.13 14.14 WOM OUTC	Onset of Spousal Violence Physical Consequences of Spousal Violence Violence by Women against Their Husband Help-seeking Behavior by Women Who Experience Violence EN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH COMES	
15	14.11 14.12 14.13 14.14 <b>WOM</b> OUTC 15.1	Onset of Spousal Violence Physical Consequences of Spousal Violence Violence by Women against Their Husband Help-seeking Behavior by Women Who Experience Violence EN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH COMES Employment and Cash Earnings	
15	14.11 14.12 14.13 14.14 <b>WOM</b> <b>OUTC</b> 15.1 15.2	Onset of Spousal Violence Physical Consequences of Spousal Violence Violence by Women against Their Husband Help-seeking Behavior by Women Who Experience Violence EN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH COMES Employment and Cash Earnings Control Over Cash Earnings and Relative Magnitude of Women's Earnings	
15	14.11 14.12 14.13 14.14 <b>WOM</b> OUTC 15.1	Onset of Spousal Violence Physical Consequences of Spousal Violence Violence by Women against Their Husband Help-seeking Behavior by Women Who Experience Violence EN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH COMES Employment and Cash Earnings	

15.5	Attitudes toward Wife Beating	
15.6	Attitudes toward and Ability to Negotiate Safer Sex with Husbands	
15.7	Indicators of Women's Empowerment	
15.8	Contraceptive Use by Women's Status	
REFERENCES	5	
APPENDIX A	SAMPLE DESIGN	
A.1	Introduction	
A.2	Sample Frame	
A.3	Sample Design and Implementation	
A.4	Sample Probabilities and Sample Weights	
A.5	Survey Implementation	
APPENDIX B	ESTIMATES OF SAMPLING ERRORS	
APPENDIX C	DATA QUALITY TABLES	
APPENDIX D	PERSONS INVOLVED IN THE 2015-16 ARMENIA DEMOGRAPHIC	
	AND HEALTH SURVEY	
APPENDIX E	QUESTIONNAIRES	

## TABLES AND FIGURES

1	<b>INTRODUC</b> Table 1.1	FION AND SURVEY METHODOLOGY Results of the household and individual interviews	
2		HARACTERISTICS AND HOUSEHOLD POPULATION	
2			
	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 Table 2.6	Household possessions.	
		Wealth quintiles	
	Table 2.7	Hand washing	
	Table 2.8	Household population by age, sex, and residence	
	Table 2.9	Household composition	
	Table 2.10	Children's living arrangements and orphanhood	
	Table 2.11.1	Educational attainment of the female household population	
	Table 2.11.2	Educational attainment of the male household population	
	Table 2.12	School attendance ratios	
	Table 2.13	Birth registration of children under age 5	
	Table 2.14	Child discipline	
	Table 2.15	Poverty benefits	29
	Figure 2.1	Population pyramid	
	Figure 2.2	Age-specific attendance rates in the de facto population age 5-24	25
3	BACKGROU	IND CHARACTERISTICS OF RESPONDENTS	
	Table 3.1	Background characteristics of respondents	
	Table 3.2.1	Educational attainment: Women	
	Table 3.2.2	Educational attainment: Men	
	Table 3.3.1	Exposure to mass media: Women	
	Table 3.3.2	Exposure to mass media: Men	
	Table 3.4.1	Internet usage: Women	
	Table 3.4.2	Internet usage: Men	
	Table 3.5.1	Employment status: Women	
	Table 3.5.2	Employment status: Men	
	Table 3.6.1	Occupation: Women	
	Table 3.6.2	Occupation: Men	
	Table 3.7	Type of employment	
	Table 3.8	Respondent's employment abroad	45
	Figure 3.1	Employment status	41
4	MARRIAGE	AND SEXUAL ACTIVITY	47
	Table 4.1	Current marital status	
	Table 4.2	Age at first marriage	
	Table 4.3	Median age at first marriage by background characteristics	
	Table 4.4	Age at first sexual intercourse	
	Table 4.5	Median age at first sexual intercourse by background characteristics	51
	Table 4.6.1	Recent sexual activity: Women	
	Table 4.6.2	Recent sexual activity: Men	

5	FERTILITY.		55
	Table 5.1	Current fertility	56
	Table 5.2	Fertility by background characteristics	
	Table 5.3	Trends in age-specific fertility rates	
	Table 5.4	Trends in fertility	
	Table 5.5	Children ever born and living	
	Table 5.6	Birth intervals	
	Table 5.7	Postpartum amenorrhea, abstinence and insusceptibility	
	Table 5.8	Menopause	
	Table 5.9	Age at first birth	
	Table 5.10	Median age at first birth	
	Table 5.11	Teenage pregnancy and motherhood	
	Figure 5.1	Trends in age-specific fertility rates	58
6	FERTILITY	PREFERENCES	65
	Table 6.1	Fertility preferences according to number of living children	66
	Table 6.2.1	Desire to limit childbearing: Women	67
	Table 6.2.2	Desire to limit childbearing: Men	
	Table 6.3	Ideal number of children according to number of living children	
	Table 6.4	Mean ideal number of children according to background characteristics	
	Table 6.5	Fertility planning status.	
	Table 6.6	Wanted fertility rates	
	Figure 6.1	Trends in fertility desires among married women	68
7	CONTRACE	PTION	73
	Table 7.1	Knowledge of contraceptive methods	
	Table 7.2	Current use of contraception according to age	
	Table 7.3	Current use of contraception according to background characteristics	76
	Table 7.4	Trends in the current use of contraception	
	Table 7.5	Source of modern contraception methods	
	Table 7.6	Informed choice	
	Table 7.7	Twelve-month contraceptive discontinuation rates	
	Table 7.8	Reasons for discontinuation	
	Table 7.9	Knowledge of fertile period	
	Table 7.10	Need and demand for family planning among currently married women	
	Table 7.11	Future use of contraception.	
	Table 7.12.1	Exposure to family planning messages: Women	
	Table 7.12.1	Exposure to family planning messages: Momen	
	Table 7.12.2 Table 7.13	Contact of nonusers with family planning providers	
	Table 7.13	Exposure to reproductive health messages	
	Figure 7.1	Turn da in contracontivo uco amon o cumontly morniod women	70
	Figure 7.1 Figure 7.2	Trends in contraceptive use among currently married women Trends in unmet need for family planning	
8.	ABORTION.		91
0.	Table 8.1	Pregnancy outcome by background characteristics	
	Table 8.2	Lifetime experience with induced abortion	
	Table 8.3	Induced abortion rates	
	Table 8.4	Induced abortion rates by background characteristics	
	Table 8.4	Trends in age-specific abortion rates	
	Table 8.6	Use of contraception before pregnancy	
	Table 8.0	Reason for abortion	
	1 0010 0.1		77
	Figure 8.1 Figure 8.2	Trends in induced abortion by urban-rural residence, Armenia 2000-2016 Age-specific fertility rates and abortion rates, 2015-16	

	Figure 8.3	Trends in age-specific abortion rates, 2000-2016	97
9	REPRODUC	ГІVЕ НЕАLTН	101
	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	Ultrasound testing during antenatal care	
	Table 9.5	Place of delivery	
	Table 9.6	Assistance during delivery	
	Table 9.7	Caesarean section	
	Table 9.8	Access to free delivery services	
	Table 9.9	Payment for delivery of the last birth	
	Table 9.10	Timing of first postnatal checkup for the mother	
	Table 9.11	Timing of first postnatal checkup for the newborn	
	Table 9.12	Type of provider of first postnatal checkup for the newborn	
	Table 9.12	Content of postnatal care for newborns	
	Table 9.14	Problems in accessing health care	
	Table 9.15	Travel to the nearest clinic	
	14010 9.15		11/
	Figure 9.1	Mother's duration of stay in the health facility after giving birth	109
	Figure 9.2	Type of provider of postnatal care for the mother	
	Tigure 7.2	Type of provider of postilatar care for the motifer	112
10	HEALTH INS	SURANCE, USE OF TOBACCO, KNOWLEDGE AND	
10		ABOUT TUBERCULOSIS	119
	Table 10.1.1	Health insurance coverage: Women	
	Table 10.1.1 Table 10.1.2	Health insurance coverage: Men	
	Table 10.1.2 Table 10.2.1	Use of tobacco: Women	
	Table 10.2.1 Table 10.2.2	Use of tobacco: Men	
		Average number of cigarettes smoked daily: Men	
	Table 10.3		
	Table 10.4.1	Knowledge and attitudes concerning tuberculosis: Women	
	Table 10.4.2	Knowledge and attitudes concerning tuberculosis: Men	
	Table 10.5.1	Knowledge of symptoms of tuberculosis: Women	
	Table 10.5.2	Knowledge of symptoms of tuberculosis: Men	
	Table 10.6.1	Knowledge about organs that can be affected by tuberculosis: Women	
	Table 10.6.2	Knowledge about organs that can be affected by tuberculosis: Men	
	Table 10.7.1	Misconceptions about tuberculosis transmission: Women	
	Table 10.7.2	Misconceptions about tuberculosis transmission: Men	134
	Figure 10.1	Knowledge of tuberculosis	125
11	CHILD HEA	LTH	
	Table 11.1	Child's size and weight at birth	
	Table 11.2	Vaccinations by source of information	
	Table 11.2	Vaccinations by source of information Vaccinations by background characteristics	
	Table 11.4	Prevalence and treatment of symptoms of ARI	
	Table 11.4	Prevalence and treatment of fever	
	Table 11.5	Prevalence and treatment of rever	
	Table 11.6 Table 11.7		
		Feeding practices during diarrhea	
	Table 11.8	Diarrhea treatment	
	Table 11.9	Knowledge of ORS packets	
	Table 11.10	Disposal of children's stools	147/
	Figure 11.1	Trends in vaccination coverage among children 18-29 months	141

12	NUTRITION.		149
	Table 12.1	Nutritional status of children	153
	Table 12.2	Initial breastfeeding	158
	Table 12.3	Breastfeeding status according to age	159
	Table 12.4	Median duration of breastfeeding	161
	Table 12.5	Foods and liquids consumed by children in the day or night preceding the	
		interview	
	Table 12.6	Infant and young child feeding (IYCF) practices	
	Table 12.7	Presence of iodized salt in household	
	Table 12.8	Micronutrient intake among children	
	Table 12.9	Nutritional status of women	
	Table 12.10	Micronutrient intake among mothers	
	Table 12.11	Folate or multivitamins intake among mothers	
	Table 12.12	Prevalence of anemia in women	
	Table 12.13	Prevalence of anemia in children	
	Table 12.14	Knowledge of anemia	
	Table 12.15.1	Knowledge of symptoms of anemia: Women	
	Table 12.15.2	Knowledge of symptoms of anemia: Men	
	Table 12.16.1	Knowledge about what may cause anemia: Women	
	Table 12.16.2	Knowledge about what may cause anemia: Men	
	Table 12.17.1	What person can eat or drink to prevent anemia: Women	
	Table 12.17.2	What person can eat or drink to prevent anemia: Men	186
	Table 12.18	Attitudes about drinking tea or coffee during meal time in relation	
		to anemia	187
	Figure 12.1	Nutritional status of children by age	155
	Figure 12.2	Trends in nutritional status of children under age 5, 2005-2016	
	Figure 12.3	Infant feeding practices by age	160
	Figure 12.4	IYCF Indicators on breastfeeding status	161
	Figure 12.5	IYCF indicators on minimum acceptable diet	166
	Figure 12.6	Trends in nutritional status of women age 15-49	171
	Figure 12.7	Trends in anemia status among women age 15-49, 2000-2016	176
	Figure 12.8	Trends in anemia status among children age 6-59 months, 2000-2016	178
13	HIV/AIDS AN	ND SEXUALLY TRANSMITTED INFECTIONS	189
	Table 13.1	Knowledge of HIV or AIDS	
	Table 13.2	Knowledge of HIV prevention methods	
	Table 13.3	Comprehensive knowledge about HIV	193
	Table 13.4	Knowledge of prevention of mother-to-child transmission of HIV	
	Table 13.5	Discriminatory attitudes towards people living with HIV	
	Table 13.6	Multiple sexual partners and higher-risk sexual intercourse in the past	
		12 months: Men	197
	Table 13.7	Payment for sexual intercourse and condom use at last paid sexual	
		intercourse	198
	Table 13.8.1	Coverage of prior HIV testing: Women	200
	Table 13.8.2	Coverage of prior HIV testing: Men	201
	Table 13.9	Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms	203
	Table 13.10	Prevalence of medical injections	
	Table 13.11	Comprehensive knowledge about HIV among young people	
	Table 13.12	Age at first sexual intercourse among young people	
	Table 13.13	Premarital sexual intercourse among young people	
	Table 13.14	Recent HIV tests among young people	
	Figure 13.1	Women seeking advice or treatment for STIs	204
	Figure 13.2	Trends in age at first sexual intercourse.	
	Figure 13.3	Multiple sexual partners and higher-risk sex among young people	
	0		

14	DOMESTIC V	VIOLENCE	211
	Table 14.1	Experience of physical violence	214
	Table 14.2	Experience of sexual violence	215
	Table 14.3	Experience of different forms of violence	215
	Table 14.4	Experience of violence during pregnancy	
	Table 14.5	Marital control exercised by husbands	
	Table 14.6	Forms of spousal violence	
	Table 14.7	Spousal violence by background characteristics	
	Table 14.8	Spousal violence by husband's characteristics and empowerment indicators.	
	Table 14.9	Frequency of physical or sexual violence	
	Table 14.10	Experience of spousal violence by duration of marriage	
	Table 14.11	Injuries to women due to spousal violence	
	Table 14.12	Violence by women against their spouse	
	Table 14.13	Violence by women against their husband according to the husband's	
		characteristics and empowerment indicators	226
	Table 14.14	Help seeking to stop violence	
15	WOMEN'S E	MPOWERMENT AND DEMOGRAPHIC AND HEALTH	
			229
	Table 15.1	Employment and cash earnings of currently married women and men	
	Table 15.2.1	Control over women's cash earnings and relative magnitude of women's	
	10010 10.2.1	cash earnings	232
	Table 15.2.2	Control over men's cash earnings	
	Table 15.3	omen's control over their own earnings and over those of their husbands	
	Table 15.4.1	Ownership of assets: Women	
	Table 15.4.2	Ownership of assets: Men	
	Table 15.5.1	Ownership of title or deed for house: Women	
	Table 15.5.2	Ownership of title or deed for house: Men	
	Table 15.6.1	Ownership of title or deed for land: Women	
	Table 15.6.2	Ownership of title or deed for land: Men	
	Table 15.7.1	Ownership and use of bank accounts and mobile phones: Women	
	Table 15.7.2	Ownership and use of bank accounts and mobile phones: Wonen	
	Table 15.8	Participation in decision making	
	Table 15.9.1	Women's participation in decision making by background characteristics	
	Table 15.9.1 Table 15.9.2	Men's participation in decision making by background characteristics	
	Table 15.10.1	Attitude toward wife beating: Women	
	Table 15.10.1 Table 15.10.2	Attitude toward wife beating: Men	
	Table 15.11	Attitude toward whe beating. Men	
	Table 15.12	Ability to negotiate sexual relations with husband	
	Table 15.12 Table 15.13	Indicators of women's empowerment	
	Table 15.13 Table 15.14	*	
	Table 15.14 Table 15.15	Current use of contraception by women's empowerment Ideal number of children and unmet need for family planning by women's	233
	Table 15.15	empowerment	254
	Figure 15.1	Number of decisions in which currently married women participate	
	·		
APPI		AMPLE DESIGN	
	Table A.1	Households	
	Table A.2	Enumeration areas	
	Table A.3	Sample allocation of enumeration areas and households	
	Table A.4	Sample allocation of completed interviews with women and men	
	Table A.5	Sample implementation: Women	
	Table A.6	Sample implementation: Men	265

APPENDIX B	ESTIMATES OF SAMPLING ERRORS	267
Table B.1	List of selected indicators for sampling errors, Armenia 2015-16	269
Table B.2	Sampling errors: Total sample, Armenia 2015-16	270
Table B.3	Sampling errors: Urban sample, Armenia 2015-16	271
Table B.4	Sampling errors: Rural sample, Armenia 2015-16	272
Table B.5	Sampling errors: Yerevan sample, Armenia 2015-16	273
Table B.6	Sampling errors: Aragatsotn sample, Armenia 2015-16	274
Table B.7	Sampling errors: Ararat sample, Armenia 2015-16	275
Table B.8	Sampling errors: Armavir sample, Armenia 2015-16	276
Table B.9	Sampling errors: Gegharkunik sample, Armenia 2015-16	277
Table B.10	Sampling errors: Lori sample, Armenia 2015-16	278
Table B.11	Sampling errors: Kotayk sample, Armenia 2015-16	279
Table B.12	Sampling errors: Shirak sample, Armenia 2015-16	280
Table B.13	Sampling errors: Syunik sample, Armenia 2015-16	
Table B.14	Sampling errors: Vayots Dzor sample, Armenia 2015-16	282
Table B.15	Sampling errors: Tavush sample, Armenia 2015-16	283
APPENDIX C	DATA QUALITY TABLES	285
Table C.1	Household age distribution	285
Table C.2.1	Age distribution of eligible and interviewed women	
Table C.2.2		
Table C.3	Completeness of reporting	287
Table C.4	Births by calendar years	287
Table C.5	Reporting of age at death in days	288
Table C.6	Reporting of age at death in months	288
Table C.7	Nutritional status of children based on the NCHS/CDC/WHO	
	International Reference Population	289
Table C.8	Vaccinations by background characteristics for children age 18-29 months	

### PREFACE

The 2015-16 Armenia Demographic and Health Survey (2015-16 ADHS) is a nationally representative sample survey designed to provide information on population and health issues in Armenia. The ADHS was conducted by the National Statistical Service (NSS) and the Ministry of Health (MOH) of the Republic of Armenia from December 8, 2015, through April 5, 2016. ICF provided technical support for the survey through The DHS Program. The DHS Program is funded by the United States Agency for International Development (USAID) to assist countries worldwide in obtaining information on key population and health indicators. USAID/Armenia provided funding for the survey. The United Nations Children's Fund (UNICEF)/Armenia, United Nations Population Fund (UNFPA)/Armenia, and Joint United Nations Program on HIV/AIDS (UNAIDS)/Armenia supported the survey through in-kind contributions.

The primary objective of the 2015-16 ADHS project is to provide up-to-date estimates of key demographic and health indicators. Specifically, the ADHS collected information on fertility and abortion levels, marriage, fertility preferences, awareness and use of family planning methods, breastfeeding practices, nutrition, maternal and child health, childhood mortality, domestic violence against women, child discipline, awareness and behavior regarding HIV/AIDS and other sexually transmitted infections (STIs), and other health-related issues such as smoking, tuberculosis, and anemia. The 2015-16 ADHS is a follow-up survey to the 2000, 2005, and 2010 ADHS surveys and provides updated estimates of key demographic and health indicators.

The 2015-16 ADHS results are intended to provide the information needed to evaluate existing social programs and to design new strategies for improving health and health services for the people of Armenia. They also contribute to the international database on demographic and health-related indicators.

## ACKNOWLEDGMENTS

The National Statistical Service of the Republic of Armenia and the Ministry of Health of the Republic of Armenia wish to express their appreciation to those involved in the implementation of the 2015-16 Armenia Demographic and Health Survey (2015-16 ADHS) and the preparation of this report.

Particular thanks go to:

- U.S. Agency for International Development (USAID/Armenia), for providing the funding for organizing and conducting the 2015-16 ADHS.
- ICF for providing technical support, training of fieldwork staff, consultations, recommendations, and analyses of the data collected.
- United Nations Children's Fund (UNICEF)/Armenia, Joint United Nations Program on HIV/AIDS (UNAIDS)/Armenia, and United Nations Population Fund (UNFPA)/Armenia for providing technical, financial, and administrative support.
- The technical staff of the ADHS, the input of field staff and data quality teams, and the valuable contribution of all experts and organizations, whose joint efforts ensured the effective implementation of the survey.
- Finally, to 7,893 households, 6,116 women, and 2,755 men, whose honest participation made it possible to obtain the reliable information collected in the 2015-16 ADHS.

Mr. Gagik Gevorgyan National Director, ADHS Member of the State Council on Statistics of RA

Mr. Sergey Khachatryan National Director for Medical Affairs, ADHS Deputy Minister of Health

### MILLENNIUM DEVELOPMENT GOAL INDICATORS

			Value	
Goa	Is and Indicators	Male	Female	Total
1.	Eradicate extreme poverty and hunger 1.8 Prevalence of underweight children under age 5 <sup>1</sup>	3.2	2.0	2.6
2.	Achieve universal primary education 2.1 Net enrollment ratio in primary education <sup>2</sup>	98.1	97.2	97.7
3.	<ul> <li>Promote gender equality and empower women</li> <li>3.1a Ratio of girls to boys in primary education<sup>3</sup></li> <li>3.1b Ratio of girls to boys in secondary education<sup>3</sup></li> <li>3.1c Ratio of girls to boys in tertiary education<sup>3</sup></li> </ul>	na na na	na na na	0.99 1.29 1.31
4.	Reduce child mortality 4.3 Proportion of 1-year-old children immunized against measles <sup>4</sup>	94.2	91.3	92.8
5.	Improve maternal health         5.2       Proportion of births attended by skilled health personnel <sup>5</sup> 5.3       Contraceptive prevalence rate <sup>6</sup> 5.4       Adolescent birth rate <sup>7</sup> 5.5a       Antenatal care coverage: at least one visit by skilled health professional         5.5b       Antenatal care coverage: at least four visits by any provider         5.6       Unmet need for family planning	na na na na na	na 57.1 24 99.6 96.0 12.5	99.8 na na na na
6.	<ul> <li>Combat HIV/AIDS, malaria and other diseases</li> <li>6.2 Condom use at last high-risk sex: youth age 15-24<sup>8</sup></li> <li>6.3 Percentage of population age 15-24 with comprehensive knowledge of HIV/AIDS<sup>9</sup></li> </ul>	86.3ª 12.5ª	0.0 20.2	43.1 <sup>b</sup> 16.4 <sup>b</sup>
7.	Ensure environmental sustainability	Urban	Rural	Total
	<ul> <li>7.8 Percentage of population using an improved drinking water source<sup>10</sup></li> <li>7.9 Percentage of population with access to improved sanitation<sup>11</sup></li> </ul>	98.9 96.1	97.0 48.6	98.1 76.6

na = Not applicable

<sup>1</sup> Proportion of children age 0-59 months who are below -2 standard deviations (SD) from the median of the WHO Child Growth Standards in weight-for-age

<sup>2</sup> Based on reported attendance, not enrollment

<sup>3</sup> Based on reported net attendance, not gross enrollment, among 6-9-year-olds for primary, 10-17-year-olds for secondary, 18-24year-olds for tertiary education

<sup>4</sup> In Armenia, the measles vaccinations are given at the age of 12 months. The values presented in the table are for children age 24-35 months who have been vaccinated at any time before the survey against measles. <sup>5</sup> Among births in the 5-year period before the survey <sup>6</sup> Use of any contraceptive method among married or in-union women age 15-49

<sup>7</sup> Age-specific fertility rates for women age 15-19 corresponding to the 3-year period before the survey

<sup>8</sup> High-risk sex is defined as sexual intercourse with a non-marital, non-cohabiting partner. It is expressed as a percentage of men

<sup>9</sup> A person is considered to have comprehensive knowledge about HIV/AIDS when s/he knows that consistent use of a condom during sexual intercourse and having just one HIV-negative and faithful partner can reduce the chances of getting HIV, knows that a healthy-looking person can have HIV, and rejects the two most common misconceptions about HIV, i.e., that HIV can be transmitted by mosquito bites and that a person can get HIV by kissing someone who has HIV.

<sup>10</sup> Percentage of de-jure population whose main source of drinking water is a household connection (piped), public standpipe, borehole, protected dug well or spring, or rainwater collection

<sup>11</sup> Percentage of de-jure population with access to flush toilet, ventilated improved pit latrine, traditional pit latrine with a slab, or composting toilet and does not share its facility with other households

<sup>a</sup> Restricted to men in sub-sample of households selected for the male interview
 <sup>b</sup> The total is calculated as the simple arithmetic mean of the percentages in the columns for male and females

### SUSTAINABLE DEVELOPMENT GOAL INDICATORS

#### Sustainable Development Goal Indicators

Armenia 2015-16

		_		ex		
ndi	cator		Male	Female	Total	
	Zero hu	Inger				
	2.2.1	Prevalence of stunting among children under 5 years of age	10.9	7.8	9.4	
	2.2.2	Prevalence of malnutrition among children under 5 years of age	18.1	17.7	17.8	
		a) Prevalence of wasting among children under 5 years of age	3.6	5	4.2	
		b) Prevalence of overweight among children under 5 years of age	14.5	12.7	13.6	
	Good h	ealth and well-being				
	3.1.2	Proportion of births attended by skilled health personnel	na	na	99.8	
	3.7.1	Proportion of women of reproductive age (aged 15-49 years) who have their need for family	na	40.2	na	
	0	planning satisfied with modern methods				
	3.7.2	Adolescent birth rates per 1,000 women				
	5.7.2	a) Girls aged 10-14 years <sup>1</sup>	na	na	na	
		b) Women aged 15-19 years <sup>2</sup>	na	24	na	
	3.a.1	Age-standardized prevalence of current tobacco use among persons aged 15 years and older <sup>3</sup>	61.4	1.2	31.3ª	
	3.b.1	Proportion of the target population covered by all vaccines included in their national	88.0	84.7	86.4	
	3.0.1	programme <sup>4</sup>	00.0	04.7	00.4	
		programme				
	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 <sup>5.6</sup>				
		a) Physical violence	na	3.5	na	
		b) Sexual violence	na	0.3	na	
		c) Psychological violence	na	na	na	
	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	0.0	na	
		b) before age 18	na	5.3	na	
	5.b.1	Proportion of individuals who own a mobile telephone <sup>7</sup>	98.8	96.7	97.8ª	
		-	Resi	dence		
	Clean v	vater and sanitation	Urban	Rural	Total	
	6.1.1	Proportion of the population using safely managed drinking water services <sup>8</sup>	98.9	97	98.1	
	6.2.1	Proportion of population using safely managed sanitation services, including a handwashing	96.1	48.6	76.6	
		facility with soap and water <sup>9</sup>				
	Afforda	ble clean energy				
•	7.1.1	Proportion of population with access to electricity <sup>10</sup>	100.0	100.0	100.0	
	7.1.2	Proportion of population with primary reliance on clean fuels and technology <sup>11</sup>	99.7	92.0	96.9	
	1.1.2		55.7	52.0	50.5	
				Sex		
		work and economic growth	Male	Female	Total	
	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 <sup>7</sup>	20.7	19.3	20.0ª	
<b>3</b> .	Peace.	justice, and strong institutions				
	16.2.1	Percentage of children aged 1-17 years who experienced any physical punishment and/or	70.8	66.8	68.9	
		psychological aggression by caregivers in the past month <sup>12</sup>				
	16.9.1	Proportion of children under 5 years of age whose births have been registered with a civil	98.9	98.5	98.7	
		authority				
7.	Partner	ships for the goals				
	17.8.1		88.9	85.3	87.1ª	
	17.0.1	י יטאטינוטר טי וויטואטעמוס עסוויץ נווכ ווונכוווכנ	00.9	00.0	07.1	

na = Not applicable <sup>1</sup> 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 <sup>2</sup> 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 15-10

age 15-19 <sup>3</sup>Data are not age-standardized and are available for women and men age 15-49 only.

<sup>4</sup> Data are presented for children age 12-23 months who received all vaccinations appropriate for their age that are included in the national program: BCG, hepatitis B (birth dose), three doses of DPT-HEPB-HIB, three doses of oral polio vaccine, and two doses of rotavirus vaccine (excluding the recently <sup>5</sup>Data are available for women age 15-49 who have ever been in union only.

 <sup>6</sup> In the DHS, psychological violence is termed emotional violence.
 <sup>7</sup> Data are available for women and men age 15-49 who have used the internet in the past 12 months.
 <sup>8</sup> Measured as the percentage of population using an improved water source: the percentage of de jure population whose main source of drinking water is a <sup>6</sup> Measured as the percentage of population using an improved water source, the percentage of using bottled using an improved source in percentage of using population (piped), public tap or standpipe, tubewell or boreholds, protected dug well, protected spring, or rainwater collection. Households using bottled water for drinking are classified as using an improved or unimproved source according to their water source for cooking and handwashing.
 <sup>9</sup> Measured as the percentage of population using an improved or unimproved source according to their water source for cooking and handwashing.
 <sup>9</sup> Measured as the percentage of population using an improved source according to their water source for cooking and handwashing.
 <sup>10</sup> Measured as the percentage of households with access to electricity.
 <sup>11</sup> Measured as the percentage of thouseholds with access to electricity.

<sup>11</sup> Measured as the percentage of the households using clean fuel for cooking.

<sup>12</sup> Data are available for children age 1-14 only.

<sup>a</sup> The total is calculated as the simple arithmetic mean of the percentages in the columns for males and females

## ARMENIA



The 2015-16 Armenia Demographic and Health Survey (ADHS) was implemented by the National Statistical Service (NSS) and Ministry of Health (MOH) of the Republic of Armenia. Data collection took place from 8 December 2015 to 5 April 2016. ICF provided technical assistance through The DHS Program, which is funded by the United States Agency for International Development (USAID) and offers support and technical assistance for population and health surveys in countries worldwide. Other agencies and organizations that facilitated the successful implementation of the survey through technical or financial support were the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA), and the Joint United Nations Programme on HIV/AIDS (UNAIDS).

#### 1.1 GEOGRAPHY AND POPULATION

#### 1.1.1 Geography

The Republic of Armenia (RA) is situated in the western part of Asia and occupies the northeastern part of the Armenian plateau between the Caucasus and Nearest Asia (the inter-river territory between the middle flows of the rivers Kur and Araxes). The country borders with Georgia in the north, with Azerbaijan in the east, with Iran in the south, and with Turkey in the west and southwest. The area of the country is 29,743 square km, 68.8 percent of which is agricultural, 11.2 percent is forest, 11.3 percent is protected territory, and 8.7 percent is other types of land. The highest elevation in the country is the peak of Mt. Aragats (4,090 m), the lowest point is the underflow region of the Debed River (375 m). The largest lake is Lake Sevan, which is located 1,900 m above sea level. The surface of the lake is 1,276 square km. The longest rivers are the Araxes (192 km in the territory of RA, with a total length of 1,072 km) and the Akhuryan (186 km). The climate in Armenia is dry and continental, with cold winters and hot summers. The country is subdivided into 10 regions (marz), and the capital city of Yerevan (NSS 2016a).

#### 1.1.2 Population

The First National Population Census of the Republic of Armenia after independence took place from 10-19 October 2001. As of 10 October 2001, the de facto population number in Armenia was 3,002,594 and the de jure population was 3,213,011 (NSS 2013).

The most recent census prior to ADHS 2015-16 was conducted from 12-21 October 2011. According to the 2011 Census results, the de facto population in Armenia was 2,871,771 and the de jure population was 3,018,854 (NSS 2013).

The de jure population of RA as of 1 April 2016, is 2,994,400, with 1,904,700 urban and 1,089,700 rural (NSS 2016b). More than half of the urban population (1,073,400) was living in the capital city, Yerevan. Men and women comprised 47.7 percent and 52.3 percent, respectively, of the permanent population in Armenia in 2016. The average age of the population was 36.1; it was 34.2 for men and 37.8 for women (NSS 2016d). As of early 2016, 20.8 percent of the permanent population was age 15 or younger, 66.3 percent was age 16-62, and 12.9 percent was age 63 or older.

One of the existing problems of the demographic distribution is the ageing of the population, a process that greatly accelerated in Armenia during the post-Soviet period. Population ageing or demographic ageing is the result of long-lasting demographic changes, mainly changes in population reproduction, fertility, mortality, and their correlates and also partially the result of migration as well. By the demographic ageing scale set by the UN, if the share of the population age 65 is more than 7 percent, then this population is considered to be ageing. In early 2016, the share of the RA population age 65 and older was 11.0 percent.

#### 1.2 SYSTEMS FOR COLLECTING DEMOGRAPHIC AND HEALTH DATA

The National Statistical Service (NSS) of RA is responsible for conducting a nationwide census every 10 years and for providing information about the current population using data from the national registration system. The 2001 census results were published during 2002-2004, and the 2011 census results during 2012-2014. Data on births, deaths, marriages, and divorces are provided by the Civil Status Acts Registration offices of the Ministry of Justice. Administrative data on internal and external migration of the population are provided by the Passport and Visa Department of RA police, and are based on the data from an electronic database, which is, in turn, based on the administrative records of registration of residency. The NSS handles statistical processing and analysis of the obtained administrative data, and publishes the preliminary data in the monthly report "Socio-Economic Situation of RA," while final data by specific characteristics are published in a number of different annual reports of RA, including "The Demographic Handbook of Armenia," "Men and Women in Armenia," "Statistical Yearbook," and others, all are available at the official website of the NSS of RA.

Data on health are collected by the Ministry of Health through administrative statistical reporting forms filled in and provided by the health facilities. The collected information is then passed to the NSS. The NSS compiles and analyzes the data for the country level and publishes monthly, quarterly and annual reports and various publications. Based on compiled health data, the Ministry of Health publishes annual and quarterly thematic reports, such as "Health Indicators of the Population and Efficiency of Healthcare Resources in Armenia." The country statistics are available at the World Health Organization (WHO) website through the Global Health Observatory, the WHO's gateway to health-related statistics for its member states.

#### 1.3 HEALTH CARE SYSTEM UPDATES IN ARMENIA

#### Principles of health care policy

Soon after regaining its independence Armenia began to reform the health care system. The country has recognized health and health care as a fundamental human right over the past 2 decades, and a number of major reforms have been carried out. These include decentralizing management and organizational structure, privatizing a number of health facilities, centralizing public financing activities, strengthening primary health care (PHC), and reforming the public health care system.

The need for continuous reform to the health care system is conditioned by the new health challenges emerging both in the world and in Armenia. In particular, the balance between communicable and non-communicable diseases (NCDs) has changed, and NCDs are now the primary cause of mortality.

The main directions of development in the health care system in Armenia arise from the provisions of the Actions Plan of RA Government and the comprehensive policy of "Health 2020," adopted by the World Health Organization (WHO-EURO 2013). They are directed towards:

- Ensuring universal health care coverage, that is, maximum access to health care and services for all the population groups
- Maintaining and improving public health
- Increasing the efficiency of management in the health care system
- Maintaining the principle of social justice and equality, and formation of a stable and "peoplecentered" health care system

The improvement of the quality of medical services is one of the key issues among current health care system priorities. According to the requirements of RA Government Protocol Decision  $N_{2}$  40 "On the Concept of Health Care Service Quality Assessment and Approval of the List of Activities for Realization of the Concept" (14 October 2010), and in order to improve the quality of health care and services in the primary health care circle, a complex package of quality ensuring practical measures (methods, procedures,

registration-reporting forms) has been put into use in 139 large health facilities throughout all the regions and the capital city of Yerevan.

In Armenia health care services are provided in the outpatient (ambulatory) and inpatient (specialized) levels. Inpatient health care is provided at multiprofile, monoprofile, or specialized hospitals (including maternity homes and children's hospitals). Outpatient health care is provided by urban polyclinics, health centers, rural ambulatory facilities, and feldsher-accoucher posts. At present there are 85 urban polyclinics, 255 rural ambulatory facilities and health centers, and 617 feldsher-accoucher posts in Armenia.

#### Maternal and Child Health

Armenia, as a member of the United Nations, has made the well-being and health of the mother and child a priority at the national level. This emphasis is reflected in the strategic documents of the RA government, particularly those of the Ministry of Health. They are the following:

- The strategic program of prospective development for 2014-2025 of RA (GoA 2014a)
- The national policy on the improvement of reproductive health and the implementation of an action plan for 2016-2020 (GoA 2016a)
- The national policy on the improvement of child and adolescent health and the implementation of an action plan for 2015-2020 (GoA 2016b)
- The concept of improvement of child nutrition and the implementation of an action plan for 2015-2020 (GoA 2014b)
- The national breastfeeding promotion program and the implementation of an action plan for 2016-2020
- The national program on immunization for 2016-2020

These documents reflect the current status of reproductive, maternal, and child health care issues in the country. They define the policies and goals aimed at improving women's and children's health and nutrition, and at reducing maternal and child mortality.

Within the framework of the above mentioned policies and programs, the activities aimed at the protection of maternal and child health are considered as priorities of the Ministry of Health.

Free delivery care vouchers and state certificates for free child health care have been in use since their respective introductions in 2008 and 2011. Additional financial contributions within these programs resulted in a three-to-four-fold rise in the wages of health workers, which significantly contributed to truly free and affordable delivery services for the population.

#### Financing of the Health Care System

Historically, the state budget was the primary financing source of the health care system. Currently, the health care system is financed by both local and international sources. The main local sources are the state budget and out-of-pocket payment. The international financing sources are generally in the form of humanitarian aid and special grants for the implementation of international projects. Grants received from abroad and from international organizations are mainly directed to the implementation of projects aimed at HIV/AIDS prevention, improvement of immunization coverage, and improvements in reproductive, maternal, and child health.

The state budget is still the main source of financing. The funding for health care is determined as the final state budget is prepared. Budget allocations to health facilities are administered by the Ministry of Health on a contract basis, according to the principles of a limited budget. The primary health care (PHC) budget is financed according to per capita financing, whereas hospital-level facilities are financed according to the cost of each hospital case presented for reimbursement. The financing for medicine, medical equipment, and other health programs is also organized on a contract basis. State expenditures on the health

care system are not sufficient to support the system and therefore do not meet the health needs of the population. Furthermore, the use of the given financial resources is not efficient.

Taking into account the low level of state expenditures on the health care system, the RA government increases financing each year. Serious steps have been taken to reform the structure of the financing system. These have aimed at reducing non-official payment and introducing objective criteria for reimbursement.

One valuable future program will be the introduction of compulsory health (medical) insurance, which is considered a way to add financial resources to the health care system, make health care more affordable for the population, promote principles of social justice, and increase the purposeful use of resources and the efficiency of medical services.

#### Family planning policies

Good reproductive health forms the basis of every family, the entire society, and the well-being and prosperity of a country. The status of reproductive health guarantees stable economic and social development. Investments in this sector are viewed as investments in the future. Family planning is the key component of reproductive health. The state and society must create proper conditions and take appropriate measures to ensure the birth of healthy children, to provide the prerequisites for education of the growing generation, and to support the reproduction of the population.

Family planning has a broad impact on sexual and reproductive health, because it enables women to exercise their right of choice and to control their fertility. It reduces maternal and fetal morbidity and mortality, and lowers the transmission of sexually transmitted infections, including HIV. Family planning increases gender equality and gives opportunities for women to get an education, find a job, and fully engage in society.

At present, according to Armenian law, induced abortions are permitted only in the first trimester of the pregnancy, a 12-week period (GoA 2004). In the case of medical or social indications, induced abortions may be done up to 22 weeks of gestation.

Contraceptives once were provided free, and the services necessary for their prescription were charged to patients. In 2006, gynecological services were included among those services provided at no cost, in accord with the government's principle of guaranteed, free primary health care.

Because of the high concentration of estrogens in the early contraceptive pills and the frequency of serious complications, the Ministry of Health of the Soviet Union forbade their use and dissemination in 1974 under the "Side Effects and Complications of Oral Contraceptives" order. Today, the concentration of estrogens in the contraceptive pills of the new generation has been reduced, providing safety of use and medical efficiency. The use of modern contraceptive methods, including pills, has been permitted by the RA, as a part of the legislation on reproductive health and reproductive rights" (National Assembly of RA 2002). For the first time in 2015 some funds were allocated from within the state budget (National Assembly of RA 2014) for the purchase of modern contraceptive methods and for the dissemination of these methods among couples in socially insecure families.

#### 1.4 OBJECTIVES AND ORGANIZATION OF THE SURVEY

The 2015-16 Armenia Demographic and Health Survey (2015-16 ADHS) is the fourth in a series of nationally representative sample surveys designed to provide information on population and health issues. It is conducted in Armenia under the worldwide Demographic and Health Surveys program. Specifically, the objective of the 2015-16 ADHS is to provide current and reliable information on fertility and abortion levels, marriage, sexual activity, fertility preferences, awareness and use of family planning methods, breastfeeding practices, nutritional status of young children, childhood mortality, maternal and child health, domestic

violence against women, child discipline, awareness and behavior regarding AIDS and other sexually transmitted infections (STIs), and other health-related issues such as smoking, tuberculosis, and anemia. The survey obtained detailed information on these issues from women of reproductive age and, for certain topics, from men as well.

The 2015-16 ADHS results are intended to provide information needed to evaluate existing social programs and to design new strategies to improve the health of and health services for the people of Armenia. Data are presented by region (marz) wherever sample size permits. The information collected in the 2015-16 ADHS will provide updated estimates of basic demographic and health indicators covered in the 2000, 2005, and 2010 surveys.

The long-term objective of the survey includes strengthening the technical capacity of major government institutions, including the NSS. The 2015-16 ADHS also provides comparable data for long-term trend analysis because the 2000, 2005, 2010, and 2015-16 surveys were implemented by the same organization and used similar data collection procedures. It also adds to the international database of demographic and health–related information for research purposes.

#### 1.5 SAMPLE DESIGN AND IMPLEMENTATION

The sample was designed to produce representative estimates of key indicators at the national level, for Yerevan, and for total urban and total rural areas separately. Many indicators can also be estimated at the regional (marz) level.

The sampling frame used for the 2015-16 ADHS is the Armenia Population and Housing Census, which was conducted in Armenia in 2011 (APHC 2011). The sampling frame is a complete list of enumeration areas (EAs) covering the whole country, a total number of 11,571 EAs, provided by the National Statistical Service (NSS) of Armenia, the implementing agency for the 2015-16 ADHS. This EA frame was created from the census data base by summarizing the households down to EA level. A representative probability sample of 8,749 households was selected for the 2015-16 ADHS sample. The sample was selected in two stages. In the first stage, 313 clusters (192 in urban areas and 121 in rural areas) were selected from a list of EAs in the sampling frame. In the second stage, a complete listing of households was carried out in each selected cluster. Households were then systematically selected for participation in the survey. Appendix A provides additional information on the sample design of the 2015-16 Armenia DHS. Because of the approximately equal sample size in each marz, the sample is not self-weighting at the national level, and weighting factors have been calculated, added to the data file, and applied so that results are representative at the national level.

All women age 15-49 who were either permanent residents of the households in the 2015-16 ADHS sample or visitors present in the household on the night before the survey were eligible to be interviewed. Interviews were completed with 6,116 women. In addition, in a subsample of one-half of all households selected for the survey, all men age 15-49 were eligible to be interviewed if they were either permanent residents or visitors present in the household on the night before the survey. Interviews were completed with 2,755 men.

Anemia testing was performed in each household among eligible women age 15-49 who consented. With the parent's or guardian's consent, children age 6-59 months were also tested for anemia in each household. Height and weight information was collected from eligible women age 15-49 and children age 0-59 months in all households. In addition, a subsample of one eligible woman in each household was randomly selected to be asked additional questions about domestic violence.

#### **1.6 QUESTIONNAIRES**

Five questionnaires were used for the 2015-16 ADHS: the Household Questionnaire, the Woman's Questionnaire, the Biomarker Questionnaire, and the Fieldworker 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 Armenia. Input was solicited from various stakeholders representing government ministries and agencies, nongovernmental organizations, and international donors. After all questionnaires were finalized in English, they were translated into Armenian. They were pretested in September-October 2015.

The Household Questionnaire was used to list all usual members of and visitors to the selected households and to collect information on the socioeconomic status of the household. The first part of the questionnaire collected, for each household member or visitor, information on age, sex, educational attainment, and relationship to the head of household. This information provided basic demographic data for Armenian households. It also was used to identify the women and men who were eligible for an individual interview (that is, women and men age 15-49). In the second part of the Household Questionnaire, there were questions on housing characteristics (for example, the flooring material, the source of water, and the type of toilet facilities), on ownership of a variety of consumer goods, and on other aspects of the socioeconomic status of the household. In addition, the Household Questionnaire was used to obtain information on each child's birth registration, collect information about child discipline from one randomly selected child age 1-14 per household, and identify women age 15-49 and children under age 5 who were eligible for height and weight measurements and hemoglobin testing.

The Woman's Questionnaire obtained information from women age 15-49 on the following topics:

- Background characteristics
- Pregnancy history, reasons for any abortions, and child mortality
- Knowledge, attitudes, and use of contraception
- Antenatal, delivery, and postnatal care
- Vaccinations of children under age 3
- Episodes of diarrhea and respiratory illness of children under age 5
- Breastfeeding and weaning practices
- Marriage and recent sexual activity
- Fertility preferences
- Knowledge of and attitudes toward AIDS and other sexually transmitted diseases
- Woman's work and husband's background characteristics
- Domestic violence
- Knowledge, attitudes, and behavior related to other health issues (for example, tuberculosis, anemia, and smoking)

The Man's Questionnaire was administered to all men age 15-49 in the subsample of households selected for the male survey (every second household). The Man's Questionnaire collected much of the same information as the Woman's Questionnaire, but was shorter because it did not contain a detailed reproductive history or questions about child health or domestic violence.

In addition, the Biomarker Questionnaire was used to record the results of the informed consent procedures, as well as the anthropometry measurements and hemoglobin testing results, for consenting respondents.

For the first time, the Fieldworker Questionnaire was used in the ADHS. This questionnaire was created to serve as a tool in conducting analyses of data quality. The questionnaire was distributed and collected by the NSS after final selection of fieldworkers was done and before fieldworkers entered the field. Fieldworkers filled out a 2-page self-administered questionnaire on their general background characteristics.

#### 1.7 ANTHROPOMETRY AND ANEMIA TESTING

The 2015-16 ADHS incorporated two biomarkers: anthropometry and anemia testing. Data related to the coverage of the biomarker component, the anthropometric measures, and the result of the anemia

testing was directly recorded in the Biomarker Questionnaire. The protocol for anemia testing was reviewed and approved by the National Center for AIDS Prevention of the Ministry of Health and the Institutional Review Board of ICF.

#### Anthropometry

In all households, height and weight measurements were recorded for children age 0-59 months and women age 15-49 years. Weight measurements were obtained using lightweight, electronic Seca scales with a digital screen and the mother/child function. Height measurements were carried out with measuring boards provided by UNICEF<sup>1</sup>. Children younger than age 24 months were measured lying down (recumbent) on the board, while standing height was measured for older children.

#### Anemia Testing

Blood specimens were collected for anemia testing from all children age 6-59 months and all women age 15-49 years who voluntarily consented to the testing. Blood samples consisted of a drop of blood taken from a finger prick (or a heel prick, for young children with small fingers) and collected in a microcuvette. Hemoglobin analysis was carried out on site using a battery-operated portable HemoCue® analyzer, which produces a result in less than one minute. Results were given verbally and in writing. Parents of children with a hemoglobin level below 7 g/dl were instructed to take the child to a health facility for follow-up care. Likewise, nonpregnant women and pregnant women were referred for follow-up care if their hemoglobin level was below 7 g/dl and 9 g/dl, respectively. All households in which anthropometry and/or anemia testing was conducted were given a brochure explaining the causes and prevention of anemia.

#### 1.8 PRETEST

Eleven women and four men participated in a training to pretest the ADHS survey questionnaires over a three-week period from September 16 through October 7, 2015. Twelve days of classroom training was provided. The training was led in Armenian by the in-country ADHS core team and was supported by The DHS Program staff. Senior subject specialists from the MOH attended the sessions to provide technical background on different topics included in the questionnaires.

In addition, seven women were recruited as health investigators for the pretest. Classroom training for these women was conducted at the National Institute of Health (NIH) from 22-30 September 2015. Biomarker training was led by staff from the DHS Program and the NIH. Before going for the field practice, to make sure that the health investigators had enough practical experience to measure women and children, a standardization exercise was organized in the classroom.

<sup>&</sup>lt;sup>1</sup> Portable baby/child/adult length-height measuring board, UNICEF supply catalogue number S0114540.

The pretest fieldwork was conducted on 1-7 October 2015. A total of 87 interviews with households were completed, as well as 81 interviews of women and 24 interviews of men. All interviews were conducted in Armenian. Approximately 77 women and 55 children were measured and tested for anemia after obtaining informed consent. Following the pretest fieldwork, a debriefing session was held with the pretest field staff, and modifications to the questionnaires were made based on lessons drawn from the exercise.

#### 1.9 TRAINING OF FIELD STAFF

The main survey training, which was conducted by NSS, MOH, and the DHS Program staff, was held during a 3-week period in November and was attended by all supervisors, field editors, interviewers, and quality control personnel, a total of 104 people (85 women and 19 men). The training included lectures, demonstrations, practice interviews in small groups, and examinations. All field staff received training in anthropometric measurement and participated in 2 days of field practice.

Health investigators were trained separately. Fifteen health investigators (13 women, 2 men) attended the training; all of them were skilled health professionals. The classroom training of the health investigators was conducted at the National Institute of Health (NIH). The biomarker portion of the training was conducted by the NIH/MOH and the DHS Program staff and included classroom instruction focusing on anthropometry measurements, anemia testing, and recording of biomarker information in the Biomarker Questionnaire. The training was divided into three sessions following the DHS biomarker curriculum: classroom training on anthropometry and anemia, in-class standardization of tests and practice sessions, and field practice with interviewers.

#### 1.10 Fieldwork and Data Processing

Thirteen teams collected the survey data; each team consisted of four female interviewers, a male interviewer, a field editor, a health investigator, and a team supervisor. Fieldwork started on 8 December 2015 in most regions and stopped from 31 December 2015 until 7 January 2016 for the New Year and Orthodox Christmas holidays. Fieldwork resumed on 8 January 2016, and was completed by 5 April 2016.

Fieldwork monitoring was an integral part of the ADHS. Senior ADHS technical staff from NSS and NIH visited teams regularly to review the work and monitor data quality. Representatives from The DHS Program and USAID/Armenia also visited teams to monitor data collection and to observe the anemia testing and height and weight measurements of women and children under age 5.

The processing of the 2015-16 ADHS data began shortly after fieldwork commenced. All completed questionnaires were edited immediately by field editors while still in the field and checked by the supervisors before being dispatched to the data processing center at the NSS central office in Yerevan. These completed questionnaires were edited and entered by 15 data processing personnel specially trained for this task. All data were entered twice for 100 percent verification. Data were entered using the CSPro computer package. The concurrent processing of the data was an advantage because the senior ADHS technical staff were able to advise field teams of problems detected during the data entry. In particular, tables were generated to check various data quality parameters. Moreover, the double entry of data enabled easy comparison and identification of errors and inconsistencies. As a result, specific feedback was given to the teams to improve performance. The data entry and editing phase of the survey was completed in June 2016.

#### 1.11 RESPONSE RATES

Table 1.1 shows response rates for the 2015-16 ADHS. A total of 8,749 households were selected in the sample, of which 8,205 were occupied at the time of the fieldwork. The main reason for the difference is that some of the dwelling units that were occupied during the household listing operation were either vacant or the household was away for an extended period at the time of interviewing. The number of occupied households successfully interviewed was 7,893, yielding a household response rate in urban areas (96 percent) was nearly the same as in rural areas (97 percent).

In these households, a total of 6,251 eligible women were identified; interviews were completed with 6,116 of these women, yielding

#### Table 1.1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Armenia 2015-16  $\,$ 

	Resi		
Result	Urban	Rural	Total
Household interviews			
Households selected	5,369	3,380	8,749
Households occupied	5,017	3,188	8,205
Households interviewed	4,806	3,087	7,893
Household response rate <sup>1</sup>	95.8	96.8	96.2
Interviews with women age 15-49			
Number of eligible women	3,631	2,620	6,251
Number of eligible women interviewed	3,545	2,571	6,116
Eligible women response rate <sup>2</sup>	97.6	98.1	97.8
Interviews with men age 15-49			
Number of eligible men	1,587	1,269	2,856
Number of eligible men interviewed	1,522	1,233	2,755
Eligible men response rate <sup>2</sup>	95.9	97.2	96.5

a response rate of 98 percent. In one-half of the households, a total of 2,856 eligible men were identified, and interviews were completed with 2,755 of these men, yielding a response rate of 97 percent. Among men, response rates are slightly lower in urban areas (96 percent) than in rural areas (97 percent), whereas rates for women are the same in urban and in rural areas (98 percent).

The 2015-16 ADHS achieved a slightly higher response rate for households than the 2010 ADHS (NSS 2012). The increase is only notable for urban households (96 percent in 2015-16 compared with 94 percent in 2010). Response rates in all other categories are very close to what they were in 2010.

#### **Key Findings**

- The average household has 3.5 members.
- All households have electricity.
- A majority of households (77 percent) use improved, not shared sanitation facilities.
- Nearly all households (98 percent) obtain drinking water from an improved source.
- Almost all households (97 percent) have soap and water available at the place that household members use for handwashing.
- Most dwellings have some type of flooring, mostly parquet or polished wood, or wood/planks.
- More than 9 in 10 households use gas for cooking and have a specific place for cooking inside the house. Natural gas is the most common fuel used for cooking in both urban and rural households (92 percent and 70 percent, respectively).
- Eight percent of rural households use solid fuels for cooking versus less than 1 percent of urban households.
- Virtually all Armenian households have a television, 97 percent have a refrigerator, and 93 percent have a washing machine. Most households also have a mobile telephone (96 percent).
- Possession of a computer has increased from 29 percent of households in 2010 to 69 percent in 2015-16. Ownership among rural households has been especially rapid, increasing from 12 percent in 2010 to 62 percent in 2015-16.
- The median number of completed years of schooling is 9.9 years among females and 9.7 years among males.
- School attendance among youth is widespread but not universal; 96 percent of the basic school-age population and 56 percent of the high-school-age population attend school.
- There is almost no gender gap in basic and high school attendance, but girls are slightly more likely to attend school than boys.
- Seven in ten children age 1-14 experienced some form of psychological or physical punishment during the 30 days preceding the survey: 19 percent experienced only non-violent discipline; 65 percent experienced psychological aggression, and 38 percent of children experienced some form of physical punishment. Four percent experienced severe physical punishment.

This chapter presents a demographic and socioeconomic profile of the households in the 2015-16 ADHS, including information on the age, sex, place of residence, and educational status of household members; housing characteristics; and the ownership of durable goods. Information on child birth registration and child discipline is also presented. Knowledge about the characteristics of respondents and their households helps in understanding and interpreting the findings of the survey and also in assessing the representativeness of the survey.

A household is defined as a person or group of related and unrelated persons who live together in the same dwelling unit(s) or on connected premises, who acknowledge one adult member as head of the household, and who have common arrangements for cooking and eating their food. The questionnaire for the 2015-16 ADHS distinguishes between the de jure population (persons who usually live in the household) and the de facto population (persons who stayed the night before the interview in the household). According to the 2015-16 ADHS data, the differences between these populations are small. Tabulations for the household data presented in this chapter are based primarily on the de facto population.

Throughout the report, because of the way the sample was designed, the number of cases in some regions may appear small in the tables; this is because they are weighted to make the regional distribution nationally representative. To identify results that may be based on numbers too small to ensure statistical reliability, percentages based on 25 to 49 unweighted cases are shown within parentheses, and percentages based on fewer than 25 unweighted cases are suppressed.

#### 2.1 HOUSING CHARACTERISTICS

There is a strong correlation between the socioeconomic condition of a household and the vulnerability of its members, especially children, to common diseases. The amenities and assets available to households are important in determining the general socioeconomic status of the population. To assess the socioeconomic conditions under which the population lives, respondents were asked to give specific information about their household environment. They answered questions about the household's access to electricity, type of water source, sanitation facilities, floor material, and ownership of durable goods. Tables 2.1 through 2.6 present major housing characteristics by urban-rural residence.

#### 2.1.1 Drinking Water

The source of drinking water is an indicator of whether it is suitable for drinking. Table 2.1 provides information on the source of drinking water, the amount of time it takes to obtain the water, and the type of treatment of water used for drinking. The table shows the results separately for households and for the de jure population living in those households.

Overall, the 2015-16 ADHS shows that most households (98 percent) in Armenia have access to an improved source of drinking water, with the large majority (96 percent) reporting that their drinking water is piped directly into the dwelling, yard, or plot (Table 2.1). Only 3 percent of rural households and 1 percent of urban households rely on an unimproved source for drinking water, mainly water obtained from a tanker truck/cart. The small number of households that do not obtain their drinking water on the premises spend less than 30 minutes going to get water.

Because households may use more than one method to treat water to make it safe to drink, water treatment is shown in Table 2.1 as the percentages of households and of the de jure population using specific treatment methods rather than a percent distribution. Because almost all households rely on piped water, which presumably comes from a public source where it is treated, it is not surprising that water is not treated further in most households (94 percent). At the household level, the most frequently used method for treating water is boiling (4 percent). Overall, 5 percent of households use an appropriate treatment method— boiling, bleaching, straining, filtering, or solar disinfecting.

Interruptions to the supply of water may lead households to use unimproved sources for drinking water. Most households in Armenia do not have problems with lack of access to water. Only 8 percent of households using piped water or water from a borehole or dug well reported that water was not available from their usual source for at least 1 day in the 2 weeks prior to the survey (Table 2.2).

### 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, Armenia 2015-16

		Households			Population	
Characteristic	Urban	Rural	Total	Urban	Rural	Total
Source of drinking water						
Improved source Piped into dwelling/ yard/ plot	99.0 98.7	97.3 92.5	98.3 96.4	98.9 98.6	97.0 92.2	98.1 96.0
Public tap/standpipe Tube well/borehole Protected dug well Protected spring	0.1 0.0 0.0 0.1	1.1 0.6 0.6 2.5	0.5 0.2 0.2 1.0	0.1 0.0 0.0 0.1	1.1 0.8 0.5 2.3	0.5 0.3 0.2 1.0
Unimproved source Unprotected spring Tanker truck/cart with small tank	1.0 0.0 1.0	2.7 0.2 2.4	1.7 0.1 1.6	1.1 0.0 1.1	3.0 0.2 2.8	1.9 0.1 1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Time to obtain drinking water (round trip) Water on premises Less than 30 minutes 30 minutes or longer Don't know/missing	98.8 0.9 0.0 0.3	95.6 2.6 0.6 1.2	97.6 1.5 0.2 0.7	98.7 0.9 0.0 0.3	95.5 2.5 0.7 1.4	97.4 1.6 0.3 0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Water treatment prior to drinking <sup>1</sup> Boiled	5.4	2.8	4.4	6.2	3.2	5.0
Bleach/chlorine added	0.0	0.1	0.0	0.0	0.1	0.0
Strain through cloth	0.1	0.1	0.1	0.1	0.1	0.1
Ceramic, sand, or other filter	0.9	1.0	1.0	1.1	1.4	1.2
Solar disinfection	0.1	0.0	0.0	0.0	0.0	0.0
Let it stand and settle	0.8	0.3	0.6	0.7	0.3	0.5
Other No treatment	0.8 92.2	0.0 95.6	0.5 93.5	0.9 91.3	0.0 94.7	0.5 92.7
Percentage using an appropriate treatment method <sup>2</sup>	6.4	3.8	5.4	7.3	4.6	6.2
Number	4,924	2,969	7,893	16,482	11,475	27,958

<sup>1</sup> Respondents may report multiple treatment methods, so the sum of treatment may exceed 100 percent. <sup>2</sup> Appropriate water treatment methods include boiling, bleaching, filtering, and solar disinfecting.

### Table 2.2 Availability of water

Among households and de jure population using piped water or water from a tube well or borehole, percentage with lack of availability of water in the last 2 weeks, according to residence, Armenia 2015-16

		Households			Population	
Availability of water in last 2 weeks	Urban	Rural	Total	Urban	Rural	Total
Not available for at least 1day Available with no interruption of at least 1 day	8.1 91.0	8.1 90.7	8.1 90.9	8.6 90.8	8.2 91.0	8.4 90.9
Don't know	0.9	1.2	1.0	0.6	0.8	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number using piped water or water from a tube well/borehole	4,868	2,798	7,666	16,281	10,800	27,081

## 2.1.2 Sanitation Facility

A household's toilet/latrine facility is classified as hygienic if it is used only by household members (i.e., not shared) and if the type of facility effectively separates human waste from human contact. The types of facilities that are most likely to accomplish this are toilets that flush or pour flush into a piped sewer system/septic tank/pit latrine, and pit latrines with a slab. A household's sanitation facility is classified as unhygienic if it is shared with other households or if it does not effectively separate human waste from human contact. Table 2.3 shows the proportion of households and of the de jure population with access to hygienic sanitation facilities (that is, those with access to improved, unshared facilities), shared facilities, and non-improved facilities.

The 2015-16 ADHS found that 77 percent of households in Armenia use improved sanitation facilities that are not shared with another household (Table 2.3), which is lower than the percentage using improved, unshared facilities at the time of the 2010 ADHS (80 percent)<sup>1</sup>. Flush toilets are widespread in urban areas (95 percent), while pit latrines without a slab or open pits are the most prevalent type of toilet facility in rural areas (47 percent).

#### 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, Armenia 2015-16

Type and location		Households			Population	
of toilet/ latrine facility	Urban	Rural	Total	Urban	Rural	Total
Improved, not shared facility						
Flush/pour flush to piped sewer system	94.8	27.1	69.3	94.8	28.2	67.5
Flush/pour flush to septic tank	0.3	4.8	2.0	0.3	5.7	2.5
Pit latrine with slab	0.9	14.8	6.2	1.0	14.7	6.6
Total	96.0	46.7	77.4	96.1	48.6	76.6
Shared facility <sup>1</sup>						
Flush/pour flush to piped sewer system	0.6	0.1	0.4	0.5	0.1	0.3
Total	0.6	0.1	0.4	0.5	0.2	0.4
Unimproved facility						
Flush/pour flush not to sewer/septic tank/pit latrine	0.8	5.6	2.6	0.9	5.5	2.8
Pit latrine without slab/open pit	2.5	47.4	19.4	2.4	45.8	20.2
Missing	0.1	0.0	0.0	0.1	0.0	0.0
Total	3.4	53.1	22.1	3.4	51.3	23.0
Location of toilet facility						
In own dwelling	94.4	34.6	71.9	94.1	36.7	70.6
In own yard/plot	5.4	65.1	27.9	5.7	63.0	29.2
Elsewhere	0.2	0.3	0.2	0.2	0.2	0.2
Missing	0.0	0.0	0.0	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	4,924	2,969	7,893	16,482	11,475	27,958

<sup>&</sup>lt;sup>1</sup> It should be noted, that unlike in the 2010 ADHS, the 2015-16 ADHS Household Questionnaire did not include the coding category for toilets that flush to a pit latrine.

### 2.1.3 Household Characteristics

Table 2.4 presents the distribution of households by housing characteristics, according to residence. All households in Armenia have electricity (Table 2.4). More than 9 in 10 households use gas for cooking and have a specific place for cooking inside the house. Natural gas is the most common fuel used for cooking among both urban and rural households (92 and 70 percent, respectively). Eight percent of rural households rely on biomass fuels, primarily wood, for cooking. The use of biomass fuels may contribute to indoor air pollution, which has been shown to have adverse health effects (Fullerton et al. 2008).

Slightly more than one-quarter of households (28 percent) have three or more rooms used for sleeping, and 42 percent have two rooms. Urban households are more likely than rural households to have only one room for sleeping (34 percent versus 22 percent).

Virtually all households have a finished floor. Parquet or polished wood is the most common flooring material in both urban areas (77 percent) and rural areas (52 percent). Most rural households (87 percent) have stone walls with lime or cement. The majority of urban households have either stone (51 percent) or cement blocks for walls (39 percent). Shingles, or schiefer, are the most common roofing material in both urban and rural areas (45 and 74 percent, respectively), while taule roofing is used almost exclusively in urban areas (31 percent). Urban and rural households show a similar preference for metal roofing (21 and 24 percent, respectively).

# 2.2 SECONDHAND SMOKE EXPOSURE

Secondhand smoke (SHS) causes health risks in children and adults who do not smoke. Pregnant women exposed to SHS have a higher risk of giving birth to a lowbirth-weight baby (Windham et al. 1999). Children who are exposed to SHS are at increased risk for respiratory and ear infections and poor lung development (US Department of Health and Human Services 2006). The 2015-16 ADHS collected information on smoking inside the home to assess the percentage of households in which there is exposure to secondhand smoke. The last panel in Table 2.4 shows percent distribution of households by frequency of smoking inside the home. In over half of the households in Armenia, someone smokes inside the house on a daily basis, compared with just over one-third of households where no one smokes inside the house. Rural households (60 percent) are slightly more likely to report

### Table 2.4 Household characteristics

Percent distribution of households by housing characteristics, percentage using solid fuel for cooking, and percent distribution by frequency of smoking in the home, according to residence, Armenia 2015-16

Armenia 2015-16			
Housing characteristic	Resid Urban	dence Rural	Total
Electricity			
Yes No	100.0 0.0	100.0 0.0	100.0 0.0
Total	100.0	100.0	100.0
Flooring material			
Earth/sand Wood planks	0.4 11.7	0.2 36.0	0.3 20.8
Parquet/polished	76.5	51.9	67.2
wood/laminate Vinyl/linoleum	3.0	2.3	2.7
Ceramic/marble tiles	3.4	3.3	3.4
Cement Carpet	1.3 3.5	4.1 2.3	2.3 3.1
Missing	0.2	0.0	0.1
Total	100.0	100.0	100.0
Main wall material No walls	0.0	0.0	0.0
Dirt	0.0	0.0	0.0
Stone with mud Uncovered adobe	6.0 0.1	8.2	6.8 0.0
Plywood	0.0	0.0 0.0	0.0
Reused wood Cement/monolith	0.0 3.2	0.0	0.0 2.3
Stone with lime/cement	3.2 50.6	0.8 86.6	64.1
Bricks	0.7 38.9	2.5 1.4	1.4 24.8
Cement blocks or panels Covered adobe	0.0	0.1	0.0
Wood planks/ shingles Other	0.4 0.1	0.2 0.1	0.3 0.1
Total	100.0	100.0	100.0
Main roof material	100.0	100.0	100.0
No roof	0.1	0.0	0.1
Wood planks Metal	0.0 20.7	0.1 23.5	0.1 21.7
Wood	0.1	0.3	0.2
Calamine/cement fiber Ceramic tiles	3.0 0.1	1.4 0.5	2.4 0.3
Cement	0.1	0.5	0.2
Roofing shingles/schiefer Taule (tarred roofing	44.8 31.0	73.6 0.1	55.6 19.4
paper)			
Missing	0.1	0.0	0.1
Total Rooms used for sleeping	100.0	100.0	100.0
One	34.1	22.2	29.6
Two Three or more	44.3 21.5	37.5 40.0	41.8 28.4
Missing	0.2	0.3	0.2
Total	100.0	100.0	100.0
Place for cooking In the house	99.5	95.2	97.9
In a separate building	0.4	4.7	2.0
Outdoors	0.1 0.0	0.0 0.0	0.1 0.0
Missing Total	100.0	100.0	100.0
Cooking fuel			
Electricity	2.8	2.2	2.6
LPG Natural gas	4.5 92.1	19.4 70.2	10.1 83.9
Biogas	0.3	0.2	0.3
Wood Animal dung	0.3 0.0	7.1 0.8	2.9 0.3
Total	100.0	100.0	100.0
Percentage using solid fuel for cooking <sup>1</sup>	0.3	8.0	3.2
Frequency of smoking in			
<b>the home</b> Daily	49.5	59.7	53.4
Weekly	4.5	4.7	4.6
Monthly Less than monthly	1.8 3.9	1.8 2.3	1.8 3.3
Never	40.3	31.5	37.0
Total	400.8	412.8	405.3
Number	4,924	2,969	7,893
LPG = Liquefied petroleum ga <sup>1</sup> Includes wood and animal d			

<sup>1</sup> Includes wood and animal dung

someone smokes on a daily basis and less likely to say no one ever smokes inside the house (32 percent) than urban households (50 and 40 percent, respectively). A comparison of the 2010 and 2015-16 ADHS results indicates that there has been virtually no change either in the proportion of households in which members are exposed to smoking on a daily basis (55 percent and 53 percent, respectively) or in the proportion of households in which no one smokes (38 percent and 37 percent, respectively).

## 2.3 HOUSEHOLD POSSESSIONS

The availability of durable goods is an approximate measure of household socioeconomic status. Moreover, particular goods have specific benefits: having access to a radio or a television exposes household members to innovative ideas; a refrigerator prolongs the wholesomeness of foods; and a means of transportation allows greater access to many services away from the local area. Table 2.5 provides information on household ownership of durable goods (e.g., radios, televisions, phones, computers, or refrigerators) and means of transportation (e.g., bicycles, motorcycles, or automobiles).

Virtually all Armenian households have a television, 97 percent have a refrigerator, and 93 percent have a washing machine. Most households also have a mobile telephone (96 percent), and 69 percent have a computer. Virtually all households own common household furnishings like a table, sofa, and bed. Thirty-nine percent of households own a car or truck.

Urban households are more likely than rural households to own most of the household effects shown in Table 2.5, although the differences in ownership rates are not large for many goods. Rural households are notably more likely to own a car or truck than urban households (48 percent and 34 percent, respectively). As expected, they are also much more likely to own agricultural land and farm animals than urban households.

Household ownership of most durable goods has increased since the 2010 ADHS. Particularly noteworthy is the rapid growth in computer ownership. Around 7 in 10

#### Table 2.5 Household possessions

Percentage of households possessing various household effects, means of transportation, agricultural land and livestock/farm animals by residence, Armenia 2015-16

	Resid	dence	
Possession	Urban	Rural	Total
Household effects			
Radio	7.8	2.4	5.8
Television	99.6	99.5	99.5
Mobile phone	96.5	96.0	96.3
Non-mobile phone	77.7	25.2	57.9
Computer	72.7	62.2	68.7
Refrigerator	97.9	95.2	96.9
Washing machine	94.2	90.5	92.8
Vacuum cleaner	80.3	62.1	73.4
Video camera	21.7	12.4	18.2
camcorder			
Table	99.9	99.8	99.9
Chair	100.0	99.8	99.9
Sofa	99.3	98.4	99.0
Bed	99.9	99.9	99.9
Wall unit/buffet	95.4	95.6	95.5
Air conditioner	13.9	6.5	11.1
DVD player	35.4	35.2	35.3
Satellite antenna	26.4	40.6	31.8
Freezer	10.0 42.6	6.7	8.8
Sewing machine	42.6 93.9	40.0 92.2	41.6 93.3
Carpet Internet connection	93.9 72.7	92.2 62.2	93.3 68.8
Internet connection	12.1	02.2	00.0
Means of transport			
Bicycle	7.2	11.0	8.6
Animal drawn cart	0.2	0.8	0.4
Motorcycle/scooter	0.2	0.3	0.2
Car/truck	34.1	47.7	39.2
Boat with a motor	0.2	0.3	0.3
Ownership of agricultural land	13.0	84.2	39.7
Ownership of farm animals <sup>1</sup>	4.1	56.1	23.7
Number of households	4,924	2,969	7,893

<sup>1</sup> Milk cows or bulls; cattle; horses, donkeys, or mules; goats; sheep; pigs; rabbits; other animals with fur; chickens or other poultry; or beehives

households owned a computer in 2015-16 compared with 29 percent at the time of the 2010 ADHS. The increase in computer ownership among rural households has been especially rapid, from 12 percent in 2010 to 62 percent in 2015-16. The proportion of households owning a mobile phone also increased, from 87 percent in 2010 to 96 percent in 2015-16. On the other hand, there was a sharp drop in the percentage of households owning a non-mobile telephone, from 78 percent in 2010 to 58 percent in 2015-16. The drop in ownership of non-mobile phones was especially large among rural households, from 56 percent in 2010 to 25 percent in 2015-16.

# 2.4 WEALTH QUINTILES

The wealth index is a measure that has been tested in a number of countries in relation to inequities in household income, use of health services, and health outcomes (Rutstein et al. 2000; Rutstein and Johnston 2004). Its construction takes into account urban-rural differences in household and dwelling characteristics

(Rutstein 2008). Each household is assigned a score based on the assets the household owns, and individuals are ranked according to the total score of the household in which they reside. The sample is then divided into population quintiles—five groups, each with the same number of individuals. At the national level, approximately 20 percent of the population is in each wealth quintile.

Table 2.6 shows the distribution of the de jure household population across the five wealth quintiles, for urban and rural areas and by region. These distributions indicate the degree to which wealth is evenly (or unevenly) distributed among geographic areas. For example, 82 percent of the rural population is in the lowest and second-lowest wealth quintiles. In contrast, 64 percent of the urban population is in the two highest wealth quintiles. Considering the regional distributions, around 7 in 10 residents in Aragatsotn, Ararat, and Armavir are in the lowest two wealth quintiles compared with only 4 percent of residents in Yerevan.

Table 2.6 also shows the Gini coefficient of wealth in Armenia, which indicates the concentration of wealth, with 0 representing an exactly equal distribution (everyone having the same amount of wealth) and 1 representing a totally unequal distribution (one person having all the wealth). The overall Gini coefficient is 0.05, suggesting a relatively equal distribution of wealth at the national level. The lowest Gini coefficient is seen in Yerevan (0.02), where nearly half of the population (47 percent) is in the highest wealth quintile. The highest Gini coefficients—that is, the least equitable distributions of wealth—are observed in Armavir (0.19) and Vayots Dzor (0.12).

### Table 2.6 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles, and the Gini coefficient, according to residence and region, Armenia 2015-16

		W	/ealth quinti	le			Number	0.11
Residence/region	Lowest	Second	Middle	Fourth	Highest	Total	of persons	Gini coefficient
Residence								
Urban	3.9	6.9	25.4	32.1	31.7	100.0	16,482	0.04
Rural	43.1	38.8	12.3	2.6	3.2	100.0	11,475	0.03
Region								
Yerevan	1.5	2.4	17.0	32.3	46.8	100.0	8,558	0.02
Aragatsotn	30.7	40.4	17.4	9.1	2.4	100.0	1,451	0.06
Ararat	40.1	33.3	13.2	8.3	5.1	100.0	2,623	0.08
Armavir	42.9	27.5	15.1	10.4	3.9	100.0	2,550	0.19
Gegharkunik	27.4	25.9	29.5	12.6	4.6	100.0	2,208	0.05
Lori	28.5	20.6	25.5	20.0	5.3	100.0	1,942	0.08
Kotayk	16.4	26.0	21.2	19.8	16.7	100.0	3,019	0.10
Shirak	18.0	23.8	25.2	20.0	13.0	100.0	2,377	0.09
Syunik	19.0	28.2	26.7	15.5	10.6	100.0	1,295	0.06
Vayots Dzor	27.6	24.4	19.2	16.6	12.2	100.0	578	0.12
Tavush	28.6	29.5	23.0	12.6	6.3	100.0	1,357	0.07
Total	20.0	20.0	20.0	20.0	20.0	100.0	27,958	0.05

# 2.5 HAND WASHING

Washing hands with soap and water is the most hygienic way to wash. However, hand washing with a non-soap cleaning agent such as ash or sand is an improvement over not using any cleansing agent. In the 2015-16 ADHS, the household respondents were asked to show the interviewer where household members most often wash their hands, and the interviewer recorded if water, soap, and a non-soap cleaning agent were available at that location.

A hand washing station was observed in 96 percent of households interviewed in the ADHS (Table 2.7). Among households where a place for hand washing was observed, 97 percent had soap and water available at the time of interview. Only 2 percent of households in Armenia had soap alone, and less than 1 percent did not have water, soap, or another cleansing agent available. Households in the lowest wealth quintile (90 percent) and households in Armavir (91 percent) were least likely to have water and soap or another cleansing agent available.

### Table 2.7 Hand washing

Percentage of households in which the place most often used for washing hands was observed, and among households in which the place for hand washing was observed, percent distribution by availability of water, soap and other cleansing agents, Armenia 2015-16

	Percentage of households		Am	ona househo	olds where pla	ace for hand	d washing wa	s observed. r	percentage w	ith:	<ul> <li>Number of</li> </ul>
Background characteristic	in which place for washing hands was observed <sup>1</sup>	Number of house- holds	Soap and water <sup>2</sup>	Water and cleansing agent <sup>3</sup> other than soap only	Water only	Soap but no water <sup>4</sup>	Cleansing agent other than soap only <sup>3</sup>	No water, no soap, no other cleansing agent	Missing	Total	households with place for hand washing observed
Residence											
Urban	97.2	4,924	98.4	0.0	0.6	0.5	0.0	0.1	0.5	100.0	4,788
Rural	94.5	2,969	93.4	0.0	2.2	3.5	0.2	0.7	0.0	100.0	2,806
Region											
Yerevan	96.8	2,480	98.7	0.0	0.2	0.3	0.0	0.0	0.8	100.0	2,401
Aragatsotn	89.8	387	92.5	0.0	3.3	3.0	0.0	1.1	0.0	100.0	347
Ararat	96.7	682	95.1	0.1	3.1	0.8	0.2	0.6	0.1	100.0	659
Armavir	93.6	633	90.6	0.0	0.5	8.5	0.0	0.5	0.0	100.0	592
Gegharkunik	96.2	601	91.9	0.0	3.5	3.8	0.0	0.7	0.1	100.0	579
Lori	99.1	645	97.5	0.0	0.5	1.9	0.0	0.0	0.0	100.0	639
Kotayk	98.1	799	95.7	0.0	2.2	0.3	0.5	1.0	0.3	100.0	784
Shirak	93.8	685	98.4	0.0	0.3	1.2	0.0	0.0	0.2	100.0	643
Syunik	100.0	448	99.9	0.0	0.0	0.1	0.0	0.0	0.0	100.0	448
Vayots Dzor	95.5	167	98.5	0.0	1.5	0.0	0.0	0.0	0.0	100.0	160
Tavush	93.5	366	97.7	0.0	1.1	0.8	0.0	0.4	0.0	100.0	342
Wealth quintile											
Lowest	91.4	1,700	89.8	0.0	3.3	5.4	0.3	1.1	0.1	100.0	1,554
Second	97.0	1,452	96.2	0.0	1.7	1.7	0.0	0.3	0.1	100.0	1,409
Middle	97.4	1,791	98.1	0.0	0.6	0.6	0.1	0.2	0.5	100.0	1,744
Fourth	98.3	1,558	99.2	0.0	0.2	0.1	0.0	0.0	0.5	100.0	1,531
Highest	97.4	1,392	99.5	0.0	0.0	0.0	0.0	0.0	0.5	100.0	1,355
Total	96.2	7,893	96.5	0.0	1.2	1.6	0.1	0.3	0.3	100.0	7,594

<sup>1</sup> Includes fixed and mobile place

<sup>2</sup> 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.

Cleansing agents other than soap include locally available materials such as ash, mud, or sand.

<sup>4</sup> Includes households with soap only as well as those with soap and another cleansing agent

# 2.6 HOUSEHOLD POPULATION BY AGE AND SEX

Age and sex are important demographic variables and form the primary basis of demographic classification in vital statistics, censuses, and surveys. They are also important variables in the study of mortality, fertility, and nuptiality. Table 2.8 shows how the de facto household population is distributed by 5-year age groups, according to urban-rural residence and sex.

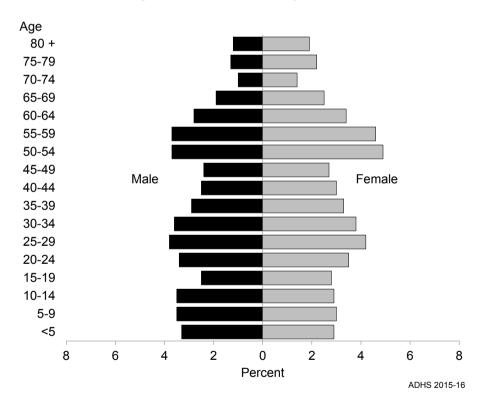
The 2015-16 ADHS results indicate that, as expected, women outnumber men in Armenia. Overall, there were only 89 men for every 100 women in the de facto population in the households interviewed in the survey. The gender disparity is much more pronounced in urban areas than in rural areas (83 and 98 men per 100 women, respectively). Among the population under age 15, there are more males than females. The opposite pattern is consistently observed among the population age 50 and over, a result of higher mortality among men than women.

The age structure shown in Figure 2.1 is typical of an older population characterized by low fertility. Over two-thirds of the population is in the 15-64 age group, also referred to as the economically active population. The dependency ratio, which is the ratio of the non-productive population (persons under age 15 and age 65 and over) to the economically active population, is 48, which represents a slight increase over the dependency ratio of 45 at the time of the 2010 ADHS. The increase reflects the aging of the population, which characterizes countries in which fertility has fallen below the replacement level.

		Urban			Rural			Total			
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total		
<5	7.0	5.4	6.1	7.3	5.6	6.4	7.1	5.5	6.3		
5-9	7.8	5.4	6.5	6.8	6.3	6.5	7.4	5.8	6.5		
10-14	7.4	5.4	6.3	7.3	5.7	6.5	7.4	5.5	6.4		
15-19	5.5	4.6	5.0	5.3	6.2	5.7	5.4	5.2	5.3		
20-24	6.1	6.3	6.2	8.8	7.1	7.9	7.2	6.6	6.9		
25-29	7.5	8.1	7.8	8.8	7.6	8.2	8.0	7.9	8.0		
30-34	7.8	7.3	7.5	7.5	6.9	7.2	7.7	7.1	7.4		
35-39	7.1	6.3	6.7	5.1	6.2	5.6	6.2	6.2	6.2		
40-44	5.6	5.5	5.5	4.8	5.8	5.3	5.2	5.6	5.4		
45-49	4.5	5.0	4.8	6.0	5.2	5.6	5.2	5.1	5.1		
50-54	7.0	8.6	7.9	9.1	10.1	9.6	7.9	9.2	8.6		
55-59	7.6	9.3	8.5	8.2	7.8	8.0	7.8	8.7	8.3		
60-64	6.6	7.2	6.9	4.9	5.3	5.1	5.9	6.5	6.2		
65-69	4.9	5.5	5.2	2.9	3.6	3.3	4.0	4.8	4.4		
70-74	2.4	3.0	2.7	1.6	2.2	1.9	2.0	2.7	2.4		
75-79	2.8	4.0	3.5	3.0	4.2	3.6	2.9	4.1	3.5		
80 +	2.5	3.1	2.8	2.8	4.2	3.5	2.6	3.5	3.1		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
Number of persons	7,466	8,955	16,421	5,624	5,758	11,382	13,089	14,713	27,803		

Table 2.8 Household population by age, sex, and residence

Figure 2.1 Population pyramid



# 2.7 HOUSEHOLD SIZE AND COMPOSITION

Table 2.9 presents the percent distribution of households in the 2015-16 ADHS sample by sex of the head of the household and by mean household size. These characteristics are important because they are often associated with differences in household socioeconomic levels. For example, female-headed households are frequently poorer than households headed by males. In addition, the size and composition of the household affects the allocation of financial and other resources among household members, which in turn influences the overall well-being of these individuals. Household size is also associated with crowding in the dwelling, which can lead to unfavorable health conditions.

The average household size at the time of the 2015-16 ADHS had fallen to 3.5 persons, compared with 4.3 persons in at the time of the 2000 ADHS. The majority of households are headed by males, with one-third (33 percent) headed by females. The rate of households run by women is slightly lower than that reported in the 2010 ADHS; this reverses an upward trend in which the proportion of femaleheaded households increased from 29 percent at the time of the 2000 ADHS to 37 percent in 2010. The average household size in rural areas is larger than in urban areas (3.9 compared with 3.3 members). On the other hand, households in urban areas are more likely than those in rural areas to be headed by a woman (37 percent compared with 28 percent).

Information on households with foster children and orphans also was collected in the 2015-16 ADHS. Foster children are defined here as children under age 18 living in households with neither their mother nor their father present, while orphans are children with one or both parents dead. Table 2.9 shows that only a small proportion of households (2 percent) include orphans or foster children under age 18.

#### Table 2.9 Household composition

Percent distribution of households by sex of head of household and by household size; mean size of households; and percentage of households with orphans and foster children under age 18, according to residence, Armenia 2015-16

-		dence	-
Characteristic	Urban	Rural	Total
Household headship Male Female	63.5 36.5	72.4 27.6	66.8 33.2
Total	100.0	100.0	100.0
Number of usual members 1 2 3 4 5 6 7 8 9+	16.6 21.9 16.8 19.1 12.6 8.8 2.6 0.8 0.8	12.8 16.9 15.1 17.6 15.7 13.4 5.3 1.8 1.5	15.2 20.0 16.1 18.6 13.7 10.5 3.6 1.1 1.0
Total Mean size of households	100.0 3.3	100.0 3.9	100.0 3.5
Percentage of households with orphans and foster children under 18 Double orphans	0.1	0.0	0.1
Single orphans <sup>1</sup>	1.3	1.0	1.2
Foster children <sup>2</sup>	0.7	0.7	0.7
Orphans and/or foster children	2.0	1.6	1.9
Number of households	4,924	2,969	7,893

Note: Table is based on de jure household members, that is, usual residents

 <sup>1</sup> Includes children with one dead parent and an unknown survival status of the other parent
 <sup>2</sup> Foster children are those under age 18 living in

households with neither their mother nor their father present, and the mother and/or father are alive.

## 2.8 CHILDREN'S LIVING ARRANGEMENTS AND ORPHANHOOD

Table 2.10 presents information on living arrangements and orphanhood for children under age 18. The majority of children under age 18 (86 percent) live with both parents, 11 percent live with their mother only, 1 percent live with their father only, and 1 percent live with neither of their biological parents.

The table also provides data on the extent of orphanhood, that is, the proportion of children who have lost one or both parents. Three percent of children under age 18 have lost one or both parents. Two percent of children under age 18 have lost their fathers, while less than 1 percent have lost their mothers. Very few children under age 18 are reported to have lost both parents.

Differentials in fosterhood and orphanhood by background characteristics are generally not large. Older children are less likely than younger children to live with both parents. This results from increases with age in both proportions of children who are fostered and children who are orphaned. Shirak and Yerevan have the lowest proportions of children living with both parents (77 percent and 82 percent, respectively). These regions also report the highest proportions of children who live only with their mothers but whose fathers are alive (18 percent for Shirak and 12 percent for Yerevan). Greater employment-driven outmigration from these regions may be a factor in both patterns.

### Table 2.10 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, the percentage of children not living with a biological parent, and the percentage of children with one or both parents dead, according to background characteristics, Armenia 2015-16

			g with		ith father		Not livir	ng with eith	er parent			Percent-	Percent-	
	Living		but not father		ot with ther		Only	Only		Missing infor- mation on		age not living with a biolo-	age with one or both	Number
Background	with both	Father	Father	Mother	Mother	Both	father	mother	Both	father/		gical	parents	of
characteristic	parents	alive	dead	alive	dead	alive	alive	alive	dead	mother	Total	parent	dead <sup>1</sup>	children
Age														
0-4	91.3	8.0	0.4	0.1	0.1	0.1	0.0	0.0	0.0	0.1	100.0	0.1	0.5	1,743
<2	92.4	7.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.3	724
2-4	90.4	8.5	0.5	0.2	0.1	0.2	0.0	0.0	0.0	0.1	100.0	0.2	0.6	1,019
5-9	86.9	9.7	1.3	0.7	0.2	0.8	0.2	0.0	0.1	0.1	100.0	1.1	1.8	1,807
10-14 15-17	82.9 82.9	9.6 10.7	3.8 2.5	1.3 0.8	0.5 0.6	1.3 2.1	0.3 0.0	0.0 0.0	0.0 0.3	0.3 0.2	100.0 100.0	1.6 2.4	4.6 3.4	1,781 988
	02.9	10.7	2.5	0.0	0.0	2.1	0.0	0.0	0.5	0.2	100.0	2.4	5.4	900
Sex	05.0	0.0	0.0	0.0	0.0	0.0		0.0	0.4		400.0		~ ~	0.000
Male Female	85.9 86.8	9.6 9.0	2.2 1.7	0.6 0.8	0.3 0.3	0.8 1.1	0.2 0.1	0.0 0.0	0.1 0.0	0.2 0.1	100.0 100.0	1.1 1.2	2.8 2.1	3,366 2,953
	00.0	9.0	1.7	0.0	0.5	1.1	0.1	0.0	0.0	0.1	100.0	1.2	2.1	2,955
Residence			~ /	~ <b>-</b>										
Urban	83.3	11.8	2.4	0.7	0.3	1.0	0.2	0.0	0.1	0.1	100.0	1.3	3.0	3,662
Rural	90.5	6.0	1.3	0.8	0.3	0.9	0.0	0.0	0.0	0.2	100.0	0.9	1.7	2,657
Region														
Yerevan	82.3	12.1	2.8	0.9	0.2	1.1	0.3	0.0	0.2	0.0	100.0	1.6	3.6	1,900
Aragatsotn	93.2	4.3	1.6	0.3	0.2	0.1	0.0	0.0	0.0	0.3	100.0	0.1	1.8	311
Ararat	90.9 84.8	5.6 9.9	2.1 1.9	0.6 0.7	0.0 0.5	0.6 1.6	0.2 0.0	0.0 0.0	0.0 0.0	0.0 0.6	100.0 100.0	0.8 1.6	2.3 2.4	600 640
Armavir	84.8 91.4	9.9 4.6	2.7	0.7	0.5	0.4	0.0	0.0	0.0	0.6	100.0	0.6	2.4 3.6	640 467
Gegharkunik Lori	91.4 87.7	4.6 9.4	1.0	0.0	0.8	0.4 1.4	0.0	0.0	0.1	0.0	100.0	0.6 1.4	3.0 1.4	309
Kotavk	89.7	5.4 7.9	0.8	0.0	0.3	0.1	0.0	0.0	0.0	0.2	100.0	0.3	1.4	772
Shirak	77.0	17.5	2.5	1.2	0.4	1.4	0.0	0.0	0.0	0.2	100.0	1.4	2.9	568
Syunik	88.9	7.0	1.2	0.7	0.0	2.3	0.0	0.0	0.0	0.0	100.0	2.3	1.2	281
Vayots Dzor	94.7	3.5	1.1	0.0	0.0	0.7	0.0	0.0	0.0	0.0	100.0	0.7	1.1	128
Tavush	91.9	4.4	0.1	1.8	0.2	0.7	0.0	0.0	0.0	0.8	100.0	0.7	0.4	344
Wealth quintile														
Lowest	86.3	8.9	2.7	1.2	0.1	0.4	0.1	0.0	0.0	0.3	100.0	0.5	2.8	1,287
Second	88.8	6.7	1.3	0.6	0.4	1.9	0.0	0.0	0.0	0.3	100.0	1.9	1.8	1,201
Middle	82.8	11.8	2.4	0.7	0.5	0.8	0.7	0.0	0.2	0.1	100.0	1.7	3.8	1,189
Fourth	86.1	10.4	1.5	0.6	0.2	1.0	0.0	0.0	0.0	0.2	100.0	1.0	1.8	1,211
Highest	87.5	9.1	1.7	0.6	0.3	0.7	0.0	0.0	0.1	0.0	100.0	0.8	2.2	1,431
Total <15	87.0	9.1	1.8	0.7	0.2	0.7	0.2	0.0	0.0	0.2	100.0	0.9	2.3	5,331
Total <18	86.3	9.4	1.9	0.7	0.3	0.9	0.1	0.0	0.1	0.2	100.0	1.2	2.5	6,319

Note: Table is based on de jure members, that is, usual residents

<sup>1</sup> Includes children with father dead, mother dead, both dead, and one parent dead but missing information on survival status of the other parent

# 2.9 EDUCATIONAL ATTAINMENT OF HOUSEHOLD MEMBERS

Education is important because it helps individuals make informed decisions that influence their health and well-being. Armenia's educational system has undergone several stages of restructuring over the past decade, making the analysis of educational data across a wide range of ages challenging.<sup>2</sup> The current school system has been in place since 2007. The system consists of primary school (grades 1 through 4 for students age 6-9), middle school (grades 5 through 9 for students age 10-14), and high school (grades 10

<sup>&</sup>lt;sup>2</sup> The Armenian educational system before 2007 consisted of primary school (grades 1-3, age 7-9), middle school (grades 4-8, age 10-14), and high school (grades 9-10, ages 15-16). Education of at least 8 grades was compulsory. Students who had completed at least 8 grades were eligible for secondary-special education. Since 2005, age 6 years and 6 months has become the mandatory age of school enrollment. Before 2005, when children were allowed to enter school at age 6 or 7, the majority of children would start school at age 7.

through 12 for students age 15-17). Primary and middle school (grades 1 through 9) together constitute what is referred to as basic education. In the constitution of Armenia basic education is declared to be mandatory. Primary, middle, and high school together (or grades 1 through 12) constitute what is referred to as a standard school or secondary education. In this report, respondents who have attended or completed grades 1 through 9 are presented as having attained basic education, and those who, in addition to basic school, have attended or completed high school are presented as having attained secondary education.

Students who have completed a minimum of nine grades may enroll in specialized secondary education, which provides training for careers that require mid-level qualifications, such as nurses, midwives, musicians, technicians, and others. The course of study for specialized secondary education can be completed in 3-5 years depending on the number of grades. Upon graduation students receive a secondary-special education degree, which recognizes a level that is somewhat higher than secondary education but lower than higher education. University and postgraduate education provides training for a higher level of specialist. Students who have completed secondary education or secondary-special education may enroll in a university.

Tables 2.11.1 and 2.11.2 present information on the educational attainment of the Armenian population age 6 and older. Virtually all Armenians have gone to school. The proportions of the female and male populations with no education are negligible (less than 1 percent each) in most age groups, with the highest levels observed among those age 6 to 9 (reflecting some who have not yet started school) and those age 65 and older. Overall, more than 9 in 10 women and men age 6 and over have attended secondary school, and more than 4 in10 women and around one-third of men have a secondary-special or higher education. The median number of years of schooling is 9.9 years for women and 9.7 years for men.

Individuals residing in urban areas have substantially higher rates of secondary-special and higher education than those residing in rural areas. Individuals in Yerevan are around twice as likely to have at least some higher education compared with those in other regions. Wealth status has a strong positive relationship with education; 43 percent of women in the highest wealth quintile have at least some higher education compared with 6 percent of women in the lowest quintile. The corresponding proportions for men are 40 percent and 6 percent, respectively.

Data on net attendance ratios (NARs) and gross attendance ratios (GARs) by school level, sex, residence, region, and wealth quintile are shown in Table 2.12. The NAR indicates participation in basic education (primary and middle school) for the population age 6-14 and high school for the population age 15-17. The GAR measures participation at each level of schooling among those of any age from 6 to 24. The GAR is nearly always higher than the NAR for the same level because the GAR includes participation by those who may be older or younger than the official age range for that level.<sup>3</sup> A NAR of 100 percent would indicate that all children in the official age range for the level are attending education at that level. The GAR can exceed 100 percent if there is significant over-age or under-age participation at a given level of schooling.

In Armenia, attendance among school-age household members is high. The overall NAR for basic education is 96, indicating that, among children who should be attending basic education, 96 percent are currently doing so. The NAR for basic education in 2015-16 is slightly higher than the NAR at the time of the 2010 ADHS (92 percent). The basic school NARs are virtually the same for females and males. Differences in basic school attendance by residence, region, and wealth quintile are not large, with the NAR lowest in Shirak (91 percent) and highest in the highest wealth quintile (98 percent). The basic school GAR is 101 percent. A comparison of the NAR and GAR indicates that approximately 5 percent of students attending basic school are either under age or over age for their grade level.

<sup>&</sup>lt;sup>3</sup> Students who are over age for a given level of schooling may have started school over age, may have repeated one or more grades in school, or may have dropped out of school and later returned.

### Table 2.11.1 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, Armenia 2015-16

Background characteristic	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	Secondary special	Higher	Don't know/ missing	Total	Number	Median years completed
Age											
6-9	6.7	93.0	0.3	0.0	0.0	0.0	0.0	0.0	100.0	693	0.6
10-14	0.3	7.3	20.0	72.4	0.0	0.0	0.0	0.0	100.0	813	5.0
15-19	0.1	0.0	0.0	46.1	21.5	16.2	16.1	0.0	100.0	770	10.3
20-24	0.2	0.0	0.0	2.9	31.9	16.4	48.6	0.0	100.0	969	12.5
25-29	0.1	0.2	0.2	3.7	34.3	20.4	41.0	0.0	100.0	1,161	12.3
30-34	0.1	0.0	0.1	4.6	42.1	22.5	30.7	0.0	100.0	1,052	11.4
35-39	0.0	0.2	0.0	6.6	43.7	22.9	26.6	0.0	100.0	919	10.0
40-44	0.3	0.0	0.0	4.3	42.3	28.6	24.4	0.0	100.0	825	11.2
45-49	0.3	0.0	0.0	5.6	40.2	30.9	23.0	0.0	100.0	746	11.2
50-54	0.2	0.1	0.1	5.3	46.8	25.6	21.7	0.1	100.0	1,353	9.9
55-59	0.1	0.1	0.2	6.4	44.6	28.5	20.1	0.0	100.0	1,281	10.0
60-64	0.3	0.4	0.2	9.6	40.3	27.5	21.7	0.0	100.0	949	10.0
65+	1.1	2.7	3.6	22.7	38.0	15.0	16.8	0.1	100.0	2,219	9.5
Residence											
Urban	0.5	4.8	1.4	11.3	28.8	22.3	30.9	0.0	100.0	8,376	11.3
Rural	1.0	6.9	2.6	18.7	44.4	16.2	10.3	0.0	100.0	5,374	9.5
Region											
Yerevan	0.3	4.9	1.3	9.9	23.0	20.3	40.4	0.0	100.0	4,409	12.2
Aragatsotn	0.2	6.2	0.9	13.1	52.5	14.9	12.1	0.0	100.0	697	9.6
Ararat	0.5	7.4	2.7	20.9	40.9	15.3	12.3	0.0	100.0	1,232	9.5
Armavir	1.5	6.5	2.0	19.2	38.8	19.4	12.7	0.0	100.0	1,181	9.6
Gegharkunik	1.8	6.3	3.2	18.2	49.9	11.7	8.9	0.0	100.0	1,105	9.5
Lori	0.5	4.1	1.8	16.5	41.0	21.7	14.4	0.0	100.0	978	9.7
Kotayk	0.7	7.0	2.2	12.9	36.2	22.3	18.5	0.1	100.0	1,452	9.8
Shirak	0.7	4.6	1.2	12.1	36.8	24.8	19.8	0.0	100.0	1,154	9.9
Syunik	0.5	3.8	2.0	16.0	39.9	20.6	17.2	0.0	100.0	627	9.8
Vayots Dzor	0.2	6.0	3.0	12.3	41.0	24.4	13.1	0.0	100.0	278	9.7
Tavush	1.0	7.0	1.6	18.0	29.9	27.5	15.0	0.0	100.0	635	9.8
Wealth guintile											
Lowest	1.1	7.4	3.1	23.1	45.9	13.2	6.1	0.0	100.0	2.705	9.4
Second	0.8	5.8	2.1	14.3	42.9	19.3	14.8	0.0	100.0	2,667	9.7
Middle	0.6	4.0	1.3	13.9	39.6	22.6	18.0	0.1	100.0	2,810	9.8
Fourth	0.5	5.1	1.2	9.8	27.0	24.2	32.3	0.0	100.0	2,832	11.6
Highest	0.2	6.0	1.6	10.1	19.6	20.0	42.6	0.0	100.0	2,735	12.3
Total	0.7	5.6	1.8	14.2	34.9	19.9	22.9	0.0	100.0	13,750	9.9
<sup>1</sup> Completed 4 grade a			-		-	-	-	-		,	

<sup>1</sup> Completed 4 grade at the primary level
<sup>2</sup> Completed grade 12 or completed more than 9 years of schooling and has a secondary school attestat

### Table 2.11.2 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, Armenia 2015-16

Background characteristic	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	Secondary special	Higher	Don't know/ missing	Total	Number	Median years completed
Age											
6-9	6.8	93.1	0.1	0.0	0.0	0.0	0.0	0.0	100.0	764	0.8
10-14	0.2	6.3	19.2	74.3	0.0	0.0	0.0	0.0	100.0	967	5.2
15-19	0.5	0.0	0.0	49.8	20.7	16.0	13.0	0.0	100.0	706	10.0
20-24	0.2	0.1	0.2	9.6	44.9	10.7	34.3	0.0	100.0	948	10.9
25-29	0.2	0.4	0.0	10.2	43.7	11.5	33.8	0.1	100.0	1,050	9.9
30-34	0.5	0.1	0.0	11.3	44.5	9.4	34.1	0.1	100.0	1,003	9.8
35-39	0.2	0.3	0.2	11.2	51.4	12.5	24.1	0.1	100.0	814	9.7
40-44	0.2	0.0	0.0	7.3	47.9	19.1	25.4	0.0	100.0	686	9.9
45-49	0.0	0.0	0.0	8.5	46.8	25.3	19.4	0.1	100.0	674	9.9
50-54	0.2	0.5	0.1	6.7	50.6	21.8	20.1	0.0	100.0	1,038	9.8
55-59	0.0	0.1	0.2	8.1	42.3	25.1	24.2	0.1	100.0	1,025	10.0
60-64	0.3	0.4	0.1	6.9	45.6	22.8	23.9	0.0	100.0	773	9.9
65+	0.4	1.3	2.5	20.7	37.2	15.7	22.1	0.0	100.0	1,512	9.7
Residence										, -	
Urban	0.6	7.1	1.6	13.7	30.8	16.2	30.0	0.0	100.0	6,830	9.9
Rural	0.8	6.3	2.3	22.8	45.1	12.2	10.5	0.0	100.0	5,130	9.5
Region										-,	
Yerevan	0.3	7.1	1.6	12.1	24.6	15.0	39.4	0.0	100.0	3,531	11.4
Aragatsotn	0.2	6.5	1.7	17.5	49.0	9.6	15.3	0.2	100.0	662	9.5
Ararat	0.8	6.7	2.7	23.4	40.3	12.4	13.6	0.0	100.0	1,141	9.5
Armavir	0.8	8.5	2.6	28.2	37.0	12.5	10.4	0.0	100.0	1,117	9.3
Gegharkunik	1.0	6.3	2.2	18.3	54.7	6.2	11.2	0.0	100.0	1,025	9.5
Lori	0.9	5.0	1.4	15.8	49.1	16.2	11.2	0.4	100.0	837	9.6
Kotayk	1.1	6.6	1.9	17.1	38.5	16.6	18.2	0.0	100.0	1,242	9.7
Shirak	1.2	5.9	2.1	16.6	37.9	18.5	17.7	0.0	100.0	984	9.7
Syunik	0.2	5.8	1.7	16.6	44.8	14.7	16.3	0.0	100.0	593	9.6
Vayots Dzor	0.3	6.8	1.2	14.8	37.2	25.1	14.6	0.0	100.0	251	9.8
Tavush	0.8	7.9	2.0	24.6	28.9	20.9	14.8	0.0	100.0	578	9.6
Wealth guintile											
Lowest	1.0	7.4	2.9	27.8	45.1	10.2	5.5	0.2	100.0	2,421	9.3
Second	0.8	5.5	1.7	18.8	44.3	14.0	14.8	0.0	100.0	2,499	9.6
Middle	0.8	6.8	1.5	16.6	40.0	16.1	18.1	0.0	100.0	2,354	9.7
Fourth	0.2	6.6	1.7	12.3	31.3	17.0	31.0	0.0	100.0	2,353	10.0
Highest	0.6	7.6	1.8	11.9	22.9	15.2	40.0	0.0	100.0	2,334	11.6
Total	0.7	6.8	1.9	17.6	36.9	14.5	21.7	0.0	100.0	11,961	9.7

<sup>2</sup> Completed grade 12 or completed more than 9 years of schooling and has a secondary school attestat

The NAR is much lower at the high school level: only 56 percent of students age 15-17 who should be attending high school are in school. While it is low, a comparison with the NAR in 2010 (45 percent) indicates that high school attendance improved substantially in the period between the two surveys. High school attendance ratios are higher among females than males (62 percent and 51 percent, respectively). Surprisingly, both the NAR and GAR at the high school level are slightly higher among students living in rural areas than among those living in urban areas. The high school NAR and GAR are also lower in Yerevan than in other regions. The high school GAR is 64 percent. A comparison of the NAR and GAR indicates that approximately 8 percent of students are either under age or over age for their grade level. Syunik has the highest proportion of high school age students who are either under age or over age for their grade level (21 percent).

#### Table 2.12 School attendance ratios

Net attendance ratios (NARs) and gross attendance ratios (GARs) for the de facto household population, by sex and level of schooling; and the Gender Parity Index (GPI), according to background characteristics, Armenia 2015-16

		Net attenda	ance ratio <sup>1</sup>			Gross atten	dance ratio <sup>2</sup>	
		for allohat		Gender		erece attern		Gender
Background				Parity				Parity
characteristic	Male	Female	Total	Index <sup>3</sup>	Male	Female	Total	Index <sup>3</sup>
			BAS	C SCHOOL				
Residence								
Urban	97.5	95.5	96.6	0.98	102.5	100.1	101.4	0.98
Rural	95.5	96.1	95.8	1.01	100.4	100.3	100.4	1.00
Region								
Yerevan	99.5	95.5	97.6	0.96	104.3	101.3	102.9	0.97
Aragatsotn	95.9	95.4	95.6	0.99	104.4	97.5	101.2	0.93
Ararat	96.9	98.0	97.5	1.01	102.2	101.7	102.0	1.00
Armavir	96.0	98.3	96.9	1.02	101.0	102.2	101.5	1.01
Gegharkunik	96.2	93.5	95.0	0.97	99.9	96.4	98.2	0.97
Lori	95.1	95.0	95.0	1.00	97.9	99.4	98.6	1.01
Kotayk	95.8	96.1	95.9	1.00	101.0	100.3	100.7	0.99
Shirak	94.8	94.8	94.8	1.00	101.9	101.4	101.7	1.00
Syunik	91.1	91.5	91.3	1.00	96.6	94.6	95.6	0.98
Vayots Dzor	97.8	94.4	96.2	0.97	101.6	100.6	101.1	0.99
Tavush	94.0	97.7	95.6	1.04	96.3	100.4	98.1	1.04
Wealth quintile								
Lowest	95.7	96.1	95.8	1.00	100.8	100.1	100.5	0.99
Second	95.8	95.5	95.7	1.00	101.7	100.0	100.9	0.98
Middle	96.0	94.9	95.5	0.99	99.7	98.5	99.2	0.99
Fourth	97.7	94.9	96.4	0.97	102.8	99.8	101.4	0.97
Highest	98.1	97.0	97.5	0.99	103.3	102.1	102.7	0.99
Total	96.7	95.7	96.2	0.99	101.7	100.2	101.0	0.99
			HIG	H SCHOOL				
Residence								
Urban	44.0	53.8	48.7	1.22	49.7	62.6	55.9	1.26
Rural	60.6	71.7	66.1	1.18	70.7	78.3	74.4	1.11
Region								
Yerevan	36.5	49.8	43.0	1.36	37.0	58.3	47.4	1.58
Aragatsotn	64.9	61.2	63.6	0.94	72.6	68.4	71.2	0.94
Ararat	51.8	68.0	59.7	1.31	64.3	74.9	69.5	1.16
Armavir	51.8	47.4	49.9	0.92	57.1	50.9	54.4	0.89
Gegharkunik	69.0	76.4	73.2	1.11	78.1	83.5	81.2	1.07
Lori	59.0	65.7	62.3	1.11	68.1	82.7	75.3	1.21
Kotayk	51.0	71.0	60.3	1.39	62.2	77.2	69.2	1.24
Shirak	52.9	57.4	55.0	1.08	67.5	59.6	63.8	0.88
Syunik	64.7	78.9	72.3	1.22	86.8	99.2	93.4	1.14
Vayots Dzor	67.1	80.8	73.7	1.20	69.8	92.8	80.9	1.33
Tavush	61.3	77.0	69.7	1.26	76.7	79.9	78.4	1.04
Wealth quintile								
Lowest	61.1	77.7	69.3	1.27	70.1	85.2	77.6	1.21
Second	56.3	64.2	60.0	1.14	64.1	72.4	68.0	1.13
Middle	56.4	53.3	54.8	0.95	69.9	56.4	62.8	0.81
Fourth	43.4	57.6	49.3	1.33	47.8	71.4	57.7	1.49
Highest	41.3	56.8	49.2	1.38	45.7	64.0	55.1	1.40
Total	51.3	61.9	56.4	1.21	58.9	69.7	64.1	1.18

<sup>1</sup> The NAR for basic school is the percentage of the basic-school age (6-14 years) population that is attending basic school (grades 1-9). The NAR for high school is the percentage of the high-school age (15-17) population that is attending high school (grades 10-12). By definition the NAR cannot exceed 100 percent.

<sup>2</sup> The GAR for basic school is the total number of basic school students, expressed as a percentage of the official basic-schoolage population. The GAR for high school is the total number of high school students, expressed as a percentage of the official high-school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent. <sup>3</sup> The Gender Parity Index for basic school is the ratio of the basic school NAR(GAR) for females to the NAR(GAR) for males. The

Gender Parity Index for high school is the ratio of the high school NAR(GAR) for females to the NAR(GAR) for males

The gender parity index (GPI), or the ratio of the female to the male NAR or GAR at the basic and high school levels, is an indicator of the magnitude of the gender gap in attendance ratios. If there is no gender difference, the GPI will equal one. The GPI will be closer to zero if the disparity is in favor of males. If the gender gap favors females, the GPI will exceed one. Table 2.12 shows the GAR GPI is 0.99 for the basic level, which indicates that there is no gender gap at the basic level. At the high school level, the GPI is 1.18, indicating a gender gap favoring females at the high school level.

Figure 2.2 presents the age-specific attendance rates (ASAR) for the population age 5-24, by sex. The ASAR indicates that almost all youths of basic school age (6-14) attend school, with virtually no differences by gender. Among the high-school-age population (15-17), attendance ratios begin to decline, with a particularly sharp decline at age 17 among males. One possible explanation is that the requirement to serve in the military at age 18 keeps some young men out of school once they have completed the secondary level.

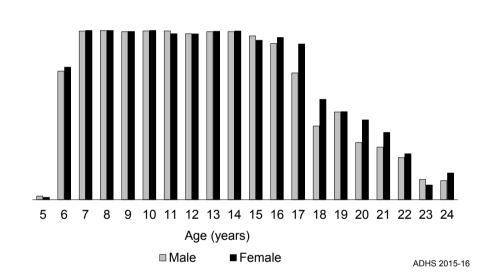


Figure 2.2 Age-specific attendance rates in the de facto population age 5-24

# 2.10 CHILD PROTECTION

Percent

In 1989, Armenia became a signatory to the Convention on the Rights of the Child, a document that recognizes that all children have the right to be protected from any harm, including abuse, neglect, and economic exploitation (UN 1989). Armenia ratified the Convention on the Rights of the Child in 1992. In 2003, the Armenia adopted the National Plan of Action for Protection of Children's Rights, which is an integral part of the country's child welfare reforms. Information obtained in the 2015-16 ADHS allows for an assessment of two topics that bear on the protection of Armenia's children: birth registration and child discipline.

# 2.10.1 Birth Registration

In Armenia, birth registration is recognized as a child's right. The registration of a birth involves the inscription of the facts of the birth into an official log in the registrar's office. A birth certificate is issued at the time of registration or later as proof that the birth was registered. The certificate establishes a child's legal identity, which is important not only during childhood, e.g., to gain access to school, but later in life when the child seeks to marry, vote, or inherit property.

In the 2015-16 ADHS. birth registration information was collected in the Household Questionnaire for children under age 5. Table 2.13 gives the percentage of children under age 5 whose births were officially registered and the percentage who had a birth certificate at the time of the survey. Not all children who are registered may have a birth certificate because some certificates may have been lost or were never issued. However, all children with a certificate have been registered.

Birth registration is virtually universal in Armenia, with 99 percent of births in the 5 years preceding the survey registered.

Table 2.13 Birth registration of children under age 5

Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Armenia 2015-16

	Children births are i	registered	_	
Background characteristic	Percentage who had birth certificate	Percentage who did not have birth certificate	Percentage registered	Number of children
Age <2	98.6	0.1	98.7	724
<2 2-4	98.7	0.1	98.7 98.7	1,019
Sex				
Male Female	98.7 98.5	0.1 0.0	98.9 98.5	930 813
Residence	00.0	0.4	00.4	1 000
Urban Rural	99.0 98.1	0.1 0.0	99.1 98.1	1,009 734
Region				
Yerevan	99.0	0.0	99.0	499
Aragatsotn	97.8	0.0	97.8	64
Ararat	96.5	0.0	96.5	174
Armavir	96.0	0.0	96.0	195
Gegharkunik	100.0	0.0	100.0	80
Lori	98.8	0.0	98.8	98
Kotayk	99.6	0.4	100.0	249
Shirak	99.5	0.0	99.5	182
Syunik	100.0 100.0	0.0 0.0	100.0 100.0	64 37
Vayots Dzor Tavush	100.0	0.0	100.0	37 98
Wealth quintile				
Lowest	98.1	0.0	98.1	340
Second	97.4	0.0	97.4	341
Middle	99.7	0.0	99.7	325
Fourth	99.3	0.3	99.7	311
Highest	98.8	0.0	98.8	427
Total	98.6	0.1	98.7	1,743

Practically all births have a certificate. Only small variations are found across subgroups of children, with children in Armavir and Ararat regions the least likely to have a birth certificate (96 percent and 97 percent, respectively).

# 2.10.2 Child Discipline

The manner in which parents and caretakers discipline children can have long-term consequences for their physical and psychological development and well-being. To identify the types of child disciplinary methods used in Armenia, questions on child discipline were asked about one randomly selected child age 1-14 in each household.<sup>4</sup> The questions were addressed to the household respondent. Questions referred to practices that may have been used to discipline the child during the 30 days prior to the interview. Specifically, questions asked whether anyone in the household had taken away the child's privileges, forbade something the child liked, or did not allow the child to leave the house; explained why some behavior was wrong; shook the child; shouted, yelled, or screamed at the child; gave the child something else to do; spanked, hit, or slapped the child on the bottom with a bare hand; hit on the bottom or elsewhere on the body with something like a belt, hairbrush, stick, or other hard object; called the child dumb, lazy, or a similar name; hit or slapped on the face, head, or ears; hit or slapped on the hand, arm, or leg; or beat the child over and over as hard as possible.

<sup>&</sup>lt;sup>4</sup> If several children age 1-14 were listed in the household schedule, only one child per household was randomly selected for administration of the questions on child discipline. If one child age 1-14 was listed in the household schedule, the questions on child discipline were administered about this child. If none of the children listed in the household schedule were age 1-14, the questions on child discipline were not administered.

Table 2.14 shows that 7 in 10 children age 1-14 experienced some form of psychological or physical punishment during the 30 days preceding the survey. Approximately one-fifth of children (19 percent) experienced only non-violent discipline. Psychological aggression was more common than physical punishment; about two-thirds of children (65 percent) experienced psychological aggression while 38 percent of children experienced some form of physical punishment. Four percent experienced severe physical punishment.

Violent methods were used almost as often to discipline girls (67 percent) as boys (71 percent). Very young children experienced violence less often than children age 3-14; nevertheless, some type of violent method was used to discipline half of 1- and 2-year-old children. Violent disciplinary methods were almost as common among urban (68 percent) as rural children (71 percent). Children from Syunik and Vayots Dzor were least likely to have experienced any violent disciplinary method (56 percent and 59 percent, respectively). In contrast, some type of violent method was used to discipline around 8 in 10 children in Aragatsotn and Lori.

Lack of education tends to be positively associated with the use of violent disciplinary methods, especially psychological aggression. Seventy-two percent of children whose head of household had only basic education experienced some form of psychological aggression during the month before the survey compared with 58 percent of children whose head of household had a higher education. The use of violent methods to discipline children tends to decline with the wealth quintile. The relationship between the use of severe physical punishment and both education and wealth is marked. Severe methods were used to discipline 8 percent of children whose head of household had only basic education compared with only 2 percent of children whose head of household had secondary special or higher education. Similarly, the percentage experiencing severe physical punishment decreased from 8 percent among children in the lowest wealth quintile to 2 percent among children in the fourth and fifth quintiles.

### Table 2.14 Child discipline

Percentage of children age 1-14 by child disciplinary methods experienced during the month before the survey, according to background characteristics, Armenia 2015-16

	Perc	entage of children	age 1-14 ye	ears who exper	ienced:	_
Background characteristic	Only non- violent discipline <sup>1</sup>	Psychological	Physical   Any <sup>3</sup>	punishment Severe⁴	Any violent discipline method <sup>5</sup>	Number of children age 1-14 years
Age						
1-2	12.0	41.5	33.0	0.9	50.1	394
3-4	15.1	67.9	53.4	1.2	74.7	375
5-9	17.3	72.0	41.1	4.0	74.9	1,081
10-14	23.8	65.8	30.6	6.6	67.7	1,030
Sex						
Male	16.7	67.2	39.0	4.5	70.8	1,515
Female	20.7	62.7	36.6	3.7	66.8	1,365
Residence						
Urban	21.0	63.7	37.2	2.7	67.6	1,677
Rural	15.3	67.0	38.8	6.2	70.7	1,203
Region						
Yerevan	22.0	63.7	41.8	1.9	68.9	870
Aragatsotn	17.9	70.4	49.4	9.6	78.6	138
Ararat	7.2	69.0	34.4	9.6	70.4	295
Armavir	14.2	62.9	33.2	2.9	65.0	287
Gegharkunik	13.9	68.4	57.1	20.0	74.7	203
Lori	14.2	76.7	44.8	2.1	79.3	142
Kotayk	17.8	70.1	24.3	0.7	71.2	353
Shirak Syunik	18.9 34.4	59.4 51.9	35.6 15.1	1.5 0.8	62.7 56.2	261 121
Vayots Dzor	26.3	52.6	36.8	1.7	50.2 59.4	58
Tavush	26.6	62.5	41.4	0.8	66.3	153
Education of head of household						
No education	*	*	*	*	*	5
Basic	12.4	72.1	40.9	7.7	73.6	359
Secondary	17.6	66.8	37.6	4.8	71.0	1,370
Secondary special	19.2	64.2	37.2	1.9	66.8	552
Higher	24.4	57.7	37.0	2.3	63.1	593
Wealth quintile						
Lowest	12.2	69.6	43.1	8.0	73.1	595
Second	17.9	65.2	35.4	4.2	69.3	538
Middle	18.3	66.0	36.8	4.2	69.0	547
Fourth	23.9	61.0	33.2	2.4	64.9	543
Highest	20.9	63.4	39.8	2.0	68.0	657
Total	18.6	65.1	37.8	4.1	68.9	2,880

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Total includes one child with

missing information on education of head of household. <sup>1</sup>Only non-violent discipline: (1) providing an affirmative response to one or both of the following: took away child's privileges, forbade something the child liked, or did not allow the child to leave the house or explained why some behavior was wrong, or gave the child something else to do; and (2) a negative response to all of the following: shook the child; shouted, yelled, or screamed at the child; spanked, hit, or slapped the child on the bottom with a bare hand; hit the child on the bottom or elsewhere on the body with something like a belt, hairbrush, stick, or other hard object; called the child dumb, lazy, or similar name; hit or slapped the child on the face, head, or ears; hit or slapped the child on the hand, arm, or leg; or beat the child over and over as hard as possible

<sup>2</sup> Psychological aggression: providing an affirmative answer to one or both of the following: shouted, yelled, or screamed at the child or called the child dumb, lazy, or similar name.

<sup>3</sup> Any physical punishment: providing an affirmative response to any of the following: shook the child; spanked, hit, or slapped the child on the bottom with a bare hand; hit the child on the bottom or elsewhere on the body with something like a belt, hairbrush, stick, or other hard object; hit or slapped the child on the face, head, or ears; hit or slapped the child on the hand, arm, or leg; or beat the child over and over as hard as possible.

<sup>4</sup> Severe physical punishment: providing an affirmative response to one or both of the following: hit or slapped the child on the face, head, or ears; or beat the child over and over as hard as possible.

<sup>5</sup> Any violent discipline method (MICS indicator 8.3 - Violent discipline): providing an affirmative response to any of the following: shook the child; shouted, yelled, or screamed at the child; spanked, hit, or slapped the child on the bottom with a bare hand; hit the child on the bottom or elsewhere on the body with something like a belt, hairbrush, stick, or other hard object; called the child dumb, lazy, or similar name; hit or slapped the child on the face, head, or ears; hit or slapped the child on the hand, arm, or leg; or beat the child over and over as hard as possible.

## 2.11 POVERTY BENEFITS

The government of Armenia provides a number of benefits to assist poor families. According to the Law on State Benefits, there are 10 types of benefits financed from the state budget: a family benefit, a social benefit, an emergency benefit, a lump-sum benefit at childbirth, a child-care leave benefit (under age 2), a temporary disability benefit, an old-age benefit, a disability benefit, a survivor benefit, and a funeral benefit.

In ADHS 2015-16 respondents were asked about two types of benefits: a family benefit and an emergency benefit. To provide information on the coverage of these benefits, the 2015-16 ADHS included questions on whether or not households received any of the following benefits in the 6 months before the survey: (1) a monthly cash benefit, that is, the poverty family benefit; (2) an emergency benefit, a cash benefit available to families four times per year. The respondents were also asked to report if any member of their household received a government "order" to cover the costs of health services for which fees are charged. The ADHS questionnaire also included a question to determine if households that had not received any of the benefits during the 6 months prior to the survey had registered or updated their registration in the family benefit program in the 6-month period before the survey.

Table 2.15 shows that 14 percent of households interviewed in the ADHS had received at least one of the family benefits during the 6 months prior to the survey. Eleven percent of households received a monthly cash benefit, 3 percent received a government order to cover health care costs, and 1 percent received an emergency cash benefit. Virtually no households received all three benefits. Among the households not receiving benefits, 3 percent had registered or updated their registration in the family benefit program database. Overall, one in six households either received benefits or were registered in the family benefit database in the 6 months before the survey.

#### Table 2.15 Poverty benefits

Percentages of households receiving a poverty family benefit, an emergency benefit in the past 6 months or a government order for any health services that are otherwise not free; percentages receiving all three types of poverty family benefits and none of the poverty family benefits in the 6 months prior to the survey; and, among households receiving no poverty family benefits, percentage that registered or updated their registration in the family benefits program database in the s6months prior to the survey, according to selected background characteristics, Armenia 2015-16

	Feicent-	_	receiving a	Feicent-	Feicent-	Fercent-		registering of	
	age of	Percent-	government	age of	age of	age of		updating	
	households	age of	order to any	households	households	households		registration in	
	receiving a	households	health	receiving at	receiving all	received		the family	Number of
	poverty	receiving an	services that	least one of	three of the	none of the	Number	benefit	households
Background	family	emergency	are otherwise	the family	family	family	of house-	program	not receiving
characteristic	benefit <sup>1</sup>	benefit <sup>2</sup>	not free <sup>3</sup>	benefits	benefits	benefits	holds	database	benefits
Residence									
Urban	8.5	0.9	2.0	10.8	0.1	89.2	4,924	2.3	4,390
Rural	15.4	1.1	3.3	18.9	0.0	81.1	2,969	2.7	2,408
Region									
Yerevan	3.8	0.2	1.9	5.6	0.1	94.4	2,480	2.3	2,340
Aragatsotn	10.1	0.6	0.1	10.9	0.0	89.1	387	1.7	345
Ararat	8.9	0.6	0.2	9.3	0.0	90.7	682	0.9	618
Armavir	8.8	0.7	3.8	12.4	0.0	87.6	633	5.7	554
Gegharkunik	23.1	2.8	8.5	31.1	0.3	68.9	601	5.2	414
Lori	17.0	0.5	0.5	17.3	0.2	82.7	645	0.2	533
Kotayk	13.6	0.6	1.2	15.1	0.0	84.9	799	1.7	678
Shirak	21.2	0.6	1.3	22.5	0.0	77.5	685	2.4	531
Syunik	7.4	6.5	7.7	20.8	0.0	79.2	448	0.1	355
Vayots Dzor	12.5	0.0	4.4	16.1	0.0	83.9	167	3.4	140
Tavush	18.5	0.6	2.5	21.0	0.0	79.0	366	5.9	289
Wealth quintile									
Lowest	20.6	1.9	3.2	24.5	0.1	75.5	1,700	3.3	1,284
Second	12.8	1.1	2.2	15.7	0.0	84.3	1,452	2.4	1,224
Middle	10.8	1.2	3.1	14.1	0.3	85.9	1,791	3.0	1,539
Fourth	6.9	0.4	1.8	8.6	0.0	91.4	1,558	1.7	1,423
Highest	2.8	0.1	1.8	4.5	0.0	95.5	1,392	1.9	1,329
Total	11.1	1.0	2.5	13.9	0.1	86.1	7,893	2.5	6,798

<sup>1</sup> A poverty family benefit' that is, a monthly cash benefit

<sup>2</sup> An emergency benefit; that is, a cash benefit up to four times per year

<sup>3</sup> A government order to cover the cost of any health services that are not free (for example, an operation board)

Rural households were almost twice as likely as urban households to have received at least one of the family benefits. Gegharkunik (31 percent) had the highest proportion of households receiving one family benefits and Yerevan the lowest (6 percent). Households receiving family benefits were largely concentrated in the bottom three wealth quintiles, with one in four households in the lowest quintile receiving benefits.

# Key Findings:

- Virtually all women and men age 15-49 have at least a secondary education, and 31 percent of women and 27 percent of men have some higher education.
- More than 9 in 10 women and men in Armenia are exposed to some form of mass media, primarily television, at least once per week.
- Internet usage is almost as widespread; 91 percent of women and 89 percent of men access the Internet at least once per week.
- More than 7 in 10 men and 4 in 10 women report they were employed in the 12 months prior to the survey.

This chapter gives a demographic and socioeconomic profile of respondents in the 2015-16 ADHS sample. Information on the basic characteristics of women and men interviewed in the survey is essential to interpret the findings on reproduction, health, and women's status that are presented in final chapters of the report. The distribution of the respondents by their various demographic and socioeconomic characteristics can be compared to the likelihood of occurrence in the general population and, thus, offer a means of assessing the representativeness of the ADHS sample. The main background characteristics, described in detail here and used in subsequent chapters on reproduction and health, are as follows: age at the time of the survey, marital status, residence, education, and wealth quintile. This chapter also includes information on exposure to mass media and employment.

# 3.1 BACKGROUND CHARACTERISTICS OF RESPONDENTS

As noted in Chapter 1, all women age 15-49 who were usual residents or present in the household on the night before the interviewer's visit were eligible to be interviewed in the 2015-16 ADHS. Men age 15-49 were interviewed in every second household. To avoid double counting the respondents, the tables in this report are, in most cases, based on the de facto population, that is, those who stayed in the household the night before the interview.

Table 3.1 presents the distribution of interviewed women and men age 15-49 by selected background characteristics. The age distribution shows that 45 percent of the women and a similar percentage of the men (46 percent) are under age 30. About one-quarter of both women and men are age 40-49. Nearly two-thirds of the women (64 percent) and more than half of the men (55 percent) are married or living together. Because men tend to marry later in life than women do, more men (43 percent) than women (30 percent) have never been married. Six percent of women and two percent of men are divorced, separated, or widowed.

### Table 3.1 Background characteristics of respondents

Percent distribution of women and men age 15-49 by selected background characteristics, Armenia 2015-16

		Women			Men	
Background characteristic	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Age						
15-19	11.9	725	743	12.5	345	346
20-24	15.2	928	922	17.0	467	450
25-29	18.0	1,099	1,076	16.9	464	477
30-34	16.5	1,007	1,005	15.5	427	434
35-39	14.2	867	874	13.6	376	373
40-44	12.8	784	782	12.6	346	341
45-49	11.5	704	714	12.0	330	334
	11.0	700	114	12.0	000	004
Marital status	00.0	1 000	4 7 4 7	10.0	4 400	4 470
Never married	29.9	1,830	1,747	43.2	1,190	1,179
Married	63.3	3,870	3,973	49.4	1,361	1,368
Living together	0.4	25	25	5.3	145	159
Divorced/separated	4.3	262	244	2.0	56	46
Widowed	2.1	128	127	0.1	3	3
Residence						
Urban	59.8	3,657	3,545	56.5	1,558	1,522
Rural	40.2	2,459	2,571	43.5	1,197	1,233
Region						
Yerevan	32.7	2,001	1,055	30.2	833	440
Aragatsotn	5.2	315	453	5.8	159	228
Ararat	9.0	552	597	10.5	290	313
Armavir	9.6	586	642	9.7	268	284
Gegharkunik	7.8	478	551	8.5	235	268
Lori	5.8	355	337	6.7	184	164
Kotayk	11.1	678	659	10.8	299	288
Shirak	8.3	510	536	7.3	201	191
Syunik	3.9	238	383	3.8	104	174
Vayots Dzor	1.9	119	405	2.0	56	186
Tavush	4.6	283	498	4.6	126	219
Education No education	0.1	5	5	0.2	5	6
Basic	6.5	396	406	13.1	360	379
Secondary	40.0	2,444	2,580	45.4	1,250	1,293
Secondary special	22.2	1,360	1,444	14.6	403	422
Higher	31.2	1,910	1,681	26.7	736	655
5	01.2	1,010	1,001	20.7	700	000
Wealth quintile	177	1 001	4 407	10.0	500	526
Lowest	17.7	1,081	1,137	19.0	523	536
Second	20.3	1,242	1,358	21.2	583	626
Middle	18.7	1,142	1,324	18.9	521	608
Fourth	21.0	1,287	1,293	20.5	566	565
Highest	22.3	1,365	1,004	20.4	562	420
Total	100.0	6,116	6,116	100.0	2,755	2,755

Three-fifths of the respondents live in urban areas. The majority live in Yerevan. Outside of Yerevan, the largest proportions of respondents are found in Kotayk, Ararat, and Armavir, each with around 10 percent of the total sample. The regions with the smallest proportions of respondents are Vayots Dzor and Syunik.

Male and female respondents are universally well educated, with 93 percent of the women and 87 percent of the men having at least some secondary education. Thirty-one percent of the women and just over a quarter of the men have some higher education.

# 3.2 EDUCATIONAL ATTAINMENT OF RESPONDENTS

Education provides people with the knowledge and skills to lead a better quality of life. Educational attainment has been found to be closely associated with the health of women and children as well as with the reproductive behavior of women and men.

Tables 3.2.1 and 3.2.2 show the distribution of women and men age 15-49 by highest level of schooling<sup>1</sup> attended or completed and the median number of years of schooling completed, according to background characteristics. Education has been almost universal in Armenia for some time, and almost all women and men have completed at least some secondary education. More than a fifth of women and 15 percent of men have secondary special education. Three in 10 women and more than one-quarter of the men have had at least some university education.

### 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, Armenia 2015-16

			Highe	st level of sch	ooling				Median	
Background characteristic	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	Secondary special	Higher	Total	years completed	Number of women
Age										
15-24	0.0	0.2	0.1	23.0	25.9	16.4	34.3	100.0	11.0	1,653
15-19	0.0	0.3	0.0	48.6	18.2	16.9	16.0	100.0	10.1	725
20-24	0.0	0.2	0.1	3.0	32.0	16.1	48.6	100.0	11.9	928
25-29	0.1	0.6	0.1	3.7	33.9	20.7	40.9	100.0	12.3	1,099
30-34	0.1	0.2	0.1	5.2	41.6	22.6	30.2	100.0	11.5	1,007
35-39	0.0	0.3	0.0	6.6	43.7	22.6	26.9	100.0	10.0	867
40-44	0.3	0.0	0.0	4.4	42.5	28.3	24.6	100.0	11.2	784
45-49	0.0	0.2	0.0	5.8	40.2	30.6	23.1	100.0	11.3	706
Residence										
Urban	0.0	0.3	0.0	6.5	26.6	24.9	41.7	100.0	12.2	3,657
Rural	0.2	0.2	0.1	15.0	50.6	18.3	15.6	100.0	9.8	2,459
Region										
Yerevan	0.0	0.2	0.0	5.7	20.3	22.0	51.8	100.0	12.7	2,001
Aragatsotn	0.0	0.0	0.0	7.7	57.4	15.4	19.5	100.0	9.9	315
Ararat	0.0	0.3	0.2	12.9	51.8	16.2	18.6	100.0	9.9	552
Armavir	0.5	1.1	0.2	19.6	41.2	19.7	17.7	100.0	9.8	586
Gegharkunik	0.0	0.0	0.0	12.7	56.7	17.3	13.3	100.0	9.8	478
Lori	0.0	0.0	0.0	7.4	43.3	23.1	26.2	100.0	11.1	355
Kotayk	0.0	0.4	0.0	9.9	36.5	26.5	26.8	100.0	11.0	678
Shirak	0.2	0.2	0.0	8.6	39.6	25.3	26.0	100.0	11.0	510
Syunik	0.2	0.0	0.0	13.1	36.6	28.7	21.3	100.0	10.9	238
Vayots Dzor	0.0	0.0	0.0	10.6	40.2	29.6	19.6	100.0	10.3	119
Tavush	0.3	0.0	0.0	13.9	32.3	32.0	21.5	100.0	11.1	283
Wealth guintile										
Lowest	0.1	0.4	0.1	21.0	53.2	16.1	9.0	100.0	9.7	1,081
Second	0.1	0.1	0.1	9.6	47.6	20.8	21.6	100.0	10.0	1,242
Middle	0.0	0.4	0.0	9.2	41.4	25.4	23.6	100.0	10.7	1,142
Fourth	0.2	0.4	0.0	5.6	25.5	26.7	41.6	100.0	12.2	1,287
Highest	0.0	0.0	0.0	6.0	18.2	21.6	54.2	100.0	12.8	1,365
Total	0.1	0.3	0.0	9.9	36.2	22.2	31.2	100.0	11.3	6,116

<sup>1</sup> Completed 4 grade at the primary level

<sup>2</sup> Completed 12 grade at the secondary level or completed more than 9 years of schooling and has a secondary school attestat

Although virtually all female respondents have attended secondary school, differences in attendance at higher levels of education are evident by background characteristics. For example, 42 percent of urban women have some higher education compared with only 16 percent of rural women. There also is considerable variation by region: the largest proportion of highly educated women is found in Yerevan (52 percent), and the smallest proportion in Gegharkunik (13 percent). Attainment of higher education is closely related to wealth status; more than half of the women in the highest wealth quintile (54 percent) have some university education compared with less than 1 in 10 women in the lowest quintile.

Differences in the proportion of men attaining higher education are similar to those among women (Table 3.2.2). Thirty-seven percent of urban men have some higher education compared with 14 percent of rural men. As with women, there is considerable variation by region. Yerevan residents have a clear

<sup>&</sup>lt;sup>1</sup> As reported in Chapter 2, Armenia's educational system has undergone several stages of restructuring. Since 2007, basic education has consisted of grades 1-9 instead of grades 1-8 as in the previous system; high school consists of grades 10-12 instead of grades 9-10 as in the previous system. The two levels together (basic education and high school) are referred to as secondary education (grades 1 through 12 in the new system versus grades 1 through 10 in the old system).

educational advantage over the rest of the country: nearly half of the men in Yerevan (47 percent) have some university education compared with 10 percent of men in Armavir and 12 percent in Gegharkunik. Wealth status is positively associated with education; half of men in the highest wealth quintile have some higher education compared with 5 percent of men in the lowest wealth quintile.

### 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, Armenia 2015-16

			Highe	st level of sch	looling				Median	
Background characteristic	No education	Some primary	Completed primary <sup>1</sup>	Some secondary	Completed secondary <sup>2</sup>	Secondary special	Higher	Total	years completed	Numbe of mer
Age										
15-24	0.2	0.6	0.0	28.8	31.4	13.4	25.7	100.0	10.4	813
15-19	0.4	0.1	0.0	53.1	18.2	14.4	13.9	100.0	10.1	345
20-24	0.0	0.9	0.0	10.9	41.1	12.6	34.5	100.0	10.9	467
25-29	0.0	1.1	0.0	12.2	40.8	11.7	34.2	100.0	9.9	464
30-34	0.4	0.1	0.0	12.9	45.8	10.2	30.6	100.0	9.8	427
35-39	0.7	0.3	0.3	12.9	50.0	13.2	22.7	100.0	9.7	376
40-44	0.0	0.0	0.0	7.1	52.2	17.9	22.8	100.0	9.8	346
45-49	0.0	0.0	0.0	9.3	42.4	26.0	22.3	100.0	10.0	330
Residence										
Urban	0.2	0.1	0.0	11.1	33.6	18.2	36.8	100.0	11.2	1,558
Rural	0.2	0.8	0.1	23.1	52.2	10.0	13.6	100.0	9.6	1,197
Region										
Yerevan	0.0	0.0	0.0	7.7	28.1	17.0	47.2	100.0	12.0	833
Aragatsotn	0.0	0.0	0.0	12.7	55.7	9.4	22.2	100.0	9.8	159
Ararat	0.0	0.6	0.0	22.2	51.1	9.4	16.7	100.0	9.6	290
Armavir	0.4	1.5	0.5	33.9	44.5	8.7	10.4	100.0	9.4	268
Gegharkunik	0.0	0.9	0.0	17.0	64.2	6.0	11.9	100.0	9.7	235
Lori	0.0	1.2	0.0	14.0	53.7	12.5	18.6	100.0	9.8	184
Kotayk	0.0	0.0	0.0	20.0	39.2	19.5	21.3	100.0	9.9	299
Shirak	1.7	0.0	0.0	18.4	38.7	18.4	22.8	100.0	9.9	201
Syunik	0.0	0.0	0.0	16.4	40.1	22.4	21.2	100.0	9.9	104
Vayots Dzor	0.0	0.8	0.0	8.2	44.6	21.9	24.4	100.0	10.0	56
Tavush	0.7	0.7	0.0	20.7	36.1	22.6	19.3	100.0	9.9	126
Wealth quintile										
Lowest	0.5	0.9	0.2	30.2	53.7	8.9	5.4	100.0	9.4	523
Second	0.3	1.1	0.0	17.6	51.5	11.9	17.7	100.0	9.7	583
Middle	0.0	0.0	0.0	15.6	44.0	16.3	24.1	100.0	9.9	521
Fourth	0.0	0.0	0.0	10.7	36.8	17.1	35.4	100.0	11.0	566
Highest	0.2	0.1	0.0	8.4	22.9	18.8	49.7	100.0	12.4	562
Total 15-49	0.2	0.4	0.0	16.3	41.7	14.6	26.7	100.0	9.9	2,755

<sup>2</sup> Completed 12 grade at the secondary level or completed more than 9 years of schooling and has a secondary school attestat

A comparison of the median years of schooling among women and men in the 2010 ADHS and 2015-16 ADHS shows educational attainment increased only modestly for women between the surveys, from 11.2 to 11.3 years, and remained stable at 9.9 years among men. The proportion of women with some higher education also increased only slightly in the period between the 2010 and 2015-16 ADHS surveys, from 30 to 31 percent. Among men, the proportion with some higher education actually dropped from 30 percent in 2010 (NSS et al. 2012) to 27 percent in 2015-16.

# 3.3 EXPOSURE TO MASS MEDIA AND INTERNET

Access to information is essential to increase people's knowledge and awareness of what happens around them. The 2015-16 ADHS collected information relating to the respondent's access to mass media, including print and broadcast media, as well as usage of the Internet. This information can help program managers plan the dissemination of information on health, family planning, nutrition, and other topics.

### 3.3.1 Mass Media

In the survey, exposure to media was assessed by asking how often respondents read a newspaper or magazine, watched television, or listened to the radio. The results indicate that more than 9 in 10 Armenian women watch television at least once a week, just over a quarter read a newspaper or magazine, and 15 percent listen to the radio (Table 3.3.1). In general, men report a slightly lower level of exposure to television and newspapers or magazines and a higher level of exposure to radio than women (Table 3.3.2). Eighty-nine percent of men watch television, 22 percent read a newspaper or magazine, and 24 percent listen to the radio at least once a week. Overall, around one in eight women and men are exposed to all three types of media on a weekly basis, while 10 percent of men and 6 percent of women are not regularly exposed to any of the three types of media. Among both women and men, media exposure rates are highest among urban residents, those living in Yerevan, those with higher education, and those in the highest wealth quintile.

### Table 3.3.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Armenia 2015-16

	Reads a				Accesses	
	newspaper or	Watches		Accesses all	none of the	
	magazine at	television at		three media at	three media at	
Background	least once a	least once a	radio at least	least once a	least once a	Number of
characteristic	week	week	once a week	week	week	women
Age						
15-19	25.4	90.4	14.6	9.8	8.3	725
20-24	27.1	93.3	16.9	12.9	6.0	928
25-29	28.5	93.9	17.9	13.7	5.5	1,099
30-34	26.9	94.2	17.8	13.0	5.7	1,007
35-39	28.1	94.3	13.9	11.4	5.1	867
40-44	26.5	94.3	13.4	10.4	4.7	784
45-49	27.1	93.4	10.1	7.1	5.8	706
Residence						
Urban	33.7	94.6	20.9	15.8	4.5	3,657
Rural	17.4	91.8	7.0	5.1	7.8	2,459
Region						
Yerevan	41.3	96.9	30.4	23.8	2.5	2,001
Aragatsotn	15.5	86.9	4.2	3.8	12.7	315
Ararat	15.9	97.2	15.7	10.1	1.8	552
Armavir	18.0	97.8	7.2	5.5	2.0	586
Gegharkunik	3.6	65.7	0.3	0.0	32.7	478
Lori	8.7	87.3	2.5	1.5	12.1	355
Kotayk	26.4	97.8	14.0	10.0	1.5	678
Shirak	18.4	95.8	11.3	7.3	3.9	510
Syunik	29.4	97.7	6.0	4.5	2.0	238
Vayots Dzor	37.0	98.0	2.1	1.6	1.1	119
Tavush	56.1	95.4	2.3	1.6	3.7	283
Education						
Basic	10.5	91.0	6.3	2.8	8.1	396
Secondary	14.5	91.7	8.8	5.1	8.0	2,444
Secondary special	26.8	94.8	11.4	8.1	4.5	1,360
Higher	47.1	95.4	28.3	24.0	3.5	1,910
Wealth quintile						
Lowest	11.5	92.0	4.9	2.5	7.8	1,081
Second	22.2	93.1	9.3	7.2	6.3	1,242
Middle	25.3	91.0	14.9	10.9	8.2	1,142
Fourth	29.4	93.8	17.3	11.9	4.9	1,287
Highest	43.6	96.9	27.5	22.7	2.8	1,365
Total	27.2	93.5	15.3	11.5	5.8	6,116

Note: Total includes 5 (weighted) women with no education.

Looking at the trends in exposure to specific media between the 2010 and 2015-16 ADHS surveys, the greatest change was in the proportion of women reading a newspaper or magazine at least once a week, which dropped from 45 percent in 2010 to 27 percent in 2015-16. Men also were less likely to have regular exposure to newspapers or magazines in 2015-16 compared with 2010 (30 percent and 22 percent, respectively). The level of exposure to radio and television also changed between 2010 and 2015-16. Among women, the percentage listening to the radio at least once per week declined from 20 percent in 2010 to 15 percent in 2015-16 while, among men, regular exposure to radio broadcasts increased from 18 percent to 24

percent. Considering television exposure, the percentage of men watching television at least once per week dropped from 96 percent in 2010 to 89 percent in 2015-16, while the percentage of women regularly exposed to television broadcasts remained essentially stable (93 percent in 2010 and 94 percent in 2015-16). Overall, the proportion of women who accessed none of the three mass media on a weekly basis remained stable at 6 percent between 2010 and 2015-16 while the proportion of men who did not access any of the three media rose from 3 percent to 10 percent.

### Table 3.3.2 Exposure to mass media: Men

Percentage of men age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Armenia 2015-16

	Reads a				Accesses	
	newspaper or	Watches		Accesses all	none of the	
	magazine at	television at	Listens to the	three media at	three media at	
Background	least once a	least once a	radio at least	least once a	least once a	Number o
characteristic	week	week	once a week	week	week	men
Age						
15-19	12.2	87.4	10.0	6.4	12.5	345
20-24	17.2	87.2	16.7	8.1	12.3	467
25-29	22.4	89.8	23.3	11.5	9.1	464
30-34	23.5	88.8	27.0	13.6	10.5	427
35-39	28.6	89.9	34.8	19.0	8.5	376
40-44	24.3	87.2	23.9	13.4	12.0	346
45-49	28.8	91.4	32.1	18.0	8.1	330
Residence						
Urban	27.5	92.2	30.1	17.5	6.9	1,558
Rural	15.4	84.3	15.6	6.3	15.0	1,197
Region						
Yerevan	35.5	97.6	40.6	27.1	1.6	833
Aragatsotn	12.1	98.7	4.6	1.0	1.3	159
Ararat	12.6	93.4	9.7	4.9	5.6	290
Armavir	26.3	99.0	53.9	21.3	0.7	268
Gegharkunik	0.7	2.9	0.0	0.0	96.4	235
Lori	3.7	98.9	8.2	2.0	1.1	184
Kotayk	17.6	99.4	22.4	5.7	0.6	299
Shirak	27.6	85.6	14.7	4.5	9.8	201
Syunik	10.5	98.8	3.6	1.2	1.2	104
Vavots Dzor	16.8	93.9	6.2	4.2	5.7	56
Tavush	42.7	99.7	14.8	13.0	0.0	126
Education						
Basic	8.0	90.4	17.2	4.0	9.4	360
Secondary	13.0	83.6	17.1	6.7	15.8	1,250
Secondary special	19.5	94.7	25.1	9.7	4.5	403
Higher	46.5	93.5	37.9	28.7	5.2	736
Wealth quintile						
Lowest	12.9	87.5	16.6	6.0	12.1	523
Second	17.0	86.2	16.9	7.3	12.8	583
Middle	17.9	82.9	19.0	8.8	16.8	521
Fourth	26.1	91.9	24.9	14.4	7.3	566
Highest	36.5	95.0	40.8	26.1	3.7	562
Total	22.2	88.8	23.8	12.6	10.4	2,755

### 3.3.2 Internet Usage

Changes in the level of exposure to various mass media may relate at least in part to the rapid growth in computer ownership among Armenian households between the 2010 and 2015-16 ADHS surveys (see Chapter 2). Increased access to the Internet, which accompanied computer ownership, affected usage of traditional mass media. Tables 3.4.1 and 3.4.2 present information from the 2015-16 ADHS on the extent to which respondents accessed the Internet.

Overall, a large majority of women and men reported that they had ever used the Internet (87 percent and 91 percent, respectively), and most women and men had used it at some point in the 12 months prior to the survey (85 percent and 89 percent, respectively). Overall, among respondents who had used the Internet in the 12 months before the survey, around 90 percent reported that they were online at least once a week during the month before the survey; 70 percent of women and 61 percent of men reported use almost every day during the month.

#### Table 3.4.1 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, Armenia 2015-16

				10		en who have us entage who, in			ot:	
		Used the		12	Less than	entage who, in	the past mon	in, used mien	iei.	_
		Internet in			every day					
Background	Ever used	the past 12	Number of	Almost	but at least	Less than				Number of
characteristic	the Internet	months	women	every day		once a week	Not at all	Missing	Total	women
Age										
15-19	93.7	93.1	725	85.1	10.2	4.6	0.2	0.0	100.0	675
20-24	94.8	93.4	928	83.4	10.9	5.7	0.1	0.0	100.0	867
25-29	91.1	89.9	1,099	76.7	17.1	5.8	0.4	0.0	100.0	988
30-34	89.5	87.5	1,007	65.5	24.1	10.2	0.1	0.0	100.0	881
35-39	81.5	80.2	867	63.1	25.6	10.1	1.2	0.0	100.0	695
40-44	81.4	79.8	784	54.6	32.1	13.1	0.1	0.0	100.0	625
45-49	71.3	69.3	706	52.6	29.7	16.8	0.8	0.2	100.0	489
Residence										
Urban	92.9	91.9	3,657	75.2	18.3	6.2	0.3	0.0	100.0	3,360
Rural	77.8	75.6	2,459	61.3	24.5	13.7	0.5	0.0	100.0	1,860
Region										
Yerevan	95.1	94.5	2,001	76.9	17.4	5.4	0.3	0.0	100.0	1,891
Aragatsotn	83.1	77.7	315	63.4	26.2	9.8	0.6	0.0	100.0	245
Ararat	79.5	78.4	552	66.3	23.8	9.6	0.3	0.0	100.0	433
Armavir	73.9	71.5	586	70.3	18.8	10.9	0.0	0.0	100.0	419
Gegharkunik	82.4	81.1	478	41.4	37.5	20.5	0.6	0.0	100.0	388
Lori	87.1	84.8	355	63.9	22.8	11.7	1.3	0.3	100.0	301
Kotayk	86.2	84.7	678	67.3	18.4	13.6	0.7	0.0	100.0	574
Shirak	84.2	81.7	510	75.6	18.5	5.6	0.3	0.0	100.0	417
Syunik	92.2	91.4	238	80.8	16.6	2.5	0.0	0.0	100.0	218
Vayots Dzor	88.4	87.9	119	68.4	21.4	10.2	0.0	0.0	100.0	105
Tavush	81.4	81.1	283	76.3	16.5	7.3	0.0	0.0	100.0	229
Education										
Basic	65.2	62.8	396	59.1	25.4	15.3	0.1	0.0	100.0	249
Secondary	80.0	77.7	2,444	59.9	25.9	13.4	0.7	0.0	100.0	1,899
Secondary special	89.4	88.4	1,360	66.3	23.9	9.6	0.2	0.0	100.0	1,203
Higher	98.4	97.8	1,910	84.9	12.0	2.9	0.2	0.0	100.0	1,867
Wealth quintile										
Lowest	62.9	59.7	1,081	55.0	24.6	19.0	1.3	0.0	100.0	645
Second	84.8	82.9	1,242	65.2	23.7	10.8	0.3	0.0	100.0	1,029
Middle	88.8	87.1	1,142	65.9	24.1	9.7	0.4	0.0	100.0	994
Fourth	95.6	95.2	1,287	75.2	19.2	5.3	0.3	0.1	100.0	1,225
Highest	97.7	97.2	1,365	80.5	14.4	5.1	0.0	0.0	100.0	1,327
Total	86.8	85.3	6,116	70.3	20.5	8.8	0.4	0.0	100.0	5,220

Among women and men, both the likelihood that an individual had ever used the Internet and had used the Internet in the 12 months before the survey decreased with age. Ever use and use in the 12 months before the survey was lower among rural than urban residents and among women living in Armavir and men living in Vayots Dzor compared with those living in other regions. Such use rose with increasing education and wealth. Among those who had used the Internet in the 12 months before the survey, the likelihood that use was infrequent during the month before the survey, (i.e., less than once a week or not at all), was greatest for women in Gegharkunik (21 percent) and in the lowest wealth quintile (19 percent) and for men in Aragatsotn (28 percent) and Ararat (21 percent) and in the lowest wealth quintile (19 percent).

#### Table 3.4.2 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, Armenia 2015-16

		Among men who have used the Internet in the past 12 months, percentage who, in the past month, used Internet:								
Background characteristic	Ever used the Internet	Used the internet in the past 12 months	Number of men	Almost every day	Less than every day but at least	Less than	Not at all	Missing	Total	– Number o men
Age				, ,						
15-19	95.5	95.2	345	76.0	18.3	5.6	0.0	0.0	100.0	329
20-24	96.3	95.2	467	72.5	21.2	5.4	0.9	0.0	100.0	445
25-29	94.1	93.5	464	66.8	24.3	8.5	0.3	0.0	100.0	434
30-34	91.2	89.9	427	64.6	22.4	12.5	0.5	0.0	100.0	384
35-39	89.6	87.0	376	52.0	33.3	13.6	0.5	0.5	100.0	327
40-44	86.9	83.1	346	43.1	38.5	17.6	0.5	0.0	100.0	287
45-49	75.8	74.1	340	36.3	45.9	16.0	1.8	0.0	100.0	207
40-49	75.6	74.1	330	30.3	45.9	10.0	1.0	0.0	100.0	244
Residence										
Urban	94.4	93.5	1,558	66.7	24.2	8.5	0.4	0.1	100.0	1,456
Rural	85.4	83.0	1,197	52.5	32.7	13.9	1.0	0.0	100.0	994
Region										
Yerevan	94.0	93.4	833	67.5	24.1	8.2	0.2	0.0	100.0	778
Aragatsotn	78.5	77.9	159	27.7	43.9	28.4	0.0	0.0	100.0	124
Ararat	86.9	77.8	290	49.6	25.7	20.5	4.2	0.0	100.0	225
Armavir	76.4	76.4	268	67.3	28.1	4.6	0.0	0.0	100.0	204
Gegharkunik	94.7	93.2	235	25.0	57.7	17.3	0.0	0.0	100.0	219
Lori	94.4	91.9	184	60.2	22.5	16.8	0.6	0.0	100.0	170
Kotayk	94.1	94.1	299	67.9	24.1	6.3	1.1	0.6	100.0	281
Shirak	97.3	97.3	201	74.1	20.7	5.2	0.0	0.0	100.0	196
Syunik	92.2	97.3 89.8	104	74.1	27.0	2.5	0.0	0.0	100.0	94
Vayots Dzor	92.2 75.8	89.8 75.4	56	46.8	39.3	13.9	0.0	0.0	100.0	94 42
Tavush	93.1									116
	93.1	92.8	126	91.2	4.8	4.0	0.0	0.0	100.0	116
Education										
Basic	80.4	78.4	360	53.0	30.8	16.0	0.2	0.0	100.0	282
Secondary	89.5	87.2	1,250	50.3	34.5	14.2	0.8	0.2	100.0	1,090
Secondary special	90.2	89.1	403	60.9	28.9	9.5	0.7	0.0	100.0	359
Higher	97.9	97.4	736	80.2	15.4	3.9	0.5	0.0	100.0	717
Wealth quintile										
Lowest	77.3	74.0	523	49.1	31.4	18.5	1.1	0.0	100.0	387
Second	90.4	87.8	583	57.3	31.1	10.6	1.0	0.0	100.0	512
Middle	92.0	91.0	521	55.9	32.4	11.3	0.4	0.0	100.0	474
Fourth	95.0	94.8	566	66.8	22.7	9.9	0.6	0.0	100.0	537
Highest	97.0	96.2	562	71.5	22.5	5.4	0.2	0.3	100.0	540
Total	90.5	88.9	2,755	60.9	27.7	10.7	0.6	0.1	100.0	2,450

Note: Total includes five (weighted) men with no education.

# 3.4 EMPLOYMENT

In the 2015-16 ADHS, respondents were asked about their employment status at the time of the survey as well as their continuity of employment in the 12 months prior to the survey. The measurement of women's employment can be especially difficult, because some of the activities that women do, especially work on family farms, family businesses, or in the informal sector, are often not perceived by women themselves as employment and hence are not reported as such. To avoid underestimating employment, respondents were asked several questions to probe for their employment status and to ensure complete coverage of employment in both the formal and informal sectors.

Tables 3.5.1 and 3.5.2 show the percent distribution of female and male respondents by employment status, according to background characteristics. Respondents are considered "employed" if they were currently working at the time of the survey (that is, if they had worked in the past 7 days). Thirty-four percent of women reported being currently employed and 6 percent were employed in the 12 months preceding the survey but not working at the time of the survey. As expected, employment was more common among men than women (Figure 3.1). Fifty-six percent of men reported they were employed at the time of the survey and 16 percent had worked in the 12 months prior to the survey but were not employed at the time of the survey.

#### Table 3.5.1 Employment status: Women

Percent distribution of women age 15-49 by employment status, according to background characteristics, Armenia 2015-16

		the 12 months the survey	Not employed in the 12 months			
Background characteristic	Currently employed <sup>1</sup>	Not currently employed	preceding the survey	Missing/ don't know	Total	Number of women
Age						
15-19	2.5	1.4	96.0	0.1	100.0	725
20-24	19.9	4.2	75.9	0.0	100.0	928
25-29	34.7	6.3	58.9	0.0	100.0	1,099
30-34	34.7	6.7	58.9	0.0	100.0	
						1,007
35-39	44.7	8.7	46.6	0.0	100.0	867
40-44	50.5	9.2	40.2	0.0	100.0	784
45-49	51.5	7.8	40.7	0.0	100.0	706
larital status						
Never married	28.6	3.3	68.0	0.1	100.0	1,830
Married or living						,
together	34.3	7.5	58.2	0.0	100.0	3,895
Divorced/separated/	01.0	7.0	00.2	0.0	100.0	0,000
widowed	56.0	8.7	35.3	0.0	100.0	390
		5	• •			
Number of living children						
0	29.8	3.6	66.6	0.0	100.0	0 1 0 0
					100.0	2,120
1-2	35.4	6.8	57.8	0.0	100.0	2,990
3-4	39.2	10.5	50.3	0.0	100.0	966
5+	(25.7)	(15.6)	(58.7)	(0.0)	100.0	39
Residence						
Urban	37.9	2.7	59.4	0.0	100.0	3,657
Rural	28.2	11.8	60.0	0.0	100.0	2,459
Region						
Yerevan	41.5	1.8	56.6	0.0	100.0	2.001
						,
Aragatsotn	27.3	0.9	71.8	0.0	100.0	315
Ararat	37.3	13.6	49.0	0.1	100.0	552
Armavir	36.0	17.0	47.0	0.0	100.0	586
Gegharkunik	32.4	15.4	52.3	0.0	100.0	478
Lori	15.1	1.1	83.6	0.3	100.0	355
Kotavk	33.5	8.2	58.3	0.0	100.0	678
Shirak	17.7	4.4	77.8	0.0	100.0	510
Syunik	39.3	3.8	56.9	0.0	100.0	238
Vayots Dzor	34.9	2.9	62.2	0.0	100.0	119
Tavush	29.1	2.3	68.6	0.0	100.0	283
	20.1	2.0	00.0	0.0	100.0	200
Education	00.0	<b>C C</b>	~~~~	0.0	100.0	
Basic	22.2	8.6	69.3	0.0	100.0	396
Secondary	23.6	9.3	67.1	0.0	100.0	2,444
Secondary special	37.2	5.6	57.1	0.0	100.0	1,360
Higher	47.4	2.6	49.9	0.1	100.0	1,910
Nealth guintile						
Lowest	22.6	13.7	63.7	0.0	100.0	1,081
Second	31.6	9.4	58.9	0.0	100.0	1,242
Middle	31.6	5.2	63.2	0.1	100.0	1,142
Fourth	39.5	3.2	57.4	0.0	100.0	1,287
Highest	41.9	1.8	56.2	0.0	100.0	1,365
Fotal	34.0	6.4	59.6	0.0	100.0	6,116

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes five (weighted) women with no education.

<sup>1</sup> *Currently employed* is defined as having done work in the past 7 days and 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.

Current employment among both women and men generally increased with age, education, and wealth quintile. Divorced, separated, or widowed women were substantially more likely to be employed at the time of the survey than currently or never-married women. Among men, those who were currently married were more likely to be currently employed than those who were formerly married or especially those who were never-married. Urban residents were more likely to be currently employed than rural residents. Considering regional differences, the proportion of women who were currently employed was highest in Yerevan (42 percent) and Syunik (39 percent) and lowest in Lori (15 percent) and Shirak (18 percent). Among men, the highest proportions currently employed were found in Ararat (76 percent), Syunik (72 percent), and the lowest proportion was in Shirak (31 percent).

### Table 3.5.2 Employment status: Men

Percent distribution of men age 15-49 by employment status, according to background characteristics, Armenia 2015-16

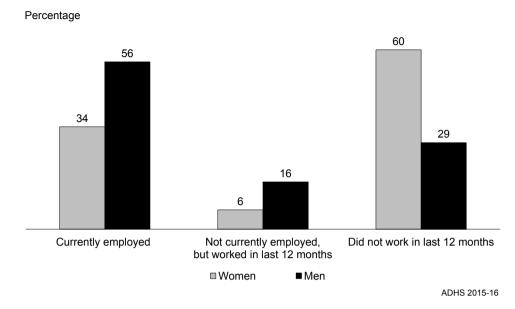
_		the 12 months the survey	Not employed in the 12 months			
Background	Currently	Not currently	preceding the		Number	
characteristic	employed <sup>1</sup>	employed	survey	Total	of men	
Age						
15-19	4.2	5.7	90.1	100.0	345	
20-24	34.9	16.0	49.1	100.0	467	
25-29	63.7	18.8	17.5	100.0	464	
30-34	73.5	17.4	9.2	100.0	427	
35-39	72.4	14.8	12.8	100.0	376	
40-44	71.2	17.8	11.0	100.0	346	
45-49	68.4	18.5	13.1	100.0	330	
Marital status						
Never married	33.7	14.2	52.1	100.0	1,190	
Married or living						
together	72.6	16.4	11.0	100.0	1,506	
Divorced/separated/						
widowed	(59.9)	(30.9)	(9.1)	100.0	59	
Number of living children						
0	37.5	14.3	48.1	100.0	1,321	
1-2	71.5	17.0	11.5	100.0	1,100	
3-4	75.0	16.3	8.8	100.0	322	
Residence						
Urban	58.8	10.4	30.8	100.0	1,558	
Rural	51.4	22.7	25.9	100.0	1,197	
Region						
Yerevan	59.7	6.9	33.4	100.0	833	
Aragatsotn	43.8	18.0	38.2	100.0	159	
Ararat	75.9	7.9	16.2	100.0	290	
Armavir	59.5	22.6	17.9	100.0	268	
Gegharkunik	32.5	49.0	18.4	100.0	235	
Lori	34.6	26.4	39.0	100.0	184	
Kotayk	70.7	9.9	19.4	100.0	299	
Shirak	30.7	23.3	46.0	100.0	201	
Syunik	71.5	0.4	28.1	100.0	104	
Vayots Dzor	64.8	9.7	25.5	100.0	56	
Tavush	48.0	14.3	37.7	100.0	126	
Education						
Basic	44.8	17.7	37.5	100.0	360	
Secondary	51.4	21.7	26.9	100.0	1,250	
Secondary special	59.3	15.4	25.3	100.0	403	
Higher	66.1	5.0	28.9	100.0	736	
Nealth quintile						
Lowest	49.5	24.0	26.5	100.0	523	
Second	51.6	20.4	28.0	100.0	583	
Middle	51.8	17.7	30.5	100.0	521	
Fourth	58.0	10.9	31.0	100.0	566	
Highest	66.4	6.2	27.4	100.0	562	

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes 13 (weighted) men with five or more living children and 5 (weighted) men with no education.

<sup>1</sup> Currently employed is defined as having done work in the past 7 days and 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.

The proportions of women and men who had worked in the 12 months prior to the survey but were not currently employed also varied by background characteristics. As expected, given the seasonality of agricultural employment, it was higher in rural than in urban areas among both women (12 percent and 3 percent, respectively) and men (23 percent and 10 percent, respectively). Looking at the regional patterns, the proportion that had been employed in the 12 months prior to the survey but were not currently working was highest among men in Gegharkunik (49 percent) and among women in Armavir (17 percent). Although the relationship was not uniform, the proportion tended to decrease with increasing education and wealth among both women and men.

## Figure 3.1 Employment status



# 3.5 OCCUPATION

Respondents who indicated that they had worked at any time in the 12 months prior to the survey were asked about the kind of work that they did. Their responses were recorded verbatim and then coded into occupation groups after questionnaires were sent to the central office. Information on occupation not only allows for an evaluation of the source of income for both women and men but also has implications for women's empowerment.

Tables 3.6.1 and 3.6.2 show the occupational profiles of male and female respondents who were employed in the 12 months preceding the survey, according to background characteristics. The majority of employed women were working in professional, technical, or managerial (42 percent) or in sales and services (23 percent) positions, and about one-fifth worked in agriculture. Among employed men, 21 percent held professional, technical, or managerial jobs, 27 percent worked in sales and services, more than one-third were employed as manual laborers, either skilled (28 percent) or unskilled (6 percent), and 13 percent worked in agriculture.

### Table 3.6.1 Occupation: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Armenia 2015-16

Background	Professional/ technical/	Olariad	Sales and	Skilled	Unskilled			<b>T</b> .1.1	Number of
characteristic	managerial	Clerical	services	manual	manual	Agriculture	Missing	Total	women
Age									
15-19	(14.4)	(0.0)	(33.4)	(10.0)	(1.0)	(41.2)	(0.0)	100.0	28
20-24	<b>48.6</b>	`8.3 <sup>´</sup>	27.5	`4.1´	`1.6 <sup>´</sup>	8.8	`1.2 <sup>´</sup>	100.0	224
25-29	50.5	4.7	22.8	5.6	1.3	14.9	0.3	100.0	451
30-34	43.3	3.9	21.3	5.1	4.1	21.5	0.8	100.0	413
35-39	42.9	2.1	21.3	6.8	4.3	21.6	1.1	100.0	463
40-44	32.3	2.3	27.3	9.2	4.8	24.1	0.0	100.0	468
45-49	39.2	2.8	18.9	9.1	4.0	25.3	0.7	100.0	419
Marital status									
Never married Married or living	54.9	5.9	27.8	4.0	0.9	6.1	0.4	100.0	585
together Divorced/separated/	38.8	3.0	18.7	7.3	4.3	27.4	0.5	100.0	1,629
widowed	31.5	2.0	39.9	11.2	4.2	9.9	1.4	100.0	252
Number of living children									
0	52.9	5.6	28.1	5.1	0.9	6.9	0.6	100.0	708
1-2	42.2	3.5	23.1	7.8	3.5	19.2	0.0	100.0	1,262
3-4	26.3	0.9	15.5	7.8	5.5 6.9	42.5	0.7	100.0	480
	20.3	0.9	15.5	1.5	0.9	42.5	0.0	100.0	400
Residence Urban	53.8	4.6	29.0	7.5	1.7	2.4	0.8	100.0	1,484
					6.1	47.9			982
Rural	23.8	1.9	13.9	6.0	0.1	47.9	0.3	100.0	962
Region								100.0	
Yerevan	59.7	3.8	27.9	6.6	0.9	0.3	0.8	100.0	868
Aragatsotn	40.1	2.6	15.6	8.5	1.5	31.6	0.0	100.0	89
Ararat	34.0	0.6	22.6	10.8	3.7	27.3	1.1	100.0	281
Armavir	19.0	3.9	11.5	3.5	8.8	52.9	0.4	100.0	311
Gegharkunik	18.8	2.9	13.0	1.6	4.1	59.6	0.0	100.0	228
Lori	47.8	3.2	36.4	6.4	0.0	3.6	2.7	100.0	57
Kotayk	34.0	4.7	24.7	11.8	7.1	17.6	0.0	100.0	283
Shirak	55.6	8.0	26.3	4.4	1.0	4.7	0.0	100.0	113
Syunik	41.6	3.0	28.9	10.4	2.2	14.0	0.0	100.0	102
Vayots Dzor	39.0	2.2	23.5	12.1	11.1	10.3	1.8	100.0	45
Tavush	39.8	4.0	24.7	3.7	0.8	25.7	1.3	100.0	89
Education									
Basic	5.3	0.0	21.4	8.0	15.7	49.6	0.0	100.0	122
Secondary	6.4	1.3	34.6	9.2	6.1	41.8	0.6	100.0	804
Secondary special	40.8	5.0	28.2	7.6	2.6	15.3	0.6	100.0	583
Higher	77.2	5.1	10.3	4.5	0.2	2.0	0.7	100.0	956
Wealth quintile									
Lowest	10.9	1.7	16.6	6.2	9.7	54.6	0.3	100.0	392
Second	33.5	2.6	15.8	7.0	4.3	36.5	0.3	100.0	509
Middle	34.2	5.2	31.0	8.9	2.8	17.3	0.7	100.0	420
Fourth	53.8	4.4	28.3	8.0	1.2	3.5	0.9	100.0	548
Highest	63.9	3.7	22.9	4.9	1.3	2.5	0.8	100.0	597
Total	41.9	3.6	23.0	6.9	3.5	20.5	0.6	100.0	2,466

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes 1 (weighted) woman with no education and 16 women with5 or more living children.

### Table 3.6.2 Occupation: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Armenia 2015-16

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Agriculture	Missing	Total	Number o men
	managenai	Cicilical	301 11003	manaar	manaai	Agriculture	Wissing	Total	men
Age									
15-19	(7.8)	(1.5)	(30.8)	(10.8)	(24.3)	(24.8)	(0.0)	100.0	34
20-24	13.9	0.8	19.6	35.3	7.9	16.7	5.8	100.0	238
25-29	21.2	1.6	26.3	26.8	5.7	15.0	3.4	100.0	383
30-34	22.6	1.2	30.6	26.4	5.5	8.7	5.1	100.0	388
35-39	22.6	0.4	28.1	31.0	5.8	8.1	4.0	100.0	328
40-44	19.9	1.1	30.0	26.8		12.7	2.6	100.0	
					7.0				308
45-49	23.6	0.6	26.8	23.8	3.7	18.9	2.6	100.0	287
Marital status									
Never married	19.1	1.0	23.0	29.7	6.4	17.0	3.7	100.0	570
Married or living									
together	21.4	0.9	29.0	27.2	5.8	11.7	4.0	100.0	1,341
Divorced/separated/									
widowed	(21.0)	(4.4)	(31.2)	(21.3)	(12.2)	(9.9)	(0.0)	100.0	53
	(=)	()	(0)	(=)	(-=-=)	(0.0)	(0.0)	10010	
Number of living									
children	00.4	0.0	00.4	00.0	0.0	45 7		400.0	005
0	20.1	0.9	23.1	30.0	6.3	15.7	3.9	100.0	685
1-2	21.6	1.3	30.7	26.6	5.5	10.5	3.8	100.0	973
3-4	20.1	0.5	27.4	25.4	7.4	15.2	3.9	100.0	294
Residence									
Urban	30.2	1.4	32.5	25.1	5.0	1.4	4.4	100.0	1,078
Rural	9.2	0.6	21.1	30.9	7.6	27.5	3.2	100.0	887
	0.2	0.0		00.0	1.0	21.0	0.2	100.0	001
Region									
Yerevan	37.1	2.1	33.2	19.9	4.6	0.3	2.8	100.0	555
Aragatsotn	17.5	1.0	28.4	23.4	1.7	26.3	1.7	100.0	98
Ararat	13.5	0.7	26.9	27.0	6.0	23.0	2.9	100.0	243
Armavir	12.0	0.2	19.0	19.0	8.0	37.8	3.8	100.0	220
Gegharkunik	6.4	0.0	17.8	41.7	5.7	26.3	2.2	100.0	192
•	17.2	0.0	28.2	36.1	6.9	6.7	4.9	100.0	113
Lori									
Kotayk	18.9	1.1	30.6	34.4	8.9	3.3	2.8	100.0	241
Shirak	15.9	1.1	24.6	47.3	2.1	3.2	5.8	100.0	109
Syunik	18.0	0.8	22.9	30.1	10.8	5.9	11.5	100.0	75
Vayots Dzor	13.7	2.0	26.6	15.2	23.5	9.4	9.5	100.0	42
Tavush	15.2	0.0	30.1	25.6	1.8	18.6	8.8	100.0	78
Education									
Basic	5.1	0.0	19.6	30.1	14.3	28.7	2.3	100.0	225
			28.8	36.3	7.1	17.6	2.3	100.0	225 913
Secondary	7.2	0.1							
Secondary special	12.0	2.8	38.9	30.4	6.2	5.5	4.2	100.0	301
Higher	56.2	2.1	21.3	10.3	1.1	3.2	5.8	100.0	524
Wealth quintile									
Lowest	4.4	0.3	18.7	31.1	8.9	33.8	2.7	100.0	384
Second	10.6	0.3	25.0	33.1	7.3	19.5	3.9	100.0	420
Middle	16.8	0.4	30.7	30.7	6.8	9.0	5.6	100.0	362
Fourth	31.1	1.2	29.1	27.0	5.0	2.0	4.7	100.0	390
Highest	40.1	2.4	33.3	17.1	2.9	1.7	2.4	100.0	408
Fotal	20.7	1.0	27.3	27.7	6.2	13.2	3.8	100.0	1.965
Utai	20.7	1.0	21.3	21.1	0.2	13.2	3.0	100.0	1,905

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes 13 (weighted) men with 5 or more living children and 1 (weighted) man with no education.

As expected, the proportions of both women and men who worked in professional, technical, and managerial occupations were higher in urban than in rural areas. The proportions in these occupations also rose rapidly with both increasing education and wealth. Men and especially women with basic education and those in the lowest wealth quintile were most likely to be working in agriculture.

## 3.6 WOMEN'S EMPLOYMENT CHARACTERISTICS

As with education, employment can be a source of empowerment for women, particularly employment that involves cash earnings. Table 3.7 shows the percent distribution of women who were employed in the 12 months preceding the survey by type of earnings and employer, and continuity of employment, according to type of employment (agricultural or nonagricultural). Overall, 74 percent of employed women earn cash only, 12 percent were paid in cash and in kind, and 14 percent either received only in-kind payment or were not paid at all. Virtually all women who worked in nonagricultural jobs (95 percent) were paid in cash. On the other hand, women who worked in agricultural positions most often did not receive any cash payments for the work they did; more than half were paid either in kind only (33 percent) or not paid at all (22 percent).

### Table 3.7 Type of employment

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 type of employment (agricultural or nonagricultural), Armenia 2015-16

Employment characteristic	Agricultural work	Nonagricultural work	Total	
Type of earnings				
Cash only	4.5	94.5	73.9	
Cash and in-kind	40.6	3.4	11.9	
In-kind only	33.0	0.1	7.6	
Not paid	21.9	2.1	6.6	
Total	100.0	100.0	100.0	
Type of employer				
Employed by family member	14.2	4.2	6.5	
Employed by nonfamily member	4.2	88.4	69.1	
Self-employed	81.6	7.4	24.4	
Total	100.0	100.0	100.0	
Continuity of employment				
All year	48.4	94.4	83.9	
Seasonal	51.6	5.2	15.8	
Occasional	0.0	0.3	0.2	
Missing	0.0	0.1	0.1	
Total	100.0	100.0	100.0	
Number of women employed				
during the last 12 months	564	1,887	2,466	

Women who work in agriculture were mainly either self-employed (82 percent) or employed by a family member (14 percent), while the majority of women employed in nonagricultural jobs were employed by nonfamily members (88 percent).

More than 8 in 10 working women were employed throughout the year, while 16 percent had seasonal jobs. As expected, the ADHS results confirm that continuity of employment is more assured for women engaged in nonagricultural work; more than half of women employed in agricultural occupations had seasonal jobs compared with 5 percent of women in nonagricultural occupations.

# 3.7 EMPLOYMENT ABROAD

Armenia is a country that regularly experiences an outflow of citizens, particularly men, in search of employment. The 2015-16 ADHS collected information about recent employment abroad as a proxy indicator for labor migration. To obtain this information, all women and men age 15-49 were asked whether they had worked abroad during the 3 years preceding the survey for 3 or more months at a time. In addition, currently married women and men age 15-49 in the 2015-16 ADHS were asked whether their spouses were working abroad during the 3 years preceding the survey for 3 or more months at a time.

Table 3.8 shows the percentages of women and men age 15-49 who worked abroad during the 3 years preceding the survey for 3 or more months at a time, by background characteristics. Overall, 1 percent of women and 12 percent of men reported that they had worked abroad at some point in the 3 years preceding the 2105-16 ADHS for 3 or more months at a time. The rates of employment abroad among women and men have not changed much over the past 5 years since the 2010 ADHS when 3 percent of women and 11 percent of men reported they had worked abroad.

Marked differences were evident by background characteristics in the likelihood that men had worked abroad (Table 3.8). Eighteen percent of rural men had worked abroad compared with 8 percent of urban men. Considering regional differences, men in Shirak (26 percent), Lori (27 percent) and Gegharkunik

### Table 3.8 Respondent's employment abroad

Percentage of women and men 15-49 who worked abroad during the 3 years before the survey for 3 or more months at a time, by background characteristics, Armenia 2015-16

Wo	men	Men			
Worked abroad <sup>1</sup>	Number of women	Worked abroad <sup>1</sup>	Number of men		
1.0	1,653	6.6	813		
0.9	1,099	17.5	464		
1.7	1,874	13.5	802		
1.5	1,490	13.4	676		
1.2	1,830	8.6	1,190		
1.3	3,895	15.0	1,506		
2.2	390	(8.4)	59		
1.7	3,657	7.8	1,558		
0.7	2,459	17.7	1,197		
2.5	2,001	3.0	833		
0.0	315	2.0	159		
0.5	552	3.2	290		
1.0	586	18.8	268		
0.4	478	30.9	235		
0.8	355	26.9	184		
1.0	678	16.1	299		
1.9	510	25.5	201		
0.0	238	1.1	104		
0.0	119	6.3	56		
0.0	283	16.0	126		
1.0	396	12.5	360		
0.8	2,444	16.0	1,250		
1.5	1,360	13.0	403		
1.9	1,910	5.0	736		
0.8	1,081	16.0	523		
0.6	1,242	16.8	583		
1.3	1,142	16.5	521		
1.1	1,287	6.8	566		
2.6	1,365	5.1	562		
1.3	6,116	12.1	2,755		
	Worked abroad <sup>1</sup> 1.0 0.9 1.7 1.5 1.2 1.3 2.2 1.7 0.7 2.5 0.0 0.5 1.0 0.4 0.8 1.0 1.9 0.0 0.8 1.5 1.9 0.8 0.6 1.3 1.1	abroad <sup>1</sup> women           1.0         1,653           0.9         1,099           1.7         1,874           1.5         1,490           1.2         1,830           1.3         3,895           2.2         390           1.7         2,459           2.5         2,001           0.0         315           0.5         552           1.0         586           0.4         478           0.8         355           1.0         678           1.9         510           0.0         119           0.8         283           1.0         396           0.8         2,444           1.5         1,360           1.9         1,910           0.8         1,081           0.6         1,242           1.3         1,142           1.1         1,287           2.6         1,365	$\begin{array}{c c c c c c c c c c c c c c c c c c c $		

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes five (weighted) women and five (weighted) men with no education. <sup>1</sup> Employment abroad refers to working abroad during the past 3 years before the survey for 3 or more months at a time.

(31 percent) were the most likely to have worked abroad, while men in Syunik (1 percent) were the least likely. Men with secondary special or less education were more than twice as likely as men with higher education to have worked abroad. Similarly, men in the lowest wealth quintiles were more than twice as likely to have recently worked abroad as men in the two highest quintiles.

Finally, although few currently married women themselves had worked abroad recently, 22 percent reported that their spouse had worked abroad in the 3 years prior to the 2015-16 ADHS. Among currently married men only 1 percent reported that their wife had worked abroad during the referenced period (data not shown).

# **Key Findings**

- Approximately two-thirds of women age 15-49 (64 percent) and more than half of men age 15-49 (55 percent) are currently married or living together with a partner. Thirty percent of women and 43 percent of men have never been married; 4 percent of women and 2 percent of men are divorced or separated; and 2 percent of women but virtually no men are widowed.
- Most Armenian women and men marry at least once during their lifetime; the proportion who have never married decreases rapidly with age, dropping to 6 percent among women age 45-49 and 4 percent among men age 45-49.
- Less than 1 percent of women age 25-49 married for the first time before age 15, and only 13 percent married before age 18.
- The percentage of women age 25-49 who were married by age 18 decreases from 21 percent among those age 40-44 to 5 percent among those age 20-24.
- Men in Armenia marry on average 5 years later than women. The median age at first marriage among women age 30-49 is 20.9 years, compared with 25.9 years among men in the same age group.
- Women in Armenia generally initiate sexual intercourse around the time of their first marriage. In contrast, men age 30-49 initiate intercourse 4.7 years before their first marriage.
- Fifty-seven percent of women were sexually active within the 4 weeks before the survey, and an additional 6 percent were active within the 12 months before the survey although not in the month before the survey; corresponding figures for men are 64 percent and 9 percent.

This chapter presents 2015-16 ADHS data on marriage and sexual activity. If couples have the biological capacity to reproduce, the social environment in which they live largely determines whether they will have children and, if so, how many and how often. In Armenia, sexual activity usually takes place within marriage; therefore, marriage is a primary indicator of a woman's sustained exposure to the risk of pregnancy. More direct measures of exposure are age at first sexual intercourse and the frequency of intercourse. Although postpartum amenorrhea, abstinence, and menopause also influence fertility, their impact is reviewed in the next chapter. None of these determining factors are independent; they interact and influence each other to affect fertility levels and trends. Their contribution varies from person to person, from region to region, and from time to time.

# 4.1 MARITAL STATUS

Table 4.1 shows the percent distribution of all women and men age 15-49 by their marital status at the time of the survey, according to age. The term *married* refers to legal or formal marriage (civil or religious), while *living together* refers to informal unions. In subsequent tables, these two categories are merged and referred to collectively as *currently married*. Persons who are divorced, separated, or widowed are considered to be *formerly married*.

### Table 4.1 Current marital status

			Marita	l status			Percentage of respondents		
<b>A</b>	Never	Never Living					<b>T</b> . ( . )	currently in union	Number of
Age	married	Married	together	Divorced	Separated	Widowed	Total	union	respondents
				WOM	EN				
15-19	95.2	4.6	0.0	0.2	0.0	0.0	100.0	4.6	725
20-24	60.1	39.2	0.1	0.2	0.2	0.1	100.0	39.3	928
25-29	27.4	69.1	0.2	2.4	0.5	0.4	100.0	69.2	1,099
30-34	12.5	81.5	0.5	4.1	0.8	0.6	100.0	82.0	1,007
35-39	8.2	81.4	0.4	6.3	1.5	2.2	100.0	81.8	867
40-44	5.2	81.1	0.4	6.3	1.3	5.6	100.0	81.5	784
45-49	6.0	78.1	1.5	6.3	0.6	7.5	100.0	79.6	706
Total	29.9	63.3	0.4	3.6	0.7	2.1	100.0	63.7	6,116
				MEN	1				
15-19	100.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	345
20-24	87.9	8.6	2.6	0.4	0.4	0.0	100.0	11.2	467
25-29	55.1	40.1	4.3	0.3	0.2	0.0	100.0	44.4	464
30-34	21.6	67.3	8.1	2.0	0.5	0.5	100.0	75.4	427
35-39	13.5	77.3	8.0	0.7	0.2	0.3	100.0	85.3	376
40-44	6.0	82.2	7.1	3.5	1.1	0.0	100.0	89.3	346
45-49	4.4	82.6	7.3	4.2	1.5	0.0	100.0	90.0	330
Total	43.2	49.4	5.3	1.5	0.5	0.1	100.0	54.7	2,755

Percent distribution of women and men age 15-49 by current marital status, according to age, Armenia 2015-16

According to the 2015-16 ADHS, more than three-fifths of women (64 percent) and more than half of men (55 percent) are married or living together with a partner. Four percent of women and 2 percent of men are either divorced or separated, while 2 percent of women but virtually no men are widowed.

The proportion of women currently married increases with age, peaking at 82 percent among women age 30-44, and then declining slightly among the oldest women. Among women age 45-49, only 6 percent have never married, 80 percent are married or cohabiting with a man, 7 percent are divorced or separated, and 8 percent are widowed.

Men, in comparison with women, are more likely to have never married (43 percent versus 30 percent). This difference is largely explained by the tendency of men to marry at later ages. For example, 11 percent of men age 20-24 are in union compared with 39 percent of women of the same age.

Marriage patterns have remained largely stable over the past decade in Armenia. The proportions reported as ever married varied only slightly between the 2005, 2010, and 2015-16 ADHS surveys among both women (69 percent, 68 percent, and 70 percent, respectively) and men (58 percent, 55 percent, and 57 percent, respectively).

# 4.2 AGE AT FIRST MARRIAGE AND SEXUAL INTERCOURSE

Marriage is an important demographic and social indicator; it generally marks the point in a person's life when parenthood becomes socially acceptable. Information on age at first marriage was obtained in the 2015-16 ADHS by asking all ever-married respondents the month and year they started living together with their first spouse. Table 4.2 shows the proportions of women and men who first married by specific exact ages and the median age at first marriage among women age 25-49 and women and men age 30-49. The median age at first marriage is not shown for men age 25-49 because less than 50 percent of men married for the first time before reaching age 25.

The results in Table 4.2 show that more than one-third of women age 25-49 had married by age 20, and 73 percent had married by age 25. The median age at first marriage among women age 25-49 was 21.4 years. An examination of cohort differences in the median age at first marriage among women age 25-49 indicates that younger women married more than 2 years later than older women; the median age at first marriage among women age 25-29 was 22.9 years compared with 20.6 years among women age 45-49.

#### Table 4.2 Age at first marriage

Percentage of women and men age 15-49 who were first married, by specific exact ages, and median age at first marriage, according to current age. Armenia 2015-16

		Percentage f	irst married by	exact age:		Percentage		Median age
0	45	40	20	22	05	never	Number of	at first
Current age	15	18	20	22	25	married	respondents	marriage
			W	OMEN				
15-19	0.0	na	na	na	na	95.2	725	а
20-24	0.0	5.3	19.1	na	na	60.1	928	а
25-29	0.2	7.6	23.9	41.7	63.3	27.4	1,099	22.9
30-34	0.1	11.1	32.4	52.4	69.5	12.5	1,007	21.7
35-39	0.7	16.0	39.5	56.7	73.6	8.2	867	21.0
40-44	0.2	20.6	51.4	67.6	81.1	5.2	784	19.9
45-49	0.0	14.0	43.0	65.6	82.6	6.0	706	20.6
25-49	0.2	13.3	36.7	55.3	72.9	13.0	4,463	21.4
30-49	0.2	15.2	40.9	59.8	76.0	8.3	3,364	20.9
				MEN				
15-19	0.0	na	na	na	na	100.0	345	а
20-24	0.0	0.4	1.6	na	na	87.9	467	а
25-29	0.0	0.3	0.9	7.7	26.9	55.1	464	а
30-34	0.0	0.5	2.4	11.2	35.4	21.6	427	26.3
35-39	0.0	0.9	3.5	13.0	41.7	13.5	376	26.1
40-44	0.0	0.5	4.5	15.1	37.8	6.0	346	26.6
45-49	0.0	0.5	2.8	21.3	52.1	4.4	330	24.7
25-49	0.0	0.5	2.7	13.1	37.9	22.3	1,942	а
30-49	0.0	0.6	3.3	14.8	41.3	12.0	1,478	25.9

Note: The age at first marriage 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 percent of the women or men began living with their spouse or partner for the first time before reaching the beginning of the age group

Unlike women, very few men age 25-49 had married by age 20 (3 percent), and only 38 percent had married by age 25. The majority of men marry between ages 25 and 30, with nearly 90 percent of men age 30-49 reporting they had married. The tendency of men to delay marriage to much older ages than women is further evidenced by the 5-year difference between the median ages at first marriage among men and women age 30-49 (25.9 years and 20.9 years, respectively).

The median ages at first marriage among women age 25-49 and women and men age 30-49 are shown by background characteristics in Table 4.3. The median age at first marriage is lower in rural areas than in urban areas for both women and men age 30-49. Considering regional differentials, Yerevan has by far the highest median age at first marriage among women (22.4), while Yerevan and Aragatsotn have the highest median ages among men (26.8 years and 27.1 years, respectively).

The median age at first marriage rises with increasing education among women and men. However, education clearly has a much stronger influence on age at first marriage among women than men. On average, women age 30-49 with higher education married more than 5 years later than women with basic education (23.8 years and 18.5 years, respectively). In contrast, men age 30-49 with higher education married less than 2 years

#### Table 4.3 Median age at first marriage by background characteristics

Median age at first marriage among women age 25-49 and age 30-49, and median age at first marriage among men age 30-49, according to background characteristics. Armenia 2015-16

Background	Wome	en age	Men age
characteristic	25-49	30-49	30-49
Residence			
Urban	22.3	21.9	26.4
Rural	20.1	19.7	25.3
Region			
Yerevan	22.8	22.4	26.8
Aragatsotn	21.0	20.3	27.1
Ararat	21.3	21.0	25.7
Armavir	20.0	19.6	25.5
Gegharkunik	20.1	19.8	25.4
Lori	21.3	20.8	25.3
Kotayk	20.7	20.4	25.3
Shirak	21.0	20.5	26.3
Syunik	20.8	20.4	26.6
Vayots Dzor	20.2	20.0	26.2
Tavush	20.4	19.9	24.6
Education			
No education	*	*	*
Basic	18.8	18.5	25.5
Secondary	19.9	19.7	25.6
Secondary special	21.2	20.9	25.9
Higher	24.1	23.8	27.2
Wealth quintile			
Lowest	20.3	19.9	25.8
Second	20.4	20.0	25.5
Middle	20.8	20.2	25.8
Fourth	22.4	21.7	26.6
Highest	22.7	22.4	26.1
Total	21.4	20.9	25.9

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner An asterisk indicates that a figure is based on fewer than 25 cases and has been suppressed.

later than men with basic education (27.2 years and 25.5 years, respectively). Among women, wealth is directly related to the age at first marriage; the median age at first marriage increases steadily among women age 30-49, from 19.9 years in the lowest quintile to 22.4 years in the highest quintile. The relationship between wealth and age at marriage is not as strong among men, but men in the fourth and the highest wealth quintiles report marrying somewhat later on average (26.6 years and 26.1 years, respectively) than men in the lowest three quintiles (between 25.5 years and 25.8 years).

With regard to recent trends in the age at first marriage, the median age at first marriage among women age 25-49 increased from 21.1 years in 2010 to 21.4 years in 2015-16, while the median age at first marriage among men age 30-49 increased from 25.8 in 2010 to 25.9 in 2015-16.

#### 4.2 AGE AT FIRST SEXUAL INTERCOURSE

Table 4.4 Age at first sexual intercourse

Age at first marriage is sometimes seen as a proxy for a woman's first exposure to intercourse, but the two events need not occur at the same time. Because women and men may engage in sexual relations prior to marriage, age at first sexual intercourse is a more reliable indicator of a woman's exposure to the risk of pregnancy than age at first marriage. In the 2015-16 ADHS, women and men were asked how old they were when they first had sexual intercourse. Table 4.4 shows the proportion of women and men who first had sex by specific exact ages and the median ages at first intercourse.

Overall, the 2015-16 ADHS results indicate that, among Armenian women, the reported age at first marriage and age at first intercourse correspond closely. Among all women age 25-49, for example, the median age at first intercourse was 21.2 years, only very slightly lower than the median age at first marriage (21.4 years). The very close correspondence between the age at first intercourse and the age at first marriage may be in part a result of women's unwillingness to report premarital sexual activity due to the strong cultural norms against such behavior.

	Perce	entage who had	first sexual inte	rcourse by exac	t age:	Percentage who never had	Number of	Median age at first
Current age	15	18	20	22	25	intercourse	respondents	intercourse
				WOMEN				
15-19	0.0	na	na	na	na	95.2	725	а
20-24	0.2	5.9	19.6	na	na	59.9	928	а
25-29	0.2	8.1	25.0	42.1	64.3	27.0	1,099	22.8
30-34	0.1	11.7	33.3	52.9	70.0	12.1	1,007	21.7
35-39	0.7	16.8	40.4	57.3	74.7	8.2	867	20.9
40-44	0.5	21.2	51.9	68.2	81.4	5.1	784	19.9
45-49	0.0	15.4	44.2	66.9	83.6	5.9	706	20.4
20-49	0.2	11.1	30.6	na	na	29.6	5,265	а
25-49	0.3	14.1	37.6	56.0	73.6	12.8	4,463	21.2
30-49	0.3	16.0	41.8	60.6	76.7	8.2	3,364	20.7
15-24	0.1	na	na	na	na	75.4	1,653	а
				MEN				
15-19	1.0	na	na	na	na	87.5	345	а
20-24	1.0	14.9	31.8	na	na	39.9	467	а
25-29	0.7	15.5	35.4	65.0	87.6	7.5	464	21.1
30-34	0.8	15.9	33.6	58.9	83.4	3.3	427	21.3
35-39	0.8	19.2	37.0	59.3	84.2	3.4	376	21.1
40-44	0.3	11.1	28.0	57.5	84.3	1.7	346	21.5
45-49	0.9	14.4	37.3	66.4	88.9	0.5	330	20.9
20-49	0.8	15.3	33.8	na	na	10.6	2,410	а
25-49	0.7	15.4	34.3	61.5	85.6	3.6	1,942	21.2
30-49	0.7	15.3	34.0	60.3	85.0	2.3	1,478	21.2
15-24	1.0	na	na	na	na	60.1	813	а

Describer of second sec

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

Unlike women, it is common for Armenian men to report having sexual intercourse before marriage. For example, although very few men age 30-49 were married by age 20 (just 3 percent), one-third of men said they had had sexual intercourse for the first time by that age. The median age at first sexual intercourse among men age 30-49 is more than 4 years younger than the median age at first marriage (21.2 years and 25.9 years, respectively).

Table 4.5 shows the median age at first sexual intercourse for women and men in the age groups 25-49 and 30-49 by background characteristics. Looking at the results for the women, differentials in the median age at first intercourse within subgroups closely parallel the differentials observed in the median ages at first marriage; the highest median ages at first sex were observed among women in urban areas, women in Yerevan, women with at least some higher education, and women in the highest wealth quintile. In contrast, the median age at first intercourse is lower among men in urban areas than among men in rural areas and generally declines with increasing education and wealth.

# Table 4.5 Median age at first sexual intercourse by background characteristics

Median age at first sexual intercourse among women and men age 25-49 and age 30-49, according to background characteristics, Armenia 2015-16  $\,$ 

Background	Wome	n age	Men	age
characteristic	25-49	30-49	25-49	30-49
Residence				
Urban	22.2	21.7	20.8	20.9
Rural	20.0	19.6	21.7	21.7
Region				
Yerevan	22.8	22.3	20.1	20.2
Aragatsotn	20.9	20.2	23.7	23.8
Ararat	21.3	20.9	21.1	21.1
Armavir	19.8	19.5	18.8	18.8
Gegharkunik	20.0	19.7	22.3	22.3
Lori	21.3	20.8	22.0	22.0
Kotayk	20.6	20.3	21.8	22.1
Shirak	20.9	20.4	17.9	17.9
Syunik	20.8	20.4	а	25.8
Vayots Dzor	20.2	20.0	24.2	24.1
Tavush	20.3	19.8	23.9	23.4
Education				
No education	*	*	*	*
Basic	18.6	18.3	21.0	21.1
Secondary	19.8	19.6	21.4	21.4
Secondary special	21.2	20.8	21.2	21.4
Higher	23.9	23.7	20.9	20.8
Wealth quintile				
Lowest	20.2	19.8	21.5	21.7
Second	20.3	19.9	21.5	21.5
Middle	20.7	20.1	21.4	21.6
Fourth	22.3	21.6	21.3	21.3
Highest	22.6	22.4	20.0	20.1
Total	21.2	20.7	21.2	21.2

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

 ${\sf a}$  = Omitted because less than 50 percent of the respondents had intercourse for the first time before reaching the beginning of the age group

### 4.3 RECENT SEXUAL ACTIVITY

In the absence of contraceptive use, the frequency of sexual intercourse is a direct determinant of pregnancy; therefore, information about the frequency of sexual activity is a useful indicator of exposure to pregnancy. The 2015-16 ADHS asked women and men the timing of their last sexual intercourse. Tables 4.6.1 and 4.6.2 show the percent distributions for women and men age 15-49 by how long ago their last sexual intercourse occurred. Respondents were considered to be sexually active if they had sexual intercourse at least once in the 4 weeks prior to the survey.

In the 4 weeks preceding the survey, 57 percent of women were sexually active. Six percent of women had sexual intercourse in the year preceding the survey, but not in the month before the survey, and another 7 percent reported they last had sexual intercourse more than a year before. At the time of the survey, 30 percent of all female respondents had never had sexual intercourse.

The proportion of women who were recently sexually active increases with age to a peak at 76 percent among women age 30-34 and then declines to 67 percent among women age 45-49. Only 4 percent of women age 15-19 reported recent sexual activity; the majority (95 percent) have never had sexual intercourse. As expected, marital status is closely related to the frequency of sexual activity. Among currently married women, 90 percent reported they had had intercourse within the month before the interview. As previously noted, almost no women reported sexual activity outside of marriage: virtually all never-married women reported that they had never had intercourse.

#### 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, Armenia 2015-16

Background	Within the	Within	exual intercourse One or	5	Never had sexual		Number
characteristic	past 4 weeks	1 year <sup>1</sup>	more years	Missing	intercourse	Total	of wome
Age	•		•				
15-19	4.0	0.8	0.0	0.0	95.2	100.0	725
20-24	35.6	3.6	0.0	0.0	59.9	100.0	928
25-29	62.7	6.7	3.4	0.2	27.0	100.0	1,099
30-34	76.1	5.3	6.5	0.1	12.1	100.0	1,007
35-39	74.5	5.8	11.3	0.1	8.2	100.0	867
40-44	73.0	6.9	14.7	0.2	5.1	100.0	784
45-49	66.7	11.1	16.1	0.2	5.9	100.0	706
/arital status							
Never married	0.4	0.1	0.1	0.0	99.3	100.0	1,830
Married or living together	89.7	8.1	2.1	0.1	0.0	100.0	3,895
Divorced/separated/widowed	0.9	8.2	90.1	0.8	0.0	100.0	390
	010	0.2		0.0	0.0	10010	
	89.1	9.7	1.0	0.2	0.0	100.0	609
0-4 years				0.2		100.0	698
5-9 years	90.9	7.5	1.4	0.2	0.0	100.0	772
10-14 years	91.9	6.0	2.1	0.0	0.0	100.0	694
15-19 years	92.4	5.5	2.0	0.2	0.0	100.0	565
20-24 years	88.5	8.4	3.0	0.1	0.0	100.0	560
25+ years	85.0	11.5	3.3	0.2	0.0	100.0	545
Married more than once	83.1	9.7	7.3	0.0	0.0	100.0	61
mployment abroad (past 3 years) <sup>3</sup>							
Yes	45.4	10.6	16.3	0.0	27.7	100.0	81
No	57.4	5.6	7.0	0.1	29.8	100.0	6,035
an and a malayment abroad reported							
Spousal employment abroad reported by currently married women <sup>4</sup>	1						
	*	*	*	*	*	100.0	10
Respondent worked abroad herself						100.0	18
Spouse worked abroad	72.6	20.0	7.4	0.0	0.0	100.0	834
Both worked abroad	(66.6)	(20.8)	(12.7)	(0.0)	(0.0)	100.0	32
None worked abroad	94.7	4.7	0.5	0.2	0.0	100.0	2,998
Not currently married	0.5	1.6	16.0	0.1	81.9	100.0	2,221
Missing	*	*	*	*	*	100.0	13
Residence							
Urban	54.3	5.9	8.7	0.1	31.0	100.0	3,657
Rural	61.7	5.4	4.8	0.2	27.8	100.0	2,459
							,
Region	50.9	F 0	0.4	0.1	22.0	100.0	2 001
Yerevan	50.8	5.8	9.4	0.1	33.9	100.0	2,001
Aragatsotn	55.3	1.3	4.8	1.3	37.2	100.0	315
Ararat	62.1	2.8	6.6	0.0	28.6	100.0	552
Armavir	60.1	8.1	7.6	0.2	24.0	100.0	586
Gegharkunik	59.2	2.7	4.0	0.1	34.0	100.0	478
Lori	53.5	5.7	5.5	0.0	35.3	100.0	355
Kotayk	62.9	6.6	6.4	0.0	24.1	100.0	678
Shirak	55.0	11.8	8.2	0.0	25.0	100.0	510
	69.4	2.1	5.4	0.0	23.0	100.0	238
Syunik							
Vayots Dzor	64.8	7.5	4.0	0.0	23.7	100.0	119
Tavush	69.0	4.9	3.9	0.2	21.9	100.0	283
ducation							
No education	*	*	*	*	*	100.0	5
Basic	45.2	6.1	7.4	0.3	41.0	100.0	396
Secondary	61.0	6.0	7.8	0.2	25.0	100.0	2,444
Secondary special	62.1	7.4	7.7	0.2	22.6	100.0	1,360
Higher	51.6	4.0	5.8	0.1	38.5	100.0	1,360
0	01.0	4.0	0.0	0.0	00.0	100.0	1,310
Vealth quintile	<b>FO i</b>	<b>-</b> ·	<u> </u>	<u> </u>	07.0	400.0	
Lowest	58.1	5.4	8.6	0.2	27.8	100.0	1,081
Second	61.0	5.2	4.3	0.2	29.3	100.0	1,242
Middle	56.2	6.7	8.6	0.1	28.3	100.0	1,142
Fourth	55.6	5.5	6.6	0.2	32.1	100.0	1,287
Highest	55.8	5.7	7.8	0.1	30.6	100.0	1,365
Fotal	57.3	5.7	7.1	0.1	29.7	100.0	6,116
	h/3	h /	/ 1	0.1	- JU /	1 (1)(1)	6116

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

<sup>1</sup> Excludes women who had sexual intercourse within the last 4 weeks

<sup>2</sup> Excludes women who are not currently married

<sup>3</sup> Employment abroad refers to working abroad during the past 3 years before the survey for 3 or more months at a time.
 <sup>4</sup> Information is based on currently married women's report of their own and their husband's employment abroad for a period of 3 or more months at any time in the 3 years before the survey.

#### 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, Armenia 2015-16

Background characteristic	Within the	Within 1	One or		sexual		Number
				Minning		Tatal	Number
-	past 4 weeks	year <sup>1</sup>	more years	Missing	intercourse	Total	of men
Age							
15-19	3.7	7.6	1.2	0.0	87.5	100.0	345
20-24	34.7	14.9	10.5	0.0	39.9	100.0	467
25-29	65.8	15.8	9.9	1.0	7.5	100.0	464
30-34	80.5	10.1	5.7	0.4	3.3	100.0	427
35-39	87.7	4.7	3.9	0.3	3.4	100.0	376
40-44	89.3	3.9	3.9	1.2	1.7	100.0	346
45-49	91.8	3.7	3.4	0.7	0.5	100.0	330
Marital status							
Never married	24.5	16.5	11.8	0.4	46.9	100.0	1,190
Married or living together	96.5	2.8	0.1	0.6	0.0	100.0	1,506
Divorced/separated/widowed	(33.4)	(30.8)	(35.8)	(0.0)	(0.0)	100.0	59
•	(33.4)	(30.8)	(35.6)	(0.0)	(0.0)	100.0	59
Marital duration <sup>2</sup>	o / =						o / =
0-4 years	94.7	5.0	0.0	0.3	0.0	100.0	317
5-9 years	95.8	3.9	0.0	0.4	0.0	100.0	331
10-14 years	97.4	2.1	0.0	0.5	0.0	100.0	291
15-19 years	98.4	0.5	0.0	1.1	0.0	100.0	252
20-24 years	96.1	2.1	0.6	1.2	0.0	100.0	182
25+ years	99.7	0.3	0.0	0.0	0.0	100.0	83
Married more than once	94.3	3.5	0.0	2.2	0.0	100.0	51
	94.5	3.5	0.0	2.2	0.0	100.0	51
Residence							
Urban	66.1	9.4	6.1	0.5	17.9	100.0	1,558
Rural	61.4	9.1	5.7	0.6	23.2	100.0	1,197
Region							
Yerevan	69.3	8.8	6.5	0.0	15.4	100.0	833
Aragatsotn	54.8	4.8	16.0	0.2	24.2	100.0	159
				0.2	21.5		290
Ararat	55.8	11.2	11.4			100.0	
Armavir	83.1	5.2	0.4	0.0	11.3	100.0	268
Gegharkunik	50.1	15.8	3.7	0.0	30.4	100.0	235
Lori	47.1	10.3	8.1	7.3	27.3	100.0	184
Kotayk	68.7	10.4	4.6	0.0	16.4	100.0	299
Shirak	70.7	15.4	1.9	0.0	12.0	100.0	201
Syunik	55.6	4.2	0.0	0.0	40.2	100.0	104
Vayots Dzor	54.5	6.3	3.6	0.5	35.0	100.0	56
Tavush	60.0	2.1	4.2	0.0	33.6	100.0	126
	00.0	<b>_</b> .,		0.0	00.0	100.0	.20
Education	*	*	*	*	*	400.0	-
No education						100.0	5
Basic	52.6	9.3	6.2	0.3	31.6	100.0	360
Secondary	63.9	8.6	5.5	0.7	21.3	100.0	1,250
Secondary special	68.4	9.0	4.9	0.7	17.0	100.0	403
Higher	67.7	10.8	7.0	0.2	14.3	100.0	736
Wealth guintile							
Lowest	62.1	9.3	6.7	0.6	21.3	100.0	523
Second	60.1	9.7	5.8	0.6	23.8	100.0	583
Middle	62.0	10.8	6.0	0.4	20.8	100.0	521
Fourth	68.1	7.3	5.0	0.7	18.9	100.0	566
Highest	67.8	9.5	6.1	0.2	16.4	100.0	562
		9.3			20.2		2,755

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 cases and has been suppressed. <sup>1</sup> Excludes men who had sexual intercourse within the last 4 weeks

<sup>2</sup> Excludes men who are not currently married

Employment abroad was related to the likelihood of recent sexual activity among currently married women. Those whose spouse had worked abroad were less likely to have been sexually active within the 4week period before the survey than married women who reported they and their spouse had never worked abroad (73 percent and 95 percent, respectively). Recent sexual activity was lowest among the small number of married women who reported that both they and their spouse had worked abroad (66 percent).

Overall, men are more likely to report having had recent sexual intercourse than women (Table 4.6.2). Sixty-four percent had sexual intercourse in the 4 weeks preceding the survey; 9 percent had sexual intercourse in the past year, although not in the previous 4 weeks; 6 percent had sex one or more years ago and 20 percent have never had sexual intercourse. Among men under age 30, the likelihood a man has been recently sexually active increases sharply with age, from 4 percent among men age 15-19 to 66 percent among those age 25-29. Among men age 30 and older, 80 percent or more reported they had sex in the month preceding the interview.

As expected, men who are currently married or living with a woman are most likely to have had recent sexual intercourse: 97 percent compared with 25 percent of never married men and one-third of the small number of formerly married men.

### Key Findings:

- The total fertility rate for the 3 years prior to the 2015-16 ADHS was 1.7 births per woman.
- Three prior ADHS surveys in 2000, 2005, and 2010 also reported total fertility rates of 1.7 births per woman, indicating that fertility in Armenia has been stable for more than 15 years.
- Women are delaying childbearing to later ages. Almost 60 percent of childbearing at the time of the 2000 ADHS was concentrated among women age 15-24, but only a little more than 40 percent of childbearing took place in those age groups at the time of the 2015-16 ADHS.
- Short birth intervals may adversely affect maternal health and children's chances of survival. More than one fifth of non-first births in the 5-year period before the 2015-16 ADHS took place within 24 months of a previous birth, and 11 percent occurred within 18 months of the older sibling.
- Childbearing at a young age also places the mother and child at increased risk. The proportion of teenagers who are already mothers or pregnant with their first child is higher in rural than urban areas (6 percent versus 1 percent, respectively).

For the age at which women initiate childbearing; and teenage fertility. Postpartum amenorrhea, abstinence from sexual relations, and menopause are also presented in this chapter. Postpartum amenorrhea and sexual abstinence affect the duration of a woman's insusceptibility to pregnancy, which in turn affects birth spacing. Menopause is important because it marks the end of a woman's period of exposure to the risk of pregnancy.

All women interviewed in the 2015-16 ADHS were asked for a complete reproductive history. Each woman was first asked about the total number of pregnancies that had ended in live births, stillbirths, miscarriages, and induced abortions. After obtaining these aggregate data, an event-by-event pregnancy history was collected. For each pregnancy, the month and year in which the pregnancy ended and the result of the pregnancy were recorded. Information was collected about all pregnancies the respondent had in the order in which they occurred, starting with her first one. For each pregnancy that resulted in a live birth, information was collected on the sex of the child, its survival status, and its current age (for surviving children) or age at death (for deceased children). In addition, the duration was recorded for each pregnancy ending during the 5-year period preceding the survey.

# 5.1 CURRENT FERTILITY

The data collected in the pregnancy history were used to calculate two of the most widely used measures of current fertility: the total fertility rate (TFR) and its component age-specific fertility rates. The TFR is interpreted as the number of children the average woman would bear in her lifetime if she experienced the currently observed age-specific fertility rates throughout her reproductive years. The fertility rates refer to the 3-year period before the survey (i.e., approximately from February 2013 to February 2016).

According to the results of the 2015-16 ADHS, the TFR is 1.7 children per woman (Table 5.1). The ADHS estimate is identical to the TFR of 1.7 births per woman reported by the National Statistical Service of Armenia for 2014 (NSS 2015), the year that falls in the middle of the 3-year period used to calculate the 2015-16 ADHS TFR.<sup>1</sup> Thus, both sources confirm that childbearing in Armenia is substantially below replacement-level fertility, which is 2.1 children per woman.

The age pattern presented in Table 5.1, displays fertility as highest in the 20-24 age group (124 births per 1,000 women), followed closely by the 25-29 age group (116 births per 1,000 women). Births to women in these age groups account for almost 70 percent of the total fertility rate.

Table 5.1 also shows that the urban TFR is slightly lower than the rural rate (1.7 births per woman versus 1.8 births per woman) although, given sampling variability, this difference is not statistically significant. Among both urban and rural women,

#### Table 5.1 Current fertility

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the 3 years preceding the survey, according to residence, Armenia 2015-16

	Resid	lence	_
Age group	Urban	Rural	Total
15-19	11	39	24
20-24	108	148	124
25-29	119	112	116
30-34	58	49	55
35-39	31	15	25
40-44	3	4	4
45-49	2	0	1
TFR(15-49)	1.7	1.8	1.7
GFR	62	67	64
CBR	12.7	13.2	12.9

Note: Age-specific fertility rates are per 1,000 women. Rates for age group 45-49 may be slightly biased due to truncation. Rates are for the period 1-36 months prior to interview.

TFR: Total fertility rate expressed per woman GFR: General fertility rate expressed per 1,000 women age 15-44

CBR: Crude birth rate, expressed per 1,000 population

fertility rates are highest in the 20-24 and 25-29 age groups. Teenage fertility is lower among urban women than among rural women (11 births per 1,000 women versus 39 births per 1,000 women). Urban women also tend to delay childbearing to older ages more often than rural women; births to women age 30 and older account for 28 percent of the total urban TFR compared with 19 percent of the rural TFR.

# 5.2 FERTILITY DIFFERENTIALS BY BACKGROUND CHARACTERISTICS

Table 5.2 presents differentials by background characteristics in three fertility measures: the total fertility rate, the percentage of women age 15-49 who are currently pregnant, and the mean number of children ever born among women age 40-49. Caution should be exercised in interpreting differences in the three measures between subgroups since some of the differences may be due simply to sampling variability, particularly where subgroups include comparatively small numbers of respondents.<sup>2</sup>

The TFR varies markedly by region. The rate is lowest in Aragatsotn and Gegharkunik (each 1.1 births per woman) and highest in Tavush (2.4 births per woman). The TFR declines with the level of education, from 2.8 births per woman among those with only basic education to 1.6 births per woman among those with at least some higher education. Wealth is also generally negatively associated with the TFR, which drops from 2 births per woman in the lowest wealth quintile to 1.4 births in the fourth quintile before rising to 1.9 births in the highest quintile.

The percentage of women who are pregnant provides another measure of current fertility, although it is subject to some error as women may not recognize or report all first trimester pregnancies. Table 5.2 shows that 3 percent of women reported being pregnant at the time of the survey, with only minor differences across subgroups of women.

<sup>&</sup>lt;sup>1</sup> The data on which the ADHS rate and the annual rate reported by the NSS are based differ. Whereas the ADHS rates are based on information on live births collected from the complete pregnancy history of the de facto population of women (those who stayed the night before the interview in the household) for the 3 years preceding the survey, the official government rate is based on births among the de jure population of women (those who usually live in the household) registered in 2014.

<sup>&</sup>lt;sup>2</sup> Sampling errors and confidence intervals are presented in Appendix B for all of the fertility measures included in Table 5.2 at the national, urban and rural, and regional levels.

The last column in Table 5.2 shows the mean number of children ever born to women age 40-49. This is an indicator of cumulative fertility; it reflects the fertility performance of older women who are nearing the end of their reproductive period and thus represents completed fertility. If fertility had remained stable over time, the two fertility measures, TFR and children ever born, would be equal. The findings show that the mean number of children ever born to women age 40-49 (2.2 children per woman) is higher than the TFR for the 3 years preceding the survey (1.7 children per woman), indicating a decline in fertility of around half a child over the past 30 years. In general, comparisons of the TFR and the mean children ever born measures indicate that fertility has declined by less than one birth over the past three decades in most subgroups. Exceptions to this pattern are Aragatsotn and Gegharkunik, with implied fertility declines of 1.4 births and 1.3 births, respectively, and the basic education subgroup with an implied increase of 0.3 births.

# 5.3 FERTILITY TRENDS

Using data from the 2015-16 ADHS, two approaches can be used to explore fertility trends in Armenia. The first method uses retrospective data on the childbearing patterns among the ADHS respondents to examine changes in age-specific

#### 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, Armenia 2015-16

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Residence			
Urban	1.7	2.6	2.0
Rural	1.8	3.2	2.6
Deview			
Region Yerevan	1.6	2.3	1.9
Aragatsotn	1.0	2.3	2.5
Ararat	1.9	2.9	2.3
Armavir	2.2	3.5	2.6
Gegharkunik	11	1.7	2.4
Lori	1.5	3.7	2.1
Kotayk	2.1	4.3	2.3
Shirak	1.9	3.3	2.4
Syunik	2.0	2.8	2.3
Vayots Dzor	1.9	3.7	2.6
Tavush	2.4	2.8	2.8
Education			
Basic	2.8	1.6	2.5
Secondary	1.9	2.7	2.4
Secondary special	1.7	2.8	2.1
Higher	1.6	3.4	1.9
Wealth quintile			
Lowest	2.0	2.1	2.6
Second	1.7	2.8	2.5
Middle	1.7	3.4	2.1
Fourth	1.4	2.7	2.0
Highest	1.9	3.1	1.9
Total	1.7	2.8	2.2

Note: Total fertility rates are for the period 1-36 months prior to interview. Totals include 5 women with no education for which indicators are not shown separately.

fertility rates during the 20 years prior to survey. The second method compares the total and age-specific fertility rates from the 2015-16 ADHS with the results of the 2000, 2005, and 2010 ADHS surveys (NSS 2001; NSS 2006; NSS 2012).

### 5.3.1 Retrospective Data

Table 5.3 uses information from the retrospective pregnancy histories obtained in the ADHS respondents to examine trends in age-specific fertility rates for successive five-year periods before the survey. Because women age 50 and older were not interviewed in the survey, the rates are successively truncated as the number of years before the survey increases. The results in Table 5.3 indicate that age-specific fertility declined sharply among women under age 25 over the past 20 years. The decline was most rapid among women age 15-19, with fertility dropping by more than half, from 58 births per 1,000 women in the period 15 to 19 years before the survey. Fertility among women age 20-24 also decreased over the period from 173 births per 1,000 women in the period 15-

#### Table 5.3 Trends in age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, according to mother's age at the time of the birth, Armenia 2015-16

Mother's	Number	of years	preceding	g survey
age at birth	0-4	5-9	10-14	15-19
15-19	25	31	40	58
20-24	126	141	163	173
25-29	110	116	104	101
30-34	52	52	41	[47]
35-39	21	14	[17]	
40-44	3	[4]	• •	
45-49	[1]			

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of interview.

19 years before the survey to 126 births per 1,000 women in the period 0-4 years before the survey, a decrease of 27 percent. Unlike the pattern among younger women, age-specific fertility generally rose among women age 25-49. Although this suggests a trend toward delaying childbearing to older ages, the increases among women age 30 and over were modest so that childbearing remains heavily concentrated among women age 20-29.

### 5.3.2 Comparison with Prior ADHS Surveys

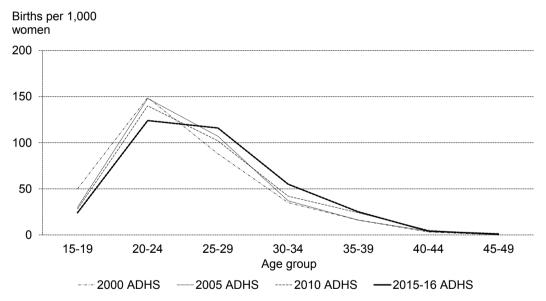
Table 5.4 shows total and age-specific fertility rates for the four ADHS surveys conducted between 2000 and 2015-16. The TFR was 1.7 per woman in all of the surveys indicating that the overall level of fertility has remained stable in Armenia for more than 15 years. However, an examination of the age-specific fertility rates shows that there has been a shift away from childbearing among women age 15-24 to older ages, particularly the late 20s (Figure 5.1). Thus, while almost 60 percent of childbearing at the time of the 2000 ADHS was concentrated among women age 15-24, only a little more than 40 percent of childbearing at the time of the 2015-16 ADHS took place in those age groups.

#### Table 5.4 Trends in fertility

Age-specific and total fertility rates (TFR) for the three-year period preceding several surveys, according to mother's age at the time of the birth, Armenia 2000-2016

Age	2000 ADHS (1997-2000)	2005 ADHS (2002-2005)	2010 ADHS (2007-2010)	2015-16 ADHS (2013-2016)
15-19	50	30	28	24
20-24	149	148	140	124
25-29	88	107	102	116
30-34	35	37	42	55
35-39	16	16	24	25
40-44	3	4	5	4
45-49	0	0	0	1
TFR 15-49	1.7	1.7	1.7	1.7

Note: Age-specific fertility rates are per 1,000 women. Rates for age group 45-49 may be slightly biased due to truncation. Rates are for the period 1-36 months prior to interview.





# 5.4 CHILDREN EVER BORN AND LIVING

Table 5.5 shows the distribution of all women and currently married women by number of children ever born. The marked differences between the results for currently married women and for all women at the younger ages are due to the comparatively large numbers of never-married women who have had no births. Data on the number of children ever born reflect the accumulation of births to women over the past three decades and therefore have limited reference to current fertility levels. However, the information is

useful in looking at how average family size varies across age groups and for looking at the level of primary infertility.

Table 5.5 indicates that the average woman in Armenia had given birth to 1.4 children at the time of the 2015-16 ADHS. A comparison with the average number of surviving children indicates that virtually all of the children ever born are still alive. Reflecting the natural family-building process, the number of children that women have borne increases directly with age from an average of less than one child among women age 15-24 to an average of 2.3 births among women 45-49.

The percentage of currently married women age 45-49 who have no births provides an indirect indicator of primary infertility since voluntary childlessness is rare in Armenia. Table 5.5 shows that 1 percent of currently married women age 45-49 have never had a live birth, suggesting that primary infertility affects comparatively few women in Armenia.

		1	Number o	of children	ever bor	n			Number of	Mean number of children	Mean number o living
Age group	up 0 1 2	2	3	4	5	6+	Total	women	ever born	children	
						ALL WC	MEN				
15-19	97.5	2.5	0.0	0.0	0.0	0.0	0.0	100.0	725	0.03	0.03
20-24	69.5	19.5	10.0	0.9	0.0	0.0	0.0	100.0	928	0.42	0.42
25-29	34.9	26.4	31.4	5.9	0.9	0.4	0.0	100.0	1,099	1.13	1.12
30-34	16.5	15.0	49.3	17.2	1.6	0.3	0.1	100.0	1,007	1.74	1.72
35-39	9.8	11.8	50.9	21.6	4.6	1.1	0.3	100.0	867	2.04	2.00
40-44	9.7	9.9	45.9	27.2	5.3	1.1	0.8	100.0	784	2.16	2.10
45-49	7.8	8.4	44.4	29.4	7.6	2.0	0.4	100.0	706	2.28	2.23
Total	34.6	14.4	33.5	14.0	2.7	0.7	0.2	100.0	6,116	1.39	1.36
				(	CURREN	tly Maf	RRIED WO	DMEN			
15-19	(45.0)	(55.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	33	(0.55)	(0.55)
20-24	23.9	48.5	25.3	2.3	0.0	0.0	0.0	100.0	365	1.06	1.05
25-29	10.7	34.6	44.4	8.4	1.3	0.6	0.0	100.0	761	1.57	1.55
30-34	4.3	14.9	58.2	20.2	1.9	0.4	0.1	100.0	826	2.02	2.00
35-39	1.6	8.2	58.1	25.6	4.9	1.3	0.3	100.0	709	2.29	2.25
40-44	3.4	7.4	50.0	31.2	5.9	1.4	0.7	100.0	639	2.36	2.32
45-49	1.4	4.9	48.9	33.6	8.3	2.5	0.5	100.0	562	2.52	2.46
Total	6.7	18.4	49.2	20.8	3.7	1.0	0.3	100.0	3,895	2.01	1.97

# 5.5 BIRTH INTERVALS

A birth interval is defined as the length of time between two live births. Research has shown that short birth intervals may adversely affect maternal health and children's chances of survival. Children born within 36 months of a previous birth, especially if the interval between the births is less than two years, are at increased risk of health problems and death at an early age (Rutstein and Winter, 2014; WHO, 2006; Conde-Agudelo et al., 2006). Longer birth intervals, on the other hand, contribute to the improved health status of both mother and child.

Table 5.6 shows the percent distribution of non-first births, i.e., second and higher-order births, in the five years prior to the survey by the number of months since the previous birth. Six in ten of non-first births occurred at the recommended interval of at least 36 months after a prior birth. The median birth interval was 41.6 months, which was 4.4 months longer than the median birth interval reported in the 2010 ADHS (37.2 months). Despite the increase in the average birth interval, the results in Table 5.6 indicate that a substantial proportion of non-first births still take place at too short an interval; more than one fifth (23 percent) of non-first births in the five-year period before the 2015-16 ADHS took place within 24 months of a previous birth, and 11 percent occurred within 18 months of previous birth.

#### Table 5.6 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, Armenia 2015-16

					·			of number	Median number of
Background characteristic	7-17	18-23	onths since 24-35	preceding b 36-47	48-59	60+	Total	non-first births	months since preceding birth
Age									
20-29	17.2	14.9	24.6	22.2	11.7	9.4	100.0	477	32.5
30-39	3.6	9.6	11.9	10.2	15.3	49.4	100.0	415	59.4
40-49	(4.7)	(5.9)	(2.6)	(3.3)	(10.9)	(72.7)	100.0	31	(104.5)
Sex of preceding birth									
Male	11.8	12.5	19.2	15.8	12.3	28.4	100.0	461	39.3
Female	9.6	11.9	17.1	16.6	14.3	30.5	100.0	462	44.6
Survival of preceding birth									
Living	10.7	12.1	18.0	16.2	13.4	29.6	100.0	908	41.8
Dead	*	*	*	*	*	*	100.0	15	*
Birth order									
2-3	10.8	12.2	18.9	16.2	13.1	28.8	100.0	870	41.2
4-6	6.3	13.6	6.5	14.6	17.8	41.2	100.0	50	54.7
7+	*	*	*	*	*	*	100.0	3	*
Residence									
Urban	8.7	11.9	15.6	16.0	14.3	33.5	100.0	525	45.7
Rural	13.4	12.6	21.5	16.4	12.0	24.2	100.0	398	37.4
Region									
Yerevan	8.6	11.8	12.7	16.9	14.6	35.4	100.0	262	49.0
Aragatsotn	(5.1)	(8.7)	(28.1)	(20.3)	(13.5)	(24.2)	100.0	31	(37.9)
Ararat	9.6	14.5	19.9	14.3	10.4	31.4	100.0	97	42.1
Armavir	14.6	14.5	20.9	12.6	14.3	23.0	100.0	97	36.0
Gegharkunik	9.5	6.9	20.9	12.0	9.2	41.5	100.0	44	51.3
Lori	16.5	19.5	23.1	10.3	16.3	14.3	100.0	56	34.0
Kotayk Shirak	7.7 17.3	10.3 10.2	13.0 24.5	19.2 20.7	16.5 9.6	33.3 17.7	100.0 100.0	140 83	47.7 35.0
Syunik	11.8	8.2	24.5	11.8	9.0 6.4	34.5	100.0	34	37.5
Vayots Dzor	7.1	14.0	20.6	19.6	12.6	26.1	100.0	22	43.6
Tavush	12.3	14.1	19.9	16.2	12.8	24.6	100.0	56	37.5
Education									
Basic	13.6	15.2	15.6	17.4	13.1	25.1	100.0	65	39.4
Secondary	12.7	10.5	21.1	11.7	12.1	31.9	100.0	384	41.2
Secondary special	8.0	12.8	18.9	17.7	13.3	29.3	100.0	190	43.1
Higher	9.1	13.3	14.3	20.9	15.0	27.4	100.0	284	42.2
Wealth quintile									
Lowest	14.9	16.0	18.1	14.1	12.5	24.4	100.0	193	36.6
Second	11.0	12.1	24.3	17.3	11.9	23.4	100.0	181	37.5
Middle	11.2	8.0	20.9	14.4	11.2	34.2	100.0	157	43.1
Fourth	11.1	14.8	12.5	17.8	14.5	29.3	100.0	154	43.1
Highest	6.4	10.3	15.4	17.1	15.6	35.3	100.0	238	50.3
Total	10.7	12.2	18.1	16.2	13.3	29.5	100.0	923	41.6

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

In general, younger women are more likely to have births that are too closely spaced than older women. For example, 57 percent of non-first births to women age 20-29 were spaced less than the recommended interval of at least than 36 months apart, and 32 percent took place less than 24 months after a prior birth. On the other hand, among births to mothers age 30-39, only 25 percent were spaced less than 36 months apart, and only 13 percent occurred less than 24 months after a prior birth.

Birth intervals are related to residence. The median birth interval in urban areas is 45.7 months compared with 37.4 months in rural areas, and only a little more than one-third of urban births were spaced less than 36 months after a prior birth compared with almost half of rural births. Birth intervals also vary widely across regions, with the longest in Gegharkunik (51.3 months) and the shortest in Lori (34.0 months).

Both education and wealth are associated with birth intervals. For example, 44 percent of births to mothers with basic education occur less than 36 months after their older sibling compared with 37 percent of births to mothers with higher education. Half of births in the lowest wealth quintile were spaced less than the recommended interval of at least 36 months after a prior birth compared with around one-third of births in the highest quintile.

### 5.6 POSTPARTUM AMENORRHEA, ABSTINENCE, AND INSUSCEPTIBILITY

Postpartum amenorrhea refers to the interval between childbirth and the return of menstruation. During this period, the risk of pregnancy is reduced. The duration of reduced risk of conception largely depends on two factors: the length and intensity of breastfeeding, which tends to suppress the resumption of ovulation, and the length of time before the resumption of sexual intercourse. Women who are either amenorrheic or abstaining (or both) are considered insusceptible to the risk of pregnancy.

Among births that occurred in the three years preceding the survey, the percentage of mothers who were postpartum amenorrheic, abstaining, or insusceptible at the time of the survey is shown in Table 5.7. At the time of the survey, 11 percent of women who had given birth during the three years preceding the survey were amenorrheic, and 7 percent were abstaining. Overall, 14 percent of these women were insusceptible to the risk of pregnancy.

#### Table 5.7 Postpartum amenorrhea, abstinence and insusceptibility

Percentage of births in the 3 years preceding the survey for which mothers are postpartum amenorrheic, abstaining, and insusceptible, according to number of months since birth, and median and mean durations, Armenia 2015-16

Months	Percentage of	births for which	the mother is:	Number of
since birth	Amenorrheic	Abstaining	Insusceptible <sup>1</sup>	births
<2	(83.7)	(71.3)	(91.5)	28
2-3	`54.4 <sup>´</sup>	`19.9 <sup>´</sup>	`62.2 <sup>´</sup>	58
4-5	32.8	5.4	34.9	62
6-7	23.3	7.1	27.6	77
8-9	6.6	8.7	11.8	62
10-11	5.9	3.6	9.4	55
12-13	2.7	3.5	6.2	50
14-15	3.4	5.1	8.5	61
16-17	0.0	3.5	3.5	60
18-19	2.4	1.5	3.8	57
20-21	0.0	1.3	1.3	59
22-23	5.5	3.8	5.5	54
24-25	3.2	7.6	7.6	58
26-27	1.3	0.0	1.3	51
28-29	4.1	3.9	8.0	68
30-31	0.0	0.0	0.0	53
32-33	0.0	2.7	2.7	48
34-35	0.0	2.2	2.2	55
Total	11.2	6.7	14.4	1,016
Median	2.6	1.5	3.3	na
Mean	4.9	3.4	6.1	na

Note: Estimates are based on status at the time of the survey. Figures in parentheses are based on 25-49 unweighted cases. na = Not applicable

<sup>1</sup> Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth

During the first year after birth, there

was a rapid decline in postpartum amenorrhea, from 84 percent during the first 2 to 3 months after birth to 33 percent of women 4 to 5 months after giving birth and to just 6 percent of women 10 to 11 months after birth. Postpartum abstinence also declined rapidly after birth; only 20 percent of women were abstaining after 2 to 3 months and just 4 percent were abstaining after 10 to 11 months. Overall, the median duration of insusceptibility after birth was 3 months. Because a few women in Armenia are amenorrheic or abstain for a very long time, the mean durations are higher than the median duration for amenorrhea, abstinence, and insusceptibility.

### 5.7 MENOPAUSE

For women age 30 and older, the risk of pregnancy declines as increasing proportions of women become menopausal. Although the onset of menopause is difficult to determine for an individual woman, the proportion of women who are menopausal can be estimated for the population as a whole. Table 5.8 shows the percentage of women age 30 and older who are menopausal, that is, who are not pregnant or postpartum amenorrheic and who have not menstruated for six months or more in the period preceding the survey.

According to the 2015-16 ADHS, 8 percent of women age 30 to 49 are menopausal. As expected, the proportion of women who are menopausal increases with age, from 1 percent of women age 30-34 to 37 percent of women age 48-49.

#### Table 5.8 Menopause

Percentage of women age 30-49 who are menopausal, according to age, Armenia 2015-16

AgePercentage menopausal1Number of women30-341.11,00735-392.886740-416.234442-436.029344-4513.630846-4717.527048-4937.4274Total7.93,364			
35-39         2.8         867           40-41         6.2         344           42-43         6.0         293           44-45         13.6         308           46-47         17.5         270           48-49         37.4         274	Age		
40-41         6.2         344           42-43         6.0         293           44-45         13.6         308           46-47         17.5         270           48-49         37.4         274	30-34	1.1	1,007
42-43         6.0         293           44-45         13.6         308           46-47         17.5         270           48-49         37.4         274	35-39	2.8	867
44-45         13.6         308           46-47         17.5         270           48-49         37.4         274	40-41	6.2	344
46-47         17.5         270           48-49         37.4         274	42-43	6.0	293
48-49 37.4 274	44-45	13.6	308
	46-47	17.5	270
Total 7.9 3,364	48-49	37.4	274
	Total	7.9	3,364

<sup>1</sup> Percentage of all women who are not pregnant and not postpartum amenorrheic whose last menstrual period occurred six or more months preceding the survey

### 5.8 AGE AT FIRST BIRTH

The age at which childbearing typically begins has important demographic consequences for society as a whole as well as for the health and welfare of mother and child. Table 5.9 shows the percentages of women age 15-49 that have given birth by specific exact ages, according to current age. Median age at first birth is presented in the last column of the table. For women under age 25, the median age at first birth is not shown because less than 50 percent of women in those ages had given birth at the time of the survey.

### Table 5.9 Age at first birth

Percentage of women age 15-49 who gave birth by specific exact ages, percentage who have never given birth, and median age at first birth, according to current age, Armenia 2015-16

Current age		centage w	ho gave bir	th by exact a	age	who have never given	Number of	Median age at
e an entrage	15	18	20	22	25	birth	women	first birth
15-19	0.0	na	na	na	na	97.5	725	а
20-24	0.0	1.0	9.6	na	na	69.5	928	а
25-29	0.0	2.5	14.1	29.9	53.8	34.9	1,099	24.4
30-34	0.0	4.0	17.8	39.4	61.8	16.5	1,007	23.2
35-39	0.3	7.2	25.5	45.3	64.0	9.8	867	22.6
40-44	0.0	6.8	30.8	55.9	73.9	9.7	784	21.4
45-49	0.0	3.1	24.2	50.1	76.2	7.8	706	22.0
20-49	0.0	4.0	19.6	na	na	26.2	5,391	а
25-49	0.1	4.6	21.7	42.8	64.6	17.2	4,463	22.8

a = Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group

The 2015-16 ADHS findings indicate that childbearing among Armenian women begins relatively late. Seven in ten women age 20-24 and more than one-third of women age 25-29 have never given birth. Women age 35 and over are much more likely than younger women to have begun childbearing in their early twenties. For example, among women age 45-49, 24 percent had become a mother before age 20, while only 10 percent of women age 20-24 gave birth to their first child before that age. The median age at first birth ranges from a low of 21.4 years among women age 40-44 to 24.4 years among women age 25-29.

The median age at first birth cannot be computed for women age 15-19 and age 20-24 because less than half of these women had a live birth before the beginning of the age group. However, recent trends in the initiation of childbearing among young women can be assessed by comparing the proportion of women in these age groups that had given birth in the 2015-16 ADHS with similar results from the 2010 ADHS. The comparisons indicate that, in 2015-16, 3 percent of women age 15-19 had had their first birth, which represents only a slight drop from the already low proportion of women age 20-24, there also was only a small decline between 2010 and 2015-16 in the percentage who had had their first birth (33 percent and 31 percent, respectively).

Table 5.10 shows the median age at first birth among women age 25-49, by background characteristics. The median age at first birth for urban women is more than two years older than for rural women (23.8 years compared with 21.4 years). Considering the regional patterns, the highest median age at first birth is observed in Yerevan (24.5 years) and the lowest in Gegharkunik (21.4 years). Education and wealth status are positively

#### Table 5.10 Median age at first birth

Median age at first birth among women age 25-49 years, according to background characteristics, Armenia 2015-16

Background characteristic	Women age 25-49
<b>Residence</b> Urban Rural	23.8 21.4
Region Yerevan Aragatsotn Ararat Armavir Gegharkunik Lori Kotayk Shirak Syunik Vayots Dzor Tavush	24.5 22.4 21.5 21.4 22.7 22.1 22.5 22.5 21.5 21.9
Education Basic Secondary Secondary special Higher	20.3 21.3 22.7 a
Wealth quintile Lowest Second Middle Fourth Highest	21.6 21.8 22.4 23.8 24.2
Total	22.8

a = Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group

group Total includes 5 women (unweighted) with no education for which median age at first birth is not shown separately. related to the age at which women initiate childbearing. The median age at first birth is 20.3 years for women with basic education compared with 22.7 years among women with secondary-special education. Similarly, women living in the poorest households begin childbearing more than two and a half years earlier on average than women living in the wealthiest households (21.6 years and 24.2 years, respectively).

Finally, information on the age at which women marry (see Chapter 4) and the age at which they give birth provides an insight into which how long couples typically delayed childbearing after marriage. A comparison of the median ages at first marriage and first birth among all women age 25-49 (21.4 years and 22.8 years, respectively) indicates that women in Armenia had their first birth on average just under 18 months after they marry.

# 5.9 TEENAGE PREGNANCY AND MOTHERHOOD

It is well known that adolescent pregnancy, early childbearing, and motherhood have negative socioeconomic and health consequences. Adolescent mothers are more likely to have complications during pregnancy and labor, which result in higher morbidity and mortality for themselves and their children. Moreover, childbearing during the teenage years frequently has adverse social consequences, particularly with respect to female educational attainment, because women who become mothers in their teens are more likely to curtail education.<sup>3</sup>

Table 5.11 shows that, overall, 4 percent of women age 15-19 (teenagers) had begun childbearing, with 3 percent reporting they were already mothers, and 1 percent pregnant with their first child. In terms of trends, the rate of teenage pregnancy and motherhood in 2015-16 was slightly lower than the level observed in the 2010 ADHS (5 percent).

Considering the variation by background characteristics, none of the 15-yearold women in the ADHS sample had begun childbearing. Among women age 16-19, the proportion that started childbearing rises rapidly from one percent or less among those ages 16 and 17 to 12 percent among 19-year-olds.

The proportion of teenagers who had begun childbearing was higher in rural areas

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, by background characteristics, Armenia 2015-16

	Percentage age 15-			
Background characteristic	Have had a live birth	Are pregnant with first child	Percentage who have begun childbearing	Number of women
Age				
15	0.0	0.0	0.0	137
16	0.0	0.4	0.4	156
17	0.4	0.7	1.1	156
18	4.8	0.8	5.5	135
19	8.0	3.5	11.6	140
Residence				
Urban	0.9	0.3	1.2	386
Rural	4.4	2.0	6.3	339
Region				
Yerevan	1.0	0.5	1.5	216
Aragatsotn	(3.2)	(0.0)	(3.2)	31
Ararat	1.0	0.0	1.0	63
Armavir	8.1	3.8	11.8	72
Gegharkunik	4.0	0.0	4.0	78
Lori	(0.0)	(0.0)	(0.0)	37
Kotayk	1.1	1.1	2.2	82
Shirak	5.4	3.9	9.3	56
Syunik	0.0	0.0	0.0	35
Vayots Dzor	1.5	1.8	3.4	17
Tavush	4.0	1.5	5.6	39
Education				
Basic	2.3	1.8	4.1	133
Secondary	3.4	1.2	4.6	354
Secondary special	2.5	1.0	3.5	122
Higher	0.2	0.0	0.2	116
Wealth quintile				
Lowest	4.5	1.6	6.1	150
Second	3.1	1.8	4.9	154
Middle	3.2	0.7	3.9	138
Fourth	1.8	0.8	2.6	130
Highest	0.0	0.4	0.4	153
Total	2.5	1.1	3.6	725

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

than in urban areas (6 percent and 1 percent, respectively). Looking at regional differences, teenage childbearing was highest in Armavir (12 percent). With respect to educational attainment, 4 to 5 percent of teenagers with basic or secondary education had begun childbearing compared with less than one percent of teenagers with some higher education. Similarly, the proportion of teenagers who had begun childbearing decreased from 6 percent in the lowest wealth quintile to less than one percent in the highest quintile.

<sup>&</sup>lt;sup>3</sup> The legal age for marriage of women in Armenia is 18.

### **Key Findings**

- About half of married women (54 percent) and men (48 percent) want no more children.
- The ideal number of children wanted by women is 2.6 and by men is 2.7.
- Overall, 92 percent of births were wanted at the time of conception, 6 percent were reported as mistimed (wanted later), and 2 percent were unwanted.
- The total wanted fertility rate is 1.7 children per woman, identical to the actual fertility rate of 1.7 children per woman.

Information on fertility preferences is of considerable importance to family planning program administrators because it allows them to assess the need for contraception, whether for spacing or limiting of births, and to evaluate the extent of unwanted and mistimed pregnancies. Data on fertility preferences can also be useful as an indicator of the direction that future fertility patterns may take. This chapter presents information on whether and when married women and men want more children, ideal family size, whether recent births were wanted at the time they occurred, and what the theoretical fertility rate would be if all unwanted births were prevented.

### 6.1 FERTILITY PREFERENCES

In the 2015-16 ADHS, women and men were asked whether they wanted to have another child and, if so, how soon. Table 6.1 shows fertility preferences among currently married women and men by the number of living children they already had at the time of the survey (including any current pregnancy).

The majority of married Armenian women wish to control their future fertility. Over half (54 percent) do not want to have any more children or are sterilized. Only about one-quarter want to have a child in the future. The desire to limit fertility markedly increases by number of living children. For example, 70 percent of married women with no children say they want to have a child soon; only 3 percent of these women do not want to have any children. On the other hand, 6 in 10 women with two children say that they do not want any more, as do more than 8 in 10 women with three or more children.

Men's fertility preferences, in general, are similar to women's. However, a lower proportion of married men than women report that they want no more children (48 percent versus 54 percent), and a much higher percentage of men than women report that they are undecided about their desire for more children (21 percent versus 11 percent). Men are also much less likely than women to admit that they cannot have another child.

#### Table 6.1 Fertility preferences according to number of living children

Percent distribution of currently married women and currently married men age 15-49 by desire for children, according to number of living children, Armenia 2015-16

		Num	ber of living	children		Total
Desire for children	0	1	2	3	4+	15-49
		WOME	N <sup>1</sup>			
Have another soon <sup>2</sup>	69.7	26.3	5.3	0.9	0.0	11.2
Have another later <sup>3</sup>	0.0	38.7	8.7	1.4	1.7	12.0
Have another, undecided when	2.5	7.2	2.4	1.4	0.6	3.0
Undecided	2.9	6.9	15.8	7.9	4.5	11.4
Want no more	3.0	8.8	60.4	80.1	77.9	52.8
Sterilized <sup>4</sup>	0.0	0.7	0.4	1.2	2.8	0.7
Declared infecund	21.9	11.2	7.1	7.2	12.5	8.8
Missing	0.0	0.2	0.0	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	195	719	2,009	811	161	3,895
		MEN	5			
Have another soon <sup>2</sup>	76.8	30.1	6.0	3.1	0.6	14.2
Have another later <sup>3</sup>	0.0	27.5	6.9	1.1	1.4	9.7
Have another, undecided when	16.2	19.9	2.1	0.0	0.0	6.2
Undecided	2.6	13.2	24.6	25.2	17.9	20.8
Want no more	0.5	7.8	59.7	69.9	73.4	47.8
Sterilized <sup>4</sup>	0.0	0.3	0.1	0.4	0.0	0.2
Declared infecund	3.8	0.8	0.4	0.1	0.0	0.6
Missing	0.0	0.4	0.3	0.0	6.7	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	80	323	768	274	60	1,506

<sup>1</sup> The number of living children includes the current pregnancy.

<sup>2</sup> Wants next birth within 2 years

<sup>3</sup> Wants to delay next birth for 2 or more years

<sup>4</sup> Includes both female and male sterilization

<sup>5</sup> The number of living children includes one additional child if respondent's wife is pregnant.

Table 6.2.1 shows the percentage of currently married women who want no more children or are sterilized, by number of living children and background characteristics. Women in urban and rural areas are equally likely to want no more children. Differences between urban and rural women become more evident if one compares groups of women based on the number of living children that they already have. For example, urban mothers are more likely than rural mothers to want to stop childbearing at all parities, except for those with only one child. Women in Gegharkunik, Vayots Dzor, and Yerevan are the most likely to want no more children, whereas those in Aragatsotn and Kotayk are the least likely to want to stop childbearing. Married women with higher education are the least likely to want no more children; however, that is likely because they tend to be younger and have fewer children. Differences by education according to the number of living children are very small. There is little relationship between desire to stop childbearing and women's wealth status.

Table 6.2.2 shows the percentage of currently married men who want no more children, who are sterilized, or who declared that their wife/partner is sterilized, by number of living children and background characteristics. There is no strong relationship between desire to stop childbearing and residence, education, or wealth.

### Table 6.2.1 Desire to limit childbearing: Women

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Armenia 2015-16

Background		Number of liv	ving children	1	
characteristic	0	1	2	3+	Total
Residence					
Urban	3.7	9.4	64.1	84.1	53.3
Rural	1.5	9.7	55.3	79.1	53.8
Region					
Yerevan	(5.7)	10.3	69.4	92.3	56.8
Aragatsotn	*	0.0	39.6	71.1	41.5
Ararat	*	12.4	53.9	74.8	49.2
Armavir	*	7.0	59.4	82.4	56.7
Gegharkunik	*	7.7	79.0	89.9	68.4
Lori	*	(31.1)	61.3	(62.2)	52.7
Kotayk		4.7	45.8	67.5	42.4
Shirak	*	9.0	64.2	79.1	54.0
Syunik	*	(0.0)	55.9	83.6	52.6
Vayots Dzor	*	(8.3)	56.8	87.3	57.0
Tavush	^	3.3	48.2	88.7	51.0
Education					
Basic	*	(21.4)	56.0	78.7	59.8
Secondary	4.3	11.3	59.9	81.6	56.6
Secondary special	(2.8)	9.5	65.1	77.4	56.2
Higher	2.2	6.7	58.4	85.5	44.8
Wealth guintile					
Lowest	(3.4)	12.3	53.0	76.6	54.0
Second	(0.0)	10.8	58.7	78.1	53.7
Middle	(7.3)	11.1	62.2	86.6	53.7
Fourth	(0.0)	5.7	65.9	81.1	51.7
Highest	(4.7)	9.0	61.9	88.2	54.3
Total	3.0	9.5	60.8	81.2	53.5

Note: Women who have been sterilized or whose husband has been sterilized are considered to want no more children. Total includes 4 (weighted) women with no education. A figure in parentheses is based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. <sup>1</sup> The number of living children includes the current pregnancy.

#### Table 6.2.2 Desire to limit childbearing: Men

Percentage of currently married men age 15-49 who want no more children, by number of living children, according to background characteristics, Armenia 2015-16

Background		Number of liv	ving children	1	
characteristic	0	1	2	3+	Total
Residence					
Urban	0.0	7.1	59.9	69.9	46.4
Rural	(1.8)	9.4	59.6	71.7	50.1
Education					
Basic	*	(6.6)	50.8	65.5	45.5
Secondary	(0.0)	7.0	62.7	71.1	49.5
Secondary special	*	(13.2)	70.4	70.7	57.6
Higher	*	8.4	50.4	74.8	40.1
Wealth quintile					
Lowest	*	10.8	50.6	69.7	45.6
Second	*	9.1	63.6	68.1	50.5
Middle	*	7.8	73.2	79.8	53.0
Fourth	*	3.4	65.8	76.0	49.4
Highest	*	9.6	48.6	64.6	42.3
Total	0.5	8.0	59.8	70.9	48.0

Note: Men who have been sterilized or who state in response to the question about desire for children that their wife has been sterilized are considered to want no more children. Total includes 3 (weighted) men with no education. A figure in parentheses is based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. <sup>1</sup> The number of living children includes one additional child if respondent's wife is

pregnant.

With regard to trends in fertility preference, the proportion of married women who say that they want to stop childbearing has decreased steadily in the past 15 years, from 74 percent in 2000 to 71 percent in 2005, to 58 percent in 2010, and to 54 percent in 2015-16 (Figure 6.1). However, an increase is seen in the percentage of women who say that they cannot conceive (from 3 percent in 2005 to 9 percent in 2015-16) or who are undecided about whether they want to have another child or about when to have it (6 percent in 2005 and 14 percent in 2015-16), as well as smaller increases in the proportions who want to have another child either soon or later (NSS et al. 2001, NSS et al. 2006, NSS et al. 2012).

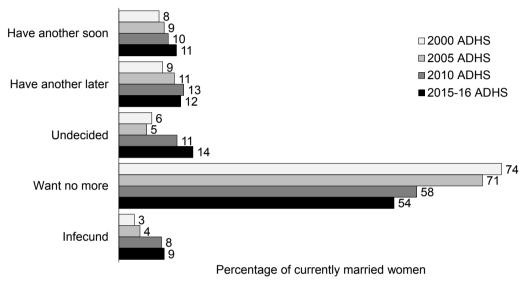


Figure 6.1 Trends in fertility desires among married women

# 6.2 IDEAL NUMBER OF CHILDREN

In the 2015-16 ADHS, respondents were asked what they considered the ideal family size to be. This information was obtained by asking each respondent one of two questions. Respondents who had no children were asked, "If you could choose exactly the number of children to have in your whole life, how many would that be?" For respondents who had children, the question was, "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?" Responses to these questions are meant to be independent of the number of children that a respondent already has. However, there is typically a correlation between the actual number of children that respondents have and their reported ideal. This correlation may occur because respondents who want larger families have more children or because respondents adjust their ideal family size to match their actual family size (rationalization). The percent distribution of women and men age 15-49 by ideal number of children is detailed in Table 6.3, according to the number of living children.

Virtually all Armenian women want at least some children. Almost half of all women (47 percent) say that two children are ideal, and 33 percent say that three children are ideal. One in seven women (14 percent) states that she prefers to have four or more children. Overall, the mean ideal number of children is 2.6 among all women and 2.7 among currently married women. There is a positive correlation between the actual and ideal number of children. Among all women, the mean ideal number of children increases from 2.3 among women with no children to 3.9 among women with four or more children.

In general, Armenian men want the same number of children as women. Forty-seven percent of men say that two children are ideal, 34 percent say that three children are ideal, and 15 percent say that four or more children are ideal. Overall, the mean ideal number of children among all men is 2.7 children, and among currently married men is 2.8 children. As there is for women, there is a positive correlation between the actual and ideal number of children among men.

#### Table 6.3 Ideal number of children according to 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 currently married respondents, according to the number of living children, Armenia 2015-16

		Num	ber of living	children		
Ideal number of children	0	1	2	3	4+	Total
		WOMEN <sup>1</sup>				
0	1.8	0.2	0.2	0.1	0.0	0.7
1	6.9	5.2	0.5	1.0	0.2	3.4
2	55.7	51.8	51.8	13.3	12.2	46.6
3	21.9	34.1	34.3	56.4	15.8	32.7
4	8.6	7.4	12.0	24.9	55.9	13.3
5 6+	0.5	0.3	0.3	1.2	7.7	0.7
5	0.0 4.6	0.1 0.9	0.1 0.7	0.7 2.4	6.5 1.7	0.3 2.3
Non-numeric responses	4.0	0.9	0.7	2.4	1.7	2.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	2,053	892	2,139	858	175	6,116
Mean ideal number of children for: <sup>2</sup>						
All women	2.3	2.5	2.6	3.1	3.9	2.6
Number of women	1,958	884	2,124	837	172	5,974
Currently married women	2.4	2.5	2.6	3.2	3.9	2.7
Number of currently married women	189	712	1,994	792	158	3,845
		MEN <sup>3</sup>				
0	1.0	0.0	0.1	0.0	0.0	0.5
1	3.0	0.9	0.3	0.0	0.0	1.6
2	56.7	55.5	43.1	10.7	6.2	46.8
3	27.0	36.7	39.0	52.1	4.4	33.7
4	7.6	5.4	15.3	33.8	65.9	13.5
5	0.9	0.7	1.0	3.1	19.3	1.5
6+ Non averagin and a second	0.2 3.6	0.0 0.7	0.3 0.9	0.3 0.0	4.2 0.0	0.3 2.0
Non-numeric responses	3.0	0.7	0.9	0.0	0.0	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,281	337	794	283	61	2,755
Mean ideal number of children for: <sup>2</sup>						
All men	2.4	2.5	2.8	3.3	4.1	2.7
Number of men	1,235	334	786	283	61	2,699
Currently married men	2.6	2.5	2.8	3.3	4.1	2.8
Number of currently married men	80	321	761	274	60	1,497

<sup>1</sup> The number of living children includes current pregnancy for women.

<sup>2</sup> Means are calculated excluding respondents who gave non-numeric responses.

<sup>3</sup> The number of living children includes one additional child if respondent's wife is pregnant.

The data do not indicate any substantial change in ideal family size among women since 2000; the mean number of children considered ideal was 2.7 among all women in 2000, 2.6 in 2005, 2.5 in 2010, and 2.6 in 2015-16 (NSS et al. 2001, NSS et al. 2006, NSS et al. 2012). Similarly, there has been almost no change in the mean ideal family size among men over the past 10 years (2.8 in 2005, 2.7 in 2010, and 2.7 in 2015-16).

Table 6.4 shows the mean ideal number of children by background characteristics. In general, there are no significant variations in the mean ideal number of children. However, the mean ideal number of children among both women and men increases slightly with age. It tends to decline slightly with increasing education and wealth.

Table 6.4 Mean ideal number of children according to background characteristics

Mean ideal	number	of	children	for	all	women	and	men	age	15-49	by
background	characteri	istic	cs, Arme	nia 2	201	5-16					

-	We	omen	Men		
Background		Number of		Number of	
characteristic	Mean	women <sup>1</sup>	Mean	men <sup>1</sup>	
Age					
15-19	2.4	675	2.5	321	
20-24	2.5	899	2.5	460	
25-29	2.6	1,081	2.5	455	
30-34	2.6	988	2.6	423	
35-39	2.6	858	2.7	370	
40-44	2.7	774	3.0	340	
45-49	2.8	700	2.9	330	
Residence					
Urban	2.5	3,595	2.6	1,528	
Rural	2.7	2,380	2.7	1,171	
Region					
Yerevan	2.5	1,995	2.6	829	
Aragatsotn	2.7	314	2.7	159	
Ararat	2.6	552	2.6	289	
Armavir	2.7	528	3.0	266	
Gegharkunik	2.7	475	2.9	234	
Lori	2.5	320	2.5	157	
Kotayk	2.6	652	2.7	285	
Shirak	2.5	499	2.4	201	
Syunik	2.5	238	2.3	104	
Vayots Dzor	2.6	119	2.8	51	
Tavush	2.8	281	2.7	126	
Education					
Basic	2.7	368	2.8	345	
Secondary	2.7	2,388	2.7	1,222	
Secondary special	2.6	1,335	2.6	403	
Higher	2.5	1,876	2.5	725	
Wealth quintile					
Lowest	2.8	1,040	2.8	514	
Second	2.6	1,203	2.7	570	
Middle	2.6	1,113	2.6	509	
Fourth	2.6	1,265	2.6	552	
Highest	2.5	1,354	2.6	555	
Total	2.6	5,974	2.7	2,699	

Note: Totals include 5 women and 5 men (weighted) with no education <sup>1</sup> Number who gave a numeric response

# 6.3 FERTILITY PLANNING

In the 2015-16 ADHS, women were asked a series of questions about each of their children born in the 5 years preceding the survey—and, if pregnant, asked about their current pregnancy—to determine if their pregnancies were wanted then (planned), wanted later (mistimed), or not wanted (unplanned).

Table 6.5 shows the percent distribution of births in the 5 years preceding the survey by whether the birth was wanted then, wanted later, or not wanted. About 92 percent of the births in the past 5 years were wanted at the time of conception. Six percent of births were wanted later, and 2 percent of births were not wanted at all at the time of conception. These proportions suggest that over the past 15 years, there has been a notable improvement in the level of planned births in Armenia. The percentage of births that were unwanted decreased from 8 percent in 2000 to 7 percent in 2005, and to 1 percent in 2010, before increasing very slightly to 2 percent in 2015-16. In turn, the proportion of births that were wanted at the time of conception has increased from 83 percent in 2000 to 92 percent in 2015-16 (NSS et al. 2001, NSS et al. 2006, NSS et al. 2012).

There is a relationship between planning status and birth order. For example, while 98 percent of first births were wanted at the time of conception, 8 percent of fourth and higher order births were not wanted at all. Younger women were more likely than older women to want their births at the time they were conceived, while older women were more likely than younger women to have wanted no more children.

#### 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, Armenia 2015-16

		Planning s	tatus of birth			
Birth order and mother's age at birth	Wanted then	Wanted later	Wanted no more	Missing	Total	Number o births
, i i i i i i i i i i i i i i i i i i i	then	later	more	Wilsong	Total	011113
Birth order						
1	98.2	1.6	0.1	0.1	100.0	809
2	88.6	10.4	0.8	0.2	100.0	693
3	86.5	7.2	6.3	0.0	100.0	284
4+	86.5	5.6	7.9	0.0	100.0	60
Mother's age at birth						
<20	97.7	2.3	0.0	0.0	100.0	108
20-24	92.4	7.2	0.1	0.3	100.0	697
25-29	93.6	5.9	0.5	0.1	100.0	656
30-34	89.7	5.9	4.4	0.0	100.0	278
35-39	88.9	1.1	10.0	0.0	100.0	93
40-44	*	*	*	*	100.0	13
45-49	*	*	*	*	100.0	2
Total	92.4	5.9	1.6	0.1	100.0	1,846

### 6.4 WANTED AND UNWANTED FERTILITY

Table 6.6 provides information on total "wanted" fertility rates and total fertility rates for the 3 years preceding the survey, by background characteristics. Unwanted births are defined as births that exceed the number considered ideal. Women who did not report a numeric ideal family size were assumed to want all their births. The total wanted fertility rate represents the level of fertility that would have prevailed in the 3 years preceding the survey if all unwanted births were prevented. A comparison of the total wanted fertility rate suggests the potential demographic impact of the elimination of unwanted births.

In Armenia, because of the low level of unwanted childbearing, there is no difference between the observed total fertility rate (1.7 children per woman) and the wanted total fertility rate (1.7 children per woman). Differences between desired and actual fertility are very small by background characteristics.

#### Table 6.6 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the 3 years preceding the survey, by background characteristics, Armenia 2015-16

Background characteristic	Total wanted fertility rates	Total fertility rate
<b>Residence</b> Urban Rural	1.6 1.8	1.7 1.8
Region Yerevan Aragatsotn Ararat Armavir Gegharkunik Lori Kotayk Shirak Syunik Vayots Dzor Tavush	1.5 1.0 2.1 0.9 1.5 2.0 1.7 2.0 1.7 2.3	1.6 1.1 2.2 1.1 1.5 2.1 1.9 2.0 1.9 2.4
Education Basic Secondary Secondary special Higher	2.5 1.8 1.6 1.6	2.8 1.9 1.7 1.6
Wealth quintile Lowest Second Middle Fourth Highest Total	1.9 1.7 1.6 1.4 1.9 1.7	2.0 1.7 1.7 1.4 1.9 1.7

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. Total includes five women with no education.

### Key Findings

- Knowledge of contraception is widespread in Armenia, with 97 percent of women and 99 percent of men having heard of at least one method.
- The contraceptive prevalence rate has fluctuated over the last 15 years, decreasing from 61 percent of currently married women in 2000 to a low of 53 percent in 2005 before increasing to 57 percent in 2015-16.
- Use of modern methods has increased since 2000, but are used by only 28 percent of currently married women.
- Use of withdrawal has decreased slightly over time, but is still the most commonly used contraceptive method (25 percent of married women).
- Only about one-third of modern contraceptive users (primarily IUD users) obtain their contraceptives from the public sector, while two-thirds (primarily pill and condom users) depend on private medical sources.
- Eighty-seven percent of modern contraceptive users were informed of the side effects or health problems associated with the method they used; 85 percent were told what to do if they experienced side effects, and 72 percent were told about other methods available.
- Half of women know that they are most fertile midway between two menstrual periods.
- Only 13 percent of currently married women have an unmet need for family planning services, half for spacing and half for limiting births.

amily planning refers to a conscious effort by a couple to limit or space the number of children they have through the use of contraceptive methods. The efficacy of family planning depends on people's knowledge of contraceptive methods and on the availability of methods to meet the varying needs of a wide spectrum of potential users. Availability of methods, in turn, depends on the quality and quantity of service providers and on financial and technical resources. According to the legislation on reproductive health and rights adopted by the parliament of Armenia in 2002, use of contraception, including voluntary sterilization, is legal in Armenia.

This chapter presents the 2015-16 ADHS findings on contraceptive knowledge, use, sources, met and unmet need for family planning, and exposure to media messages about family planning. The information is particularly useful for policymakers, program managers, international and national nongovernmental organizations, and researchers in population and family planning. The information provides a means to assess the success of the Armenian family planning program. Although the focus is on women, some results from the male survey are presented because men play an important role in realizing women's reproductive goals. Comparisons are made with findings from previous surveys to evaluate trends over the past 15 years in Armenia.

# 7.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

Acquiring knowledge about fertility control is an important step toward gaining access to and then using a suitable contraceptive method in a timely and effective manner. The 2015-16 ADHS collected information on knowledge and use of contraception. To obtain these data, interviewers read aloud the name of each contraceptive method and asked respondents if they had heard of the method; if not, the

interviewers read a description of the method. Non-pregnant women were asked if they (or their partners) were currently using any method to delay or avoid getting pregnant. All women were asked about any periods of contraceptive use in the 5 years before the survey (contraceptive calendar). For analytical purposes, contraceptive methods are grouped into two types: modern and traditional. Modern methods include female sterilization, male sterilization, pill, intrauterine device (IUD), injectables, implants, male condom, lactational amenorrhea method (LAM), and emergency contraception. Traditional methods include periodic abstinence (rhythm method), withdrawal, and folk methods.

Table 7.1 shows that knowledge of contraception is high among women and men. Almost all respondents know at least one method (97 percent of women and 99 percent of men); knowledge is slightly higher among currently married respondents than among all respondents. The mean number of methods known is a rough indicator of the breadth of knowledge of family planning methods. On average, currently married women, who have the greatest exposure to the risk of pregnancy, know almost eight methods. Knowledge of a modern method is nearly universal. More than nine out of every ten married women have heard about the male condom, the IUD, and the pill. However, other modern methods are less well-known. For example, only about two-thirds of married women are aware of female sterilization and less than half have heard about injectables and emergency contraception. Awareness of male sterilization (37 percent) and implants (24 percent) is substantially lower. Withdrawal is the most widely known traditional method (94 percent) among currently married women.

#### Table 7.1 Knowledge of contraceptive methods

Percentage of all respondents, currently married respondents, and sexually active unmarried respondents age 15-49 who have heard of any contraceptive method, according to specific method, Armenia 2015-16

		Women			Men	
Method	All women	Currently married women	Sexually active unmarried women <sup>1</sup>	All men	Currently married men	Sexually active unmarried men <sup>1</sup>
Any method	97.4	99.8	*	99.3	99.8	100.0
Any modern method Female sterilization Male sterilization Pill IUD Injectables Implants Male condom Emergency contraception Lactational amenorrhea (LAM) Other modern method	97.2 57.4 32.5 89.1 87.9 43.1 21.2 96.3 40.1 60.5 0.2	99.7 64.7 36.8 93.5 94.8 47.7 24.3 99.1 46.4 74.1 0.3	* * * * * * *	99.3 58.8 45.8 74.3 75.4 41.0 24.3 99.2 46.0 26.0 0.2	99.7 66.7 53.1 81.7 85.4 46.4 29.3 99.6 52.5 37.3 0.1	100.0 51.6 43.6 81.2 68.8 40.6 23.3 100.0 43.7 18.4 1.4
Any traditional method Rhythm Withdrawal Other traditional Mean number of methods known by respondents Number of respondents	83.3 70.3 78.2 1.1 6.8 6,116	96.3 82.1 93.5 1.4 7.6 3,895	* * * * 11	90.9 45.4 90.3 0.1 6.3 2,755	97.5 55.3 96.8 0.0 7.0 1,506	89.9 34.4 89.7 0.4 6.0 311

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. <sup>1</sup> Had last sexual intercourse within 30 days before the survey.

Similar to women, currently married men are most aware of the male condom (100 percent), the IUD (85 percent), and the pill (82 percent). Men are more likely than women to know of some methods, especially those in which they are directly involved such as male sterilization, condoms, and withdrawal, but less likely to have heard of the pill, the IUD, LAM, and the rhythm method. Married men know an average of seven contraceptive methods, which is slightly less than married women.

The percentage of currently married women and currently married men who know of at least one method of contraception does not vary by background characteristics. Knowledge of any method and of a modern method is virtually universal (data not shown).

In the past 15 years, contraceptive knowledge has remained consistently high in Armenia. The level of awareness of specific methods among currently married women and men has increased over the past 5 years. Knowledge of female and male sterilization, implants, LAM<sup>1</sup>, and emergency contraception has increased, while knowledge of injectables has decreased. Overall, the mean number of methods known by currently married Armenian women and men has remained roughly stable since 2010 (7.7 and 6.8 methods for women and men, respectively, in 2010, compared with 7.6 and 7.0 methods for women and men, respectively, in 2010, compared with 7.6 and 7.0 methods for women and men, respectively, in 2015-16).

### 7.2 CURRENT USE OF CONTRACEPTION

This section presents information on the prevalence of current contraceptive use among women age 15-49. The level of current use is a measure of actual contraceptive practice at the time of the survey. Table 7.2 shows the percent distribution of all women and currently married women by the contraceptive method they are currently using, disaggregated by age group.

					Mo	dern met	thod			Anv	Tradi	tional me	ethod			
Age	Any method	Any modern method	Female sterili- zation	Pill	IUD	Inject- ables	Male condom	LAM	Other	tradi- tional method	Rhythm	With- drawal	Other	Not current- ly using	Total	Number of women
							AL	L WOME	EN							
15-19 20-24 25-29 30-34 35-39 40-44 45-49 Total	1.5 16.9 38.5 54.7 54.5 49.9 34.0 36.7	1.0 9.0 20.4 29.8 26.7 21.8 13.0 18.1	0.0 0.0 0.1 0.5 0.8 0.6 1.6 0.5	0.0 1.0 1.5 2.4 3.0 2.4 1.5 1.7	0.0 1.6 5.4 9.7 9.7 8.5 4.0 5.7	0.0 0.0 0.5 0.0 0.3 0.0 0.1	0.6 5.2 12.4 16.2 13.1 10.0 5.9 9.6	0.4 1.3 0.8 0.5 0.0 0.1 0.0 0.5	0.0 0.0 0.3 0.1 0.1 0.0 0.0 0.1	0.5 7.9 18.1 24.9 27.8 28.1 21.0 18.6	0.1 0.6 2.9 2.9 3.4 5.2 1.7 2.5	0.3 7.2 15.1 21.5 23.9 22.6 19.3 15.9	0.0 0.1 0.5 0.5 0.3 0.0 0.2	98.5 83.1 61.5 45.3 45.5 50.1 66.0 63.3	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	725 928 1,099 1,007 867 784 706 6,116
						CL	JRRENTLY	' MARRI	ED WON	MEN						
15-19 20-24 25-29 30-34 35-39 40-44 45-49 Total	(32.4) 42.5 55.0 66.4 66.2 60.9 41.7 57.1	(21.9) 22.4 28.8 36.0 32.2 26.6 15.4 28.0	(0.0) 0.0 0.1 0.6 1.0 0.8 1.7 0.7	(0.0) 2.1 2.9 3.7 2.9 1.9 2.6	(0.0) 3.9 7.7 11.8 11.8 10.3 4.6 8.9	(0.0) 0.0 0.6 0.0 0.4 0.0 0.2	(14.0) 13.2 17.3 19.5 15.5 12.1 7.2 14.7	(7.8) 3.2 1.1 0.6 0.0 0.1 0.0 0.7	(0.0) 0.0 0.4 0.1 0.1 0.0 0.0 0.1	<ul> <li>(10.5)</li> <li>20.1</li> <li>26.1</li> <li>30.4</li> <li>34.0</li> <li>34.4</li> <li>26.4</li> <li>29.2</li> </ul>	(3.1) 1.6 4.2 3.6 4.2 6.3 2.1 3.8	<ul> <li>(7.4)</li> <li>18.2</li> <li>21.8</li> <li>26.3</li> <li>29.3</li> <li>27.7</li> <li>24.3</li> <li>25.0</li> </ul>	(0.0) 0.4 0.1 0.6 0.6 0.4 0.0 0.3	(67.6) 57.5 45.0 33.6 33.8 39.1 58.3 42.9	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	33 365 761 826 709 639 562 3,895

Note: 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.

LAM = Lactational amenorrhea method.

Results show that 57 percent of married women of reproductive age are using a method of contraception. Among married women, use of traditional methods (29 percent) is slightly more common than use of modern methods (28 percent). The most widely used method among currently married women by far, is withdrawal (25 percent), followed by the male condom (15 percent), and the IUD (9 percent).

The use of any contraceptive method rises rapidly with age, peaking at 66 percent among currently married women age 30-39 and then declining to 42 percent among women age 45-49. As expected, contraceptive use is lower among all women (37 percent) than among married women (57 percent) because the former includes women who are not married and who are not sexually active, and are not in need of family planning.

<sup>&</sup>lt;sup>1</sup> In 2000 and 2015-16 ADHS, if a woman did not recognize the term "lactational amenorrhea method" when she was asked if she had ever heard of the method, a description of LAM was read to her, while in the 2005 and 2010 ADHS, the description was not read to her.

# 7.3 CURRENT USE BY BACKGROUND CHARACTERISTICS

Table 7.3 presents information by background characteristics on the current use of contraceptives by currently married women. In general, women in Armenia do not begin to use contraception until they have had at least one child. Use of any contraception among married women is similar among urban and rural women (57 percent and 58 percent, respectively). However, urban women are markedly more likely to be using a modern method than rural women (32 percent and 23 percent, respectively).

		-			Mo	odern me	thod			Any	Trad	itional me	thod	_		
Background characteristic	Any method	Any modern method	Female sterili- zation	Pill		Inject- ables	Male condom	LAM	Other	tradi- tional method	Rhythm	With- drawal	Other	Not current- ly using	Total	Number of women
Number of living children																
0 1-2 3-4 5+	2.3 60.3 64.1 (46.7)	0.2 31.4 26.1 (23.9)	0.0 0.5 1.2 (7.2)	0.0 3.0 2.5 (0.0)	0.2 10.0 8.4 (5.0)	0.0 0.3 0.0 (0.0)	0.0 16.7 13.5 (5.4)	0.0 0.8 0.4 (6.3)	0.0 0.2 0.0 (0.0)	2.1 28.9 38.1 (22.7)	0.5 4.3 3.6 (0.0)	1.6 24.1 34.3 (22.7)	0.0 0.4 0.2 (0.0)	97.7 39.7 35.9 (53.3)	100.0 100.0 100.0 100.0	261 2,690 908 36
<b>Residence</b> Urban Rural	56.5 58.1	31.9 22.7	0.7 0.7	3.0 2.2	9.5 8.1	0.3 0.0	17.4 11.2	0.8 0.6	0.2 0.0	24.5 35.3	4.9 2.5	19.3 32.5	0.4 0.3	43.5 41.9	100.0 100.0	2,221 1,674
Region Yerevan Aragatsotn Ararat Armavir Gegharkunik Lori Kotayk Shirak Syunik Vayots Dzor Tavush Education Basic Secondary	58.4 63.0 66.1 59.7 69.7 69.7 69.7 69.7 69.0 55.6 40.6 88.5 60.3 59.0 58.1	40.1 35.3 34.7 22.4 19.3 13.4 23.2 18.7 13.1 13.4 26.8 20.5 24.1	0.9 0.0 1.8 0.5 0.0 0.5 0.0 0.5 0.0 0.3 0.3 2.5 0.0 1.0	4.1 7.8 0.8 2.3 2.1 2.4 0.8 2.6 0.3 0.3 1.9 0.8 2.3	11.0 8.7 13.4 5.0 9.7 8.0 8.8 7.1 1.2 4.8 8.8 4.9 7.5	0.6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	22.3 17.8 18.1 14.6 5.4 3.0 12.1 8.7 10.8 7.6 12.1 13.6 12.4	1.0 1.0 0.5 0.0 1.9 0.0 1.0 0.3 0.4 0.4 0.3 1.1 0.8	0.2 0.0 0.0 0.2 0.0 0.0 0.0 0.0 0.0 1.2 0.0	18.3 27.7 31.4 37.3 50.5 46.6 32.4 22.0 7.7 55.1 33.6 38.5 34.0	6.3 0.9 4.4 0.8 2.4 1.5 3.9 6.5 1.3 0.7 1.1	11.6 26.8 26.9 35.6 47.7 44.2 28.5 15.5 6.4 54.4 31.4 35.7 31.0	0.4 0.0 0.1 0.9 0.4 0.0 0.0 0.0 0.0 1.0 0.9 0.3	41.6 37.0 33.9 40.3 30.3 40.0 44.4 59.4 79.2 31.5 39.7 41.0 41.9	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	1,140 187 360 405 298 214 476 349 172 87 208 205 1,669
Secondary special Higher	56.4 55.9	28.4 35.3	0.6 0.5	2.0 4.1	11.1 9.9	0.2 0.2	13.9 19.3	0.2 1.1	0.3 0.2	28.0 20.6	3.8 6.0	23.7 14.4	0.5 0.2	43.6 44.1	100.0 100.0	953 1,064
Wealth quintile Lowest Second Middle Fourth Highest	58.6 56.8 54.4 55.2 60.4	21.1 24.6 25.2 30.3 37.2	0.7 0.6 0.5 0.6 1.0	2.2 2.1 2.1 2.5 4.2	7.5 8.2 7.5 9.0 11.8	0.0 0.0 0.3 0.0 0.5	10.2 12.7 13.2 17.3 19.2	0.5 0.6 1.3 0.8 0.5	0.0 0.3 0.2 0.1 0.0	37.6 32.2 29.2 24.9 23.2	2.5 2.3 2.4 4.9 6.7	34.7 29.6 26.6 19.6 16.2	0.4 0.3 0.3 0.4 0.4	41.4 43.2 45.6 44.8 39.6	100.0 100.0 100.0 100.0 100.0	695 834 721 790 855

Note: 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. Total includes 4 (weighted) women with no education. LAM = Lactational amenorrhea method.

There is considerable variation in contraceptive use by region. Gegharkunik and Vayots Dzor have the highest contraceptive prevalence rates (70 percent and 69 percent, respectively), while Syunik has the lowest (21 percent). With modern methods, Yerevan has the highest use with 40 percent. There have been large, erratic changes in contraceptive use by region since 2010, with use of traditional methods (primarily withdrawal) increasing dramatically in Gegharkunik and declining precipitously in Syunik. It is not clear if these trends are valid or an anomaly, and further investigation is needed.

Table 7.3 Current use of contraception according to background characteristics

Although overall contraceptive use actually decreases slightly as the education of the woman increases, use of modern methods increases with educational attainment. Women with higher levels of education are almost twice as likely to use a modern method as women with only basic education (35 percent compared with 21 percent). This difference is due primarily to the increased use of IUDs and the male condom. The overall contraceptive prevalence rate does not vary uniformly with wealth quintile. However, modern contraceptive use increases markedly as household wealth increases, from 21 percent among married women in the lowest wealth quintile to 37 percent among those in the highest wealth quintile.

Use of any contraceptive method has increased slightly over the past 10 years, from 53 percent of currently married women in 2005 to 55 percent in 2010 and 57 percent in 2015-16, although the levels are not as high as they were in 2000, when 61 percent of married women were using a method of contraception (Table 7.4 and Figure 7.1). After an initial decline from 22 percent of married women in 2000 to 20 percent in 2005, use of modern methods increased to 27 percent in 2010 and 28 percent in 2015-16. Use of traditional methods declined considerably, from 38 percent <sup>2</sup> of married women in 2000 to 28 percent in 2010, before rising slightly to 29 percent in 2015-16.

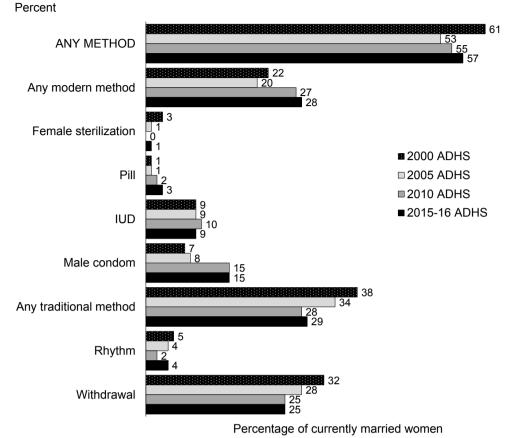
#### Table 7.4 Trends in the current use of contraception

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to several surveys.

Method	2000	2005	2010	2015-16
	ADHS	ADHS	ADHS	ADHS
Any method	60.5	53.1	54.9	57.1
Any modern method	22.3	19.5	27.2	28.0
Female sterilization	2.7	0.6	0.2	0.7
Pill	1.1	0.8	1.5	2.6
IUD	9.4	9.4	9.6	8.9
Male condom	6.9	8.1	14.6	14.7
Other modern method	2.2	0.6	1.3	1.0
Any traditional method	38.2ª	33.6	27.7	29.2
Rhythm	4.8	3.8	2.4	3.8
Withdrawal	31.9	27.7	24.5	25.0
Other	1.5	2.1	0.8	0.3
Not currently using	39.5	46.9	45.1	42.9
Total	100.0	100.0	100.0	100.0
Number of women	4,125	4,044	3,626	3,895

<sup>a</sup> Includes "other" traditional methods, such as folk methods. This estimate differs from the 36.7 percent published in the 2000 ADHS final report, because "folk method" was not included in the "any traditional method" category in that report.

<sup>&</sup>lt;sup>2</sup> This estimate differs from the 36.7 percent published in the 2000 ADHS final report because "folk method" was not included in the "any traditional method" category in the 2000 report tabulation but was included in the 2005 and 2010 report tabulations.



*Figure 7.1* Trends in contraceptive use among currently married women

Compared with data from DHS surveys conducted in the past 10 years in other countries of the former Soviet Union and in Albania, use of a modern contraceptive method among married women age 15-49 in Armenia (28 percent) appears to be higher than that in Albania (11 percent in 2008-09), Azerbaijan (14 percent in 2006), and Tajikistan (26 percent in 2012), but lower than in Ukraine (48 percent in 2007) and the Kyrgyz Republic (34 percent in 2012). Armenia has a high percentage of currently married women using a traditional method (29 percent) compared with those reported in Tajikistan (2 percent), the Kyrgyz Republic (3 percent), and Ukraine (19 percent), although their rates are lower than those reported in neighboring Azerbaijan (37 percent) (ICF 2015a).

### 7.4 SOURCE OF FAMILY PLANNING

Information on where women obtain their modern contraceptive methods is useful for family planning managers and those who implement logistics planning. In the 2015-16 ADHS, women who reported that they were currently using a modern method of contraception were asked where they obtained the method the last time they acquired it. Interviewers recorded the name of the source or facility because respondents may not always be able to accurately categorize a source as public or private. Supervisors and editors then verified and coded this information to improve the accuracy.

Table 7.5 shows that almost two-thirds of users of modern methods received their method from the private sector, with the overwhelming majority being from pharmacies; only one-third of users received their method from the public sector, primarily from maternity homes and government hospitals. The source is heavily dependent on the method. Almost all users of female sterilization and the IUD reported obtaining their method from government sources (98 percent and 94 percent, respectively), while almost all users of the pill and male condom reported obtaining their method from private sources (96 percent and 98 percent, respectively). There has been little change since 2010 in the public-private distribution of methods.

#### Table 7.5 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, Armenia 2015-16

Source	Female sterilization	Pill	IUD	Male condom	Total
Public sector	(97.9)	4.5	94.0	1.7	35.0
Government hospital	(58.8)	1.8	38.6	0.1	14.8
Maternity home	(31.8)	0.3	48.5	0.2	16.9
Diagnostic center	(0.0)	0.6	0.5	0.2	0.3
Woman consultation	(0.0)	1.9	4.4	0.2	1.8
Polyclinic	(0.0)	0.0	1.4	0.2	0.6
Ambulatory/family	(0.0)	0.0	1.4	0.2	0.0
doctor's office	(0.0)	0.0	0.4	0.6	0.4
Other public	(0.0)	0.0	0.4	0.0	0.4
	(7.5)	0.0	0.1	0.0	0.2
Private medical sector	(2.1)	95.5	6.0	98.0	64.8
Private hospital	(2.1)	0.9	3.4	0.0	1.3
Maternity home	(0.0)	0.0	1.3	0.0	0.4
Diagnostic center	(0.0)	0.0	0.7	0.0	0.2
Woman consultation	(0.0)	2.4	0.0	0.0	0.2
Polyclinic	(0.0)	0.0	0.0	0.3	0.2
FAP	(0.0)	0.0	0.0	0.2	0.1
Pharmacy	(0.0)	92.2	0.6	97.4	62.3
Other source	(0.0)	0.0	0.0	0.3	0.2
Friend/relative	(0.0)	0.0	0.0	0.3	0.2
Total	100.0	100.0	100.0	100.0	100.0
Number of women	29	105	349	586	1,081

Note: Total includes users of other modern methods but excludes lactational amenorrhea method (LAM). Figures in parentheses are based on 25-49 unweighted cases.

In the 2015-16 ADHS, women who were using an IUD were asked if they received the IUD free of charge the most recent time they obtained one or if they paid for it. Results indicate that only 3 percent of IUD users received the IUD for free (data not shown). Women were also asked if they knew of a place where they could obtain a method of contraception free of charge. Only 3 percent of all women and 4 percent of currently married women said they knew of a place to obtain a free contraceptive method (data not shown).

### 7.5 INFORMED CHOICE

Informed choice is an important aspect of family planning services. Family planning clients have the right to information about their contraceptive method. Providers are required to inform all users of contraceptive methods about (1) the potential side effects of their method, (2) what they should do if they encounter side effects or signs of a problem, and (3) alternative methods of family planning. Current users of modern methods who are well informed about the side effects and problems associated with methods and know of a range of method options are better able to make an informed choice about the method they prefer. This information improves the quality of care and compliance by assisting users to cope with side effects and decreasing unnecessary discontinuation of temporary methods.

Current users of selected modern contraceptive methods were asked whether, at the time they adopted the particular method, they were informed about the possible side effects or problems that might be encountered with the method. Table 7.6 shows the percentage of current users of modern methods who were informed about possible side effects or problems with the method used; what to do if they experienced side effects or problems; and other methods available for use. These are described below by method type and the initial source of the method.

#### Table 7.6 Informed choice

Among current users of modern methods age 15-49 who started the last episode of use within the 5 years before the survey, the percentage who were informed about possible side effects or problems of that method, the percentage who were informed about what to do if they experienced side effects, and the percentage who were informed about other methods available for use, according to method and initial source, Armenia 2015-16

		•	d last episode of mode 5 years before the sur	
Method/source	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if side effects experienced	Percentage who were informed by a health or family planning worker of other methods that could be used	Number of women
Method				
Pill	68.8	65.9	82.5	62
IUD	94.5	92.5	67.8	167
Initial source of method <sup>1</sup>				
Public sector	92.9	90.9	70.9	172
Government hospital	92.6	92.6	85.0	74
Maternity home	94.9	90.3	56.2	74
Private medical sector	74.2	71.7	76.4	71
Pharmacy	76.2	73.1	72.3	58
Total	87.2	85.1	72.3	243

Note: Total includes 7 (weighted) users of female sterilization and 7 users of injectables not shown separately.

<sup>1</sup> Source at start of current episode of use.

Almost nine in ten modern contraceptive users reported that they were informed about side effects (87 percent) and were told what to do if they did experience such side effects (85 percent). The percentage of currently married women informed of side effects and told what to do if they experience side effects has increased from 69 percent and 62 percent of women in 2010. Furthermore, 72 percent of currently married women in 2015-16 reported that they were informed about other methods of contraception, an increase from 49 percent in 2010.

The IUD users are more likely than pill users to be informed about side effects and what to do if they experience side effects. However, the IUD users are less likely than pill users to be informed of alternative methods available for use. Women who obtain their methods from public sources are more likely to be informed about methods than those who use private sources. For example, over 90 percent of women who obtained their method from the public sector were informed about side effects or problems of the method used and about what to do if they experienced side effects, compared with less than threequarters of women who obtained their method from the private sector. This relationship may be due to the types of methods obtained at public and private sources. The main methods obtained from public sources are the IUD and female sterilization, while the main methods obtained from private sources are pills and condoms, methods that have fewer side effects. This mix of methods may also explain why women who obtain their method from a public source (primarily pills and condoms) are somewhat more likely than women who obtained their method from a public source (primarily IUDs and female sterilization) to be informed about other methods available for use.

## 7.6 DISCONTINUATION WITHIN 12 MONTHS OF USE

Reproductive goals can only be realized if contraceptive methods are used consistently and correctly. A major concern among family planning program workers is the rate at which contraceptive users discontinue their methods. To obtain information on contraceptive discontinuation, all segments of contraceptive use in the 5-year period before the survey were recorded in the "calendar" section of the Woman's Questionnaire, as well as the reason for any discontinuation. In analyzing these data, the month of interview and the two preceding months are ignored in order to avoid the bias that may be introduced by unrecognized pregnancies.

Table 7.7 shows contraceptive discontinuation rates within 12 months of starting use among women age 15-49. Overall, 32 percent of women who started using a contraceptive method in the 5 years before the survey discontinued use within 12 months of adopting the method. The one-year discontinuation rate is lowest among users of the IUD (2 percent), highest among users of LAM (99 percent) and withdrawal (30 percent), and intermediate among users of condoms (17 percent). Almost one-third of the discontinuation rate is due to a desire to use a more effective method.

#### Table 7.7 Twelve-month contraceptive discontinuation rates

Among women age 15-49 who started an episode of contraceptive use within the 5 years before the survey, the percentage of episodes discontinued within 12 months, according to reason for discontinuation and specific method, Armenia 2015-16

Method	Method failure	Desire to become pregnant	Other fertility related reasons <sup>2</sup>	Side effects/ health reasons	Wanted more effective method	Other method related reasons <sup>3</sup>	Other reasons	Any reason⁴	Switched to another method <sup>5</sup>	Number of episodes of use <sup>6</sup>
IUD	(0.8)	(0.4)	(0.0)	(0.3)	(0.0)	(0.0)	(0.5)	(2.0)	(0.5)	234
Male condom	3.0	4.3	6.2	0.4	0.8	`1.1 <sup>´</sup>	0.8	16.5	2.3	560
Lactational amenorrhea										
(LAM)	4.1	4.2	4.6	0.8	63.4	16.0	5.8	99.0	74.1	279
Withdrawal	9.7	5.5	10.9	0.0	2.9	0.0	1.0	30.0	2.6	1,026
Other <sup>1</sup>	(7.4)	(6.1)	(5.5)	(2.8)	(2.4)	(0.9)	(0.4)	(25.6)	(6.2)	271
All methods	6.4	4.6	7.3	0.6	9.5	2.4	1.4	32.2	11.6	2,377

Note: Figures are based on life table calculations using information on episodes of use that began 3-62 months before the survey. Figures in parentheses are based on 125-249 unweighted women using the method during the first month of the life table.

<sup>1</sup> Includes pills, injectables, emergency contraception and rhythm.

<sup>2</sup> Includes infrequent sex/husband away, difficult to get pregnant/menopausal, and marital dissolution/separation.

<sup>3</sup> Includes lack of access/too far, costs too much, and inconvenient to use.

<sup>4</sup> Reasons for discontinuation are mutually exclusive and add to the total given in this column.

<sup>5</sup> The episodes of use included in this column are a subset of the discontinued episodes included in the discontinuation rate. A woman is considered to have switched to another method if she used a different method in the month after discontinuation or if she gave "wanted a more effective method" as the reason for discontinuation and started another method within 2 months of discontinuation.

<sup>6</sup> Number of episodes of use includes 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.

According to definition of the method, it is impossible to use LAM for longer than 6 months. Effective use of LAM means that a woman is exclusively or predominantly breastfeeding, is less than 6 months postpartum, is postpartum amenorrheic, and knows to use another contraceptive method when any of the previous criteria do not pertain. Therefore, a 12-month discontinuation rate for LAM is expected to be high, but it is not expected to be 100 percent. Since figures in Table 7.7 are based on life table calculation with information on episodes of use that began 3-62 months before the survey, a small number of LAM users could be legitimate users of the method at the time of the interview if they began their episode of use 3-5 months before the survey. The 12-month discontinuation rate is higher for LAM than for any other method—99 percent of LAM users who started an episode of use in the 5 years before the survey were no longer using this method at the time of the interview. Sixty-three percent of LAM users said they discontinued the method because they wanted a more effective method. As expected, most LAM users who discontinued use of the method (74 percent) switched to another method.

Table 7.8 shows the distribution of discontinuations of all contraceptive methods during the 5 years before the survey by reason for discontinuation. The desire to become pregnant is the most commonly cited reason for discontinuing use, accounting for slightly over one-quarter (27 percent) of all discontinuations. Almost as common is method failure (accidental pregnancy or becoming pregnant while using), which accounts for 24 percent of discontinuations. Other common reasons for discontinuing contraceptive use are infrequent sex or the absence of their partner (17 percent) and the desire to use a more effective method (15 percent).

#### Table 7.8 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the 5 years before the survey by main reason stated for discontinuation, according to specific method, Armenia 2015-16

			Male				
Reason	Pill	IUD	condom	LAM	Rhythm	Withdrawal	All methods
Became pregnant while using	13.1	3.4	16.7	4.1	40.8	34.4	24.1
Wanted to become pregnant	15.8	44.9	46.1	4.6	35.0	26.1	27.1
Husband disapproved	0.0	0.0	4.1	4.8	2.9	3.8	3.5
Wanted a more effective method	8.4	0.0	4.5	61.4	12.4	7.7	15.3
Side effects/health concerns	29.4	33.6	0.9	1.0	0.0	0.0	3.6
Lack of access/too far	1.8	0.0	0.0	0.0	0.0	0.0	0.1
Cost too much	0.0	0.0	2.2	0.2	0.0	0.2	0.5
Inconvenient to use	5.1	1.9	2.0	16.7	0.9	0.1	3.4
Up to God/fatalistic	0.0	0.0	0.0	0.4	0.0	0.1	0.2
Difficult to get pregnant/							
menopausal	5.1	6.7	1.5	0.9	1.2	2.1	2.3
Infrequent sex/husband away	18.9	5.2	18.6	4.1	4.1	23.2	17.1
Marital dissolution/separation	1.4	0.0	1.0	0.2	0.0	0.3	0.4
Other	0.9	0.7	0.5	0.3	0.0	0.4	0.4
Missing	0.0	3.5	2.0	1.4	2.6	1.6	1.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	67	91	259	239	91	781	1,546

Note: All methods includes 2 weighted users of injectables, 4 users of emergency contraception, and 13 users of other methods. LAM = Lactational amenorrhea method.

Reasons for discontinuing contraceptive use vary depending on the method. For example, users of rhythm and withdrawal have the highest levels of discontinuations due to method failure; 41 percent of those discontinuing use of the rhythm method and 34 percent of those discontinuing use of withdrawal said that it was due to becoming pregnant while using the method. The main reason for discontinuing use of condoms (46 percent) and the IUD (45 percent) is the desire to get pregnant. Side effects and health concerns are the most commonly cited reason for discontinuing use of the pill, reported by 29 percent of women, while LAM users discontinued their method because they wanted a more effective method (61 percent) or because they found it inconvenient to use (17 percent).

The low efficacy of the rhythm method and withdrawal is evidenced by the high failure rate of these methods during use. As previously noted, withdrawal is the most popular method of contraception in Armenia. This method is used by 25 percent of currently married women and accounts for almost half of all contraceptive use. It is striking that a method with such a high failure rate is used by such a substantial proportion of Armenian women who are trying to control their fertility.

# 7.7 KNOWLEDGE OF THE FERTILE PERIOD

A basic knowledge of the physiology of reproduction is especially useful for the successful practice of coitus-related methods such as withdrawal, condoms, vaginal methods, and those fertility-awareness methods collectively referred to as periodic abstinence, rhythm, or the calendar method. Knowledge of the fertile period in a woman's menstrual cycle is particularly critical in the case of the rhythm method, and the successful practice of natural family planning depends on an understanding of when a woman is most likely to conceive.

#### Table 7.9 Knowledge of fertile period

Percent distribution of women age 15-49 by knowledge of the fertile period during the ovulatory cycle, according to current use of the rhythm method, Armenia 2015-16

Perceived fertile period	Users of rhythm method	Nonusers of rhythm method	All women
Just before her menstrual period begins During her menstrual period Right after her menstrual	5.4 0.0	3.1 0.1	3.2 0.1
period has ended Halfway between two	13.4	19.5	19.3
menstrual periods	77.2	48.9	49.6
Other	0.0	0.1	0.1
No specific time	3.2	2.3	2.3
Don't know	0.8	25.9	25.3
Total Number of women	100.0 150	100.0 5,966	100.0 6,116

The 2015-16 ADHS included a question designed to obtain information on the respondent's understanding of when a woman is most likely to become pregnant during her menstrual cycle. All women were asked, "From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?" If the answer was "yes," the women were further asked whether that time was just before her period begins, during her period, right after her period ended, or halfway between two periods. Table 7.9 shows the results for all women age 15-49 and for those who reported they are currently using the rhythm method.

Half of all women age 15-49 correctly identified the fertile period as occurring halfway between two periods. However, one-quarter of women said that they did not know when a woman is most likely to become pregnant. Knowledge of the fertile period is higher among users of the rhythm method; 77 percent were able to correctly identify the fertile period.

Knowledge of the fertile period has improved since 2010. Overall, the proportion of women who know that they are most likely to get pregnant if they have sexual intercourse halfway between two menstrual periods increased from 32 percent in 2010 to 50 percent in 2015-16. Among users of the rhythm method, the percentage of women who can correctly identify the fertile period has slightly increased from 71 percent in 2010 to 77 percent in 2015-16.

### 7.8 NEED FOR FAMILY PLANNING

Maternal health care services focus on defining the size of the population of women who have a potential need for family planning services and identifying women whose need for contraception is unmet. Unmet need for family planning refers to fecund women who are not using contraception but who wish to postpone the next birth (spacing) or stop childbearing altogether (limiting). Specifically, women are considered to have unmet need for spacing if they are:

- At risk of becoming pregnant, not using contraception, and either do not want to become pregnant within the next 2 years, or are unsure if or when they want to become pregnant
- Pregnant with a mistimed pregnancy
- Postpartum amenorrheic for up to 2 years after a mistimed birth and not using contraception

Women are considered to have unmet need for limiting if they are:

- At risk of becoming pregnant, not using contraception, and want no (more) children
- Pregnant with an unwanted pregnancy
- Postpartum amenorrheic for up to 2 years after an unwanted birth and not using contraception.

Women who are classified as infecund have no unmet need because they are not at risk of becoming pregnant.

Women who are using contraception are considered to have met need. Women using contraception who say they want no (more) children are considered to have met need for limiting, and women who are using contraception and say they want to delay having a child, or are unsure if or when they want a/another child, are considered to have met need for spacing.

Unmet need, total demand, percentage of demand satisfied, and percentage of demand satisfied by modern methods are defined as follows:

- Unmet need: the sum of unmet need for spacing plus unmet need for limiting
- Total demand for family planning: the sum of unmet need plus total contraceptive use
- **Percentage of demand satisfied:** total contraceptive use divided by the sum of unmet need plus total contraceptive use
- **Percentage of demand satisfied by modern methods:** use of modern contraceptive methods divided by the sum of unmet need plus total contraceptive use

The definition of unmet need for family planning has been revised to make levels of unmet need comparable over time and across surveys (Bradley et al. 2012). The aspect of the change in the definition that has the largest impact on levels of unmet need is the removal of information collected from the contraceptive calendar, which has not been included in all DHS surveys across countries. Previously, in surveys that included a calendar, women who were pregnant or postpartum amenorrheic resulting from contraceptive failure were not considered to have unmet need, even if their last pregnancy/birth was unwanted or mistimed. In contrast, if the survey did not collect information on contraceptive failure in the calendar, all pregnant and postpartum amenorrheic women whose last pregnancy/birth was unwanted or mistimed to have unmet need. To make the definition of unmet need comparable in both types of surveys, the new definition does not take information on contraceptive failure into account for any woman when assigning unmet need status. Removing contraceptive failure from the calculation can result in a small increase in the estimated level of unmet need by moving some women who were in the failure category into the unmet need category. The revised definition was employed in determining the women who have an unmet need for family planning (Table 7.10).

Table 7.10 presents information on unmet need, met need, and the total demand for family planning services among currently married women, by background characteristics. Overall, 13 percent of currently married women have an unmet need for family planning, evenly split between unmet need for spacing (6 percent) and unmet need for limiting (6 percent). Over half of women (57 percent) have a met need for family planning because they are currently using a method. If all currently married women who say they want to space or limit their children were to use a family planning method, the contraceptive prevalence rate would increase to 70 percent (total demand for family planning). Currently, 82 percent of the family planning needs of currently married women are being met, with less than half of that need met by modern methods (40 percent). The total demand for family planning is comprised more heavily of the demand to limit births (45 percent), with only 25 percent of the demand for spacing purposes.

Unmet need is highest among married women age 20-24 (20 percent). There are only minor differences in unmet need by residence, education, and wealth quintile. However, unmet need varies considerably by region, ranging from only 5 percent among married women in Aragatsotn to 22 percent of women in Shirak.

#### Table 7.10 Need and demand for family planning among currently married women

Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, total demand for family planning, and percentage of the demand for family planning that is satisfied, according to background characteristics, Armenia 2015-16

	Unmet ne	ed for family	planning	Met need for family planning (currently using)			Total dem	and for family	/ planning <sup>1</sup>	Percentage of demand – Percentage satisfied by		
Background characteristic	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total	of demand satisfied <sup>2</sup>	modern methods <sup>3</sup>	Number of women
Age												
15-19	(9.3)	(0.0)	(9.3)	(28.1)	(4.3)	(32.4)	(37.4)	(4.3)	(41.7)	(77.7)	(52.5)	33
20-24	19.4	1.1	20.4	36.2	6.3	42.5	55.6	7.4	63.0	67.6	35.6	365
25-29	12.3	3.3	15.6	38.0	17.0	55.0	50.3	20.3	70.6	77.9	40.9	761
30-34	5.9	4.2	10.1	25.9	40.5	66.4	31.8	44.7	76.5	86.8	47.1	826
35-39	2.6	8.7	11.2	9.2	57.0	66.2	11.8	65.6	77.5	85.5	41.6	709
40-44	0.8	7.7	8.5	2.6	58.4	60.9	3.4	66.1	69.5	87.7	38.2	639
45-49	0.0	13.1	13.1	0.8	40.9	41.7	0.8	54.0	54.8	76.2	28.0	562
Residence												
Urban	6.2	7.4	13.6	19.7	36.7	56.5	26.0	44.1	70.1	80.5	45.6	2,221
Rural	6.0	5.0	11.0	17.5	40.6	58.1	23.5	45.5	69.0	84.1	32.9	1,674
Region												
Yerevan	6.0	7.1	13.1	19.6	38.8	58.4	25.6	45.9	71.5	81.6	56.1	1,140
Aragatsotn	2.7	1.7	4.5	23.9	39.1	63.0	26.6	40.8	67.4	93.4	52.4	187
Ararat	5.7	1.9	7.7	21.3	44.9	66.1	27.0	46.8	73.8	89.6	47.1	360
Armavir	5.8	5.4	11.2	17.1	42.5	59.7	22.9	48.0	70.8	84.2	31.6	405
Gegharkunik	2.8	4.7	7.5	9.9	59.8	69.7	12.7	64.5	77.3	90.3	24.9	298
Lori	7.7	4.3	12.0	16.5	43.5	60.0	24.3	47.8	72.1	83.3	18.6	214
Kotayk	7.8	7.2	15.0	26.5	29.1	55.6	34.3	36.3	70.6	78.7	32.9	476
Shirak	7.5	14.7	22.2	14.5	26.1	40.6	22.1	40.8	62.9	64.6	29.7	349
Syunik	9.4	7.9	17.3	9.2	11.6	20.8	18.7	19.5	38.1	54.6	34.3	172
Vayots Dzor	1.2	4.3	5.5	20.6	48.0	68.5	21.8	52.2	74.0	92.6	18.1	87
Tavush	7.6	4.3	11.8	20.1	40.2	60.3	27.7	44.5	72.2	83.6	37.1	208
Education												
Basic	6.8	6.7	13.5	14.1	44.9	59.0	20.9	51.6	72.5	81.4	28.3	205
Secondary	5.9	6.1	12.0	17.2	40.9	58.1	23.1	47.0	70.2	82.8	34.3	1,669
Secondary special	5.7	6.2	11.9	16.3	40.1	56.4	22.0	46.4	68.3	82.5	41.6	953
Higher	6.8	6.8	13.6	24.4	31.5	55.9	31.2	38.3	69.5	80.4	50.8	1,064
Wealth quintile												
Lowest	6.8	5.9	12.7	17.2	41.4	58.6	24.0	47.3	71.3	82.2	29.5	695
Second	6.4	5.3	11.7	17.4	39.4	56.8	23.8	44.7	68.5	82.9	35.9	834
Middle	6.3	7.3	13.6	18.1	36.3	54.4	24.4	43.6	68.0	80.0	37.0	721
Fourth	5.8	5.9	11.7	18.4	36.8	55.2	24.3	42.6	66.9	82.5	45.3	790
Highest	5.5	7.5	13.0	22.3	38.1	60.4	27.8	45.6	73.4	82.3	50.6	855
Total	6.1	6.4	12.5	18.8	38.4	57.1	24.9	44.7	69.6	82.1	40.2	3,895

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012. Figures in parentheses are based on 25-49 unweighted cases. Total includes 4 (weighted) women with no education.

<sup>1</sup> Total demand is the sum of unmet need and met need.

<sup>2</sup> Percentage of demand satisfied is met need divided by total demand.

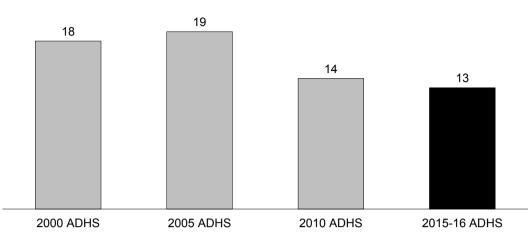
<sup>3</sup> Modern methods include female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, emergency contraception, lactational amenorrhea method (LAM), and other modern methods.

A comparison with the 2000, 2005, and 2010 ADHS shows that unmet need has decreased somewhat, especially since 2005 (Figure 7.2).<sup>3</sup> The change is entirely due to a decrease in unmet need for limiting births. The total demand for family planning has remained fairly steady since 2005 at about 70 percent of married women.

<sup>&</sup>lt;sup>3</sup> All numbers in Figure 7.2 have been recalculated with the revised definition of unmet need and differ from numbers published in the final reports for each previous survey.



Percent



Note: Estimates for all years are based on the revised definition of unmet need.

## 7.9 FUTURE USE OF CONTRACEPTION

The needs and practices of women in contraception change as they mature through their reproductive years. Currently married women who were not using contraception at the time of the survey were asked whether they intended to use family planning methods in the future. The results are presented in Table 7.11.

Percent distribution of currently married women age 15-49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Armenia 2015-16

	Number of living children <sup>1</sup>						
Intention	0	1	2	3	4+	Total	
Intends to use	25.2	33.6	20.0	14.9	9.3	22.4	
Unsure	39.8	37.2	30.4	26.4	17.0	31.8	
Does not intend to use	34.6	28.6	49.4	58.7	73.7	45.5	
Missing	0.3	0.6	0.2	0.0	0.0	0.3	
Total	100.0	100.0	100.0	100.0	100.0	100.0	
Number of women	189	400	707	297	75	1,669	

Twenty-two percent of all currently married nonusers stated that they intend to use a contraceptive method at some time in the future, almost identical to the 23 percent reported in the 2010 ADHS, but lower than the 29 percent reported in the 2005 ADHS. One-third (34 percent) of nonusers with one child say they intend to use a contraceptive method in the future. These women are more likely to intend to use a contraceptive method in the future than women with no children and women with two or more living children. Except among those with no children, the more children a woman has, the more likely she is to say she does not intend to use a method in the future.

## 7.10 EXPOSURE TO FAMILY PLANNING MESSAGES IN THE MASS MEDIA

The mass media provide an opportunity to communicate family planning information to a broad spectrum of the population. Information on the level of exposure to such media is important for programmers and planners to effectively target population subgroups for information, education, and communication campaigns. To assess the extent to which media serve as sources of family planning messages, respondents were asked whether they had heard or seen a message about family planning on the radio or television, in newspapers or magazines, on a mobile phone, or on the Internet in the few months before the survey. Exposure to family planning messages among women and men age 15-49 are shown in Table 7.12.1 for women and in Table 7.12.2 for men.

#### Table 7.12.1 Exposure to family planning messages: Women

Percentage of women age 15-49 who heard or saw a family planning message on radio, on television, in a newspaper or magazine, on a mobile phone, or on the Internet in the past few months, according to background characteristics, Armenia 2015-16

_				Women			
						None of these	
Background characteristic	Radio	Television	Newspaper/	Mahila nhana	Internet	five media	Number o
characteristic	Radio	relevision	magazine	Mobile phone	Internet	sources	women
Age							
15-19	1.7	15.1	8.7	3.6	21.0	72.6	725
20-24	2.6	18.6	11.5	3.3	26.9	66.3	928
25-29	4.3	23.5	12.0	3.6	28.6	62.7	1,099
30-34	3.1	27.6	10.4	3.7	27.6	60.2	1,007
35-39	2.8	25.9	9.1	3.6	25.8	61.8	867
40-44	2.3	20.9	9.5	3.1	21.9	67.9	784
45-49	1.4	20.7	10.2	1.9	15.8	72.4	706
Residence							
Urban	3.6	23.5	13.1	4.2	30.1	61.2	3,657
Rural	1.4	20.1	6.2	2.0	16.3	72.4	2,459
Region							
Yerevan	5.4	20.6	14.2	4.7	33.9	60.2	2,001
Aragatsotn	0.5	14.3	5.3	3.4	23.4	70.7	315
Ararat	1.3	16.7	5.0	1.1	8.0	77.2	552
Armavir	0.0	3.2	0.3	0.0	5.7	92.0	586
Gegharkunik	0.0	16.5	4.0	0.4	14.8	76.4	478
Lori	0.6	18.3	5.4	1.6	17.3	74.7	355
Kotayk	4.7	26.9	14.3	0.0	25.6	58.6	678
Shirak	1.8	28.2	8.4	1.7	21.5	66.0	510
Syunik	2.4	67.8	19.2	21.4	55.4	20.0	238
Vayots Dzor	0.0	17.6	5.6	3.8	20.3	71.8	119
Tavush	0.0	46.7	25.2	6.5	35.6	44.5	283
Education							
Basic	0.5	6.8	2.4	1.8	6.5	88.0	396
Secondary	1.2	19.0	4.9	2.2	14.7	73.7	2,444
Secondary special	2.4	26.7	11.1	3.2	27.5	61.3	1,360
Higher	5.4	26.1	18.4	5.1	38.9	53.8	1,910
Wealth guintile							
Lowest	0.6	12.8	4.1	1.3	10.9	81.0	1,081
Second	1.9	24.5	7.8	2.3	18.7	67.0	1,242
Middle	1.6	24.7	8.8	2.8	23.3	65.2	1,142
Fourth	3.2	22.7	13.5	3.6	31.1	60.7	1,287
Highest	5.6	24.7	15.8	6.0	35.6	57.4	1,365
0	2.7	22.1	10.3	3.3	24.5	65.7	,
Total	2.1	22.1	10.3	3.3	24.5	05.7	6,116

Among women, the Internet is the most common source of information on family planning. Onequarter of all female respondents accessed contraceptive information through the Internet in the few months before the survey. Almost as many women (22 percent) saw a family planning message on the television. Newspapers and magazines are not common sources of family planning messages (10 percent). Women are least likely to report the radio as a source; only 3 percent of women heard a family planning message on the radio in the months before the survey.

#### Table 7.12.2 Exposure to family planning messages: Men

Percentage of men age 15-49 who heard or saw a family planning message on radio, on television, in a newspaper or magazine, on a mobile phone, or on the Internet in the past few months, according to background characteristics, Armenia 2015-16

_				Men			
De de consta			N			None of these	NL
Background characteristic	Radio	Television	Newspaper/ magazine	Mobile phone	Internet	five media sources	Number o men
Characteristic	Raulo	TEIEVISION	mayazine		Internet	sources	men
Age							
15-19	0.0	6.1	0.8	2.0	13.7	81.9	345
20-24	0.5	10.2	1.0	1.5	20.2	76.0	467
25-29	2.5	18.0	3.7	1.8	26.2	65.8	464
30-34	3.8	18.0	3.7	2.6	20.7	70.4	427
35-39	4.0	13.3	5.7	1.5	16.7	74.6	376
40-44	3.6	19.0	3.6	2.5	17.3	73.6	346
45-49	3.8	15.9	3.1	3.0	13.0	75.8	330
Residence							
Urban	3.6	12.9	3.6	1.6	20.0	73.6	1,558
Rural	1.2	16.4	2.4	2.8	17.2	73.8	1,197
Region							
Yerevan	3.1	6.1	2.9	0.1	16.7	80.6	833
Aragatsotn	0.0	30.6	3.3	0.0	33.4	56.2	159
Ararat	0.4	2.4	0.4	0.0	8.6	91.4	290
Armavir	0.5	4.0	2.9	0.5	11.6	86.6	268
Gegharkunik	0.5	25.7	0.8	1.3	23.4	64.4	235
Lori	0.7	5.1	0.0	0.0	7.2	89.9	184
Kotavk	5.3	9.0	0.4	0.0	4.8	84.3	299
Shirak	11.6	62.6	18.4	11.0	56.9	15.4	201
Syunik	0.0	23.2	3.7	29.2	44.7	37.7	104
Vavots Dzor	0.7	36.5	0.8	0.0	9.2	58.8	56
Tavush	0.0	10.0	1.2	0.0	15.8	78.9	126
Education							
Basic	1.1	7.4	0.3	2.3	10.0	84.6	360
Secondary	1.7	14.9	2.3	1.9	15.3	75.7	1,250
Secondary special	6.1	16.8	3.0	3.3	17.8	72.5	403
Higher	2.8	15.8	5.6	1.8	29.5	65.5	736
Wealth quintile							
Lowest	0.8	11.1	1.0	1.2	12.3	80.6	523
Second	1.9	18.0	2.5	2.9	18.8	71.1	583
Middle	2.3	17.5	4.2	2.9	18.3	73.1	521
Fourth	3.5	14.6	4.5	2.3	22.9	69.7	566
Highest	4.1	10.8	3.1	1.3	21.0	74.3	562
Total	2.6	14.4	3.1	2.1	18.8	73.6	2,755

Men are less likely than women to have seen or heard a family planning message during the few months before the survey; this is true for every type of source. For example, 22 percent of women say they saw a family planning message on the television in the few months before the survey, while only 14 percent of men say they did. Overall, almost three-quarters of men were not exposed to a family planning message from any of the five specified sources (compared to two-thirds of women). As with women, the Internet is the most common source of messages on family planning for men (19 percent).

Exposure to family planning messages is related to place of residence, level of education, and household wealth. Women living in rural areas, women with lower levels of education, and those living in poorer households are less likely to have been exposed to family planning messages than urban dwellers, women with higher levels of education, and those living in economically advantaged households. Differentials by residence, education, and wealth are less pronounced among men than women.

Regional differences in exposure to family planning messages are considerable. Among women, Armavir is the region with the highest proportion of respondents who were not exposed to a family planning message from any of the five specified sources (92 percent). Among men, Ararat has the highest proportion who were not exposed to any message (91 percent). Women living in Syunik and men living in Shirak were the most likely to have heard a family planning message. Men age 15-19 report the lowest exposure to family planning messages in the media.

Exposure to family planning messages has decreased considerably since 2010. For example, the proportion of women who saw a family planning message on television in the few months before the survey decreased from 51 percent in 2010 to 22 percent in 2015-16. Similarly, the proportion who saw a message in a newspaper or magazine declined from 32 percent to 10 percent. Decreases are also seen for men.

## 7.11 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

To determine whether nonusers of family planning in Armenia have had an opportunity to receive information about family planning from providers, women who were not using contraception were asked whether they had attended a health facility in the past year for any reason and, if so, whether a staff person at that facility spoke to them about family planning methods. These questions help to assess the level of so-called "missed opportunities" to inform women about contraception. The results are shown in Table 7.13.

Among women age 15-49 who are not using contraception, the percentage who during the past 12 months visited a health facility, the percentage who visited a health facility and discussed family planning with any staff member, and the percentage who visited a health facility but did not discuss family planning, according to background characteristics, Armenia 2015-16							
		Percentage of womer facility in the past 1					
Background characteristic	Percentage of women who visited a health facility	Discussed family planning with any staff member	Did not discuss family planning	Number of women			
Age							
15-19	16.2	0.3	15.9	714			
20-24	31.7	3.2	28.5	771			
25-29	50.8	5.9	44.9	676			
30-34	55.6	5.6	50.0	456			
35-39	46.8	3.8	43.0	394			
40-44	42.3	2.1	40.2	393			
45-49	41.2	2.1	39.2	466			
Residence							
Urban	44.0	2.9	41.1	2,384			
Rural	30.3	3.7	26.6	1,487			
Region							
Yerevan	47.4	1.6	45.7	1,321			
Aragatsotn	27.0	4.1	22.9	197			
Ararat	21.4	3.8	17.6	312			
Armavir	29.3	2.2	27.0	344			
Gegharkunik	23.8	1.4	22.4	270			
Lori	25.5	0.0	25.5	227			
Kotayk	55.6	11.0	44.5	412			
Shirak	34.1	2.3	31.8	368			
Syunik	46.4	5.3	41.1	202			
Vayots Dzor	40.2	4.4	35.8	60			
Tavush	37.5	2.9	34.5	157			
Education							
Basic	22.1	1.4	20.7	273			
Secondary	34.7	2.6	32.1	1,468			
Secondary special	44.6	3.8	40.8	819			
Higher	43.1	3.9	39.2	1,308			
Wealth quintile							
Lowest	27.3	2.8	24.5	674			
Second	31.5	3.9	27.7	765			
Middle	40.9	4.0	36.9	742			
Fourth	43.7	3.7	40.0	843			
Highest	47.6	1.9	45.7	847			
Total	38.7	3.2	35.5	3,870			

Less than four in ten nonusers (39 percent) visited a health facility during the 12 months before the survey. Overall, among women not using a method of contraception, 36 percent visited a health facility and had no discussions about family planning with a health professional. Only 3 percent visited a health facility and discussed family planning. Although there are differences by background characteristics in the proportion of nonusers who visited a health facility, differences in the proportions who discussed family planning are minor.

## 7.12 EXPOSURE TO REPRODUCTIVE HEALTH MESSAGES

Similar to the questions about family planning methods, the 2015-16 ADHS also included questions about reproductive health messages on the Internet. Respondents were asked whether they had read information about reproductive health on the Internet in the few months before the survey. Exposure to reproductive health messages among women and men age 15-49 is shown in Table 7.14.

Among women, only about one in five accessed information about reproductive health on the Internet in the few months before the survey. Urban women and women in Syunik are the most likely to have read about reproductive health on the Internet. The proportion of women who obtained information on the Internet increases steadily as education and wealth quintile increase.

Men are less likely than women to have read information about reproductive health on the Internet in the few months before the survey (9 percent). Differences by background characteristics among men are similar to those among women, but much less pronounced. Also, men in Aragatsotn are the most likely to say they obtained reproductive health information on the Internet.

Table 7.14	Ex	posure t	o rep	orodu	ctive	health	mess	sages	
Percentage	of	women	and	men	age	15-49	who	read	informa

Percentage of women and men age 15-49 who read information about reproductive health on the Internet in the past few months, according to background characteristics, Armenia 2015-16

	Wor	men	Me	en
Background characteristic	Percentage of women	Number of women	Percentage of men	Number of men
Age 15-19 20-24 25-29 30-34 35-39 40-44 45-49	9.4 22.7 26.6 28.1 24.6 20.9 16.6	725 928 1,099 1,007 867 784 706	3.8 9.8 12.8 9.4 7.3 8.1 6.9	345 467 464 427 376 346 330
<b>Residence</b> Urban Rural	26.7 15.1	3,657 2,459	10.3 6.3	1,558 1,197
Region Yerevan Aragatsotn Ararat Armavir Gegharkunik Lori Kotayk Shirak Syunik Vayots Dzor Tavush	26.8 13.5 11.5 7.0 14.2 19.0 26.5 19.4 52.5 31.0 31.5	2,001 315 552 586 478 355 678 510 238 119 283	12.8 26.2 2.7 2.4 9.7 2.0 2.7 8.1 8.2 14.5 5.4	833 159 290 268 235 184 299 201 104 56 126
Education Basic Secondary Secondary special Higher	6.7 13.3 23.8 35.2	396 2,444 1,360 1,910	2.6 4.8 7.4 18.7	360 1,250 403 736
Wealth quintile Lowest Second Middle Fourth Highest	8.7 17.4 21.6 25.6 33.8	1,081 1,242 1,142 1,287 1,365	4.5 5.5 8.1 12.2 12.5	523 583 521 566 562
Total	22.1	6,116	8.6	2,755
Note: Total includes 5	(weighted) wo	men and 5 m	en with no edu	ication.

## **Key Findings**

- Nearly one in four pregnancies in the three-year period before the survey ended in an abortion.
- The total induced abortion rate (TAR) during the period was 0.6 abortions per woman, little changed from the 2010 ADHS when the rate was 0.8 abortions per woman; however substantially lower than the rates found on the 2000 and 2005 ADHS surveys (2.6 and 1.8 abortions per woman, respectively).
- The TAR among rural women (0.8) is twice the rate among urban women (0.4). The Gegharkunik region had the highest TAR among regions (1.4), followed closely by Armavir (1.2).
- Half of women who had an induced abortion in the 3-year period before the survey were using some form of contraception at the time they became pregnant, mainly traditional methods.
- About two-thirds of abortions were performed because of a desire to stop childbearing. Other reasons included concerns about the mother's health (7 percent) and the risk of birth defects (8 percent), sex selection (8 percent), and a lack of economic resources (6 percent).

Information about induced abortion was collected in the 2015-16 ADHS through a detailed reproductive history. Women were first asked about the number of pregnancies, if any, that had ended in stillbirths, miscarriages, or induced abortions. A complete pregnancy history was then obtained. In the pregnancy history, the woman was asked to report the outcome of each pregnancy, i.e., whether the pregnancy ended in a live birth, a stillbirth, a miscarriage, or an induced abortion. The manner of collecting information in the pregnancy history differed from the procedure used in the three previous ADHS surveys. In the 2015-16 ADHS, respondents were asked to list pregnancies in chronological order, beginning with the first pregnancy and ending with the most recent pregnancy. In earlier ADHS surveys, the respondent was asked to list pregnancies in reverse order, beginning with the first pregnancy.

To decrease underreporting of induced abortions, the question on the pregnancy outcome asked women to include abortions that may have been induced by cytotec or a similar abortion medication. Although no direct question was asked, interviewers in the 2015-16 ADHS were specifically trained to record abortions that may have been performed by the women at home or elsewhere using herbs with an abortive effect.<sup>1</sup> At the end of the pregnancy history, interviewers were also required to check the consistency between the aggregate data collected at the outset of the reproductive section and the number of events reported in the pregnancy history.

<sup>&</sup>lt;sup>1</sup> In the 2000 ADHS, respondents were asked separately about "self-induced abortions" and "induced abortions". However, only 37 women in the 2000 ADHS sample reported inducing an abortion themselves. Thus, the distinction between self-induced and medically induced abortions was dropped from the question on pregnancy outcomes in the 2005, 2010, and 2015-16 ADHS questionnaires.

## 8.1 PREGNANCY OUTCOMES

Table 8.1 shows the percent distribution of pregnancy outcomes that occurred during the 3-year period before the survey (approximately February 2013 to February 2016). Nearly seven in ten pregnancies resulted in a live birth (69 percent), and about one in four resulted in an abortion (23 percent). Eight percent of pregnancies miscarried, and less than 1 percent resulted in stillbirths.

#### Table 8.1 Pregnancy outcome by background characteristics

Percent distribution of pregnancies ending in the three years before the survey by type of outcome, according to background characteristics, Armenia 2015-16.

			cy outcome			
Background	1.1.1.1.1.1.	Induced		0.00	<b>T</b> . ( . )	Number of
characteristics	Live birth	abortion	Miscarriage	Stillbirth	Total	pregnancies
Age at pregnancy						
outcome						
<20	84.7	5.9	9.4	0.0	100.0	64
20-24	77.6	12.3	9.9	0.2	100.0	479
25-34	65.2	26.6	7.5	0.7	100.0	811
35-44	51.6	42.1	5.4	0.9	100.0	140
45-49	*	*	*	*	100.0	2
Pregnancy order						
First	90.6	2.3	6.7	0.4	100.0	423
Second	82.4	5.3	12.1	0.4	100.0	392
Third	65.3	24.2	9.7	0.2		271
	45.2	24.2 49.6			100.0	161
Fourth			3.8	1.4	100.0	
Fifth or higher	29.0	65.2	5.3	0.5	100.0	249
Residence						
Urban	72.4	18.7	8.6	0.3	100.0	827
Rural	64.3	27.4	7.5	0.8	100.0	669
Region						
Yerevan	77.8	14.8	7.1	0.3	100.0	401
Aragatsotn	79.6	10.4	4.6	5.4	100.0	41
Ararat	78.4	18.9	2.7	0.0	100.0	137
Armavir	57.2	30.7	11.5	0.6	100.0	211
Gegharkunik	42.1	56.7	1.2	0.0	100.0	100
Lori	65.5	22.5	10.8	1.3	100.0	82
Kotayk	67.0	23.8	8.7	0.5	100.0	210
Shirak	64.2	23.5	12.3	0.0	100.0	156
Syunik	92.8	3.9	3.3	0.0	100.0	39
Vayots Dzor	77.6	10.0	12.4	0.0	100.0	27
Tavush	67.6	19.2	11.9	1.4	100.0	91
Education						
Basic	68.8	27.9	3.3	0.0	100.0	99
Secondary	64.1	27.0	8.0	0.9	100.0	625
	65.3	25.8	8.9	0.0	100.0	311
Secondary special						
Higher	77.7	12.9	8.9	0.5	100.0	459
Wealth quintile						
Lowest	61.3	30.1	7.6	1.0	100.0	318
Second	65.4	24.3	9.7	0.5	100.0	318
Middle	68.9	21.4	9.7	0.0	100.0	274
Fourth	73.1	21.2	4.6	1.1	100.0	247
Highest	75.4	16.0	8.4	0.2	100.0	339
Total	68.7	22.6	8.1	0.5	100.0	1,496

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes 2 (weighted) women with no education.

The proportion of pregnancies that ended in an induced abortion rises dramatically with the woman's age. Six percent of teenage pregnancies ended in abortion, compared with 12 percent of pregnancies among women age 20-24, 27 percent among women age 25-34, and 42 percent among women age 35-44. There is an even steeper increase in the proportion of pregnancies ending in abortion by pregnancy order; only 2 percent of first order and 5 percent of second-order pregnancies ended in an abortion compared to 24 percent of third-order pregnancies, 50 percent of fourth-order pregnancies, and 65 percent of fifth-or-higher-order pregnancies.

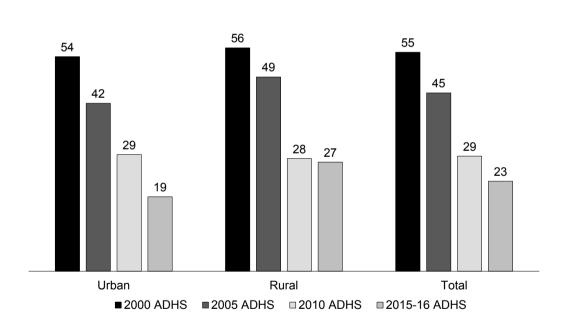
Pregnancies among rural women were somewhat more likely to have ended in an induced abortion than pregnancies among urban women (27 percent versus 19 percent). The proportion of pregnancies that ended in induced abortions also varies by region, from a low of 4 percent in Syunik to a high of 57 percent

in Gegharkunik. Since regional results are based on a small number of pregnancies, these findings should be viewed with caution.

Women with basic education only had the highest percentage of pregnancies resulting in induced abortions (28 percent), closely followed by women with secondary-special and secondary education (26-27 percent). In comparison, only 13 percent of pregnancies among women with higher than secondary education resulted in an induced abortion. There also is a negative relationship between abortion and wealth status; three in ten pregnancies among mothers in the lowest wealth quintile resulted in abortion (30 percent) compared with 16 percent of pregnancies among women in the highest wealth quintile.

Figure 8.1 shows that the proportion of pregnancies ending in induced abortion steadily declined over the past 16 years, from 55 percent in 2000, 45 percent in 2005, 29 percent in 2010, and 23 percent in 2015-16. Conversely, the proportion of pregnancies ending in live births has increased from 38 percent in 2000, 48 percent in 2005, 63 percent in 2010, and 69 percent in 2015-16 (NSS et al. 2001; NSS et al. 2006; NSS et al. 2012).

Over the past 6 years, there is some shift in pregnancy outcome by urban-rural residence. For example, the proportion of pregnancies that ends in induced abortion declined from 29 percent in 2010 to 19 percent in 2015-16 among urban women. This represented a 34 percent decrease since 2010, with no similar changes reported by rural women (28 percent in 2010 and 27 percent in 2015-16).



# *Figure 8.1* Trends in induced abortion by urban-rural residence, Armenia 2000-2016

Percent

## 8.2 LIFETIME EXPERIENCE WITH INDUCED ABORTION

Table 8.2 shows the number of abortions that are experienced over women's lifetimes. Statistics are based on all women age 15-49, irrespective of their exposure to the risk of pregnancy.

#### Table 8.2 Lifetime experience with induced abortion

Percentage of women who have had at least 1 induced abortion, and among these women, percent distribution by number of abortions, and the mean number of abortions, according to background characteristics, Armenia 2015-16

	Percentage of women		Among w		d on obortion	n noroont			Number of
	with an			Among women who had an abortion, percent distribution by number of abortion				Mean	women
Background	induced	Number of						number of	with
Characteristics	abortion	women	1	2-3	4-5	6+	Total	abortions	abortions
Age									
<20	0.2	725	*	*	*	*	100.0	1.0	2
20-24	2.4	928	(73.9)	(23.3)	(0.0)	(2.8)	100.0	1.4	23
25-34	21.9	2,106	54.0	38.0	`5.1 <sup>′</sup>	2.9	100.0	1.8	461
35+	45.4	2,357	31.9	51.3	11.6	5.2	100.0	2.4	1,070
Number of living children									
0	0.3	2,120	*	*	*	*	100.0	2.6	7
1	10.9	899	69.2	26.5	2.4	1.9	100.0	1.5	98
2-3	46.1	2,924	37.8	48.6	9.8	3.8	100.0	2.2	1,348
4+	59.7	172	27.7	44.3	12.9	15.2	100.0	3.2	103
Marital status									
Never married	0.0	1,830	*	*	*	*	100.0	10.0	1
Currently married	37.2	3,895	38.3	47.7	9.5	4.5	100.0	2.2	1,450
Formerly married	27.0	390	50.4	36.4	9.0	4.3	100.0	2.2	105
Residence									
Urban	21.8	3,657	47.0	41.0	8.3	3.8	100.0	2.1	797
Rural	30.8	2,459	30.8	53.1	0.3 10.8	5.8 5.3	100.0	2.1	758
	30.8	2,459	30.6	55.1	10.0	5.5	100.0	2.4	750
Region	40.7	0.004	50.0			07	100.0	1.0	070
Yerevan	18.7	2,001	56.6	36.2	4.5	2.7	100.0	1.8	373
Aragatsotn	26.9	315	50.2	49.0	0.4	0.4	100.0	1.6	85
Ararat	26.5	552	39.9	51.1	8.4	0.6	100.0	1.9	147
Armavir	34.6	586	24.7	49.0	16.4	9.9	100.0	2.9	202
Gegharkunik	35.2	478	17.6	56.0	17.5	8.8	100.0	2.9	168
Lori	23.6	355	36.6	37.1	16.9	9.3	100.0	2.7	84
Kotayk	34.1	678	32.3	52.8	10.4	4.4	100.0	2.3	231
Shirak	28.5	510	36.4	52.6	8.6	2.4	100.0	2.1	146
Syunik	9.0	238	(56.4)	(38.8)	(2.3)	(2.4)	100.0	1.8	21
Vayots Dzor	17.9	119	50.2	46.3	3.5	0.0	100.0	1.7	21
Tavush	27.0	283	45.2	47.8	4.6	2.4	100.0	2.0	77
Education									
Basic	29.4	396	26.6	47.2	16.8	9.4	100.0	2.9	116
Secondary	30.5	2,444	32.1	52.0	10.8	5.0	100.0	2.3	746
Secondary special	29.4	1,360	45.1	43.7	6.8	4.5	100.0	2.1	400
Higher	15.2	1,910	54.3	38.2	6.2	1.3	100.0	1.8	290
Wealth quintile									
Lowest	30.0	1,081	32.3	49.8	10.3	7.6	100.0	2.6	324
Second	28.8	1,242	30.9	53.5	12.4	3.2	100.0	2.3	357
Middle	26.5	1,142	36.9	46.6	10.6	5.9	100.0	2.3	303
Fourth	21.3	1,287	48.1	39.7	9.4	2.8	100.0	2.0	274
Highest	21.8	1,365	50.4	42.7	4.1	2.8	100.0	1.9	298
Total	25.4	6,116	39.1	46.9	9.5	4.5	100.0	2.2	1,555

Note: Currently married includes respondents in consensual union (living together). Formerly married includes divorced, separated, and widowed respondents. 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. Total includes 5 (weighted) women with no education.

Approximately one-quarter of Armenian women age 15-49 have ever had an induced abortion (25 percent). As expected, a woman's likelihood of having had an abortion increases rapidly with age, from 2 percent among women age 20-24 years to 22 percent among women age 25-34 and 45 percent among women age 35 and older. There is a positive relationship between having had an induced abortion and the number of living children. Less than 1 percent of women with no living children have had an abortion, compared with 11 percent of women with one child, 46 percent of women with two to three children, and 60 percent of women with four or more children.

Marital disruptions are associated with a lower level of induced abortion; 37 percent of currently married women have ever had an abortion compared with 27 percent of women who are divorced, separated, or widowed. Rural women are more likely to have ever had an abortion than urban women (31 and 22 percent, respectively). Gegharkunik, Armavir, and Kotayk had the highest percentages of women ever having had an abortion (34-35 percent) and Syunik (9 percent) the lowest. Fifteen percent of women with higher education have ever had an abortion, about half the level observed among women with less education (29-31 percent). The proportion of women ever having had an induced abortion generally decreases with the wealth quintile.

Among women who have ever had an abortion, 39 percent had only one abortion, nearly half (47 percent) reported two to three abortions, while 14 percent reported having four or more abortions. Overall, among women who have had an abortion, the mean number of abortions per woman is 2.2.

## 8.3 RATES OF INDUCED ABORTION

Table 8.3 shows rates of induced abortion for the 3year period before the 2015-16 ADHS survey (approximately February 2013 to February 2016). Three types of rates are presented: age-specific abortion rates, the total abortion rate, and the general abortion rate. Age-specific abortion rates (ASARs), which are shown per 1,000 women, express the number of abortions among women of a given age, divided by the total number of women in that age group. The total abortion rate (TAR), which is expressed per woman, is a summary measure of the age-specific rates. The TAR is interpreted as the number of abortions a woman would have in her lifetime if she experienced the currently observed age-specific rates during her childbearing years. The general abortion rate (GAR) is the number of abortions divided by the number of women age 15-44 and expressed per 1,000 women.

#### Table 8.3 Induced abortion rates

Age-specific induced abortion rates (per 1,000 women), total abortion rates (TAR), and general abortion rates (GAR), for the 3-year period before the survey, by residence, Armenia 2015-16

	Resid	lence	
Age group	Urban	Rural	Total
15-19	2	2	2
20-24	17	24	19
25-29	30	63	42
30-34	20	45	29
35-39	15	19	16
40-44	8	10	9
45-49	0	0	0
TAR(15-49) <sup>1</sup>	0.4	0.8	0.6
TAR(15-44)	0.4	0.8	0.6
GAR <sup>2</sup>	16.0	28.0	21.0

<sup>1</sup> Total abortion rate (TAR) expressed per woman. <sup>2</sup> General abortion rate (GAR) = number of abortions divided by number of women (15-44), expressed per 1,000 women.

Table 8.3 shows that the total abortion rate during the 3 years prior to the 2015-16 ADHS was 0.6 abortions per woman. At the national level, age-specific abortion rates peaked among women age 25-29 and declined in the older age groups. Table 8.3 also shows that the TAR for rural women is almost twice as high as that for urban women (0.8 versus 0.4). With age, abortion rates are higher among rural women than among urban women for all age groups, with the gap is especially wide among women age 25-29 and 30-34.

Figure 8.2 examines differences in the age pattern of fertility and abortion during the 3-year period prior to the 2015-16 ADHS. Age-specific abortion rates were substantially lower than the fertility rates for women under age 40 but were virtually the same as the fertility rates among older women (Figure 8.2).

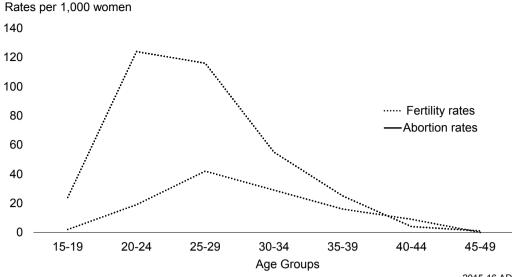


Figure 8.2 Age-specific fertility rates and abortion rates, 2015-16

2015-16 ADHS

Table 8.4 presents differences in two measures of abortion levels by background characteristics. The first column shows the total abortion rate during the 3-year period before the 2015-16. The second column shows the mean number of abortions ever performed among women age 40-49. The latter measure is an indicator of cumulative terminations that reflects the lifetime abortion experience of older women who are nearing the end of their reproductive period.

The TAR varied markedly by region, ranging from 0.1 abortions per woman in Syunik to 1.4 in Gegharkunik. Women with higher education and those from the wealthier households had among the lowest TARs.

A comparison of the TARs with the mean abortion rates among women age 40-49 indicate the direction of changes in abortion levels over the past several decades in Armenia. Because the mean number of abortions among older women is subject to recall problems, the comparisons may understate the true magnitude of the changes over time. The mean number of abortions ever performed among women age 40-49 (1.3 abortions per woman) is more than twice as high as the TAR (0.6 abortions per woman); this indicates that there has been a substantial decline in abortions over the past 30 years. The decline in abortions appears to be shared by all subgroups, but is particularly evident among women with the lowest educational attainment and among residents of Lori, Armavir, and Kotayk. For these women, the difference between the TAR and the mean number of abortions is 1.0 to 1.3 abortions per woman.

# Table 8.4 Induced abortion rates by background characteristics

Total induced abortion rates for the 3 years before the survey and mean number of abortions among women age 40-49, by background characteristics, Armenia 2015-16

		Mean number
	Total abortion	of abortions
	rate for	among
Background	women	women age
characteristic	15-49	40-49
Residence		
Urban	0.4	1.0
Rural	0.8	1.7
Region		
Yerevan	0.3	0.8
Aragatsotn	0.2	0.9
Ararat	0.5	1.2
Armavir	1.2	2.4
Gegharkunik	1.4	1.9
Lori	0.5	1.8
Kotayk	0.7	1.9
Shirak	0.7	1.5
Syunik	0.1	0.3
Vayots Dzor	0.3	0.7
Tavush	0.7	1.1
Education		
Basic	0.9	1.9
Secondary	0.8	1.5
Secondary special	0.6	1.1
Higher	0.3	0.9
Wealth quintile		
Lowest	0.9	1.6
Second	0.7	1.6
Middle	0.6	1.3
Fourth	0.4	1.0
Highest	0.4	1.0
Total	0.6	1.3

## 8.4 TRENDS IN INDUCED ABORTION

## Comparisons with Previous Surveys

Insight into the trends in induced abortion since 2000 in Armenia can be obtained by comparing the total abortion rates reported in the four ADHS surveys conducted between 2000 and 2015-16. The TAR decreased steadily during that period from a high of 2.6 abortions per woman at the time of the 2000 ADHS to 1.8 abortions in 2005 and 0.8 abortions in 2010 before reaching 0.6 abortions in the 2015-16 ADHS. Figure 8.3 shows that the decline was shared by every age group.

The decline in the prevalence of induced abortion over the past 16 years is also reflected in the changes in lifetime abortion measures since 2000. For example, almost half (47 percent) of all respondents in the 2000 ADHS had had an induced abortion, compared with 37 percent in the 2005 ADHS, 31 percent in the 2010 ADHS and 25 percent in the 2015-16 ADHS. Women age 40-49 had an average of 2.8 abortions in 2000, compared with 1.7 in 2005, 1.6 in 2010, and 1.3 in 2015-16.

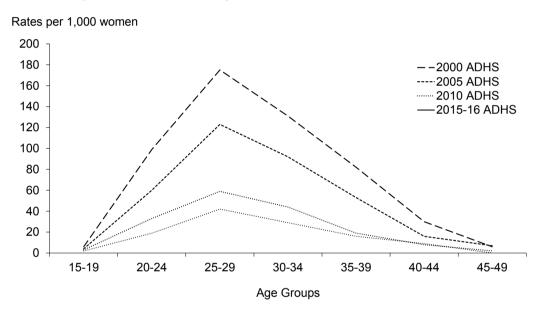
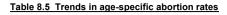


Figure 8.3 Trends in age-specific abortion rates, 2000-2016

#### Retrospective Data

Another approach to understanding abortion trends is to examine changes in the age-specific abortion rates of the 2015-16 ADHS respondents over time. Table 8.5 shows the age-specific abortion rates for 5-year periods before the 2015-16 ADHS survey. Because women age 50 and above were not interviewed in the survey, the rates are successively truncated as the number of years before the survey increases.

The changes in abortion rates over time reported by the 2015-16 ADHS respondents are consistent with trends observed in the comparisons with the 2000, 2005, and 2010 ADHS survey results. For example, the age-



Age-specific induced abortion rates for 5-year periods before the survey, by woman's age at the time of the abortion, Armenia 2015-16

Woman's age at the time of	Nun	nber of yea	rs before su	rvey
the abortion	0-4	5-9	10-14	15-19
15-19 20-24 25-29 30-34 35-39 40-44 45-49	1 22 45 32 18 8 [0]	3 31 68 44 28 [9]	1 34 74 60 [45]	5 53 111 [85]

Note: Age-specific induced abortion rates are per 1,000 women. Estimates in brackets are truncated.

specific abortion rate for women age 25-29 declined by almost 40 percent, from 74 abortions per 1,000 women in the period 10-14 years before the survey to 45 abortions per 1,000 women in the period 0-4 years before the survey. The most rapid decline in the age-specific rates was observed for women age 30-34; the abortion rate decreased by nearly 50 percent in this age group, from 60 abortions per 1,000 women in the period 10 to 14 years before the survey to 32 abortions per 1,000 women in the period 0-4 years before the survey.

## 8.5 USE OF CONTRACEPTIVE METHODS BEFORE ABORTION

Information from the reproductive calendar included in the ADHS in Table 8.6 explored how induced abortions related to women's contraceptive behavior during the 3-year period before the survey. This information is of particular interest to both family planning counselors and abortion providers because a woman who had an abortion was either not using a method of contraception at the time of conception or was using (perhaps incorrectly) a method that had failed.

Slightly more than half of women who had an induced abortion were using a method of contraception at the time they

Table 8.6 Use of contraception before pregnancy
---

Percent distribution of pregnancy outcomes in the three years before the survey, by contraceptive method used at the time of conception, Armenia 2015-16

_	Pro	_		
	Live	Induced		All
Contraceptive method	birth	abortion	Miscarriage	pregnancies
No method used	92.0	49.1	81.5	81.4
Any method	8.0	50.9	18.5	18.6
Any modern method	2.0	10.2	1.4	3.8
Pill	0.3	1.0	0.0	0.4
IUD	0.1	0.6	0.0	0.2
Male condom	1.1	8.0	1.4	2.7
Lactational amenorrhea (LAM)	0.5	0.4	0.0	0.4
Emergency contraception	0.0	0.2	0.0	0.1
Any traditional method	6.0	40.7	17.1	14.8
Rhythm	0.8	4.3	1.3	1.6
Withdrawal	5.2	36.3	15.9	13.2
Total	100.0	100.0	100.0	100.0
All pregnancies	1,028	338	122	1,496

Note: Total includes 8 stillbirths that are not shown separately.

became pregnant (51 percent). This suggests that almost half of the abortions resulted from contraceptive failure. The majority of contraceptive failures occurred when the woman was using a traditional method; 36 percent of induced abortions occurred among women who said they were using withdrawal and 4 percent among those who used rhythm.

Although many abortions are related to contraceptive failure, the ADHS results show that nearly half of the pregnancies resulting in induced abortion occurred among women who were not using any method of contraception. Access to and use of more reliable methods of contraception would reduce the number of unwanted pregnancies and the incidence of induced abortions, and would improve the reproductive health of women in Armenia.

## 8.6 REASONS FOR ABORTION

Table 8.7 presents the primary reasons for having an abortion in the 3 years before the survey. About two-thirds of abortions (65 percent) were performed because the women did not want to have any more children. Fifteen percent of abortions were performed because of concerns about maternal health (7 percent) or risk of birth defects (8 percent). Sex selection was cited as a reason for 8 percent of abortions, while socioeconomic reasons or other reasons were each cited for 6 percent.

#### Table 8.7 Reason for abortion

Percent distribution of induced abortion in the 3 years before the survey by the most important reason for the abortion, according to selected background characteristics, Armenia 2015-16

				Rea	son for abor	tion					
Background Characteristics	Health of mother	Risk of birth defects	Sex selection	Poverty	Unwanted child	Un- married	Other	Don't remember	Missing	Total	Number of abortion
Age											
15-19	*	*	*	*	*	*	*	*	*	100.0	2
20-24	(2.4)	(26.0)	(0.0)	(0.0)	(64.9)	(0.0)	(6.7)	(0.0)	(0.0)	100.0	27
25-29	8.5	7.6	13.0	3.1	59.1	0.0	7.9	0.8	0.0	100.0	120
30-34	2.9	0.7	2.9	12.4	76.3	0.0	4.7	0.0	0.0	100.0	111
35+	12.1	11.4	9.3	1.8	59.6	0.8	3.3	1.7	0.0	100.0	79
Education											
Basic	(4.2)	(5.2)	(8.0)	(17.2)	(65.5)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	28
Secondary	4.4	5.2	5.3	4.0	70.5	0.0	10.5	0.0	0.0	100.0	169
Secondary special	4.5	10.4	5.4	7.7	69.6	0.8	0.0	1.7	0.0	100.0	80
Higher	19.3	13.7	17.9	2.1	43.4	0.0	2.1	1.6	0.0	100.0	59
Wealth quintile											
Lowest	2.3	5.3	11.0	8.7	66.4	0.0	4.8	1.4	0.0	100.0	96
Second	8.0	6.1	2.8	1.6	77.6	0.0	2.6	1.2	0.0	100.0	77
Middle	3.3	9.3	11.0	0.0	75.3	1.1	0.0	0.0	0.0	100.0	58
Fourth	1.6	9.2	7.4	4.7	70.1	0.0	7.0	0.0	0.0	100.0	52
Highest	(23.0)	(12.1)	(5.7)	(12.6)	(30.5)	(0.0)	(16.0)	(0.0)	(0.0)	100.0	54
Total	7.0	7.9	7.7	5.6	65.4	0.2	5.6	0.7	0.0	100.0	338

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25 to 49 unweighted cases. Total includes 2 women (weighted) with no education.

## **Key Findings**

- All women who gave birth in the 5 years before the survey received antenatal care (ANC) from a skilled provider for their most recent birth; 94 percent received care during their first trimester of pregnancy.
- Virtually all women who gave birth in the 5 years before the survey reported that during the pregnancy of their most recent birth, their blood pressure was measured and they received urine, blood, and ultrasound tests. Nutritional supplements are less common; only 40 percent of women took iron supplements and 45 percent took folate supplements or multi-vitamins during pregnancy.
- Ninety-nine percent of live births in the 5 years before the survey took place in a health facility and100 percent were assisted by a skilled provider.
- Almost one in five births in Armenia is delivered by caesarean section.
- Among women who gave birth in the 2 years before the survey, 97 percent received a postnatal checkup from a skilled provider within the first 2 days after birth.
- Among women who had a birth in the 2 years before the survey, 98 percent of their newborns received a postnatal check-up from a skilled provider in the first 2 days after birth.
- More than half of women age 15-49 report that having money for treatment is a serious problem in obtaining health care, while one-quarter say that not wanting to go alone is a problem.

Reproductive and maternal health care in Armenia is implemented through an extensive system of feldsher<sup>1</sup>-accoucher posts (FAPs), ambulatory facilities, polyclinics, and hospitals. The network of ambulatory health care is organized by geographical regions and offered through women's consultation clinics and rural health facilities. Obstetric care is provided at hospital obstetric-gynecological departments, regional delivery hospitals located in urban areas, and republican centers for specialized (tertiary) care. Under the state Basic Benefits Package (BBP), a set of limited reproductive health services is free of charge for all people, and broader services are free for certain vulnerable groups.

This chapter presents findings in several areas of importance to reproductive and maternal health: antenatal, delivery, and postnatal care; access to free delivery care; costs for delivery services; problems in accessing health care; and travel time to nearest clinic. These data are of great value in identifying subgroups of women who utilize or receive specific health services and are useful in developing plans to improve service delivery.

<sup>&</sup>lt;sup>1</sup> A feldsher is a health professional trained in nursing and midwifery with extended training in clinical diagnosis.

### 9.1 ANTENATAL CARE

The survival and well-being of both mother and child are closely associated with the health care that a mother receives during pregnancy and delivery. In this chapter, antenatal care (ANC) is described according to the type of provider, number of ANC visits, stage of pregnancy at the first visit, and services and information provided during a visit, including the use of ultrasound.

## 9.1.1 Antenatal Care Provider

Table 9.1 shows that all women in Armenia (just under 100 percent) receive antenatal care (ANC) from a skilled provider. This is an increase from 92 percent in the 2000 ADHS, 93 percent in the 2005 ADHS, and 99 percent in the 2010 ADHS (NSS 2001, NSS 2006, NSS 2012). Practically all women who received ANC saw a doctor (99 percent), while only 1 percent saw a nurse/midwife. The role of the nurse, midwife, or feldsher in providing ANC is gradually diminishing at 9 percent in 2000, 3 percent in 2005, and less than 1 percent in 2010 and 2015-16.<sup>2</sup>

#### Table 9.1 Antenatal care

Percent distribution of women age 15-49 who had a live birth in the 5 years before the survey by antenatal care (ANC) provider during pregnancy for the most recent birth and the percentage receiving ANC from a skilled provider for the most recent birth, according to background characteristics, Armenia 2015-16

	Antenatal care provider						
Background characteristic	Doctor	Nurse/ midwife	Missing	No ANC	Total	Percentage receiving antenatal care from a skilled provider <sup>1</sup>	Number of women
Mother's age at birth							
<20	100.0	0.0	0.0	0.0	100.0	100.0	63
20-34	98.7	0.8	0.1	0.4	100.0	99.6	1,207
35-49	97.3	2.7	0.0	0.0	100.0	100.0	92
Birth order							
1	98.8	1.1	0.1	0.0	100.0	99.9	495
2-3	99.0	0.6	0.0	0.4	100.0	99.6	818
4-5	(91.4)	(5.9)	(0.0)	(2.7)	(100.0)	(97.3)	45
6+	(	()	*	*	(******	(	3
Residence							
Urban	99.3	0.5	0.1	0.1	100.0	99.9	794
Rural	97.8	1.5	0.0	0.7	100.0	99.3	568
Region							
Yerevan	100.0	0.0	0.0	0.0	100.0	100.0	398
Aragatsotn	100.0	0.0	0.0	0.0	100.0	100.0	51
Ararat	97.6	0.9	0.4	1.1	100.0	98.5	140
Armavir	96.7	2.3	0.0	1.0	100.0	99.0	147
Gegharkunik	86.8	10.4	0.0	2.8	100.0	97.2	65
Lori	98.6	1.4	0.0	0.0	100.0	100.0	76
Kotayk	100.0	0.0	0.0	0.0	100.0	100.0	200
Shirak	100.0	0.0	0.0	0.0	100.0	100.0	130
Syunik	100.0	0.0	0.0	0.0	100.0	100.0	46
Vayots Dzor	99.1	0.9	0.0	0.0	100.0	100.0	30
Tavush	100.0	0.0	0.0	0.0	100.0	100.0	78
Education							
Basic	98.0	0.0	0.0	2.0	100.0	98.0	70
Secondary	98.0	1.2	0.1	0.6	100.0	99.3	533
Secondary special	98.8	1.2	0.0	0.0	100.0	100.0	286
Higher	99.5	0.5	0.0	0.0	100.0	100.0	472
Wealth quintile							
Lowest	97.0	1.9	0.0	1.1	100.0	98.9	252
Second	98.6	1.4	0.0	0.0	100.0	100.0	275
Middle	98.1	1.1	0.0	0.8	100.0	99.2	253
Fourth	99.2	0.5	0.2	0.0	100.0	99.8	250
Highest	100.0	0.0	0.0	0.0	100.0	100.0	331
Total	98.7	0.9	0.0	0.3	100.0	99.6	1,361

Note: 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; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

<sup>1</sup> Skilled provider includes doctor, nurse, midwife, and feldsher. A feldsher is a health professional trained in nursing and midwifery with extended training in clinical diagnosis.

 $^{2}$  If more than one source of ANC was mentioned by a respondent, only the provider with the highest qualifications was considered in the tabulations.

There are only small variations in provider use across subgroups of women. The most notable differences are by region. In Gegharkunik, only 87 percent of women saw a doctor, 10 percent saw a nurse or midwife for ANC, and 3 percent had no ANC.

#### 9.1.2 Number and Timing of ANC Visits

The prevention of complications during pregnancy and delivery and the successful outcome of the pregnancy for both mother and child are associated with the quality of ANC, the number of visits, and the timing of the first visit. The Ministry of Health has adopted the World Health Organization (WHO) guidelines of at least four to six ANC visits for a normal pregnancy and the first visit by 12 weeks of gestation.

Progress in access to quality ANC over time is seen in the increase of women who made four or more ANC visits for their most recent birth. Table 9.2 shows that 96 percent of women who had a live birth in the 5 years before the survey had four or more ANC visits during pregnancy for the most recent birth. This represents a steady increase from the levels recorded in 2000 (65 percent), 2005 (71 percent), and 2010 (93 percent). Although there is some urban-rural differential in the percentage of women making four or more ANC visits in 2015-

#### 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 before 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, Armenia 2015-16

Background	Resi	dence	
characteristic	Urban	Rural	Total
Number of ANC visits			
None	0.1	0.7	0.3
1	0.2	0.3	0.2
2-3	1.0	3.5	2.1
4+	97.8	93.6	96.0
Don't know/missing	1.0	1.9	1.3
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	0.1	0.7	0.3
<4	94.6	92.3	93.6
4-5	4.9	5.9	5.4
6-7	0.1	0.7	0.3
8+	0.3	0.0	0.2
Don't know/missing	0.0	0.3	0.1
Total	100.0	100.0	100.0
Number of women	794	568	1,361
Median months pregnant at first visit (for those with ANC) Number of women with ANC	2.9 793	3.0 563	2.9 1,357

women making four or more ANC visits in 2015-16 (98 and 94 percent, respectively), the gap is much smaller than that reported in prior ADHS surveys (82 and 45 percent, respectively, in 2000).

Overall, 94 percent of women make their first ANC visit in the first trimester. Urban women are slightly more likely than rural women to have their first examination in the first trimester (95 percent compared with 92 percent).

#### 9.1.3 Folate and Iron Supplements

Women are advised to take folate tablets or multivitamins before or during pregnancy to guard against birth defects such as fetal neural tube anomalies. They are also advised to take iron supplements during pregnancy because maternal anemia is a principal cause of both maternal and neonatal mortality. Table 9.3 shows that while only 16 percent of women with a live birth in the past 5 years took folate tablets or multivitamins immediately before the pregnancy, 45 percent took folate supplements during the pregnancy. Forty percent of women took iron tablets or syrup during pregnancy for their last birth, an increase from the 29 percent in the 2010 ADHS.

#### Table 9.3 Components of antenatal care

Among women age 15-49 with a live birth in the 5 years before the survey, the percentage who took iron tablets or syrup and tablets or syrup and folate tables or multivitamins during the pregnancy of the most recent birth, and among women receiving antenatal care (ANC) for the most recent live birth in the 5 years before the survey, the percentage receiving specific antenatal services, according to background characteristics, Armenia 2015-16

	Among women with a live birth in the past 5 years, the percentage who	years, the	n with a live birth percentage who nancy of their las	during the	Among women who received antenatal care for their most recent birth in the past 5 years, the percentage with selected services			
Background characteristic	immediately before the pregnancy of their last birth took folate tablets or multivitamins	Took iron tablets or syrup	Took folate tablets or multivitamins	Number of women with a live birth in the past five years	Blood pressure measured	Urine sample taken	Blood sample taken	Number of women with ANC for their most recent birth
Mother's age at birth <20 20-34 35-49	10.0 16.0 20.6	29.1 39.5 53.5	30.8 46.3 41.7	63 1,207 92	100.0 99.8 99.1	100.0 99.8 98.2	100.0 99.8 99.1	63 1,202 92
Birth order 1 2-3 4-5 6+	19.9 13.8 (15.0)	42.2 38.4 (42.6)	47.3 44.7 (36.2)	495 818 45 3	99.4 99.9 (100.0) *	99.4 99.8 (100.0) *	99.4 99.9 (100.0) *	495 815 44 3
<b>Residence</b> Urban Rural	18.3 13.0	42.6 36.3	49.5 39.5	794 568	99.8 99.6	99.8 99.4	99.8 99.6	793 563
Region Yerevan Aragatsotn Arrarat Armavir Gegharkunik Lori Kotayk Shirak Syunik Vayots Dzor Tavush	17.1 29.1 9.6 12.3 17.0 11.7 10.9 12.8 63.7 14.6 15.5	42.8 70.2 44.7 31.2 25.9 51.0 35.8 19.0 92.0 27.4 33.4	48.0 57.2 19.6 42.4 45.9 67.4 56.0 30.3 90.3 39.3 27.0	398 51 140 147 65 76 200 130 46 30 78	100.0 100.0 98.7 99.4 100.0 99.6 100.0 100.0 99.2 100.0	100.0 100.0 98.1 99.4 100.0 99.6 100.0 100.0 99.2 100.0	100.0 100.0 98.7 99.4 100.0 99.6 100.0 100.0 99.2 100.0	398 51 139 146 63 76 200 130 46 30 78
Education Basic Secondary Secondary special Higher	16.0 14.3 15.8 18.3	39.7 37.0 38.3 44.4	38.7 40.0 43.2 53.6	70 533 286 472	100.0 99.7 99.4 99.9	98.9 99.7 99.4 99.9	100.0 99.7 99.4 99.9	69 530 286 472
Wealth quintile Lowest Second Middle Fourth Highest	11.7 15.2 18.1 19.2 16.2	31.6 42.1 40.0 42.1 42.8	34.1 42.1 47.3 46.2 54.3	252 275 253 250 331	99.4 99.6 100.0 99.7 99.9	99.1 99.6 100.0 99.7 99.9	99.4 99.6 100.0 99.7 99.9	249 275 251 250 331
Total	16.1	40.0	45.3	1,361	99.7	99.7	99.7	1,357

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

Older women and urban women are more likely than other women to have taken folate and iron supplements. Differences by education and wealth levels are not uniform. However, women in the lowest wealth quintile are the least likely to have taken either folate or iron supplements. Prominent differentials are shown by region. For example, the proportion of women who took iron supplements during the pregnancy of their most recent birth ranges from 19 percent in Shirak to 92 percent in Syunik. The proportion of women who took folate or multivitamins during pregnancy ranges from 20 percent in Ararat to 90 percent in Syunik.

#### 9.1.4 Antenatal Care Content

In Armenia, standard ANC includes the testing of urine and blood samples and blood pressure measurement. The 2015-16 ADHS respondents who received ANC for their most recent birth in the past 5 years were asked whether they had received each service during at least one of the ANC visits (Table 9.3). The content of ANC is important in judging its value. Pregnancy complications are an important source of maternal and child mortality and morbidity and thus, tests for complications should be routinely included in ANC.

Virtually all women who had a live birth in the 5 years before the survey in Armenia received all of the specified procedures during an ANC visit for their most recent birth, including blood pressure measurement and analysis of urine and blood samples.

#### 9.1.5 Ultrasound Tests

In addition to urine and blood testing, prenatal ultrasound tests can also provide indications of certain problems with pregnancy. Women interviewed in the 2015-16 ADHS who received ANC for their most recent birth in the past 5 years were asked whether they had had an ultrasound test during any of their ANC visits. Results show that 99 percent of women had at least one ultrasound test during the pregnancy (Table 9.4). Among those who said they had at least one ultrasound test, the vast majority (77 percent) said they had three or more ultrasound tests.

#### Table 9.4 Ultrasound testing during antenatal care

Among women receiving antenatal care (ANC) for the most recent live birth in the 5 years before the survey, the percentage receiving an ultrasound examination of the fetus, and among them, the percentage with one, two or three ultrasounds and the median number months of pregnancy at the first ultrasound test, according to background characteristics, Armenia 2015-16

			Among women birth in the past and the med					
Had at least Number of Had at least women with one ANC for their Background ultrasound most recent characteristic test birth	One ultrasound test	Two ultrasound tests	Three or more ultrasound tests	Don't know/ Missing	Median number months of pregnancy at first ultrasound	Number of women who received an ultrasound tes		
Age at pregnancy								
outcome <20	97.5	58	2.8	17.7	77.8	1.8	3.7	57
20-24	97.5	459	2.0 5.6	18.0	75.9	0.4	3.5	455
20-24 25-34	99.1 99.7	459 742	5.6 4.0	18.0	75.9	0.4	3.5 3.4	455 740
25-34 35-44	100.0	96	2.4	18.9	78.7			96
35-44 45-49	100.0	96	2.4 *	18.9	/8./	0.0	3.4	96
Birth order								
1	98.8	495	3.9	16.0	79.5	0.6	3.4	489
2-3	99.8	815	4.7	19.3	75.6	0.5	3.5	813
4-5	(100.0)	44	(2.8)	(19.4)	(77.8)	(0.0)	(3.7)	44
6+	*	3	*	*	*	*	*	3
Sex of last birth								
Male	99.5	723	3.8	19.1	76.5	0.5	3.4	719
Female	99.4	633	5.0	16.8	77.7	0.5	3.5	630
Residence								
Urban	99.9	793	2.2	16.4	81.1	0.4	3.4	792
Rural	98.8	563	7.5	20.4	71.4	0.7	3.5	556
Region								
Yerevan	100.0	398	1.1	9.6	88.5	0.8	3.2	398
Aragatsotn	100.0	51	0.0	9.7	84.9	5.4	4.3	51
Ararat	95.6	139	27.9	29.2	42.9	0.0	4.2	133
Armavir	99.0	146	0.9	16.2	82.4	0.4	3.4	144
Gegharkunik	100.0	63	3.7	16.1	80.2	0.0	3.9	63
Lori	100.0	76	2.7	41.6	55.7	0.0	3.6	76
Kotayk	100.0	200	2.1	17.9	80.0	0.0	3.4	200
Shirak	100.0	130	4.3	16.4	79.3	0.0	3.2	130
Syunik	100.0	46	0.0	39.3	60.7	0.0	3.5	46
Vayots Dzor	99.2	30	2.9	13.8	82.3	0.9	3.5	30
Tavush	100.0	78	1.4	21.4	77.2	0.0	3.3	78
Education								
Basic	97.9	69	8.2	22.5	69.3	0.0	3.5	67
Secondary	99.2	530	6.0	22.3	70.7	1.1	3.6	525
Secondary special	99.6	286	4.2	18.0	77.3	0.4	3.4	285
Higher	99.9	472	2.1	12.7	85.3	0.0	3.3	471
Wealth quintile								
Lowest	98.4	249	7.9	25.9	65.2	1.1	3.6	245
Second	98.9	275	7.8	19.3	72.6	0.4	3.5	272
Middle	100.0	251	1.9	18.5	78.3	1.2	3.4	251
Fourth	100.0	250	2.4	18.3	79.3	0.0	3.4	250
Highest	99.8	331	2.3	10.7	87.1	0.0	3.3	331
Total	99.4	1,357	4.4	18.0	77.1	0.5	3.4	1,349

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

Although there are no meaningful differences by background characteristics in the proportion of women who have at least one ultrasound test during pregnancy, women who are better educated and in the higher wealth quintiles are more likely to have three or more ultrasound tests. Urban women and those who live in Yerevan are also more likely to have three or more ultrasound tests during pregnancy than rural women and those living in other regions. The median number of months of pregnancy at the time of the first ultrasound test is 3.4, which means that most women are tested around the end of the first trimester or the beginning of the second.

## 9.2 Assistance and Medical Care at Delivery

Hygienic conditions during delivery and supervision of delivery by trained medical staff reduce the risk of infections and ensure that the complications of delivery are effectively handled. The 2015-16 ADHS collected information on the place of delivery for all children born in the 5 years before the survey and the type of medical staff assisting during delivery. In addition, there were questions about payment for delivery.

#### 9.2.1 Place of Delivery

Table 9.5 shows that almost all births (99 percent) occurred in a health facility. The proportion of births in a health facility increased from 91 percent in 2000 to 97 percent in 2005 and 99 percent in both 2010 and 2015-16. Almost all births take place in public sector facilities, with less than 4 percent in private facilities. There are only minor differentials by background characteristics, with the only exception the relatively high proportion of births in Armavir that take place in private facilities (14 percent).

Table 9.5 Place of delivery

Percent distribution of live births in the 5 years before the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Armenia 2015-16

	Health	facility					Percentage delivered in	
Background	Public	Private					a health	Number o
characteristic	sector	sector	Home	Other	Missing	Total	facility	births
Mother's age at birth								
<20	94.2	4.6	0.0	0.0	1.2	100.0	98.8	99
20-34	95.8	3.5	0.2	0.1	0.4	100.0	99.3	1,475
35-49	97.7	2.3	0.0	0.0	0.0	100.0	100.0	98
Birth order								
1	94.8	4.4	0.3	0.0	0.4	100.0	99.3	741
2-3	96.5	2.9	0.0	0.1	0.5	100.0	99.3	876
4-5	100.0	0.0	0.0	0.0	0.0	100.0	100.0	51
6+	*	*	*	*	*	*	*	4
Residence								
Urban	96.4	2.6	0.2	0.1	0.7	100.0	99.0	962
Rural	95.1	4.7	0.0	0.1	0.2	100.0	99.8	710
Region								
Yerevan	96.7	2.9	0.4	0.0	0.0	100.0	99.6	475
Aragatsotn	95.1	3.8	0.5	0.0	0.5	100.0	98.9	61
Ararat	95.6	4.4	0.0	0.0	0.0	100.0	100.0	168
Armavir	85.0	14.0	0.0	0.3	0.6	100.0	99.0	190
Gegharkunik	99.2	0.0	0.0	0.0	0.8	100.0	99.2	77
Lori	97.9	2.1	0.0	0.0	0.0	100.0	100.0	99
Kotavk	96.7	2.6	0.0	0.0	0.7	100.0	99.3	239
Shirak	97.6	0.0	0.0	0.0	2.4	100.0	97.6	168
Syunik	100.0	0.0	0.0	0.0	0.0	100.0	100.0	61
Vayots Dzor	99.0	0.0	0.0	1.0	0.0	100.0	99.0	37
Tavush	100.0	0.0	0.0	0.0	0.0	100.0	100.0	99
Mother's education								
Basic	99.3	0.7	0.0	0.0	0.0	100.0	100.0	95
Secondary	96.0	3.8	0.0	0.0	0.3	100.0	99.7	670
Secondary special	97.8	1.7	0.1	0.3	0.1	100.0	99.5	346
Higher	93.9	4.7	0.3	0.0	1.0	100.0	98.6	562
Wealth quintile								
Lowest	95.3	4.4	0.0	0.1	0.2	100.0	99.7	324
Second	95.8	3.8	0.0	0.0	0.4	100.0	99.6	338
Middle	95.1	3.5	0.0	0.2	1.2	100.0	98.6	305
Fourth	98.0	1.3	0.0	0.0	0.7	100.0	99.3	299
Highest	95.3	4.0	0.6	0.0	0.1	100.0	99.4	406
Total	95.9	3.5	0.1	0.1	0.5	100.0	99.3	1,672

#### 9.2.2 Assistance at Delivery

Assistance at delivery by a health professional is universal in Armenia (Table 9.6). A doctor attended 96 percent of live births during the 5 years before the survey, while a nurse or midwife attended 3 percent. There are no significant variations across groups of women in the proportion of births assisted by a skilled provider. However, relative to other regions, the role of nurses and midwives in assisting deliveries is more prominent in Gegharkunik (14 percent) and Lori (11 percent).

#### Table 9.6 Assistance during delivery

Percent distribution of live births in the 5 years before the survey by person providing assistance during delivery, percentage of birth assisted by a skilled provider, according to background characteristics, Armenia 2015-16

	F	Person providi	ng assistance	e during delivery		Percentage delivered by	
Background		Nurse/	Relative/	Don't know/		a skilled	Number of
characteristic	Doctor	midwife	other	missing	Total	provider <sup>1</sup>	births
Mother's age at birth							
<20	97.7	2.3	0.0	0.0	100.0	100.0	99
20-34	96.3	3.5	0.0	0.2	100.0	99.8	1,475
35-49	97.0	3.0	0.0	0.0	100.0	100.0	98
Birth order							
1	96.7	3.0	0.0	0.3	100.0	99.7	741
2-3	96.4	3.5	0.0	0.1	100.0	99.9	876
4-5	92.4	7.6	0.0	0.0	100.0	100.0	51
6+	*	*	*	*	*	*	4
Residence							
Urban	96.2	3.5	0.0	0.3	100.0	99.7	962
Rural	96.6	3.3	0.1	0.0	100.0	99.9	710
Region							
Yerevan	94.9	4.7	0.0	0.5	100.0	99.5	475
Aragatsotn	100.0	0.0	0.0	0.0	100.0	100.0	61
Ararat	100.0	0.0	0.0	0.0	100.0	100.0	168
Armavir	93.8	6.2	0.0	0.0	100.0	100.0	190
Gegharkunik	84.8	14.4	0.0	0.8	100.0	99.2	77
Lori	89.3	10.7	0.0	0.0	100.0	100.0	99
Kotayk	100.0	0.0	0.0	0.0	100.0	100.0	239
Shirak	99.4	0.6	0.0	0.0	100.0	100.0	168
Syunik	100.0	0.0	0.0	0.0	100.0	100.0	61
Vayots Dzor	97.5	1.6	1.0	0.0	100.0	99.0	37
Tavush	100.0	0.0	0.0	0.0	100.0	100.0	99
Mother's education							
Basic	98.5	1.5	0.0	0.0	100.0	100.0	95
Secondary	95.6	4.3	0.0	0.1	100.0	99.9	670
Secondary special	97.6	2.3	0.1	0.0	100.0	99.9	346
Higher	96.3	3.3	0.0	0.4	100.0	99.6	562
Wealth quintile							
Lowest	95.6	4.1	0.1	0.2	100.0	99.7	324
Second	96.8	3.2	0.0	0.0	100.0	100.0	338
Middle	98.8	1.2	0.0	0.0	100.0	100.0	305
Fourth	97.0	2.2	0.0	0.8	100.0	99.2	299
Highest	94.4	5.6	0.0	0.0	100.0	100.0	406
Total	96.4	3.4	0.0	0.2	100.0	99.8	1,672

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

suppressed. <sup>1</sup> Skilled provider includes doctor, nurse, midwife, and feldsher.

#### 9.2.3 Caesarian Deliveries

Table 9.7 presents information on the extent of caesarean section delivery (C-section). Access to C-section surgery is a measure of access to emergency care for childbirth complications. In Appropriate Technology for Birth (1985), based on the evidence available at that time, the WHO concluded that the caesarean section delivery rate should not exceed 10-15 percent. The recent WHO Statement on Caesarean Section Rates (2015), based on the available data, concluded that at population level, C-section rates above 10 percent are not associated with reductions in maternal and newborn mortality rates (WHO 2015b).

#### Table 9.7 Caesarean section

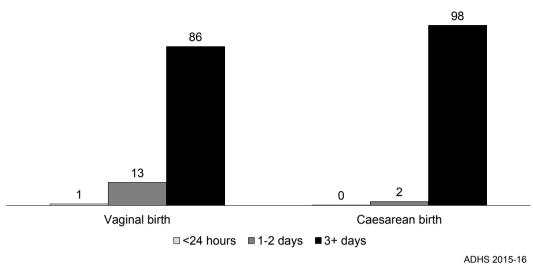
Percentage of live births in the 5 years before the survey delivered by Caesarian section (C-section), percentage delivered by C-section that was planned before the onset of labor pains, and percentage delivered by C-section that was decided after the onset of labor pains, according to background characteristics, Armenia 2015-16

		Timing of c		
	Percentage	Decided	Decided after	
Background	delivered by	before onset of		Number
characteristic	C-section	labor pains	pains	of births
Mother's age at birth				
<20	8.1	5.2	2.8	99
20-34	18.0	15.1	2.9	1,475
35-49	27.5	25.0	2.6	98
Birth order				
1	19.6	15.4	4.2	741
2-3	17.0	15.1	1.9	876
4-5	11.5	11.5	0.0	51
6+	*	*	*	4
Residence				
Urban	20.1	17.4	2.8	962
Rural	15.0	12.0	3.0	710
Region				
Yerevan	23.1	20.0	3.1	475
Aragatsotn	6.5	3.3	3.3	61
Ararat	14.6	13.8	0.7	168
Armavir	19.3	15.0	4.3	190
Gegharkunik	0.8	0.8	0.0	77
Lori	12.8	12.8	0.0	99
Kotayk	21.4	18.7	2.7	239
Shirak	13.7	8.0	5.8	168
Syunik	13.5	12.4	1.0	61
Vayots Dzor	14.5	11.0	3.4	37
Tavush	24.9	20.7	4.2	99
Mother's education	. – .			
Basic	15.2	13.8	1.4	95
Secondary	13.9	11.0	2.9	670
Secondary special	20.4	17.7	2.7	346
Higher	21.8	18.5	3.2	562
Wealth quintile				
Lowest	16.7	13.1	3.7	324
Second	16.5	14.1	2.4	338
Middle	16.5	12.8	3.7	305
Fourth	19.2	16.5	2.8	299
Highest	20.4	18.2	2.1	406
Total	18.0	15.1	2.9	1,672

Note: The question on C-section is 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 have a C-section. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

In Armenia, almost one in five births (18 percent) are delivered by C-section. This represents a steady increase from 7 percent in 2000, 9 percent in 2005, and 13 percent in 2010. Caesarean deliveries increase with the woman's age, education, and wealth quintile. First births are more likely to be delivered by C-section than higher order births. Women living in urban areas are slightly more likely than rural women to deliver by caesarean section (20 and 15 percent, respectively). Delivery by caesarean section varies widely across regions, ranging from 1 percent in Gegharkunik to 25 percent in Tavush. In almost all cases, the decision have a C-section was made before the onset of labor (15 percent), as opposed to after the onset of labor (3 percent).

Figure 9.1 presents the mother's duration of stay in the health facility after giving birth. Almost 9 in 10 women (86 percent) who had a vaginal delivery spent 3 or more days at the health facility, while 13 percent stayed for 1-2 days. For those mothers who had a caesarean delivery, 98 percent spent at least three days at the health facility.



## *Figure 9.1* Mother's duration of stay in the health facility after giving birth

Percentage

## 9.2.4 Payment for Delivery

In 2008, as part of broader reproductive health care reforms, Armenia introduced vouchers that entitled pregnant women to receive free delivery care services. In the 2015-16 ADHS, women who gave birth in a health facility in the 5 years before the survey were asked whether they had a delivery voucher, whether they were eligible for free delivery and medicine, and whether they were asked to pay for any of the services they received during delivery. Table 9.8 shows that women had a delivery voucher for 99 percent of births, that they were eligible to receive free hospital care for 98 percent of births, and eligible for free medicine during delivery for 89 percent of births. Women said they were charged for delivery services for only 13 percent of births.

There are only slight variations in the extent of eligibility for free services by background characteristics. Eligibility for free medicines during delivery appears to be particularly low in the Aragatsotn region and relatively high for births to rural women and those with less education. Mothers in the Kotayk region were the most likely to be charged for delivery.

In the 2015-16 ADHS, the small number of women who said they were charged for delivery services were further asked how much they paid for various services during delivery for their most recent birth in the past 5 years. The results are presented in Table 9.9. Among those who were charged for any delivery service, almost all paid money for the service; only 12 percent said that they did not pay any money for any delivery service. About 2 in 5 women (43 percent) paid 51,000 drams or more. Women are most likely to pay for delivery and other expenses and less likely to pay for laboratory services and medicines. The median amount paid for all delivery services is 59, 231 drams.

#### Table 9.8 Access to free delivery services

Percentage of live births in the 5 years before the survey who had a delivery voucher, who were eligible for free hospital care and for free medicine during delivery, and who were charged for delivery, according to background characteristics, Armenia 2015-16

	Amor		curred in the 5 ye e percentage wh		irvey,
Background	Had a delivery	Were eligible for free hospital care	Were eligible for free medicine	Were charged/paid	Number of
characteristic	voucher	during delivery	during delivery	for delivery	births
Mother's age at birth					
<20	99.7	96.1	91.0	10.7	99
20-34	99.1	98.0	88.8	13.5	1,475
35-49	96.6	96.6	80.3	6.8	98
Residence					
Urban	99.1	98.2	85.9	12.2	962
Rural	98.8	97.2	92.0	14.1	710
Region					
Yerevan	99.5	99.1	79.6	9.4	475
Aragatsotn	99.4	97.2	56.8	2.2	61
Ararat	98.4	98.4	94.2	13.4	168
Armavir	99.7	100.0	96.7	12.6	190
Gegharkunik	99.2	99.2	94.7	21.8	77
Lori	97.6	98.7	98.7	9.8	99
Kotayk	98.3	99.5	93.1	30.1	239
Shirak	98.2	85.4	83.8	2.8	168
Syunik	100.0	100.0	100.0	6.5	61
Vayots Dzor	98.6	99.3	92.4	13.5	37
Tavush	99.6	99.6	98.4	13.0	99
Education					
Basic	97.8	97.8	96.6	10.5	95
Secondary	98.9	97.6	88.3	12.0	670
Secondary special	99.4	97.9	89.5	12.3	346
Higher	99.0	97.9	86.7	14.9	562
Wealth quintile					
Lowest	98.5	97.1	92.4	12.3	324
Second	99.3	97.9	91.8	13.2	338
Middle	99.3	98.3	91.9	12.6	305
Fourth	98.7	95.8	85.1	13.4	299
Highest	99.1	99.3	82.6	13.4	406
Total	99.0	97.8	88.5	13.0	1,672

#### Table 9.9 Payment for delivery of the last birth

Among women who were charged for delivery of the most recent birth in the 5 years before the survey, percent distribution by whether they paid for delivery and amount paid; and the median amount paid, according to type of service, Armenia 2015-16

	Payment for	Paym	ent for deliver	y by type of s	ervice
Payment for delivery and amount paid	any delivery service	Laboratory	Medicine	Delivery	Other expenses
Paid money and knows the amount	79.3	13.3	10.4	48.5	45.4
1,000-5,000 Armenian drams	0.6	0.7	0.0	1.3	0.6
6,000-10,000 Armenian drams	0.2	1.6	1.3	0.2	1.6
11,000-25,000 Armenian drams	6.3	5.1	4.1	2.6	7.7
26,000-50,000 Armenian drams	28.8	3.1	2.7	14.0	20.7
51,000+ Armenian drams	43.4	2.7	2.2	30.4	14.8
Paid money and does not know					
amount	8.8	12.7	14.0	12.0	12.6
Paid no money	11.9	74.0	75.6	39.5	42.1
Total Number of women	100.0 175	100.0 175	100.0 175	100.0 175	100.0 175
Median Paid (Armenian dram) <sup>1</sup>	59,231	22,428	24,753	59,848	39,682

<sup>1</sup> Among women who reported the amount they paid; one US dollar is about 486 Armenian drams. For the first column, the median is calculated by summing the amounts the woman paid for all delivery services.

## 9.3 POSTNATAL CARE FOR THE MOTHER

The postnatal period is defined as the time between the delivery of the placenta and 42 days after delivery. Postnatal care provides an opportunity to treat complications arising from the delivery as well as to provide the mother with important information on how to care for herself and her child. Because many maternal deaths occur during the first few days after delivery, the timing of postnatal care is important.

## 9.3.1 Timing of Postnatal Checkups for the Mother

Table 9.10 presents information on the timing of the first postnatal checkup after the most recent birth for women who gave birth in the 2 years before the survey. The data show that 97 percent of these women received a postnatal checkup in the first 2 days after birth. Three in five women (60 percent) receive a checkup within 4 hours after delivery. Differences by background characteristics are very small.

#### Table 9.10 Timing of first postnatal checkup for the mother

Among women age 15-49 giving birth in the 2 years before the survey, the percent distribution of the mother's first postnatal check-up for the last live birth by time after delivery, and percentage of women with a live birth in the 2 years before the survey who received a postnatal checkup in the first 2 days after giving birth, according to background characteristics, Armenia 2015-16

									Percentage of women with a postnatal checkup in	
		Time after del	ivery of mothe	er's first postr	atal checkup		-		the first 2	
Background characteristic	Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know/ missing	No postnatal checkup <sup>2</sup>	Total	days after birth <sup>1</sup>	Number of women
Mother's age at birth										
<20	(57.0)	(10.2)	(32.8)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(100.0)	36
20-34	<b>`</b> 59.5 <sup>´</sup>	`13.7 <sup>´</sup>	23.8	0.9	0.1	0.5	1.6	`100.0 <sup>´</sup>	<b>97.0</b>	579
35-49	(70.5)	(6.8)	(22.7)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(100.0)	52
Birth order										
1	57.7	14.9	25.5	1.1	0.0	0.0	0.8	100.0	98.1	278
2-3	61.5	12.3	23.0	0.6	0.1	0.8	1.8	100.0	96.7	367
4+	*	*	*	*	*	*	*	*	*	21
Residence										
Urban	60.5	13.8	23.4	1.1	0.1	0.2	1.0	100.0	97.6	391
Rural	59.8	11.9	25.3	0.4	0.0	0.8	1.8	100.0	97.0	275
Region										
Yerevan	58.7	15.9	24.2	1.2	0.0	0.0	0.0	100.0	98.8	190
Aragatsotn	(10.5)	(19.4)	(70.1)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(100.0)	22
Ararat	55.5	21.8	22.8	0.0	0.0	0.0	0.0	100.0	100.0	65
Armavir	49.0	4.6	45.4	1.0	0.0	0.0	0.0	100.0	99.0	79
Gegharkunik	(30.6)	(24.9)	(38.2)	(0.0)	(0.0)	(6.3)	(0.0)	(100.0)	(93.7)	28
Lori	(28.7)	(17.9)	(47.9)	(2.9)	(0.0)	(0.0)	(2.6)	(100.0)	(94.5)	36
Kotayk	87.8	2.9	6.4	0.8	0.0	1.1	1.1	100.0	97.0	103
Shirak	60.6	18.5	12.2	0.0	0.0	0.0	8.7	100.0	91.3	65
Syunik	(95.4)	(4.6)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(100.0)	24
Vavots Dzor	(60.6)	(16.1)	(10.8)	(2.5)	(0.0)	(0.0)	(10.1)	(100.0)	(87.4)	13
Tavush	78.2	6.8	14.1	0.0	0.9	0.0	0.0	100.0	`99.1´	43
Education										
Basic	(59.3)	(11.5)	(29.2)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(100.0)	39
Secondary	59.0	11.2	26.7	1.0	0.0	0.4	1.6	100.0	97.0	266
Secondary special	62.4	10.0	24.9	0.2	0.0	0.8	1.7	100.0	97.2	133
Higher	60.4	17.0	20.0	1.0	0.2	0.3	1.2	100.0	97.4	229
Wealth quintile										
Lowest	53.4	11.3	31.0	0.7	0.0	0.9	2.7	100.0	95.7	117
Second	61.7	13.2	23.8	0.0	0.0	0.0	1.3	100.0	98.7	141
Middle	66.9	10.7	19.9	0.3	0.0	1.4	0.8	100.0	97.6	126
Fourth	60.0	10.9	23.5	3.4	0.3	0.0	1.8	100.0	94.5	122
Highest	58.6	17.3	23.5	0.0	0.0	0.0	0.6	100.0	99.4	161
Total	60.2	13.0	24.2	0.8	0.1	0.4	1.4	100.0	97.4	666

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

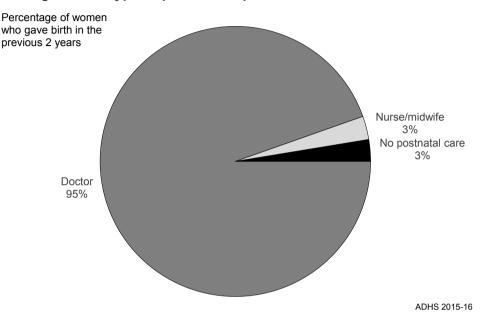
<sup>1</sup> Includes women who received a checkup from a doctor, midwife, nurse, feldsher, or traditional birth attendant.

<sup>2</sup> Includes women who received a checkup after 41 days.

Doroontogo

## 9.3.2 Type of Provider of Postnatal Checkups for the Mother

Figure 9.2 shows the type of health care provider who performed the postnatal checkup for the mother for the most recent birth in the 2 years before the survey. Almost all were examined by a doctor (95 percent), with only 3 percent examined by a nurse or midwife and another 3 percent receiving no postnatal care within the first 2 days after giving birth.





## 9.4 POSTNATAL CARE FOR THE NEWBORN

## 9.4.1 Timing of Postnatal Care for Newborns

Table 9.11 shows that 98 percent of births in the 2 years before the survey received a postnatal checkup within 2 days after birth, almost twice the level in 2010 (50 percent)<sup>3</sup>. Only 30 percent of births received a postnatal check within 1 hour after birth; however, 50 percent were checked 1-3 hours after birth. Differences by background characteristics in both the coverage and timing of postnatal care are minor; differences by region in the timing of postnatal care are hampered by the small numbers of cases.

<sup>&</sup>lt;sup>3</sup> When comparing the 2015-16 ADHS postnatal checkup data to the previous surveys, it should be noted that the questions on postnatal care for the newborn have been modified to obtain a better sense of coverage of postnatal care. In the 2015-16 ADHS, for a facility birth, women were asked whether someone checked on the health of her baby and the timing of the first check while still in the facility. Women were also asked if the baby had a check on his/her health in the 2 months after they left the facility and the timing of the first post-discharge check. For the 2010 ADHS and earlier surveys, for a facility birth, women were asked if the baby had a checkup on his/her health in the 2 months after birth and the timing of the first check without specifying whether still in the facility or after they left the facility.

#### Table 9.11 Timing of first postnatal checkup for the newborn

Percent distribution of last births in the 2 years before the survey by time after birth of first postnatal checkup, and the percentage of births with a postnatal checkup in the first two days after birth, according to background characteristics, Armenia 2015-16

									Percentage of births with	
		<b>T</b>		1. C					a postnatal checkup in	
Dealersond	Less than	Time after b	irth of newborr	i s first postna	атаї спескир	Den't lun euu/			the first 2	Ni
Background characteristic	1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days	missing	No postnatal checkup <sup>2</sup>	Total	days after birth <sup>1</sup>	Number of births
Mother's age at birth										
<20	(23.6)	(55.9)	(4.8)	(15.8)	(0.0)	(0.0)	(0.0)	(100.0)	(100.0)	36
20-34	30.1	50.2	8.8	8.9	0.2	1.7	0.1	100.0	97.9	579
35-49	(38.8)	(45.7)	(12.3)	(3.2)	(0.0)	(0.0)	(0.0)	(100.0)	(100.0)	52
Birth order										
1	29.4	54.5	6.0	9.9	0.0	0.0	0.3	100.0	99.7	278
2-3	31.6	46.8	11.4	7.2	0.3	2.7	0.0	100.0	97.0	367
4+	*	*	*	*	*	*	*	*	*	21
Residence										
Urban	32.6	49.8	9.0	6.6	0.3	1.5	0.2	100.0	98.0	391
Rural	27.3	50.7	8.5	12.0	0.0	1.5	0.0	100.0	98.5	275
Region										
Yerevan	27.0	56.0	11.2	4.6	0.0	1.2	0.0	100.0	98.8	190
Aragatsotn	(0.0)	(48.2)	(10.8)	(41.0)	(0.0)	(0.0)	(0.0)	(100.0)	(100.0)	22
Ararat	16.2	68.2	12.8	2.0	0.0	0.8	0.0	100.0	99.2	65
Armavir	0.0	50.3	11.3	38.5	0.0	0.0	0.0	100.0	100.0	79
Gegharkunik	(2.0)	(40.1)	(38.9)	(14.8)	(0.0)	(4.1)	(0.0)	(100.0)	(95.9)	28
Lori	(81.7)	(12.2)	(0.0)	(0.0)	(2.9)	(3.3)	(0.0)	(100.0)	(93.8)	36
Kotayk	84.2	11.6	2.0	1.1	0.0	1.1	0.0	100.0	98.9	103
Shirak	7.5	75.5	6.2	5.1	0.0	4.5	1.2	100.0	94.3	65
Syunik	(15.2)	(84.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(100.0)	24
Vayots Dzor	(10.2)	(75.9)	(5.9)	(8.1)	(0.0)	(0.0)	(0.0)	(100.0)	(100.0)	13
Tavush	33.5	63.6	0.9	0.0	0.0	2.1	0.0	100.0	97.9	43
Mother's education										
Basic	(33.8)	(49.9)	(9.9)	(6.4)	(0.0)	(0.0)	(0.0)	(100.0)	(100.0)	39
Secondary	27.2	47.6	9.6	13.9	0.0	1.6	0.0	100.0	98.4	266
Secondary special	38.2	51.4	2.3	5.7	0.0	1.7	0.6	100.0	97.7	133
Higher	29.1	52.4	11.4	5.1	0.5	1.5	0.0	100.0	98.0	229
Wealth quintile										
Lowest	27.1	47.4	8.9	15.1	0.0	1.6	0.0	100.0	98.4	117
Second	26.5	53.9	8.4	10.4	0.0	0.8	0.0	100.0	99.2	141
Middle	38.4	43.4	6.4	8.0	0.0	3.1	0.6	100.0	96.3	126
Fourth	29.7	56.6	6.8	3.5	0.9	2.7	0.0	100.0	96.5	122
Highest	30.6	49.4	12.4	7.5	0.0	0.0	0.0	100.0	100.0	161
Total	30.4	50.2	8.8	8.8	0.2	1.5	0.1	100.0	98.2	666

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been <sup>1</sup> Includes newborns who received a checkup from a doctor, midwife, nurse, feldsher, or traditional birth attendant.
 <sup>2</sup> Includes newborns who received a checkup after 41 days.

## 9.4.2 Type of Provider of Postnatal Care for Newborns

Table 9.12 shows that the vast majority of births receive a postnatal checkup from a doctor (88 percent), while 10 percent receive postnatal care from a nurse or midwife. Births that are more likely to receive postnatal care from a doctor include urban births and those whose mothers are better educated and in the higher wealth quintiles. Interpretation of differences by region is hampered by the small number of births.

Percent distribution of las health check during the 2					
	Type of he	alth provider of ne postnatal checku			
Background characteristic	Doctor	Nurse/ midwife	No postnatal checkup in the first 2 days after birth	Total	Number o births
Mother's age at birth <20 20-34 35-49	(83.8) 88.8 (88.3)	(16.2) 9.2 (11.7)	(0.0) 2.1 (0.0)	(100.0) 100.0 (100.0)	36 579 52
<b>Birth order</b> 1 2-3 4+	90.0 87.8 *	9.7 9.2 *	0.3 3.0	100.0 100.0 *	278 367 21
<b>Residence</b> Urban Rural	91.5 84.1	6.5 14.5	2.0 1.5	100.0 100.0	391 275
Region Yerevan Aragatsotn Ararat Armavir Gegharkunik Lori Kotayk Shirak Syunik Vayots Dzor Tavush	95.5 (90.8) 93.2 57.7 (79.0) (91.6) 91.0 92.6 (100.0) (62.5) 97.9	3.3 (9.2) 6.0 42.3 (16.8) (2.3) 7.9 1.7 (0.0) (37.5) 0.0	$\begin{array}{c} 1.2 \\ (0.0) \\ 0.8 \\ 0.0 \\ (4.1) \\ (6.2) \\ 1.1 \\ 5.7 \\ (0.0) \\ (0.0) \\ 2.1 \end{array}$	$\begin{array}{c} 100.0\\ (100.0)\\ 100.0\\ 100.0\\ (100.0)\\ (100.0)\\ 100.0\\ 100.0\\ (100.0)\\ (100.0)\\ (100.0)\\ 100.0\end{array}$	190 22 65 79 28 36 103 65 24 13 43
<b>Nother's education</b> Basic Secondary Secondary special Higher	(84.8) 84.6 93.3 90.7	(15.2) 13.7 4.4 7.3	(0.0) 1.6 2.3 2.0	(100.0) 100.0 100.0 100.0	39 266 133 229
<b>Wealth quintile</b> Lowest Second Middle Fourth Highest	83.2 83.5 90.2 92.3 92.3	15.2 15.7 6.1 4.2 7.7	1.6 0.8 3.7 3.5 0.0	100.0 100.0 100.0 100.0 100.0	117 141 126 122 161
Total	88.4	9.8	1.8	100.0	666

## 9.4.3 Content of Postnatal Care for Newborns

Table 9.13 shows information on the types of care given within 2 days after birth for the most recent birth in the 2 years before the survey. Mothers report that the umbilical cord was examined for almost all births (99 percent), while for 98 percent of births, the baby's temperature was measured. Almost all new mothers were counseled about breastfeeding (96 percent), while 89 percent were observed breastfeeding their newborns. Eighty-seven percent of mothers said they received counseling about danger signs for newborns. All but a tiny fraction of babies were reported by the mother to have been weighed at birth (100 percent). Virtually all births received at least two types of care and almost 4 in 5 births (79 percent) received all six types of care (data not shown separately). Differences by background characteristics are small.

#### Table 9.13 Content of postnatal care for newborns

Among last births in the 2 years before the survey, percentage for whom selected functions were performed within 2 days after birth and percentage with at least two signal functions performed within 2 days after birth, according to background characteristics, Armenia 2015-16

					ne survey, percen d within 2 days af			
Background characteristic	Cord examined	Temperature measured	Counseling on danger signs	Counseling on breastfeeding	Observation of breastfeeding	Weighed <sup>1</sup>	Percentage with at least two signal functions performed during the 2 days after birth	Number of births
Mother's age at birth								
<20 20-34 35-49	(98.2) 99.2 (100.0)	(95.1) 97.8 (98.1)	(86.2) 85.6 (96.1)	(97.4) 95.1 (98.8)	(92.7) 88.7 (86.8)	(100.0) 99.5 (100.0)	(100.0) 99.4 (100.0)	36 579 52
Birth order	. ,	. ,	. ,		. ,	. ,	, , , , , , , , , , , , , , , , , , ,	
1 2-3 4-5	99.0 99.3 *	97.1 98.0 *	87.8 85.4 *	95.3 95.3 *	92.0 86.5 *	99.4 99.6 *	99.7 99.3 *	278 367 19
6+	*	*	*	*	*	*	*	2
<b>Residence</b> Urban Rural	99.0 99.5	98.2 97.0	88.1 84.2	94.6 96.7	87.3 90.9	99.6 99.5	99.1 100.0	391 275
Region								
Yerevan Aragatsotn Ararat Armavir	99.2 (100.0) 100.0 98.2	99.2 (90.9) 98.8 100.0	91.5 (84.7) 80.5 82.3	95.3 (95.5) 90.3 100.0	88.4 (89.3) 90.0 92.6	100.0 (100.0) 97.1 100.0	99.2 (100.0) 100.0 100.0	190 22 65 79
Gegharkunik Lori Kotayk	(100.0) (96.7) 100.0	(100.0) (96.7) 100.0	(76.7) (62.9) 99.0	(100.0) (84.5) 99.2	(83.5) (81.9) 89.1	(100.0) (100.0) 100.0	(100.0) (96.7) 100.0	28 36 103
Shirak Syunik Vayots Dzor Tavush	98.8 (97.4) (100.0) 100.0	85.9 (100.0) (100.0) 98.0	78.9 (91.7) (92.5) 84.0	97.3 (88.4) (94.5) 94.7	94.6 (79.9) (94.5) 84.3	98.8 (100.0) (100.0) 99.0	98.8 (100.0) (100.0) 100.0	65 24 13 43
Mother's education	10010	0010	0.110	0	0110	00.0		10
Basic Secondary Secondary special Higher	(96.3) 99.3 99.4 99.3	(100.0) 97.1 97.3 98.1	(77.8) 85.1 85.3 90.3	(97.1) 96.5 96.4 93.4	(84.2) 91.5 88.7 86.5	(100.0) 99.1 99.4 100.0	(100.0) 99.6 99.4 99.3	39 266 133 229
Wealth quintile	00.0	07.0	77.0	06.3	96.6	100.0	100.0	447
Lowest Second Middle Fourth	98.8 99.6 99.4 99.0	97.8 97.3 97.2 98.1	77.8 87.2 90.4 84.9	96.3 96.4 96.1 93.9	86.6 91.4 90.4 88.9	100.0 99.3 99.4 100.0	100.0 100.0 99.4 99.0	117 141 126 122
Highest Total	99.1 99.2	98.0 97.7	90.2 86.5	94.7 95.5	86.7 88.8	99.1 99.5	99.1 99.5	161 666

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

Captures newborns who were weighed "at birth." May exclude some newborns were weighed during the 2 days after birth.

#### 9.5 PROBLEMS IN ACCESSING HEALTH CARE

Many factors can prevent women from accessing medical advice or treatment for themselves. The 2015-16 ADHS included questions on the type of barriers women may face in accessing health care for themselves. All women were asked if the following factors would be a big problem for them in obtaining medical advice or treatment if they were sick: obtaining permission to go for treatment, having money for treatment, traveling the distance to the health facility, and feeling concerned about going alone to the facility.

Table 9.14 shows that almost two in three women considered at least one of these issues to be potentially a serious problem in accessing health care for themselves. Women most frequently cited the lack of money to pay for treatment (55 percent). One in four women (25 percent) cited not wanting to go alone as a potential barrier. Nine percent of women said that distance to a health facility is a problem. Obtaining permission to go to a doctor is the least often cited issue (4 percent).

#### Table 9.14 Problems in accessing health care

Percentage of women age 15-49 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, Armenia 2015-16

Background characteristic Age 15-19 20-34 35-49 Number of living children	Getting permission to go for treatment 6.3 4.3 3.6	Getting money for treatment 45.3 53.4 60.1	Distance to health facility 9.1	Not wanting to go alone	At least one problem accessing health care	Number of women
15-19 20-34 35-49 Number of living	4.3	53.4		50.0		
			9.7 8.7	50.8 26.2 14.4	67.9 62.3 65.3	725 3,034 2,357
0 1-2 3-4 5+	5.3 3.4 4.6 (10.1)	47.6 58.4 59.9 (81.1)	8.0 8.8 12.8 (18.7)	35.5 18.8 18.0 (31.0)	63.2 64.0 65.4 (89.6)	2,120 2,990 966 39
Marital status Never married Married or living together Divorced/separated/	5.5 3.7	47.1 57.1	8.0 9.8	36.6 19.9	63.1 63.5	1,830 3,895
widowed Employed last 12	4.4	71.6	9.0	14.4	74.7	390
months Not employed Employed for cash Employed not for cash	4.2 4.4 4.8	56.6 53.3 49.7	9.8 7.6 13.4	29.1 18.1 15.9	66.9 60.6 55.9	3,650 2,115 351
<b>Residence</b> Urban Rural	3.3 5.8	54.4 56.0	5.6 14.7	21.7 28.8	63.6 64.8	3,657 2,459
Region Yerevan Aragatsotn Ararat Armavir Gegharkunik Lori Kotayk Shirak Syunik Vayots Dzor Tavush	3.7 13.6 2.7 0.0 15.4 0.0 0.5 3.0 5.1 11.2 4.4	57.4 72.9 54.8 40.4 45.5 44.0 56.0 65.9 64.2 49.1 52.1	6.1 25.1 14.5 5.6 16.1 0.2 1.6 9.5 13.2 17.3 21.7	24.0 23.0 32.8 12.2 36.9 21.4 24.2 23.2 13.8 26.7 33.8	68.5 73.7 64.6 42.5 60.2 55.0 64.5 73.4 67.1 54.4 68.5	2,001 315 552 586 478 355 678 510 238 119 283
Education Basic Secondary Secondary special Higher	6.2 5.4 2.5 3.7	62.4 62.1 60.0 41.0	16.2 11.3 8.6 5.7	36.0 27.7 20.9 20.7	74.4 70.1 67.2 52.2	396 2,444 1,360 1,910
Wealth quintile Lowest Second Middle Fourth Highest	5.7 5.2 4.4 3.9 2.6	65.1 55.2 55.9 54.6 46.6	18.9 10.9 8.4 5.1 4.7	30.7 24.5 23.7 23.7 21.3	71.5 62.3 65.3 65.3 57.8	1,081 1,242 1,142 1,287 1,365
Total	4.3	55.0	9.2	24.5	64.1	6,116

The proportion of women who cite at least one problem in accessing health care for themselves has remained more or less stable over the past 5 years, declining from 66 percent in 2010 to 64 percent in 2015-16. However, the proportion who cite distance to a health facility as an obstacle has declined from 19 percent to 9 percent, and the proportion who say that not wanting to go alone is a problem has declined from 33 percent to 25 percent since 2010.

Women who are divorced, separated, or widowed are somewhat more likely to report at least one potential problem than those who never married or are currently married. Women who were not employed were more likely than others to have encountered at least one obstacle in accessing health care. Women from Aragatsotn and Shirak are the most likely to mention at least one potential obstacle, while women from Armavir are the least likely to have an obstacle in getting health care for themselves. The proportion of women who mention at least one problem accessing health care generally declines with increasing education and wealth.

### 9.6 TRAVEL TO NEAREST HEALTH CLINIC

The 2015-16 ADHS obtained information on the mode of transportation and the travel time to the clinic or health facility usually used by household members. The information provides insights into how households access health care and the potential travel burdens they may face in obtaining care. Table 9.15 shows that slightly more than half of households report that members walk to the clinic or health facility they typically use; 29 percent travel in a car or taxi, and 15 percent rely on public transportation. A large majority of households (89 percent) say that it takes less than 30 minutes to travel to their usual clinic or health facility. Virtually no households say that it takes more than 1 hour to travel to the clinic or health facility. The proportion reporting it takes less than 30 minutes to travel to the clinic or health facility is higher if members walk (93 percent) than if they use public transportation (82 percent) (data not shown separately).

Households are the least likely to report that members walk to their usual clinic or health facility in Aragatsotn (35 percent) and Lori (30 percent) (Table 9.15). Public transport is used most often in households in Lori (37 percent). The Lori and Gegharkunik regions have the highest proportions of households reporting that it requires 30 minutes or more to travel to their usual clinic or health facility (18 percent and 17 percent, respectively). The proportion of households reporting it takes members 30 minutes or more to travel to their usual clinic or health facility varies from a high of 12 percent in the lowest wealth quintile to 6 percent in the highest quintile.

#### Table 9.15 Travel to the nearest clinic

Percent distribution of households by usual method to travel to the nearest clinic or health facility usually used by household members and percent distribution of households by the approximate time to travel to the nearest clinic or health facility in minutes, according to background characteristics, Armenia 2015-16

		Usual m	ode of trans	portation		Time to get to the nearest clinic in minutes					Number	
Background characteristic	Foot	Car/taxi	Public transport	Missing	Total	<30	30-60	>60	Don't know	Missing	Total	of house- holds
Residence												
Urban	52.2	27.3	19.8	0.7	100.0	90.0	9.0	0.3	0.7	0.0	100.0	4,924
Rural	60.8	30.5	7.9	0.8	100.0	88.1	10.7	0.3	0.8	0.1	100.0	2,969
Region												
Yerevan	53.5	21.8	23.8	0.9	100.0	89.8	9.0	0.3	0.9	0.0	100.0	2,480
Aragatsotn	35.0	56.8	5.4	2.9	100.0	86.4	10.8	0.0	2.9	0.0	100.0	387
Ararat	57.2	38.3	4.4	0.2	100.0	97.9	1.9	0.0	0.2	0.0	100.0	682
Armavir	67.1	28.4	4.3	0.2	100.0	94.0	5.3	0.1	0.2	0.4	100.0	633
Gegharkunik	52.0	40.6	6.2	1.2	100.0	81.4	17.1	0.3	1.2	0.0	100.0	601
Lori	30.1	31.1	37.4	1.4	100.0	79.3	18.2	1.1	1.4	0.0	100.0	645
Kotayk	60.1	27.0	12.6	0.3	100.0	93.4	6.2	0.1	0.3	0.0	100.0	799
Shirak	65.5	21.3	13.1	0.1	100.0	85.2	14.5	0.1	0.1	0.0	100.0	685
Syunik	72.6	18.1	9.3	0.0	100.0	94.2	5.8	0.0	0.0	0.0	100.0	448
Vavots Dzor	67.6	32.4	0.0	0.0	100.0	96.6	3.4	0.0	0.0	0.0	100.0	167
Tavush	60.7	29.8	9.1	0.4	100.0	85.0	13.4	1.3	0.4	0.0	100.0	366
Wealth quintile												
Lowest	62.9	24.3	11.6	1.3	100.0	86.2	12.1	0.4	1.3	0.1	100.0	1,700
Second	53.8	34.8	11.0	0.4	100.0	88.4	10.8	0.3	0.4	0.1	100.0	1,452
Middle	54.4	27.3	17.5	0.8	100.0	88.0	10.9	0.3	0.8	0.0	100.0	1,791
Fourth	52.9	28.1	18.2	0.8	100.0	91.2	7.6	0.4	0.8	0.0	100.0	1,558
Highest	52.1	29.2	18.5	0.2	100.0	93.6	6.0	0.1	0.2	0.0	100.0	1,392
Total	55.4	28.5	15.4	0.7	100.0	89.3	9.6	0.3	0.7	0.0	100.0	7,893

# HEALTH INSURANCE, USE OF TOBACCO, KNOWLEDGE AND ATTITUDES ABOUT TUBERCULOSIS

#### **Key Findings:**

- Fewer than one in ten women and men has any form of health insurance.
- Men are much more likely to smoke tobacco products than women (61 percent versus 1 percent).
- More than eight in ten women and men have heard about tuberculosis, but fewer than ten percent are aware of multidrug-resistant TB.
- Most individuals who know about TB also are not aware that it may affect organs in the body other than the lungs.

his chapter includes information on health insurance coverage, use of tobacco, and knowledge and attitudes about tuberculosis.

## **10.1 HEALTH INSURANCE**

In 1998, the government of Armenia introduced the first state Basic Benefits Package (BBP) and established the State Health Agency as the purchaser of publicly financed health care services. The BBP is a publicly funded package of basic medical services, which are free for the entire population, and broader services, which are free for certain vulnerable groups. The services and population groups covered under the BBP are reviewed annually by the government in response to financial and political requirements. The fluctuation of services covered under the BBP over the years has caused confusion and uncertainty for both service providers and patients. The government is attempting to standardize the BBP and its review process. Voluntary health insurance that is provided through an employer or purchased independently does not play a significant role in the Armenian health system and is unaffordable for most citizens (Richardson 2013).

The 2015-16 ADHS asked all respondents whether or not they were covered by a health insurance plan. The level of health insurance coverage is very low: only 7 percent of women and 8 percent of men reported having any type of health insurance (Tables 10.1.1 and 10.1.2). Most women and men who have health insurance coverage indicate that they have the BBP (5 percent and 6 percent, respectively). The BBP is a government-sponsored program that provides specific health services including primary health care to a limited segment of the Armenian population who are considered poor and vulnerable. Only 2 percent of men and women report being covered by private plans, primarily through their employers.

While fewer than one in ten women and men have health insurance, coverage levels are better than at the time of the 2010 ADHS when only 1 percent of women and 2 percent of men had health insurance. Coverage levels for both women and men are lowest among those under age 25, those with secondary or less education, and those in the lowest wealth quintile. Among women, coverage levels are highest in Syunik (21 percent). Men are the most likely to report having insurance in Syunik (24 percent) and Vayots Dzor (19 percent).

#### Table 10.1.1 Health insurance coverage: Women

Percentage of women age 15-49 with specific types of health insurance coverage, according to background characteristics, Armenia 2015-16

Background	Basic Benefits	Employer based	Privately purchased commercial		Number of
characteristic	Package	insurance	insurance	None	women
Age					
15-19	0.6	0.3	0.3	98.8	725
20-24	2.8	1.2	0.1	95.9	928
25-29	4.9	2.6	0.2	92.4	1,099
30-34	4.9	1.4	0.0	93.7	1,007
35-39	7.9	1.7	0.5	90.0	867
40-44	5.8	3.6	0.4	90.2	784
45-49	7.2	2.5	0.2	90.1	706
Residence					
Urban	5.1	2.4	0.3	92.3	3,657
Rural	4.6	1.2	0.0	94.1	2,459
	1.0	•	0.1	01.1	2,100
Region			0.4	~~~~	0.004
Yerevan	4.7	1.4	0.4	93.6	2,001
Aragatsotn	5.4	2.2	0.1	92.3	315
Ararat	8.4	0.5	0.2	90.8	552
Armavir	3.1	2.1	0.0	94.7	586
Gegharkunik	3.3	1.2	0.1	95.3	478
Lori	4.7	0.0	0.3	95.1	355
Kotayk	5.1	1.8	0.0	93.2	678
Shirak	4.9	0.7	0.2	94.2	510
Syunik	2.8	17.9	0.2	79.3	238
Vayots Dzor	6.7	2.7	0.0	90.8	119
Tavush	5.9	0.3	0.0	93.9	283
Education					
Basic	0.7	0.4	0.0	98.9	396
Secondary	0.6	0.5	0.0	98.9	2,444
Secondary special	3.9	1.7	0.2	94.2	1,360
Higher	12.0	4.2	0.5	83.4	1,910
Wealth quintile					
Lowest	1.9	0.4	0.0	97.6	1,081
Second	5.8	1.9	0.1	92.2	1,242
Middle	4.3	2.1	0.1	93.5	1,142
Fourth	6.1	2.8	0.4	90.8	1,287
Highest	5.7	2.1	0.4	91.8	1,365
Total	4.9	1.9	0.2	93.0	6,116

## Table 10.1.2 Health insurance coverage: Men

Percentage of men age 15-49 with specific types of health insurance coverage, according to background characteristics, Armenia 2015-16

Background characteristic	Basic Benefits	Employer based	Privately purchased commercial	Other	Nono	Number of
characteristic	Package	insurance	insurance	Other	None	men
Age						
15-19	0.0	0.4	0.4	0.1	99.1	345
20-24	3.6	0.6	0.0	0.1	95.8	467
25-29	6.3	1.3	0.1	0.0	92.4	464
30-34	9.9	2.3	0.0	0.0	87.9	427
35-39	9.8	2.0	0.1	0.0	88.2	376
40-44	6.2	1.8	0.0	0.4	91.6	346
45-49	7.3	1.8	0.1	0.1	90.7	330
Residence						
Urban	7.2	1.5	0.1	0.1	91.1	1,558
Rural	4.9	1.3	0.0	0.1	93.8	1,197
	4.9	1.5	0.0	0.1	93.0	1,197
Region						
Yerevan	4.9	0.6	0.0	0.0	94.5	833
Aragatsotn	7.5	0.6	0.2	0.0	91.7	159
Ararat	8.1	0.8	0.0	0.0	91.1	290
Armavir	3.1	2.3	0.5	0.6	93.6	268
Gegharkunik	2.8	1.0	0.0	0.0	96.2	235
Lori	9.4	0.0	0.0	0.0	90.6	184
Kotavk	4.3	2.7	0.0	0.0	93.1	299
Shirak	8.0	0.4	0.0	0.0	91.6	201
Syunik	16.9	7.0	0.0	0.0	76.0	104
Vayots Dzor	5.9	10.1	0.8	1.8	82.1	56
Tavush	9.6	0.3	0.0	0.0	90.1	126
Education						
Basic	1.7	0.7	0.0	0.0	97.6	360
Secondary	2.6	0.9	0.0	0.0	96.3	1,250
	8.6	0.9	0.0	0.2	90.3 90.9	403
Secondary special	0.0 13.3	3.2	0.0	0.0	90.9 83.4	736
Higher	13.3	3.2	0.1	0.1	83.4	736
Wealth quintile						
Lowest	2.5	0.9	0.0	0.3	96.4	523
Second	6.7	0.7	0.1	0.0	92.5	583
Middle	5.9	2.3	0.1	0.0	91.7	521
Fourth	7.8	1.4	0.2	0.2	90.5	566
Highest	7.7	1.9	0.0	0.0	90.3	562
Total	6.2	1.4	0.1	0.1	92.2	2,755

Note: Total includes 5 (weighted) men with no education.

# **10.2 USE OF TOBACCO**

Smoking is a known risk factor for cardiovascular disease. Smoking also causes lung cancer, emphysema, and other respiratory illnesses. Smoking may also have an effect on individuals who are exposed to second-hand smoke. For example, inhaling second-hand smoke may adversely affect children's growth and cause childhood illness, especially respiratory diseases.

Since the mid-1990s, a number of tobacco control measures have been put into effect in Armenia. Advertising of tobacco products is banned in the mass media. However, there is no control over the broadcast of foreign television programs in Armenia. Legislation requires health warnings as well as tar and nicotine content labeling on cigarette cartons. In addition, the sale of cigarettes to minors under age 18 years has been prohibited. Smoking is restricted in public areas, government and health facilities, restaurants and bars, indoor workplaces and offices, and on public transportation.

To measure the extent of smoking among Armenian adults, women and men who were interviewed in the 2015-16 ADHS were asked if they currently smoke cigarettes or use other forms of tobacco. Tables 10.2.1 and 10.2.2 show the distribution of women and men who smoke cigarettes or use other tobacco.

Overall, a very small proportion of women interviewed in the 2015-16 ADHS reported that they currently smoke cigarettes (1 percent), and virtually no women say they use other forms of tobacco (Table 10.2.1). It is possible that some female respondents were reluctant to report that they smoke tobacco traditional Armenian because attitudes discourage women smoking. Urban dwellers, women residing in Yerevan, women age 35-49, women with some higher education, and women in the highest two wealth quintiles are the most likely to smoke (2 to 3 percent). Among the women who smoke cigarettes, fewer than half report that they smoke every day and, among the small number of daily smokers, around half say they smoke an average of 6 or more cigarettes each day (data not shown).

Smoking is considerably more common among men (Table 10.2.2). Sixty-one percent of men report that they use tobacco, with virtually all saying that they smoke cigarettes. This proportion is slightly lower that the proportion who reported tobacco use in 2010 ADHS (64 percent). Almost all men who use tobacco are regular smokers; 59 percent of all men say they are daily smokers while 2 percent report they smoke only occasionally. More than two-thirds of men who are daily smokers reported they smoke an average of 15-24 cigarettes per day, and 23 percent smoke more than 25 cigarettes per day (Table 10.3).

#### Table 10.2.1 Use of tobacco: Women

Percentage of women age 15-49 who smoke various tobacco products, according to background characteristics, Armenia 2015-16

	Perce	entage who sn	noke:1	
Background characteristic	Cigarettes <sup>2</sup>	Other type of tobacco <sup>3</sup>	Any type of tobacco	Number of women
Age				
15-19	0.1	0.0	0.1	725
20-24	0.2	0.0	0.2	928
25-29	0.8	0.2	0.8	1,099
30-34	1.1	0.2	1.1	1,007
35-39	2.0 2.0	0.0 0.0	2.0 2.0	867 784
40-44 45-49	2.0	0.0	2.0	704
	5.1	0.5	3.1	700
Residence				
Urban	2.0	0.2	2.0	3,657
Rural	0.1	0.0	0.1	2,459
Region				
Yerevan	3.0	0.4	3.0	2,001
Aragatsotn	0.3	0.1	0.3	315
Ararat	0.3	0.0	0.3	552
Armavir	0.2	0.0	0.2	586
Gegharkunik Lori	0.5 0.0	0.0 0.0	0.5 0.0	478 355
Kotayk	0.0	0.0	0.8	678
Shirak	0.0	0.0	0.0	510
Syunik	1.1	0.3	1.1	238
Vayots Dzor	0.2	0.0	0.2	119
Tavush	0.4	0.0	0.4	283
Education				
Basic	1.6	0.6	1.6	396
Secondary	0.8	0.1	0.8	2,444
Secondary special	1.3	0.1	1.3	1,360
Higher	1.8	0.1	1.8	1,910
Wealth quintile				
Lowest	0.0	0.0	0.0	1,081
Second	0.2	0.1	0.2	1,242
Middle	1.3	0.2	1.3	1,142
Fourth	2.1	0.3	2.1	1,287
Highest	2.3	0.1	2.3	1,365
Total	1.2	0.1	1.2	6,116

Note: Total includes 5 (weighted) women with no education.

Includes daily and occasional (less than daily) use.

<sup>2</sup> Includes manufactured cigarettes.

<sup>3</sup> Includes cigars, cheroots and cigarillos, and water pipes.

Table 10.2.2 shows that the proportion of men who use tobacco increases rapidly with age, from 16 percent of men age 15-19 to around half of men age 20-24, nearly two-thirds of men age 25-29, and more than 70 percent among men age 35-49. Men are only slightly more likely to use tobacco in urban than in rural areas (63 percent and 59 percent, respectively). Men in Syunik are least likely to use tobacco (38 percent), while those in Yerevan and Aragatsotn are the most likely to use tobacco (71 percent and 78 percent, respectively).

#### Table 10.2.2 Use of tobacco: Men

Percentage of men age 15-49 who smoke various tobacco products, and the percent distribution of men by smoking frequency, according to background characteristics, Armenia 2015-16

	Perce	entage who sn	noke:1	S	moking frequen	су		
Background characteristic	Cigarettes <sup>2</sup>	Other type of tobacco <sup>3</sup>	Any type of tobacco	Daily smoker	Occasional smoker <sup>4</sup>	Non- smoker	Total	Number of men
Age								
15-19	15.5	0.0	15.5	13.3	2.2	84.5	100.0	345
20-24	51.3	0.3	51.3	48.4	2.9	48.7	100.0	467
25-29	67.1	0.0	67.1	64.8	2.3	32.9	100.0	464
30-34	73.8	0.3	73.8	72.1	1.7	26.2	100.0	427
35-39	73.1	0.0	73.1	71.2	1.9	26.9	100.0	376
40-44	73.9	0.0	73.9	72.9	1.4	25.7	100.0	346
45-49	73.2	0.0	73.2	71.7	1.5	26.8	100.0	330
Residence								
Urban	63.2	0.0	63.2	61.8	1.5	36.7	100.0	1,558
Rural	59.1	0.2	59.1	56.4	2.7	40.9	100.0	1,197
Region								
Yerevan	70.5	0.0	70.5	70.0	0.5	29.5	100.0	833
Aragatsotn	77.9	0.0	77.9	71.6	6.3	22.1	100.0	159
Ararat	58.3	0.0	58.3	51.5	6.8	41.7	100.0	290
Armavir	59.4	0.5	59.4	56.5	2.8	40.6	100.0	268
Gegharkunik	53.6	0.5	53.6	52.9	0.7	46.4	100.0	235
Lori	51.8	0.0	51.8	51.2	1.2	47.5	100.0	184
Kotayk	61.2	0.0	61.2	59.7	1.6	38.8	100.0	299
Shirak	55.2	0.0	55.2	54.7	0.5	44.8	100.0	201
Syunik	37.8	0.0	37.8	35.8	2.1	62.2	100.0	104
Vayots Dzor	58.4	0.0	58.4	56.6	1.8	41.6	100.0	56
Tavush	51.8	0.0	51.8	50.6	1.3	48.2	100.0	126
Education								
Basic	53.2	0.0	53.2	52.4	0.8	46.8	100.0	360
Secondary	64.2	0.2	64.2	61.9	2.4	35.8	100.0	1,250
Secondary special	62.3	0.0	62.3	60.3	2.3	37.4	100.0	403
Higher	60.0	0.0	60.0	58.0	1.9	40.0	100.0	736
Wealth quintile								
Lowest	63.3	0.5	63.3	60.5	2.7	36.7	100.0	523
Second	58.3	0.0	58.3	54.5	3.7	41.7	100.0	583
Middle	59.6	0.0	59.6	58.8	0.8	40.4	100.0	521
Fourth	59.3	0.0	59.3	58.0	1.5	40.5	100.0	566
Highest	66.7	0.0	66.7	65.4	1.3	33.3	100.0	562
Total	61.4	0.1	61.4	59.4	2.0	38.5	100.0	2,755

Note: Total includes 5 (weighted) men with no education.

<sup>1</sup> Includes daily and occasional (less than daily) use.

<sup>2</sup> Includes manufactured cigarettes.

<sup>4</sup> Occasional refers to less often than daily use.

#### Table 10.3 Average number of cigarettes smoked daily: Men

Among men age 15-49 who smoke cigarettes daily, percent distribution by average number of cigarettes smoked per day, according to background characteristics, Armenia 2015-16

			ribution of mer r of cigarettes					Number o men who smoke
Background characteristic	<5	5-9	10-14	15-24	≥25	Don't know/ missing	Total	cigarettes daily
Age								
15-19	(0.0)	(3.8)	(33.8)	(51.9)	(10.4)	(0.0)	(100.0)	46
20-24	1.2	1.5	9.2	77.6	10.5	0.0	100.0	226
25-29	0.9	1.4	5.0	72.7	20.0	0.0	100.0	301
30-34	0.2	1.0	4.5	67.7	26.6	0.0	100.0	308
35-39	1.3	0.9	4.7	67.0	26.1	0.0	100.0	268
40-44	0.4	0.4	4.9	64.1	30.2	0.0	100.0	252
45-49	0.5	1.3	5.6	65.2	27.4	0.0	100.0	236
Residence			- <b>-</b>					
Urban	0.6	0.8	6.5	70.4	21.8	0.0	100.0	962
Rural	0.9	1.7	6.1	65.9	25.4	0.0	100.0	675
Region								
Yerevan	0.3	0.4	5.9	75.5	18.0	0.0	100.0	583
Aragatsotn	0.0	0.0	2.6	65.6	31.8	0.0	100.0	114
Ararat	0.0	0.8	7.0	68.9	23.4	0.0	100.0	149
Armavir	2.1	3.9	11.3	63.2	19.4	0.0	100.0	151
Gegharkunik	0.0	0.0	0.5	95.2	4.3	0.0	100.0	124
Lori	1.1	1.0	4.9	55.2	37.8	0.0	100.0	95
Kotayk	2.7	3.2	5.1	60.4	28.7	0.0	100.0	178
Shirak	1.1	0.9	6.4	54.3	37.3	0.0	100.0	110
Syunik	0.0	0.0	24.3	51.8	23.9	0.0	100.0	37
Vayots Dzor	0.0	0.0	1.4	29.8	68.8	0.0	100.0	32
Tavush	0.0	3.0	11.2	66.1	19.7	0.0	100.0	63
Education								
Basic	0.5	3.3	6.3	67.0	22.9	0.0	100.0	189
Secondary	0.7	0.9	6.8	65.8	25.9	0.0	100.0	773
Secondary special	0.4	0.9	8.0	67.0	23.7	0.0	100.0	243
Higher	1.1	0.9	4.4	75.3	18.4	0.0	100.0	427
Wealth quintile								
Lowest	1.8	2.5	6.6	62.4	26.6	0.0	100.0	317
Second	0.4	0.3	5.0	66.7	27.6	0.0	100.0	318
Middle	0.2	0.8	6.7	70.4	21.8	0.0	100.0	307
Fourth	0.2	1.0	7.5	64.7	26.5	0.0	100.0	328
Highest	1.0	1.0	5.7	77.2	15.1	0.0	100.0	367
Total	0.7	1.1	6.3	68.5	23.3	0.0	100.0	1,637

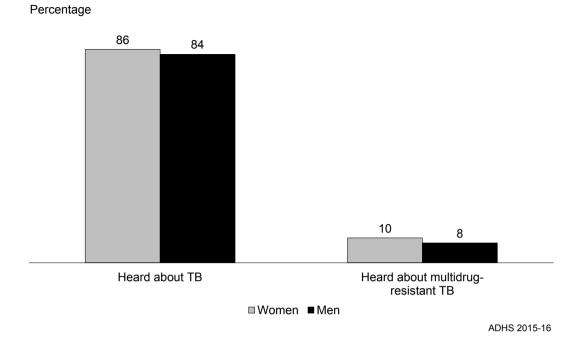
## **10.3** TUBERCULOSIS

Tuberculosis (TB) is a serious health concern in Armenia. In 2015, the incidence of tuberculosis was estimated to be 41 per 100,000, while the incidence of multi-drug-resistant tuberculosis was 8.9 per 100,000. This indicated that more than one-fifth of new TB cases are resistant to standard first-line drug treatment (WHO 2017). Information on the population's level of TB knowledge and attitudes is crucial for designing effective communication strategies that educate the public about TB and reduce the spread of the disease. To obtain this information, the 2015-16 ADHS included a series of questions to assess the overall level of awareness of tuberculosis, attitudes about the disease, and knowledge about the modes of transmission, symptoms, and the possibility that tuberculosis could be cured.

## 10.3.1 Knowledge and Attitudes about Tuberculosis

Tables 10.4.1 and 10.4.2 present the percentages of women and men age 15-49 who had heard about tuberculosis, and, among those who know about tuberculosis, the percentages who are aware that tuberculosis is spread through the air by coughing or sneezing, who believe that tuberculosis can be cured, and who would want to keep it a secret if a family member had tuberculosis. More than eight in ten women and men say they have heard of tuberculosis, showing that awareness of the disease is widespread in Armenia but not universal. Figure 10.1 shows that, while overall awareness of the disease is common among women and men, only 10 percent of women and 8 percent of men have heard of the multi-drug resistant form of TB.

## Figure 10.1 Knowledge of tuberculosis



Tables 10.4.1 and 10.4.2 show that the majority of women and men in all subgroups have heard of TB. The percentage of women who have heard about TB is lowest in the Gegharkunik region (57 percent), in the 15-19 age group (64 percent), and among those who have only basic education (65 percent). Men are least likely to have heard about TB if they are in the 15-19 age group (60 percent), or live in the Gegharkunik (40 percent) and Lori (37 percent) regions.

The majority of women and men age 15-49 who have heard about tuberculosis correctly believe that the disease is spread through the air when an infected individual coughs or sneezes (85 percent and 88 percent, respectively). Women and men with only basic education (67 percent and 75 percent, respectively), women living in the Armavir region (72 percent), and men living in the Lori, Shirak, and Vayots Dzor regions (66 percent, 68 percent, and 69 percent respectively) were among the least likely to report that coughing and sneezing can spread TB.

Almost seven in ten men but only six in ten women who know about tuberculosis think that the disease can be cured. Regional differences in the proportion believing that TB can be cured are especially marked. For example, only slightly more than one quarter of women in Gegharkunik believe a person with TB can be cured compared with eight in ten or more women in Ararat and Tavush. Around one quarter of men in Lori think TB is curable compared with 92 percent in Aragatsotn.

Only a minority of women and men age 15-49 say they would want to keep it secret if a family member had TB. This suggests that most individuals in Armenia do not believe there is stigma associated with the disease. Among those individuals who would want to keep a family member's TB status secret, women outnumber men; one in four women would hide a family member's TB status compared with 16 percent of men. Differences in the proportion who would want to keep a family member's TB a secret are especially marked by region. Women in Lori are least likely and women in Ararat are most likely to express concern about keeping a family member's TB status secret (3 percent and 49 percent, respectively). Among men, 10 percent or less express a concern about keeping a family member's TB a secret in all regions except Armavir (36 percent), Ararat (44 percent), and Gegharkunik (96 percent).

#### Table 10.4.1 Knowledge and attitudes concerning tuberculosis: Women

Percentage of women age 15-49 who have heard of tuberculosis (TB), and among women who have heard of TB, the percentages who report that TB is spread through the air when an infected person coughs or sneezes, the percentage who believe that TB can be cured, and the percentage who would want to keep secret that a family member has TB, according to background characteristics, Armenia 2015-16

			Among wor	nen who have hea	ard of TB, the perce	ntage who:
Background characteristic	Percentage of women who have heard of TB	Number of women	Report that TB is spread through the air when an infected person coughs or sneezes	Believe that TB can be cured	Would want a family member's TB kept secret	Number of women who have heard o tuberculosis
Age						
15-19	64.0	725	77.1	53.7	23.9	464
20-24	81.0	928	84.8	57.9	21.4	752
25-29	89.6	1,099	85.0	59.5	26.1	985
30-34	91.2	1,007	84.6	60.3	24.8	919
35-39	90.8	867	87.0	64.9	20.8	787
40-44	92.0	784	86.9	63.2	27.4	721
45-49	92.2	706	87.5	61.5	26.1	651
Residence						
Urban	88.7	3,657	86.6	63.9	23.1	3,245
Rural	82.7	2,459	82.7	55.0	26.5	2,033
Region						
Yerevan	89.2	2,001	86.5	65.8	26.3	1,785
Aragatsotn	82.4	315	94.3	37.4	30.9	260
Ararat	89.7	552	91.8	83.3	48.9	496
Armavir	80.1	586	72.1	43.9	5.8	469
Gegharkunik	56.5	478	81.7	27.2	25.4	270
Lori	79.4	355	80.8	45.4	2.5	282
Kotayk	94.7	678	81.6	52.2	15.7	643
Shirak	91.7	510	87.3	71.2	20.9	468
Syunik	96.8	238	95.8	69.0	30.7	230
Vayots Dzor	93.4	119	68.6	54.2	7.1	111
Tavush	93.3	283	87.1	80.2	43.6	264
Education						
Basic	65.1	396	67.0	45.4	30.2	258
Secondary	82.4	2,444	80.7	50.9	27.1	2,015
Secondary special	90.7	1,360	86.8	64.3	23.9	1,233
Higher	92.6	1,910	91.6	71.0	20.7	1,769
Wealth quintile						
Lowest	78.7	1,081	77.2	49.5	22.6	851
Second	86.3	1,242	85.6	58.6	27.3	1,071
Middle	85.3	1,142	84.2	56.6	24.2	974
Fourth	88.9	1,287	87.3	64.5	23.8	1,144
Highest	90.8	1,365	88.8	69.0	23.7	1,239
Total	86.3	6,116	85.1	60.5	24.4	5,278

#### Table 10.4.2 Knowledge and attitudes concerning tuberculosis: Men

Percentage of men age 15-49 who have heard of tuberculosis (TB), and among men who have heard of TB, the percentages who report that TB is spread through the air when an infected person coughs or sneezes, the percentage who believe that TB can be cured, and the percentage who would want to keep secret that a family member has TB, according to background characteristics, Armenia 2015-16

			Among m	en who have hear	d of TB, the percer	itage who:
Background characteristic	Percentage of men who have heard of TB	Number of men	Report that TB is spread through the air when an infected person coughs or sneezes	Believe that TB can be cured	Would want a family member's TB kept secret	Number of men who have heard of tuberculosis
Age 15-19 20-24 25-29 30-34 35-39 40-44 45-49	60.2 82.1 85.3 87.9 90.5 88.4 93.0	345 467 464 427 376 346 330	81.5 84.8 88.7 90.6 88.9 91.3 89.6	56.3 63.8 71.3 74.9 69.4 69.4 73.1	9.0 20.5 18.4 14.0 14.5 11.7 16.7	208 384 396 375 340 306 307
<b>Residence</b> Urban Rural	87.4 79.6	1,558 1,197	90.0 85.7	64.5 75.4	8.5 25.5	1,362 953
Region Yerevan Aragatsotn Ararat Armavir Gegharkunik Lori Kotayk Shirak Syunik Vayots Dzor Tavush	93.1 96.5 91.4 93.2 40.2 37.2 90.3 93.7 86.7 76.5 93.4	833 159 290 268 235 184 299 201 104 56 126	93.9 96.1 89.4 75.0 97.0 65.6 94.1 67.9 99.3 68.6 89.2	59.0 91.8 67.9 77.5 51.3 27.4 86.2 78.8 80.8 86.2 57.0	2.1 0.7 44.3 36.1 96.1 2.5 3.1 9.6 4.7 9.3 6.2	775 154 265 249 94 69 270 189 90 43 117
Education Basic Secondary Secondary special Higher	79.8 76.1 91.2 95.9	360 1,250 403 736	74.5 87.3 89.2 94.7	65.3 64.5 65.9 78.3	26.0 20.5 10.3 7.1	287 951 368 706
Wealth quintile Lowest Second Middle Fourth Highest	77.0 82.0 79.9 88.4 92.0	523 583 521 566 562	82.1 88.2 86.4 89.1 93.6	72.8 74.4 66.9 63.1 68.4	29.4 21.0 17.5 10.5 2.7	403 478 416 501 517
Total	84.0	2,755	88.2	69.0	15.5	2,315

Note: Total includes 5 (weighted) men with no education.

## 10.3.2 Knowledge of Tuberculosis Symptoms

Respondents in the 2015-16 ADHS were asked to identify symptoms that would lead them to think that a person had TB. All symptoms or signs mentioned by respondents mentioned were recorded.

The results in Tables 10.5.1 and 10.5.2 indicate that more than eight in ten women and men in Armenia who know about TB identify coughing as a symptom of the disease. Most of these women and men cite coughing alone without any other signs of illness. However, one-third of women and 39 percent of men mention coughing with sputum and 12 percent of women and 23 percent of men cite a cough that lasts several weeks as symptoms of TB. Slightly more than one-third of women and 10 percent of women consider weight loss as symptoms of TB. Other symptoms such as loss of appetite, pain in the chest, or tiredness/fatigue were identified by 10 percent or less of women and men.

Overall, 10 percent of women and 8 percent of men who have heard about tuberculosis are not able to name any TB symptom. The percentages of women and men who are not able to identify any TB symptoms generally decline with age and with increasing education and wealth. With regional differences, the percentages who are unable to identify any TB symptoms are highest among women in Armavir (25 percent) and Vayots Dzor (22 percent) and among men in Shirak (41 percent) and Vayots Dzor (38 percent).

#### Table 10.5.1 Knowledge of symptoms of tuberculosis: Women

Among women age 15-49 who have heard of tuberculosis (TB), the percentage identifying specific symptoms as signs that would lead them to think a person has tuberculosis, according to background characteristics, Armenia 2015-16

0	Non- specific coughing	Cough- ing with sputum	Cough- ing for several weeks	Any coughing	Fever	Blood in sputum	Loss of appetite	Night sweating	Pain in chest	Tired- ness/ fatigue	Weight loss	Lethargy	Other	Don't know	Number of women who have heard of TB
Age															
15-19	63.6	23.9	8.8	78.8	21.0	24.0	10.7	2.8	5.0	7.1	7.7	2.0	1.6	16.1	464
20-24	62.9	32.9	10.3	82.9	25.9	35.2	7.3	4.3	5.8	7.2	10.5	1.4	0.3	11.7	752
25-29	61.9	34.5	11.7	83.3	26.6	35.0	9.5	5.8	7.9	7.7	12.9	2.2	0.7	10.2	985
30-34	64.6	35.1	13.3	85.5	28.2	36.0	10.5	5.5	8.1	7.1	10.6	1.6	1.0	10.4	919
35-39	65.8	38.1	13.3	87.5	30.6	38.0	9.2	5.8	6.1	8.0	10.4	2.0	0.6	8.1	787
40-44	62.6	31.9	11.7	85.2	28.3	38.9	11.0	6.0	5.2	8.2	7.0	3.5	1.2	8.0	721
45-49	68.5	32.0	12.2	86.4	30.6	38.0	11.0	3.4	6.2	8.1	11.6	4.2	0.1	6.6	651
Residence															
Urban	68.1	33.3	10.7	85.4	26.8	37.8	7.9	4.5	6.2	8.2	11.2	2.4	0.9	8.6	3,245
Rural	57.9	33.4	13.7	83.0	28.9	32.1	12.8	5.9	7.2	6.7	9.0	2.3	0.5	12.0	2,033
Region															
Yerevan	72.8	32.2	10.0	84.9	23.0	40.0	6.9	3.7	6.2	9.4	12.8	1.7	0.9	7.9	1,785
Aragatsotn	45.2	45.8	19.8	88.5	20.0	54.2	28.8	12.0	14.3	6.3	13.9	2.6	0.0	0.1	260
Ararat	60.5	48.6	18.2	93.7	38.3	27.3	13.8	1.8	1.6	2.3	11.1	0.0	0.0	1.7	496
Armavir	58.0	12.1	6.7	71.9	23.5	11.7	7.8	5.6	0.3	7.0	7.0	1.3	0.9	24.5	469
Gegharkunik	38.9	37.3	22.2	81.2	32.4	54.1	10.5	14.3	7.0	8.2	12.8	1.9	0.5	8.9	270
Lori	61.3	23.2	16.8	82.3	33.0	27.4	6.8	2.5	2.6	4.3	2.9	0.7	0.5	13.5	282
Kotayk	56.7	38.5	7.0	81.7	34.0	24.5	4.2	3.6	9.0	6.4	8.1	3.6	1.5	14.7	643
Shirak	69.3	36.1	5.5	85.0	17.8	54.3	11.2	1.3	7.2	6.5	5.6	3.7	0.5	11.4	468
Syunik	71.4	42.7	21.6	98.3	34.2	40.0	16.1	5.8	10.3	11.4	12.3	5.3	0.0	0.4	230
Vayots Dzor	63.4	25.7	7.1	76.2	20.4	10.4	7.1	6.1	8.1	5.7	6.9	0.9	0.0	21.7	111
Tavush	74.1	22.1	14.2	86.2	42.0	35.9	16.4	14.1	14.5	13.8	14.6	8.1	1.7	8.1	264
Education															
Basic	55.3	27.6	9.7	74.4	21.4	23.6	9.8	4.2	4.2	2.8	7.0	2.6	0.4	21.1	258
Secondary	60.0	29.7	12.5	81.0	24.7	31.1	9.3	4.5	5.5	5.8	7.7	2.3	0.7	13.7	2,015
Secondary special	65.0	33.2	11.7	86.2	28.1	36.5	11.1	6.1	8.0	8.7	10.5	2.3	0.7	7.9	1,233
Higher	69.6	38.4	11.6	88.9	31.5	41.8	9.4	5.0	7.1	9.7	13.8	2.5	0.9	5.3	1,769
Wealth quintile															
Lowest	57.7	29.3	13.1	79.4	26.8	26.6	10.4	5.2	3.7	5.8	8.1	1.6	0.6	15.6	851
Second	58.4	36.3	14.3	85.1	29.9	35.0	13.0	5.2	7.2	7.1	9.3	2.4	0.4	10.0	1,071
Middle	62.5	30.6	13.1	83.3	27.8	35.8	9.5	5.2	7.9	7.7	11.0	2.8	0.8	10.0	974
Fourth	67.1	33.3	9.8	86.8	26.6	37.1	9.3	4.5	7.3	6.9	10.0	2.6	1.3	7.4	1,144
Highest	72.2	35.7	9.7	86.3	26.9	40.7	7.4	5.1	6.2	10.1	12.7	2.3	0.6	8.2	1,239
Total	64.2	33.3	11.8	84.5	27.6	35.6	9.8	5.0	6.5	7.6	10.4	2.4	0.8	9.9	5,278

Health Insurance, use of Tobacco, Knowledge and Attitudes about Tuberculosis • 129

# Table 10.5.2 Knowledge of symptoms of tuberculosis: Men

Among men age 15-49 who have heard of tuberculosis (TB), the percentage identifying specific symptoms as signs that would lead them to think a person has tuberculosis, according to background characteristics, Armenia 2015-16

Background characteristic	Non- specific coughing	Cough- ing with sputum	Cough- ing for several weeks	Any Cough- ing	Fever	Blood in sputum	Loss of appetite	Night sweating	Pain in chest	Tired- ness/ fatigue	Weight loss	Lethargy	Other	Don't know	Number of men who have heard of TB
Age															
15-19	63.7	26.8	15.9	79.0	12.7	23.5	3.5	1.9	1.8	7.6	9.2	2.7	0.0	17.9	208
20-24	55.3	41.4	18.6	85.3	20.6	32.2	6.7	4.3	6.5	9.9	9.1	1.8	0.3	10.4	384
25-29	60.4	40.0	24.1	87.1	14.4	35.2	8.1	7.7	8.2	7.9	11.2	0.8	0.5	7.7	396
30-34	57.8	40.0	23.4	86.7	15.5	33.6	5.6	6.1	4.2	8.4	11.4	2.2	0.2	8.6	375
35-39	62.5	37.3	23.8	89.1	16.3	38.6	6.7	4.8	9.1	10.3	11.3	1.6	0.4	4.4	340
40-44	61.3	38.2	28.9	91.0	15.8	38.8	9.8	9.3	7.3	11.8	13.1	3.3	0.7	5.5	306
45-49	54.2	41.9	25.5	89.4	19.1	42.0	9.0	7.2	9.4	9.5	13.7	2.0	0.0	5.3	307
Residence															
Urban	65.3	38.9	17.5	89.1	15.3	31.1	6.7	5.6	5.5	7.5	9.5	2.1	0.5	5.8	1,362
Rural	50.1	38.4	31.1	84.3	18.3	41.2	7.9	6.8	8.9	12.1	13.9	1.8	0.1	11.4	953
Region															
Yerevan	75.8	46.1	10.5	95.8	14.6	22.3	4.5	4.2	2.9	4.5	3.9	1.8	0.5	1.6	775
Aragatsotn	61.8	85.4	79.6	97.0	43.8	30.5	1.9	3.7	0.2	1.5	0.2	1.0	0.0	2.4	154
Ararat	23.4	52.4	30.0	88.7	6.4	21.3	8.4	8.1	6.9	0.2	2.0	3.5	0.0	9.9	265
Armavir	73.9	24.7	0.0	91.8	2.2	19.7	2.3	0.0	0.0	1.8	4.2	0.3	0.3	4.8	249
Gegharkunik	2.6	56.4	55.8	97.5	26.9	93.1	9.0	44.9	12.3	18.9	8.3	6.0	0.0	0.7	94
Lori	55.6	20.9	11.9	82.2	18.2	28.3	1.5	0.0	0.0	3.7	10.5	0.0	0.0	7.0	69
Kotavk	80.3	13.6	38.3	87.9	34.7	72.1	25.3	13.7	25.9	53.5	67.9	2.2	1.1	6.9	270
Shirak	44.2	15.2	6.6	49.3	5.9	33.7	0.6	0.0	12.6	3.0	0.5	1.6	0.0	41.1	189
Syunik	70.9	47.9	17.5	87.2	30.7	37.3	5.5	0.7	3.5	3.1	6.0	4.3	0.0	0.0	90
Vayots Dzor	51.9	15.3	6.5	62.3	13.7	16.5	1.6	1.5	0.6	1.1	21.7	0.0	0.0	37.7	43
Tavush	10.1	20.1	48.1	65.6	3.5	72.4	13.6	0.3	7.7	1.0	1.3	1.3	0.0	13.7	117
Education															
Basic	55.3	26.4	17.4	81.9	12.8	24.6	4.7	3.9	2.2	5.6	10.8	0.7	0.3	15.2	287
Secondary	56.8	35.9	27.1	86.7	17.4	35.8	7.9	5.4	7.4	10.0	11.0	1.5	0.1	8.6	951
Secondary special	56.7	32.2	25.6	86.1	16.1	37.4	7.8	7.8	7.2	10.9	11.7	2.2	0.3	8.4	368
Higher	64.9	50.9	18.8	90.4	17.1	37.9	7.0	6.9	7.8	9.4	11.7	2.9	0.7	4.3	706
Wealth guintile															
Lowest	51.8	34.6	23.9	84.8	13.2	32.9	5.6	4.5	5.1	6.8	9.1	0.7	0.0	12.4	403
Second	52.2	39.6	32.7	85.1	22.0	40.4	7.9	6.3	7.7	11.2	13.6	2.7	0.2	11.0	478
Middle	48.9	40.1	25.5	83.7	16.4	43.5	6.5	6.6	8.3	11.3	12.9	1.5	0.7	8.5	416
Fourth	65.0	35.4	20.7	90.0	12.0	33.3	9.7	7.0	5.9	10.7	11.9	2.5	0.6	4.4	501
Highest	73.5	43.0	14.0	90.7	18.6	27.6	6.0	5.8	7.2	6.8	9.1	2.2	0.2	5.3	517
Total	59.1	38.7	23.1	87.1	16.5	35.3	7.2	6.1	6.9	9.4	11.3	2.0	0.3	8.1	2,315

Note: Total includes 3 (weighted) men with no education.

## 10.3.3 Knowledge of Organs Affected by Tuberculosis

To further assess a respondent's knowledge of the disease, the 2015-16 ADHS included a question about the organs of the body that may be affected by TB. Tables 10.6.1 and 10.6.2 show that only 23 percent of women and 18 percent of men believe correctly that TB can affect any organ in the body. The majority of both women and men age 15-49 think that TB affects the lungs (66 percent of women and 77 percent of men). Ten percent of women and 5 percent of men are not able to identify any organs that TB affects. Among both women and men, the proportions who correctly believe that any organ in the body may be affected by TB are lowest in the 15-19 age group and generally increase with increasing education and household wealth.

#### Table 10.6.1 Knowledge about organs that can be affected by tuberculosis: Women

Among women age 15-49 who have heard of TB, the percentage who report that TB can affect the lungs, and percentage who report that TB can affect any organs and the percentage who don't know which organs can be affected by TB, according to background characteristics, Armenia 2015-16

	Among wor	nen who have hea	rd of TB, the perc	entage who:
Background characteristic	Report that TB can affect lungs	Believe that TB can affect any organs	Don't know which organs can be affected by TB	Number of women who have heard of TB
Age				
15-19	67.7	13.6	18.0	464
20-24	67.5	20.6	11.9	752
25-29	65.7	23.9	10.0	985
30-34	63.2	25.5	10.8	919
35-39	64.4	26.9	8.1	787
40-44	65.7	24.6	8.5	721
45-49	68.7	23.5	7.8	651
Residence				
Urban	64.3	25.3	9.6	3,245
Rural	68.3	20.1	11.5	2,033
Region				
Yerevan	64.5	23.5	10.7	1,785
Aragatsotn	89.9	7.1	3.0	260
Ararat	63.4	31.0	5.6	496
Armavir	62.7	15.2	22.1	469
Gegharkunik	62.5	30.9	6.6	270
Lori	72.7	13.4	13.6	282
Kotayk	61.7	25.7	12.4	643
Shirak	66.6	24.1	9.3	468
Syunik	61.2	38.7	0.2	230
Vayots Dzor	67.6	13.8	18.6	111
Tavush	70.0	24.2	5.8	264
Education				
Basic	65.4	9.2	25.4	258
Secondary	70.8	15.8	13.1	2,015
Secondary special	66.0	25.7	8.0	1,233
Higher	60.3	32.2	6.6	1,769
Wealth quintile				
Lowest	69.7	14.5	15.6	851
Second	68.0	22.5	9.3	1,071
Middle	67.6	21.4	10.7	974
Fourth	63.9	27.6	8.4	1,144
Highest	61.8	27.6	9.1	1,239
Total	65.9	23.3	10.3	5,278

Note: Total includes 2 (weighted) women with no education

#### Table 10.6.2 Knowledge about organs that can be affected by tuberculosis: Men

Among men age 15-49 who have heard of TB, the percentage who report that TB can affect the lungs, and percentage who report that TB can affect any organs and the percentage who don't know which organs can be affected by TB, according to background characteristics, Armenia 2015-16

	Among m	en who have hear	d of TB, the percer	ntage who:
Background characteristic	Report that TB can affect lungs	Believe that TB can affect any organs	Don't know which organs can be affected by TB	Number of men who have heard of TB
Age				
15-19	79.2	11.4	9.3	208
20-24	77.8	16.0	5.6	384
25-29	78.8	17.2	3.5	396
30-34	76.6	18.3	5.0	375
35-39	77.1	19.6	2.9	340
40-44	76.3	18.8	4.1	306
45-49	73.7	23.6	2.8	307
Residence				
Urban	77.0	18.4	4.1	1,362
Rural	77.1	17.6	5.1	953
Region				
Yerevan	80.7	16.7	1.8	775
Aragatsotn	70.9	26.1	3.0	154
Ararat	83.8	13.3	2.9	265
Armavir	79.2	15.0	5.3	249
Gegharkunik	8.7	91.3	0.0	94
Lori	78.9	10.8	10.3	69
Kotayk	85.1	10.8	4.0	270
Shirak	69.1	14.1	16.7	189
Syunik	81.2	13.7	5.2	90
Vayots Dzor	72.4	2.4	25.2	43
Tavush	87.8	11.8	0.4	117
Education				
Basic	81.5	10.4	8.1	287
Secondary	79.2	16.0	4.7	951
Secondary special	79.3	14.7	4.9	368
Higher	71.1	25.9	2.6	706
Wealth quintile				
Lowest	79.1	14.8	5.8	403
Second	75.6	18.2	6.1	478
Middle	76.8	19.1	3.6	416
Fourth	76.8	20.3	2.9	501
Highest	77.2	17.5	4.4	517
Total	77.1	18.1	4.5	2,315

# 10.3.4 Misconceptions about How Tuberculosis is Spread

The ADHS respondents who had heard about tuberculosis were asked to identify ways in which the disease is spread from one person to another. All modes of transmission that respondents mentioned in response to the question were recorded. The results presented in Tables 10.7.1 and 10.7.2 highlight the most common misconceptions about how the disease is spread. Women and men were most likely to think incorrectly that TB can be spread through sharing utensils; 21 percent of women and 12 percent of men believe that TB is spread in this manner. Ten percent of women and 8 percent share a misconception that a person can contract the disease through touching a person with TB. Six percent or less of women and men share other misconceptions about how TB is spread including through food, sexual contact, or mosquito bites.

#### Table 10.7.1 Misconceptions about tuberculosis transmission: Women

Among women age 15-49 who have heard of tuberculosis (TB), the percentage who report various misconceptions about ways tuberculosis is spread, according to background characteristics, Armenia 2015-16

Background characteristic	Through sharing utensils	Through touching a person with TB	Through food	Through sexual contact	Through mosquito bites	Other	Don't know	Number of women who have heard of TB
Age								
15-19	13.3	7.6	3.8	5.0	1.8	0.0	19.5	464
20-24	16.7	8.9	4.2	2.4	1.4	0.0	12.3	752
25-29	20.5	9.4	5.4	2.4	1.4	0.0	11.3	985
30-34	21.1	10.4	4.1	4.5	0.9	0.0	11.7	919
35-39	20.1	10.4	5.8	4.4	1.2	0.0	9.6	787
40-44	23.1	10.6	7.7	3.9	0.9	0.0	10.3	721
45-49	26.7	13.1	6.0	4.3	2.0	0.1	7.9	651
	20.7	10.1	0.0	4.5	2.0	0.1	1.5	001
Residence								
Urban	19.8	10.0	5.5	2.9	1.2	0.0	10.2	3,245
Rural	21.5	10.2	5.1	5.1	1.5	0.0	13.4	2,033
Region								
Yerevan	14.8	8.4	5.2	0.9	0.3	0.0	10.0	1,785
Aragatsotn	8.5	4.0	7.9	1.0	0.0	0.0	3.1	260
Ararat	12.0	2.3	3.9	21.3	0.0	0.0	6.7	496
Armavir	26.5	15.4	0.8	0.4	0.2	0.0	23.3	469
Gegharkunik	13.2	23.3	1.3	4.6	0.8	0.0	12.0	270
Lori	20.4	10.3	4.2	3.1	0.4	0.0	15.1	282
Kotavk	36.6	7.8	6.9	0.6	7.4	0.1	15.4	643
Shirak	18.9	13.0	6.4	0.8	0.0	0.0	10.0	468
Syunik	48.3	9.9	7.1	14.3	5.2	0.0	2.6	230
Vayots Dzor	17.0	2.5	18.0	0.0	0.0	0.5	23.4	111
Tavush	23.9	23.1	6.6	3.5	0.3	0.1	7.6	264
Education								
Basic	12.9	5.7	3.4	3.2	1.2	0.0	28.2	258
Secondary	18.4	9.7	6.4	5.5	1.3	0.0	14.8	2,015
Secondary special	23.3	11.6	4.8	3.5	1.3	0.0	9.9	1,233
Higher	22.1	10.2	4.8	2.0	1.3	0.1	6.1	1,769
Wealth guintile								.,
Lowest	16.8	7.5	5.0	2.0	0.5	0.0	19.0	851
Second	22.8	7.5 11.1	5.0 5.5	2.0 8.1	0.5 2.3	0.0	19.0	1,071
Middle	22.8	11.1	5.5 4.8	0.1 3.7	2.3	0.0	12.0	974
Fourth	20.8	8.9	4.0 5.9	2.6	1.3 1.5	0.0	9.0	974 1,144
Highest	22.3 19.1	8.9 11.2	5.9 5.3	2.6	1.5 0.9	0.1	9.0 9.0	1,144
riigilest								
Total	20.5	10.1	5.3	3.7	1.3	0.0	11.4	5,278

Note: Total includes 2 (weighted) women with no education.

# Table 10.7.2 Misconceptions about tuberculosis transmission: Men

Among men age 15-49 who have heard of tuberculosis (TB), the percentage who report various misconceptions about ways tuberculosis is spread, according to background characteristics, Armenia 2015-16

Background characteristic	Through sharing utensils	Through touching a person with TB	Through food	Through sexual contact	Through mosquito bites	Other	Don't know	Number o men who have heard of TB
Age								
15-19	7.2	1.6	2.4	1.1	0.2	0.0	15.9	208
20-24	10.2	8.2	5.0	4.9	0.0	0.0	10.6	384
25-29	11.5	11.4	6.4	6.0	0.6	0.5	7.9	396
30-34	11.1	7.1	7.6	3.6	0.3	0.0	9.0	375
35-39	16.6	7.4	7.5	4.9	0.0	0.0	7.3	340
40-44	15.9	7.4		4.9 5.0	0.0	0.0	7.3	340
			6.9 7.3					
45-49	13.7	9.9	7.3	5.5	0.0	0.0	6.1	307
Residence								
Urban	9.7	5.2	5.6	3.6	0.0	0.1	8.3	1,362
Rural	16.4	12.0	7.4	6.1	0.5	0.1	9.5	953
Region								
Yerevan	6.2	1.6	3.7	0.3	0.0	0.0	5.5	775
Aragatsotn	1.7	1.3	7.2	14.6	0.2	0.0	3.2	154
Ararat	14.6	5.7	0.9	0.2	0.0	0.0	6.5	265
Armavir	18.0	5.7	3.2	0.0	0.0	0.0	8.3	249
Gegharkunik	18.5	9.0	1.7	15.4	0.0	0.0	0.0	94
Lori	5.0	0.0	5.7	3.0	0.0	0.0	31.4	69
Kotayk	35.6	43.7	23.6	15.4	0.0	0.8	5.4	270
Shirak	4.3	7.0	10.7	8.8	2.5	0.0	29.7	189
Syunik	22.6	0.0	1.4	0.0 7.1	0.0	0.0	0.7	90
	12.7	3.0	2.0	0.9	0.0	0.0	31.4	90 43
Vayots Dzor								
Tavush	2.5	0.6	4.9	0.0	0.0	0.0	10.8	117
Education								
Basic	11.8	9.0	3.5	1.6	0.1	0.0	17.8	287
Secondary	13.5	8.1	6.8	5.1	0.2	0.1	9.7	951
Secondary special	14.5	9.8	9.5	5.8	0.3	0.3	9.1	368
Higher	10.2	6.6	5.4	4.6	0.2	0.0	3.7	706
Wealth quintile								
Lowest	14.5	9.6	4.8	5.0	0.3	0.3	12.4	403
Second	15.4	11.2	8.1	5.1	0.2	0.0	7.7	478
Middle	12.8	9.2	7.5	6.2	0.4	0.0	9.6	416
Fourth	11.5	6.5	6.3	5.0	0.2	0.2	9.8	501
Highest	8.8	4.2	5.1	2.3	0.0	0.0	5.6	517
Total	12.4	8.0	6.4	4.6	0.2	0.1	8.8	2,315

Total includes 3 (weighted) men with no education.

## **Key Findings**

- By mothers' estimates, 9 percent of children born alive in the 5 years before the survey were very small or smaller than average at birth. Among infants with a birth weight reported, 6 percent weighed less than 2.5 kg.
- Almost 9 in 10 children age 24-35 months (89 percent) had received all basic vaccinations at the time of the survey; 73 percent of this age group had received all vaccinations recommended by the Armenia Ministry of Health except pneumococcal (BCG, HepB at birth, MMR, three doses of DPT-HepB-Hib, a fourth dose of DPT, four doses of polio, and two doses of rotavirus).
- Only 1 percent of children under age 5 experienced symptoms of an acute respiratory infection (ARI) in the 2 weeks before the survey, while 9 percent had fever and 4 percent had diarrhea in the same time period.

This chapter presents findings about child health, including characteristics of the neonate (birth weight and size), the vaccination status of young children, and treatment practices among children suffering from three childhood illnesses: acute respiratory infection (ARI), fever, and diarrhea. Since appropriate sanitary practices can help prevent and reduce the severity of diarrheal disease, information is provided on the disposal of children's fecal matter. These results from the 2015-16 ADHS are expected to assist policymakers and program managers in formulating appropriate strategies and interventions to improve the health of children in Armenia. These indicators are based on data collected from mothers of children born in the 5 years before the survey.

# 11.1 CHILD'S WEIGHT AND SIZE AT BIRTH

Birth weight or size at birth is an important indicator of children's vulnerability to childhood illnesses and their chances of survival. Children whose birth weight is less than 2.5 kilograms, or children reported to be "very small" or "smaller than average," are considered to have a higher than average mortality risk. For births in the 5 years before the survey, the birth weight was recorded in the questionnaire if the weight was available from child health cards kept at home or from mother's recall. Because birth weight may not be known for all babies, the mother's estimate of the baby's size at birth was also obtained. Table 11.1 presents information on size at birth and weight, according to background characteristics.

Only 1 percent of babies were reported by the mother to have been very small at birth and only 7 percent were smaller than average. Babies who were very small or smaller than average at birth are more likely to be those born to women under age 20 and those born to women with only a basic education.

Birth weight was obtained for 99 percent of all births in the 5 years before the survey. Of those babies weighed, only 6 percent weighed less than 2.5 kilograms. Newborns of mothers under age 20 and those born to mothers with only basic education were more likely than other newborns to weigh less than 2.5 kilograms.

#### Table 11.1 Child's size and weight at birth

Percent distribution of live births in the 5 years before the survey by mother's estimate of baby's size at birth, percentage of live births in the 5 years before the survey that have a reported birth weight, and among live births in the 5 years before the survey with a reported birth weight, percentage less than 2.5 kg, according to background characteristics, Armenia 2015-16

	Percer	nt distributio	n of births by	size of baby at	birth	Percentage of births		Among bin reported bi	ths with a rth weight <sup>1</sup>
Background characteristic	Very small	Smaller than average	Average or larger	Don't know/ missing	Total	that have a reported birth weight <sup>1</sup>	Number of births	Percentage less than 2.5 kg	Number of births
Mother's age at birth									
<20	0.8	19.7	79.6	0.0	100.0	99.6	99	12.2	99
20-34	1.4	6.5	91.9	0.3	100.0	99.4	1,475	5.8	1,467
35-49	2.9	9.3	87.8	0.0	100.0	98.0	98	5.9	96
Birth order									
1	0.9	7.8	91.0	0.3	100.0	99.3	741	5.4	736
2-3	2.0	6.6	91.2	0.2	100.0	99.6	876	6.9	872
4-5	0.0	11.9	88.1	0.0	100.0	97.5	51	2.5	50
6+	*	*	*	*	100.0	*	4	*	4
Residence									
Urban	1.7	7.1	90.9	0.2	100.0	99.6	962	7.0	958
Rural	1.0	7.8	90.8	0.4	100.0	99.0	710	5.0	703
Region									
Yerevan	1.8	4.9	93.3	0.0	100.0	100.0	475	6.3	475
Aragatsotn	0.0	2.2	97.8	0.0	100.0	100.0	61	5.2	61
Ararat	2.0	9.1	87.0	1.9	100.0	96.5	168	6.7	162
Armavir	1.6	12.1	86.2	0.0	100.0	99.7	190	6.1	189
Gegharkunik	0.0	6.5	92.7	0.8	100.0	99.2	77	1.6	76
Lori	0.0	12.9	87.1	0.0	100.0	100.0	99	8.8	99
Kotayk	0.0	8.1	91.9	0.0	100.0	100.0	239	4.2	239
Shirak	1.2	4.0	94.7	0.0	100.0	98.9	168	7.8	166
Syunik	4.4	6.0	89.7	0.0	100.0	99.1	61	8.7	61
Vavots Dzor	6.3	7.1	85.9	0.6	100.0	99.4	37	9.2	37
Tavush	1.7	11.0	86.8	0.4	100.0	99.2	99	5.6	98
Mother's education									
Basic	1.4	13.2	85.4	0.0	100.0	100.0	95	10.0	95
Secondary	1.4	8.6	89.3	0.7	100.0	98.8	670	6.2	662
Secondary special	1.3	5.7	93.0	0.0	100.0	99.7	346	4.5	345
Higher	1.6	6.0	92.4	0.0	100.0	99.7	562	6.5	560
Wealth quintile									
Lowest	2.1	9.3	88.4	0.2	100.0	99.0	324	7.7	321
Second	0.6	8.6	90.4	0.3	100.0	99.3	338	6.9	336
Middle	0.5	4.8	94.7	0.0	100.0	99.7	305	3.4	304
Fourth	1.0	9.6	89.4	0.0	100.0	99.5	299	4.9	298
Highest	2.6	5.2	91.5	0.7	100.0	99.3	406	7.4	403
Total	1.4	7.4	90.9	0.3	100.0	99.4	1,672	6.2	1,662

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. <sup>1</sup> Based on either a written record or the mother's recall.

# 11.2 VACCINATION COVERAGE

Armenia's Ministry of Health has adopted the World Health Organization (WHO) guidelines for childhood immunizations that call for all children to receive the following: a BCG vaccination against tuberculosis; three doses of DPT to prevent diphtheria, pertussis, and tetanus; three doses of polio vaccine; and a measles vaccine, with all but the last to be given during the first year of life. In Armenia, protection against measles is given in the form of an MMR vaccination at 12 months to protect against measles, mumps, and rubella. In addition to these standard recommendations, since 1999, the Ministry of Health has recommended that children receive three doses of the hepatitis B vaccine, with the first dose given at birth. The pentavalent vaccine "DPT/Hep-B/Hib," which was introduced in September 2009, has replaced the DPT vaccine and is to be given on the same schedule as DPT. The pentavalent vaccine contains, in addition to DPT, the hepatitis B vaccine (Hep-B) and a vaccine against Haemophilus influenza type B (Hib). The 2015-16 ADHS also collected information on the coverage of three doses of pneumococcal vaccine introduced in the routine immunizations for children in Armenia in September 2014 and two doses of the rotavirus vaccine introduced in 2012.

Information on vaccination coverage was collected in the 2015-16 ADHS for all children under age 3. In Armenia, child health cards (MOH form 112) and vaccination forms (MOH form 63) are maintained in the local health care facilities. Vaccination certificates (cards kept by the child's parents or guardian) were made available in 1995. In this survey, data were collected from both sources, when available. A mother who did not have a vaccination certificate was asked to recall her child's immunizations. She was also asked for consent for survey personnel to obtain vaccination records for the child from the health facility where he/she received the vaccinations. After all the interviews in a cluster were completed, the supervisor visited the local clinic to record information from the health cards of the children in the sample.

Information on vaccinations by source of information is shown in Table 11.2. In this report, results are shown for children age 12-23 months, since most vaccines are given to children during infancy and this age group provides the most up-to-date coverage data. However, because children in Armenia receive the measles vaccine at age 12 months, results are also shown for children age 24-35 months. Overall, for more than 9 in 10 children, the immunization data reported here are based on the health facility cards or vaccination certificates (96 percent of children age 12-23 months and 92 percent of children age 24-35 months). While most of the data in Table 11.2 are based on health facility cards or vaccination certificates kept at home, the data are based on the mother's recall for children for whom a facility card or a vaccination certificate was not located.

#### Table 11.2 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, Armenia 2015-16

	(	Children age	12-23 month	S		Children age 2	24-35 month	IS
Source of information	Vaccination card <sup>1</sup>	Mother's report	Either source	Vaccinated by appropriate age <sup>2,3</sup>	Vaccination card <sup>1</sup>	Mother's report	Either source	Vaccinated by appro- priate age <sup>3,4</sup>
BCG	95.5	3.5	99.0	99.0	92.4	6.8	99.2	99.2
HepB (birth dose)⁵ Within 1 day of birth After 1 day of birth	94.4 79.1 13.1	3.5 na na	97.9 na na	97.9 na na	91.3 75.2 14.5	6.8 na na	98.2 na na	98.2 na na
DPT-HepB-Hib 1 2 3	95.0 92.1 90.1	3.5 3.5 2.6	98.5 95.6 92.7	97.7 94.2 90.4	91.1 89.9 88.3	5.4 4.8 4.3	96.4 94.6 92.6	94.5 92.8 87.4
DPT 4	na	na	na	na	77.0	0.9	77.9	74.4
Polio 1 2 3 4	94.3 93.3 90.6 na	3.5 3.5 2.6 na	97.8 96.8 93.2 na	97.8 96.2 92.0 na	92.4 91.4 89.7 79.0	6.5 6.5 5.9 1.2	98.9 97.9 95.6 80.1	96.1 95.0 91.3 75.7
Pneumococcal 1 2 3	59.1 55.5 50.3	2.6 2.2 1.2	61.6 57.7 51.5	61.2 57.3 50.5	23.7 21.1 15.6	3.1 3.1 1.9	26.8 24.2 17.5	25.5 23.0 17.5
Rotavirus 1 2 Measles, mumps and rubella (MMR)	90.0 87.7 na	2.6 2.4 na	92.6 90.2 na	92.6 89.2 na	87.7 84.0 87.4	4.7 3.3 5.4	92.4 87.3 92.8	92.4 85.6 91.2
All basic vaccinations <sup>6</sup> All age appropriate vaccinations <sup>7</sup> No vaccinations Number of children	na 84.2 0.3 325	na 2.2 0.3 13	na 86.4 0.6 338	na 84.4 na 338	85.8 71.7 0.0 310	3.2 0.9 0.6 25	88.9 72.6 0.6 335	83.6 67.1 na 335

na = Not applicable.

BCG = Bacille Calmette-Guerin. DPT = Diphtheria-pertussis-tetanus.

HepB = Hepatitis B.

Hib = Haemophilus influenza type b. DPT-HepB-Hib is sometimes referred to as Pentavalent.

Vaccination card, booklet or other home-based record or a facility based record.

<sup>2</sup> Received by age 12 months.

<sup>3</sup> 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

<sup>4</sup> Received by age 12 months for all vaccines except DPT4, Polio4, and measles, mumps and rubella (MMR), which were received by age 24 months.

<sup>5</sup> For children whose vaccination information is based on the mother's report, children reported to have received hepatitis B (birth dose) received the vaccine within 24 hours after birth. For children whose vaccination information is based on the written record of vaccination, children are considered to have received hepatitis B (birth dose) if this vaccine is recorded on their card, regardless of when the dose <sup>6</sup> Basic vaccinations are defined as: BCG, three doses of DPT-HepB-Hib, three doses of oral polio vaccine, and one dose of measles,

mumps, and rubella (MMR).

<sup>7</sup> Age-appropriate vaccinations are defined as: for children 12-23 months: BCG, HepB (birth dose), three doses of DPT-HepB-Hib, three doses of oral polio vaccine, and two doses of rotavirus vaccine (excludes pneumococcal vaccines) and for children 24-35 months, all of these plus one dose of DPT4, a fourth dose of polio, and one dose of measles, mumps and rubella (MMR).

Table 11.2 shows, based on data from either source (health card or mother's recall), that 89 percent of children age 24-35 months have received all the basic WHO-recommended vaccinations, which include BCG, three doses of DPT-HepB-Hib, three doses of polio, and at least one dose of measles, mumps, and rubella (MMR). Almost all these children (84 percent) received these basic vaccinations at the appropriate age. With the additional vaccinations recommended by the MOH (including the hepatitis B vaccine at birth, the two doses of rotavirus vaccine, and for children age 24-35 months, a fourth dose of DPT and a fourth dose of polio)<sup>1</sup>, coverage is somewhat lower, with 73 percent of children age 24-35 months receiving all and 67 percent receiving them by the appropriate age.

Table 11.3 shows rates of vaccination coverage for children age 12-23 and 24-35 months by background characteristics. Almost all children age 12-23 months (98-99 percent) had received vaccinations for BCG, hepatitis B at birth, and the first doses of DPT-HepB-Hib and polio. The proportions of children receiving the second and third doses of DPT-HepB-Hib and polio are slightly lower—93 percent of children completed the required three doses of the DPT-HepB-Hib and polio vaccines. Ninety percent of children age 12-23 months received both doses of the rotavirus vaccine and 52 percent received all three doses of the pneumococcal vaccine. The relatively low coverage for the latter vaccine is expected since the vaccine was only introduced in September 2014. Thus, among children age 12-23 months, 86 percent have received all the age-appropriate vaccinations excluding the recently introduced pneumococcal vaccine.

<sup>&</sup>lt;sup>1</sup> Since the pneumococcal vaccine regimen was only introduced in 2014, it has been ignored in calculating the summary statistics.

ch aractorieti ce	CI I AL ACIEN I SULCE
ballorphoted i	/ nackyloullu
Vaccinatione h	Vaccillations D
Table 11.2	Laure I.S.

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

							5	Children age 12-23 months	07-71 a	months								Chil	Children age 24-35 months:	24-35 mo	onths:	
		HepB	DPT	DPT-HepB-Hib	텯		Polio		Pneu	Pneumococcal	<u></u>	Rotavirus		All age appropriate	No	Number	Measles, mumps			All basic	All age appropriate	
background characteristic	BCG	dose) <sup>1</sup>	-	2	3	-	2	3	-	2	3	-	2	vaccin- ations <sup>2</sup>	vaccin- ations	or criil- dren	and rupella (MMR)	DPT4	Polio4	vaccin- ations³	vaccin- ations <sup>4</sup>	children
<b>Sex</b> Male Female	99.3 98.7	98.4 97.3	98.7 98.2	97.4 93.6	93.4 91.9	98.3 97.2	97.9 95.5	93.4 93.0	64.2 58.9	58.5 56.9	51.3 51.7	94.0 91.1	91.3 89.0	88.0 84.7	0.7 0.6	174 164	94.2 91.3	74.2 81.8	76.5 84.0	87.9 90.0	68.3 77.2	173 162
Birth order 1 2-3 6+ 6+	99.3 98.6 * *	97.6 97.9 *	98.6 98.5 * * *	95.7 95.3 *	92.3 93.3 * *	97.2 98.3 *	97.2 96.4 *	92.6 93.3 *	64.6 61.8 *	61.4 57.1 *	56.4 49.5 5.	91.6 93.7 *	89.7 90.6 *	85.0 87.3 *	0.3 0.9 1.0	148 173 2	91.1 94.0 *	74.7 80.1 *	76.9 81.7 *	87.5 89.7 *	71.4 73.4 *	139 186 10
<b>Residence</b> Urban Rural	99.1 98.9	97.1 98.9	98.5 98.4	93.4 98.4	90.9 95.1	98.0 97.5	96.2 97.5	91.8 95.1	59.8 64.0	55.2 61.1	49.3 54.4	91.6 94.0	89.0 91.7	84.0 89.6	0.9 0.2	193 146	91.5 94.5	73.6 83.4	75.3 86.1	85.8 92.9	69.4 76.7	187 148
Mother's education Basic Secondary	* 99.1	* 98.4	* 97.2	* 95.3	* 92.1	* 96.6	* 96.6	* 92.2	* 59.1	* 56.0	48.1	* 92.0	* 88.7	* 85.0	* 0.9	27 136	* 91.7	* 79.2	* 81.0	* 90.5	* 71.1	22 129
secondary special Higher	97.5 99.5	96.1 99.0	98.7 99.5	94.3 95.6	94.3 92.7	98.7 98.1	94.3 97.6	94.3 93.0	71.3 60.8	62.7 57.7	59.6 52.5	96.8 90.3	91.4 90.0	88.8 86.6	1.3 0.0	64 111	95.1 93.0	78.9 74.9	80.1 77.0	87.9 87.7	75.7 71.2	66 118
Wealth quintile Lowest Second Middle Fourth Highest	99.1 98.8 97.8 100.0	95.7 98.8 98.9 98.9	98.4 97.6 97.8 98.0 100.0	98.4 97.6 94.7 88.3 97.3	97.0 91.4 87.4 95.2	99.1 97.6 92.9 99.1 100.0	99.1 97.6 92.9 93.1	97.6 91.4 89.1 95.2	66.8 73.2 47.4 57.0 63.6	65.0 66.8 51.3 59.4	59.2 57.2 43.7 53.6	94.9 93.3 93.1 90.0	93.8 90.3 90.5 86.7 89.3	88.4 85.7 87.8 84.0 85.9	0.0 0.0 0.0 0.0	67 63 57 83	92.1 95.9 92.8 91.1	83.6 88.3 79.6 80.4 62.7	91.1 90.3 78.2 82.4 63.1	90.1 93.5 88.9 84.8	78.8 80.1 74.6 80.4 55.6	74 60 53 86
Total	0.66	97.9	98.5	92.6	92.7	97.8	96.8	93.2	61.6	57.7	51.5	92.6	90.2	86.4	0.6	338	92.8	77.9	80.1	88.9	72.6	335

BCG = Bacille Calmette-Guerin. DPT = Diphteria-pertussis-tetanus. HepB = Hepattits B. Hib = Haemophilus influenza type b. DPT-HepB-Hib is sometimes referred to as Pentavalent.

<sup>1</sup> For children whose vaccination information is based on the mother's report, children reported to have received HepB (birth dose) received the vaccine within 24 hours after birth. For children whose vaccination information is based on the written record of vaccination, children are considered to have received hepatitis B (birth dose) if this vaccine is recorded on their card, regardless of when the dose was administered. <sup>2</sup> Age-appropriate vaccinations for those age 12-23 months: BCG, HepB (birth dose), three doses of DPT-HepB-Hib, three doses of oral polio vaccine, two doses of rotavirus vaccine at any time before the survey (excludes

pneumococcal vaccines).

<sup>3</sup> Basic vaccinations are defined as: BCG, three doses of DPT-HepB-Hib, three doses of oral polio vaccine, and one dose of measles, mumps and rubella (MMR) vaccine at any time before the survey <sup>4</sup> Age-appropriate vaccinations for those age 24-35 months: BCG, HepB (birth dose), three doses of DPT-HepB-Hib, a fourth dose of DPT vaccine, four doses of oral polio vaccine, two doses of rotavirus vaccine, and one dose of measles, mumps, and rubella (MMR) vaccine at any time before the survey (excludes pneumococcal vaccines).

With children age 24-35 months, Table 11.3 shows that 93 percent of children received one dose of the MMR vaccine, 78 percent received the fourth dose of DPT, and 80 percent received the fourth dose of polio vaccine; 89 percent of children age 24-35 months have received all the basic recommended vaccinations, while 73 percent have received all the vaccinations recommended by the Ministry of Health (not including the pneumococcal vaccines).

Differences in immunization coverage by sex are minimal, although a higher percentage of girls than boys age 24-35 months have received all the MOH-recommended vaccinations (77 percent versus 68 percent). This gender difference is due to the lower coverage among boys for the fourth doses of DPT and polio. Surprisingly, vaccination coverage is generally lower among urban than rural children. For example, 86 percent of urban children age 24-35 months have received all the basic WHO-recommended vaccinations, compared with 93 percent of rural children. There is no clear association between vaccination coverage and either the mother's education or the household wealth quintile.

# 11.3 TRENDS IN VACCINATION COVERAGE

In the 2015-16 ADHS, rates of vaccination coverage were calculated separately for children age 12-23 months and 24-35 months to allow for examination of the receipt of vaccines appropriate for the two age groups. However, for the 2010 ADHS, data were presented for children age 18-29 months. For comparison purposes, data from the 2015-16 ADHS survey were re-calculated for the same age group as in the 2010 ADHS, or 18-29 months (Appendix C, Table C.8). The results indicate that vaccination coverage has decreased slightly over the past 5 years for all basic vaccines by the date of the interview in 2010, only 89 percent were fully immunized in 2015-16 (Figure 11.1). The coverage levels for most of the individual vaccines have also decreased slightly.

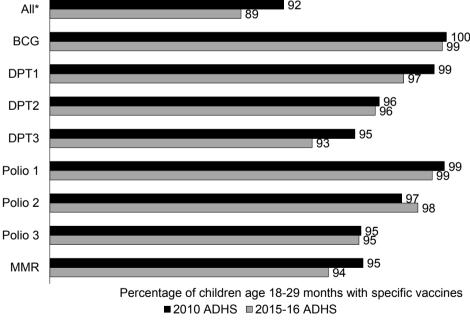


Figure 11.1 Trends in vaccination coverage among children 18-29 months

\* Includes BCG, MMR, and 3 doses of DPT and polio

# **11.4 ACUTE RESPIRATORY INFECTION**

Acute respiratory infection (ARI) is among the leading causes of childhood morbidity and mortality throughout the world. Among acute respiratory diseases, pneumonia is the most serious for young children. Early diagnosis and treatment with antibiotics can prevent a large number of deaths caused by ARIs. In the 2015-16 ADHS, the prevalence of ARIs was estimated by asking mothers whether their children under age 5 had been ill with a cough accompanied by fast, short, rapid, or difficult breathing, which was chest-related, in the 2 weeks before the survey. These symptoms are consistent with ARIs. The morbidity data are subjective because they are based on a mother's perception of illness without validation by medical personnel. Table 11.4 shows the percentage of children under age 5 who had a cough with symptoms of ARI.

From mothers' reports, it was estimated that only 1 percent of children under age 5 had symptoms of ARI in the 2 weeks before the survey. Prevalence of symptoms of ARI is higher among children living in Ararat region than in other regions. Differences in ARI prevalence by other characteristics are minimal. Due to the small number of children with symptoms of ARI in the 2 weeks before the survey, it is not meaningful to examine treatment behavior.

#### Table 11.4 Prevalence and treatment of symptoms of ARI

Among children under age 5, the percentage who had symptoms of acute respiratory infection (ARI) in the 2 weeks before the survey, according to background characteristics, Armenia 2015-16

	Among children u	nder age five:
Background characteristic	Percentage with symptoms of ARI <sup>1</sup>	Number of children
Age in months		
< <u>-</u> 6	1.1	177
6-11	2.3	180
12-23	0.6	338
24-35	1.1	335
36-47	1.4	309
48-59	2.2	324
Sex		
Male	1.4	888
Female	1.4	776
Residence		
Urban	0.7	958
Rural	2.3	705
Region		
Yerevan	0.0	475
Aragatsotn	0.0	61
Ararat	9.6	166
Armavir	0.8	188
Gegharkunik	0.0	76
Lori	0.7	98
Kotayk	0.8	239
Shirak	0.0	167
Syunik	0.0	61
Vayots Dzor	1.5	36
Tavush	2.6	97
Mother's education		
Basic	2.3	93
Secondary	1.9	664
Secondary special	0.4	344
Higher	1.3	562
Wealth quintile		
Lowest	2.1	323
Second	3.0	333
Middle	1.6	303
Fourth	0.6	299
Highest	0.0	406
Total	1.4	1,663
	fined as rapid breathing	
related and/or difficult breat	athing which was chest-re	elated.

## 11.5 FEVER

Fever is a symptom of malaria in malaria endemic areas. However, because Armenia is not in a malaria endemic region, fever is regarded as a sign of childhood infections other than malaria, such as ARIs, and throat and ear infections. To obtain information about the frequency of fever, mothers were asked (for each child under age 5) whether the child had had a fever in the 2 weeks before the survey. Table 11.5 shows the percentage of children with fever, by selected background characteristics.

Nine percent of all children under age 5 were reported to have had a fever in the 2 weeks before the survey. Fever is most common among children age 36-47 months (11 percent) and least common, at 6 percent, among the youngest children (under 6 months). There are large regional differences in the prevalence of fever, with the highest prevalence occurring in Ararat region (20 percent) and the lowest prevalence in Syunik region (3 percent). The prevalence of fever tends to decrease as mother's education and wealth quintile increase.

Almost three-quarters of children with a fever (72 percent) were taken to a health facility or provider for treatment, and 4 percent were given antibiotics (data not shown). Differences in treatment of fever by background characteristics are not large, and are hampered by small numbers in most categories.

Table 11.5 Prevalence and treatment of fever

Background characteristic	Percentage with fever	Number of children
Age in months		
<6	6.0	177
6-11	9.7	180
12-23	8.9	338
24-35	9.2	335
36-47	11.1	309
48-59	9.1	324
Sex		
Male	8.5	888
Female	9.9	776
Residence		
Urban	8.2	958
Rural	10.5	705
	10.0	100
Region	- 0	475
Yerevan	5.6	475
Aragatsotn Ararat	8.4 20.3	61 166
Armavir	8.9	188
Gegharkunik	4.0	76
Lori	13.4	98
Kotayk	10.4	239
Shirak	9.3	167
Syunik	3.3	61
Vayots Dzor	3.9	36
Tavush	11.3	97
Mathaula advaatian		
Mother's education Basic	11.4	93
Secondary	10.9	664
Secondary special	7.5	344
Higher	7.8	562
0		
Wealth quintile Lowest	10.3	323
Second	12.3	323
Middle	8.6	333
Fourth	6.5	299
Highest	6.5 8.1	299 406
Ū.		
Total	9.2	1,663

Among children under age 5, the percentage who had a fever in the 2 weeks before the survey, by background

# 11.6 DIARRHEA

Dehydration caused by severe diarrhea is a major cause of death among young children. A simple and effective response to dehydration is a prompt increase in the child's fluid intake through some form of oral rehydration therapy (ORT). This may include the use of a solution prepared from commercially produced packets of oral rehydration salts (ORS) or a homemade mixture usually prepared from sugar, salt, and water. Increasing the amount of any other liquids given to a child during a diarrheal episode is another means of preventing dehydration.

In the 2015-16 ADHS, mothers were asked if each of their children under age 5 had diarrhea during the 2-week period before the survey. If a child had diarrhea, the mother was asked what actions were taken to treat the diarrhea and what feeding practices were followed during the diarrheal episode.

Table 11.6 shows the percentages of children under age 5 who had diarrhea at some time during the 2-weeks before the survey. It is important to note that the prevalence figures may involve some reporting error because they are based on the mothers' subjective assessments of their child's illness. Because there are seasonal variations in the pattern of diarrheal illnesses, the percentages in Table 11.6 may represent the prevalence of diarrhea at the time of the 2015-16 ADHS (December 2015- early April 2016) and not the situation at other times of the year in Armenia.

Among children under age 5, only 4 percent were reported by their mothers to have been ill with diarrhea during the 2-week period before the ADHS interview. Children age 6-35 months were slightly more likely to suffer from diarrhea than older children or those under age 6 months. Diarrheal episodes were most common among children living in the Aragatsotn and Shirak regions and least common among those in Yerevan. Diarrhea prevalence among children decreases as mother's education level and wealth quintile increase.

Mothers are encouraged to continue normal feeding of children with diarrhea and to increase the amount of fluids given to the child. These practices help to reduce dehydration and minimize the adverse consequences of diarrhea on the child's nutritional status. Mothers interviewed in the 2015-16 ADHS were asked whether they gave the child less, the same amount, or more fluids and foods than usual when their child had diarrhea. Table 11.7 shows the percent distribution of children under age 5 who had diarrhea in the 2 weeks before the survey by feeding practices. It is important to remember that only 4 percent of children under age 5 were reported to have had diarrhea in the 2 weeks before the survey, so the findings about treatments are based on small number of cases and should be interpreted with caution.

#### Table 11.6 Prevalence of diarrhea

Percentage of children under age 5 who had diarrhea in the 2 weeks before the survey, by background characteristics, Armenia 2015-16

Armenia 2015-16		
Background	Percentage with	Number of
characteristic	diarrhea	children
Age in months		
<6	1.7	177
6-11	5.3	180
12-23	4.9	338
24-35	4.7	335
36-47	3.2	309
48-59	2.7	324
Sex		
Male	4.5	888
Female	3.0	776
Toilet facility <sup>1</sup>		
Improved, not shared	3.2	1,299
Non-improved	5.9	352
Shared <sup>2</sup> /missing	*	12
Residence		
Urban	2.6	958
Rural	5.4	705
	0.1	100
Region		475
Yerevan	0.4 8.8	475 61
Aragatsotn	•.•	• ·
Ararat Armavir	5.7 6.4	166 188
Gegharkunik	1.5	76
Lori	2.2	98
Kotayk	5.6	239
Shirak	8.4	167
Syunik	1.7	61
Vayots Dzor	3.9	36
Tavush	1.5	97
Mother's education		
Basic	6.2	93
Secondary	5.0	664
Secondary special	4.5	344
Higher	1.5	562
Ū.	1.0	002
Wealth quintile	E C	202
Lowest	5.6	323
Second	4.2	333
Middle Fourth	4.7 3.3	303 299
Highest	3.3 1.7	299 406
•		
Total	3.8	1,663

<sup>1</sup> See Table 2.3 for definition of categories

<sup>2</sup> Facilities that would be considered improved if they were not shared by two or more households

#### Table 11.7 Feeding practices during diarrhea

Percent distribution of children under age 5 who had diarrhea in the 2 weeks before the survey by amount of liquids and food offered compared with normal practice, Armenia 2015-16

		A	mount of I	iquids giv	en				Amou	unt of food	given			Number
	More	Same as usual	Some- what less	Much less	Don't know/ missing	Total	More	Same as usual	Some- what less	Much less	None	Never gave food	Total	of children with diarrhea
Total	38.9	47.4	7.8	3.8	2.2	100.0	3.4	55.9	34.4	2.8	1.6	1.9	100.0	63

Note: It is recommended that children should be given more liquids to drink during diarrhea and food should not be reduced.

Only 39 percent of children with diarrhea were given more to drink than usual, 47 percent were given the same amount as usual, and 12 percent were given somewhat less or much less than usual. The proportion of children with diarrhea who received more to drink than usual has decreased substantially in the past 5 years, from 65 percent in 2010 to 39 percent in 2015-16.

Food intake is curtailed more than fluid intake during episodes of diarrhea. Only 3 percent of children with diarrhea were given more to eat than usual, 56 percent were given the same amount of food as usual, 34 percent were given somewhat less food than usual, and 3 percent were given much less food than usual.

Table 11.8 shows the percentage of children with diarrhea who were taken to a health facility or provider for treatment, the percentage who received ORT, and the percentage who were given other treatments. Overall, 41 percent of children with diarrhea were taken to a health facility or provider for treatment of diarrhea.

Table 11.8	Diarrhea	treatment

Among children under age 5 who had diarrhea in the 2 weeks before the survey, percentage for whom advice or treatment was sought from a health facility or provider; percentage given fluid from an ORS packet, homemade fluids (HF), ORS or HF, zinc, ORS and zinc, ORS or increased fluids, oral rehydration therapy (ORT), continued feeding and ORT, and other treatments; and percentage given no treatment, Armenia 2015-16

	Percentage for				Percer	ntage of	children v	vith diarrh	nea who wer	e giver	:			_		
	whom advice or treatment was sought	Fluid					ORS or	ORT (ORS, HF, or								Number
	from a health facility or provider <sup>1</sup>	from ORS packets	Home fluids (HF)	Either ORS or HF	Zinc	ORS and zinc	in- creased fluids	in-	Continued feeding and ORT <sup>2</sup>	Anti- biotic drugs		Intra- venous solution		Miss- ing		of chil- dren with diarrhea
Total	40.6	36.9	24.5	48.8	3.7	2.0	36.9	66.4	63.1	18.3	19.5	0.0	7.8	4.1	18.3	63

ORS = Oral rehydration salts.

<sup>1</sup> Excludes pharmacy, shop, market, traditional practitioner, and itinerant drug peddler.

<sup>2</sup> Continued feeding includes children who were given more, same as usual, or somewhat less food during the diarrhea episode.

Oral rehydration therapy, which involves giving children with diarrhea a solution prepared from oral rehydration salts (ORS) or recommended home fluids (HF)—usually a homemade sugar-salt-water solution—is a simple and effective response to diarrheal illness. According to the 2015-16 ADHS, half of children with diarrhea (49 percent) were treated with either ORS (37 percent) or HF (25 percent). Two in three children (66 percent) were treated with ORS, HF, or increased liquids.

Antibiotics are generally not recommended for use in treating non-bloody diarrhea in young children. According to the 2015-16 ADHS, 18 percent of children were given antibiotics, 20 percent were given anti-motility drugs, and 4 percent were given a zinc supplement to treat the diarrhea. Eight percent of children were given a home remedy to treat the diarrhea. Eighteen percent of children were given no treatment.

Seeking treatment for diarrhea from a health provider has remained roughly stable in the past 5 years; however, the use of ORS packets and particularly, the use of home fluids (HF) for treatment of diarrhea, have decreased considerably. According to the 2010 ADHS, 90 percent of children with diarrhea received ORS, HF, or increased fluids, compared with only 66 percent in the 2015-16 ADHS. The use of antibiotics to treat diarrhea has increased (12 percent in 2010 compared with 18 percent in 2015-16), but the use of anti-motility drugs has remained almost the same (18 percent in 2010 compared with 20 percent in 2015-16). The use of home remedies has decreased over the past 5 years from 26 percent in 2010 to 8 percent in 2015-16.

# 11.7 KNOWLEDGE OF ORS PACKETS

As mentioned earlier, a prompt increase in a child's fluid intake is a simple and effective means to prevent diarrhea from developing into a life-threatening illness. Oral rehydration therapy (ORT) may include the use of a solution prepared from packets of oral rehydration salts (ORS). To ascertain how widespread knowledge of ORS is in Armenia, female respondents were asked if they knew about ORS packets.

Table 11.9 shows the percentage of women who gave birth in the 5 years before the survey who know about ORS packets for treatment of diarrhea, by background characteristics. More than 4 in 5 Armenian mothers of young children know about ORS packets (83 percent). Younger mothers are slightly less likely to know about ORS packets than older mothers. By region, the proportion of mothers who know about ORS packets ranges from 70 percent in the Armavir region to 100 percent in the Syunik region. Knowledge of ORS packets increases with level of education of the mother, from only 59 percent of mothers with basic education to 88-89 percent of mothers with secondary special or higher education.

Knowledge of ORS packets has increased somewhat in the past 5 years, from 75 percent of mothers in 2010 to 83 percent in 2015-16.

# 11.8 DISPOSAL OF CHILDREN'S STOOLS

# Poor hygiene, which includes improper disposal of fecal matter, contributes to the spread of disease, including diarrhea. Table 11.10 shows the percent distribution of youngest children under age 2 living with the mother by the way in which the child's stools are disposed, according to background characteristics and the type of toilet facilities in the household.

The most common method of disposing of young children's stools is throwing them into the garbage (55 percent), followed by rinsing the stools into a toilet or latrine (33 percent) and having the child use a toilet or latrine (11 percent). Overall, 43 percent of children under age 2 have their stools disposed of safely.

Older children are more likely than younger children to have their stools disposed of safely. Differences by urban-rural residence and by mother's education and wealth quintile are notably small. Differences by region in children's stool disposal are difficult to interpret due to small numbers of children in some regions.

There has been a steep decrease in the past 5 years in the proportion of young children's stools that are disposed of safely. In the 2010 ADHS, data were tabulated for children under 5, whereas in the 2015-16 ADHS, the table refers to children under 2. However, re-calculating data for 2010 indicates that the proportion of children under age 2 whose stools are disposed of safely has decreased from about 75 percent to only 43 percent in 2015-16.

#### Table 11.9 Knowledge of ORS packets

Percentage of women age 15-49 with a live birth in the 5 years before the survey who know about ORS packets for treatment of diarrhea by background characteristics, Armenia 2015-16

Background characteristic	Percentage of women who know about ORS packets	Number of women
Age 15-19 20-24 25-34 35-49	* 73.7 84.6 88.2	18 279 890 173
<b>Residence</b> Urban Rural	83.3 81.6	794 568
Region Yerevan Aragatsotn Ararat Armavir Gegharkunik Lori Kotayk Shirak Syunik Vayots Dzor Tavush	80.8 86.1 92.8 70.4 82.5 74.5 90.8 70.5 100.0 83.6 90.1	398 51 140 147 65 76 200 130 46 30 78
Education Basic Secondary Secondary special Higher	58.7 77.5 88.8 88.2	70 533 286 472
Wealth quintile Lowest Second Middle Fourth Highest	75.7 86.7 78.6 88.0 83.4	252 275 253 250 331
Total	82.6	1,361

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. ORS = Oral rehydration salts

#### Table 11.10 Disposal of children's stools

Percent distribution of youngest children under age 2 living with the mother by the manner of disposal of the child's last fecal matter, and percentage of children whose stools are disposed of safely, according to background characteristics, Armenia 2015-16

		Manner of o	disposal of child	Iren's stools			Percentage	
Background characteristic	Child used toilet or latrine	Put/rinsed into toilet or latrine	Put/rinsed into drain or ditch	Thrown into garbage	Missing	Total	of children whose stools are disposed of safely <sup>1</sup>	Number of children
Age of child in months								
0-1	(0.0)	(36.8)	(0.9)	(62.2)	(0.0)	100.0	(36.8)	41
2-3	1.0	20.7	2.7	75.5	0.0	100.0	21.8	57
4-5	2.4	23.9	0.8	72.9	0.0	100.0	26.3	73
6-8	2.8	42.8	0.0	54.4	0.0	100.0	45.6	86
9-11	7.7	26.2	1.0	65.0	0.0	100.0	34.0	91
12-17	16.7	30.9	3.3	48.7	0.4	100.0	47.7	165
18-23	21.3	40.3	1.6	36.8	0.0	100.0	61.6	148
6-23	14.0	34.9	1.8	49.1	0.1	100.0	48.9	490
Toilet facility <sup>2</sup>								
Improved, not shared	11.0	33.3	0.7	55.0	0.1	100.0	44.2	531
Shared <sup>3</sup>	*	*	*	*	*	100.0	*	5
Unimproved	8.6	29.7	6.2	55.4	0.0	100.0	38.3	125
Residence								
Urban	9.3	34.4	0.2	55.9	0.2	100.0	43.8	390
Rural	12.7	30.0	3.9	53.4	0.0	100.0	42.7	272
Region								
Yerevan	6.3	42.1	0.0	51.6	0.0	100.0	48.4	190
Aragatsotn	(4.5)	(25.8)	(4.6)	(65.1)	(0.0)	100.0	(30.3)	22
Ararat	0.0	`15.8 <sup>´</sup>	0.0	84.2	0.0	100.0	15.8	65
Armavir	5.4	30.4	6.0	57.3	0.8	100.0	35.8	75
Gegharkunik	(15.0)	(66.5)	(4.0)	(14.5)	(0.0)	100.0	(81.5)	28
Lori	(41.2)	(45.8)	(0.0)	(13.0)	(0.0)	100.0	(87.0)	36
Kotavk	<b>4</b> .8	24.0	0.0	71.2	<b>0</b> .0	100.0	28.8	103
Shirak	21.4	13.5	1.6	63.5	0.0	100.0	34.9	64
Syunik	(25.0)	(60.9)	(7.4)	(6.7)	(0.0)	100.0	(86.0)	24
Vayots Dzor	(25.1)	(37.6)	(14.1)	(23.2)	(0.0)	100.0	(62.7)	13
Tavush	`16.7 <sup>´</sup>	21.7	0.0	`61.6 <sup>´</sup>	`0.0 <sup>´</sup>	100.0	38.4	42
Mother's education								
Basic	(8.7)	(39.8)	(3.7)	(47.7)	(0.0)	100.0	(48.5)	39
Secondary	13.3	30.5	2.9	<b>`</b> 53.1 <sup>´</sup>	0.2	100.0	43.8	264
Secondary special	11.1	31.0	1.4	56.5	0.0	100.0	42.1	132
Higher	7.8	34.8	0.1	57.2	0.0	100.0	42.6	227
Wealth quintile								
Lowest	15.3	28.2	5.7	50.8	0.0	100.0	43.6	115
Second	10.0	28.1	1.3	60.6	0.0	100.0	38.1	139
Middle	13.8	34.3	2.0	49.9	0.0	100.0	48.1	125
Fourth	9.7	32.6	0.4	56.8	0.5	100.0	42.3	122
Highest	6.3	38.4	0.0	55.3	0.0	100.0	44.7	161
Total	10.7	32.6	1.7	54.9	0.1	100.0	43.3	662

Note: Total includes 1 child for whom type of toilet facility is missing. Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

<sup>1</sup> Children's stools are considered to be disposed of safely if the child used a toilet or latrine, if the fecal matter was put/rinsed into a toilet or latrine, or if it was buried.

<sup>2</sup> See Table 2.3 for definition of categories

<sup>3</sup> Facilities that would be considered improved if they were not shared by two or more households.

# 11.9 CHILDHOOD MORTALITY

In the 2015-16 ADHS, data on infant and child mortality were collected in the reproductive history section of the Woman's Questionnaire. Only 16 under-five deaths (unweighted) were reported by women out of total of 1,724 live births in the period 0-4 years prior to the survey. The small number of deaths reported in the ADHS is a reflection of fact that child mortality has been steadily falling in Armenia (NSS, 2015). However, the small number of deaths makes it impossible to derive reliable estimates of child mortality rates from the survey. Consequently, a decision has been made not to present mortality estimates presented in the ADHS Key Indicators report (NSS et al., 2016) as reliable estimates of child mortality levels in Armenia.

## **Key Findings**

- Nine percent of children under age 5 are stunted (short for their age); 4
  percent of the children are wasted (thin for their height); 3 percent are
  underweight (thin for their age), and 14 percent are overweight/obese
  (heavy for their height).
- Almost all children (97 percent) are breastfed at some point in their life and 45 percent of infants under 6 months are exclusively breastfed.
- Only one-quarter (25 percent) of children age 6-23 months meet the minimum acceptable dietary standards.
- Sixteen percent of children 6-59 months are anemic; 13 percent of women age 15-49 are anemic.
- Forty-five percent of women age 15-49 are overweight/obese.
- All households used iodized salt for cooking.

Good nutrition is a prerequisite for national development and individual wellbeing. Although problems related to poor nutrition affect the entire population, women and children are especially vulnerable because of their unique physiology and socioeconomic characteristics. In children, the period from birth to age 2 is especially important for optimal growth, health, and development. Unfortunately, this period is often marked by protein-energy and micronutrient deficiencies that interfere with optimal physical growth and cognitive development. Illnesses such as diarrhea and acute respiratory infections, which are common in young children, also contribute to nutritional deficiencies (Black et al. 2008). Malnutrition in adults results in reduced productivity, increased susceptibility to infections, slow recovery from illness, and for women, increased risk of adverse pregnancy outcomes (Cesar et al. 2008). A woman with poor nutritional status (indicated by a low body mass index, short stature, anemia, or other micronutrient deficiencies) has a heightened risk of experiencing obstructed labor, having a baby with low birth weight, and dying from postpartum hemorrhage. Morbidity, in general, is high for both the woman and her baby. Numerous socioeconomic and cultural factors influence patterns of feeding and nutritional status.

To assess nutritional status in the 2015-16 ADHS, health investigators took height, weight, and hemoglobin measurements of all children under age 5 and all women age 15-49 in the household. In addition, data were collected from women on feeding practices for infants and young children, including breastfeeding, introduction of solid and semi-solid foods, diversity of foods, and frequency of feeding. Information was also collected on the use of iron supplements for both women and children. Cooking salt was also tested for the presence of iodine.

This chapter uses these data to assess several aspects of the nutritional status of children and women in Armenia. The chapter includes the nutritional status of women and children under age 5 based on the anthropometric data (height and weight) collected during the survey; infant and young child feeding practices including breastfeeding, complementary feeding patterns, and the prevalence of bottle-feeding; micronutrient intake among mothers and children; iodization of salt used in the household; prevalence of anemia in women and children, and knowledge of anemia among women and men. A summary indicator that describes the quality of infant and young child (age 6-23 months) feeding practices (IYCF) is also included.

# 12.1 NUTRITIONAL STATUS OF CHILDREN

The 2015-16 ADHS collected data on the nutritional status of children by measuring the height and weight of all children under age 5 in the interviewed households. The nutritional status assessment helps to identify subgroups of children that face increased risk of faltered growth.

## 12.1.1 Measurement of Nutritional Status among Young Children

All children listed in the household questionnaire who were born in January 2010 or later were eligible for height and weight measurement. Thus, height and weight measurements were collected from children whose mothers may not have been interviewed in the survey. Weight was measured with lightweight scales with digital screens manufactured by SECA (878). Height measurements were carried out with measuring boards provided by UNICEF<sup>1</sup>. Recumbent length was recorded for children under age 2. Standing height was measured for all other children.

Based on these measurements, three internationally accepted indices were constructed to reflect the nutritional status of children:

- Height-for-age (the measure to assess stunting)
- Weight-for-height (the measure to assess wasting and overweight)
- Weight-for-age (the measure to assess underweight)

For the 2015-16 ADHS, the nutritional status of children was calculated using growth standards published by the World Health Organization (WHO) in 2006. These growth standards were generated from data collected in the WHO Multicentre Growth Reference Study (WHO Multicentre Growth Reference Study Group 2006). Use of a standard reference population as a point of comparison facilitates the examination of differences in the anthropometric status of subgroups in a population and of changes in nutritional status over time. Each of the three nutritional status indicators described here is expressed in standard deviation (SD) units from the median of the WHO Child Growth Standards.

The 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 who are below minus three standard deviations (-3 SD) are considered severely stunted. Stunting of a child's growth may result from failure to receive adequate nutrition over a long period, sustained improper feeding practices, or the effects of repeated episodes of illness. Height-for-age represents a measure of the outcome of malnutrition in a population over a long period and does not vary appreciably with the season of data collection.

The weight-for-height index measures body mass in relation to body height or length and describes current nutritional status. The index allows for identification of children who show evidence of recent substantial weight loss, usually from acute shortage of food, severe disease, or both. 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 weight-for-height Z-score is below minus three standard deviations (-3 SD) from the reference population median are considered severely wasted. Wasting represents the failure to receive adequate nutrition during the period immediately before the survey and usually shows marked seasonal patterns associated with changes in food availability or disease prevalence. Wasting may result from recent episodes of illness, particularly diarrhea, improper feeding practices, or acute food shortage.

<sup>&</sup>lt;sup>1</sup> Portable baby/child/adult length-height measuring board, UNICEF supply catalogue number S0114540.

Weight-for-age is a composite index of height-for-age and weight-for-height that takes into account acute and chronic malnutrition. 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 weight-for-age Z-score is below minus three standard deviations (-3 SD) from the reference population median are considered severely underweight.

Overweight and obesity are becoming problems for children in many countries. 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.

Mean Z-scores are also calculated for each of the nutritional indices. The mean Z-score describes the nutritional status of the entire population in question without the use of a cut-off. A mean Z-score of less than 0 (a negative mean value) on any of the indices suggests that the status of the children in the survey population (or in a subgroup of the survey population) on that index is, on average, below that of the WHO Growth Standards reference population.

## 12.1.2 Levels of Child Malnutrition

In the survey, children under age 5 in the household were eligible for height and weight measurements. Of the 1,740 children eligible for measurement (age 0-59 months at the time of the survey), height measurements were missing for 7 percent of the children and weight measurements were missing for 6 percent of the children because the child was not present, the parents refused, or the child was ill. Another 8-10 percent of the children were considered to have implausibly high or low values for their height or weight measures. The following analysis focuses on the children for whom complete and plausible anthropometric and age data were collected. Table 12.1 shows the percentage of these children classified as malnourished, according to height-for-age, weight-for-height, and weight-for-age indices, by demographic and other background characteristics.

## Height-for-age (stunting)

The results of data collection show that 9 percent of children under age 5 are stunted or chronically malnourished (height-for-age below -2 SD); 4 percent of children are severely stunted (Table 12.1). Analysis of stunting by age groups shows that stunting is highest (17 percent) among children age 6-8 months and declines rapidly in the second year of age to the lowest (5 percent) among children age 24-35 months, and then oscillates between the 10 and 6 percent among older children (Figure 12.1). Male children are slightly more likely to be stunted than female children (11 percent compared with 8 percent). There is little difference in the level of stunting by birth interval, size at birth, or mother's nutritional status. However, differences by urban-rural residence, mother's education, and wealth are considerable. Stunting is more common in rural areas, with rural children twice as likely to be stunted as their urban counterparts (13 and 6 percent, respectively). In general, children born to mothers with less education are more than twice as likely to be stunted as children born to mothers with secondary special or higher education. Stunting is more common in the lowest to middle wealth quintile categories (12 percent) than in the fourth and highest wealth quintile wealth categories (6 percent each). There is substantial regional variation in the prevalence of stunted children, ranging from a low of 4 percent in Yerevan to a high of 20 percent in Shirak.

## Weight-for-height (wasting)

Four percent of children under age 5 are wasted (weight-for-height below -2 SD). With differentials by age, wasting is highest in children under age 6 months and age 36-47 months (6 percent each) and lowest (0 percent) in children age 18-23 months. There is little difference in the level of wasting by sex or birth interval. Female and male children are almost equally likely to be wasted. Children who are small or very small at birth are more likely to be wasted than children who are of average size or larger at birth. Wasting in children is more prevalent in Aragatsotn (23 percent), Ararat (13 percent), and Gegharkunik (11 percent) than in other regions (5 percent or less).

## Weight-for-age (underweight)

Overall, 3 percent of children are underweight (weight-for-age below -2 SD). Peak levels of low weight-for-age are found among children less than 9 months old. Children living in Aragatsotn have a higher prevalence of underweight than their counterparts (14 percent compared with 5 percent or less).

Percentage bercentage low         Percentage bercentage becompare below         Percentage becompare below         Percentage becompare below         Percentage below	I		Height-for-age	ir-age <sup>1</sup>			\$	Weight-for-height					Weight-for-age	¢,	
	Rackaround	Dercentage	Percentage helow	Mean Z- score	Number	itag	Percentage	Percentage	Mean 7-score	Number	Percentage	Percentage helow	Percentage	Maan Z-score	Number
	characteristic	-3 SD	-2 SD <sup>2</sup>	(SD)	of children	-3 SD	-2 SD <sup>2</sup>	+2 SD	(SD)	children	-3 SD	-2 SD <sup>2</sup>	+2 SD	(SD)	children
	Age in months														
	<6	4.2	15.4	-0.3	150	1.7	6.3	11.2	0.3	153	1.9	7.5	4.3	-0.1	163
	6-8	14.6	16.9	-0.0	75	0.0	1.6	12.2	0.7	75	2.4	7.8	8.1	0.4	80
	9-11	7.5	11.8	-0.3	85	2.7	5.4	12.6	0.8	85	0.0	0.8	3.8	0.4	86
32         14         51         0.0         157         0.0         10 <th< td=""><td>12-17</td><td>4.7</td><td>12.8</td><td>-0.1</td><td>161</td><td>0.0</td><td>2.1</td><td>16.7</td><td>0.9</td><td>159</td><td>0.0</td><td>0.4</td><td>12.2</td><td>0.7</td><td>167</td></th<>	12-17	4.7	12.8	-0.1	161	0.0	2.1	16.7	0.9	159	0.0	0.4	12.2	0.7	167
	18-23	4 2	50	-0 4	157	00	0.0	18.6	<del>,</del>	157	00	0.0	10.6	0.7	166
	24-35	i 4	5.0 4.7	00	330	0.0	о <del>с</del>	11.9	90	326	0.0	0.5	7 1	0.5	330
0 $0$ <td>20 J</td> <td>t C - 0</td> <td></td> <td>4 C</td> <td>200</td> <td>1 C 1 L</td> <td>- <del>-</del> -</td> <td>8.11</td> <td>0.0 9</td> <td>200</td> <td>0.0 C</td> <td>0.4</td> <td>- U</td> <td>0.0</td> <td>305</td>	20 J	t C - 0		4 C	200	1 C 1 L	- <del>-</del> -	8.11	0.0 9	200	0.0 C	0.4	- U	0.0	305
100 $100$ <t< td=""><td>18-59</td><td>2.0</td><td>6.2</td><td>-0.2</td><td>311</td><td>1.8</td><td>4.2</td><td>12.2</td><td>0.6</td><td>301</td><td>1.1</td><td>2.3</td><td>7.4</td><td>0.2</td><td>314</td></t<>	18-59	2.0	6.2	-0.2	311	1.8	4.2	12.2	0.6	301	1.1	2.3	7.4	0.2	314
	×														
	//ale Temale	4.4 0 0	10.9 7 8	-0.2 -	833 740	1.2 2 0		14.5 10.7	0.7	822 733	1.0	3.2	7.7 6.5	0.3	854 755
		2	2	0		2			0	202	r D	2	0	r.	8
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	th interval in months³ iret birth4	~ ~	0 7	C 0-	684	- 0	с с с	10.3	90	678	00	26	7 1		203
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	11.51.511.111 124	t t-	10.2	4 Q 7 Q 7 Q	195		5.1	19.4	0.8	191	0.0	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9.7	t 0	197
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4-47	3.0	9.7	-0.2	315		4.6	12.4	0.6	309	0.8	1.1	7.0	0.3	317
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	-8+	3.2	8.2	0.0	367		5.5	13.6	0.5	365	0.5	3.7	5.9	0.4	380
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	ze at birth³														
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	'ery small	*	*	*	19	(7.2)	(12.4)	(8.7)	0.0	22	(19.5)	(33.0)	(0.0)	1.5	23
53       54       03       03       54       03       03       54       03       03       54       03       04       04         110       138.1       0.2       14.3       0.7       55       55       55       54       0.4       0.4         110       138.1       0.2       14.3       0.7       0.5       52.5       68       0.4	Small	0.0 1.0	10.9	0.2	115	30.02 7 7	7.1	00 v	4.0	115	0.6	9.0 7	6.7	0.2	117
	Average or larger	0.0	Ø.Y	-0	1,422	<u>c.</u>	0.0 0		0.7	1,403	0. 4.	z.	7.7	4. 1	1,403
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	other's nutritional status <sup>5</sup>														
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Thin (BMI<18.5)	6.3 0	0.0 1	0.2 0	71		1.9	14.2	0.5	210	1.3 0	1.3	9.4 4.0	0.3	73
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Vormal (BMI 18:5-24.9) Dverweicht/chese (BMI > 25)	3.7	10.5 8 1	2 	821 532		4.4 4.4	13.7 14 3	0.0	813 525	0.8	2.9	2. Z 2. Z 2. Z	4.0 4	838 540
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			-	-	100		ŕ	<u>,</u>		010	0	) i	0	ţ	8
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	ssidence	Ċ	с 4	č	040	L.	c	4	6	277	5	c c	t.	Č	200
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Jubari Sural	5.3	13.4	- 6	070 697	- <u>-</u>	0.0 2.5	16.4	0.0	679	6.0	0 <del>-</del>	4 0 4 7	4 O O	202
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$															
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	verevan	1.5	3.5	00	419	14	14	11 4	90	420	00	01	47	0.5	441
7.9         13.7         0.8         161         2.7         13.4         35.9         1.0         147         1.1         2.8         3.48         1.2           kunik         6.7         9.9         0.6         75         3.5         10.6         12.3         0.7         187         1.0         4.8         1.7         0.2           kunik         6.7         9.9         0.6         75         3.5         10.6         12.3         0.7         187         1.0         4.8         1.7         0.2           1.8         7.7         0.5         6.9         0.0         1.1         1.1         0.0         0.1         1.1         0.6         0.6         0.1         1.1         0.2         73         0.0         0.6         0.0         0.1         1.1         0.6         0.6         0.0         0.1         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3<	Aragatsotn	11.0	18.1	0.2	65	10.1	22.9	10.3	-0. 4.0	61	5 4 4 4	14.3	6.5	0.2	65
r         1.5         9.7         -0.4         185         0.7         2.2         13.1         0.7         187         1.0         4.8         1.7         0.2           kunik         6.7         9.9         0.6         75         3.5         10.6         12.3         0.2         73         0.0         0.11         0.0         11.7         0.6           0.0         5.6         -0.2         6.9         0.6         7.5         3.5         10.6         12.3         0.2         73         0.0         0.11         0.1         0.6         0.1         1.7         0.6         0.0         0.1         1.7         0.6         0.0         0.1         1.7         0.6         0.0         0.1         0.1         0.3         0.6         0.1         0.3         0.6         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3         0.1         0.3<	Ararat	7.9	13.7	0.8	161	2.7	13.4	35.9	1.0	147	1.1	2.8	34.8	1.2	164
Multik         0.7         9.9         0.0         7.7         0.0         7.3         0.0         0.1         0.0         0.1         0.0         0.1         0.0         0.1         0.0         0.1         0.0<	Armavir	1.5 1	9.7	0 0 4 0	185 31	0.7	2.2	13.1	0.7	187	1.0	4 0 8 0	1.7	0.2	191
10     -0.2     -0.2     -0.2     -0.2     -0.3     <	Gegnarkunk I Ari	7.0	n G	0.0	C /	0.0	0.0	0.7	7 0	50	0.0		1.1.1	0.0	4 00
B6         19.5         -0.7         169         1.7         5.1         18.4         0.7         170         1.1         2.4         4.3         0.1           3.9         12.3         -0.5         62         1.1         2.6         12.2         0.4         62         2.0         4.4         1.5         -0.1           3.9         11.5         -0.5         5.7         18.9         0.9         36         0.7         1.5         -0.1           3.8         11.5         -0.5         37         0.0         2.2         18.9         0.9         36         0.7         1.5         6.8         0.4           Dzor         3.8         11.5         -0.5         37         0.0         2.2         18.9         0.9         36         0.7         1.5         6.8         0.4	LUI Kotavk	0.0 8	0.0	7 C	245	0.0	- <del>-</del>	0.0	 	244		0.0	- 8	0.0 L	09 746
3.9     12.3     -0.5     62     1.1     2.6     12.2     0.4     62     2.0     4.4     1.5     -0.1       Dzor     3.8     11.5     -0.5     3.7     0.0     2.2     18.9     0.9     3.6     0.7     1.5     6.8     0.4	Shirak	8.6	19.5	-0.7	169	1.7	5.1	18.4	0.7	170	- <del>-</del> -	2.4	4.3	0.1	172
Dzor 3.8 11.5 -0.5 37 0.0 2.2 18.9 0.9 36 0.7 1.5 6.8 0.4	Syunik	3.9	12.3	-0.5	62	1.1	2.6	12.2	0.4	62	2.0	4.4	1.5	-0.1	63
	/ayots Dzor	3.8	11.5	-0.5	37	0.0	2.2	18.9	0.9	36	0.7	1.5	6.8	4.0	37

Table 12.1 Nutritional status of children

(Continued...)

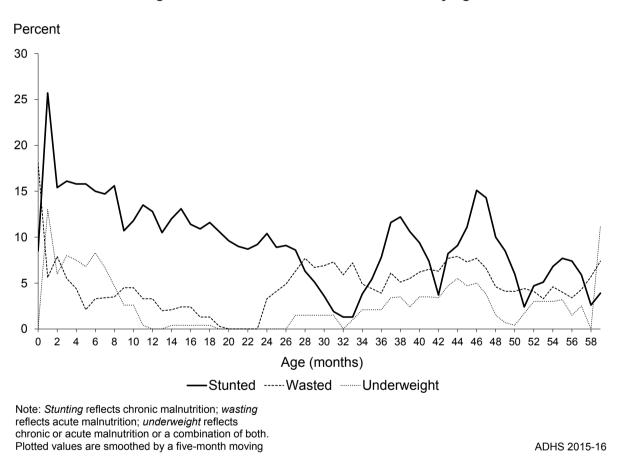
Percentage Percentage below above -2 SD <sup>2</sup> +2 SD	tage Mean e Z-score D (SD)	Number of childran	Percentage below	Percentage below	Percentage above N	Mean Z-score	Number of
		of children	below	below	,	Vean Z-score	of
		childran					
			-3 SD	-2 SD≄	+2 SD	(SD)	children
5.7 24.	1 0.8	89	0.0	3.1	7.7	0.2	91
5.9 14.2		632	0.7	2.7	7.9	0.3	650
1.6 13.6	3 0.7	321	1.2	1.6	6.3	0.4	332
3.7 11.0	0.6	509	0.4	3.1	6.7	0.4	533
6.1 16.8	3 0.6	309	1.4	4.9	9.5	0.2	315
5.6 16.1	0.6	319	0.5	1.6	12.0	0.5	333
4.3 15.1	1 0.7	293	0.3	1.8	6.3	0.4	302
2.3 12.5	5 0.7	266	0.8	2.0	3.7	0.4	274
2.8 8.5	0.5	368	0.5	2.8	4.1	0.3	384
4.2 13.6	0.6	1.555	0.7	2.6	7.2	0.4	1,609
		(0 (0 K K 10		309 268 283 888 888	309 319 293 266 0.3 266 0.3 368 0.3 368 0.5 0.5	309     1.4     4.9       319     0.5     1.6       293     0.5     1.6       266     0.3     1.8       368     0.5     2.0	309         1.4         4.9         9.5           319         0.5         1.6         12.0           293         0.3         1.8         6.3           266         0.8         2.0         3.7           368         0.5         2.8         4.1

<sup>3</sup> Excludes children whose mothers were not interviewed.

<sup>4</sup> First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval. <sup>5</sup> 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 past 2 months. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 12.9. <sup>6</sup> For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

#### Overweight

Table 12.1 also shows the proportion of children who are more than 2 standard deviations above the reference median. These children are considered to be heavy for their height. Fourteen percent of children under age 5 are overweight (weight-for-height above +2 SD units). This indicates that overweight is more of a concern than underweight among Armenian children. Although differences are small, levels of overweight-for-height are higher among boys (15 percent) than girls (13 percent), and higher among rural children (16 percent) than urban children (12 percent). Children living in Ararat (36 percent) are more likely to be overweight than children living in other regions (5-19 percent). Children born to mothers with only basic education are more likely to be overweight (24 percent) than children born to more educated mothers (11-14 percent, respectively). The proportion of children who are overweight declines steadily as wealth quintile increases.





The nutritional status of children varies with age, as shown in Figure 12.1. After being stable in the first 6-7 months of life at a high of 15-16 percent, the prevalence of stunting steadily declines with age from 8 months through the first 2 years of life before increasing again in the third and fourth years. The levels of wasting and underweight peak at 6-10 months when complementary food is typically introduced in addition to breast milk. After age 12 months, both wasting and underweight levels remain low, before increasing again after the second year of age.

## 12.1.3 Trends in Children's Nutritional Status

The nutritional status of Armenian children as measured by the 2015-16 ADHS can be compared with data from two previous DHS surveys conducted in Armenia in 2005 and 2010<sup>2</sup>. Figure 12.2 depicts trends in children's nutritional status between the 2005 and 2015-16 ADHSs, according to stunting, wasting, underweight, and overweight categories.

Figure 12.2 shows that stunting decreased from 18-19 percent in 2005 and 2010, to 9 percent in 2015-16. Levels of wasting have not changed since 2005. The proportion of underweight children has decreased by almost half from 5 percent in 2010 to 3 percent in 2015-16. The proportion of overweight children (weight-for-height above +2 SD units) increased from 11 percent in 2005 to 15 percent in 2010, but has not changed over the last 5 years (14 percent in 2015-16). Further investigation is needed to better understand the reasons that may underlie the improvements in the rates of stunting and, to a lesser degree, of underweight in 2015-16 ADHS survey compared to the levels observed in the 2005 and 2010 ADHS surveys. The stunting values for children under age 2 are similar among children under age 24 months across the three surveys (14 percent in 2005 ADHS, 17 percent in 2010 ADHS, 13 percent in 2015-16 ADHS). Stunting among children age 24-59 months is markedly high in 2010 (21 percent) than in the 2015-16 ADHS (7 percent) and 2005 ADHS (12 percent). Factors that may have contributed include differences in the equipment utilized for collecting the height measures<sup>3</sup>, as well as in the timing of the fieldwork in the three surveys<sup>4</sup>. Sampling variability also plays a role. However, the comparisons of the 2005-2010 ADHS nutrition status information with the 2015-16 ADHS findings suggest that, as was true in the earlier ADHS surveys, Armenian children continue to be more likely to experience stunting and overweight than to be underweight or wasted.

<sup>&</sup>lt;sup>2</sup> The 2000 ADHS data on children's nutritional status are not used in this trend analysis because anthropometric measurements were restricted to children born to women who were interviewed. The 2005, 2010, and 2015-16 ADHS surveys included height and weight measurements of all children born in the 5 years before the survey and listed in the Household Questionnaire, irrespective of the interview status of their mother. The levels of stunting, wasting, and underweight shown in Figure 12.2 differ from the data published in the 2005 ADHS survey report (NSS et al. 2006), which were derived using the National Center for Health Statistics (NCHS) reference standards. In order to assess trends in nutrition status, the 2005 ADHS nutrition indicators were re-calculated with the 2006 WHO Child Growth Standards.

<sup>&</sup>lt;sup>3</sup> The 2015-16 ADHS survey employed portable baby/child/adult length-height measuring boards (UNICEF supply catalogue number S0114540) and the 2005 ADHS survey employed Shorr boards. Locally constructed height boards were used in the 2010 ADHS.

<sup>&</sup>lt;sup>4</sup> The 2015-16 ADHS was conducted in the height of winter while the two earlier surveys were conducted largely in the fall. Because of the timing of the 2015-16 ADHS, it was more difficult to fully undress children for the anthropometric measurement, which may have contributed to differences in the nutrition indicators between the 2015-16 ADHS and the earlier surveys. Although it was not preferable to conduct the fieldwork in the height of winter, the ADHS data collection commenced in December 2015 in order to expeditiously provide the MOH with the ADHS anemia testing results. The MOH needed the data on anemia prevalence to advocate for a flour fortification program proposed to the parliament that would prevent and control anemia in Armenia.

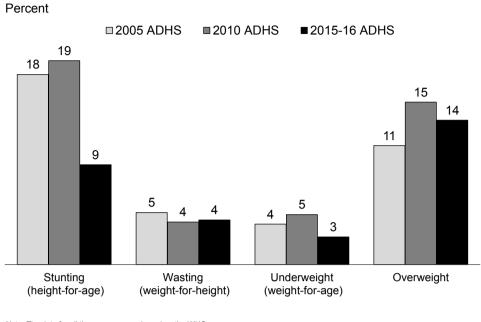


Figure 12.2 Trends in nutritional status of children under age 5, 2005-2016

Note: The data for all three surveys are based on the WHO Child Growth standards adopted in 2006.

# 12.2 BREASTFEEDING AND SUPPLEMENTATION

# 12.2.1 Initiation of Breastfeeding

Early initiation of breastfeeding is encouraged for a number of reasons. Mothers benefit from early suckling because it stimulates breast milk production and facilitates the release of oxytocin, which helps the uterus to contract and reduces postpartum blood loss. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn from diseases. Prelacteal feeding (giving something other than breast milk in the first three days of life) is generally discouraged because it may inhibit breastfeeding and expose the newborn infant to illness.

The importance and necessity of breastfeeding has been well recognized in Armenia since the 1993 adoption of the State Program on Breastfeeding by the Ministry of Health. In conjunction with the state program, reforms occurred in maternity hospitals as part of the Baby Friendly Hospital Initiative (BFHI). Examples of these reforms include establishing immediate contact between mother and newborn after delivery, initiating early breastfeeding (in the first 30 to 60 minutes after birth), allowing the mother and newborn to stay in the same hospital room, breastfeeding the baby on demand, and other Baby Friendly practices. The BFHI Program has expanded since 2000, but has not changed since 2010 when 22 maternity hospitals and 10 polyclinics had earned Baby Friendly status.

Table 12.2 presents the breastfeeding status of all last-born children born in the 2 years<sup>5</sup> before the survey by background characteristics. The table shows the percentage of children according to whether they were ever breastfed, when they started breastfeeding, and whether they were fed anything other than breast milk prior to the commencement of breastfeeding. Breastfeeding is almost universal in Armenia; 97 percent of last-born children born in the 2 years before the survey were breastfed at some point in their life.

<sup>&</sup>lt;sup>5</sup> For the 2000 and 2005 ADHS surveys, the initiation of breastfeeding indicators were reported for all children born in the 5 years before the survey. Initiation of breastfeeding within 1 hour and within 1 day of birth was calculated among the children who were ever-breastfed, whereas the 2010 and 2015-16 results are based on last-born children who were born in the 2 years before the survey. Hence, caution should be observed when comparing the figures in this table with the results published in the final reports for previous ADHS surveys.

Overall, 41 percent of last-born children were breastfed within 1 hour after birth, and 86 percent were breastfed within 1 day after birth.

#### Table 12.2 Initial breastfeeding

	Among	last-born children	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 <sup>1</sup>	Number of last- born children	Percentage who received a prelacteal feed <sup>2</sup>	Number of last- born children ever breastfed
Sex						
Male	97.0	40.3	84.8	337	11.5	327
Female	96.0	41.5	86.4	329	10.7	316
Residence						
Urban	96.7	35.3	84.8	391	13.1	378
Rural	96.1	48.7	86.7	275	8.2	265
Region						
Yerevan	96.8	34.9	87.2	190	14.2	184
Aragatsotn	(100.0)	(67.8)	(86.2)	22	(13.6)	22
Ararat	91.6	74.4	91.6	65	7.9	59
Armavir	94.0	16.3	59.1	79	5.6	74
Gegharkunik	(98.0)	(59.5)	(98.0)	28	(0.0)	27
Lori	(100.0)	(20.1)	(97.4)	36	(0.0)	36
Kotayk	99.0	27.4	83.6	103	17.2	102
Shirak	97.6	65.8	94.5	65	4.7	63
Syunik	(100.0)	(37.5)	(97.2)	24	(4.9)	24
Vayots Dzor	(92.2)	(27.9)	(83.8)	13	(25.1)	12
Tavush	93.1	54.0	84.4	43	21.8	40
Mother's education						
Basic	(89.4)	(34.3)	(73.5)	39	(8.7)	35
Secondary	96.8	43.5	86.5	266	7.5	258
Secondary special	97.9	41.8	89.5	133	15.8	130
Higher	96.5	38.4	84.3	229	12.9	221
Wealth guintile						
Lowest	94.8	45.2	83.0	117	8.3	111
Second	96.5	50.7	83.5	141	9.0	136
Middle	97.2	36.3	81.1	126	13.9	122
Fourth	98.0	36.0	86.1	122	14.5	119
Highest	96.0	36.4	92.3	161	10.0	155
Total	96.5	40.9	85.6	666	11.1	643

Among last-horn children who were born in the 2 years before the survey, the percentage who were ever breastfed and the percentages

Note: Table is based on last-born children born in the 2 years before the survey regardless of whether the children are living or dead at the time of interview. Figures in parentheses are based on 25-49 unweighted cases 1 Includes children who started breastfeeding within 1 hour of birth.

<sup>2</sup>Children given something other than breast milk during the first 3 days of life.

Differences in early initiation of breastfeeding are small by sex of the child. Children in rural areas are more likely to start breastfeeding during the first hour after birth than children in urban areas. Almost half (49 percent) of children in rural areas started breastfeeding within 1 hour of birth compared with over one-third of children in urban areas (35 percent). However, this difference is almost gone within the next 24 hours, with 87 percent of children in rural areas and 85 percent in urban areas initiating breastfeeding within 1 day of birth. Children born to mothers with secondary special education and children from households in the highest wealth quintile are more likely to begin breastfeeding within 1 day of birth compared with children born to mothers with other levels education or wealth.

Among last-born children under age 2 who were ever breastfed, 11 percent received a prelacteal feed (something other than breast milk during the first three days of life). Children born in urban areas were more likely to receive a prelacteal feed than children born in rural areas (13 percent and 8 percent, respectively). Regional variations in prelacteal feeding are notable but are hampered by the small number of children in some regions. There is no clear relationship between prelacteal feeding and the mother's education or wealth quintile.

Comparisons with data from the 2000, 2005 and 2010 ADHSs indicate that the percentage of children who were breastfed within 1 hour of birth has markedly increased over the past 15 years (25 percent in 2000, 32 percent in 2005, 36 percent in 2010, and 41 percent in 2015-16, with the sharpest

increase observed during the period between the 2000 ADHS and the 2005 ADHS<sup>6</sup>. The percentage of children who started breastfeeding within 1 day of birth also increased rapidly, from 70 percent in 2000 to 78 percent in 2005, 84 percent in 2010, and 86 percent in 2015-16 (ICF 2015b).

# 12.2.2 Breastfeeding Status by Age

Breast milk is the optimal source of nutrients for infants. Children who are exclusively breastfed receive only breast milk. Exclusive breastfeeding is recommended during the first 6 months of a child's life because it limits exposure to disease agents and provides all the nutrients that are required for a baby. As the infant grows, breast milk alone no longer provides sufficient nourishment, and other liquids and foods need to be added to a child's diet.

The 2015-16 ADHS collected data on infant and young child feeding for all last-born children under age 2 living with their mothers, using a 24-hour recall method. Table 12.3 shows the percent distribution of youngest children under age 2 living with the mother by breastfeeding status, and the percentage of children under age 2 using a bottle with a nipple, according to age in months.<sup>7</sup> Figure 12.3 illustrates breastfeeding practices by age in Armenia. The results presented in Table 12.3 and Figure 12.3 show that 85 percent of children under age 6 months in Armenia are breastfed. The duration of breastfeeding, however, is not long; at age 12-17 months, 69 percent of infants are no longer breastfed. By age 18-23 months, 74 percent of children have been weaned.

#### Table 12.3 Breastfeeding status according to age

Percent distribution of youngest children under age 2 who are living with their mother by breastfeeding status and percentage currently breastfeeding; and the percentage of all children under age 2 using a bottle with a nipple, according to age in months, Armenia 2015-16

			Bre	eastfeeding sta	atus						
Age in months	Not breast- feeding	Exclusively breastfed	Breast- feeding and consuming plain water only	Breast- feeding and consuming non milk liquids <sup>1</sup>	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 the mother	Percentage using a bottle with a nipple	Number of all children under age 2
0-1	(6.9)	(79.7)	(4.7)	(2.9)	(1.0)	(4.8)	(100.0)	(93.1)	41	(8.6)	42
2-3	11.4	`57.2 <sup>´</sup>	`9.8 <sup>´</sup>	0.4	`8.0 <sup>´</sup>	13.1	`100.0 <sup>´</sup>	88.6	57	24.9	60
4-5	22.3	14.8	20.6	2.8	4.0	35.5	100.0	77.7	73	53.6	75
6-8	29.1	6.7	1.3	0.0	0.0	62.9	100.0	70.9	86	53.5	87
9-11	29.1	0.7	0.0	0.7	0.0	69.5	100.0	70.9	91	66.6	94
12-17	69.2	0.4	0.0	0.0	0.0	30.4	100.0	30.8	165	56.3	170
18-23	73.6	0.0	0.0	0.0	0.0	26.4	100.0	26.4	148	50.1	169
0-3	9.5	66.6	7.7	1.5	5.1	9.6	100.0	90.5	99	18.2	101
0-5	15.0	44.5	13.2	2.0	4.6	20.7	100.0	85.0	172	33.3	177
6-9	28.0	5.1	0.9	0.0	0.0	66.0	100.0	72.0	124	56.1	126
12-15	64.0	0.6	0.0	0.0	0.0	35.4	100.0	36.0	109	56.9	113
12-23	71.3	0.2	0.0	0.0	0.0	28.5	100.0	28.7	313	53.2	338
20-23	78.4	0.0	0.0	0.0	0.0	21.6	100.0	21.6	82	44.7	97

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 semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. 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. Figures in parentheses are based on 25-49 unweighted cases.

Contrary to recommended practices, supplementation of breast milk with other liquids or foods starts at an early age, with just under half (45 percent) of children under age 6 months exclusively breastfed. In addition to breast milk, 13 percent of children under age 6 months consume plain water, 5

<sup>&</sup>lt;sup>6</sup> In order to assess trends in early initiation of breastfeeding, the 2000 ADHS and 2005 ADHS initiation of breastfeeding indicators have been re-calculated for all last-born children born in the 2 years before the survey.

<sup>&</sup>lt;sup>7</sup> When comparing the total results of the 2015-16 ADHS to the 2000 and 2005 surveys, it should be noted that in 2015-16, the table on breastfeeding status by age is restricted to the youngest children under age 2 living with their mothers instead of the youngest children under age 3 living with their mothers (as in the 2005 ADHS report) and instead of all children under age 3 (as in the 2000 ADHS report).

percent consume other milk, 2 percent consume non-milk liquids, and 21 percent consume complementary foods. Use of bottles with a nipple for infant feeding is widespread in Armenia. Twenty-five percent of children age 2-3 months are bottle fed. This proportion increases with age and peaks at 67 percent among children age 9-11 months before declining. For the younger children (2-3 months old), the use of a bottle with a nipple for feeding has decreased by 12 percentage points since the 2010 ADHS, from 37 percent in 2010 to 25 percent in 2015-16; for children age 9-11 months, it has decreased by 9 percentage points, from 76 percent in 2010 to 67 percent in 2015.

Since 2010, the proportion of children under age 6 months who were breastfeeding at the time of the survey has decreased slightly from 89 percent in 2010 to 85 percent in 2015-16. Exclusive breastfeeding, as recommended by the Ministry of Health, shows improvement in this age group (35 percent in 2010 compared with 45 percent in 2015-16). The proportion of children under age 6 months who received complementary foods in addition to breast milk has increased from 17 percent in 2010 to 21 percent in this survey.

The pattern of weaning at an early age has not changed. Among children age 6-8 months, 29 percent are not breastfed, which remains unchanged since 2010. Sixty-three percent of children age 6-8 months received breast milk and complementary foods in 2015-16, which indicated an increase of 15 percentage points since 2010 (48 percent).

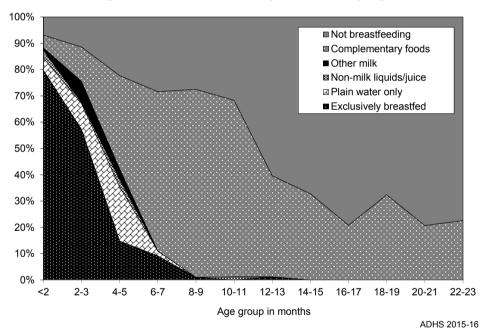
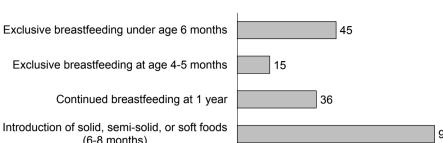


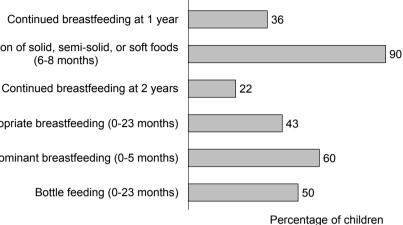


Figure 12.4 shows 2015-16 ADHS results for key infant and young child feeding (IYCF) practices. As noted above, 45 percent of children under age 6 months are exclusively breastfed, and 90 percent of children age 6-8 months are given a timely introduction of complementary foods. More than three in ten children (36 percent) are still breastfeeding at age 1, and a little more than two in ten children are still breastfeeding at age 2 (22 percent). Forty-three percent of Armenian children age 0-23 months are given age-appropriate breastfeeding. This includes exclusive breastfeeding for children under 6 months and continued breastfeeding plus complementary foods for children age 6-23 months. Sixty percent of children under 6 months are predominantly breastfed. This percentage includes children who are exclusively breastfed, plus those who receive breast milk and only plain water or non-milk liquids such as juice. Finally, 50 percent of children under age 2 are bottle fed.



## Figure 12.4 IYCF Indicators on breastfeeding status

Age-appropriate breastfeeding (0-23 months) Predominant breastfeeding (0-5 months)



ADHS 2015-16

### 12.2.3 Duration of Breastfeeding

Table 12.4 shows the median duration of breastfeeding by sex and residence. The estimates of median and mean durations of breastfeeding are based on current status data, which is the proportion of children born in the 3 years before the survey who were breastfed at the time of the survey.

The median duration of any breastfeeding in Armenia is 11.9 months. However, the median durations exclusive predominant breastfeeding of and (breastfeeding plus plain water, water-based liquids, or juice) are shorter (2.2 months and 3.4 months, respectively). The mean durations of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding are longer (13.2 months, 3.6 months, and 4.4 months, respectively). These figures indicate that the Ministry of Health's official recommendation of exclusive breastfeeding for 6 months has not been reached. Nevertheless, the median duration of any breastfeeding has increased, from 10.5 months in the 2005 ADHS to 10.9 months in the 2010 ADHS, and 11.9 months in the current survey.

## **12.2.4 Types of Complementary Foods**

#### Table 12.4 Median duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the 3 years before the survey, according to sex and residence, Armenia 2015-16

	breastfeed	Median duration (months) of breastfeeding among children born in the past three years <sup>1</sup>							
		Exclusive	Predominant						
Background	Any breast-	breast-	breast-						
characteristic	feeding	feeding	feeding <sup>2</sup>						
<b>Sex</b> Male Female	12.4 11.7	(2.1) *	3.2 3.6						
Residence									
Urban	12.1	(2.0)	3.1						
Rural	11.5	2.7	3.8						
Total	11.9	(2.2)	3.4						
Mean for all children	13.2	3.6	4.4						

Note: Median and mean durations are based on the distributions at the time of the survey of the proportion of births by months since birth. Includes children living and deceased at the time of the survey. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases

<sup>1</sup> It is assumed that non-last-born children and last-born children living with the mother are not currently not currently breastfeeding

Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only

As mentioned, it is recommended that complementary feeding (giving solid or semi-solid foods to infants in addition to breast milk) start at age 6 months, because at this age, breast milk is no longer sufficient to maintain the child's growth (WHO 2008). In the 2015-16 ADHS, women who had at least one child living with them who was born in 2013 or later were asked questions about the types of liquids and foods such as fortified baby food, meat, and eggs their youngest child had consumed during the day or night before the interview. Data based on responses to these questions are subject to a number of limitations. First, the mother may have had difficulty in recalling all the foods and liquids her child consumed. In addition, a mother may not have been able to report fully on a child's intake of food and liquids if the child was fed by other individuals during the period. Despite these limitations, the information collected on the types of foods and liquids consumed by young children is useful in assessing timely, appropriate complementary feeding.

Table 12.5 provides information on the types of foods and liquids given to the youngest children under age 2 living with their mother, on the day and night before the interview, according to the child's age and breastfeeding status.<sup>8</sup>

The results show that, for many breastfeeding children, foods and liquids other than breast milk are being consumed earlier than the recommended age of 6 months. For example, on the day before the survey interview, 15 percent of breastfeeding children age 2-3 months were given solid or semi-solid food, 10 percent received other animal milk, 6 percent received fortified baby foods, and 5 percent each received liquids other than plain water, foods made from grains, and foods made from roots and tubers in addition to breast milk.

#### Table 12.5 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 the mother by type of foods consumed in the day or night before the interview, according to breastfeeding status and age, Armenia 2015-16

		Liquids					Solid o	or semi-solid	foods					
Age in months	Infant formula	Other milk <sup>1</sup>	Other liquids <sup>2</sup>	Fortified baby foods	Foods made from grains <sup>3</sup>	Fruits and vege- tables rich in vitamin A <sup>4</sup> BREASTE	Other fruits and vege- tables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry	Eggs	Cheese, yogurt, other milk product	Any solid or semi- solid food	Number o children under age 2
0-1 2-3 4-5 6-8 9-11 12-17 18-23 0-5 6-11 6-23 Total	(2.1) 1.5 2.3 6.8 0.7 5.0 (10.7) 2.0 3.7 5.3 3.9	(1.1) 10.1 12.2 10.9 22.2 18.0 (26.9) 8.5 16.7 18.8 14.7	(3.1) 5.4 13.1 44.0 61.0 75.2 (62.8) 7.8 52.8 59.9 38.8	(5.2) 6.4 21.0 11.3 16.5 3.8 (13.4) 11.8 14.0 11.5 11.6	(0.0) 4.9 18.2 65.3 78.4 92.1 (92.8) 8.8 72.0 80.5 51.5	(0.0) 2.5 9.8 36.6 40.3 56.2 (46.5) 4.7 38.5 44.1 28.2	(0.0) 0.0 13.9 55.0 56.9 79.7 (65.0) 5.4 56.0 63.2 39.8	(0.0) 4.9 11.6 46.7 75.6 84.9 (82.4) 6.2 61.6 70.8 44.7	(0.0) 0.0 2.0 0.0 4.3 (6.1) 0.8 0.0 2.1 1.6	(0.0) 0.0 2.6 10.1 38.2 44.7 (57.3) 1.0 24.6 35.3 21.4	(0.0) 0.0 1.1 4.6 15.6 25.4 (24.6) 0.4 10.3 16.4 10.0	(0.0) 5.9 14.4 39.3 52.6 67.6 (77.0) 7.7 46.2 56.8 36.9	(5.2) 14.8 45.7 98.0 98.8 (100.0) 24.3 93.5 95.9 66.9	38 51 57 61 65 51 39 146 125 215 362
						NONBREAS	TFEEDING		N					
0-1 2-3 4-5 6-8 9-11 12-17 18-23 0-5 6-11 6-23	* * (0.0) 1.4 6.7 (11.5) (8.2) 4.8	* * (57.1) 44.8 43.7 (58.9) (56.8) 46.6	* * (71.1) 74.0 77.2 (17.2) (58.0) 72.3	* * (13.4) 5.7 4.0 (25.9) (20.7) 7.8	* * (94.4) 96.3 96.5 (18.8) (77.1) 92.8	* * (43.0) 49.2 50.8 (3.8) (36.1) 47.4	* * * (67.5) 72.2 84.2 (29.8) (51.5) 73.1	* * (80.9) 83.1 82.9 (18.8) (66.5) 79.9	* * * (0.0) 5.5 10.5 (0.0) (2.6) 7.0	* * (37.7) 58.4 62.5 (5.1) (27.4) 54.2	* * (8.6) 23.3 30.0 (3.3) (14.1) 24.2	* * (71.8) 66.1 74.8 (36.0) (59.0) 68.2	* * (100.0) 100.0 99.2 (59.8) (96.4) 99.0	3 7 16 25 26 114 109 26 51 274
Total	5.3	47.7	67.5	9.4	86.4	43.6	69.3	74.7	6.4	50.0	22.4	65.5	95.6	300

Note: 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 denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

Other milk includes fresh, tinned and powdered cow or other animal milk.

<sup>2</sup> Doesn't include plain water. Includes juice, juice drinks, clear broth, or other non-milk liquids.

<sup>3</sup> Includes fortified baby food.

<sup>4</sup> Includes fruits and vegetables such as red sweet pepper, pumpkin or squash, carrots, dark green leafy vegetables, ripe or dried apricots, dried peaches, cantaloupe melon, and other locally grown fruits and vegetables that are rich in vitamin A,

<sup>8</sup> When comparing the total results of the 2015-16 ADHS to 2000 and 2005 surveys, it should be noted that in 2015-16 the table on foods and liquids consumed by children on the day or night before the interview are restricted to the youngest children under age 2 living with their mothers, instead of the youngest children under age 3 living with their mothers (as in the 2005 ADHS report) and instead of all children under age 3 (as in the 2000 ADHS report). In addition, the wording of questions in the 2015-16 and 2010 surveys differed from those in 2005 and 2000, and questions about foods made with oil, fat, or butter were not asked.

After children reach age 6 months, they should be fed small quantities of solid and semi-solid foods, while continuing to breastfeed. The results in Table 12.5 suggest that these guidelines are not being observed in a small proportion of children age 6 months and older. For example, 89 percent of breastfed children age 6-8 months received any solid or semi-solid food on the day before the interview. Among breastfeeding children age 9-11 months, almost all (98 percent) were given any solid or semi-solid food on the day before the interview.

Table 12.5 shows that, as expected, foods made from grains are the staple in the diet of young children. Over four-fifths of breastfeeding children age 6-23 months (81 percent) consume foods made from grains (including fortified baby foods), 71 percent consume foods made from roots and tubers, 57 percent receive cheese, yogurt, or other milk products, 35 percent eat meat, fish, or poultry, and 16 percent consume eggs. In addition to being breastfed, 5 percent of these children also receive infant formula, and 19 percent receive other milk. Forty-four percent of breastfeeding children consume fruits and vegetables rich in vitamin A, and 63 percent consume other fruits and vegetables. Overall in Armenia, 96 percent of breastfeed children age 6-23 months are receiving solid or semi-solid foods.

Consumption of complementary foods is generally higher among non-breastfeeding children than breastfeeding children. Almost all (99 percent) of non-breastfeeding children age 6-23 months received solid or semi-solid foods. Ninety-three percent of non-breastfeeding children age 6-23 months received foods made from grains; 80 percent ate foods made from roots or tubers, and 68 percent were given cheese, yogurt, or other milk products. Almost half (47 percent) of non-breastfeeding children older than 6 months consumed fruits and vegetables rich in vitamin A and 73 percent ate other fruits and vegetables. Consumption of meat, fish, poultry (54 percent), and eggs (24 percent) is higher among non-breastfeeding children.

# 12.3 INFANT AND YOUNG CHILD FEEDING (IYCF) PRACTICES

Infant and young child feeding (IYCF) practices include initiating timely feeding of solid or semisolid foods at age 6 months and increasing the amount and variety of foods and frequency of feeding as the child gets older, while maintaining frequent breastfeeding. Guidelines have been established for IYCF practices for children age 6-23 months (PAHO/WHO 2003; WHO 2005; WHO 2008). Although breastfeeding is recommended for infants up to age 2, the guidelines include standards for assessing feeding practices for non-breastfeeding children as well as breastfed children, since it is recognized that children may stop breastfeeding before reaching age 2, for various reasons (WHO 2005). The IYCF guidelines include recommendations for both dietary diversity and the frequency of feeding.

With dietary diversity, studies have shown that plant-based complementary foods by themselves are insufficient to meet the child's needs for certain micronutrients (WHO and UNICEF 1998). Therefore, it is recommended that meat, poultry, fish, or eggs be eaten daily or as often as possible. It is also important to pay attention to the types of fruits and vegetables a child consumes, since vegetarian diets may not meet children's nutrient requirements in the absence of supplements or fortified products. In particular, children should consume fruits and vegetables rich in vitamin A on a daily basis. Children's diets also should include an adequate fat content, because fat provides essential fatty acids, facilitates absorption of fat-soluble vitamins (such as vitamin A), and enhances dietary energy density and palatability. Taking these factors into account, the IYCF guidelines for minimum dietary diversity call for feeding the child food from at least four of the following seven food groups: grains, roots, and tubers; legumes and nuts; dairy products (milk, yogurt, cheese); flesh foods (meat, fish, poultry, and liver/organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables. Consumption of food from at least one fruit or vegetable in addition to a staple food (grains, roots, or tubers) (WHO 2008).

In addition to dietary diversity, frequency of feeding is important to ensure that children meet their nutrient and caloric requirements. The minimum feeding frequencies are based on the energy needs from complementary foods estimated from age-specific total daily energy requirements. The guidelines differ for breastfeeding and non-breastfeeding children. Since meal frequency is considered a proxy for energy intake from foods other than breast milk, the feeding frequency indicator for non-breastfeeding children includes both milk feeds and solid/semi-solid feeds (WHO 2008).

The recommended number of feedings is as follows:

- Breastfeeding infants age 6-8 months should be fed meals of complementary foods two to three times per day, with one to two snacks as desired; breastfeeding children age 9-23 months should be fed meals three to four times per day, with one to two snacks.
- Non-breastfeeding children 6-23 months should receive milk products at least twice a day to ensure that they meet their calcium needs. Non-breastfeeding children also should be fed meals four to five times per day, with one to two snacks as desired (WHO 2005).

Table 12.6 presents the results of the 2015-16 ADHS on IYCF practices for breastfed and nonbreastfed children living with their mothers. The recommendations include children for whom feeding practices meet minimum standards for:

- Food diversity (the number of food groups consumed)
- Feeding frequency (the number of times the child is fed)
- Consumption of breast milk or other types of milk or milk products

#### Table 12.6 Infant and young child feeding (IYCF) practices

Percentage of youngest children age 6-23 months living with their mother who are fed according to three IYCF feeding practices based on breastfeeding status, number of food groups, and times they are fed during the day or night before the survey, according to background characteristics, Armenia 2015-16

	ag	Among brea e 6-23 month	, I 0				non-breastfed months, perce					ng all children nths, percenta		
Background characteristic	4+ food groups <sup>1</sup>	Minimum meal frequency <sup>2</sup>	Both 4+ food groups and minimum meal frequency	Number of breastfed children age 6-23 months	Milk or milk products <sup>3</sup>	4+ food groups <sup>1</sup>	Minimum meal frequency⁴	With 3 IYCF practices⁵	Number of non- breastfed children age 6-23 months	Breast- milk, milk, or milk products <sup>6</sup>	4+ food groups <sup>1</sup>	Minimum meal frequency <sup>7</sup>	With 3 IYCF practices	Number of all children age 6-23 months
Age in months 6-8 9-11 12-17 18-23	20.2 36.0 47.3 (53.1)	69.7 64.1 72.7 (72.2)	16.3 26.1 40.4 (39.6)	61 65 51 39	* (46.4) 49.5 57.0	(45.4) 62.5 67.3	* (68.2) 66.9 82.6	(5.6) 21.0 27.8	25 26 114 109	91.0 84.4 65.1 68.3	24.7 38.7 57.8 63.5	69.6 65.3 68.7 79.9	13.0 20.2 27.0 30.9	86 91 165 148
<b>Sex</b> Male Female	39.7 34.8	69.7 68.7	33.2 25.0	109 106	57.4 50.9	59.0 61.4	81.1 66.7	21.0 20.6	129 146	76.9 71.6	50.2 50.2	75.9 67.5	26.6 22.5	238 252
<b>Residence</b> Urban Rural	37.3 37.4	64.2 76.1	27.1 32.0	125 91	56.0 51.3	64.6 54.6	75.7 70.5	24.7 15.5	156 118	75.5 72.4	52.5 47.1	70.6 72.9	25.8 22.7	280 209
Mother's education Basic Secondary Secondary special Higher	* 37.4 (29.1) 49.2	* 68.2 (72.1) 70.1	* 30.9 (22.1) 36.8	13 90 43 69	* 57.4 39.0 57.6	* 52.5 62.9 66.7	* 77.2 63.6 73.5	* 21.6 15.0 24.0	16 108 58 92	(80.0) 76.7 65.2 75.8	(36.8) 45.7 48.4 59.2	(73.5) 73.2 67.2 72.0	(9.4) 25.8 18.0 29.5	29 198 101 162
Wealth quintile Lowest Second Middle Fourth Highest Total	(33.8) 36.1 42.7 (29.3) (42.9) 37.3	(71.3) 75.0 67.3 (62.3) (68.2) 69.2	(28.6) 29.4 37.4 (18.2) (30.5) 29.2	35 53 44 37 46 215	47.4 62.7 47.4 44.3 63.7 53.9	64.0 50.3 57.7 67.4 61.8 60.3	73.5 75.7 70.2 61.3 82.7 73.5	15.1 16.8 15.4 21.2 31.7 20.8	53 53 49 50 69 274	68.3 81.3 72.2 68.3 78.1 74.2	52.0 43.2 50.6 51.0 54.3 50.2	72.6 75.4 68.8 61.8 76.9 71.6	20.5 23.1 25.8 19.9 31.2 24.5	89 107 93 87 115 490

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases. <sup>1</sup> Food groups: a. infant formula, milk other than breast milk, cheese or yogurt 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. <sup>2</sup> For breastfed children, minimum meal frequency is receiving solid or semi-solid food at least twice a day for infants 6-8 months and at least three times a day for children 9-23 months. <sup>3</sup> Includes two or more feedings of commercial infant formula, fresh, tinned, and powdered animal milk, and yogurt. <sup>4</sup> For non-breastfed children age 6-23 months, minimum meal frequency is receive solid or semi-solid food for milk feeds at least four times a day. <sup>6</sup> Non-breastfed children age 6-23 months are considered to be fed with a minimum standard of three Infant and Young Child Feeding Practices if they receive other milk or milk products at least twice a day, receive the minimum meal frequency, and receive solid or semi-solid foods from at least four food groups not including the milk or milk products food group. <sup>6</sup> Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula, fresh, tinned and powdered animal milk, and yogurt. <sup>7</sup> Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in footnotes 2 and 4.

Breastfed children are considered to be fed in accordance with the minimum IYCF standards if they consume at least four food groups and receive foods at least twice per day for children age 6-8 months and at least three times per day for children age 9-23 months.

Table 12.6 shows that among breastfed children age 6-23 months, 37 percent were given food from at least four food groups in the 24 hours before the survey, and 69 percent were fed the recommended minimum number of times. About three in ten breastfed children (29 percent) fall into both categories, in which their feeding practices meet minimum standards with respect to food diversity and feeding frequency.

Non-breastfed children age 6-23 months are considered to be fed with a minimum standard of three IYCF practices if they receive commercial infant formula, animal milk, or milk products at least twice a day, receive solid or semi-solid food or milk feeds at least four times a day, and receive solid or semi-solid foods from at least four food groups, not including the milk/milk product group.

Among non-breastfed children age 6-23 months, 54 percent are given milk or milk products, 60 percent are given food from at least four food groups, and 74 percent are fed four or more times per day. However, only about one in five (21 percent) non-breastfeeding children are fed in accordance with all three IYCF practices.

Table 12.6 shows that among all children age 6-23 months, nearly three-quarters (74 percent) are given breast milk or other milk products, 72 percent are fed the recommended number of times a day, and one-half receive foods from the recommended number of food groups for their age. Only one-quarter (25 percent) are being fed in accordance with all three of the IYCF recommendations of consuming breast milk or other milk products, having the minimum dietary diversity, and having the minimum meal frequency.

Feeding practices are generally more likely to comply with minimum standards for older children. Children age 18-23 months (31 percent) are the most likely to be fed according to the IYCF practices, while those age 6-8 months (13 percent) are the least likely. Some slight differences are seen in feeding practices by sex and residence. Boys and children residing in urban areas are slightly more likely to be fed according to all three IYCF practices. The relationships between infant and child feeding practices and mother's education or mother's wealth status are not clear, although children born to mothers with higher education and in the highest wealth quintile households are more likely to be fed appropriately in accordance with all three IYCF practices than other children.

Figure 12.5 shows the percentage of youngest children age 6-23 months living with the mother fed according to a minimum standard of acceptable feeding practices and by breastfeeding status. In terms of overall feeding practices, a higher proportion of breastfeeding children meet the minimum requirements (29 percent) than non-breastfeeding children (21 percent).

There has been a decrease in the proportion of children age 6-23 months fed according to all three IYCF practices between 2010 and 2015-16 (32 percent in 2010 to 25 percent in 2015-16).

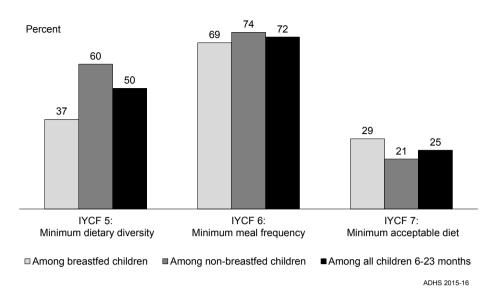


Figure 12.5 IYCF indicators on minimum acceptable diet

# 12.4 HOUSEHOLD IODIZED SALT CONSUMPTION

Salt used in the household is the most common vehicle for iodine fortification to prevent the public health concerns of iodine deficiency disorders (IDD). In Armenia, the government developed and adopted national laws to prevent and reduce the prevalence of iodine deficiency among its citizens through universal salt iodization. In February 2004, the Government of Armenia passed a decree that required mandatory iodization of all salt for human consumption. Import of non-iodized salt was also banned (UNICEF 2005).

To assess the use of iodized salt in Armenia, the 2015-16 ADHS included salt testing at the household level using the MBI rapid test kit for salt fortified with potassium iodate, which was required because in Armenia, salt is commonly iodized with potassium iodate. The MBI rapid test kit provides a qualitative indication of the presence or absence of iodine. To perform the test, interviewers asked households to provide a teaspoon of the salt that the household used for cooking. A recheck solution was used when the salt showed no change in color.

Table 12.7 shows the proportion of households with iodized salt according to background characteristics. Overall, salt was tested in 99 percent of households and virtually all the tested households were found to use salt with at least some iodine. According to the WHO, a country's salt iodization program is on a good track to eliminating iodine deficiency when 90 percent of households use iodized salt.

#### Table 12.7 Presence of iodized salt in household

Among all households, the percentage with salt tested for iodine content and the percentage with no salt in the household; and among households with salt tested, the percent distribution by level of iodine in salt (parts per million or ppm) and the percentage with iodized salt, according to background characteristics, Armenia 2015-16

	Among a	ll households, p	ercentage	Among households with tested salt:							
		With no salt						Percentage			
Background	With salt	in the	Number of	None	Inadequate	Adequate		with iodized	Number of		
characteristic	tested	household	households	(0 ppm)	(<15 ppm)	(15+ ppm)	Total	salt	households		
Residence											
Urban	99.1	0.9	4,924	0.2	0.8	99.0	100.0	99.8	4,879		
Rural	99.7	0.3	2,969	0.3	1.5	98.1	100.0	99.7	2,959		
Region											
Yerevan	98.7	1.3	2,480	0.0	0.4	99.6	100.0	100.0	2,449		
Aragatsotn	99.6	0.4	387	0.0	7.8	92.2	100.0	100.0	385		
Ararat	99.2	0.8	682	0.0	0.2	99.8	100.0	100.0	676		
Armavir	99.9	0.1	633	0.3	0.5	99.2	100.0	99.7	632		
Gegharkunik	99.8	0.2	601	0.0	0.8	99.2	100.0	100.0	600		
Lori	100.0	0.0	645	0.0	0.0	100.0	100.0	100.0	645		
Kotayk	98.9	1.1	799	0.0	0.4	99.6	100.0	100.0	790		
Shirak	99.1	0.9	685	2.1	4.8	93.1	100.0	97.9	679		
Syunik	100.0	0.0	448	0.0	0.0	100.0	100.0	100.0	448		
Vayots Dzor	100.0	0.0	167	0.4	0.2	99.5	100.0	99.6	167		
Tavush	99.8	0.2	366	0.0	0.3	99.7	100.0	100.0	365		
Wealth quintile											
Lowest	99.4	0.6	1,700	0.2	1.3	98.4	100.0	99.8	1,690		
Second	99.5	0.5	1,452	0.3	1.4	98.3	100.0	99.7	1,444		
Middle	99.0	1.0	1,791	0.1	1.9	98.1	100.0	99.9	1,774		
Fourth	99.6	0.4	1,558	0.3	0.4	99.2	100.0	99.7	1,551		
Highest	99.0	1.0	1,392	0.1	0.3	99.6	100.0	99.9	1,378		
Total	99.3	0.7	7,893	0.2	1.1	98.7	100.0	99.8	7,838		

Although the presence of any iodine is most commonly accepted to define iodized salt, the test kits used in the ADHS allow classification on whether the salt contains at least 15 parts per million (ppm) of iodine, which constitutes the adequate amount of iodization.<sup>9</sup> Using this criterion, 99 percent of the tested households had adequately iodized salt. These results show substantial improvement in use of iodized salt since the 2000 ADHS.

### 12.5 MICRONUTRIENT INTAKE IN CHILDREN

Micronutrient deficiencies are major contributors to childhood morbidity and mortality. Children can receive micronutrients from foods, food fortification, and direct supplementation. Table 12.8 shows indicators used to measure children's intake of several key micronutrients. Table 12.8 also presents information about the proportion of children age 6-59 months who live in households that use iodized salt.

Vitamin A is an essential micronutrient for the immune system and plays an important role in maintaining the epithelial tissue in the body. Vitamin A deficiency can increase the severity of infections, such as measles and diarrheal diseases in children, and can slow recovery from illness. Vitamin A is found in breast milk, other milks, liver, eggs, fish, butter, carrots, pumpkins, yellow-orange sweet potatoes, and dark green leafy vegetables. Periodic dosing (usually every 6 months) with vitamin A supplements is one way to ensure that children at risk do not develop vitamin A deficiency.

Iron is essential for cognitive development. Low iron intake can also contribute to anemia. Iron requirements are greatest between the ages of 6 and 12 months, when growth is extremely rapid. The 2015-16 ADHS collected information on the consumption of foods rich in vitamin A and foods rich in iron. Household salt samples were also tested for iodine levels.

Table 12.8 shows that over two-thirds of children age 6-23 months living with their mother consumed foods rich in vitamin A in the 24 hours before the survey (69 percent), and half (52 percent)

<sup>&</sup>lt;sup>9</sup> Recent laboratory studies suggest that rapid tests kits may be reliable only to distinguish between the presence and absence of iodine in salt, but not to determine whether salt is adequately iodized (Gorstein et al. 2016).

consumed foods rich in iron. There is a steady increase with age in the proportion of children who eat foods rich in vitamin A and iron. With foods rich in vitamin A, the proportion rises from 46 percent of children age 6-8 months to 77 percent of those age 12-17 months, and remains unchanged among children age 18-23 months. A similar pattern is observed for foods rich in iron, with consumption highest among children age 18-23 months (66 percent). Children who are not breastfeeding are more likely to receive vitamin A-rich and iron-rich foods than breastfeeding children. There are no major differentials in the percentages of children who consumed foods rich in vitamin A or iron in past 24 hours, by urban-rural residence. Mother's education is positively associated with children consuming these foods that provide important micronutrients.

#### Table 12.8 Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, the percentages who consumed vitamin A-rich and iron-rich foods in the 24 hours before the survey, and among all children 6-59 months, the percentages who were given iron supplements in the past 7 days, and among all children age 6-59 months who live in households in which salt was tested for iodine, the percentage who live in households with iodized salt, according to background characteristics, Armenia 2015-16

		oungest children a s living with the m		Among all age 6-59		Among children age 6-59 months living in households in which salt was tested		
Background characteristic	Percentage who consumed foods rich in vitamin A in past 24 hours <sup>1</sup>	Percentage	Number of children	Percentage given iron supplements in past 7 days <sup>3</sup>	Number of children	Percentage living in households with iodized salt <sup>4</sup>	Number of children	
Age in months								
ō-8	45.7	17.8	86	0.8	87	100.0	87	
9-11	66.0	45.5	91	0.0	94	100.0	92	
12-17	76.8	61.6	165	1.8	170	98.8	170	
18-23	76.5	66.2	148	0.6	169	100.0	169	
24-35	na	na	na	0.6	335	99.7	332	
36-47	na	na	na	2.6	309	100.0	309	
48-59	na	na	na	1.4	324	99.7	320	
Sex								
Male	68.7	51.7	238	1.2	787	99.6	785	
Female	69.7	52.9	252	1.4	700	99.9	694	
Breastfeeding status								
Breastfeeding	63.6	43.9	215	0.6	239	99.5	238	
Not breastfeeding	73.7	59.0	274	1.4	1,248	99.8	1,241	
Mother's age at birth								
15-19	*	*	8	*	11	*	11	
20-29	68.9	52.7	326	0.9	939	99.6	932	
30-39	69.3	51.1	148	2.0	501	100.0	500	
40-49	*	*	7	(1.7)	35	(100.0)	35	
Residence								
Urban	70.4	52.2	280	1.7	845	99.9	840	
Rural	67.7	52.5	209	0.8	641	99.5	639	
Region								
Yerevan	68.8	47.9	142	1.4	425	100.0	423	
Aragatsotn	*	*	15	1.1	54	100.0	54	
Ararat	54.2	46.7	53	0.0	154	100.0	154	
Armavir	71.7	59.4	57	1.1	168	99.3	168	
Gegharkunik	*	*	17	0.0	65	100.0	65	
Lori	*	*	23	0.0	85	100.0	85	
Kotayk	81.7	41.1	74	1.0	209	100.0	208	
Shirak	(55.2)	(44.5)	47	0.0	149	98.1	145	
Syunik	(77.9)	(77.9)	18	14.2	55	100.0	55	
Vayots Dzor Tavush	(63.9) 79.1	(51.6) 75.0	10 33	1.6 0.5	34 88	100.0 100.0	34 88	
Mother's education				0.0				
Basic	(57.7)	(45.9)	29	0.0	83	100.0	83	
Secondary	64.6	48.5	198	1.4	598	99.7	598	
Secondary special	67.3	52.4	101	1.2	313	99.7	311	
Higher	78.1	58.1	162	1.4	493	99.8	487	
Wealth quintile								
Lowest	69.8	54.2	89	0.9	296	99.4	295	
Second	59.7	46.2	107	1.0	300	99.6	299	
Middle	71.6	54.3	93	0.4	271	100.0	270	
Fourth	68.1	54.5	87	2.3	264	99.6	262	
Highest	76.8	53.3	115	1.8	356	100.0	354	

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

na = Not applicable

Includes meat (and organ meat), fish, poultry, eggs, red sweet pepper, pumpkin, yellow squash, carrots, dark green leafy vegetables, mango, ripe or dried apricets, dried peaches, cantaloupe melon and other locally grown fruits and vegetables that are rich in vitamin A. <sup>2</sup> Includes meat (including organ meat), fish, poultry and eggs.

<sup>3</sup> Based on mother's recall

<sup>4</sup> Excludes children in households in which salt was not tested

The 2015-16 ADHS also collected information on iron supplementation. In the 2015-16 ADHS, mothers were asked if their children under age 5 had taken an iron tablet in the seven days before the survey. Only 1 percent of children age 6-59 months received an iron supplement in the seven days before the survey. Consumption of iron supplements is highest in Syunik region at 14 percent. Differences in iron supplementation by other background characteristics are small.

Fortified salt that contains 15 parts of iodine per million of salt (15 ppm) is considered adequate for the prevention of iodine deficiency (ICCIDD, UNICEF, and WHO 2001). Table 12.8 shows that at the national level, virtually all children live in households that use iodized salt.

### 12.6 NUTRITIONAL STATUS OF WOMEN

Low pre-pregnancy BMI and short stature of women are risk factors for poor birth outcomes and delivery complications. In developing countries, maternal underweight is the leading risk factor for preventable death and diseases (The World Health Report WHO 2002). The prevalence of overweight women and men is a growing concern in developing countries, and is associated with a wide range of health problems such as diabetes, heart disease, and poor birth outcomes for women. In many countries, chronic energy deficiency of adults is still a problem which leads to low work productivity and reduced resistance to illness.

Using the same equipment employed to measure children (UNICEF measuring boards and SECA digital scales), the 2015-16 ADHS obtained the height and weight measurements for women age 15-49. The data are used to derive two measures of women's nutritional status: height and body mass index (BMI). Given the relationship between maternal stature and pelvic size, women's height can be useful in predicting the risk of difficulties in delivery. The risk of giving birth to low-weight babies is higher among women of small stature. The cut-off point at which mothers are considered at risk because of short stature normally falls between 140 and 150 centimeters. The BMI is used to measure thinness or obesity, and is defined as weight in kilograms divided by height in meters squared (kg/m2). A BMI of less than 18.5 is used to define thinness or acute undernutrition, while BMI of 25 or above usually indicates overweight and a BMI of 30 or above indicates obesity.

Table 12.9 presents nutritional status of women. Of a total of 6,116 women age 15-49, 96 percent were measured for height and 93 percent have a BMI calculated. The table excludes women for whom there was no information on height and/or weight and women for whom a BMI could not be estimated because they were pregnant or had given birth in the previous two months.

Overall, less than 1 percent of women fall below 145 centimeters in height, the mid-range of the cut-off for risk of giving birth to low-weight babies.

Over half of women have a normal BMI (51 percent), while 4 percent are undernourished or thin (BMI less than 18.5), and 45 percent are overweight or obese (BMI 25 or higher). The mean BMI for women age 15-49 is 25.3, which falls in the overweight BMI classification.

Differences in BMI levels by background characteristics are apparent. Women in their teens or 20s are more likely than women in older age groups to be thin or undernourished (7-8 percent versus 1 percent). In contrast, the proportion of women who are overweight increases with age: among women age 40-49, 45 percent are overweight and 35 percent are obese. Differences by urban-rural residence are small; women in rural areas (46 percent) are almost as likely as urban women (44 percent) to be overweight or obese. By region, the proportion of undernourished women does not vary considerably (1-7 percent), with the proportion of overweight women ranging from 23 percent in Tavush to 45 percent in the Aragatsotn region. Obesity is more common among women from Tavush (27 percent), Armavir (23 percent) and Vayots Dzor (21 percent) than among women from other regions (9-19 percent). Women with higher education are less likely to be obese compared with women with lower education (10 percent compared

with 16-20 percent). There are no major differences in the prevalence of overweight/obesity by wealth quintile.

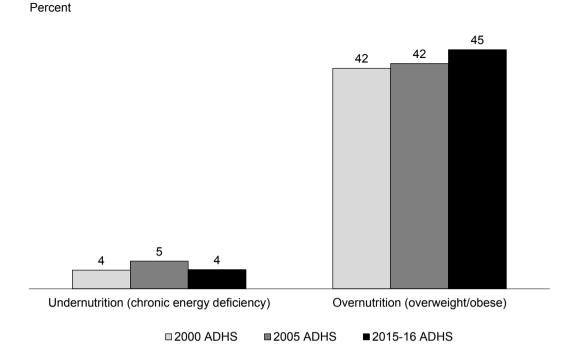
Compared with data from the 2000 and 2005 ADHSs, the percentage of non-pregnant women age 15-49 who are thin (BMI <18.5) has not changed and remains stable at about 4 percent. The percentage of women who are overweight or obese (BMI ≥25.0) has increased somewhat, from 42 percent each in 2000 and 2005 to 45 percent in 2015-16 (Figure 12.6).

#### Table 12.9 Nutritional status of women

Among women age 15-49, percentage with height under 145 cm, mean Body Mass Index (BMI), and percentage with specific BMI levels, according to background characteristics, Armenia 2015-16

						В	ody Mass Inde	ex <sup>1</sup>			
				Normal		Thin		Ov	erweight/obe	se	
							<17				-
		ight	Mean				(moderately	≥25.0 (total			
Background characteristic	Percent- age below 145 cm	Number of women	Body Mass Index (BMI)	18.5-24.9 (total normal)	<18.5 (total thin)	17.0-18.4 (mildly thin)	and severely thin)	over- weight or obese)	25.0-29.9 (over- weight)	≥30.0 (obese)	Number of women
Age											
15-19	1.7	701	21.6	82.2	8.2	6.3	1.9	9.6	7.0	2.6	689
20-29	0.4	1,941	23.1	71.0	6.6	5.1	1.6	22.4	17.8	4.5	1,796
30-39	0.5	1,801	26.0	45.5	1.2	1.1	0.2	53.3	38.6	14.7	1,758
40-49	0.5	1,434	28.9	19.4	0.6	0.5	0.0	80.1	45.3	34.8	1,432
Residence											
Urban	0.3	3.474	25.1	51.6	4.1	3.3	0.9	44.3	30.6	13.7	3,366
Rural	1.0	2,402	25.5	51.2	2.9	2.2	0.7	45.9	28.8	17.1	2,308
Region											
Yerevan	0.1	1,884	25.1	51.4	3.8	3.1	0.7	44.8	32.4	12.3	1,835
Aragatsotn	1.8	312	26.4	40.4	0.9	0.8	0.1	58.7	45.4	13.3	306
Ararat	0.3	539	25.0	53.6	2.7	2.3	0.5	43.6	27.5	16.1	519
Armavir	1.2	584	26.4	44.9	3.7	2.7	0.9	51.4	28.9	22.5	561
Gegharkunik	0.8	472	24.8	60.4	1.0	1.0	0.0	38.6	25.1	13.5	461
Lori	1.4	300	25.5	48.1	3.9	2.5	1.4	48.0	33.8	14.1	287
Kotayk	0.2	670	25.3	53.3	3.5	2.6	0.9	43.2	27.4	15.8	632
Shirak	0.2	507	24.0	56.9	7.3	6.1	1.1	35.8	26.6	9.3	486
Syunik	1.9	235	25.3	53.8	4.0	2.5	1.5	42.2	23.7	18.6	228
Vavots Dzor	1.2	113	25.9	47.1	5.0	4.6	0.4	47.9	27.1	20.8	107
Tavush	1.7	261	26.5	46.4	4.1	2.4	1.7	49.5	22.9	26.6	251
Education											
Basic	2.0	382	25.3	51.0	5.6	4.4	1.2	43.4	23.7	19.7	371
Secondary	0.8	2,374	25.6	49.5	3.0	2.3	0.7	47.4	31.0	16.4	2,298
Secondary special	0.5	1,313	25.9	46.0	3.9	3.5	0.5	50.1	31.7	18.4	1,269
Higher	0.1	1,803	24.5	58.0	3.7	2.7	1.0	38.2	28.4	9.8	1,732
Wealth quintile											
Lowest	1.3	1,054	25.3	51.9	3.8	2.9	0.9	44.3	27.9	16.4	1,026
Second	0.7	1,214	25.5	51.0	2.3	1.8	0.6	46.7	29.8	16.9	1,170
Middle	0.7	1,103	25.3	51.5	4.0	2.6	1.4	44.5	29.4	15.1	1,058
Fourth	0.4	1,205	25.2	51.9	3.6	3.1	0.5	44.5	30.5	14.1	1,172
Highest	0.2	1,300	25.1	51.0	4.4	3.8	0.6	44.7	31.4	13.3	1,250
Total	0.6	5,876	25.3	51.4	3.6	2.8	0.8	45.0	29.9	15.1	5,675

Note: The Body Mass Index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m2). Total includes 5 (weighted) women with no education. <sup>1</sup> Excludes pregnant women and women with a birth in the previous 2 months.



# Figure 12.6 Trends in nutritional status of women age 15-49

# 12.7 MICRONUTRIENT INTAKE AMONG MOTHERS

Adequate micronutrient intake by women has important benefits for women and their children. Breastfeeding children benefit from micronutrient supplementation that mothers receive, especially vitamin A. Iron supplementation during pregnancy can reduce the likelihood of anemia. Iodine deficiency is related to a number of adverse pregnancy outcomes including abortion, stillbirth, fetal brain damage, and congenital malformation.

The 2015-16 ADHS collected information from women age 15-49 who had given birth during the 5 years before the survey on their use of iron, folic acid, or multivitamin supplements during pregnancy. To obtain the information on iron supplementation, women were asked if they had been given or bought iron tablets or syrup during pregnancy for their most recent birth. If they responded affirmatively, they were asked about the number of days that they took the tablets or syrup. A similar set of questions was asked to obtain information on folic acid or multivitamin supplementation.

Table 12.10 shows that approximately six in ten women did not take any iron tablets or syrup during pregnancy for their most recent birth in the 5 years before the survey. Most of the women who took iron supplements did so for fewer than 60 days; only 5 percent of women said they took iron supplements for 90 days or more. Iron supplementation during pregnancy is more common among women age 40-49, women in urban areas, women in the Syunik and Aragatsotn regions, and those with higher education. Mothers in the lowest wealth quintile (28 percent) are less likely than mothers in the other wealth quintiles to have received iron supplements (38-41 percent).

Table 12.10 also shows that virtually all women age 15-49 with a child born in the past 5 years live in a household with iodized salt.

#### Table 12.10 Micronutrient intake among mothers

Among women age 15-49 with a child born in the 5 years before the survey, percent distribution by number of days they took iron tablets or syrup during the pregnancy of the last child, and among women age 15-49 with a child born in the 5 years before the survey and who live in households that were tested for iodized salt, percentage who live in households with iodized salt, according to background characteristics, Armenia 2015-16

Among women with a

		Numbo	r of dove wor	non took iro	a tablata			child born in years, wi households	the last five no live in s that were
			r of days wor					Percentage	
Background characteristic	or syrup during pregnancy of last birth Don't know/ Number of None <60 60-89 90+ missing Total women					Number of women	living in house- holds with iodized salt <sup>1</sup>	Number of women	
Age									
15-19	*	*	*	*	*	*	18	*	18
20-29	59.0	29.7	2.8	4.1	4.4	100.0	833	99.4	828
30-39	56.7	30.1	2.4	5.5	5.4	100.0	476	100.0	475
40-49	(55.3)	(36.4)	(0.0)	(4.8)	(3.5)	100.0	34	100.0	34
Residence									
Urban	55.4	30.2	2.9	7.0	4.4	100.0	794	99.8	790
Rural	62.2	29.2	2.3	1.0	5.3	100.0	568	99.5	565
Region									
Yerevan	55.5	27.9	2.5	10.5	3.6	100.0	398	100.0	395
Aragatsotn	27.3	68.3	1.9	0.0	2.5	100.0	51	100.0	51
Ararat	48.2	30.2	7.0	1.8	12.8	100.0	140	100.0	140
Armavir	67.6	21.7	0.2	4.2	6.3	100.0	147	98.7	147
Gegharkunik	74.1	12.6	0.0	0.0	13.4	100.0	65	100.0	65
Lori	44.2	43.1	3.2	1.5	7.9	100.0	76	100.0	76
Kotayk	64.2	31.1	1.9	1.3	1.5	100.0	200	100.0	199
Shirak	81.0	17.6	0.0	0.7	0.8	100.0	130	97.8	127
Syunik	6.9	64.3	14.4	12.0	2.5	100.0	46	100.0	46
Vayots Dzor	72.6	22.1	3.6	1.8	0.0	100.0	30	100.0	30
Tavush	65.5	29.0	1.1	0.5	3.8	100.0	78	100.0	78
Education									
Basic	56.3	29.5	4.5	3.0	6.6	100.0	70	100.0	70
Secondary	61.0	28.2	2.7	3.0	5.1	100.0	533	99.6	533
Secondary special	60.2	27.4	2.3	4.6	5.5	100.0	286	99.7	284
Higher	54.2	33.1	2.5	6.4	3.8	100.0	472	99.6	468
Wealth quintile									
Lowest	66.2	24.8	2.8	0.4	5.7	100.0	252	99.3	251
Second	55.7	31.9	1.8	3.9	6.7	100.0	275	99.6	274
Middle	57.7	29.6	4.0	3.9	4.8	100.0	253	100.0	252
Fourth	56.1	30.8	3.7	5.0	4.3	100.0	250	99.3	249
Highest	56.3	31.2	1.5	8.3	2.8	100.0	331	100.0	329
Total	58.2	29.8	2.7	4.5	4.8	100.0	1,361	99.7	1,355

<sup>1</sup> Excludes women in households where salt was not tested. Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

Table 12.11 shows that supplementation with folic acid or multivitamins is slightly more common than iron supplementation. Approximately five in ten women did not take any folic acid tablets or multivitamins during pregnancy for their most recent birth in the 5 years before the survey. Most of the women who took folate or multivitamin supplements did so for fewer than 60 days; only 4 percent took a supplement for 60-89 days, and 6 percent took folic acid or multivitamins for 90 days or more. Folic acid and multivitamin supplementation during pregnancy is more common among women age 20-29, women in urban areas, women in the Syunik and Lori regions, and those with more education and wealth.

Sixteen percent of women took folic acid or multivitamin supplements immediately prior to pregnancy for their most recent birth in the 5 years before the survey. Folate or multivitamin supplementations *before* pregnancy is substantially more common among women residing in Syunik (64 percent) and Aragatsotn (29 percent), compared with the 10-17 percent among women from other regions (data not shown).

#### Table 12.11 Folate or multivitamins intake among mothers

Among women age 15-49 with a child born in the past 5 years, the percent distribution by number of days they took folate tablets or
multivitamins during the pregnancy of the last child, according to background characteristics, Armenia 2015-16

	Among women with a child born in the last five years, number of days women took folate tablets or multivitamins during pregnancy of last birth									
Background				unig program	Don't know/		Number of			
characteristic	None	<60	60-89	90+	missing	Total	women			
Age										
15-19	*	*	*	*	*	*	18			
20-29	49.9	34.1	4.4	6.2	5.5	100.0	833			
30-39	53.7	32.9	3.3	5.4	4.7	100.0	476			
40-49	(62.2)	(18.2)	(6.4)	(7.8)	(5.4)	100.0	34			
Residence										
Urban	47.2	33.9	5.1	8.6	5.3	100.0	794			
Rural	58.1	32.0	2.5	2.0	5.4	100.0	568			
Region										
Yerevan	48.6	30.4	3.4	12.5	5.1	100.0	398			
Aragatsotn	42.8	41.7	6.1	7.5	1.9	100.0	51			
Ararat	70.1	16.0	1.2	1.3	11.4	100.0	140			
Armavir	56.3	30.0	3.0	5.2	5.4	100.0	147			
Gegharkunik	48.8	28.5	0.0	0.0	22.7	100.0	65			
Lori	25.9	58.4	7.8	0.0	8.0	100.0	76			
Kotayk	43.5	49.3	2.6	3.7	0.9	100.0	200			
Shirak	69.1	23.8	3.7	2.0	1.4	100.0	130			
Syunik	9.7	48.5	30.0	10.4	1.4	100.0	46			
Vayots Dzor	60.7	33.2	3.5	1.7	0.9	100.0	30			
Tavush	73.0	21.9	1.3	1.1	2.6	100.0	78			
Education										
Basic	56.5	26.2	7.9	2.0	7.4	100.0	70			
Secondary	56.1	30.8	3.0	3.1	7.0	100.0	533			
Secondary special	54.6	31.5	4.6	5.1	4.2	100.0	286			
Higher	44.3	37.8	4.2	9.9	3.8	100.0	472			
Wealth quintile										
Lowest	61.2	28.3	2.1	0.4	8.0	100.0	252			
Second	57.0	30.7	3.1	3.7	5.5	100.0	275			
Middle	49.1	32.8	6.7	5.7	5.7	100.0	253			
Fourth	50.3	32.2	5.8	6.3	5.4	100.0	250			
Highest	43.3	39.7	2.8	11.5	2.8	100.0	331			
Total	51.7	33.1	4.0	5.8	5.3	100.0	1,361			

## **12.8 ANEMIA**

Anemia is a condition characterized by a reduction in the red blood cell volume and a decrease in the concentration of hemoglobin in the blood. Hemoglobin is necessary for transporting oxygen to tissues and organs in the body. Approximately 1.62 billion people or about one-quarter of the global population are affected by anemia (WHO and CDC 2008). Globally in 2011, about 43 percent of children, 38 percent of pregnant women, and 29 percent of all women of reproductive age had anemia. About half of cases of anemia are due to iron deficiency (WHO 2015a). Iron deficiency, in turn, is largely due to an inadequate dietary intake of bioavailable iron, increased iron requirements during rapid growth periods, such as pregnancy and infancy, and increased blood loss due to hookworm or schistosome infestation. Nutritional anemia includes the anemic burden due to deficiency in iron plus deficiencies in folate, vitamins B and B12, and certain trace elements involved with red blood cell production. Anemia in children is associated with impaired mental and physical development, increased mortality, and morbidity. Anemia can be a particularly serious problem for pregnant women, because it leads to premature delivery and low birth weight.

Determining anemia levels among women and their children under age 5 was one component of the ADHS. Anemia levels were determined by measuring the level of hemoglobin in the blood, a decreased concentration of which characterizes anemia. Hemoglobin concentration was measured using the Hb301+ analyzer by HemoCue. For the hemoglobin measurement, capillary blood was taken with a finger prick using sterile, disposable instruments. The first two drops of blood were wiped off with a sterile gauze pad, and the third drop was used for anemia testing. As described in Chapter 1, medically trained personnel on each 2015-16 ADHS interviewing team performed the testing procedures on eligible, consenting respondents. After the test, hemoglobin concentration levels were reported back to the respondent or parents/responsible adults. In the case of severe anemia, a written referral that recommended immediate follow up with a health professional was provided.

## 12.8.1 Anemia Prevalence in Women

In addition to causing weakness, frequent tiredness, and lowered resistance to disease, anemia can be a particularly serious problem for pregnant women, and can lead to premature delivery and low birth weight. All women age 15 to 49 in households interviewed in the 2015-16 ADHS were offered an anemia test. Before participating in the survey, each respondent was read a consent statement that informed her of her right not to participate in the anemia testing. Each woman was asked if she would give permission for the collection of a blood droplet from her and her children. Ninety-three percent of eligible women participated in the hemoglobin measurement.

Levels of anemia were classified as severe, moderate, and mild based on the hemoglobin concentration in the blood, according to criteria developed by WHO (DeMaeyer et al. 1989). Because hemoglobin levels vary by altitude, the measurements were adjusted based on altitude measurements taken in each cluster. Levels of anemia were classified as follows:

- Mild: hemoglobin concentration 10.0-10.9 g/dl
- Moderate: hemoglobin concentration 7.0-9.9 g/dl
- Severe: hemoglobin concentration less than 7.0 g/dl

Table 12.12 presents the prevalence of anemia in women age 15-49 based on hemoglobin levels adjusted for altitude and smoking status using the formulas recommended by CDC (CDC 1998). Thirteen percent of women in Armenia suffer from some degree of anemia; most of these (12 percent of all women) have mild anemia, 1 percent have moderate anemia, and almost none have severe anemia. Table 12.12 shows that anemia rates generally decrease with age. The prevalence of anemia is somewhat higher among breastfeeding women (16 percent) than among pregnant women (11 percent), or among women who are neither pregnant nor breastfeeding (13 percent). Women in Gegharkunik are the most likely to be anemic (39 percent) compared with women in other regions (7-14 percent). The prevalence of anemia decreases with education, from 17 percent of women with basic education to 11 percent among women with higher education.

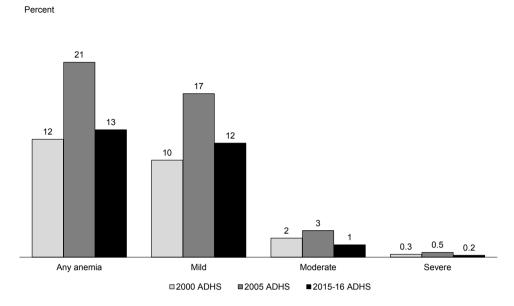
A comparison of the three ADHS surveys of 2015-16, 2005, and 2000 (Figure 12.7) indicates that prevalence of anemia among women age 15-49 has returned to levels observed in 2000.

#### Table 12.12 Prevalence of anemia in women

Percentage of women age 15-49 with anemia, according to background characteristics, Armenia 2015-16

		Anemia status by hemoglobin level							
		Any	Mild	Moderate	Severe				
Background	Not pregnant	<12.0 g/dl	10.0-11.9 g/dl	7.0-9.9 g/dl	<7.0 g/dl	Number o			
characteristic	Pregnant	<11.0 g/dl	10.0-10.9 g/dl	7.0-9.9 g/dl	<7.0 g/dl	women			
Age									
15-19		17.2	16.6	0.4	0.3	686			
20-29		13.7	12.9	0.8	0.0	1,894			
30-39		11.1	10.2	0.7	0.2	1,770			
40-49		14.1	10.8	3.1	0.2	1,419			
Number of children						,			
ever born									
0		15.1	14.5	0.4	0.1	1,972			
1		11.5	10.6	0.6	0.3	813			
2-3		12.8	10.8	1.9	0.2	2.775			
4-5		14.2	10.3	3.9	0.0	197			
6+		*	*	*	*	12			
Maternity status									
Pregnant		11.2	9.8	1.3	0.0	156			
Breastfeeding		16.1	15.6	0.5	0.0	351			
Neither		13.3	11.8	1.3	0.2	5,261			
Jsing IUD									
Yes		11.9	10.2	1.6	0.1	322			
No		13.5	12.1	1.3	0.2	5,448			
Smoking status									
Smokes cigarettes/		(18.5)	(13.4)	(5.1)	(0.0)	36			
tobacco		(1010)	(1011)	(0.1)	(0.0)				
Does not smoke		13.4	12.0	1.3	0.2	5,733			
Residence									
Urban		12.9	11.4	1.4	0.2	3,381			
Rural		14.2	12.9	1.1	0.1	2,388			
Region									
Yerevan		11.9	10.4	1.4	0.1	1,812			
Aragatsotn		14.2	14.1	0.1	0.0	308			
Ararat		9.0	8.9	0.1	0.0	539			
Armavir		7.4	6.3	0.9	0.2	580			
Gegharkunik		39.2	37.8	1.1	0.4	468			
Lori		13.8	10.2	2.9	0.7	299			
Kotayk		12.6	10.9	1.7	0.0	662			
Shirak		11.3	9.8	1.4	0.2	504			
Syunik		10.4	8.9	1.5	0.0	232			
Vayots Dzor		9.6	7.5	1.1	1.1	113			
Tavush		9.5	7.2	2.4	0.0	253			
Education									
Basic		17.3	15.6	1.2	0.5	380			
Secondary		14.9	13.4	1.3	0.2	2,340			
Secondary special		13.4	11.2	2.1	0.1	1,296			
Higher		10.7	9.9	0.7	0.1	1,748			
Vealth quintile									
Lowest		13.9	12.0	1.6	0.3	1,047			
Second		14.4	13.1	1.2	0.1	1,196			
Middle		14.1	12.4	1.6	0.2	1,092			
Fourth		13.6	11.9	1.5	0.2	1,175			
Highest		11.4	10.8	0.6	0.0	1,260			
Total		13.4	12.0	1.3	0.2	5,769			

Note: Prevalence is adjusted for altitude and for smoking status if known using formulas in CDC 1998. Total includes 5 (weighted) women with no education. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.



*Figure 12.7* Trends in anemia status among women age 15-49, 2000-2016

Note: 2005 anemia estimates have been re-calculated to reflect corrections that were made to the 2005 ADHS altitude data.

### 12.8.2 Anemia Prevalence in Children

Table 12.13 presents anemia prevalence for children age 6-59 months. The results are based on tests of 1,349 (weighted) children who were present at the time of testing, whose parents consented to their being tested, and whose hemoglobin results represented plausible data. These children represented 85 percent of the 1,582 (weighted) children eligible for testing. Table 12.13 presents the prevalence of anemia in children age 6-69 months based on hemoglobin levels adjusted for altitude.

The results in Table 12.13 indicate that overall, one in six children age 6 to 59 months (16 percent) have some level of anemia. Almost all children who suffer from anemia are mildly anemic (11 percent of all children) or moderately anemic (4 percent of all children). Less than 1 percent of children age 6-59 months are severely anemic.

As Table 12.13 shows, anemia prevalence declines with age. Anemia is more prevalent among children under age 24 months than among older children with a peak prevalence of 35 percent observed among children age 9-11 months. Children age 48-59 months are five times less likely to be anemic than children age 12-17 months (6 percent and 31 percent, respectively). Anemia is almost equally prevalent in boys and girls (16 and 15 percent, respectively). Children in rural areas (18 percent) are slightly more likely than urban children (14 percent) to be anemic. Differences in the prevalence of anemia by maternal education or wealth are small.

Unlike the 2015-16 or 2005 surveys, the 2000 ADHS restricted hemoglobin measurement to children whose mothers were interviewed with the Woman's Individual Questionnaire. Therefore, in order to compare the 2015-16 and 2005 estimates of anemia prevalence to the 2000 estimates, 2015-16 and 2005 estimates were recalculated, restricting the estimates to children age 6-59 months, whose mothers were interviewed with the Woman's Questionnaire.

#### Table 12.13 Prevalence of anemia in children

Percentage of children age 6-59 months classified as having anemia, according to background characteristics, Armenia 2015-16

		Anemia s	tatus by hemoglo	bin level	
-	Any	Mild	Moderate	Severe	Number of
Background	anemia	anemia	anemia	anemia	children age
characteristic	(<11.0 g/dl)	(10.0-10.9 g/dl)	(7.0-9.9 g/dl)	(< 7.0 g/dl)	6-59 months
Age in months					
6-8	24.4	15.8	8.6	0.0	66
9-11	34.7	20.6	14.1	0.0	77
12-17	30.5	20.2	8.2	2.0	155
18-23	21.7	15.4	6.3	0.0	142
24-35	13.0	10.4	2.3	0.3	309
36-47	10.4	8.6	1.8	0.0	299
48-59	6.3	3.8	1.8	0.7	301
Sex					
Male	15.8	11.7	3.5	0.6	718
Female	15.4	10.2	4.9	0.3	631
Residence					
Urban	13.6	9.9	3.0	0.7	721
Rural	18.0	12.3	5.5	0.1	628
Region					
Yerevan	10.4	6.9	1.9	1.6	331
Aragatsotn	11.5	9.7	1.8	0.0	58
Ararat	10.3	9.7	0.0	0.5	159
Armavir	7.4	5.3	2.1	0.0	172
Gegharkunik	48.8	41.7	7.1	0.0	64
Lori	33.6	19.5	14.1	0.0	52
Kotayk	20.2	11.9	8.3	0.0	207
Shirak	21.4	13.5	7.9	0.0	153
Syunik	9.8	6.6	3.2	0.0	53
Vayots Dzor	15.1	10.6	4.5	0.0	34
Tavush	11.2	9.8	1.4	0.0	66
Mother's					
education <sup>1</sup>	16.6	10.1	6.5	0.0	82
Basic	18.9	13.5	5.3	0.0	62 571
Secondary Secondary special	13.4		5.3 3.5	1.1	280
	13.4	8.8 9.5	3.5 2.6	0.5	280 411
Higher	12.0	9.5	2.0	0.5	411
Wealth quintile	10.0	447	2.0	0.2	205
Lowest	18.8	14.7	3.9	0.3	285
Second	14.4	8.6	5.8	0.0	292
Middle	19.9	12.8	6.2	0.8	250
Fourth	13.8	9.2	3.6	0.9	219
Highest	11.6	9.7	1.6	0.4	302
Total	15.6	11.0	4.2	0.4	1,349

Note: Table is based on children who stayed in the household on the night before the interview and who were tested for anemia. Prevalence of anemia, based on hemoglobin levels, is adjusted for altitude using formulas in CDC, 1998. Hemoglobin in grams per deciliter (g/dl). <sup>1</sup> For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Figure 12.8 compares anemia data from the 2000, 2005 and 2015-16 ADHS surveys. Children are much less likely to be anemic in 2015-16 than at the time of the two earlier ADHS surveys. The downward trend is especially marked with the rates of moderate anemia.

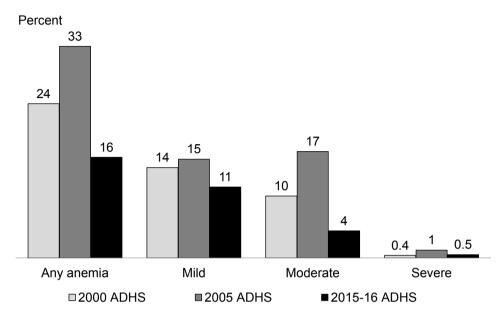


Figure 12.8 Trends in anemia status among children age 6-59 months, 2000-2016

Note: The estimates are restricted to children born to mothers who were interviewed. The 2005 ADHS anemia estimates have been re-calculated to reflect corrections that were made to the 2005 ADHS altitude data.

# 12.8.3 Knowledge about Anemia

Although anemia levels among women and children have fallen, anemia continues to be a serious health concern in Armenia. A flour fortification program is being proposed to the parliament to prevent and control anemia in Armenia. Information on the population's level of anemia knowledge is crucial for designing effective communication strategies to educate the public about anemia. To obtain this information, the 2015-16 ADHS included a series of questions in the Woman' and Man's questionnaires to assess the overall level of awareness of anemia and the extent of knowledge about symptoms and ways to prevent and control anemia.

## Anemia Knowledge

Table 12.14 presents the percentages of women and men age 15-49 who had heard about anemia. Nearly eight in ten women (78 percent) and five in ten men (55 percent) say they have heard of anemia, showing that awareness of the disease is widespread in Armenia but not universal. The percentage of women who have heard about anemia is lowest in the Gegharkunik region (42 percent), in the 15-19 age group (57 percent), and among those who have only basic education (46 percent). Men are least likely to have heard about anemia if they are in the 15-19 age group (30 percent), are rural residents (44 percent), or live in the Lori (11 percent), Syunik (25 percent), Shirak (30 percent), and Gegharkunik (32 percent) regions. Among both women and men, the proportions who have heard about anemia generally increase with increasing education and household wealth.

## Knowledge of Anemia Symptoms

Respondents in the 2015-16 ADHS who had heard about anemia were asked to mention symptoms that would lead them to think that a person had anemia. All the symptoms or signs that respondents mentioned were recorded.

#### Table 12.14 Knowledge of anemia

Percentage of women and men age 15-49 who have heard of anemia, according to background characteristics, Armenia 2015-16

	Wo	men	Me	en
Background	Percentage who have heard of	Number	Percentage who have heard of	Number
characteristic	anemia	of women	anemia	of men
Age				
15-19	57.1	725	30.1	345
20-24	73.0	928	43.2	467
25-29	81.2	1,099	52.3	464
30-34	81.5	1,007	60.9	427
35-39	83.4	867	65.9	376
40-44	83.6	784	65.4	346
45-49	83.9	706	66.3	330
Residence				
Urban	83.4	3,657	62.3	1,558
Rural	70.1	2,459	44.3	1,197
Region		2,.00		.,
Yerevan	87.5	2,001	78.8	833
Aragatsotn	66.8	315	52.5	159
Ararat	75.5	552	73.8	290
Armavir	59.3	586	51.7	268
Gegharkunik	41.5	478	31.5	235
Lori	67.8	355	10.7	184
Kotavk	84.6	678	30.4	299
Shirak	90.0	510	25.4	201
Syunik	94.6	238	77.2	104
Vayots Dzor	84.9	119	49.2	56
Tavush	89.1	283	51.6	126
Education				
Basic	45.7	396	35.1	360
Secondary	70.9	2.444	47.3	1,250
Secondary special	84.9	1,360	54.8	403
Higher	89.3	1,910	76.5	736
Wealth quintile				
Lowest	63.9	1,081	41.1	523
Second	76.2	1,242	47.1	583
Middle	74.7	1,142	49.1	521
Fourth	84.4	1,287	63.4	566
Highest	88.0	1,365	70.5	562
Total	78.1	6,116	54.5	2,755
- otai	75.1	3,110	0 7.0	2,700

The results in Tables 12.15.1 and 12.15.2 indicate that nearly three-quarters of women (72 percent) and two-thirds of men (66 percent) in Armenia who know about anemia identify pale skin as a symptom of the disease. Approximately half of women and men mention weakness, two-fifths of women and about one-fifth of men mention dizziness/lightheadedness, one-fifth of women and one-quarter of men cite tiredness/fatigue, and one-fifth of women and one-tenth of men consider headache as symptom of anemia. Shortness of breath and frequent infections are mentioned by 7 percent or less of women and men. Two percent or less of women and men mentioned other symptoms or said that anemia does not have any visible signs.

Overall, 10 percent of women and 8 percent of men who have heard about anemia are not able to identify any anemia symptoms. The percentages of women and men who are not able to identify any anemia symptoms generally decline with age and with increasing education and wealth. Considering regional differences, the percentages who are unable to identify any anemia symptoms are highest among women in the Armavir (30 percent), Vayots Dzor (23 percent) and Lori (22 percent) regions and among men in Vayots Dzor (68 percent) and Tavush (33 percent) regions.

#### Causes of Anemia

The ADHS respondents who had heard about anemia were asked to identify what may cause anemia; all causes that respondents mentioned in response to the question were recorded. The results presented in Tables 12.16.1 and 12.16.2 highlight the most common answers about potential causes of anemia.

About half of women and men age 15-49 who have heard about anemia correctly believe that lack of iron in food (49 percent and 55 percent, respectively) or poor nutrition (58 percent women and 55 percent men) may cause anemia. About three in ten women and two in ten men cite blood loss or trauma as causes of anemia. Hereditary anemia was mentioned by 14 percent of women and 9 percent of men.

Overall, 13 percent of women and 8 percent of men who have heard about anemia are not able to name any cause of anemia.

### Anemia Prevention

The ADHS respondents who had heard about anemia were also asked to identify what person can eat or drink to prevent anemia; all answers that respondents mentioned in response to the question were recorded. The results presented in Tables 12.17.1 and 12.17.2.

Around three in ten women and men age 15-49 who have heard about anemia mentioned eating iron rich foods without specifying the type of food. With regard to specific foods, more than six in ten women and men believe that consumption of red meat/any meat/any organ meat can prevent anemia. Other foods that were frequently mentioned by women as preventing anemia include beetroot (43 percent), vegetables/red fruits or vegetables (25 percent), and green apples (21 percent). Men were somewhat more likely than women to mention vegetables/red fruits or vegetables (29 percent) but less likely to cite eating beetroot (15 percent) or green apples (15 percent) as a means of preventing anemia. Eighteen percent of women and 17 percent of men said that medicine with iron can prevent anemia. Less than 10 percent of women and men mentioned factors like taking any vitamins, taking vitamin C/vitamin B12, or eating vitamin C-rich food as ways to prevent anemia. Overall, 12 percent of women and 11 percent of men who have heard about anemia were not able to cite any action a person can take to prevent anemia.

#### Table 12.15.1 Knowledge of symptoms of anemia: Women

Among women age 15-49 who have heard of anemia, the percentage identifying specific symptoms as signs that would lead them to think a person has anemia, by background characteristics, Armenia 2015-16

Background characteristic	Pale skin	Weakness	Tiredness/ fatigue	Shortness of breath	Headache	Dizziness or light- headed- ness	Frequent	No visible signs	Other	Don't know	Number of women who heard of anemia
Age											
15-19	62.9	39.2	18.9	5.5	19.2	33.7	5.1	1.3	3.4	15.4	414
20-24	70.0	45.9	21.9	3.4	19.0	39.7	5.3	1.4	1.4	12.0	678
25-29	73.9	43.9	20.2	5.3	19.9	40.4	4.8	1.2	2.1	9.7	893
30-34	74.5	47.9	23.0	4.2	17.9	40.2	3.0	1.3	2.0	9.0	821
35-39	75.0	45.6	21.1	5.7	18.5	40.4	4.5	0.8	1.4	9.2	723
40-44	72.6	45.6	20.2	5.6	19.3	37.4	5.7	1.0	2.0	7.3	655
45-49	73.1	47.9	24.2	4.3	19.2	42.1	4.5	1.9	2.4	7.5	593
Residence											
Urban	73.1	47.4	22.6	3.9	18.3	40.8	5.1	0.7	2.6	8.7	3,052
Rural	71.1	42.1	19.5	6.5	20.2	37.1	3.8	2.2	1.0	11.6	1,725
Region											
Yerevan	71.1	50.8	24.5	3.6	18.6	42.3	4.4	0.2	4.1	8.1	1,751
Aragatsotn	64.4	50.6	19.9	18.9	15.3	59.0	1.5	0.0	0.0	0.4	211
Ararat	86.3	45.7	25.3	5.6	22.5	14.1	2.1	5.6	0.0	2.5	417
Armavir	48.1	29.3	6.5	0.5	23.6	30.8	1.0	0.4	0.4	29.9	347
Gegharkunik	57.4	53.0	29.1	6.8	21.8	53.6	4.7	12.6	0.0	6.6	198
Lori	61.0	18.1	21.1	5.2	29.3	39.5	1.5	0.0	2.4	22.1	241
Kotayk	74.5	39.7	10.7	1.5	11.1	49.9	13.5	0.2	1.0	10.1	574
Shirak	80.7	45.4	18.0	6.0	14.7	36.1	0.7	0.2	0.2	10.5	459
Syunik	87.9	63.4	33.4	8.4	12.5	10.1	9.5	1.9	0.0	1.4	225
Vayots Dzor	62.7	34.4	9.7	0.7	25.0	44.5	1.9	0.0	0.3	23.4	101
Tavush	90.9	47.8	34.7	8.1	29.8	52.8	4.7	0.0	4.3	3.2	252
Education											
Basic	65.9	38.7	14.7	3.1	19.6	29.5	1.7	3.1	2.0	20.4	181
Secondary	68.0	38.6	17.6	4.9	17.3	35.7	3.8	1.9	1.8	12.0	1,734
Secondary special	73.9	45.7	23.9	5.2	19.2	40.1	5.1	0.8	1.6	9.0	1,155
Higher	76.4	53.0	24.5	4.7	20.5	44.0	5.4	0.7	2.5	6.8	1,705
Wealth quintile											
Lowest	66.8	39.3	15.2	4.6	17.8	34.8	2.1	2.6	1.4	15.2	691
Second	74.1	42.8	21.1	8.5	21.5	35.4	4.8	2.0	1.0	8.8	946
Middle	72.8	45.7	23.4	4.4	18.4	39.4	4.9	1.6	1.7	8.8	853
Fourth	71.7	47.3	22.2	4.2	17.5	39.5	5.5	0.3	2.7	9.4	1,085
Highest	74.5	49.2	23.2	3.1	19.5	45.4	4.9	0.4	2.8	8.3	1,202
Total	72.4	45.5	21.4	4.8	19.0	39.5	4.6	1.2	2.0	9.7	4,777

Note: Total includes 1 (weighted) woman with no education.

#### Table 12.15.2 Knowledge of symptoms of anemia: Men

Among men age 15-49 who have heard of anemia, the percentage identifying specific symptoms as signs that would lead them to think a person has anemia, by background characteristics, Armenia 2015-16

Background characteristic	Pale skin	Weakness	Tiredness/ fatigue	Shortness of breath	Headache	Dizziness or light- headed- ness	Frequent infections	No visible signs	Other	Don't know	Number o men who heard of anemia
Age											
15-19	68.5	50.7	24.6	2.4	5.0	23.8	4.0	1.7	0.0	6.0	104
20-24	68.0	58.2	18.5	4.1	11.4	18.1	6.1	1.6	1.1	6.6	202
25-29	67.6	57.2	22.8	4.1	8.6	19.7	7.0	2.4	0.4	7.3	243
30-34	58.2	58.8	28.0	5.1	8.4	14.9	7.8	1.3	0.0	10.1	260
35-39	65.0	57.4	23.2	5.1	11.6	19.2	4.7	2.5	0.8	7.5	247
40-44	68.9	58.1	23.9	7.1	18.6	22.2	8.6	2.3	0.9	7.7	226
45-49	66.3	56.3	29.9	4.1	6.8	18.5	8.1	2.1	0.2	11.2	219
Residence											
Urban	65.3	62.2	24.9	4.2	11.0	19.0	5.0	1.2	0.5	6.7	970
Rural	66.3	48.1	23.8	5.8	9.4	19.1	10.2	3.4	0.5	11.2	531
Region											
Yerevan	61.8	71.5	26.4	2.6	11.9	18.3	2.7	0.0	0.6	4.7	657
Aragatsotn	59.1	94.6	90.4	16.8	4.7	7.1	1.9	0.0	0.0	2.7	84
Ararat	54.0	49.7	4.9	2.8	1.0	4.2	5.6	9.8	0.0	8.9	214
Armavir	94.7	12.8	3.8	3.2	2.8	3.5	0.0	0.0	0.0	5.1	138
Gegharkunik	45.6	63.6	47.7	5.0	36.8	78.0	13.4	0.0	0.0	0.0	74
Lori	*	*	*	*	*	*	*	*	*	*	20
Kotayk	84.4	43.6	32.5	12.6	17.0	61.5	45.8	6.5	3.5	13.4	91
Shirak	(75.4)	(46.0)	(22.6)	(3.3)	(8.0)	(8.6)	(1.7)	(0.0)	(0.0)	(18.9)	51
Syunik	100.0	39.9	19.9	14.2	25.2	7.5	8.8	0.8	0.0	0.0	80
Vayots Dzor	14.6	17.0	6.9	0.0	0.0	14.1	2.4	8.8	1.6	67.7	28
Tavush	55.1	51.2	8.1	1.9	2.3	19.7	15.0	0.0	0.0	33.4	65
Education											
Basic	68.9	40.5	22.8	7.0	6.2	11.9	5.0	2.3	2.4	10.3	126
Secondary	58.3	54.7	23.9	3.6	10.6	19.7	5.2	2.0	0.1	10.6	591
Secondary special	65.8	53.7	22.9	3.9	8.6	18.6	12.7	2.0	1.9	9.9	221
Higher	72.6	65.0	26.3	5.8	11.9	20.2	6.7	1.9	0.0	4.8	563
Wealth quintile											
Lowest	70.4	38.1	18.1	4.0	8.2	12.9	6.2	3.7	0.0	11.5	215
Second	64.1	51.4	28.3	7.3	7.9	17.6	11.4	3.7	0.8	11.2	275
Middle	62.4	55.7	27.3	3.9	9.3	22.8	7.6	2.0	0.8	9.9	256
Fourth	63.2	60.0	26.2	2.3	9.2	19.2	5.6	1.0	0.8	6.1	359
Highest	68.5	70.1	22.1	6.2	15.2	20.9	4.6	0.8	0.1	5.4	396
Total	65.7	57.2	24.5	4.8	10.4	19.1	6.8	2.0	0.5	8.3	1,501

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

Among women age 15-49 who have heard of anemia, the percentage who report various cau	Background Lack of Eating Here- Background iron in Poor bread ditary l characteristic food nutrition only anemia t	Age         15-19         44.7         50.6         7.3         12.8         15-19         22-24         45.7         55.7         5.3         13.4         25-29         13.4         25-29         13.4         25.6         5.4         13.3         33.4         33.4         33.5         33.4         33.5         34.4         35.6         5.4         13.3         35.5         13.4         35.6         5.4         13.3         33.4         35.6         5.6         5.5         15.1         33.3         35.5         5.6         5.6         5.6         5.6         5.6         5.6         5.6         5.6         5.6         5.6         5.6         5.1         5.3         5.9         5.6         5.6         5.6         5.1         5.3         5.3         5.9         4.4         5.1         17.3         5.9         4.4         5.1         17.3         5.4         5.1         17.3         5.1         17.3         5.1         17.3         5.1         17.3         5.1         17.3         5.1         17.3         5.1         17.3         5.1         17.3         5.1         17.3         5.1         17.3         5.1         17.3         5.1         17.3         5.1 <t< th=""><th>Residence Urban 49.5 60.2 5.1 15.1 Rural 48.1 53.1 5.0 12.8</th><th>Region         7.8         63.6         5.2         17.7           Yerevan         47.8         63.6         5.2         17.7           Aragatsotn         52.5         32.0         4.2         22.9           Armart         59.6         55.7         3.7         26.0           Armart         33.1         50.6         0.7         18           Armart         33.1         50.6         0.7         18           Armart         33.1         50.6         0.7         14           Lori         48.6         48.4         0.3         14           Kotayk         37.2         63.9         5.1         5.1           Shirak         38.9         48.6         2.0         14           Syunik         87.5         63.9         16.6         21           Vayots Dzor         29.1         73.5         14.7         6.1</th><th>Education Basic 38.1 52.6 4.1 9.1 Secondary 41.6 53.2 4.6 12.7 Secondary 49.6 58.5 5.4 14.9 special 57.3 62.1 5.5 16.1</th><th><b>3</b> 39.6 52.7 4.1 52.8 53.7 6.2 47.1 57.3 4.9 48.4 59.3 5.7 53.2 62.3 4.3</th><th>49.0 57.7 5.1 14.3</th></t<>	Residence Urban 49.5 60.2 5.1 15.1 Rural 48.1 53.1 5.0 12.8	Region         7.8         63.6         5.2         17.7           Yerevan         47.8         63.6         5.2         17.7           Aragatsotn         52.5         32.0         4.2         22.9           Armart         59.6         55.7         3.7         26.0           Armart         33.1         50.6         0.7         18           Armart         33.1         50.6         0.7         18           Armart         33.1         50.6         0.7         14           Lori         48.6         48.4         0.3         14           Kotayk         37.2         63.9         5.1         5.1           Shirak         38.9         48.6         2.0         14           Syunik         87.5         63.9         16.6         21           Vayots Dzor         29.1         73.5         14.7         6.1	Education Basic 38.1 52.6 4.1 9.1 Secondary 41.6 53.2 4.6 12.7 Secondary 49.6 58.5 5.4 14.9 special 57.3 62.1 5.5 16.1	<b>3</b> 39.6 52.7 4.1 52.8 53.7 6.2 47.1 57.3 4.9 48.4 59.3 5.7 53.2 62.3 4.3	49.0 57.7 5.1 14.3
ercentage who	Blood loss or trauma Abortion	20.6 26.4 31.4 28.3 28.3 28.3 28.3 5.4 6.4 6.4 6.4 6.4 5.4 8.0 6.7 8.0 8.0 8.0	31.1 7.4 25.1 5.6	32.5 32.5 22.0 22.0 22.2 22.2 22.2 22.2 13.7 16.8 4.4 13.7 13.7 13.7 13.7 13.7 13.7 13.7 13.7	21.0 2.2 23.2 5.6 31.8 7.1 33.7 8.2	00474 00474 0074740	29.0 6.
o report vario	Menstru- tion ation	6 7 7 7 7 7 7 7 7 8 5 3 3 9 7 3	4 6.4 6 3.0	8 8 7 5 7 6 8 8 4 0 0 8 8 9 0 9 8 8 9 0 9 8 8 9 0 9 8 9 9 9 9	2 4.2 4.1 4.2 4.2 4.2 4.2 4.2 4.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7.2 7		.7 5.2
is causes of	Preg- nancy	6.5 7.2 7.2 7.2 7.2	6.3 8.6		3.9 5.7 7.7 8.6	6.1 7.5 7.5 7.1	7.1
<sup>:</sup> anemia, b	Delivery	3.0 7.0 7.0 7.0 7.1 7.1	6.6 5.6	2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2 2.2	3.4 5.3 8 8	6 0.0 0.0 0.0 0.0 0.0 0.0	6.3
y backgrou	Environ- ment pollution	0.8 0.8 0.7 0.6 0.3 0.3	0.9 0.2	- 0 0 0 0 0 0 0 4 0 0 0 0 4 0 0 6 6 6 6 0 0 0 6 7 0 7 0 7 0 0	0.0 0.3 0.5	0.4 0.3 0.6 1.0	9.0
und chara	Lead poison	0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.1	0.0000000000000000000000000000000000000	0.0 0.1 0.0	0.0000000000000000000000000000000000000	0.0
cteristics,	Unclean polluted water	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0 0.0	0.2	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 0.1 0.3	0.0 0.3 0.3 0.2	0.2
ises of anemia, by background characteristics, Armenia 2015-16	Diseases In	6.5 8.2 9.4 9.7	7.7 9.4	2017 2017 212 212 212 212 212 212 214 214	6.0 9.2 3		8.3
5-16	Mos- quitos Infection malari	4.0 5.3 5.3 5.9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5.4 3.4 0	5.5 5.0 5.5 5.5 5.5 5 5.5 5 5 5 5 5 5 5	5.6.2 5.6 0.000 0.000 0.000	0 8 6 4 0	4.7 0.
	Mos- quitos/ Para- malaria sites	0.0 0.1 0.1 0.2 0.7 0.2 0.3 0.3 0.3 0.3 0.4 0.1 1.1	.3 1.4 .2 0.2	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.3 0.0 0.2 0.0 0.2 1.2 0.3 1.7		.2 0.9
	Wrong blood trans- fusion	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2.8 1.9	ю 4 - 0 7 0 0 - 4 6 6 8 6 0 4 7 0 6 0 - 4 6 6 8 6 0 7 7 0 6 0 6 6 0 0	1.2 1.2 1.0 4.6	11.7 3.0 3.6	2.5
	Injec- tions	0.5 0.6 0.0 0.0 0.0 0.0	0.6 0.5	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0 0.6 0.6	0.5 0.5 0.5 0.8 0.8	0.6
	Other	2.6 2.6 2.0	2.1 0.7	3.2 0.0 0.0 1.6 0.0 1.7 7.7	0.0 0.9 0.9	0.5 2.2 2.2 2.7	1.6
	Don't know	22.1 16.9 12.5 10.2 10.2	11.5 16.8	21.3 21.3 33.5 115.9 115.9 115.9 2.7 5.7 5.7	26.8 18.9 7.5	2222 1222 1222 94	13.4
	Number of women who heard of anemia	414 678 893 821 723 655 593	3,052 1,725	1,751 211 2417 347 347 574 574 459 252 225 225	181 1,734 1,155	691 946 853 1,085	4,777

Table 12.16.1 Knowledge about what may cause anemia: Women

Background	Lack of iron in food	Poor	Eating bread	Here- ditary	Blood loss or trauma	Abortion	Menstru- ation	Preg-	Delivery	Environ- ment	Lead	Unclean polluted water	Dis-	Infection	Mosqui- tos/ malaria	Para sites	Wrong blood trans-	Injec- tions	Other	Don't know	of men of men who heard of
Age	000		6					6								200					5
15-19 20.24	47.7 52 5	43.7 54 o	0 0 0	5.3 6	13.1	5 9 7 7		0.0	6.2 7	0.7	- c ci +	7.9	c	10.4 م م	5.9 7	1.6 0.0	10.5	1.6	0.0	4.0	407 07 07 07 07 07 07 07 07 07 07 07 07 0
25-29	53.5 61.6	51.1	0.0 10.4	0.0 9.6	20.0 19.2	2.4	1.1	0.9 1.8	0.0 7.0	8.7 2.6	1.2	2.9	0.0 7 4	4 C	3.7	0.0	4 0 7 4	2.5	0.0	10.0 5.6	242
30-34	52.3	54.4	11.7	6.9	15.4	1.9	2.0	2.5	6.0	7.1	3.3	5.2	2.8	4.0	3.9	0.0	9.2	3.7	0.0	11.3	26
35-39 40-44	53.9 53.4	60.8 56.0	13.7 8.8	11.9 12.8	18.6 24.0	2.3	1.9 - 1	2.7	5.1 12.9	5.6 4 4	3.3 1 1	6.6 8 7	3.6 4 0	0.6	2.9	0.0	7.7 8.5	5.0 25	0.0	5.8 8.0	247 226
45-49	57.7	55.3	10.8	6.7	20.6	23	3.9	3.2	7.9	5.6	1.3	э. 1	4.0	0.80 0.00	9.9	0.0	3.6	2.0	0.0	8.6 8.6	12
Residence	50 7	57 G	đ	6.4	8 8 8	ע ד	ע ל	00	3 9	α,	10	ά	0 6	67	7 5	40	0 4	4.4	60	67	20
Rural	62.5	47.9	13.5	13.5	19.4	3.4 4.0	3.1 2.1	3.6	9.0	4.1	1.7	1.7	4.3	8.1	0.2	0.0	3.6	0.2	0.0	11.4	531
<b>Region</b> Yerevan	45.2	65.2	7.1	44	18.5	0.7	-	16	45	10.1	24	11 4	21	6.5	10.9	0.5	11.2	62	0.3	80	65
Aragatsotn	93.4	85.0	78.9	5 7 7 7	17.9	. 4	. 4	0.0	. 4	0.0	0.0	0.0	0.0	, <del>4</del> .0	0.0	0.0	0.0	10.4	0.0	2.7	300
Ararat	39.4	44.7	0.0 0.0	24.4	8.7	0.0	0.0	4 c 8 0	2.9	7.1	3.0	4.0 0.4	2.2	21.7	0.0	0.0	დ. ი დ. ი	0.0	0.0	15.2 3.2	5
Armavır Gegharkunik	84.U 95.9	13.0 5.7	0.9 3.3	0.0 42.0	29.8 28.8	0.9 36.9	1.9 25.6	2.0 15.9	9.06 2.0	0.0	0.0 0.0	0.0	21.6 21.6	0.0	0.5 2.5	0.0	9.2 11.5	0.0 2.2	0.0	1.6	2 1
Lori Kotavk	* 44 F	* *	* C	* T C	+ ۲0 ۱0 ×	* 0	* 0	* ~	* C	יי א ת	* C	* <del>-</del> ~	* * *	* 0	* 0	* 0	* R	* 0	* 0	א ע די די	ασ
Shirak	(43.9)	(35.4)	(1.9)	(0.0)	(10.2)	(0.0)	(5.1)	(0.0)	(5.1)	(0.0)	(0.0)	(0.0)	(6.2)	(4.2)	(0.0)	(0.0)	(5.7)	(0.0)	(0.0)	(26.8)	51
syunik Vayots Dzor	90.U	24.3 24.3	0.0	6.9 27.7	4.0 26.9	0.0	0.0	0.0 2.5	0.0	3.2 0.0	0.0	0.0	2.2 7.9	0.0	0.0	0.0	7.7 0.0	0.0 0.0	0.0	u.u 58.7	йğ
Tavush	44.4	87.3	3.2	0.0	56.7	0.0	0.0	0.0	1.2	0.0	0.0	0.0	9.2	24.9	0.0	0.0	0.0	0.0	0.0	4.4	9
Education Basic	16 G	0.44	τ α	c 01	4 0 0		۲ ۲	ч С	и С	0 0	90		ä	V 01			0			15.7	5
Secondary	50.2	51.6	10.3	11.1	20.4	6.7 2	2.7	2.9	11.3	9.4 9.0	1.0	5.5 2.2	3 3 2 2 2 2 3	4.7	3.2	0.3	0.4 0.0	2.5	0.0	4.01	591
Secondary special	52.8	61.1	9.3	6.1	23.3	0.0	<del>.</del> .	3.0	4.3	4.1	0.3	4.8	2.7	7.5	1.7	6.0	8. 8	2.8	0.0	9.1	22
Higher	62.4	56.5	10.9	7.4	17.1	1.3	1.8	2.0	5.7	10.5	3.5	8.0	3.6	6.2	9.2	0.0	10.0	4.0	0.4	4.3	563
Wealth quintile																					
Lowest	61.1	39.2	10.1	10.5	15.7	1.6 1.6	2.3	3.8 7.8	7.1	2.4	0.0	1.3	4.6	7.0	0.5	0.0	0.9	0.5	0.0	15.2	215
Middle	07.U	54.3	12.0	12.0	74.0 14.2	4 °. 0 10	2.2	л с 4 8	۲1 8 8 5	0.4 0.0	2.2	4 7 7 7	4 c.	0.9 C	0.0	0.0	0. K	0.0	0.0	9.9 7	250
Fourth	47.7	56.4	10.3	5.3	21.1	1.3	1.9	2.8	5.8	4.2	1.3	6.9	3.0	5.0	5.7	1.0	9.2	3.8 8.0	0.0	8.5	35
Highest	55.7	61.4	7.4	6.4	20.0	0.9	1.4	1.7	5.1	10.7	2.9	10.8	2.4	7.6	11.4	0.0	10.8	5.6	0.0	3.8	39
Total	54.9	54.2	10.5	8.9	19.0	2.2	2.1	2.6	7.5	6.7	2.0	5.9	3.4	7.2	5.0	0.2	7.3	2.9	0.1	8.4	1,501

Among women age 15-49 who have heard of anemia, the percentage who report various foods and drinks a person can consume to prevent anemia, by background characteristics, Armenia 2015-16	e 15-49 who	have heard c	of anemia, th	ie percentage	e who report	various foods	and drinks	a person ca	an consume to	prevent ane	mia, by back	ground chars	acteristics, Al	rmenia 201	5-16
Background	Red meat/any meat/ organ	Iron food	Any fruits	Green	Beet-	Any vegeta- bles/red fruits or	Any	Tea or	Vitamin "C" rich foods	Vitamin C/ vitamin B12	Any	Iron containing tablets/ capsules/ syrup/ medicine	Cthor C	Don't	Number of women who heard
CIIAIACIEIISIIC	וובמו	nooi	SIUI	appies	1001	vegeraures	Juice	20100		710					
Age 15-19	53.0	25.5	4 9	23.2	38.7	20.9	3.5	0.8	7.5	00	0 6	13.5	с Т	205	414
20-24	80.50 RO R	28.0	, u	10.01	40.0	21 Q	, c . <del>c</del>		. r	0.0	0.0	0.01 9.41	- 0	16.0	578 878
25-20	00.00 80 3	26.0		22.1	49.5	6-1-2 0-2-C		0.0	2.4	6 L	- C 1 C	0.00	н п 1 4	10.0	803
20-24	60.7	20.04 22.0	0.0 	21 F	20.0t	26.30	00		 	0. L	0.0 V	20 1 CC	F P P	- 1- - 1- - 1-	801 108
35-39	67.9	29.8	7.5	24.1	45.3	24.7	2.8	4.0	7.0	9.5	5.5	16.6	- <del>1</del>	11.8	723
40-44	66.4	28.2	6.1	16.3	45.8	28.6	2.9	0.2	6.7	7.1	8.0	15.1	7.9	9.4	655
45-49	72.3	25.9	8.4	19.5	44.0	27.5	3.4	0.4	7.1	5.9	6.4	16.4	6.4	8.6	593
Residence															
Urban	66.0	29.0	6.7	23.0	41.0	23.8	3.2	0.4	7.1	8.7	7.2	19.7	7.6	10.7	3,052
Rural	67.5	27.7	7.1	17.0	46.3	27.7	2.2	0.3	6.5	6.4	6.3	14.2	1.6	14.9	1,725
Region															
Yerevan	63.4	30.3	5.8	26.2	40.2	20.4	3.1	0.2	7.8	10.4	7.1	22.6	12.1	9.2	1.751
Aragatsotn	69.8	37.8	3.6	6.5	25.7	12.8	0.7	0.0	8.7	5.2	18.1	6.0	0.2	6.1	211
Ararat	70.8	36.4	1.0	28.5	51.9	27.0	0.0	0.0	2.1	3.4	1.2	10.1	0.0	9.4	417
Armavir	53.8	15.8	3.0	9.1	32.6	13.7	0.0	0.0	8.1	3.3	1.3	11.0	1.5	32.0	347
Gegharkunik	65.6	55.0	10.7	7.9	10.8	36.8	1.1	2.3	13.0	18.6	15.0	66.7	0.0	9.4	198
Lori	45.6	23.7	8.6	13.1	39.0	8.0	0.6	0.5	2.9	10.9	7.4	13.3	1.1	23.1	241
Kotayk	69.1	21.3	7.3	11.5	68.0	43.4	1.0	0.0	2.9	6.7	3.8	15.2	2.1	13.3	574
Shirak	71.7	23.1	8.5	18.8	38.2	25.6	5.4	0.6	5.9	1.7	10.8	2.0	1.0	14.9	459
Syunik	96.1	21.0	6.5	27.5	24.3	29.7	2. 4 i	0.3	8.7	5.7	4.2	22.5	0.5	0.8	225
Vayots Dzor Tavush	53.8 80.4	16.0 34.8	1.4 25.8	6.5 42.2	46.9 70.3	11.3 48.4	3.7 14.6	0.0	4.0 14.2	18.1 6.3	6.2 8.6	12.6	2.4	28.4 3.5	101 252
Education															
Basir	58.8	20 5	77	19.2	47 F	17.8	۵. ۲	00	44	89	46	۵ ۲	۲ د	25.4	181
Secondary	62.7	24.7	7.3	17.0	42.4	26.0	2.7	0.2	5.2	6.2	0.0 F 9	12.5	3.6	16.4	1.734
Secondary	68.9	28.1	7.0	20.1	43.8	25.4	3.8	0.4	7.9	6.6	7.5	16.5	6.4	10.2	1,155
special														i	
Higher	69.7	33.5	6.3	25.5	42.7	25.0	2.4	0.3	8.2	10.5	6.6	24.9	6.9	7.8	1,705
Wealth quintile															
Lowest	60.7	22.3	7.2	13.1	42.4	23.4	1.6	0.2	5.8	5.2	5.7	8.3 9.3	3.6	19.0	691
Viddlo	71.Z	31.3 27 E	0.0 7 0	21.0	48.5 200	8.12	4.4	N 0 0 0	0.0	4.7 7.7	0 0 0	16.8 16.5	ю. С	11.5 C C C	946 0F3
Fourth	00.0 66.1	0.17 78 F	o u	1.11	200	5 8 5 5 2 3	- ლ + ო	0.0 0	0. K	ດ. ຜ	ν.α ν	0.01	ית מ	1 0 1 1	1 085
Highest	67.2	30.7	7.5	25.5	44.3	23.0	2.3	0.2	0.0 4.8	11.6	5.9	24.5	8.6 8.6	0.6	1,202
Total	66.5	28.5	6.9	20.9	42.9	25.2	2.8	0.3	6.9	7.8	6.9	17.7	5.4	12.2	4,777
Note: Total includes 1 (weighted) woman with no education.	s 1 (weighte	d) woman wit	th no educat	tion.											

Red meat/ Background         Red meat/ any meat/ any meat/ characteristic           Age         56.6           25-29         56.4           30-34         53.8														
	at/ at/ Iron rich eat food	Any fruits	Green apples	Beetroot	Any vegeta- bles/red fruits or vegetables	Any juice	Tea or coffee	Vitamin "C" rich foods	Vitamin C/ vitamin B12	Any vitamins	rron containing tablets/ capsules/ syrup/ medicine	Other	Don't know	Number of men who heard of anemia
					þ									
		с С	00	17 3	24 R	57	17	с с	13.4	96	15 1	4.7	00	104
		0 0	20.0 1		0.1.0	- c c	- 0	0 F F	1 C	- c - c		- <b>-</b>	, c c	
		0.4		- 0	0.12	0 <del>-</del>	1 1 0 0	- 1	0.0		0.24	t u v c	1 C	202
		13.1	15.9	12.0	29.0	4.0	7.7	1.1	9.9	0.0 1	18.3	0.0	10.2	243
		14.5	13.6	14.4	32.7	3.5	4.0	12.3	4	8.5	13.5	1.1	11.0	260
		10.0	15.2	17.3	28.9	6.8	3.5	8.9	6.1	6.9	22.1	4.1	7.3	247
	33.2 26.1	12.6 13.6	20.2 12.6	19.3 14.4	28.3 26.0	7.0 4.2	2.3	12.8 9.1	8.6 1.3	8.1 8.5	21.3 12.3	3.1 2.9	12.6 12.6	226 219
Decidence														
	76 Q	11 1	11 7	17.0	76.3	с С	80	6	73	10 0	13.8	л С	ч Т	070
Rural 71.3	35.5	12.0	21.3	11.4	33.0	2.6	5.0	 9.8	4.0	2.8	23.6	0.0	9.7	531
Reaion														
<b>u</b>		10.6	8	17 0	20.7	76		00	98	16.8	7 0	50	110	657
ţ		25.2	0.0	. r	201			0.0	0.0 0 c	0.0			- c - c	87
Ararat 60.4	1. 1. 1. 1. 1.	10,0	28.1	ο. - σ	25.7	0.0 Q	16.0	t <del>-</del>	4 C	104	1 00		0.40	410
_		9.9	11 4	0 0 0 0	20.8	о. <del>с</del>	100	0.4	0.4	2.0	11.6	5.0	7.6	138
hinik		0.0	0	0.0 7	0.02 84.0			50 C	1.0 4		0.00			20
		) * )	) *	: * )	) * )	o *	o *	1 *	) * 	*	) * ))	) * )	) * )	02
¥		58.2	20.7	26.8	74.1	2.3	0.0	26.4	0.0	9.3	45.2	0.0	15.6	91
		(1.6)	(31.7)	(3.7)	(0.0)	(0.0)	(0.0)	(4.0)	(4.2)	(0.0)	(2.2)	(0.0)	(26.5)	51
		0.0	25.3	24.2	4.7	0.0	0.0	0.0	3.0	2.5	28.9	0.0	0.0	80
Vayots Dzor 28.2	10.1	13.7	3.8	30.6	18.8	3.7	0.0	1.7	0.9	2.6	6.1	15.4	56.3	28
Tavush 57.9		10.2	10.9	21.9	58.4	0.0	0.0	26.1	4.2	0.6	2.1	0.0	12.3	65
Education														
Basic 62.2	18.8	3.0	17.2	16.8	23.4	5.6	5.7	6.5	4.6	3.3	15.6	0.0	18.6	126
	29.0	11.7	15.1	12.3	31.4	3.1	2.6	8.7	7.2	5.7	19.6	2.6	16.0	591
lary		1				4			1	1				
special 66.7 Higher 61.9	25.2 35.2	9.7 14.4	14.9 14.7	22.1 15.0	27.3	5.7 5.7	1.2	8.6 11.0	5.0 2.8	6.5 14.3	16.4 15.6	4.6 2.1	9.9 1.1	221 263
alintila														
		0.0	16.9	9.5	26.5	3.3	3.1	6.2	3.1	1.9	21.2	0.2	10.1	215
		14.0	20.9	12.2	32.7	3.2	6.4	9.8	2.8	3.1	23.3	0.3	9.9	275
		12.1	13.1	12.4	33.4	4.0	2.2	9.2	8.0	8.3	20.8	0.7	11.1	256
Fourth 57.7	27.2	10.1	14.9	17.7	25.0	4.5	0.6	7.6	8.6	8.7	12.2	4.1	15.7	359
Highest 55.8		12.7	11.6	19.7	27.1	6.9	0.6	12.5	6.7	17.0	13.4	4.9	7.4	396
Total 62.4	29.9	11.7	15.1	15.1	28.6	4.7	2.3	9.4	6.1	8.8	17.3	2.5	10.9	1,501

### Awareness about drinking tea or coffee during meal time can promote anemia

The burden of anemia is primarily due to deficiency in iron. Iron deficiency, in turn, is largely due to an inadequate dietary intake of bioavailable iron. Tea, and to a lesser extent coffee, contain tannins that inhibit the absorption of nonheme iron if taken with or shortly after the meal (DeMaeyer et al. 1989). To assess awareness of the population about the inhibitory effect of tea and coffee on iron absorption, the 2015-16 ADHS respondents who had heard about anemia were further asked if they think that drinking tea or coffee during a meal can promote anemia.

#### Table 12.18 Attitudes about drinking tea or coffee during meal time in relation to anemia

Among women and men age 15-49 who have heard of anemia, the percent distribution by belief that drinking tea or coffee during a meal promotes anemia, according to background characteristics, Armenia 2015-16

		Wo	men			N	en	
	Believes	drinking tea or	coffee promot	es anemia:	Believes	drinking tea or	coffee promot	es anemia:
				Number of				Number of
				women who				men who
Background			Don't	heard of			Don't	heard of
characteristic	Yes	No	know	anemia	Yes	No	know	anemia
Age								
15-19	17.1	24.4	58.5	414	4.8	28.0	67.2	104
20-24	17.7	18.8	63.5	678	7.4	19.5	73.1	202
25-29	16.3	21.5	62.2	893	11.0	22.7	66.3	243
30-34	20.1	22.8	57.0	821	8.3	19.0	72.7	260
35-39	19.3	22.6	58.1	723	8.7	20.7	70.5	247
40-44	16.5	25.8	57.7	655	9.6	22.7	67.7	226
45-49	20.6	23.3	56.0	593	11.0	19.2	69.9	219
Residence								
Urban	18.0	23.7	58.4	3,052	9.1	23.5	67.4	970
Rural	18.7	20.6	60.7	1,725	9.1 8.9	16.9	74.2	531
Ruidi	10.7	20.0	00.7	1,725	0.9	10.9	74.2	551
Region								
Yerevan	16.3	26.1	57.6	1,751	9.1	24.0	66.9	657
Aragatsotn	7.2	14.2	78.6	211	18.7	1.5	79.8	84
Ararat	18.0	31.9	50.1	417	13.1	14.1	72.8	214
Armavir	12.3	19.0	68.7	347	7.8	12.8	79.4	138
Gegharkunik	28.4	13.1	58.4	198	1.6	0.8	97.5	74
Lori	16.1	13.3	70.6	241	*	*	*	20
Kotayk	21.4	14.2	64.3	574	4.9	17.0	78.1	91
Shirak	9.1	22.5	68.4	459	(1.7)	(31.5)	(66.8)	51
Syunik	40.2	25.0	34.8	225	6.9	75.3	17.8	80
Vayots Dzor	23.9	9.2	66.9	101	14.1	16.7	69.2	28
Tavush	31.8	32.6	35.5	252	4.9	21.4	73.7	65
Education								
Basic	18.6	22.8	58.6	181	9.0	18.6	72.4	126
Secondary	12.1	21.8	66.1	1,734	5.0	18.7	76.4	591
Secondary special	21.5	21.6	56.9	1,155	6.7	21.5	71.8	221
Higher	22.3	23.9	53.8	1,705	14.2	24.2	61.6	563
Wealth quintile								
Lowest	18.0	15.2	66.7	691	9.7	12.0	78.3	215
Second	18.4	24.9	56.7	946	7.9	20.0	72.1	275
Middle	19.1	21.0	59.9	853	6.5	22.3	71.2	256
Fourth	15.5	24.2	60.3	1,085	7.0	20.5	72.6	359
Highest	20.2	24.6	55.3	1,202	13.0	26.8	60.2	396
Total	18.3	22.6	59.2	4,777	9.0	21.2	69.8	1,501
IUlai	10.3	22.0	09.Z	4,777	9.0	21.2	09.0	1,501

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

Total includes 1 (weighted) woman with no education.

Table 12.18 shows that slightly more women believe that drinking tea or coffee during a meal does not promote anemia than think it has that effect (23 percent and 18 percent, respectively). Men are also more likely to feel that drinking tea or coffee during a meal does not promote anemia than to think that it can have that effect (21 percent and 9 percent, respectively). Overall, however, most women and men are not sure if drinking tea or coffee during a meal plays a role in promoting anemia (59 percent and 70 percent, respectively).

## Key Findings

- Awareness of AIDS is very widespread in Armenia; 89 percent of women and 88 percent of men age 15-49 have heard of HIV or AIDS.
- Nevertheless, comprehensive knowledge about HIV is low: only 25 percent of women and 21 percent of men know that use of condoms and having just one uninfected faithful partner can reduce the chances of getting HIV, know that a healthy-looking person can have HIV, and reject the two most common local misconceptions about HIV transmission.
- About half of women and men age 15-49 know that HIV can be transmitted from a mother to her child by breastfeeding; about onequarter of women and one-fifth of men know that the risk of mother-tochild transmission can be reduced by a mother taking special drugs during pregnancy.
- Discriminatory attitudes towards people living with HIV are common. For example, over half of women and more than two-thirds of men age 15-49 say they would not buy fresh vegetables from a shopkeeper who has HIV.
- High-risk sexual behavior appears to be rare in Armenia. No women and only 5 percent of men age 15-49 reported having two or more sexual partners in the 12 months before the survey.
- Mean numbers of lifetime sexual partners among Armenian women and men age 15-49 are 1.1 and 4.0, respectively.
- Ten percent of men said they had paid for sexual intercourse in the past 12 months; among these men, 84 percent reported using a condom during their most recent paid sexual intercourse.
- Fifteen percent of women and 2 percent of men have ever been tested for HIV.
- Five percent of women and 1 percent of men reported having a sexually transmitted infection (STI) or symptoms of an STI in the 12 months preceding the survey.

cquired immune deficiency syndrome (AIDS) is caused by a human immunodeficiency virus (HIV) that weakens the immune system, making the body susceptible to and unable to recover from other diseases. HIV/AIDS is an international pandemic, with cases reported from every country. The Joint United Nations Programme on HIV/AIDS (UNAIDS) estimates that in 2015, 36.7 million people worldwide were living with HIV and an estimated 2.1 million people became newly infected. Due to the substantial scale-up of antiretroviral therapy (ART) over the past few years, the annual number of new HIV infections worldwide has fallen by 6 percent since 2010. Despite these signs of progress, only 46 percent of adults living with HIV were obtaining treatment in 2015 (UNAIDS 2016a).

Armenia has a low HIV prevalence overall, with a concentrated epidemic specifically affecting people who inject drugs, migrant workers, men who have sex with men, and sex workers (WHO-EURO 2015). In 2015, an estimated 3,600 of the country's residents were living with HIV, of whom fewer than two out of five were aware of their status and only one-third were linked to care (UNAIDS 2016b; WHO-

EURO 2015). According to the Armenian National Center for AIDS Prevention (NCAP), the estimated HIV prevalence in the 15-49 age group is 0.2 percent (NCAP 2016).

The 2015-16 ADHS collected information from women and men on knowledge and attitudes regarding HIV/AIDS, as well as on sexual behavior and the prevalence of symptoms of sexually transmitted infections (STIs). This chapter summarizes information on knowledge, perceptions, and behaviors at the national level and within geographic and socioeconomic subgroups of the population.

#### 13.1 KNOWLEDGE OF HIV/AIDS AND METHODS OF HIV PREVENTION

Table 13.1 shows the percentages of women and men age 15-49 who have heard of HIV or AIDS, by background characteristics. Knowledge of AIDS in Armenia continues to be very high. Almost 9 in 10 women and men (89 percent of women and 88 percent of men) reported that they have heard of

Table 13.1 Knowledge of HIV or AIDS

Percentage of women and men age 15-49 who have heard of HIV or AIDS, according to background characteristics, Armenia 2015-16

	W	omen	Mer	1
Background characteristic	Have heard of HIV or AIDS	Number of women	Have heard of HIV or AIDS	Number of men
Age				
15-24	82.0	1,653	70.0	813
15-19	73.6	725	63.4	345
20-24	88.6	928	74.9	467
25-29	92.3	1,099	91.8	464
30-39	92.8	1,874	95.4	802
40-49	91.0	1,490	96.2	676
Marital status				
Never married	83.6	1,830	76.3	1,190
Ever had sex	*	12	88.3	631
Never had sex	83.5	1.818	62.6	559
	91.6	3,895	96.3	1,506
Married/living together				
Divorced/separated/widowed	93.7	390	(89.5)	59
Employment abroad <sup>1</sup>	06.3	01	04.4	224
Worked abroad	96.3	81	94.4	334
Did not work abroad	89.3	6,035	86.5	2,419
Spousal employment abroad <sup>2</sup>	*	10		
Only respondent worked abroad		18	96.0	220
Only spouse worked abroad <sup>2</sup>	86.7	834	*	10
Both worked abroad	(94.6)	32	*	6
Neither worked abroad	92.9	2,998	96.2	1,264
Residence				
Urban	94.0	3,657	89.6	1,558
Rural	82.4	2,459	84.7	1,197
Region				
Yerevan	97.3	2,001	89.4	833
Aragatsotn	64.0	315	77.1	159
Ararat	92.8	552	84.4	290
Armavir	91.0	586	95.1	268
Gegharkunik	50.4	478	68.8	235
Lori	89.4	355	75.1	184
	97.7	678	100.0	299
Kotayk				
Shirak	87.4	510	87.9	201
Syunik	96.7	238	91.4	104
Vayots Dzor	94.3	119	90.5	56
Tavush	92.4	283	96.7	126
Education	74.0		70.4	
Basic	71.6	396	78.1	360
Secondary	83.7	2,444	85.3	1,250
Secondary special	93.5	1,360	91.9	403
Higher	97.6	1,910	93.7	736
Wealth quintile				
Lowest	79.9	1,081	84.1	523
Second	86.3	1,242	86.0	583
Middle	87.5	1,142	84.8	521
Fourth	94.6	1,142	92.0	566
Highest	96.3	1,365	89.9	562
Total	89.4	6,116	87.5	2,755

Note: Total includes 2 men with missing information about employment abroad, 13 women and 7 men with missing information about spousal employment abroad, and 5 women and 5 men with no education. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases

"Employment abroad" refers to working abroad during the three years before the survey for three or more months

<sup>2</sup> Currently married respondents only; information on spouse's employment abroad is based on respondent's report.

HIV/AIDS, a slight decrease from the figures reported in the 2010 ADHS (96 percent among both women and men) (NSS et al. 2012). Awareness of AIDS is somewhat lower among the youngest and least educated respondents and among those who have never had sex, those who have not worked abroad, and those in the lowest wealth quintile. Additionally, women and men living in Gegharkunik region (50 percent and 69 percent, respectively) are considerably less likely than respondents in other regions to have heard of AIDS.

AIDS prevention programs focus their messages and efforts on safe sexual practices, specifically on proper condom use (using a condom at every sexual intercourse) and staying faithful to one uninfected partner who has no other partners. Table 13.2 shows the percentages of women and men who gave positive responses when asked prompted questions on these two specific ways of avoiding HIV infection. Overall, more than three-quarters of women and men agree that people can reduce their chances of getting HIV by limiting sex to one uninfected partner (79 percent of women and 77 percent of men) and by using condoms (76 percent of women and 78 percent of men). Just over 7 in 10 women (72 percent) and men (73 percent) mentioned both using condoms and limiting sex to one uninfected partner.

#### Table 13.2 Knowledge of HIV prevention methods

Percentage of women and men age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting HIV by using condoms every time they have sexual intercourse and by having one sex partner who is not infected and has no other partners, according to background characteristics, Armenia 2015-16

Background characteristic <b>Age</b> 15-24 15-19	Using condoms <sup>1</sup> 65.4 52.6	Limiting sexual intercourse to one uninfected partner <sup>2</sup>	intercourse to	Number of		Limiting sexual intercourse to	Using condoms and limiting sexual intercourse to	
15-24 15-19				women	Using condoms <sup>1</sup>	one uninfected partner <sup>2</sup>	one uninfected partner <sup>1,2</sup>	Number of men
15-24 15-19								
	52.6	69.0	61.1	1,653	62.3	58.4	55.3	813
		56.5	47.5	725	55.4	49.2	46.9	345
20-24	75.4	78.8	71.6	928	67.3	65.2	61.5	467
25-29	80.8	84.4	78.0	1,099	84.2	85.1	82.1	464
30-39	79.8	82.6	75.8	1,874	85.6	84.2	79.6	802
40-49	78.9	81.6	75.1	1,490	84.8	84.3	78.8	676
Residence								
Urban	81.9	84.4	77.8	3.657	80.9	76.1	72.5	1,558
Rural	66.9	71.0	63.5	2,459	74.9	77.6	72.9	1,197
Employment abroad <sup>3</sup>								
Worked abroad	86.4	85.3	79.8	81	84.1	83.5	80.5	334
Did not work abroad	75.7	78.9	71.9	6,035	77.5	75.9	71.7	2,419
Region								
Yerevan	87.5	89.3	83.5	2,001	83.3	73.1	70.2	833
Aragatsotn	53.0	50.5	49.1	315	74.1	75.9	72.9	159
Ararat	84.1	81.5	77.6	552	72.1	79.8	68.9	290
Armavir	68.9	81.3	68.4	586	89.7	92.8	88.3	268
Gegharkunik	42.7	46.8	41.3	478	63.4	67.5	62.2	235
Lori	79.6	80.6	75.4	355	45.9	45.0	39.9	184
Kotayk	87.4	89.2	84.5	678	99.0	100.0	99.0	299
Shirak	70.3	75.8	66.1	510	86.0	85.9	84.4	201
Syunik	45.2	59.2	39.3	238	31.7	33.4	28.0	104
Vayots Dzor	78.9	82.1	74.2	119	78.5	80.9	76.7	56
Tavush	75.5	77.7	68.5	283	92.9	89.0	85.8	126
Education								
Basic	46.4	45.8	39.7	396	68.5	68.8	64.3	360
Secondary	67.5	71.3	62.9	2,444	75.4	73.7	69.7	1,250
Secondary special	80.9	84.2	77.7	1,360	81.8	76.7	73.2	403
Higher	89.2	92.3	86.5	1,910	86.3	86.2	81.7	736
Wealth quintile								
Lowest	62.8	66.7	58.1	1,081	72.1	76.8	70.0	523
Second	71.3	74.3	67.4	1,242	77.8	78.0	74.3	583
Middle	70.1	74.9	66.4	1,142	75.0	72.1	68.8	521
Fourth	84.5	86.4	80.9	1,287	82.7	78.8	75.4	566
Highest	87.0	89.5	83.7	1,365	83.2	77.7	74.4	562
Total	75.9	79.0	72.0	6,116	78.3	76.8	72.7	2,755

Note: Total includes 2 men with missing information about employment abroad and 5 women and 5 men with no education.

<sup>1</sup> Using condoms every time they have sexual intercourse

<sup>2</sup> Partner who has no other partners

<sup>3</sup> "Employment abroad" refers to working abroad during the three years before the survey for three or more months at a time.

As Table 13.2 shows, young women and men age 15-24 are somewhat less knowledgeable than older respondents about the various modes of prevention. Urban women are more aware of both specified HIV prevention methods than rural women (78 percent versus 64 percent), while there is no difference among men: 73 percent of both urban and rural men are aware of both HIV prevention methods.

Women and men who worked abroad in the past three years for three or more months (80 percent and 81 percent, respectively) are more likely to be aware of safe sexual practices than those who did not work abroad (72 percent among both women and men). Among women, knowledge of both specified HIV prevention methods ranges from 39 percent in Syunik region to 85 percent in Kotayk region, while among men it ranges from 28 percent in Syunik region to 99 percent in Kotayk region.

There is a strong positive relationship between the respondent's educational background and knowledge of ways to prevent getting HIV. For example, 40 percent of women and 64 percent of men with a basic education say that the risk of getting HIV can be reduced by using condoms and limiting sex to one uninfected partner, as compared with 87 percent of women and 82 percent of men with a higher education. There is a similar relationship among women between wealth and knowledge of HIV prevention measures; only 58 percent of women in the lowest wealth quintile are aware of both prevention methods, compared with 84 percent of those in the highest wealth quintile. Among men, however, the relationship is weak and not consistent.

Overall, awareness of these two HIV prevention methods at the national level has changed little during the past five years. The proportion of respondents who say that using condoms and limiting sexual intercourse to only one uninfected partner can reduce the risk of getting HIV increased from 69 percent in 2010 to 72 percent in 2015-16 among women and decreased from 80 percent in 2010 to 73 percent in 2015-16 among men (NSS et al. 2012).

# 13.2 MISCONCEPTIONS ABOUT HIV TRANSMISSION AND COMPREHENSIVE KNOWLEDGE OF AIDS

In addition to knowing effective ways to avoid contracting HIV, it is also useful to be able to identify incorrect beliefs about AIDS to eliminate misconceptions. Misconceptions about AIDS and HIV transmission are among the factors that result in discrimination and stigmatization. Common misconceptions about AIDS include the idea that HIV-positive people always appear ill and the belief that HIV can be transmitted through mosquito bites, by kissing someone who has HIV, by sharing food with someone who has HIV, and by shaking hands with someone who has HIV. Respondents in the 2015-16 ADHS who had heard of HIV or AIDS were asked about these five misconceptions, and the results are presented in Table 13.3.

The findings indicate that many Armenian adults lack accurate knowledge about the ways in which HIV can and cannot be transmitted. For example, only 60 percent of women and 64 percent of men know that a healthy-looking person can have HIV. Particularly critical is the fact that only 49 percent of women and 35 percent of men know that HIV cannot be transmitted by kissing a person who has the virus and only half of women and men know that HIV cannot be transmitted through mosquito bites. Two-thirds of women and almost 6 in 10 men know that HIV cannot be contracted by sharing food with a person who has HIV. Somewhat higher proportions of respondents know that HIV cannot be transmitted by shaking hands with a person who has HIV (75 percent of women and 64 percent of men).

Table 13.3 provides an assessment of the level of comprehensive knowledge of HIV/AIDS prevention and transmission. Comprehensive knowledge is defined as (1) knowing that both condom use and limiting sexual partners to one HIV-negative person can reduce the chances of transmitting HIV/AIDS, (2) being aware that a healthy-looking person can have HIV, and (3) rejecting the two most common local misconceptions in Armenia—namely, that HIV can be transmitted through mosquito bites and by kissing someone infected with HIV. The ADHS results indicate that only one in four women (25 percent) and just over one in five men (21 percent) in Armenia have comprehensive knowledge of

HIV/AIDS prevention and transmission. As is the case with individual aspects of HIV/AIDS transmission, young respondents age 15-19 and men age 20-24 are less likely than older respondents to have comprehensive knowledge of AIDS.

Over the past 10 years, levels of comprehensive knowledge about HIV/AIDS have fluctuated. The percentage of women who have comprehensive knowledge about HIV/AIDS decreased from 26 percent in 2005 to 20 percent in 2010 and then increased to 25 percent in 2015-16. The percentage also fluctuated among men, from 24 percent in 2005 to 16 percent in 2010 and 21 percent in 2015-16 (NSS et al. 2006; NSS et al. 2012).

#### Table 13.3 Comprehensive knowledge about HIV

Percentage of women and men age 15-49 who say that a healthy-looking person can have HIV and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of HIV, and the percentage with comprehensive knowledge about HIV, according to age, Armenia 2015-16

	Percentage	e of respondents w	ho say that:		Percentage who say that a healthy-looking person can have		
A healthy-looking person can have HIV	HIV cannot be transmitted by mosquito bites	HIV cannot be transmitted by kissing a person who has HIV	A person cannot become infected by sharing food with a person who has HIV	HIV cannot be transmitted by shaking hands with a person who has HIV	HIV and who reject the two most common local misconceptions <sup>1</sup>	Percentage with comprehensive knowledge about HIV <sup>2</sup>	Number of respondents
			WOMEN				
51.8 43.1 58.6 64.3 62.9 63.2	45.5 35.9 53.0 54.2 53.1 49.7	42.4 33.6 49.3 53.3 52.3 49.5	60.2 51.7 66.9 72.8 72.9 70.8	67.1 59.1 73.4 78.1 79.0 76.2	23.1 17.7 27.3 29.1 29.5 25.0	20.2 14.7 24.5 27.4 27.7 22.9	1,653 725 928 1,099 1,874 1,490
60.2	50.4	49.1	68.9	75.0	26.6	24.5	6,116
			MEN				
49.3 43.3 53.8 68.4 71.3 69.4	34.5 27.9 39.5 55.2 58.4 59.1	22.0 15.0 27.1 39.0 40.8 41.6	40.8 30.7 48.2 61.8 64.1 65.6	48.1 41.7 52.8 67.0 72.8 70.7	13.5 8.9 16.9 24.2 27.0 25.9	12.5 8.9 15.2 23.5 24.8 23.2	813 345 467 464 802 676 2,755
	person can have HIV 51.8 43.1 58.6 64.3 62.9 63.2 60.2 49.3 43.3 53.8 68.4 71.3	A healthy-looking person can have HIV 51.8 45.5 43.1 35.9 58.6 53.0 64.3 54.2 62.9 53.1 63.2 49.7 60.2 50.4 49.3 34.5 43.3 27.9 53.8 39.5 68.4 55.2 71.3 58.4 69.4 59.1	A healthy-looking person can have HIV         HIV cannot be transmitted by mosquito bites         HIV cannot be transmitted by who has HIV           51.8         45.5         42.4           43.1         35.9         33.6           58.6         53.0         49.3           64.3         54.2         53.3           62.9         53.1         52.3           63.2         49.7         49.5           60.2         50.4         49.1           49.3         34.5         22.0           43.3         27.9         15.0           53.8         39.5         27.1           68.4         55.2         39.0           71.3         58.4         40.8           69.4         59.1         41.6	A healthy-looking person can have HIV         HIV cannot be transmitted by sharing food with a person who has HIV         become infected by sharing food with a person who has HIV           51.8         45.5         42.4         60.2           43.1         35.9         33.6         51.7           58.6         53.0         49.3         66.9           64.3         54.2         53.3         72.8           62.9         53.1         52.3         72.9           63.2         49.7         49.5         70.8           60.2         50.4         49.1         68.9           43.3         27.9         15.0         30.7           53.8         39.5         27.1         48.2           68.4         55.2         39.0         61.8           71.3         58.4         40.8         64.1           69.4         59.1         41.6         65.6	A healthy-looking person can have HIV         HIV cannot be transmitted by mosquito bites         A person cannot become infected by sharing food with a person who has HIV         HIV cannot be transmitted by shaking hands with a person who has HIV           51.8         45.5         42.4         60.2         67.1           43.1         35.9         33.6         51.7         59.1           58.6         53.0         49.3         66.9         73.4           64.3         54.2         53.3         72.8         78.1           62.9         53.1         52.3         72.9         79.0           63.2         49.7         49.5         70.8         76.2           60.2         50.4         49.1         68.9         75.0           MEN         49.3         34.5         22.0         40.8         48.1           43.3         27.9         15.0         30.7         41.7           53.8         39.5         27.1         48.2         52.8           68.4         55.2         39.0         61.8         67.0           71.3         58.4         40.8         64.1         72.8           69.4         59.1         41.6         65.6         70.7	A healthy-looking person can         HIV cannot be transmitted by mosquito bites         A person cannot transmitted by transmitted by sharing food who has HIV         HIV cannot be transmitted by transmitted by sharing food who has HIV         HIV cannot be transmitted by transmitted by sharing food who has HIV         HIV cannot be transmitted by transmitted by sharing food who has HIV         HIV cannot be transmitted by transmitted by sharing food who has HIV         HIV cannot be transmitted by transmitted by sharing food who has HIV         HIV cannot be transmitted by transmitted by sharing food who has HIV         HIV cannot be transmitted by transmitted by transmitted by the person can have transmit	

Two most common local misconceptions involve transmission by mosquito bites and by kissing a person who has HIV.

<sup>2</sup> Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about transmission or prevention of HIV.

# 13.3 KNOWLEDGE OF PREVENTION OF 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 by use of antiretroviral drugs are critical to the prevention of mother-tochild transmission (MTCT) of HIV. To assess MTCT knowledge, respondents in the 2015-16 ADHS were asked if HIV can be transmitted from a mother to her baby during pregnancy, delivery, or breastfeeding and whether they know of any special drugs a mother with HIV can take to reduce the risk of transmission to the baby.

Table 13.4 shows that while almost 7 in 10 women and men know that HIV can be transmitted from mother to child during pregnancy, less than 6 in 10 know that it can be transmitted during delivery and only around 5 in 10 know of the risk of mother-to-child transmission of HIV during breastfeeding. Less than half of respondents are aware of all three means of MTCT (48 percent of women and 44 percent of men). Knowledge of antiretroviral therapy to prevent MTCT of HIV is very limited in Armenia. Only 27 percent of women and 20 percent of men say they know that the risk of mother-to-child transmission can be reduced by the mother taking special drugs. Respondents age 15-19 are considerably less likely than older respondents to know that HIV can be transmitted by breastfeeding or that the risk of MTCT can be reduced by the mother taking special drugs.

#### Table 13.4 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, Armenia 2015-16

	Percentage who k	know that HIV ca	n be transmitted fron	n mother to child:	Percentage who know that the risk of MTCT can be reduced by	
Age	During pregnancy	During delivery	By breastfeeding	By all three means	mother taking special drugs	Number of respondents
			WOMEN			
15-24 15-19 20-24 25-29 30-39 40-49 Total	55.7 42.0 66.4 72.8 74.0 73.3 68.7	45.1 33.0 54.6 63.0 65.2 61.9 58.6	44.1 31.8 53.7 61.2 61.1 57.5 55.7	37.0 25.5 45.9 53.1 53.4 50.0 48.1	19.9 15.7 23.1 28.6 31.0 28.9 27.0	1,653 725 928 1,099 1,874 1,490 6,116
			MEN			
15-24 15-19 20-24 25-29 30-39 40-49	49.1 39.6 56.1 73.8 78.5 81.9	34.0 21.8 43.1 60.9 66.5 70.9	26.7 18.1 33.0 52.8 58.2 56.0	24.5 15.8 31.0 48.6 54.3 53.6	9.9 3.8 14.3 22.3 25.3 26.1	813 345 467 464 802 676
Total	69.9	57.1	47.5	44.4	20.4	2,755

Although knowledge about MTCT of HIV in Armenia is rather limited, there has been improvement over the past five years. For example, the proportion of respondents who know that HIV can be transmitted from a mother to a child during breastfeeding increased from 44 percent in 2010 to 56 percent in 2015-16 among women and from 35 to 48 percent among men. Similarly, knowledge that MTCT can be reduced by the mother taking special drugs increased between 2010 and 2015-16, from 17 to 27 percent among women and from 9 to 20 percent among men (NSS et al. 2012).

### 13.4 DISCRIMINATORY ATTITUDES TOWARDS PEOPLE LIVING WITH HIV

Knowledge and beliefs about AIDS can affect how people treat those they know to be living with HIV. Widespread stigma and discrimination in a population can adversely affect people's willingness to be tested for HIV as well as their adherence to antiretroviral therapy. Reduction of stigma and discrimination in a population is, thus, an important impetus to the success of programs targeting HIV/AIDS prevention and control.

In the 2015-16 ADHS, several questions were posed to respondents to assess the level of stigma associated with HIV and AIDS. Respondents were asked if they think children living with HIV should be allowed to attend school with children who do not have HIV. They were also asked if they would buy fresh vegetables from a shopkeeper or vendor if they knew that the person had HIV. Table 13.5 shows the percentages of women and men who express discriminatory attitudes toward people with HIV, by background characteristics.

The results show a high level of discriminatory attitudes towards people living with HIV among Armenian adults. They also indicate that men are considerably more likely than women to have such attitudes. For example, just over one-third of women do not think that children with HIV should be able to attend school with HIV-negative children, as compared with well over half of men (36 percent and 56 percent, respectively). Similarly, 53 percent of women and 69 percent of men say they would not buy fresh vegetables from a shopkeeper who has HIV. Taken together, almost 6 in 10 women and 3 in 4 men hold one or both of these discriminatory attitudes.

### Table 13.5 Discriminatory attitudes towards people living with HIV

Among women and men age 15-49 who have heard of HIV or AIDS, percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative, percentage who would not buy fresh vegetables from a shopkeeper who has HIV, and percentage with discriminatory attitudes towards people living with HIV, according to background characteristics, Armenia 2015-16

		Wo	men		Men						
Background characteristic	school with	Percentage who would not buy fresh vegetables from a shopkeeper who has HIV	Percentage with discriminatory attitudes towards people living with HIV <sup>1</sup>	Number of women who have heard of HIV or AIDS	school with	Percentage who would not buy fresh vegetables from a shopkeeper who has HIV	Percentage with discriminatory attitudes towards people living with HIV <sup>1</sup>	Number of men who have heard of HIV or AIDS			
Age											
15-24	34.9	50.4	55.0	1,356	52.4	66.6	72.8	569			
15-19	38.4	52.0	57.0	534	46.5	66.6	72.5	219			
20-24	32.6	49.3	53.6	822	56.1	66.5	73.0	350			
25-29	34.3	53.6	57.3	1,014	55.5	66.5	72.2	426			
30-39	35.9	52.1	56.3	1,740	57.5	70.1	74.8	765			
40-49	38.0	54.4	59.5	1,356	56.2	70.2	73.8	650			
Marital status											
Never married	32.8	48.9	53.2	1,530	52.7	65.1	71.0	908			
Ever had sex	*	*	*	12	54.4	63.3	69.9	557			
Never had sex Married/living	33.1	49.3	53.6	1,519	49.9	68.0	72.8	350			
together	37.3	54.5	58.8	3,569	57.4	71.1	75.2	1,450			
Divorced/separated/ widowed	34.4	48.0	54.6	366	(57.9)	(60.9)	(74.1)	53			
Employment abroad <sup>2</sup>											
Worked abroad	30.9	49.1	50.0	78	70.0	82.5	85.2	315			
Did not work abroad	35.9	52.6	57.1	5,387	53.4	66.5	71.8	2,092			
Spousal employment abroad <sup>3</sup> Only respondent			*	40	70.5	04.0	22.2	014			
worked abroad Only spouse worked	•	Â	ĥ	16	70.5	84.6	88.0	211			
abroad <sup>3</sup> Both worked abroad	40.2 (29.6)	58.0 (45.9)	61.5 (45.9)	723 31	*	*	*	10 6			
Neither worked abroad	36.9	53.9	58.5		55.0	68.9	73.2	1,217			
	30.9	55.9	56.5	2,786	55.0	00.9	13.2	1,217			
Residence Urban	33.4	51.8	55.5	3,438	49.3	66.2	71.7	1,396			
Rural	40.0	53.7	59.4	2,027	49.3 64.2	72.1	76.3	1,014			
	40.0	00.1	00.4	2,021	04.2	12.1	10.0	1,014			
Region	31.1	52.4	56.0	1,946	33.4	58.5	64.4	745			
Yerevan	35.6	52.4 67.0	56.0 71.3	202	33.4 1.8	2.9	3.7	123			
Aragatsotn Ararat	32.7	21.0	39.6	513	78.6	82.0	89.8	245			
Armavir	33.7	41.0	41.4	533	37.1	45.3	49.8	255			
Gegharkunik	61.3	77.7	81.8	241	96.3	98.9	98.9	162			
Lori	61.2	77.1	79.1	318	83.0	77.6	86.3	139			
Kotayk	28.9	66.4	68.7	663	84.6	86.7	94.0	299			
Shirak	30.5	31.9	36.3	446	66.1	85.6	87.4	177			
Syunik	37.2	47.6	49.9	230	82.7	84.3	88.8	95			
Vayots Dzor	48.1	69.7	75.1	112	49.8	64.7	68.2	51			
Tavush	48.1	71.3	73.2	261	47.6	89.0	90.3	121			
Education											
Basic	36.0	53.1	58.2	284	62.3	70.9	75.9	281			
Secondary	44.3	57.8	63.6	2,045	61.0	72.9	78.1	1,065			
Secondary special	33.8	52.0	56.2	1,272	53.4	69.3	75.2	371			
Higher	28.0	47.0	50.0	1,864	45.7	60.7	64.8	690			
Wealth quintile											
Lowest	39.2	52.1	56.3	864	62.4	68.5	73.5	440			
Second	38.8	51.9	58.7	1,071	62.9	71.3	75.6	502			
Middle	38.5	56.1	59.9	999	62.8	75.2	80.3	442			
Fourth	33.0	52.2	56.7	1,217	45.7	66.3	72.3	521			
Highest	31.9	51.0	53.9	1,314	46.4	62.8	67.2	505			
Total	35.9	52.5	57.0	5,465	55.6	68.6	73.6	2,410			

Note: Total includes 2 men with missing information about employment abroad, 13 women and 7 men with missing information about spousal employment abroad, and 2 women and 3 men with no education. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based

 <sup>1</sup> Percentage who do not think that children living with HIV should be able to attend school with children who are HIV negative or would not buy fresh vegetables from a <sup>2</sup> "Employment abroad" refers to working abroad during the three years before the survey for three or more months at a time.
 <sup>3</sup> Currently married respondents only; information on spouse's employment abroad is based on respondent's report.

For the most part, variations in the extent of discriminatory attitudes towards people with HIV are not large. Although the proportions of women and men who have discriminatory attitudes are lowest among those with a higher education and those in the highest wealth quintile, there is no uniform pattern by either education or wealth. Whereas working abroad is associated with a decrease in discriminatory attitudes among women, it is associated with an increase among men. Differences by age and marital status are very small, and rural residents are only slightly more likely than urban residents to hold discriminatory attitudes. However, there are large variations in attitudes by region. For example, the proportion of women with discriminatory attitudes towards people with HIV varies from 36 percent in Shirak to 82 percent in Gegharkunik. Among men, the proportion ranges from 4 percent in Aragatsotn to a high of 99 percent in Gegharkunik.

## 13.5 HIGHER-RISK SEX

Limiting the number of sexual partners and having protected sex are crucial to combating HIV/AIDS and other sexually transmitted infections (STIs). Condom use is an important tool in the fight. The 2015-16 ADHS included questions on respondents' sexual partners over their lifetime and during the 12 months preceding the survey. Men were asked an additional question: whether they paid anyone for sex during the 12 months preceding the interview. Information on the use of condoms at last sexual intercourse with each type of partner was collected from both women and men. Because the questions were sensitive, some respondents may have been reluctant to provide information on recent sexual behavior.

### 13.5.1 Multiple Partners and Higher-Risk Sexual Intercourse

Table 13.6 shows (1) the percentage of all men age 15-49 who had sexual intercourse with more than one partner in the past 12 months; (2) the percentage of men with more than one partner who reported using a condom at last intercourse; (3) the percentage of men who had sex in the past 12 months who had sex with a non-marital, non-cohabiting partner; (4) the percentage of men who had sex with a non-marital, non-cohabiting partner; (4) the percentage of men who had sex with a non-marital, non-cohabiting partner; (4) the percentage of men who had sex with a non-marital, non-cohabiting partner; (4) the percentage of men who had sex with a non-marital, non-cohabiting partner; (4) the percentage of men who had sex with a non-marital, non-cohabiting partner in the past 12 months who used a condom during the last such episode; and (5) among men who ever had sex, the mean number of sexual partners during their lifetime, by background characteristics.<sup>1</sup>

The table shows that 5 percent of all men age 15-49 reported having had more than one sexual partner in the 12 months preceding the survey, a decrease from the figure reported in 2010 (15 percent). The proportion of men with more than one partner in the previous 12 months is slightly higher among men age 25-29 than among older or younger men. It is also higher among men in Armavir (18 percent) and Kotayk (12 percent). The percentage of men who had more than one partner in the past 12 months varies erratically according to education and wealth.

Sixty-two percent of men who had more than one sexual partner in the past 12 months used a condom during their last sexual intercourse. Among those with more than one sexual partner, nevermarried men were more likely than married men to have had protected sex in the past 12 months, and rural men were less likely than urban men to have done so.

Among men who had sexual intercourse in the 12 months before the survey, 29 percent said they had sex with a person they were not married to or living with. As expected, this proportion is highest among men who have never been married and among younger men. It is also relatively higher among men in Armavir.

<sup>&</sup>lt;sup>1</sup> The data for women are not presented because close to 0 percent of women age 15-49 reported having had more than one partner in the past 12 months and less than 1 percent of women who had sex in the 12 months before the survey reported having sex with a non-marital, non-cohabiting partner in the past 12 months. Among all women who ever had sex, the mean number of lifetime partners was 1.1.

#### Table 13.6 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; among those 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, percentage who had intercourse in the past 12 months with a non-marital, non-cohabiting partner; among men age 15-49 who had sexual intercourse in the past 12 months with a non-marital, non-cohabiting partner, 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, Armenia 2015-16

			Manutha	hed 21	Manuhah	od oowiel	Men wh intercourse 12 months w marital, non- partr	in the past with a non- -cohabiting	Men who sexual int	
	All n	nen	Men who partners ir 12 mo	n the past	Men who h intercours past 12	se in the	Percentage who reported			
Background characteristic	Percentage who had 2+ partners in the past 12 months	Number of men	Percentage who reported using a condom during last sexual intercourse	Number of men	Percentage who had intercourse in the past 12 months with a non- marital, non- cohabiting partner <sup>1</sup>	Number of men	using a condom during last sexual intercourse with a non- marital, non- cohabiting partner <sup>1</sup>	Number of men	Mean number of sexual partners in lifetime	Number of men
Age										
15-24	2.8	813	*	22	79.4	271	85.9	215	2.8	310
15-19	1.3	345	*	4	(100.0)	39	(100.0)	39	(2.6)	43
20-24	3.9	467	(77 ^)	18	76.0	232	82.8	176	2.9	267
25-29	7.9	464	(77.9)	37	46.7	379	75.6	177	4.0	392
30-39	6.8	802	(52.6)	54	17.5	734	86.6	128	4.0	691 601
40-49	5.4	676	(43.6)	36	9.8	637	84.7	63	4.8	601
Marital status Never married Married or living	5.9	1,190	93.8	71	98.6	487	81.8	481	3.9	563
together	5.1	1,506	33.9	77	5.2	1,495	94.7	77	4.1	1,375
Divorced/separated/	0.11	.,	0010		0.2	1,100	0			1,010
widowed	(3.7)	59	*	2	(65.6)	38	*	25	(3.8)	56
Envelopment charact	. ,				. ,					
Employment abroad <sup>3</sup>	7.0	224	(22.2)	22	20 F	207	60.2	04	4 5	201
Worked abroad Did not work abroad	7.0 5.2	334 2,419	(33.2) 67.9	23 126	30.5 28.6	307 1,711	60.3 87.1	94 489	4.5 4.0	281 1,711
DIU HOL WOLK ADIOAU	5.2	2,419	07.9	120	20.0	1,711	07.1	409	4.0	1,711
Residence										
Urban	5.1	1,558	67.2	80	29.3	1,177	85.7	345	4.3	1,167
Rural	5.8	1,197	56.9	70	28.1	844	78.7	238	3.7	827
Region										
Yerevan	4.5	833	*	38	31.5	650	92.1	205	4.6	678
Aragatsotn	0.0	159	*	0	25.8	95	(100.0)	200	1.3	89
Ararat	3.9	290	*	11	22.4	194	(74.9)	44	3.9	226
Armavir	17.6	268	(52.3)	47	47.7	236	92.2	113	7.5	163
Gegharkunik	0.8	235	(***	2	23.6	155	(15.7)	37	2.6	164
Lori	1.1	184	*	2	18.6	106	*	20	1.3	70
Kotayk	11.8	299	(42.2)	35	30.2	236	95.7	71	3.8	249
Shirak	5.4	201	*	11	34.7	173	75.2	60	5.7	177
Syunik	3.1	104	*	3	12.4	62	*	8	1.3	60
Vayots Dzor	0.0	56	*	0	2.1	34	*	1	1.6	36
Tavush	0.5	126	*	1	1.3	78	*	1	1.4	83
Education										
Basic	5.0	360	*	18	28.6	223	81.7	64	4.7	215
Secondary	4.8	1,250	50.2	60	24.5	905	77.8	221	3.8	868
Secondary special	5.9	403	*	24	25.8	312	83.1	80	4.3	310
Higher	6.5	736	(75.6)	48	37.6	578	88.2	217	4.0	599
Ū.										
Wealth quintile Lowest	6.4	523	(69.2)	33	29.0	373	83.9	108	4.0	358
Second	6.4 5.0	523 583	(46.8)	33 29	29.0 28.6	373 407	83.9 75.6	108	4.0 3.7	358 401
Middle	7.0	521	(65.1)	29 36	32.3	380	75.5	123	3.7	363
Fourth	4.0	566	(00.1)	22	29.8	426	88.2	123	4.3	414
Highest	4.0 5.0	560 562	*	22	29.8 25.1	426 434	00.2 91.3	109	4.3 4.4	414
-			00 <i>i</i>							
Total	5.4	2,755	62.4	150	28.8	2,021	82.8	583	4.0	1,994

Note: Total includes 2 men with missing information about employment abroad and 5 men with no education. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> A person who was not his wife and did not live with him
 <sup>2</sup> Means are calculated excluding respondents who gave non-numeric responses.
 <sup>3</sup> "Employment abroad" refers to working abroad during the three years before the survey for three or more months at a time.

Among men who reported having sex with a non-marital, non-cohabiting partner in the previous 12 months, 83 percent said they used a condom during the most recent such episode. Condom use with non-marital partners is higher among married men than never-married men (95 percent and 82 percent, respectively) and higher among men who did not work abroad in the past three years than those who worked abroad (87 percent and 60 percent, respectively). It is also higher among urban men and shows a slight tendency to increase with increasing education and wealth.

Men who have ever been sexually active report having an average (mean number) of 4.0 lifetime sexual partners, about four times the average number of lifetime sexual partners reported by sexually active women (1.1 partners) (data not shown). Men's mean number of sexual partners increases with age and is slightly higher among those who worked abroad than among those who did not; it is also higher among urban men than rural men. Men in Armavir have the highest mean number of lifetime partners (7.5). The mean number of lifetime sexual partners reported by men has decreased since 2010, from 5.8 to 4.0 (NSS et al. 2012).

### 13.5.2 Transactional Sex

Transactional sex is the exchange of sex for money, favors, or gifts. Transactional sex is associated with a high risk of contracting HIV and other sexually transmitted infections because of compromised power relations and the likelihood of having multiple partners as a result. Male respondents in the 2015-16 ADHS were asked whether they had ever paid money in exchange for sex and whether they had done so in the 12 months preceding the survey. The findings are presented in Table 13.7.

Table 13.7 Payment for sexual intercourse and condom use at last paid se	xual
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, the percentage reporting that a condom was used the last time they paid for sexual intercourse, according to age, Armenia 2015-16

		Among all men:		Among men wh in the past 1	
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	17.4	13.6	813	91.2	111
15-19	7.7	7.4	345	*	25
20-24	24.6	18.2	467	88.6	85
25-29	36.0	13.2	464	73.5	61
30-39	31.0	6.6	802	83.8	53
40-49	25.9	7.9	676	82.6	53
Total	26.6	10.1	2,755	84.2	278

Among men age 15-49, 27 percent reported having ever paid for sexual intercourse. The percentage who ever paid for sex is highest among men age 25-29 (36 percent).

One in 10 men reported paying for sexual intercourse in the 12 months before the survey. It is encouraging that 84 percent of men who paid for sex in the 12 months before the survey said they used a condom during the most recent paid sexual intercourse.

### 13.6 COVERAGE OF PRIOR HIV TESTING

For people who are HIV negative, knowledge of their HIV status helps in making specific decisions that will reduce the risk of getting HIV, lead to safer sex practices, and enable them to remain disease free. For those who are HIV positive, knowledge of their HIV status allows them to take action to protect their sexual partners, to access treatment, and to plan for the future. In the 2015-16 ADHS, respondents were asked whether they had ever been tested for HIV. If they had been tested, they were asked when they were most recently tested, 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 if they knew a place where they could go to be tested.

Tables 13.8.1 and 13.8.2 show that 48 percent of women and 45 percent of men age 15-49 know where to get an HIV test, an increase from the figures reported in 2010 (43 percent and 35 percent, respectively) (NSS et al. 2012). Knowledge about where to get an HIV test is more common among respondents age 25-49, ever-married respondents, urban respondents, and women in Kotayk and men in Tavush. Interestingly, women who worked abroad in the past three years are more likely to know where to get an HIV test than women who did not work abroad; however, the relationship is reversed among men, with higher levels of knowledge among those who did not work abroad. Knowledge of a place for HIV testing services increases dramatically with increasing education and wealth among both women and men.

The proportions of respondents who have ever been tested are much smaller; only 15 percent of women and 2 percent of men age 15-49 have ever been tested for HIV, and 12 percent of women and 1 percent of men have been tested and received the results. The proportions of respondents who were tested in the 12 months before the survey and received the results of their most recent test are even smaller: only 3 percent of women and less than 1 percent of men.

The proportion of women ever tested for HIV is lowest among those age 15-19 (2 percent) and highest among those age 25-29 (28 percent). Currently married women (21 percent) are more likely to have had an HIV test than those who have never been married (2 percent) and those who were previously married (12 percent). There are sizeable regional variations in HIV testing. The proportion of women who have ever been tested for HIV ranges from 0 percent in Gegharkunik to 27 percent in Syunik. Women's likelihood of having been tested for HIV increases slightly as education and wealth increase.

In general, variations in the proportion of men ever tested for HIV by background characteristics are not pronounced; men who worked abroad in the three years prior to the survey (9 percent) and men in Shirak (8 percent) were most likely to have been tested.

### Table 13.8.1 Coverage of prior HIV testing: Women

Percentage of women age 15-49 who know where to get an HIV test, percent distribution of women age 15-49 by testing status and by whether they received the results of the last test, the percentage of women ever tested, and the percentage of women age 15-49 who were tested in the past 12 months and received the results of the last test, according to background characteristics, Armenia 2015-16

	Percentage		ution of women b r they received th last test				Percentage who have been tested for HIV in the past 12 months and	
Background characteristic	who know where to get an HIV test	Ever tested and received results	Ever tested, did not receive results	Never tested <sup>1</sup>	Total	Percentage ever tested	received the results of the last test	Number of women
Age								
15-24	35.6	7.0	2.5	90.5	100.0	9.5	3.0	1,653
15-19	25.9	1.5	0.5	98.0	100.0	2.0	0.6	725
20-24	43.2	11.3	4.0	84.7	100.0	15.3	4.9	928
25-29	57.2	21.9	5.5	72.5	100.0	27.5	5.5	1,099
30-39	53.6	14.5	3.5	81.9	100.0	18.1	2.7	1,874
40-49	48.5	6.0	1.0	93.0	100.0	7.0	2.2	1,490
Marital status								
Never married	36.5	1.5	0.1	98.4	100.0	1.6	0.8	1,830
Ever had sex	*	*	*	*	100.0	*	*	12
Never had sex	36.2	1.4	0.1	98.5	100.0	1.5	0.6	1,818
Married/living together	52.8	16.8	4.4	78.8	100.0	21.2	4.4	3,895
Divorced/separated/								
widowed	55.7	9.3	2.6	88.1	100.0	11.9	2.1	390
Employment abroad <sup>2</sup>								
Worked abroad	67.1	14.6	1.6	83.8	100.0	16.2	0.0	81
Did not work abroad	47.9	11.7	3.0	85.3	100.0	14.7	3.2	6,035
Spousal employment abroad <sup>3</sup> Only respondent		*					*	
worked abroad Only spouse worked	*		*	*	100.0	*		18
abroad <sup>3</sup>	44.1	14.5	2.2	83.3	100.0	16.7	3.4	834
Both worked abroad	(74.6)	(22.6)	(2.0)	(75.4)	100.0	(24.6)	(0.0)	32
Neither worked abroad	55.0	17.5	5.1	77.5	100.0	22.5	4.8	2,998
Residence								
Urban	53.4	13.6	2.7	83.7	100.0	16.3	3.4	3,657
Rural	40.3	9.0	3.3	87.6	100.0	12.4	2.9	2,459
Region								
Yerevan	58.2	15.0	1.7	83.3	100.0	16.7	2.9	2,001
Aragatsotn	22.5	0.4	0.0	99.6	100.0	0.4	0.1	315
Ararat	59.6	12.5	7.2	80.3	100.0	19.7	2.9	552
Armavir	47.8	14.6	3.3	82.0	100.0	18.0	2.5	586
Gegharkunik	11.0	0.0	0.0	100.0	100.0	0.0	0.0	478
Lori	19.7	7.8	1.0	91.3	100.0	8.7	3.0	355
Kotayk	67.5	15.3	6.0	78.6	100.0	21.4	7.8	678
Shirak	46.0	14.8	0.8	84.5	100.0	15.5	4.9	510
Syunik	45.9	10.6	16.0	73.4	100.0	26.6	3.0	238
Vayots Dzor	27.9	4.5	0.3	95.2	100.0	4.8	1.6	119
Tavush	50.4	9.0	0.5	90.5	100.0	9.5	1.9	283
	0011	0.0	0.0	0010	100.0	0.0		200
Education					100.0			
Basic	29.2	8.6	3.5	87.9	100.0	12.1	2.8	396
Secondary	37.7	8.2	3.3	88.5	100.0	11.5	2.1	2,444
Secondary special	50.8	12.8	2.5	84.7	100.0	15.3	3.6	1,360
Higher	63.6	16.2	2.9	81.0	100.0	19.0	4.3	1,910
Wealth quintile								
Lowest	32.8	8.7	3.0	88.3	100.0	11.7	2.4	1,081
Second	45.8	9.0	3.4	87.6	100.0	12.4	2.5	1,242
Middle	43.8	11.8	2.8	85.4	100.0	14.6	3.5	1,142
Fourth	52.6	12.6	2.8	84.6	100.0	15.4	4.2	1,287
Highest	61.8	15.8	2.9	81.2	100.0	18.8	3.2	1,365
Total	48.1	11.7	3.0	85.3	100.0	14.7	3.2	6,116

Note: Total includes 13 women with missing information about spousal employment abroad and 5 women with no education. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases. <sup>1</sup> Includes "don't know/missing" <sup>2</sup> "Employment abroad" refers to working abroad during the three years before the survey for three or more months at a time.

<sup>3</sup> Currently married respondents only; information on spouse's employment abroad is based on respondent's report.

### Table 13.8.2 Coverage of prior HIV testing: Men

Percentage of men age 15-49 who know where to get an HIV test, percent distribution of men age 15-49 by testing status and by whether they received the results of the last test, the percentage of men ever tested, and the percentage of men age 15-49 who were tested in the past 12 months and received the results of the last test, according to background characteristics, Armenia 2015-16

	Percentage	status and	istribution of mer by whether they sults of the last t	received the			Percentage who have been tested for HIV in the past 12 months and	
Background characteristic	who know where to get an HIV test	Ever tested and received results	Ever tested, did not receive results	Never tested <sup>1</sup>	Total	Percentage ever tested	received the results of the last test	Number of men
Age								
15-24	31.9	0.7	0.5	98.8	100.0	1.2	0.3	813
15-19	25.9	0.2	0.0	99.8	100.0	0.2	0.2	345
20-24	36.3	1.1	0.9	98.0	100.0	2.0	0.3	467
25-29	51.2	2.2	0.5 0.1	97.3	100.0	2.7	0.5	464 802
30-39 40-49	49.5 52.4	1.7 1.3	0.1	98.2 98.6	100.0 100.0	1.8 1.4	0.4 0.6	676
	52.4	1.5	0.1	90.0	100.0	1.4	0.6	070
Marital status								
Never married	37.1	0.9	0.1	99.0	100.0	1.0	0.2	1,190
Ever had sex	47.7	1.7	0.2	98.1	100.0	1.9	0.4	631
Never had sex	25.2	0.1	0.0	99.9	100.0	0.1	0.0	559
Married/living together	51.7	1.8	0.5	97.7	100.0	2.3	0.6	1,506
Divorced/separated/ widowed	(48.8)	(0.0)	(0.0)	(100.0)	100.0	(0.0)	(0.0)	59
	(40.0)	(0.0)	(0.0)	(100.0)	100.0	(0.0)	(0.0)	59
Employment abroad <sup>2</sup>	<b>a</b> c :			<b></b>	105 5			<b></b>
Worked abroad	38.4	7.0	1.9	91.1	100.0	8.9	1.6	334
Did not work abroad	46.3	0.6	0.1	99.3	100.0	0.7	0.2	2,419
Spousal employment abroad <sup>3</sup>								
Only respondent worked abroad Only spouse worked	43.3	6.6	2.3	91.1	100.0	8.9	2.1	220
abroad <sup>3</sup>	*	*	*	*	100.0	*	*	10
Both worked abroad	*	*	*	*	100.0	*	*	6
Neither worked abroad	53.4	1.0	0.2	98.8	100.0	1.2	0.3	1,264
Residence								
Urban	53.5	0.8	0.4	98.8	100.0	1.2	0.2	1,558
Rural	34.6	2.1	0.2	97.7	100.0	2.3	0.7	1,197
Deview								,
Region Yerevan	69.7	0.0	0.0	100.0	100.0	0.0	0.0	833
	8.2	0.0	0.0	99.4	100.0	0.0	0.6	159
Aragatsotn Ararat	58.1	0.0	0.0	100.0	100.0	0.0	0.0	290
Armavir	8.2	4.1	0.0	95.9	100.0	4.1	1.8	268
Gegharkunik	9.9	0.0	0.0	100.0	100.0	0.0	0.0	235
Lori	12.3	0.5	1.0	98.5	100.0	1.5	0.0	184
Kotayk	60.0	3.5	0.7	95.8	100.0	4.2	0.6	299
Shirak	46.1	6.4	1.1	92.5	100.0	7.5	1.8	201
Syunik	19.8	0.0	2.1	97.9	100.0	2.1	0.0	104
Vayots Dzor	24.3	1.7	0.0	98.3	100.0	1.7	0.0	56
Tavush	89.9	0.7	0.0	99.3	100.0	0.7	0.0	126
Education								
Basic	28.0	2.2	0.6	97.3	100.0	2.7	0.4	360
Secondary	35.6	1.2	0.4	98.4	100.0	1.6	0.5	1,250
Secondary special	51.1	1.8	0.2	97.9	100.0	2.1	0.3	403
Higher	67.4	1.1	0.1	98.8	100.0	1.2	0.4	736
Wealth quintile								
Lowest	27.5	1.1	0.0	98.9	100.0	1.1	0.4	523
Second	37.5	2.7	0.0	97.2	100.0	2.8	1.2	583
Middle	40.2	1.9	1.1	97.0	100.0	3.0	0.1	521
Fourth	54.6	0.6	0.3	99.0	100.0	1.0	0.4	566
Highest	65.4	0.6	0.0	99.4	100.0	0.6	0.0	562
Total	45.3	1.4	0.3	98.3	100.0	1.7	0.4	2,755

Note: Total includes 2 men with missing information about employment abroad, 7 men with missing information about spousal employment abroad, and 5 men with no education. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases. <sup>1</sup> Includes "don't know/missing"

<sup>2</sup> "Employment abroad" refers to working abroad during the three years before the survey for three or more months at a time.

<sup>3</sup> Currently married respondents only; information on spouse's employment abroad is based on respondent's report.

# 13.7 SELF-REPORTED SEXUALLY TRANSMITTED INFECTIONS

Sexually transmitted infections are closely associated with HIV because they increase the likelihood of contracting HIV and involve similar risk factors. In the 2015-16 ADHS, all respondents who ever had sexual intercourse were asked if they had had an STI or symptoms of an STI (including a bad-smelling/abnormal genital discharge and a genital sore or ulcer) in the 12 months preceding the survey. It is important to note that these data are likely to underestimate the true prevalence of STIs for a number of reasons. First, if symptoms are not obvious or prolonged, they may not be recognized as an STI. Furthermore, health care may not be sought for STIs because of the embarrassment or the presumed stigma associated with such infections, and they may go undiagnosed. Finally, even if people know they have an STI, they may be reluctant to report the infection during an interview.

Table 13.9 shows that less than 1 percent of women and men reported having an STI in the past 12 months. These results suggest some underreporting of STIs. When asked whether they had experienced an abnormal genital discharge or genital sores or ulcers in the past 12 months, 5 percent and 1 percent of women, respectively, and less than 1 percent each of men reported that they had. To the extent that women may report a normal genital discharge as abnormal, this may be an overestimate of any serious STIs among women.

Overall, 5 percent of women reported having had an STI, genital discharge, or genital sore or ulcer in the 12 months before the survey, about midway between the figure of 3 percent reported in 2010 and the 8 percent figure reported in 2005 (NSS et al. 2006; NSS et al. 2012). Among men, the self-reported prevalence of STIs and STI symptoms is less than 1 percent, similar to the prevalence in 2005 (less than 1 percent) and 2010 (2 percent).

Among women, the prevalence of STIs or their symptoms increases slightly with age and decreases slightly as educational level and wealth quintile increase. Rural women and women whose husbands worked abroad are more likely than their counterparts to report having had an STI or an STI symptom (8 percent each). Women in Ararat, Aragatsotn, and Shirak are more likely than women in other regions to report having had an STI or a symptom of an STI in the 12 months before the survey. There are no substantial variations by background characteristics in the prevalence of STIs or STI symptoms among men.

### Table 13.9 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

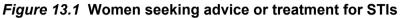
Among women and men age 15-49 who ever had sexual intercourse, the percentage reporting having an STI and/or symptoms of an STI in the past 12 months, according to background characteristics, Armenia 2015-16

			Women					Men		
-	Pe	rcentage of wo	omen who repo past 12 months			F	Percentage of n having in the p	•		
- Background characteristic	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	0.3	2.1	0.7	2.4	407	0.6	0.6	0.0	0.6	324
15-19	(0.0)	(0.0)	(0.0)	(0.0)	35	(4.5)	(4.5)	(0.0)	(4.5)	43
20-24 25-29	0.3 0.9	2.3 3.8	0.8 0.9	2.6 4.1	372 802	0.0 0.7	0.0 0.0	0.0 0.0	0.0 0.7	281 428
30-39	0.9	3.8 4.4	0.9	5.2	1,681	0.7	0.5	0.0	0.7	428 776
40-49	0.9	6.1	1.9	6.3	1,408	0.0	0.2	0.0	0.2	668
Marital status										
Never married Married or living	*	*	*	*	12	0.8	0.3	0.0	0.8	631
together	0.9	4.6	1.3	5.1	3,895	0.1	0.3	0.2	0.4	1,506
Divorced/separated/ widowed	0.0	4.8	0.5	4.8	390	(3.1)	(0.0)	(0.0)	(3.1)	59
	0.0	4.0	0.5	4.0	390	(3.1)	(0.0)	(0.0)	(3.1)	39
Employment abroad <sup>1</sup>	0.4	0.7	0.0	0.7	50	0.0	0.0	0.0	0.0	200
Worked abroad Did not work abroad	2.4 0.8	3.7 4.6	0.0 1.2	3.7 5.1	59 4,239	0.0 0.4	0.0 0.4	0.0 0.2	0.0 0.7	322 1,872
Spousal employment abroad <sup>2</sup>					.,					.,
Only respondent worked abroad	*	*	*	*	18	0.0	0.0	0.0	0.0	220
Only spouse worked abroad <sup>2</sup>	1.1	7.1	2.1	7.8	834	*	*	*	*	10
Both worked abroad	(0.0)	(0.0)	(0.0)	(0.0)	32	*	*	*	*	6
Neither worked abroad	0.8	4.0	1.1	4.5	2,998	0.1	0.4	0.2	0.5	1,264
Residence										
Urban	0.6	2.9	0.6	3.3	2,523	0.3	0.2	0.0	0.3	1,278
Rural	1.2	7.1	2.1	7.7	1,775	0.4	0.5	0.3	0.9	918
Region										
Yerevan	0.6 1.0	1.5	0.0 5.6	1.9 11.3	1,322 198	0.6	0.3 0.3	0.0	0.6 1.1	705
Aragatsotn Ararat	1.0	8.8 12.0	5.0	12.0	394	1.1 0.3	0.5	0.3 0.0	0.8	120 227
Armavir	1.2	1.9	0.6	2.5	445	0.0	1.0	0.5	1.5	237
Gegharkunik	1.4	7.7	0.0	7.7	315	0.0	0.0	0.0	0.0	164
Lori	0.0	2.1	0.0	2.1	230	0.0	0.0	0.0	0.0	133
Kotayk	1.6	4.3	1.9	5.3	515	0.4	0.0	0.0	0.4	250
Shirak	0.5	10.3	1.6	10.5	383	0.6	0.6	0.6	0.6	177
Syunik Vavota Dzor	0.0 1.2	0.0 3.2	0.3 0.3	0.3 3.8	183 91	0.0 0.6	0.0 0.6	0.0 0.6	0.0 0.6	62 37
Vayots Dzor Tavush	0.4	5.4	0.5	5.8 5.7	221	0.0	0.0	0.0	0.0	83
Education										
Basic	0.3	6.4	2.7	7.1	234	0.0	0.4	0.0	0.4	246
Secondary	1.0	6.3	1.4	6.7	1,833	0.5	0.4	0.3	0.9	982
Secondary special	0.7	3.9	1.2	4.5	1,053	0.6	0.6	0.0	0.6	334
Higher	0.9	2.2	0.6	2.8	1,175	0.2	0.0	0.0	0.2	631
Wealth quintile										
Lowest	0.6	6.9	2.3	7.5	780	0.2	0.3	0.3	0.8	411
Second	0.9	6.5	1.8	6.8	878	0.2	0.5	0.0	0.7	444
Middle	0.8	6.1	1.3	6.4	818	0.1	0.1	0.1	0.1	413
Fourth Highest	0.8 0.9	2.9 1.3	0.2 0.6	3.4 2.1	874 948	1.1 0.3	0.4 0.3	0.0 0.3	1.1 0.3	458 470
-										
Total	0.8	4.6	1.2	5.1	4,298	0.4	0.3	0.1	0.6	2,196

Note: Total includes 2 men with missing information about employment abroad, 13 women and 7 men with missing information about spousal employment abroad, and 4 women and 3 men with no education. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in <sup>1</sup> "Employment abroad" refers to working abroad during the three years before the survey for three or more months at a time.
 <sup>2</sup> Currently married respondents only; information on spouse's employment abroad is based on respondent's report.

If respondents reported an STI or an STI symptom (i.e., genital discharge or sore/ulcer) in the past 12 months, they were asked questions about their actions in response to the infection or symptom. Figure 13.1 shows that more than 6 in 10 of the women (62 percent) who reported having had an STI or STI symptoms in the past 12 months sought advice or treatment from a clinic, hospital, or health professional.<sup>2</sup> More than one-third (35 percent) of women did not solicit any advice or seek treatment.





13.8 PREVALENCE OF MEDICAL INJECTIONS

Respondents in the 2015-16 ADHS were asked how many injections they had from a doctor, nurse, pharmacist, dentist, or other health worker in the 12 months preceding the survey. If they had had such a medical injection, they were asked if the syringe and needle were taken from a new, unused package for the most recent injection. It should be noted that injections that are self-administered (e.g., insulin for diabetes) are not considered medical injections for this analysis. Table 13.10 shows the percentages of women and men age 15-49 who received a medical injection in the past 12 months, the average number of injections, and whether or not the syringe and needle used were taken from an unopened package.

The data show that 12 percent of women and 17 percent of men report having received an injection from a health worker in the 12 months preceding the survey, with an average of 1.2 injections for both women and men. Older women and, to a lesser extent, older men are more likely than younger women and men to report getting an injection. The proportion of women who had a medical injection in the 12 months before the survey is twice as high in Tavush (19 percent) as in Syunik and Aragatsotn (8 percent each). Among men, the regional variation is even larger, ranging from less than 1 percent in Ararat to 36 percent in Armavir. Prevalence of medical injections among women and men is not strongly related to either education or wealth.

When asked whether the syringe used in the last medical injection came from a new, unopened package, 98 percent of women and 96 percent of men responded positively.

The proportion of women who reported receiving a medical injection in the 12 months before the survey has decreased slightly over the past five years, from 14 percent in 2010 to 12 percent in 2015-16. Among men, however, there has been a sizeable increase, from 8 percent to 17 percent (NSS et al. 2012).

<sup>&</sup>lt;sup>2</sup> There were too few men who reported having had an STI or an STI symptom to show information about treatment.

### Table 13.10 Prevalence of medical injections

Percentage of women and men age 15-49 who received at least one medical injection in the last 12 months, the average number of medical injections per person in the last 12 months, and among those who received a medical injection, the percentage of last medical injections for which the syringe and needle were taken from a new, unopened package, by background characteristics, Armenia 2015-16

			Women					Men		
Background characteristic	Percentage who received a medical injection in the last 12 months	number of medical injections per person	Number of women	For last injection, syringe and needle taken from a new, unopened package	Number of women receiving medical injections in the last 12 months	Percentage who received a medical injection in the last 12 months	Average number of medical injections per person in the last 12 months	Number of men	For last injection, syringe and needle taken from a new, unopened package	Number of men receiving medical injections in the last 12 months
Age										
15-24	7.2	0.5	1,653	98.1	119	13.6	0.7	813	98.9	111
15-19	5.0	0.2	725	(93.6)	36	15.1	0.7	345	99.5	52
20-24	9.0	0.6	928	100.0	83	12.6	0.7	467	98.4	59
25-29 30-39	14.2 12.5	1.4 1.4	1,099 1,874	98.1 97.6	156 235	15.3 17.5	0.9 1.4	464 802	96.8 97.3	71 141
30-39 40-49	12.5	1.4	1,674	97.6 98.5	235	17.5	1.4	676	97.3 91.8	141
	10.0	1.0	1,100	00.0	201	10.0	1.0	010	01.0	101
Marital status Never married	5.3	0.3	1,830	97.6	98	15.0	0.9	1,190	96.5	179
Ever had sex	5.5	*	1,030	*	2	17.8	1.0	631	90.5 95.5	112
Never had sex	5.2	0.3	1,818	97.6	95	11.9	0.8	559	98.2	67
Married/living together	15.1	1.6	3,895	98.0	590	17.9	1.4	1,506	96.1	270
Divorced/separated/										
widowed	13.6	1.5	390	100.0	53	(13.3)	(0.8)	59	*	8
Employment abroad <sup>1</sup>										
Worked abroad	16.4	1.3	81	*	13	16.1	1.2	334	98.0	54
Did not work abroad	12.1	1.2	6,035	98.2	728	16.7	1.2	2,419	95.7	403
Spousal employment abroad <sup>2</sup>										
Only respondent worked abroad Only spouse worked	*	*	18	*	5	17.9	1.5	220	(97.3)	39
abroad <sup>2</sup>	16.0	1.5	834	99.2	134	*	*	10	*	4
Both worked abroad	(19.9)	(1.8)	32	*	6	*	*	6	*	0
Neither worked abroad	14.8	1.6	2,998	97.8	445	17.8	1.4	1,264	95.8	225
Residence										
Urban	12.2	1.2	3,657	97.9	447	18.2	1.3	1,558	94.6	283
Rural	12.0	1.3	2,459	98.3	294	14.5	1.1	1,197	98.3	173
Region										
Yerevan	11.4	1.0	2,001	96.1	229	19.4	1.3	833	91.1	161
Aragatsotn	8.1	0.7	315	(100.0)	26	31.5	1.7	159	100.0	50
Ararat Armavir	10.3 10.4	1.2 1.4	552 586	100.0 97.5	57 61	0.7 35.8	0.0 2.3	290 268	98.0	2 96
Gegharkunik	8.5	1.4	478	(100.0)	41	5.8	0.7	235	\$0.0	90 14
Lori	15.6	1.2	355	100.0	55	21.7	1.2	184	(97.4)	40
Kotayk	16.7	1.9	678	100.0	113	13.9	1.6	299	(100.0)	42
Shirak	13.9	1.1	510	97.0	71	12.8	0.8	201	*	26
Syunik	7.7	1.1	238	(100.0)	18	2.5	0.8	104	*	3
Vayots Dzor	13.9	1.1	119	100.0	17	18.7	1.4	56	(91.4)	11
Tavush	18.6	1.8	283	96.6	53	10.5	0.6	126	*	13
Education										
Basic	9.6	0.9	396	(94.2)	38	14.8	1.2	360	97.1	53
Secondary	10.9	1.2	2,444	97.9	267	17.1	1.3	1,250	93.8	214
Secondary special	15.3	1.7	1,360	98.5	208	14.5	0.9	403	95.1	58
Higher	11.9	1.0	1,910	98.5	228	17.8	1.1	736	99.5	131
Wealth quintile	40.0	4.0	4 664	00.0	47-	4= 0			00.0	~~
Lowest	10.9	1.2	1,081	96.3	117	17.6	1.4	523	98.6	92
Second	13.0	1.4	1,242	100.0	162	14.4	1.0	583	98.3 07.4	84
Middle	11.6	1.1	1,142	98.5 08.4	133	15.3	0.9	521 566	97.4	80 100
Fourth Highest	12.1 12.7	1.3 1.1	1,287 1,365	98.4 96.8	156 173	19.3 16.3	1.5 1.1	566 562	92.1 94.7	109 92
-										
Total	12.1	1.2	6,116	98.1	741	16.6	1.2	2,755	96.0	457

Note: Medical injections are those given by a doctor, nurse, pharmacist, dentist, or other health worker. Total includes 2 men with missing information about employment abroad, 13 women and 7 men with missing information about spousal employment abroad, and 5 women and 5 men with no education. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases. <sup>1</sup> "Employment abroad" refers to working abroad during the three years before the survey for three or more months at a time.

<sup>2</sup> Currently married respondents only; information on spouse's employment abroad is based on respondent's report.

### 13.9 HIV/AIDS-RELATED KNOWLEDGE AND BEHAVIOR AMONG YOUTH

This section addresses knowledge of HIV/AIDS issues and related sexual behavior among youth age 15-24. This age group is of particular interest for HIV/AIDS programs. The period between initiation of sexual activity and marriage is often a time of sexual experimentation, and it may also involve risky behaviors. The survey collected data on comprehensive knowledge of HIV/AIDS transmission and prevention among youth. Information was also gathered on issues such as age at sexual debut, premarital sex, higher-risk sexual behavior, condom use, and HIV testing.

### 13.9.1 HIV/AIDS-Related Knowledge among Young Adults

Young respondents in the 2015-16 ADHS were asked the same set of questions as older respondents about whether condom use and limiting the number of sexual partners to one uninfected partner can help protect against getting HIV and whether a healthy-looking person can have HIV (see Table 13.3). Table 13.11 shows the level of comprehensive knowledge among young people, that is, the proportion of youth who, in response to prompted questions, answer in the affirmative that people can reduce their chances of getting HIV by having sex with only one uninfected faithful partner and by using condoms consistently, who know that a healthy-looking person can have HIV, and who know that HIV cannot be transmitted by mosquito bites or by kissing someone who has HIV.

Only 20 percent of young women and 13 percent of young men have comprehensive knowledge about HIV/AIDS. Comprehensive knowledge about HIV/AIDS increases with the age of the respondent. It does not vary between respondents who have been married and those who have never been married. Urban youth are more likely than those in rural areas to have comprehensive knowledge about HIV/AIDS. The proportion of young women and men with comprehensive knowledge about HIV increases dramatically as educational level increases.

# Table 13.11 Comprehensive knowledge about HIV among young people

Percentage of young women and young men age 15-24 with comprehensive knowledge about HIV, according to background characteristics, Armenia 2015-16

	Women a	ge 15-24	Men age	e 15-24
Background characteristic	Percentage with compre- hensive knowledge of HIV <sup>1</sup>	Number of women	Percentage with compre- hensive knowledge of HIV <sup>1</sup>	Number of men
Age 15-19 15-17 18-19 20-24 20-22 23-24	14.7 11.9 19.3 24.5 23.0 26.4	725 450 275 928 506 422	8.9 7.2 14.1 15.2 13.1 17.5	345 261 85 467 247 221
Marital status Never married Ever had sex Never had sex Ever married	20.5 * 20.5 19.4	1,249 2 1,247 405	12.5 16.0 10.5 13.3	756 267 489 56
<b>Residence</b> Urban Rural	24.9 14.3	928 725	15.6 8.9	438 374
Education Basic Secondary Secondary special Higher	6.7 10.7 26.1 32.2	163 651 272 567	4.5 8.9 9.1 25.8	139 354 109 209
Total	20.2	1,653	12.5	813

Note: Total includes 1 man with no education. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

<sup>1</sup> Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common local misconceptions about transmission or prevention of HIV. The components of comprehensive knowledge are presented in Tables 13.2 and 13.3.

### 13.9.2 Age at First Sex among Youth

Information from the 2015-16 ADHS can be used to look at the timing of the initiation of sexual activity among youth. Table 13.12 shows the proportions of young women and men in the 15-24 age cohort who had sex before age 15 and before age 18.

Overall, almost no women and only 1 percent of men age 15-24 in Armenia report having had sex by age 15 (Table 13.12). By age 18, however, 6 percent of women and 16 percent of men age 18-24 have had their sexual debut.

Differences in age at initiation of sexual relations by residence are not uniform. Among women age 18-24, those in rural areas are more likely to have had sex before age 18 than those in urban areas. However, among men, the reverse is true: urban men are slightly more likely to have had sex before age 18 than rural men. The proportion of young women and young men age 18-24 who had sex by age 18 tends to decrease as educational level increases, although the relationship is stronger among women than men.

### Table 13.12 Age at first sexual intercourse among young people

Percent

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, Armenia 2015-16

	Women a	ge 15-24	Women a	ge 18-24	Men age	Men age 15-24 Mer		
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	0.0	725	na	na	1.0	345	na	na
15-17	0.0	450	na	na	1.1	261	na	na
18-19	0.0	275	5.7	275	0.8	85	21.8	85
20-24	0.2	928	5.9	928	1.0	467	14.9	467
20-22	0.3	506	5.8	506	1.0	247	16.6	247
23-24	0.0	422	6.1	422	1.0	221	12.9	221
Residence								
Urban	0.1	928	3.0	675	1.8	438	17.6	287
Rural	0.1	725	9.6	529	0.0	374	14.1	265
Education								
Basic	1.0	163	(28.5)	40	0.9	139	24.2	59
Secondary	0.0	651	10.8	406	1.9	354	14.7	220
Secondary special	0.0	272	5.5	203	0.0	109	18.1	77
Higher	0.0	567	0.8	554	0.0	209	14.1	195
Total	0.1	1,653	5.9	1,204	1.0	813	15.9	552

Note: Total includes 1 man with no education. Figures in parentheses are based on 25-49 unweighted cases. na = Not applicable

Figure 13.2 shows that there has been very little change in age at first sexual intercourse since 2010. The percentage of young women age 18-19 who initiated sexual intercourse before age 18 has decreased slightly, from 8 percent in 2010 to 6 percent in 2015-16. The percentage of men age 18-19 who had sex before age 18 has remained stable at 22 percent (NSS et al. 2012).

### Figure 13.2 Trends in age at first sexual intercourse

22 22 8 6 1 0 0 0 Percentage of women Percentage of women Percentage of men Percentage of men 15-19 who had sexual 15-19 who had sexual 18-19 who had sexual 18-19 who had sexual intercourse before intercourse before intercourse before intercourse before exact age 15 exact age 15 exact age 18 exact age 18 ■ 2010 ADHS ■ 2015-16 ADHS

### **13.9.3 Abstinence and Premarital Sex**

As noted, the period between sexual initiation and marriage is often a time of sexual experimentation. Premarital sex and the length of the interval between sexual initiation and marriage are among the factors contributing to the spread of HIV.

Table 13.13 shows the percentages of never-married young women and men age 15-24 who have never had sexual intercourse. Almost all never-married young women report that they have never had sex, and there are no differentials by age, residence, or education.

	Table 13.13	Premarital sexual intercourse among young people
--	-------------	--

Among never-married women and men age 15-24, percentage who have never had sexual intercourse, according to background characteristics, Armenia 2015-16

	Never-married wo	men age 15-24	Never-married men age 15-24			
Background characteristic	Percentage who have never had sexual intercourse	Number of women	Percentage who have never had sexual intercourse	Number of men		
Age						
15-19	100.0	690	87.5	345		
15-17	100.0	446	94.4	261		
18-19	100.0	244	66.4	85		
20-24	99.7	558	45.4	411		
20-22	100.0	346	53.2	237		
23-24	99.1	212	34.7	174		
Residence						
Urban	99.7	739	59.1	415		
Rural	100.0	509	71.4	341		
Education						
Basic	100.0	138	79.7	131		
Secondary	100.0	454	73.0	326		
Secondary special	100.0	195	61.0	101		
Higher	99.6	460	42.3	197		
Total	99.8	1,249	64.6	756		

Overall, 65 percent of never-married young men age 15-24 report that they have never had sex. The proportion of never-married young men who have never had sex drops rapidly with increasing age and education. For example, 94 percent of never-married men age 15-17 have never had sex, as compared with 35 percent of men age 23-24. Similarly, 80 percent of young men with a basic education have never had sex, compared with 42 percent of those with a higher education. Young men in urban areas (59 percent) are considerably less likely than those in rural areas (71 percent) to have never had sex.

## 13.9.4 Multiple Sexual Partners and Condom Use among Young People

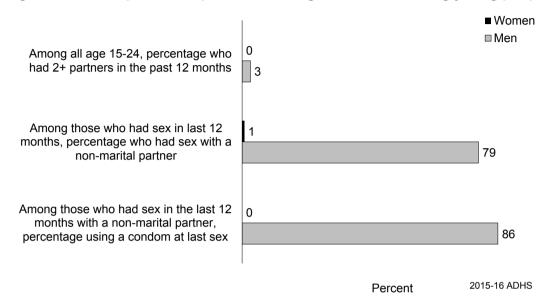
In many societies, young adulthood is a time of sexual experimentation. Multiple partnerships and sexual experiences with non-marital partners can expose people to sexually transmitted infections such as HIV. In the 2015-16 ADHS, young women and men were asked the same set of questions as older respondents regarding the number and types of sexual partners they had in the 12 months before the survey. Figure 13.3 shows information for young women and men age 15-24 as to the proportion with more than one sexual partner in the past 12 months, the proportion who had sex with a non-marital partner, and, among them, the proportion using a condom at the last sexual intercourse.

As was the case in the 2010 ADHS, no young women age 15-24 reported having multiple sexual partners in the 12 months before the survey (NSS et al. 2012). Less than 1 percent of young women who had had sexual intercourse in the 12 months before the survey said they had sex with a non-marital, non-cohabiting partner in that time frame.

Only 3 percent of young men reported having had more than one sexual partner in the 12 months preceding the survey, a steep decline from the 16 percent figure reported in 2010. Differences by background characteristics are minimal (data not shown).

Among young men who had sexual intercourse in the 12 months before the survey, 79 percent said they had sex with a non-marital, non-cohabiting partner (i.e., not a wife or live-in partner). Of those who had non-marital sex, 86 percent said they used a condom the last time they had sex.

Figure 13.3 Multiple sexual partners and higher-risk sex among young people



### 13.9.5 Recent HIV Tests among Youth

Individuals' knowledge of their own HIV status can provide motivation to practice safer sexual practices. People who learn that they do not have HIV may decide to take precautions in the future so as not to contract the virus, and those who learn that they are carrying the virus may decide to take precautions to avoid transmitting the virus to others.

Only 10 percent of young women and 1 percent of young men reported that they had ever been tested for HIV (see Tables 13.8.1 and 13.8.2). The fact that many young people in Armenia are not sexually active may explain these low percentages. Consequently, Table 13.14 presents results on coverage of HIV testing among sexually active young women and men age 15-24, focusing on those who may be more motivated to get tested.

Overall, 11 percent of young women and less than 1 percent of young men who had sexual intercourse in the 12 months before the survey were recently tested for HIV and received the results. In general, the numbers are too small to reach meaningfu

Table 13.14 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, the percentage who were tested for HIV in the past 12 months and received the results of the last test, according to background characteristics, Armenia 2015-16

	Women ag who have h intercourse 12 mo	ad sexual in the past	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 15-17 18-19 20-24 20-22 23-24	(9.9) * 10.5 9.4 11.4	35 3 31 363 157 206	(1.7) * 0.7 0.0 1.2	39 14 25 232 96 136			
Marital status Never married Ever married Total	* 10.5 10.5	2 396 398	0.7 1.2 0.8	215 56 271			
Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.							

general, the numbers are too small to reach meaningful conclusions on variations in testing coverage by the background characteristics shown in Table 13.14.

# **Key Findings**

- Six percent of women age 15-49 have experienced physical violence at least once since age 15, and 3 percent experienced physical violence in the 12 months prior to the survey.
- One percent of women age 15-49 report having experienced sexual violence at least once in their lifetime.
- Among ever-married women age 15-49, 14 percent report having experienced physical, sexual, or emotional violence from their spouse, and 8 percent report experiencing such violence in the past 12 months.
- Among ever-married women who have experienced spousal violence (physical or sexual), 40 percent reported experiencing physical injuries.
- Twenty-nine percent of women who have experienced physical or sexual violence by anyone have sought assistance to stop the violence.

Gender-based violence is defined as any act that results in, or is likely to result in, physical, sexual, or psychological harm or suffering among women, including threats of such acts and coercion or arbitrary deprivations of liberty, whether occurring in public or in private life (United Nations 1993; United Nations 1996; WHO 2016). Domestic violence against women, a major form of gender-based violence, has negative health consequences, especially for the reproductive health of women and the physical, emotional, and mental health of their children. The 2015-16 ADHS included a domestic violence module administered to women age 15-49 to assess the prevalence and correlates of women's experience of domestic violence in Armenia.

## 14.1 MEASUREMENT OF VIOLENCE

Collecting valid, reliable, and ethical data on domestic violence poses particular challenges because what constitutes violence or abuse varies across cultures and among individuals. In addition, a culture of silence usually surrounds the experience of domestic violence and can affect reporting. Assuring the safety of respondents and interviewers when asking about domestic violence in a familial setting, protecting women who disclose violence, and reducing the risk of double victimization of respondents as they relive their experiences are all specific ethical concerns.

# 14.1.1 Use of Valid Measures of Violence

In the 2015-16 ADHS, information was obtained from ever-married women on violence committed by their current and former husbands and by others. Information was collected from nevermarried women on violence committed by anyone. Since international research shows that intimate partner violence is one of the most common forms of violence, especially against women, information on spousal violence was measured in more detail than violence committed by other perpetrators. These measurements were made using a shortened, modified version of the Conflict Tactics Scale (Strauss 1990). Specifically, violence by the current husband/partner among currently married women and by the most recent husband/partner among formerly married women was measured by asking all ever-married women the following set of questions. Does (did) your (last) husband/partner ever:

- (a) Push you, shake you, or throw something at you?
- (b) Slap you?
- (c) Twist your arm or pull your hair?
- (d) Punch you with his fist or with something that could hurt you?
- (e) Kick you, drag you, or beat you up?
- (f) Try to choke you or burn you on purpose?
- (g) Threaten or attack you with a knife, gun, or other weapon?
- (h) Physically force you to have sexual intercourse with him even when you did not want to?
- (i) Physically force you to perform any other sexual acts you did not want to?
- (j) Force you with threats or in any other way to perform sexual acts you did not want to?

For every question that a woman answered "yes," she was asked about the frequency of the act in the 12 months preceding the survey (often, sometimes, or not at all). A yes answer to one or more of items (a) to (g) above constitutes evidence of physical violence, and a yes answer to item (h), (i), or (j) constitutes evidence of sexual violence.

Similarly, emotional violence among ever-married women was measured with the following questions.

Does (did) your (last) husband/partner ever:

- (a) Say or do something to humiliate you in front of others?
- (b) Threaten to hurt or harm you or someone you care about?
- (c) Insult you or make you feel bad about yourself?

This approach of asking about specific acts to measure different forms of violence has the advantage of not being affected by different understandings of what constitutes a summary term such as "violence." By including a wide range of acts, this approach has the additional advantage of giving the respondent multiple opportunities to disclose any experience of violence.

In addition to these questions asked only of ever-married respondents, all women were asked about physical and sexual violence from persons other than the current or most recent husband/partner. Respondents who answered yes to this question were asked who committed violence against them and the frequency of such violence during the 12 months preceding the survey. Respondents who reported experiencing different forms of violence were asked for the perpetrators of the violence.

Although this approach to questioning is generally considered to be optimal, the possibility of underreporting of violence, particularly sexual violence, cannot be entirely ruled out in any survey, and this survey is no exception.

# 14.1.2 Ethical Considerations

In recognition of the challenges in collecting data on violence, the 2015-16 ADHS interviewers were specially trained on the sensitivity around asking about domestic violence; additionally, they were trained to ensure privacy when asking this module of questions and on how to build rapport with the respondent. Rapport with the respondent, confidentiality, and privacy are all keys to building respondents' confidence so that they can safely share their experiences with the interviewer. Also, placement of questions about violence at the end of the questionnaire provides time for the interviewer to develop a certain degree of intimacy that should further encourage respondents to share their experiences of violence, if any. In addition, the following protections were built into the survey in keeping with the World Health Organization's ethical and safety recommendations for research on domestic violence (WHO 2001):

- 1. To maintain confidentiality, only one woman per household was administered the questions on violence. The random selection of one woman was done through a simple selection procedure based on the Kish grid, which was built into the Household Questionnaire (Kish 1965).
- 2. As a means of obtaining additional consent beyond the initial consent provided at the start of the interview, the respondent was informed that the questions could be sensitive and was reassured regarding the confidentiality of her responses.
- 3. The violence module was implemented only if privacy could be obtained. The interviewers were instructed to skip the module, thank the respondent, and end the interview if they could not ensure privacy.

As a result of the various precautions and restrictions, a total of 4,592 women age 15-49 (3,208 ever-married women) completed the domestic violence module. Specially constructed weights were used to adjust for the selection of only one woman per household in order to ensure that the subsample of women administered the domestic violence module was nationally representative. Note that for the remainder of this chapter the term "husband" refers to any man living with a respondent in either a formal or an informal marital union.

# 14.2 EXPERIENCE OF PHYSICAL VIOLENCE

Table 14.1 shows the percentages of women who have experienced physical violence since age 15 and the percentages who experienced violence during the 12 months preceding the survey, by background characteristics. Six percent of women have experienced physical violence since age 15, and 3 percent experienced physical violence in the 12 months preceding the survey. Overall, 1 percent of women reported that they had experienced physical violence often in the past 12 months and 2 percent said they had experienced physical violence sometimes during the same period.

The percentage of women who have experienced physical violence since age 15 increases with age; no women in the 15-19 age group reported experiencing violence, as compared with 10 percent of women in the 40-49 age group. A similar pattern is observed by women's number of children. Women's experience of violence varies greatly by region, from a low of 0 percent in Syunik and 1 percent in Tavush to a high of 18 percent in Aragatsotn. Thirty-five percent of women who are divorced, separated, or widowed have experienced physical violence since age 15, compared with 6 percent of currently married women. The percentage of women who have experienced physical violence since age 15 tends to decline with increasing education and wealth.

Almost all of the women who reported experiencing any physical violence since age 15 are currently or formerly married. Thus, it is not surprising that the majority of reported perpetrators of violence are current husbands (60 percent) and former husbands (39 percent). Former boyfriends, mothersin-law, and siblings were also mentioned as perpetrators by 1 percent each of women (data not shown).

#### Table 14.1 Experience of physical violence

Percentage who Percentage who have experienced have ever physical violence in the past 12 months experienced Background physical violence Often or Number of sometimes<sup>2</sup> characteristic Often Sometimes since age 151 women Age 15-19 0.0 0.0 0.0 0.0 534 724 827 20-24 1.2 0.1 0.9 1.0 25-29 30-39 41 0.1 0.7 1.6 2.8 1.7 8.5 3.5 1,399 40-49 9.7 1.2 2.7 3.8 1.109 Residence Urban 5.2 0.5 1.6 2.1 2,741 Rural 6.8 0.6 2.4 3.0 1,851 Region 4.6 0.3 1.7 2.0 1,522 Yerevan Aragatsotn 17.5 1.2 12.4 13.6 241 3.5 0.7 Ararat 13.0 1.7 1.8 421 0.3 442 Armavir 22 04 365 4.3 Gegharkunik 0.0 1.1 1.1 10.1 3.7 4.8 224 Lori 1.1 Kotayk 6.1 0.0 513 1.1 1.1 Shirak 3.4 1.3 1.1 2.4 381 Syunik 0.0 0.0 0.0 0.0 181 Vayots Dzor 8.6 0.0 1.3 1.3 91 Tavush 1.2 0.2 0.5 0.7 211 Marital status 0.1 0.0 0.1 0.1 1,384 Never married Married or living together 5.8 0.4 2.2 2.6 2,923 Divorced/separated/widowed 35.0 4.9 7.9 12.8 285 Number of living children 0.4 0.0 0.0 0.0 1,600 0 1-2 8.5 0.7 2.9 3.7 2,219 3-4 9.5 0.7 2.8 3.6 737 5+ (14.7)(8.3) (5.0)(13.3)35 Employment 7.1 0.8 1.5 2.3 1,606 Employed for cash Employed not for cash 5.7 0.4 0.4 0.8 260 Not employed 5.1 0.4 2.3 2.7 2,726 Education Basic 8.6 1.0 1.1 2.0 300 Secondary 7.6 0.5 2.6 3.2 1,810 Secondary special 0.8 2.4 3.2 1,020 6.6 Higher 2.6 0.3 0.9 1.2 1,458 Wealth guintile 9.0 3.4 Lowest 1.1 4.5 812 Second 5.9 0.4 1.6 1.9 930 Middle 8.0 0.8 2.3 3.2 860 Fourth 3.5 0.2 1.0 1.2 956 Highest 3.7 0.3 1.6 1.9 1,034 Total 5.9 0.5 1.9 2.5 4,592

Percentage of women age 15-49 who have ever experienced physical violence since age 15 and percentage who have experienced physical violence during the 12 months preceding the survey, by background characteristics, Armenia 2015-16

Note: Total includes 4 women with no education. Figures in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> Includes violence in the past 12 months. For women who were married before age 15 and who reported physical violence, the violence could have occurred before age 15. <sup>2</sup> Includes women who report physical violence in the past 12 months but for whom frequency is not known

## 14.3 EXPERIENCE OF SEXUAL VIOLENCE

Table 14.2 shows the percentage of women who have experienced sexual violence ever and in the past 12 months, according to background characteristics.

The results show that 1 percent of women age 15-49 have ever experienced sexual violence, and for a minority of them, the violence occurred in the past 12 months. Women's experience of sexual violence increases with age, with 2 percent of women age 40-49 reporting such violence. As with physical violence, formerly married women are much more likely to report sexual violence than currently married women (6 percent versus 1 percent). Experience of sexual violence is most common in Aragatsotn (4 percent) and in Ararat and Lori (2 percent each).

As with reports of physical violence, almost all women reporting sexual violence were currently or formerly married, and the reported perpetrators were either current or former husbands or boyfriends (data not shown).

# 14.4 EXPERIENCE OF DIFFERENT FORMS OF VIOLENCE

Table 14.3 presents information on the experience of various forms of violence among women age 15-49. Overall, 6 percent of women reported that they have experienced either physical or sexual violence or both. Five percent have experienced physical violence only, less than 1 percent have experienced sexual violence only, and 1 percent have experienced both physical and sexual violence. The percentage of women who have experienced physical or sexual violence or sexual violence of women who have experienced physical or sexual violence.

### Table 14.2 Experience of sexual violence

Percentage of women age 15-49 who have ever experienced sexual violence and percentage who have experienced sexual violence in the 12 months preceding the survey, by background characteristics, Armenia 2015-16

	Percentag experien viol		
Background characteristic	Ever <sup>1</sup>	In the past 12 months	Number of women
Age	0.0	0.0	524
15-19 20-24	0.0 0.1	0.0 0.1	534 724
25-29	0.1	0.1	827
30-39	1.2	0.4	1,399
40-49	1.8	0.6	1,109
Residence			
Urban	0.8	0.2	2,741
Rural	1.0	0.4	1,851
Region			
Yerevan	0.5	0.2	1,522
Aragatsotn	3.7	0.9	241
Ararat	1.9	1.3	421
Armavir	0.4	0.1 0.3	442 365
Gegharkunik Lori	0.6 1.8	0.3	365 224
Kotayk	1.0	0.3	513
Shirak	0.0	0.1	381
Syunik	0.0	0.0	181
Vayots Dzor	1.0	0.0	91
Tavush	0.6	0.4	211
Marital status			
Never married	0.1	0.0	1,384
Married or living together	0.7	0.3	2,923
Divorced/separated/widowed	6.3	1.8	285
Employment			
Employed for cash	1.4	0.7	1,606
Employed not for cash	0.4	0.0	260
Not employed	0.6	0.1	2,726
Number of living children	0.2	0.0	1,600
1-2	1.2	0.0	2,219
3-4	1.2	0.4	737
5+	(1.4)	(1.4)	35
Education			
Basic	2.1	0.7	300
Secondary	0.9	0.3	1,810
Secondary special	1.5	0.6	1,020
Higher	0.1	0.0	1,458
Wealth quintile			
Lowest	1.4	0.5	812
Second	1.1	0.6	930
Middle Fourth	1.1 0.4	0.2 0.1	860 956
Highest	0.4	0.1	956 1,034
•			
Total	0.9	0.3	4,592
Note: Total includes 4 wome	en with no	education.	Figures in

Note: Total includes 4 women with no education. Figures in parentheses are based on 25-49 unweighted cases. <sup>1</sup> Includes violence in the past 12 months

# Table 14.3 Experience of different forms of violence

Percentage of women age 15-49 who have ever experienced different forms of violence by current age, Armenia 2015-16

Age	Physical violence only	Sexual violence only	Physical and sexual violence	Physical or sexual violence	Number of women
15-19 15-17 18-19 20-24 25-29 30-39 40-49	0.0 0.0 1.1 3.8 7.5 8.0	0.0 0.0 0.0 0.1 0.1 0.1	0.0 0.0 0.1 0.3 1.0 1.7	0.0 0.0 0.1 1.2 4.2 8.6 9.8	534 321 212 724 827 1,399 1,109
Total	5.1	0.1	0.8	9.0 5.9	4,592

### 14.5 VIOLENCE DURING PREGNANCY

Respondents who had ever been pregnant were asked specifically whether they had ever experienced physical violence while pregnant.

Table 14.4 shows that 1 percent of women who had ever been pregnant experienced physical violence during pregnancy. This percentage increases with age, from less than 1 percent among women age 20-24 to 2 percent among women age 40-49. Eight percent of formerly married women report having experienced physical violence when they were pregnant, as compared with 1 percent of currently married women. Experience of violence during pregnancy is most common, at 3 percent each, in Ararat, Lori, and Kotayk. Violence during pregnancy tends to decline with increasing wealth but does not vary consistently with education.

# 14.6 MARITAL CONTROL BY SPOUSE

Attempts by husbands to closely control and monitor their wives' behavior may be important warning signs and correlates of violence in a relationship. A series of questions were included in the 2015-16 ADHS to elicit the degree of marital control exercised by husbands over their wives. Controlling behaviors most often manifest themselves in terms of extreme possessiveness, jealousy, and attempts to isolate women from their family and friends. To determine the degree of marital control by husbands, ever-married women were asked whether their current or former husband or partner exhibited each of the following controlling behaviors: (1) he is jealous or gets angry if she talks to other men, (2) he frequently accuses her of being unfaithful, (3) he does not permit meetings with female friends, (4) he tries to limit contact with her family, and (5) he insists on knowing where she is at all times. Because the concentration of such behaviors is more significant than the display of any single behavior, the proportion of respondents whose husbands display at least three of the specified behaviors is highlighted. Table 14.5 shows the percentage of ever-married women whose current

#### Table 14.4 Experience of violence during pregnancy

Among women age 15-49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, by background characteristics, Armenia 2015-16

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
Age		
15-19	*	21
20-24	0.4	242
25-29	0.4	568
30-39 40-49	1.4 1.5	1,218 1,019
Residence		
Urban	1.2	1,779
Rural	1.2	1,290
Region	<u>م ج</u>	0.40
Yerevan	0.5	943
Aragatsotn	1.3 3.1	144
Ararat Armavir	3.1 0.5	300 317
Gegharkunik	0.0	224
Lori	3.0	127
Kotayk	2.5	382
Shirak	1.1	276
Syunik	0.0	131
Vayots Dzor	1.2	66
Tavush	0.7	159
Marital status		
Never married	*	1
Married or living	0.5	0.000
together	0.5	2,803
Divorced/separated/ widowed	8.2	265
Number of living		
<b>children</b> 0	2.0	77
1-2	1.1	77 2,219
3-4	1.3	737
5+	(1.4)	35
Education		
Basic	1.5	171
Secondary	1.1	1,309
Secondary special	2.3 0.2	759 826
Higher	0.2	020
Wealth quintile	1.6	569
Lowest Second	1.6	569 641
Middle	1.4	578
Fourth	1.0	591
Highest	0.3	690
3	1.2	3,069

Note: Total includes 4 women with no education. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

husbands display each of the listed behaviors by selected background characteristics.

#### Table 14.5 Marital control exercised by husbands

Percentage of ever-married women age 15-49 whose husbands/partners have ever demonstrated specific types of controlling behaviors, by background characteristics, Armenia 2015-16

	Percentage of women whose husband/partner:							
Background characteristic	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 behaviors	Displays none of the specific behaviors	Number of ever-married women
Age								
15-19 20-24 25-29	(36.9) 36.9 42.5	(0.0) 0.5 1.7	(3.1) 8.1 8.1	(0.0) 3.0 2.8	(38.2) 39.3 42.5	(3.1) 6.2 8.0	(57.5) 49.5 43.6	27 278 610
30-39 40-49	37.1 29.1	3.5 2.3	8.3 7.3	3.9 2.7	39.5 34.5	8.3 7.3	49.0 56.9	1,248 1,045
<b>Residence</b> Urban Rural	36.6 34.0	3.0 1.8	7.0 9.2	3.7 2.5	39.1 37.5	7.6 7.8	48.6 53.5	1,872 1,337
Region								
Yerevan Aragatsotn Ararat	36.9 69.9 44.1	3.2 4.3 2.5	5.2 18.6 17.7	3.2 6.5 5.4	41.6 59.2 50.5	7.0 18.3 14.4	45.8 19.8 39.3	995 146 306
Armavir Gegharkunik Lori	20.0 43.7 51.1	0.8 3.7 2.2	2.6 16.0 8.4	0.7 3.3 4.3	14.5 38.4 48.3	1.5 17.0 7.8	76.1 47.5 39.5	336 236 132
Kotayk Shirak Syunik	36.5 30.4 9.8	1.7 2.9 0.6	3.3 12.9 0.7	2.0 5.5 0.7	42.8 49.4 4.1	3.3 8.8 1.5	49.4 42.1 89.4	393 288 141
Vayots Dzor Tavush	50.3 10.1	3.1 1.7	6.7 4.4	4.4 1.0	41.2 17.6	7.9 2.4	44.9 76.6	68 168
Marital status Married or living together	33.4	0.8	6.5	1.8	36.9	5.3	52.0	2,923
Divorced/separated/ widowed	56.8	20.5	21.9	17.5	53.7	31.8	36.2	285
Number of living children								
0 1-2 3-4	33.0 36.9 32.3	1.8 2.8 1.9	5.1 7.6 9.1	1.6 3.5 2.8	34.9 40.1 34.5	4.4 7.7 8.0	53.6 48.6 55.4	217 2,219 737
5+	(29.8)	(4.4)	(17.6)	(4.4)	(32.8)	(14.5)	(59.8)	35
Employment Employed for cash Employed not for	35.7	3.9	7.5	3.9	39.5	8.6	50.9	1,181
cash Not employed	24.0 36.9	2.2 1.6	8.1 8.1	2.2 2.9	21.4 40.0	6.2 7.3	65.9 48.4	241 1,786
Education Basic Secondary Secondary special Higher	36.2 37.8 34.9 32.4	2.2 2.4 3.0 2.3	11.7 10.1 7.7 3.9	5.6 3.3 3.4 2.4	40.3 38.4 38.3 38.3	12.4 9.2 7.0 5.0	51.6 49.7 50.2 52.0	175 1,361 787 881
Wealth quintile Lowest	31.6	3.3	10.6	4.4	35.4	9.4	56.2	586
Second Middle Fourth Highest	36.8 38.8 36.0 34.2	1.1 3.5 2.1 2.8	8.9 9.0 7.2 4.4	2.3 4.0 2.5 3.0	41.0 39.5 37.8 38.1	7.4 9.6 6.8 5.6	49.7 48.3 47.9 51.5	664 608 633 717
Woman afraid of husband/partner Afraid most of the								
time Sometimes afraid Never afraid	(81.2) 71.0 28.9	(58.1) 7.9 0.8	(61.0) 26.2 4.0	(62.7) 11.1 1.0	(76.9) 65.0 33.4	(72.7) 28.3 3.2	(17.0) 20.5 56.2	41 452 2,714
Total	35.5	2.5	7.9	3.2	38.4	7.7	50.6	3,208

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes 4 women with no education and 1 woman with missing information on fear of husband/partner. Figures in parentheses are based on 25-49 unweighted cases.

The main controlling behaviors women experienced from their husbands were that the husband insisted on knowing where they were at all times (38 percent), was jealous or angry if they talked to other men (36 percent), and did not permit them to meet their female friends (8 percent). Overall, 8 percent of ever-married women say that their husbands display three or more of these controlling behaviors, and 51 percent say that their husbands display none of the specified behaviors.

Women living in Aragatsotn (18 percent) and Gegharkunik (17 percent) and divorced, separated, or widowed women (32 percent) are more likely than most other women to report that their husbands display at least three controlling behaviors. In general, more educated and wealthier women are less likely than less educated and poorer women to report having a husband who displays at least three of the controlling behaviors. Having a husband who displays three or more controlling behaviors is highly correlated with women being afraid of their husband. Only 3 percent of women who are never afraid of their husband say that their husband displays three or more controlling behaviors, as compared with 28 percent of women who are sometimes afraid of their husband.

### 14.7 FORMS OF SPOUSAL VIOLENCE

Different types of spousal violence are not mutually exclusive, and women may report experiencing multiple forms of violence. Table 14.6 shows the percentage of ever-married women age 15-49 who have experienced various forms of violence by their spouse over the course of the marriage and in the 12 months preceding the survey. Note that respondents who are currently married reported on violence by their current spouse, and respondents who are widowed, divorced, or separated reported on violence by their most recent spouse. The lower panel of the table provides information on violence by any husband as opposed to only the current or most recent husband.

#### Table 14.6 Forms of spousal violence

Percentage of ever-married women age 15-49 who have experienced various forms of violence ever or in the 12 months preceding the survey committed by their husband/partner, Armenia 2015-16

		In the past 12 months			
Type of violence	Ever	Often	Sometimes	Often or sometimes	
Spousal violence committed by current or most recent					
husband/partner					
Physical violence					
Any physical violence	8.0	0.8	2.7	3.5	
Pushed her, shook her, or threw something at her	5.8	0.6	2.0	2.7	
Slapped her	6.5	0.7	2.0	2.7	
Twisted her arm or pulled her hair	3.2	0.4	0.8	1.3	
Punched her with his fist or with something that could hurt her	2.1	0.4	0.4	0.7	
Kicked her, dragged her, or beat her up	1.5	0.4	0.2	0.6	
Tried to choke her or burn her on purpose	0.5	0.2	0.0	0.2	
Threatened her or attacked her with a knife, gun, or other weapon	0.5	0.1	0.1	0.2	
Sexual violence					
Any sexual violence	1.1	0.2	0.1	0.3	
Physically forced her to have sexual intercourse with him when she					
did not want to	1.1	0.2	0.1	0.3	
Physically forced her to perform any other sexual acts she did not					
want to	0.4	0.1	0.1	0.2	
Forced her with threats or in any other way to perform sexual acts					
she did not want to	0.4	0.1	0.1	0.2	
Emotional violence					
Any emotional violence	11.4	1.3	5.1	6.4	
Said or did something to humiliate her in front of others	5.7	0.8	2.2	3.0	
Threatened to hurt or harm her or someone she cared about	1.5	0.3	0.4	0.8	
Insulted her or made her feel bad about herself	10.5	1.2	4.6	5.8	
Any form of physical and/or sexual violence	8.1	0.8	2.7	3.5	
Any form of emotional and/or physical and/or sexual violence	14.0	1.6	6.0	7.6	
Any form of emotional and/or physical and/or sexual violence	14.0	1.0	0.0	7.0	
Spousal violence committed by any husband/partner					
Physical violence	8.2	na	na	3.5	
Sexual violence	1.1	na	na	0.3	
Physical and/or sexual violence	8.2	na	na	3.5	
Number of ever-married women	3,208	3,208	3,208	3,208	

Eight percent of ever-married women reported ever experiencing physical violence committed by their current or most recent husband, 1 percent reported sexual violence, and 11 percent reported emotional violence. Overall, 8 percent of women have ever experienced spousal physical and/or sexual violence, and 14 percent have experienced at least one of the three forms of spousal violence.

Six percent of women reported experiencing spousal emotional violence in the past 12 months, and 4 percent and less than 1 percent reported spousal physical violence and spousal sexual violence, respectively, in the past 12 months. Overall, 8 percent of women experienced spousal physical, sexual, or emotional violence in the past 12 months.

The most common forms of spousal violence reported by ever-married women are being insulted or made to feel bad about themselves (11 percent), being slapped (7 percent), being pushed or shaken or having something thrown at them (6 percent), and being humiliated in front of others (6 percent). About 1 percent each of women reported being threatened or attacked with a gun or other weapon or being choked or burned on purpose.

Some women have been married or partnered more than once. When previous husbands are included as perpetrators, the percentage of ever-married women who report having ever experienced physical and/or sexual violence by any husband remains almost unchanged at 8 percent.

# 14.8 SPOUSAL VIOLENCE BY BACKGROUND CHARACTERISTICS

Table 14.7 shows the percentages of ever-married women age 15-49 who have experienced spousal emotional, physical, or sexual violence from their current or most recent husband by selected background characteristics. Overall, 14 percent of ever-married women have experienced at least one form of spousal violence.

Women's experience of at least one form (physical, sexual, or emotional) of spousal violence increases with age, from 6 percent among women age 20-24 to 17 percent among women age 40-49; experience of violence also increases sharply with women's number of living children. Eleven percent of currently married women report experiencing spousal violence, as compared with 43 percent of divorced, separated, or widowed women. While no women in Syunik report spousal violence, almost one in three (32 percent) women report spousal violence in Ararat. Women with a higher education and those in the top two wealth quintiles are less likely to have experienced at least one form of spousal violence than women with less education and poorer women.

#### Table 14.7 Spousal violence by background characteristics

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their husband/partner, by background characteristics, Armenia 2015-16

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- married women
Age								
15-19	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	27
20-24	5.0	2.7	0.3	0.3	0.3	2.7	5.6	278
25-29	8.4	5.2	0.4	0.4	0.4	5.2	10.0	610
30-39	12.9	9.3	1.1	1.0	1.0	9.3	15.7	1,248
40-49	13.3	9.9	1.7	1.7	1.5	9.9	16.8	1,045
Residence								
Urban	11.1	7.2	1.0	0.9	0.8	7.2	13.0	1.872
Rural	11.8	9.2	1.2	1.2	1.2	9.2	15.3	, -
	11.8	9.2	1.2	1.2	1.2	9.2	15.3	1,337
Region	10.0	<u> </u>	0.7	0.0	0.5	<u> </u>	11.0	005
Yerevan	10.2	6.8	0.7	0.6	0.5	6.9	11.9	995
Aragatsotn	13.6	28.2	5.6	5.6	5.1	28.2	28.6	146
Ararat	23.3	17.8	2.1	2.1	2.1	17.8	31.5	306
Armavir	4.7	2.9	0.3	0.3	0.3	2.9	5.9	336
Gegharkunik	13.6	6.7	0.5	0.5	0.5	6.7	15.8	236
Lori	17.0	15.3	3.0	3.0	3.0	15.3	19.9	132
Kotayk	16.4	7.0	1.3	1.3	1.3	7.0	17.6	393
Shirak	5.3	4.2	0.0	0.0	0.0	4.2	5.6	288
Syunik	0.0	0.0	0.0	0.0	0.0	0.0	0.0	141
Vayots Dzor	23.6	10.7	1.3	1.3	1.3	10.7	24.3	68
Tavush	3.5	1.3	0.1	0.1	0.1	1.3	3.5	168
Marital status								
Married or living together	8.8	5.5	0.6	0.6	0.6	5.5	11.2	2,923
Divorced/separated/widowed	37.6	34.3	5.8	5.4	4.9	34.7	42.7	285
·	07.0	04.0	0.0	0.4	4.5	04.7	72.1	200
Number of living children	2.0	4 5	0.5	0.5	0.5	4 5	2.0	047
0	3.8	1.5	0.5	0.5	0.5	1.5	3.8	217
1-2	11.4	8.2	1.1	1.0	0.9	8.2	14.1	2,219
3-4	12.9	9.2	1.2	1.2	1.2	9.2	15.9	737
5+	(24.6)	(14.7)	(0.0)	(0.0)	(0.0)	(14.7)	(25.2)	35
Employment								
Employed for cash	12.7	9.5	1.6	1.5	1.4	9.5	16.1	1,181
Employed not for cash	8.4	6.2	0.4	0.4	0.4	6.2	11.2	241
Not employed	10.9	7.4	0.8	0.8	0.8	7.4	12.9	1,786
Education								
Basic	19.0	14.4	2.9	2.9	1.9	14.4	24.4	175
Secondary	13.4	9.8	1.0	1.0	0.9	9.8	16.5	1,361
Secondary special	10.4	7.8	1.8	1.7	1.7	8.0	13.5	787
Higher	7.7	4.3	0.1	0.1	0.1	4.3	8.5	881
Wealth quintile								
Lowest	16.0	12.3	1.6	1.6	1.5	12.3	20.9	586
Second	10.7	7.8	1.2	1.2	1.2	7.8	13.6	664
Middle	13.3	10.8	1.4	1.2	1.0	11.0	16.0	608
Fourth	8.5	4.8	0.6	0.6	0.6	4.8	9.9	633
Highest	9.0	5.3	0.6	0.6	0.6	5.3	10.5	717
Total	11.4	8.0	1.1	1.0	1.0	8.1	14.0	3,208

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes 4 women with no education. Figures in parentheses are based on 25-49 unweighted cases.

#### 14.9 VIOLENCE BY SPOUSAL CHARACTERISTICS AND WOMEN'S EMPOWERMENT INDICATORS

Table 14.8 presents information on ever-married women age 15-49 who have experienced emotional, physical, or sexual violence committed by their current or most recent husband according to their husband's characteristics and women's empowerment indicators.

#### Table 14.8 Spousal violence by husband's characteristics and empowerment indicators

Percentage of ever-married women age15-49 who have ever experienced emotional, physical, or sexual violence committed by their husband/partner, by husband's characteristics and empowerment indicators, Armenia 2015-16

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- married women
Husband's/partner's education <sup>1</sup> Basic Secondary Secondary special Higher	17.2 10.0 7.3 4.3	7.2 7.1 4.9 2.2	0.0 1.0 0.7 0.0	0.0 1.0 0.7 0.0	0.0 1.0 0.7 0.0	7.2 7.1 4.9 2.2	19.3 13.0 9.9 5.6	294 1,377 491 752
Husband's/partner's alcohol consumption Does not drink alcohol Drinks alcohol but is never drunk Is sometimes drunk Is often drunk Missing	4.9 6.3 17.6 52.0 37.3	3.7 3.1 11.2 54.0 33.9	0.2 0.3 1.7 8.2 5.7	0.2 0.3 1.6 8.2 5.4	0.2 0.3 1.4 8.2 4.8	3.7 3.1 11.3 54.0 34.2	6.8 6.8 21.1 67.9 42.3	1,170 833 1,080 124 289
Spousal education difference <sup>1</sup> Husband has more education Wife has more education Both have equal education Neither has any education	4.4 9.0 10.6 *	4.1 4.8 6.5 *	0.3 0.7 0.7 *	0.3 0.7 0.7 *	0.3 0.7 0.7 *	4.1 4.8 6.5 *	7.0 10.8 13.2 *	595 950 1,372 2
Spousal age difference <sup>1</sup> Wife older Wife same age Wife 1-4 years younger Wife 5-9 years younger Wife 10 or more years younger	8.8 9.0 9.6 7.5 9.9	9.2 5.7 4.5 5.1 9.5	0.4 2.0 0.6 0.3 0.7	0.4 2.0 0.6 0.3 0.7	0.4 2.0 0.6 0.3 0.4	9.2 5.7 4.5 5.1 9.5	11.0 11.3 11.6 9.5 15.3	127 216 1,246 1,053 281
Number of marital control behaviors displayed by husband/partner <sup>2</sup> 0 1-2 3-4 5	3.0 14.2 46.2 (88.8)	2.9 8.3 36.5 (76.8)	0.2 0.9 5.3 (27.5)	0.2 0.8 5.3 (27.5)	0.2 0.7 5.0 (27.5)	2.9 8.3 36.5 (76.8)	4.6 17.7 51.6 (88.8)	1,625 1,338 218 27
Number of decisions in which women participate <sup>3</sup> 0 1-2 3	14.1 14.8 7.0	17.1 5.1 5.3	1.5 0.3 0.7	1.5 0.3 0.7	1.5 0.3 0.6	17.1 5.1 5.3	21.1 16.0 9.6	57 625 2,241
Number of reasons for which wife beating is justified <sup>4</sup> 0 1-2 3-4 5	10.6 20.9 8.3	7.0 19.7 7.6	0.9 3.1 1.4	0.9 3.1 1.4 *	0.8 2.8 1.4 *	7.0 19.7 7.6 *	12.8 29.3 10.2	2,850 229 116 14
<b>Woman's father beat mother</b> Yes No Don't know/missing	26.8 8.9 19.6	24.6 6.1 12.9	4.2 0.8 1.3	4.2 0.8 1.3	4.2 0.7 1.1	24.6 6.1 12.9	32.4 11.0 23.8	180 2,589 439
Woman afraid of husband/partner Afraid most of the time Sometimes afraid Never afraid	(88.2) 33.9 6.4	(93.1) 28.1 3.4	(29.2) 3.9 0.2	(29.2) 3.9 0.1	(29.2) 3.4 0.1	(93.1) 28.1 3.4	(98.8) 40.8 8.2	41 452 2,714
Total	11.4	8.0	1.1	1.0	1.0	8.1	14.0	3,208

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes 5 women whose husbands/partners have no education, 4 women with missing information on husband's/partner's education, 1 woman with missing information on spousal age difference, 1 woman with missing information on husband's/partner's alcohol consumption, and 1 woman with missing information on fear of husband/partner. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases. <sup>1</sup> Includes only currently married women

<sup>2</sup> According to the wife's report. See Table 14.5 for list of behaviors.
 <sup>3</sup> According to the wife's report. Includes only currently married women. See Table 15.9.1 for list of decisions.
 <sup>4</sup> According to the wife's report. See Table 15.10.1 for list of reasons.

Spousal violence is higher among women whose husbands have only a basic education (19 percent) than among women whose husbands have a higher education (6 percent). Women in couples where the spouses have an equal amount of education are more likely to experience spousal violence (13 percent) than women whose husbands have more education (7 percent). Also, women who are much younger than their husbands—at least 10 or more years younger—are more likely to experience spousal violence (15 percent) than women who are closer in age to their husbands (10 to 12 percent).

Spousal violence increases sharply with the number of controlling behaviors displayed by the husband. Among women whose husbands exhibit 3-4 types of controlling behaviors, more than half (52 percent) have experienced one or more forms of violence. In contrast, only 5 percent of women whose husbands display none of the controlling behaviors have experienced any form of spousal violence. There is no clear association between women's experience of violence and the number of reasons they give for which wife beating is justified; however, women who do not participate in any household decisions are twice as likely as women who participate in all three specified decisions to experience spousal violence (21 percent versus 10 percent). The intergenerational effects of domestic violence are very evident in Armenia: women whose father beat their mother are much more likely to experience any type of violence by their husband than women whose father did not beat their mother (32 percent versus 11 percent). Finally, women who are afraid of their husband sometimes are much more likely to experience spousal violence than women who are never afraid (41 percent versus 8 percent).

# 14.10 RECENT SPOUSAL VIOLENCE BY ANY HUSBAND

Table 14.9 shows the percentage of ever-married women who have experienced physical or sexual violence by any husband (current, most recent, or previous) in the past 12 months, by background characteristics.

Overall, 4 percent of women experienced physical or sexual violence by any husband in the past 12 months. The percentage of women who have experienced recent physical or sexual violence by any husband ranges from a high of 22 percent in Aragatsotn and 8 percent in Lori to a low of 0 percent in Syunik and tends to decline with increasing wealth. Twelve percent of women who are sometimes afraid of their husband reported experiencing spousal physical or sexual violence in the past 12 months, as compared with 1 percent of women who are never afraid of their husband.

### Table 14.9 Frequency of physical or sexual violence

Percentage of ever-married women who have experienced physical or sexual violence by any husband/partner in the past 12 months, by background characteristics, Armenia 2015-16

Armenia 2015-16		
	Percentage of	
	women who	
	have	
	experienced	
	physical or sexual violence	
	in the past 12	
	months from	Number of
Background	any husband/	ever-married
characteristic	partner	women
Age	•	
15-19	(0.0)	27
20-24	2.4	278
25-29	2.3	610
30-39	4.0	1,248
40-49	4.1	1,045
Residence		
Urban	3.1	1,872
Rural	4.1	1,337
Region		
Yerevan	3.1	995
Aragatsotn	21.9	146
Ararat	4.8	306
Armavir	0.9	336
Gegharkunik	1.7	236
Lori	8.1	132
Kotayk Shirak	1.5 3.1	393 288
Syunik	0.0	200 141
Vayots Dzor	1.8	68
Tavush	0.9	168
	0.0	
Marital status Married or living		
together	2.6	2,923
Divorced/separated/	2.0	2,320
widowed	13.2	285
Number of living		
children		
0	0.0	217
1-2	3.7	2,219
3-4	3.6	737
5+	(13.3)	35
Employment		
Employed for cash	3.2	1,181
Employed not for cash	0.9	241
Not employed	4.1	1,786
Education		
Basic	3.5	175
Secondary	4.2	1,361
Secondary special	4.3	787
Higher	1.8	881
Wealth quintile		
Lowest	6.2	586
Lowest Second	6.2 2.6	586 664
Second Middle	2.6 4.6	664 608
Second Middle Fourth	2.6 4.6 1.8	664 608 633
Second Middle	2.6 4.6	664 608
Second Middle Fourth	2.6 4.6 1.8	664 608 633
Second Middle Fourth Highest Woman afraid of husband/partner	2.6 4.6 1.8	664 608 633 717
Second Middle Fourth Highest <b>Woman afraid of</b> husband/partner Afraid most of the time	2.6 4.6 1.8 2.8 (49.1)	664 608 633 717 41
Second Middle Fourth Highest Woman afraid of husband/partner Afraid most of the time Sometimes afraid	2.6 4.6 1.8 2.8 (49.1) 12.0	664 608 633 717 41 452
Second Middle Fourth Highest <b>Woman afraid of</b> <b>husband/partner</b> Afraid most of the time	2.6 4.6 1.8 2.8 (49.1)	664 608 633 717 41

Note: Any husband/partner includes all current, most recent, and former husbands/partners. Total includes 4 women with no education and 1 woman with missing information on fear of husband/partner. Figures in parentheses are based on 25-49 unweighted cases.

## 14.11 ONSET OF SPOUSAL VIOLENCE

To obtain information on the onset of marital violence, the 2015-16 ADHS asked currently married women who have been married only once how long after marriage the onset of spousal violence occurred, if ever.

Table 14.10 shows that the majority of women (95 percent) have never experienced spousal physical or sexual violence. Overall, 1 percent of currently married women experienced violence in the first two years of marriage, and 4 percent experienced it in the first five years of marriage. These data suggest that, for a considerable percentage of women who have experienced spousal physical or sexual violence, the violence began relatively early in their marriage.

Table 14.10 Experience of spousal violence by duration of marriage								
Among currently married women age 15-49 who have been married only once, the percentage who first experienced physical or sexual violence committed by their current husband/partner by specific exact years since marriage according to marital duration, Armenia 2015-16								
Years since	Percentage wh		Percentage who have not experienced sexual or	Number of currently married women who have been				
marriage	Before marriage	2 years	5 years	10 years	physical violence	married only once		
<2	0.0	na	na	na	98.9	203		
2-4	0.0	0.8	na	na	99.0	310		
5-9	0.0	0.5	3.1	na	96.4	582		
10+	0.1	1.5	4.4	5.7	92.6	1,735		
Total	0.0	1.2	3.5	4.4	94.6	2,830		
na=Not applica	able							

na=Not applicable

# 14.12 PHYSICAL CONSEQUENCES OF SPOUSAL VIOLENCE

In the 2015-16 ADHS, ever-married women were asked whether they had sustained any injury as a result of physical or sexual violence inflicted by their spouse. Thirty-eight percent of women who reported ever having experienced spousal physical or sexual violence suffered cuts, bruises, or aches; 11 percent had eye injuries, sprains, dislocations, or burns; and 4 percent had deep wounds, broken bones, broken teeth, or other serious injuries (Table 14.11). Overall, 40 percent of women who had ever experienced spousal physical or sexual violence suffered one or more of these injuries. The prevalence of all forms of injury is even higher among women who experienced violence in the past 12 months.

#### Table 14.11 Injuries to women due to spousal violence

Percentage of ever-married women age 15-49 who have experienced specific types of spousal violence by types of injuries resulting from the violence, according to the type of violence and whether they experienced the violence ever and in the 12 months preceding the survey, Armenia 2015-16

Type of violence	Cuts, bruises, or aches	Eye injuries, sprains, dis- locations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	Number of ever-married women who have ever experienced any physical or sexual violence
Experienced physical violence <sup>1</sup> Ever <sup>2</sup> Past 12 months	38.0 40.5	10.9 16.8	4.0 6.6	40.4 43.7	258 112
Experienced sexual violence Ever <sup>2</sup> Past 12 months	(56.0)	(16.1)	(13.5)	(56.0)	34 10
Experienced physical or sexual violence <sup>1</sup> Ever <sup>2</sup> Past 12 months	37.8 40.2	10.9 16.6	4.0 6.5	40.2 43.3	259 113

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

<sup>1</sup> Excludes women who reported violence only in response to a direct question on violence during pregnancy

<sup>2</sup> Includes in the past 12 months

### 14.13 VIOLENCE BY WOMEN AGAINST THEIR HUSBAND

In cases of domestic violence, either person, the husband or the wife, can be the initiator of the violence. In the 2015-16 ADHS, ever-married women were asked whether they had ever initiated physical violence against their current or most recent husband when he was not already hitting or beating them.

Table 14.12 shows the percentages of ever-married women age 15-49 who reported initiating physical violence against their husbands ever and in the 12 months prior to the survey by women's background characteristics. Table 14.13 shows the percentages of women initiating physical violence by husbands' characteristics and women's empowerment indicators.

### Table 14.12 Violence by women against their spouse

Percentage of ever-married women age 15-49 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 women's own experience of spousal violence and background characteristics, Armenia 2015-16

characteristics, Armenia 2015-16			
	Percentage v physical violer		
	nusban	d/partner	Number of
Background	Ever <sup>1</sup>	Past 12	ever-married
characteristic	Evei	months	women
Woman's experience of spousal			
physical violence Ever <sup>1</sup>	2.0	1 0	259
In the past 12 months	2.8 5.0	1.8 3.3	258 112
Never	0.3	0.1	2,950
Age		••••	_,
15-19	(3.6)	(3.6)	27
20-24	0.0	0.0	278
25-29	0.3	0.3	610
30-39	0.7	0.4	1,248
40-49	0.3	0.1	1,045
Residence			
Urban	0.4	0.2	1,872
Rural	0.5	0.3	1,337
Region			
Yerevan	0.4	0.0	995
Aragatsotn	2.4	2.4	146
Ararat	0.4	0.1	306
Armavir	1.6	1.0	336
Gegharkunik	0.0 0.5	0.0 0.5	236 132
Lori Kotayk	0.0	0.0	393
Shirak	0.3	0.0	288
Syunik	0.0	0.0	141
Vayots Dzor	0.0	0.0	68
Tavush	0.0	0.0	168
Marital status			
Married or living together	0.3	0.2	2,923
Divorced/separated/widowed	2.0	1.3	285
Employment			
Employed for cash	0.7	0.3	1,181
Employed not for cash	0.4	0.4	241
Not employed	0.3	0.2	1,786
Number of living children			
0	0.0	0.0	217
1-2	0.6	0.3	2,219
3-4 5+	0.3	0.2	737
	(0.0)	(0.0)	35
Education	0.0	4.0	475
Basic Secondary	2.2 0.1	1.8 0.1	175 1,361
Secondary special	1.1	0.1	787
Higher	0.1	0.1	881
Wealth guintile			
Lowest	0.6	0.6	586
Second	0.7	0.2	664
Middle	0.5	0.4	608
Fourth	0.2	0.2	633
Highest	0.4	0.0	717
Total	0.5	0.3	3,208

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes 4 women with no education. Figures in parentheses are based on 25-49 unweighted cases.

<sup>1</sup> Includes in the past 12 months

#### Table 14.13 Violence by women against their husband according to the husband's characteristics and empowerment indicators

Percentage of ever-married women age 15-49 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 their husband's characteristics, Armenia 2015-16

	Percentage v physical vio their husb	Number of ever-	
Background characteristic	Ever <sup>1</sup>	Past 12 months	married women
Husband's/partner's education <sup>2</sup>			
Basic	0.6	0.3	294
Secondary	0.4	0.1	1,377
Secondary special	0.3	0.3	491
Higher	0.1	0.1	752
Husband's/partner's alcohol consumption			
Does not drink alcohol	0.0	0.0	1,170
Drinks alcohol but is never drunk Sometimes drunk	0.7 0.3	0.4 0.1	833 1,080
Often drunk	4.9	3.1	124
Spousal education difference <sup>2</sup>		0.1	
Husband has more education	0.1	0.1	595
Wife has more education	0.6	0.2	950
Both have equal education	0.2	0.2	1,372
Neither has any education	*	*	2
Missing	1.9	1.3	289
Spousal age difference <sup>2</sup>			
Wife older	0.0	0.0	127
Wife same age Wife 1-4 years younger	0.8 0.4	0.0 0.2	216 1,246
Wife 5-9 years younger	0.4	0.2	1,053
Wife 10 or more years younger	0.3	0.3	281
Number of marital control behaviors displayed by husband/partner <sup>3</sup>			
0	0.4	0.3	1,625
1-2	0.3	0.1	1,338
3-4	1.2	1.0	218
5	(6.3)	(6.3)	27
Number of decisions in which women participate <sup>4</sup>			
0	0.0	0.0	57
1-2 3	0.0 0.4	0.0 0.2	625 2,241
	0.4	0.2	2,241
Number of reasons for which wife beating is justified <sup>5</sup>			
0	0.5	0.2	2,850
1-2 3-4	1.0 0.0	1.0 0.0	229 116
5	*	*	14
Woman's father beat mother			
Yes	1.7	0.2	180
No	0.4	0.2	2,589
Don't know/missing	0.6	0.6	439
Woman afraid of husband/partner			
Afraid most of the time	(10.0)	(10.0)	41
Sometimes afraid	1.0	0.3	452
Never afraid	0.3	0.1	2,714
Total	0.5	0.3	3,208

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes 5 women whose husbands/partners have no education, 4 women with missing information on husband's/partner's education, 1 woman with missing information on spousal age difference, 1 woman with missing information on husband's/partner's alcohol consumption, and 1 woman with missing information on fear of husband/partner. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases. <sup>1</sup>Includes in the past 12 months

<sup>13</sup> Includes only currently married women
 <sup>3</sup> According to the wife's report. See Table 14.5 for list of behaviors.
 <sup>4</sup> According to the wife's report. Includes only currently married women. See Table 15.9.1 for list of decisions.
 <sup>5</sup> According to the wife's report. See Table 15.10.1 for list of reasons.

One percent of women reported that they had ever initiated physical violence against their husbands, and less than 1 percent had done so in the past 12 months. Women who had been physically abused by their current or most recent husband ever (3 percent) or in the past 12 months (5 percent) were more likely to have initiated spousal violence than women who had never experienced spousal violence (less than 1 percent). By region, women's use of violence against their husbands is highest at 2 percent in Aragatsotn and Armavir. Notably, initiation of spousal violence by women, although still very low, is higher among those whose father beat their mother (2 percent) than among those whose father did not beat their mother (less than 1 percent).

# 14.14 HELP-SEEKING BEHAVIOR BY WOMEN WHO EXPERIENCE VIOLENCE

Table 14.14 shows the percent distribution of women age 15-49 who have ever experienced physical or sexual violence committed by anyone according to whether they have ever sought help to stop the violence and, if not, whether they told anyone about the violence.

Overall, 3 in 10 women (29 percent) who have experienced any type of physical or sexual violence from anyone sought help to stop the violence. Forty percent of women never sought help and never told anyone, and 29 percent never sought help but told someone. Rural women (24 percent) are less likely than urban women (34 percent) to have sought help. Help seeking tends to increase with increasing education but does not vary consistently with wealth. Women who are employed for cash are more likely than those who are not employed to have ever sought help.

Most women who experienced physical or sexual violence and sought help went to their families for help: 82 percent sought help from their own families and 22 percent from their husbands' families. Neighbors were the next most common source of help (3 percent). Two percent each of women sought help from friends and lawyers (data not shown).

### Table 14.14 Help seeking to stop violence

Percent distribution of women age 15-49 who have ever experienced physical or sexual violence by their help-seeking behavior, according to type of violence and background characteristics, Armenia 2015-16

Background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Missing/ don't know	Total	Number of women who have ever experi- enced any physical or sexual violence
Type of violence experienced						
Physical only	27.2	30.3	39.9	2.5	100.0	232
Sexual only	*	*	*	*	100.0	3
Physical and sexual	(43.5)	(19.0)	(37.5)	(0.0)	100.0	37
Age						
15-19	*	*	*	*	100.0	0
20-24	*	*	*	*	100.0	9
25-29	(38.4)	(24.9)	(32.2)	(4.5)	100.0	34
30-39	33.1	35.1	29.7	2.0	100.0	121
40-49	22.6	24.0	51.8	1.7	100.0	109
Residence						
Urban	34.0	27.3	37.5	1.1	100.0	144
Rural	24.3	30.1	42.3	3.3	100.0	128
Region <sup>1</sup>						
Yerevan	(24.8)	(32.7)	(42.4)	(0.0)	100.0	70
Aragatsotn	23.3	22.8	53.9	0.0	100.0	42
Ararat	26.5	35.2	36.3	1.9	100.0	56
Armavir	*	*	*	*	100.0	10
Gegharkunik	*	*	*	*	100.0	17
Lori	(39.4)	(13.2)	(47.4)	(0.0)	100.0	23
Kotayk	(48.5)	(20.7)	(20.9)	(9.9)	100.0	31
Shirak	*	*	*	*	100.0	13
Vayots Dzor	(26.3)	(22.0)	(51.7)	(0.0)	100.0	8
Tavush	*	*	*	*	100.0	3
Marital status						
Never married	*	*	*	*	100.0	2
Married or living together	17.5	33.8	45.3	3.4	100.0	170
Divorced/separated/widowed	50.2	19.8	30.0	0.0	100.0	101
Number of living children						
0	*	*	*	*	100.0	7
1-2	30.8	25.4	41.8	1.9	100.0	190
3-4	20.4	40.0	36.5	3.1	100.0	70
5+	*	*	*	*	100.0	5
Employment						
Employed for cash	35.9	29.6	33.9	0.6	100.0	118
Employed not for cash	*	*	*	*	100.0	15
Not employed	27.0	25.9	44.1	3.0	100.0	140
Education						
Basic	(21.4)	(43.3)	(35.2)	(0.0)	100.0	27
Secondary	`21.9 <sup>´</sup>	34.9	41.4	1.7	100.0	139
Secondary special	39.6	21.0	36.9	2.5	100.0	69
Higher	(44.0)	(9.4)	(42.2)	(4.4)	100.0	38
Wealth quintile						
Lowest	32.9	24.2	39.5	3.4	100.0	74
Second	24.0	28.8	41.6	5.6	100.0	55
Middle	31.6	28.2	39.9	0.3	100.0	71
Fourth	(32.2)	(36.3)	(31.5)	(0.0)	100.0	34
Highest	(24.3)	(30.8)	(44.9)	(0.0)	100.0	38
Total	29.4	28.6	39.8	2.1	100.0	272

Note: Women can report more than one source from which they sought help. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases. <sup>1</sup> Syunik is not included because no women in Syunik reported physical or sexual violence.

### Key Findings

- Forty-two percent of currently married women are employed, up from 36 percent at the time of the 2010 ADHS. Currently married men are more than twice as likely as currently married women to be employed (89 percent).
- Two-thirds of currently married women who are employed work for cash only, down from 72 percent at the time of the 2010 ADHS. Among women who earn cash, 28 percent say that they themselves mainly decide how their cash earnings are used and 67 percent say that they make this decision jointly with their husband.
- About half of women (48 percent) own a house alone or jointly with someone else, and 16 percent own land. The corresponding percentages among men are 72 percent and 35 percent. Most women and men who own either asset have a title deed for the asset and have their name on the title deed.
- About one in five women and men have a bank account that they use. Mobile phone ownership is virtually universal in Armenia.
- A large majority of married women either make specified household decisions themselves or participate in these decisions jointly with their husbands. About three out of four women participate either alone or jointly in all three decisions asked about.
- Ten percent of women and 23 percent of men agree that wife beating is justified in at least one of five specified situations.
- Modern contraceptive use is higher among women who participate in one or more household decisions and who do not agree with any reason for wife beating.

The study of women's status and empowerment—important in its own right—takes on special significance in the context of promoting demographic change and improving health outcomes. Women are the ones who bear children and are typically the primary caregivers, particularly for children. This makes women the prime targets of maternal and child health and nutrition programs. Women's empowerment and control over decisions and resources are likely to play an important role in their ability to access and utilize these and other developmental programs and achieve their own and their family's demographic and health goals.

The 2015-16 ADHS collected data specific to women's empowerment from both women and men age 15-49. Specifically, information was collected on receipt of cash earnings, the magnitude of a woman's earnings relative to those of her husband/partner,<sup>1</sup> and women's and men's control over the use of their own earnings. Women were also asked about the use of their husband's earnings. Information was collected from both women and men on ownership of a house, agricultural or non-agricultural land, and a mobile phone. Additionally, respondents were asked about their use of an account at a bank or other financial institution and use of their mobile phone for financial transactions. The survey also collected data on women's and men's participation in household decision making, their attitudes toward wife beating, and their attitudes

<sup>&</sup>lt;sup>1</sup> In the remainder of this chapter, the term "husband" refers to any man living with a respondent in either a formal or informal marital union.

toward women's right to negotiate safer sexual relations with their husband. Finally, women were asked about their own ability to negotiate safer sex with their spouse.

Information collected from women is summarized in two indices of women's empowerment. The first index is based on the number of household decisions in which a woman participates, and the second is based on the number of reasons for which a woman justifies wife beating. The ranking of women on these two indices is then related to selected demographic and health outcomes, including contraceptive use.

### 15.1 EMPLOYMENT AND CASH EARNINGS

In the 2015-16 ADHS, respondents were asked a number of questions to determine their employment status at the time of the survey and their continuity of employment in the 12 months prior to the survey. They were also asked about the type of payment they received for their work. Table 15.1 shows the percentage of currently married women and men who were employed at any time during the 12 months preceding the survey and the percent distribution of those employed at any time in the 12 months preceding the survey by the type of earnings they received (cash, in-kind, or both).

#### Table 15.1 Employment and cash earnings of currently married women and men

Percentage of currently married women and men age 15-49 who were employed at any time in the past 12 months and percent distribution of currently married women and men employed in the past 12 months by type of earnings, according to age, Armenia 2015-16

	•	currently spondents:		nt distribution yed in the pas					
Age	Percentage employed in past 12 months	Number of respondents	Cash only	Cash and in-kind	In-kind only	Not paid	Missing/ don't know	Total	Number of respondents
				WO	MEN				
15-19	(7.2)	33	*	*	*	*	*	*	2
20-24	16.3	365	75.7	6.2	14.9	3.2	0.0	100.0	59
25-29	30.1	761	73.0	13.3	8.7	5.0	0.0	100.0	229
30-34	36.8	826	68.0	13.1	11.9	7.0	0.0	100.0	304
35-39	49.9	709	61.3	16.4	11.0	11.2	0.0	100.0	354
40-44	57.0	639	66.2	16.2	8.1	9.5	0.0	100.0	364
45-49	56.2	562	58.9	16.1	12.6	12.5	0.0	100.0	316
Total	41.8	3,895	65.3	14.9	10.7	9.1	0.0	100.0	1,629
				М	EN				
15-19	*	*	*	*	*	*	*	*	0
20-24	83.0	52	(82.0)	(10.7)	(2.5)	(4.8)	(0.0)	(100.0)	43
25-29	87.9	206	85.6	7.1	4.9	2.3	0.0	100.0	181
30-34	91.3	322	90.6	8.0	1.0	0.1	0.3	100.0	294
35-39	90.2	320	91.7	5.0	3.2	0.1	0.0	100.0	289
40-44	90.1	309	87.0	10.1	1.3	1.6	0.0	100.0	278
45-49	86.0	297	81.5	14.5	1.0	3.0	0.0	100.0	255
Total	89.0	1,506	87.4	9.0	2.1	1.4	0.1	100.0	1,341

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

According to the 2015-16 ADHS, 42 percent of currently married women were employed at any time in the preceding 12 months, up from 36 percent at the time of the 2010 ADHS (NSS et al. 2012). The likelihood of being employed increases sharply with age; this is likely because younger women may still be completing their education. By age 40-49, well over half of all currently married women are employed.

Among women who were employed in the preceding 12 months, two-thirds received only cash for their work, down from 72 percent in 2010. About 1 in 10 (9 percent) women did not receive any payment at all; 15 percent received cash and in-kind earnings for their work, and 11 percent received in-kind earnings only.

Currently married men are much more likely to be employed than currently married women (89 percent versus 42 percent). Employed men are also more likely than women to be paid in cash only (87 percent versus 65 percent) and less likely to work with no pay (1 percent versus 9 percent). Only 9 percent of men employed in the preceding 12 months received cash and in-kind payment, and 2 percent were paid in-kind only.

# 15.2 CONTROL OVER CASH EARNINGS AND RELATIVE MAGNITUDE OF WOMEN'S EARNINGS

In addition to access to paid employment, control over cash earnings is another important dimension of empowerment. Currently married employed women who earn cash for their work were asked who the main decision maker is with regard to the use of their earnings and the relative magnitude of their earnings compared with their husbands' earnings. This information may provide some insight into women's empowerment within the family and the extent of their control over household resources and other decision making.

Table 15.2.1 shows the percent distribution of currently married women who received cash earnings in the past 12 months, according to the person who mainly decides about the use of their earnings and their perception of the magnitude of their earnings relative to those of their husbands. Twenty-eight percent of women say that they themselves mainly decide how their cash earnings are used. The majority of women (67 percent) indicate that the decision is made jointly with their husbands. Only 3 percent of women say that the decision is made mainly by their husbands.

The likelihood that a currently married woman is the main decision maker regarding the use of her cash earnings tends to increase somewhat with age, suggesting that older women are more empowered than younger women; the likelihood declines somewhat with women's number of living children. In terms of residence, women in urban areas (31 percent) are more likely than women in rural areas (22 percent) to mainly decide themselves how their cash earnings are used. Decision making alone by women on the use of their cash earnings varies widely across regions, ranging from 13 percent in Ararat to 41 percent in Armavir. The percentage of women who mainly decide themselves how their cash earnings are used varies inconsistently with education and wealth.

Table 15.2.1 also shows that about two-thirds of women (65 percent) earn less than their husbands and that one in five (20 percent) earn about the same amount as their husbands. Only 8 percent earn more than their husbands. Six percent of women say that their husbands have no cash earnings. The proportion of women who earn more than their husbands does not vary uniformly with most background characteristics but does increase with increasing education.

Notably, the distributions of currently married employed women by the person who mainly decides about the use of their earnings and by their earnings relative to those of their husband are virtually identical to the corresponding distributions in the 2010 ADHS.

Currently married men age 15-49 who receive cash earnings were asked who decides how their cash earnings are spent. Additionally, currently married women age 15-49 whose husbands receive cash earnings were asked who decides how the husband's earnings are spent. Table 15.2.2 shows that two-thirds (65 percent) of currently married men who receive cash earnings report that they decide jointly with their wives how their earnings will be used, and almost one in five (17 percent) say that decisions on how their earnings are used are mainly made by their wives. Less than one in eight men (13 percent) say that they mainly make the decisions themselves.

### Table 15.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Armenia 2015-16

			no decides h arnings are		6				sh earnings band's cash				
Background characteristic	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total	More	Less	About	Husband has no earnings	Don't know/ missing	Total	Number of women
Age	*	*	*	*	*	*	*	*	*	*	*		
15-19												100.0	2
20-24	25.8	69.0	0.0	5.2	0.0	100	10.6	70.0	8.7	10.7	0.0	100.0	49
25-29	24.3	71.3	1.3	3.0	0.0	100	5.6	72.4	16.7	4.4	0.9	100.0	198
30-34	25.8	65.8	5.8	2.5	0.0	100	5.4	67.3	23.0	2.8	1.4	100.0	246
35-39	23.2	70.1	3.1	2.7	0.8	100	8.4	70.0	14.5	5.0	2.0	100.0	275
40-44	31.3	64.4	2.7	1.4	0.1	100	7.8	62.1	23.1	6.0	1.1	100.0	300
45-49	34.5	61.8	3.2	0.5	0.0	100	13.9	53.3	23.5	8.1	1.1	100.0	237
Number of living children													
0	32.0	64.8	2.1	1.1	0.0	100	9.1	64.9	18.6	6.8	0.6	100.0	97
1-2	28.2	67.2	2.6	1.8	0.2	100	7.8	64.0	21.0	5.7	1.5	100.0	897
3-4	25.8	65.9	5.1	3.1	0.2	100	10.1	67.8	16.8	4.4	1.0	100.0	304
5+	*	*	*	*	*	*	*	*	*	*	*	100.0	9
Residence													
Urban	31.2	65.5	1.7	1.5	0.2	100	8.2	64.3	20.0	6.5	1.0	100.0	834
Rural	22.0	68.7	5.8	3.3	0.3	100	8.7	66.0	19.6	4.0	1.7	100.0	473
Region													
Yerevan	32.8	64.6	1.7	0.9	0.0	100	9.3	59.6	23.7	6.9	0.5	100.0	455
Aragatsotn	24.0	69.5	5.4	0.0	1.1	100	15.5	61.7	19.7	2.0	1.1	100.0	30
Ararat	13.0	76.9	6.4	3.4	0.3	100	8.1	66.4	22.2	2.1	1.1	100.0	169
Armavir	41.3	54.0	3.8	0.0	0.8	100	5.8	74.0	12.3	6.1	1.8	100.0	144
Gegharkunik	20.0	62.7	11.4	5.3	0.6	100	4.7	74.8	13.0	4.7	2.8	100.0	109
Lori	(16.5)	(83.5)	(0.0)	(0.0)	(0.0)	(100)	(14.3)	(51.5)	(20.3)	(10.5)	(3.4)	100.0	37
Kotayk	29.1	66.5	0.0	4.3	0.0	100	2.8	76.8	17.2	2.6	0.7	100.0	149
Shirak	36.7	53.9	1.7	7.6	0.0	100	17.9	54.5	21.4	6.2	0.0	100.0	64
Syunik	17.7	80.6	0.8	0.9	0.0	100	7.2	72.4	14.3	5.4	0.7	100.0	69
Vayots Dzor	23.6	76.4	0.0	0.0	0.0	100	10.8	53.6	25.4	5.5	4.7	100.0	31
Tavush	22.9	74.1	3.0	0.0	0.0	100	11.5	47.6	22.7	13.5	4.6	100.0	49
Education													
Basic	(18.4)	(63.7)	(15.6)	(2.2)	(0.0)	(100)	(4.0)	(65.7)	(19.5)	(7.8)	(3.0)	100.0	48
Secondary	22.7	67.6	5.4	4.3	0.0	100	7.0	65.2	20.2	7.0	0.7	100.0	384
Secondary	34.3	62.4	1.1	1.5	0.7	100	8.7	67.3	15.5	6.7	1.9	100.0	347
Higher	28.1	69.1	1.7	1.0	0.1	100	9.5	63.2	22.4	3.7	1.2	100.0	527
Wealth quintile													
Lowest	21.9	66.3	10.0	1.4	0.4	100	6.5	63.9	21.0	6.1	2.4	100.0	167
Second	24.5	68.2	4.4	2.3	0.7	100	8.6	68.4	17.9	3.2	1.9	100.0	260
Middle	23.0	70.1	2.4	4.4	0.2	100	7.3	62.9	21.5	7.4	0.8	100.0	223
Fourth	33.9	62.2	1.3	2.6	0.0	100	10.3	64.1	16.4	8.1	1.1	100.0	313
Highest	30.9	67.6	1.0	0.5	0.0	100	7.9	65.0	22.7	3.7	0.7	100.0	342
Total	27.8	66.7	3.1	2.1	0.2	100	8.3	65.0	19.8	5.6	1.3	100.0	1,306

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

### Table 15.2.2 Control over men's cash earnings

Percent distributions of currently married men age 15-49 who receive cash earnings and of currently married women age 15-49 whose husbands receive cash earnings, by person who decides how husband's cash earnings are used, according to background characteristics, Armenia 2015-16

				Men							Women			
		Person	who decid	es how					Person	who decid	es how			
	h	usband's c	ash earning	gs are us	ed:			h	usband's c	ash earning	gs are us	ed:		
		Husband							Husband					Number
Background characteristic	Mainly wife	and wife jointly	Mainly husband	Other	Missing	Total	Number of men	Mainly wife	and wife jointly	Mainly husband	Other	Missing	Total	of women
Age														
15-19	*	*	*	*	*	0.0	0	(3.6)	(68.0)	(15.2)	(13.2)	(0.0)	100.0	28
20-24	(13.5)	(52.2)	(14.0)	(20.4)	(0.0)	100.0	40	2.1	73.6	14.3	9.3	0.7	100.0	334
25-29	16.4	62.6	13.7	7.3	0.0	100.0	168	2.7	75.7	12.1	9.3	0.1	100.0	718
30-34	15.2	61.6	15.3	7.9	0.0	100.0	290	5.0	76.6	12.2	6.2	0.1	100.0	787
35-39	17.7	63.1	16.3	2.9	0.0	100.0	279	8.6	81.4	7.6	2.4	0.0	100.0	670
40-44	15.9	68.0	12.5	3.4	0.2	100.0	270	6.8	83.7	8.3	1.2	0.0	100.0	605
45-49	17.9	72.7	8.4	1.0	0.0	100.0	245	7.8	82.7	8.9	0.5	0.0	100.0	524
			••••											
Number of living children														
0	16.4	58.0	16.8	8.9	0.0	100.0	99	4.8	72.8	15.1	7.3	0.0	100.0	236
1-2	15.5	67.0	13.1	4.4	0.0	100.0	907	5.4	79.6	9.8	5.0	0.1	100.0	2,533
3-4	20.6	61.3	13.5	4.4	0.2	100.0	275	6.3	78.9	11.0	3.7	0.1	100.0	862
5+	*	*	*	*	*	100.0	12	(11.7)	(77.9)	(9.3)	(1.1)	(0.0)	100.0	34
Residence								( )	( - )	()	( )	()		
Urban	12.6	74.0	11.5	1.9	0.0	100.0	755	6.5	79.8	10.5	3.0	0.2	100.0	2.096
Rural	22.0	74.0 52.9	16.0	9.0	0.0	100.0	538	4.4	79.0	10.3	3.0 7.3	0.2	100.0	2,090
	22.0	52.9	10.0	9.0	0.1	100.0	550	4.4	70.0	10.5	1.5	0.0	100.0	1,509
Region								- <b>-</b>		10 <b>-</b>				4 0 0 0
Yerevan	2.1	91.9	5.9	0.0	0.0	100.0	387	8.7	79.1	10.7	1.4	0.2	100.0	1,083
Aragatsotn	2.2	78.4	19.4	0.0	0.0	100.0	59	9.9	74.6	15.5	0.0	0.0	100.0	181
Ararat	34.0	56.5	9.5	0.0	0.0	100.0	148	1.6	70.0	21.8	6.0	0.6	100.0	339
Armavir	1.3	33.5	42.8	22.4	0.0	100.0	142	7.8	85.5	6.4	0.4	0.0	100.0	379
Gegharkunik	0.0	71.8	1.5	26.7	0.0	100.0	112	2.2	65.7	19.9	12.1	0.0	100.0	289
Lori	0.0	85.1	13.9	1.0	0.0	100.0	70	9.8	79.2	7.8	3.2	0.0	100.0	183
Kotayk	88.4	4.8	6.3	0.5	0.0	100.0	170	2.5	78.8	4.7	14.0	0.0	100.0	468
Shirak	1.1	48.5	50.3	0.0	0.0	100.0	76	3.5	83.1	4.9	8.4	0.0	100.0	331
Syunik	0.0	100.0	0.0	0.0	0.0	100.0	50	2.7	91.6	2.8	2.8	0.0	100.0	164
Vayots Dzor Tavush	1.4 0.0	84.8 98.9	13.7 0.0	0.0 0.0	0.0 1.1	100.0 100.0	24 55	3.9 2.4	86.2 85.8	9.6 11.1	0.4 0.7	0.0 0.0	100.0 100.0	82 168
Tavusii	0.0	90.9	0.0	0.0	1.1	100.0	55	2.4	00.0	11.1	0.7	0.0	100.0	100
Education							100							400
Basic	24.9	45.4	19.7	10.0	0.0	100.0	136	5.1	74.8	15.4	4.8	0.0	100.0	182
Secondary	17.5	62.2	13.4	6.8	0.1	100.0	599	4.7	76.9	11.9	6.5	0.1	100.0	1,555
Secondary	15.5	68.4	14.8	1.4	0.0	100.0	214	6.4	79.9	9.5	4.1	0.0	100.0	897
special	40.0	70.0	07	4 7	0.0	100.0	242	<u>с</u> г	00.4	0.0	2.0	0.0	400.0	4 000
Higher	12.0	76.6	9.7	1.7	0.0	100.0	343	6.5	82.1	8.2	3.0	0.2	100.0	1,028
Wealth quintile														
Lowest	16.6	49.7	21.3	12.4	0.0	100.0	228	5.7	75.7	13.5	5.1	0.0	100.0	629
Second	23.7	56.9	14.0	5.4	0.0	100.0	251	4.2	80.2	9.8	5.7	0.0	100.0	794
Middle	15.5	66.6	12.5	5.4	0.0	100.0	231	4.5	79.0	9.8	6.6	0.2	100.0	675
Fourth	18.3	68.0	11.0	2.7	0.0	100.0	274	5.8	80.5	10.4	3.2	0.0	100.0	743
Highest	9.6	80.0	9.8	0.4	0.2	100.0	308	7.7	79.0	9.2	3.8	0.3	100.0	825
Total	16.5	65.2	13.4	4.9	0.0	100.0	1,293	5.6	79.0	10.4	4.8	0.1	100.0	3,665

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases. Total for men includes 1 man with no education and total for women includes 4 women with no education.

There are a few distinct patterns with respect to who decides how men's earnings are used. Older men are somewhat more likely than younger men to make joint decisions with their wives on how to use their cash earnings; for example, 73 percent of men age 45-49 make joint decisions with their wives, as compared with 63 percent of men age 25-29. Men in rural areas (53 percent) are less likely than those in urban areas (74 percent) to make joint decisions with their wives on how to use their cash earnings. Among regions, the percentage of men who make joint decisions with their wives ranges from 5 percent in Kotayk to 100 percent in Syunik. Joint decision making about men's earnings increases sharply as men's education and household wealth increase.

Table 15.2.2 shows that 79 percent of currently married women age 15-49 whose husbands receive cash earnings report that their husbands decide jointly with them how the husbands' cash earnings will be used. Six percent of women report that they mainly decide how their husbands' cash earnings are used, and 10 percent say that their husbands mainly make this decision. Thus, women's reports on decision making about the use of their husbands' earnings differ somewhat from the reports of men about the use of their own earnings, particularly with respect to joint decision making.

Table 15.3 shows, for currently married women who earned cash in the past 12 months, the person who decides how their cash earnings are used and, for all currently married women whose husbands earned cash in the past 12 months, the person who decides how their husbands' cash earnings are used, according to the magnitude of women's earnings relative to their husbands' earnings. This table indicates whether women's control over the use of their own and their husbands' earnings varies by whether they earn more or less than their husbands. Women who earn less than their husbands are more likely than women who earn an equal amount to be the main decision maker about their own cash earnings (30 percent versus 18 percent). However, women who earn about the same as their husbands are somewhat more likely than other women to jointly make decisions about the use of their own earnings as well as the use of their husbands' earnings.

			who decide h earnings					h		who decide ash earning		ed:		
Women's earnings relative to husband's earnings	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total	Number of women	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total	Number of women
More than husband Less than husband Same as husband	26.0 30.0 17.6	70.9 64.4 78.8	0.9 3.2 2.3	2.2 2.4 1.2	0.0 0.0 0.0	100.0 100.0 100.0	109 849 259	7.7 8.7 4.8	86.1 79.1 89.6	6.2 9.3 4.2	0.0 2.9 1.3	0.0 0.0 0.0	100.0 100.0 100.0	109 849 259
Husband has no cash earnings or did not work	41.9	50.5	4.8	2.8	0.0	100.0	73	na	na	na	na	na	na	0
Woman worked but has no cash earnings	na	na	na	na	na	na	0	1.2	88.0	5.2	5.6	0.0	100.0	308
Woman did not work	na	na	na	na	na	na	0	5.0	76.2	12.5	6.1	0.2	100.0	2,124
Total <sup>1</sup>	27.8	66.7	3.1	2.1	0.2	100.0	1,306	5.6	79.0	10.4	4.8	0.1	100.0	3,665

Table 15.3 Women's control over their own earnings and over those of their husbands

Percent distribution of currently married women age 15-49 with cash earnings in the last 12 months by person who decides how the wife's cash earnings are used, and percent distribution of currently married women age 15-49 whose husbands have cash earnings by person who decides how the husband's cash earnings are used, according to the relation between wife's and husband's cash earnings, Armenia 2015-16

na = Not applicable

<sup>1</sup> Includes cases where a woman does not know whether she earned more or less than her husband

### 15.3 OWNERSHIP OF ASSETS, BANK ACCOUNTS, AND MOBILE PHONES

Asset ownership, particularly of land and a house, has many beneficial effects for households including protection against financial ruin. For women, asset ownership is a source of financial empowerment, and for married women, it can provide economic protection in the case of marital dissolution or abandonment. Information on women's asset ownership can provide important insights into women's status and demographic and health outcomes.

The 2015-16 ADHS asked women and men if they own agricultural or non-agricultural land or a house (the one they were in at the time of the interview or any other), alone or jointly. If respondents are the

sole owners of the asset (they do not share ownership with anyone), then they own the asset "alone." If respondents own the asset with someone else, they are classified as owning the asset "jointly only." If they own more than one asset, and some assets are owned alone and some jointly with someone else, they are classified in the "alone and jointly" category. Finally, respondents who do not own the specific asset, either alone or jointly, are included in the "does not own" category. Additionally, women and men who owned either asset were asked if they had a title deed for the asset and whether their name was on the deed.

Tables 15.4.1 and 15.4.2 show the percent distributions of women and men age 15-49, respectively, by ownership of a house and land, according to background characteristics. Less than half of women in Armenia (48 percent) own a house, down sharply from 72 percent in the 2010 ADHS. The majority of women who own a house do so jointly. House ownership, alone or jointly, increases with age from 30 percent among women age 15-19 to 72 percent among women age 45-49. House ownership does not vary substantially by urban or rural residence but varies greatly by region: 81 percent of women in Gegharkunik own a house, either alone or jointly, as compared with only 20 percent in Shirak. Women with only a basic education are less likely (32 percent) than women with any type of secondary or higher education to own a house alone or jointly (48-50 percent). There is no clear relationship between women's house ownership and wealth.

#### Table 15.4.1 Ownership of assets: Women

Percent distribution of women age 15-49 by ownership of housing and land, according to background characteristics, Armenia 2015-16

		ercentage v		Per-		_			_		
		own a hous		centage		Percen	tage who o	wn land:	Per-		
Deekaround			Alone and	who do not own a				Alono and	centage who do not		Number o
Background characteristic	Alone	Jointly	jointly	house	Total	Alone	Jointly	jointly	own land	Total	women
Age	7 10110	oomay	Jonnay	neace		7 40110	oomay	Jonnay	onniana	. otai	
15-19	0.0	28.9	0.7	70.4	100.0	0.0	9.1	0.5	90.3	100.0	725
20-24	0.8	35.9	1.4	61.9	100.0	0.8	9.5	0.6	89.2	100.0	928
25-29	1.6	36.8	1.4	60.1	100.0	0.0	9.4	0.0	89.2	100.0	1.099
30-34	3.3	40.7	2.3	53.7	100.0	1.1	13.3	0.9	84.7	100.0	1,007
35-39	6.7	47.4	1.6	44.3	100.0	1.3	16.3	0.9	81.6	100.0	867
40-44	8.2	50.8	4.5	36.5	100.0	3.1	17.5	1.8	77.6	100.0	784
45-49	13.6	53.0	5.6	27.8	100.0	4.9	19.1	2.0	74.0	100.0	704
Residence	10.0	00.0	0.0	2110	100.0			2.0	1 1.0		
Urban	6.2	37.9	2.2	53.7	100.0	0.8	4.0	0.3	94.9	100.0	3,657
Rural	2.0	46.9	2.8	48.3	100.0	2.8	26.7	2.0	68.5	100.0	2,459
Region											
Yerevan	7.3	35.6	1.3	55.7	100.0	0.8	0.8	0.0	98.5	100.0	2,001
Aragatsotn	2.3	67.4	6.2	24.1	100.0	2.5	41.7	8.5	47.3	100.0	315
Ararat	3.8	63.0	2.6	30.6	100.0	3.3	31.9	1.1	63.7	100.0	552
Armavir	2.2	20.7	0.0	77.0	100.0	3.4	6.2	0.0	90.3	100.0	586
Gegharkunik	3.5	73.4	3.9	19.2	100.0	2.5	58.3	1.0	38.2	100.0	478
Lori	5.6	47.1	2.7	44.5	100.0	0.3	0.3	0.0	99.4	100.0	355
Kotayk	3.6	43.5	2.4	50.4	100.0	2.0	10.2	0.6	87.2	100.0	678
Shirak	2.5	12.3	5.0	80.2	100.0	0.9	1.5	1.3	96.3	100.0	510
Syunik	2.0	49.9	3.8	44.3	100.0	0.8	12.4	2.5	84.2	100.0	238
Vayots Dzor	3.1	48.2	0.0	48.6	100.0	0.4	14.5	0.0	85.0	100.0	119
Tavush	1.8	33.0	2.8	62.4	100.0	1.3	14.3	1.6	82.9	100.0	283
Education											
Basic	2.8	27.5	1.7	68.1	100.0	2.0	11.3	0.5	86.3	100.0	396
Secondary	3.3	43.9	2.7	50.0	100.0	2.2	18.9	1.4	77.4	100.0	2,444
Secondary special	5.2	40.4	2.3	52.1	100.0	1.4	12.6	0.9	85.0	100.0	1,360
Higher	5.9	42.3	2.2	49.6	100.0	0.9	6.6	0.5	92.0	100.0	1,910
Wealth quintile											
Lowest	3.1	39.4	2.2	55.3	100.0	3.3	22.4	1.2	73.1	100.0	1,081
Second	1.8	48.5	3.5	46.2	100.0	2.6	25.0	2.5	69.8	100.0	1,242
Middle	4.9	39.3	1.6	54.2	100.0	1.7	14.2	0.4	83.8	100.0	1,142
Fourth	5.9	40.4	2.8	50.9	100.0	0.5	4.5	0.5	94.5	100.0	1,287
Highest	6.5	39.8	1.9	51.9	100.0	0.3	2.3	0.3	97.1	100.0	1,365
Total	4.5	41.5	2.4	51.5	100.0	1.6	13.1	1.0	84.3	100.0	6,116

#### Table 15.4.2 Ownership of assets: Men

Percent distribution of men age 15-49 by ownership of housing and land, according to background characteristics, Armenia 2015-16

		rcentage w wn a house		Per- centage		Percent	age who o	wn land:	Per- centage			
Background characteristic	Alone	Jointly	Alone and jointly	who do not own a house	Total	Alone	Jointly	Alone and jointly	who do not own land	Missing	Total	Numbe of men
Age												
15-19	0.7	52.2	0.6	46.5	100.0	0.3	23.7	0.3	75.7	0.0	100.0	345
20-24	0.7	54.8	0.9	43.6	100.0	1.1	28.7	0.2	69.9	0.0	100.0	467
25-29	5.8	66.0	0.3	27.8	100.0	3.0	34.3	0.1	62.7	0.0	100.0	464
30-34	10.6	59.5	0.5	29.4	100.0	7.3	29.1	0.4	63.2	0.0	100.0	427
35-39	25.0	56.0	1.1	17.9	100.0	10.4	23.4	0.9	65.1	0.3	100.0	376
40-44	31.7	52.9	1.2	14.3	100.0	13.4	23.2	1.1	62.2	0.0	100.0	346
45-49	37.1	51.4	2.9	8.7	100.0	22.8	19.4	1.0	56.8	0.0	100.0	330
Residence												
Urban	15.2	54.0	0.7	30.1	100.0	3.3	9.1	0.0	87.5	0.1	100.0	1,558
Rural	13.9	60.0	1.4	24.7	100.0	13.5	49.3	1.2	36.1	0.0	100.0	1,197
Region												
Yerevan	17.4	49.9	0.2	32.4	100.0	2.3	0.5	0.0	97.2	0.0	100.0	833
Aragatsotn	21.1	67.9	1.0	9.9	100.0	20.8	65.3	0.6	13.3	0.0	100.0	159
Ararat	10.4	81.7	1.8	6.0	100.0	9.0	60.3	0.4	30.3	0.0	100.0	290
Armavir	19.4	2.9	0.0	77.8	100.0	10.6	1.0	0.0	88.4	0.0	100.0	268
Gegharkunik	20.9	76.4	2.1	0.5	100.0	22.7	75.4	1.4	0.5	0.0	100.0	235
Lori	13.5	15.9	0.0	70.6	100.0	6.9	0.6	0.0	92.5	0.0	100.0	184
Kotayk	1.4	94.8	0.0	3.8	100.0	1.0	52.8	0.0	45.8	0.4	100.0	299
Shirak	13.3	79.0	0.4	7.3	100.0	4.8	25.7	0.0	69.4	0.0	100.0	201
Syunik	12.7	48.1	3.3	35.9	100.0	9.1	4.7	0.6	85.6	0.0	100.0	104
Vayots Dzor	11.8	20.9	17.3	50.0	100.0	9.2	11.3	14.2	65.3	0.0	100.0	56
Tavush	13.9	62.0	0.0	24.2	100.0	9.7	37.1	0.3	52.9	0.0	100.0	126
Education												
Basic	10.2	49.2	1.5	39.1	100.0	8.6	28.9	0.3	61.8	0.3	100.0	360
Secondary	16.3	57.8	0.7	25.2	100.0	9.7	33.7	0.5	56.2	0.0	100.0	1,250
Secondary special	18.4	52.0	1.8	27.8	100.0	8.0	19.0	0.9	72.1	0.0	100.0	403
Higher	11.9	60.8	0.8	26.5	100.0	3.7	17.5	0.5	78.3	0.0	100.0	736
Wealth quintile												
Lowest	13.9	48.9	0.7	36.5	100.0	13.4	38.8	0.3	47.5	0.0	100.0	523
Second	15.5	60.7	1.6	22.2	100.0	13.7	47.5	1.1	37.7	0.0	100.0	583
Middle	12.5	59.9	1.1	26.4	100.0	5.4	32.5	0.8	61.3	0.0	100.0	521
Fourth	13.9	56.6	0.9	28.6	100.0	3.7	9.7	0.3	86.2	0.2	100.0	566
Highest	17.2	56.4	0.6	25.8	100.0	2.3	4.9	0.1	92.7	0.0	100.0	562
Total	14.6	56.6	1.0	27.8	100.0	7.7	26.6	0.5	65.2	0.0	100.0	2,755

Women are less likely to own land than a house; about 16 percent of women own land, either alone or jointly. As with house ownership, land ownership among women has declined since 2010, when 39 percent of women owned land. Land ownership increases somewhat with age: 10 percent of women age 15-19 own land, as compared with 26 percent of women age 45-49. As expected, women living in rural areas, where more land is available and is necessary for farming, are more likely to own land (32 percent) than women in urban areas (5 percent). Land ownership, either alone or jointly, is lowest among women in Lori and Yerevan (1-2 percent) and highest among women in Gegharkunik (62 percent). The percentage of women who own land decreases with increasing education and wealth, implying that those at the highest levels of education and wealth are least likely to own land. For example, 27 percent of women in the lowest wealth quintile own land, compared with 3 percent of women in the highest wealth quintile.

Table 15.4.2 shows that about 7 in 10 men (72 percent) own a house, as compared with less than half of women (48 percent). More than half of men (57 percent) own a house jointly. House ownership among men increases rapidly with age, from 53 percent among those age 15-19 to 91 percent among those age 45-49. House ownership, either alone or jointly, is lowest among men in Armavir (22 percent) and highest among men in Gegharkunik (99 percent). House ownership does not vary uniformly with men's education or wealth.

Thirty-five percent of men, compared with only 16 percent of women, own land. Twenty-seven percent of men own land jointly. Land ownership tends to increase with age but not linearly. As observed for women, rural men are much more likely (64 percent) than urban men (12 percent) to own land. Land ownership, either jointly or alone, ranges from 3 percent among men in Yerevan to almost 100 percent among men in Gegharkunik. Men at lower levels of wealth are more likely to own land than wealthier men.

Tables 15.5.1 and 15.5.2 show the percent distributions of women and men age 15-49 who own a house, respectively, by whether there is a title or deed for the house they own and whether their name is on the title or deed, according to background characteristics. Most men and women who own a house have a title or deed for the house. Eighty-six percent of women and 93 percent of men who own a house have their name on the title or deed for the house; however, these proportions are not fully comparable because 7 percent of women who own a house do not know whether their name is on the title or deed or are missing data on one or more of the questions about the title or deed, as compared with less than 1 percent of men.

#### Table 15.5.1 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, Armenia 2015-16

	House ha					
	Woman's	Woman's name is	Does not	Don't		Number of women
Background	name is on	not on	have a	know/		who own a
characteristic	title/deed	title/deed	title/deed	missing <sup>1</sup>	Total	house <sup>2</sup>
Age						
15-19	66.1	1.0	3.6	29.3	100.0	214
20-24	77.5	3.0	4.7	14.7	100.0	354
25-29	86.1	2.0	4.2	7.8	100.0	438
30-34	88.7	4.2	4.0	3.1	100.0	466
35-39	88.2	3.2	4.0	4.7	100.0	483
40-44	90.0	1.7	4.5	3.7	100.0	498
45-49	94.2	0.6	3.3	1.9	100.0	510
Residence						
Urban	90.6	1.4	2.0	5.9	100.0	1,692
Rural	80.8	3.5	6.8	8.9	100.0	1,272
Region						
Yerevan	93.9	0.0	0.6	5.5	100.0	885
Aragatsotn	51.7	3.0	19.5	25.7	100.0	239
Ararat	96.4	1.4	1.4	0.8	100.0	384
Armavir	95.2	1.0	2.3	1.5	100.0	134
Gegharkunik	65.1	11.2	5.5	18.2	100.0	386
Lori	94.0	0.0	1.1	4.9	100.0	197
Kotayk	93.6	2.7	1.2	2.6	100.0	336
Shirak	92.9	1.1	5.1	0.9	100.0	101
Syunik	93.9	0.4	5.2	0.5	100.0	133
Vayots Dzor	98.0	0.0	0.4	1.6	100.0	61
Tavush	73.7	0.0	18.7	7.6	100.0	106
Education						
Basic	83.5	4.6	5.1	6.8	100.0	126
Secondary	84.4	2.5	4.8	8.3	100.0	1,222
Secondary special	84.8	2.6	5.7	6.9	100.0	651
Higher	90.5	1.5	1.9	6.2	100.0	963
Wealth quintile						
Lowest	79.7	4.0	6.2	10.1	100.0	483
Second	83.0	2.5	7.7	6.9	100.0	668
Middle	84.5	3.2	3.8	8.6	100.0	523
Fourth	90.4	1.7	2.0	5.9	100.0	632
Highest	92.6	0.8	1.0	5.7	100.0	657
Total	86.4	2.3	4.0	7.2	100.0	2,963

Note: Total includes 1 woman with no education.

<sup>1</sup> Includes women whose house has a title/deed, but they do not know if their name is on it (or this information is missing), and women who do not know if the house has a deed/title (or this information is missing)

<sup>2</sup> Includes alone, joint, or alone and joint ownership

### Table 15.5.2 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, Armenia 2015-16

	House title or de	has a				
		Man's				Number of
	Man's	name is	Does not	Don't		men who
Background		not on title/	have a	know/		own a
characteristic	title/deed	deed	title/deed	missing <sup>1</sup>	Total	house <sup>2</sup>
Age						
15-19	89.9	0.0	9.2	0.9	100.0	185
20-24	89.7	0.0	10.3	0.0	100.0	263
25-29	88.4	0.1	11.1	0.4	100.0	335
30-34	90.7	0.5	8.8	0.0	100.0	301
35-39	96.6	0.0	3.4	0.0	100.0	308
40-44	95.7	0.2	4.1	0.0	100.0	297
45-49	95.5	0.0	4.4	0.1	100.0	301
Residence						
Urban	96.0	0.1	3.8	0.1	100.0	1,089
Rural	88.3	0.1	11.4	0.2	100.0	901
Region						
Yerevan	98.8	0.0	1.2	0.0	100.0	563
Aragatsotn	27.5	0.2	72.2	0.0	100.0	143
Ararat	97.4	0.0	2.3	0.3	100.0	272
Armavir	88.0	0.0	12.0	0.0	100.0	59
Gegharkunik	97.1	0.0	2.4	0.5	100.0	234
Lori	(94.0)	(0.0)	(6.0)	(0.0)	(100.0)	54
Kotayk	98.1	0.4	1.2	0.3	100.0	288
Shirak	99.4	0.0	0.6	0.0	100.0	187
Syunik	99.2	0.0	0.0	0.8	100.0	67
Vayots Dzor	82.8	4.1	13.1	0.0	100.0	28
Tavush	97.3	0.0	2.7	0.0	100.0	95
Education						
Basic	91.0	0.0	8.4	0.6	100.0	219
Secondary	90.9	0.1	8.9	0.1	100.0	935
Secondary special	96.7	0.1	2.9	0.3	100.0	291
Higher	93.5	0.3	6.1	0.2	100.0	541
Wealth quintile						
Lowest	87.7	0.1	11.9	0.3	100.0	332
Second	89.2	0.0	10.5	0.3	100.0	454
Middle	90.4	0.1	9.4	0.1	100.0	384
Fourth	95.4	0.3	4.0	0.2	100.0	404
Highest	98.9	0.1	0.9	0.0	100.0	417
Total	92.5	0.1	7.2	0.2	100.0	1,990

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes 4 men with no

education. <sup>1</sup> Includes men whose house has a title/deed, but they do not know if their name is on it (or this information is missing), and men who do not know if the house has a deed/title (or this information is missing) <sup>2</sup> Includes alone, joint, or alone and joint ownership

Similarly, Tables 15.6.1 and 15.6.2 show the percent distributions of women and men age 15-49 who own land, respectively, by whether there is a title or deed for the land they own and whether their name is on the title or deed, according to background characteristics. As in the case of house ownership, most women and men who own land have a title or deed and have their name on the deed (75 percent of women and 86 percent of men who own land). Again, women are much more likely than men to not know whether their name is on the deed or to be missing other information regarding the deed, making comparisons difficult.

#### Table 15.6.1 Ownership of title or deed for land: Women

Among women age 15-49 who own land, percent distribution by whether the land owned has a title or deed and whether or not the woman's name appears on the title or deed, according to background characteristics, Armenia 2015-16

	Land has a tit	le or deed and:				
	Woman's	Woman's	Does not			Number of
Background	name is on	name is not	have a	Don't know/		women who
characteristic	title/deed	on title/deed	title/deed	missing <sup>1</sup>	Total	own land <sup>2</sup>
Age						
15-19	57.0	4.2	5.8	33.0	100.0	70
20-24	55.6	8.7	5.4	30.3	100.0	101
25-29	72.0	5.9	7.6	14.4	100.0	119
30-34	77.4	7.1	5.6	9.9	100.0	154
35-39	76.6	2.5	8.5	12.3	100.0	160
40-44	80.8	3.9	7.4	7.8	100.0	175
45-49	86.6	1.3	7.1	5.1	100.0	184
Residence						
Urban	71.2	5.4	6.7	16.7	100.0	187
Rural	76.2	4.2	7.0	12.6	100.0	775
Region						
Yerevan	*	*	*	*	100.0	31
Aragatsotn	46.2	5.1	19.2	29.5	100.0	166
Ararat	97.0	1.8	0.6	0.6	100.0	201
Armavir	(98.8)	(0.0)	(0.0)	(1.2)	100.0	57
Gegharkunik	69.4	9.6	2.2	18.9	100.0	295
Lori	*	*	*	*	100.0	2
Kotayk	93.3	2.3	1.2	3.2	100.0	87
Shirak	*	*	*	*	100.0	19
Syunik	72.5	0.0	20.6	6.9	100.0	38
Vayots Dzor	94.9	1.9	3.2	0.0	100.0	18
Tavush	61.2	0.0	32.1	6.6	100.0	48
Education						
Basic	79.8	6.2	4.3	9.7	100.0	54
Secondary	76.6	4.2	4.9	14.4	100.0	552
Secondary special	71.9	4.3	13.6	10.3	100.0	204
Higher	73.3	4.9	6.4	15.4	100.0	152
Wealth quintile						
Lowest	75.4	5.6	6.4	12.6	100.0	291
Second	75.8	3.7	7.9	12.6	100.0	375
Middle	76.9	4.4	5.1	13.6	100.0	185
Fourth	66.0	1.3	9.7	23.0	100.0	71
Highest	(77.0)	(8.4)	(5.5)	(9.1)	100.0	40
Total	75.2	4.4	6.9	13.4	100.0	962

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

<sup>1</sup> Includes women whose land has a title/deed, but they do not know if their name is on it (or this information is missing), and women who do not know if the land has a deed/title (or this information is missing)

<sup>2</sup> Includes alone, joint, or alone and joint ownership

### Table 15.6.2 Ownership of title or deed for land: Men

Among men age 15-49 who own land, percent distribution by whether the land owned has a title or deed and whether or not the man's name appears on the title or deed, according to background characteristics, Armenia 2015-16

	title or de	ed and:				
		Man's				
	Man's	name is	Does not	Don't		Number of
Background	name is on	not on	have a	know/		men who
characteristic	title/deed	title/deed	Title/deed	missing <sup>1</sup>	Total	own land <sup>2</sup>
Age						
15-19	79.0	0.0	19.6	1.5	100.0	84
20-24	77.1	0.8	21.2	0.8	100.0	141
25-29	81.4	0.0	17.7	0.9	100.0	173
30-34	86.4	0.0	13.6	0.0	100.0	157
35-39	91.3	0.8	7.9	0.0	100.0	130
40-44	89.8	0.0	10.2	0.0	100.0	131
45-49	93.9	0.0	6.1	0.0	100.0	143
Residence						
Urban	83.7	0.0	15.5	0.8	100.0	193
Rural	86.2	0.3	13.2	0.3	100.0	765
	00.2	0.5	10.2	0.0	100.0	700
Region						
Yerevan	*	*	*	*	*	23
Aragatsotn	27.5	0.0	72.5	0.0	100.0	138
Ararat	96.2	0.0	2.7	1.1	100.0	202
Armavir	(93.3)	(0.0)	(6.7)	(0.0)	(100.0)	31
Gegharkunik	96.2	0.5	2.8	0.5	100.0	234
Lori	00.7	0.7	0.7	0.0	400.0	14 161
Kotayk Shirak	98.7 98.2	0.7 0.0	0.7 1.8	0.0 0.0	100.0 100.0	62
Syunik	90.2	0.0	1.0	0.0	100.0	62 15
Vavots Dzor	90.2	0.0	9.8	0.0	100.0	20
Tavush	90.2 97.4	0.0	9.0 1.9	0.0	100.0	20 59
	57.4	0.0	1.5	0.7	100.0	55
Education						
Basic	87.9	0.8	10.4	0.9	100.0	136
Secondary	84.2	0.2	15.2	0.4	100.0	548
Secondary special	89.1	0.0	10.5	0.4	100.0	113
Higher	86.6	0.0	13.4	0.0	100.0	160
Wealth quintile						
Lowest	86.4	0.0	13.5	0.2	100.0	275
Second	85.3	0.3	13.6	0.8	100.0	363
Middle	83.0	0.0	17.0	0.0	100.0	202
Fourth	89.2	0.0	10.0	0.8	100.0	77
Highest	(92.0)	(2.8)	(5.2)	(0.0)	(100.0)	41
Total	85.7	0.2	13.6	0.4	100.0	958

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases. Total includes 1 man with no education. <sup>1</sup> Includes men whose land has a title/deed, but they do not know if their name is on it (or this information is missing), and men who do not know if the land has a deed/title (or this information is missing).

missing) <sup>2</sup> Includes alone, joint, or alone and joint ownership

In the 2015-16 ADHS, women and men were also asked about their ownership of a mobile phone and, if they owned a mobile phone, whether they used the phone for any financial transactions. Additionally, women and men were asked if they have an account in a bank or other financial institution that they themselves use. Tables 15.7.1 and 15.7.2 show the percentages of women and men age 15-49 who have a bank account that they use and who own a mobile phone, respectively, according to background characteristics. These tables also provide percentages of mobile phone owners who use the phone for financial transactions.

#### Table 15.7.1 Ownership and use of bank accounts and mobile phones: Women

Percentage of women age 15-49 who use an account in a bank or other financial institution and percentage who own a mobile phone, and among women who own a mobile phone, percentage who use it for financial transactions, according to background characteristics, Armenia 2015-16

Background characteristic	Use a bank account	Own a mobile phone	Number of women	Use mobile phone for financial transactions	Number of women who own a mobile phone
Age					•
15-19	4.5	93.6	725	28.7	679
20-24	14.4	97.5	928	35.6	905
25-29	19.1	97.7	1,099	34.2	1,073
30-34	21.3	97.1	1,007	29.9	977
35-39	24.6	98.0	867	26.4	850
40-44	26.7	96.4	784	23.7	755
45-49	23.5	95.9	706	23.0	677
Residence					
Urban	24.2	98.6	3,657	33.3	3,606
Rural	12.0	94.0	2,459	23.1	2,310
Region					
Yerevan	26.3	99.0	2,001	33.2	1,981
Aragatsotn	16.2	99.4	315	35.4	313
Ararat	21.3	97.2	552	28.0	537
Armavir	12.0	89.8	586	22.3	526
Gegharkunik	8.8	90.6	478	9.8	433
Lori	7.4	97.7	355	65.2	347
Kotayk	16.2	96.7	678	34.0	656
Shirak	14.1	98.1	510	4.9	501
Syunik	28.3	98.2	238	45.3	234
Vayots Dzor	24.4	97.2	119	23.9	116
Tavush	23.2	96.5	283	18.3	273
Education					
Basic	3.1	88.7	396	15.3	352
Secondary	6.6	95.3	2,444	20.8	2,329
Secondary special	18.5	97.7	1,360	26.6	1,330
Higher	39.5	99.7	1,910	44.3	1,904
Wealth quintile					
Lowest	7.3	89.6	1,081	22.4	969
Second	15.8	97.1	1,242	24.4	1,205
Middle	14.1	97.5	1,142	26.5	1,113
Fourth	23.3	99.1	1,287	35.8	1,275
Highest	32.5	99.2	1,365	34.9	1,354
Total	19.3	96.7	6,116	29.3	5,917

Note: Total for all women age 15-49 includes 5 women with no education and total for women who have a mobile phone includes 3 women with no education.

#### Table 15.7.2 Ownership and use of bank accounts and mobile phones: Men

Percentage of men age 15-49 who use an account in a bank or other financial institution and percentage who own a mobile phone, and among men who own a mobile phone, percentage who use it for financial transactions, according to background characteristics, Armenia 2015-16

Background characteristic	Use a bank account	Own a mobile phone	Number of men	Use mobile phone for financial transactions	Number of men who own a mobile phone
	account	mobile priorie	UTITIETT	แล้าเรลิดดีแบบเร	priorie
Age					
15-19	3.7	97.1	345	8.2	335
20-24	12.1 23.3	99.4	467	15.6	464
25-29		99.9	464	20.8	464
30-34 35-39	26.8 27.0	98.3 98.5	427 376	24.2 23.8	420 370
35-39 40-44	27.0 28.9	98.5 99.4	376 346	23.8	370 344
40-44 45-49	28.9				344 324
	23.5	98.3	330	22.9	324
Residence					
Urban	22.0	99.0	1,558	23.4	1,543
Rural	19.1	98.4	1,197	15.2	1,178
Region					
Yerevan	11.5	99.7	833	24.9	830
Aragatsotn	15.5	98.7	159	12.2	157
Ararat	12.9	98.3	290	4.6	285
Armavir	29.8	95.9	268	3.7	257
Gegharkunik	12.0	97.7	235	26.0	230
Lori	19.7	97.8	184	17.1	180
Kotayk	29.8	100.0	299	42.4	299
Shirak	28.4	99.5	201	9.9	200
Syunik	53.6	98.2	104	29.1	102
Vayots Dzor	45.4	98.2	56	2.3	55
Tavush	33.0	99.7	126	18.8	125
Education					
Basic	10.5	97.4	360	8.3	351
Secondary	14.7	98.6	1,250	14.9	1,233
Secondary special	21.9	98.6	403	20.2	398
Higher	35.5	99.9	736	33.6	736
Wealth guintile					
Lowest	13.3	97.3	523	8.2	509
Second	20.7	99.2	583	17.2	578
Middle	24.4	98.4	521	21.4	513
Fourth	22.3	99.9	566	26.8	566
Highest	22.7	98.9	562	24.9	555
Total	20.7	98.8	2,755	19.9	2,721

Note: Total for all men age 15-49 includes 5 men with no education and total for men who have a mobile phone includes 4 men with no education.

About one in five women and men in Armenia have a bank account that they use. Ownership and use of a bank account tends to increase with age for both women and men. Among men, use of a bank account does not vary substantially by rural-urban residence, but rural women are only half as likely (12 percent) as urban women to have a bank account that they use (24 percent). Possession of a bank account increases with increasing education among both women and men.

In Armenia, virtually all women (97 percent) and men (99 percent) age 15-49 have a mobile phone, and there are only minimal variations in these proportions by background characteristics. However, mobile phone usage for financial transactions is very limited. Only 29 percent of women and 20 percent of men who own a mobile phone use the phone for financial transactions. Urban women and men are somewhat more likely to conduct financial transactions on their mobile phone, and use of mobile phones for financial transactions tends to increase with increasing education and wealth. Notably, 44 percent of women and 34 percent of men with a higher education use their mobile phones for financial transactions. Use of mobile phones for financial transactions varies greatly by region among both women and men. Use of a mobile phone for this purpose is highest among women in Lori (65 percent) and among men in Kotayk (42 percent).

### 15.4 WOMEN'S PARTICIPATION IN DECISION MAKING

To assess women's decision-making autonomy within the household, the 2015-16 ADHS collected information on currently married women's participation in three different types of decisions: on their own health care, on making major household purchases, and on visits to the women's family, friends, or relatives. Having a final say in the decision-making process reflects a high degree of autonomy. Women are considered a participant in a decision if they usually make that decision alone or jointly with their husbands. The ability of women to make decisions that affect their own lives is an essential aspect of empowerment and will have consequences with respect to fulfilling health and demographic goals.

Table 15.8 shows the percent distribution of currently married women and currently married men according to the person in the household who usually makes the decisions concerning these matters. Twentyeight percent of women are the main decision makers about their own health care, 68 percent decide jointly with their husband, and 4 percent have no say in this decision. Fourteen percent of currently married women decide mainly themselves about major household purchases, two-thirds (67 percent) decide jointly with their husbands, and 17 percent have no say. Decisions about visits to the woman's family or relatives are also mostly made jointly (80 percent), with 13 percent of women making this decision by themselves.

#### Table 15.8 Participation in decision making

Percent distribution of currently married women and currently married men age 15-49 by person who usually makes decisions about various issues, Armenia 2015-16

Decision	Mainly wife	Wife and husband jointly	Mainly husband WOMEN	Someone else	Other	Missing	Total	Number
			WONLIN					
Own health care	28.0	68.0	2.6	1.3	0.0	0.1	100.0	3,895
Major household purchases	13.6	66.6	7.4	10.1	2.3	0.1	100.0	3.895
Visits to her family or relatives	12.5	79.8	3.4	3.4	0.7	0.2	100.0	3,895
			MEN					
Own health care Major household purchases	15.7 18.4	59.3 61.2	23.1 6.0	0.6 6.3	1.2 7.7	0.2 0.3	100.0 100.0	1,506 1,506

Currently married men were asked who usually makes decisions about their own health care and about large household purchases. Table 15.8 shows that 23 percent of men are the main decision makers about their own health care and 6 percent are the main decision makers about major household purchases, while about three in five decide jointly with their wives (59 percent and 61 percent, respectively). For 16 percent and 18 percent of men, respectively, decisions about their own health care and about major household purchases are mainly made by their wives or someone else.

A comparison of women's and men's participation in decisions about their own health care and major household purchases suggests that women in Armenia are somewhat more likely to participate in these decisions than men.

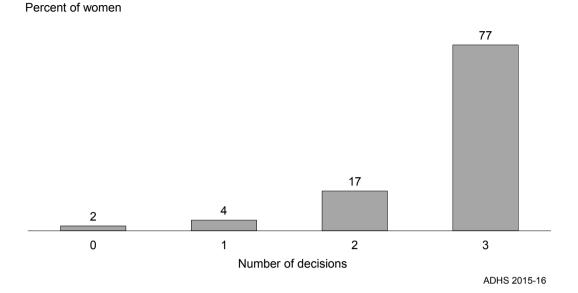
Table 15.9.1 shows how women's participation in decision making varies by their background characteristics. As mentioned above, a large majority of married women either make household decisions themselves or participate in the decisions jointly with their husbands. Overall, more than 9 in 10 women have a say in decisions about their own health care (96 percent) or visits to their family and friends (92 percent), while 80 percent are involved in decision making about major household purchases. About three out of four currently married women (77 percent) participate in all three specified household decisions, while only 2 percent report having no say in any of the three decisions (Figure 15.1).

### Table 15.9.1 Women's participation in decision making by background characteristics

Percentage of currently married women age 15-49 who usually make specific decisions either alone or jointly with their husband, according to background characteristics, Armenia 2015-16

Woman's own health household over features         Visits to her family decisions         None of the three decisions         None of the three decisions           Age 15-19         (91.9)         (60.2)         (83.8)         (57.2)         1.8           20-24         90.7         59.5         84.4         66.3         2.0         7           30-34         96.7         78.3         91.1         75.2         1.9         7           35-39         96.9         86.2         94.3         82.5         1.2         7           40-44         95.6         90.1         95.2         86.1         1.4         6           45-49         98.0         91.8         95.8         89.4         1.2         5           Employment (last 12         months)          81.3         1.6         1.5           Motemployed         95.5         76.5         90.7         73.4         2.6         2.6           Employed for cash         96.1         84.8         94.9         81.3         1.6         1.5           Employed for cash         96.7         85.8         91.6         82.2         2.8         5           Urban         96.9         82.9         93.7         <		Sp	ecific decisio	ons			
Age $(5.19)$ $(91.9)$ $(60.2)$ $(83.8)$ $(57.2)$ $1.8$ $20.24$ $90.7$ $59.5$ $84.4$ $56.0$ $6.4$ $32.52$ $30.34$ $96.7$ $78.3$ $91.1$ $75.2$ $1.9$ $85.39$ $96.9$ $86.2$ $94.3$ $22.5$ $1.2$ $7$ $40.44$ $95.6$ $90.1$ $95.2$ $86.1$ $1.4$ $66.1$ $1.4$ $66.1$ $1.4$ $66.1$ $1.4$ $66.1$ $1.4$ $66.1$ $1.4$ $66.1$ $1.4$ $66.1$ $1.4$ $66.1$ $1.4$ $66.1$ $1.4$ $66.1$ $1.4$ $66.1$ $1.6$ $1.2$ $56.1$ $1.4$ $66.1$ $1.6$ $1.5$ $2.2$ $2.5$ $2.6$ $2.5$ $2.6$ $2.5$ $2.6$ $2.5$ $2.6$ $2.5$ $2.6$ $2.5$ $2.6$ $2.5$ $2.6$ $2.5$ $2.6$ $2.5$ $2.6$ $2.5$ $2.6$ $2.5$ $2.6$ <	kground c	own health	household	her family		the three	Number of women
15-19 $(91.9)$ $(60.2)$ $(83.8)$ $(57.2)$ 1.8         20-24       90.7       59.5       84.4       56.0       6.4       33         25-29       95.7       70.9       91.0       68.3       2.0       7         30-34       96.7       78.3       91.1       75.2       1.9       8         35-39       96.9       86.2       94.3       82.5       1.2       7         40-44       95.6       90.1       95.8       89.4       1.2       5         Employment (last 12							
35-39         96.9         86.2         94.3         82.5         1.2         7           40-44         95.6         90.1         95.2         86.1         1.4         6           45-49         98.0         91.8         95.8         89.4         1.2         5           Employment (last 12 months)         months)         76.5         90.7         73.4         2.5         2.2           Employed for cash         96.1         84.8         94.9         81.3         1.6         1.3           Children         0         94.0         70.4         87.6         66.5         3.8         2           1-2         96.3         79.3         93.0         76.4         1.6         2.6           3-4         95.7         85.8         91.6         82.2         2.8         5           Urban         96.9         82.9         93.7         80.1         1.7         2.6           Region         7         76.7         90.6         73.0         2.5         1.6           Yerevan         97.4         84.4         95.0         81.6         1.3         1.1           Aragatsotn         97.9         89.9         85.8	i-19 i-24 i-29	90.7 95.7	59.5 <sup>°</sup> 70.9	84.4 91.0	56.0 68.3	6.4 2.0	33 365 761
Employment (last 12 months)         Not employed         95.5         76.5         90.7         73.4         2.5         2.2           Employed for cash         96.1         84.8         94.9         81.3         1.6         1.3           Employed not for cash         98.7         88.0         93.9         85.4         0.3         33           Number of living children         0         94.0         70.4         87.6         66.5         3.8         2           1-2         96.3         79.3         93.0         76.4         1.6         2.6           3-4         95.7         85.8         91.6         82.2         2.8         9           5+         (90.3)         (82.4)         (97.6)         (76.1)         0.0           Residence           Urban         96.9         82.9         93.7         80.1         1.7         2.2           Rural         94.7         76.7         90.6         73.0         2.5         1.6           Aragatsotn         97.9         89.9         85.8         79.4         0.5         1.4           Aragatsotn         97.9         89.6         0.5         4         3.4         3.1.1	5-39	96.9	86.2	94.3	82.5	1.2 1.4	826 709 639
months)         Not employed         95.5         76.5         90.7         73.4         2.5         2.2           Employed for cash         96.1         84.8         94.9         81.3         1.6         1.3           Employed not for cash         98.7         88.0         93.9         85.4         0.3         3           Number of living children	-49	98.0	91.8	95.8	89.4	1.2	562
Employed for cash         96.1         84.8         94.9         81.3         1.6         1.3           Employed not for cash         98.7         88.0         93.9         85.4         0.3         3           Number of living children	onths)	05.5	70 5	00.7	70.4	0.5	0.000
cash         98.7         88.0         93.9         85.4         0.3         33           Number of living children	nployed for cash						2,266 1,306
children         0         94.0         70.4         87.6         66.5         3.8         2           1-2         96.3         79.3         93.0         76.4         1.6         2.6           3-4         95.7         85.8         91.6         82.2         2.8         9           5+         (90.3)         (82.4)         (97.6)         (76.1)         0.0         0           Residence           Urban         96.9         82.9         93.7         80.1         1.7         2.2           Rural         94.7         76.7         90.6         73.0         2.5         1.6           Yerevan         97.4         84.4         95.0         81.6         1.3         1.1           Aragatsotn         97.9         89.9         85.8         79.4         0.5         1           Ararat         87.0         53.6         81.2         47.3         6.4         33           Armavir         99.2         90.8         97.9         89.6         0.5         44           Gegharkunik         88.1         62.4         81.4         60.2         86         22           Lori         99.1         76		98.7	88.0	93.9	85.4	0.3	322
1-2       96.3       79.3       93.0       76.4       1.6       2.6         3-4       95.7       85.8       91.6       82.2       2.8       95         5+       (90.3)       (82.4)       (97.6)       (76.1)       0.0         Residence         Urban       96.9       82.9       93.7       80.1       1.7       2.2         Rural       94.7       76.7       90.6       73.0       2.5       1.6 <b>Region</b> Yerevan       97.4       84.4       95.0       81.6       1.3       1.1         Aragatsotn       97.9       89.9       85.8       79.4       0.5       1         Arraat       87.0       53.6       81.2       47.3       6.4       33         Armavir       99.2       90.8       97.9       89.6       0.5       4         Gegharkunik       88.1       62.4       81.4       60.2       8.6       22         Lori       99.1       76.1       96.7       74.7       0.0       2         Kotayk       98.2       80.7       95.4       80.1       1.0       4         Shirak <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
3-4         95.7         85.8         91.6         82.2         2.8         95.7           5+         (90.3)         (82.4)         (97.6)         (76.1)         0.0         0.0           Residence           Urban         96.9         82.9         93.7         80.1         1.7         2.2           Rural         94.7         76.7         90.6         73.0         2.5         1.6           Region           Yerevan         97.4         84.4         95.0         81.6         1.3         1.1           Aragatsotn         97.9         89.9         85.8         79.4         0.5         1           Armavir         99.2         90.8         97.9         89.6         0.5         4           Gegharkunik         88.1         62.4         81.4         60.2         8.6         2           Lori         99.1         76.1         96.7         74.7         0.0         2           Kotayk         98.2         80.7         95.4         80.1         1.0         4           Shirak         98.5         84.2         94.2         82.0         0.6         3           Syunik <td>o</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>261 2,690</td>	o						261 2,690
Residence       Urban       96.9       82.9       93.7       80.1       1.7       2.2         Rural       94.7       76.7       90.6       73.0       2.5       1.6         Region       Yerevan       97.4       84.4       95.0       81.6       1.3       1.1         Aragatsotn       97.9       89.9       85.8       79.4       0.5       1         Ararat       87.0       53.6       81.2       47.3       6.4       3         Armavir       99.2       90.8       97.9       89.6       0.5       4         Gegharkunik       88.1       62.4       81.4       60.2       8.6       2         Lori       99.1       76.1       96.7       74.7       0.0       2         Kotayk       98.2       80.7       95.4       80.1       1.0       4         Shirak       98.5       84.2       94.2       82.0       0.6       3         Syunik       92.9       92.1       89.2       80.1       1.5       1         Vayots Dzor       97.8       90.7       95.4       88.6       0.5       3         Tavush       96.1       82.7       94.6							2,090
Urban         96.9         82.9         93.7         80.1         1.7         2.2           Rural         94.7         76.7         90.6         73.0         2.5         1.6           Region         Yerevan         97.4         84.4         95.0         81.6         1.3         1.1           Aragatsotn         97.9         89.9         85.8         79.4         0.5         1           Aragatsotn         97.9         89.9         85.8         79.4         0.5         1           Ararat         87.0         53.6         81.2         47.3         6.4         3           Armavir         99.2         90.8         97.9         89.6         0.5         4           Gegharkunik         88.1         62.4         81.4         60.2         8.6         2           Lori         99.1         76.1         96.7         74.7         0.0         2           Kotayk         98.2         80.7         95.4         80.1         1.0         4           Shirak         98.5         84.2         94.2         82.0         0.6         3           Syunik         92.9         92.1         89.2         80.1		(90.3)	(82.4)		(76.1)	0.0	36
Rural         94.7         76.7         90.6         73.0         2.5         1.6           Region							
Region           Yerevan         97.4         84.4         95.0         81.6         1.3         1,1           Aragatsotn         97.9         89.9         85.8         79.4         0.5         1           Aragatsotn         97.9         89.9         85.8         79.4         0.5         1           Ararat         87.0         53.6         81.2         47.3         6.4         3           Armavir         99.2         90.8         97.9         89.6         0.5         4           Gegharkunik         88.1         62.4         81.4         60.2         8.6         2           Lori         99.1         76.1         96.7         74.7         0.0         2           Kotayk         98.2         80.7         95.4         80.1         1.0         4           Shirak         98.5         84.2         94.2         82.0         0.6         3           Syunik         92.9         92.1         89.2         80.1         1.5         1           Vayots Dzor         97.8         90.7         95.4         88.6         0.5         3           Tavush         96.1         82.7         94.6							2,221
Yerevan         97.4         84.4         95.0         81.6         1.3         1,1           Aragatsotn         97.9         89.9         85.8         79.4         0.5         1           Aragatsotn         97.9         89.9         85.8         79.4         0.5         1           Ararat         87.0         53.6         81.2         47.3         6.4         3           Armavir         99.2         90.8         97.9         89.6         0.5         4           Gegharkunik         88.1         62.4         81.4         60.2         8.6         2           Lori         99.1         76.1         96.7         74.7         0.0         2           Kotayk         98.5         84.2         90.7         95.4         80.1         1.0         4           Shirak         98.5         84.2         94.2         80.1         1.5         1           Vayots Dzor         97.8         90.7         95.4         88.6         0.5         1           Tavush         96.1         82.7         94.6         81.3         1.3         2           Education         E         92.9         77.1         88.3		94.7	/0./	90.6	73.0	2.5	1,674
Aragatsotn         97.9         89.9         85.8         79.4         0.5         1           Ararat         87.0         53.6         81.2         47.3         6.4         3           Armavir         99.2         90.8         97.9         89.6         0.5         4           Gegharkunik         88.1         62.4         81.4         60.2         8.6         2           Lori         99.1         76.1         96.7         74.7         0.0         2           Kotayk         98.2         80.7         95.4         80.1         1.0         4           Shirak         98.5         84.2         94.2         82.0         0.6         3           Syunik         92.9         92.1         89.2         80.1         1.5         1           Vayots Dzor         97.8         90.7         95.4         88.6         0.5         3           Tavush         96.1         82.7         94.6         81.3         1.3         2           Education         E         E         E         Secondary special         96.9         83.5         93.1         7.6           Secondary special         96.9         83.5		97.4	84.4	95.0	81.6	13	1,140
Ararat       87.0       53.6       81.2       47.3       6.4       53.6         Armavir       99.2       90.8       97.9       89.6       0.5       44.5         Gegharkunik       88.1       62.4       81.4       60.2       8.6       24.5         Lori       99.1       76.1       96.7       74.7       0.0       24.5         Kotayk       98.2       80.7       95.4       80.1       1.0       44.5         Shirak       98.5       84.2       94.2       82.0       0.6       55.5         Syunik       92.9       92.1       89.2       80.1       1.5       1.5         Vayots Dzor       97.8       90.7       95.4       88.6       0.5       56.7         Tavush       96.1       82.7       94.6       81.3       1.3       26         Education       E       92.9       77.1       88.3       70.6       3.0       22.9         Secondary special       96.9       83.5       93.1       79.8       1.3       95.8         Secondary special       96.9       83.5       95.3       80.8       0.9       1.0         Wealth quintile       E							187
Gegharkunik         88.1         62.4         81.4         60.2         8.6         22           Lori         99.1         76.1         96.7         74.7         0.0         22           Kotayk         98.2         80.7         95.4         80.1         1.0         4           Shirak         98.5         84.2         94.2         82.0         0.6         3           Syunik         92.9         92.1         89.2         80.1         1.5         1           Vayots Dzor         97.8         90.7         95.4         88.6         0.5         3           Tavush         96.1         82.7         94.6         81.3         1.3         22           Education         Basic         92.9         77.1         88.3         70.6         3.0         2           Secondary special         96.9         83.5         93.1         79.8         1.3         9           Higher         97.8         83.5         95.3         80.8         0.9         1,0           Wealth quintile         Usest         94.3         74.9         89.8         71.9         3.7         6           Second         94.5         79.2		87.0	53.6		47.3	6.4	360
Lori         99.1         76.1         96.7         74.7         0.0         22           Kotayk         98.2         80.7         95.4         80.1         1.0         4           Shirak         98.5         84.2         94.2         82.0         0.6         3           Syunik         92.9         92.1         89.2         80.1         1.5         1           Vayots Dzor         97.8         90.7         95.4         88.6         0.5         1           Tavush         96.1         82.7         94.6         81.3         1.3         2           Education         Basic         92.9         77.1         88.3         70.6         3.0         2           Secondary special         96.9         83.5         93.1         1.6         9         3.5         93.1         1.6           Secondary special         96.9         83.5         95.3         80.8         0.9         1,0           Wealth quintile         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U         U	mavir						405
Kotayk         98.2         80.7         95.4         80.1         1.0         44           Shirak         98.5         84.2         94.2         82.0         0.6         3           Syunik         92.9         92.1         89.2         80.1         1.5         1           Vayots Dzor         97.8         90.7         95.4         88.6         0.5           Tavush         96.1         82.7         94.6         81.3         1.3         22           Education         Basic         92.9         77.1         88.3         70.6         3.0         22           Secondary special         96.9         83.5         93.1         79.8         1.3         9           Higher         97.8         83.5         95.3         80.8         0.9         1,0           Wealth quintile         Lowest         94.3         74.9         89.8         71.9         3.7         6           Second         94.5         79.2         91.0         75.5         2.2         8							298
Shirak         98.5         84.2         94.2         82.0         0.6         33           Syunik         92.9         92.1         89.2         80.1         1.5         1           Vayots Dzor         97.8         90.7         95.4         88.6         0.5         1           Tavush         96.1         82.7         94.6         81.3         1.3         2           Education         Education         Secondary         94.6         76.7         90.5         73.9         3.1         1.6           Secondary special         96.9         83.5         93.1         79.8         1.3         9           Higher         97.8         83.5         95.3         80.8         0.9         1,0           Wealth quintile         Lowest         94.3         74.9         89.8         71.9         3.7         6           Second         94.5         79.2         91.0         75.5         2.2         8							214
Syunik         92.9         92.1         89.2         80.1         1.5         1           Vayots Dzor         97.8         90.7         95.4         88.6         0.5         1           Tavush         96.1         82.7         94.6         81.3         1.3         2           Education         Basic         92.9         77.1         88.3         70.6         3.0         2           Secondary         94.6         76.7         90.5         73.9         3.1         1.6           Secondary special         96.9         83.5         93.1         79.8         1.3         9           Higher         97.8         83.5         95.3         80.8         0.9         1,0           Wealth quintile         Lowest         94.3         74.9         89.8         71.9         3.7         6           Second         94.5         79.2         91.0         75.5         2.2         8							476
Vayots Dzor         97.8         90.7         95.4         88.6         0.5           Tavush         96.1         82.7         94.6         81.3         1.3         22           Education         Basic         92.9         77.1         88.3         70.6         3.0         22           Secondary         94.6         76.7         90.5         73.9         3.1         1,6           Secondary special         96.9         83.5         93.1         79.8         1.3         5           Higher         97.8         83.5         95.3         80.8         0.9         1,0           Wealth quintile         Lowest         94.3         74.9         89.8         71.9         3.7         6           Second         94.5         79.2         91.0         75.5         2.2         8							349 172
Tavush96.182.794.681.31.32EducationBasic92.977.188.370.63.02Secondary94.676.790.573.93.11.6Secondary special96.983.593.179.81.39Higher97.883.595.380.80.91,0Wealth quintileLowest94.374.989.871.93.76Second94.579.291.075.52.28							87
Basic         92.9         77.1         88.3         70.6         3.0         22           Secondary         94.6         76.7         90.5         73.9         3.1         1,6           Secondary special         96.9         83.5         93.1         79.8         1.3         9           Higher         97.8         83.5         95.3         80.8         0.9         1,0           Wealth quintile         Lowest         94.3         74.9         89.8         71.9         3.7         6           Second         94.5         79.2         91.0         75.5         2.2         8							208
Secondary         94.6         76.7         90.5         73.9         3.1         1,6           Secondary special         96.9         83.5         93.1         79.8         1.3         9           Higher         97.8         83.5         95.3         80.8         0.9         1,0           Wealth quintile         Lowest         94.3         74.9         89.8         71.9         3.7         6           Second         94.5         79.2         91.0         75.5         2.2         8	cation						
Secondary special         96.9         83.5         93.1         79.8         1.3         99.9           Higher         97.8         83.5         95.3         80.8         0.9         1,0           Wealth quintile         Lowest         94.3         74.9         89.8         71.9         3.7         66           Second         94.5         79.2         91.0         75.5         2.2         8		92.9	77.1	88.3	70.6	3.0	205
Higher         97.8         83.5         95.3         80.8         0.9         1,0           Wealth quintile         Lowest         94.3         74.9         89.8         71.9         3.7         6           Second         94.5         79.2         91.0         75.5         2.2         8	econdary	94.6			73.9		1,669
Lowest         94.3         74.9         89.8         71.9         3.7         6           Second         94.5         79.2         91.0         75.5         2.2         8							953
Lowest94.374.989.871.93.76Second94.579.291.075.52.28	•	97.8	83.5	95.3	80.8	0.9	1,064
Second 94.5 79.2 91.0 75.5 2.2 8		04.0	74.0	00.0	74.0	0.7	005
							695
							834 721
							721
							855
5	•						3,895

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes 1 woman with missing information on employment and 4 women with no education.



### Figure 15.1 Number of decisions in which currently married women participate

There is a strong correlation between currently married women's age and their participation in decision making. The percentage of women participating in all three decisions increases with age, from 56 percent among women age 20-24 to 89 percent among women age 45-49. Women with no children are less likely (67 percent) than women with children, particularly women with 3-4 children (82 percent), to participate in all three decisions. The proportion of currently married women participating in all three decisions varies widely among regions, ranging from 47 percent in Ararat to 90 percent in Armavir. Women's education and wealth have a positive association with their participation in household decisions.

Table 15.9.2 shows that a large majority of married men (82 percent) participate alone or jointly with their wives in making decisions about their own health care, while only 67 percent participate in making decisions about major household purchases. Only two-thirds of currently married men participate in both decisions, and 16 percent report having no say in either of the decisions. The percentage of men participating in both specified decisions increases with age and number of children and is much higher among men in urban areas (72 percent) than among men in rural areas (57 percent). There are large differences in the proportion of currently married men participating in both decisions across regions, with very few men in Kotayk (3 percent) and almost all men in Aragatsotn (99 percent) participating in both decisions. The proportion of men who participate in both decisions does not vary in a clear pattern by wealth but does increase with increasing education, from 52 percent among men with a basic education to 74 percent among men with a higher education.

## Table 15.9.2 Men's participation in decision making by background characteristics

Percentage of currently married men age 15-49 who usually make specific decisions either alone or jointly with their wife, according to background characteristics, Armenia 2015-16

Making major         Neither of the two purchases         Neither of decisions         Number of decisions           Age		Specific	decisions			
Background characteristic         Man's own houséhold         Both purchases         decisions         the two decisions         Number of decisions           Age 20-24         74.0         41.3         41.3         26.0         52           25-29         80.6         63.2         60.8         17.0         206           30-34         81.5         63.6         61.9         16.8         322           30-34         81.5         63.6         61.9         16.8         322           40-44         85.4         69.8         68.5         13.2         309           45-49         82.9         74.5         73.3         16.0         277           Employment (last 12 months)         0         65.4         17.4         1.293           Employed for cash         81.0         67.0         65.4         17.4         1.293           Employed not for cash         80.2         60.1         58.7         18.4         120           1-2         83.3         66.8         65.2         15.1         1.061           3-4         79.4         71.1         69.3         18.8         313           5+         *         *         *         *         *					Neither of	
Age74.041.341.326.05225-2980.663.260.817.020630-3481.563.661.916.832235-3982.368.566.615.8320 $40.44$ 85.469.868.513.2309 $45-49$ 82.974.573.316.0297Employment (last 12months)Not employed93.871.569.74.4165Employed for cash81.067.065.417.41,293Employed not for cash80.457.157.119.647O80.260.158.718.41201-283.366.865.215.11,0613-479.471.169.318.83135+*****ResidenceUrban86.773.771.911.5859Rural76.758.657.422.1648Region95.986.698.60.571Yerevan97.185.484.01.5446Aragatsotin99.598.698.60.571Ararat68.059.658.831.1151Arrat68.059.658.831.3118Lori100.068.968.90.094Kotayk10.74.72.887.4186Shirak <t< td=""><td>Background</td><td>Man's own</td><td>,</td><td>Both</td><td></td><td>Number of</td></t<>	Background	Man's own	,	Both		Number of
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	characteristic	health	purchases	decisions	decisions	men
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Age					
30-34         81.5         63.6         61.9         16.8         322           35-39         82.3         68.5         66.6         15.8         320           40-44         85.4         69.8         68.5         13.2         309           45-49         82.9         74.5         73.3         16.0         297           Employment (last 12 months)		74.0	41.3	41.3	26.0	52
35-39         82.3         68.5         66.6         15.8         320           40-44         85.4         69.8         68.5         13.2         309           45-49         82.9         74.5         73.3         16.0         297           Employment (last 12 months)         months)         93.8         71.5         69.7         4.4         165           Employed for cash         81.0         67.0         65.4         17.4         1.293           Employed not for cash         80.4         57.1         57.1         19.6         47           0         80.2         60.1         58.7         18.4         120           1-2         83.3         66.8         65.2         15.1         1.061           3-4         79.4         71.1         69.3         18.8         313           5+         *         *         *         *         13           Residence           Urban         86.7         73.7         71.9         11.5         859           Rural         76.7         58.6         57.4         22.1         648           Region         Yerevan         97.1         85.4         84.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
40-44         85.4         69.8         68.5         13.2         309           45-49         82.9         74.5         73.3         16.0         297           Employment (last 12 months)						
45-49         82.9         74.5         73.3         16.0         297           Employment (last 12 months)         Not employed         93.8         71.5         69.7         4.4         165           Employed for cash Employed not for cash         81.0         67.0         65.4         17.4         1,293           Number of living children         0         80.2         60.1         58.7         18.4         120           1-2         83.3         66.8         65.2         15.1         1,061           3-4         79.4         71.1         69.3         18.8         313           5+         *         *         *         *         13           Residence           Urban         86.7         73.7         71.9         11.5         859           Rural         76.7         58.6         57.4         22.1         648           Region           Yerevan         97.1         85.4         84.0         1.5         446           Aragatsotn         99.5         98.6         98.6         0.5         71           Araet         68.0         59.6         58.8         31.1         151 <tr< td=""><td></td><td></td><td></td><td></td><td></td><td></td></tr<>						
months) Not employed93.871.569.74.4165Employed for cash Employed not for cash81.067.065.417.41,293Number of living children77.157.119.647080.260.158.718.41201-283.366.865.215.11,0613-479.471.169.318.83135+*****Urban ResidenceUrban Yerevan86.773.771.911.5MarceUrban Yerevan97.185.484.01.5446Aragatsotn99.598.698.60.571Ararat68.059.658.831.1151Armavir87.256.655.812.0159Gegharkunik93.786.383.33.3118Lori100.068.968.90.094Kotayk10.74.72.887.4186Shirak94.770.966.40.7119Syunik99.257.857.00.076EducationEEEEBasic71.255.051.925.6174Secondary82.965.564.215.8717Secondary special Becial82.367.966.616.4240Higher86.575.774.2 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
Not employed         93.8         71.5         69.7         4.4         165           Employed for cash         81.0         67.0         65.4         17.4         1,293           Employed not for cash         80.4         57.1         57.1         19.6         47           cash         -         57.1         57.1         19.6         47           Number of living children         -         -         -         -         -           0         80.2         60.1         58.7         18.4         120           1-2         83.3         66.8         65.2         15.1         1,061           3-4         79.4         71.1         69.3         18.8         313           5+         *         *         *         *         13           Residence	Employment (last 12					
Employed for cash         81.0         67.0         65.4         17.4         1,293           Employed not for cash         80.4         57.1         57.1         19.6         47           Number of living children						
Employed not for cash         80.4         57.1         57.1         19.6         47           Number of living children						
cash           Number of living children           0         80.2         60.1         58.7         18.4         120           1-2         83.3         66.8         65.2         15.1         1,061           3-4         79.4         71.1         69.3         18.8         313           5+         *         *         *         *         13           Residence         Utrban         86.7         73.7         71.9         11.5         859           Rural         76.7         58.6         57.4         22.1         648           Region           446         47.3         446           Aragatsotn         99.5         98.6         98.6         0.5         71           Ararat         68.0         59.6         58.8         31.1         151           Armavir         87.2         56.6         55.8         12.0         159           Gegharkunik         93.7         86.3         33.3         3.3         118           Lori         100.0         68.9         68.9         0.0         94           Kotayk         10.7         4.7         2.8         87.4						,
Number of living children0 $80.2$ $60.1$ $58.7$ $18.4$ $120$ 1-2 $83.3$ $66.8$ $65.2$ $15.1$ $1.061$ $3-4$ $79.4$ $71.1$ $69.3$ $18.8$ $313$ $5+$ ****13ResidenceUrban $86.7$ $73.7$ $71.9$ $11.5$ $859$ Rural $76.7$ $58.6$ $57.4$ $22.1$ $648$ RegionYerevan $97.1$ $85.4$ $84.0$ $1.5$ $446$ Aragatsotn $99.5$ $98.6$ $98.6$ $0.5$ $71$ Ararat $68.0$ $59.6$ $58.8$ $31.1$ $151$ Armavir $87.2$ $56.6$ $55.8$ $12.0$ $159$ Gegharkunik $93.7$ $86.3$ $83.3$ $3.3$ $118$ Lori $100.0$ $68.9$ $68.9$ $0.0$ $94$ Kotayk $10.7$ $4.7$ $2.8$ $87.4$ $186$ Shirak $94.7$ $70.9$ $66.4$ $0.7$ $119$ Syunik $98.9$ $97.0$ $95.9$ $0.0$ $55$ Vayots Dzor $92.3$ $78.6$ $75.3$ $4.4$ $34$ Tavush $99.2$ $55.5$ $64.2$ $15.8$ $717$ Secondary $82.9$ $65.5$ $64.2$ $15.8$ $717$ Secondary special $82.3$ $67.9$ $66.6$ $16.4$ $240$ Higher $86.5$ $75.7$ <td></td> <td>80.4</td> <td>57.1</td> <td>57.1</td> <td>19.6</td> <td>47</td>		80.4	57.1	57.1	19.6	47
children         0         80.2         60.1         58.7         18.4         120           1-2         83.3         66.8         65.2         15.1         1,061           3-4         79.4         71.1         66.8         65.2         15.1         1,061           3-4         79.4         71.7         71.9         11.5         859         8           Residence         Urban         86.7         73.7         71.9         11.5         859           Rural         76.7         58.6         57.4         22.1         648           Region           44.0         1.5         446           Aragatsotn         99.5         98.6         98.6         0.5         71           Ararat         68.0         59.6         58.8         31.1         151           Armavir         87.2         56.6         55.8         12.0         159           Gegharkunik         93.7         86.3         83.3         3.3         118           Lori         100.0         68.9         9.0         94         Kotayk         10.7         4.7         2.8         87.4         186           Shirak						
1-2       83.3       66.8       65.2       15.1       1,061         3-4       79.4       71.1       69.3       18.8       313         5+       *       *       *       *       *       13         Residence         Urban       86.7       73.7       71.9       11.5       859         Rural       76.7       58.6       57.4       22.1       648         Region         Yerevan       97.1       85.4       84.0       1.5       446         Aragatsotn       99.5       98.6       98.6       0.5       71         Ararat       68.0       59.6       58.8       31.1       151         Armavir       87.2       56.6       55.8       12.0       159         Gegharkunik       93.7       86.3       83.3       3.3       118         Lori       100.0       68.9       0.0       94         Kotayk       10.7       4.7       2.8       87.4       186         Shirak       94.7       70.9       66.4       0.7       119         Syunik       98.9       97.0       95.9       0.0       76						
3-479.471.1 $69.3$ $18.8$ $313$ 5+*****13ResidenceUrban $86.7$ $73.7$ $71.9$ $11.5$ $859$ Rural76.7 $58.6$ $57.4$ $22.1$ $648$ RegionYerevan97.1 $85.4$ $84.0$ $1.5$ $446$ Aragatsotn99.5 $98.6$ $98.6$ $0.5$ $71$ Ararat $68.0$ $59.6$ $58.8$ $31.1$ $151$ Armavir $87.2$ $56.6$ $55.8$ $12.0$ $159$ Gegharkunik93.7 $86.3$ $83.3$ $3.3$ $118$ Lori100.0 $68.9$ $68.9$ $0.0$ $94$ Kotayk $10.7$ $4.7$ $2.8$ $87.4$ $186$ Shirak $94.7$ $70.9$ $66.4$ $0.7$ $119$ Syunik $98.9$ $97.0$ $95.9$ $0.0$ $55$ Vayots Dzor $92.3$ $77.6$ $75.3$ $4.4$ $34$ Tavush $99.2$ $57.8$ $57.0$ $0.0$ $76$ Education $Basic$ $71.2$ $55.0$ $51.9$ $25.6$ $174$ Secondary $82.9$ $65.5$ $64.2$ $15.8$ $717$ Secondary special $82.3$ $67.9$ $66.6$ $16.4$ $240$ Higher $86.5$ $75.7$ $74.2$ $12.0$ $372$ Weath $quintile$ $auinauinauinauin<$	-					
5+*****13ResidenceUrban86.773.771.911.5859Rural76.758.657.422.1648RegionYerevan97.185.484.01.5446Aragatsotn99.598.698.60.571Ararat68.059.658.831.1151Armavir87.256.655.812.0159Gegharkunik93.786.383.33.3118Lori100.068.968.90.094Kotayk10.74.72.887.4186Shirak94.770.966.40.7119Syunik98.997.095.90.055Vayots Dzor92.378.675.34.434Tavush99.257.857.00.076EducationEBasic71.255.051.925.6174Secondary special82.367.966.616.4240Higher86.575.774.212.0372Wealth quintileLowest79.757.955.918.4280Lowest79.757.955.918.428036Second78.062.261.921.6306Middle82.873.070.915.1267Fourth82.065.565.01						
Residence         Urban         86.7         73.7         71.9         11.5         859           Rural         76.7         58.6         57.4         22.1         648           Region         97.1         85.4         84.0         1.5         446           Aragatsotn         99.5         98.6         98.6         0.5         71           Ararat         68.0         59.6         58.8         31.1         151           Armavir         87.2         56.6         55.8         12.0         159           Gegharkunik         93.7         86.3         83.3         3         118           Lori         100.0         68.9         68.9         0.0         94           Kotayk         10.7         4.7         2.8         87.4         186           Shirak         94.7         70.9         66.4         0.7         119           Syunik         98.9         97.0         95.9         0.0         55           Vayots Dzor         92.3         78.6         75.0         0.0         76           Education         E         E         E         E         P         P         P         P	•	/9.4	/1.1	69.3	18.8	
Urban86.773.771.911.5859Rural76.758.657.422.1648RegionYerevan97.185.484.01.5446Aragatsotn99.598.698.60.571Ararat68.059.658.831.1151Armavir87.256.655.812.0159Gegharkunik93.786.383.33.3118Lori100.068.968.90.094Kotayk10.74.72.887.4186Shirak94.770.966.40.7119Syunik98.997.095.90.055Vayots Dzor92.378.675.34.434Tavush99.257.857.00.076EducationBasic71.255.051.925.6174Secondary82.965.564.215.8717Secondary special82.367.966.616.4240Higher86.575.774.212.0372Wealth quintileUUUUULowest79.757.955.918.4280Second78.062.261.921.6306Middle82.873.070.915.1267Fourth82.065.565.017.5319Highest<						10
Rural         76.7         58.6         57.4         22.1         648           Region		86 7	73 7	71 9	11.5	859
Yerevan         97.1         85.4         84.0         1.5         446           Aragatsotn         99.5         98.6         98.6         0.5         71           Ararat         68.0         59.6         58.8         31.1         151           Armavir         87.2         56.6         55.8         12.0         159           Gegharkunik         93.7         86.3         83.3         3.3         118           Lori         100.0         68.9         68.9         0.0         94           Kotayk         10.7         4.7         2.8         87.4         186           Shirak         94.7         70.9         66.4         0.7         119           Syunik         98.9         97.0         95.9         0.0         55           Vayots Dzor         92.3         78.6         75.3         4.4         34           Tavush         99.2         57.8         57.0         0.0         76           Education         E         E         E         E         E         E         E         E         E         E         E         E         E         E         E         E         E         E						
Aragatsotn         99.5         98.6         98.6         0.5         71           Ararat         68.0         59.6         58.8         31.1         151           Armavir         87.2         56.6         55.8         12.0         159           Gegharkunik         93.7         86.3         83.3         3.3         118           Lori         100.0         68.9         0.0         94           Kotayk         10.7         4.7         2.8         87.4         186           Shirak         94.7         70.9         66.4         0.7         119           Syunik         98.9         97.0         95.9         0.0         55           Vayots Dzor         92.3         78.6         75.3         4.4         34           Tavush         99.2         57.8         57.0         0.0         76           Education         E         E         Secondary         82.9         65.5         64.2         15.8         717           Secondary special         82.3         67.9         66.6         16.4         240           Higher         86.5         75.7         74.2         12.0         372	Region					
Ararat         68.0         59.6         58.8         31.1         151           Armavir         87.2         56.6         55.8         12.0         159           Gegharkunik         93.7         86.3         83.3         3.3         118           Lori         100.0         68.9         68.9         0.0         94           Kotayk         10.7         4.7         2.8         87.4         186           Shirak         94.7         70.9         66.4         0.7         119           Syunik         98.9         97.0         95.9         0.0         55           Vayots Dzor         92.3         78.6         75.3         4.4         34           Tavush         99.2         57.8         57.0         0.0         76           Education         E         E         Secondary         82.9         65.5         64.2         15.8         717           Secondary special         82.3         67.9         66.6         16.4         240           Higher         86.5         75.7         74.2         12.0         372           Wealth quintile         E         E         26.6         16.4         240 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Armavir         87.2         56.6         55.8         12.0         159           Gegharkunik         93.7         86.3         83.3         3.3         118           Lori         100.0         68.9         68.9         0.0         94           Kotayk         10.7         4.7         2.8         87.4         186           Shirak         94.7         70.9         95.9         0.0         55           Vayots Dzor         92.3         78.6         75.3         4.4         34           Tavush         99.2         57.8         57.0         0.0         76           Education         E         E         Secondary         82.9         65.5         64.2         15.8         717           Secondary special         82.3         67.9         66.6         16.4         240         14         14         14         14         12.0         372           Wealth quintile         E         E         E         E         E         18.5         75.7         74.2         12.0         372           Wealth quintile         82.8         73.0         70.9         15.1         267         267         12.6         306						
Gegharkunik         93.7         86.3         83.3         3.3         118           Lori         100.0         68.9         68.9         0.0         94           Kotayk         10.7         4.7         2.8         87.4         186           Shirak         94.7         70.9         66.4         0.7         119           Syunik         98.9         97.0         95.9         0.0         55           Vayots Dzor         92.3         78.6         75.3         4.4         34           Tavush         99.2         57.8         57.0         0.0         76           Education         Basic         71.2         55.0         51.9         25.6         174           Secondary         82.9         65.5         64.2         15.8         717           Secondary special         82.3         67.9         66.6         16.4         240           Higher         86.5         75.7         74.2         12.0         372           Wealth quintile         Lowest         79.7         57.9         55.9         18.4         280           Second         78.0         62.2         61.9         21.6         306 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Lori100.068.968.90.094Kotayk10.74.72.887.4186Shirak94.770.966.40.7119Syunik98.997.095.90.055Vayots Dzor92.378.675.34.434Tavush99.257.857.00.076EducationBasic71.255.051.925.6174Secondary82.965.564.215.8717Secondary special82.367.966.616.4240Higher86.575.774.212.0372Wealth quintileLowest79.757.955.918.4280Second78.062.261.921.6306Middle82.873.070.915.1267Fourth82.065.565.017.5319Highest88.776.773.78.3335						
Kotayk         10.7         4.7         2.8         87.4         186           Shirak         94.7         70.9         66.4         0.7         119           Syunik         98.9         97.0         95.9         0.0         55           Vayots Dzor         92.3         78.6         75.3         4.4         34           Tavush         99.2         57.8         57.0         0.0         76           Education         E         E         Secondary         82.9         65.5         64.2         15.8         717           Secondary special         82.3         67.9         66.6         16.4         240           Higher         86.5         75.7         74.2         12.0         372           Wealth quintile         E         E         280         365.5         65.9         18.4         280           Second         78.0         62.2         61.9         21.6         306           Middle         82.8         73.0         70.9         15.1         267           Fourth         82.0         65.5         65.0         17.5         319           Highest         88.7         76.7         73.7 <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td>	0					
Syunik         98.9         97.0         95.9         0.0         55           Vayots Dzor         92.3         78.6         75.3         4.4         34           Tavush         99.2         57.8         57.0         0.0         76           Education         Basic         71.2         55.0         51.9         25.6         174           Secondary         82.9         65.5         64.2         15.8         717           Secondary special         82.3         67.9         66.6         16.4         240           Higher         86.5         75.7         74.2         12.0         372           Wealth quintile         Lowest         79.7         57.9         55.9         18.4         280           Second         78.0         62.2         61.9         21.6         306           Middle         82.8         73.0         70.9         15.1         267           Fourth         82.0         65.5         65.0         17.5         319           Highest         88.7         76.7         73.7         8.3         335						
Vayots Dzor         92.3         78.6         75.3         4.4         34           Tavush         99.2         57.8         57.0         0.0         76           Education         Basic         71.2         55.0         51.9         25.6         174           Secondary         82.9         65.5         64.2         15.8         717           Secondary special         82.3         67.9         66.6         16.4         240           Higher         86.5         75.7         74.2         12.0         372           Wealth quintile         Lowest         79.7         57.9         55.9         18.4         280           Second         78.0         62.2         61.9         21.6         306           Middle         82.8         73.0         70.9         15.1         267           Fourth         82.0         65.5         65.0         17.5         319           Highest         88.7         76.7         73.7         8.3         335	Shirak	94.7	70.9	66.4	0.7	119
Tavush99.257.857.00.076Education99.257.857.051.925.6174Basic71.255.051.925.6174Secondary82.965.564.215.8717Secondary special82.367.966.616.4240Higher86.575.774.212.0372Wealth quintileLowest79.757.955.918.4280Second78.062.261.921.6306Middle82.873.070.915.1267Fourth82.065.565.017.5319Highest88.776.773.78.3335						
Education         Basic         71.2         55.0         51.9         25.6         174           Secondary         82.9         65.5         64.2         15.8         717           Secondary special         82.3         67.9         66.6         16.4         240           Higher         86.5         75.7         74.2         12.0         372           Wealth quintile         Lowest         79.7         57.9         55.9         18.4         280           Second         78.0         62.2         61.9         21.6         306           Middle         82.8         73.0         70.9         15.1         267           Fourth         82.0         65.5         65.0         17.5         319           Highest         88.7         76.7         73.7         8.3         335						
Basic         71.2         55.0         51.9         25.6         174           Secondary         82.9         65.5         64.2         15.8         717           Secondary special         82.3         67.9         66.6         16.4         240           Higher         86.5         75.7         74.2         12.0         372           Wealth quintile         Lowest         79.7         57.9         55.9         18.4         280           Second         78.0         62.2         61.9         21.6         306           Middle         82.8         73.0         70.9         15.1         267           Fourth         82.0         65.5         65.0         17.5         319           Highest         88.7         76.7         73.7         8.3         335		00.2	07.0	07.0	0.0	70
Secondary         82.9         65.5         64.2         15.8         717           Secondary special         82.3         67.9         66.6         16.4         240           Higher         86.5         75.7         74.2         12.0         372           Wealth quintile         Lowest         79.7         57.9         55.9         18.4         280           Second         78.0         62.2         61.9         21.6         306           Middle         82.8         73.0         70.9         15.1         267           Fourth         82.0         65.5         65.0         17.5         319           Highest         88.7         76.7         73.7         8.3         335		71.2	55.0	51.0	25.6	174
Secondary special Higher         82.3 86.5         67.9 75.7         66.6 74.2         16.4 12.0         240 372           Wealth quintile Lowest         79.7         57.9         55.9         18.4         280 306           Second         78.0         62.2         61.9         21.6         306           Middle         82.8         73.0         70.9         15.1         267           Fourth         82.0         65.5         65.0         17.5         319           Highest         88.7         76.7         73.7         8.3         335						
Wealth quintile           Lowest         79.7         57.9         55.9         18.4         280           Second         78.0         62.2         61.9         21.6         306           Middle         82.8         73.0         70.9         15.1         267           Fourth         82.0         65.5         65.0         17.5         319           Highest         88.7         76.7         73.7         8.3         335						
Lowest79.757.955.918.4280Second78.062.261.921.6306Middle82.873.070.915.1267Fourth82.065.565.017.5319Highest88.776.773.78.3335	Higher	86.5	75.7	74.2	12.0	372
Second78.062.261.921.6306Middle82.873.070.915.1267Fourth82.065.565.017.5319Highest88.776.773.78.3335						
Middle         82.8         73.0         70.9         15.1         267           Fourth         82.0         65.5         65.0         17.5         319           Highest         88.7         76.7         73.7         8.3         335						
Fourth82.065.565.017.5319Highest88.776.773.78.3335						
Highest         88.7         76.7         73.7         8.3         335						
Total 82.4 67.2 65.6 16.0 1,506						
	Total	82.4	67.2	65.6	16.0	1,506

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Total includes 1 man with missing information on employment and 3 men with no education.

### 15.5 ATTITUDES TOWARD WIFE BEATING

Wife beating is a form of physical violence that degrades women's humanity and is a violation of women's human rights. Furthermore, this form of violence lowers a woman's self-esteem and her image in society, leading to her disempowerment. Acceptance of this practice reflects women's low status and the perception that men are superior to women.

The 2015-16 ADHS collected information on attitudes toward wife beating. Women and men were asked whether a husband is justified in beating his wife under a series of circumstances: if the wife burns the food, argues with him, goes out without telling him, neglects the children, and refuses to have sexual intercourse with him. Women who perceive that a husband is justified in hitting or beating his wife for any

of the mentioned reasons may believe that they are lower in status, both absolutely and relative to men. Such a stereotypical perception could act as a barrier to taking advantage of social and economic opportunities. This in turn may negatively affect women's quality of life and general well-being.

Tables 15.10.1 and 15.10.2 show acceptance of wife beating by women and men, respectively, in each of the five circumstances listed above. They also show the percentages of women and men who agree with wife beating for at least one of the specified circumstances.

### Table 15.10.1 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, Armenia 2015-16

	Husban	d is justified	d in hitting or	beating his	s wife if she:	Percentage who agree	
Background characteristic	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him	with at least one specified reason	Number of women
Age							
15-19	0.4	4.8	5.1	7.2	0.6	8.7	725
20-24	0.2	5.4	4.5	7.0	0.7	8.7	928
25-29 30-34	0.4 0.4	6.0 7.0	4.9 6.3	8.2 9.7	0.7 1.0	9.5 11.3	1,099 1,007
35-39	0.4	6.4	0.3 5.7	9.7 8.6	0.6	10.1	867
40-44	0.3	6.1	4.6	9.2	1.2	10.1	784
45-49	0.2	7.1	5.8	10.4	0.5	11.7	704
Employment (last 12 months)							
Not employed	0.2	5.2	4.2	7.6	0.6	9.1	3,648
Employed for cash	0.6	6.1	4.6	7.6	1.1	9.1	2,115
Employed not for cash	0.3	16.0	19.8	24.4	0.6	26.2	351
Number of living children							
0	0.2	4.7	4.7	6.7	0.5	8.2	2,120
1-2	0.3	5.5	4.2	8.3	0.5	9.5	2,990
3-4	0.9	10.5	9.1	13.4	2.1	15.8	966
5+	(0.0)	(16.4)	(13.8)	(17.8)	(0.0)	(19.3)	39
Marital status							
Never married	0.3	4.7	5.0	6.8	0.5	8.4	1,830
Married or living	0.4	7.1	5.7	9.9	0.9	11.4	3,895
together Divorced/separated/ widowed	0.3	3.2	2.5	3.8	0.8	5.3	390
Residence							
Urban	0.1	3.4	2.5	5.4	0.5	6.3	3,657
Rural	0.8	10.2	9.3	13.4	1.2	15.7	2,459
Region							
Yerevan	0.0	0.7	0.3	1.6	0.3	2.2	2,001
Aragatsotn	0.3	18.6	23.2	32.2	0.7	40.2	315
Ararat	0.0	3.1	1.1	3.1	0.3	5.7	552
Armavir Gegharkunik	0.1 3.4	1.5 33.2	0.2 38.3	1.9 40.0	0.1 5.1	2.2 41.2	586 478
Lori	0.0	0.9	1.0	7.6	0.0	7.8	355
Kotayk	0.3	2.8	1.5	6.9	0.7	7.3	678
Shirak	0.0	4.1	0.4	1.6	0.0	4.9	510
Syunik	0.0	0.3	0.0	2.8	0.3	2.8	238
Vayots Dzor	1.5	33.9	12.0	31.1	2.6	39.9	119
Tavush	0.0	11.4	7.3	16.9	0.6	17.4	283
Education	0.1	F 2	E 4	0.4	1 5	10.0	206
Basic Secondary	0.1 0.9	5.3 9.2	5.4 8.7	9.4 12.6	1.5 1.2	12.0 14.4	396 2,444
Secondary special	0.9	9.2 5.1	6.7 4.2	7.5	0.4	8.5	2,444 1,360
Higher	0.0	3.0	4.2	4.2	0.4	5.3	1,300
Wealth guintile							
Lowest	0.9	9.4	7.5	11.4	1.5	14.3	1,081
Second	0.5	8.2	8.0	12.7	0.9	14.5	1,242
Middle	0.4	8.4	7.9	10.5	0.7	11.9	1,142
Fourth	0.0	3.4	2.6	6.1	0.2	6.9	1,287
Highest	0.1	2.2	1.2	3.5	0.6	4.2	1,365
Total	0.4	6.1	5.2	8.6	0.8	10.1	6,116

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes 2 women with missing information on employment and 5 women with no education.

### Table 15.10.2 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, Armenia 2015-16

	Husband	is justified	in hitting or l	peating his	wife if she: Refuses to	Percentage who agree	
			Goes out	Neglacta	have sexual	who agree with at least one	
Background	Burns	Argues	without	Neglects the	intercourse	specified	Numbe
characteristic	the food	with him	telling him	children	with him	reason	of men
Age							
15-19	0.7	14.0	14.2	19.0	0.7	24.7	345
20-24	0.6	16.9	13.4	18.7	1.2	23.9	467
25-29	0.8	16.9	10.3	16.0	1.3	23.2	464
30-34	0.5	16.7	10.7	17.3	1.6	22.7	427
35-39 40-44	0.9 0.4	12.2 20.9	8.2 14.2	15.2 20.0	2.8 2.2	19.7 25.1	376 346
45-49	0.4	14.9	14.2	14.0	1.9	18.1	330
Employment (last 12							
months)							
Not employed	0.7	12.2	8.7	16.0	1.5	20.7	790
Employed for cash	0.6	17.0	12.3	17.0	1.5	22.2	1,874
Employed not for cash	1.0	31.7	26.3	31.5	6.0	47.0	90
Number of living							
children	0.0	1E 9	10.0	17.0	1 0	22.0	1 204
0 1-2	0.9 0.4	15.8 15.8	12.9 9.7	17.2 17.0	1.3 2.1	22.9 22.2	1,321
3-4	0.4 0.5	15.8	9.7 13.5	17.0	2.1 1.4	22.2	1,100 322
5-4 5+	0.5	10.0	13.5	*	1.4	*	13
Aarital status							
Never married	1.0	16.0	12.9	17.2	1.4	23.2	1,190
Married or living							
together	0.4	15.8	10.3	16.5	1.5	21.3	1,506
Divorced/separated/ widowed	(0.0)	(27.5)	(22.5)	(33.7)	(9.1)	(42.3)	59
Residence	(0.0)	()	()	(00.17)	(0.1)	(.=)	
Urban	0.7	9.5	7.1	12.0	1.2	15.1	1,558
Rural	0.7	24.7	17.7	23.9	2.2	32.3	1,197
Region							
Yerevan	0.2	1.3	1.0	3.1	0.9	3.8	833
Aragatsotn	0.0	3.1	3.3	3.7	0.0	4.3	159
Ararat	0.0	0.8	0.8	0.2	0.0	1.2	290
Armavir	1.4	28.5	13.9	12.1	2.1	34.5	268
Gegharkunik	0.3	77.3	99.0	97.7	6.4	100.0	235
Lori	0.4	2.5	0.4	9.5 17.1	0.0	9.9 22 7	184
Kotayk Shirak	0.0 4.5	14.9 33.4	4.7 3.5	17.1 38.0	0.3 6.2	22.7 50.9	299 201
Shirak Syunik	4.5 2.3	33.4 2.3	3.5 5.5	38.0 7.8	6.2 3.0	50.9 10.4	104
Vayots Dzor	2.3	2.3	5.5 13.8	7.0 18.8	3.0 0.4	24.2	56
Tavush	0.0	22.5	1.2	12.2	0.4	31.3	126
Education							
Basic	1.0	22.0	13.6	17.8	2.4	30.3	360
Secondary	0.6	20.2	16.3	22.8	2.2	27.9	1,250
Secondary special	0.6	13.0	6.8	14.1	1.5	18.9	403
Higher	0.6	8.1	5.8	9.1	0.5	11.9	736
Vealth quintile	o -				<b>a</b> -	<b></b>	
Lowest	0.5	22.6	16.3	19.1	2.3	29.2	523
Second	1.2	23.2	15.0	23.1	1.8	30.6	583
Middle	0.4	19.5	17.5	24.7	2.8	28.8	521
Fourth	1.0	10.2	5.9	11.9	0.9	15.6	566
Highest	0.2	5.5	4.4	7.6	0.4	9.3	562
Fotal	0.7	16.1	11.7	17.2	1.6	22.6	2,755

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases. Total includes 1 man with missing information on employment and 5 men with no education.

Among women age 15-49, agreement with specific reasons justifying wife beating ranges from a low of less than 1 percent if she burns the food to a high of 9 percent if she neglects the children. Agreement with each reason justifying wife beating is higher among men than women and ranges from a low of 1 percent if she burns the food to 17 percent if she neglects the children. Overall, 10 percent of women and 23 percent of men agree that wife beating is justified for at least one of the specified situations.

Whether women believe a husband is justified in wife beating for any of the specified reasons increases marginally with age and number of children and is relatively high among women who are employed but do not earn cash (26 percent). Agreement with at least one reason is more than twice as high among women in rural areas (16 percent) as among women in urban areas (6 percent). In addition, women who have never been married (8 percent) and those who were previously married (5 percent) are less likely than currently married women (11 percent) to believe that there are occasions when wife beating is justified. Attitudes toward wife beating vary considerably across regions, with acceptance of wife beating ranging from 2 to 3 percent in Yerevan, Armavir, and Syunik to 40 to 41 percent in Gegharkunik, Aragatsotn, and Vayots Dzor. Acceptance of wife beating among women tends to vary inversely with education and wealth.

The percentage of men who believe a husband is justified in beating his wife for any of the specified reasons varies inconsistently with age, and men who are employed but do not earn cash are much more likely to justify wife beating (47 percent) than unemployed men or men employed for cash (21-22 percent). Similar to women, men in rural areas (32 percent) are more likely than those in urban areas (15 percent) to agree with at least one specified justification for wife beating. Men in Ararat (1 percent) are least likely to agree with at least one specified reason, while men in Gegharkunik are most likely (100 percent) to do so. As observed for women, the percentage of men who agree with at least one of the specified reasons that justify wife beating is highest among the least educated and poorest men.

There has been virtually no change in attitudes toward wife beating among either women or men since the 2010 ADHS, suggesting little or no change in gender attitudes. The proportions of women (9 percent) and men (20 percent) who agreed with at least one of the specified reasons that justify wife beating in 2010 are both marginally lower than the corresponding proportions in 2015-16 (10 percent and 23 percent).

### 15.6 ATTITUDES TOWARD AND ABILITY TO NEGOTIATE SAFER SEX WITH HUSBANDS

The 2015-16 ADHS asked women and men if they believe that a wife is justified in refusing to have sexual intercourse with her husband if she knows he has sexual intercourse with other women and that a woman is justified in asking that they use a condom if she knows that her husband has a sexually transmitted infection (STI). Believing in a woman's right to refuse sex for any reason and believing in her right to request condom use if she perceives the need for it are both important for negotiating safer sex with husbands. Safer sex protects women and their partners against many diseases, and the ability to have safer sex is an important aspect of women's empowerment.

Table 15.11 shows that 85 percent of women and 73 percent of men age 15-49 agree that a woman can refuse to have sexual intercourse with her husband if she knows that he has sex with other women; also, 87 percent of women and 93 percent of men agree that a woman can ask that they use a condom if she knows that her husband has an STI. In general, attitudes among women favoring women's right to negotiate safer sex with their husbands tend to increase with increasing age, education, and wealth, and these attitudes are more common in urban than rural areas. Ever-married women are more likely to hold favorable attitudes than never-married women. Although agreement varies by region, a majority of women in all regions favor these rights of women for negotiating safer sex. Notably, agreement with a woman's right to refuse sexual intercourse with her husband if she knows he has sex with other women is lowest at 61 percent in Tavush, and agreement with a woman's right to ask that they use a condom if she knows that her husband has an STI is lowest at 72 percent in Gegharkunik and Syunik.

#### Table 15.11 Attitudes toward negotiating safer sexual relations with husband

Percentage of women and men age 15-49 who believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows that he has sexual intercourse with other women, and percentage who believe that a woman is justified in asking that they use a condom if she knows that her husband has a sexually transmitted infection (STI), according to background characteristics, Armenia 2015-16

		Women			Men	
	Woman is	justified in:		Woman is	justified in:	
	Refusing to			Refusing to		
	have sexual			have sexual		
	intercourse	Asking that		intercourse	Asking that	
	with her	they use a		with her	they use a	
	husband if she				condom if she	
Declaration	knows he has		Number		knows that her	Ni unala a u
Background	sex with other	husband has	Number	sex with other	husband has	Number
characteristic	women	an STI	of women	women	an STI	of men
Age						
15-24	73.4	75.7	1,653	64.0	86.0	813
15-19	63.0	64.7	725	57.8	81.5	345
20-24	81.5	84.3	928	68.5	89.4	467
25-29	87.3	89.7	1,099	72.9	95.8	464
30-39	89.6	91.7	1,874	76.3	95.1	802
40-49	88.4	91.6	1,490	78.4	96.3	676
Marital status						
Never married	73.7	75.4	1,830	66.2	87.9	1,190
Ever had sex	*	100.0	12	69.5	93.9	631
Never had sex	73.8	75.2	1,818	62.5	81.2	559
Married/living together	89.1	91.8	3,895	77.5	96.6	1,506
Divorced/separated/	89.2	93.3	390	(75.6)	(95.9)	59
widowed				(*****)	()	
Residence						
Urban	89.4	91.6	3,657	70.6	92.5	1,558
Rural	77.3	80.1	2,459	75.2	93.2	1,197
Region						
Yerevan	95.0	96.6	2,001	65.3	92.9	833
Aragatsotn	81.0	84.2	315	84.5	97.1	159
Ararat	84.9	84.8	552	80.9	94.4	290
Armavir	77.1	79.2	586	94.9	95.8	268
Gegharkunik	70.1	71.6	478	96.1	97.9	235
Lori	90.1	89.8	355	64.9	73.3	184
Kotayk	84.5	92.5	678	47.1	98.7	299
Shirak	81.7	82.2	510	97.4	97.8	201
Syunik	74.4	71.9	238	69.0	69.1	104
Vayots Dzor	82.8	88.7	119	52.5	92.0	56
Tavush	61.2	73.5	283	38.8	94.0	126
Education						
Basic	59.2	65.0	396	72.0	89.3	360
Secondary	81.0	83.5	2,444	74.6	93.1	1,250
Secondary special	88.0	89.3	1,360	71.4	91.3	403
Higher	92.1	94.7	1,910	70.2	95.0	736
Wealth quintile						
Lowest	73.8	75.8	1,081	78.4	92.4	523
Second	81.8	84.0	1,242	74.7	93.1	583
Middle	83.7	87.0	1,142	71.6	93.0	521
Fourth	88.2	90.5	1,287	74.8	93.1	566
Highest	92.8	95.3	1,365	63.7	92.5	562
Total	84.5	87.0	6,116	72.6	92.8	2,755

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. Figures in parentheses are based on 25-49 unweighted cases. Total includes 5 women with no education.

Men's attitudes towards a woman's right to negotiate safer sex generally vary less by background characteristics than attitudes among women. Rural men appear to have more favorable attitudes towards a woman's right to negotiate safer sex than urban men, and the wealthiest men appear less likely than most other men to have these attitudes. Only 39 percent of men in Tavush agree with a woman's right to refuse sexual intercourse with her husband if she knows he has sex with other women, and agreement with this right is also below 50 percent in Kotayk. By contrast, agreement with a woman's right to ask that they use a condom if she knows that her husband has an STI is high in most regions, with the lowest percentage among men in Syunik (69 percent).

In addition to asking about women's and men's attitudes regarding a wife's right to negotiate safer sex with her husband, the 2015-16 ADHS asked currently married women about their own ability to negotiate safer sex. In particular, currently married women age 15-49 were asked if they can say no to their husband if they do not want to have sexual intercourse and if they can ask their husband to use a condom. Table 15.12 shows the percentages of currently married women who said yes to each of these questions by background characteristics. Overall, less than half of currently married women (48 percent in each case) report that they can say no to their husband if they do not want to have sexual intercourse and that they can ask their husband to use a condom.

Only 17 percent of currently married women age 15-24 say yes to each of the two questions about their ability to negotiate safer sex; however, this proportion tends to rise sharply with age. Among women age 40-49, 63 percent report that they can say no to their husband if they do not want to have sex, and 59 percent say that they can ask their husband to use a condom. The rural-urban differential in women's ability to negotiate safer sex with their husband is very small, with urban women only slightly more likely than rural women to say ves to either question. Women's ability to negotiate safer sex with their husband increases with increasing wealth but varies inconsistently with education; women with a secondary special education are most likely to say yes to both questions, and women with a basic education are least likely to do so. The percentage of women who

#### Table 15.12 Ability to negotiate sexual relations with husband

Percentage of currently married women age 15-49 who can say no to their husband if they do not want to have sexual intercourse, and percentage who can ask their husband to use a condom, according to background characteristics. Armenia 2015-16

background characteri	sucs, Armenia zu	015-16	
	Percentage		
	who can say		
	no to their		
	husband if	Percentage	
	they do not	who can ask	
	want to have	their husband	
Background	sexual	to use a	Number of
characteristic	intercourse	condom	women
A			
Age	16 7	17.0	1 650
15-24	16.7	17.2	1,653
15-19	3.4	3.4	725
20-24	27.2	27.9	928
25-29	50.7	53.0	1,099
30-39	61.7	62.2	1,874
40-49	63.2	59.1	1,490
Residence			
Urban	49.6	49.7	3,657
Rural	45.4	44.5	2,459
Region			
Yerevan	51.3	50.7	2,001
Aragatsotn	33.0	30.8	315
Ararat	47.2	49.1	552
Armavir	49.5	47.9	586
Gegharkunik	31.2	28.2	478
Lori	54.7	48.0	355
Kotayk	43.8	52.2	678
Shirak	52.0	54.3	510
Syunik	53.8	35.7	238
Vavots Dzor	49.4	47.9	119
Tavush	55.1	60.9	283
Tavusii	55.1	00.9	203
Education			
Basic	31.2	24.0	396
Secondary	46.9	47.2	2,444
Secondary special	54.9	55.0	1,360
Higher	47.8	47.9	1,910
Wealth quintile			
Lowest	42.8	39.9	1,081
Second	45.3	45.8	1,242
Middle	47.3	46.2	1,142
Fourth	47.7	49.6	1,287
Highest	55.1	54.8	1,365
Total	47.0	17.6	6 116
IUldi	47.9	47.6	6,116
Note: Total includes 5	women with no e	education.	

report that they are able to say no to their husband if they do not want to have sexual intercourse ranges from a high of 55 percent in Tavush and Lori to a low of 31 percent in Gegharkunik, while the percentage of women who say that they can ask their husband to use a condom varies from a high of 61 percent in Tavush to a low of 28 percent in Gegharkunik.

### **15.7** INDICATORS OF WOMEN'S EMPOWERMENT

The two sets of empowerment indicators, namely women's participation in making household decisions and their attitudes toward wife beating, are summarized in two separate indices. The first index shows the number of decisions (see Table 15.9.1 for the list of decisions) in which women participate alone or jointly with their husbands. This index ranges in value from 0 to 3 and is positively related to women's empowerment. It reflects the degree of decision-making control that women are able to exercise in areas that affect their own lives and environments. The second indicator, which ranges in value from 0 to 5, is the total number of reasons (see Table 15.10.1 for the list of reasons) for which the woman feels that a husband is justified in beating his wife. A lower score on this indicator is interpreted as reflecting a greater sense of entitlement and self-esteem and higher status.

Table 15.13 shows how these indicators relate to each other among currently married women. In general, the expectation is that women who participate in making household decisions are also more likely to have gender-egalitarian beliefs. The data show that there is the expected positive relationship between the number of decisions in which women participate and the proportion who disagree with all of the reasons justifying a husband beating his wife. Table 15.13 shows that 72 percent of women who do not participate in any of the household decisions disagree with all of the given reasons for a husband beating his wife, as compared with 89 percent of women who participate in all three decisions.

The second panel in Table 15.13 shows that participation in all household decisions declines as the number of justifications for wife beating increases, from 78 percent among women who agree with none of the reasons justifying wife beating to 66 percent among women who agree with three to four reasons. The number of cases of women agreeing with all five reasons is too small to allow any conclusion.

#### Table 15.13 Indicators of women's empowerment

Percentage of currently married women age 15-49 who participate in all decision making and the percentage who disagree with all of the reasons justifying wife beating, according to value on each of the indicators of women's empowerment, Armenia 2015-16

Empowerment indicator	Percentage who participate in all decision making	Percentage who disagree with all reasons justifying wife beating	Number of women
Number of decisions in which women participate <sup>1</sup>			
0	na	71.9	79
1-2	na	87.4	814
3	na	89.4	3,002
Number of reasons for which wife beating is justified <sup>2</sup>			
0	77.7	na	3,452
1-2	76.4	na	278
3-4	66.3	na	153
5	*	na	12

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. na = Not applicable

<sup>1</sup> See Table 15.9.1 for the list of decisions.

 $^{2}$  See Table 15.9.1 for the list of decisions.

15.8 CONTRACEPTIVE USE BY WOMEN'S STATUS

A woman's ability to control her fertility and use a method of contraception is likely to be affected by her sense of empowerment and belief in her ability to control her sexual life and fertility. A woman who feels that she is unable to control other aspects of her life may be less likely to feel that she can make decisions regarding fertility.

Table 15.14 shows the relationship of each of the two empowerment indices with current use of contraceptive methods among currently married women age 15-49. The data indicate that there is a positive association between the two empowerment indices and contraceptive use. For example, the proportion of married women who are using any method of contraception is lower among those who do not participate in household decision making (44 percent) than among those who participate in one or more decisions (57-58 percent). Use of modern methods follows the same pattern: 16 percent of women who do not participate in any of the household decisions are using a modern method, as compared with 28-30 percent of women who participate in at least one decision.

The relationship between contraceptive use and the empowerment indicator based on attitudes toward wife beating is more complex. Women who agree with 3-4 reasons for wife beating are much more likely than women who do not agree with any reason to use a traditional method. By contrast, modern contraception use is much higher among women who do not agree with any reason for wife beating (29 percent) than among women who agree with 3-4 reasons (18 percent). This suggests that while modern contraceptive use varies positively according to women's empowerment, use of traditional methods may be inversely related to empowerment.

Table 15.15 shows how unmet need for family planning varies by the two empowerment indicators. As was the case with contraceptive use, the relationship of the empowerment indicators with unmet need is nuanced and needs to be interpreted with care. Unmet need is higher among women who do not participate in any of the three household decisions (20 percent) than among women who participate in one or more decisions (12 percent); it is also higher among women who do not agree with any reason for wife beating than among women who do. The latter result is more consistent with the idea that women who are more empowered may be more desirous of controlling their fertility, and, if they are not able to access family planning, they will have a higher level of unmet need. In keeping with the idea of more empowered women desiring fewer children, Table 15.15 also shows that the mean ideal number of children is lower among women who participate in at least one household decision (2.7 children) and among women who do not agree with any reason for wife beating (2.6 children) than among women who do not participate in any decisions (3.0 children) and who agree with one or more reasons for wife beating (2.8 to 3.0 children).

#### Table 15.14 Current use of contraception by women's empowerment

Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indicators of women's status, Armenia 2015-16

			M	odern metho	ds	_			
				Tem-					
		A	Famala	porary		A	Net		
Empowerment	4.004	Any modern	Female sterili-	modern	Male	Any traditional	Not		Number
Empowerment indicator	Any method	method <sup>1</sup>	zation	female methods <sup>2</sup>	condom	method	currently using	Total	Number of women
Indicator	method	methou	Zation	methous	CONDON	method	using	TUlai	or women
Number of decisions									
in which women									
participate <sup>3</sup>									
0	43.7	15.5	1.1	5.6	8.8	28.2	56.3	100.0	79
1-2	58.2	30.1	0.7	14.2	15.2	28.1	41.8	100.0	814
3	57.2	27.7	0.7	12.3	14.7	29.5	42.8	100.0	3,002
Number of reasons									
for which wife									
beating is justified <sup>4</sup>									
0	55.8	28.7	0.7	12.8	15.2	27.1	44.2	100.0	3,452
1-2	65.3	25.9	0.2	12.5	13.2	39.4	34.7	100.0	278
3-4	71.5	18.1	0.4	9.0	8.6	53.4	28.5	100.0	153
5	*	*	*	*	*	*	*	100.0	12
Total	57.1	28.0	0.7	12.6	14.7	29.2	42.9	100.0	3,895

Note: If more than one method is used, only the most effective method is considered in this tabulation. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

<sup>1</sup> Female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, lactational amenorrhea method (LAM), and other modern methods

<sup>2</sup> Pill, IUD, injectables, implants, female condom, emergency contraception, lactational amenorrhea method, and other modern methods

<sup>3</sup> See Table 15.9.1 for the list of decisions.

<sup>4</sup> See Table 15.10.1 for the list of reasons.

#### Table 15.15 Ideal number of children and unmet need for family planning by women's empowerment

Mean ideal number of children for women age 15-49 and percentage of currently married women age 15-49 with an unmet need for family planning, according to indicators of women's empowerment, Armenia 2015-16

Empowerment indicator	Mean ideal number of children <sup>1</sup>	Number of	with an unm	of currently mari	y planning <sup>2</sup>	Number of currently married
Empowerment indicator	children	women	For spacing	For limiting	Total	women
Number of decisions in which women participate <sup>3</sup>						
0	3.0	79	14.0	5.6	19.6	79
1-2	2.7	803	8.7	3.6	12.2	814
3	2.7	2,963	5.3	7.1	12.4	3,002
Number of reasons for which wife beating is justified <sup>4</sup>						
0	2.6	5,361	6.5	6.7	13.1	3,452
1-2	2.8	384	3.6	5.5	9.1	278
3-4	3.0	213	2.6	1.3	4.0	153
5	*	17	*	*	*	12
Total	2.6	5,974	6.1	6.4	12.5	3,895

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

<sup>1</sup> Mean excludes respondents who gave non-numeric responses.

<sup>2</sup> Figures for unmet need correspond to the revised definition described in Bradley et al. 2012.
 <sup>3</sup> Restricted to currently married women. See Table 15.9.1 for the list of decisions.

<sup>4</sup> See Table 15.10.1 for the list of reasons.

In societies where health care is widespread, such as in Armenia, women's status may not affect their access to health services. In other societies, however, increased empowerment among women is likely to increase their ability to seek out and use health services to better meet their reproductive health goals, including the goal of safe motherhood. As a woman becomes more empowered, she is more likely to have a say in the number and spacing of children she desires. However, in Armenia, almost all women received antenatal care or delivery care from health personnel for their most recent birth in the five years preceding the survey, and almost all births were delivered at a health facility (see Chapter 9). Therefore, it is not surprising that women's access to and use of reproductive health care services are not found to vary by women's empowerment indices in Armenia (data not shown), where reproductive health services are widely accessible to all women.

# REFERENCES

Black, R. E., L. H. Allen, Z. A. Bhutta, L. E. Caulfied, M. de Onis, M. Ezzati, C. Mathers, and J. Rivera, for the Maternal and Child Undernutrition Study Group. 2008. "Maternal and Child Undernutrition: Global and Regional Exposures and Health Consequences." *Lancet* 371:243. doi:10.1016/S0140-6736(07)61690-0.

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.

Centers for Disease Control and Prevention. 1998. "Recommendations to Prevent and Control Iron Deficiency in the United States." *Morbidity and Mortality Weekly Report* 47(RR-3):1-29.

Cesar, G. V., L. Adair, C. Fall, P. C. Hallal, R. Martorell, L. Richter, H. Singh Sachdev. 2008. "Maternal and Child Undernutrition: Consequences for Adult Health and Human Capital." *Lancet* 317(9609):340-357.

Conde-Agudelo, A., A. Rosas-Bermudez, and A. C. Kafury-Goeta. 2006. "Birth Spacing and Risk of Adverse Perinatal Outcomes, a Meta-analysis." *Journal of the American Medical Association* 295(15):1809-1823. doi:10.1001/jama.295.15.1809.

DeMaeyer E. M., P. Dallman, J. M. Gurney, L. Hallberg, S. K. Sood, and S. G. Srikantia. 1989. *Preventing and Controlling Iron Deficiency Anemia through Primary Health Care: A Guide for Health Administrators and Program Managers*. Geneva: World Health Organization.

Fullerton, D. G., N. Bruce, and S. B. Gordon. (2008). "Indoor Air Pollution from Biomass Fuel Smoke is a Major Health Concern in the Developing World. *Transactions of the Royal Society of Tropical Medicine and Hygiene* 102(9):843–851. doi.org/10.1016/j.trstmh.2008.05.028.

Gorstein, J, F. van der Haar, K. Codling, R. Houston, J. Knowles, A. Timmer. 2016. "Performance of Rapid Test Kits to Assess Household Coverage of Iodized Salt." *Public Health Nutr*ition (15):2712-24. doi:10.1017/S1368980016000938. Epub 2016 May 11.

Government of the Republic of Armenia (GoA). 2004. Decision No.1116-N, *On Approval of Terms and Conditions of Abortions*. Yerevan, Armenia: Government of the RA. http://www.arlis.am/DocumentView.aspx?DocID=12781.

Government of the Republic of Armenia (GoA). 2014a. Appendix, Order No. 442-N, *On Strategic Plan of Prospective Development for 2014-2025*. Yerevan, Armenia: Government of the RA. http://www.gov.am/files/docs/1322.pdf.

Government of the Republic of Armenia (GoA). 2014b. Appendix No. 2, Protocol Decision No. 40, *On Concept of Improvement of Child Nutrition and the Implementation of the Activity Plan for 2015-2020.* Yerevan, Armenia: Government of the RA. https://www.e-gov.am/u files/file/decrees/arc voroshum/2104/09/40-1 2ardz.pdf.

Government of the Republic of Armenia (GoA). 2016a. Appendix No. 1, Protocol Decision No. 24, *On National Policy on the Improvement of Reproductive Health and the Implementation of Activity Plan for* 2016-2020. Yerevan, Armenia: Government of the RA. http://www.irtek.am/views/act.aspx?aid=86074&m=%27%27&sc=%20.

Government of the Republic of Armenia (GoA). 2016b. Appendix No. 1, Protocol Decision No. 34, *On National Policy on the Improvement of Child and Adolescent Health and the Implementation of Activity Plan for 2015-2020*. Yerevan, Armenia: Government of the RA. http://irtek.am/views/act.aspx?aid=86895&sc=%20. ICF International. 2015a. *The DHS Program STATcompiler*. Accessed September 12, 2016. http://www.statcompiler.com.

ICF International, 2015b. *The DHS Program STATcompiler*. Accessed November 21, 2016. http://www.statcompiler.com.

Joint United Nations Programme on HIV/AIDS (UNAIDS). 2016a. Fact sheet. http://www.unaids.org/en/resources/fact-sheet.

Joint United Nations Programme on HIV/AIDS (UNAIDS). 2016b. Armenia. http://www.unaids.org/en/regionscountries/countries/armenia.

Kish, L. 1965. Survey Sampling. New York: John Wiley and Sons Inc.

National Assembly of the Republic of Armenia (NARA). 2002. *The Law on Reproductive Health and Reproductive Rights*. Yerevan, Armenia: National Assembly of the RA. http://www.parliament.am/legislation.php?sel=show&ID=1339&lang=arm.

National Assembly of the Republic of Armenia (NARA). 2014. *The Law on State Budget of the Republic of Armenia for 2015*. Yerevan, Armenia: Government of the RA. http://www.arlis.am/DocumentView.aspx?docid=94674.

National Center for AIDS Prevention (NCAP). 2016. *HIV/AIDS Epidemic in the Republic of Armenia*. <u>http://www.armaids.am/statistics/2016/stat\_september.html</u>.

National Statistical Service (NSS) [Armenia]. 2013. The Results of RA Census 2011. Yerevan: NSS.

National Statistical Service (NSS) [Armenia]. 2015. *The Demographic Handbook of Armenia*. Yerevan: NSS.

National Statistical Service (NSS) [Armenia]. 2016a. Armenia in Figures, 2016. Yerevan: NSS.

National Statistical Service (NSS) [Armenia]. 2016b. *De Jure Population of RA as of April 1, 2016*. Yerevan: NSS.

National Statistical Service (NSS) [Armenia]. 2016c. *Social Snapshot and Poverty in Armenia, 2016*. Yerevan: NSS.

National Statistical Service (NSS) [Armenia]. 2016d. *The Demographic Handbook of Armenia, 2016*. Yerevan: NSS.

National Statistical Service (NSS) [Armenia], Ministry of Health (MOH), and ORC Macro. 2001. Armenia Demographic and Health Survey 2000. Calverton, Maryland: NSS, MOH, and ORC Macro.

National Statistical Service (NSS) [Armenia], Ministry of Health (MOH), and ORC Macro. 2006. *Armenia Demographic and Health Survey 2005*. Calverton, Maryland: NSS, MOH, and ORC Macro.

National Statistical Service [Armenia], Ministry of Health [Armenia], and ICF International. 2012. *Armenia Demographic and Health Survey 2010*. Calverton, Maryland: National Statistical Service, Ministry of Health, and ICF International.

National Statistical Service [Armenia], Ministry of Health [Armenia], and ICF International. 2016. *Armenia Demographic and Health Survey 2015-16: Key Indicators*. Rockville, Maryland, USA: National Statistical Service (NSS), Ministry of Health (MOH), and ICF International.

Pan American Health Organization (PAHO) and World Health Organization (WHO). 2003. *Guiding Principles for Complementary Feeding of the Breastfed Child*. Washington, D.C., and Geneva, Switzerland: WHO.

Richardson E. 2013. "Armenia: Health System Review." Health Systems in Transition, 2013. 15(4):1-99.

Rutstein, S. O. 2008. *The DHS Wealth Index: Approaches for Rural and Urban Areas*. DHS Working Paper No. 60. Calverton, Maryland: Macro International Inc.

Rutstein, S. O., and K. Johnston. 2004. *The DHS Wealth Index*. DHS Comparative Report No. 6. Calverton, Maryland: ORC Macro.

Rutstein, S., K. Johnston, and D. Gwatkin. 2000. "Poverty, Health Inequality, and Its Health and Demographic Effects." Paper presented at the 2000 annual meeting of the Population Association of America, Los Angeles, California.

Rutstein, S., and R. Winter. 2014. *The Effects of Fertility Behavior on Child Survival and Child Nutritional Status: Evidence from the Demographic and Health Surveys, 2006 to 2012.* DHS Analytical Studies No. 37. Rockville, Maryland, USA: ICF International.

Strauss, M. A. 1990. "Measuring Intra-family Conflict and Violence: The Conflict Tactics Scale." In *Physical Violence in American Families: Risk Factors and Adaptation to Violence in 8,145 Families*. New Brunswick, New Jersey, USA: Transaction Publications.

United Nations. 1996. Report of the Fourth World Conference on Women, Beijing, China – 4-5 September 1995, Action for Equality, Development and Peace. New York: United Nations.

United Nations Children's Fund (UNICEF). 2005. ARMENIA: Prevention of Iodine Deficiencies Disorders, Annual Progress Report 2005. New York: UNICEF.

United Nations General Assembly. 1989. Resolution 25, session 44. Convention on the Rights of the Child. November 20, 1989.

United Nation General Assembly. 1993. Declaration on the Elimination of Violence against Women. A/RES/48/104 New York, United Nations. <u>http://www.un.org/documents/ga/res/48/a48r104.htm.</u>

US Department of Health and Human Services. 2006. *The Health Consequences of Involuntary Exposure to Tobacco Smoke. A Report of the Surgeon General.* Rockville, MD: US Department of Health and Human Services, Public Health Service, and Office of the Surgeon General, Washington, DC.

Windham G. C., A. Eaton, and B. Hopkins. 1999. "Evidence for an Association between Environmental Tobacco Smoke Exposure and Birth Weight: A Meta-analysis and New Data." *Paediatric and Perinatal Epidemiology* 13:35-37. doi:10.1046/j.1365-3016.1999.00150.x.

World Health Organization (WHO). 2001. Putting Women First: Ethical and Safety Recommendations for Research on Domestic Violence against Women. Geneva, Switzerland: Department of Gender and Women's Health, WHO.

World Health Organization (WHO). 2002. The World Health Report 2002. Geneva, Switzerland: WHO.

World Health Organization (WHO). 2005. *Guiding Principles for Feeding Nonbreastfed Children 6 to 24 Months of Age*. Geneva, Switzerland: WHO.

World Health Organization (WHO). 2006. *Birth Spacing: Report from a WHO Technical Consultation*. Geneva: WHO.

World Health Organization (WHO). 2008. *Indicators for Assessing Infant and Young Child Feeding Practices: Conclusions of a Consensus Meeting*. Held 6-8 November 2007 in Washington D.C., USA. Geneva, Switzerland: WHO.

World Health Organization (WHO). 2015a. *The Global Prevalence of Anaemia in 2011*. Geneva: World Health Organization.

World Health Organization (WHO). 2015b. "WHO Statement on Caesarean Section Rates." *Reproductive Health Matters* 23(45):149-150.

World Health Organization (WHO). 2016. *Violence against Women: Intimate Partner and Sexual Violence against Women*. Fact sheet. Accessed in September 2016. http://www.who.int/mediacentre/factsheets/fs239/en/.

World Health Organization (WHO). 2017. Armenia Tuberculosis 2015. https://extranet.who.int/sree/ Reports?op=Replet&name=%2FWHO\_HQ\_Reports%2FG2%2FPROD%2FEXT%2FTBCountryProfile&I SO2=AM&LAN=EN&outtype=html.

World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC). 2008. *Worldwide Prevalence of Anaemia 1993–2005: WHO Global Database on Anaemia*. Edited by Bruno de Benoist, Erin McLean, Ines Egli, and Mary Cogswell. Geneva, Switzerland: WHO and Atlanta, GA, USA: (CDC). Accessed on 12 December 2016.

http://www.who.int/nutrition/publications/micronutrients/anaemia\_iron\_deficiency/9789241596657/en/.

World Health Organization (WHO) and UNICEF. 1998. *Complementary Feeding of Young Children in Developing Countries: A Review of Current Scientific Knowledge*. Geneva, Switzerland: WHO and UNICEF.

WHO Multicentre Growth Reference Study Group. 2006. WHO Child Growth Standards: Length/Heightfor-Age, Weight-for-Age, Weight-for-Length, Weight-for-Height and Body Mass Index-for-Age: Methods and Development. Geneva, Switzerland: World Health Organization.

World Health Organization, Regional Office for Europe (WHO-EURO). 2013. *Health 2020. A European Policy Framework and Strategy for the 21st Century*. WHO Regional Office for Europe, Copenhagen, Denmark. http://www.euro.who.int/en/health-topics/health-policy/health-2020-the-european-policy-for-health-and-well-being/publications/2013/health-2020.-a-european-policy-framework-and-strategy-for-the-21st-century-2013.

World Health Organization, Regional Office for Europe (WHO-EURO). 2015. *HIV Programme Review in Armenia (2015)*. http://www.euro.who.int/en/health-topics/communicable-diseases/hivaids/publications/2015/hiv-programme-review-in-armenia-2015.

No authors listed. 1985. "Appropriate Technology for Birth." Lancet 326 (8452): 436-437.

### A.1 INTRODUCTION

The 2015-16 Armenia Demographic and Health Survey (2015-16 ADHS) is the fourth DHS survey conducted in Armenia, following those carried out in 2000, 2005, and 2010. A nationally representative sample of 8,764 households was selected for the 2015-16 ADHS from 313 clusters. All women age 15-49 who were usual members of the selected households or who stayed the night before the survey in the households were eligible for the survey interview. The main objectives of the interviews with women were to provide up-to-date information on fertility and fertility preferences, abortions, awareness and use of family planning methods, maternal and child health, and knowledge and attitudes regarding HIV/AIDS and other sexually transmitted infections (STIs).

In addition, the ADHS collected domestic violence data from one randomly selected woman age 15-49 in each household. The survey also collected information on several biomarkers for women as well as for young children. All women age 15-49 living in the households sampled for the 2015-16 ADHS were asked to provide a few drops of blood from a finger prick for on-the-spot anemia testing, and parents or guardians of all children age 6-59 months living in the interviewed households were asked for permission to test the children for anemia. All women age 15-49 and all children age 0-59 months were also eligible for collection of anthropometric indicators (height and weight).

Finally, a male survey was simultaneously conducted in a subsample of one-half of the households selected for the 2015-16 ADHS. All men age 15-49 who were usual members of the selected households or who stayed the night before the survey in the households were eligible for the male survey, which collected information on men's demographic status and knowledge and attitudes regarding family planning methods and HIV/AIDS and other STIs.

### A.2 SAMPLE FRAME

Armenia is divided into 10 marz (regions). Each marz is in turn sub-divided into communities, and each community is sub-divided into settlements. The capital city of Yerevan, considered a special region, is sub-divided into 12 urban districts. The 2015-16 ADHS was designed to produce representative results for the country as a whole, for urban and rural areas separately at the national level, for the city of Yerevan, and for each of the 10 administrative regions (marz).

Table A.1 shows the distribution of residential households at the time of the census by region and by type of residence (urban and rural). The regional share of households varies from 2 percent for Vayots Dzor to 34 percent for Yerevan. In Armenia, 65 percent of residential households are in urban areas, and, among urban households, more than half are in Yerevan. By region, the percentage of households that are urban varies from 24 percent in Aragatsotn to 100 percent in Yerevan.

#### Table A.1 Households

Distribution of residential households in the sampling frame by region and residence, Armenia 2015-16

	Number o	f households ir	Percent	Percentage of total households in	
Region	Urban	Rural	Total	urban	the frame
Yerevan Aragatsotn Ararat Armavir Gegharkunik Lori Kotayk Shirak Syunik Vayots Dzor Tavush	271,125 8,303 19,670 23,722 20,805 50,651 43,107 40,126 25,370 5,555 14,927	na 26,507 47,982 41,506 33,878 31,680 28,029 27,358 12,670 8,801 21,556	271,125 34,810 67,652 65,228 54,683 82,331 71,136 67,484 38,040 14,356 36,483	100.0 23.9 29.1 36.4 38.0 61.5 60.6 59.5 66.7 38.7 40.9	33.8 4.3 8.4 8.1 6.8 10.2 8.9 8.4 4.7 1.8 4.5
Armenia	523,361	279,967	803,328	65.1	100.0
na = Not applicab Source: 2011 API					

The sampling frame used in the survey was provided by the National Statistical Service (NSS) of Armenia, the implementing agency for the 2015-16 ADHS. The frame, which is based on the 2011 Armenia Population and Housing Census (2011 APHC), includes a complete list of census enumeration areas (EAs). For each EA, the frame includes basic identification information such as region and other administrative designations. Each EA in the frame is also classified into one of the two types of residence, urban or rural. In rural areas, an EA is a natural village, a segment of a large village, or a group of small villages; in urban areas, an EA is a street or a city block. In addition, the frame includes the number of residential households in the EA, which served as the measure of size for the EA during sample selection. At the time of the census, cartographical materials were prepared for each EA that delineated its geographical location, boundaries, main access routes, and landmarks in or outside the EA that could be used to help to identify it. The NSS EA frame was not linked to these cartographic materials, which were maintained by another institution. Because of the lack of EA maps, the complete list of residential households with household addresses recorded in the population census was used to identify the selected EAs during the 2015-16 ADHS household listing operation.

Table A.2 presents the number of EAs in the 2015-16 ADHS sampling frame and the average number of residential households in each EA, by region and by type of residence. Of the total of 11,571 EAs, 6,613 are in urban areas and 4,958 are in rural areas. Overall, each EA has an average of 69 households, with EAs in urban areas averaging 79 households and those in rural areas averaging 56 households.

		Number of	n and residen	Average	number of re olds in enum	
	enume	ration areas	in frame		area	
Region	Urban	Rural	Total	Urban	Rural	Total
Yerevan	3,522	na	3,522	77	na	77
Aragatsotn	116	483	599	72	55	58
Ararat	257	813	1,070	77	59	63
Armavir	317	800	1,117	75	52	58
Gegharkunik	278	652	930	75	52	59
Lori	560	450	1,010	90	70	82
Kotayk	474	524	998	91	53	71
Shirak	527	500	1027	76	55	66
Syunik	323	238	561	79	53	68
Vayots Dzor	70	156	226	79	56	64
Tavush	169	342	511	88	63	71
Armenia	6,613	4,958	11,571	79	56	69

### A.3 SAMPLE DESIGN AND IMPLEMENTATION

The sample for the 2015-16 ADHS was a stratified sample selected in two stages. Stratification was achieved by separating each region into urban and rural areas. In total, 21 sampling strata were created, since Yerevan has only urban areas. Samples were selected independently in each stratum via a two-stage selection procedure. Implicit stratification and proportional allocation were achieved by sorting the sampling frame within each sampling stratum according to administrative units before sample selection.

In the first stage, a total of 313 EAs were selected with probability proportional to EA size. The sample selected at the second stage was fixed at 28 households per EA, resulting in a total sample of 8,764 households. Table A.3 shows the allocation of EAs and households selected by region and residence. Among the 313 EAs, 192 came from urban areas and 121 came from rural areas. With regard to the household sample, 5,376 households were from urban areas and 3,388 from rural areas.

Table A.3 Sample allocation of enumeration areas and households

		of enumerat	tion areas	Alloca	tion of hous	eholds
Region	Urban	Rural	Total	Urban	Rural	Total
Yerevan	48	0	48	1,344	0	1,344
Aragatsotn	11	12	23	308	336	644
Ararat	14	14	28	392	392	784
Armavir	15	13	28	420	364	784
Gegharkunik	14	12	26	392	336	728
Lori	18	13	31	504	364	868
Kotayk	17	12	29	476	336	812
Shirak	17	12	29	476	336	812
Syunik	15	10	25	420	280	700
Vavots Dzor	10	12	22	280	336	616
Tavush	13	11	24	364	308	672
Armenia	192	121	313	5,376	3,388	8,764

Sample allocation of enumeration areas and households by region, according to residence, Armenia 2015-16

Table A.4 shows the expected number of completed interviews with women and men by region and residence. The allocations were based on information from the 2010 ADHS. In the 2010 ADHS, household response rates were 87 percent in urban areas and 92 percent in rural areas. The average number of women age 15-49 per household was 0.86 in urban areas and 1.02 in rural areas. Women's individual response rates were 97 percent in urban areas and 99 percent in rural areas. The average number of men age 15-49 per household was 0.72 in urban areas and 0.85 in rural areas. Men's individual response rates were 96 percent in urban areas and 97 percent in rural areas. The sample allocation for the 2015-16 ADHS involved a power allocation with small adjustments because of the large regional size variations.

As detailed in Table A.4, the 2015-16 ADHS was expected to achieve about 7,000 completed interviews with women age 15-49, with a minimum sample of 514 for the region of Vayots Dzor and a maximum sample of 976 for the city of Yerevan. The expected number of completed interviews with men age 15-49 was 2,839, 1,569 in urban areas and 1,270 in rural areas. The regional sample sizes for the 2015-16 ADHS are small relative to DHS surveys in other countries, where a minimum of 800 interviews with women per region is generally recommended. With the 2015-16 ADHS sample size, adequate survey precision for women's indicators at the regional level is expected to be at the 10% level or above.

#### 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 region, according to residence, Armenia 2015-16

	١	Nomen 15-4	9		Men 15-49	
Region	Urban	Rural	Total	Urban	Rural	Total
Yerevan	976	0	976	392	0	392
Aragatsotn	224	310	534	90	126	216
Ararat	284	362	646	114	147	261
Armavir	305	337	642	123	136	259
Gegharkunik	284	310	594	114	126	240
Lori	365	337	702	147	136	283
Kotayk	346	310	656	139	126	265
Shirak	346	310	656	139	126	265
Syunik	305	259	564	123	105	228
Vayots Dzor	204	310	514	82	126	208
Tavush	265	285	550	106	116	222
Armenia	3,904	3,130	7,034	1,569	1,270	2,839

Note: Male surveys were conducted in half of the households selected for interviews with women.

A household listing operation was carried out in all of the selected EAs before the main survey. The listing operation consisted of visiting each of the 313 selected EAs to draw a location map and a detailed sketch map and to record on the household listing forms the address and the name of the head of the household for all residential households found in the EA. The resulting list of households served as the sampling frame for the selection of households in the second stage. In the second stage, a fixed number of 28 households was selected from each of the EAs included. No replacements and no changes in the preselected households were allowed in the implementing stages to prevent bias. The interviewers were asked to make at least two to three callbacks for households that could not be interviewed during the first visit in order to keep the nonresponse rate low.

### A.4 SAMPLE PROBABILITIES AND SAMPLE WEIGHTS

Because of the non-proportional allocation of the sample to the different regions and to urban and rural areas, and because of the differences in response rates, analysis of the 2015-16 ADHS requires that the data be weighted to ensure the representation of the survey results at the national level as well as at the domain levels. Because the 2015-16 ADHS sample was a two-stage stratified cluster sample, sampling weights were based on sampling probabilities calculated separately for each sampling stage and for each cluster.

 $P_{1hi}$ : first-stage sampling probability of selecting the *i*<sup>th</sup> EA in stratum *h* 

 $P_{2hi}$ : second-stage sampling probability within the *i*<sup>th</sup> EA (household selection)

The following describes the calculation of the probabilities of selection in the first stage.

In cases where the ADHS cluster was an entire EA, let  $a_h$  be the number of EAs selected in stratum h,  $M_{hi}$  the total number of households according to the sampling frame in the  $i^{th}$  EA, and  $\sum M_{hi}$  the total number of households in stratum h. The probability of selecting the  $i^{th}$  EA in the 2015-16 ADHS sample is calculated as follows:

$$P_{lhi} = \frac{a_h M_{hi}}{\sum M_{hi}}$$

The following describes the calculation of the probabilities of selection in the second stage.

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 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 is the product of the first- and second-stage 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:

$$W_{hi} = 1/P_{hi}$$

A spreadsheet containing all of the sampling parameters and selection probabilities was prepared to facilitate the calculation of the design weights. The design weights were adjusted for nonresponse to obtain sampling weights for households and for women and men. In turn, the sampling weights were normalized so that, at the national level, the total number of weighted cases would be equal to the total number of unweighted cases. The normalized weights are relative weights that are valid for estimating means, proportions, and ratios but not for estimating population totals and pooled data. In addition, the number of cases obtained by applying the normalized weights has no direct relation with survey precision because it is relative; therefore, especially for oversampled areas, the number of weighted cases will be much smaller than the number of unweighted cases, which is directly related to survey precision.

Four sets of general weights were calculated for the 2015-16 ADHS:

- one set for all households selected for the survey
- one set for women
- one set for households selected for the male survey
- one set for men

In addition, there were two sets of special weights that applied to the subsample of women age 15-49 selected randomly for the domestic violence module and the subsample of children age 1-14 selected for the child discipline module.

### A.5 SURVEY IMPLEMENTATION

Tables A.5 and A.6 show the results of the household and individual interviews by residence and region.

	Recidence	Residence						Region						
								region						
Result	Urban R	Rural	Yerevan ,	Aragatsotn	Ararat	Armavir	Gegharkunik	Lori	Kotayk	Shirak	Syunik	v ayots Dzor	Tavush	Total
Selected households														
Completed (C)	89.5	91.3	93.2	86.3	92.7	87.6	92.7	78.7	92.9	86.8	96.9	88.5	95.8	90.2
Household present but no		1.1	0.3	0.0	0.6	1.3	0.0	1.5	1.8	4.3	0.0	4.7	0.0	1.3
competent respondent														
Postponed (P)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Refused (R)	2.5	1.9	2.2	0.2	1.5	2.1	0.0	9.4	1.8	3.2	0.1	0.5	1.6	2.3
Dwelling not found (DNF)	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household absent (HA)	5.6	5.0	3.1	11.8	4.7	7.6	5.9	9.4	3.2	4.0	2.3	6.3	2.5	5.3
Dwelling vacant/address	0.5	0.2	0.8	0.5	0.0	0.4	0.7	0.5	0.0	0.9	0.3	0.0	0.0	0.4
not a dwelling (DV)	č	0	č	0	0	0	0	0	0	0	0	0	0	0
Dther (O)	- 0	0.0	- 0	0.0	0.0	0.0	0.0	0.0 0	0.0	0.2		0.0	0.0	0.0
	t.	0.0	0.0	4	t S	0	1.0	0.0	7.0	0.0	t. 5	0.0	0.0	†. >
mpled	100.0 1( 5,369 3,	100.0 3,380	100.0 1,340	100.0 644	100.0 784	100.0 776	100.0 728	100.0 868	100.0 812	100.0 809	100.0 700	100.0 616	100.0 672	100.0 8,749
households Household response rate (HRR) <sup>1</sup>	95.8	96.8	0.79	99.8	97.7	96.3	100.0	87.8	96.2	92.0	<u> 9</u> .9	94.5	98.3	96.2
Eligible women														
Completed (EWC)		98.1	99.4	99.8	99.5	98.2	99.5	83.6	98.4	96.9	99.5	99.8	97.5	97.8
Not at home (EWNH)	0.4	0.5	0.0	0.0	0.0	0.2	0.0	2.2	1.0	1.3	0.0	0.0	1.2	0.5
Postponed (EWP)		0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Refused (EWR)	1.6		0.2	0.0	0.3		0.4	13.6	0.3	1.6	0.0	0.0	1.2	4. 4
Partly completed (EWPC)	0.1	0.1	0.2	0.2	0.0	0.0	0.2	0.0	0.0	0.2	0.3	0.0	0.2	0.1
Incapacitated (EWI) Other (EWO)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0 10	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
		2,620	1,061	454	600	654	554	403	670	553	385	406	511	6,251
Eligible women response rate (EWRR) <sup>2</sup>	97.6	98.1	99.4	99.8	99.5	98.2	99.5	83.6	98.4	96.9	99.5	99.8	97.5	97.8
Overall women response rate (ORR) <sup>3</sup>	93.5	95.0	96.5	9.66	97.2	94.5	<u> 99.5</u>	73.4	94.6	89.2	99.3	94.2	95.8	94.1

100 \* C

C + HP + P + R + DNF

<sup>2</sup> The eligible women's response rate (EWRR) is equivalent to the percentage of interviews completed (EWC). <sup>3</sup> The overall women's response rate (OWRR) is calculated as: OWRR = HRR \* EWRR/100

Table A.6 Sample implementation: Men	entation: Me	<u>ue</u>												
Percent distribution of households and eligible men by results of and region (unweighted), Armenia 2015-16	rolds and eli Ienia 2015-1	igible men b 6	y results of t	he household	and individu	ual interview	the household and individual interviews, and household, eligible men's, and overall men's response rates, according to urban-rural residence	ld, eligible m	en's, and ov	erall men's r	esponse rate	s, according	to urban-rură	l residence
	Residence	ence						Region						
Result	Urban	Rural	Yerevan	Aragatsotn	Ararat	Armavir	Gegharkunik	Lori	Kotayk	Shirak	Syunik	Vayots Dzor	Tavush	Total
Selected households Completed (C) Household present but no competent respondent	89.4 1.5	91.1	93.4 0.6	85.4 0.0	93.4 0.8	87.9 1.0	93.7 0.0	78.8 1.2	91.1 1.7	84.2 5.9	97.1 0.0	89.6 3.9	95.8 0.0	90.1 1.3
at home (HP) Postponed (P) Refused (R) Dwelling not found (DNF) Household absent (HA) Dwelling vacant/address	0.0 0.1 0.4 0.4	0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.0 3.0 0.6 0.6	0.0 0.0 0.3 0.3	0.0 0.2 0.8 0.0	0.0 0.0 0.8 0.3 0.3	0.0 0.0 0.0 0.3	0.0 10.4 0.0 9.0	0.0 7.2 4.6 0.0	0.400 0.200 2.20 2.20 2.20 2.20 2.20 2.2	0.0 0.0 0.3 0.3	0.0 0.0 0.0 0.0	0.2 0.2 0.0 0.0 0.0	0.0 5.3 0.4
not a dwelling (DV) Dwelling destroyed (DD) Other (O)	0.0 0.3	0.0 0.5	0.0 0.0	0.0 0.9	0.0 0.5	0.0 1.0	0.0 0.0	0.0 0.9	0.0 0.0	0.2 0.7	0.0 0.3	0.0 0.0	0.0 0.0	0.0 0.4
Total Number of sampled households Household response rate (HRR) <sup>1</sup>	100.0 2,684 95.5	100.0 1,689 96.5	100.0 670 96.9	100.0 322 99.6	100.0 392 97.6	100.0 387 97.7	100.0 364 100.0	100.0 434 87.2	100.0 406 95.4	100.0 404 89.0	100.0 350 99.7	100.0 308 95.5	100.0 336 97.9	100.0 4,373 95.9
Eligible men Completed (EMC) Not at home (EMNH) Postponed (EMP) Refused (EMR) Partly completed (EMPC) Incapacitated (EMI) Other (EMO)	000200 000200 000200	97.2 0.1 0.3 0.3 0.0	98 0.0 1.0 0.0 0.0 0.0	90.0 0.0 0.0 0.0 0.0 0.0 0.0	98 0.0 0.0 0.0 0.0 0.0 0.0	97.6 0.0 7.0 7.0 0.1	90 0.0 0.0 0.0 0.0 0.0	78.8 0.5 0.5 17.8 1.9 0.5	98:3 0.3 0.0 0.0 0.0 0.0	91.0 2.4 6.7 0.0 0.0 0.0	000 000 000 000 000 000 000	97.4 0.0 0.5 0.5 0.0	98. 0.0 0.0 0.0 0.0 0.0	96.5 0.3 0.4 0.0 0.0
Total Number of men Eligible men response rate (EMRR) <sup>2</sup> Overall men response	100.0 1,587 95.9 91.6	1,269 97.2 93.7	100.0 447 98.4 95.4	100.0 230 99.1 98.8	100.0 319 98.1 95.8	100.0 291 97.6 95.4	100.0 270 99.3 99.3	100.0 208 78.8 68.8	100.0 293 98.3 93.7	100.0 210 91.0 81.0	100.0 174 100.0 99.7	100.0 191 97.4 93.0	100.0 223 98.2 96.1	100.0 2,856 96.5 92.5
rate (ORR) <sup>3</sup>														

<sup>1</sup> Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as: 100 \* C

<sup>2</sup> The eligible men's response rate (EMRR) is equivalent to the percentage of interviews completed (EMC). <sup>3</sup> The overall men's response rate (OMRR) is calculated as: OMRR = HRR \* EMRR/100

Appendix A • 265

The estimates from a sample survey are affected by two types of errors: (1) nonsampling errors and (2) 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 2015-16 Armenia Demographic and Health Survey (ADHS) 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 2015-16 ADHS 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 between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A 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 percent 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 2015-16 ADHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulae. Programs developed through SAS computer software were used to calculate sampling errors for the 2015-16 ADHS. The programs used the Taylor linearization method of variance estimation for means or proportions and the Jackknife repeated replication method 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:

$$SE^{2}(r) = var(r) = \frac{1}{x^{2}} \sum_{h=1}^{H} \left[ (1 - f_{h}) \frac{m_{h}}{m_{h} - 1} \left( \sum_{i=1}^{m_{h}} z_{hi}^{2} - \frac{z_{h}^{2}}{m_{h}} \right) \right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}$$
, 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  $h^{\text{th}}$  stratum,
- $y_{hi}$  is the sum of the weighted values of variable y in the *i*<sup>th</sup> cluster in the *h*<sup>th</sup> stratum,
- $x_{hi}$  is the sum of the weighted number of cases in the *i*<sup>th</sup> cluster in the *h*<sup>th</sup> stratum, and
- $f_h$  is the sampling fraction of PSU in the  $h^{\text{th}}$  stratum.

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 2015-16 ADHS, there were 313 nonempty clusters. Hence, 313 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 313 clusters,

- $r_{(i)}$  is the estimate computed from the reduced sample of 312 clusters (*i*<sup>th</sup> cluster excluded), and
- *k* is the total number of clusters.

In addition to the standard error, the SAS programs calculate the design effect (DEFT) for each estimate. DEFT 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 such as multistage and cluster selection. The relative error and confidence limits for the estimates are also computed by the SAS programs.

Sampling errors for the 2015-16 ADHS are calculated for selected variables considered to be of primary interest for the women's survey and for the men's survey. The results are presented in this appendix for Armenia as a whole, for urban and rural areas, and for each of the 11 regions. 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.15 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 percent confidence limits (R $\pm$ 2SE) for each variable. In the tables, the DEFT is shown as undefined (i.e., not applicable) when the standard error considering a simple random sample is zero (when the estimate is close to 0 or 1). In the case of the total fertility rate, the number of unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to childbearing.

The confidence interval (e.g., as calculated for *currently married women currently using a modern contraceptive method*) can be interpreted as follows: the overall percentage of currently married women currently using a modern contraceptive method is 28 percent, and the standard error is 0.009 (rounded). Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, that is,  $28\pm 2\times 0.009$ . There is a high probability (95 percent) that the *true* percentage of currently married women currently using a modern method is between 26 percent and 30 percent (rounded).

For the total sample, the value of the design effect (DEFT), averaged over all variables for the women's survey, is 1.21. This means that, due to multistage clustering of the sample, the average standard error is increased by a factor of 1.21 over that in an equivalent simple random sample.

#### Table B.1 List of selected indicators for sampling errors, Armenia 2015-16

Variable	Estimate	Base population
Tanabio	WOMEN	Baco population
Urban residence	Proportion	All women 15-49
Secondary education or higher	Proportion	All women 15-49
Never married/in union	Proportion	All women 15-49
Currently married/in union	Proportion	All women 15-49
Married before age 20	Proportion	Women 25-49
Had sexual intercourse before age 18	Proportion	Women 25-49
Currently pregnant	Proportion	All women 15-49
Children ever born	Mean	All women 15-49
Children surviving	Mean	All women 15-49
Children ever born to women age 40-49	Mean	Women 40-49
Know any contraceptive method	Proportion	Currently married women 15-49
Know a modern method	Proportion	Currently married women 15-49
Currently using any method	Proportion	Currently married women 15-49
Currently using a modern method	Proportion	Currently married women 15-49
Currently using pill	Proportion	Currently married women 15-49
Currently using IUD	Proportion	Currently married women 15-49
Currently using condoms	Proportion	Currently married women 15-49
Currently using injectables	Proportion	Currently married women 15-49
Currently using female sterilization	Proportion	Currently married women 15-49
Using public sector source	Proportion	Currently married women 15-49 currently using a modern method
Want no more children	Proportion	Currently married women 15-49
Want to delay next birth at least 2 years	Proportion	Currently married women 15-49
ldeal number of children Mothers received antenatal care for last birth	Mean	All women 15-49
Births with skilled attendant at delivery	Proportion Proportion	Women with at least one live birth in 5 years before survey Births occurring 1-59 months before survey
Had diarrhea in the past 2 weeks	Proportion	Children under 5
Treated with ORS	Proportion	Children under 5
Sought medical treatment for diarrhea	Proportion	Children under 5 with diarrhea in past 2 weeks
Vaccination card seen (children age 12-23 months)	Proportion	Children 12-23 months
Received BCG vaccination	Proportion	Children 12-23 months
Received HepB vaccination at birth	Proportion	Children 12-23 months
Received DPT-HepB-Hib vaccination (third dose)	Proportion	Children 12-23 months
Received polio vaccination (third dose)	Proportion	Children 12-23 months
Received rotavirus vaccination (second dose)	Proportion	Children 12-23 months
Received all vaccinations appropriate for a child age 12-23 months	Proportion	Children 12-23 months
Vaccination card seen (children age 24-35 months)	Proportion	Children 24-35 months
Received measles, mumps, and rubella (MMR) vaccination	Proportion	Children 24-35 months
Received DPT vaccination (fourth dose)	Proportion	Children 24-35 months
Received polio vaccination (fourth dose)	Proportion	Children 24-35 months
Received all basic vaccinations appropriate for children age 24-35	Proportion	Children 24-35 months
months		
Received all vaccinations appropriate for a child age 24-35 months	Proportion	Children 24-35 months
Height-for-age (-2SD)	Proportion	Children under 5 who were measured
Weight-for-height (-2SD)	Proportion	Children under 5 who were measured
Weight-for-age (-2SD)	Proportion	Children under 5 who were measured
Prevalence of anemia (children age 6-59 months)	Proportion	All children 6-59 months who were tested
Prevalence of anemia (women age 15-49)	Proportion	All women 15-49 who were tested
Body mass index (BMI) < 18.5	Proportion	All women 15-49 who were measured
Body mass index (BMI) ≥ 25 Ever experienced any physical violence since are 15	Proportion	All women 15-49 who were measured
Ever experienced any physical violence since age 15	Proportion	All women 15-49
Ever experienced any sexual violence Ever experienced any physical or sexual violence by husband/partner	Proportion Proportion	All women 15-49 All ever-married women 15-49
Ever experienced any physical or sexual violence by husband/partner in	Proportion	All ever-married women 15-49
the last 12 months	FIOPOLION	All evel-manieu women 13-49
Total fertility rate (3 years)	Rate	Woman-years of exposure to childbearing
Total abortion rate (3 years)	Rate	Woman-years of exposure to childbearing
	MEN	
Jrban residence	Proportion	All men 15-49
Secondary education or higher	Proportion	All men 15-49
Never married/in union	Proportion	All men 15-49
Currently married/in union	Proportion	All men 15-49
Had sexual intercourse before age 18	Proportion	Men 25-49
Want no more children	Proportion	Currently married men 15-49
Want to delay next birth at least 2 years	Proportion	Currently married men 15-49
deal number of children	Mean	All men 15-49
Had 2+ sexual partners in past 12 months	Proportion	All men 15-49
Abstinence among youth (never had sex)	Proportion	Never-married men 15-24
Paid for sexual intercourse in past 12 months	Proportion	All men 15-49

#### Table B.2 Sampling errors: Total sample, Armenia 2015-16

			Number	of cases				
Variable	Value (R)	Standard error (SE)	Un- weighted (N)	Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confide R-2SE	nce limits R+2SE
Tanabio		WOMEN		(111)		(02/10)	TT LOL	TULUL
Urban residence	0.598	0.010	6,116	6,116	1.621	0.017	0.578	0.618
Secondary or higher education	0.934 0.299	0.006 0.006	6,116	6,116	1.847 1.107	0.006 0.022	0.923	0.946 0.312
Never married (never in union) Currently married (in union)	0.299	0.006	6,116 6,116	6,116 6,116	1.107	0.022	0.286 0.623	0.312
Married before age 20	0.367	0.009	4,451	4,463	1.257	0.025	0.349	0.385
Had sexual intercourse before age 18	0.141	0.006	4,451	4,463	1.197	0.044	0.128	0.153
Currently pregnant	0.028	0.003	6,116	6,116	1.208	0.090	0.023	0.034
Children ever born Children surviving	1.385 1.360	0.016 0.015	6,116 6,116	6,116 6,116	0.996 0.994	0.011 0.011	1.354 1.330	1.417 1.390
Children ever born to women age 40-49	2.216	0.033	1,496	1,490	1.157	0.015	2.150	2.282
Know any contraceptive method	0.998	0.001	3,998	3,895	1.099	0.001	0.996	0.999
Know a modern method	0.997 0.571	0.001 0.009	3,998 3,998	3,895 3,895	1.040 1.194	0.001 0.016	0.995 0.553	0.999 0.590
Currently using any method Currently using a modern method	0.280	0.009	3,998	3,895	1.209	0.010	0.333	0.297
Currently using pill	0.026	0.003	3,998	3,895	1.287	0.124	0.020	0.033
Currently using IUD	0.089	0.006	3,998	3,895	1.328	0.067	0.077	0.101
Currently using condoms Currently using injectables	0.147 0.002	0.006 0.001	3,998 3,998	3,895 3,895	1.112 1.946	0.042 0.732	0.135 0.000	0.160 0.004
Currently using female sterilization	0.002	0.002	3,998	3,895	1.195	0.226	0.000	0.004
Using public sector source	0.350	0.018	999	1,081	1.198	0.052	0.314	0.387
Want no more children	0.535	0.009	3,998	3,895	1.146	0.017	0.517	0.553
Want to delay next birth at least 2 years	0.120 2.596	0.006 0.013	3,998 5,972	3,895	1.208 1.152	0.052 0.005	0.107 2.570	0.132 2.622
Ideal number of children Mothers received antenatal care for last birth	0.996	0.013	1,396	5,974 1,361	1.152	0.005	0.992	1.000
Births with skilled attendant at delivery	0.998	0.001	1,724	1,672	1.325	0.001	0.995	1.000
Had diarrhea in the past 2 weeks	0.038	0.005	1,710	1,663	1.028	0.131	0.028	0.048
Treated with ORS	0.369	0.066	68	63	1.045	0.179	0.237	0.502
Sought medical treatment for diarrhea Vaccination card seen (children age 12-23 months)	0.406 0.962	0.066 0.011	68 345	63 338	1.030 1.046	0.163 0.011	0.274 0.940	0.539 0.983
Received BCG vaccination	0.990	0.004	345	338	0.780	0.004	0.982	0.998
Received HepB vaccination at birth	0.979	0.007	345	338	0.901	0.007	0.965	0.993
Received DPT-HepB-Hib vaccination (third dose)	0.927	0.015	345	338	1.044	0.016	0.898	0.956
Received polio vaccination (third dose) Received rotavirus vaccination (second dose)	0.932 0.902	0.014 0.020	345 345	338 338	1.059 1.258	0.015 0.022	0.903 0.861	0.961 0.942
Received all vaccinations appropriate for a child age 12-	0.864	0.020	345	338	1.195	0.022	0.820	0.908
23 months								
Vaccination card seen (children age 24-35 months)	0.926	0.019	332	335	1.338	0.020	0.888	0.964
Received measles, mumps, and rubella (MMR) vaccination	0.779	0.029	332	335	1.282	0.037	0.721	0.837
Received DPT vaccination (fourth dose)	0.801	0.029	332	335	1.318	0.036	0.743	0.859
Received polio vaccination (fourth dose)	0.928	0.016	332	335	1.150	0.017	0.896	0.960
Received all basic vaccinations appropriate for children	0.889	0.020	332	335	1.164	0.022	0.850	0.929
age 24-35 months Received all vaccinations appropriate for a child age 24-	0.726	0.030	332	335	1.226	0.041	0.666	0.786
35 months	0.720	0.000	552	000	1.220	0.041	0.000	0.700
Height-for-age (-2SD)	0.094	0.009	1,593	1,573	1.181	0.094	0.076	0.112
Weight-for-height (-2SD)	0.042	0.006	1,572	1,555	1.132	0.141	0.030	0.054
Weight-for-age (-2SD) Prevalence of anemia (children age 6-59 months)	0.026 0.156	0.005 0.011	1,620 1,371	1,609 1,349	1.140 1.099	0.174 0.071	0.017 0.134	0.036 0.179
Prevalence of anemia (women age 15-49)	0.134	0.001	5,807	5,769	1.690	0.071	0.134	0.179
Body mass index (BMI) < 18.5	0.036	0.003	5,688	5,675	1.286	0.088	0.030	0.043
Body mass index (BMI) ≥ 25	0.450	0.008	5,688	5,675	1.206	0.018	0.434	0.466
Ever experienced any physical violence since age 15	0.059	0.005	4,592	4,592	1.409	0.083	0.049	0.068
Ever experienced any sexual violence Ever experienced any physical/sexual violence by	0.009 0.081	0.002 0.007	4,592 3,540	4,592 3,208	1.143 1.470	0.180 0.083	0.006 0.067	0.012 0.094
husband/partner	0.001	0.001	0,010	0,200	1.170	0.000	0.007	0.001
Ever experienced any physical or sexual violence by	0.035	0.004	3,540	3,208	1.296	0.114	0.027	0.043
husband/partner in the last 12 months Total fertility rate (last 3 years)	1 746	0.064	17.661	17 601	1 0 4 0	0.027	1 6 1 9	1 074
Total abortion rate (last 3 years)	1.746 0.588	0.064 0.050	17,661	17,681 17,681	1.242 1.144	0.037 0.085	1.618 0.488	1.874 0.688
	0.000		,001	,001		0.000	0.100	0.000
		MEN						
Urban residence	0.565	0.012	2,755	2,755	1.273	0.021	0.541	0.590
Secondary or higher education Never married (in union)	0.867 0.432	0.010 0.011	2,755 2,755	2,755 2,755	1.610 1.123	0.012 0.025	0.846 0.411	0.888 0.453
Currently married (in union)	0.432	0.011	2,755	2,755	1.123	0.025	0.411	0.455
Had first sexual intercourse before age 18	0.154	0.013	1,959	1,942	1.540	0.082	0.128	0.179
Want no more children	0.480	0.018	1,527	1,506	1.403	0.037	0.444	0.516
Want to delay birth at least 2 years	0.097	0.009	1,527	1,506	1.155	0.090	0.079	0.114
Ideal number of children Had 2+ sexual partners in past 12 months	2.659 0.054	0.023 0.006	2,695 2,755	2,699 2,755	1.377 1.416	0.009 0.113	2.612 0.042	2.705 0.067
Abstinence among never-married youth (never had sex)	0.646	0.000	738	2,755	1.247	0.034	0.602	0.690
	0.101	0.010	2,755	2,755	1.744	0.099	0.081	0.121

#### Table B.3 Sampling errors: Urban sample, Armenia 2015-16

			Number	of cases				
M. C.L.		Standard	Un- weighted	Weighted	Design effect	Relative error		nce limits
Variable	Value (R)	error (SE) WOMEN	(N)	(WN)	(DEFT)	(SE/R)	R-2SE	R+2SE
Urban residence	1.000	0.000	3,545	3,657	na	0.000	1.000	1.000
Secondary or higher education	0.963 0.313	0.004	3,545	3,657	1.152	0.004 0.027	0.956 0.296	0.970 0.330
Never married (never in union) Currently married (in union)	0.515	0.009 0.009	3,545 3,545	3,657 3,657	1.095 1.120	0.027	0.296	0.330
Married before age 20	0.288	0.003	2.645	2,729	1.332	0.041	0.265	0.312
Had sexual intercourse before age 18	0.099	0.007	2,645	2,729	1.220	0.072	0.085	0.113
Currently pregnant	0.026	0.004	3,545	3,657	1.332	0.137	0.019	0.033
Children ever born	1.263	0.019 0.019	3,545	3,657	0.999	0.015 0.015	1.225	1.301
Children surviving Children ever born to women age 40-49	1.248 1.973	0.019	3,545 870	3,657 894	0.999 1.200	0.015	1.211 1.890	1.285 2.056
Know any contraceptive method	0.999	0.001	2,233	2,221	0.849	0.001	0.998	1.000
Know a modern method	0.999	0.001	2,233	2,221	0.806	0.001	0.997	1.000
Currently using any method	0.565	0.013	2,233	2,221	1.206	0.022	0.539	0.590
Currently using a modern method	0.319 0.030	0.013 0.005	2,233 2,233	2,221 2,221	1.273 1.393	0.039 0.168	0.294 0.020	0.345 0.040
Currently using pill Currently using IUD	0.095	0.009	2,233	2,221	1.475	0.096	0.020	0.040
Currently using condoms	0.174	0.009	2,233	2,221	1.122	0.052	0.156	0.192
Currently using injectables	0.003	0.002	2,233	2,221	1.916	0.729	0.000	0.008
Currently using female sterilization	0.007	0.002	2,233	2,221	1.190	0.296	0.003	0.011
Using public sector source Want no more children	0.324 0.533	0.024 0.012	631 2,233	710 2,221	1.307 1.148	0.075 0.023	0.275 0.508	0.372 0.557
Want to delay next birth at least 2 years	0.135	0.012	2,233	2,221	1.140	0.023	0.508	0.557
Ideal number of children	2.526	0.017	3,476	3,595	1.217	0.007	2.492	2.561
Mothers received antenatal care for last birth	0.999	0.001	804	794	0.768	0.001	0.996	1.000
Births with skilled attendant at delivery	0.997	0.002	979	962	1.370	0.002	0.992	1.000
Had diarrhea in the past 2 weeks	0.026	0.005	971	958	0.869	0.180	0.017	0.036
Treated with ORS Sought medical treatment for diarrhea	0.542 0.343	0.105 0.097	31 31	25 25	1.010 0.965	0.193 0.282	0.333 0.150	0.752 0.537
Vaccination card seen (children age 12-23 months)	0.962	0.014	195	193	1.037	0.015	0.933	0.990
Received BCG vaccination	0.991	0.005	195	193	0.787	0.005	0.980	1.000
Received HepB vaccination at birth	0.971	0.011	195	193	0.937	0.012	0.949	0.994
Received DPT-HepB-Hib vaccination (third dose)	0.909	0.021	195	193	1.031	0.024	0.866	0.951
Received polio vaccination (third dose) Received rotavirus vaccination (second dose)	0.918 0.890	0.021 0.030	195 195	193 193	1.058 1.327	0.023 0.034	0.876 0.830	0.960 0.950
Received all vaccinations appropriate for a child age 12-	0.840	0.032	195	193	1.226	0.039	0.776	0.905
23 months Vaccination card seen (children age 24-35 months)	0.899	0.031	180	187	1.406	0.034	0.837	0.961
Received measles, mumps, and rubella (MMR)	0.736	0.044	180	187	1.347	0.059	0.649	0.823
vaccination Received DPT vaccination (fourth dose)	0.753	0.045	180	187	1.396	0.060	0.663	0.844
Received polio vaccination (fourth dose)	0.915	0.024	180	187	1.169	0.026	0.867	0.963
Received all basic vaccinations appropriate for children	0.858	0.031	180	187	1.201	0.036	0.797	0.919
age 24-35 months	0.604	0.044	100	107	1 070	0.064	0.606	0 700
Received all vaccinations appropriate for a child age 24- 35 months	0.694	0.044	180	187	1.278	0.064	0.606	0.782
Height-for-age (-2SD)	0.062	0.009	885	876	1.048	0.142	0.044	0.080
Weight-for-height (-2SD)	0.033	0.007	881	877	1.115	0.215	0.019	0.047
Weight-for-age (-2SD) Prevalence of anemia (children age 6-59 months)	0.023 0.136	0.006 0.015	909 743	907 721	1.114 1.119	0.249 0.110	0.012 0.106	0.034 0.166
Prevalence of anemia (women age 15-49)	0.129	0.013	3,315	3,381	1.805	0.082	0.108	0.150
Body mass index (BMI) < 18.5	0.041	0.005	3,280	3,366	1.333	0.112	0.032	0.051
Body mass index (BMI) ≥ 25	0.443	0.011	3,280	3,366	1.273	0.025	0.421	0.465
Ever experienced any physical violence since age 15	0.052	0.007	2,715	2,741	1.667	0.137	0.038	0.066
Ever experienced any sexual violence Ever experienced any physical/sexual violence by	0.008 0.072	0.002 0.010	2,715 2,055	2,741 1,872	1.164 1.741	0.255 0.138	0.004 0.053	0.012 0.092
husband/partner								
Ever experienced any physical or sexual violence by husband/partner in the last 12 months	0.031	0.006	2,055	1,872	1.463	0.181	0.020	0.042
Total fertility rate (last 3 years)	1.656	0.082	10,258	10,578	1.353	0.049	1.492	1.820
Total abortion rate (last 3 years)	0.450	0.056	10,258	10,578	1.162	0.124	0.338	0.562
		MEN						
Urban residence	1.000	0.000	1,522	1,558	na	0.000	1.000	1.000
Secondary or higher education	0.926	0.008	1,522	1,558	1.199	0.009	0.910	0.942
Never married (in union) Currently married (in union)	0.420 0.551	0.016 0.017	1,522 1,522	1,558 1,558	1.235 1.302	0.037 0.030	0.389 0.518	0.451 0.584
Had first sexual intercourse before age 18	0.331	0.019	1,111	1,119	1.682	0.030	0.135	0.211
Want no more children	0.464	0.028	854	859	1.621	0.060	0.409	0.520
Want to delay birth at least 2 years	0.107	0.013	854	859	1.228	0.121	0.081	0.133
Ideal number of children	2.591	0.035	1,495	1,528	1.531	0.013	2.521	2.660
Had 2+ sexual partners in past 12 months Abstinence among never-married youth (never had sex)	0.051 0.591	0.007 0.033	1,522 385	1,558 415	1.310 1.294	0.144 0.055	0.037 0.526	0.066 0.656
Paid for sexual intercourse in past 12 months	0.095	0.033	1,522	1,558	1.857	0.055	0.067	0.050
na=Not applicable				,	-			

#### Table B.4 Sampling errors: Rural sample, Armenia 2015-16

			Number	of cases				
Veriable		Standard	Un- weighted	Weighted	Design effect	Relative error		nce limits
Variable	Value (R)	error (SE) WOMEN	(N)	(WN)	(DEFT)	(SE/R)	R-2SE	R+2SE
Urban residence	0.000	0.000	2,571	2,459	na	na	0.000	0.000
Secondary or higher education	0.892	0.013	2,571	2,459	2.171	0.015	0.865 0.258	0.918 0.299
Never married (never in union) Currently married (in union)	0.278 0.681	0.010 0.011	2,571 2,571	2,459 2,459	1.138 1.158	0.036 0.016	0.256	0.299
Married before age 20	0.490	0.014	1,806	1,734	1.185	0.028	0.463	0.518
Had sexual intercourse before age 18	0.206	0.011	1,806	1,734	1.194	0.055	0.184	0.229
Currently pregnant Children ever born	0.032 1.567	0.004 0.027	2,571 2,571	2,459 2,459	1.019 1.013	0.111 0.017	0.025 1.514	0.039 1.620
Children surviving	1.527	0.026	2,571	2,459	1.009	0.017	1.476	1.578
Children ever born to women age 40-49	2.581	0.047	626	596	1.052	0.018	2.486	2.675
Know any contraceptive method Know a modern method	0.996 0.994	0.002 0.002	1,765 1,765	1,674 1,674	1.183 1.107	0.002 0.002	0.993 0.990	1.000 0.998
Currently using any method	0.581	0.014	1,765	1,674	1.171	0.024	0.553	0.608
Currently using a modern method	0.227	0.011	1,765	1,674	1.096	0.048	0.206	0.249
Currently using pill Currently using IUD	0.022 0.081	0.004 0.007	1,765 1,765	1,674 1,674	1.052 1.032	0.168 0.083	0.014 0.067	0.029 0.094
Currently using condoms	0.112	0.009	1,765	1,674	1.143	0.077	0.095	0.129
Currently using injectables	0.000	0.000	1,765	1,674	na	na	0.000	0.000
Currently using female sterilization Using public sector source	0.007 0.402	0.002 0.026	1,765 368	1,674 371	1.199 1.027	0.348 0.065	0.002 0.349	0.011 0.454
Want no more children	0.402	0.020	1,765	1,674	1.139	0.005	0.549	0.454
Want to delay next birth at least 2 years	0.100	0.008	1,765	1,674	1.144	0.082	0.083	0.116
Ideal number of children Mothers received antenatal care for last birth	2.702 0.993	0.019 0.004	2,496 592	2,380 568	1.048 1.199	0.007 0.004	2.664 0.984	2.740 1.000
Births with skilled attendant at delivery	0.993	0.004	745	710	0.619	0.004	0.984	1.000
Had diarrhea in the past 2 weeks	0.054	0.010	739	705	1.140	0.181	0.034	0.073
Treated with ORS	0.253 0.449	0.078	37 37	38 38	1.113	0.307	0.098	0.409 0.624
Sought medical treatment for diarrhea Vaccination card seen (children age 12-23 months)	0.449	0.088 0.017	150	- 30 146	1.065 1.059	0.195 0.017	0.274 0.928	0.824 0.994
Received BCG vaccination	0.989	0.006	150	146	0.771	0.007	0.976	1.000
Received HepB vaccination at birth	0.989	0.006	150	146	0.771	0.007	0.976	1.000
Received DPT-HepB-Hib vaccination (third dose) Received polio vaccination (third dose)	0.951 0.951	0.018 0.018	150 150	146 146	1.020 1.013	0.019 0.019	0.916 0.915	0.987 0.986
Received rotavirus vaccination (second dose)	0.917	0.025	150	146	1.101	0.027	0.868	0.967
Received all vaccinations appropriate for a child age 12-	0.896	0.027	150	146	1.105	0.031	0.841	0.950
23 months Vaccination card seen (children age 24-35 months)	0.960	0.017	152	148	1.079	0.018	0.926	0.994
Received measles, mumps, and rubella (MMR)	0.834	0.033	152	148	1.116	0.040	0.767	0.901
vaccination	0.004	0.000	450	4.40	4 005	0.004	0.000	0.004
Received DPT vaccination (fourth dose) Received polio vaccination (fourth dose)	0.861 0.945	0.030 0.020	152 152	148 148	1.065 1.103	0.034 0.021	0.802 0.904	0.921 0.985
Received all basic vaccinations appropriate for children	0.929	0.022	152	148	1.064	0.024	0.885	0.973
age 24-35 months	0 707	0.000	450	4.40	4.405	0.040	0.000	0.040
Received all vaccinations appropriate for a child age 24- 35 months	0.767	0.038	152	148	1.105	0.049	0.692	0.843
Height-for-age (-2SD)	0.134	0.016	708	697	1.281	0.123	0.101	0.167
Weight-for-height (-2SD)	0.055	0.010	691	679	1.133	0.182	0.035	0.075
Weight-for-age (-2SD) Prevalence of anemia (children age 6-59 months)	0.031 0.180	0.007 0.017	711 628	702 628	1.167 1.074	0.241 0.092	0.016 0.147	0.046 0.213
Prevalence of anemia (women age 15-49)	0.142	0.011	2,492	2,388	1.509	0.074	0.121	0.163
Body mass index (BMI) < 18.5	0.029	0.004	2,408	2,308	1.153	0.137	0.021	0.036
Body mass index (BMI) $\geq 25$ Ever experienced any physical violence since age 15	0.459 0.068	0.011 0.006	2,408 1.877	2,308 1.851	1.092 1.026	0.024 0.087	0.437 0.056	0.481 0.080
Ever experienced any sexual violence	0.010	0.003	1,877	1,851	1.123	0.253	0.005	0.016
Ever experienced any physical/sexual violence by	0.092	0.008	1,485	1,337	1.096	0.089	0.076	0.109
husband/partner Ever experienced any physical or sexual violence by	0.041	0.006	1,485	1,337	1.093	0.137	0.030	0.053
husband/partner in the last 12 months	0.041	0.000	1,400	1,007	1.000	0.107	0.000	0.000
Total fertility rate (last 3 years)	1.841	0.101	7,402	7,103	1.073	0.055	1.638	2.043
Total abortion rate (last 3 years)	0.812	0.087	7,402	7,103	1.138	0.107	0.638	0.986
		MEN						
Urban residence	0.000	0.000	1,233	1,197	na	na	0.000	0.000
Secondary or higher education Never married (in union)	0.791 0.447	0.021 0.014	1,233 1,233	1,197 1,197	1.833 0.955	0.027 0.030	0.749 0.420	0.834 0.474
Currently married (in union)	0.447 0.541	0.014	1,233	1,197	0.955	0.030	0.420 0.513	0.474 0.569
Had first sexual intercourse before age 18	0.127	0.014	848	823	1.245	0.112	0.099	0.156
Want no more children	0.501	0.020	673	648	1.024	0.039	0.461	0.540
Want to delay birth at least 2 years Ideal number of children	0.083 2.747	0.011 0.030	673 1,200	648 1,171	1.015 1.177	0.130 0.011	0.061 2.688	0.104 2.806
Had 2+ sexual partners in past 12 months	0.058	0.010	1,233	1,197	1.540	0.177	0.038	0.079
Abstinence among never-married youth (never had sex)	0.714	0.028	353	341	1.176	0.040	0.657	0.770
Paid for sexual intercourse in past 12 months	0.108	0.014	1,233	1,197	1.587	0.130	0.080	0.136
na=Not applicable								

#### Table B.5 Sampling errors: Yerevan sample, Armenia 2015-16

			Number	of cases				
		Otendend	Un-	M/sishtsd	Design	Relative	Confido	noo limito
Variable	Value (R)	Standard error (SE)	weighted (N)	Weighted (WN)	effect (DEFT)	error (SE/R)	R-2SE	nce limits R+2SE
		WOMEN						
Urban residence	1.000	0.000	1,055	2,001	na	0.000	1.000	1.000
Secondary or higher education Never married (never in union)	0.973 0.344	0.005 0.013	1,055 1,055	2,001 2,001	0.955 0.887	0.005 0.038	0.963 0.318	0.982 0.370
Currently married (in union)	0.570	0.014	1,055	2,001	0.928	0.025	0.542	0.598
Married before age 20	0.248	0.018	790	1,498	1.201	0.074	0.211	0.285
Had sexual intercourse before age 18 Currently pregnant	0.085 0.023	0.011 0.006	790 1,055	1,498 2,001	1.070 1.194	0.125 0.239	0.064 0.012	0.107 0.034
Children ever born	1.174	0.028	1,055	2,001	0.816	0.024	1.118	1.230
Children surviving	1.169	0.028 0.061	1,055 267	2,001 505	0.822 0.983	0.024 0.033	1.113 1.736	1.225 1.980
Children ever born to women age 40-49 Know any contraceptive method	1.858 1.000	0.001	601	1,140	0.983 na	0.000	1.000	1.980
Know a modern method	1.000	0.000	601	1,140	na	0.000	1.000	1.000
Currently using any method Currently using a modern method	0.584 0.401	0.019 0.022	601 601	1,140 1,140	0.968 1.091	0.033 0.054	0.545 0.357	0.623 0.444
Currently using pill	0.041	0.009	601	1,140	1.133	0.224	0.023	0.059
Currently using IUD	0.110	0.017	601	1,140	1.300	0.151	0.076	0.143
Currently using condoms Currently using injectables	0.223 0.006	0.016 0.004	601 601	1,140 1,140	0.967 1.374	0.074 0.721	0.190 0.000	0.256 0.015
Currently using female sterilization	0.009	0.004	601	1,140	0.985	0.421	0.001	0.017
Using public sector source	0.304 0.568	0.036 0.020	243 601	460	1.215 1.000	0.118 0.036	0.232 0.527	0.376 0.608
Want no more children Want to delay next birth at least 2 years	0.568	0.020	601	1,140 1,140	0.999	0.036	0.527 0.123	0.608
Ideal number of children	2.526	0.026	1,051	1,995	1.038	0.010	2.473	2.579
Mothers received antenatal care for last birth Births with skilled attendant at delivery	1.000 0.995	0.000 0.005	209 250	398 475	na 1.071	0.000 0.005	1.000 0.986	1.000 1.000
Had diarrhea in the past 2 weeks	0.004	0.003	250	475	0.999	1.002	0.000	0.012
Treated with ORS	1.000	0.000	1	2	na	0.000	1.000	1.000
Sought medical treatment for diarrhea Vaccination card seen (children age 12-23 months)	0.000 0.965	0.000 0.024	1 51	2 99	na 0.931	na 0.025	0.000 0.917	0.000 1.000
Received BCG vaccination	1.000	0.000	51	99	na	0.000	1.000	1.000
Received HepB vaccination at birth	1.000	0.000	51	99	na	0.000	1.000	1.000
Received DPT-HepB-Hib vaccination (third dose) Received polio vaccination (third dose)	0.903 0.903	0.036 0.036	51 51	99 99	0.867 0.867	0.039 0.039	0.832 0.832	0.974 0.974
Received rotavirus vaccination (second dose)	0.870	0.053	51	99	1.141	0.061	0.764	0.977
Received all vaccinations appropriate for a child age 12-	0.848	0.055	51	99	1.107	0.065	0.737	0.958
23 months Vaccination card seen (children age 24-35 months)	0.881	0.050	56	109	1.164	0.057	0.781	0.981
Received measles, mumps, and rubella (MMR)	0.667	0.070	56	109	1.107	0.104	0.528	0.806
vaccination Received DPT vaccination (fourth dose)	0.681	0.073	56	109	1.135	0.107	0.535	0.826
Received polio vaccination (fourth dose)	0.909	0.037	56	109	0.975	0.041	0.834	0.983
Received all basic vaccinations appropriate for children	0.846	0.047	56	109	0.992	0.056	0.751	0.941
age 24-35 months Received all vaccinations appropriate for a child age 24-	0.629	0.069	56	109	1.044	0.109	0.491	0.766
35 months								
Height-for-age (-2SD) Weight-for-height (-2SD)	0.035 0.014	0.012 0.008	208 209	419 420	0.933 1.015	0.332 0.590	0.012 0.000	0.059 0.030
Weight-for-age (-2SD)	0.019	0.009	220	441	1.035	0.498	0.000	0.038
Prevalence of anemia (children age 6-59 months)	0.104	0.026	163	331	1.052	0.247	0.052	0.155
Prevalence of anemia (women age 15-49) Body mass index (BMI) < 18.5	0.119 0.038	0.019 0.007	955 966	1,812 1,835	1.766 1.196	0.156 0.194	0.082 0.023	0.156 0.053
Body mass index (BMI) ≥ 25	0.448	0.018	966	1,835	1.126	0.040	0.412	0.484
Ever experienced any physical violence since age 15	0.046 0.005	0.012 0.003	791 791	1,522 1,522	1.603 1.113	0.261 0.579	0.022 0.000	0.069 0.010
Ever experienced any sexual violence Ever experienced any physical/sexual violence by	0.069	0.003	555	995	1.628	0.254	0.034	0.104
husband/partner								
Ever experienced any physical or sexual violence by husband/partner in the last 12 months	0.031	0.010	555	995	1.289	0.305	0.012	0.050
Total fertility rate (last 3 years)	1.551	0.134	3,054	5,789	1.245	0.086	1.283	1.819
Total abortion rate (last 3 years)	0.317	0.073	3,054	5,789	1.119	0.229	0.172	0.463
		MEN						
Urban residence	1.000	0.000	440	833	na	0.000	1.000	1.000
Secondary or higher education	0.960	0.011	440	833	1.187	0.011	0.938	0.983
Never married (in union) Currently married (in union)	0.426 0.535	0.025 0.027	440 440	833 833	1.066 1.118	0.059 0.050	0.376 0.482	0.477 0.588
Had first sexual intercourse before age 18	0.555	0.033	311	586	1.534	0.050	0.462	0.233
Want no more children	0.403	0.048	238	446	1.504	0.119	0.307	0.499
Want to delay birth at least 2 years Ideal number of children	0.111 2.593	0.021 0.057	238 438	446 829	1.030 1.331	0.189 0.022	0.069 2.479	0.153 2.707
Had 2+ sexual partners in past 12 months	0.045	0.037	438	833	1.209	0.022	0.021	0.069
Abstinence among never-married youth (never had sex)	0.521	0.050	123	235	1.094	0.095	0.422	0.620
Paid for sexual intercourse in past 12 months	0.108	0.025	440	833	1.665	0.229	0.058	0.157

#### Table B.6 Sampling errors: Aragatsotn sample, Armenia 2015-16

Variable Urban residence Secondary or higher education Never married (never in union) Currently married (in union)	Value (R) 0.202	Standard error (SE)	Un- weighted	Weighted	Design effect	Relative error	Confide	ano limito
Urban residence Secondary or higher education Never married (never in union)			(N)	(ŴN)	(DEFT)	(SE/R)	R-2SE	R+2SE
Secondary or higher education Never married (never in union)	0 202	WOMEN		(0010)			N-23L	NT20L
Never married (never in union)		0.016	453	315	0.856	0.080	0.169	0.234
	0.939	0.042	453	315	3.654	0.044	0.856	1.000
	0.373 0.593	0.027 0.030	453 453	315 315	1.170 1.309	0.071 0.051	0.320 0.533	0.427 0.654
Married before age 20	0.418	0.040	335	228	1.477	0.095	0.339	0.498
Had sexual intercourse before age 18	0.099	0.025	335	228	1.509	0.249	0.050	0.149
Currently pregnant	0.016	0.005	453	315	0.944	0.354	0.005	0.026
Children ever born Children surviving	1.348 1.335	0.067 0.065	453 453	315 315	1.099 1.070	0.050 0.048	1.214 1.206	1.482 1.465
Children ever born to women age 40-49	2.452	0.086	109	74	1.019	0.035	2.280	2.624
Know any contraceptive method	1.000	0.000	262	187	na	0.000	1.000	1.000
Know a modern method Currently using any method	0.998 0.630	0.002 0.033	262 262	187 187	0.684 1.112	0.002 0.053	0.995 0.563	1.000 0.696
Currently using a modern method	0.353	0.033	262	187	0.762	0.055	0.308	0.398
Currently using pill	0.078	0.015	262	187	0.927	0.197	0.048	0.109
Currently using IUD	0.087	0.019	262	187	1.072	0.215	0.049	0.124
Currently using condoms Currently using injectables	0.178 0.000	0.022 0.000	262 262	187 187	0.932 na	0.124 na	0.134 0.000	0.222 0.000
Currently using female sterilization	0.000	0.000	262	187	na	na	0.000	0.000
Using public sector source	0.248	0.045	86	64	0.971	0.183	0.157	0.339
Want no more children	0.415	0.044	262	187	1.456	0.107	0.326	0.504
Want to delay next birth at least 2 years Ideal number of children	0.061 2.688	0.021 0.051	262 452	187 314	1.389 1.128	0.337 0.019	0.020 2.586	0.103 2.790
Mothers received antenatal care for last birth	1.000	0.000	432	51	na	0.000	1.000	1.000
Births with skilled attendant at delivery	1.000	0.000	84	61	na	0.000	1.000	1.000
Had diarrhea in the past 2 weeks	0.088	0.030	84	61	1.005	0.338	0.029	0.148
Treated with ORS Sought medical treatment for diarrhea	0.245 0.346	0.186 0.167	7 7	5 5	1.204 0.977	0.760 0.482	0.000 0.012	0.617 0.680
Vaccination card seen (children age 12-23 months)	1.000	0.000	12	9	na	0.000	1.000	1.000
Received BCG vaccination	1.000	0.000	12	9	na	0.000	1.000	1.000
Received HepB vaccination at birth	1.000	0.000	12 12	9 9	na 0.716	0.000	1.000	1.000
Received DPT-HepB-Hib vaccination (third dose) Received polio vaccination (third dose)	0.961 0.961	0.039 0.039	12	9	0.716	0.041 0.041	0.882 0.882	1.000 1.000
Received rotavirus vaccination (second dose)	0.961	0.039	12	9	0.716	0.041	0.882	1.000
Received all vaccinations appropriate for a child age 12-	0.922	0.079	12	9	1.032	0.085	0.764	1.000
23 months Vaccination card seen (children age 24-35 months)	1.000	0.000	15	10	na	0.000	1.000	1.000
Received measles, mumps, and rubella (MMR)	0.933	0.048	15	10	0.725	0.051	0.837	1.029
vaccination								
Received DPT vaccination (fourth dose)	0.933	0.048	15	10	0.725	0.051	0.837	1.029
Received polio vaccination (fourth dose) Received all basic vaccinations appropriate for children	1.000 0.968	0.000 0.034	15 15	10 10	na 0.714	0.000 0.035	1.000 0.900	1.000 1.035
age 24-35 months	0.000	0.004	10	10	0.714	0.000	0.000	1.000
Received all vaccinations appropriate for a child age 24-	0.906	0.053	15	10	0.690	0.059	0.799	1.013
35 months	0.181	0.052	84	65	1.202	0.289	0.076	0.286
Height-for-age (-2SD) Weight-for-height (-2SD)	0.229	0.052	84 80	61	1.202	0.289	0.078	0.280
Weight-for-age (-2SD)	0.143	0.044	85	65	1.194	0.305	0.056	0.231
Prevalence of anemia (children age 6-59 months)	0.115	0.051	76	58	1.456	0.446	0.012	0.217
Prevalence of anemia (women age 15-49) Body mass index (BMI) < 18.5	0.142 0.009	0.020 0.005	439 438	308 306	1.227 1.044	0.143 0.513	0.102 0.000	0.183 0.019
Body mass index (BMI) $\ge 25$	0.587	0.042	438	306	1.797	0.072	0.503	0.672
Ever experienced any physical violence since age 15	0.175	0.022	339	241	1.081	0.128	0.131	0.220
Ever experienced any sexual violence	0.037	0.012	339	241	1.160	0.321	0.013	0.061
Ever experienced any physical/sexual violence by husband/partner	0.282	0.031	230	146	1.030	0.108	0.221	0.344
Ever experienced any physical or sexual violence by	0.219	0.028	230	146	1.010	0.126	0.164	0.274
husband/partner in the last 12 months		0.004	1 001	000	4 405	0.400	0.000	4 504
Total fertility rate (last 3 years) Total abortion rate (last 3 years)	1.144 0.151	0.224 0.064	1,331 1,331	929 929	1.195 1.028	0.196 0.422	0.696 0.023	1.591 0.278
Total abolition rate (last 5 years)	0.131		1,551	929	1.020	0.422	0.023	0.276
		MEN						
Urban residence	0.199	0.017	228	159	0.638	0.085	0.166	0.233
Secondary or higher education	0.877	0.058	228	159	2.626	0.066	0.761	0.993
Never married (in union) Currently married (in union)	0.539 0.445	0.038 0.038	228 228	159 159	1.143 1.144	0.070 0.085	0.463 0.369	0.614 0.520
Had first sexual intercourse before age 18	0.445	0.038	159	111	1.075	0.085	0.000	0.020
Want no more children	0.084	0.031	100	71	1.101	0.366	0.023	0.145
Want to delay birth at least 2 years	0.062	0.025	100	71	1.033	0.405	0.012	0.112
Ideal number of children Had 2+ sexual partners in past 12 months	2.741 0.000	0.047 0.000	227 228	159 159	0.861 na	0.017 na	2.648 0.000	2.834 0.000
Abstinence among never-married youth (never had sex)	0.000	0.000	67	47	1.366	0.109	0.553	0.861
Paid for sexual intercourse in past 12 months	0.008	0.007	228	159	1.106	0.810	0.000	0.021
na=Not applicable								

#### Table B.7 Sampling errors: Ararat sample, Armenia 2015-16

			Number	of cases				
			Un-		Design	Relative		
Veriekle	Value (D)	Standard	weighted	Weighted	effect	error		nce limits
Variable	Value (R)	error (SE) WOMEN	(N)	(WN)	(DEFT)	(SE/R)	R-2SE	R+2SE
Urban residence	0.269	0.025	597	552	1.367	0.092	0.220	0.319
Secondary or higher education	0.885	0.025	597	552	1.943	0.029	0.834	0.936
Never married (never in union)	0.286	0.023	597	552	1.216	0.079	0.241	0.331
Currently married (in union) Married before age 20	0.651 0.355	0.025 0.028	597 445	552 407	1.254 1.240	0.038 0.079	0.602 0.299	0.700 0.411
Had sexual intercourse before age 18	0.133	0.013	445	407	0.820	0.100	0.106	0.159
Currently pregnant	0.029	0.007	597	552	1.009	0.239	0.015	0.043
Children ever born Children surviving	1.454 1.424	0.049 0.049	597 597	552 552	0.981 1.012	0.034 0.035	1.356 1.325	1.552 1.523
Children ever born to women age 40-49	2.286	0.085	134	128	0.897	0.037	2.116	2.456
Know any contraceptive method	1.000 1.000	0.000	395	360	na	0.000	1.000	1.000 1.000
Know a modern method Currently using any method	0.661	0.000 0.024	395 395	360 360	na 0.992	0.000 0.036	1.000 0.614	0.709
Currently using a modern method	0.347	0.033	395	360	1.360	0.094	0.282	0.413
Currently using pill	0.008 0.134	0.005 0.014	395 395	360 360	1.057 0.806	0.576 0.103	0.000 0.106	0.018 0.162
Currently using IUD Currently using condoms	0.134	0.014	395	360	1.300	0.103	0.100	0.102
Currently using injectables	0.000	0.000	395	360	na	na	0.000	0.000
Currently using female sterilization	0.018 0.411	0.009	395 135	360	1.311	0.484 0.088	0.001	0.036 0.483
Using public sector source Want no more children	0.411 0.492	0.036 0.019	135 395	125 360	0.850 0.759	0.088	0.339 0.454	0.483
Want to delay next birth at least 2 years	0.084	0.018	395	360	1.302	0.216	0.048	0.121
Ideal number of children Mothers received antenatal care for last birth	2.584 0.985	0.028 0.011	597 160	552 140	0.913 1.113	0.011 0.011	2.528 0.963	2.641 1.000
Births with skilled attendant at delivery	1.000	0.000	193	140	na	0.000	1.000	1.000
Had diarrhea in the past 2 weeks	0.057	0.018	191	166	1.000	0.321	0.020	0.093
Treated with ORS Sought medical treatment for diarrhea	0.838 0.797	0.152 0.157	10 10	9 9	1.310 1.236	0.182 0.198	0.534 0.482	1.000 1.000
Vaccination card seen (children age 12-23 months)	0.988	0.012	47	43	0.752	0.190	0.462	1.000
Received BCG vaccination	0.988	0.012	47	43	0.752	0.012	0.964	1.000
Received HepB vaccination at birth Received DPT-HepB-Hib vaccination (third dose)	0.974 0.916	0.018 0.042	47 47	43 43	0.756 1.029	0.018 0.046	0.939 0.832	1.000 0.999
Received polio vaccination (third dose)	0.885	0.042	47	43	1.025	0.054	0.789	0.982
Received rotavirus vaccination (second dose)	0.856	0.053	47	43	1.025	0.062	0.750	0.961
Received all vaccinations appropriate for a child age 12- 23 months	0.842	0.053	47	43	0.999	0.064	0.735	0.949
Vaccination card seen (children age 24-35 months)	1.000	0.000	41	39	na	0.000	1.000	1.000
Received measles, mumps, and rubella (MMR)	0.811	0.054	41	39	0.897	0.066	0.703	0.918
vaccination Received DPT vaccination (fourth dose)	0.826	0.059	41	39	1.010	0.071	0.709	0.943
Received polio vaccination (fourth dose)	0.935	0.040	41	39	1.050	0.042	0.856	1.014
Received all basic vaccinations appropriate for children	0.935	0.040	41	39	1.050	0.042	0.856	1.014
age 24-35 months Received all vaccinations appropriate for a child age 24-	0.649	0.074	41	39	1.014	0.114	0.501	0.797
35 months								
Height-for-age (-2SD) Weight-for-height (-2SD)	0.137 0.134	0.037 0.028	179 164	161 147	1.360 1.044	0.272 0.210	0.062 0.078	0.211 0.191
Weight-for-age (-2SD)	0.028	0.020	182	164	0.963	0.429	0.004	0.052
Prevalence of anemia (children age 6-59 months)	0.103	0.025	172	159	1.099	0.247	0.052	0.153
Prevalence of anemia (women age 15-49) Body mass index (BMI) < 18.5	0.090 0.027	0.014 0.007	586 563	539 519	1.143 1.014	0.151 0.256	0.063 0.013	0.117 0.041
Body mass index (BMI) ≥ 25	0.436	0.020	563	519	0.961	0.046	0.396	0.477
Ever experienced any physical violence since age 15	0.130	0.017	464	421	1.060	0.127	0.097	0.163
Ever experienced any sexual violence Ever experienced any physical/sexual violence by	0.019 0.178	0.008 0.024	464 372	421 306	1.318 1.231	0.437 0.138	0.002 0.129	0.036 0.226
husband/partner								
Ever experienced any physical or sexual violence by husband/partner in the last 12 months	0.048	0.018	372	306	1.638	0.379	0.012	0.084
Total fertility rate (last 3 years)	1.949	0.209	1,748	1,614	1.159	0.107	1.531	2.368
Total abortion rate (last 3 years)	0.527	0.133	1,748	1,614	1.198	0.252	0.262	0.792
		MEN						
Urban residence	0.268	0.032	313	290	1.272	0.119	0.205	0.332
Secondary or higher education	0.791	0.054	313	290	2.340	0.069	0.683	0.900
Never married (in union) Currently married (in union)	0.466 0.520	0.022 0.022	313 313	290 290	0.781 0.791	0.047 0.043	0.422 0.475	0.510 0.565
Had first sexual intercourse before age 18	0.520	0.022	235	290 217	0.791	0.043	0.475	0.565
Want no more children	0.303	0.029	170	151	0.829	0.097	0.245	0.362
Want to delay birth at least 2 years Ideal number of children	0.008 2.574	0.005 0.060	170 312	151 289	0.778 1.286	0.673 0.023	0.000 2.455	0.018 2.694
Had 2+ sexual partners in past 12 months	2.574 0.039	0.000	312	289	1.200	0.023	2.455 0.014	2.694
Abstinence among never-married youth (never had sex)	0.713	0.062	70	67	1.134	0.087	0.590	0.837
Paid for sexual intercourse in past 12 months	0.064	0.014	313	290	0.979	0.212	0.037	0.091
na=Not applicable								
··· F.F. ··· ·								

#### Table B.8 Sampling errors: Armavir sample, Armenia 2015-16

Value (R) 0.351 0.817 0.240 0.692 0.495 0.225 0.035	Standard error (SE) WOMEN 0.028 0.040 0.021 0.019	Un- weighted (N) 642	Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confider R-2SE	nce limits R+2SE
0.351 0.817 0.240 0.692 0.495 0.225	WOMEN 0.028 0.040 0.021		(000)			IT LOL	TREEL
0.817 0.240 0.692 0.495 0.225	0.040 0.021	642					
0.240 0.692 0.495 0.225	0.021		586	1.484	0.080	0.295	0.407
0.692 0.495 0.225		642	586	2.615	0.049	0.737	0.897
0.495 0.225		642 642	586 586	1.248 1.061	0.088 0.028	0.198 0.653	0.282 0.731
0.225	0.023	457	417	0.991	0.028	0.449	0.542
0.035	0.027	457	417	1.363	0.118	0.172	0.279
	0.008	642	586	1.040	0.215	0.020	0.050
							1.729 1.673
							2.836
0.995	0.003	435	405	1.037	0.003	0.989	1.000
0.989	0.005	435	405	1.020	0.005	0.978	0.999
							0.637
							0.251 0.039
0.050							0.065
0.146	0.013	435	405	0.788	0.091	0.119	0.173
				na	na		0.000
							0.013 0.340
							0.619
0.126	0.014	435	405	0.895	0.113	0.097	0.154
2.732	0.047	575	528	1.189	0.017	2.638	2.826
							1.000
							1.000 0.112
							0.000
0.494	0.148	10	12	0.959	0.299	0.198	0.790
0.947	0.041	39	38	1.163	0.043	0.866	1.000
							1.000
							1.000 1.000
		39					1.000
0.890	0.059	39	38	1.207	0.067	0.771	1.000
0.890	0.059	39	38	1.207	0.067	0.771	1.000
0.082	0.018	30	38	0.866	0.018	0.047	1.018
							1.010
0.001	0.01				0.000	0	
0.948	0.039	39	38		0.042	0.869	1.027
							1.010
0.915	0.049	39	30	1.101	0.055	0.015	1.010
0.814	0.078	39	38	1.275	0.096	0.658	0.971
			185	1.166		0.051	0.143
							0.051 0.080
							0.000
0.074	0.010	634	580	0.956	0.134	0.054	0.094
0.037	0.011	617	561	1.391	0.289	0.015	0.058
							0.559
							0.034 0.009
							0.045
0.009	0.005	370	336	0.924	0.503	0.000	0.018
2 168	0.206	1 954	1 605	0.042	0.005	1 756	2.581
							1.611
1.170		1,001	1,000	1.221	0.100	0.100	1.011
	MEN						
0.293	0.026	284	268	0.950	0.088	0.241	0.344
0.650	0.055	284	268	1.918	0.084	0.541	0.759
							0.462 0.649
							0.649
	0.045			1.182	0.077	0.490	0.669
0.078	0.020	172	159	0.965	0.253	0.039	0.118
							3.185
							0.262 0.520
							0.520
		•					
	1.615 1.565 2.608 0.995 0.989 0.597 0.224 0.023 0.050 0.146 0.000 0.005 0.248 0.567 0.126 2.732 0.990 1.000 0.064 0.000 0.494 0.947 1.000 1.000 0.494 0.982 0.982 0.890 0.982 0.890 0.982 0.890 0.982 0.890 0.982 0.890 0.982 0.890 0.982 0.890 0.982 0.890 0.982 0.890 0.982 0.891 0.948 0.913 0.913 0.913 0.913 0.814 0.007 0.022 0.048 0.074 0.074 0.022 0.048 0.074 0.022 0.004 0.029 0.009 2.168 1.170	1.615         0.057           1.565         0.054           2.608         0.114           0.995         0.003           0.989         0.005           0.597         0.020           0.224         0.014           0.023         0.008           0.146         0.013           0.000         0.000           0.005         0.004           0.248         0.046           0.567         0.026           0.126         0.014           2.732         0.047           0.990         0.010           1.000         0.000           0.644         0.024           0.000         0.000           0.494         0.148           0.947         0.414           1.000         0.000           0.948         0.018           0.947         0.141           1.000         0.000           0.982         0.118           0.982         0.118           0.890         0.599           0.982         0.018           0.891         0.049           0.913         0.049           0.913 <td>1.615         0.057         642           1.565         0.054         642           2.608         0.114         154           0.995         0.003         435           0.989         0.005         435           0.297         0.020         435           0.023         0.008         435           0.050         0.008         435           0.050         0.008         435           0.050         0.004         435           0.005         0.004         435           0.005         0.004         435           0.248         0.046         101           0.567         0.026         435           0.126         0.014         435           2.732         0.047         575           0.990         0.010         159           1.000         0.000         199           0.064         0.024         197           0.000         39         1.000         0.000           0.947         0.041         39           1.000         0.000         39           0.982         0.018         39           0.982         0.0</td> <td>1.615         0.057         642         586           2.608         0.114         154         141           0.995         0.003         435         405           0.989         0.005         435         405           0.224         0.014         435         405           0.023         0.008         435         405           0.050         0.008         435         405           0.050         0.008         435         405           0.050         0.004         435         405           0.050         0.004         435         405           0.248         0.046         101         91           0.567         0.026         435         405           2.732         0.047         575         528           0.990         0.010         159         147           1.000         0.000         199         190           0.64         0.024         197         188           0.000         12         0.433         38           0.992         0.018         39         38           0.900         0.000         39         38           <t< td=""><td>1.615         0.057         642         586         1.031           1.565         0.054         642         586         1.091           2.608         0.114         154         141         1.173           0.995         0.003         435         405         1.020           0.597         0.020         435         405         0.850           0.224         0.014         435         405         0.734           0.160         0.008         435         405         0.734           0.144         0.013         435         405         0.788           0.000         0.004         435         405         1.121           0.248         0.046         101         91         1.063           0.567         0.026         435         405         1.097           0.262         0.014         435         405         0.895           2.732         0.047         575         528         1.189           0.900         0.000         10         12         na           0.494         0.148         10         12         0.959           0.900         0.000         39         38</td><td>1615         0.057         642         586         1.103         0.034           1565         0.054         642         586         1.031         0.034           0.995         0.003         435         405         1.037         0.003           0.989         0.005         435         405         0.850         0.034           0.224         0.014         435         405         0.799         0.061           0.223         0.008         435         405         0.734         0.153           0.146         0.013         435         405         0.788         0.091           0.005         0.004         435         405         1.121         0.766           0.248         0.046         101         91         1.063         0.185           0.567         0.026         435         405         1.097         0.046           0.126         0.014         435         405         1.121         0.756           0.567         0.026         435         405         1.129         0.017           0.990         0.010         12         na         na         0.000           0.664         0.024</td><td>1.615         0.057         642         586         1.091         0.034         1.458           2.608         0.114         154         141         1.173         0.044         2.381           0.995         0.005         435         405         1.037         0.034         2.889           0.999         0.005         435         405         0.020         0.034         0.557           0.524         0.014         435         405         0.734         0.135         0.065           0.023         0.008         435         405         0.734         0.153         0.035           0.460         0.013         435         405         0.734         0.155         0.000           0.461         0.013         435         405         0.738         0.091         0.119           0.400         0.004         435         405         1.89         0.015         0.263         0.000         0.264         0.065         0.000         0.264         0.051         0.166         0.515         0.567         0.226         435         405         1.037         0.466         0.515           0.567         0.226         435         405         1.037</td></t<></td>	1.615         0.057         642           1.565         0.054         642           2.608         0.114         154           0.995         0.003         435           0.989         0.005         435           0.297         0.020         435           0.023         0.008         435           0.050         0.008         435           0.050         0.008         435           0.050         0.004         435           0.005         0.004         435           0.005         0.004         435           0.248         0.046         101           0.567         0.026         435           0.126         0.014         435           2.732         0.047         575           0.990         0.010         159           1.000         0.000         199           0.064         0.024         197           0.000         39         1.000         0.000           0.947         0.041         39           1.000         0.000         39           0.982         0.018         39           0.982         0.0	1.615         0.057         642         586           2.608         0.114         154         141           0.995         0.003         435         405           0.989         0.005         435         405           0.224         0.014         435         405           0.023         0.008         435         405           0.050         0.008         435         405           0.050         0.008         435         405           0.050         0.004         435         405           0.050         0.004         435         405           0.248         0.046         101         91           0.567         0.026         435         405           2.732         0.047         575         528           0.990         0.010         159         147           1.000         0.000         199         190           0.64         0.024         197         188           0.000         12         0.433         38           0.992         0.018         39         38           0.900         0.000         39         38 <t< td=""><td>1.615         0.057         642         586         1.031           1.565         0.054         642         586         1.091           2.608         0.114         154         141         1.173           0.995         0.003         435         405         1.020           0.597         0.020         435         405         0.850           0.224         0.014         435         405         0.734           0.160         0.008         435         405         0.734           0.144         0.013         435         405         0.788           0.000         0.004         435         405         1.121           0.248         0.046         101         91         1.063           0.567         0.026         435         405         1.097           0.262         0.014         435         405         0.895           2.732         0.047         575         528         1.189           0.900         0.000         10         12         na           0.494         0.148         10         12         0.959           0.900         0.000         39         38</td><td>1615         0.057         642         586         1.103         0.034           1565         0.054         642         586         1.031         0.034           0.995         0.003         435         405         1.037         0.003           0.989         0.005         435         405         0.850         0.034           0.224         0.014         435         405         0.799         0.061           0.223         0.008         435         405         0.734         0.153           0.146         0.013         435         405         0.788         0.091           0.005         0.004         435         405         1.121         0.766           0.248         0.046         101         91         1.063         0.185           0.567         0.026         435         405         1.097         0.046           0.126         0.014         435         405         1.121         0.756           0.567         0.026         435         405         1.129         0.017           0.990         0.010         12         na         na         0.000           0.664         0.024</td><td>1.615         0.057         642         586         1.091         0.034         1.458           2.608         0.114         154         141         1.173         0.044         2.381           0.995         0.005         435         405         1.037         0.034         2.889           0.999         0.005         435         405         0.020         0.034         0.557           0.524         0.014         435         405         0.734         0.135         0.065           0.023         0.008         435         405         0.734         0.153         0.035           0.460         0.013         435         405         0.734         0.155         0.000           0.461         0.013         435         405         0.738         0.091         0.119           0.400         0.004         435         405         1.89         0.015         0.263         0.000         0.264         0.065         0.000         0.264         0.051         0.166         0.515         0.567         0.226         435         405         1.037         0.466         0.515           0.567         0.226         435         405         1.037</td></t<>	1.615         0.057         642         586         1.031           1.565         0.054         642         586         1.091           2.608         0.114         154         141         1.173           0.995         0.003         435         405         1.020           0.597         0.020         435         405         0.850           0.224         0.014         435         405         0.734           0.160         0.008         435         405         0.734           0.144         0.013         435         405         0.788           0.000         0.004         435         405         1.121           0.248         0.046         101         91         1.063           0.567         0.026         435         405         1.097           0.262         0.014         435         405         0.895           2.732         0.047         575         528         1.189           0.900         0.000         10         12         na           0.494         0.148         10         12         0.959           0.900         0.000         39         38	1615         0.057         642         586         1.103         0.034           1565         0.054         642         586         1.031         0.034           0.995         0.003         435         405         1.037         0.003           0.989         0.005         435         405         0.850         0.034           0.224         0.014         435         405         0.799         0.061           0.223         0.008         435         405         0.734         0.153           0.146         0.013         435         405         0.788         0.091           0.005         0.004         435         405         1.121         0.766           0.248         0.046         101         91         1.063         0.185           0.567         0.026         435         405         1.097         0.046           0.126         0.014         435         405         1.121         0.756           0.567         0.026         435         405         1.129         0.017           0.990         0.010         12         na         na         0.000           0.664         0.024	1.615         0.057         642         586         1.091         0.034         1.458           2.608         0.114         154         141         1.173         0.044         2.381           0.995         0.005         435         405         1.037         0.034         2.889           0.999         0.005         435         405         0.020         0.034         0.557           0.524         0.014         435         405         0.734         0.135         0.065           0.023         0.008         435         405         0.734         0.153         0.035           0.460         0.013         435         405         0.734         0.155         0.000           0.461         0.013         435         405         0.738         0.091         0.119           0.400         0.004         435         405         1.89         0.015         0.263         0.000         0.264         0.065         0.000         0.264         0.051         0.166         0.515         0.567         0.226         435         405         1.037         0.466         0.515           0.567         0.226         435         405         1.037

#### Table B.9 Sampling errors: Gegharkunik sample, Armenia 2015-16

			Number	of cases				
		Standard	Un- weighted	Weighted	Design effect	Relative error		nce limits
Variable	Value (R)	error (SE) WOMEN	(N)	(WN)	(DEFT)	(SE/R)	R-2SE	R+2SE
Urban residence	0.352	0.022	551	478	1.059	0.061	0.309	0.395
Secondary or higher education	0.937	0.011	551	478	1.090	0.012	0.915	0.960
Never married (never in union)	0.341 0.623	0.020	551	478	0.973 1.019	0.058 0.034	0.302 0.581	0.381 0.665
Currently married (in union) Married before age 20	0.488	0.021 0.032	551 379	478 324	1.235	0.034	0.381	0.005
Had sexual intercourse before age 18	0.248	0.031	379	324	1.379	0.124	0.186	0.309
Currently pregnant Children ever born	0.017 1.421	0.005 0.056	551 551	478 478	0.883 1.007	0.290 0.039	0.007 1.309	0.026 1.533
Children surviving	1.421	0.050	551	478	0.943	0.039	1.296	1.503
Children ever born to women age 40-49	2.366	0.115	139	115	1.356	0.049	2.136	2.597
Know any contraceptive method Know a modern method	0.992 0.992	0.005 0.005	345 345	298 298	0.995 0.995	0.005 0.005	0.983 0.983	1.000 1.000
Currently using any method	0.697	0.038	345	298	1.519	0.054	0.622	0.773
Currently using a modern method	0.193	0.017	345	298	0.821	0.091	0.158	0.228
Currently using pill Currently using IUD	0.021 0.097	0.009 0.017	345 345	298 298	1.224 1.042	0.451 0.171	0.002 0.064	0.040 0.130
Currently using condoms	0.054	0.011	345	298	0.929	0.210	0.031	0.076
Currently using injectables	0.000	0.000	345	298	na	na	0.000	0.000
Currently using female sterilization Using public sector source	0.000 0.601	0.000 0.065	345 64	298 52	na 1.047	na 0.107	0.000 0.472	0.000 0.731
Want no more children	0.684	0.025	345	298	0.989	0.036	0.635	0.734
Want to delay next birth at least 2 years	0.045	0.011	345	298	0.995	0.246	0.023	0.068
Ideal number of children Mothers received antenatal care for last birth	2.735 0.972	0.047 0.021	548 73	475 65	1.051 1.083	0.017 0.021	2.642 0.931	2.829 1.000
Births with skilled attendant at delivery	0.992	0.008	88	77	0.853	0.008	0.976	1.000
Had diarrhea in the past 2 weeks	0.015	0.015	87	76	1.135	0.964	0.000	0.044
Treated with ORS Sought medical treatment for diarrhea	0.000 0.000	0.000 0.000	1 1	1	na na	na na	0.000 0.000	0.000 0.000
Vaccination card seen (children age 12-23 months)	0.947	0.054	14	12	0.875	0.057	0.840	1.000
Received BCG vaccination Received HepB vaccination at birth	0.947 0.947	0.054 0.054	14 14	12	0.875 0.875	0.057 0.057	0.840 0.840	1.000 1.000
Received DPT-HepB-Hib vaccination (third dose)	0.663	0.054	14	12 12	1.085	0.037	0.840	0.943
Received polio vaccination (third dose)	0.764	0.113	14	12	0.977	0.148	0.537	0.990
Received rotavirus vaccination (second dose)	0.743 0.612	0.139 0.157	14 14	12 12	1.168 1.178	0.188 0.256	0.464 0.298	1.000 0.926
Received all vaccinations appropriate for a child age 12- 23 months	0.012	0.157	14	12	1.170	0.250	0.290	0.920
Vaccination card seen (children age 24-35 months) Received measles, mumps, and rubella (MMR)	0.957 0.740	0.040 0.099	18 18	16 16	0.829 0.927	0.042 0.134	0.877 0.542	1.037 0.937
vaccination Received DPT vaccination (fourth dose)	0.807	0.080	18	16	0.842	0.099	0.648	0.967
Received polio vaccination (fourth dose)	0.807	0.080	18	16	0.842	0.099	0.648	0.967
Received all basic vaccinations appropriate for children	0.807	0.080	18	16	0.842	0.099	0.648	0.967
age 24-35 months Received all vaccinations appropriate for a child age 24-	0.740	0.099	18	16	0.927	0.134	0.542	0.937
35 months Height-for-age (-2SD)	0.099	0.049	83	75	1.525	0.494	0.001	0.197
Weight-for-height (-2SD)	0.106	0.046	81	73	1.073	0.434	0.014	0.199
Weight-for-age (-2SD)	0.000	0.000	82	74	na 1 504	na	0.000	0.000
Prevalence of anemia (children age 6-59 months) Prevalence of anemia (women age 15-49)	0.488 0.392	0.085 0.033	71 540	64 468	1.504 1.582	0.175 0.085	0.317 0.326	0.659 0.459
Body mass index (BMI) < 18.5	0.010	0.004	532	461	1.010	0.429	0.001	0.019
Body mass index (BMI) $\geq 25$	0.386 0.043	0.022 0.011	532 409	461 365	1.049 1.130	0.057 0.264	0.341 0.020	0.430 0.066
Ever experienced any physical violence since age 15 Ever experienced any sexual violence	0.045	0.004	409	365	0.942	0.204	0.020	0.000
Ever experienced any physical/sexual violence by	0.067	0.018	297	236	1.230	0.268	0.031	0.102
husband/partner Ever experienced any physical or sexual violence by husband/partner in the last 12 months	0.017	0.008	297	236	1.054	0.464	0.001	0.033
Total fertility rate (last 3 years) Total abortion rate (last 3 years)	1.054 1.396	0.149 0.250	1,577 1,577	1,369 1,369	0.969 1.061	0.141 0.179	0.756 0.896	1.352 1.897
		MEN	.,	.,				
	0.222		260	225	0.007	0.097	0.274	0.200
Urban residence Secondary or higher education	0.332 0.888	0.029 0.019	268 268	235 235	0.997 0.963	0.087 0.021	0.274 0.851	0.389 0.925
Never married (in union)	0.470	0.020	268	235	0.646	0.042	0.431	0.509
Currently married (in union)	0.501	0.025	268	235	0.811	0.049	0.452	0.551
Had first sexual intercourse before age 18 Want no more children	0.009 0.702	0.007 0.035	178 133	152 118	0.929 0.877	0.736 0.050	0.000 0.632	0.022 0.771
Want to delay birth at least 2 years	0.044	0.018	133	118	1.008	0.409	0.008	0.080
Ideal number of children	2.897 0.008	0.063	267	234	1.039	0.022	2.771	3.022 0.020
Had 2+ sexual partners in past 12 months Abstinence among never-married youth (never had sex)	0.008	0.006 0.036	268 86	235 78	1.102 0.992	0.760 0.041	0.000 0.801	0.020 0.945
Paid for sexual intercourse in past 12 months	0.155	0.041	268	235	1.833	0.263	0.074	0.237

#### Table B.10 Sampling errors: Lori sample, Armenia 2015-16

Unitable         Unitable         Unitable         Unitable         Unitable         Unitable         Unitable         Unitable         Confidence limits         Confidence limits           Secondary of higher education         0.653         0.078         337         355         1.798         0.051         0.262         0.084         0.091           Secondary of higher education         0.633         0.033         337         355         1.138         0.201         0.643         0.044         337         355         1.138         0.201         0.078         0.844         1.314         0.131         0.028         0.643         0.643         0.643         0.644         0.678	Standard         Velopited         Weighted         Weighted         Weighted         Effect         effect         Confidence Imits           manage         WOMEN         Women         Women         Women         Women         Women         0.551         0.611         0.628         0.928         0.928         0.937         355         1.216         0.051         0.628         0.989         0.028         0.937         355         1.138         0.028         0.989         0.038			-	Number	of cases				
WOMEN         V           Ubare residence         0.670         0.670         0.621         0.623         0.611         0.622         0.623         0.611         0.622         0.623         0.611         0.620         0.623         0.611         0.621         0.623         0.611         0.623         0.611         0.623         0.611         0.623         0.611         0.623         0.611         <	WOMEN         WOMEN           nondary or pigher education         0.653         0.024         337         365         1.076         0.014         0.975         0.985         0.925         0.985         0.924         0.975         0.985         0.924         0.975         0.985         0.294         0.975         0.985         0.294         0.985         0.294         0.985         0.294         0.985         0.294         0.985         0.294         0.985         0.294         0.985         0.294         0.985         0.294         0.985         0.294         0.985         0.294         0.985         0.294         0.985 <th>Variable</th> <th>Value (P)</th> <th></th> <th>weighted</th> <th></th> <th>effect</th> <th>error</th> <th></th> <th></th>	Variable	Value (P)		weighted		effect	error		
Secondary or higher education         0.953         0.014         337         355         1.216         0.015         0.925         0.981           Nextmer mand (over in union)         0.358         0.036         237         235         1.126         0.081         0.242         0.415           Married baffers age 20         0.036         0.037         0.014         337         355         1.138         0.0216         0.018         0.0428         0.018         0.0428         0.018         0.0216         0.018         0.0216         0.018         0.018         0.018         0.0216         0.018         0.018         0.0216         0.018         0.018         0.018         0.018         0.018         0.018         0.018         0.018         0.018         0.018         0.018         0.018         0.001         0.000         0.022         1.146         0.000         0.026         2.14         n.80         0.000         1.000         0.000         2.25         2.14         0.023         0.164         0.026         0.018         0.022         0.164         0.026         2.14         0.323         0.164         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000 <td< th=""><th>condary higher education         0.853         0.014         337         355         1.216         0.015         0.825         0.891           streed before age 20         0.353         0.028         231         244         1.214         0.016         0.240         0.413           streed before age 20         0.353         0.028         231         244         1.214         0.016         0.433           streed before age 20         0.131         0.028         231         244         1.214         0.016         0.145           streed before age 20         0.014         237         355         1.134         0.028         0.016         0.831           streed before before age 24         2.060         0.145         79         80         1.150         0.070         1.707         2.350           streed before before age 20         0.044         0.022         2.024         1.344         0.024         0.010         1.000         1.000         1.000         1.001         1.000         1.001         1.000         1.001         1.000         1.001         1.001         1.001         1.001         1.001         1.001         1.001         1.001         1.001         1.001         1.001         1.001</th><th>Vanabie</th><th>value (IV)</th><th></th><th>(11)</th><th>(0010)</th><th></th><th>(OL/IV)</th><th>11-20L</th><th>R120L</th></td<>	condary higher education         0.853         0.014         337         355         1.216         0.015         0.825         0.891           streed before age 20         0.353         0.028         231         244         1.214         0.016         0.240         0.413           streed before age 20         0.353         0.028         231         244         1.214         0.016         0.433           streed before age 20         0.131         0.028         231         244         1.214         0.016         0.145           streed before age 20         0.014         237         355         1.134         0.028         0.016         0.831           streed before before age 24         2.060         0.145         79         80         1.150         0.070         1.707         2.350           streed before before age 20         0.044         0.022         2.024         1.344         0.024         0.010         1.000         1.000         1.000         1.001         1.000         1.001         1.000         1.001         1.000         1.001         1.001         1.001         1.001         1.001         1.001         1.001         1.001         1.001         1.001         1.001         1.001	Vanabie	value (IV)		(11)	(0010)		(OL/IV)	11-20L	R120L
Never mained (fiver in union)         0.353         0.029         337         355         1.127         0.083         0.244         0.442           Currently marined (in union)         0.030         0.039         337         355         1.127         0.048         0.022         2.14         0.023         0.144         0.022         0.144         0.022         2.14         0.023         0.014         0.022         0.178         0.0078         0.008         0.008         0.022         2.14         0.023         0.014         0.022         0.014         0.025	were markel (ñever in union)         0.353         0.029         337         356         1.127         0.068         0.242         0.641           uf avoid interouse before age 18         0.331         0.028         231         244         1.183         0.068         0.078         0.183           uf avoid interouse before age 18         0.337         0.028         231         244         1.183         0.038         0.077         355         1.181         0.038         0.077         2355         1.181         0.038         0.077         2355         1.181         0.038         0.071         1.098         1.409           uiden surving         wormen age 40-49         1.268         0.164         377         355         1.181         0.000         1.100         1.001         1.000         1.001         1.000         1.001         1.000         1.001         1.000         1.001         1.000         1.001         1.000         1.001         1.000         1.00									
Currently using particular for union) 0.063 0.030 0.337 355 1.138 0.050 0.542 0.663 0.487 0.014 0.0189 0.0180 0.0542 0.0683 0.487 0.014 0.337 0.555 1.138 0.050 0.542 0.0683 0.487 0.014 0.337 0.555 1.138 0.050 0.542 0.0683 0.487 0.014 0.337 0.555 1.138 0.052 0.016 0.068 0.498 0.016 0.062 0.068 0.498 0.068 0.016 0.062 0.068 0.498 0.068 0.498 0.006 0.062 0.554 0.008 0.498 0.008 0.008 0.008 0.008 0.008 0.008 0.008 0.008 0.008 0.214 0.000	menthy married (in union)         0.603         0.337         355         1.138         0.030         0.422         0.683           internetly pregnant         0.037         0.014         337         355         1.138         0.038         0.016         0.038         0.017         337         355         1.138         0.068         0.016         0.068         1.016         0.028         0.016         0.068         1.016         0.028         0.016         0.068         1.016         0.028         1.138         0.068         1.016         0.068         1.016         0.068         1.016         0.068         1.016         1.016         1.016         1.016         1.016         1.016         1.000         0.000         1.000         1.000         1.000         1.000         1.000         1.000         0.000         1.									
Marine before age 20         0.386         0.038         221         224         1.214         0.108         0.280         0.438           Held sexual intercourse before age 18         0.137         0.224         237         2344         1.183         0.210         0.078         0.788           Children swind on Children wer born         0.225         0.071         3377         355         1.184         0.062         1.068         0.070         1.777         2.55           Children wer born         0.070         0.777         2.55         0.178         3377         355         1.184         0.082         1.060         0.070         1.777         2.55           Children wer born         0.070         0.778         2.347         3.347         3.55         1.184         0.080         0.665         0.666           Currently using particitables         0.080         0.014         2.025         2.14         0.842         0.644         0.178           Currently using particitables         0.000         0.000         2.025         2.14         0.846         0.021         0.244         0.73         0.450         0.044         0.178           Currently using particitables         0.000         0.000         0.000	arried before age 20 a scalar intercurve before age 20 a scalar intercurve before age 18 a scalar intercurve before age 18 bit a scalar intercurve before age 18 bit a scalar intercurve before age 40-40 1 255 1 25									
Currently using product and a set of the set	memby program         0.37         0.014         337         385         1.316         0.369         0.010         0.064           lider everything         0.007         337         385         1.181         0.027         1.797         385         1.181         0.027         1.797									
Children survival survival survival super	nikter einerborn       1.233       0.078       337       355       1.184       0.062       1.068       1.434         nikter eurorn to women ape 40-49       2.050       0.145       75       84       1.154       0.070       1.770       2.350         nikter eurorn to women ape 40-49       2.050       0.145       75       84       1.184       0.067       1.070       1.070       2.130         war modern method       0.000       0.000       2.025       2.14       nage 40       0.000       0.000       0.025       2.214       0.823       0.164       0.000       0.071       3.357       0.164       0.080       0.022       0.214       0.823       0.164       0.000       0.000       0.025       2.214       0.824       0.004       0.0178       0.000       0.000       0.025       2.214       nage and 0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.001       0.001       0.001       0.001       0.001       0.001       0.001       0.001       0.001       0.001       0.001       0.001       0.001       0.001       0.001       0.001       0.001       0.001									
Children ever born to women age 40-49 Children	wilden ever born to women age 40-49       1.205       0.071       337       355       1.134       0.059       1.065       1.770       2.350         ow any contrade-prive method       0.000       0.000       205       2.14       ns       0.000       1.000       0.000       1.000       0.000       1.000       0.000       1.000       0.000									
Children ever born to women age 40-49 2.060 0.145 79 80 1.150 0.070 1.770 2.350 Krow av contraceptive method 1.000 0.000 205 214 na 0.000 1.000 1.000 Krow av contraceptive method 1.000 0.000 205 214 na 0.000 1.000 Currently using anodern method 0.134 0.022 205 214 0.323 0.144 0.044 0.045 Currently using pill 0.018 0.024 0.010 205 214 0.343 0.414 0.040 0.045 Currently using pill 0.018 0.024 0.010 205 214 0.343 0.414 0.040 0.045 Currently using piletables 0.000 0.000 205 214 1.038 0.414 0.040 0.000 Currently using piletables 0.000 0.000 205 214 1.038 0.414 0.040 0.000 Currently using piletables 0.000 0.000 205 214 1.038 0.414 0.040 0.000 Using public sector source 0.956 0.101 29 29 1.068 0.169 0.394 0.798 Currently using releatables 0.000 0.000 205 214 1.039 0.078 0.445 0.600 Using public sector source 0.956 0.101 29 29 1.068 0.169 0.394 0.798 Currently using releatables 0.000 0.000 52 76 na 0.000 1.000 1.000 Eithe with skilled attendart at elvery 1.000 0.000 52 99 na 0.000 1.000 1.000 Eithe with skilled attendart at elvery 1.000 0.000 22 7 6 na 0.000 1.000 1.000 Eithe with skilled attendart at elvery 1.000 0.000 2 2 1 na na 0.000 1.000 1.000 Eithe with skilled attendart at elvery 1.000 0.000 2 2 1 na na 0.000 1.000 1.000 Eithe with skilled attendart at elvery 1.000 0.000 1.5 16 na 0.000 1.000 1.000 Eithe with skilled attendart at elvery 1.000 0.000 2 2 2 na na 0.000 1.000 1.000 Eithe with skilled attendart at elvery 1.000 0.000 2 5.15 16 na 0.000 1.000 1.000 Eithe with skilled attendart at elvery 0.000 0.000 2 1.000 0.000 1.000 0.000 1.000 0.000 1.000 0.000 1.000 0.000 1.000 0.000 1.000 0.000 1.000 0.000 1.000 0.000 1.000 0.000 1.000 0.000 1.000 0.000 1.000 0.000 1.000 0.000 1.000 0.000 0.000 1.000 0.000 0.000 1.000 0.000 1.000 0.000 0.000 1.000 0.000 1.000 0.000 1.000 0.000 0.000 0.000 0.000 1.000 0.000	wilden ever born to women age 40-49       2.060       0.145       79       8.0       1.150       0.070       1.770       2.350         ow any contraceptime method       1.000       0.000       225       214       nag       0.000       1.000       1.000         ow any contraceptime method       0.040       0.022       225       214       0.923       0.164       0.060       0.678         arrently using pull       0.044       0.012       205       214       0.934       0.044       0.040       0.424         arrently using pulledahes       0.000       0.000       205       214       0.940       0.223       0.164       0.044       0.164         arrently using finelesteric       0.000       0.000       0.000       225       214       nag       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000									
Know an oddern method         1.000         0.000         205         214         n.a.         0.000         1.000         1.000           Currently using a modern method         0.134         0.022         205         214         0.024         0.034         0.036         0.068         0.068         0.076           Currently using poind         0.010         0.025         214         0.024         0.023         0.044         0.016         0.025         214         0.024         0.023         0.044         0.056         214         0.024         0.046         0.030         0.014         205         214         0.036         0.000	owa mödern method         1.000         0.000         205         214         1.34         0.000         1.000           menthy using a modern method         0.134         0.022         205         214         0.024         0.014         0.030         0.0780           menthy using ondoms         0.030         0.014         205         214         0.044         0.023         0.044         0.016           menthy using ondoms         0.030         0.014         205         214         1.08         0.000         0.000           menthy using injectables         0.000         0.000         205         214         na         na         0.000         0.000           menthy using injectables         0.000         0.000         205         214         na         na         0.000         0.000         0.000         205         214         na         na         0.000         0.000         0.000         1.000         0.000         1.000         0.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000		2.060	0.145	79	80		0.070	1.770	2.350
Currently using any method 0.6600 0.048 205 214 1.324 0.080 0.505 0.686 0.678 0.478 0.022 0.016 205 214 0.023 0.144 0.080 0.074 0.044 0.044 0.044 0.044 0.045 0.078 0.073 0.073 0.073 0.073 0.073 0.078 0.080 0.077 0.000 0.000 0.071 0.000 0.000 0.077 0.078 0.080 0.077 0.000 0.000 0.073 0.078 0.086 0.003 0.020 0.000 0.086 0.088 0.030 0.000 0.000 0.086 0.088 0.030 0.00	enrently using any method         0.600         0.648         205         214         1.394         0.000         0.505         0.606           irrently using pill         0.024         0.012         205         214         0.923         0.164         0.060         0.078           irrently using pill         0.024         0.010         205         214         0.930         0.044         0.045           irrently using pilectables         0.000         0.000         205         214         n.a         n.a         0.000         0.000           inp oblic sector source         0.566         0.011         29         1.087         0.073         0.450         0.680         0.600         1.000         <									
Currently using a modern method 0.134 0.022 205 214 0.038 0.414 0.090 0.078 Currently using JUD 0.026 214 0.238 0.164 0.048 Currently using JUD 0.026 214 0.238 0.164 0.048 Currently using JUD 0.000 0.000 205 214 1.16 0.228 0.044 0.169 Currently using female stellization 0.000 0.000 205 214 na na 0.000 0.000 Currently using female stellization 0.000 0.000 205 214 na na 0.000 0.000 Currently using female stellization 0.000 0.000 205 214 na na 0.000 0.000 Currently using female stellization 0.000 0.000 205 214 na na 0.000 0.000 Currently using female stellization 0.000 0.000 205 214 na na 0.000 0.000 Currently using female stellization 0.000 0.000 205 214 na na 0.000 0.000 0.000 Currently using temale stellization 0.000 0.000 205 214 1.050 0.078 0.450 0.000 Currently using temale stellization 0.000 1.000 0.000 72 76 na 0.000 1.000 1.000 Tite diamate in the past 2 years 0.222 0.015 92 99 na 0.000 1.000 1.000 Tite diamate in the past 2 weeks 0.022 0.015 92 99 na 0.000 1.000 0.000 0.000 Vaccination card seen (children age 12-3 months) 0.827 0.092 15 16 0.950 0.0112 0.642 1.000 Vaccination card seen (children age 12-3 months) 0.827 0.092 15 16 0.960 0.0112 0.642 1.000 Taceeved EAPB vaccination at bitth 0.011 0.000 0.000 15 16 na 0.000 1.000 1.000 Taceeved EAPB vaccination at bitth 0.014 0.013 0.015 16 0.945 0.132 0.589 0.990 2.3 months Received ploix vaccination (second dose) 0.938 0.655 15 16 1.027 0.068 0.806 1.000 Taceeved EAPB vaccination (burth dose) 0.617 1.31 15 16 1.041 0.212 0.338 0.927 2.3 months Careeved Div vaccination (burth dose) 0.617 0.33 0.627 0.59 0.441 0.55 Careeved Div vaccination (burth dose) 0.617 0.33 0.627 0.59 0.441 0.55 Careeved Div vaccination (burth dose) 0.617 0.33 0.627 0.59 0.441 0.55 Careeved Div vaccination (burth dose) 0.617 0.33 0.627 0.59 0.941 0.421 0.225 0.268 0.831 Careeved Div vaccination (burth dose) 0.617 0.33 0.627 0.59 0.941 0.55 Careeved Div vaccination (burth dose) 0.617 0.33 0.627 0.59 0.941 0.75 0.79 0.790 0.790 0.790 Careeved Div vaccination (burth dose) 0.617 0.33 0.62	inrentfy using a modern method         0.134         0.022         205         214         0.938         0.414         0.090         0.748           inrentfy using LDD         0.080         0.011         205         214         0.938         0.414         0.044         0.101           inrentfy using condomise         0.000         0.000         205         214         0.938         0.414         0.044         0.101           inrentfy using condomise         0.000         0.000         205         214         n.8         0.000         0.000           inrentfy using condomise         0.000         0.029         214         1.368         0.288         0.042         0.173         0.450         0.680           and nome children         0.556         0.101         29         29         1.885         0.160         0.000         1.001         1.000         1.000         1.000         1.000         0.000         2.017         2.388         2.388         2.438         2.458         1.042         1.000         0.000         2         n.8         0.000         0.000         2.00         n.8         0.000         0.000         1.000         0.000         2.017         1.000         0.000         1.001									
Currently using pill         0.024         0.010         205         214         0.936         0.414         0.044         0.045           Currently using condoms         0.030         0.014         205         214         1.15         0.486         0.001         0.059           Currently using female stellization         0.000         0.000         2050         214         nas         0.000         1.000         1.00	internetly using pull         0.024         0.019         205         214         0.934         0.044         0.044         0.044         0.044           internetly using concloses         0.030         0.0118         205         214         1.214         1.214         0.214         0.214         0.214         0.214         0.214         0.214         0.214         0.214         0.214         0.214         0.214         0.214         0.214         0.214         0.214         0.214         0.216         0.214         0.216         0.214         0.216         0.118         0.020         0.020         1.017         0.450         0.600         0.000         1.007         0.450         0.603         0.603         0.603         0.603         0.603         0.600         1.000         1.000         0.000         22         1.026         0.000         1.000         1.000         1.000         1.000         1.000         0.000         22         1.027         0.085         0.000         0.000         1.000         1.000         0.000         1.000         0.000         1.000         0.000         1.000         0.000         1.000         0.000         1.000         0.000         1.000         0.000         1.000         0.									
Currently using condoms         0.030         0.014         205         214         1.215         0.486         0.001         0.069           Currently using injectables         0.000         0.000         205         214         na         na         0.000         0.000           Currently using injectables         0.000         0.000         205         214         na         na         0.000         0.000           Using public sector source         0.627         0.100         0.028         205         214         na         0.001         0.001         0.001         0.001         0.001         0.001         0.001         0.001         0.001         0.001         1.000         0.001         2.001         0.001         0.000         1.000         0.001         0.000         1.000	urrently using increations         0.030         0.014         205         214         1.215         0.486         0.000         0.000           urrently using increate settilization         0.000         0.000         205         214         na         na         0.000         0.000           ing public sector source         0.559         0.113         2.56         21         1.087         0.017         2.388         2.55           an unber of holdren         2.473         0.403         3.04         3.20         0.920         0.017         2.388         2.558           an unber of holdren         0.403         3.04         3.20         0.920         0.001         1.000 </td <td>Currently using pill</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Currently using pill								
Currently using injectables         0.000         0.000         205         214         na         na         0.000         0.000           Using public sector source         0.595         0.101         23         29         1.005         0.165         0.298         0.424         0.165         0.298         0.424         0.165         0.298         0.424         0.165         0.298         0.424         0.165         0.298         0.424         0.657         0.433         304         320         0.920         0.017         2.388         2.2559           Mothers received antenatic care for last birth         1.000         0.000         93         99         na         0.000         1.000         1.000           Had darrhea in the past 2 weeks         0.022         0.015         12         0.482         1.000         1	mrentfy using injectables       0.000       0.000       205       214       na       na       0.000       0.000         ing public sector source       0.596       0.101       29       29       1.085       0.168       0.798         ant to more children       0.527       0.433       204       2.24       1.085       0.173       0.450       0.000         nat to dream children       0.423       2.04       2.24       1.085       0.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       0.000 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>									
Currently using fernale sterilization         0.000         2000         205         214         na         na         0.000         0.004           Want no more children         0.557         0.038         205         214         1.086         0.169         0.034         0.798           Want no more children         0.527         0.038         205         214         1.086         0.288         0.042         0.042         0.042         0.045         0.169         0.046         0.169         0.046         0.169         0.046         0.169         0.000         1.000 <td>impublic sector source         0.000         0.000         205         214         na         na         na         0.000         0.000           ant no more children         0.527         0.038         205         214         1.097         0.738         0.643         0.738         205         214         1.398         0.628         0.642         0.157           an unber of children         2473         0.043         304         320         0.288         0.422         0.157           an unber of children         2473         0.043         304         320         0.888         0.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         0.000         2         na         na         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         1.000         0.000         0.000         1.000         0.000         1.000         0.000         1.000         0.000         1.000         0.000         1.000         0.000         1.000         0.000</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	impublic sector source         0.000         0.000         205         214         na         na         na         0.000         0.000           ant no more children         0.527         0.038         205         214         1.097         0.738         0.643         0.738         205         214         1.398         0.628         0.642         0.157           an unber of children         2473         0.043         304         320         0.288         0.422         0.157           an unber of children         2473         0.043         304         320         0.888         0.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         0.000         2         na         na         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         1.000         0.000         0.000         1.000         0.000         1.000         0.000         1.000         0.000         1.000         0.000         1.000         0.000         1.000         0.000									
Want for more children         0.527         0.038         205         214         1.087         0.073         0.450         0.642         0.157           Ideal number of children         2.473         0.043         304         320         0.920         0.017         2.388         2.559           Briths with skiller attendart at delivery         1.000         0.000         72         76         na         0.000         1.000 <t< td=""><td>and fine more children and to delay next bith at least 2 years 0.100 0.029 205 214 1.368 0.288 0.042 0.157 all number of children and tarlengt at tellivery 2.473 0.043 304 320 0.920 0.017 2.388 2.659 all number of children at tellivery 1.020 0.000 72 76 na 0.000 1.000 0.000 2.2 na na 0.000 0.000 0.000 0.000 2.2 na na 0.000 1.000 1.000 0.000 0.000 1.5 16 0.950 0.112 0.642 1.000 0.000 1.5 16 0.950 0.112 0.642 1.000 0.000 1.5 16 0.960 0.120 0.000 1.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	and fine more children and to delay next bith at least 2 years 0.100 0.029 205 214 1.368 0.288 0.042 0.157 all number of children and tarlengt at tellivery 2.473 0.043 304 320 0.920 0.017 2.388 2.659 all number of children at tellivery 1.020 0.000 72 76 na 0.000 1.000 0.000 2.2 na na 0.000 0.000 0.000 0.000 2.2 na na 0.000 1.000 1.000 0.000 0.000 1.5 16 0.950 0.112 0.642 1.000 0.000 1.5 16 0.950 0.112 0.642 1.000 0.000 1.5 16 0.960 0.120 0.000 1.									
Want to delay next birth at least 2 years         0.100         0.029         205         214         1.368         0.248         0.042         0.137           Births with skilled attendart at delivery         1.000         0.000         72         76         na         0.000         1.000         1.000           Had diarthea in the past 2 weeks         0.022         0.015         92         98         na         0.000         0.000         0.000         0.000         1.000         1.000           Vaccination card seen (children age 12-23 months)         0.827         0.092         15         16         0.950         0.112         0.642         1.000           Received BCS vaccination         1.000         0.000         15         16         na         0.000         1.000         1.000           Received DIV vaccination (third dose)         0.914         0.660         15         16         0.926         0.255         0.245         0.230         0.265         15         16         0.027         0.265         0.265         0.265         0.265         0.245         0.232         0.147         15         16         1.027         0.236         0.255         0.269         0.831         0.333         0.927         0.255	ant to delay next birth at least 2 years       0.100       0.029       205       214       1.366       0.288       0.042       0.157         anumber of children       2.473       0.043       304       304       304       300       0.200       0.001       2.388       2.559         others received antenatal care for last birth       1.000       0.000       99       na       0.000       1.000       1.000         d alerhage in the past 2 weeks       0.022       0.011       92       98       na       0.000       0.000       0.000         contain card seen (children age 12-23 months)       0.827       0.092       15       16       0.950       0.112       0.642       1.000         ceviewd DCF -HepB-Hb vaccination (third dose)       0.941       0.660       15       16       0.966       0.633       6.21       1.000       1.	Using public sector source								
Ideal number of children         2.473         0.043         304         302         0.920         0.017         2.388         2.559           Births with skilled attendant at delivery         1.000         0.000         72         76         na         0.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         1.000         0.003         2         2         na         na         0.000         0.000         2         2         na         na         0.000         1.000	all number of children       2.473       0.043       304       320       0.917       2.388       2.559         htters received all nethatic are for last birth       1.000       0.000       76       na       0.000       1.000       1.000         the with skilled attendant at delivery       1.000       0.000       2       98       1.007       0.685       0.000       0.003         atted with ORS       0.000       0.000       2       2       na       na       0.000       0.000         contract seen (children age 12-23 months)       0.000       0.000       15       16       0.966       0.668       0.663       0.821       1.000         ceviced DPT-HepB-Hib vaccination (hird dose)       0.941       0.060       15       16       0.946       0.063       0.821       1.000         ceviced DPT-HepB-Hib vaccination (spropriate for a child age 12       0.794       0.098       15       16       0.946       0.255       0.898       0.806       1.000         ceviced DPT-HepB-Hib vaccination (spropriate for a child age 12       0.794       0.098       15       16       0.945       0.255       0.269       0.831       1.000         ceviced Intersition (children age 24-35 months)       0.632       0.147 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
Mothers received antenatal care for last birth         1.000         0.000         72         76         na         0.000         1.000         1.000           Had diarrhea in the past 2 weeks         0.022         0.015         92         98         na         0.000         0.000           Sought medical treatment for diarrhea         0.000         0.000         2         2         na         na         0.000         0.000           Sought medical treatment for diarrhea         0.000         0.000         1.000         1.000         0.000         1.000         0.000         1.000         0.000         1.000         0.000         1.000         0.000         1.000         0.000         1.000         1.000         0.000         1.000         0.000         1.000         1.000         0.000         1.000         1.000         1.000         0.000         1.0	phers received antenatal care for last birth         1.000         0.000         72         76         na         0.000         1.000         1.000           diarbase in the past 2 weeks         0.022         0.015         92         98         na         0.000         0.000           diarbase         0.000         0.000         2         2         na         0.000         0.000           upint medical treatment for diarbas         0.000         0.000         16         16         0.000         0.000           exided with ORS         0.001         1000         0.000         16         16         0.000         0.000           exide with ORS         0.001         1000         0.000         15         16         0.040         0.771         1.000           exide vacination at birth         0.018         0.066         15         16         1.041         0.080         0.061         10.000         1.000									
Had diarrhea in the past 2 weeks       0.022       0.015       92       98       1.007       0.685       0.000       0.000         Sought medical treatment for diarrhea       0.000       0.000       2       2       na       na       0.000       0.000         Sought medical treatment for diarrhea       0.000       0.000       2       2       na       na       0.000       0.000         Received BCG vaccination       1.000       0.000       15       16       0.980       0.110       0.642       0.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       Received DPT vaccination (hind dose)       0.941       0.060       15       16       0.946       0.063       0.621       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       Received DPT vaccination (did dose)       0.636       0.65       16       1.0       1.000	diarrheam in the past 2 weeks       0.022       0.015       92       98       1.007       0.685       0.000       0.000         ught medical treatment for diarrhea       0.000       0.000       2       2       na       na       0.000       0.000         contation card seen (children age 12-23 months)       0.827       0.992       15       16       0.950       0.112       0.642       1.000									
Treated with ORS         0.000         0.000         2         2         na         na         0.000         0.000           Vaccination card seen (children age 12-23 months)         0.827         0.092         15         16         0.950         0.112         0.842         1.000           Received BCG vaccination         1         0.000         1.000         0.000         1.0	eated with ORS       0.000       0.000       2       2       na       na       0.000       0.000         ccination card seen (children age 12-23 months)       0.827       0.092       15       16       0.950       0.112       0.642       1.000         ceview BCP HepB-Hib vaccination (third dose)       0.918       0.073       15       16       n.a       0.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       1.000       0.000       15       16       n.a       0.000       1.000									
Sought medical treatment for diarrhea         0.000         0.002         2         na         na         0.000         0.000           Vaccination and seen (children age 12-23 months)         0.827         0.992         15         16         n.950         0.112         0.642         1.000           Received BCG vaccination (third dose)         0.941         0.073         15         16         0.950         0.122         0.633         0.821         1.000           Received DPT-HepB-Hith vaccination (third dose)         0.941         0.060         15         16         n.986         0.063         0.821         1.000           Received ordevirus vaccination (third dose)         0.938         0.066         15         16         1.022         0.593         0.980           2armonth         2aronths         0.652         0.147         15         16         1.079         0.233         0.338         0.927           Vaccination         Received DPT vaccination (fourth dose)         0.617         0.131         15         16         1.041         0.212         0.336         0.827         1.027           Received DIPT vaccination (fourth dose)         0.617         0.112         15         16         1.058         0.075         0.790         <	ught medical treatment for diarrhea         0.000         0.000         2         2         na         na         0.000         0.000           ceived BCG vaccination         1.000         0.000         15         16         n.950         0.112         0.642         1.000           ceived DPT-HepB-Hib vaccination         (hird dose)         0.941         0.060         15         16         n.960         0.771         1.000           ceived DPT-HepB-Hib vaccination         (hird dose)         0.936         0.065         15         16         n.986         0.063         0.821         1.000           ceived of totavirus vaccination         (scontation acritications appropriate for a child age 12-         0.794         0.098         15         16         0.945         0.123         0.580         0.990           31 months         ccination acri acria acria seen (children age 24-35 months)         0.632         0.147         15         16         1.092         0.255         0.268         0.831           ceived dDPT vaccination (fourth dose)         0.917         0.131         15         16         1.092         0.255         0.878           ceived dDPT vaccination sappropriate for children         0.796         0.112         15         16         1.092									
Vaccination card seen (children age 12-23 months)         0.827         0.092         15         16         0.950         0.112         0.642         1.000           Received BCV sectination at birth         0.918         0.073         15         16         n.a         0.000         1.000         1.000           Received DF1-HepB-Hi boxcination (third dose)         0.941         0.660         15         16         n.a         0.000         1.000         1.000           Received of Vaccination (third dose)         1.000         0.936         0.655         15         16         0.986         0.630         0.821         1.000           Received all vaccinations appropriate for a child age 12-         0.794         0.098         15         16         1.179         0.233         0.338         0.927           Vaccination card seen (children age 24-35 months)         0.632         0.147         15         16         1.058         0.075         0.790         1.070           Received all basic vaccination fourth dose)         0.930         0.070         15         16         1.058         0.075         0.790         1.077           Received all vaccinations appropriate for a child age 24-         0.550         0.140         15         16         1.092         0.2	ccination card seen (children age 12-23 months)       0.827       0.092       15       16       0.950       0.112       0.642       1.000         ceived BCP vaccination at birth       0.918       0.073       15       16       n.a       0.000       1.000       1.000         ceived DPT-HepB-Hib vaccination (third dose)       0.941       0.060       15       16       n.048       0.063       0.821       1.000         ceived polic vaccination (third dose)       0.936       0.065       15       16       n.027       0.069       0.806       1.000         ceived all vaccinations appropriate for a child age 12-       0.794       0.098       15       16       1.179       0.233       0.338       0.927         ceived all vaccination (fourth dose)       0.617       0.131       15       16       1.041       0.212       0.255       0.269       0.831         serived DPT vaccination (fourth dose)       0.617       0.112       15       16       1.047       0.212       0.355       0.878         veived poli vaccinations appropriate for children       0.796       0.112       15       16       1.041       0.212       0.255       0.269       0.831         veived poli vaccination (fourth dose)       0.930				2	2				
Received HepB vaccination at birth         0.918         0.073         15         16         1.041         0.080         0.771         1.000           Received polic vaccination (third dose)         1.000         0.000         15         16         n.a         0.006         1.000           Received polic vaccination (attind dose)         0.396         0.065         15         16         1.027         0.069         0.806         1.000           Received all vaccinations appropriate for a child age 12-         0.794         0.098         15         16         1.045         0.235         0.598         0.990           23 months         Received polic vaccination (fourth dose)         0.617         0.131         15         16         1.041         0.212         0.355         0.878           Received polic vaccination (fourth dose)         0.617         0.131         15         16         1.041         0.212         0.355         0.878           Received polic vaccination sappropriate for children         0.790         0.112         16         1.092         0.255         0.790         1.071           age 24-35 months         Received all vaccinations appropriate for a child age 24-         0.550         0.140         15         16         1.092         0.255	ceived PHepB vaccination at birth         0.918         0.073         15         16         1.41         0.080         0.771         1.000           ceived DPT-HepB-Hib vaccination (third dose)         1.000         0.000         15         16         n.a         0.008         0.821         1.000           ceived oplic vaccination (third dose)         0.936         0.065         15         16         n.a         0.009         1.000           seen (children age 24-35 months)         0.632         0.147         15         16         1.079         0.233         0.338         0.927           accination card seen (children age 24-35 months)         0.652         0.147         15         16         1.041         0.212         0.355         0.878           accination         fourth dose)         0.550         0.140         15         16         1.041         0.212         0.355         0.878           ceived al vaccination fourth dose)         0.930         0.070         15         16         1.058         0.075         0.790         1.071           ge24-35 months         0.056         0.266         73         69         0.981         0.470         0.003         0.199           giph1-for-age (-2SD)         0.012	Vaccination card seen (children age 12-23 months)	0.827	0.092	15	16		0.112	0.642	1.000
Received DPT-HepB-Hib vaccination (third dose)         0.941         0.060         15         16         0.986         0.681         0.821         1.000           Received provacination (second dose)         0.393         0.065         15         16         1.027         0.099         0.806         1.000           Received all vaccinations appropriate for a child age 12-         0.794         0.098         15         16         0.945         0.123         0.589         0.990           23 months         vaccination         appropriate for a child age 12-         0.794         0.098         15         16         1.042         0.255         0.269         0.831           Vaccination card seen (children age 24-35 months)         0.632         0.147         15         16         1.041         0.212         0.355         0.871           Received DPT vaccination (fourth dose)         0.617         0.131         15         16         1.041         0.212         0.355         0.878           Received ploit vaccination fourth dose)         0.617         0.131         15         16         1.041         0.212         0.355         0.878           Received ploit vaccinations appropriate for children age 24-3         0.550         0.140         15         16         1	ceived pDi vaccination (third dose)         0.941         0.060         15         16         0.986         0.081         1.000           oceived poi vaccination (second dose)         0.000         15         16         n.27         0.069         0.806         1.000           oceived rotavirus vaccination (second dose)         0.794         0.098         15         16         0.27         0.069         0.806         1.000           33 months         cicination card seen (children age 24-35 months)         0.632         0.147         15         16         1.092         0.255         0.269         0.831           occination card seen (children age 24-35 months)         0.650         0.140         15         16         1.041         0.212         0.355         0.878           oceived poli vaccination (fourth dose)         0.617         0.131         15         16         1.041         0.212         0.355         0.878           oceived poli vaccination (fourth dose)         0.930         0.070         15         16         1.058         0.075         1.070           oceived poli vaccination (fourth dose)         0.012         0.122         15         16         1.052         0.265         0.269         0.831           septi-for-iegit(FSD) </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
Received polic vaccination (third dose)         1.000         0.000         15         16         na         0.000         1.000         1.000           Received polic vaccinations (second dose)         0.936         0.065         15         16         1.023         0.038         0.990           Vaccination card seen (children age 24-35 months)         0.632         0.147         15         16         1.179         0.233         0.338         0.927           Vaccination (fourth dose)         0.617         0.131         15         16         1.041         0.212         0.355         0.881           Received polic vaccination (fourth dose)         0.617         0.131         15         16         1.041         0.212         0.355         0.878           Received polic vaccination (fourth dose)         0.617         0.131         15         16         1.058         0.075         0.790         1.071           age 24-35 months         Received all vaccinations appropriate for a child age 24-         0.550         0.140         15         16         1.092         0.255         0.269         0.831           age 24-35 months         0.336         0.041         15         16         1.024         0.000         0.033         0.107         0.134 </td <td>becived polic vaccination (third dose)       1.000       0.000       15       16       na       0.000       1.000       1.000         becived rolavirus vaccination (second dose)       0.936       0.065       15       16       1.027       0.069       0.806       0.990         smonths       16       1.179       0.233       0.338       0.927         recination card seen (children age 24-35 months)       0.632       0.147       15       16       1.079       0.233       0.338       0.927         recived mesles, mumps, and rubella (MMR)       0.550       0.140       15       16       1.041       0.212       0.355       0.878         recived olio vaccination (fourth dose)       0.617       0.131       15       16       1.055       0.750       0.790       1.070         recived al vaccination sappropriate for a child age 24-       0.550       0.140       15       16       1.052       0.265       0.269       0.831         ight-for-age (-2SD)       0.056       0.026       73       69       0.981       0.470       0.003       0.109         evalence of anemia (women age 15-49)       0.138       0.252       284       299       1.211       0.180       0.384       0.254       <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<></td>	becived polic vaccination (third dose)       1.000       0.000       15       16       na       0.000       1.000       1.000         becived rolavirus vaccination (second dose)       0.936       0.065       15       16       1.027       0.069       0.806       0.990         smonths       16       1.179       0.233       0.338       0.927         recination card seen (children age 24-35 months)       0.632       0.147       15       16       1.079       0.233       0.338       0.927         recived mesles, mumps, and rubella (MMR)       0.550       0.140       15       16       1.041       0.212       0.355       0.878         recived olio vaccination (fourth dose)       0.617       0.131       15       16       1.055       0.750       0.790       1.070         recived al vaccination sappropriate for a child age 24-       0.550       0.140       15       16       1.052       0.265       0.269       0.831         ight-for-age (-2SD)       0.056       0.026       73       69       0.981       0.470       0.003       0.109         evalence of anemia (women age 15-49)       0.138       0.252       284       299       1.211       0.180       0.384       0.254 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>									
Received rotavirus vaccination (second dose)       0.936       0.065       15       16       1.027       0.069       0.806       1.000         Z3 months       0.932       0.936       0.558       0.930       0.558       0.930         Z4 months       0.632       0.147       15       16       1.179       0.233       0.338       0.927         Received DPT vaccination (fourth dose)       0.617       0.131       15       16       1.041       0.212       0.355       0.878         Received DIV vaccination (fourth dose)       0.617       0.131       15       16       1.041       0.212       0.355       0.878         Received JIV vaccinations appropriate for a child age 24-       0.550       0.140       15       16       1.092       0.255       0.269       0.831         35 months       0.076       0.112       15       16       1.092       0.255       0.269       0.831         49(pH-for-age (-25D)       0.066       0.026       73       69       0.981       0.470       0.033       0.109         Weight-for-age (-25D)       0.012       0.138       0.025       24       29       1.211       0.180       0.88       0.181       0.000       0.000 <td>ceived rotavirus vaccination (second dose)         0.936         0.065         15         16         1.027         0.0699         0.123         0.598         0.990           33 months         coicnation card seen (children age 24-35 months)         0.632         0.147         15         16         0.945         0.223         0.338         0.927           ceived measles, mumps, and rubella (MMR)         0.550         0.140         15         16         1.042         0.2255         0.269         0.831           recived polit vaccination (fourth dose)         0.617         0.131         15         16         1.041         0.212         0.355         0.769           recived polit vaccination (fourth dose)         0.617         0.131         15         16         1.041         0.212         0.355         0.780           recived all vaccinations appropriate for a child age 24-         0.550         0.140         15         16         1.041         0.572         1.021           recived all vaccinations appropriate for a child age 24-         0.550         0.140         15         16         1.047         0.033         0.109           recived all vaccinations appropriate for a child age 24-         0.550         0.141         15         0.041         0.051         0.041</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	ceived rotavirus vaccination (second dose)         0.936         0.065         15         16         1.027         0.0699         0.123         0.598         0.990           33 months         coicnation card seen (children age 24-35 months)         0.632         0.147         15         16         0.945         0.223         0.338         0.927           ceived measles, mumps, and rubella (MMR)         0.550         0.140         15         16         1.042         0.2255         0.269         0.831           recived polit vaccination (fourth dose)         0.617         0.131         15         16         1.041         0.212         0.355         0.769           recived polit vaccination (fourth dose)         0.617         0.131         15         16         1.041         0.212         0.355         0.780           recived all vaccinations appropriate for a child age 24-         0.550         0.140         15         16         1.041         0.572         1.021           recived all vaccinations appropriate for a child age 24-         0.550         0.140         15         16         1.047         0.033         0.109           recived all vaccinations appropriate for a child age 24-         0.550         0.141         15         0.041         0.051         0.041									
23 months         0.000           Vaccination card seen (children age 24-35 months)         0.632         0.147         15         16         1.179         0.233         0.338         0.927           Received measles, numps, and rubella (MMR)         0.550         0.140         15         16         1.092         0.255         0.269         0.831           Received Dio vaccination (fourth dose)         0.617         0.131         15         16         1.041         0.212         0.355         0.878           Received ploi vaccination (fourth dose)         0.930         0.070         15         16         1.057         0.141         0.572         1.021           age 24-35 months         0.550         0.140         15         16         1.092         0.255         0.269         0.831           35 months         0.966         0.226         73         69         0.941         0.024         0.000         0.003         1.092           Weight-for-age (-25D)         0.010         0.000         73         69         n.44         0.242         0.031         0.192           Prevalence of anemia (women age 15-49)         0.138         0.025         24         287         0.847         0.254         0.049 <td< td=""><td>B months         Decimation         Construction         <thconstruction< th="">         Construction</thconstruction<></td><td>Received rotavirus vaccination (second dose)</td><td>0.936</td><td>0.065</td><td>15</td><td>16</td><td>1.027</td><td>0.069</td><td>0.806</td><td>1.000</td></td<>	B months         Decimation         Construction         Construction <thconstruction< th="">         Construction</thconstruction<>	Received rotavirus vaccination (second dose)	0.936	0.065	15	16	1.027	0.069	0.806	1.000
Vaccination card seen (children age 24-35 months)       0.632       0.147       15       16       1.179       0.233       0.338       0.927         Received neasles, mumps, and rubella (MMR)       0.550       0.140       15       16       1.092       0.255       0.269       0.831         Received DPT vaccination (fourth dose)       0.617       0.131       15       16       1.041       0.212       0.355       0.878         Received DI basic vaccinations appropriate for children       0.796       0.112       15       16       1.068       0.075       0.790       1.070         Received all vaccinations appropriate for a child age 24-       0.550       0.140       15       16       1.092       0.255       0.269       0.831         35 months       0.656       0.026       73       69       0.981       0.470       0.003       0.109         Weight-for-height (-2SD)       0.012       0.012       73       69       0.941       1.024       0.000       0.030         Prevalence of anemia (children age 6-59 months)       0.336       0.041       56       52       0.700       0.122       0.244       0.418         Prevalence of anemia (children age 15-49)       0.138       0.025       224 <td< td=""><td>ccination card seen (children age 24-35 months)       0.632       0.147       15       16       1.179       0.233       0.338       0.927         vaccination       oscination       0.550       0.140       15       16       1.092       0.255       0.269       0.831         vaccination       (fourth dose)       0.617       0.131       15       16       1.041       0.212       0.355       0.876         verived of Vaccination (fourth dose)       0.930       0.070       15       16       1.058       0.075       0.790       1.070         verived all vaccinations appropriate for a child age 24-       0.550       0.140       15       16       1.092       0.255       0.269       0.831         verived all vaccinations appropriate for a child age 24-       0.550       0.140       15       16       1.092       0.255       0.269       0.831         verived all vaccinations appropriate for a child age 24-       0.550       0.140       15       16       1.092       0.255       0.269       0.831         verived all vaccinations appropriate for a child age 24-       0.550       0.120       0.73       69       0.941       1.024       0.000       0.035         veripht-for-age (-2SD)       0.012</td><td></td><td>0.794</td><td>0.098</td><td>15</td><td>16</td><td>0.945</td><td>0.123</td><td>0.598</td><td>0.990</td></td<>	ccination card seen (children age 24-35 months)       0.632       0.147       15       16       1.179       0.233       0.338       0.927         vaccination       oscination       0.550       0.140       15       16       1.092       0.255       0.269       0.831         vaccination       (fourth dose)       0.617       0.131       15       16       1.041       0.212       0.355       0.876         verived of Vaccination (fourth dose)       0.930       0.070       15       16       1.058       0.075       0.790       1.070         verived all vaccinations appropriate for a child age 24-       0.550       0.140       15       16       1.092       0.255       0.269       0.831         verived all vaccinations appropriate for a child age 24-       0.550       0.140       15       16       1.092       0.255       0.269       0.831         verived all vaccinations appropriate for a child age 24-       0.550       0.140       15       16       1.092       0.255       0.269       0.831         verived all vaccinations appropriate for a child age 24-       0.550       0.120       0.73       69       0.941       1.024       0.000       0.035         veripht-for-age (-2SD)       0.012		0.794	0.098	15	16	0.945	0.123	0.598	0.990
Received measles, numps, and rubella (MMR)         0.550         0.140         15         16         1.092         0.255         0.269         0.831           Received pDT vaccination (fourth dose)         0.617         0.131         15         16         1.041         0.212         0.355         0.878           Received polio vaccinations appropriate for children         0.796         0.112         15         16         1.058         0.075         0.790         1.070           Received polio vaccinations appropriate for a child age 24-         0.550         0.140         15         16         1.092         0.255         0.269         0.831           36 months         age 24-350         0.056         0.026         73         69         0.981         0.470         0.003         0.109           Weight-for-age (-2SD)         0.056         0.026         73         69         0.941         1.024         0.000         0.000           Prevalence of anemia (children age 6-59 months)         0.336         0.041         56         52         0.700         0.122         0.254         0.418           Body mass index (BMI) < 18.5	ceived measles, mumps, and rubella (MMR)       0.550       0.140       15       16       1.092       0.255       0.269       0.831         secived DPT vaccination (fourth dose)       0.617       0.131       15       16       1.041       0.212       0.355       0.279       1.070         secived polito vaccination (fourth dose)       0.930       0.070       15       16       1.068       0.075       0.790       1.071         received all basic vaccinations appropriate for children       0.796       0.112       15       16       1.092       0.255       0.269       0.831         ight-for-age (-2SD)       0.056       0.026       73       69       0.981       0.470       0.003       0.109         eight-for-age (-2SD)       0.012       0.012       73       69       0.941       1.024       0.000       0.000         evalence of anemia (children age 6-59 months)       0.336       0.041       56       52       0.700       0.122       0.254       0.418       0.045       0.554         dy mass index (BMI) > 18.5       0.039       0.010       274       287       0.847       0.254       0.049       0.554         dy mass index (BMI) > 18.5       0.101       0.162       253 <td></td> <td>0.632</td> <td>0.147</td> <td>15</td> <td>16</td> <td>1.179</td> <td>0.233</td> <td>0.338</td> <td>0.927</td>		0.632	0.147	15	16	1.179	0.233	0.338	0.927
Received DPT vaccination (fourth dose)       0.617       0.131       15       16       1.041       0.212       0.355       0.878         Received polic vaccinations appropriate for children       0.796       0.112       15       16       1.058       0.075       0.790       15       16       1.057       0.141       0.572       1.021         age 24-35 months       8coeived all vaccinations appropriate for a child age 24-       0.550       0.140       15       16       1.092       0.255       0.269       0.831         35 months       0.056       0.026       73       69       0.941       1.024       0.000       0.000         Weight-for-height (-2SD)       0.010       0.012       73       69       0.941       1.024       0.000       0.000         Prevalence of anemia (women age 15-49)       0.138       0.025       284       299       1.211       0.180       0.188         Body mass index (BMI) < 18.5	ceived DPT vaccination (fourth dose)0.6170.13115161.0410.2120.3550.878sceived poli vaccination (fourth dose)0.9300.07015161.0680.0750.7901.070tecived all vaccinations appropriate for children0.7960.11215161.0680.0750.7901.070tecived all vaccinations appropriate for a child age 24-35 months0.5500.14015161.0920.2550.2690.83115 months0.0720.0560.02673690.9411.0240.0000.0030.109eight-for-age (-2SD)0.0120.0127369n.an.a0.0000.000evalence of anemia (children age 6-59 months)0.3360.04156520.7000.1220.2540.488valence of anemia (children age 6-590.3360.0102742870.8470.2540.019valence of anemia (children age 6-590.0390.0102742870.8470.2540.019valence of anemia (children age 6-590.1380.0252842991.2110.0680.188valence of anemia (children age 6-590.0390.0102742870.8470.2540.019valence of anemia (children age 6-590.0350.1010.1622532240.6570.1610.0680.184var mass index (BMI) < 18.5									
Received polic vaccination (fourth dose)       0.930       0.070       15       16       1.058       0.075       0.790       1.070         age 24-35 months       Received all basic vaccinations appropriate for a child age 24-       0.550       0.112       15       16       1.077       0.141       0.572       1.021         age 24-35 months       0.550       0.140       15       16       1.092       0.255       0.269       0.831         35 months       0.056       0.026       73       69       0.981       0.470       0.003       0.109         Weight-for-height (-2SD)       0.012       0.012       73       69       na       na       0.000       0.000         Prevalence of anemia (children age 6-59 months)       0.338       0.041       56       52       0.700       0.122       0.254       0.418       0.043       0.188       0.188         Body mass index (BMI) ≥ 15       0.039       0.010       274       287       0.847       0.254       0.019       0.059         Body mass index (BMI) ≥ 25       0.480       0.037       274       287       1.231       0.078       0.405       0.554         Body mass index (BMI) ≥ 25       0.0410       0.016       253	ceived polic vaccination (fourth dose)       0.930       0.070       15       16       1.058       0.075       0.790       1.070         uselved all basic vaccinations appropriate for children       0.796       0.112       15       16       1.077       0.141       0.572       1.021         uselved all vaccinations appropriate for a child age 24-       0.550       0.140       15       16       1.092       0.255       0.269       0.831         ight-for-age (-2SD)       0.012       0.012       73       69       0.981       0.470       0.003       0.109         eight-for-age (-2SD)       0.012       0.012       0.012       73       69       na       na       0.000       0.000         evalence of anemia (children age 6-59 months)       0.336       0.041       56       52       0.700       0.122       0.254       0.418         evalence of anemia (women age 15-49)       0.138       0.025       284       299       1.211       0.180       0.088       0.184         evalence of anemia (women age 15-49)       0.138       0.025       284       299       1.211       0.180       0.081       0.554         dy mass index (BMI) < 25		0.047	0.404	45	10	4.044	0.010	0.055	0.070
Received all basic vaccinations appropriate for children         0.796         0.112         15         16         1.077         0.141         0.572         1.021           age 24-35 months         Received all vaccinations appropriate for a child age 24- 35 months         0.550         0.140         15         16         1.092         0.255         0.269         0.831           35 months         0.056         0.026         73         69         0.981         0.470         0.003         0.109           Weight-for-age (-2SD)         0.000         0.000         73         69         na         na         0.000         0.005           Prevalence of anemia (women age 15-49)         0.138         0.025         284         299         1.211         0.180         0.088         0.188           Body mass index (BMI) < 18.5	scived all basic vaccinations appropriate for children         0.796         0.112         15         16         1.077         0.141         0.572         1.021           ige 24-35 months         0.550         0.140         15         16         1.092         0.255         0.269         0.831           55 months         0.012         0.012         0.012         73         69         0.941         1.024         0.000         0.000           eight-for-age (-2SD)         0.012         0.012         73         69         0.941         1.024         0.000         0.000           evalence of anemia (children age 6-59 months)         0.336         0.041         56         52         0.700         0.122         0.254         0.448           orgenation (CHIR) < 18.5									
age 24-35 monthsReceived all vaccinations appropriate for a child age 24-0.5500.14015161.0920.2550.2690.83135 months0.0000.002673690.9810.4700.0030.109Weight-for-age (-2SD)0.0120.01273690.9411.0240.0000.000Weight-for-age (-2SD)0.0120.3360.04156520.7000.1220.2550.2690.818Prevalence of anemia (children age 6-59 months)0.3360.04156520.7000.1220.2240.418Body mass index (BMI) < 18.5	is a construction of the construction of									
35 months       1.1       1.0         Height-for-age (-2SD)       0.056       0.026       73       69       0.981       0.470       0.003       0.109         Weight-for-age (-2SD)       0.000       0.000       73       69       na       na       0.000       0.000         Prevalence of anemia (children age 6-59 months)       0.336       0.041       56       2       0.700       0.122       0.254       0.418         Prevalence of anemia (children age 15-49)       0.138       0.025       284       299       1.211       0.180       0.088       0.188         Body mass index (BMI) ≥ 18.5       0.039       0.010       274       287       0.847       0.254       0.019       0.059         Body mass index (BMI) ≥ 25       0.480       0.337       274       287       0.847       0.254       0.019       0.058         Ever experienced any physical violence since age 15       0.101       0.016       253       224       0.857       0.161       0.068       0.134         Ever experienced any physical violence by       0.153       0.024       169       132       0.940       0.244       0.402       0.121         husband/parther in the last 12 months       0.557       0.	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	age 24-35 months								
Height-for-age (-2SD)       0.056       0.026       73       69       0.981       0.470       0.003       0.109         Weight-for-height (-2SD)       0.012       0.012       73       69       na       na       0.000       0.035         Weight-for-age (-2SD)       0.000       0.036       0.041       56       52       0.700       0.122       0.254       0.418         Body mass index (BMI) < 18.5	$\begin{array}{c c c c c c c c c c c c c c c c c c c $		0.550	0.140	15	16	1.092	0.255	0.269	0.831
Weight-for-height (-25D)0.0120.0120.01273690.411.0240.0000.035Weight-for-age (-2SD)0.0000.0007369nana0.0000.000Prevalence of anemia (children age 6-59 months)0.3360.04156520.7000.1220.2540.418Body mass index (BMI) ≥ 18.50.0390.0102742870.8470.2540.0190.059Body mass index (BMI) ≥ 250.4800.0372742871.2310.0780.4050.554Ever experienced any physical violence since age 150.1010.0162532241.1630.5440.0000.037Ever experienced any physical violence by0.1130.0241091320.8520.1540.1060.201husband/partnerin the last 12 months0.5370.0241691320.9400.2440.0420.121Total fertility rate (last 3 years)1.5150.2049801.0321.0970.3430.1690.939Secondary or higher education0.8710.3351.641840.9030.6610.4990.639Never married (in union)0.4860.0451641841.1660.0930.3950.577Had first sexual intercourse before age 180.0200.0141141281.0790.7050.0000.049Warried (in union)0.5850.6552941.1910.112 <td><math display="block">\begin{split} &amp; \begin{array}{c} \ddot{e}(h)(-c)\ddot{e}(h)(-c)\dot{S}(b)) &amp; 0.012 &amp; 0.012 &amp; 73 &amp; 69 &amp; 0.941 &amp; 1.024 &amp; 0.000 &amp; 0.035 \\ eight-for-age (-2SD) &amp; 0.000 &amp; 0.000 &amp; 73 &amp; 69 &amp; na &amp; na &amp; 0.000 &amp; 0.005 \\ eight-for-age (-2SD) &amp; 0.336 &amp; 0.041 &amp; 56 &amp; 52 &amp; 0.700 &amp; 0.122 &amp; 0.254 &amp; 0.418 \\ evalence of anemia (women age 15-49) &amp; 0.138 &amp; 0.025 &amp; 284 &amp; 299 &amp; 1.211 &amp; 0.180 &amp; 0.088 &amp; 0.188 \\ evalence draker (BMI) &gt; 18.5 &amp; 0.039 &amp; 0.010 &amp; 274 &amp; 287 &amp; 0.847 &amp; 0.254 &amp; 0.019 &amp; 0.059 \\ edy mass index (BMI) &gt; 25 &amp; 0.480 &amp; 0.037 &amp; 274 &amp; 287 &amp; 1.231 &amp; 0.078 &amp; 0.405 &amp; 0.554 \\ er experienced any physical violence since age 15 &amp; 0.101 &amp; 0.016 &amp; 253 &amp; 224 &amp; 0.857 &amp; 0.161 &amp; 0.068 &amp; 0.134 \\ er experienced any physical violence by &amp; 0.153 &amp; 0.024 &amp; 169 &amp; 132 &amp; 0.852 &amp; 0.154 &amp; 0.106 &amp; 0.201 \\ usband/partner \\ er experienced any physical or sexual violence by &amp; 0.811 &amp; 0.020 &amp; 169 &amp; 132 &amp; 0.940 &amp; 0.244 &amp; 0.042 &amp; 0.121 \\ usband/partner in the last 12 months \\ tal fertility rate (last 3 years) &amp; 1.515 &amp; 0.204 &amp; 980 &amp; 1.032 &amp; 0.955 &amp; 0.135 &amp; 1.107 &amp; 1.923 \\ tal abortion rate (last 3 years) &amp; 0.537 &amp; 0.184 &amp; 980 &amp; 1.032 &amp; 1.097 &amp; 0.343 &amp; 0.169 &amp; 0.905 \\ \hline \\ </math></td> <td></td> <td>0.056</td> <td>0.026</td> <td>73</td> <td>69</td> <td>0.981</td> <td>0 470</td> <td>0.003</td> <td>0 109</td>	$\begin{split} & \begin{array}{c} \ddot{e}(h)(-c)\ddot{e}(h)(-c)\dot{S}(b)) & 0.012 & 0.012 & 73 & 69 & 0.941 & 1.024 & 0.000 & 0.035 \\ eight-for-age (-2SD) & 0.000 & 0.000 & 73 & 69 & na & na & 0.000 & 0.005 \\ eight-for-age (-2SD) & 0.336 & 0.041 & 56 & 52 & 0.700 & 0.122 & 0.254 & 0.418 \\ evalence of anemia (women age 15-49) & 0.138 & 0.025 & 284 & 299 & 1.211 & 0.180 & 0.088 & 0.188 \\ evalence draker (BMI) > 18.5 & 0.039 & 0.010 & 274 & 287 & 0.847 & 0.254 & 0.019 & 0.059 \\ edy mass index (BMI) > 25 & 0.480 & 0.037 & 274 & 287 & 1.231 & 0.078 & 0.405 & 0.554 \\ er experienced any physical violence since age 15 & 0.101 & 0.016 & 253 & 224 & 0.857 & 0.161 & 0.068 & 0.134 \\ er experienced any physical violence by & 0.153 & 0.024 & 169 & 132 & 0.852 & 0.154 & 0.106 & 0.201 \\ usband/partner \\ er experienced any physical or sexual violence by & 0.811 & 0.020 & 169 & 132 & 0.940 & 0.244 & 0.042 & 0.121 \\ usband/partner in the last 12 months \\ tal fertility rate (last 3 years) & 1.515 & 0.204 & 980 & 1.032 & 0.955 & 0.135 & 1.107 & 1.923 \\ tal abortion rate (last 3 years) & 0.537 & 0.184 & 980 & 1.032 & 1.097 & 0.343 & 0.169 & 0.905 \\ \hline \\ $		0.056	0.026	73	69	0.981	0 470	0.003	0 109
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	evalence of anemia (children age 6-59 months) 0.336 0.041 56 52 0.700 0.122 0.254 0.418 evalence of anemia (women age 15-49) 0.138 0.025 284 299 1.211 0.180 0.088 0.088 0.188 0.98 0.089 0.010 274 287 1.231 0.078 0.405 0.405 0.554 er experienced any physical violence since age 15 0.101 0.016 253 224 1.63 0.544 0.000 0.37 er experienced any physical violence by 0.153 0.024 169 132 0.867 0.164 0.042 0.121 usband/partner re rexperienced any physical or sexual violence by 0.081 0.020 169 132 0.940 0.244 0.042 0.121 usband/partner re rexperienced any physical or sexual violence by 0.081 0.020 169 132 0.940 0.244 0.042 0.121 usband/partner re rexperienced any physical or sexual violence by 0.051 0.021 1.515 0.204 980 1.032 0.955 0.135 1.107 1.923 tal abortion rate (last 3 years) 0.537 0.184 980 1.032 0.955 0.135 1.107 1.923 tal abortion rate (last 3 years) 0.569 0.035 164 184 0.903 0.061 0.499 0.639 condary or higher education 0.871 0.034 164 184 1.166 0.090 0.417 0.599 ant no more children 0.558 0.065 82 94 1.91 0.11 0.112 0.454 0.716 ant to delay birth at least 2 years 0.101 0.033 82 94 0.989 0.328 0.035 0.667 0.718 0.000 0.277 2.355 2.625 0.167 2.50 0.001 0.012 0.004 0.004 164 184 0.792 0.997 0.000 0.012 0.012 0.012 0.012 0.012 0.012 0.012 0.012 0.012 0.012 0.012 0.012 0.01 0.02 0.01 0.02 0.01 0.02 0.01 0.02 0.01 0.02 0.02				73					
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	evalence of anemia (women age 15-49)       0.138       0.025       284       299       1.211       0.180       0.088       0.188         vdy mass index (BMI) < 18.5									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	udy mass index (BMI) < 18.5									
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	dý mass index (BMI) ≥ 25       0.480       0.037       274       287       1.231       0.078       0.405       0.554         er experienced any physical violence since age 15       0.101       0.016       253       224       0.857       0.161       0.068       0.134         er experienced any physical/sexual violence by       0.153       0.024       169       132       0.852       0.154       0.106       0.201         usband/partner       er experienced any physical or sexual violence by       0.081       0.020       169       132       0.940       0.244       0.042       0.121         usband/partner       ner experienced any physical or sexual violence by       0.081       0.020       169       132       0.940       0.244       0.042       0.121         usband/partner       ner experienced any physical or sexual violence by       0.537       0.184       980       1,032       0.955       0.135       1.107       1.923         tal abortion rate (last 3 years)       0.569       0.035       164       184       0.903       0.061       0.499       0.639         condary or higher education       0.871       0.034       164       184       1.160       0.993       0.893       0.577         tr									
Ever experienced any sexual violence         0.018         0.010         253         224         1.163         0.544         0.000         0.037           Ever experienced any physical/sexual violence by husband/partner         0.153         0.024         169         132         0.852         0.154         0.106         0.201           Ever experienced any physical or sexual violence by husband/partner in the last 12 months         0.081         0.020         169         132         0.940         0.244         0.042         0.121           Total fertility rate (last 3 years)         1.515         0.204         980         1.032         0.955         0.135         1.107         1.923           Total abortion rate (last 3 years)         0.537         0.184         980         1.032         1.097         0.343         0.169         0.905           MEN           Urban residence         0.569         0.035         164         184         0.903         0.061         0.499         0.639           Secondary or higher education         0.871         0.034         164         184         1.289         0.039         0.393         0.393         0.593           Never married (in union)         0.486         0.045         164         18	er experienced any sexual violence       0.018       0.010       253       224       1.163       0.544       0.000       0.037         er experienced any physical/sexual violence by       0.153       0.024       169       132       0.852       0.154       0.106       0.201         uusband/partner       0.081       0.020       169       132       0.940       0.244       0.042       0.121         uusband/partner       1s1 fertility rate (last 3 years)       1.515       0.204       980       1.032       0.955       0.135       1.107       1.923         tal fertility rate (last 3 years)       0.537       0.184       980       1.032       1.097       0.343       0.169       0.905         MEN         ban residence       0.569       0.035       164       184       0.903       0.061       0.499       0.639         condary or higher education         0.871       0.034       164       184       1.266       0.093       0.395       0.577         urrently married (in union)       0.486       0.045       164       184       1.160       0.090       0.417       0.599         ant no more children       0.585 <t< td=""><td>Body mass index (BMI) ≥ 25</td><td>0.480</td><td>0.037</td><td>274</td><td>287</td><td>1.231</td><td>0.078</td><td>0.405</td><td>0.554</td></t<>	Body mass index (BMI) ≥ 25	0.480	0.037	274	287	1.231	0.078	0.405	0.554
Ever experienced any physical/sexual violence by husband/partner         0.153         0.024         169         132         0.852         0.154         0.106         0.201           Ever experienced any physical or sexual violence by husband/partner in the last 12 months         0.081         0.020         169         132         0.940         0.244         0.042         0.121           Total fertility rate (last 3 years)         1.515         0.204         980         1.032         0.955         0.135         1.107         1.923           Total abortion rate (last 3 years)         0.537         0.184         980         1.032         1.097         0.343         0.169         0.905           MEN           Urban residence         0.569         0.035         164         184         0.903         0.061         0.499         0.639           Secondary or higher education         0.871         0.034         164         184         1.269         0.039         0.803         0.938           Never married (in union)         0.508         0.045         164         184         1.160         0.090         0.417         0.599           Had first sexual intercourse before age 18         0.020         0.014         114         128         1.079	rer experienced any physical/sexual violence by nusband/partner       0.153       0.024       169       132       0.852       0.154       0.106       0.201         nusband/partner       0.081       0.020       169       132       0.940       0.244       0.042       0.121         nusband/partner in the last 12 months       1.515       0.204       980       1,032       0.955       0.135       1.107       1.923         tal fertility rate (last 3 years)       0.537       0.184       980       1,032       1.097       0.343       0.169       0.905         MEN    ban residence          condary or higher education       0.871       0.034       164       184       0.903       0.061       0.499       0.639         Aust on the last 12 months         MEN             ban residence       0.569       0.035       164       184       0.903       0.061       0.499       0.639         condary or higher education       0.871       0.034       164       184       1.160       0.090       0.417       0.599         output for the invition       0.568       0.045       164       184 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
husband/partner       1.1         Ever experienced any physical or sexual violence by husband/partner in the last 12 months       0.081       0.020       169       132       0.940       0.244       0.042       0.121         Total fertility rate (last 3 years)       1.515       0.204       980       1,032       0.955       0.135       1.107       1.923         Total abortion rate (last 3 years)       0.537       0.184       980       1,032       1.097       0.343       0.169       0.905         MEN         Urban residence       0.569       0.035       164       184       0.903       0.061       0.499       0.639         Secondary or higher education         0.871       0.034       164       184       1.289       0.039       0.803       0.938         Never married (in union)       0.486       0.045       164       184       1.166       0.090       0.417       0.599         Currently married (in union)       0.508       0.045       164       184       1.160       0.090       0.417       0.599         Want no more children       0.585       0.065       82       94       1.191       0.112       0.454       0.716	nusbaind/partner       0.081       0.020       169       132       0.940       0.244       0.042       0.121         rer experienced any physical or sexual violence by tusband/partner in the last 12 months       1.515       0.204       980       1,032       0.955       0.135       1.107       1.923         tal fertility rate (last 3 years)       0.537       0.184       980       1,032       1.097       0.343       0.169       0.905         MEN         ban residence       0.569       0.035       164       184       0.903       0.061       0.499       0.639         wer married (in union)       0.871       0.034       164       184       1.289       0.039       0.803       0.938         ver married (in union)       0.486       0.045       164       184       1.166       0.090       0.417       0.599         d first sexual intercourse before age 18       0.020       0.014       114       128       1.079       0.705       0.000       0.049         ant to delay birth at least 2 years       0.101       0.033       82       94       0.989       0.328       0.035       0.167         ad 1 to delay birth at least 12 months       0.011       0.0	Ever experienced any sexual violence				224				
husband/partner in the fast 12 months         Total fertility rate (last 3 years)       1.515       0.204       980       1.032       0.955       0.135       1.107       1.923         Total abortion rate (last 3 years)       0.537       0.184       980       1.032       1.097       0.343       0.169       0.905         MEN         Urban residence       0.569       0.035       164       184       0.903       0.061       0.499       0.639         Secondary or higher education         0.871       0.034       164       184       1.289       0.039       0.803       0.938         Never married (in union)       0.486       0.045       164       184       1.160       0.090       0.417       0.599         Had first sexual intercourse before age 18       0.020       0.014       114       128       1.079       0.705       0.000       0.049         Want to delay birth at least 2 years       0.101       0.033       82       94       1.989       0.328       0.455       0.665         Usant to delay birth at least 12 months       0.011       0.008       164       184       0.967       0.718       0.000       0.027         Ab	nusband/partner in the fast 12 months       1.515       0.204       980       1,032       0.955       0.135       1.107       1.923         tal ferlility rate (last 3 years)       0.537       0.184       980       1,032       1.097       0.343       0.169       0.905         MEN         ban residence       0.569       0.035       164       184       0.903       0.061       0.499       0.639         condary or higher education       0.871       0.034       164       184       1.289       0.039       0.803       0.998         ever married (in union)       0.486       0.045       164       184       1.160       0.090       0.417       0.599         ad first sexual intercourse before age 18       0.020       0.014       114       128       1.079       0.705       0.000       0.049         ant to delay birth at least 2 years       0.101       0.033       82       94       0.191       0.112       0.445       0.464       184       0.967       0.718       0.030       0.045       0.64       184       1.160       0.090       0.417       0.599         ad first sexual intercourse before age 18       0.020<		0.100	0.024	100	102	0.002	0.104	0.100	0.201
Total fertility rate (last 3 years)       1.515       0.204       980       1.032       0.955       0.135       1.107       1.923         Total abortion rate (last 3 years)       0.537       0.184       980       1.032       1.097       0.343       0.169       0.905         MEN         Urban residence       0.569       0.035       164       184       0.903       0.061       0.499       0.639         Secondary or higher education       0.871       0.034       164       184       1.289       0.039       0.803       0.938         Never married (in union)       0.486       0.045       164       184       1.166       0.090       0.417       0.599         Had first sexual intercourse before age 18       0.020       0.014       114       128       1.079       0.705       0.000       0.049         Want to delay birth at least 2 years       0.101       0.033       82       94       0.989       0.328       0.716         Udal number of children       2.490       0.067       141       157       1.117       0.027       2.355       2.625         Had 2+ sexual partners in past 12 months       0.011       0.008       164       184	tal fertility rate (last 3 years)       1.515       0.204       980       1,032       0.955       0.135       1.107       1.923         tal abortion rate (last 3 years)       0.537       0.184       980       1,032       1.097       0.343       0.169       0.905         MEN         ban residence       0.569       0.035       164       184       0.903       0.061       0.499       0.639         were married (in union)       0.871       0.034       164       184       1.289       0.039       0.803       0.938         were married (in union)       0.568       0.045       164       184       1.166       0.090       0.417       0.599         of first sexual intercourse before age 18       0.020       0.014       114       128       1.079       0.705       0.000       0.049         ant to delay birth at least 2 years       0.101       0.033       82       94       0.989       0.328       0.035       0.6167         al number of children       2.490       0.067       141       157       1.117       0.027       2.355       2.625         al number of children       2.490       0.067 </td <td>Ever experienced any physical or sexual violence by</td> <td>0.081</td> <td>0.020</td> <td>169</td> <td>132</td> <td>0.940</td> <td>0.244</td> <td>0.042</td> <td>0.121</td>	Ever experienced any physical or sexual violence by	0.081	0.020	169	132	0.940	0.244	0.042	0.121
Total abortion rate (last 3 years)         0.537         0.184         980         1.032         1.097         0.343         0.169         0.905           MEN           Urban residence         0.569         0.035         164         184         0.903         0.061         0.499         0.639           Secondary or higher education         0.871         0.034         164         184         1.289         0.039         0.803         0.938           Never married (in union)         0.486         0.045         164         184         1.166         0.093         0.395         0.577           Currently married (in union)         0.486         0.045         164         184         1.160         0.090         0.417         0.599           Had first sexual intercourse before age 18         0.020         0.014         114         128         1.079         0.705         0.000         0.049           Want no more children         0.585         0.065         82         94         1.911         0.112         0.454         0.716           Want to delay birth at least 2 years         0.101         0.033         82         94         0.989         0.328         0.035	tal abortion rate (last 3 years)       0.537       0.184       980       1,032       1.097       0.343       0.169       0.905         MEN         ban residence       0.569       0.035       164       184       0.903       0.061       0.499       0.639         condary or higher education       0.871       0.034       164       184       1.289       0.039       0.803       0.938         over married (in union)       0.486       0.045       164       184       1.156       0.093       0.395       0.577         urrently married (in union)       0.508       0.045       164       184       1.160       0.090       0.417       0.599         differences before age 18       0.020       0.014       114       128       1.079       0.705       0.000       0.049         ant no more children       0.585       0.065       82       94       1.919       0.112       0.454       0.767         ant to delay birth at least 2 years       0.101       0.033       82       94       0.989       0.328       0.035       0.167         al number of children       2.490       0.067 <t< td=""><td></td><td>1 5 1 5</td><td>0.204</td><td>000</td><td>1 022</td><td>0.055</td><td>0 125</td><td>1 107</td><td>1 0 2 2</td></t<>		1 5 1 5	0.204	000	1 022	0.055	0 125	1 107	1 0 2 2
MEN           Urban residence         0.569         0.035         164         184         0.903         0.061         0.499         0.639           Secondary or higher education         0.871         0.034         164         184         1.289         0.039         0.803         0.937           Never married (in union)         0.486         0.045         164         184         1.156         0.093         0.395         0.577           Currently married (in union)         0.508         0.045         164         184         1.160         0.090         0.417         0.599           Had first sexual intercourse before age 18         0.020         0.014         114         128         1.079         0.705         0.000         0.049           Want to delay birth at least 2 years         0.101         0.033         82         94         0.989         0.328         0.035         0.167           Ideal number of children         2.490         0.067         141         157         1.117         0.027         2.355         2.625           Had 2+ sexual partners in past 12 months         0.011         0.008         164         184         0.967         0.718         0.000         0.027 <td< td=""><td>MEN           ban residence         0.569         0.035         164         184         0.903         0.061         0.499         0.639           ccondary or higher education         0.871         0.034         164         184         1.289         0.039         0.803         0.938           ever married (in union)         0.486         0.045         164         184         1.156         0.093         0.395         0.577           irrently married (in union)         0.508         0.045         164         184         1.160         0.090         0.417         0.599           ad first sexual intercourse before age 18         0.020         0.014         114         128         1.079         0.705         0.000         0.049           ant to delay birth at least 2 years         0.101         0.033         82         94         0.989         0.328         0.035         0.167           eal number of children         2.490         0.067         141         157         1.117         0.027         2.355         2.625           ad 2 + sexual partners in past 12 months         0.011         0.008         164         184         0.967         0.718         0.000         0.027           ustinence among neve</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	MEN           ban residence         0.569         0.035         164         184         0.903         0.061         0.499         0.639           ccondary or higher education         0.871         0.034         164         184         1.289         0.039         0.803         0.938           ever married (in union)         0.486         0.045         164         184         1.156         0.093         0.395         0.577           irrently married (in union)         0.508         0.045         164         184         1.160         0.090         0.417         0.599           ad first sexual intercourse before age 18         0.020         0.014         114         128         1.079         0.705         0.000         0.049           ant to delay birth at least 2 years         0.101         0.033         82         94         0.989         0.328         0.035         0.167           eal number of children         2.490         0.067         141         157         1.117         0.027         2.355         2.625           ad 2 + sexual partners in past 12 months         0.011         0.008         164         184         0.967         0.718         0.000         0.027           ustinence among neve									
Urban residence0.5690.0351641840.9030.0610.4990.639Secondary or higher education0.8710.0341641841.2890.0390.8030.938Never married (in union)0.4860.0451641841.1560.0930.3950.577Currently married (in union)0.5080.0451641841.1600.0900.4170.599Had first sexual intercourse before age 180.0200.0141141281.0790.7050.0000.049Want no more children0.5850.06582941.1910.1120.4540.716Want to delay birth at least 2 years0.1010.03382940.9890.3280.0350.167Ideal number of children2.4900.0671411571.1170.0272.3552.625Had 2+ sexual partners in past 12 months0.0110.0081641840.9670.7180.0000.027Abstinence among never-married youth (never had sex)0.8160.07048531.2350.0860.6760.957Paid for sexual intercourse in past 12 months0.0040.0041641840.7920.9970.0000.012	ban residence0.5690.0351641840.9030.0610.4990.639scondary or higher education0.8710.0341641841.2890.0390.8030.938ever married (in union)0.4860.0451641841.1560.0930.3950.577urrently married (in union)0.5080.0451641841.1600.0900.4170.599dd first sexual intercourse before age 180.0200.0141141281.0790.7050.0000.049ant no more children0.5850.06582941.1910.1120.4540.716ant to delay birth at least 2 years0.1010.03382940.9890.3280.0350.167eal number of children2.4900.0671411571.1170.0272.3552.625ad 2 + sexual partners in past 12 months0.0110.0081641840.9670.7180.0000.027stinence among never-married youth (never had sex)0.8160.07048531.2350.0860.6760.957id for sexual intercourse in past 12 months0.0040.0041641840.7920.9970.0000.012		0.001			.,		0.0.10	0.100	0.000
Secondary or higher education         0.871         0.034         164         184         1.289         0.039         0.803         0.938           Never married (in union)         0.486         0.045         164         184         1.156         0.093         0.395         0.577           Currently married (in union)         0.508         0.045         164         184         1.160         0.090         0.417         0.599           Had first sexual intercourse before age 18         0.020         0.014         114         128         1.079         0.705         0.000         0.049           Want no more children         0.585         0.065         82         94         1.191         0.112         0.454         0.716           Want to delay birth at least 2 years         0.101         0.033         82         94         0.989         0.328         0.035         0.167           Ideal number of children         2.490         0.067         141         157         1.117         0.027         2.355         2.625           Had 2+ sexual partners in past 12 months         0.011         0.008         164         184         0.967         0.718         0.000         0.027           Abstinence among never-married youth (never had	econdary or higher education0.8710.0341641841.2890.0390.8030.938ever married (in union)0.4860.0451641841.1560.0930.3950.577irrently married (in union)0.5080.0451641841.1660.0900.4170.599ad first sexual intercourse before age 180.0200.0141141281.0790.7050.0000.049ant no more children0.5850.06582941.1910.1120.4540.716ant to delay birth at least 2 years0.1010.03382940.9890.3280.0350.167ad number of children2.4900.0671411571.1170.0272.3552.625ad 2+ sexual partners in past 12 months0.0110.0081641840.9670.7180.0000.027stinence among never-married youth (never had sex)0.8160.07048531.2350.0860.6760.957id for sexual intercourse in past 12 months0.0040.0041641840.7920.9970.0000.012									
Never married (in union)0.4860.0451641841.1560.0930.3950.577Currently married (in union)0.5080.0451641841.1600.0900.4170.599Had first sexual intercourse before age 180.0200.0141141281.0790.7050.0000.049Want no more children0.5850.06582941.1910.1120.4540.716Want to delay birth at least 2 years0.1010.03382940.9890.3280.0350.167Ideal number of children2.4900.0671411571.1170.0272.3552.625Had 2+ sexual partners in past 12 months0.1110.0081641840.9670.7180.0000.027Abstinence among never-married youth (never had sex)0.8160.07048531.2350.0860.6760.957Paid for sexual intercourse in past 12 months0.0040.0041641840.7920.9970.0000.012	ever married (in union)         0.486         0.045         164         184         1.156         0.093         0.395         0.577           urrently married (in union)         0.508         0.045         164         184         1.160         0.090         0.417         0.599           ad first sexual intercourse before age 18         0.020         0.014         114         128         1.079         0.705         0.000         0.049           ant no more children         0.585         0.065         82         94         1.911         0.112         0.454         0.716           ant to delay birth at least 2 years         0.101         0.033         82         94         0.989         0.328         0.035         0.167           aal number of children         2.490         0.067         141         157         1.117         0.027         2.355         2.625           ad 2 + sexual partners in past 12 months         0.011         0.008         164         184         0.967         0.718         0.000         0.027           stinence among never-married youth (never had sex)         0.816         0.070         48         53         1.235         0.086         0.676         0.957           id for sexual intercourse in past 1									
Currently marrièd (in union)0.5080.0451641841.1600.0900.4170.599Had first sexual intercourse before age 180.0200.0141141281.0790.7050.0000.049Want no more children0.5850.06582941.1910.1120.4540.716Want to delay birth at least 2 years0.1010.03382940.9890.3280.0350.167Ideal number of children2.4900.0671411571.1170.0272.3552.625Had 2+ sexual partners in past 12 months0.0110.0081641840.9670.7180.0000.027Abstinence among never-married youth (never had sex)0.8160.07048531.2350.0860.6760.957Paid for sexual intercourse in past 12 months0.0040.0041641840.7920.9970.0000.012	Irrently marrièd (in union)0.5080.0451641841.1600.0900.4170.599ud first sexual intercourse before age 180.0200.0141141281.0790.7050.0000.049ant no more children0.5850.06582941.1910.1120.4540.716ant to delay birth at least 2 years0.1010.03382940.9890.3280.0350.167eal number of children2.4900.0671411571.1170.0272.3552.625ad 2 + sexual partners in past 12 months0.0110.0081641840.9670.7180.0000.027vistinence among never-married youth (never had sex)0.8160.07048531.2350.0860.6760.957id for sexual intercourse in past 12 months0.0040.0041641840.7920.9970.0000.012									
Had first sexual intercourse before age 180.0200.0141141281.0790.7050.0000.049Want no more children0.5850.06582941.1910.1120.4540.716Want to delay birth at least 2 years0.1010.03382940.9890.3280.0350.167Ideal number of children2.4900.0671411571.1170.0272.3552.625Had 2+ sexual partners in past 12 months0.0110.0081641840.9670.7180.0000.027Abstinence among never-married youth (never had sex)0.8160.07048531.2350.0860.6760.957Paid for sexual intercourse in past 12 months0.0040.0041641840.7920.9970.0000.012	and first sexual intercourse before age 18       0.020       0.014       114       128       1.079       0.705       0.000       0.049         ant no more children       0.585       0.065       82       94       1.191       0.112       0.454       0.716         ant to delay birth at least 2 years       0.101       0.033       82       94       0.989       0.328       0.035       0.167         sal number of children       2.490       0.067       141       157       1.117       0.027       2.355       2.625         ad 2+ sexual partners in past 12 months       0.011       0.008       164       184       0.967       0.718       0.000       0.027         vistinence among never-married youth (never had sex)       0.816       0.070       48       53       1.235       0.086       0.676       0.957         id for sexual intercourse in past 12 months       0.004       0.004       164       184       0.792       0.997       0.000       0.012									
Want to delay birth at least 2 years0.1010.03382940.9890.3280.0350.167Ideal number of children2.4900.0671411571.1170.0272.3552.625Had 2+ sexual partners in past 12 months0.0110.0081641840.9670.7180.0000.027Abstinence among never-married youth (never had sex)0.8160.07048531.2350.0860.6760.957Paid for sexual intercourse in past 12 months0.0040.0041641840.7920.9970.0000.012	ant to delay birth at least 2 years       0.101       0.033       82       94       0.989       0.328       0.035       0.167         sal number of children       2.490       0.067       141       157       1.117       0.027       2.355       2.625         ad 2+ sexual partners in past 12 months       0.011       0.008       164       184       0.967       0.718       0.000       0.027         sistinence among never-married youth (never had sex)       0.816       0.070       48       53       1.235       0.086       0.676       0.957         id for sexual intercourse in past 12 months       0.004       0.004       164       184       0.792       0.997       0.000       0.012	Had first sexual intercourse before age 18	0.020	0.014	114	128	1.079	0.705	0.000	0.049
Ideal number of children         2.490         0.067         141         157         1.117         0.027         2.355         2.625           Had 2+ sexual partners in past 12 months         0.011         0.008         164         184         0.967         0.718         0.000         0.027           Abstinence among never-married youth (never had sex)         0.816         0.070         48         53         1.235         0.086         0.676         0.957           Paid for sexual intercourse in past 12 months         0.004         0.004         164         184         0.792         0.997         0.000         0.012	eal number of children       2.490       0.067       141       157       1.117       0.027       2.355       2.625         ad 2+ sexual partners in past 12 months       0.011       0.008       164       184       0.967       0.718       0.000       0.027         stinence among never-married youth (never had sex)       0.816       0.070       48       53       1.235       0.086       0.676       0.957         id for sexual intercourse in past 12 months       0.004       0.004       164       184       0.792       0.997       0.000       0.012	Want no more children	0.585	0.065	82	94	1.191	0.112		0.716
Had 2+ sexual partners in past 12 months       0.011       0.008       164       184       0.967       0.718       0.000       0.027         Abstinence among never-married youth (never had sex)       0.816       0.070       48       53       1.235       0.086       0.676       0.957         Paid for sexual intercourse in past 12 months       0.004       0.004       164       184       0.792       0.997       0.000       0.012	ad 2+ sexual partners in past 12 months       0.011       0.008       164       184       0.967       0.718       0.000       0.027         istinence among never-married youth (never had sex)       0.816       0.070       48       53       1.235       0.086       0.676       0.957         id for sexual intercourse in past 12 months       0.004       0.004       164       184       0.792       0.997       0.000       0.012									
Abstinence among never-married youth (never had sex)         0.816         0.070         48         53         1.235         0.086         0.676         0.957           Paid for sexual intercourse in past 12 months         0.004         0.004         164         184         0.792         0.997         0.000         0.012	Instinue among never-married youth (never had sex)         0.816         0.070         48         53         1.235         0.086         0.676         0.957           id for sexual intercourse in past 12 months         0.004         0.004         164         184         0.792         0.997         0.000         0.012									
		Abstinence among never-married youth (never had sex)	0.816	0.070	48	53	1.235	0.086	0.676	0.957
na=Not applicable	=Not applicable	Paid for sexual intercourse in past 12 months	0.004	0.004	164	184	0.792	0.997	0.000	0.012
		na=Not applicable								

#### Table B.11 Sampling errors: Kotayk sample, Armenia 2015-16

			Number	of cases				
Variable	Value (D)	Standard	Un- weighted	Weighted	Design effect	Relative error		nce limits
Variable	Value (R)	error (SE) WOMEN	(N)	(WN)	(DEFT)	(SE/R)	R-2SE	R+2SE
Urban residence	0.497	0.026	659	678	1.330	0.052	0.445	0.549
Secondary or higher education Never married (never in union)	0.944 0.241	0.010 0.017	659 659	678 678	1.124 1.030	0.011 0.071	0.924 0.206	0.965 0.275
Currently married (in union)	0.701	0.020	659	678	1.092	0.028	0.662	0.740
Married before age 20 Had sexual intercourse before age 18	0.430 0.162	0.019 0.018	491 491	507 507	0.864 1.066	0.045 0.110	0.391 0.126	0.469 0.197
Currently pregnant	0.043	0.009	659	678	1.100	0.202	0.026	0.061
Children ever born	1.515	0.042	659	678	0.905	0.028	1.431	1.600
Children surviving Children ever born to women age 40-49	1.480 2.312	0.039 0.073	659 152	678 157	0.871 0.915	0.026 0.031	1.403 2.167	1.557 2.457
Know any contraceptive method	1.000	0.000	461	476	na	0.000	1.000	1.000
Know a modern method Currently using any method	1.000 0.556	0.000 0.025	461 461	476 476	na 1.068	0.000 0.044	1.000 0.507	1.000 0.605
Currently using a modern method	0.232	0.020	461	476	0.997	0.084	0.193	0.272
Currently using pill	0.008	0.004	461	476	0.971	0.495	0.000	0.017
Currently using IUD Currently using condoms	0.088 0.121	0.013 0.014	461 461	476 476	0.986 0.944	0.148 0.118	0.062 0.093	0.115 0.150
Currently using injectables	0.000	0.000	461	476	na	na	0.000	0.000
Currently using female sterilization Using public sector source	0.005 0.402	0.003 0.044	461 105	476 108	1.057 0.907	0.716 0.108	0.000 0.315	0.011 0.489
Want no more children	0.402	0.044	461	476	1.285	0.108	0.315	0.489
Want to delay next birth at least 2 years	0.148	0.019	461	476	1.150	0.129	0.110	0.186
Ideal number of children Mothers received antenatal care for last birth	2.624 1.000	0.028 0.000	636 196	652 200	0.914 na	0.011 0.000	2.569 1.000	2.679 1.000
Births with skilled attendant at delivery	1.000	0.000	237	239	na	0.000	1.000	1.000
Had diarrhea in the past 2 weeks	0.056 0.563	0.012 0.150	237 13	239 13	0.776 1.040	0.222 0.267	0.031 0.262	0.081 0.863
Treated with ORS Sought medical treatment for diarrhea	0.384	0.130	13	13	0.995	0.364	0.202	0.663
Vaccination card seen (children age 12-23 months)	0.959	0.029	52	53	1.057	0.030	0.901	1.000
Received BCG vaccination Received HepB vaccination at birth	1.000 1.000	0.000 0.000	52 52	53 53	na na	0.000 0.000	1.000 1.000	1.000 1.000
Received DPT-HepB-Hib vaccination (third dose)	0.965	0.025	52	53	0.972	0.026	0.915	1.000
Received polio vaccination (third dose)	0.965 0.957	0.025 0.030	52 52	53 53	0.972 1.070	0.026 0.032	0.915 0.896	1.000 1.000
Received rotavirus vaccination (second dose) Received all vaccinations appropriate for a child age 12-	0.957	0.030	52 52	53	1.070	0.032	0.847	0.998
23 months								
Vaccination card seen (children age 24-35 months) Received measles, mumps, and rubella (MMR) vaccination	1.000 0.976	0.000 0.024	37 37	38 38	na 0.941	0.000 0.025	1.000 0.928	1.000 1.024
Received DPT vaccination (fourth dose)	0.976	0.024	37	38	0.941	0.025	0.928	1.024
Received polio vaccination (fourth dose)	1.000	0.000	37	38	na	0.000	1.000	1.000
Received all basic vaccinations appropriate for children age 24-35 months	1.000	0.000	37	38	na	0.000	1.000	1.000
Received all vaccinations appropriate for a child age 24- 35 months	0.950	0.035	37	38	0.955	0.036	0.881	1.019
Height-for-age (-2SD)	0.077	0.018	234	245	1.047	0.237	0.040	0.113
Weight-for-height (-2SD) Weight-for-age (-2SD)	0.011 0.012	0.008 0.008	234 235	244 246	1.165 1.160	0.720 0.707	0.000 0.000	0.027 0.028
Prevalence of anemia (children age 6-59 months)	0.202	0.034	198	207	1.166	0.167	0.135	0.270
Prevalence of anemia (women age 15-49)	0.126	0.014	642	662	1.094	0.113	0.098	0.155
Body mass index (BMI) < 18.5 Body mass index (BMI) $\ge$ 25	0.035 0.432	0.008 0.016	613 613	632 632	1.084 0.819	0.229 0.038	0.019 0.399	0.051 0.465
Ever experienced any physical violence since age 15	0.061	0.012	484	513	1.066	0.190	0.038	0.084
Ever experienced any sexual violence Ever experienced any physical/sexual violence by	0.012 0.070	0.005 0.013	484 396	513 393	0.953 1.047	0.401 0.192	0.002 0.043	0.021 0.097
husband/partner Ever experienced any physical or sexual violence by husband/partner in the last 12 months	0.015	0.005	396	393	0.824	0.340	0.005	0.025
Total abortion rate (last 3 years)	2.080 0.749	0.184 0.122	1,901 1,901	1,954 1,954	1.264 1.196	0.088 0.163	1.712 0.505	2.448 0.992
	510	MEN	.,	.,				
Urban residence	0.479	0.034	266	299	1.139	0.070	0.412	0.546
Secondary or higher education	0.479 0.856	0.034	288 288	299 299	1.139	0.070	0.412	0.546
Never married (in union)	0.364	0.036	288	299	1.261	0.099	0.292	0.435
Currently married (in union) Had first sexual intercourse before age 18	0.623 0.135	0.037 0.035	288 209	299 216	1.305 1.479	0.060 0.260	0.548 0.065	0.698 0.206
Want no more children	0.570	0.044	180	186	1.196	0.078	0.482	0.659
Want to delay birth at least 2 years Ideal number of children	0.162 2.672	0.026 0.058	180 275	186 285	0.959 1.208	0.163 0.022	0.109 2.557	0.214 2.788
Had 2+ sexual partners in past 12 months	0.118	0.058	275	205	0.872	0.022	2.557	2.760 0.151
Abstinence among never-married youth (never had sex) Paid for sexual intercourse in past 12 months	0.615 0.041	0.067 0.014	71 288	75 299	1.157 1.205	0.110 0.345	0.480 0.013	0.750 0.069
na=Not applicable	0.011	0.011		_00	00	0.010	0.010	

#### Table B.12 Sampling errors: Shirak sample, Armenia 2015-16

			Number	of cases				
			Un-		Design	Relative		
		Standard	weighted	Weighted	effect	error		nce limits
Variable	Value (R)	error (SE) WOMEN	(N)	(WN)	(DEFT)	(SE/R)	R-2SE	R+2SE
Urban residence Secondary or higher education	0.495 0.941	0.024 0.019	536 536	510 510	1.118 1.845	0.049 0.020	0.446 0.903	0.543 0.979
Never married (never in union)	0.941	0.019	536	510	1.166	0.020	0.903	0.979
Currently married (in union)	0.684	0.020	536	510	1.018	0.030	0.643	0.725
Married before age 20 Had sexual intercourse before age 18	0.407 0.150	0.033 0.017	380 380	365 365	1.290 0.927	0.080 0.113	0.341 0.116	0.472 0.184
Currently pregnant	0.033	0.007	536	510	0.854	0.201	0.020	0.046
Children ever born	1.484	0.049	536	510	0.942	0.033	1.386	1.583
Children surviving Children ever born to women age 40-49	1.451 2.425	0.051 0.098	536 123	510 117	0.998 0.973	0.035 0.040	1.350 2.229	1.552 2.621
Know any contraceptive method	0.994	0.004	363	349	0.986	0.004	0.987	1.000
Know a modern method	0.991	0.005	363	349	0.979	0.005	0.982	1.000
Currently using any method Currently using a modern method	0.406 0.187	0.023 0.022	363 363	349 349	0.909 1.075	0.058 0.118	0.359 0.143	0.453 0.231
Currently using pill	0.026	0.008	363	349	0.965	0.311	0.010	0.042
Currently using IUD	0.071	0.018	363	349	1.345	0.256	0.035	0.107
Currently using condoms Currently using injectables	0.087 0.000	0.016 0.000	363 363	349 349	1.052 na	0.179 na	0.056 0.000	0.118 0.000
Currently using female sterilization	0.000	0.000	363	349	na	na	0.000	0.000
Using public sector source	0.386	0.073	69	64	1.236	0.190	0.240	0.533
Want no more children Want to delay next birth at least 2 years	0.540 0.119	0.026 0.017	363 363	349 349	0.992 1.014	0.048 0.145	0.488 0.085	0.592 0.154
Ideal number of children	2.548	0.049	526	499	1.312	0.019	2.450	2.646
Mothers received antenatal care for last birth	1.000	0.000	136	130	na	0.000	1.000	1.000
Births with skilled attendant at delivery Had diarrhea in the past 2 weeks	1.000 0.084	0.000 0.023	175 174	168 167	na 1.125	0.000 0.275	1.000 0.038	1.000 0.131
Treated with ORS	0.208	0.028	15	14	0.922	0.471	0.012	0.404
Sought medical treatment for diarrhea	0.205	0.111	15	14	1.053	0.544	0.000	0.428
Vaccination card seen (children age 12-23 months) Received BCG vaccination	1.000 1.000	0.000 0.000	30 30	28 28	na na	0.000 0.000	1.000 1.000	1.000 1.000
Received HepB vaccination at birth	0.935	0.045	30	28	0.987	0.048	0.845	1.000
Received DPT-HepB-Hib vaccination (third dose)	1.000	0.000	30	28	na	0.000	1.000	1.000
Received polio vaccination (third dose) Received rotavirus vaccination (second dose)	1.000 1.000	0.000 0.000	30 30	28 28	na na	0.000 0.000	1.000 1.000	1.000 1.000
Received all vaccinations appropriate for a child age 12-	0.935	0.045	30	28	0.987	0.048	0.845	1.000
23 months Vaccination card seen (children age 24-35 months)	0.943	0.040	33	33	0.993	0.042	0.864	1.022
Received measles, mumps, and rubella (MMR)	0.943	0.040	33	33	1.174	0.042	0.549	0.907
vaccination			~~			0.400		
Received DPT vaccination (fourth dose) Received polio vaccination (fourth dose)	0.728 0.906	0.089 0.053	33 33	33 33	1.174 1.066	0.123 0.059	0.549 0.799	0.907 1.012
Received all basic vaccinations appropriate for children	0.877	0.060	33	33	1.063	0.068	0.758	0.997
age 24-35 months	0 700	0.000	00		4 4 7 4	0.400	0 5 40	0.007
Received all vaccinations appropriate for a child age 24- 35 months	0.728	0.089	33	33	1.174	0.123	0.549	0.907
Height-for-age (-2SD)	0.195	0.041	173	169	1.316	0.208	0.114	0.276
Weight-for-height (-2SD)	0.051	0.021	174	170	1.256	0.409	0.009	0.092
Weight-for-age (-2SD) Prevalence of anemia (children age 6-59 months)	0.024 0.214	0.011 0.024	176 156	172 153	0.955 0.657	0.460 0.111	0.002 0.166	0.046 0.261
Prevalence of anemia (women age 15-49)	0.113	0.024	530	504	1.572	0.191	0.070	0.157
Body mass index (BMI) < 18.5	0.073	0.014	510	486	1.185	0.188	0.045	0.100
Body mass index (BMI) ≥ 25 Ever experienced any physical violence since age 15	0.358 0.034	0.024 0.010	510 405	486 381	1.128 1.162	0.067 0.310	0.310 0.013	0.406 0.055
Ever experienced any sexual violence	0.000	0.000	405	381	na	na	0.000	0.000
Ever experienced any physical/sexual violence by	0.042	0.013	326	288	1.209	0.322	0.015	0.068
husband/partner Ever experienced any physical or sexual violence by	0.031	0.011	326	288	1.104	0.341	0.010	0.053
husband/partner in the last 12 months								
Total fertility rate (last 3 years)	1.882	0.124	1,556	1,483	0.843	0.066	1.634	2.129
Total abortion rate (last 3 years)	0.725	0.132	1,556	1,483	0.928	0.183	0.460	0.990
		MEN						
Urban residence	0.437	0.038	191	201	1.054	0.087	0.361	0.513
Secondary or higher education	0.862	0.031	191	201	1.244	0.036	0.800	0.924
Never married (in union) Currently married (in union)	0.392 0.590	0.032 0.034	191 191	201 201	0.917 0.957	0.083 0.058	0.327 0.522	0.457 0.658
Had first sexual intercourse before age 18	0.590	0.034 0.044	138	144	1.020	0.058	0.522	0.607
Want no more children	0.567	0.045	113	119	0.958	0.079	0.478	0.657
Want to delay birth at least 2 years Ideal number of children	0.160 2.424	0.038 0.094	113 191	119 201	1.095 1.384	0.237 0.039	0.084 2.236	0.237 2.611
Had 2+ sexual partners in past 12 months	2.424 0.054	0.094 0.016	191	201	0.974	0.039	0.022	0.086
Abstinence among never-married youth (never had sex)	0.444	0.058	51	54	0.834	0.132	0.327	0.561
Paid for sexual intercourse in past 12 months	0.061	0.019	191	201	1.088	0.309	0.023	0.099
na=Not applicable								

#### Table B.13 Sampling errors: Syunik sample, Armenia 2015-16

	Number of ca							
			Un-		Design	Relative		
Variable	Value (D)	Standard	weighted	Weighted	effect	error		nce limits
Variable	Value (R)	error (SE) WOMEN	(N)	(WN)	(DEFT)	(SE/R)	R-2SE	R+2SE
	0.501	-		220	2 202	0.000	0.474	0.707
Urban residence Secondary or higher education	0.591 0.939	0.058 0.013	383 383	238 238	2.302 1.065	0.099 0.014	0.474 0.913	0.965
Never married (never in union)	0.231	0.017	383	238	0.788	0.073	0.197	0.265
Currently married (in union)	0.722 0.405	0.019 0.043	383 290	238 181	0.813 1.495	0.026 0.107	0.684 0.319	0.759 0.492
Married before age 20 Had sexual intercourse before age 18	0.405	0.043	290	181	0.866	0.107	0.319	0.492
Currently pregnant	0.028	0.009	383	238	1.038	0.315	0.010	0.045
Children ever born	1.572	0.061	383	238	0.948	0.038	1.451	1.693
Children surviving Children ever born to women age 40-49	1.557 2.284	0.059 0.094	383 107	238 70	0.935 0.938	0.038 0.041	1.440 2.095	1.675 2.473
Know any contraceptive method	0.988	0.011	276	172	1.645	0.011	0.967	1.000
Know a modern method	0.985	0.011	276	172	1.495	0.011	0.963	1.000
Currently using any method Currently using a modern method	0.208 0.131	0.048 0.035	276 276	172 172	1.960 1.724	0.232 0.269	0.112 0.060	0.305 0.201
Currently using pill	0.003	0.004	276	172	0.997	1.015	0.000	0.011
Currently using IUD	0.012	0.006	276	172	0.977	0.542	0.000	0.024
Currently using condoms	0.108 0.000	0.031 0.000	276 276	172 172	1.638	0.284	0.047 0.000	0.170 0.000
Currently using injectables Currently using female sterilization	0.000	0.000	276	172	na 0.922	na 0.992	0.000	0.000
Using public sector source	0.231	0.093	32	22	1.218	0.403	0.045	0.416
Want no more children	0.526	0.031	276	172	1.030	0.059	0.464	0.588
Want to delay next birth at least 2 years Ideal number of children	0.099 2.525	0.018 0.054	276 383	172 238	1.001 1.452	0.182 0.021	0.063 2.417	0.136 2.633
Mothers received antenatal care for last birth	1.000	0.004	77	46	na	0.021	1.000	1.000
Births with skilled attendant at delivery	1.000	0.000	101	61	na	0.000	1.000	1.000
Had diarrhea in the past 2 weeks	0.017	0.013	101	61	0.975	0.746	0.000	0.042
Treated with ORS Sought medical treatment for diarrhea	1.000 1.000	0.000 0.000	2 2	1	na na	0.000 0.000	1.000 1.000	1.000 1.000
Vaccination card seen (children age 12-23 months)	1.000	0.000	20	11	na	0.000	1.000	1.000
Received BCG vaccination	0.894	0.070	20	11	0.970	0.078	0.754	1.000
Received HepB vaccination at birth Received DPT-HepB-Hib vaccination (third dose)	0.894 0.802	0.070 0.083	20 20	11 11	0.970 0.887	0.078 0.103	0.754 0.637	1.000 0.967
Received polio vaccination (third dose)	0.802	0.083	20	11	0.887	0.103	0.637	0.967
Received rotavirus vaccination (second dose)	0.849	0.075	20	11	0.898	0.088	0.699	0.999
Received all vaccinations appropriate for a child age 12- 23 months	0.802	0.083	20	11	0.887	0.103	0.637	0.967
Vaccination card seen (children age 24-35 months)	1.000	0.000	17	11	na	0.000	1.000	1.000
Received measles, mumps, and rubella (MMR)	0.899	0.063	17	11	0.897	0.071	0.772	1.025
vaccination Received DPT vaccination (fourth dose)	0.899	0.063	17	11	0.897	0.071	0.772	1.025
Received polio vaccination (fourth dose)	0.899	0.063	17	11	0.897	0.071	0.772	1.025
Received all basic vaccinations appropriate for children	0.842	0.104	17	11	1.223	0.124	0.634	1.051
age 24-35 months	0.040	0.404	47	4.4	4 000	0.404	0.004	4.054
Received all vaccinations appropriate for a child age 24- 35 months	0.842	0.104	17	11	1.223	0.124	0.634	1.051
Height-for-age (-2SD)	0.123	0.036	98	62	0.978	0.293	0.051	0.195
Weight-for-height (-2SD)	0.026	0.016	97	62	0.946	0.595	0.000	0.058
Weight-for-age (-2SD) Prevalence of anemia (children age 6-59 months)	0.044 0.098	0.020 0.036	99 83	63 53	0.943 1.121	0.453 0.365	0.004 0.027	0.083 0.170
Prevalence of anemia (women age 15-49)	0.098	0.036	373	232	0.935	0.305	0.027	0.170
Body mass index (BMI) < 18.5	0.040	0.010	369	228	0.950	0.243	0.021	0.059
Body mass index (BMI) $\geq$ 25 Ever experienced any physical violence since age 15	0.422 0.000	0.021 0.000	369 309	228 181	0.796 na	0.049	0.381 0.000	0.463 0.000
Ever experienced any physical violence since age 15 Ever experienced any sexual violence	0.000	0.000	309	181	na na	na na	0.000	0.000
Ever experienced any physical/sexual violence by	0.000	0.000	261	141	na	na	0.000	0.000
husband/partner	0.000	0.000	004	4 4 4			0.000	0.000
Ever experienced any physical or sexual violence by husband/partner in the last 12 months	0.000	0.000	261	141	na	na	0.000	0.000
Total fertility rate (last 3 years)	2.030	0.201	1,082	665	0.712	0.099	1.629	2.432
Total abortion rate (last 3 years)	0.087	0.044	1,082	665	0.987	0.511	0.000	0.175
		MEN						
Urban residence	0.618	0.050	174	104	1.357	0.081	0.518	0.719
Secondary or higher education	0.876	0.030	174	104	1.227	0.035	0.814	0.938
Never married (in union)	0.469	0.044	174	104	1.157	0.094	0.381	0.557
Currently married (in union)	0.524	0.044	174	104	1.168	0.085	0.435	0.613
Had first sexual intercourse before age 18 Want no more children	0.026 0.703	0.013 0.058	121 93	71 55	0.886 1.219	0.498 0.083	0.000 0.587	0.051 0.820
Want to delay birth at least 2 years	0.092	0.046	93	55	1.524	0.504	0.000	0.184
Ideal number of children	2.305	0.080	174	104	1.291	0.035	2.145	2.466
Had 2+ sexual partners in past 12 months	0.031	0.019	174	104	1.473 1.687	0.628	0.000	0.070 1.000
Abstinence among never-married youth (never had sex) Paid for sexual intercourse in past 12 months	0.935 0.042	0.060 0.020	50 174	31 104	1.687	0.065 0.467	0.815 0.003	0.082
na=Not applicable								

#### Table B.14 Sampling errors: Vayots Dzor sample, Armenia 2015-16

	Number of cases							
Veriable	Value (D)	Standard	Un- weighted	Weighted	Design effect	Relative error		nce limits
Variable	Value (R)	error (SE) WOMEN	(N)	(WN)	(DEFT)	(SE/R)	R-2SE	R+2SE
Urban residence	0.351	0.031	405	119	1.285	0.087	0.290	0.412
Secondary or higher education	0.942 0.237	0.018 0.018	405 405	119	1.546 0.859	0.019 0.077	0.906 0.201	0.978 0.273
Never married (never in union) Currently married (in union)	0.237	0.018	405	119 119	0.859	0.077	0.201	0.273
Married before age 20	0.469	0.025	286	84	0.854	0.054	0.419	0.520
Had sexual intercourse before age 18	0.187	0.032	286	84	1.399	0.173	0.123	0.252
Currently pregnant Children ever born	0.037 1.628	0.009 0.054	405 405	119 119	0.982 0.819	0.249 0.033	0.019 1.520	0.056 1.736
Children surviving	1.588	0.053	405	119	0.834	0.033	1.482	1.695
Children ever born to women age 40-49	2.594	0.152	110	33	1.457	0.059	2.289	2.898
Know any contraceptive method	1.000	0.000	292	87	na	0.000	1.000	1.000
Know a modern method Currently using any method	1.000 0.685	0.000 0.022	292 292	87 87	na 0.793	0.000 0.031	1.000 0.642	1.000 0.729
Currently using a modern method	0.134	0.023	292	87	1.136	0.169	0.089	0.180
Currently using pill	0.003	0.003	292	87	0.998	1.003	0.000	0.010
Currently using IUD	0.048	0.016	292	87	1.282	0.336	0.016	0.080
Currently using condoms Currently using injectables	0.076 0.000	0.015 0.000	292 292	87 87	0.947 na	0.194 na	0.047 0.000	0.105 0.000
Currently using female sterilization	0.000	0.003	292	87	0.893	0.990	0.000	0.008
Using public sector source	0.390	0.097	38	11	1.208	0.250	0.195	0.584
Want no more children Want to delay next birth at least 2 years	0.570 0.146	0.031 0.015	292 292	87 87	1.077 0.715	0.055 0.101	0.507 0.117	0.632 0.176
Ideal number of children	2.583	0.015	405	119	1.016	0.014	2.512	2.653
Mothers received antenatal care for last birth	1.000	0.000	103	30	na	0.000	1.000	1.000
Births with skilled attendant at delivery	0.990	0.009	126	37	1.062	0.009	0.972	1.000
Had diarrhea in the past 2 weeks	0.039 0.556	0.015 0.238	123	36 1	0.850 1.048	0.381 0.428	0.009 0.080	0.068 1.000
Treated with ORS Sought medical treatment for diarrhea	0.000	0.238	5 5	1	na	0.428 na	0.000	0.000
Vaccination card seen (children age 12-23 months)	0.850	0.060	25	7	0.838	0.071	0.729	0.970
Received BCG vaccination	0.955	0.046	25	7	1.100	0.048	0.863	1.000
Received HepB vaccination at birth Received DPT-HepB-Hib vaccination (third dose)	0.955 0.955	0.046 0.046	25 25	7 7	1.100 1.100	0.048 0.048	0.863 0.863	1.000 1.000
Received polio vaccination (third dose)	0.955	0.040	25	7	1.100	0.048	0.863	1.000
Received rotavirus vaccination (second dose)	0.955	0.046	25	7	1.100	0.048	0.863	1.000
Received all vaccinations appropriate for a child age 12-	0.955	0.046	25	7	1.100	0.048	0.863	1.000
23 months Vaccination card seen (children age 24-35 months)	1.000	0.000	27	8	na	0.000	1.000	1.000
Received measles, mumps, and rubella (MMR)	1.000	0.000	27	8	na	0.000	1.000	1.000
vaccination								
Received DPT vaccination (fourth dose)	1.000 1.000	0.000 0.000	27 27	8	na	0.000 0.000	1.000 1.000	1.000 1.000
Received polio vaccination (fourth dose) Received all basic vaccinations appropriate for children	1.000	0.000	27	8 8	na na	0.000	1.000	1.000
age 24-35 months	1.000	0.000	21	0	na	0.000	1.000	1.000
Received all vaccinations appropriate for a child age 24-	0.880	0.076	27	8	1.217	0.086	0.728	1.032
35 months	0.115	0.042	119	37	1.300	0.368	0.030	0.200
Height-for-age (-2SD) Weight-for-height (-2SD)	0.022	0.042	116	36	0.829	0.504	0.000	0.200
Weight-for-age (-2SD)	0.015	0.015	119	37	1.353	0.998	0.000	0.045
Prevalence of anemia (children age 6-59 months)	0.151	0.039	109	34	1.134	0.258	0.073	0.229
Prevalence of anemia (women age 15-49) Body mass index (BMI) < 18.5	0.096 0.050	0.017 0.010	383 366	113 107	1.095 0.909	0.172 0.207	0.063 0.030	0.129 0.071
Body mass index (BMI) $\geq$ 25	0.050	0.010	366	107	0.909	0.047	0.030	0.523
Ever experienced any physical violence since age 15	0.086	0.016	304	91	0.988	0.185	0.054	0.118
Ever experienced any sexual violence	0.010	0.008	304	91	1.344	0.772	0.000	0.025
Ever experienced any physical/sexual violence by	0.107	0.023	249	68	1.150	0.211	0.062	0.152
husband/partner Ever experienced any physical or sexual violence by	0.018	0.007	249	68	0.827	0.388	0.004	0.032
husband/partner in the last 12 months								
Total fertility rate (last 3 years)	1.948	0.234	1,150	338	1.092	0.120	1.481	2.415
Total abortion rate (last 3 years)	0.271	0.117	1,150	338	1.259	0.433	0.037	0.506
		MEN						
Urban residence	0.312	0.038	186	56	1.105	0.121	0.237	0.387
Secondary or higher education	0.950	0.011	186	56	0.714	0.012	0.927	0.973
Never married (in union)	0.389	0.034	186	56	0.949	0.087	0.321	0.457
Currently married (in union) Had first sexual intercourse before age 18	0.601 0.009	0.032 0.009	186 131	56 39	0.877 1.070	0.053 0.994	0.538 0.000	0.664 0.026
Want no more children	0.009	0.009	115	39	1.122	0.994	0.366	0.020
Want to delay birth at least 2 years	0.092	0.027	115	34	0.987	0.290	0.039	0.145
Ideal number of children	2.801	0.063	169	51	0.861	0.022	2.676	2.926
Had 2+ sexual partners in past 12 months	0.000	0.000	186	56 17	na	na	0.000	0.000
Abstinence among never-married youth (never had sex) Paid for sexual intercourse in past 12 months	1.000 0.013	0.000 0.008	51 186	17 56	na 0.995	0.000 0.645	1.000 0.000	1.000 0.029
	0.010	0.000	100	00	0.000	0.040	0.000	0.020
na=Not applicable								

#### Table B.15 Sampling errors: Tavush sample, Armenia 2015-16

WCMEN         V           Secondary to figher education         0.230         0.014         448         223         1.079         0.014         0.807           Secondary to figher education         0.222         0.021         448         283         1.174         0.086         0.868         0.271           Currently married (in union)         0.737         0.022         449         283         1.112         0.086         0.868         0.781           Had sexual introcurse before age 18         0.028         0.007         448         283         0.888         0.223         0.113         0.114         0.238         1.126         0.108         1.146         0.038         1.146         0.128         1.146         1.146         1.146         1.146         1.147         1.149         0.038         1.145         1.146         1.145         1.145         0.038         1.145         1.146         1.1				Number					
Variable         Value (R)         Prov (EE)         (N)         (N)         (N)         (N)         (N)         E28E         R<28E         R<28E           Under relationce         0.33         0.004         488         283         1.123         0.010         0.231         0.034         0.064         0.852         0.014         0.060         0.035         0.034         0.060         0.035         0.034         0.060         0.035         0.034         0.060         0.035         0.034         0.035         0.035         0.035         0.035         0.035         0.035         0.046         0.032         397         208         1.214         0.035         0.040         0.238         0.051         0.043         0.043         0.043         0.043         0.043         0.043         0.043         0.043         0.043         0.044         0.035         2.444         1.722         0.119         0.143         0.043         0.043         0.043         0.043         0.043         0.043         0.043         0.044         0.053         0.041         0.053         0.041         0.053         0.041         0.053         0.041         0.053         0.027         0.016         0.0160         0.066         0.016			Otendend					Confido	noo limito
Ubber existence         0.339         0.024         448         223         1.129         0.070         0.281         0.382           Never married (rever in union)         0.282         0.071         498         283         1.124         0.036         0.846           Currently married (rever in union)         0.282         0.022         498         283         1.124         0.036         0.846         0.284           Currently married (rever in union)         0.273         0.022         498         283         1.021         0.031         0.124           Chardmen ever born         1.677         0.658         2.484         1.051         0.013         0.142           Chardmen ever born         1.677         0.658         2.88         0.848         0.283         0.044         1.005           Krow any contraceptive method         1.000         0.000         363         208         na         0.000         1.000           Currently using a modern method         0.019         0.032         2.286         1.295         0.488         0.207         0.328           Currently using a modern method         0.029         363         2.08         1.296         0.481         0.556           Currently using a modern met	Variable	Value (R)							
Secondary or higher education         0.956         0.013         496         283         1.079         0.014         0.901         0.652           Marred before age 20         0.456         0.032         397         208         1.212         0.014         0.901         0.652           Currently pregnant         0.025         397         208         1.201         0.130         0.141         0.242           Currently pregnant         0.028         0.007         498         2233         0.989         0.038         0.042           Children surving         1.607         0.008         498         283         0.099         0.038         1.421         1.722           Children surving         1.000         0.000         583         208         n.ee         0.000         1.000         1.000         0.000         583         208         0.970         0.011         0.010         1.000         0.000         583         208         0.970         0.011         0.000         0.032         1.121         0.016         1.000         0.000         583         208         0.133         0.167         0.167         0.169         0.017         0.141         0.017         0.141         0.017         0.130			WOMEN						
Secondary or higher education         0.956         0.013         496         283         1.079         0.014         0.901         0.652           Marred before age 20         0.456         0.032         397         208         1.212         0.014         0.901         0.652           Currently pregnant         0.025         397         208         1.201         0.130         0.141         0.242           Currently pregnant         0.028         0.007         498         2233         0.989         0.038         0.042           Children surving         1.607         0.008         498         283         0.099         0.038         1.421         1.722           Children surving         1.000         0.000         583         208         n.ee         0.000         1.000         1.000         0.000         583         208         0.970         0.011         0.010         1.000         0.000         583         208         0.970         0.011         0.000         0.032         1.121         0.016         1.000         0.000         583         208         0.133         0.167         0.167         0.169         0.017         0.141         0.017         0.141         0.017         0.130	Urban residence	0.339	0.024	498	283	1.123	0.070	0.291	0.387
Currently using particle for sub-formed before age 20 and	Secondary or higher education	0.926	0.013	498	283	1.079	0.014	0.901	0.952
Marined before age 20         0.766         0.025         367         208         1.211         0.170         0.333         0.520           Child en surviving         0.670         0.025         367         208         0.291         0.130         0.140         0.232           Child en surviving         0.670         0.058         448         2283         0.494         0.232           Child en surviving         1.607         0.058         448         2283         0.496         0.035         1.442         1.722           Child en ever born to wome age 40-49         2.788         0.147         1.22         70         1.199         0.055         2.444         0.653         0.656									
Currently using product         0.028         0.007         498         283         0.988         0.035         1.644         1.787           Children verbrag         0.008         498         228         0.189         0.035         1.244         1.787           Children verbrag         0.000         363         2.084         1.080         1.000		0.456	0.032	367	208	1.219	0.070	0.393	0.520
Children survivol surven age 0.4:9 Children surven a									
Children ever born to women age 40-49 Children ever born to women age									
Know any contraceptive method         1.000         0.000         363         208         na         0.000         1.000         1.000           Currently using any method         0.633         0.633         0.633         0.633         0.641         0.637         0.637         0.637         0.637         0.641         0.637         0.637         0.637         0.637         0.637         0.637         0.637         0.637         0.637         0.637         0.637         0.637         0.637         0.637         0.638         208         0.737         0.748         0.041         0.638         0.117         0.638         208         1.738         0.179         0.737         0.169         0.038         208         1.738         0.179         0.737         0.161         0.632         0.638         1.711         0.633         0.445         0.651         0.632         98         1.221         0.636         0.642         0.633         0.632         1.718         0.764         0.633         0.633         1.718         0.764         0.633         0.633         1.754         1.718         0.764         0.755         1.722         0.764         0.753         1.754         1.764         0.767         0.753         1.754         <	Children surviving	1.607	0.058	498	283	0.990	0.036	1.492	1.722
Know a meddern method         1.000         0.000         363         208         n.a         0.000         1.000         1.000           Currently using a modern method         0.280         0.323         383         208         1.28         0.113         0.207         0.328           Currently using condoms         0.121         0.224         383         208         1.38         0.117         0.073         0.161           Currently using injectables         0.000         0.000         0.000         383         208         1.397         0.033         0.463           Varian form occitable         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.000         0.040         0.045<									
Currently using a modern method 0.268 0.030 363 208 1.225 0.468 0.011 0.039 Currently using JUD 0.038 0.015 3.83 208 1.225 0.468 0.001 0.039 Currently using lipetables 0.009 363 208 1.225 0.468 0.007 0.039 Currently using formale stellization 0.025 0.009 363 208 1.072 0.334 0.007 0.042 Using public score surce 0.418 0.051 9.75 1.202 0.123 0.316 0.521 Want no more children 1.845 2.years 0.511 0.032 363 208 1.072 0.344 0.007 0.042 Want no more children 1.845 2.years 0.511 0.032 363 2.08 1.225 0.468 0.245 0.524 Want no more children 1.845 2.years 0.511 0.032 363 2.08 1.225 0.066 0.445 0.521 Want no more children 1.000 0.000 140 78 na 0.000 1.000 1.000 1.864 0.000 1.000									
Currently using pill         0.019         0.099         363         208         1.225         0.468         0.011         0.036           Currently using condoms         0.121         0.024         383         208         1.333         0.178         0.073         0.178           Currently using formatis stemilization         0.024         383         208         1.072         0.344         0.070         0.042           Using public sector source         0.419         0.051         97         55         1.020         0.123         0.316         0.521           Want to delay next birth at least 2 years         0.111         0.022         383         208         1.221         0.063         0.445         0.574           Want to delay next birth at least 2 years         0.111         0.022         383         208         1.221         0.163         0.000         1.55           Births with skiled attendant at delivery         1.000         0.000         1.76         78         78         0.000         1.000         1.000           Treated with ORS         0.001         0.002         2         na         na         0.000         0.001         1.000           Sought medical treatment for darbat         0.000         0									
Currently using UD         0.088         0.015         363         208         0.990         0.168         0.0172           Currently using injectables         0.000         0.000         363         208         1.393         0.197         0.073         0.168           Currently using injectables         0.000         0.000         363         208         1.020         1.021         0.316         0.621           Vant no more children         0.510         0.032         363         208         1.318         0.005         0.445         0.574           Want no more children         0.510         0.032         363         208         1.318         0.001         1.000									
Currently using injectables 0.000 0.000 363 208 na na na 0.000 0.0		0.088	0.015	363	208	0.990	0.168	0.058	0.117
Currently using female sterilization 0.025 0.009 363 208 1.072 0.354 0.007 0.042 Want no more children i en 2 years 0.510 0.032 363 208 1.211 0.026 0.123 0.036 0.521 Want no more children i en 2 years 0.510 0.032 363 208 1.316 0.120 0.060 0.155 Want to delay next birth at least 2 years 0.510 0.032 363 208 1.316 0.120 0.060 0.155 Want to delay next birth at least 2 years 0.510 0.032 363 208 1.316 0.122 0.026 0.123 0.060 0.155 Want to delay next birth at least 2 years 0.156 0.000 1.400 7.4									
Using public sector source         0.419         0.051         97         55         1.020         0.123         0.316         0.524           Want to delay next birth at least 2 years         0.111         0.022         363         208         1.211         0.083         0.0455         0.574           Want to delay next birth at least 2 years         0.111         0.022         363         208         1.211         0.020         0.068         0.056         0.056         0.056         0.056         0.056         0.056         0.056         0.056         0.056         0.056         0.056         0.056         0.056         0.056         0.056         0.000         1.000         1.000         0.000         2         1         na         na         0.000         1.000         Na         Na         Na         Na         Na         Na         Na <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
Want to delay next birth at least 2 years         0.111         0.022         363         208         1.316         0.166         0.068         0.155           Births with skilled attendard at delivery         1.000         0.000         140         78         na         0.000         1.000         1.000           Had diarthea in the past 2 weeks         0.011         174         97         na         0.000         1.000           Had diarthea in the past 2 weeks         0.015         0.011         174         97         na         0.000         1.000           Vaccination card seen (children age 12-23 months)         0.982         0.019         40         23         0.844         0.019         0.944         1.000           Received DEV vaccination at birth         0.966         0.027         40         23         0.844         0.030         0.894         1.000           Received DIV vaccination (third dose)         0.942         0.019         40         23         0.844         0.030         0.894         1.000           Received polit vaccination (third dose)         0.952         0.013         40         23         0.844         0.030         0.847         1.000           Vaccination at seen (children age 24-3         0.847	Using public sector source	0.419	0.051	97	55	1.020	0.123	0.316	0.521
Ideal number of children       2.752       0.056       495       281       1.121       0.020       2.840       2.864         Births with skilled attendant at delivery       1.000       0.000       178       99       na       0.000       1.000       1.000         Births with skilled attendant at delivery       1.000       0.000       127       97       1.140       0.725       0.000       0.038         Treated with CRS       0.010       0.010       2       1       ns       0.000       0.000         Vacunation card seen (children age 12-23 months)       0.982       0.019       40       23       0.804       0.019       0.944       1.000         Received BCG vaccination       0.989       0.027       40       23       0.804       0.039       0.890       1.000         Received DFT-HepB-Hib vaccination (indrid dose)       0.946       0.022       40       23       0.844       0.030       0.890       1.000         Received DFT-HepB-Hib vaccination (indrid dose)       0.946       0.032       40       23       0.844       0.030       0.890       1.000         Received DFT-HepB-Hib vaccination (second dose)       0.847       0.055       34       19       0.767       0.977									
Births with skilled attendant at delivery         1.000         0.000         178         99         na         0.000         1.000         1.000           Treated with ORS         0.015         0.011         174         97         1.140         0.725         0.000         0.036           Sought medical treatment for diarrhea         0.000         2         1         na         0.000         0.036           Vaccination card seen (children age 12-23 months)         0.982         0.019         40         2.3         1.007         0.228         0.894         0.019         0.944         1.000           Received DIT-HepB-Hith vaccination (hird dose)         0.948         0.028         40         2.3         0.804         0.030         0.840         1.000           Received DIT-HepB-Hith vaccination (second dose)         0.948         0.019         40         2.3         0.844         0.035         0.871         1.000           Received all vaccination (second dose)         0.936         0.032         40         2.3         0.844         0.035         0.871         1.000           Vaccination (curit dose)         0.867         0.053         40         2.3         0.104         0.767         0.976         0.7767         0.976	Ideal number of children	2.752	0.056	495	281		0.020	2.640	2.864
Had diarrhea in the past 2 weeks       0.015       0.011       174       97       1.140       0.725       0.000       0.0300         Sought medical treatment for diarrhea       1.000       0.000       2       1       na       0.000       1.000         Sought medical treatment for diarrhea       1.000       0.000       2       1       na       0.000       1.000         Received BCG vaccination       0.989       0.027       40       23       0.844       0.030       0.994       1.000         Received DPT vaccination (flord dose)       0.946       0.028       40       23       0.844       0.030       0.894       1.000         Received all vaccination (flord dose)       0.846       0.052       40       23       0.844       0.065       0.976       0.976         23 months       0.847       0.050       34       19       0.787       0.059       0.748       0.947         Vaccination card seen (children age 24-35 months)       0.847       0.052       34       19       0.852       0.065       0.753       0.979         Received DIV vaccination (fourth dose)       0.866       0.056       34       19       0.982       0.065       0.753       0.979									
Treated with ORS         0.000         0.000         2         1         na         na         0.000         0.000           Vaccination card seen (children age 12-23 months)         0.982         0.019         40         23         0.894         0.019         0.944         1.000           Received BCG vaccination         0.969         0.027         40         23         1.007         0.028         0.914         1.000           Received DC vaccination (third dose)         0.946         0.028         40         23         0.894         0.019         0.944         1.000           Received olix vaccination (scoond dose)         0.946         0.028         40         23         0.894         0.019         0.944         1.000           Received olix vaccination (scoond dose)         0.966         0.052         40         23         0.844         0.051         0.751         1.000           Received all vaccination (scoond dose)         0.866         0.056         34         19         0.952         0.065         0.753         0.979           Received polix vaccination (south dose)         0.866         0.056         34         19         0.902         0.055         0.753         0.979           Received polix vaccination (sou									
Vaccination card seen (children age 12-23 months)         0.982         0.019         40         23         0.894         0.019         0.944         1.000           Received BCV succination         0.969         0.027         40         23         1.007         0.028         0.914         1.000           Received DF1-HegB-Hib vaccination (third dose)         0.946         0.028         0.23         0.894         0.019         0.944         1.000           Received polic vaccination (third dose)         0.936         0.032         40         23         0.844         0.036         0.871         1.000           Received all vaccinations appropriate for a child age 12-         0.899         0.053         40         23         1.010         0.061         0.762         0.976           23 months         0.870         0.050         34         19         0.892         0.767         0.973           Received all vaccination fourth dose)         1.000         0.050         34         19         0.952         0.767         0.973           Received all vaccination sappropriate for children         0.888         0.049         34         19         0.902         0.056         0.773         0.979           Received all vaccinations appropriate for a child age 24	Treated with ORS	0.000	0.000	2	1	na	na	0.000	0.000
Received BCG vaccination         0.969         0.027         40         23         1.007         0.028         0.914         1.000           Received DPT-HepB-Hib vaccination (third dose)         0.946         0.028         40         23         0.804         0.030         0.890         1.000           Received DIV accination (third dose)         0.936         0.032         40         23         0.844         0.035         0.811         1.000           Received divarius vaccination (sepropriate for a child age 12-         0.897         0.053         40         23         0.844         0.035         0.871         1.000           Vaccination card seen (children age 24-35 months)         0.887         0.055         34         19         0.797         0.059         0.748         0.947           Vaccination card seen (children age 24-35 months)         0.847         0.055         34         19         0.797         0.055         0.753         0.973           Vaccination card seen (children age 24-35 months)         0.847         0.055         34         19         0.952         0.065         0.753         0.973           Received all basic vaccination fourth dose)         0.866         0.066         34         19         0.900         0.056         0.753									
Received DPT-HepB-Hib vaccination (third dose)         0.946         0.028         40         23         0.804         0.039         0.890         1.000           Received ploiv accination (third dose)         0.936         0.032         40         23         0.844         0.035         0.871         1.000           Received all vaccination sepropriate for a child age 12-         0.869         0.053         40         23         0.844         0.035         0.871         1.000           Yaccination card seen (children age 24-35 months)         0.847         0.050         34         19         0.797         0.059         0.748         0.947           Yaccination card seen (children age 24-35 months)         0.847         0.056         34         19         0.952         0.065         0.753         0.973           Yaccination card seen (children dose)         0.866         0.056         34         19         0.902         0.065         0.753         0.973           Received ploi vaccination if (ourth dose)         0.866         0.066         34         19         0.902         0.056         0.754         0.894           Received all vaccinations appropriate for children doge 24-3         0.729         0.077         34         19         0.000         0.055									
Received polic vaccination (third dose)         0.882         0.019         40         23         0.894         0.019         0.944         1.000           Received polic vaccinations (second dose)         0.836         0.032         40         23         0.844         0.035         0.871         1.000           Received all vaccinations appropriate for a child age 12-         0.869         0.053         40         23         1.010         0.061         0.762         0.976           Vaccination card seen (children age 24-35 months)         0.847         0.050         34         19         0.797         0.059         0.748         0.947           Vaccination (fourth dose)         0.866         0.056         34         19         0.952         0.065         0.753         0.979           Received polic vaccinations appropriate for children ge 24-         0.729         0.077         34         19         0.902         0.056         0.789         0.884           35 months         Received all vaccinations appropriate for a child age 24-         0.729         0.077         34         19         0.902         0.106         0.574         0.884           409th-for-height (-25D)         0.074         0.028         153         86         1.279         0.373									
Received rotavirus vaccination (second dose)       0.936       0.032       40       23       0.844       0.035       0.871       1.000         Received rotavirus vaccinations appropriate for a child age 12-       0.869       0.053       40       23       1.010       0.061       0.762       0.976         Vaccination card seen (children age 24-35 months)       0.847       0.052       34       19       0.797       0.059       0.767       0.973         Vaccination (ourth dose)       0.866       0.056       34       19       0.952       0.065       0.767       0.973         Received DPT vaccination (fourth dose)       1.000       0.000       34       19       n.000       0.005       0.767       0.973         Received all vaccinations appropriate for a child age 24-       0.729       0.077       34       19       1.002       0.106       0.574       0.884         35 months       0.990       0.000       153       86       n.033       86       n.049       90       0.277       0.373       0.119       0.300       0.020         36 months       0.101       0.511       0.333       86       1.279       0.373       0.119       0.300       0.277       0.560       0.774       <									
23 months				40	23				
Vaccination card seen (children age 24-35 months)0.8470.05034190.7970.0590.7480.947Received measles, mumps, and rubella (MMR)0.8700.05234190.8830.0590.7670.973Received polio vaccination (fourth dose)0.8660.05634190.9520.06650.7530.979Received polio vaccination sappropriate for children0.8880.04934190.9020.0560.7890.987Received all vaccinations appropriate for a child age 24-0.7290.07734191.0020.1060.5740.884Age 24-35 months0.0740.028153861.2790.3730.0190.130Weight-for-height (-2SD)0.0740.028153861.2790.3730.0190.130Weight-for-keight (-2SD)0.0100.000155870.8800.9900.0000.029Prevalence of anemia (children age 6-59 months)0.1120.031114660.9980.2770.0500.174Body mass index (BMI) > 18.50.1740.0620.0410.0114402511.1450.1740.062Body mass index (BMI) > 18.50.0740.0653772110.9360.4460.0010.022Ler experienced any physical violence since age 150.0120.0053772110.9360.4460.0010.022Ler experienced any physical or sexual violence0.		0.869	0.053	40	23	1.010	0.061	0.762	0.976
Received measles, numps, and rubella (MMR)         0.870         0.052         34         19         0.883         0.059         0.767         0.973           Received DPT vaccination (fourth dose)         0.866         0.056         34         19         0.952         0.065         0.753         0.979           Received Dio vaccination (fourth dose)         1.000         0.000         34         19         0.902         0.056         0.789         0.987           age 24-35 months         age 24-35 months         0.077         34         19         1.002         0.106         0.574         0.884           35 months         0.0074         0.028         153         86         1.279         0.373         0.019         0.130           Weight-for-height (-2SD)         0.010         0.010         155         87         0.860         0.990         0.000         0.029           Prevalence of anemia (children age 6-59 months)         0.112         0.311         14         66         0.998         0.277         0.052         0.174           Body mass index (BMI) < 18.5		0.847	0.050	34	19	0.797	0.059	0.748	0.947
Received pDT vaccination (fourth dose)         0.866         0.056         34         19         0.852         0.065         0.753         0.979           Received polio vaccinations appropriate for children         0.888         0.049         34         19         0.902         0.056         0.789         0.987           age 24-35 months         0.000         1.000         0.000         14         19         0.902         0.056         0.789         0.987           Age 24-35 months         0.077         34         19         1.002         0.106         0.574         0.884           Smonths         0.074         0.028         153         86         n.a         n.a         0.000         0.000           Weight-for-age (-2SD)         0.010         0.010         153         86         n.a         n.a         0.000         0.000           Prevalence of anemia (women age 15-49)         0.095         0.017         441         251         1.140         0.263         0.019         0.632           Body mass index (BMI) < 18.5	Received measles, mumps, and rubella (MMR)	0.870	0.052	34	19	0.883	0.059	0.767	0.973
Received polio vaccination (fourth dose)         1.000         0.000         34         19         na         0.000         1.000         1.000           Received all basic vaccinations appropriate for children         0.888         0.049         34         19         0.902         0.056         0.789         0.987           age 24-35 months         0.729         0.077         34         19         1.002         0.106         0.574         0.884           35 months         0.074         0.028         153         86         1.279         0.373         0.019         0.130           Weight-for-age (-2SD)         0.000         0.000         155         87         0.860         0.990         0.000         0.029           Prevalence of anemia (women age 15-49)         0.095         0.017         441         253         1.185         0.174         0.662         0.128           Body mass index (BMI) ≥ 25         0.495         0.020         440         251         1.485         0.446         0.010         0.262           Ever experienced any physical violence since age 15         0.012         0.005         377         211         0.926         0.995         0.000         0.022           Ever experienced any physical violence b		0.866	0.056	34	19	0 952	0.065	0 753	0 979
age 24-35 months         Received all vaccinations appropriate for a child age 24- $0.729$ $0.077$ $34$ $19$ $1.002$ $0.106$ $0.574$ $0.884$ 35 months       0.074 $0.028$ 153       86 $1.279$ $0.373$ $0.019$ $0.130$ Weight-for-height (-2SD)       0.000 $0.000$ 153       86 $n$ $n$ $0.000$ $0.000$ Prevalence of anemia (children age 6-59 months) $0.112$ $0.011$ 440 $251$ $1.486$ $0.174$ $0.662$ $0.128$ Body mass index (BMI) < 18.5									
Received all vaccinations appropriate for a child age 24- 35 months       0.729       0.077       34       19       1.002       0.106       0.574       0.884         Height-for-age (-2SD)       0.074       0.028       153       86       n.279       0.373       0.019       0.130         Weight-for-age (-2SD)       0.010       0.010       155       87       0.860       0.990       0.000       0.000         Prevalence of anemia (women age 15-49)       0.095       0.017       441       253       1.185       0.174       0.052       0.128         Body mass index (BMI) < 18.5		0.888	0.049	34	19	0.902	0.056	0.789	0.987
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		0.729	0.077	34	19	1.002	0.106	0.574	0.884
Weight-for-height (-25D)0.0000.00015386nana0.0000.000Weight-for-age (-2SD)0.0100.010155870.8600.9900.0000.029Prevalence of anemia (women age 15-49)0.0950.0174412531.1850.1740.0620.128Body mass index (BMI) ≥ 18.50.0410.0114402511.1850.1740.0620.128Body mass index (BMI) ≥ 250.4950.0204402510.8530.0410.4550.536Ever experienced any physical violence since age 150.0120.0063772110.9260.5950.0000.014Ever experienced any physical violence by0.0130.0063151681.0010.4890.0000.022Ever experienced any physical or sexual violence by0.0090.0053151680.9910.5880.0000.020Ivusband/partner1.4288110.9900.0911.9312.792Total fertility rate (last 3 years)2.3620.2151.4288110.8950.2030.3860.915MENUrban residence0.3280.0392191261.2240.1190.2500.406Secondary or higher education0.8230.0332191261.2240.1190.2500.406Output0.3280.0392191261.2240.	35 months								
Weight-for-age (-2SD)         0.010         0.010         155         87         0.860         0.990         0.000         0.029           Prevalence of anemia (women age 15-49)         0.095         0.011         441         253         1.185         0.174         0.062         0.128           Body mass index (BMI) < 18.5									
Prevalence of anemia (children age 6-59 months)       0.112       0.031       114       66       0.998       0.277       0.050       0.174         Body mass index (BMI) > 18.5       0.041       0.017       441       253       1.185       0.174       0.062       0.128         Body mass index (BMI) > 25       0.495       0.020       440       251       1.833       0.041       0.455       0.536         Ever experienced any physical violence since age 15       0.012       0.006       377       211       0.926       0.595       0.000       0.014         Ever experienced any physical violence by       0.013       0.006       315       168       1.001       0.499       0.000       0.025         husband/partner       n       n       0.099       0.005       315       168       0.991       0.588       0.000       0.020         husband/partner       n       labortion rate (last 3 years)       2.362       0.215       1.428       811       0.990       0.991       1.931       2.792         Total abortion rate (last 3 years)       0.651       0.132       1.428       811       0.895       0.203       0.386       0.915         Urban residence       0.328       0.039									
Body mass index (BMI) < 18.50.0410.0114402511.1400.2630.0190.062Body mass index (BMI) ≥ 250.4950.0204402510.8530.0410.4550.536Ever experienced any sexual violence since age 150.0120.0053772110.9260.5950.0000.014Ever experienced any sexual violence by0.0130.0063151681.0010.4990.0000.022husband/partnernlast1.0090.0053151680.9910.5880.0000.022husband/partnernlast1.4288110.9900.0911.9312.792Total fertility rate (last 3 years)2.3620.2151.4288110.8950.2030.3860.915MENUrban residence0.3280.0392191261.2240.1190.2500.406Secondary or higher education0.8230.0322191261.2930.0410.7560.890Never married (in union)0.3710.0282191260.9790.0540.5390.668Urban residence0.3280.0322191260.9790.0540.5390.668MENUrban residence0.3280.0322191260.9790.0540.5390.668Corrently married (in union) </td <td>Prevalence of anemia (children age 6-59 months)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Prevalence of anemia (children age 6-59 months)								
Body mass index (BMI) ≥ 250.4950.0204402510.8530.0410.4550.536Ever experienced any physical violence0.0120.0053772110.9360.4460.0010.022Ever experienced any physical/sexual violence by0.0130.0063151681.0010.4990.0000.025husband/partner0.0090.0053151680.9910.5880.0000.020husband/partner0.6510.1321.4288110.9900.0911.9312.792Total fertility rate (last 3 years)0.6510.1321.4288110.8950.2030.3860.915MENUrban residence0.3280.0332191261.2240.1190.2500.406Secondary or higher education0.8230.0332191261.2930.0410.7560.890Never married (in union)0.3710.0282191260.9790.0540.5390.681Want to delay birth at least 2 years0.0820.005160910.8650.9960.0000.014Want to delay birth at least 2 years0.0820.0951.31761.0130.0970.3660.5390.681Want to delay birth at least 2 years0.0820.0051.31761.0130.0970.3660.5390.681Want to delay b									
Ever experienced any sexual violence         0.006         0.004         377         211         0.926         0.595         0.000         0.014           Ever experienced any physical/sexual violence by husband/partner         0.013         0.006         315         168         1.001         0.499         0.000         0.025           Ever experienced any physical or sexual violence by husband/partner in the last 12 months         0.009         0.005         315         168         0.991         0.588         0.000         0.020           Total fertility rate (last 3 years)         2.362         0.215         1.428         811         0.990         0.991         1.931         2.792           Total abortion rate (last 3 years)         0.651         0.132         1,428         811         0.895         0.203         0.386         0.915           MEN           Urban residence         0.328         0.039         219         126         1.224         0.119         0.250         0.406           Secondary or higher education         0.823         0.032         219         126         1.293         0.041         0.756         0.890           Currently married (in union)         0.371         0.028         219         126	Body mass index (BMI) ≥ 25	0.495	0.020	440	251	0.853	0.041	0.455	0.536
Ever experienced any physical/sexual violence by husband/partner         0.013         0.006         315         168         1.001         0.499         0.000         0.025           Ever experienced any physical or sexual violence by husband/partner in the last 12 months         0.009         0.005         315         168         0.991         0.588         0.000         0.020           husband/partner in the last 12 months         2.362         0.215         1,428         811         0.990         0.091         1.931         2.792           Total fertility rate (last 3 years)         0.651         0.132         1,428         811         0.895         0.203         0.386         0.915           MEN           Urban residence         0.328         0.039         219         126         1.224         0.119         0.250         0.406           Secondary or higher education         0.823         0.033         219         126         1.293         0.041         0.756         0.890           Never married (in union)         0.604         0.032         219         126         0.979         0.054         0.539         0.648           Had first sexual intercourse before age 18         0.005         0.005         160         91         0.865 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
husband/partner       1         Ever experienced any physical or sexual violence by husband/partner in the last 12 months       0.009       0.005       315       168       0.991       0.588       0.000       0.020         Total fertility rate (last 3 years)       2.362       0.215       1,428       811       0.990       0.091       1.931       2.792         Total abortion rate (last 3 years)       0.651       0.132       1,428       811       0.895       0.203       0.386       0.915         MEN         Urban residence         0.328       0.039       219       126       1.224       0.119       0.250       0.406         Secondary or higher education       0.823       0.033       219       126       1.293       0.041       0.756       0.890         Never married (in union)       0.371       0.028       219       126       0.867       0.076       0.315       0.428         Currently married (in union)       0.604       0.032       219       126       0.979       0.654       0.539       0.668         Had first sexual intercourse before age 18       0.005       0.005       160       91       0.865       0.996       0.000									
husband/partner in the last 12 months       2.362       0.215       1,428       811       0.990       0.091       1.931       2.792         Total abortion rate (last 3 years)       0.651       0.132       1,428       811       0.895       0.203       0.386       0.915         MEN         Urban residence       0.328       0.039       219       126       1.224       0.119       0.250       0.406         Secondary or higher education         Never married (in union)       0.371       0.028       219       126       1.293       0.041       0.756       0.498         Currently married (in union)       0.604       0.032       219       126       0.979       0.054       0.539       0.668         Had first sexual intercourse before age 18       0.005       0.005       160       91       0.865       0.996       0.000       0.014         Want to delay birth at least 2 years       0.082       0.026       131       76       1.013       0.097       0.366       0.543         Want to delay birth at least 12 months       0.082       0.026       131       76       1.013       0.097       0.366       543         Want to delay birth at least 12	husband/partner								
Total fertility rate (last 3 years)       2.362       0.215       1,428       811       0.990       0.091       1.931       2.792         Total abortion rate (last 3 years)       0.651       0.132       1,428       811       0.895       0.203       0.386       0.915         MEN         Urban residence       0.328       0.039       219       126       1.224       0.119       0.250       0.406         Secondary or higher education         0.823       0.033       219       126       1.293       0.041       0.756       0.890         Never married (in union)       0.371       0.028       219       126       0.867       0.076       0.315       0.428         Currently married (in union)       0.604       0.032       219       126       0.979       0.054       0.539       0.668         Had first sexual intercourse before age 18       0.005       0.005       160       91       0.865       0.996       0.000       0.014         Want to delay birth at least 2 years       0.082       0.026       131       76       1.013       0.097       0.366       0.543         Udeal number of children       2.738       0.058	Ever experienced any physical or sexual violence by husband/partner in the last 12 months	0.009	0.005	315	168	0.991	0.588	0.000	0.020
MEN           Urban residence         0.328         0.039         219         126         1.224         0.119         0.250         0.406           Secondary or higher education         0.823         0.033         219         126         1.293         0.041         0.756         0.890           Never married (in union)         0.371         0.028         219         126         0.867         0.076         0.315         0.428           Currently married (in union)         0.604         0.032         219         126         0.879         0.054         0.539         0.668           Had first sexual intercourse before age 18         0.005         0.005         160         91         0.865         0.996         0.000         0.014           Want to delay birth at least 2 years         0.082         0.026         131         76         1.013         0.097         0.366         0.543           Want to delay birth at least 2 years         0.082         0.026         131         76         1.013         0.097         0.364         0.454           Ideal number of children         2.738         0.058         219         126         1.283         0.021         2.622         2.855           Had	Total fertility rate (last 3 years)								
Urban residence0.3280.0392191261.2240.1190.2500.406Secondary or higher education0.8230.0332191261.2930.0410.7560.890Never married (in union)0.3710.0282191260.8670.0760.3150.428Currently married (in union)0.6040.0322191260.9790.0540.5390.668Had first sexual intercourse before age 180.0050.005160910.8650.9960.0000.014Want no more children0.4540.044131761.0130.0970.3660.543Want to delay birth at least 2 years0.0820.026131761.0880.3200.0290.134Ideal number of children2.7380.0582191261.2830.0212.6222.855Had 2+ sexual partners in past 12 months0.0050.0052191261.0090.9950.0000.014Abstinence among never-married youth (never had sex)1.0000.0005231na0.0001.0001.000Paid for sexual intercourse in past 12 months0.0050.0052191261.0090.9950.0000.014	Total abortion rate (last 3 years)	0.651	0.132	1,428	811	0.895	0.203	0.386	0.915
Secondary or higher education         0.823         0.033         219         126         1.293         0.041         0.756         0.890           Never married (in union)         0.371         0.028         219         126         0.867         0.076         0.315         0.428           Currently married (in union)         0.604         0.032         219         126         0.979         0.054         0.539         0.668           Had first sexual intercourse before age 18         0.005         0.005         160         91         0.865         0.996         0.000         0.014           Want no more children         0.454         0.044         131         76         1.013         0.097         0.366         0.543           Want to delay birth at least 2 years         0.082         0.026         131         76         1.088         0.320         0.029         0.134           Ideal number of children         2.738         0.055         219         126         1.283         0.021         2.622         2.855           Had 2+ sexual partners in past 12 months         0.005         0.005         219         126         1.009         0.995         0.000         0.014           Abstinence among never-married youth (never ha			MEN						
Secondary or higher education         0.823         0.033         219         126         1.293         0.041         0.756         0.890           Never married (in union)         0.371         0.028         219         126         0.867         0.076         0.315         0.428           Currently married (in union)         0.604         0.032         219         126         0.979         0.054         0.539         0.668           Had first sexual intercourse before age 18         0.005         0.005         160         91         0.865         0.996         0.000         0.014           Want no more children         0.454         0.044         131         76         1.013         0.097         0.366         0.543           Want to delay birth at least 2 years         0.082         0.026         131         76         1.088         0.320         0.029         0.134           Ideal number of children         2.738         0.055         219         126         1.283         0.021         2.622         2.855           Had 2+ sexual partners in past 12 months         0.005         0.005         219         126         1.009         0.995         0.000         0.014           Abstinence among never-married youth (never ha	Urban residence	0.328	0.039	219	126	1.224	0.119	0.250	0.406
Currently married (in union)0.6040.0322191260.9790.0540.5390.668Had first sexual intercourse before age 180.0050.005160910.8650.9960.0000.014Want no more children0.4540.044131761.0130.0970.3660.543Want to delay birth at least 2 years0.0820.026131761.0880.3200.0290.134Ideal number of children2.7380.0582191261.2830.0212.6222.855Had 2+ sexual partners in past 12 months0.0050.0052191261.0090.9950.0000.14Abstinence among never-married youth (never had sex)1.0000.0005231na0.0001.0001.000Paid for sexual intercourse in past 12 months0.0050.0052191261.0090.9950.0000.014	Secondary or higher education	0.823	0.033	219	126	1.293	0.041	0.756	0.890
Had first sexual intercourse before age 180.0050.005160910.8650.9960.0000.014Want no more children0.4540.044131761.0130.0970.3660.543Want to delay birth at least 2 years0.0820.026131761.0880.3200.0290.134Ideal number of children2.7380.0582191261.2830.0212.6222.855Had 2+ sexual partners in past 12 months0.0050.0052191261.0090.9950.0000.014Abstinence among never-married youth (never had sex)1.0000.0005231na0.0001.0001.000Paid for sexual intercourse in past 12 months0.0050.0052191261.0090.9950.0000.014									
Want no more children0.4540.044131761.0130.0970.3660.543Want to delay birth at least 2 years0.0820.026131761.0880.3200.0290.134Ideal number of children2.7380.0582191261.2830.0212.6222.855Had 2+ sexual partners in past 12 months0.0050.0052191261.0090.9950.0000.014Abstinence among never-married youth (never had sex)1.0000.0052191261.0090.9950.0001.000Paid for sexual intercourse in past 12 months0.0050.0052191261.0090.9950.0000.014	Had first sexual intercourse before age 18	0.005	0.005			0.865			0.014
Ideal number of children         2.738         0.058         219         126         1.283         0.021         2.622         2.855           Had 2+ sexual partners in past 12 months         0.005         0.005         219         126         1.009         0.995         0.000         0.014           Abstinence among never-married youth (never had sex)         1.000         0.000         52         31         na         0.000         1.000         1.000           Paid for sexual intercourse in past 12 months         0.005         0.005         219         126         1.009         0.995         0.000         0.014	Want no more children	0.454	0.044	131	76	1.013	0.097		0.543
Had 2+ sexual partners in past 12 months       0.005       0.005       219       126       1.009       0.995       0.000       0.014         Abstinence among never-married youth (never had sex)       1.000       0.000       52       31       na       0.000       1.000       1.000         Paid for sexual intercourse in past 12 months       0.005       0.005       219       126       1.009       0.995       0.000       1.000								0.029	
Paid for sexual intercourse in past 12 months         0.005         0.005         219         126         1.009         0.995         0.000         0.014	Had 2+ sexual partners in past 12 months	0.005	0.005	219	126		0.995	0.000	0.014
na=Not applicable		0.005	0.005	219	120	1.009	0.990	0.000	0.014
	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), Armenia DHS 2015-16  $\,$ 

	Wor		Me	
Age	Number	Percent	Number	Percent
0 1	179	1.2	189	1.4
1	172	1.2	182	1.4
2	177 145	1.2	184	1.4
2 1	145	1.0 0.9	178 196	1.4 1.5
5	153	1.0	200	1.5
5	198	1.3	202	1.5
2 3 4 5 6 7 8	176	1.2	178	1.4
3	177	1.2	209	1.6
9	142	1.0	175	1.3
10	176	1.2	180	1.4 1.6
11 12	174 153	1.2 1.0	207 196	1.6
13	152	1.0	190	1.5
14	158	1.1	189	1.4
15	151	1.0	149	1.1
16	164	1.1	166	1.3
17	165	1.1	193	1.5
18	140	1.0	109	0.8
19 20	150 179	1.0 1.2	89 146	0.7 1.1
21	172	1.2	183	1.4
22	174	1.2	173	1.3
23	215	1.5	212	1.6
24	228	1.6	235	1.8
25	278	1.9	228	1.7
26 27	202 203	1.4 1.4	195 219	1.5 1.7
28	203	1.4	219	1.7
29	254	1.5 1.7	182	1.4
30	230	1.6	244	1.9
31	211	1.4	187	1.4
32	198	1.3	198	1.5
33	229	1.6	196	1.5
34 35	184 195	1.3 1.3	177 183	1.4 1.4
36	193	1.3	166	1.4
37	186	1.3	141	1.1
38	172	1.2	158	1.2
39	174	1.2	166	1.3
40	185	1.3	171	1.3
41	172	1.2	133	1.0
42 43	150 168	1.0 1.1	114 152	0.9 1.2
+3 44	150	1.1	116	0.9
45	162	1.1	152	1.2
46	147	1.0	152	1.2
47	144	1.0	125	1.0
48	141	1.0	113	0.9
49 50	151	1.0	133	1.0 1.7
50 51	330 257	2.2 1.7	228 173	1.7
52	298	2.0	223	1.7
53	270	1.8	203	1.6
54	199	1.4	210	1.6
55	304	2.1	237	1.8
56	234	1.6	182	1.4
57	252	1.7	200	1.5
58 59	281 211	1.9 1.4	224 182	1. <i>1</i> 1.4
50	232	1.4	211	1.4
50	150	1.0	143	1.1
62	169	1.1	163	1.2
53	238	1.6	152	1.2
54	160	1.1	103	0.8
65 66	200 145	1.4	151	1.2
67	145	1.0 0.9	103 112	0.8 0.9
58	138	0.9	94	0.3
	83	0.6	69	0.5
69				
59 70+	1,520	10.3	984	7.5

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, Armenia DHS 2015-16

	Household population of women age	women	viewed age 15-49	Percentage of eligible women
Age group	10-54	Number	Percentage	interviewed
10-14	813	na	na	na
15-19	770	754	11.9	97.9
20-24	969	953	15.1	98.4
25-29	1,161	1,134	18.0	97.6
30-34	1,052	1,038	16.4	98.7
35-39	919	901	14.3	98.1
40-44	825	804	12.7	97.5
45-49	746	730	11.6	97.8
50-54	1,353	na	na	na
15-49	6,442	6,314	100.0	98.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both 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 10-54, number and percent distribution of interviewed men age 15-49; and percentage of eligible men who were interviewed (weighted), by 5-year age groups, Armenia DHS 2015-16

	Household population of men age	Inter men a	Percentage of eligible men	
Age group	10-54	Number	Percentage	interviewed
10-14	468	na	na	na
15-19	365	355	12.6	97.1
20-24	494	478	16.9	96.6
25-29	488	474	16.8	97.2
30-34	451	433	15.4	96.1
35-39	398	387	13.7	97.4
40-44	367	352	12.5	96.0
45-49	356	339	12.0	95.1
50-54	518	na	na	na
15-49	2,919	2,817	100.0	96.5

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both 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), Armenia DHS 2015-16

		Percentage with information	Number
Subject	Reference group	missing	of cases
Birth date Month only Month and year	Births in the 15 years preceding the survey	0.03 0.00	4,975 4,975
Age at death	Deceased children born in the 15 years preceding the survey	0.00	59
Age/date at first union <sup>1</sup>	Ever-married women age 15-49 Ever-married men age 15-49	0.00 0.09	4,286 1,565
Respondent's education	All women age 15-49 All men age 15-49	0.00 0.00	6,116 2,755
Diarrhea in last 2 weeks	Living children 0-59 months	0.08	1,663
Anthropometry of children Height Weight Height or weight	Living children age 0-59 months from the Household Questionnaire	8.35 7.10 8.48	1,740 1,740 1,740
Anthropometry of women Height Weight Height or weight	Women age 15-49 from the Household Questionnaire	5.28 4.84 5.28	6,442 6,442 6,442
Anemia Children	Living children age 6-59 months from the Household Questionnaire	14.78	1,582
Women	All women from the Household Questionnaire	6.98	6,442

## 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 (L), dead (D), and total (T) children (weighted), Armenia DHS 2015-16

	Nu	Number of births			ercentage v nplete birth		Se	ex ratio at b	irth <sup>2</sup>	Calendar year ratio <sup>3</sup>		
Calendar year	L	D	Т	L	D	Т	L	D	Т	L	D	Т
2016	102	0	102	100.0	na	100.0	126.1	na	126.1	na	na	na
2015	379	2	382	100.0	100.0	100.0	98.3	23.1	97.6	na	na	na
2014	341	1	342	100.0	100.0	100.0	100.5	na	101.2	97.7	67.7	97.5
2013	318	1	319	100.0	100.0	100.0	125.0	385.2	125.4	100.5	95.8	100.5
2012	292	1	294	100.0	100.0	100.0	126.7	0.0	125.3	87.9	70.5	87.8
2011	347	3	350	100.0	100.0	100.0	125.6	91.0	125.2	107.7	63.8	107.1
2010	352	7	359	99.5	100.0	99.5	135.6	67.5	133.6	99.9	163.4	100.7
2009	357	6	363	100.0	100.0	100.0	98.1	142.3	98.8	101.8	90.7	101.6
2008	350	6	356	100.0	100.0	100.0	107.5	124.5	107.8	101.7	134.7	102.2
2007	331	3	334	100.0	100.0	100.0	110.7	52.8	109.9	98.8	58.5	98.2
2012-2016	1,432	6	1,438	100.0	100.0	100.0	111.7	74.2	111.5	na	na	na
2007-2011	1,736	26	1,762	99.9	100.0	99.9	114.7	94.2	114.3	na	na	na
2002-2006	1,559	27	1,586	100.0	100.0	100.0	117.6	122.4	117.7	na	na	na
1997-2001	1,419	33	1,452	100.0	98.2	100.0	114.0	189.3	115.2	na	na	na
<1997	2,174	63	2,236	100.0	96.4	99.9	97.9	194.7	99.7	na	na	na
All	8,319	154	8,473	100.0	98.1	99.9	109.9	150.8	110.6	na	na	na

na = Not applicable <sup>1</sup> Both year and month of birth given <sup>2</sup> (Bm/Bf)x100, where Bm and Bf are the numbers of male and female births, respectively <sup>3</sup> [2Bx/(Bx-1+Bx+1)]x100, where Bx 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 at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for 5-year periods of birth preceding the survey (weighted), Armenia DHS 2015-16

Age at	Numbe	Total			
death (days)	0-4	5-9	10-14	15-19	0-19
<1	1	4	4	6	15
1	1	2	7	0	11
2	1	4	1	3	9
3	0	2	1	2	5
4	0	0	0	1	2
5	0	0	0	1	1
6	0	0	1	0	1
7	0	0	0	1	1
8	0	0	0	1	1
10	0	0	1	0	1
12	0	0	0	0	0
20	0	0	0	0	0
21	1	0	0	0	1
30	5	13	16	15	49
Percentage early neonatal <sup>1</sup>	75.2	100.0	92.2	89.0	91.4

 $^{1} \leq 6$  days /  $\leq 30$  days

#### Table C.6 Reporting of age at death in months

Distribution of reported deaths under age 2 by age at death in months and the percentage of infant deaths reported to occur at age less than 1 month, for 5-year periods of birth preceding the survey, Armenia DHS 2015-16

Age at death	Number	of years p	receding the	e survey	Total
(months)	0-4	5-9	10-14	15-19	0-19
<1	5	13	16	15	49
1	0	2	0	1	-3
2	0	3	0	2	4
3	ŏ	Ő	0	3	3
4	0	2	1	2	6
5	0	0	3	1	3
6	1	0	1	1	3
8	1	2	0	1	4
9	0	0	1	1	2
11	0	0	1	0	1
12	0	1	0	2	2
13	0	1	0	0	1
14	0	0	0	0	0
16	1	0	0	0	1
17	0	0	1	0	1
20	0	1	0	0	1
Year <sup>1</sup>	0	1	0	0	1
Total 0-11	7	21	22	28	78
Percentage neonatal <sup>1</sup>	73.9	60.7	71.8	54.9	63.0

a Includes deaths under1 month reported in days <sup>1</sup> Under1 month/under 1 year

#### Table C.7 Nutritional status of children based on the NCHS/CDC/WHO International Reference Population

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, by background characteristics, based on the NCHS/CDC/WHO International Reference Population, Armenia DHS 2015-16

		leight-for-age			Weight-fe			. 10	Weight	-for-age		
Packground	Percentage	Percentage		Percentage	Percentage	Percentage	Moon 7	Percentage	Percentage	Percentage	Moon 7	Number of
Background characteristic	below -3 SD	below -2 SD <sup>2</sup>	Mean Z- score (SD)	below -3 SD	below -2 SD <sup>2</sup>	above +2 SD	Mean Z- score (SD)	below -3 SD	below -2 SD <sup>2</sup>	above +2 SD	Mean Z- score (SD)	children
Age in months												
<6 6-8	0.9 6.5	8.4 12.8	-0.2 0.0	0.4 0.0	0.9 3.0	11.6 11.4	0.5 0.6	0.0 1.3	1.1 6.4	6.4 9.8	0.3 0.4	150 74
9-11	4.6	9.1	-0.2	1.6	4.4	9.5	0.5	0.0	4.7	2.8	0.1	81
12-17 18-23	2.0 1.5	9.6 7.0	-0.0 -0.3	0.0 0.0	2.9 0.0	12.3 12.2	0.5 0.7	0.0 0.0	2.6 1.6	11.1 10.2	0.3 0.3	157 153
24-35	0.3	3.7	0.5	0.9	4.9	5.9	0.2	0.0	1.7	7.2	0.3	326
36-47 48-59	1.5 1.3	7.9 5.8	-0.0 -0.0	0.9 1.1	5.3 3.7	8.8 8.7	0.4 0.3	0.8 0.0	3.8 1.6	4.8 7.4	0.2 0.2	299 306
Sex	1.5	5.0	-0.0	1.1	5.7	0.7	0.5	0.0	1.0	7.4	0.2	500
Male	1.6	8.1	-0.1	0.3	2.8	8.7	0.4	0.1	2.0	6.7	0.2	819
Female	1.6	5.8	0.1	1.1	4.3	10.0	0.4	0.4	3.0	7.9	0.3	728
Birth interval in months <sup>3</sup>												
First birth <sup>4</sup>	1.7	7.3	0.0	0.6	2.7	8.8	0.4	0.4	2.4	7.5	0.3	677
<24 24-47	3.1 1.4	8.5 6.4	-0.2 -0.0	0.5 0.6	4.2 3.4	16.4 7.9	0.6 0.4	0.0 0.3	3.5 1.9	9.7 7.5	0.3 0.2	192 306
48+	0.7	6.1	0.2	1.2	5.1	7.3	0.3	0.0	2.9	5.4	0.2	359
Size at birth <sup>3</sup>			*					*	*			
Very small Small	* 3.0	* 9.2	-0.1	* 1.2	* 7.6	* 5.7	* 0.1	* 0.6	* 3.7	* 8.9	* (0.0)	20 115
Average or larger	1.2	6.2	0.1	0.7	3.1	9.6	0.4	0.1	1.9	7.2	0.3	1,397
Missing	*	*	*	*	*	*	*	*	*	*	*	3
Mother's interview status												
Interviewed	1.6	7.0	0.0	0.7	3.6	9.2	0.4	0.2	2.5	7.3	0.3	1,535
Not interviewed but in household	-	•	•	•	Ŷ	•	•	•	•	•	•	8
Not interviewed	*	*	*	*	*	*	*	*	*	*	*	4
and not in the household⁵												
Mother's												
nutritional												
<b>status</b> ⁵ Thin (BMI<18.5)	6.2	8.5	-0.1	0.0	1.9	9.2 9.3	0.3	1.4	1.4	8.6	0.1	70
Normal (BMI 18.5-	1.5	7.8	0.0	0.5	3.9	9.3	0.4	0.3	3.0	7.1	0.2	812
24.9) Overweight/obese	1.4	6.7	0.1	1.3	3.6	9.3	0.5	0.0	2.5	7.5	0.3	534
(BMI ≥ 25)												
Residence Urban	1.3	5.1	0.0	0.9	2.6	7.8	0.4	0.2	2.1	5.7	0.2	873
Rural	2.0	9.5	-0.0	0.5	4.8	11.3	0.4	0.2	3.0	9.4	0.2	673
Region												
Yerevan Aragatsotn	1.0 7.1	3.5 14.8	0.1 0.4	1.0 5.7	1.0 20.7	5.5 10.3	0.4 (0.5)	0.0 3.0	1.4 14.6	4.5 6.8	0.3 (0.3)	419 61
Ararat	4.1	8.6	1.0	0.8	10.6	29.4	`0.9 <sup>′</sup>	0.5	3.6	34.7	`1.3´	146
Armavir Gegharkunik	0.4 3.5	6.4 6.9	-0.3 0.9	0.0 0.9	2.2 9.0	8.3 7.6	0.5 0.1	0.0 0.0	1.5 2.6	2.4 13.8	0.1 0.5	184 72
Lori	0.0	4.3	-0.1	0.0	1.2	5.8	0.4	0.0	1.5	8.9	0.3	69
Kotayk Shirak	0.4 2.3	5.1 14.7	-0.3 -0.4	0.0 0.0	1.2 3.3	5.2 10.5	0.3 0.4	0.0 0.6	1.6 3.5	1.1 3.9	0.0 0.0	243 168
Syunik	1.9	10.5	-0.4	2.1	2.9	9.4	0.4	0.0	3.6	3.9	(0.2)	63
Vayots Dzor Tavush	1.5 0.9	7.1 6.9	-0.2 -0.4	0.0 0.0	2.3 0.0	13.2 6.9	0.5 0.6	0.0 0.0	1.6 0.5	8.5 5.1	0.3 0.2	36 86
Mother's	0.0	0.0	-0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	00
education <sup>7</sup>												
Basic Secondary	1.5 1.6	15.7 7.6	-0.2 0.0	1.2 0.3	4.4 5.1	14.4 10.3	0.5 0.4	0.0 0.1	3.4 3.1	9.3 8.5 6.2	0.2 0.2 0.3	87 631
Secondary special	1.6	5.7	0.1	0.9	2.2	8.0	0.4	0.3	2.0	6.2	0.2	822
Higher	*	*	*	*	*	*	*	*	*	*	*	3
Wealth quintile Lowest	1.4	9.2	-0.1	0.3	6.0	12.2	0.4	0.6	4.1	9.9	0.2	305
Second	1.6	7.0	0.1	1.3	4.7	11.6	0.4	0.2	2.8	10.5	0.3	318
Middle Fourth	2.4 2.2	9.5 5.3	-0.1 -0.0	0.0 0.4	2.6 2.3	9.9 8.0	0.5 0.5	0.0 0.4	2.3 1.4	8.0 5.2	0.3 0.3	293 265
Highest	0.7	4.4	0.2	1.3	2.1	5.3	0.3	0.0	1.8	3.2	0.2	365
Total	1.6	7.0	0.0	0.7	3.5	9.3	0.4	0.2	2.5	7.3	0.3	1,546

Note: Table is based on children who slept in the household the night before the interview. Each of the indices is expressed in standard deviation units (SDs) from the median of the NCHS/CDC/WHO International Reference Population. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight. Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed. <sup>1</sup> Recumbent length is measured for children under age 2, or in the few cases when the age of the child ids unknown and the child is less than 85cm; standing height is measured for all other children" to be consistent with table 12.1. <sup>2</sup> Includes children who are below -3 standard deviations (SDs) from the International Reference Population median <sup>3</sup> Excludes children whose mothers were not interviewed <sup>4</sup> First born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval. <sup>6</sup> Excludes children whose mothers are deceased <sup>6</sup> Excludes children whose mothers were not interviewed, children whose mothers were not weighed and measured, 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 12.9. <sup>7</sup> 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 C.8 Vaccinations by background characteristics for children age 18-29 months	cinations b	y backgrou	nd charact	eristics for	children a	ge 18-29 m	onths											
Percentage of children age 18-29 months who received specific vaccines at an characteristics, Armenia DHS 2015-16	hildren age Armenia DH	18-29 mont S 2015-16	hs who rec	eived specif	fic vaccines	s at any tim	e before th	e survey (a	according to	a vaccinati	ion card or	the mother	's report), ai	nd percenta	ige with a √	/accination	y time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card, by background	ckground
Background characteristic	BCG	HepB (birth dose) <sup>1</sup>	DPT- HepB- Hib 1	DPT- HepB- Hib 2	DPT- HepB- Hib 3	Polio 1	Polio 2	Polio 3	Measles, mumps, and rubella (MMR)	All basic vaccina- tions <sup>2</sup>	Pneumo- coccal 1	Pneumo- coccal 2	Pneumo- coccal 3	Rota- virus 1	Rota- virus 2	No vaccina- tions	Percen- tage with a vaccina- tion card seen o	Number of children
<b>Sex</b> Male Female	9.86 98.9	99.3 97.3	97.0 97.9	96.0 95.9	91.3 94.8	98.2 99.6	98.2 98.0	93.2 97.5	94.7 92.6	88.6 90.4	34.2 20.3	30.1 19.7	22.2 16.5	93.5 94.3	87.4 92.7	0.0 0.0	89.3 96.9	193 169
<b>Birth order</b> 1 2-3 4-5 6+	60.3 99.3 99.3	98.0 98.5 * *	97.9 97.5 *	96.8 95.6 * *	6 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	99.7 98.7 *	98.5 98.2 * *	95.3 95.3 * *	94.2 93.5 * *	90.7 88.9 *	25.1 30.9 *	23.2 27.9 *	20.3 20.0 *	93.0 95.3 * *	89.5 90.7 *	0.0 0.0 * *	93.6 91.8 * *	151 198 0
<b>Residence</b> Urban Rural	99.5 99.2	97.9 99.0	96.3 98.9	94.3 98.2	90.7 96.0	98.9 98.8	98.1 98.1	93.9 96.9	93.1 94.6	87.7 91.8	28.4 26.8	26.2 23.9	20.6 18.2	92.9 95.2	88.0 92.5	0.2	92.4 93.5	210 151
Mother's education Basic Secondary Sepecial Higher	(100.0) 100.0 98.1 99.1	(95.4) 99.4 96.7 98.6	(96.3) 97.7 95.6 98.3	(94.1) 96.3 95.6 96.1	(87.7) 94.7 91.5 92.7	(97.8) 97.9 99.2 100.0	(97.8) 97.1 99.2 98.7	(95.5) 95.3 93.0 96.1	(93.3) 92.3 94.2 95.2	(87.7) 90.3 87.3 90.0	(35.0) 28.4 20.8 29.0	(35.0) 25.3 16.6 27.5	(24.5) 18.5 16.6 21.2	(93.7) 94.4 92.2 94.2	(93.7) 89.7 90.7 88.7	(0.0) 0.0 0.0	(98.5) 91.5 93.7 92.8	125 125 125
Wealth quintile Lowest Second Middle Fourth Hichest	~ ~	98.9 98.4 98.9 98.9 98.9	97.1 99.0 94.7 88.8	97.1 99.0 90.2 96.9	95.6 96.3 90.2 93.1	100.0 96.3 98.8	100.0 95.3 98.8	100.0 96.3 94.3 95.1	93.9 97.2 92.4 94.4	91.7 95.2 86.3 88.0	32.4 18.9 33.8	29.1 24.4 15.9 32.6	23.0 17.5 14.7 24.1	96.5 99.5 91.9 34	94.9 97.3 91.9 84.3	0.0 8.0 0	95.9 93.3 94.6 91.1	06 66 66 70 70 70 70 70 70 70 70 70 70 70 70 70
Total	99.3	98.3	97.4	96.0	92.9	98.8	98.1	95.2	93.7	89.4	27.7	25.2	19.6	93.9	89.8	0.1	92.9	362
Note: Children are considered to have received the vaccine if it was either written a figure based on fewer than 25 unweighted cases that has been subpressed	re consider 1 fewer thar	ed to have re מאסל מיון 25 unweidh	sceived the sted cases t	vaccine if it hat has bee	was either	tten	ie child's va	ccination c	ard or repor	ted by the r	nother. Figu	ures in parer	theses are	based on 24	5-49 unweiç	ghted cases	on the child's vaccination card or reported by the mother. Figures in parentheses are based on 25.49 unweighted cases; an asterisk denotes	k denotes

a figure based on fewer than 25 unweighted cases that has been suppressed. BCG = Bacille Calmette-Guerin DPT = leiphtheria-pertussis-tetarus HepB = hepatitis B Hib = Haemophilus influenza type b DPT-HepD-Hib is sometimes referred to as pentavalent. <sup>1</sup> For children whose vaccination information is based on the mother's report, children reported to have received HepB (birth dose) received the vaccine within 24 hours after birth. For children whose vaccination information is based on the written record of vaccination, children are considered to have received HepB (birth dose) received an their card, regardless of when the dose was administered. <sup>2</sup> BCG, three doses of DPT-HepB-Hib, three doses of oral polio vaccine, and one dose of measles, mumps, and rubella (MMR) vaccine at any time before the survey

## PERSONS INVOLVED IN THE 2015-16 ARMENIA DEMOGRAPHIC AND HEALTH SURVEY

## 

## **National Directors**

Mnatsakanyan Stepan, President of the National Statistical Service of Republic of Armenia (RA), Chairman of the State Council of Statistics of RA Gevorgyan Gagik, Member of the State Council of Statistics of RA

## **National Directors for Medical Affairs**

**Khachatryan Sergey**, Deputy Minister of Health **Saribekyan Karine**, Head of Mother and Child Health Care Department of the Ministry of Health

## **National Statistical Service**

 Safyan Anahit, Member of the State Council of Statistics of RA, Person Responsible for International Statistical Collaboration Hayrapetyan Araik, Chief of Staff
 Markosyan Lusine, Head of Household Survey Division
 Kuyumjyan Karine, Head of Population Census and Demography Division Kalantaryan Lusine, Head of Labor Statistics Division
 Baghdasaryan Nelli, Head of Social Sphere and Nature Protection Division Manandyan Anahit, Head of Internal Audit Department

## **Ministry of Health**

Abrahamyan Razmik, Chief Obstetrician-Gynecologist Avagyan Gayane, Head of Maternity and Reproductive Health Care Division, Mother and Child Health Care Department Yuzbashyan Ruzanna, Head of Health Programs Division, Health Programs and Quality Management Department Ghazaryan Armine, Chief Specialist of Child Health Care Division, Mother and Child Health Care Department Sahakyan Gayane, Coordinator of the National Expanded Program on Immunization Arushanyan Sonya, Coordinator of the National Integrated Management of Childhood Illness Program Grigoryan Trdat, National Center for AIDS Prevention

> National Institute of Health, Ministry of Health Bazarchyan Alexander, Director

Davtyan Naira, Head of the Center of National Health Accounts, Health Economics and

Pharmaeconomics Babayan Roza, Lawyer-Adviser Torosyan Arevik, Expert Babayan Gohar, Physician (CSJC)

## Armenia Demographic and Health Survey

Gevorgyan Tigran, Project Manager Kosakyan Armine, Technical Manager Petrosyan Ani, Project Assistant Khangeldyan Anahit, Project Accountant

#### **The DHS Program**

Gulnara Semenov, Regional Coordinator and Survey Manager Ruilin Ren, Senior Sampling Specialist Ladys Ortiz, Senior Data Processing Specialist Luis Alejandro Rey, Data Processing Specialist Mianmian Yu, Data Processing Specialist Annie Cross, Survey Specialist Ann Way, Survey Specialist Sunita Kishor, Survey Specialist Monica Kothari, Biomarker Specialist Megan Gottfried, GIS Specialist Trinadh Dontamsetti, GIS Specialist Audrey Shenett, Production Specialist Nancy Johnson, Editor Christopher Gramer, Cover Design Sarah Balian, Dissemination Specialist Erica Nybro, Senior Advisor for Communication

#### FIELD STAFF Supervisors

Achinyan Lyudmila Aleksanyan Arpik Avetisyan Gor Babajanyan Bella Baghdishyan Satenik Hovhannisyan Valerik Iskandaryan Nune Melikyan Karine Melkonyan Haykush Petrosyan Svetlana Setoyan Hrach Tarverdyan Ishkhan Zakaryan Susanna

#### Editors

Afyan Karine Antonyan Ovsanna Bakhtikyan Hamest Davtyan Anahit Davtyan Ruzanna Gharibyan Nelli Ghazaryan Silva Grigoryan Aghavni Iritsyan Susanna Khachatryan Anna Makaryan Heghush Sargsyan Zhanna

#### Interviewers

Abrahamyan Susanna Adamvan Gurgen Aghajanyan Ishkhan Avagyan Emma Avetisyan Karine Avetyan Arevik Avetvan Petik Babayan Armen Barseghvan Ofelva Bryan Ashot Chobanyan Anahit Davtvan Armenuhi Ghavalyan Karine Ghazaryan Karine Ghazaryan Marine Grigoryan Susanna Gulovan Armine Hakobyan Gayane Harutyunyan Hasmik Harutyunyan Lusik Harutyunyan Nazik Harutyunyan Tamila Hayrapetyan Simon Hovhannisyan Armine Hovsepyan Armen Hovsepyan Leonard Hovsepyan Tcovinar Karapetyan Zarik Khachatryan Goharik Khachatryan Greta Khachatryan Valeri Khnkoyan Andranik Khokhikyan Gayane

Kolozyan Ashot Kosakyan Armen Kurghinyan Alvard Mardanyan Marina Martirosyan Bella Martirosyan Svetlana Matevosvan Anahit Meliksetvan Armenuhi Melikvan Ashot Melkonyan Anna Mikayelyan Anahit Mkrtchyan Arpine Movsisyan Melanya Padunts Armine Petrosyan Mariam Poghosyan Anahit Poghosyan Lusine Poghosyan Margarita **Riganyan** Emma Sahakyan Heghine Sargsyan Hasmik Sargsyan Heriknaz Shakrikyan Tcovinar Simonyan Aregnaz Simonyan Susanna Tadevosvan Anahit Vardanyan Armenuhi Yeganyan Nune Zakaryan Anna Zakoyan Marus Zazyan Hasmik Zhamharyan Shogher

#### **Health Technicians**

Bejanyan Tamara Gevorgyan Naira Ghalumyan Lusine Hakobyan Marina Harutyunyan Gayane Hovhannisyan Lusik Karamyan Heghine Khachatryan Anush Kocharyan Svetlana Movroyan Albert Sahakyan Larisa Yerimyan Ani Zamelyan Rita

#### **Data Entry Staff**

Hovhannisyan Ruzanna Kalashyan Yeva Meliksetyan Marieta Petoyan Anush Khumaryan Karen Nitalyan Margarit Poghosyan Ruzanna Hovhannisyan Karen Martirosyan Eleonora Abrahamyan Andranik Movsisyan Ani Hovhannisyan Hayrapet Gevorgyan Samvel Igitkhanyan Irina Apriyan Ernest Hovhannisyan Hamlet

#### **Listers and Mappers**

Abrahamyan Andranik Amirkhanyan Knarik Aghayan Davit Grigoryan Hasmik Igitkhanyan Irina Harutyunyan Susanna Khachatryan Dianna Harutyunyan Ruzanna Hovhannisyan Hayrapet Hovhannisyan Valerik Ghazaryan Silva Ghukasyan Ani Manukyan Lilit Martirosyan Eleonora Margaryan Anush Margaryan Voskehat Meliksetyan Marieta Mkrtchyan Edgar Movsisyan Ani Nitalyan Margarit Petoyan Anush Petrosyan Feliks Poghosyan Ruzanna Poghosyan Ruzanna Poghosyan Anahit Sargsyan Baghdasar Simonyan Suren Ulikhanyan Hrachik Kalashyan Yeva Asriev Vitali Simonyan Gayane

#### **Regional Chiefs of NSS**

Avetisyan Vrezh, Chief of Yerevan Agency Movsisyan Levik, Chief of Aragatsotn Marz Agency Davtyan Levon, Chief of Ararat Marz Agency Sargsyan Ishkhan, Chief of Armavir Marz Agency Badalyan Hakob, Chief of Gegharkunik Marz Agency Manukyan Vrezh, Chief of Lori Marz Agency Davtyan Vahagn, Chief of Kotayk Marz Agency Margaryan Anahit, Chief of Shirak Marz Agency Grigoryan Vladimir, Chief of Syunik Marz Agency Ghazaryan Arushan, Chief of Vayots Dzor Marz Agency Achinyan Aida, Chief of Tavush Marz Agency

#### 2015 ARMENIA DEMOGRAPHIC AND HEALTH SURVEY HOUSEHOLD QUESTIONNAIRE

REPUBLIC OF ARMENIA

NATIONAL STATISTICAL SERVICE AND MINISTRY OF HEALTH

		IDENTIFICA	TION										
PLACE NAME	IEAD												
CLUSTER NUMBER													
HOUSEHOLD NUMBER													
HOUSEHOLD SELECTED	FOR MAN'S SURVEY	? (1=YES, 2=NO)											
		INTERVIEWE	R VISITS										
	1	2	3	FINAL VISIT									
DATE INTERVIEWER'S NAME RESULT*				DAY MONTH YEAR INT. NO. RESULT*									
NEXT VISIT: DATE				TOTAL NUMBER									
TIME													
*RESULT CODES:				TOTAL PERSONS IN HOUSEHOLD									
2 NO HOUSEHOL AT HOME A 3 ENTIRE HOUSE 4 POSTPONED 5 REFUSED 6 DWELLING VAC 7 DWELLING DES	T TIME OF VISIT EHOLD ABSENT FOR CANT OR ADDRESS N STROYED T FOUND	EXTENDED PERIOD O		TOTAL ELIGIBLE WOMEN									
DATE DAY DAY													
QUESTIONNAIRE**		/IEW** **LANGU 00	OF RESPONDENT** AGE CODES: ENGLISH 02	(YES = 1, NO = 2)									
SUPERVIS	OR	FIEL	DEDITOR	OFFICE EDITOR KEYED BY									
NAME	NUMBER	NAME	NUMBER	NUMBER NUMBER									

THIS PAGE IS INTENTIONALLY BLANK

#### INTRODUCTION AND CONSENT

Hello. My name is	. I am working with National Statistical Service. We are
conducting a survey about health and other topics all over Armenia.	The information we collect will help the government to plan
health services. Your household was selected for the survey. I would	d like to ask you some questions about your household. The
questions usually take about 15 to 20 minutes. All of the answers yo	ou give will be confidential and will not be shared with
anyone other than members of our survey team. You don't have to be	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 y	ou 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 cas	e 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?

SIGNA		DATE
	RESPONDENT AGREES TO BE INTERVIEWED 1	RESPONDENT DOES NOT AGREE TO BE INTERVIEWED 2> END
100	RECORD THE TIME.	HOURS

				HOUS	EHOLD SC	HEDULE										HC	USEHOLD	SCHEDULE				
							IF AGE 15 OR OLDER						IF AGE 0-	17 YEARS		IF	AGE 5 YEA	RS OR OLDER		IF A	GE 5-24 YEARS	IF AGE 0-4 YEARS
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESID	ENCE	AGE	MARITAL STATUS		ELIGIBILITY		LINE NO.	s	JRVIVORSHIP AN BIOLOGICA		CE OF			ITENDED 100L	ATTES- TAT FOR SCHOOL		RRENT/RECENT XOL ATTENDANCE	BIRTH REGISTRA TION
1	2	3	4	5	6	7	8	9	10	11		12	13	14	15	16	16A	17	17C	18	19	20
	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.	What is the relationship of (NAME) to the head of the household?	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)?	What is (NAME)'s current mantal status? 1 = MARRIED	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	IF HOUSE- HOLD SELEC- TED FOR MAN'S SURVEY	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5		Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name?	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name?	Has (NAME) ever attended school?	What is the total number of complete d years of schooling (NAME) has had?	What is the highest level of school (NAME) has attended? What is the highest grade (NAME) completed at that level?	IF 17: CLASS 10 OR 11 IN LEVEL '1'; OR LEVEL '1'; OR LEVEL '2' SECON- DARY- SPECIAL	Did (NAME) attend school at any time during the [2015- 2016] school year?	During (this/that) school year, what level and grade [is/was] (NAME) attending?	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been
	AT LER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK OUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS	SEE CODES				IF 95 OR MORE, RECORD	OR LIVING OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER- MARRIED AND NEVER LIVED		UNCLE NUMBER OF ALL MEN AGE 15-49				RECORD MOTHER'S LINE NUMBER. IF NO, RECORD		RECORD FATHER'S LINE NUMBER. IF NO, RECORD		IF IN PRE- SCHOOL RECOR D "00'.	SEE CODES	(NAME) receive an attestat for completing secondary school?		SEE CODES	registered with the civil authority? 1 = HAS CERTI- FICATE 2 = REGISTE RED 3 = NEITHER 8 = DONT
01	5-20 FOR EACH PERSON.	BELOW.	M F 1 2	Y N 1 2	Y N 1 2	'95'. IN YEARS	TOGETHER	01	01	01	01	Y N DK	100'.	Y N DK	100'.	Y N 1 2		BELOW.	Y N 1 2	Y N	BELOW.	KNOW
			1 2	1 2	1 2							GO TO 14		GO TO 16		NEXT LINE			Y N	NEXT LINE		
02			1 2	1 2	1 2			02	02	02	02	GO TO 14		GO TO 16		NEXT LINE			1 2 Y N	NEXT LINE		
03								03	03	03	03	GO TO 14		GO TO 16		NEXT LINE			1 2	NEXT LINE		
04			1 2	1 2	1 2			04	04	04	04	1 2 - 8 GO TO 14		1 2 78 GO TO 16		NEXT LINE			Y N 1 2	NEXT LINE		
05			1 2	1 2	1 2			05	05	05	05	1 2 - 8 GO TO 14		1 2 78 GO TO 16		1 2 NEXT LINE			Y N 1 2	NEXT LINE		
06			1 2	1 2	1 2			06	06	06	06	1 2 - 8 GO TO 14		1 2 78 GO TO 16		1 2 VEXT LINE			Y N 1 2	1 2 ↓ NEXT LINE		
07			1 2	1 2	12			07	07	07	07	1 2 78 GO TO 14		1 2 <del>↓</del> 8 GO TO 16		1 2 VEXT LINE			Y N 1 2	1 2 ↓ NEXT LINE		
08			1 2	1 2	12			08	08	08	08	1 2 ↓8 GO TO 14		1 2 ⊤8 GO TO 16		1 2 VEXT LINE			Y N 1 2	1 2 ↓ NEXT LINE		
09			1 2	1 2	1 2			09	09	09	09	1 2 ↓8 GO TO 14		1 2 ↓8 GO TO 16		1 2 ↓ NEXT LINE			Y N 1 2	1 2 ↓ NEXT LINE		
10			1 2	1 2	1 2			10	10	10	10	1 2 ↓8 GO TO 14		1 2 ↓ 8 GO TO 16		1 2 ↓ NEXT LINE			Y N 1 2	1 2 ↓ NEXT LINE		
ai hi 2B) A yi w 2C) A ai	ist to make sure that I have a con ny other people such as small chill were not listed? re there any other people who ma usur family, such as domestic serve ho usually live here? re there any guests or temporary ' nyone else who stayed here last n ted?	Idren or infants that in not be members of ants, lodgers, or frie visitors staying here	we YES f nds YES		<ul> <li>ADD TO TABLE</li> <li>ADD TO TABLE</li> <li>ADD TO TABLE</li> </ul>		CODES FOR Q. 3: RI 01 = HEAD 02 = WIFE OR HUSB. 03 = SON OR DAUGH 04 = SON-IN-LAW OF DAUGHTER-IN-LAW 05 = GRANDCHILD 06 = PARENT	0 AND 0 ITER 0 R 1 V V 1	7 = PARENT-IN 8 = BROTHER ( 9 = OTHER RE) 0 = ADOPTED/I STEPCHILD 1 = NOT RELAT 8 = DON'T KNO	I-LAW OR SISTER LATIVE FOSTER/ TED					1			0 = PRESCHOO	ASIC-SECONE Y-SPECIAL	GRADE ARY 00 = LE (USI THIS FOR		
11			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		11	11	11	11	Y N DK <sup>1</sup> <sup>2</sup> <del>1</del> GO TO 14		Y N DK <sup>1</sup> <sup>2</sup> ↓ <sup>8</sup> GO TO 16		Y N 1 2 ↓ NEXTLINE		LEVEL GRADE	Y N 1 2	Y N 1 2 ↓ NEXT LINE	LEVEL GRADE	
12			12	12	12			12	12	12	12	1 2 <del>↓</del> 8 GO TO 14		1 2 <b>↓</b> 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 VEXT LINE		
13			12	12	12			13	13	13	13	1 2 <del>↓</del> 8 GO TO 14		1 2 ↓8 GO TO 16		1 2 ↓ NEXT LINE			Y N 1 2	1 2 VEXT LINE		
14			12	1 2	1 2			14	14	14	14	1 2 ↓8 GO TO 14		1 2 <del>↓</del> 8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 VEXT LINE		
15			1 2	1 2	12			15	15	15	15	1 2 78 GO TO 14		1 2 →8 GO TO 16		1 2 ↓ NEXT LINE			Y N 1 2	1 2 V		
16			1 2	1 2	1 2			16	16	16	16	1 2 ↓8 GO TO 14		1 2 ↓8 GO TO 16		1 2 ↓ NEXT LINE			Y N 1 2	1 2 ↓ NEXT LINE		
17			1 2	1 2	1 2			17	17	17	17	1 2 78 GO TO 14		1 2 <del>↓</del> 8 GO TO 16		1 2 ↓ NEXT LINE			Y N 1 2	1 2 VEXT LINE		
18			1 2	1 2	1 2			18	18	18	18	1 2 78 GO TO 14		1 2 ↓8 GO TO 16		1 2 ↓ NEXT LINE			Y N 1 2	1 2 VEXT LINE		
19			1 2	1 2	1 2			19	19	19	19	1 2 ↓8 GO TO 14		1 2 ↓8 GO TO 16		1 2 NEXT LINE			Y N 1 2	1 2 VEXT LINE		
20			1 2	1 2	1 2			20	20	20	20	1 2 ↓8 GO TO 14		1 2 <del>↓</del> 8 GO TO 16		1 2 ↓ NEXT LINE			Y N 1 2	1 2 ↓ NEXT LINE		
TICK	HERE IF CONTINUATION SHEE	ET USED					CODES FOR Q. 3: RI												OR Qs. 16A, 1			

#### CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

 CUDES FUR U. 2. RELATIONSHIP 10 READ UP ROUSERULI

 01 = HEAD
 07 = PARENT-IN-LAW

 02 = WIFE C0 R HUSBAND
 08 = BROTHER C0 RS ISTER

 03 = SON OR DAUGHTER
 09 = 0'THER RELATIVE

 04 = SON-HUN VOR
 10 = ADOPTED/FOSTER

 DAUGHTER-IN-LAW
 STEPCHILD

 05 = GRANDCHILD
 11 = NOT RELATED

 06 = PARENT
 98 = DONT KNOW

 CODES FOR Qs. 164. 17 AND 19: EDUCATION

 LEVEL
 0 = PRESCHOOL
 GRADE

 1 = PRIMARY-BASIC-SECONDRY 00 = LESS THAN 1 YEAR COMPLETED
 2 = SECONDARY.SPECIAL
 (USE VD FOR Q, 17 O.N.Y.

 2 = SECONDARY.SPECIAL
 (USE VD FOR Q, 17 O.N.Y.
 3 = HIGHER
 THIS CODE IS NOT ALLOWED

 8 = DONT KNOW
 98 = DONT KNOW
 98 = DONT KNOW
 10 = NONT KNOW

SELECTION OF ONE CHILD FOR CHILD DISCIPLINE

NO.	QUESTIONS AND FILTERS				C	ODING	CATEGORIES	
31			HOUSEHOLD MEMBERS ER OF CHILDREN AGE 1-	тоти	AL NUM	IBER		
32	CHECK THE			➤ VIC SK NU	IP TO 51 DOMEST DLENCE SELECTI IP TO 39 AND RE( MBER AS '1', ENT MBER, CHILD'S N	ON MODULE CORD THE RANK ER THE LINE		
32A	LIST EACH OF THE CHILDREN AGE 1-14 YEARS BELOW IN HOUSEHOLD MEMBERS. DO NOT INCLUDE OTHER HOUS YEARS. RECORD THE LINE NUMBER, NAME, SEX, AND AG			HOLD ME	MBERS CH CH	S OUTS ILD.	BIDE OF THE AGE	
	33. RANK NUMBER	34. HH LINE NUMBER	35. NAME FROM COL. 2		SEX F	6. FROM L. 4	37. AGE FROM COL. 7	
	RANK	LINE	NAME		М	F	AGE	
	1				1	2		
	2				1	2		
	3				1	2		
	4				1	2		
	5				1	2		
	6				1	2		
	7				1	2		
	8				1	2		
	9				1	2		

138 LOOK AT THE LAST DIGIT OF THE HOUSEHOLD NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD GO TO. CHECK THE TOTAL NUMBER OF ELIGIBLE CHILDREN [31] ON THE PREVIOUS PAGE. 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 RANK NUMBER OF THE CHILD SELECTED FOR THE CHILD LABOUR/CHILD DISCIPLINE QUESTIONS FROM THE BOX OF ELIGIBLE CHILDREN IN [33]. WRITE THE NAME, LINE NUMBER, AND RANK NUMBER OF THE SELECTED CHILD IN THE SPACE BELOW THE TABLE.

EXAMPLE: THE HOUSEHOLD NUMBER IS '16' AND [31] SHOWS THAT THERE ARE THREE ELIGIBLE CHILDREN AGE 1-14 IN THE HOUSEHOLD. SINCE THE LAST DIGIT OF THE HOUSEHOLD NUMBER IS '6' GO TO ROW '6' AND SINCE THERE ARE THREE ELIGIBLE CHILDREN 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 [33] AND FIND THE SECOND CHILD. WRITE THE NAME, LINE NUMBER, AND RANK NUMBER OF THE CHILD IN THE SPACE BELOW THE TABLE.

LAST DIGIT OF THE HOUSE- HOLD		TOTAL NUM	BER OF ELIG	BLE CHILDRE	EN AGE 1-14 I	N HOUSEHOL	.D FROM [31]	
NUMBER	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
39 NAME OF SELECTED CHILD HH LINE NUMBER OF SELECTED CHILD RANK NUMBER OF SELECTED CHILD								
					AGE OF SELEC	CTED CHILD		

# CHILD DISCIPLINE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
41	CHECK THE SELECTED CHILD'S AGE FROM 39:		
	1-14 YEARS NO CHILDREN C	DR OTHER AGE	→ NEXT SECT.
42	WRITE THE HOUSEHOLD LINE NUMBER AND NAME OF THE CHILD FROM 39.		
43	<ul> <li>Adults use certain ways to teach children the right behaviour or to address a behaviour problem. I will read various methods that are used. Please tell me if you or anyone else in the household has used this method with (NAME) in the past month.</li> <li>a) Took away privileges, forbade something (NAME) liked or did not allow (him/her) to leave the house.</li> <li>b) Explained why (NAME)'s behaviour was wrong.</li> <li>c) Shook (him/her).</li> </ul>	YES NO a) TOOK AWAY PRIVILEGES 1 2 b) EXPLAINED WRONG BEHAVIOUR 1 2 c) SHOOK HIM/HER 1 2	
	<ul><li>d) Shouted, yelled at or screamed at (him/her).</li></ul>	d) SHOUTED, YELLED, SCREAMED 1 2	
	e) Gave (him/her) something else to do.	e) GAVE SOMETHING ELSE TO DO 1 2	
	<li>f) Spanked, hit or slapped (him/her) on the bottom with bare hand.</li>	f) HIT ON BOTTOM WITH BARE HAND 1 2	
	g) Hit (him/her) on the bottom or elsewhere on the body with something like a belt, hairbrush, stick, or other hard object.	g) HIT WITH HARD OBJECT 1 2	
	h) Called (him/her) dumb, lazy, or another name like that.	h) CALLED NAME 1 2	
	i) Hit or slapped (him/her) on the face, head, or ears.	i) HIT ON HEAD/FACE/EARS 1 2	
	j) Hit or slapped (him/her) on the hand, arm, or leg.	j) HIT ON HAND/ARM/LEG 1 2	
	<ul> <li>k) Beat him/her up, that is hit (him/her) over and over as hard as one could.</li> </ul>	k) BEAT HIM/HER UP 1 2	
44	Do you believe that in order to bring up, raise or educate a child properly, the child needs to be physically punished?	YES         1           NO         2           DON'T KNOW / NO OPINION         8	

SELECTION OF WOMAN FOR THE DOMESTIC VIOLENCE QUESTIONS

NO.		QUESTIO	NS AND FILTE	RS		CODIN	NG CATEGOR	IES		SKIP
51		COL. 4, 7 AND 9 IN THE LIST OF HOUSEHOLD RS AND WRITE THE TOTAL NUMBER OF WOMEN AGE ARS.				τοται	L NUMBER			
52	CHECK TH	HECK THE NUMBER OF WOMEN AGE 15-49 YEARS IN <b>51</b> : ZERO								
	TWO OR MORE ONE ONE ONE WOMAN'S NAME									
	LOOK AT THE LAST DIGIT OF THE HOUSEHOLD NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD GO TO. CHECK THE TOTAL NUMBER OF ELIGIBLE WOMEN (COLUMN 9) IN 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 DOMESTIC VIOLENCE QUESTIONS FROM THE LIST OF ELIGIBLE WOMEN IN COLUMN 9 OF THE HOUSEHOLD SCHEDULE. WRITE THE NAME AND LINE NUMBER OF THE SELECTED WOMAN IN THE SPACE BELOW THE TABLE. <b>EXAMPLE:</b> THE HOUSEHOLD NUMBER IS '16' AND THE HOUSEHOLD SCHEDULE COLUMN 9 SHOWS THAT THERE ARE THREE ELIGIBLE WOMEN AGE 15-49 IN THE HOUSEHOLD SCHEDULE COLUMN 9. SHOWS THAT THERE ARE THREE ELIGIBLE WOMEN AGE 15-49 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 HOUSE- HOLD									
	NUMBER	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	
53		ME SELECTED V	VOMAN				NE NUMBER	MAN		

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       11         PIPED TO YARD/PLOT       12         PUBLIC TAP/STANDPIPE       14         TUBE WELL OR BOREHOLE       21         DUG WELL       31         UNPROTECTED WELL       32         WATER FROM SPRING       41	]→ 106      → 103
		UNPROTECTED SPRING	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       11         PIPED TO YARD/PLOT       12         PUBLIC TAP/STANDPIPE       14         TUBE WELL OR BOREHOLE       21         DUG WELL       21         PROTECTED WELL       31         UNPROTECTED WELL       32         WATER FROM SPRING       41         UNPROTECTED SPRING       42         TANKER TRUCK       61         CART WITH SMALL TANK       71         SURFACE WATER (RIVER/DAM/       81         OTHER       96	]→ 106
103	Where is that water source located?	IN OWN DWELLING	<b>]→</b> 105
104	How long does it take to go there, get water, and come back?	MINUTES	
105	CHECK 101 AND 102: CODE '14' OR '21' CIRCLED? YES	NO	→ 107

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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 1 NO 2 DON'T KNOW 8	]→ 109
108	What do you usually do to make the water safer to drink? Anything else? RECORD ALL MENTIONED.	BOIL       A         ADD BLEACH/CHLORINE       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 SOMEWHERE ELSE       14         FLUSH, DON'T KNOW WHERE       15         PIT LATRINE       11         PIT LATRINE WITH SLAB       22         PIT LATRINE WITHOUT SLAB/OPEN PIT       23         BUCKET TOILET       41         NO FACILITY/BUSH/FIELD       61         OTHER       96	→ 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	
112	Where is this toilet facility located?	IN OWN DWELLING	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
113	What type of fuel does your household mainly use for cooking?	ELECTRICITY       01         LPG       02         NATURAL GAS       03         BIOGAS       04         KEROSENE       05         COAL, LIGNITE       06         CHARCOAL       07         WOOD       08         STRAW/SHRUBS/GRASS       09         AGRICULTURAL CROP       10         ANIMAL DUNG       11         NO FOOD COOKED IN HOUSEHOLD       95         OTHER      96	
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)	<b>→</b> 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	
117	Does this household own any livestock, herds, other farm animals, or poultry?	YES 1 NO 2	→ 119
118	<ul> <li>How many of the following animals does this household own?</li> <li>IF NONE, RECORD '00'.</li> <li>IF 95 OR MORE, RECORD '95'.</li> <li>IF UNKNOWN, RECORD '98'.</li> <li>a) Milk cows or bulls?</li> <li>b) Other cattle?</li> <li>c) Horses, donkeys, or mules?</li> <li>d) Goats?</li> </ul>	a) COWS/BULLS	
	e) Sheep?	e) SHEEP	
	<ul><li>f) Chickens or other poultry?</li><li>g) Pigs?</li></ul>	f) CHICKENS/POULTRY	
	h) Rabbits?	h) RABBITS	
	i) Other animals for fur?	i) FUR ANIMALS	
	j) Beehives?	j) BEEHIVES	
119	Does any member of this household own any agricultural land?	YES 1 NO 2	→ 121
120	How many square meters of agricultural land do members of this household own, including ponds for farming fish or seafood? IF 950.000 M <sup>2</sup> OR MORE, CIRCLE '999950'.	SQUARE	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
<u>NO.</u> 121	QUESTIONS AND FILTERS         Does your household have:         a) Electricity?         b) A radio-receiver?         c) A television?         d) A non-mobile telephone?         e) A computer?         f) A refrigerator?         g) A washing machine?         h) A vacuum cleaner?         i) A video-camera or camcorder?         j) A table?         k) A chair?         l) A sofa or divan?         m) A buffet/ curio cabinet/ wall unit?         o) An air conditioner?         p) A DVD player?         q) A satellite antenna or a dish?         r) A freezer?	YES         NO           a) ELECTRICITY         1         2           b) RADIO         1         2           c) TELEVISION         1         2           d) NON-MOBILE TELEPHONE         1         2           e) COMPUTER         1         2           f) REFRIGERATOR         1         2           g) WASHING MACHINE         1         2           h) VACCUUM CLEANE         1         2           i) VIDEO CAMERA         1         2           j) TABLE         1         2           k) CHAIR         1         2           m) BED         1         2           n) BUFFET         1         2           n) DVD PLAYER         1         2	SKIP
	<ul><li>s) A sewing machine?</li><li>t) A carpet?</li><li>u) A connection to the Internet through any device?</li></ul>	s) SEWING MACHINE       1       2         t) CARPET       1       2         u) INTERNET       1       2	
122	<ul> <li>Does any member of this household own:</li> <li>a) A watch?</li> <li>b) A mobile phone?</li> <li>c) A bicycle?</li> <li>d) A motorcycle or motor scooter?</li> <li>e) An animal-drawn cart?</li> <li>f) A car or truck?</li> <li>g) A boat with a motor?</li> </ul>	YES         NO           a) WATCH         1         2           b) MOBILE PHONE         1         2           c) BICYCLE         1         2           d) MOTORCYCLE/SCOOTER         1         2           e) ANIMAL-DRAWN CART         1         2           f) CAR/TRUCK         1         2           g) BOAT WITH MOTOR         1         2	
123	Does any member of this household have a bank account?	YES 1 NO 2	
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	
124A	In the past 3 years, has any member of the household worked abroad for three or more months at a time, including those currently working abroad?	YES 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
125	Did any member of this household receive the following in the past 6 months:	YES NO	
	<ul> <li>a) A poverty family benefit, that is a monthly cash benefit?</li> </ul>	a) POVERY FAMILY BENEFIT 1 2	
	b) An emergency benefit, that is a cash benefit up to 4 times per year?	b) EMERGENCY BENEFIT 1 2	
	c) A government order to any health services which are otherwise not free?	c) GOVERNMENT ORDER 1 2	
126	CHECK 125: ANY BENEFITS RECEIVED? YES, ANY CODE '1' CIRCLED OTHER		→ 128
127	Did your household register or update their registration in the family benefit program database in the past 6 months?	YES 1 NO 2	
128	How far from your house in minutes is the nearest clinic or health facility that members of your household usually use?	MINUTES BY WALKING 1	
	PROBE FOR METHOD USED TO GET TO THE FACILITY	MINUTES BY CAR OR TAXI	
		MINUTES BY PUBLIC TRANSPOR 3	
	IF 1,000 MINUTES OR MORE, CIRCLE CODE FOR THE UNIT OF MEASURE AND ENTER '995'.	DON'T KNOW	

ADDITIONAL HOUSEHOLD CHARACTERISTICS
--------------------------------------

		IOLD CHARACTERISTICS	
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,       3         NOT IN DWELLING/YARD/PLOT       3         NOT OBSERVED, NO PERMISSION TO SEE       4         NOT OBSERVED, OTHER REASON       5	142
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 C	
142	OBSERVE MAIN MATERIAL OF THE FLOOR OF THE DWELLING.	NATURAL FLOOR EARTH/SAND	
	RECORD OBSERVATION.	RUDIMENTARY FLOOR WOOD PLANKS	
		FINISHED FLOOR PARQUET OR POLISHED WOOD OR LAMINATE	
143	OBSERVE MAIN MATERIAL OF THE ROOF OF THE DWELLING.	NATURAL ROOFING NO ROOF	
	RECORD OBSERVATION.	SOD 13 RUDIMENTARY ROOFING	
		RUSTIC MAT         21           WOOD PLANKS         23           CARDBOARD         24           FINISHED ROOFING         24	
		METAL31WOOD32CALAMINE/CEMENT FIBER33CERAMIC TILES34CEMENT35ROOFING SHINGLES/SHIFER36TAULE37	
		OTHER96 (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 WALLS11NO WALLS11TREE TRUNKS12DIRT13RUDIMENTARY WALLS22STONE WITH MUD22UNCOVERED ADOBE23PLYWOOD24CARDBOARD25REUSED WOOD26FINISHED WALLSCEMENT/MONOLIT31STONE WITH LIME/CEMENT32BRICKS33CEMENT BLOCKS OR PANELS34COVERED ADOBE35WOOD PLANKS/SHINGLES36OTHER96				
145	I would like to check whether the salt used in your household is iodized. May I have a sample of the salt used to cook meals in your household? TEST SALT FOR IODINE.	0 PPM (NO IODINE)       1         BELOW 15 PPM       2         15 PPM AND ABOVE       3         NO SALT IN HH       4         SALT NOT TESTED       6         (SPECIFY REASON)				
146	RECORD THE TIME.	HOURS				

#### INTERVIEWER'S OBSERVATIONS

#### TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

#### 2015 ARMENIA DEMOGRAPHIC AND HEALTH SURVEY BIOMARKER QUESTIONNAIRE

REPUBLIC OF ARMENIA NATIONAL STATISTICAL SERVICE AND MINISTRY OF HEALTH

IDENTIFICATION						
PLACE NAME						
NAME OF HOUSEHOLD	HEAD					
CLUSTER NUMBER .						
HOUSEHOLD NUMBER						
HOUSEHOLD SELECTED	FOR MAN'S SURVEY	? (1=YES, 2=NO)				
		HEALTHWORKE	R VISITS			
	1	2	3		FINAL V	ISIT
DATE				DAY		
HEALTHWORKER'S				MONTH		
NAME				YEAR		
NEXT VISIT: DATE				TOTAL NU OF VIS		
TIME					ЛО	
NOTES:				TOTAL EL WOME		
				TOTAL EL MEN	IGIBLE	
				TOTAL EL CHILDI		
LANGUAGE OF QUESTIONNAIRE**			NATIVE LANGUAGE OF RESPONDENT**			NSLATOR
LANGUAGE OF <b>ENGLISH</b> QUESTIONNAIRE**       ENGLISH       02 RUSSIAN         01 ARMENIAN       03 OTHER						
SUPERVIS	SOR	FIELD	EDITOR	OFFICE	EDITOR	KEYED BY
NAME	NUMBER	NAME	NUMBER	NUM	IBER	NUMBER

## WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5

101	CHECK COLUMN 11 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 102; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11. NAME FROM COLUMN 2.	LINE NUMBER	LINE NUMBER	LINE NUMBER
103	IF MOTHER INTERVIEWED: COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM BIRTH HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (NAME)'s date of birth?	DAY	DAY	DAY
104	CHECK 103: CHILD BORN IN 2010- 2016?	YES 1 NO	YES1 NO2 (SKIP TO 114) ←	YES1 NO2 (SKIP TO 114) ←
105	WEIGHT IN KILOGRAMS.	KG9994 NOT PRESENT9994 REFUSED9995 OTHER	KG9994 NOT PRESENT9994 REFUSED9995 OTHER	KG NOT PRESENT9994 REFUSED
106	HEIGHT IN CENTIMETERS.	CM NOT PRESENT9994 REFUSED	CM NOT PRESENT9994 REFUSED	CM NOT PRESENT9994 REFUSED9995 OTHER
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 HEALTHWORKER NUMBER.	HEALTHWORKER NUMBER	HEALTHWORKER NUMBER	HEALTHWORKER NUMBER

## WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5

101	CHECK COLUMN 11 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 102; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11. NAME FROM COLUMN 2.	LINE NUMBER	LINE NUMBER	LINE 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) ←	0-5 MONTHS 1 (SKIP TO 114) ←	0-5 MONTHS 1 (SKIP TO 114) ←
	MONTHS	OLDER 2	OLDER 2	OLDER
110	LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD FROM COLUMN 1 OF	LINE NUMBER	LINE NUMBER	LINE NUMBER
	HOUSEHOLD SCHEDULE.	(RECORD '00' IF NOT LISTED)	(RECORD '00' IF NOT LISTED)	(RECORD '00' IF NOT LISTED)
111	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2010 or later take part in anemia testing in this survey and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the anemia test?		
112	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 (SIGN) REFUSED 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)	GRANTED 1 (SIGN) REFUSED 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)	GRANTED 1 (SIGN) REFUSED 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)
113	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL 994 NOT PRESENT	G/DL 994 NOT PRESENT	G/DL 994 NOT PRESENT
114	GO BACK TO 103 IN NEXT COLUMN OF IF NO MORE CHILDREN, GO TO 201.	THIS QUESTIONNAIRE OR IN TH	HE FIRST COLUMN OF THE NEX	T PAGE;

		CHILD 4	CHILD 5	CHILD 6
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11. NAME FROM COLUMN 2.	LINE NUMBER	LINE NUMBER	LINE NUMBER
103	IF MOTHER INTERVIEWED: COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM BIRTH HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (NAME)'s date of birth?	DAY	DAY	DAY
104	CHECK 103: CHILD BORN IN 2010- 2016?	YES 1 NO	YES 1 NO	YES 1 NO
105	WEIGHT IN KILOGRAMS.	KG NOT PRESENT9994 REFUSED	KG NOT PRESENT9994 REFUSED	KG NOT PRESENT9994 REFUSED
106	HEIGHT IN CENTIMETERS.	CM NOT PRESENT9994 REFUSED	CM NOT PRESENT9994 REFUSED9995 OTHER	CM NOT PRESENT9994 REFUSED9995 OTHER
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 HEALTHWORKER NUMBER.	HEALTHWORKER NUMBER	HEALTHWORKER NUMBER	HEALTHWORKER NUMBER

		CHILD 4	CHILD 5	CHILD 6
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 11. NAME FROM COLUMN 2.	LINE NUMBER	LINE NUMBER	LINE NUMBER
109	CHECK 103: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS	0-5 MONTHS 1 (SKIP TO 114)	0-5 MONTHS 1 (SKIP TO 114)	0-5 MONTHS 1 (SKIP TO 114) ←
	MONTHS?	OLDER 2	OLDER 2	OLDER 2
110	LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD FROM COLUMN 1 OF HOUSEHOLD SCHEDULE.			
	HOUSEHOLD SCHEDULE.	(RECORD 100 IF NOT LISTED)	(RECORD '00' IF NOT LISTED)	(RECORD '00' IF NOT LISTED)
111	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2010 or later take part in anemia testing in this survey and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the anemia test?		
112	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 (SIGN) REFUSED 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)	GRANTED 1 (SIGN) REFUSED 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)	GRANTED 1 (SIGN) REFUSED 2 NOT PRESENT/OTHER . 3 (SKIP TO 114)
113	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL 994 NOT PRESENT	G/DL 994 NOT PRESENT994 REFUSED	G/DL 994 NOT PRESENT
114	GO BACK TO 103 IN NEXT COLUMN OF IF NO MORE CHILDREN, GO TO 201.	THIS QUESTIONNAIRE OR IN TH	HE FIRST COLUMN OF AN ADDIT	IONAL QUESTIONNAIRE;

201	CHECK COLUMN 9 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER, NAME, AGE, AND MARITAL STATUS FOR ALL ELIGIBLE WOMEN IN 202, 203, AND 204. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).				
		WOMAN 1	WOMAN 2	WOMAN 3	
202	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 9. NAME FROM COLUMN 2.	LINE NUMBER	LINE NUMBER	LINE NUMBER	
203	CHECK HOUSEHOLD QUESTIONNAIRE COLUMN 7 (AGE):	15-17 YEARS 1 18-49 YEARS 2	15-17 YEARS 1 18-49 YEARS 2	15-17 YEARS 1 18-49 YEARS 2	
204	CHECK HOUSEHOLD QUESTIONNAIRE COLUMN 8 (MARITAL STATUS):	CODE 4 (NEVER IN UNION) . 1 OTHER 2	CODE 4 (NEVER IN UNION) . 1 OTHER 2	CODE 4 (NEVER IN UNION) . 1 OTHER 2	
205	WEIGHT IN KILOGRAMS.	KG 99994 NOT PRESENT 99994 REFUSED 99995 OTHER 99996	KG 99994 NOT PRESENT 99994 REFUSED 99995 OTHER 99996	KG 99994 NOT PRESENT 99994 REFUSED 99995 OTHER 99996	
206	HEIGHT IN CENTIMETERS.	CM	CM	CM	
207	MEASURER: ENTER YOUR HEALTHWORKER NUMBER.	HEALTHWORKER NUMBER	HEALTHWORKER NUMBER	HEALTHWORKER NUMBER	
208	CHECK 203: AGE	15-17 YEARS 1 18-49 YEARS 2 ⊣ (SKIP TO 210) ←	15-17 YEARS 1 18-49 YEARS 2 (SKIP TO 210) ←	15-17 YEARS 1 18-49 YEARS 2 ⊣ (SKIP TO 210) ←	
209	CHECK 204: MARITAL STATUS	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 216) - 2	CODE 4 (NEVER IN UNION) . 1 (SKIP TO 216) ← OTHER	CODE 4 (NEVER IN UNION) . 1 – (SKIP TO 216) – OTHER	

## WEIGHT, HEIGHT MEASUREMENT AND HEMOGLOBIN TESTING FOR WOMEN AGE 15-49

			WOMAN 1	WOMAN 2	WOMAN 3	
		NAME FROM COLUMN 2.	NAME	NAME	NAME	
Г		А	DULT RESPONDENT C	ONSENT FOR ANEMIA	TEST	
ADULT RESPORDERT	210	ASK CONSENT FOR ANEMIA TEST.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious healt problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the governme to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide. Will you take the anemia test?			
C O N S E N T	211	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED	GRANTED	GRANTED 1 RESPONDENT REFUSED 2 (SIGN) (IF REFUSED, SKIP TO 231) NOT PRESENT/OTHER 3 (SKIP TO 231)	
	211A	CHECK 226 IN WOMAN'S QUESTIONNAIRE OR ASK: Are you pregnant?	YES	YES	YES	

## WEIGHT, HEIGHT MEASUREMENT AND HEMOGLOBIN TESTING FOR WOMEN AGE 15-49

			WOMAN 1	WOMAN 2	WOMAN 3	
ĺ		NAME FROM COLUMN 2.	NAME	NAME	NAME	
	216	RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT.	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT (RECORD '00' IF NOT LISTED)	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT (RECORD '00' IF NOT LISTED)	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT (RECORD '00' IF NOT LISTED)	
P		PARENT	AL/RESPONSIBLE AD	ULT CONSENT FOR AN	NEMIA TEST	
ARENT RESPAD	217	ASK CONSENT FOR ANEMIA TEST FROM PARENT/ADULT.	problem that usually results from poor to develop programs to prevent and tr For the anemia testing, we will need a clean and completely safe. It has neve tested for anemia immediately, and th	few drops of blood from a finger. The er er been used before and will be thrown a e result will be told to you and (NAME C t be shared with anyone other than men to decide.	This survey will assist the government quipment used to take the blood is away after each test. The blood will be IF MINOR) right away. The result will	
DULT CONSENT	218	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 - (SIGN) (IF REFUSED, SKIP TO 231) NOT PRESENT/OTHER 3 - (SKIP TO231) -	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 - (SIGN) (IF REFUSED, SKIP TO 231) NOT PRESENT/OTHER 3 - (SKIP TO 231) -	GRANTED 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED 2 (SIGN) (IF REFUSED, SKIP TO 231) NOT PRESENT/OTHER 3 (SKIP TO 231)	
		м	INOR RESPONDENT C	ONSENT FOR ANEMIA	TEST	
MINOR RESPOND	219	ASK CONSENT FOR ANEMIA TEST FROM RESPONDENT.	INOR RESPONDENT CONSENT FOR ANEMIA TEST As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after we take your blood. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF PARENT/RESPONSIBLE ADULT) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes or no. It is up to you to decide.			

E			Will you take the anemia test?		
► T CONSENT	220	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 MINOR RESPONDENT REFUSED 2 (SIGN) (IF REFUSED, SKIP TO 231) NOT PRESENT/OTHER 3 (SKIP TO 231)	GRANTED	GRANTED
	220A	CHECK 226 IN WOMAN'S QUESTIONNAIRE OR ASK: Are you pregnant?	YES 1 NO 2 DON'T KNOW 8	YES	YES 1 NO 2 DON'T KNOW 8

## WEIGHT, HEIGHT MEASUREMENT AND HEMOGLOBIN TESTING FOR WOMEN AGE 15-49

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2.	NAME	NAME	NAME
231	RECORD HEMOGLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET.	G/DL 994 REFUSED	G/DL 994 REFUSED	G/DL 994 NOT PRESENT 994 REFUSED
233	GO BACK TO 202 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, END INTERVIEW.			

## HEALTHWORKER'S OBSERVATIONS

#### TO BE FILLED IN AFTER COMPLETING BIOMARKERS

SUPERVISOR'S OBSERVATIONS
EDITOR'S OBSERVATIONS

#### DEMOGRAPHIC AND HEALTH SURVEYS WOMAN'S QUESTIONNAIRE

## REPUBLIC OF ARMENIA

NATIONAL STATISTICAL SERVICE AND MINISTRY OF HEALTH

IDENTIFICATION					
PLACE NAME					
NAME OF HOUSEHOLD	) HEAD				
CLUSTER NUMBER					
HOUSEHOLD NUMBER					
NAME AND LINE NUMB	ER OF WOMAN				
WOMAN SELECTED FC	OR DV MODULE? (1=YE	S, 2=NO)			
		INTERVIEWER	₹ VISITS		
	1	2	3	FINAL VISIT	
DATE				DAY MONTH	
INTERVIEWER'S NAME RESULT*				YEAR INT. NO. RESULT*	
NEXT VISIT: DATE TIME				TOTAL NUMBER OF VISITS	
*RESULT CODES: 1 COMPLETED 4 REFUSED 2 NOT AT HOME 5 PARTLY COMPLETED 7 OTHER 3 POSTPONED 6 INCAPACITATED SPECIFY					
LANGUAGE OF QUESTIONNAIRE**	<b>D O</b> LANGUA		NATIVE LANGUAGE OF RESPONDENT**	TRANSLATOR USED (YES = 1, NO = 2)	
LANGUAGE OF QUESTIONNAIRE** ENGLISH **LANGUAGE CODES: 00 ENGLISH 02 RUSSIAN 01 ARMENIAN 03 OTHER					
SUPERV	VISOR		D EDITOR	OFFICE EDITOR KEYED BY	

## INTRODUCTION AND CONSENT

Hello. My name is	. I am working with National Statistical Service. We are conducting a						
survey about health and other topics all over Armenia. The information	tion we collect will help the government to plan health services. Your						
household was selected for the survey. The questions usually take about 30 to 60 minutes. All of the answers you give will be confidential and							
	am. You don't have to be in the survey, but we hope you will agree to						
, , ,	ny 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.	if quotient you don't want to anoner, just lot no know and i will go on to						
the next question of you can stop the interview at any time.							
In case you need more information about the survey, you may cont	act the person listed on the card that has already been given to your						
household.	act the person listed on the card that has alleady been given to your						
nousenoiu.							
Do you have any questions?							
Do you have any questions?							
May I begin the interview now?							
SIGNATURE OF INTERVIEWER	DATE						
RESPONDENT AGREES	RESPONDENT DOES NOT AGREE						
TO BE INTERVIEWED 1	TO BE INTERVIEWED 2 $\longrightarrow$ END						
Y							
SECTION 1. RESP	ONDENT'S BACKGROUND						

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS	
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	]→ 105
103	Just before you moved here, did you live in a city, in a town, or in a rural area?	CITY         1           TOWN         2           RURAL AREA         3	
104	Before you moved here, which Marz did you live in?	YEREVAN       01         ARAGATSOTN       02         ARARAT       03         ARMAVIR       04         GEGHARKUNIK       05         LORI       06         KOTAYK       07         SHIRAK       08         SYUNIK       09         VAYOTS DZOR       10         TAVUSH       11         OUTSIDE OF ARMENIA       96	
105	In what month and year were you born?	MONTH	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS	
107	Have you ever attended school?	YES 1 NO 2	→ 113
108	What is the highest level of school you attended: primary, basic, secondary, secondary-special or higher?	PRIMARY-BASIC-SECONDARY (1-12)	

## SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
109	What is the highest [YEAR/CLASS/COURSE] you completed at that level?	YEAR/CLASS/COURSE	
	IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.		
109A	CHECK 108 AND 109:		
	CLASS 10 OR 11 OR SECONDARY-SPECIAL CLASS <b>10</b> OR <b>11</b> RECORDED IN 109 OR CODE <b>'2'</b> SECONDARY-SPECIAL LEVEL CIRCLED IN 108:	OTHER CLASS <b>1-9</b> RECORDED IN 109 OR CODE " <b>3</b> " HIGHER LEVEL CIRCLED IN 108:	→ 113
109B	Did you receive an attestat for completing secondary school?	YES 1 NO 2	
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 WEEK1LESS THAN ONCE A WEEK2NOT AT ALL3	
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 WEEK1LESS THAN ONCE A WEEK2NOT AT ALL3	
115	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK1LESS THAN ONCE A WEEK2NOT AT ALL3	
116	Do you own a mobile telephone?	YES 1 NO 2	<del>→</del> 118
117	Do you use your mobile 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	<del>→</del> 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	<del>→</del> 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 DAY1AT LEAST ONCE A WEEK2LESS THAN ONCE A WEEK3NOT AT ALL4	
121A	In the last 12 months, have you used the internet to get information on any health issues?	YES 1 NO 2	
124	In the last 12 months, how many times have you been away from home for one or more nights?	NUMBER OF TIMES         00	→ 125A
125	In the last 12 months, have you been away from home for more than one month at a time?	YES	
125A	In the past 3 years, have you worked abroad for three or more months at a time?	YES 1 NO 2	

#### 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	<ul><li>a) How many sons live with you?</li><li>b) And how many daughters live with you?</li><li>IF NONE, RECORD '00'.</li></ul>	a) SONS 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	<del>→</del> 206		
205	<ul> <li>a) How many sons are alive but do not live with you?</li> <li>b) And how many daughters are alive but do not live with you?</li> <li>IF NONE, RECORD '00'.</li> </ul>	a) SONS 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	<ul><li>a) How many boys have died?</li><li>b) And how many girls have died?</li><li>IF NONE, RECORD '00'.</li></ul>	a) BOYS DEAD			
207C	Were there any other children who were born alive, but who died within a few minutes, hours, or days?	YES 1 NO 2	<del>→</del> 208		
207D	CORRECT 207 AND THEN CONTINUE WITH QUESTION	208. RECORD TWINS AS SEPARATE LIVE BIRTHS.			
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL LIVE BIRTHS			
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL live births during your life. Is that correct? YES NO PROBE AND CORRECT 201-208 AS NECESSARY.				

## SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP			
209A	<ul> <li>Women sometimes have pregnancies which do not result in a live born child. That is, a pregnancy can be ended by a stillbirth, a miscarriage, or an induced abortion. I will now ask you about each of them separately.</li> <li>How many stillbirths have you had, including an early fetal death (5-6 months pregnancy) or a late fetal death (7 or more months pregnancy)?</li> </ul>	TOTAL				
	IF NONE, RECORD '00'.	STILLBIRTHS				
209B	How many miscarriages have you had, incuding due to an ectopic pregnancy? IF NONE, RECORD '00'.	TOTAL MISCARRIAGES				
209C	In total how many the induced abortions have you had conducted with a help of a medical specialist? IF NONE, RECORD '00'.	ABORTIONS BY A SPECIALIST				
209D	Have you ever used misoprostol or cytotec, mifepristone or RU-486 or other medicines or herbs with abortive effects for menstrual regulation or medication abortion to terminate the unwanted pregnancy?	YES 1 NO 2	→ 209F			
209E	Not including the (NUMBER REPORTED IN 209C) abortions you have already told me about, how many abortions have you had by using misoprostol, cytotec, mifespristone, RU-486, or other medicines or herbs conducted at home or somewhere else, either by yourself or with the help of a medical specialist? IF NONE, RECORD '00'.	ABORTIONS BY MISOPROSTOL/ CYTOTEC/HERBS				
209F	SUM ANSWERS TO 209C, AND 209E, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL ABORTIONS				
209G	CHECK 209F: Just to make sure that I have this right: you have had in TOTAL abortions during your life including those induced by cytotec or other medicines. Is that correct? YES PROBE AND CORRECT 209C-F AS NECESSARY.					
209H	SUM ANSWERS TO 208, 209A, 209B AND 209F, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL LIVE BIRTHS, STILLBIRTHS, MISCARRIAGES AND ABORTIONS				
210	СНЕСК 209Н:					
	Just to make sure that I have this right: you have had in TO abortions during your life. Is that correct?					
	ONE OR MORE ON PREGNANCIES					

SECTION 2. REPRODUCTION	
SECTION 2. REP	

						,
	221D IF ABORTION:	What was the main reason you decided to have this abortion? 1 = HER HEALTH DEFECTS 3 = SEX 3 = SEX 3 = SEX 3 = SEX 3 = SEX 5 = UNWAN- TED CHLD 6 = UNMARRIED 7 = OTHER 7 = OTHER 7 = OTHER		(NEXT PREG-		
information. G WITH THE	221C IF DEAD:	Does (NAME) have a death certificate? IF NO, PROBE: Has (NAME)'s death ever been registered in ZAGS? 1 = HAS CERTI- FICATE 2 = REGISTE- RED 3 = NEITHER 8 = DONT KNOW	NANCY)	(NEXT PREG- NANCY)	NANCY)	NANCY)
e the following IRE, STARTIN	221B IF DEAD:	Did (NAME) die at die at home, in a health mere else?	HOME 1 FACILIT'2 ELSE 3	HOME 1 FACILIT'2 ELSE 3	HOME 1 FACILIT'2 ELSE 3	HOME 1 FACILIT'2 ELSE 3
Now I would like to talk about each of your pregnancies, including those which ended in a live birth, a stillbirth, a miscarriage, and an induced abortion. Starting with the first pregnancy, please tell me the following information. RECORD ALL THE PREGNANCIES IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE ROWS. IF THERE ARE MORE THAN 15 PREGNANCIES, USE AN ADDITIONAL QUESTIONNAIRE, STARTING WITH THE	221A 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 1 MONTH; MONTHS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN 1 MONTH; MONTHS IF	DAYS 1 DAYS MONTHS 2 VEARS 3 D	DAYS 1 MONTHS 2 YEARS 3	DAYS 1 MONTHS 2 YEARS 3	DAYS 1 MONTHS 2 YEARS 3
starting with the first CIES, USE AN ADE	221 IF ALIVE:	RECORD HOUSEHOLD LINE NUMBER OF CHILD. RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD.	HOUSEHOLD LINE NUMBER	HOUSEHOLD LINE NUMBER	HOUSEHOLD LINE NUMBER (NEXT PREG- NANCY)	HOUSEHOLD LINE NUMBER
l abortion. S PREGNAN	220 IF ALIVE:	Is (NAME) with you?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
and an inducec DRE THAN 15	219 IF ALIVE:	How old was (NAME) at (NAME)'s last birthday? Birthday? AGE IN COMP- LETED YEARS.	AGE IN YEARS	AGE IN YEARS	AGE IN YEARS	AGE IN YEARS
iscarriage, RE ARE MC	218	ls still alive?	YES 1 NO 2 (SKIP 221A)	YES 1 NO 2 (SKIP TO 221A)	YES 1 NO 2 (SKIP TO 221A)	YES 1 NO 2 (SKIP TO 221A)
illbirth, a m /S. IF THEI	217	Is ) a boy or a giri?	BOY 1 GIRL 2	BOY 1 GIRL 2	BOY 1 GIRL 2	BOY 1 GIRL 2
a live birth, a st EPARATE ROW	216	What name was given to this child? NAME. NAME. BABY 71; 'BABY 2', ETC. IF NO NAME WAS GIVEN TO A CHILD				
ig those which ended in AND TRIPLETS ON SE	215A	CHECK 212: RESPONSE RESPONSE	LIVE BIRTH 1 STILLBIRTH2 MISCARRIAGE 3 (NEXT PREGN.) ABORTION 4 (GO TO 221D)	LIVE BIRTH1 STILLBIRTH2 MISCARRIAGE 3 (NEXT PREGN.) ABORTION 4 (GO TO 221D	LIVE BIRTH 1 STILLBIRTH 2 MISCARRIAGE 3 (NEXT PREGN.) ABORTION 4 (GO TO 221D	LIVE BIRTH1 STILLBIRTH2 MISCARRIAGE 3 (INEXT PREGN.) ABORTION4 (GO TO 221D¥
gnancies, includir RECORD TWINS	215	Were there any other pregnancies that ended between this one and the pregnancy talking about, including any child who may have died after birth?		YES 1 (ADD 1 PREG- NANCY) NO 2 (NEXT 1 PREG.)	YES 1 (ADD 1 PREG- NANCY) NO 2 (NEXT 1 PREG.)	YES 1 (ADD 1 PREG- NANCY) NO 2 (NEXT 1 PREG.)
bout each of your pre GNANCIES IN 212. F	214	On what day, month, and year did this pregnancy end or child was born?	DAY DAY MONTH	DAY DAY MONTH	DAY DAY MONTH	DAY DAY MONTH
te to talk al THE PRE	213	Was this a single tiple preg- nancy?	SING 1 MUL <sup>-</sup> 2	SING 1 MUL <sup>-</sup> 2	SING 1 MUL <sup>-</sup> 2	SING 1 MUL <sup>-</sup> 2
211 Now I would lik RECORD ALL	212	Did your (first/ next/etc.) pregnancy end in a live birth, a stilbirth, a miscarriage, or an abortion (including those induced by cytotec or similar abortive medication)? PREGNANCY HISTORY NUMBER.	01 LIVE BIRTH1 STILLBIRTH 2 MISCARRIAGE 3 ABORTION 4 (GO TO 214)	02 LIVE BIRTH 1 STILLBIRTH 2 MISCARRIAGE 3 ABORTION 4 (GO TO 214)	03 LIVE BIRTH1 STILLBIRTH 2 MISCARRIAGE 3 ABORTION 4 (GO TO 214)	04 LIVE BIRTH1 STILLBIRTH2 MISCARRIAGE 3 ABORTION4 – (GO TO 214) ←

M-6

221D IF ABORTION:	What was the main reason you decided to have this abortion? 1 = HER HEALTH 2 =BIRTH DEFECTS 3 = SEX 3 = SEX 3 = SEX 3 = SEX 5 = UNWAN- 4 = POVERTY 5 = UNWARRIED 6 = UNWARRIED 6 = UNWARRIED 7 = OTHER 8 = DON'T REMEMBER	(NEXT PREG-	(NEXT PREG-	(NEXT PREG-	(NEXT PREG-
221C IF DEAD:	Does (NAME) have a death certificate? I FNO, FROBE: Has (NAME)'s death ever registered in ZAGS? 1 = HAS CERTI- FICATE 2 = REGISTE- 8 = DONT KNOW		(NEXT PREG- NANCY)		(NEXT PREG- NANCY)
221B IF DEAD:	Did (NAME) die at fie at home, in a health where else?	HOME 1 FACILIT <sup>.</sup> 2 ELSE 3	HOME 1 FACILIT <sup>2</sup> ELSE 3	HOME 1 FACILIT <sup>2</sup> ELSE 3	HOME 1 FACILIT <sup>2</sup> ELSE 3
221A 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 1F MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	DAYS 1	DAYS 1	DAYS 1	DAYS 1
221 IF ALIVE:	RECORD HOUSEHOLD LINE NUMBER OF CHILD. RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD.	HOUSEHOLD LINE NUMBER (NEXT PREG- NANCY)	HOUSEHOLD LINE NUMBER	HOUSEHOLD LINE NUMBER (NEXT PREG- NANCY)	HOUSEHOLD LINE NUMBER
220 IF ALIVE:	ls (NAME) living vith you?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
219 IF ALIVE:	How old was (NAME)'s last birthday? birthday? birthday? COMP- LETED YEARS.	AGE IN YEARS	YEARS	YEARS	YEARS
218	Is (NAME) still alive?	YES 1 NO 2 (SKIP TO 221A)	YES 1 NO 2 (SKIP TO 221A)	YES 1 NO 2 (SKIP TO 221A)	YES 1 NO 2 (SKIP TO 221A)
217	Is (NAME ) a boy or a girl?	BOY 1 GIRL 2	BOY 1 GIRL 2	BOY 1 GIRL 2	BOY 1 GIRL 2
216	What name was given to this child? NAME. BABY 1'; 'BABY 2', 'BABY 2', 'ETCI. IF NO NAME WAS GIVEN TO A CHILD				
215A	CHECK 212: RECORD SAME RESPONSE	LIVE BIRTH 1 STILLBIRTH 2 MISCARRIAGE 3 (NEXT PREGN.) ABORTION 4 (GO TO 221D)	LIVE BIRTH 1 STILLBIRTH 2 MISCARRIAGE 3 (NEXT PREGN.) ABORTION 4 (GO TO 221D)	LIVE BIRTH 1 STILLBIRTH 2 MISCARRIAGE 3 (NEXT PREGN.) ABORTION 4 (GO TO 221D)	LIVE BIRTH 1 STILLBIRTH 2 MISCARRIAGE 3 (NEXT PREGN.)
215	Were there any other pregnancies that ended between this one and the pregnancy we were just talking any child who may have died after birth?	YES 1 (ADD 1 PREG- NANCY) NO 2 (NEXT 1 PREG.)	YES 1 (ADD 1 PREG- NANCY) NO 2 (NEXT 1 PREG.)	YES 1 (ADD 1 PREG- NANCY) NO 2 (NEXT 1 PREG.)	YES 1 (ADD 1 PREG- NANCY) NO 2 (NEXT 1 PREG.)
214	On what day, month, and year did this pregnancy end or child was born?	DAY DAY MONTH	DAY DAY MONTH	DAY DAY MONTH	DAY DAY MONTH
213	Was this a single or mul- preg- nancy?	SING 1 MUL <sup>-</sup> 2	SING 1 MUL <sup>-</sup> 2	SING 1 MUL <sup>-</sup> 2	SING 1 MUL <sup>-</sup> 2
212	Did your (first/ next/etc.) pregnancy end in a live birth, a stillbirth, a miscarriage, or an abortion (including those induced by cytotec or similar abortive medication)? PREGNANCY HISTORY NUMBER.	05 LIVE BIRTH1 STILLBIRTH 2 MISCARRIAGE 3 ABORTION 4 (GO TO 214)	06 LIVE BIRTH1 STILLBIRTH2 MISCARRIAGE 3 ABORTION4 (GO TO 214)	07 LIVE BIRTH1 STILLBIRTH 2 MISCARRIAGE 3 ABORTION 4 (GO TO 214)	08 LIVE BIRTH1 STILLBIRTH 2 MISCARRIAGE 3 ABORTION 4 (GO TO 214)

221D IF ABORTION:	What was the main reason you decided to have this abortion? 1 = HER HEALTH 2 =BIRTH DEFECTS 3 = SEX 3 = SEX 3 = SEX 3 = SEX 5 = UNWAN- 4 =POVERTY 5 = UNWARRIED 6=UNMARRIED 7 = OTHER 8=DON'T REMEMBER	(NEXT PREG-	(NEXT PREG-	(NEXT PREG-	(NEXT PREG-
221C IF DEAD:	Does (NAME) have a death certificate? I FNO, FROBE: Has (NAME)'s death ever tegistered in ZAGS? 1 = HAS CERTI- FICATE 2 = REGISTE- 3 = NEITHER 8 = DONT KNOW	(NEXT PREG- NANCY)	(NEXT PREG- NANCY)		(NEXT PREG- NANCY)
221B IF DEAD:	Did (NAME) die at die at hoath facility or where else?	HOME 1 FACILIT <sup>2</sup> ELSE 3	HOME 1 FACILIT <sup>2</sup> ELSE 3	HOME 1 FACILIT <sup>.</sup> 2 ELSE 3	HOME 1 FACILIT'2 ELSE 3
221A 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 1F MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	DAYS 1	DAYS 1	DAYS 1	DAYS 1
221 IF ALIVE:	RECORD HOUSEHOLD LINE NUMBER OF CAILD. FIC CHILD. FIC CHILD NOT LISTED IN HOUSEHOLD.	HOUSEHOLD LINE NUMBER (NEXT PREG- NANCY)	HOUSEHOLD LINE NUMBER	HOUSEHOLD LINE NUMBER (NEXT PREG- NANCY)	HOUSEHOLD LINE NUMBER
220 IF ALIVE:	ls (NAME) living you? you?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
219 IF ALIVE:	How old was (NAME)'s last birthday? birthday? birthday? COMP- LETED YEARS.	AGE IN YEARS	YEARS	YEARS	YEARS
218	Is (NAME) still alive?	YES 1 NO 2 (SKIP TO 221A)	YES 1 NO 2 (SKIP TO 221A)	YES 1 NO 2 (SKIP TO 221A)	YES 1 NO 2 (SKIP TO 221A)
217	Is (NAME ) a boy girl?	BOY 1 GIRL 2	BOY 1 GIRL 2	BOY 1 GIRL 2	BOY 1 GIRL 2
216	What name was given to this child? NAME. NAME. BABY 7: 'BABY 2', 'BABY 2', 'BABY 2', 'BABY 2', 'BABY 2', 'BABY 2', 'BABY 2', 'BABY 2', 'BABY 2', 'AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA				
215A	CHECK 212: RECORD SAME RESPONSE	LIVE BIRTH 1 STILLBIRTH 2 MISCARRIAGE 3 (NEXT PREGN.) ABORTION 4 (GO TO 221D)	LIVE BIRTH 1 STILLBIRTH 2 MISCARRIAGE 2 MISCARRIAGE 3 (NEXT PREGN.)	LIVE BIRTH 1 STILLBIRTH 2 MISCARRIAGE 3 (NEXT PREGN.) ABORTION 4 (GO TO 221D)	LIVE BIRTH 1 STILLBIRTH 2 MISCARRIAGE 3 (NEXT PREGN.)
215	Were there any other pregnancies that ended between this one and the pregnancy we were just talking any child who may have died after birth?	YES 1 (ADD 1 PREG. NANCY) NO 2 (NEXT 1 PREG.)	YES 1 (ADD 1 PREG- NANCY) NO 2 (NEXT 1 PREG.)	YES 1 (ADD 1 PREG. NANCY) NO 2 (NEXT 1 PREG.)	YES 1 (ADD 1 PREG- NANCY) NO 2 (NEXT 1 PREG.)
214	On what day, month, and year did this pregnancy end or child was born?	DAY DAY MONTH V	DAY DAY MONTH V	DAY DAY MONTH V	DAY DAY MONTH
213	Was this a single or mul- preg- nancy?	SING 1 MUL <sup>-</sup> 2	SING 1 MUL <sup>-</sup> 2	SING 1 MUL <sup>-</sup> 2	SING 1 MUL <sup>-</sup> 2
212	Did your (first/ next/etc.) pregnancy end in a live birth, a stillbirth, a miscarriage, or an abortion (including those induced by cytotec or similar abortive medication)? PRE GNANCY HISTORY NUMBER.	09 LIVE BIRTH 1 STILLBIRTH 2 MISCARRIAGE 3 ABORTION 4 (GO TO 214) ←	10 LIVE BIRTH1 STILLBIRTH2 MISCARRIAGE 3 ABORTION4 (GO TO 214)	11 LIVE BIRTH1 STILLBIRTH2 MISCARRIAGE3 ABORTION4 (GO TO 214)	12 LIVE BIRTH1 STILLBIRTH 2 MISCARRIAGE3 ABORTION 4 (GO TO 214)

221D IF ABORTION:	What was the main reason you decided to have this abortion? 1 = HE R HEALTH 2 =BIRTH 2 =BIRTH 2 =BIRTH 2 =BIRTH 2 =BIRTH 2 =BIRTH 2 =BIRTH 2 = BIRTH 2 = BIR	(NEXT PREG-		
221C IF DEAD:	Does (NAME) have a death re rtificate? refificate? refificate? Has (NAME)'s death ever been registered in ZAGS? 1 = HAS CERTI- 1 = HAS CERTI- FICATE 2 = REGISTE- RED 3 = NOT KNOW	(NEXT PREG- NANCY)		NEXT NANCY)
221B IF DEAD:	Did (NAME) die at home, in a health facility or where else?	HOME 1 FACILIT'2 ELSE 3	HOME 1 FACILIT'2 ELSE 3	HOME 1 FACILIT'2 ELSE 3
221A 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 1 MONTHS IF LESS THAN 1 MONTH MONTHS IF LESS THAN 1 MONTH SIGN 2 CUS 2 MONTH SIGN 2 MONTH SIGN 2 MONTHS IF	DAYS 1	DAYS 1 DAYS 1 DAYS 1 DAYS 1 DAYS 2 DAYS 2 DAYS 3 DAYS 2 DA	DAYS 1 DAYS 1 DAYS 1 DAYS 1 DAYS 2 DAYS 3 DAYS 3 DAYS 3 DAYS 2 DAYS 3 DA
221 IF ALIVE:	RECORD HOUSEHOLD LINE NUMBER OF CHILD. RE CORLO'OO' IF CHILD NOT LISTED IN HOUSEHOLD.			
220 IF ALIVE:	Is (NAME) living you? you?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
219 IF ALIVE:	How old was (NAME) at (NAME)'s last birthday? birthday? AGE IN COMP- LETED YEARS.	AGE IN YEARS	AGE IN YEARS	AGE IN YEARS
218	ls (NAME) still alive?	YES 1 NO 2 (SKIP TO 221A)	YES 1 NO 2 (SKIP TO 221A)	YES 1 NO 2 (SKIP TO 221A)
217	Is (NAME) a boy or a girl?	GIRL 2	BOY 1 GIRL 2	BOY 1 GIRL 2
216	What name was given to this child? NAME. NAME. 'BABY 2', 'BABY 2',			
215A	CHECK 212: RECORD SAME RESPONSE	LIVE BIRTH1 STILLBIRTH2 MISCARRIAGE 3 (NEXT PREGN.)	LIVE BIRTH1 STILLBIRTH2 MISCARRIAGE 3 (NEXT PREGN.) ABORTION4 (GO TO 221D+	LIVE BIRTH1 STILLBIRTH2 MISCARRIAGE 3 (NEXT PREGN.) ABORTION4 GO TO 221D
215	Were there any other pregnancies that ended between this one and the pregnancy we were just talking any child who may have died after birth?	YES 1 (ADD J PREG. NANCY) NO 2 (NEXT J PREG.)	YES 1 (ADD J PREG- NANCY) NO 2 (NEXT J PREG.)	YES 1 (ADD 1 PREG- NANCY) NO 2 (NEXT 1 PREG.)
214	On what day, month, and year did this pregnancy end or child was born?	DAY DAY MONTH	DAY MONTH	DAY DAY MONTH
213	Was this a single or mul- tiple preg- nancy?	SING 1 MUL <sup>-</sup> 2	SING 1 MUL <sup>-</sup> 2	SING 1 MUL <sup>-</sup> 2
212	Did your (first/ next/tetc.) pregnancy end in a live birth, a stillbirth, a miscarriage, or an abortion (including those induced by cytotec or similar abortive medication)? PREGNANCY HISTORY NUMBER.	13 LIVE BIRTH1 STILLBIRTH2 MISCARRIAGE 3 ABORTION4 (GO TO 214)	14 LIVE BIRTH 1 STILLBIRTH 2 MISCARRIAGE 3 ABORTION 4 (GO TO 214)	15 LIVE BIRTH1 STILLBIRTH2 MISCARRIAGE3 ABORTION4 (GO TO 214)

# SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
222	Have you had any pregnancies that ended since (NAME OF LAST LIVE BIRTH)/ the stillbirth/ the miscarriage/ (R the abortion?	YES 1 ECORD PREGNANCY(S)THAT ENDED IN TABLE) - 2	
223	RECORD AND COMPARE NUMBER OF PREGNANCIES RESPONSES	RECORDED IN PREGNANCY HISTORY WITH EARLIER	
	COMPARE 210 WITH NUMBER OF PREGNANCIES IN PF	REGNANCY HISTORY	
	NUMBERS ARE SAME		
		(PROBE AND RECONCILE)	
	↓ COMPARE 208 WITH NUMBER OF LIVE BIRTHS IN PREGNANCY HISTORY		
	NUMBERS		
		(PROBE AND RECONCILE)	
	↓ COMPARE 209A WITH NUMBER OF STILLBIRTHS IN PREGNANCY HISTORY		
	NUMBERS ARE SAME	NUMBERS ARE DIFFERENT	
		(PROBE AND RECONCILE)	
	¥ COMPARE 209B WITH NUMBER OF MISCARRIAGES IN PREGNANCY HISTORY		
	NUMBERS		
		(PROBE AND RECONCILE)	
	COMPARE 209F WITH NUMBER OF ABORTIONS IN PRE	EGNANCY HISTORY	
	NUMBERS		
	ARE SAME		
	¥	(PROBE AND RECONCILE)	
224	CHECK 212 AND 214: ENTER THE NUMBER OF LIVE BIRTHS IN 2010-2016	NUMBER OF LIVE BIRTHS IN 2010-2016	
		NONE	
	CHECK 212 AND 214:		
225	FOR EACH BIRTH IN 2010-2016, ENTER 'B' IN MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF COMPLETED MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P'S MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.) FOR EACH PREGNANCY IN 2010-2016 OR LATER THAT DID NOT END IN A LIVE BIRTH (STILLBIRTH, MISCARRIAGE OR ABORTION), ENTER 'T' IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY ENDED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS OF PREGNANCY.		
	NOTE: THE NUMBER OF 'P'S MUST BE ONE L PREGNANCY LASTED.	ESS THAN THE NUMBER OF MONTHS THAT THE	

## SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
226	Are you pregnant now?	YES	]→ 239
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. 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	→239
229	CHECK 208: TOTAL NUMBER OF LIVE BIRTHS ONE OR MORE a) Did you want to have a baby later on or did you not want any more children?	LATER	
239	When did your last menstrual period start? (DATE, IF GIVEN)	DAYS AGO    1      WEEKS AGO    2      MONTHS 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	]→ 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	
242	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES	

## SECTION 3. CONTRACEPTION

301	Now I would like to talk about contraception - the various ways or method Have you ever heard of (METHOD)?	Is that a couple can use to delay or avoid a pregnancy.
01	Female Sterilization. PROBE: Women can have an operation to avoid having any more children.	YES
02	Male Sterilization. PROBE: Men can have an operation to avoid having any more children.	YES
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
04	Injectables. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES
05	Implants. 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
06	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES
07	Condom. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES
09	Emergency Contraception. PROBE: As an emergency measure, within three to five days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES
11	Lactational Amenorrhea Method (LAM). PROBE: Up to six months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night.	YES
12	Rhythm or Calendar Method. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES
13	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES, MODERN METHOD
		(SPECIFY) YES, TRADITIONAL METHOD
		(SPECIFY) 2
		NO

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	<del>→</del> 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 STERILIZATION       A         MALE STERILIZATION       B         IUD       C         INJECTABLES       D         IMPLANTS       E         PILL       F         CONDOM       G         EMERGENCY CONTRACEPTION       I         LACTATIONAL AMENORRHEA METHOE       K         RHYTHM METHOD       L         WITHDRAWAL       M         OTHER MODERN METHOD       X         OTHER TRADITIONAL METHOD       Y	]→ 307 → 306A ]→ 309
306A	The last time you obtained the IUD was it free of charge or did you pay for the IUD?	FREE         1           PAID         2	]→ 309
307	In what facility did the sterilization take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. (NAME OF PLACE)	PUBLIC SECTOR         GOVERNMENT HOSPITAL	
308	In what month and year was the sterilization performed?	MONTH	]→ 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	
310	YEAR AT START O	ANCY TERMINATION AFTER MONTH AND YEAR OF YES 3 OR 309, PROBE AND RECORD MONTH AND F CONTINUOUS USE OF CURRENT METHOD AST BIRTH OR PREGNANCY TERMINATION).	

311	CHECK 308 AND 309:	_	
	YEAR IS 2010-2016	YEAR IS 2009 OR EARLIER	
	ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING.	C ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2010.	
	THEN CONTINUE	THEN -	
		(SKIP TO 324) <del>&lt;</del>	
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.		
	USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2010. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS.		
	IN COLUMN 1, ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH.		
	<ul> <li>ILLUSTRATIVE QUESTIONS:         <ul> <li>When was the last time you used a method? Which method was that?</li> <li>When did you start using that method? How long after the birth of (NAME)?</li> <li>How long did you use the method then?</li> </ul> </li> <li>IN COLUMN 2, ENTER CODES FOR DISCONTINUATION NEXT TO THE LAST MONTH OF USE. NUMBER OF CODES IN COLUMN 2 MUST BE SAME AS NUMBER OF INTERRUPTIONS OF METHOD USE IN COLUMN 1.</li> <li>ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT.</li> <li>ILLUSTRATIVE QUESTIONS:         <ul> <li>Why did you stop using the (METHOD)? Did you become pregnant while using (METHOD), or did you stop to get pregnant, or did you stop for some other reason?</li> <li>IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK: How many months did it take you to get pregnant after you stopped using (METHOD)? AND ENTER '0' IN EACH SUCH MONTH IN COLUMN 1.</li> </ul> </li> </ul>		

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		→ 315
314	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES 1 NO 2	<b>]→</b> 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 CIRCLED00FEMALE STERILIZATION01MALE STERILIZATION02IUD03INJECTABLES04IMPLANTS05PILL06CONDOM07EMERGENCY CONTRACEPTION09LACTATIONAL AMENORRHEA METHOD11RHYTHM/CALENDAR METHOD12WITHDRAWAL13OTHER MODERN METHOD95OTHER TRADITIONAL METHOD96	$\rightarrow 326$ $\rightarrow 319$ $\rightarrow 329$ $\rightarrow 323$
316	You first started using (CURRENT METHOD) in (DATE FROM 308 OR 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, WRITE THE NAME OF THE PLACE.	PUBLIC SECTOR       11         GOVERNMENT HOSPITAL       11         MATERNITY HOME       12         DIAGNOSTIC CENTER       13         WOMEN'S CONSULTATION       14         POLYCLINIC       15         AMBULATORY,FAMILY DOCTOR OFFICE       16         FAP       17         EMERGENCY SERVICES       18         OTHER PUBLIC SECTOR       19         (SPECIFY)	
	(NAME OF PLACE)	PRIVATE MEDICAL SECTOR         PRIVATE HOSPITAL/CLINIC       21         MATERNITY HOME       22         DIAGNOSTIC CENTER       23         WOMEN'S CONSULTATION       24         POLYCLINIC       25         FAMILY DOCTORS OFFICE       26         FAP       27         PHARMACY       28         EMERGENCY SERVICES       29         OTHER PRIVATE MEDICAL SECTOR       30         (SPECIFY)         OTHER SOURCE         SHOP       41         CHURCH       42         FRIEND/RELATIVE       43         OTHER       96	
317	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	IUD03INJECTABLES04IMPLANTS05PILL06CONDOM07EMERGENCY CONTRACEPTION09OTHER MODERN METHOD95OTHER TRADITIONAL METHOD96	$\rightarrow 323$ $\rightarrow 322$ $\rightarrow 323$

#### 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 health or family planning 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' OTHER a) At that time, were you told about other methods of contraception that you could use? b) When you obtained (CURRENT METHOD FROM 315) from (SOURCE OF METHOD FROM 307 OR 316), were you told about other methods of contraception that you could use?	YES 1 NO 2	→ 324
323	Were you ever told by a health or family planning worker about other methods of contraception 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 STERILIZATION01MALE STERILIZATION02IUD03INJECTABLES04IMPLANTS05PILL06CONDOM07EMERGENCY CONTRACEPTION09LACTATIONAL AMENORRHEA METHOD11RHYTHM/CALENDAR METHOD12WITHDRAWAL13OTHER MODERN METHOD95OTHER TRADITIONAL METHOD96	]→ 329 ]→ 329 ]→ 329 ]→ 329

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, WRITE THE NAME OF THE PLACE.	PUBLIC SECTOR       11         GOVERNMENT HOSPITAL       11         MATERNITY HOME       12         DIAGNOSTIC CENTER       13         WOMEN'S CONSULTATION       14         POLYCLINIC       15         AMBULATORY, FAMILY DOCTOR OFFICE       16         FAP       17         EMERGENCY SERVICES       18         OTHER PUBLIC SECTOR       19         (SPECIFY)	
	(NAME OF PLACE)	PRIVATE MEDICAL SECTOR         PRIVATE HOSPITAL/CLINIC       21         MATERNITY HOME       22         DIAGNOSTIC CENTER       23         WOMEN'S CONSULTATION       24         POLYCLINIC       25         FAMILY DOCTORS OFFICE       26         FAP       27         PHARMACY       28         EMERGENCY SERVICES       29         OTHER PRIVATE MEDICAL SECTOR       30         (SPECIFY)         OTHER SOURCE         SHOP       41         CHURCH       42         FRIEND/RELATIVE       43	→ 329
		OTHER96 (SPECIFY)	ľ
326	Do you know of a place where you can obtain a method of contraception?	YES 1 NO 2	
329	CHECK 202: LIVING CHILDREN YES NOP a) In the last 12 months, have you visited a health facility for care for yourself or your children?	YES 1 NO 2	→ 330A
330	Did any staff member at the health facility speak to you about contraceptive methods?	YES 1 NO 2	
330A	Do you know of a place where you can obtain a method of contraception free of charge?	YES 1 NO 2	

401	CHECK 224:		
	ONE OR MORE LIVE BIRTHS IN 2010-2016		→ 648
402	CHECK 214. RECORD THE PREGNANCY H EACH LIVE BIRTH IN 2010-2016. ASK THE IF THERE ARE MORE THAN 2 BIRTHS, US	QUESTIONS ABOUT ALL OF THESE BIRTH	IS. BEGIN WITH THE LAST BIRTH.
	Now I would like to ask some questions abou	t your children born in the last five years. (We	e will talk about each separately.)
403	PREGNANCY HISTORY NUMBER FROM 212 IN PREGNANCY HISTORY.	LAST LIVE BIRTH PREGNANCY HISTORY NUMBER	NEXT-TO-LAST LIVE BIRTH PREGNANCY HISTORY NUMBER
404	FROM 216 AND 218:	NAME	NAME
405	When you got pregnant with (NAME), did you want to get pregnant at that time?	YES 1 (SKIP TO 408)	YES 1 (SKIP TO 426) ←
	you want to get prognant at that time :	NO 2	NO 2
406	CHECK 208:		
	ONLY MORE THAN ONE ONE BIRTH		
	a) Did you want to have a baby later on, or did you not want any children? 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) <del>&lt;</del>
407	How much longer did you want to wait?	MONTHS 1	MONTHS 1
		YEARS 2	YEARS 2
		DON'T KNOW	DON'T KNOW998
408	Did you see anyone for antenatal care for this pregnancy?	YES	
409	Whom did you see?	HEALTH PERSONNEL	
	Anyone else?	NURSE/MIDWIFE B FELDSHER C	
	PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	OTHER PERSON TRADITIONAL BIRTH ATTENDANT D	
		OTHER X (SPECIFY)	

		LAST LIVE BIRTH	NEXT-TO-LAST LIVE BIRTH
NO.	QUESTIONS AND FILTERS	NAME	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, WRITE THE NAME OF THE PLACE.	HOME HER HOME A OTHER HOME B PUBLIC SECTOR GOVERNMENT HOSPITAL C MATERNITY HOME D DIAGNOSTIC CENTER E WOMEN'S CONSULTATION F POLYCLINIC G AMBULATORY/FAMILY DOCTOR'S OFFICE H FAP I EMERGENCY SERVICE J OTHER PUBLIC SECTOR	
	(NAME OF PLACE)	PRIVATE MEDICAL SECTOR         PRV. HOSPITAL/CLINIC         MATERNITY HOME         MIDIAGNOSTIC CENTER         N         WOMEN CONSULTATION         O         POLYCLINIC         P         FAMILY DOCTOR OFFICE         Q         FAP         R         EMERGENCY SERVICE         S         OTHER PRIVATE         MEDICAL SECTOR         T         (SPECIFY)	
411	How many months pregnant were you when you first received antenatal care for this pregnancy?	MONTHS 98	
412	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES DON'T KNOW	
413	<ul> <li>As part of your antenatal care during this pregnancy, were any of the following done at least once:</li> <li>a) Was your blood pressure measured?</li> <li>b) Did you give a urine sample?</li> <li>c) Did you give a blood sample?</li> </ul>	YES NO a) BP 1 2 b) URINE 1 2 c) BLOOD 1 2	
413D	As part of your antenatal care during this pregnancy, was an ultrasound or echo of the fetus performed?	YES	
413E	How many times did you do an ultrasound or echo for this pregnancy?	NUMBER OF TIMES DON'T KNOW	
413F	How many months pregnant were you when the first ultrasound was performed for this pregnancy?	MONTHS	

		LAST LIVE BIRTH	NEXT-TO-LAST LIVE BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
420	During this pregnancy, were you given or did you buy any iron tablets or iron syrup?	YES	
421	During the whole pregnancy, for how many days did you take the tablets or syrup? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS DON'T KNOW	
422A	Immediatelly before this pregnancy, were you given or did you buy any folic acid tablets including in polyvitamins for pregnant women?	YES	
422B	During this pregnancy, were you given or did you buy any folic acid tablets including in polyvitamins for pregnant women?	YES	
422C	During the whole pregnancy, for how many days did you take the folic acid tablets including in polyvitamins for pregnant women? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS	
426	When (NAME) was born, was (NAME) very large, larger than average, average, smaller than average, or very small?	VERY LARGE1LARGER THAN2AVERAGE2AVERAGE3SMALLER THAN4AVERAGE4VERY SMALL5DON'T KNOW8	VERY LARGE1LARGER THAN2AVERAGE2AVERAGE3SMALLER THAN4AVERAGE4VERY SMALL5DON'T KNOW8
427	Was (NAME) weighed at birth?	YES	YES 1 NO 2 (SKIP TO 429) - 8

		LAST LIVE BIRTH	NEXT-TO-LAST LIVE BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
428	How much did (NAME) weigh? RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1	KG FROM CARD 1
429	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE	HEALTH PERSONNEL         DOCTOR       A         MIDWIFE       B         FELDSHER       C         OTHER PERSON       C         TRADITIONAL BIRTH       ATTENDANT         ATTENDANT       D         RELATIVE/FRIEND       E         OTHER       X         (SPECIFY)       X	HEALTH PERSONNEL         DOCTOR       A         MIDWIFE       B         FELDSHER       C         OTHER PERSON       C         TRADITIONAL BIRTH       ATTENDANT         ATTENDANT       D         RELATIVE/FRIEND       E         OTHER       X         (SPECIFY)       X
430	WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY. Where did you give birth to (NAME)?	HOME HER HOME	HOME HER HOME
	PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.	(SKIP TO 434) OTHER HOME	(SKIP TO 434) ← OTHER HOME
	(NAME OF PLACE)	29 (SPECIFY)	29 (SPECIFY)
		PRIVATE MEDICAL SECTORPRIVATE HOSPITAL/ CLINIC31MATERNITY HOME32DIAGNOSTIC CENTER33WOMEN'S CONSULTATION34POLYCLINIC35FAMILY DOCTORS OFFICE36FAP37PHARMACY38EMERGENCY SERVICE39OTHER PRIVATE MEDICAL SECTOR	PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CLINIC
		40 (SPECIFY) OTHER96 (SPECIFY) (SKIP TO 434)	40 (SPECIFY) 0THER96 (SPECIFY) (SKIP TO 434) ←

		LAST LIVE BIRTH	NEXT-TO-LAST LIVE BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
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	
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 directly on the bare skin of your chest?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
434B	Did you have a delivery voucher for (NAME)'s delivery?	YES 1 NO 2	YES 1 NO 2
434C	Were you eligible to receive a free hospital care for delivery of (NAME)?	YES 1 NO 2	YES 1 NO 2
434D	Were you eligible to receive free medicines during delivery of (NAME)?	YES 1 NO 2	YES 1 NO 2
434E	Were you charged, or did you pay anything for any services provided for delivery of (NAME)?	YES 1 NO 2 (SKIP TO 434G) ←	YES 1 NO 2
434F	<ul> <li>Now we will discuss how much money was paid for laboratory tests, medicines, consultation and delivery services, and any other services you received in association with the delivery of (NAME).</li> <li>1) How much money did you pay for laboratory tests?</li> <li>2) How much money did you pay for medicines?</li> <li>3) How much money did you pay for consultations and delivery?</li> <li>4) How much money did you pay for any other services?</li> <li>RECORD AMOUNT OF MONEY PAID SEPARATELY FOR: THE LABORATORY, MEDICINE, CONSULTATION AND OTHER SERVICES.</li> <li>PAID NO MONEY = 9999994 DON'T KNOW = 9999998</li> </ul>	1) LABORATORY	
434G	CHECK 430: PLACE OF DELIVERY	CODE 11, 12, OR 96 OTHER CIRCLED (SKIP TO 449)	

		LAST LIVE BIRTH	NEXT-TO-LAST LIVE BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
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	
437	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL         DOCTOR       11         NURSE/MIDWIFE       12         FELDSHER       13         OTHER PERSON       TRADITIONAL BIRTH         ATTENDANT       21         OTHER      96         (SPECIFY)	
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	

		LAST LIVE BIRTH	NEXT-TO-LAST LIVE BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
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	
440	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR	
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	
443	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL         DOCTOR       11         NURSE/MIDWIFE       12         FELDSHER       13         OTHER PERSON       13         TRADITIONAL BIRTH       21         OTHER       96         (SPECIFY)       96	

		LAST LIVE BIRTH	NEXT-TO-LAST LIVE BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
444	Where did the check take place?	HOME HER HOME	
	PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.	PUBLIC SECTORGOVERNMENT HOSPITAL21MATERNITY HOME22DIAGNOSTIC CENTER23WOMEN'S CONSULTATION24POLYCLINIC25AMBULATORY/ FAMILYDOCTOR OFFICIDOCTOR OFFICI26FAP27EMERGENCY SERVICE28OTHER PUBLIC SECTOR	
	(NAME OF PLACE)	29 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CLINIC	
		MATERNITY HOME32DIAGNOSTIC CENTER33WOMEN'S CONSULTATION34POLYCLINIC35FAMILY DOCTORS OFFICE36FAP37PHARMACY38EMERGENCY SERVICE39OTHER PRIVATEMEDICAL SECTOR	
		40 (SPECIFY) OTHER96 (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 or a traditional birth attendant check on (NAME)'s health in the two months after you left (FACILITY IN 430)?	YES	
446	How many hours, days or weeks after the birth of (NAME) did that check take place?	HOURS 1	
	IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	WEEKS	
447	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL         DOCTOR       11         NURSE/MIDWIFE       12         FELDSHER       13         OTHER PERSON       13         TRADITIONAL BIRTH       ATTENDANT         ATTENDANT       21         OTHER       96         (SPECIFY)	

-			
		LAST LIVE BIRTH	NEXT-TO-LAST LIVE BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
448	Where did this check of (NAME) take place?	HOME HER HOME 11 – OTHER HOME 12 –	
	PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.	PUBLIC SECTORGOVERNMENT HOSPITAL21 -MATERNITY HOME22 -DIAGNOSTIC CENTER23 -WOMEN'S CONSULTATION24 -POLYCLINIC25 -AMBULATORY/ FAMILYDOCTOR OFFICIDOCTOR OFFICI26 -FAP27 -EMERGENCY SERVICE28 -OTHER PUBLIC SECTOR	
	(NAME OF PLACE)		
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       11         NURSE/MIDWIFE       12         FELDSHER       13         OTHER PERSON         TRADITIONAL BIRTH         ATTENDANT       21         OTHER       96         (SPECIFY)	

		LAST LIVE BIRTH	NEXT-TO-LAST LIVE BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
452	Where did this first check take place?	HOME HER HOME	
	PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.	PUBLIC SECTORGOVERNMENT HOSPITAL21MATERNITY HOME22DIAGNOSTIC CENTER23WOMEN'S CONSULTATION24POLYCLINIC25AMBULATORY/ FAMILY26FAP27EMERGENCY SERVICE28OTHER PUBLIC SECTOR	
	(NAME OF PLACE)	29 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CLINIC	
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	
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	
455	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNELDOCTOR11NURSE/MIDWIFE12FELDSHER13OTHER PERSONTRADITIONAL BIRTHATTENDANT21	
		OTHER96 (SPECIFY)	

		LAST LIVE BIRTH	NEXT-TO-LAST LIVE BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
456	Where did this first check of (NAME) take place?	HOME HER HOME	
	PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.	PUBLIC SECTORGOVERNMENT HOSPITAL21MATERNITY HOME22DIAGNOSTIC CENTER23WOMEN'S CONSULTATION24POLYCLINIC25AMBULATORY/ FAMILYDOCTOR OFFICIDOCTOR OFFICI26FAP27EMERGENCY SERVICE28OTHER PUBLIC SECTOR	
	(NAME OF PLACE)	29 (SPECIFY)  PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CLINIC	
457	<ul> <li>During the first two days after (NAME)'s birth, did any health care provider do the following:</li> <li>a) Examine the cord?</li> <li>b) Measure (NAME)'s temperature?</li> <li>c) Counsel you on danger signs for newborns?</li> <li>d) Counsel you on breastfeeding?</li> <li>e) Observe (NAME) breastfeeding?</li> </ul>	YES         NO         DK           a)         CORD         1         2         8           b)         TEMP.         1         2         8           c)         SIGNS          1         2         8           d)         COUNSEL	
458	Has your menstrual period returned since the birth of (NAME)?	YES 1 - (SKIP TO 460) ← NO	
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	MONTHS

SECTION 4. PREGNANCY AND POSTNATAL CARE
---

		LAST LIVE BIRTH	NEXT-TO-LAST LIVE BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
461	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREGNANT PREGNANT OR UNSURE (SKIP TO 463)	
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	MONTHS
464	Did you ever breastfeed (NAME)?	YES 1 (SKIP TO 466) ← 1 NO 2	YES 1 NO 2
465	CHECK 404: IS CHILD LIVING?	LIVING DEAD (GO TO 471)	
466	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS; IF LESS THAN 24 HOURS, RECORD HOURS; OTHERWISE, RECORD DAYS. In the first three days after delivery, was	IMMEDIATELY	
	(NAME) given anything to drink other than breast milk?	NO 2	
468	CHECK 404: IS CHILD LIVING?	LIVING DEAD (GO TO 471)	LIVING DEAD (GO TO 471)
469	Are you still breastfeeding (NAME)?	YES 1 NO 2	
470	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES 1 NO 2 DON'T KNOW 8	YES
471		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE LIVE BIRTHS, GO TO 501A.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE LIVE BIRTHS, GO TO 501A.

SECTION 5A. CHILD IMMUNIZATION (LAST LIVE BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501A	CHECK 214 IN THE PREGNANCY HISTORY: ANY LIVE E ONE OR MORE LIVE BIRTHS IN 2012-2016	BIRTHS IN 2012-2016? NO LIVE BIRTHS IN	→ 601
502A	RECORD THE NAME FROM 216 AND PREGNANCY HISTORY NUMBER FROM 212 OF THE LAST CHILD BORN IN 2012-2016.		
	NAME OF LAST LIVE BIRTH	PREGNANCY HISTORY NUMBER	
503A	CHECK 218 FOR CHILD:	DEAD	→ 501B
504A	Do you have a card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD1YES, HAS ONLY AN OTHER DOCUMENT2YES, HAS CARD AND OTHER DOCUMENT3NO, NO CARD AND NO OTHER DOCUMENT4	→ 507A → 507A
505A	Did you ever have a vaccination card for (NAME)?	YES 1 NO 2	
506A	CHECK 504A: CODE '2' CIRCLED	CODE '4' CIRCLED	→ 511A
507A	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN1YES, ONLY OTHER DOCUMENT SEEN2YES, CARD AND OTHER DOCUMENT SEEN3NO CARD AND NO OTHER DOCUMENT SEEN4	<del>→</del> 511A

SECTION 5A. CHILD IMMUNIZATION (LAST LIVE BIRTH)

NO.	<u>SECTION 5A. CHILD IMMU</u> QUESTIONS AND FILTERS		IG CATEGORIES		SKIP
	NAME OF LAST LIVE BIRTH	PREGNANCY HISTOR	Y NUMBER		
508A	COPY DATES FROM THE CARD. WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A	DOSE WAS GIVEN, BUT NO DATE IS RECORDED. DAY MONTH YEAR			
	BCG				
	HEPATITIS B AT BIRTH				
	ORAL POLIO VACCINE (OPV) 1				
	ORAL POLIO VACCINE (OPV) 2				
	ORAL POLIO VACCINE (OPV) 3				
	ORAL POLIO VACCINE (OPV) 4				
	DPT-HEP.B-HIB (PENTAVALENT) 1				
	DPT-HEP.B-HIB (PENTAVALENT) 2				
	DPT-HEP.B-HIB (PENTAVALENT) 3				
	DPT 4				
	PNEUMOCOCCAL 1				
	PNEUMOCOCCAL 2				
	PNEUMOCOCCAL 3				
	ROTAVIRUS 1				
	ROTAVIRUS 2				
	MMR 1				
509A	CHECK 508A: 'BCG' TO 'MMR-1' ALL RECORDED?				
		YES	s		→ 526A
510A	In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in campaigns or immunization days or child health days?	YES (PROBE FOR VACCIN THE CORRESPONE THEN WRITE '00' IN T COLUMN FOR ALL V	NATIONS AND WF DING DAY COLUM THE CORRESPON	RITE '66' IN - IN IN 508A) - DING DAY DT GIVEN	
	RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508A THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.				]→ 526A
511A	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization days or child health days?			2	] <b>→</b> 526A
512A	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?			2	

## SECTION 5A. CHILD IMMUNIZATION (LAST LIVE BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LAST LIVE BIRTH	PREGNANCY HISTORY NUMBER	
513A	Within 24 hours after birth, did (NAME) receive a Hepatitis B vaccination, that is, an injection in the thigh to prevent Hepatitis B?	YES	
514A	Has (NAME) ever received oral polio vaccine, that is, a few drops in the mouth to prevent polio?	YES         1           NO         2           DON'T KNOW         8	]→ 517A
516A	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES	
517A	Has (NAME) ever received a pentavalent vaccination, that is, an injection given in the right thigh usually at the same time as polio drops?	YES         1           NO         2           DON'T KNOW         8	]→ 519A
518A	How many times did (NAME) receive the pentavalent vaccine?	NUMBER OF TIMES	
519A	Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the left thigh to prevent diseases including 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, liquid in the mouth to prevent diarrhea?	YES	] <b>→</b> 523A
522A	How many times did (NAME) receive the rotavirus vaccine?	NUMBER OF TIMES	
523A	Has (NAME) ever received a MMR vaccination, that is, an injection in the arm to prevent measles, mumps and rubella?	YES         1           NO         2           DON'T KNOW         8	
526A	CONTINUE WITH 501B.		

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST LIVE BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501B	CHECK 214 IN THE PREGNANCY HISTORY: ANY MORE MORE LIVE BIRTHS IN 2012-2016	LIVE BIRTHS IN 2012-2016? NO MORE LIVE BIRTHS IN 2012-2016	→ 601
502B	RECORD THE NAME FROM 216 AND PREGNANCY HIS CHILD BORN IN 2012-2016. NAME OF NEXT-TO- LAST LIVE BIRTH	TORY NUMBER FROM 212 OF THE NEXT-TO-LAST PREGNANCY HISTORY NUMBER	
503B	CHECK 218 FOR CHILD:	DEAD	→ 526B
504B	Do you have a card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD1YES, HAS ONLY AN OTHER DOCUMENT2YES, HAS CARD AND OTHER DOCUMENT3NO, NO CARD AND NO OTHER DOCUMENT4	→ 507B → 507B
505B	Did you ever have a vaccination card for (NAME)?	YES 1 NO 2	
506B	CHECK 504B: CODE '2' CIRCLED	CODE '4' CIRCLED	→ 511B
507B	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN1YES, ONLY OTHER DOCUMENT SEEN2YES, CARD AND OTHER DOCUMENT SEEN3NO CARD AND NO OTHER DOCUMENT SEEN4	<del>→</del> 511B

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST LIVE BIRTH)

NO.	QUESTIONS AND FILTERS	TION (NEXT-TO-LAST LIVE BIRTH) CODING CATEGORIES	SKIP
	NAME OF NEXT-TO- LAST LIVE BIRTH	PREGNANCY HISTORY NUMBER	
508B	COPY DATES FROM THE CARD. WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A		
	BCG		
	HEPATITIS B AT BIRTH		
	ORAL POLIO VACCINE (OPV) 1		
	ORAL POLIO VACCINE (OPV) 2		
	ORAL POLIO VACCINE (OPV) 3		
	ORAL POLIO VACCINE (OPV) 4		
	DPT-HEP.B-HIB (PENTAVALENT) 1		
	DPT-HEP.B-HIB (PENTAVALENT) 2		
	DPT-HEP.B-HIB (PENTAVALENT) 3		
	DPT 4		
	PNEUMOCOCCAL 1		
	PNEUMOCOCCAL 2		
	PNEUMOCOCCAL 3		
	ROTAVIRUS 1		
	ROTAVIRUS 2		
	MMR 1		
509B	CHECK 508B: 'BCG' TO 'MMR 1' ALL RECORDED?		
		YES	► 526B
510B	In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in campaigns or immunization days or child health days?	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 526B)	
	RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508B THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.	NO 2 DON'T KNOW	► 526B
511B	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization days or child health days?	YES 1 NO 2 DON'T KNOW	► 526B
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	

# SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST LIVE BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF NEXT-TO- LAST LIVE BIRTH	PREGNANCY HISTORY NUMBER	
513B	Within 24 hours after birth, did (NAME) receive a Hepatitis B vaccination, that is, an injection in the thigh to prevent Hepatitis B?	YES	
514B	Has (NAME) ever received oral polio vaccine, that is, a few drops in the mouth to prevent polio?	YES	<b>]→</b> 517B
516B	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES	
517B	Has (NAME) ever received a pentavalent vaccination, that is, an injection given in the right thigh usually at the same time as polio drops?	YES	<b>]→</b> 519B
518B	How many times did (NAME) receive the pentavalent vaccine?	NUMBER OF TIMES	
519B	Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the left thigh to prevent diseases including pneumonia?	YES	<b>]→</b> 521B
520B	How many times did (NAME) receive the pneumococcal vaccine?	NUMBER OF TIMES	
521B	Has (NAME) ever received a rotavirus vaccination, that is, liquid in the mouth to prevent diarrhea?	YES	<b>]→</b> 523B
522B	How many times did (NAME) receive the rotavirus vaccine?	NUMBER OF TIMES	
523B	Has (NAME) ever received a MMR vaccination, that is, an injection in the arm to prevent measles, mumps and rubella?	YES	
526B	CHECK 214 IN PREGNANCY HISTORY: ANY MORE LIVE	BIRTHS IN 2012-2016?	
	MORE LIVE BIRTHS IN 2012- (GO TO 502B IN AN ADDITIONAL QUESTIONNAIRE)	NO MORE LIVE BIRTHS IN 2012-2016	

601	CHECK 224:		
	ONE OR MORE LIVE BIRTHS IN 2010-2016		
602	EACH LIVE BIRTH IN 2010-2016. ASK THE BIRTH. IF THERE ARE MORE THAN 2 BIRTHS, US	NCY HISTORY NUMBER IN 603 AND THE NAME AND SURVIVAL STATUS IN 604 FOR THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST LVE S, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S). about your children born in the last five years. (We will talk about each separately.)	
603	PREGNANCY HISTORY NUMBER FROM 212 IN PREGNANCY HISTORY.	LAST LIVE BIRTH PREGNANCY HISTORY NUMBER	NEXT-TO-LAST LIVE BIRTH PREGNANCY HISTORY NUMBER
604	FROM 216 AND 218:	NAME LIVING DEAD (SKIP TO 646)	NAME LIVING DEAD (SKIP TO 646)
604 606	FROM 216 AND 218: In the last seven days, was (NAME) given iron pills, or iron syrup?		

		LAST LIVE BIRTH	NEXT-TO-LAST LIVE BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
609	CHECK 469: STILL BREASTFEEDING? YES NO/NOT ASKED a) Now I would like to know how much (NAME) was given to drink during the diarrhea 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?	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
610	<ul> <li>When (NAME) had diarrhea, was (NAME) given less than usual to eat, about the same amount, more than usual, or nothing to eat?</li> <li>IF LESS, PROBE: Was (NAME) given much less than usual to eat or somewhat less?</li> </ul>	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 diarrhea from any source?	YES 1 NO 2 - (SKIP TO 615) ←	YES 1 NO 2 - (SKIP TO 615) ←

		LAST LIVE BIRTH	NEXT-TO-LAST LIVE BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
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, WRITE THE NAME OF THE PLACE(S).	PUBLIC SECTOR         GOVERNMENT HOSPITAL       A         MATERNITY HOME       B         DIAGNOSTIC CENTER       C         WOMEN'S CONSULTATIOI       D         POLYCLINIC       E         AMBULATORY/ FAMILY       DOCTOR OFFIC         FAP       G         EMERGENCY SERVICE       H         OTHER PUBLIC SECTOR       I	PUBLIC SECTOR         GOVERNMENT HOSPITAL       A         MATERNITY HOME       B         DIAGNOSTIC CENTER       C         WOMEN'S CONSULTATIOI       D         POLYCLINIC       E         AMBULATORY/ FAMILY       DOCTOR OFFIC         DOLTOR OFFIC       F         FAP       G         EMERGENCY SERVICE       H         OTHER PUBLIC SECTOR       I
	(NAME OF PLACE(S))	(SPECIFY)         PRIVATE MEDICAL SECTOR         PRIVATE HOSPITAL/       J         CLINIC       J         MATERNITY HOME       K         DIAGNOSTIC CENTER       L         WOMEN'S CONSULTATIOI       M         POLYCLINIC       N         FAMILY DOCTORS OFFICE       O         FAP       P         PHARMACY       Q         EMERGENCY SERVICE       R         OTHER PRIVATE       MEDICAL SECTOR         S       (SPECIFY)         OTHER SOURCE       S         SHOP       T         TRADITIONAL       PRACTITIONER         PRACTITIONER       V         OTHER       X	(SPECIFY)         PRIVATE MEDICAL SECTOR         PRIVATE HOSPITAL/       J         CLINIC       J         MATERNITY HOME       K         DIAGNOSTIC CENTER       L         WOMEN'S CONSULTATIOI       M         POLYCLINIC       N         FAMILY DOCTORS OFFICE       O         FAP       P         PHARMACY       Q         EMERGENCY SERVICE       R         OTHER PRIVATE       MEDICAL SECTOR         S       (SPECIFY)         OTHER SOURCE       S         SHOP       T         TRADITIONAL       PRACTITIONER         PRACTITIONER       U         MARKET       V         OTHER       X
613	CHECK 612:	TWO OR ONLY MORE ONE CODES CIRCLED CIRCLED (SKIP TO 615)	TWO OR ONLY MORE ONE CODES CODE CIRCLED CIRCLED (SKIP TO 615)
614	Where did you first seek advice or treatment? USE LETTER CODE FROM 612.	FIRST PLACE	FIRST PLACE

		LAST LIVE BIRTH	NEXT-TO-LAST LIVE BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
615	<ul> <li>Was (NAME) given any of the following at any time since (NAME) started having the diarrhea:</li> <li>a) A fluid made from a special packet called Rehydron?</li> <li>c) A homemade fluid?</li> <li>d) Zinc tablets or syrup?</li> </ul>	YES NO DK a) FLUID FROM ORS PACKET 1 2 8 c) HOMEMADE FLUID 1 2 8 d) ZINC 1 2 8	YES NO DK a) FLUID FROM ORS PACKET 1 2 8 c) HOMEMADE FLUID 1 2 8 d) ZINC 1 2 8
616	CHECK 615: ANY 'YES' ALL 'NO' CR 'DK' a) Was anything else given to treat the diarrhea?	YES	YES
617	CHECK 615: ANY 'YES' ALL 'NO' CR 'DK' a) What else was given to treat the diarrhea? Anything else? RECORD ALL TREATMENTS GIVEN.	PILL OR SYRUP         ANTIBIOTIC       A         ANTIMOTILITY       B         OTHER (NOT ANTIBIOTIC         OR ANTIMOTILITY)       C         UNKNOWN PILL       OR SYRUP         OR SYRUP       D         INJECTION       E         NON-ANTIBIOTIC       F         UNKNOWN       INJECTION         INJECTION       G         (IV) INTRAVENOUS       H         HOME REMEDY/       H         HERBAL MEDICINE       I         OTHER       X	PILL OR SYRUP         ANTIBIOTIC       A         ANTIMOTILITY       B         OTHER (NOT ANTIBIOTIC       C         OR ANTIMOTILITY)       C         UNKNOWN PILL       OR SYRUP         OR SYRUP       D         INJECTION       E         NON-ANTIBIOTIC       F         UNKNOWN       INJECTION         INJECTION       G         (IV) INTRAVENOUS       H         HOME REMEDY/       H         HERBAL MEDICINE       I         OTHER       X
618	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES	YES
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−

		LAST LIVE BIRTH	NEXT-TO-LAST LIVE BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
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)       8         DON'T KNOW       8         (SKIP TO 624)       4	CHEST ONLY       1         NOSE ONLY       2         BOTH       3         OTHER       6         (SPECIFY)       8         DON'T KNOW       8         (SKIP TO 624)       4
623	CHECK 618: HAD FEVER?	YES NO OR DK (SKIP TO 646)	YES NO OR DK ☐ ↓ (SKIP TO 646) ←
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, WRITE THE NAME OF THE PLACE(S).	PUBLIC SECTOR GOVERNMENT HOSPITAL A MATERNITY HOME B DIAGNOSTIC CENTER C WOMEN'S CONSULTATIOI D POLYCLINIC E AMBULATORY/ FAMILY DOCTOR OFFIC F FAP G EMERGENCY SERVICE H OTHER PUBLIC SECTOR	PUBLIC SECTOR GOVERNMENT HOSPITAL A MATERNITY HOME B DIAGNOSTIC CENTER C WOMEN'S CONSULTATIOI D POLYCLINIC E AMBULATORY/ FAMILY DOCTOR OFFIC F FAP G EMERGENCY SERVICE H OTHER PUBLIC SECTOR
	(NAME OF PLACE(S))	PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CLINIC J MATERNITY HOME K DIAGNOSTIC CENTER L WOMEN'S CONSULTATIOI. M POLYCLINIC N FAMILY DOCTORS OFFICE. O FAP P PHARMACY Q EMERGENCY SERVICE. R OTHER PRIVATE MEDICAL SECTOR S (SPECIFY)	PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/ CLINIC J MATERNITY HOME K DIAGNOSTIC CENTER L WOMEN'S CONSULTATIOI. M POLYCLINIC N FAMILY DOCTORS OFFICE O FAP P PHARMACY Q EMERGENCY SERVICE R OTHER PRIVATE MEDICAL SECTOR
		OTHER SOURCE SHOP T TRADITIONAL PRACTITIONER U MARKET V ITINERANT DRUG SELLER W OTHER X (SPECIFY)	OTHER SOURCE SHOP
626	CHECK 625:	TWO OR ONLY MORE ONE CODES CODE CIRCLED CIRCLED (SKIP TO 628)	TWO OR ONLY MORE ONE CODES CODE CIRCLED CIRCLED (SKIP TO 628)

		LAST LIVE BIRTH	NEXT-TO-LAST LIVE BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
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 <sup>-</sup> (SKIP TO 646) ← DON'T KNOW 8 <sup>-</sup>
630	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED.	ANTIBIOTIC DRUGS AMOXICILLINA SUMOMED/ AZYTHROMYCINB AUGMENTINC OTHER ORAL ANTIBIOTICJ INJECTION/ IVK OTHER DRUGS ASPIRINL PARACETAMOLM NUROFEN/ IBUPROFETN	ANTIBIOTIC DRUGS AMOXICILLIN A SUMOMED/ AZYTHROMYCIN B AUGMENTIN C OTHER ORAL ANTIBIOTIC J INJECTION/ IV K OTHER DRUGS ASPIRIN L PARACETAMOL M NUROFEN/ IBUPROFEI N
		OTHER X (SPECIFY) DON'T KNOW Z	OTHER X (SPECIFY) DON'T KNOW Z
646		GO BACK TO 604 IN NEXT COLUMN; OR, IF NO MORE LIVE BIRTHS, GO TO 647.	GO TO 604 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE LIVE BIRTHS, GO TO 647.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
647	CHECK 615(a), ALL COLUMNS: NO CHILD RECEIVED FLUID FROM ORS PACKET REHYDRON	ANY CHILD RECEIVED FLUID FROM ORS PACKET REHYDRON	→ 649
648	Have you ever heard of a special product called Rehydron you can get for the treatment of diarrhea?	YES 1 NO 2	
649	CHECK 214 AND 220, ALL ROWS: NUMBER OF CHILDR RESPONDENT ONE OR MORE	EN BORN IN 2013-2016 LIVING WITH THE	→ 701

NO.	QUESTIONS AND FILTERS	CODING CATE	GORIES		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) Juice or juice drinks?	b) 1	2	8	
	c) Clear broth?	c) 1	2	8	
	<ul> <li>d) Milk such as tinned, powdered, or fresh animal milk?</li> <li>IF YES: How many times did (NAME) drink milk?</li> </ul>	d) 1	2	8	
	IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES DRANK			
	<ul> <li>e) Infant formula?</li> <li>IF YES: How many times did (NAME) drink infant formula?</li> </ul>	e) 1 NUMBER OF	2	8	
	IF 7 OR MORE TIMES, RECORD '7'.	TIMES DRANK	] 		
	f) Any other liquids?	f) 1	2	8	
	<ul> <li>g) Yogurt, kefir, Narine or mazoni?</li> <li>IF YES: How many times did (NAME) eat yogurt, kefir, Narine or mazoni?</li> </ul>	g) 1 NUMBER OF	2	8	
	IF 7 OR MORE TIMES, RECORD '7'.	TIMES ATE	] 		
	<ul> <li>h) Any commertially fortified baby foods, for example, Cerelac, Hipp, Nestle, Humana, Agusha, Malysh, Heinz, Frutonyanya, Vinni?</li> </ul>	h) 1	2	8	
	<ul> <li>Bread, rice, noodles, porridge, or other foods made from grains?</li> </ul>	i) 1	2	8	
	<ul> <li>Red sweet pepper, or pumpkin, carrots, or squash that are yellow or orange inside?</li> </ul>	j) 1	2	8	
	k) White potatoes or any other foods made from roots?	k) 1	2	8	
	<ol> <li>Any dark green, leafy vegetables, for example spinach, parsley, savoy cabbage, lettuce, mustard, turnip or beetroot greens, broccoli?</li> </ol>	l) 1	2	8	
	m) Ripe or dried apricots, dried peaches, cantaloupe melon?	m) 1	2	8	
	n) Any other fruits or vegetables?	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 or dried 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	
	u) Any other solid, semi-solid, or soft food?	u) 1	2	8	
	v) Tea or coffee?	v) 1	2	8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
651	CHECK 650 (CATEGORIES 'g' THROUGH 'u'): NOT A SINGLE 'YES' 🖓 AT LE		→ 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	→ 654
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	
654	The last time (NAME FROM 649) passed stools, what was done to dispose of the stools?	CHILD USED TOILET OR LATRINE	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED	]→ 704
702	Have you ever been married or lived together with a man as if married?	YES, FORMERLY MARRIED	<del>→</del> 712
703	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED1DIVORCED2SEPARATED3	→ 709
704	Is your (husband/partner) living with you now or is he staying elsewhere?	LIVING WITH HER	
705	RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME	
709	Have you been married or lived with a man only once or more than once?	ONLY ONCE 1 MORE THAN ONCE 2	
710	CHECK 709: MARRIED/ LIVED WITH A MAN ONLY ONCE a) In what month and year did you start living with your (husband/partner)? b) Now I would like to ask about your first (husband/partner). In what month and year did you start living with him?	MONTH       98         DON'T KNOW MONTH       98         YEAR       91         DON'T KNOW YEAR       9998	]→ 712
711	How old were you when you first started living with him?	AGE	
712	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTIL	NUING, 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	→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	→ 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 NO2 (SKIP TO 718) ←	YES 1 NO2 _ (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: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	HUSBAND       1         LIVE-IN PARTNER       2         BOYFRIEND NOT       1         LIVING WITH       3         CASUAL       4         ACQUAINTANCE       4         CLIENT/SEX WORKER       5         OTHER       6         (SPECIFY)	HUSBAND	HUSBAND       1         LIVE-IN PARTNER       2         BOYFRIEND NOT       1         LIVING WITH       3         CASUAL       4         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	AGE OF PARTNER DON'T KNOW	AGE OF PARTNER DON'T KNOW
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

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

724       CHECK 100:       AGE 15.24       AGE 25.49       727         728       CHECK 701:       NOT       CURRENTLY MARREED       727         728       In the past 12 months have you had see to been sexue the grow you or beause he grow you and sex you had sex or been sexue the grow you for sex or been sexue the grow you for sex or been sexue the grow you for sex or been sexue he grow you for sex or been sexue he grow you for sex or been sex or s	NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
725       CHECK 70::	724	CHECK 106:		
725         CHECK 70:		AGE 15-24	AGE 25-49	. 707
NOT         CURRENTLY MARRIED              • 727            10         In the part 12 months have you had so xo them             sexually moled with anyone because he gave you or             icld you he would give you gits, cash, o anything else?               vES               1               1               1               icld you he would give you gits, cash, o anything else?               vES		•		- 121
IN A UNION       LUNING WITH A MAN       Image: Constraint of the set on beam of the set or beam of the set of the s	725	CHECK 701:		
IN A UNION       LUNING WITH A MAN       Image: Constraint of the set on beam of the set or beam of the set of the s				. 707
sexually involved with anyone bocause he gave you of tot you he would give you gifts, cash, or anything else?       YES       1         727       in total, with how many different people have you had inferenceme in you inference in you withing else?       NUMBER OF PARTNERS       1         728       CHECK 716, MOST RECENT PARTNER (FIRST COLUMN): CONDOM USED       NOT       0       731         728       CHECK 716, MOST RECENT PARTNER (FIRST COLUMN): CONDOM USED       NOT       731       731         729       You told me that a condom was used the last time you had sex. What is the brand name of the condom used at the time?       CONTEX CLASSIC       01         11       PROBE NOT KNOWN, ASK TO SEE THE       CONTEX CLASSIC       01         120       From where did you obtain the condom the last time?       OCVERNMENT HOSPITAL       11         MARE OF PLACE.       B       PUBLIC SECTOR       00       12         730       From where did you obtain the condom the last time?       00       11       MATERNITY HOME       12         12       DACADE       OPUBLIC SECTOR       00       12       DACADE       12         131       PROBE TO DEENTIFY TYPE OF SOURCE.       12       DACADES       12       DACADES       12         141       DOT HER PUBLIC SECTOR <td></td> <td></td> <td>NG WITH A MAN</td> <td>- 121</td>			NG WITH A MAN	- 121
sexually involved with anyone bocause he gave you of tot you he would give you gifts, cash, or anything else?       YES       1         727       in total, with how many different people have you had inferenceme in you inference in you withing else?       NUMBER OF PARTNERS       1         728       CHECK 716, MOST RECENT PARTNER (FIRST COLUMN): CONDOM USED       NOT       0       731         728       CHECK 716, MOST RECENT PARTNER (FIRST COLUMN): CONDOM USED       NOT       731       731         729       You told me that a condom was used the last time you had sex. What is the brand name of the condom used at the time?       CONTEX CLASSIC       01         11       PROBE NOT KNOWN, ASK TO SEE THE       CONTEX CLASSIC       01         120       From where did you obtain the condom the last time?       OCVERNMENT HOSPITAL       11         MARE OF PLACE.       B       PUBLIC SECTOR       00       12         730       From where did you obtain the condom the last time?       00       11       MATERNITY HOME       12         12       DACADE       OPUBLIC SECTOR       00       12       DACADE       12         131       PROBE TO DEENTIFY TYPE OF SOURCE.       12       DACADES       12       DACADES       12         141       DOT HER PUBLIC SECTOR <td>726</td> <td>In the past 12 months have you had sex or been</td> <td></td> <td></td>	726	In the past 12 months have you had sex or been		
727       In Idat, with now many different people have you had sew in indercourse in your lifetime?       NUMBER OF PARTNERS IN LIFETIME       Image: Control of the condent indercourse in your lifetime?         728       CHECK 716, MOST RECENT PARTNERS IS 95 OR MOT LIFETIME       DON'T KNOW       96         729       CHECK 716, MOST RECENT PARTNER (FIRST COLUMN): CONDOM       MOL       Total         720       CHECK 716, MOST RECENT PARTNER (FIRST COLUMN): CONDOM       NOT       Total       Total         720       You told me that a condom was used the last time you that sex. What is the brand name of the condom used at the transmost the condom used at the set time?       CONTEX CLASSIC       01         720       You told me that a condom was used the last time?       CONTEX CLASSIC       01       YAA       CONTEX CLASSIC       01         721       The BRAND NOT KNOWN, ASK TO SEE THE       CONTEX CLASSIC       01       YAA       CONTEX CLASSIC       01         722       From where did you obtain the condom the last time?       CONT KNOW       06       00       THER       00         723       From where did you obtain the condom the last time?       CONTEX CLASSIC       01       11         MARKARE       GOVERNMENT HOSPITAL       11       MARKARE       12         MARKARE       GOVERNMENT HOSPITAL       12       MARKARE       <			-	
sexual interconse in your lifetime?       INUMEER OF PARTNERS       Inumeers         IF NON-NUMERIC ANSWER, PROBE TO GET AN BSTMATE. FINUMEER OF PARTNERS IS 95 OR       Inumeers       Inumeers         728       CHECK 7/6, MOST RECENT PARTNER (FIRST COLUMN): CONDOM USED       NO		told you he would give you gitts, cash, or anything else?	NO 2	
sexual interconse in your lifetime?       INUMEER OF PARTNERS       Inumeers         IF NON-NUMERIC ANSWER, PROBE TO GET AN BSTMATE. FINUMEER OF PARTNERS IS 95 OR       Inumeers       Inumeers         728       CHECK 7/6, MOST RECENT PARTNER (FIRST COLUMN): CONDOM USED       NO				
IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTMATE, IF NUMBER OF PARTNERS IS 95 OR       IN LIFETIME       Image: Construction of the constru	727			
ESTIMATE: IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD 95.       DON'T KNOW       98         728       CHECK 715, MOST RECENT PARTNER (FIRST COLUMN): CONDOM USED       NOT       1731         729       You told me that a condom was used the last time you that sex. What is the brand name of the condom used at that time?       NOT       1731         729       You told me that a condom was used the last time you that sex. What is the brand name of the condom used at that time?       CONTEX CLASSIC       01         730       From where did you obtain the condom the last time?       PUBLO SECTOR DON'T KNOW       98         730       From where did you obtain the condom the last time?       PUBLO SECTOR UNARCONSTIC CENTER       11 to MATEMITY HOME         731       I'UNARCOT DIDN'TFY TYPE OF SOURCE. IF UNARLE TO IDENTIFY TYPE OF SOURCE. IF UNARLE TO DENTIFY TYPE OF SOURCE. IF UNARLY DOCTOR OFFICE       19         I'UNARE OF PLACE)       PRIVATE MEDICAL SECTOR INTERNITY HOME       11 UNARCOT CENTER       12         I'UNARE OF PLACE)       I'UNARCOT CENTER       12 UNARLE ADULTS       12 UNARLE ADULTS       12 UNARLE ADULTS         I'UNARE MEDICAL SECTOR       I'UNARCOT CENTER       23 UNARCOT CENTER       23 UNARCOT CENTER       24 EMERGENCY SERVICES       28 EMERGENCY SERVICES       28 EMERGENCY				
MORE, RECORD 95'.         728       CHECK 716, MOST RECENT PARTNER (FIRST COLUMN): CONDOM USED       NO				
YES				
YES	728	CHECK 716, MOST RECENT PARTNER (FIRST COLUMN	• ():	
YES       CONDOM USED       NOT USED       NOT ASKED       You to do me that a condom wase used the last time you had see. What is the brand name of the condom used at time?       NOT USED       NOT USED       You to do me that a condom wase used the last time you had see. What is the brand name of the condom used at time?       CONTEX CLASSIC       01       You	, 20			
You told me that a condom was used the last time you had sex. What is the brand name of the condom used at tat time?       OMTEX CLASSIC       01         1F BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.       OTHER       03         730       From where did you obtain the condom the last time?       96         PROBE TO IDENTIFY TYPE OF SOURCE.       IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.       11         MAME OF PLACE)       IF WATE MEDICAL SECTOR       13         (NAME OF PLACE)       PROSE TO REPRIVATE SECTOR, WRITE THE NAME OF THE PLACE.       18         OTHER PUBLIC SECTOR       19         (NAME OF PLACE)       PRIVATE MEDICAL SECTOR       19         (NAME OF PLACE)       PRIVATE MEDICAL SECTOR       11         (SPECIFY)       19       19         (SPECIFY)       19       19         (NAME OF PLACE)       PRIVATE MEDICAL SECTOR       21         (NAME OF PLACE)       PRIVATE MEDICAL SECTOR       21         (SPECIFY)       19       19       19         OTHER PUBLIC SECTOR       21       14       25         FAP       22       16       23       24         OTHER PUBLIC SECTOR       21       12       24         OTHER PRUATE MEDICAL SECTOR       25       24				→ 731
had sex. What is the brand name of the condom used at that time?     VIVA     02       IF BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.     01     01       730     From where did you obtain the condom the last time?     96       731     PROBE TO IDENTIFY TYPE OF SOURCE.     11       IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.     90       (NAME OF PLACE)     11       (NAME OF PLACE)     11       (NAME OF PLACE)     11       (NAME OF PLACE)     11       (SPECIFY)     19       (SPECIFY)     19       (SPECIFY)     19       (NAME OF PLACE)     11       (NAME OF PLACE)     11       (NAME OF PLACE)     11       (SPECIFY)     19       PRIVATE HOSPITAL/CLINIC     21       MATERNITY HOME     22       UNAME OF PLACE)     11       (SPECIFY)     19       PRIVATE HOSPITAL/CLINIC     21       MATERNITY HOME     22       DIAGNOSTIC CENTRE     23       OTHER PUBLIC SECTOR     21       DIAGNOSTIC CENTRE     23       OTHER POUNCE     26       FRIENDIRAL CONSTIC CENTRE     23       OTHER PRIVATE HOSPITAL/CLINIC     21       DIAGNOSTIC CENTRE     28       OTHER PRIV				→ 731
had sex. What is the brand name of the condom used at that time?     VIVA     02       IF BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.     01     01       730     From where did you obtain the condom the last time?     96       731     PROBE TO IDENTIFY TYPE OF SOURCE.     11       IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.     90       (NAME OF PLACE)     11       (NAME OF PLACE)     11       (NAME OF PLACE)     11       (NAME OF PLACE)     11       (SPECIFY)     19       (SPECIFY)     19       (SPECIFY)     19       (NAME OF PLACE)     11       (NAME OF PLACE)     11       (NAME OF PLACE)     11       (SPECIFY)     19       PRIVATE HOSPITAL/CLINIC     21       MATERNITY HOME     22       UNAME OF PLACE)     11       (SPECIFY)     19       PRIVATE HOSPITAL/CLINIC     21       MATERNITY HOME     22       DIAGNOSTIC CENTRE     23       OTHER PUBLIC SECTOR     21       DIAGNOSTIC CENTRE     23       OTHER POUNCE     26       FRIENDIRAL CONSTIC CENTRE     23       OTHER PRIVATE HOSPITAL/CLINIC     21       DIAGNOSTIC CENTRE     28       OTHER PRIV	<u> </u>			-
that time?       DUREX       03         IF BRAND NOT KNOWN, ASK TO SEE THE       OTHER       96         730       From where did you obtain the condom the last time?       PUBLIC SECTOR       98         730       From where did you obtain the condom the last time?       PUBLIC SECTOR       11         PROBE TO IDENTIFY TYPE OF SOURCE.       GOVERNMENT HOSPITAL       12         IF UNABLE TO DETERNINE IF PUBLIC OR PRIVATE       GOVERNMENT HOSPITAL       15         SECTOR, WRITE THE NAME OF THE PLACE.       IF EMROGENCY SERVICES       18         OTHER PUBLIC SECTOR       19       (SPECIFY)       19         (NAME OF PLACE)       PRIVATE MEDICAL SECTOR       19         OTHER PUBLIC SECTOR       19       19         OTHER ADDITION FAMILY DOCTOR OFFICE       23       24         MOMENS CONSULTATION       24       24         POLYCLINIC       25       28       27         PHARMACY       28       27       28         OTHER SOURCE       30       30       30         OTHER SOURCE	729			
IF BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.     Image: Construct of the condom the last time?     Image: Construct of the condom the last time?     Image: Construct of the condom the last time?       730     From where did you obtain the condom the last time?     PUBLIC SECTOR     PUBLIC SECTOR       PROBE TO IDENTIFY TYPE OF SOURCE.     If UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.     POUPLIC CONSULTATION     14 MATERNITY HOME       Image: Construct of the condom the last time?     Image: Construct of construct on construct on consultation     15 AMBULATORY/ FAMILY DOCTOR OFFICE     16 FAP       Image: Construct on con			-	
PACKAGE:     DON'T KNOW     98       730     From where did you obtain the condom the last time?     PUBLIC SECTOR     11       PROBE TO IDENTIFY TYPE OF SOURCE.     15     12       IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.     PROBE TO IDENTIFY TYPE OF SOURCE.     16       (NAME OF PLACE)     (NAME OF PLACE)     17     18       (NAME OF PLACE)     PRIVATE MEDICAL SECTOR     19       PRIVATE MODIAL SECTOR     19     22       VOMEN'S CONSULTATION     24       POLYCLINIC     21       MATERNITY HOME     22       USAGNOSTIC CENTER     23       WOMEN'S CONSULTATION     24       POLYCLINIC     25       FAMILY DOCTORS OFFICE     26       FAP     27       PHARMACY     28       EMERGENCY SERVICES     29       OTHER PRIVATE MEDICAL SECTOR     10       USPECIFY)     30       OTHER PRIVATE MEDICAL SECTOR     12       OTHER PRIVATE MEDICAL SECTOR     11       PHARMACY			OTHER 96	
730       From where did you obtain the condom the last time?       PUBLIC SECTOR         730       PROBE TO IDENTIFY TYPE OF SOURCE.       11         IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.       PUBLIC SECTOR         IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.       11         IVENT       IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.       11         IVENT       IVENT       IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.       11         IVENT       IVENT       IVENT       IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.       11         IVENT       IVENT       IVENT       IVENT       IVENT         IVENT       IVENT       IVENT       IVENT       IVENT       IVENT         IVENT       IVENT       IVENT       IVENT       I				
PROBE TO IDENTIFY TYPE OF SOURCE.       If       If </td <td></td> <td>PACKAGE.</td> <td>DON'I KNOW</td> <td></td>		PACKAGE.	DON'I KNOW	
PROBE TO IDENTIFY TYPE OF SOURCE.       If UNABLE TO DETERMINE IF PUBLIC OR PRIVATE       12         IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE       14         SECTOR, WRITE THE NAME OF THE PLACE.       17         (NAME OF PLACE)       18         OTHER PUBLIC SECTOR       19         (NAME OF PLACE)       19         PRIVATE MEDICAL SECTOR       19         (NAME OF PLACE)       19         PRIVATE HOSPITAL/CLINIC       21         MATERNITY HOME       22         DIAGNOSTIC CENTER       23         WOMEN'S CONSULTATION       24         POLYCLINIC       21         MATERNITY HOME       22         DIAGNOSTIC CENTER       23         WOMEN'S CONSULTATION       24         POLYCLINIC       25         FAMILY DOCTORS OFFICE       26         FAMILY DOCTORS OFFICE       30	730	From where did you obtain the condom the last time?		
PROBE TO IDENTIFY TYPE OF SOURCE.       II PUNABLE TO DETERMINE IF PUBLIC OR PRIVATE       13         SECTOR, WRITE THE NAME OF THE PLACE.       II PUNATE       16         MOMEN'S CONSULTATION       14         OTHER PUBLIC SECTOR, WRITE THE NAME OF THE PLACE.       II PUNATE         Image: the the number of the place.       Image: the the number of the place.       Image: the the number of the place.         Image: the the number of the place.       Image: the the number of the place.       Image: the the number of the place.         Image: the the number of the place.       Image: the the number of the place.       Image: the the number of the place.         Image: the the the number of the place.       Image: the the number of the place.       Image: the the number of the place.         Image: the the the number of the place.       Image: the the number of the place.       Image: the the number of the place.         Image: the				
IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE       POLYCLINIC       15         AMBULATORY/ FAMILY DOCTOR OFFICE       16         FAP       17         EMERGENCY SERVICES       18         OTHER PUBLIC SECTOR       19         (NAME OF PLACE)       PRIVATE MEDICAL SECTOR         PRIVATE MEDICAL SECTOR       21         MATERNITY HOME       22         DIAGNOSTIC CENTER       23         WOMEN'S CONSULTATION       24         POLYCLINC       25         FAMILY DOCTORS OFFICE       26         FAMILY DOCTORS OFFICE       26         FAMILY DOCTORS OFFICE       28         EMERGENCY SERVICES       29         OTHER PRIVATE MEDICAL SECTOR       30         (SPECIFY)       30         OTHER SOURCE       30         SHOP       41         CHURCH       42         FRIEND/RELATIVE       43         OTHER       96         OTHER       96         OTHER       98         731       PRESENCE OF OTHERS DURING THIS SECTION.       YES       NO         CHILDREN <10			DIAGNOSTIC CENTER 13	
SECTOR, WRITE THE NAME OF THE PLACE.         FAP         17           EMERGENCY SERVICES         18           OTHER PUBLIC SECTOR         19           (NAME OF PLACE)         PRIVATE MEDICAL SECTOR           PRIVATE MEDICAL SECTOR         21           MATERNITY HOME         22           DIAGNOSTIC CENTER         23           WOMENS' CONSULTATION         24           POLYCLINIC         25           FAMILY DOCTORS OFFICE         26           FAP         27           PHARMACY         28           EMERGENCY SERVICES         29           OTHER SOURCE         29           OTHER SOURCE         30           OTHER         42           FRIENDRELATIVE         43           OTHER         6           OTHER         96           DON'T KNOW         98           731         PRESENCE OF OTHERS DURING THIS SECTION.         YES         NO           CHILDREN <10		PROBE TO IDENTIFY TYPE OF SOURCE.		
EMERGENCY SERVICES       18         OTHER PUBLIC SECTOR       19         (NAME OF PLACE)       PRIVATE MEDICAL SECTOR         PRIVATE MOSPITAL/CLINIC       21         MATERNITY HOME       22         DIAGNOSTIC CENTER       23         WOMEN'S CONSULTATION       24         POLYCLINIC       25         FAMILY       26         FAM       27         PHARMACY       28         EMERGENCY SERVICES       29         OTHER PRIVATE MEDICAL SECTOR       21         MATERNITY HOME       22         DIAGNOSTIC CENTER       23         WOMEN'S CONSULTATION       24         POLYCLINIC       25         FAMILY       28         EMERGENCY SERVICES       29         OTHER PRIVATE MEDICAL SECTOR       30         (SPECIFY)       30         OTHER SOURCE       SHOP         SHOP       41         CHURCH       42         FRIEND/RELATIVE       43         OTHER       (SPECIFY)         DON'T KNOW       98         731       PRESENCE OF OTHERS DURING THIS SECTION.       YES         CHILDREN <10				
(NAME OF PLACE) <ul> <li>(NAME OF PLACE)</li> <li>PRIVATE MEDICAL SECTOR</li> <li>PRIVATE MODICAL SECTOR</li> <li>PRIVATE HOSPITAL/CLINIC</li> <li>21</li> <li>MATERNITY HOME</li> <li>22</li> <li>DIAGNOSTIC CENTER</li> <li>23</li> <li>WOMEN'S CONSULTATION</li> <li>24</li> <li>POLYCLINIC</li> <li>25</li> <li>FAMILY DOMES CONSULTATION</li> <li>24</li> <li>POLYCLINIC</li> <li>25</li> <li>FAMILY DOCTORS OFFICE</li> <li>26</li> <li>FAMILY DOCTORS OFFICE</li> <li>27</li> <li>PHARMACY</li> <li>28</li> <li>EMERGENCY SERVICES</li> <li>29</li> <li>OTHER PRIVATE MEDICAL SECTOR</li> <li>(SPECIFY)</li> <li>30</li> <li>(SPECIFY)</li> <li>30</li> <li>(SPECIFY)</li> <li>30</li> </ul> <ul> <li>OTHER SOURCE</li> <li>SHOP</li> <li>(SPECIFY)</li> <li>96</li> <li>OTHER</li></ul>		SECTOR, WRITE THE NAME OF THE PLACE.		
(NAME OF PLACE) <ul> <li>(NAME OF PLACE)</li> <li>PRIVATE MEDICAL SECTOR</li> <li>PRIVATE MODICAL SECTOR</li> <li>PRIVATE HOSPITAL/CLINIC</li> <li>21</li> <li>MATERNITY HOME</li> <li>22</li> <li>DIAGNOSTIC CENTER</li> <li>23</li> <li>WOMEN'S CONSULTATION</li> <li>24</li> <li>POLYCLINIC</li> <li>25</li> <li>FAMILY DOMES CONSULTATION</li> <li>24</li> <li>POLYCLINIC</li> <li>25</li> <li>FAMILY DOCTORS OFFICE</li> <li>26</li> <li>FAMILY DOCTORS OFFICE</li> <li>27</li> <li>PHARMACY</li> <li>28</li> <li>EMERGENCY SERVICES</li> <li>29</li> <li>OTHER PRIVATE MEDICAL SECTOR</li> <li>(SPECIFY)</li> <li>30</li> <li>(SPECIFY)</li> <li>30</li> <li>(SPECIFY)</li> <li>30</li> </ul> <ul> <li>OTHER SOURCE</li> <li>SHOP</li> <li>(SPECIFY)</li> <li>96</li> <li>OTHER</li></ul>				
(NAME OF PLACE)       PRIVATE MEDICAL SECTOR         PRIVATE HOSPITAL/CLINIC       21         MATERNITY HOME       22         DIAGNOSTIC CENTER       23         WOMEN'S CONSULTATION       24         POLYCLINIC       25         FAMILY DOCTORS OFFICE       26         FAP       27         PHARMACY       28         EMERGENCY SERVICES       29         OTHER SOURCE       30         (SPECIFY)       30         OTHER SOURCE       31         OTHER       96         OTHER       96         OTHER       98         731       PRESENCE OF OTHERS DURING THIS SECTION.       YES NO         CHILDREN <10			OTHER PUBLIC SECTOR	
(NAME OF PLACE)       PRIVATE MEDICAL SECTOR         PRIVATE HOSPITAL/CLINIC       21         MATERNITY HOME       22         DIAGNOSTIC CENTER       23         WOMEN'S CONSULTATION       24         POLYCLINIC       25         FAMILY DOCTORS OFFICE       26         FAP       27         PHARMACY       28         EMERGENCY SERVICES       29         OTHER PRIVATE MEDICAL SECTOR       30         (SPECIFY)       30         OTHER SOURCE       30         SHOP       41         CHURCH       42         FRIEND/RELATIVE       43         OTHER       96         OTHER       (SPECIFY)         DON'T KNOW       98				
PRIVATE HOSPITAL/CLINIC       21         MATERNITY HOME       22         DIAGNOSTIC CENTER       23         WOMEN'S CONSULTATION       24         POLYCLINIC       25         FAMILY DOCTORS OFFICE       26         FAP       27         PHARMACY       28         EMERGENCY SERVICES       29         OTHER PRIVATE MEDICAL SECTOR       30         (SPECIFY)       30         OTHER SOURCE       31         SHOP       41         CHURCH       42         FRIEND/RELATIVE       43         OTHER       96         (SPECIFY)       98         731       PRESENCE OF OTHERS DURING THIS SECTION.       YES       NO         CHILDREN <10				
731       PRESENCE OF OTHERS DURING THIS SECTION.       MATERNITY HOME       22         DIAGNOSTIC CENTER       23         WOMEN'S CONSULTATION       24         POLYCLINIC       25         FAMILY DOCTORS OFFICE       26         FAP       27         PHARMACY       28         EMERGENCY SERVICES       29         OTHER SOURCE       30         SHOP       41         CHURCH       42         FRIEND/RELATIVE       43         OTHER       96         CHILDREN <10		(NAME OF PLACE)		
731       PRESENCE OF OTHERS DURING THIS SECTION.       YES       NO         731       PRESENCE OF OTHERS DURING THIS SECTION.       YES       NO         731       PRESENCE OF OTHERS DURING THIS SECTION.       YES       NO         731       PRESENCE OF OTHERS DURING THIS SECTION.       YES       NO         731       PRESENCE OF OTHERS DURING THIS SECTION.       YES       NO			MATERNITY HOME	
731       PRESENCE OF OTHERS DURING THIS SECTION.       POLYCLINIC       25       FAMILY DOCTORS OFFICE       26         FAP				
FAP       27         PHARMACY       28         EMERGENCY SERVICES       29         OTHER PRIVATE MEDICAL SECTOR       30         (SPECIFY)       30         OTHER SOURCE       41         SHOP       41         CHURCH       42         FRIEND/RELATIVE       43         OTHER       96         OTHER       98         731       PRESENCE OF OTHERS DURING THIS SECTION.       YES       NO         CHILDREN <10			POLYCLINIC	
PHARMACY       28         EMERGENCY SERVICES       29         OTHER PRIVATE MEDICAL SECTOR       30         (SPECIFY)       30         OTHER SOURCE       41         CHURCH       42         FRIEND/RELATIVE       43         OTHER       96         (SPECIFY)       96         ON'T KNOW       98         731       PRESENCE OF OTHERS DURING THIS SECTION.       YES       NO         CHILDREN <10				
731       PRESENCE OF OTHERS DURING THIS SECTION.       OTHER PRIVATE MEDICAL SECTOR      30         0THER SOURCE      30         SHOP      41         CHURCH      42         FRIEND/RELATIVE      43         OTHER      96         (SPECIFY)      98         731       PRESENCE OF OTHERS DURING THIS SECTION.       CHILDREN <10			PHARMACY 28	
731       PRESENCE OF OTHERS DURING THIS SECTION.       VES       NO         731       PRESENCE OF OTHERS DURING THIS SECTION.       YES       NO         CHILDREN <10				
731       PRESENCE OF OTHERS DURING THIS SECTION.       VES       NO         731       PRESENCE OF OTHERS DURING THIS SECTION.       YES       NO         CHILDREN <10			20	
SHOP       41         CHURCH       42         FRIEND/RELATIVE       43         OTHER       96         (SPECIFY)       98         731       PRESENCE OF OTHERS DURING THIS SECTION.       YES       NO         CHILDREN <10				
SHOP       41         CHURCH       42         FRIEND/RELATIVE       43         OTHER       96         (SPECIFY)       98         731       PRESENCE OF OTHERS DURING THIS SECTION.       YES       NO         CHILDREN <10			OTHER SOURCE	
FRIEND/RELATIVE       43         OTHER       96         (SPECIFY)       98         731       PRESENCE OF OTHERS DURING THIS SECTION.       YES       NO         CHILDREN <10			SHOP 41	
OTHER         96           (SPECIFY)         98           731         PRESENCE OF OTHERS DURING THIS SECTION.         YES         NO           CHILDREN <10				
(SPECIFY)         98           731         PRESENCE OF OTHERS DURING THIS SECTION.         YES         NO           CHILDREN <10				
731     PRESENCE OF OTHERS DURING THIS SECTION.     YES     NO       CHILDREN <10				
CHILDREN <10			DON'T KNOW	
MALE ADULTS 1 2	731	PRESENCE OF OTHERS DURING THIS SECTION.		

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 304:	HE OR SHE	→ 813
802	CHECK 226:	OT PREGNANT	→ 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 CHILD1NO MORE2UNDECIDED/DON'T KNOW8	→ 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) CHILD1NO MORE/NONE2SAYS SHE CAN'T GET PREGNANT3UNDECIDED/DON'T KNOW8	→ 807 → 813 → 811
805	CHECK 226: NOT PREGNANT OR UNSURE a) How long would you like b) After the birth of the to wait from now before the birth of (a/another) child? 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       996         (SPECIFY)       998	→ 811 → 813 → 811
806	CHECK 226: NOT PREGNANT OR UNSURE	PREGNANT	→ 812
807	CHECK 303: USING A CONTRACEPTIVE METHOD?		<del>→</del> 813
808	CHECK 805: '24' OR MORE MONTHS NOT OR '02' OR MORE YEARS ASKED	'00-23' MONTHS OR '00-01' YEAR	→ 812
809		EARS AGO AGO ASKED	→ 811 → 811

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
810	CHECK 804:	NOT MARRIED A	
	<ul> <li>WANTS TO HAVE A/ANOTHER CHILD</li> <li>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?</li> <li>WANTS NO MORE/ NONE</li> <li>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?</li> </ul>	FERTILITY-RELATED REASONSNOT HAVING SEXBINFREQUENT SEXCMENOPAUSAL/HYSTERECTOMYDCAN'T GET PREGNANTENOT MENSTRUATED SINCELAST BIRTHLAST BIRTHFBREASTFEEDINGGUP TO GOD/FATALISTICH	
	Any other reason? Any other reason? RECORD ALL REASONS MENTIONED.	OPPOSITION TO USE       I         RESPONDENT OPPOSED       I         HUSBAND/PARTNER OPPOSED       J         OTHERS OPPOSED       K         RELIGIOUS PROHIBITION       L         LACK OF KNOWLEDGE       M         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         NO METHOD AVAILABLE       S         INCONVENIENT TO USE       T         INTERFERES WITH BODY'S       NORMAL PROCESSES         VOTHER       (SPECIFY)         DON'T KNOW       Z	
811	CHECK 303: USING A CONTRACEPTIVE METHOD?	YES.	
			→ 813
812	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES	
813	CHECK 218: 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? PROBE FOR A NUMERIC RESPONSE.	NONE	→ 815 → 815
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	

#### SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
815	In the last few months have you:	YES NO	
	a) Heard about contraception on the radio?	a) RADIO 1 2	
	b) Seen anything about contraception on the television?	b) TELEVISION 1 2	
	c) Read about contraception in a newspaper or magazine?	c) NEWSPAPER OR MAGAZINE 1 2	
	<ul> <li>d) Received a voice or text message about contraception on a mobile phone?</li> </ul>	d) MOBILE PHONE 1 2	
	<ul> <li>e) Read information about contraception on the internet?</li> </ul>	e) INTERNET 1 2	
816	In the last few months have you read information about reproductive health on the internet?	YES 1 NO 2	
817	CHECK 701:		
	YES, YES, CURRENTLY KIVING WITH A MAN	NO, NOT IN A UNION	→ 901
818	CHECK 303: USING A CONTRACEPTIVE METHOD?		
		USING	→ 820
	ASKED		→ 822
819	Would you say that using contraception is mainly your decision, mainly your (husband's/partner's) decision, or	MAINLY RESPONDENT	h
	did you both decide together?	JOINT DECISION	→ 821
		OTHER 6	ļ
820	Would you say that not using contraception is mainly your decision, mainly your (husband's/partner's)	MAINLY RESPONDENT	
	decision, or did you both decide together?	JOINT DECISION 3	
		OTHER 6	
821	CHECK 304:		
		HE OR SHE ARE	<del>→</del> 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 NUMBER1MORE CHILDREN2FEWER CHILDREN3DON'T KNOW8	

SECTION 9. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	CHECK 701:		
	CURRENTLY MARRIED/	NOT IN UNION	→ 909
902	How old was your (husband/partner) on his last birthday?	AGE IN COMPLETED YEARS	
903	Did your (husband/partner) ever attend school?	YES 1 NO 2	<del>→</del> 906
904	What was the highest level of school he attended: primary, basic, secondary, secondary-special or higher?	PRIMARY-BASIC-SECONDARY(1-12)         1           SECONDARY-SPECIAL         2           HIGHER         3           DON'T KNOW         8	<b>→ </b> 906
905	What was the highest (YEAR/CLASS/COURSE) he completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	YEAR/CLASS/COURSE	
906	Has your (husband/partner) done any work in the last 7 days?	YES	<del>→</del> 908
907	Has your (husband/partner) done any work in the last 12 months?	YES	] <b>→</b> 908A
908	What is your (husband's/partner's) occupation? That is, what kind of work does he mainly do?		
908A	In the past 3 years, has your (husband/partner) worked abroad for three or more months at a time?	YES 1 NO 2	
909	Aside from your own housework, have you done any work in the last seven days?	YES 1 NO 2	<b>→</b> 913
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	<del>→</del> 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	<del>→</del> 917
913	What is your occupation? That is, what kind of work do you mainly do?	[	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
914	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER1FOR SOMEONE ELSE2SELF-EMPLOYED3	
915	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR1SEASONALLY/PART OF THE YEAR2ONCE IN A WHILE3	
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: CURRENTLY MARRIED/LIVING WITH A MAN		→ 925
918	CHECK 916: CODE '1' OR '2' CIRCLED		─ <del>→</del> 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       3         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 HIM1LESS THAN HIM2ABOUT THE SAME3HUSBAND/PARTNER HAS4NO EARNINGS4DON'T KNOW8	→ 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       2         HUSBAND/PARTNER JOINTLY       3         HUSBAND/PARTNER HAS       4         OTHER       6         (SPECIFY)       6	
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       1         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       1         HUSBAND/PARTNER JOINTLY       3         SOMEONE ELSE       4         OTHER       6	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
924	Who usually makes decisions about visits to your family or relatives?	RESPONDENT       1         HUSBAND/PARTNER       2         RESPONDENT AND       3         HUSBAND/PARTNER JOINTLY       3         SOMEONE ELSE       4         OTHER       6	- Criti
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	→ 928
926	Do you have a title deed for any house you own?	YES         1           NO         2           DON'T KNOW         8	]→ 928
927	Is your name on the title deed?	YES         1           NO         2           DON'T KNOW         8	
928	Do you own any agricultural or non-agricultural land either alone or jointly with someone else?	ALONE ONLY       1         JOINTLY ONLY       2         BOTH ALONE AND JOINTLY       3         DOES NOT OWN       4	<del>→</del> 931
929	Do you have a title deed for any land you own?	YES         1           NO         2           DON'T KNOW         8	]→ 931
930	Is your name on the title deed?	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./ PRES./ NOT NOT LISTEN. LISTEN. PRES. CHILDREN < 10 1 2 3 HUSBAND 1 2 3 OTHER MALES 1 2 3 OTHER FEMALES 1 2 3	
932	<ul> <li>In your opinion, is a husband justified in hitting or beating his wife in the following situations:</li> <li>a) If she goes out without telling him?</li> <li>b) If she neglects the children?</li> <li>c) If she argues with him?</li> <li>d) If she refuses to have sex with him?</li> <li>e) If she burns the food?</li> </ul>	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	

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	<del>→</del> 1042
1002	HIV is the virus that can lead to AIDS. Can people reduce their chance of getting HIV by having just one uninfected sex partner who has no other sex partners?	YES	
1003	Can people get HIV from mosquito bites?	YES	
1004	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES	
1005	Can people get HIV by sharing food with a person who has HIV?	YES	
1006	Can people get HIV through saliva by kissing a person who has HIV?	YES	
1006A	Can people get HIV by shaking hands with a person who has HIV?	YES         1           NO         2           DON'T KNOW         8	
1007	Is it possible for a healthy-looking person to have HIV?	YES	
1008	Can HIV be transmitted from a mother to her baby:	YES NO DK	
	<ul><li>a) During pregnancy?</li><li>b) During delivery?</li><li>c) By breastfeeding?</li></ul>	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	→ 1027
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	
1027	I don't want to know the results, but have you ever been tested for HIV?	YES 1 NO 2	<del>→</del> 1031
1028	How many months ago was your most recent HIV test?	MONTHS AGO 95	

SECTION	10.	<b>HIV/AIDS</b>
---------	-----	-----------------

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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, WRITE THE NAME OF THE PLACE.	PUBLIC SECTOR         GOVERNMENT HOSPITAL       11         MATERNITY HOME       12         DIAGNOSTIC CENTER       13         WOMEN'S CONSULTATION       14         POLYCLINIC       15         AMBULATORY/ FAMILY DOCTOR OFFICE       16         FAP       17         EMERGENCY SERVICES       18         STAND-ALONE HIV TESTING AND       20         COUNSELING CENTER       19         OTHER PUBLIC SECTOR       17	
	(NAME OF PLACE)	20 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC 21 MATERNITY HOME 22 DIAGNOSTIC CENTER 23 WOMEN'S CONSULTATION 24 POLYCLINIC 25 FAMILY DOCTORS OFFICE 26 FAP 27 PHARMACY 28 EMERGENCY SERVICES 29 STAND-ALONE HIV TESTING AND COUNSELING CENTER 30 OTHER PRIVATE MEDICAL SECTOR	-> 1033
		31           (SPECIFY)           OTHER SOURCE           HOME         41           WORKPLACE         42           CORRECTIONAL FACILITY         43           NGO         44           OTHER         96           (SPECIFY)         96	
1031	Do you know of a place where people can go to get an HIV test?	YES 1 NO 2	
1032	Where is that? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.	PUBLIC SECTOR         GOVERNMENT HOSPITAL       A         MATERNITY HOME       B         DIAGNOSTIC CENTER       C         WOMEN'S CONSULTATION       D         POLYCLINIC       E         AMBULATORY/ FAMILY DOCTOR OFFICE       F         FAP       G         EMERGENCY SERVICES       H         STAND-ALONE HIV TESTING AND       COUNSELING CENTER         OTHER PUBLIC SECTOR       I	
	(NAME OF PLACE)	J         (SPECIFY)         PRIVATE MEDICAL SECTOR         PRIVATE HOSPITAL/CLINIC       K         MATERNITY HOME       L         DIAGNOSTIC CENTER       M         WOMEN'S CONSULTATION       N         POLYCLINIC       O         FAMILY DOCTORS OFFICE       P         FAP       Q         PHARMACY       R         EMERGENCY SERVICES       S         STAND-ALONE HIV TESTING AND       COUNSELING CENTER.	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		OTHER PRIVATE MEDICAL SECTOR	
		(SPECIFY) U OTHER SOURCE NGO W OTHERX	
I	<u>                                     </u>	(SPECIFY)	
1033	Have you heard of test kits people can use to test themselves for HIV?	YES 1 NO 2	→ 1035
1034	Have you ever tested yourself for HIV using a self-test kit?	YES 1 NO 2	
1035	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?	YES         1           NO         2           DON'T KNOW/NOT SURE/DEPENDS         8	
1036	Do you think children living with HIV should be allowed to attend school with children who do not have HIV?	YES	
1037	Do you think people hesitate to take an HIV test because they are afraid of how other people will react if the test result is positive for HIV?	YES	
1038	Do people talk badly about people living with HIV, or who are thought to be living with HIV?	YES	
1039	Do people living with HIV, or thought to be living with HIV, lose the respect of other people?	YES         1           NO         2           DON'T KNOW/NOT SURE/DEPENDS         8	
1040	Do you agree or disagree with the following statement: I would be ashamed if someone in my family had HIV.	AGREE         1           DISAGREE         2           DON'T KNOW/NOT SURE/DEPENDS         8	
1041	Do you fear that you could get HIV if you come into contact with the saliva of a person living with HIV?	YES       1         NO       2         SAYS SHE HAS HIV       3         DON'T KNOW/NOT SURE/DEPENDS       8	
1042	CHECK 1001:		
	<ul> <li>HEARD ABOUT HIV OR AIDS</li> <li>a) Apart from HIV, have you heard about other infections that can be transmitted through sexual contact?</li> <li>NOT HEARD ABOUT HIV OR AIDS</li> <li>b) Have you heard about infections that can be transmitted through sexual contact?</li> </ul>	YES 1 NO 2	
1043	CHECK 713:		
	HAS HAD SEXUAL	NEVER HAD SEXUAL INTERCOURSE	
1044	CHECK 1042: HEARD ABOUT OTHER SEXUALLY TRANS		
	YES	NO	→ 1046

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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	
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	
1047	Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES	
1048	CHECK 1045, 1046, AND 1047:		
	HAS HAD AN INFECTION (ANY 'YES')	HAS NOT HAD AN INFECTION OR DOES NOT KNOW	→ 1051
1049	The last time you had (PROBLEM FROM 1045/1046/1047), did you seek any kind of advice or treatment?	YES 1 NO 2	→ 1051
1050	Where did you go? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.	PUBLIC SECTOR         GOVERNMENT HOSPITAL       A         MATERNITY HOME       B         DIAGNOSTIC CENTER       C         WOMEN'S CONSULTATION       D         POLYCLINIC       E         AMBULATORY/ FAMILY DOCTOR OFFICE       F         FAP       G         EMERGENCY SERVICES       H         STAND-ALONE HIV TESTING AND       COUNSELING CENTER         COUNSELING CENTER       I         OTHER PUBLIC SECTOR       J         (SPECIFY)         PRIVATE MEDICAL SECTOR       J         WOMEN'S CONSULTATION       N         POLYCLINIC       K         MATERNITY HOME       L         DIAGNOSTIC CENTER       M         WOMEN'S CONSULTATION       N         POLYCLINIC       O         FAMILY DOCTORS OFFICE       P         FAP       Q         PHARMACY       R         EMERGENCY SERVICES       S         STAND-ALONE HIV TESTING AND       COUNSELING CENTER         CUNSELING CENTER       T	
		OTHER PRIVATE MEDICAL SECTOR U (SPECIFY) OTHER SOURCE SHOP NGO OTHER X (SPECIFY)	
1051	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES         1           NO         2           DON'T KNOW         8	
1052	Is a wife justified in refusing to have sex with her husband when she knows he has sex with other women?	YES	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1053	CHECK 701:	-	
	CURRENTLY MARRIED/		→ 1101
1054	Can you say no to your (husband/partner) if you do not want to have sexual intercourse?	YES	
1055	Could you ask your (husband/partner) to use a condom if you wanted him to?	YES	

SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1101	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months?	NUMBER OF INJECTIONS	
	IF YES: How many injections have you had?		
	IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NONE 00	→ 1104
1102	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker?	NUMBER OF INJECTIONS	
	IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NONE	→ 1104
1103	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES	
1104	Do you currently smoke cigarettes every day, some days, or not at all?	EVERY DAY         1           SOME DAYS         2           NOT AT ALL         3	]→ 1106
1105	On average, how many cigarettes do you currently smoke each day?	NUMBER OF CIGARETTES	
1106	Do you currently smoke or use any other type of tobacco every day, some days, or not at all?	EVERY DAY         1           SOME DAYS         2           NOT AT ALL         3	─ <del>→</del> 1108
1107	What other type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	PIPES FULL OF TOBACCO       B         CIGARS, CHEROOTS, OR CIGARILLOS       C         WATER PIPE       D         SNUFF BY MOUTH       E         SNUFF BY NOSE       F         CHEWING TOBACCO       G         OTHER       X	
		(SPECIFY)	
1108	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:	BIG NOT A BIG PROBLEM PROBLEM	
	a) Getting permission to go to the doctor?	a) PERMISSION TO GO 1 2	
	b) Getting money needed for advice or treatment?	b) GETTING MONEY 1 2	
	c) The distance to the health facility?	c) DISTANCE 1 2	
	d) Not wanting to go alone?	d) GO ALONE 1 2	

# SECTION 11. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1109	Are you covered by any health insurance?	YES 1 NO 2	<del>→</del> 1111
1110	What type of health insurance are you covered by?		
	RECORD ALL MENTIONED.	BASIC BENEFITS PACKAGE       A         HEALTH INSURANCE THROUGH       B         OTHER PRIVATELY PURCHASED       COMMERCIAL HEALTH INSURANCE       D         OTHER       X	
		(SPECIFY)	
1111	These next questions are about common health problems in Armenia.		
	Have you ever heard of an illness called tuberculosis or TB?	YES 1 NO 2	<del>→</del> 1119
1112	What signs or symptoms would lead you to think that a person has tuberculosis? Any other? RECORD ALL MENTIONED. How does tuberculosis spread from one person to another? Any other ways? RECORD ALL MENTIONED.	COUGHING       A         COUGHING WITH SPUTUM       B         COUGHING FOR SEVERAL WEEKS       C         FEVER       D         BLOOD IN SPUTUM       E         LOSS OF APPETITE       F         NIGHTSWEATING       G         PAIN IN CHEST       H         TIREDNESS/FATIGUE       I         WEIGHT LOSS       J         LETHARGY       K         OTHER       X         (SPECIFY)       Z         THROUGH THE AIR WHEN       A         COUGHING OR SNEEZING       A         THROUGH SHARING UTENSILS       B         THROUGH FOOD       D         THROUGH FOOD       D         THROUGH SEXUAL CONTACT       E         THROUGH MOSQUITO BITES       F         OTHER       X         (SPECIFY)       X	
		DON'T KNOW Z	
1114	Which organs in a human body can be affected by tuberculosis?	LUNGS ONLY A	
	RECORD ALL MENTIONED.	ANY ORGANS CAN BE AFFECTED BY TUBERCULOSIS B OTHER X (SPECIFY) DON'T KNOW Z	
1115	Can tuberculosis be cured?		
1115	Can tuberculosis be cured?	YES 1 NO 2 DON'T KNOW 8	
1116	Have you ever heard of a multi-resistant or a multi-drug- resistant form of tuberculosis?	YES 1 NO 2	<del>→</del> 1118

# SECTION 11. OTHER HEALTH ISSUES

QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
Can multi-drug-resistant tuberculosis be cured?	YES	
If a member of your family got tuberculosis, would you want it to remain a secret or not?	YES, REMAIN A SECRET       1         NO       2         DON'T KNOW/NOT SURE/       2         DEPENDS       8	
Have you ever heard of an illness called anemia?	YES 1 NO 2	→ 1200
What signs or symptoms would lead you to think that a person has anemia? Any other? RECORD ALL MENTIONED.	PALE SKIN       A         WEAKNESS       B         TIREDNESS/FATIGUE       C         SHORTNESS OF BREATH       D         HEADACHE       E         DIZZINESS OR LIGHTHEADEDNESS       F         FREQUENT INFECTIONS       G         NO VISIBLE SIGNS       H         OTHER       X         (SPECIFY)       Z	
What causes anemia? Anything else?	LACK OF IRON IN FOOD       A         POOR NUTRITION       B         EATING BREAD ONLY       C         HEREDETERY/THALASSEMIA/CIRCLE CELL       D         BLOOD LOSS OR TRAUMA       E         ABORTION       F         MENSTRUATION       G         PREGNANCY       H         DELIVERY       I         INFECTION       J         MOSQUITOES/MALARIA       K         ENVIRONMENT POLLUTION       L         LEAD POISON       M         UNCLEAN POLLUTED WATER       N         INJECTIONS       O         PARASITES       P         WRONG BLOOD TRANSFUSION       Q         DISEASES       R         OTHER       X         (SPECIFY)       Z	
	Can multi-drug-resistant tuberculosis be cured? If a member of your family got tuberculosis, would you want it to remain a secret or not? Have you ever heard of an illness called anemia? What signs or symptoms would lead you to think that a person has anemia? Any other? RECORD ALL MENTIONED. What causes anemia?	Can multi-drug-resistant tuberculosis be cured?       YES       1         NO       2         DONT KNOW       8         If a member of your family got tuberculosis, would you want it to remain a secret or nol?       YES, REMAIN A SECRET       1         NO       2         DONT KNOW       8         Have you ever heard of an illness called anemia?       YES       1         Ves       PALE SKIN       A         Parson has anemia?       PALE SKIN       A         Any other?       PALE SKIN       A         RECORD ALL MENTIONED.       PALE SKIN       A         What causes anemia?       C       SHORTINESS OF BREATH       D         DIZZINESS OR LIGHTHEADEDNESS       F       F       FREQUENT INFECTIONS       G         NO VISIBLE SIGNS       H       OTHER

SECTION 11. OTHER HEALTH ISSUES
---------------------------------

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1122	What can a person eat or drink to prevent having anemia? Anything else?	RED MEAT       A         ANY MEAT       B         ORGAN MEAT       C         IRON RICH FOOD       D         ANY FRUITS       F	
	RECORD ALL MENTIONED.	GREEN APPLES       F         ANY VEGETABLES       G         BEETROOT       H         RED FRUITS OR VEGETABLES       I         VITAMIN 'C' RICH FOODS       J         ANY JUICE       K         TEA OR COFFEE       L         ANY VITAMINS       M         VITAMIN 'C'       N         VITAMIN 'B12'       O         IRON TABLETS/CAPSULES/SYRUP/MEDICINE       P         OTHER       X         (SPECIFY)       Z	
1123	Do you think that drinking coffee or tea during meal time can promote anemia?	YES	

NO.	QUESTIONS AND FILTERS		-		CODING	CATEGOR	ES	SKIP
1200	CHECK COVER FOR NAME AND LINE NUMBE	R OF SELECT	ED W	/OMAN				
	WOMAN SELECTED		٢		WOMAN			→ 1301A
1201	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL PRIVACY IS ENSUF	RED.						
	PRIVACY OBTAINED 1 ↓	NOT		VACY SIBLE .	2	2		
1201A	READ TO THE RESPONDENT: Now I would like to ask you questions about some these questions very personal. However, your ans Armenia. Let me assure you that your answers are else in your household will know that you were as answer, just let me know and I will go on to the ne	swers are cruc e completely c ked these ques	al for onfide	helping ntial an	to understand d will not be tol	the condition d to anyone a	of women in and no one	
1202	CHECK 701 AND 702:							
		TENSE			ARRIED/ ED WITH A MAN			
1203	First, I am going to ask you about some situations some women. Please tell me if these apply to you your (last) (husband/partner)?					YES	NO DK	
	<ul> <li>a) He (is/was) jealous or angry if you (talk/talked)</li> <li>b) He frequently (accuses/accused) you of being</li> <li>c) He (does/did) not permit you to meet your fem</li> <li>d) He (tries/tried) to limit your contact with your fa</li> <li>e) He (insists/insisted) on knowing where you (ar times?</li> </ul>	unfaithful? ale friends? amily?	,	ACC NOT NO I		1	2 8 2 8 2 8 2 8 2 8 2 8	
1204	Now I need to ask some more questions about yo with your (last) (husband/partner).	ur relationship						
	A. Did your (last) (husband/partner) ever:			1	low often did th 2 months: often t all?		0	
		EVER			OFTEN	SOME- TIMES	NOT IN LAST 12 MONTHS	
	<ul> <li>a) say or do something to humiliate you in front of others?</li> </ul>	YES NO	1 2 ↓	<b>→</b>	1	2	3	
	b) threaten to hurt or harm you or someone you care about?	YES NO	v 1 2 ↓	$\rightarrow$	1	2	3	
	c) insult you or make you feel bad about yourself?	YES NO	♥ 1 2 ↓	<b>→</b>	1	2	3	
1205	<ul> <li>A. Did your (last) (husband/partner) ever do any o things to you:</li> </ul>	of the following		1	low often did th 2 months: often t all?			

NO.	QUESTIONS AND FILTERS			CODING CATEGORIES			SKIP	
		EVER			OFTEN	SOME- TIMES	NOT IN LAST 12 MONTHS	
	<ul> <li>a) push you, shake you, or throw something at you?</li> </ul>	YES NO	1 2 I	<b></b>	1	2	3	
	b) slap you?	YES NO	¥ 1 2	$\rightarrow$	1	2	3	
	c) twist your arm or pull your hair?	YES NO	¥ 1 2	$\rightarrow$	1	2	3	
	<ul> <li>d) punch you with his fist or with something that could hurt you?</li> </ul>	YES NO	¥ 1 2	$\rightarrow$	1	2	3	
	e) kick you, drag you, or beat you up?	YES NO	¥ 1 2	$\rightarrow$	1	2	3	
	f) try to choke you or burn you on purpose?	YES NO	¥ 1 2	$\rightarrow$	1	2	3	
	g) threaten or attack you with a knife, gun, or other weapon?	YES NO	¥ 1 2	$\rightarrow$	1	2	3	
	<ul> <li>h) physically force you to have sexual intercourse with him when you did not want to?</li> </ul>	YES NO	↓ 1 2 ↓	$\rightarrow$	1	2	3	
	<ul> <li>physically force you to perform any other sexual acts you did not want to?</li> </ul>	YES NO	1 2 I	$\rightarrow$	1	2	3	
	<li>j) force you with threats or in any other way to perform sexual acts you did not want to?</li>	YES NO	¥ 1 2 ↓	$\rightarrow$	1	2	3	
1206	CHECK 1205A (a-j): AT LEAST ONE 'YES'			NOT A S	SINGLE			→ 1209
1207	How long after you first (got married/started living your (last) (husband/partner) did (this/any of these happen?			NUME	BER OF YEAR	s		
	IF LESS THAN ONE YEAR, RECORD '00'.			_	ORE MARRIAG			
1208	Did the following ever happen as a result of what y (husband/partner) did to you:	/our (last)						
	a) You had cuts, bruises, or aches?			YES NO				
	b) You had eye injuries, sprains, dislocations, or burns?		YES NO					
	c) You had deep wounds, broken bones, broken other serious injury?	teeth, or any	,	YES NO				
1209	Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) (husband/partner) at times when he was not already beating or physically hurting you?		was	YES NO				→ 1211
1210	In the last 12 months, how often have you done th (husband/partner): often, only sometimes, or not a		st)		ETIMES		2	

NO.	QUESTIONS AND FILTERS		CODING CATEGORIES	SKIP
1211	Does (did) your (last) (husband/partner) drink alco	phol?	YES 1 NO 2	→ 1213
1212	How often does (did) he get drunk: often, only sometimes, or never?		OFTEN         1           SOMETIMES         2           NEVER         3	
1213	Are (Were) you afraid of your (last) (husband/part time, sometimes, or never?	ner): most of the	MOST OF THE TIME AFRAID1SOMETIMES AFRAID2NEVER AFRAID3	
1214	CHECK 709: MARRIED MORE THAN ONCE		MARRIED ONLY	→ 1216
1215	A. So far we have been talking about the behavior (current/last) (husband/partner). Now I want to the behavior of any previous (husband/partner)	o ask you about	B. How long ago did this last happen?	
		EVER	0 - 11 12+ MONTHS MONTHS DON'T AGO AGO REMEMBER	
	<ul> <li>a) Did any previous (husband/partner) ever hit, slap, kick, or do anything else to hurt you physically?</li> </ul>	YES 1 NO 2 ↓	→ 1 2 3	
	b) Did any previous (husband/partner) physically force you to have intercourse or perform any other sexual acts against your will?	YES 1 NO 2 ↓	→ 1 2 3	
1216	<ul> <li>a) From the time you were 15 b) From the time years old has anyone other years old has than (your/any)</li> </ul>	TH A MAN 厂	YES	]→ 1219
1217	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         CURRENT BOYFRIEND       F         FORMER BOYFRIEND       G         MOTHER-IN-LAW       H         FATHER-IN-LAW       J         TEACHER       K         EMPLOYER/SOMEONE AT WOR▶       L         POLICE/SOLDIER       M         OTHER       X         (SPECIFY)       X	
1218	In the last 12 months, how often has (this person/ persons) physically hurt you: often, only sometime		OFTEN         1           SOMETIMES         2           NOT AT ALL         3	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1219	CHECK 201, 210 AND 226: EVER BEEN		
	PREGNANT ('YES' ON 201 OR 226 OR ONE OR MORE ON 210) ↓	PREGNANT	→ 1222
1220	Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES 1 NO 2	→ 1222
1221	Who has done any of these things to physically hurt you while you were pregnant?	CURRENT HUSBAND/PARTNER A MOTHER/STEP-MOTHER B FATHER/STEP-FATHEF C	
	Anyone else?	SISTER/BROTHER	
		DAUGHTER/SON E	
	RECORD ALL MENTIONED.	OTHER RELATIVE F FORMER HUSBAND/PARTNER G	
		CURRENT BOYFRIEND	
		FORMER BOYFRIEND	
		MOTHER-IN-LAW J	
		FATHER-IN-LAWK	
		OTHER IN-LAW L TEACHER M	
		EMPLOYER/SOMEONE AT WORK N	
		POLICE/SOLDIER 0	
		OTHER X (SPECIFY)	
1222	CHECK 701 AND 702:		
		ARRIED/NEVER	→ 1222B
1222A	LIVED WITH A MAN LIVE	ED WITH A MAN	→ 1222B
1222A	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/partner). At any	ED WITH A MAN YES 1	→ 1222B
1222A	LIVED WITH A MAN LIVE	ED WITH A MAN YES 1 NO 2	→ 1223
1222A	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/partner). At any time in your life, as a child or as an adult, has anyone ever forced	ED WITH A MAN YES 1	
	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to?	ED WITH A MAN       1         YES       1         NO       2         REFUSED TO ANSWER/       3	→ 1223
1222A 1222B	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to? At any time in your life, as a child or as an adult, has anyone ever	ED WITH A MAN       1         YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1	→ 1223
	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to?	ED WITH A MAN       1         YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1	→ 1223
	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to? 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 or perform any	ED WITH A MAN       1         YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO       2	→ 1223 →1224A
1222B	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to? 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 or perform any other sexual acts when you did not want to?	ED WITH A MAN       1         YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO       2         REFUSED TO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER       1         NO       3	→ 1223 →1224A
	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to? 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 or perform any	ED WITH A MAN       1         YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO       2         REFUSED TO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER/       1         NO       2         REFUSED TO ANSWER/       2	→ 1223 →1224A
1222B	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to? 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 or perform any other sexual acts when you did not want to? Who was the person who was forcing you the very first time this	ED WITH A MAN         YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO       2         REFUSED TO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER       1         NO       2         REFUSED TO ANSWER/       3         CURRENT HUSBAND/PARTNER       01	→ 1223 →1224A
1222B	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to? 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 or perform any other sexual acts when you did not want to? Who was the person who was forcing you the very first time this	ED WITH A MAN         YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO       2         REFUSED TO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER       3         VES       1         NO       2         REFUSED TO ANSWER       3         CURRENT HUSBAND/PARTNER       01         FORMER HUSBAND/PARTNEF       02         CURRENT/FORMER BOYFRIEND       03         FATHER/STEP-FATHEF       04	→ 1223 →1224A
1222B	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to? 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 or perform any other sexual acts when you did not want to? Who was the person who was forcing you the very first time this	ED WITH A MAN         YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO       2         REFUSED TO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER       3         CURRENT HUSBAND/PARTNER       01         FORMER HUSBAND/PARTNEF       02         CURRENT/FORMER BOYFRIEND       03         FATHER/STEP-FATHEF       04         BROTHER/STEP-BROTHEI       05	→ 1223 →1224A
1222B	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to? 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 or perform any other sexual acts when you did not want to? Who was the person who was forcing you the very first time this	ED WITH A MAN         YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER       1         NO       2         REFUSED TO ANSWER       3         CURRENT HUSBAND/PARTNER       01         FORMER HUSBAND/PARTNEF       02         CURRENT/FORMER BOYFRIEND       03         FATHER/STEP-FATHEF       04         BROTHER/STEP-BROTHEI       05         OTHER RELATIVE       06	→ 1223 →1224A
1222B	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to? 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 or perform any other sexual acts when you did not want to? Who was the person who was forcing you the very first time this	ED WITH A MAN         YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO       2         REFUSED TO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER       3         CURRENT HUSBAND/PARTNER       01         FORMER HUSBAND/PARTNEF       02         CURRENT/FORMER BOYFRIEND       03         FATHER/STEP-FATHEF       04         BROTHER/STEP-BROTHEI       05	→ 1223 →1224A
1222B	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to? 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 or perform any other sexual acts when you did not want to? Who was the person who was forcing you the very first time this	ED WITH A MAN         YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO       2         REFUSED TO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER       3         VES       1         NO       2         REFUSED TO ANSWER       3         CURRENT HUSBAND/PARTNER       01         FORMER HUSBAND/PARTNEF       02         CURRENT/FORMER BOYFRIEND       03         FATHER/STEP-FATHEF       04         BROTHER/STEP-BROTHEI       05         OTHER RELATIVE       06         IN-LAW       07         OWN FRIEND/ACQUAINTANC       08         FAMILY FRIEND       09	→ 1223 →1224A
1222B	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to? 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 or perform any other sexual acts when you did not want to? Who was the person who was forcing you the very first time this	YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER       3         CURRENT HUSBAND/PARTNER       01         FORMER HUSBAND/PARTNEF       02         CURRENT/FORMER BOYFRIEND       03         FATHER/STEP-FATHEF       04         BROTHER/STEP-BROTHEI       05         OTHER RELATIVE       06         IN-LAW       07         OWN FRIEND/ACQUAINTANC       08         FAMILY FRIEND       09         TEACHER       10	→ 1223 →1224A
1222B	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to? 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 or perform any other sexual acts when you did not want to? Who was the person who was forcing you the very first time this	YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO       2         REFUSED TO ANSWER       3         CURRENT HUSBAND/PARTNER       01         FORMER HUSBAND/PARTNEF       02         CURRENT/FORMER BOYFRIEND       03         FATHER/STEP-FATHEF       04         BROTHER/STEP-BROTHEI       05         OTHER RELATIVE       06         IN-LAW       07         OWN FRIEND/ACQUAINTANC       08         FAMILY FRIEND       09         TEACHER       10         EMPLOYER/SOMEONE AT WORF       11	→ 1223 →1224A
1222B	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to? 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 or perform any other sexual acts when you did not want to? Who was the person who was forcing you the very first time this	YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO       2         REFUSED TO ANSWER       3         CURRENT HUSBAND/PARTNER       01         FORMER HUSBAND/PARTNEF       02         CURRENT/FORMER BOYFRIEND       03         FATHER/STEP-FATHEF       04         BROTHER/STEP-BROTHEI       05         OTHER RELATIVE       06         IN-LAW       07         OWN FRIEND/ACQUAINTANC       08         FAMILY FRIEND       09         TEACHER       10         EMPLOYER/SOMEONE AT WORF       11         POLICE/SOLDIER       12	→ 1223 →1224A
1222B	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to? 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 or perform any other sexual acts when you did not want to? Who was the person who was forcing you the very first time this	YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO       2         REFUSED TO ANSWER       3         CURRENT HUSBAND/PARTNER       01         FORMER HUSBAND/PARTNEF       02         CURRENT/FORMER BOYFRIEND       03         FATHER/STEP-FATHEF       04         BROTHER/STEP-BROTHEI       05         OTHER RELATIVE       06         IN-LAW       07         OWN FRIEND/ACQUAINTANC       08         FAMILY FRIEND       09         TEACHER       10         EMPLOYER/SOMEONE AT WORF       11	→ 1223 →1224A
1222B	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to? 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 or perform any other sexual acts when you did not want to? Who was the person who was forcing you the very first time this	YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO       2         REFUSED TO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER       3         CURRENT HUSBAND/PARTNER       01         FORMER HUSBAND/PARTNEF       02         CURRENT/FORMER BOYFRIEND       03         FATHER/STEP-FATHEF       04         BROTHER/STEP-BROTHEI       05         OTHER RELATIVE       06         IN-LAW       07         OWN FRIEND/ACQUAINTANC       08         FAMILY FRIEND       09         TEACHER       10         EMPLOYER/SOMEONE AT WORF       11         POLICE/SOLDIER       12         PRIEST/RELIGIOUS LEADER       13         STRANGER       14	→ 1223 →1224A
1222B	LIVED WITH A MAN LIVE Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/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 or perform any other sexual acts when you did not want to? 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 or perform any other sexual acts when you did not want to? Who was the person who was forcing you the very first time this	ED WITH A MAN         YES       1         NO       2         REFUSED TO ANSWER/       3         YES       1         NO       2         REFUSED TO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER       3         YES       1         NO       2         REFUSED TO ANSWER       3         CURRENT HUSBAND/PARTNER       01         FORMER HUSBAND/PARTNEF       02         CURRENT/FORMER BOYFRIEND       03         FATHER/STEP-FATHEF       04         BROTHER/STEP-BROTHEI       05         OTHER RELATIVE       06         IN-LAW       07         OWN FRIEND/ACQUAINTANC       08         FAMILY FRIEND       09         TEACHER       10         EMPLOYER/SOMEONE AT WORF       11         POLICE/SOLDIER       12         PRIEST/RELIGIOUS LEADER       13	→ 1223 →1224A

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1224	CHECK 701 AND 702:		
	EVER MARRIED/EVER NEVER MARRIED/NEVER		
	<ul> <li>a) In the last 12 months, has anyone other than (your/any) (husband/partner) physically forced you to have sexual intercourse when you did not want to?</li> <li>b) In the last 12 months has anyone physically forced you to have sexual intercourse when you did not</li> </ul>	YES 1 NO 2	]→ 1225
1224A	CHECK 1205A (h-j) and 1215A(b)		
	AT LEAST ONE 'YES' ↓	NOT A SINGLE 'YES'	→ 1226
1225	CHECK 701 AND 702:		
	EVER MARRIED/EVER       NEVER MARRIED/NEVER         LIVED WITH A MAN       LIVED WITH A MAN		
	<ul> <li>a) How old were you the first time b) How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts by anyone, including (your/any) husband/partner?</li> <li>b) How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts?</li> </ul>	AGE IN COMPLETED YEARS	
1226	CHECK 1205A (a-j), 1215A (a,b), 1216, 1220, 1222A, AND 1222B:	·	
	AT LEAST ONE 'YES' ↓	NOT A SINGLE	→ 1230
1227	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	
1228	From whom have you sought help?	OWN FAMILY A	h
	Anyone else?	HUSBAND'S/PARTNER'S FAMILY B CURRENT/FORMER	
	RECORD ALL MENTIONED.	HUSBAND/PARTNER C CURRENT/FORMER BOYFRIEND D	
	RECORD ALL MENTIONED.	FRIEND E	
		NEIGHBOR       F         RELIGIOUS LEADEF       G	→ 1230
		DOCTOR/MEDICAL PERSONNEL H POLICE I	
		LAWYER J	
		SOCIAL SERVICE ORGANIZATIO	
		OTHERX (SPECIFY)	
1229	Have you ever told any one about this?	YES 1 NO 2	
1230	As far as you know, did your father ever beat your mother?	YES 1	
		NO         2           DON'T KNOW         8	

NO.	QUESTIONS AND FILTERS		CODING CATEGORIES		SKIP	
	THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE					
1231	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?	HUSBAND OTHER MALE A FEMALE ADUL	ADUL1 1	2	NO 3 3 3	
1232	INTERVIEWER'S COMMENTS/EXPLANATION F	OR NOT COMPLET	ING THE DOMEST	IC VIOLENCE MO	DULE.	

INFORMATION ABOUT A HEALTH FACILITY WHERE THE VACCINATION RECORDS (MOH FORMS 063 OR 112) ARE KEPT

1301A	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
10017	CHECK 214, 218, 508A AND 508B	3: ANY LIVE BIRTHS IN 2012-2016	
	YES		1314
	Ļ		
1302A	CHECK 212, 214, 216 AND 508A: BORN IN 2012-2016	RECORD THE NAME AND PREGNANCY HISTORY NUMBER OF THE LAST CHILD	
	NAME OF LAST LIVE BIRTH	PREGNANCY HISTORY NUMBER	
1303A	CHECK 218 FOR CHILD:		
		DEAD	40040
	•		1301B
1304A	ASK RESPONDENT FOR CONSENT TO COPY VACCINATION DATES FROM THE CHILD'S HEALTH CARD KEPT IN A HEALTH FACILITY	As part of this survey, we would like to visit the health facility in which your children who wer January 2012 or later got vaccinated. We would like to have your permission to copy the vac dates from your children's health records. With your permission, our team supervisor will vis facility and copy the vaccination dates from the health cards directly to the same questionna using right now for our interview. The information will be kept confidential and will not be she anyone other than members of our survey team. We hope you will allow access to the health because information about your children's vaccinations is very important. The information wi complement the information that we obtained from you in this interview. Many dangerous chi illnesses such as measles or tetanus can be prevented through timely and effective vaccinal information from the cards will assist the government to develop programs to protect children's vaccine preventable diseases and reduce childhood mortality and morbidity in Armenia. Do you have any questions? Will you allow (NAME OF CHILD) to have his/her vaccination records copied from (NAME O health card kept at the health facility?	ccination it the health ire I am ared with a cards II Idhood ion. The i from
1305A	CIRCLE THE CODE AND SIGN YOUR NAME.	GRANTED 1 (SIGN) REFUSED	
<u> </u>		(SKIP TO 1313A) ←	
		FULL NAME, CHILD'S BIRTH DATE, CHILD'S HOME ADDRESS AND NAME AND ADDRESS VACCINATION RECORDS ARE KEPT, CHILD'S DOCTOR NAME AND UCHASTOK NUMBER	OF
1306A	CHILD'S FULL NAME		
10004			
		CHILD'S FIRST NAME CHILD'S LAST NAME	
1307A	MOTHER'S FULL NAME	CHILD'S FIRST NAME CHILD'S LAST NAME	
1307A	MOTHER'S FULL NAME		
1307A	MOTHER'S FULL NAME	CHILD'S FIRST NAME CHILD'S LAST NAME  MOTHER'S FIRST NAME MOTHER'S LAST NAME	
1307A 1308A	MOTHER'S FULL NAME RECORD CHILD'S DATE OF BIRTH FROM 214		
	RECORD CHILD'S DATE OF	MOTHER'S FIRST NAME MOTHER'S LAST NAME DAY	
1308A	RECORD CHILD'S DATE OF BIRTH FROM 214	MOTHER'S FIRST NAME MOTHER'S LAST NAME DAY MONTH YEAR	
1308A	RECORD CHILD'S DATE OF BIRTH FROM 214	MOTHER'S FIRST NAME MOTHER'S LAST NAME DAY	
1308A	RECORD CHILD'S DATE OF BIRTH FROM 214	MOTHER'S FIRST NAME MOTHER'S LAST NAME DAY MONTH YEAR	
1308A	RECORD CHILD'S DATE OF BIRTH FROM 214 CHILD'S HOME ADDRESS	MOTHER'S FIRST NAME     MOTHER'S LAST NAME       DAY	
1308A 1309A	RECORD CHILD'S DATE OF BIRTH FROM 214 CHILD'S HOME ADDRESS	MOTHER'S FIRST NAME     MOTHER'S LAST NAME       DAY	
1308A 1309A	RECORD CHILD'S DATE OF BIRTH FROM 214 CHILD'S HOME ADDRESS CHILD'S HOME ADDRESS NAME, ADDRESS AND TELEPHONE NUMBER OF MEDICAL FACILITY WHERE CHILD'S VACCINATION	MOTHER'S FIRST NAME     MOTHER'S LAST NAME       DAY	
1308A 1309A	RECORD CHILD'S DATE OF BIRTH FROM 214 CHILD'S HOME ADDRESS NAME, ADDRESS AND TELEPHONE NUMBER OF MEDICAL FACILITY WHERE	MOTHER'S FIRST NAME     MOTHER'S LAST NAME       DAY	
1308A 1309A	RECORD CHILD'S DATE OF BIRTH FROM 214 CHILD'S HOME ADDRESS CHILD'S HOME ADDRESS NAME, ADDRESS AND TELEPHONE NUMBER OF MEDICAL FACILITY WHERE CHILD'S VACCINATION RECORDS (FORMS # 063 OR	MOTHER'S FIRST NAME       MOTHER'S LAST NAME         DAY	
1308A 1309A	RECORD CHILD'S DATE OF BIRTH FROM 214 CHILD'S HOME ADDRESS CHILD'S HOME ADDRESS NAME, ADDRESS AND TELEPHONE NUMBER OF MEDICAL FACILITY WHERE CHILD'S VACCINATION RECORDS (FORMS # 063 OR	MOTHER'S FIRST NAME     MOTHER'S LAST NAME       DAY	
1308A 1309A	RECORD CHILD'S DATE OF BIRTH FROM 214 CHILD'S HOME ADDRESS CHILD'S HOME ADDRESS NAME, ADDRESS AND TELEPHONE NUMBER OF MEDICAL FACILITY WHERE CHILD'S VACCINATION RECORDS (FORMS # 063 OR	MOTHER'S FIRST NAME       MOTHER'S LAST NAME         DAY	
1308A 1309A 1310A	RECORD CHILD'S DATE OF BIRTH FROM 214 CHILD'S HOME ADDRESS CHILD'S HOME ADDRESS NAME, ADDRESS AND TELEPHONE NUMBER OF MEDICAL FACILITY WHERE CHILD'S VACCINATION RECORDS (FORMS # 063 OR #112) ARE KEPT	MOTHER'S FIRST NAME       MOTHER'S LAST NAME         DAY	
1308A 1309A 1310A	RECORD CHILD'S DATE OF BIRTH FROM 214 CHILD'S HOME ADDRESS CHILD'S HOME ADDRESS NAME, ADDRESS AND TELEPHONE NUMBER OF MEDICAL FACILITY WHERE CHILD'S VACCINATION RECORDS (FORMS # 063 OR #112) ARE KEPT	MOTHER'S FIRST NAME       MOTHER'S LAST NAME         DAY	
1308A 1309A 1310A 1311A	RECORD CHILD'S DATE OF BIRTH FROM 214 CHILD'S HOME ADDRESS CHILD'S HOME ADDRESS NAME, ADDRESS AND TELEPHONE NUMBER OF MEDICAL FACILITY WHERE CHILD'S VACCINATION RECORDS (FORMS # 063 OR #112) ARE KEPT	MOTHER'S FIRST NAME       MOTHER'S LAST NAME         DAY	
1308A 1309A 1310A	RECORD CHILD'S DATE OF BIRTH FROM 214 CHILD'S HOME ADDRESS CHILD'S HOME ADDRESS NAME, ADDRESS AND TELEPHONE NUMBER OF MEDICAL FACILITY WHERE CHILD'S VACCINATION RECORDS (FORMS # 063 OR #112) ARE KEPT	MOTHER'S FIRST NAME       MOTHER'S LAST NAME         DAY	

		FACILITY WHERE THE VACCINATION RECORDS (MOH FORMS 063 OR 112) ARE KEPT			
NO. 1301B	QUESTIONS AND FILTERS CHECK 214, 218, 508A AND 508E	CODING CATEGORIES 3: ANY MORE LIVE BIRTHS IN 2012-2016?	SKIP		
	YES	NO	1314		
	↓		1314		
1302B	CHECK 212, 214, 216 AND 508B CHILD BORN IN 2012-2016	RECORD THE NAME AND PREGNANCY HISTORY NUMBER OF THE NEXT-TO-LAST			
	NAME OF NEXT TO LAST LIVE B	IRTH PREGNANCY HISTORY NUMBER			
1303B	CHECK 218 FOR CHILD:				
		DEAD	1313B		
1304B	ASK RESPONDENT FOR CONSENT TO COPY VACCINATION DATES FROM THE CHILD'S HEALTH CARD KEPT IN A HEALTH FACILITY	As part of this survey, we would like to visit the health facility in which your children who were bo January 2012 or later got vaccinated. We would like to have your permission to copy the vaccina dates from your children's health records. With your permission, our team supervisor will visit the facility and copy the vaccination dates from the health cards directly to the same quescionnaire I using right now for our interview. The information will be kept confidential and will not be shared anyone other than members of our survey team. We hope you will allow access to the health car because information about your children's vaccinations is very important. The information will complement the information that we obtained from you in this interview. Many dangerous childhor illnesses such as measles or tetanus can be prevented through timely and effective vaccination. information from the cards will assist the government to develop programs to protect children fro vaccine preventable diseases and reduce childhood mortality and morbidity in Armenia. Do you have any questions? Will you allow (NAME OF CHILD) to have his/her vaccination records copied from (NAME OF CH health card kept at the health facility?			
1305B	CIRCLE THE CODE AND	GRANTED 1 ]			
	SIGN YOUR NAME.	(SIGN) REFUSED			
		FULL NAME, CHILD'S BIRTH DATE, CHILD'S HOME ADDRESS AND NAME AND ADDRESS VACCINATION RECORDS ARE KEPT, CHILD'S DOCTOR NAME AND UCHASTOK NUMBER			
1306B	CHILD'S FULL NAME				
		CHILD'S FIRST NAME CHILD'S LAST NAME			
1307B	MOTHER'S FULL NAME				
		MOTHER'S FIRST NAME MOTHER'S LAST NAME			
1308B	RECORD CHILD'S DATE OF BIRTH FROM 214	DAY			
1309B	CHILD'S HOME ADDRESS				
		(STREET NAME, HOUSE NUMBER AND FLAT NUMBER)	_		
1310B	NAME, ADDRESS AND TELEPHONE NUMBER OF				
	MEDICAL FACILITY WHERE CHILD'S VACCINATION	(NAME OF MEDICAL FACILITY)	-		
	RECORDS (FORMS # 063 OR #112) ARE KEPT	(STREET ADDRESS OF THE MEDICAL FACILITY)	_		
		(			
		TELEPHONE NUMBER	_		
1311B	CHILD'S DOCTOR NAME	DOCTOR'S FIRST NAME DOCTOR'S LAST NAME			
1312B	CHILD'S HEALTH FACILITY UCHASTOK NUMBER	UCHASTOK NUMBER			
1313B		ISTORY: ANY MORE LIVE BIRTHS IN 2012-2016?			
1.00					
	2012-2016	BIRTHS IN 2012-	→ 1314		
	(GO TO 1301B IN <del>←</del> AN ADDITIONAL QUESTIONNAIRE)	J			
1314	RECORD THE TIME.	HOURS			
		IN THIS HOUSEHOLD, THE TEAM SUPERVISOR MUST GO TO THE MEDICAL FACILITY AN	1D		
REC	URD DATES WHEN THE SPECIFIC	VACCINES WERE GIVEN IN SECTION 14.			

### INTERVIEWER'S OBSERVATIONS

#### TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

INSTRUCTIONS:						COL. 1	COL. 2
			06	JUN	01		00L. 2
		2	05	MAY	02		
		0	04	APR	03		
		1 6	03 02	MAR FEB	04 05		
	C	0	02	JAN	00		
ONLY ONE CODE SHOULD APPEAR IN ANY BOX.	-		12	DEC	07		
COLUMN 1 REQUIRES A CODE IN EVERY MONTH.			11	NOV	08		
			10	OCT	09		
CODES FOR EACH COLUMN:		2	09	SEP	10		
		0	08	AUG	11		
COLUMN 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE (2)		1	07 06	JUL JUN	12 13		
B BIRTHS		5	05	MAY	14		
P PREGNANCIES	:	Ð	04	APR	15		
T TERMINATIONS			03	MAR	16		
0 NO METHOD			02	FEB	17		
	=		01	JAN	18		
1 FEMALE STERILIZATION			12	DEC	19		
2 MALE STERILIZATION 3 IUD			11 10	NOV OCT	20 21		
4 INJECTABLES		_	09	SEP	22		
5 IMPLANTS		2	08	AUG	23		
6 PILL		0	07	JUL	24		
		1	06	JUN	25		
9 EMERGENCY CONTRACEPTION K LACTATIONAL AMENORRHEA METHOD	4	4	05 04	MAY APR	26 27		
L RHYTHM/ CALENDAR METHOD			03	MAR	28		
M WITHDRAWAL			02	FEB	29		
X OTHER MODERN METHOD	_		01	JAN	30		
Y OTHER TRADITIONAL METHOD	-		12	DEC	31		
			11	NOV	32		
			10 09	OCT SEP	33 34		
COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE	:	2	08	AUG	35		
	(	0	07	JUL	36		
0 INFREQUENT SEX/HUSBAND AWAY		1	06	JUN	37		
1 BECAME PREGNANT WHILE USING	:	3	05	MAY	38		
2 WANTED TO BECOME PREGNANT 3 HUSBAND/PARTNER DISAPPROVED			04 03	APR MAR	39 40		
4 WANTED MORE EFFECTIVE METHOD			02	FEB	41		
5 SIDE EFFECTS/HEALTH CONCERNS	_		01	JAN	42		
6 LACK OF ACCESS/TOO FAR	-		12	DEC	43		
7 COSTS TOO MUCH			11	NOV	44		
8 INCONVENIENT TO USE F UP TO GOD/FATALISTIC			10 09	OCT SEP	45 46		
A DIFFICULT TO GET PREGNANT/MENOPAUSAL	:	2	09	AUG	40 47		
D MARITAL DISSOLUTION/SEPARATION	(	0	07	JUL	48		
X OTHER		1	06	JUN	49		
	:	2	05	MAY	50		
(SPECIFY) Z DON'T KNOW			04 03	APR MAR	51 52		
			02	FEB	53		
	_		01	JAN	54		
	=		12	DEC	55		
			11	NOV	56		
			10	OCT	57		
		2	09 08	SEP AUG	58 59		
	(	0	08	JUL	60		
		1	06	JUN	61		
		1	05	MAY	62		
		-	04	APR	63		
			03 02	MAR FEB	64 65		
			02	JAN	66		
	=		12	DEC	67		
			11	NOV	68		
			10	OCT	69		
		2	09	SEP	70		
		0	08 07	AUG JUL	71 72		L
		1	06	JUN	73		
		0	05	MAY	74		
		~	04	APR	75		
			03 02	MAR FEB	76 77		
			02 01	JAN	78		
10/ 7/					. •		

0 1

0 1

0 1

0

SECTION 14A. HEALTH FACILITY FORM 112 OR FORM 63 CHILD IMMUNIZATION (LAST LIVE BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1401A			
	ONE OR MORE LIVE BIRTHS	NO LIVE BIRTHS IN 2012-2016	→ END
1402A	CHECK 212, 216 AND 1302A RECORD THE NAME AND PREGNANCY HISTORY NUMBER OF THE LAST CHILD BORN IN 2012-2016		
	NAME OF LAST LIVE BIRT <u>H</u>	PREGNANCY HISTORY NUMBER	
1403A	CHECK 218 FOR CHILD:		
		DEAD	→ 1408A
1404A	CHECK 1310A IS THERE AN ADDRESS RECORDED IN 1310A FOR THE HEALTH FACILITY WHERE (NAME)'S IMMUNIZATION RECORDS ARE KEPT?	YES 1 NO 2	→ 1408A
1405A	WAS THIS HEALTH FACILITY VISITED?	YES 1 NO 2	<del>→</del> 1408A
1406A	HAVE YOU LOCATED THE IMMUNIZATION RECORDS (FORM 112 OR FORM 63) OF (NAME OF LAST LIVE BIRTH IN 1402A) IN THE HEALTH FACII ITY?	YES SEEN         1           YES SEEN, NO RECORD IN THE CAL         2           NC         3	
	IMMUNIZATION RECORDS FROM HEALT	H FACILITY CARD FORM 112 OR FORM 63	
	NAME OF LAST LIVE BIRT <u>H</u>	PREGNANCY HISTORY NUMBER	
1407A	COPY DATA ABOUT EACH VACCINE FROM IMMUNIZA WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A		
	BCG	DAY MONTH YEAR	
	HEPATITIS B AT BIRTH		
	ORAL POLIO VACCINE (OPV) 1		
	ORAL POLIO VACCINE (OPV) 2		
	ORAL POLIO VACCINE (OPV) 3		
	ORAL POLIO VACCINE (OPV) 4		
	DPT-HEP.B-HIB (PENTAVALENT) 1		
	DPT-HEP.B-HIB (PENTAVALENT) 2		
	DPT-HEP.B-HIB (PENTAVALENT) 3		
	DPT 4		
	PNEUMOCOCCAL 1		
	PNEUMOCOCCAL 2		
	PNEUMOCOCCAL 3		
	ROTAVIRUS 1		
	ROTAVIRUS 2		
	MMR 1		
1408A	CONTINUE WITH 1401B.		

SECTION 14B. HEALTH FACILITY FORM 112 OR FORM 63 CHILD IMMUNIZATIONN (NEXT-TO-LAST LIVE BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1401B	CHECK 214 IN THE PREGNANCY HISTORY AND 1301B: ANY MORE BIRTHS IN 2012 OR LATER		
	MORE LIVE BIRTHS IN 2012-2016	NO MORE LIVE BIRTHS IN 2012-2016	
1402B	CHECK 214, 216, AND 1302B: RECORD THE NAME AND NEXT-TO-LAST CHILD BORN IN 2012-2016	PREGNANCY HISTORY NUMBER FROM 212 OF THE	
	NAME OF NEXT-TO- LAST LIVE BIRTH	PREGNANCY HISTORY NUMBER	
1403B	CHECK 218 FOR CHILD:		
		DEAD	→ 1408B
1404B	CHECK 1310B IS THERE AN ADDRESS RECORDED IN 1310B FOR THE HEALTH FACILITY WHERE (NAME)'S IMMUNIZATION RECORDS ARE KEPT??	YES 1 NO 2	<u>→</u> 1408B
1405B	WAS THIS HEALTH FACILITY VISITED?	YES 1 NO 2	→ 1408B
1406B	HAVE YOU LOCATED THE IMMUNIZATION RECORDS (FORM 112 OR FORM 63) OF (NAME OF THE NEXT- TO-LAST LIVE BIRTH IN 1402B) IN THE HEALTH	YES SEEN         1           YES SEEN, NO RECORD IN THE CAR         2           NO         3	→ 1408B → 1408B
	SECTION 14B. HEALTH FACILITY FORM 112 OR FORM	1 63 CHILD IMMUNIZATIONN (NEXT-TO-LAST LIVE BIRTH)	
	NAME OF NEXT-TO- LAST LIVE BIRTH	PREGNANCY HISTORY NUMBER	
1407B	COPY DATES FROM THE CARD. WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.		
	BCG	DAY MONTH YEAR	
	HEPATITIS B AT BIRTH		
	ORAL POLIO VACCINE (OPV) 1		
	ORAL POLIO VACCINE (OPV) 2		
	ORAL POLIO VACCINE (OPV) 3		
	ORAL POLIO VACCINE (OPV) 4		
	DPT-HEP.B-HIB (PENTAVALENT) 1		
	DPT-HEP.B-HIB (PENTAVALENT) 2		
	DPT-HEP.B-HIB (PENTAVALENT) 3		
	DPT 4		
	PNEUMOCOCCAL 1		
	PNEUMOCOCCAL 2		
	PNEUMOCOCCAL 3		
	ROTAVIRUS 1		
	ROTAVIRUS 2		
	MMR 1		
1408B	CHECK 214 IN PREGNANCY HISTORY: ANY MORE LIVE	BIRTHS IN 2012-2016	
	MORE LIVE BIRTHS IN 2012-	NO MORE LIVE BIRTHS IN 2012-2016	
	(GO TO 1402B IN AN ← ADDITIONAL QUESTIONNAIRE)		

#### 2015 ARMENIA DEMOGRAPHIC AND HEALTH SURVEY MAN'S QUESTIONNAIRE

REPUBLIC OF ARMENIA

IDENTIFICATION				
PLACE NAME				
NAME OF HOUSEHOLD	HEAD			
CLUSTER NUMBER				
HOUSEHOLD NUMBER	·			
NAME AND LINE NUMB	BER OF MAN			
		INTERVIEWER	R VISITS	
	1	2	3	FINAL VISIT
DATE				DAY
INTERVIEWER'S NAME RESULT*				YEAR INT. NO.
NEXT VISIT: DATE TIME				TOTAL NUMBER OF VISITS
*RESULT CODES: 1 COMPLETED 4 REFUSED 2 NOT AT HOME 5 PARTLY COMPLETED 7 OTHER 3 POSTPONED 6 INCAPACITATED SPECIFY				
LANGUAGE OF       O       LANGUAGE OF       NATIVE LANGUAGE       TRANSLATOR USED         QUESTIONNAIRE**       INTERVIEW**       OF RESPONDENT**       (YES = 1, NO = 2)				
LANGUAGE OF QUESTIONNAIRE** ENGLISH **LANGUAGE CODES: 00 ENGLISH 02 RUSSIAN 01 ARMENIAN 03 OTHER				
SUPERV	/ISOR	FIELD	D EDITOR	OFFICE EDITOR KEYED BY

#### INTRODUCTION AND CONSENT

Hello. My name is \_\_\_\_\_\_. I am working with National Statistical Service. We are conducting a survey about health and other topics all over Armenia. The information we collect will help the government to plan health services. Your household was selected for the survey. 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. 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

RESPONDENT AGREES TO BE INTERVIEWED . .

1

DATE

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS	
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	]→ 105
103	Just before you moved here, did you live in a city, in a town, or in a rural area?	CITY       1         TOWN       2         RURAL AREA       3	
104	Before you moved here, which Marz did you live in?	YEREVAN       01         ARAGATSOTN       02         ARARAT       03         ARMAVIR       04         GEGHARKUNIK       05         LORI       06         KOTAYK       07         SHIRAK       08         SYUNIK       09         VAYOTS DZOR       10         TAVUSH       11         OUTSIDE OF ARMENIA       96	
105	In what month and year were you born?	MONTH       98         DON'T KNOW MONTH       98         YEAR       998         DON'T KNOW YEAR       9998	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEARS	
107	Have you ever attended school?	YES 1 NO 2	<del>→</del> 113
108	What is the highest level of school you attended: primary, basic, secondary, secondary-special, or higher?	PRIMARY-BASIC -SECONDARY (1-12)1SECONDARY-SPECIAL2HIGHER3	

# SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
109	What is the highest [YEAR/CLASS/COURSE] you completed at that level?	[YEAR/CLASS/COURSE	
_	IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.		
109A	CHECK 108 AND 109:		
	CLASS 10 OR 11 OF SCHOOL OR SECONDARY-SPECIAL CLASS 10 OR 11 RECORDED IN 109 OR	OTHER CLASS 1-9 RECORDED IN 109 OR CODE "3" HIGHER LEVEL CIRCLED IN 108:	
	CODE '2' SECONDARY-SPECIAL LEVEL CIRCLED IN 108:		
109B	Did you receive an attestat for completing secondary school?	YES 1 NO 2	
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 WEEK1LESS THAN ONCE A WEEK2NOT AT ALL3	
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 WEEK1LESS THAN ONCE A WEEK2NOT AT ALL3	
115	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK1LESS THAN ONCE A WEEK2NOT AT ALL3	
116	Do you own a mobile telephone?	YES 1 NO 2	<del>→</del> 118
117	Do you use your mobile 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	<del>→</del> 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	<del>→</del> 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 DAY1AT LEAST ONCE A WEEK2LESS THAN ONCE A WEEK3NOT AT ALL4	
121A	In the last 12 months have you used the internet to get information on any health issues?	YES 1 NO 2	
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	<del>→</del> 125A
125	In the last 12 months, have you been away from home for more than one month at a time?	YES 1 NO 2	
125A	In the past 3 years, have you worked abroad for three or more months at a time?	YES 1 NO 2	

# 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	]→ 206
202	Do you have any sons or daughters that you have fathered who are now living with you?	YES 1 NO 2	<u>→</u> 204
203	<ul><li>a) How many sons live with you?</li><li>b) And how many daughters live with you?</li><li>IF NONE, RECORD '00'.</li></ul>	a) SONS 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	<ul> <li>a) How many sons are alive but do not live with you?</li> <li>b) And how many daughters are alive but do not live with you?</li> <li>IF NONE, RECORD '00'.</li> </ul>	a) SONS 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	]→ 208
207	<ul><li>a) How many boys have died?</li><li>b) And how many girls have died?</li><li>IF NONE, RECORD '00'.</li></ul>	a) BOYS 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 NOT ANY CHILE		→ 211 → 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	→ 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? CNLY ONE LIVING CHILD b) How old is your child?	AGE IN YEARS	
214		GEST) CHILD IS	<del>→</del> 301
215	CHECK 203 AND 205: MORE THAN ONE ONLY ONE LIVING CHILD LIVING CHILD a) What is the name of your youngest 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	]→ 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 FACILITY1OTHER2	
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 USUAL1ABOUT THE SAME2LESS THAN USUAL3NOTHING TO DRINK4DON'T KNOW8	

# SECTION 3. CONTRACEPTION

301	Now I would like to talk about contraception - the various ways or method Have you ever heard of (METHOD)?	Is that a couple can use to delay or avoid a pregnancy.
01	Female Sterilization. PROBE: Women can have an operation to avoid having any more children.	YES
02	Male Sterilization. PROBE: Men can have an operation to avoid having any more children.	YES
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
04	Injectables. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES
05	Implants. 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
06	Pill. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES
07	Condom. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES
09	Emergency Contraception. PROBE: As an emergency measure, within three to five days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES
11	Lactational Amenorrhea Method (LAM). PROBE: Up to six months after childbirth, before the menstrual period has returned, women use a method requiring frequent breastfeeding day and night.	YES
12	Rhythm or Calendar Method. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES
13	Withdrawal. PROBE: Men can be careful and pull out before climax.	YES
14	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES, MODERN METHOD
		(SPECIFY) YES, TRADITIONAL METHOD
		(SPECIFY)
		NO

# SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	In the last few months have you:	YES NO	
	a) Heard about contraception on the radio?	a) RADIO 1 2	
	b) Seen anything about contraception on the television?	b) TELEVISION 1 2	
	<ul> <li>c) Read about contraception in a newspaper or magazine?</li> </ul>	c) NEWSPAPER OR MAGAZINE 1 2	
	<ul> <li>d) Received a voice or text message about contraception on a mobile phone?</li> </ul>	d) MOBILE PHONE 1 2	
	<ul> <li>e) Read information about contraception on the internet?</li> </ul>	e) INTERNET 1 2	
302F	In the last few months have you read information about reproductive health on the internet?	YES 1 NO 2	
303	In the last few months, have you discussed contraception with a health worker or health	YES 1	
	professional?	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	]→ 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 BEGINS1DURING HER PERIOD2RIGHT AFTER HER PERIOD HAS ENDED3HALFWAY BETWEEN TWO PERIODS4	
		OTHER 6 (SPECIFY) DON'T KNOW	
306	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES	
307	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one.	DIS- AGREE AGREE DK	
	<ul> <li>a) Contraception is a woman's concern and a man should not have to worry about it.</li> <li>b) Women who use contraception may become</li> </ul>	a) CONTRACEPTION WOMAN'S CONCERN 1 2 8 b) WOMEN MAY BECOME	
	promiscuous.	PROMISCUOUS 1 2 8	

SECTION 4	MARRIAGE AND	SEXUAL ACTIVITY
<u>3L0110114</u> .		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	Are you currently married or living together with a woman as if married?	YES, CURRENTLY MARRIED	]→ 404
402	Have you ever been married or lived together with a woman as if married?	YES, FORMERLY MARRIED	<b>→</b> 413
403	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED         1           DIVORCED         2           SEPARATED         3	<b>410</b>
404	Is your (wife/partner) living with you now or is she staying elsewhere?	LIVING WITH HIM 1 STAYING ELSEWHERE 2	
405	RECORD THE WIFE'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF SHE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME	
405A	In the past 3 years, has your (wife/partner) worked abroad for three or more months at a time?	YES 1 NO 2	
410	Have you been married or lived with a woman only once or more than once?	MORE THAN ONCE         1           ONLY ONCE         2	
411	CHECK 410: MARRIED/ LIVED WITH A WOMAN ONLY ONCE a) In what month and year did you start living with your (wife/partner)? MARRIED/ LIVED WITH A WOMAN MORE THAN ONCE b) Now I would like to ask about your first (wife/partner). In what month and year did you start living with her?	MONTH	⊒→ 413
412	How old were you when you first started living with her?	AGE	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
413	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
414	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	→ 501
415	Now 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 NO2 _ (SKIP TO 419) ←	YES 1 NO2 _ (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: Were you living together as if married? IF YES, RECORD '2'. IF NO, RECORD '3'.	WIFE	WIFE	WIFE
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	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

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	→ 427
426	CHECK 419 AND 417 (ALL COLUMNS): CONDOM USED WITH EVERY SEX WORKER		→ 430 → 431
427	In the last 12 months, did you pay anyone in exchange for having sexual intercourse?	YES 1 NO 2	<del>→</del> 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	<del>→</del> 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	
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	
434	CHECK 417: MOST RECENT PARTNER (FIRST COLUMN	l)	
			→ 438 → 438
435	You told me that a condom was used the last time you had sex. What is the brand name of the condom used at that time?	CONTEX CLASSIC         01           VIVA         02           DUREX         03	
	IF BRAND NOT KNOWN, ASK TO SEE THE PACKAGE.	OTHER 96 (SPECIFY) DON'T KNOW	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
436	From where did you obtain the condom the last time? PROBE TO IDENTIFY TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.	PUBLIC SECTOR         GOVERNMENT HOSPITAL       11         MATERNITY HOME       12         DIAGNOSTIC CENTER       13         WOMEN'S CONSULTATION       14         POLYCLINIC       15         AMBULATORY,FAMILY DOCTOR OFFICE       16         FAP       17         EMERGENCY SERVICES       18         OTHER PUBLIC SECTOR       19	
		(SPECIFY)	
	(NAME OF PLACE)	PRIVATE MEDICAL SECTORPRIVATE HOSPITAL/CLINIC21MATERNITY HOME22DIAGNOSTIC CENTER23WOMEN'S CONSULTATION24POLYCLINIC25FAMILY DOCTORS OFFICE26FAP27PHARMACY28EMERGENCY SERVICES29OTHER PRIVATE MEDICAL SECTOR	
		30 (SPECIFY) OTHER SOURCE SHOP	
		CHURCH         42           FRIEND/RELATIVE         43	
		OTHER 96 (SPECIFY) DON'T KNOW	
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	]→ 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 STERILIZATIONAMALE STERILIZATIONBIUDCINJECTABLESDIMPLANTSEPILLFCONDOMGEMERGENCY CONTRACEPTIONILACTATIONAL AMENORRHEA METHODKRHYTHM METHODLWITHDRAWALMOTHER MODERN METHODXOTHER TRADITIONAL METHODY	→ 501
440	Do you know of a place where you can obtain a method of contraception?	YES 1 NO 2	

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	LIVING WITH A PARTNER 💭 🛛 🗛	NTLY MARRIED DIMENSIONAL NOT LIVING TH A PARTNER	→ 514
502	CHECK 439: MAN NOT STERILIZED		<del>→</del> 514
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)       998	→ 514
507	CHECK 208: HAS FATHERED HAS NOT CHILDREN HAS NOT FATHERED CHILDREN HAS NOT FATHERED CHILDREN HAS NOT FATHERED CHILDREN HAS NOT FATHERED HAS NOT FATHE	HAVE (A/ANOTHER) CHILD1NO MORE/NONE2SAYS COUPLE CAN'T GET PREGNANT3WIFE/PARTNER STERILIZED4UNDECIDED/DON'T KNOW8	514
508	CHECK 208: HAS FATHERED HAS NOT CHILDREN HAS NOT FATHERED CHILDREN HAS N	MONTHS       1         YEARS       2         SOON/NOW       993         SAYS COUPLE       994         OTHER       996         (SPECIFY)       998	
514	CHECK 203 AND 205: HAS LIVING CHILDREN NO 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? PROBE FOR A NUMERIC RESPONSE.	NONE       00         NUMBER	→ 601 → 601
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 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	<del>→</del> 607
604	What is your occupation? That is, what kind of work do you mainly do?		
605	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR1SEASONALLY/PART OF THE YEAR2ONCE IN A WHILE3	
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	LIVING WITH A PARTNER	SURRENTLY MARRIED AND NG WITH A PARTNER	→612
608	CHECK 606: CODE '1' OR '2' CIRCLED		→ 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)         6	
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         (SPECIFY)       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         (SPECIFY)	

# 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 ONLY1JOINTLY ONLY2BOTH ALONE AND JOINTLY3DOES NOT OWN4	→ 615
613	Do you have a title deed for any house you own?	YES	]→ 615
614	Is your name on the title deed?	YES	
615	Do you own any agricultural or non-agricultural land either alone or jointly with someone else?	ALONE ONLY1JOINTLY ONLY2BOTH ALONE AND JOINTLY3DOES NOT OWN4	→ 618
616	Do you have a title deed for any land you own?	YES	]→ 618
617	Is your name on the title deed?	YES	
618	<ul> <li>In your opinion, is a husband justified in hitting or beating his wife in the following situations:</li> <li>a) If she goes out without telling him?</li> <li>b) If she neglects the children?</li> <li>c) If she argues with him?</li> <li>d) If she refuses to have sex with him?</li> <li>e) If she burns the food?</li> </ul>	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	

#### 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
702	HIV is the virus that can lead to AIDS. Can people reduce their chance of getting HIV by having just one uninfected sex partner who has no other sex partners?	YES	
703	Can people get HIV from mosquito bites?	YES         1           NO         2           DON'T KNOW         8	
704	Can people reduce their chance of getting HIV by using a condom every time they have sex?	YES	
705	Can people get HIV by sharing food with a person who has HIV?	YES	
706	Can people get HIV through saliva by kissing a person who has HIV?	YES         1           NO         2           DON'T KNOW         8	
706A	Can people get HIV by shaking hands with a person who has HIV?	YES         1           NO         2           DON'T KNOW         8	
707	Is it possible for a healthy-looking person to have HIV?	YES	
708	Can HIV be transmitted from a mother to her baby:	YES NO DK	
	<ul><li>a) During pregnancy?</li><li>b) During delivery?</li><li>c) By breastfeeding?</li></ul>	a) DURING PREGNANCY 1       2       8         b) DURING DELIVERY 1       2       8         c) BREASTFEEDING 1       2       8	
709	CHECK 708: AT LEAST ONE 'YES'		<del>→</del> 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 CONTIN	NUING, 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	

	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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, WRITE THE NAME OF THE PLACE.	PUBLIC SECTOR         GOVERNMENT HOSPITAL       11         MATERNITY HOME       12         DIAGNOSTIC CENTER       13         WOMEN'S CONSULTATION       14         POLYCLINIC       15         AMBULATORY/ FAMILY DOCTOR OFFICE       16         FAP       17         EMERGENCY SERVICES       18         STAND-ALONE HIV TESTING AND       19         OTHER PUBLIC SECTOR       20	
	(NAME OF PLACE)	(SPECIFY)         PRIVATE MEDICAL SECTOR         PRIVATE HOSPITAL/CLINIC       21         MATERNITY HOME       22         DIAGNOSTIC CENTER       23         WOMEN'S CONSULTATION       24         POLYCLINIC       25         FAMILY DOCTORS OFFICE       26         FAP       27         PHARMACY       28         EMERGENCY SERVICES       29         STAND-ALONE HIV TESTING AND       24	718
		COUNSELING CENTER	
		OTHER9696	
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?	PUBLIC SECTOR         GOVERNMENT HOSPITAL       A         MATERNITY HOME       B         DIAGNOSTIC CENTER       C         WOMEN'S CONSULTATION       D         POLYCLINIC       E         AMBULATORY/ FAMILY DOCTOR OFFICE       F         FAP       G         EMERGENCY SERVICES       H         STAND-ALONE HIV TESTING AND       STAND-ALONE	
		GOVERNMENT HOSPITALAMATERNITY HOMEBDIAGNOSTIC CENTERCWOMEN'S CONSULTATIONDPOLYCLINICEAMBULATORY/ FAMILY DOCTOR OFFICEFFAPGEMERGENCY SERVICESHSTAND-ALONE HIV TESTING ANDCOUNSELING CENTERI	
	Any other place?	GOVERNMENT HOSPITAL A MATERNITY HOME B DIAGNOSTIC CENTER C WOMEN'S CONSULTATION D POLYCLINIC E AMBULATORY/ FAMILY DOCTOR OFFICE F FAP G EMERGENCY SERVICES H STAND-ALONE HIV TESTING AND COUNSELING CENTER I OTHER PUBLIC SECTOR	
	Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE	GOVERNMENT HOSPITAL       A         MATERNITY HOME       B         DIAGNOSTIC CENTER       C         WOMEN'S CONSULTATION       D         POLYCLINIC       E         AMBULATORY/ FAMILY DOCTOR OFFICE       F         FAP       G         EMERGENCY SERVICES       H         STAND-ALONE HIV TESTING AND       COUNSELING CENTER         COUNSELING CENTER       I         OTHER PUBLIC SECTOR       J         (SPECIFY)       PRIVATE MEDICAL SECTOR         PRIVATE HOSPITAL/CLINIC       K         MATERNITY HOME       L         DIAGNOSTIC CENTER       M         WOMEN'S CONSULTATION       N         POLYCLINIC       O         FAMILY DOCTORS OFFICE       P         FAP       Q	
	Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE	GOVERNMENT HOSPITAL       A         MATERNITY HOME       B         DIAGNOSTIC CENTER       C         WOMEN'S CONSULTATION       D         POLYCLINIC       E         AMBULATORY/ FAMILY DOCTOR OFFICE       F         FAP       G         EMERGENCY SERVICES       H         STAND-ALONE HIV TESTING AND       COUNSELING CENTER         COUNSELING CENTER       I         OTHER PUBLIC SECTOR       J         (SPECIFY)       PRIVATE MEDICAL SECTOR         PRIVATE HOSPITAL/CLINIC       K         MATERNITY HOME       L         DIAGNOSTIC CENTER       M         WOMEN'S CONSULTATION       N         POLYCLINIC       O         FAMILY DOCTORS OFFICE       P	
	Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.	GOVERNMENT HOSPITAL       A         MATERNITY HOME       B         DIAGNOSTIC CENTER       C         WOMEN'S CONSULTATION       D         POLYCLINIC       E         AMBULATORY/ FAMILY DOCTOR OFFICE       F         FAP       G         EMERGENCY SERVICES       H         STAND-ALONE HIV TESTING AND       COUNSELING CENTER         COUNSELING CENTER       I         OTHER PUBLIC SECTOR       J         (SPECIFY)       PRIVATE MEDICAL SECTOR         PRIVATE HOSPITAL/CLINIC       K         MATERNITY HOME       L         DIAGNOSTIC CENTER       M         WOMEN'S CONSULTATION       N         POLYCLINIC       O         FAMILY DOCTORS OFFICE       P         FAP       Q         PHARMACY       R         EMERGENCY SERVICES       S         STAND-ALONE HIV TESTING AND       COUNSELING CENTER         COUNSELING CENTER       T         OTHER PRIVATE MEDICAL SECTOR       U	
	Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.	GOVERNMENT HOSPITAL       A         MATERNITY HOME       B         DIAGNOSTIC CENTER       C         WOMEN'S CONSULTATION       D         POLYCLINIC       E         AMBULATORY/ FAMILY DOCTOR OFFICE       F         FAP       G         EMERGENCY SERVICES       H         STAND-ALONE HIV TESTING AND       COUNSELING CENTER         COUNSELING CENTER       I         OTHER PUBLIC SECTOR       J         (SPECIFY)         PRIVATE MEDICAL SECTOR         J       I         OTHER PUBLIC SECTOR       J         OTHER PUBLIC SECTOR       J         PRIVATE MEDICAL SECTOR       J         VOMEN'S CONSULTATION       N         POLYCLINIC       K         MATERNITY HOME       L         DIAGNOSTIC CENTER       M         WOMEN'S CONSULTATION       N         POLYCLINIC       O         FAMILY DOCTORS OFFICE       P         FAP       Q         PHARMACY       R         EMERGENCY SERVICES       S         STAND-ALONE HIV TESTING AND       COUNSELING CENTER         COUNSELING CENTER       T         OTHER PRIVAT	

#### SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	7. HIV/AIDS CODING CATEGORIES	SKIP
718	Have you heard of test kits people can use to test themselves for HIV?	YES 1 NO 2	→ 720
719	Have you ever tested yourself for HIV using a self-test kit?	YES	
720	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?	YES         1           NO         2           DON'T KNOW/NOT SURE/DEPENDS         8	
721	Do you think children living with HIV should be allowed to attend school with children who do not have HIV?	YES         1           NO         2           DON'T KNOW/NOT SURE/DEPENDS         8	
722	Do you think people hesitate to take an HIV test because they are afraid of how other people will react if the test result is positive for HIV?	YES         1           NO         2           DON'T KNOW/NOT SURE/DEPENDS         8	
723	Do people talk badly about people living with HIV, or who are thought to be living with HIV?	YES         1           NO         2           DON'T KNOW/NOT SURE/DEPENDS         8	
724	Do people living with HIV, or thought to be living with HIV, lose the respect of other people?	YES         1           NO         2           DON'T KNOW/NOT SURE/DEPENDS         8	
725	Do you agree or disagree with the following statement: I would be ashamed if someone in my family had HIV.	AGREE	
726	Do you fear that you could get HIV if you come into contact with the saliva of a person living with HIV?	YES         1           NO         2           SAYS HE HAS HIV         3           DON'T KNOW/NOT SURE/DEPENDS         8	
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?	YES 1 NO 2	
728	CHECK 414: HAS HAD SEXUAL INTERCOURSE	NEVER HAD SEXUAL	→ 736
729	CHECK 727: HEARD ABOUT OTHER SEXUALLY TRANSI		→ 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	
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	
732	Sometimes men have a sore or ulcer near their penis. During the last 12 months, have you had a sore or ulcer on or near your penis?	YES	

## 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	→ 736
734	The last time you had (PROBLEM FROM 730/731/732), did you seek any kind of advice or treatment?	YES 1 NO 2	→ 736
735	Where did you go? Any other place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. (NAME OF PLACE)	PUBLIC SECTOR       GOVERNMENT HOSPITAL       A         MATERNITY HOME       B         DIAGNOSTIC CENTER       C         WOMEN'S CONSULTATION       D         POLYCLINIC       E         AMBULATORY/ FAMILY DOCTOR OFFICE       F         FAP       G         EMERGENCY SERVICES       H         STAND-ALONE HIV TESTING AND       COUNSELING CENTER         COUNSELING CENTER       I         OTHER PUBLIC SECTOR       J         (SPECIFY)         PRIVATE MEDICAL SECTOR         J       (SPECIFY)         PRIVATE HOSPITAL/CLINIC       K         MATERNITY HOME       L         DIAGNOSTIC CENTER       M         WOMEN'S CONSULTATION       N         POLYCLINIC       O         FAP       Q         PHARMACY       R         EMERGENCY SERVICES       S         STAND-ALONE HIV TESTING AND       COUNSELING CENTER         COUNSELING CENTER       T         OTHER PRIVATE MEDICAL SECTOR       U         (SPECIFY)       O         OTHER SOURCE       S         SHOP       V         NGO       W	
736	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	(SPECIFY) YES	
737	Is a wife justified in refusing to have sex with her husband when she knows he has sex with other women?	YES	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
805	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS	→ 808
806	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR	NUMBER OF INJECTIONS	
	DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NONE 00	→ 808
807	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES	
808	Do you currently smoke tobacco every day, some days, or not at all?	EVERY DAY         1           SOME DAYS         2           NOT AT ALL         3	→ 811 → 810
809	In the past, have you smoked tobacco every day?	YES 1 NO 2	]→ 812
810	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	<b>→</b> 813

	SECTION 8. OTH	ER HEALTH ISSUES	
NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
811	<ul> <li>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.</li> <li>IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'.</li> <li>a) Manufactured cigarettes?</li> <li>b) Hand-rolled cigarettes?</li> <li>d) Pipes full of tobacco?</li> <li>e) Cigars, cheroots, or cigarillos?</li> <li>f) Number of water pipe sessions?</li> </ul>	NUMBER DAILY a) MANUFACTURED CIGARETTES b) HAND-ROLLED CIGARETTES d) PIPES FULL OF TOBACCO e) CIGARS, CHEROOTS, OR CIGARILLOS f) NUMBER OF WATER PIPE SESSIONS	→ 813
	g) Any others? (SPECIFY)	g) OTHERS	
812	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? d) Pipes full of tobacco? e) Cigars, cheroots, or cigarillos? f) Number of water pipe sessions? g) Any others? (SPECIFY)	NUMBER WEEKLY a) MANUFACTURED CIGARETTES b) HAND-ROLLED CIGARETTES d) PIPES FULL OF TOBACCO f) CIGARS, CHEROOTS, OR CIGARILLOS f) NUMBER OF WATER PIPE SESSIONS g) OTHERS	
813	Do you currently use smokeless tobacco every day, some days, or not at all?	EVERY DAY         1           SOME DAYS         2           NOT AT ALL         3	→ 815 → 816

814	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? e) Any others? <u>(SPECIFY)</u> 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 mouth?	a) SNUFF, BY MOUTH   a) SNUFF, BY NOSE   b) SNUFF, BY NOSE   c) CHEWING TOBACCO   c) CHEWING TOBACCO   e) ANY OTHERS     TIMES WEEKLY     a) SNUFF, BY MOUTH   b) SNUFF, BY NOSE	}→ 816
	e) Any others? (SPECIFY)	c) CHEWING TOBACCO	
816	Are you covered by any health insurance?	YES 1 NO 2	→ 818
817	What type of health insurance are you covered by? RECORD ALL MENTIONED.	BASIC BENEFIT PACKAGE       A         HEALTH INSURANCE THROUGH       B         OTHER PRIVATELY PURCHASED       COMMERCIAL HEALTH INSURANCE         OTHER       X	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
818	These next questions are about common health problems in Armenia.		
	Have you ever heard of an illness called tuberculosis or TB?	YES 1 NO 2	→ 826
819	What signs or symptoms would lead you to think that a person has tuberculosis? Any other? RECORD ALL MENTIONED.	COUGHING       A         COUGHING WITH SPUTUM       B         COUGHING FOR SEVERAL WEEKS       C         FEVER       D         BLOOD IN SPUTUM       E         LOSS OF APPETITE       F         NIGHTSWEATING       G         PAIN IN CHEST       H         TIREDNESS/FATIGUE       I         WEIGHT LOSS       J         LETHARGY       K         OTHER      X         (SPECIFY)       Z	
820	How does tuberculosis spread from one person to another? Any other ways? RECORD ALL MENTIONED.	THROUGH THE AIR WHEN       COUGHING OR SNEEZING       A         THROUGH SHARING UTENSILS       B         THROUGH TOUCHING A PERSON       WITH TB       C         THROUGH FOOD       D         THROUGH SEXUAL CONTACT       E         THROUGH MOSQUITO BITES       F         OTHER      X         (SPECIFY)       Z	
821	Which organs in a human body can be affected by tuberculosis?	LUNGS ONLY A ANY ORGANS CAN BE AFFECTED BY TUBERCULOSIS B OTHER X (SPECIFY)	
		DON'T KNOW Z	
822	Can tuberculosis be cured?	YES	
823	Have you ever heard of a multi-resistant or a multi-drug- resistant form of tuberculosis?	YES 1 NO 2	→ 825
824	Can multi-drug-resistant tuberculosis be cured?	YES	
825	If a member of your family got tuberculosis, would you want it to remain a secret or not?	YES, REMAIN A SECRET       1         NO       2         DON'T KNOW/NOT SURE/       8         DEPENDS       8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
826	Have you ever heard of an illness called anemia?	YES 1 NO 2	→ 831
827	What signs or symptoms would lead you to think that a person has anemia? Any other? RECORD ALL MENTIONED.	PALE SKINAWEAKNESSBTIREDNESS/FATIGUECSHORTNESS OF BREATHDHEADACHEEDIZZINESS OR LIGHTHEADEDNESSFFREQUENT INFECTIONSGNO VISIBLE SIGNSH	
		OTHERX (SPECIFY) DON'T KNOWZ	
828	What causes anemia? Anything else? RECORD ALL MENTIONED.	LACK OF IRON IN FOOD       A         POOR NUTRITION       B         EATING BREAD ONLY       C         HEREDETERY/THALASSEMIA/CIRCLE CELL       D         BLOOD LOSS OR TRAUMA       E         ABORTION       F         MENSTRUATION       G         PREGNANCY       H         DELIVERY       I         INFECTION       J         MOSQUITOES/MALARIA       K         ENVIRONMENT POLLUTION       L         LEAD POISON       M         UNCLEAN POLLUTED WATER       N         INJECTIONS       O         PARASITES       P         WRONG BLOOD TRANSFUSION       Q         DISEASES       R         OTHER       X         (SPECIFY)       Z	
829	What can a person eat or drink to prevent having anemia? Anything else? RECORD ALL MENTIONED.	RED MEAT       A         ANY MEAT       B         ORGAN MEAT       C         IRON RICH FOOD       D         ANY FRUITS       E         GREEN APPLES       F         ANY VEGETABLES       G         BEETROOT       H         RED FRUITS OR VEGETABLES       I         VITAMIN 'C' RICH FOODS       J         ANY JUICE       K         TEA OR COFFEE       L         ANY VITAMINS       M         VITAMIN 'C'       N         VITAMIN 'B12'       O         IRON TABLETS/CAPSULES/SYRUP/MEDICINE       P         OTHER       X         (SPECIFY)       DON'T KNOW       Z	
830	Do you thinlk that drinking coffee or tea during meal time can promote anemia?	YES	
831	RECORD THE TIME.	HOURS	

## INTERVIEWER'S OBSERVATIONS

#### TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

## ARMENIA DEMOGRAPHIC AND HEALTH SURVEY FIELDWORKER QUESTIONNAIRE

REPUBLIC OF ARMENIA NATIONAL STATISTICAL SERVICE AND MINISTRY OF HEALTH		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 DHS field staff. Please fill in the information below. The information will be part of the survey data fi							
	nd go to the next question.	onymous. If there is any question you do not want to answer yo	u illay				
102	In what Marz do you live?	YEREVAN       01         ARAGATSOTN       02         ARARAT       03         ARMAVIR       04         GEGHARKUNIK       05         LORI       06         KOTAYK       07         SHIRAK       08         SYUNIK       09         VAYOTS DZOR       10         TAVUSH       11					
103	Do you live in a city, town, or rural area?	CITY         1           TOWN         2           RURAL         3					
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 MARRIED1LIVING WITH A MAN/ WOMAN2WIDOWED3DIVORCED4SEPARATED5NEVER MARRIED OR LIVED5WITH A MAN/ WOMAN6					
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					
109	What is the highest level of school you attended: primary, basic, secondary, secondary-special or higher?	PRIMARY-BASIC-SECONDARY (1-12)1SECONDARY-SPECIAL2HIGHER3					
110	What is the highest (YEAR/CLASS/COURSE) you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	YEAR/CLASS/COURSE					

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
113	What languages can you speak? RECORD ALL LANGUAGES YOU CAN SPEAK.	ARMENIANAASSYRIANBENGLISHCGREEKDKURDISH/ YEZIDIERUSSIANF	
		OTHERX	
114	What is your mother tongue/native language (language spoken at home growing up)?	ARMENIAN       01         ASSYRIAN       02         ENGLISH       03         GREEK       04         KURDISH/ YEZIDI       05         RUSSIAN       06         OTHER       96         (SPECIFY)	
115	Have you ever worked on a DHS survey prior to this one?	YES 1 NO 2	
116	Have you ever worked on any other survey prior to this one (not a DHS)?	YES 1 NO 2	
117	Were you already working for the National Statistical Service ot the Ministry of Health at the time you were employed to work on this DHS?	YES, NATIONAL STATISTICAL SERVICE1YES, MINISTRY OF HEALTH2NO3	<del>→</del> 119
118	Are you a permanent or temporary employee of the National Statistical Service ot the Ministry of Health?	PERMANENT	
119	If you have comments, please write them here.		

# ADDITIONAL DHS PROGRAM RESOURCES

<b>The DHS Program Website</b> – Download free DHS reports, standard documentation, key indicator data, and training tools, and view announcements.				program.com	
<b>STATcompiler</b> – Build custom tables, graphs, and maps with data from 90 countries and thousands of indicators.			Statcompiler.com		
<b>DHS Program Mobile App</b> – Access key DHS indicators for 90 countries on your mobile device (Apple, Android, or Windows).				ch DHS Program in your es or Google Play store	
<b>DHS Program User Forum</b> – Post questions about DHS data, and search our archive of FAQs.			userforum.DHSprogram.com		
<b>Tutorial Videos</b> – 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		
<b>Spatial Data Repository</b> – Download geographically linked health and demographic data for mapping in a geographic information system (GIS).				aldata.DHSprogram.com	
Socia	I Media – Follow The DHS Program	and join the	conve	rsation. Stay up to date throu	igh:
f	Facebook www.facebook.com/DHSprogram		<b>y</b>	<b>Twitter</b> www.twitter.com/ DHSprogram	
<b>@</b>	<b>Pinterest</b> www.pinterest.com/ DHSprogram		in.	LinkedIn www.linkedin.com/ company/dhs-program	
You Tube	YouTube www.youtube.com/DHSprogram			Blog Blog.DHSprogram.com	