Egypt Demographic and Health Survey 2014

Main Findings

EGYPT
DEMOGRAPHIC AND HEALTH SURVEY
2014

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Ministry of Health and Population
Cairo, Egypt

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PREFACE

Health for all is the main health objective of the Egyptian government. To monitor and evaluate progress toward the achievement of this goal, reliable data are needed. These data can be obtained from service administration (service-based data) and collected directly from the community (household-based data). The two types of data complement each other in enhancing the information available to monitor progress in the health sector.

Since 1980, a number of surveys have been carried out in Egypt to obtain data from the community on the current health situation including the series of Demographic and Health Surveys of which 2014 EDHS is the most recent. The 2014 EDHS is of special importance as it is the first national health survey since 2008. The preliminary results of the 2014 EDHS show that key maternal and child health indicators, including antenatal care coverage and medical assistance at delivery, have improved. However, the survey also documents a number of critical challenges, particularly relating to fertility and family planning.

The findings of the 2014 EDHS together with the service-based data are very important for measuring the achievements of health and population programs. Based on the above-mentioned considerations, the initial results of the 2014 EDHS should be widely disseminated at different levels of health management, in the central offices as well as local governments, and to the community at large.

Dr. Adel Adawy
Minister of Health and Population

ACKNOWLEDGMENTS

The Egypt Demographic and Health Survey represents the continuing commitment and efforts in Egypt to obtain data on fertility and contraceptive practice. The survey also reflects the strong interest in information on key maternal health and child survival issues. The wealth of demographic and health data that the survey provides will help in charting future directions for Egypt's population and health programs.

This important survey could not have been implemented without the active support and dedicated efforts of a large number of institutions and individuals. The support and approval of the Ministry of Health and Population (MOHP) under the leadership of H.E. Dr. Adel Adawy was instrumental in securing the implementation of the EDHS.

USAID/Cairo was the main contributor of funding for the survey. UNICEF and UNFPA also provided financial support. Technical assistance came from the USAID-sponsored DHS Program.

I am deeply grateful to the Ministry of Health and Population staff who contributed to the successful completion of this project, especially Dr. Atef El-Shitany, Head of the Population and Family Planning Sector, and Dr. Seham El-Sherif, Director of the Information Center for the Population and Family Planning Sector, for their continuous help and support during the survey implementation.

I also gratefully acknowledge the Office of Health and Population staff at USAID/Cairo, especially Dr. Nabil Alsoufi, Director, and Ms. Shadia Attia, Senior Monitoring and Evaluation Advisor, for their support and valuable comments throughout the survey activities.

I also recognize with gratitude the contributions of Dr. Leonardo Menchini, Chief of Social Policy, Monitoring and Evaluation, and Ms. Manar Soliman, Knowledge Management and Statistics Officer, UNICEF, and Dr. Magdy Khalid, Assistant Representative, UNFPA, in facilitating the successful implementation of the survey.

Dr. Ann Way of ICF International, who worked closely with us on all phases of the 2014 EDHS, deserves special thanks for all her efforts throughout the survey and during the preparation of this report. My thanks also are extended to Dr. Mahmoud Elkasabi for his advice and guidance in designing the sample. Ms. Jeanne Cushing deserves my deepest thanks for her assistance in data processing and tabulation required for this report. Ms. Monica Kothari provided invaluable assistance with the training and organization of the anemia-testing and anthropometry component of the survey.

I would like to express my appreciation to all the senior office staff at El-Zanaty and Associates for the dedication and skill with which they performed their tasks. Special thanks also go to the EDHS field staff for the efficiency which they performed their work in a sometimes very difficult environment.

Finally, I would like to express my appreciation to all households and women who responded in the survey; without their participation this survey would have been impossible.

Dr. Fatma El-Zanaty
Technical Director

I.   Background

The 2014 Egypt Demographic and Health Survey (2014 EDHS) is the most recent in a series of national-level population and health surveys in Egypt.[1] The 2014 EDHS was conducted under the auspices of the Ministry of Health and Population. ICF International provided technical support for the the survey through The DHS program. The DHS Program is sponsored by the United States Agency for International Development (USAID) to assist countries worldwide to obtain information on key population and health indicators. USAID/Cairo also provided funding to support the implementation of the survey. UNICEF and UNFPA also contributed funding to the survey.

The 2014 EDHS survey design involves two components; a survey of ever-married women age 15-49 to update key health and population indicators covered in past Egypt DHS surveys and a special Health Issues survey to obtain updated information on other critical health problems facing Egypt, including the prevalence of hepatitis B and C and the population's experience with non-communicable diseases.

This report presents main findings from the ever-married women component. The ever-married women survey was undertaken in order to obtain data on fertility and family planning behavior, child mortality, the utilization of maternal and child health care services, and other issues relating to the health and welfare of women and children in Egypt. The survey obtained detailed information on these issues from a sample of nearly 30,000 households and more than 21,000 ever-married women age 15-49. Anthropometric measurements also were obtained from the eligible ever-married women and for children age 0-19 in all of the sampled households. Information relating to anemia levels among the ever-married women and children age 0-19 was obtained in a subsample of the interviewed households.

This report presents initial findings relating to the principal topics in the survey. The publication of these results is intended to facilitate use of the information in the planning and management of population and health programs in Egypt. A more detailed report will be issued in early 2015.

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[1] Full-scale DHS surveys were conducted in 1988, 1992, 1995, 2000, 2005, and 2008. In addition, interim DHS surveys were carried out in 1997, 1998, and 2003. Other national-level surveys for which results are shown in this report include the Egyptian Fertility Survey (1980 EFS), the 1984 Egypt Contraceptive Prevalence Survey (1984 ECPS), and the 1991 Egypt Maternal and Child Health Survey (1991 EMCHS).

II. Survey Implementation

A. Sample Design

The sample for the 2014 EDHS was designed to provide estimates of population and health indicators including fertility and mortality rates for the country as a whole and for six major subdivisions (Urban Governorates, urban Lower Egypt, rural Lower Egypt, urban Upper Egypt, rural Upper Egypt, and the Frontier Governorates). The sample also allows for separate estimates of most key indicators at the governorate level.

In order to allow for separate estimates for the major geographic subdivisions and the governorates, the number of households selected from each of the major subdivisions and each governorate was disproportionate to the size of the population in the units. Thus, the 2014 EDHS sample is not self-weighting at the national level.

B. Sample Selection

The sample for the 2014 EDHS was selected in three stages. A list of shiakhas/towns constituted the primary sampling frame for urban areas, and a list of villages served as the frame for rural areas. The Central Agency of Public Mobilization and Statistics (CAPMAS) updated these lists, which had been originally prepared for the 2006 census, to reflect the situation in 2013.

In order to provide for implicit geographic stratification, the lists of shiakhas/towns and villages in each governorate were arranged in serpentine order according to their location from north to south within the governorate. During the first stage selection, a total of 904 primary sampling units (481 shiakhas/towns and 423 villages) were chosen for the 2014 EDHS sample.

The second stage of selection involved several steps. First, for each of the primary sampling units (PSUs), maps were obtained and divided into a number of parts of roughly equal size (assuming approximately 5,000 persons per part). One to three parts were selected systematically from each PSU, depending on the size of the shiakha or village. Three parts were selected in shiakhas/villages with a population of 100,000 or more, and two parts were selected in shiakhas/villages with populations between 20,000 and 100,000. In the remaining smaller shiakhas/villages, one part was selected.

A quick count was carried out in the selected parts in each PSU to provide the information needed to divide the parts into a number of segments of roughly equal size. Because of security issues, the quick count operation could not be undertaken in North and South Sinai, and, thus, the 42 clusters selected in those governorates were not included in the 2014 Egypt DHS. Because the populations of those governorates comprise less than 1 percent of Egypt's total population, their exclusion does not affect national estimates. However, because they comprise two of the five Frontier Governorates, information that is presented in this report for the Frontier Governorates is not comparable to results in prior EDHS surveys in which all five Frontier Governorates were surveyed.

After the quick count was completed, two to three segments were selected from each PSU. In large shiakhas/towns and villages where there were two or three parts, one segment was chosen from each part. In small shiakhas/towns and villages where only one part had been selected, two segments were chosen from that part.

A household listing was obtained for each segment. Using the household lists, a systematic random sample of 29,471 households was chosen for the 2014 EDHS. All ever-married women 15-49 who were present in the sampled households on the night before the interview were eligible for the survey. A subsample of one-third of all households in each segment was selected for the anemia-testing component. In this subsample, ever-married women age 15-49 and children age 0-19 years

were eligible for the testing. One woman in each household in the subsample in which anemia testing was carried out was also selected to be asked questions about domestic violence.

C.   Questionnaires

Two questionnaires were used in the 2014 EDHS: a household questionnaire and an ever-married woman questionnaire. The household and ever-married woman questionnaires were based on the questionnaires used in earlier EDHS surveys and on model survey instruments developed in The DHS program. The questionnaires were developed in English and translated into Arabic. A pretest of the household and individual questionnaires that involved around 250 households was conducted in January 2014.

The EDHS household questionnaire was used to enumerate all usual members of and visitors to the selected households and to collect information on the socioeconomic status of the households as well as on the nutritional status and anemia levels among women and children. The first part of the household questionnaire collected information on the age, sex, marital status, educational attainment, work status, and relationship to the household head of each household member or visitor. This information provides basic demographic data for Egyptian households and also served to identify the women who were eligible for the individual interview, anthropometric measurements, and anemia testing and the children who were eligible for the anthropometric measurements and anemia testing. In the second part of the household questionnaire, there were questions on housing characteristics (e.g., the number of rooms, the flooring material, the source of water, and the type of toilet facilities) and on ownership of a variety of consumer goods. Special modules collecting information relating to child labor and discipline were also administered in the household questionnaire. Finally, the height and weight measurements and the results of anemia testing among women and children were also recorded in the household questionnaire.

The ever-married woman questionnaire obtained information on the following topics: respondent's background characteristics, reproduction, contraceptive knowledge and use, fertility preferences and attitudes about family planning, pregnancy and breastfeeding, child immunization and health, female circumcision, husband's background, woman's work and decision-making, and domestic violence.

D.   Training, Data Collection, and Processing

Fourteen teams collected the 2014 EDHS data; each team consisted of three to four interviewers and a field editor, who were female, and the team supervisor. In addition, two health staff (technician/nurse) with special training in anthropometric measurement and anemia testing were assigned to each team to collect the height and weight measures and conduct the anemia testing. The field staff was trained during a five-week period beginning on March 10, 2014. The main fieldwork began in the second week of April and was completed by mid-June. All callbacks and reinterviews were completed by the end of June.

As soon as possible after a team had completed interviewing in a PSU, questionnaires were returned to the EDHS survey office in Cairo for data processing. Limited office editing took place to check that questionnaires for all selected households and eligible respondents had been received from the field staff. In addition, a few questions that had not been precoded (e.g., occupation) were coded at this time. Using the CSPro software, a specially trained team of data processing staff then entered the questionnaires and edited the resulting dataset on microcomputers. The process of office editing and data processing was initiated almost immediately after the beginning of fieldwork and was completed by mid-June. Data cleaning and consistency checks were completed by the end of July.

E. Coverage of the Sample

Table 1 presents information on the results of the household and ever-married women interviews. A total of 29,471 households were selected for the 2014 EDHS sample. Household interviews were completed for 28,175 households, a response rate of 98.4 percent.

Table 1 Results of the household and ever-married woman interviews

Number of the households, number of eligible ever-married women, and response rates according to residence (unweighted), Egypt 2014

Result of interview and response rate	Urban	Rural	Urban Gover-norates	Lower Egypt Total	Urban	Rural	Upper Egypt Total	Urban	Rural	Frontier Gover-norates[1]	Total
Households											
Selected	14,893	14,578	6,068	10,903	3,735	7,168	10,845	3,966	6,879	1,655	29,471
Occupied	14,305	14,325	5,796	10,643	3,597	7,046	10,552	3,800	6,752	1,639	28,630
Interviewed	13,962	14,213	5,639	10,533	3,523	7,010	10,373	3,691	6,682	1,630	28,175
Household response rate[2]	97.6	99.2	97.3	99.0	97.9	99.5	98.3	97.1	99.0	99.5	98.4
Eligible women											
Identified	9,711	12,192	3,702	8,413	2,504	5,909	8,436	2,612	5,824	1,352	21,903
Interviewed	9,628	12,134	3,667	8,384	2,492	5,892	8,376	2,593	5,783	1,335	21,762
Eligible women response rate[3]	99.1	99.5	99.1	99.7	99.5	99.7	99.3	99.3	99.3	98.7	99.4

[1] Does not include North and South Sinai governorates
[2] Households interviewed/households occupied
[3] Respondents interviewed/eligible respondents

As noted above, an eligible respondent was defined as an ever-married woman age 15-49 who was present in the household on the night before the interview. A total of 21,903 women were identified as eligible in the households in the 2014 EDHS sample that were interviewed. Of these women, 21,762 were successfully interviewed. The response rate for ever-married women was 99.4 percent.

Table 1 also presents the results of households and ever-married women interviews by urban–rural residence and place of residence. The table shows that the household response rate was 97 percent or more for all regions. The ever-married woman response rate was 99 percent or higher in all areas, with the exception of the Frontier Governorates in which the response rate was 98.7 percent.

III. Preliminary Findings from the 2014 EDHS

A. Background Characteristics

The distribution of the ever-married women 15-49 interviewed in the 2014 EDHS is presented by selected background characteristics in Table 2. Almost all of the respondents (94 percent) were currently married at the time of the interview, 3 percent were widowed, and a similar percentage were divorced or separated. Considering the age distribution, 18 percent of the respondents were under age 25, 41 percent were in the 25-34 age group, and a similar percentage were age 35 and over. The relatively small proportion of young women in the sample reflects the fact that the age at first marriage has increased over time in Egypt.

Table 2 Background characteristics of respondents

Percent distribution of ever-married women by selected background characteristics, Egypt 2014

Background Characteristic	Weighted percent	Number of women	
		Weighted number	Unweighted number
Marital status			
Currently married	94.0	20,460	20,430
Widowed	3.1	669	670
Divorced	2.1	460	486
Separated	0.8	174	176
Age			
15-19	3.5	764	738
20-24	14.0	3,055	3,051
25-29	21.8	4,753	4,718
30-34	19.0	4,127	4,133
35-39	16.1	3,495	3,473
40-44	13.2	2,864	2,902
45-49	12.4	2,705	2,747
Urban-rural residence			
Urban	35.0	7,623	9,628
Rural	65.0	14,139	12,134
Place of residence			
Urban Governorates	12.7	2,774	3,667
Lower Egypt	49.0	10,664	8,384
Urban	10.7	2,319	2,492
Rural	38.3	8,346	5,892
Upper Egypt	37.4	8,130	8,376
Urban	11.1	2,421	2,593
Rural	26.2	5,708	5,783
Frontier Governorates	0.9	194	1,335
Governorate			
Urban Governorates			
Cairo	8.3	1,811	1,189
Alexandria	3.9	857	737
Port Said	0.4	86	800
Suez	0.1	19	941
Lower Egypt			
Damietta	2.0	433	986
Dakahlia	8.0	1,740	955
Sharkia	9.0	1,956	1,011
Kalyubia	4.7	1,033	850
Kafr El-Sheikh	4.4	957	945
Gharbia	6.3	1,370	835
Menoufia	4.8	1,045	855
Behera	9.0	1,959	1,088
Ismailia	0.8	172	859

Table 2---*Continued*

| Background characteristic | Weighted percent | Number of women | |
		Weighted number	Unweighted number
Upper Egypt			
Giza	9.4	2,040	1,076
Beni Suef	3.5	770	875
Fayoum	3.3	721	843
Menya	5.1	1,107	858
Assuit	5.0	1,085	965
Souhag	4.8	1,039	913
Qena	3.6	776	1,055
Aswan	1.7	368	886
Luxor	1.0	224	905
Frontier Governorates[1]			
Red Sea	0.4	83	387
New Valley	0.2	54	443
Matroh	0.3	58	505
Education			
No education	24.0	5,232	4,861
Some primary	6.1	1,334	1,239
Primary complete/ Some secondary	17.4	3,796	3,875
Secondary complete/Higher	52.4	11,400	11,787
Work status			
Working for cash	13.6	2,964	3,064
Not working for cash	86.4	18,798	18,698
Total	100.0	21,762	21,762

[1] Does not include North and South Sinai governorates

More than 6 in 10 of the 2014 EDHS respondents are rural residents, while 35 percent live in urban areas. By place of residence, 13 percent reside in the Urban Governorates, 49 percent in Lower Egypt, 37 percent in Upper Egypt, and 1 percent in the three Frontier Governorates covered in the survey. The largest percentages of respondents come from Giza, Behera, and Sharkia governorates, each with 9 percent, and Cairo and Dakahlia, each with 8 percent. Port Said, Suez, Ismailia, Luxor, Red Sea, New Valley, and Matroh governorates each have 1 percent or less of respondents.

Although the majority of women in the sample had some education, around one in four respondents reported that they had never attended school. An additional 6 percent attended but did not complete primary school, 17 percent completed at least the primary level or had some secondary education, and just over one in two respondents had completed secondary school or higher.

A minority of 2014 EDHS respondents (14 percent) were working at a job for which they were paid in cash.

B.   Fertility

In the 2014 EDHS, retrospective reproductive histories were obtained from all ever-married respondents. In collecting these histories, each woman was first asked about the number of sons and daughters living with her, the number living elsewhere, and the number who had died. She was then asked for a history of all her births, including the month and year in which each child was born, the child's name, sex and, if dead, the age at death, and, if alive, the current age and whether the child was living with the mother.

Current and cumulative fertility

The fertility measures presented in Table 3 include the total and age-specific fertility rates and the mean number of children ever born.[2] The total fertility rate represents the number of children the average woman would have by the end of her reproductive years if she were to bear children throughout the period at the age-specific rates observed during the 36-month period before the survey. The total fertility rate in Table 3 indicates that, if fertility were to remain constant at levels prevailing during that period, an Egyptian woman would bear 3.5 children over her lifetime.

Egyptian women tend to have children early in the reproductive period. At the current age-specific rates shown in Table 3, an Egyptian woman will have one-third of her lifetime births by her 25th birthday and two-thirds by the time she reaches age 30.

Table 3 Current and cumulative fertility

Age-specific fertility rates (per 1,000 women) and total fertility rate for the three years preceding the survey and the mean number of children ever born by age of the mother, Egypt 2014

Age	Age specific fertility rates	Mean number of children ever born (all women)	Number (all women)
15-19	56	0.1	5,185
20-24	213	0.8	5,003
25-29	200	1.8	5,455
30-34	134	2.7	4,429
35-39	69	3.3	3,605
40-44	17	3.6	2,921
45-49	4	4.0	2,751
Total 15-44	3.4	1.8	26,598
Total 15-49	3.5	2.0	29,349

The effect of past high fertility among Egyptian women is evident in the mean number of children ever born in Table 3. On average, women in their 30s have had three births and women nearing the end of the childbearing period have given birth to four children. The difference between the mean number of children ever born to women 45-49 and the total fertility rate is 0.5 children, reflecting the decline in fertility Egypt experienced over the past several decades.

Trends in fertility

Using data from earlier surveys as well as from the 2014 EDHS, Table 4 and Figure 1 show the trend in fertility in Egypt since the late 1970s. Reversing the downward trend that was generally observed throughout the period, the TFR increased between the 2008 and 2014 Egypt DHS surveys by 17 percent, from 3.0 births to 3.5 births. The 2014 TFR is at the same level as the TFR observed 14 years ago in the 2000 EDHS.

Looking at age-specific fertility, increases were observed at almost all ages since 2008. The largest increase by far occurred among women age 20-24. The age-specific fertility rate in that cohort is 26 percent higher than the rate found among women age 20-24 in the 2008 EDHS (Figure 2).

The fertility increase observed in the EDHS results is also evident in the statistics on births since 2008 reported in Egypt's civil registration. Based on the birth registration data, the Central Agency for Public Mobilization and Statistics estimated that the crude birth rate rose from 27.3 births per 1,000 population in 2008 to 31.9 births in 2012, a 17 percent increase (CAPMAS, 2013).

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[2] Fertility measures for the 2014 EDHS are calculated directly from the birth history data. Although information on fertility was obtained only from ever-married women, estimates are presented for all women regardless of marital status. Data from the household questionnaire on the age structure of the population of never-married women were used to calculate the all-women factors that were used in calculating the fertility measures. This procedure assumes that women who have never been married have had no births.

Table 4 Trend in fertility

Age-specific fertility rates (per 1,000 women) and total fertility rates, Egypt 1980-2014

Age	EFS	ECPS	1988 EDHS	1991 EMCHS	1992 EDHS	1995 EDHS	2000 EDHS	2003 Interim EDHS	2005 EDHS	2008 EDHS	2014 EDHS
	1979-1980[1]	1983-1984[1]	1986-1988[2]	1990-1991[1]	1990-1992[2]	1993-1995[2]	1997-2000[2]	2000-2003[2]	2002-2005[2]	2005-2008[2]	2011-2014[2]
15-19	78	73	72	73	63	61	51	47	48	50	56
20-24	256	205	220	207	208	200	196	185	175	169	213
25-29	280	265	243	235	222	210	208	190	194	185	200
30-34	239	223	182	158	155	140	147	128	125	122	134
35-39	139	151	118	97	89	81	75	62	63	59	69
40-44	53	42	41	41	43	27	24	19	19	17	17
45-49	12	13	6	14	6	7	4	6	2	2	4
TFR 15-49	5.3	4.9	4.4	4.1	3.9	3.6	3.5	3.2	3.1	3.0	3.5

Note: Rates for the age group 45-49 may be slightly biased due to truncation
Source: El-Zanaty and Way, 2009, Table 4.4
[1] Rates are for the 12-month period preceding the survey.
[2] Rates are for the 36-month period preceding the survey.

Figure 1 Fertility Trend, Egypt 1980-2014

Total Fertility Rate (Births per Woman)
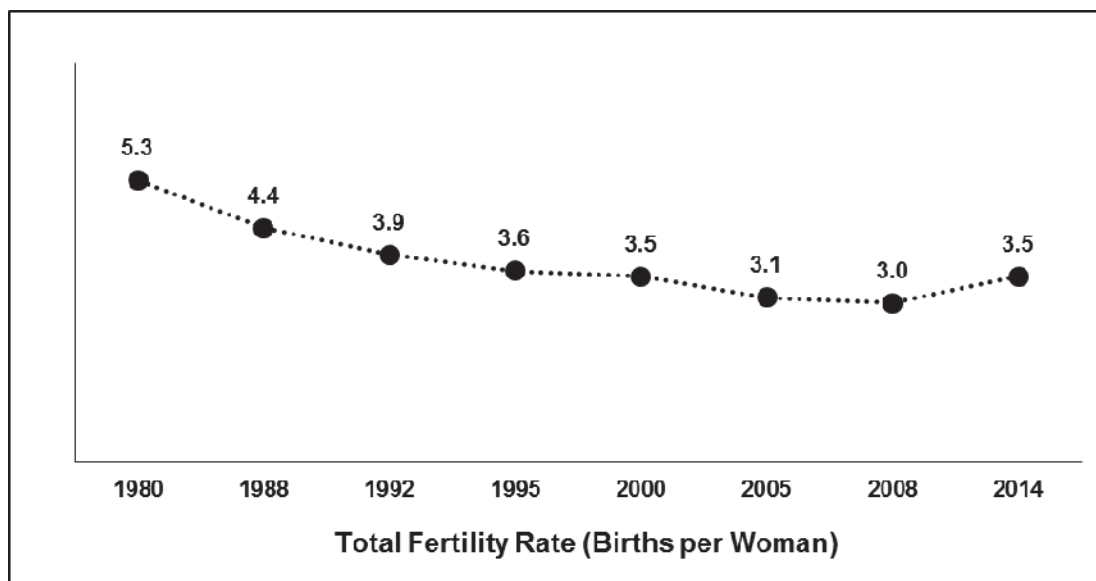
Figure 2 Trend in Age-Specific Fertility, Egypt 2008-2014
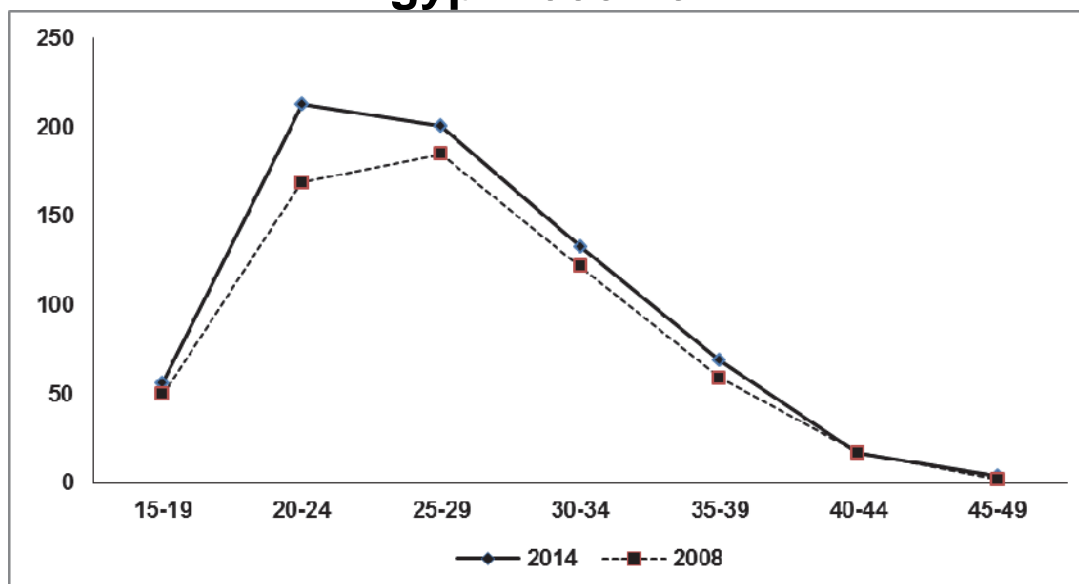
Fertility by residence

As Table 5 shows, rural women are having more children than urban women. At the fertility levels prevailing at the time of the 2014 EDHS, rural women will have 3.8 births by the end of the childbearing period while urban women will have 2.9 births. By place of residence, the current fertility level varies from 2.5 births in the Urban Governorates to 4.1 births in rural Upper Egypt.

Table 5 Current fertility by residence

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by urban-rural residence and place of residence, Egypt 2014

Age	Urban	Rural	Urban Gover-norates	Lower Egypt			Upper Egypt			Frontier Gover-norates[1]	Total
				Total	Urban	Rural	Total	Urban	Rural		
15-19	24	75	23	58	19	71	65	28	79	62	56
20-24	160	243	130	230	174	246	222	176	240	213	213
25-29	182	211	156	205	208	205	210	191	219	230	200
30-34	126	139	111	123	120	125	155	145	160	165	134
35-39	70	68	72	56	60	56	85	78	88	83	69
40-44	18	16	13	11	14	10	25	26	25	27	17
45-49	3	4	2	2	2	3	6	4	7	0	4
TFR	2.9	3.8	2.5	3.4	3.0	3.6	3.8	3.2	4.1	3.9	3.5
GFR	103	141	90	128	104	135	139	114	150	141	127
CBR	23.3	32.7	20.2	29.0	23.8	30.7	32.5	26.3	35.4	33.0	29.1

Note: Age-specific fertility rates are per 1,000 women. Rates for age group 45-49 may be slightly biased due to truncation.
TFR: Total fertility rate for ages 15-49, expressed per woman
GFR: General fertility rate (births divided by the number of women age 15-44), expressed per 1,000 women
CBR: Crude birth rate, expressed per 1,000 population
[1] Does not include North and South Sinai governorates

Table 6 examines the trend in fertility in Egypt by residence since the mid-1980s. The 2014 EDHS results indicate that fertility has risen in all areas except the Urban Governorates since 2008.

Table 6 Trends in fertility by residence

Total fertility rates by urban-rural residence and place of residence, Egypt 1986-2014

Residence	1988 EDHS 1986-1988[2]	1991 EMCHS 1990-1991[1]	1992 EDHS 1990-1992[2]	1995 EDHS 1993-1995[2]	2000 EDHS 1997-2000[2]	2003 Interim EDHS 2000-2003[2]	2005 EDHS 2002-2005[2]	2008 EDHS 2005-2008[2]	2014 EDHS 2011-2014[2]
Urban-rural residence									
Urban	3.5	3.3	2.9	3.0	3.1	2.6	2.7	2.7	2.9
Rural	5.4	5.6	4.9	4.2	3.9	3.6	3.4	3.2	3.8
Place of residence									
Urban Governorates	3.0	2.9	2.7	2.8	2.9	2.3	2.5	2.6	2.5
Lower Egypt	4.5	U	3.7	3.2	3.2	3.1	2.9	2.9	3.4
Urban	3.8	3.5	2.8	2.7	3.1	2.8	2.7	2.6	3.0
Rural	4.7	4.9	4.1	3.5	3.3	3.2	3.0	3.0	3.6
Upper Egypt	5.4	U	5.2	4.7	4.2	3.8	3.7	3.4	3.8
Urban	4.2	3.9	3.6	3.8	3.4	2.9	3.1	3.0	3.2
Rural	6.2	6.7	6.0	5.2	4.7	4.2	3.9	3.6	4.1
Frontier Governorates	U	U	U	4.1[3]	3.9[3]	U	3.3[3]	3.2[3]	3.9[3]
TFR 15-49	4.4	4.1	3.9	3.6	3.5	3.2	3.1	3.0	3.5

Note: Rates for the age group 45-49 may be slightly biased due to truncation. U-Unavailable
[1] Rates are for the 12-month period preceding the survey.
[2] Rates are for the 36-month period preceding the survey.
[3] Does not include North and South Sinai governorates
Source: El-Zanaty and Way, 2009, Table 4.5

C.   Fertility Preferences

In order to obtain insight into women's future childbearing intentions, respondents were asked in the 2014 EDHS whether they wanted to have another child and, if so, how soon. Table 7 summarizes the information on women's reproductive preferences. The majority of currently married women express a desire to control future childbearing, with 59 percent reporting they do not want another child and 1 percent using female sterilization. An additional 17 percent say that they want another child, but indicate that they want to wait at least two years before the birth of their next child.

Table 7 Fertility preferences

Percent distribution of currently married women by desire for children, according to the number of living children, Egypt 2014

Desire for children	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Have another soon[2]	90.4	30.9	13.5	5.0	2.3	1.9	0.4	14.9
Have another later[3]	0.5	57.3	23.2	6.6	2.4	1.4	1.5	17.1
Have another, undecided when	1.0	4.0	1.8	0.7	0.2	0.3	0.0	1.4
Undecided	0.4	1.4	7.2	4.5	2.8	1.7	1.2	4.0
Want no more	0.9	5.3	52.5	79.9	86.4	88.0	87.4	59.1
Sterilized	0.0	0.0	0.2	1.0	2.9	3.5	4.9	1.2
Declared infecund	6.7	1.2	1.5	2.2	3.0	3.1	4.5	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,089	3,056	5,465	5,469	3,132	1,364	885	20,460

[1] The number of living children includes current pregnancy.
[2] Wants next birth within 2 years
[3] Wants to delay next birth for 2 or more years

The desire to delay childbearing is strongly related to the number of living children the woman already had. There is very little interest among women in spacing the first birth; more than 9 in 10 women who had not yet had a birth wanted a birth soon (within 2 years). Women with one birth are more interested in spacing the next birth than having another birth soon (57 percent and 31 percent, respectively). Among women with more than one child, the desire to cease childbearing increases rapidly with the number of living children, from 53 percent among women with two births to 86 percent or more of women with four or more births.

D.   Family Planning

The 2014 EDHS collected information on the knowledge and use of family planning. To obtain these data, respondents were first asked to name all of the family planning methods that they had heard about. For methods not mentioned spontaneously, a description of the method was read, and the respondents were asked if they had heard of the method. Finally, women were asked if they were currently using a method, and, if so, where they had obtained the method that they were using.

Knowledge

Knowledge of family planning methods is universal among currently married Egyptian women (Table 8). With regard to specific methods, almost all currently married women have heard about the pill, IUD, and injectables. Nine in ten married women know about the implant. More than seven in ten women know about female sterilization (74 percent), and half have heard about condoms. Prolonged breastfeeding is the most widely known traditional method (72 percent).

Current contraceptive use

Overall, the 2014 EDHS found that 59 percent of currently married women in Egypt are currently using a contraceptive method (Table 9). The most widely used method is the IUD (30 percent), followed by the pill (16 percent) and injectables (9 percent).

Table 8 Knowledge of family planning methods

Percentage of currently married women 15-49 who know a family planning method, by method, Egypt 2014

Method	Percent knowing method
Any method	99.9
Any modern method	99.9
Pill	99.6
IUD	99.4
Injectables	99.3
Implants	90.4
Diaphragm/foam/jelly	19.6
Condom	49.7
Female sterilization	73.8
Male sterilization	14.3
Emergency contraception	7.1
Any traditional method	80.8
Periodic abstinence	30.9
Withdrawal	39.0
Prolonged breastfeeding	71.7
Other	0.5
Number of women	20,460

As expected, there are differences in the level of current use of family planning methods by residence (Table 9). Urban women are somewhat more likely to be using than rural women (61 percent and 57 percent, respectively). Use rates are higher in Lower Egypt (64 percent) and the Urban Governorates (63 percent) than in Upper Egypt (50 percent) and the three Frontier Governorates (55 percent).

Table 9 Current use of family planning methods by residence

Percent distribution of currently married women 15-49 by family planning method currently used according to urban-rural residence and place of residence, Egypt 2014

Method	Urban	Rural	Urban Gover-norates	Lower Egypt			Upper Egypt			Frontier Gover-norates[1]	Total
				Total	Urban	Rural	Total	Urban	Rural		
Any method	61.3	57.0	62.6	63.8	62.5	64.1	50.3	58.9	46.7	55.0	58.5
Any modern method	59.5	55.5	60.7	62.4	60.9	62.8	48.5	57.1	44.8	53.5	56.9
Female sterilization	1.2	1.2	0.7	1.5	1.8	1.4	1.1	1.2	1.0	0.7	1.2
Pill	16.5	15.8	13.8	16.9	18.4	16.4	15.5	17.3	14.8	20.1	16.0
IUD	34.5	27.8	38.6	34.6	34.0	34.7	21.5	30.7	17.6	24.6	30.1
Injectables	5.8	9.9	5.3	8.5	5.2	9.4	9.5	6.9	10.6	5.8	8.5
Implants	0.6	0.5	0.6	0.5	0.7	0.5	0.5	0.6	0.5	1.0	0.5
Condom	0.8	0.3	1.3	0.4	0.7	0.3	0.3	0.3	0.3	1.2	0.5
Diaphragm/foam/jelly	0.2	0.0	0.3	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.1
Any traditional method	1.8	1.6	2.0	1.4	1.6	1.3	1.9	1.8	1.9	1.5	1.6
Periodic abstinence	0.7	0.1	1.1	0.2	0.6	0.1	0.2	0.4	0.1	0.2	0.3
Withdrawal	0.4	0.2	0.3	0.4	0.4	0.3	0.2	0.3	0.1	0.3	0.3
Prolonged breastfeeding	0.7	1.2	0.5	0.8	0.6	0.9	1.5	1.1	1.6	1.1	1.0
Not currently using	38.7	43.0	37.4	36.2	37.5	35.9	49.7	41.1	53.3	45.0	41.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	7,084	13,375	2,547	10,098	2,179	7,919	7,629	2,254	5,375	185	20,460

Note: If more than one method is used, only the most effective method is considered in this tabulation.
[1] Does not include North and South Sinai governorates

Within Upper Egypt, the contraceptive use rate among urban women (59 percent) is markedly higher than the rate among rural women (47 percent). Within Lower Egypt, the urban-rural differential is much narrower; 63 percent of married women living in urban areas in Lower Egypt are using a family planning method compared to 64 percent of rural women.

Other differentials in current use are presented in Table 10. Current use rises rapidly with age, from a level of 21 percent among currently married women 15-19 to a peak of 73 percent among women 35-39. Use rates also are related to family size. Few women use before having the first birth. After the first child, contraceptive use increases sharply with the number of living children, peaking at 74 percent among women with 3-4 children, after which it declines.

Differences in use levels are relatively small across education groups. Use rates are almost the same for women with no education (59 percent) and those who have a secondary or higher education (60 percent). Women who have completed primary or have some secondary education are the least likely to be currently using a method (55 percent).

Women employed in a job for which they are paid in cash are more likely to use than other women (67 percent and 57 percent, respectively).

Table 10 Current use of family planning methods by selected demographic and social characteristics

Percent distribution of currently married women 15–49 by family planning method currently used according to selected demographic and social characteristics, Egypt 2014

Background Characteristics	Any method	Any modern	Female sterili-zation	Pill	IUD	Injecta-bles	Im-plants	Con-dom	Dia-phragm/foam/jelly	Any tradi-tional	Peri-odic absti-nence	With-drawal	Pro-longed breast-feeding	Not using	Total percent	Number of women
Age																
15-19	20.5	18.9	0.0	7.1	9.8	1.7	0.3	0.0	0.0	1.6	0.0	0.0	1.6	79.5	100.0	746
20-24	42.3	40.5	0.0	15.4	19.2	5.4	0.3	0.1	0.0	1.7	0.0	0.1	1.6	57.7	100.0	2,980
25-29	55.2	53.5	0.1	18.3	26.5	7.6	0.6	0.3	0.0	1.8	0.1	0.1	1.5	44.8	100.0	4,610
30-34	64.6	62.8	0.8	17.5	32.9	10.3	0.6	0.5	0.2	1.8	0.3	0.3	1.2	35.4	100.0	3,981
35-39	72.6	71.0	2.2	18.2	37.8	11.0	1.0	0.7	0.0	1.6	0.5	0.3	0.8	27.4	100.0	3,282
40-44	71.0	69.9	2.9	14.6	40.4	10.9	0.3	0.8	0.0	1.1	0.5	0.4	0.2	29.0	100.0	2,579
45-49	54.0	52.3	2.8	11.1	30.4	6.8	0.4	0.5	0.2	1.6	0.9	0.7	0.0	46.0	100.0	2,282
Number of living children																
0	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	99.9	100.0	1,791
1-2	54.3	52.5	0.1	17.1	29.4	4.9	0.3	0.5	0.1	1.9	0.4	0.2	1.3	45.7	100.0	8,287
3-4	73.6	72.0	1.8	18.5	38.2	12.0	0.8	0.6	0.1	1.7	0.4	0.3	1.0	26.4	100.0	8,232
5+	65.6	63.6	4.3	15.4	26.8	15.5	1.0	0.4	0.2	2.0	0.2	0.5	1.3	34.4	100.0	2,149
Education																
No education	59.2	57.9	1.8	13.2	26.8	15.2	0.5	0.3	0.1	1.3	0.0	0.2	1.1	40.8	100.0	4,778
Some primary	57.7	56.8	2.0	14.8	29.5	9.8	0.5	0.1	0.0	0.9	0.1	0.2	0.5	42.3	100.0	1,207
Primary comp./some sec.	54.7	53.1	1.2	14.5	27.7	8.7	0.8	0.2	0.0	1.7	0.0	0.2	1.4	45.3	100.0	3,572
Secondary comp./higher	59.6	57.7	0.9	17.9	32.4	5.3	0.5	0.7	0.1	1.9	0.6	0.3	0.9	40.4	100.0	10,902
Work status																
Working for cash	66.6	63.9	1.4	17.3	36.9	6.6	0.6	1.0	0.1	2.7	1.1	0.6	1.1	33.4	100.0	2,640
Not working for cash	57.3	55.9	1.2	15.8	29.1	8.8	0.5	0.4	0.1	1.5	0.2	0.2	1.0	42.7	100.0	17,820
Total	58.5	56.9	1.2	16.0	30.1	8.5	0.5	0.5	0.1	1.6	0.3	0.3	1.0	41.5	100.0	20,460

Note: If more than one method is used, only the most effective method is considered in this tabulation.

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Trend in contraceptive use

Using data from earlier surveys as well as the 2014 EDHS, Table 11 examines trends in contraceptive use in Egypt since 1980. The table shows that contraceptive use levels rose rapidly in the 1980s, and, at the time of the 1992 EDHS, the overall use rate was 47 percent, almost twice the rate reported in the 1980 Egypt Fertility Survey (24 percent). The use rate continued to rise—although at a more moderate rate—reaching 60 percent at the time of the 2003 EIDHS. Since 2003, the use rate has not changed significantly, fluctuating between 59 and 60 percent.

Table 11 Trends in current use of family planning
Percent distribution of currently married women 15-49 by the family planning method currently used, Egypt 1980-2014

Method	1980 EFS	1984 ECPS	1988 EDHS	1991 EMCHS	1992 EDHS	1995 EDHS	2000 EDHS	2003 EIDHS	2005 EDHS	2008 EDHS	2014 EDHS
Any method	24.2	30.3	37.8	47.6	47.1	47.9	56.1	60.0	59.2	60.3	58.5
Any modern method	22.8	28.7	35.4	44.3	44.8	45.5	53.9	56.6	56.5	57.6	56.9
Female sterilization	0.7	1.5	1.5	na	1.1	1.1	1.4	0.9	1.3	1.0	1.2
Pill	16.6	16.5	15.3	15.9	12.9	10.4	9.5	9.3	9.9	11.9	16.0
IUD	4.1	8.4	15.7	24.2	27.9	30.0	35.5	36.7	36.5	36.1	30.1
Injectables	na	0.3	0.1	na	0.5	2.4	6.1	7.9	7.0	7.4	8.5
Implants	na	na	na	na	0.0	0.0	0.2	0.9	0.8	0.5	0.5
Diaphragm/foam/jelly	0.3	0.7	0.4	na	0.4	0.1	0.2	0.1	0.0	0.0	0.5
Condom	1.1	1.3	2.4	na	2.0	1.4	1.0	0.9	1.0	0.7	0.1
Any traditional method	1.4	1.6	2.4	3.3	2.3	2.4	2.2	3.4	2.7	2.7	1.6
Periodic abstinence	0.5	0.6	0.6	na	0.7	0.8	0.6	0.8	0.7	0.4	0.3
Withdrawal	0.4	0.3	0.5	na	0.7	0.5	0.2	0.4	0.3	0.2	0.3
Prolonged breastfeeding	na	0.6	1.1	na	0.9	1.0	1.2	2.1	1.6	2.0	1.0
Other	0.3	0.1	0.2	na	0.1	0.1	0.1	0.1	0.1	0.0	0.0
Not using	75.8	69.7	62.2	62.2	52.9	52.1	43.9	40.0	40.8	39.7	41.5
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	8,012	9,158	8,221	8,406	9,153	13,710	14,382	8,445	18,187	15,396	20,460

na = Information on the method was not collected or was not reported.
Source: El-Zanaty and Way, 2009, Table 6.4

Looking at the trends in use of the three most popular methods, IUD use rose from a rate of 4 percent in 1980 to a level of 36-37 percent during the 2000-2008 period. The 2014 EDHS results document that a substantial drop in IUD use took place after 2008, with use of the method decreasing to 30 percent (Figure 3). The decline in IUD use was offset by rises in the use of the pill (from 12 percent in 2008 to 16 percent in 2014) and, to a lesser extent, the injectable (from 7 percent in 2008 to 9 percent in 2014).

Trends by residence

Table 12 presents the trends in contraceptive use by residence since 1984. The table shows that urban prevalence rose steadily during the 1980s, appeared to plateau in the early 1990s, and then resumed a steady pattern of growth, peaking at 66 percent in 2003. The urban use rate was below that peak in both 2005 (63 percent) and 2008 (64 percent) and declined further to 61 percent in 2014. Looking at the trends separately for the Urban Governorates, urban Lower Egypt, and urban Upper Egypt, all three areas experienced small declines in the rate of family planning use between 2008 and 2014.

Figure 3 Trends in Current Use of IUD, Pill, and Injectables, Egypt 2008-2014

Percentage of currently married women age 15-49 using method
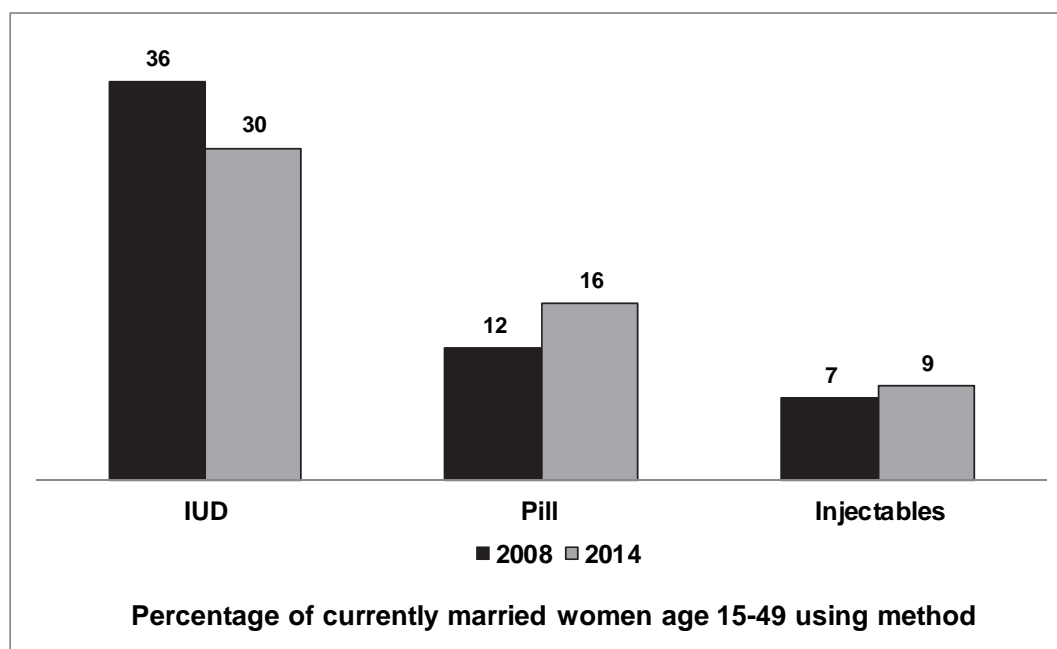
Table 12 documents a rapid increase in contraceptive use in rural Egypt between 1984 and 2000, from 19 percent to 52 percent. After 2000, the rural use rate essentially has plateaued, with only a very modest increase observed between 2003 (56 percent) and 2008 (58 percent) and virtually no change between 2008 and 2014.

Table 12 Trends in family planning use by residence

Percentage of currently married women 15-49 currently using any family planning method by urban-rural residence and place of residence, Egypt 1984-2014

Residence	1984 ECPS	1988 EDHS	1992 EDHS	1995 EDHS	2000 EDHS	2003 EIDHS	2005 EDHS	2008 EDHS	2014 EDHS
Urban-rural residence									
Urban	45.1	51.8	57.0	56.4	61.2	65.5	62.6	64.3	61.3
Rural	19.2	24.5	38.4	40.5	52.0	55.9	56.8	57.5	57.0
Place of residence									
Urban Governorates	49.6	56.0	59.1	58.1	62.7	68.5	63.9	65.2	62.6
Lower Egypt	34.1	41.2	53.5	55.4	62.4	65.2	65.9	64.3	63.8
Urban	47.6	54.5	60.5	59.1	64.9	66.3	64.1	65.5	62.5
Rural	28.5	35.6	50.5	53.8	61.4	64.8	66.5	63.9	64.1
Upper Egypt	17.3	22.1	31.4	32.1	45.1	49.4	49.9	52.7	50.3
Urban	36.8	41.5	48.1	49.9	55.4	59.8	60.0	62.4	58.9
Rural	7.9	11.5	24.3	24.0	40.2	44.7	45.2	48.4	46.7
Frontier Governorates[1]	na	na	na	44.1[1]	46.1[1]	na	55.8[1]	60.4[1]	55.0[1]
Total	30.3	37.8	47.1	47.9	56.1	60.0	59.2	60.3	58.5

na = Information on the method was not collected or was not reported
Source: El-Zanaty and Way, 2009, Table 6.6
[1] Does not include North and South Sinai governorates

Table 13 shows current use rates by governorate for the 2014 EDHS and earlier surveys. At the time of the 2014 EDHS, use rates were 60 percent or higher in all of the Urban Governorates except Port Said (59 percent) and in all of the nine governorates in Lower Egypt. In Upper Egypt, only only Giza governorate, of which a large part is included in the Cairo Metropolitan area, had a use rate over 60 percent. Among the other governorates in Upper Egypt, use rates ranged from 31 percent in Souhag to 58 percent in Beni-Suef.

Looking at the trend in current use by governorate between the 2008 and 2014 DHS surveys, changes in use levels were modest in most governorates. The majority of the 12 governorates in which there were declines in use rates were in Upper Egypt. The largest decline was observed in Qena, where the use rate dropped from 48 percent in 2008 to 38 percent in 2014. Ismailia registered the largest increase, from 57 percent in 2008 to 62 percent in 2014.

Table 13 Trends in current use of family planning methods by governorate

Percentage of currently married women 15-49 currently using any family planning method by governorate, Egypt 1988-2014

Governorate	1988 EDHS	1992 EDHS	1995 EDHS	2000 EDHS	2005 EDHS	2008 EDHS	2014 EDHS
Urban Governorates	56.0	59.1	58.1	62.7	63.9	65.2	62.6
Cairo	58.9	58.1	56.9	62.3	63.8	66.8	64.0
Alexandria	51.6	62.1	59.8	64.7	64.5	63.7	60.2
Port Said	48.2	60.5	59.7	57.7	61.6	54.7	58.5
Suez	50.3	57.3	62.4	58.0	64.0	65.8	61.9
Lower Egypt	41.2	53.5	55.4	62.4	65.9	64.3	63.8
Damietta	54.1	53.4	57.4	58.8	63.9	64.2	65.8
Dakahalia	41.3	52.8	54.9	62.8	64.4	64.4	64.1
Sharkia	35.2	49.2	53.1	61.4	61.2	65.7	59.7
Kalyubia	42.3	57.9	55.6	64.0	69.4	59.9	63.1
Kafr-El-Sheikh	41.7	47.2	54.4	64.2	65.8	62.1	63.3
Gharbia	50.1	55.9	55.9	65.7	69.7	67.1	63.2
Menoufia	43.9	55.7	54.3	61.3	64.2	66.3	67.1
Behera	32.5	54.7	58.7	59.8	68.7	66.1	66.4
Ismailia	41.0	50.2	58.5	58.5	59.6	56.5	61.7
Upper Egypt	22.1	31.4	32.1	45.1	49.9	52.7	50.3
Giza	45.7	49.9	50.9	60.5	62.1	62.4	63.9
Beni-Suef	15.3	29.2	30.4	53.0	56.0	56.9	58.3
Fayoum	20.2	33.3	34.0	50.4	55.9	55.7	57.4
Menya	16.6	21.9	24.3	46.7	51.4	54.1	51.3
Assuit	12.7	28.2	22.1	32.9	37.9	47.4	41.4
Souhag	16.2	19.8	21.7	27.5	32.7	36.3	31.0
Luxor	na	na	na	na	Na	54.5	48.4
Qena	12.2	24.7	26.3	34.6	47.2	48.0	37.8
Aswan	18.6	31.9	36.0	44.9	49.0	53.4	49.7
Total	37.8	47.1	47.9	56.1	59.2	60.3	58.5

na = Information not available
Source: El-Zanaty and Way, 2009, Table 6.7

Family planning sources

The 2014 EDHS obtained information from current users of modern methods about the source from which they had gotten their method. Table 14 presents the results of these questions. Overall, family planning users in Egypt are more likely to obtain their method from a public sector source than a private provider. The majority of both IUD and injectable users rely on public sector providers for their method. In the case of the IUD, more than six in ten current users had the method inserted at a public sector provider, principally at urban and rural health units. Among injectable users, 83 percent got the method from a public sector provider. Rural health units are a particularly important source for injectables, supplying 62 percent of all current injectable users.

Table 14 Source for modern family planning methods

Percent distribution of current users of modern family planning methods by most recent source, according to specific methods, Egypt 2014

Source	Pill	IUD	Injectable	Condom	Female sterilization	Total[1]
Public sector	34.4	62.9	83.1	23.3	21.3	56.7
Urban hospital (General/district)	1.3	8.3	3.2	0.0	13.9	5.8
Urban health unit	3.8	13.6	8.6	11.7	0.0	9.8
Health office	1.1	3.1	1.6	0.0	0.0	2.2
Rural hospital (Central)	1.1	2.3	3.4	0.0	2.2	2.1
Rural health unit	25.5	26.5	62.3	11.6	1.6	30.8
MCH center	1.0	5.8	3.1	0.0	0.0	3.8
Mobile unit	0.5	2.5	0.6	0.0	0.0	1.6
University/Teaching hospital	0.0	0.0	0.0	0.0	0.8	0.0
Health insurance organization	0.0	0.1	0.0	0.0	0.0	0.1
Curative care organization	0.1	0.1	0.0	0.0	0.0	0.1
Other governmental	0.0	0.6	0.4	0.0	2.7	0.5
Private sector	64.8	36.8	15.5	75.2	78.2	42.7
Non-governmental organization	0.0	1.0	0.1	0.0	0.0	0.6
Private medical	64.7	35.3	15.3	75.2	77.6	41.8
Private hospital/clinic	0.0	3.0	0.5	0.0	20.2	2.1
Private doctor	1.5	32.3	1.6	1.4	57.3	19.3
Pharmacy	63.1	0.1	13.1	73.8	0.0	20.5
Other private medical	0.1	0.4	0.1	0.0	0.6	0.3
Mosque health unit	0.0	0.2	0.1	0.0	0.4	0.2
Church health unit	0.1	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.1	0.0	0.0	0.3	0.1
Other non-medical	0.8	0.3	1.4	1.5	0.7	0.6
Vendor (shop, kiosk, etc.)	0.0	0.1	0.0	0.0	0.0	0.0
Friends/relative	0.2	0.1	0.9	0.0	0.0	0.2
Other	0.0	0.1	0.1	0.0	0.0	0.1
Don't know	0.4	0.0	0.0	1.5	0.0	0.1
Missing	0.2	0.0	0.4	0.0	0.7	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of users	3,278	6,156	1,733	95	248	11,638

[1] Includes users of implants and vaginal methods (diaphragm/foam/jelly) for whom the source distribution is not shown separately

In contrast to IUD and injectable users, pill users and the small number of users of the condom and female sterilization reported obtaining their method more often from a private sector source than a public sector provider. Pharmacies were the principal source for the pill and condoms. More than three-quarters of women relying on female sterilization reported the procedure was performed by a private medical provider.

Figure 4 shows that, while a majority of users of modern family planning methods continue to obtain their method from public sector providers, the proportion relying on public sector providers for family planning methods declined slightly between 2008 and 2014.

Figure 4 Trend in Reliance on Public Health Facilities for Modern Family Planning Methods, Egypt 1995-2014

Percentage of women currently using a modern family planning method who obtained the method at a public health facility
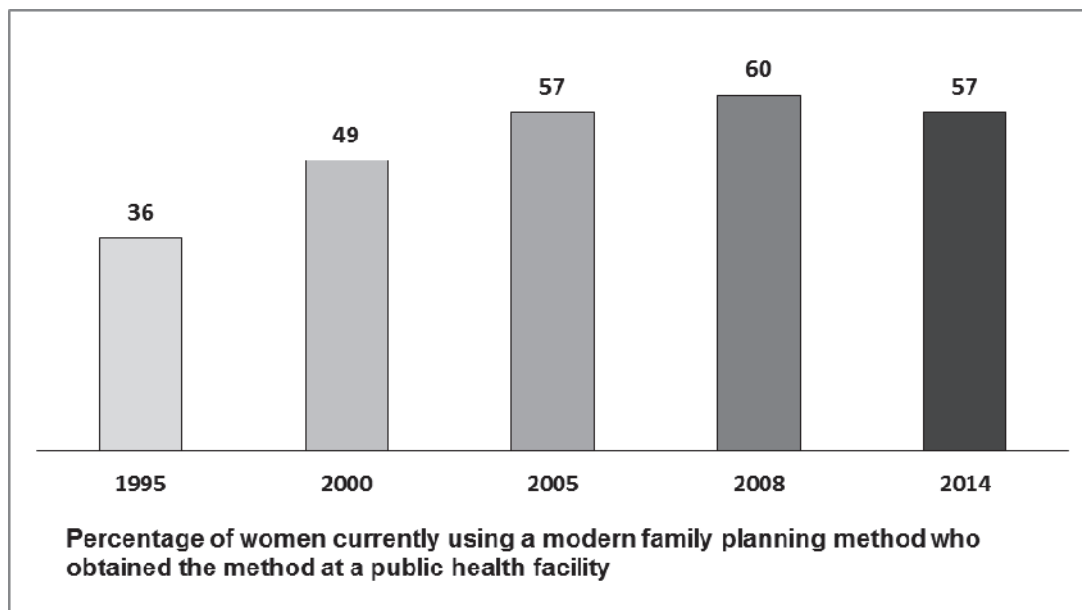
Unmet need for family planning

Unmet need for family planning was adopted as a Millennium Development Goal (MDG) indicator in 2008. At the time that unmet need became an MDG, there was concern that the unmet need definition had become increasingly complex over time and was not always calculated in the same same manner across DHS, MICS, and other reproductive health surveys. If progress toward reducing unmet need was to be compared across countries, it was recognized that unmet need had to be defined in a way that could be consistently measured across surveys. After a period of review by a Technical Expert Working Group, a revised unmet need definition was developed and adopted in 2012.[3] This report uses the revised, simpler definition in calculating the unmet need rates for the 2014 EDHS presented in Table 15. Table 15 also presents estimates of unmet need for the 2005 and 2008 EDHS surveys based on the revised unmet need definition. Those estimates are slightly higher than the levels of unmet need reported at the time of the two surveys. The differences are largely due to the fact that calendar data are not used in determining infecundity in the revised approach to calculating unmet need.

According to the revised definition, 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 two years, or are unsure if or when they want to become pregnant;
- Pregnant with a mistimed pregnancy; or
- Postpartum amenorrheic for up to two years following a mistimed birth and not using contraception.

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[3] For a detailed discussion of the rationale for the changes in the definition, see Bradley et al., 2012. The report details six changes in the way in which unmet need is calculated.

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; or
- Postpartum amenorrheic for up to two years following an unwanted birth and not using contraception.

Table 15 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, the total demand for family planning, and the percentage of the demand for contraception that is satisfied, by background characteristics, Egypt 2014, and the percentages in various need and demand categories, Egypt 2005-2014

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Age												
15-19	8.7	0.3	9.0	19.2	1.3	20.5	28.0	1.6	29.6	69.4	63.9	746
20-24	9.4	1.6	11.0	31.1	11.1	42.3	40.5	12.8	53.3	79.4	76.1	2,980
25-29	7.1	4.8	11.9	23.2	32.1	55.2	30.3	36.8	67.1	82.3	79.6	4,610
30-34	4.1	9.3	13.4	12.5	52.1	64.6	16.6	61.4	78.0	82.8	80.5	3,981
35-39	1.8	10.9	12.6	5.0	67.6	72.6	6.8	78.4	85.2	85.2	83.3	3,282
40-44	0.4	12.1	12.5	1.2	69.8	71.0	1.6	81.9	83.5	85.0	83.7	2,579
45-49	0.2	15.7	15.9	0.2	53.8	54.0	0.4	69.4	69.9	77.2	74.9	2,282
Residence												
Urban	3.3	8.5	11.8	13.6	47.7	61.3	16.9	56.2	73.2	83.8	81.4	7,084
Rural	5.1	8.0	13.0	14.0	43.1	57.0	19.0	51.0	70.1	81.4	79.2	13,375
Place of residence												
Urban Governorates	2.7	8.4	11.1	13.4	49.2	62.6	16.2	57.6	73.7	84.9	82.3	2,547
Lower Egypt	3.5	7.0	10.4	13.8	50.0	63.8	17.3	56.9	74.2	85.9	84.0	10,098
Urban	2.9	8.0	10.9	12.8	49.7	62.5	15.7	57.7	73.4	85.1	83.0	2,179
Rural	3.6	6.7	10.3	14.1	50.0	64.1	17.7	56.7	74.4	86.2	84.3	7,919
Upper Egypt	6.4	9.6	16.0	14.0	36.3	50.3	20.4	46.0	66.3	75.9	73.1	7,629
Urban	4.3	9.3	13.5	14.4	44.6	58.9	18.7	53.8	72.5	81.3	78.8	2,254
Rural	7.2	9.8	17.0	13.8	32.9	46.7	21.1	42.7	63.7	73.3	70.3	5,375
Frontier Governorates	3.5	7.6	11.0	17.2	37.8	55.0	20.7	45.4	66.0	83.3	80.9	185
Education												
No education	3.2	10.7	13.9	6.9	52.3	59.2	10.1	63.0	73.1	81.0	79.2	4,778
Some primary	3.0	11.3	14.3	8.2	49.5	57.7	11.2	60.8	72.0	80.2	78.9	1,207
Primary comp./ some sec.	5.4	7.5	12.9	14.1	40.7	54.7	19.5	48.1	67.6	80.9	78.4	3,572
Secondary comp./higher	4.9	6.9	11.8	17.5	42.1	59.6	22.3	49.0	71.3	83.5	80.9	10,902
Total EDHS 2014	4.5	8.1	12.6	13.9	44.7	58.5	18.3	52.8	71.1	82.3	80.0	20,460
Total EDHS 2008	3.4	8.2	11.6	13.2	47.1	60.3	16.6	55.3	71.9	83.9	80.1	15,396
Total EDHS 2005	3.5	8.8	12.3	12,4	46.8	59.2	15.9	55.7	71.5	82.8	79.0	18,187

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al., 2012. Thus, the figures in the table should not be compared to unmet need estimates published in earlier EDHS reports.
[1] Total demand is the sum of unmet need and met need.
[2] Percentage of demand satisfied is met need divided by total demand.
[3] Modern methods include female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, and diaphragm, foam, jelly

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

Women 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.

Considering the indicators presented in Table 15, 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.

As Table 15 shows, 13 percent of currently married women in Egypt are considered as having an unmet need for family planning. Around one-third of this need reflects a desire to space the next birth, and the remainder represents an interest in limiting births. Taking into account the women currently using contraception, the total demand for family planning comprises 71 percent of married women, and 82 percent of that demand is satisfied, mainly with modern contraceptive methods. In general, variations in the level of unmet need, the size of the total demand for family planning and the proportion of the satisfied demand are not large. Women in rural Upper Egypt have the highest unmet need and the lowest rate of satisfied demand for family planning (17 percent and 73 percent, respectively).

Table 15 also shows the trend in unmet need since 2005. The 2005 and 2008 unmet estimates are calculated according to the revised definition of unmet adopted in 2012 for MDG reporting and, thus, are not comparable to the estimates of unmet need presented in the published reports for those surveys. A comparison of the 2014 unmet rate with the rates from the two earlier EDHS surveys indicates that there has been almost no change in the proportion of currently married women in Egypt considered to be in need of family planning. Around 1 in 8 married women was in need of family planning at the time of all three surveys.

E.   Child Mortality

Table 16 presents information on child mortality levels in Egypt for three successive five-year periods prior to the 2014 EDHS. The rates are estimated directly from the information on a child's birth date, survivorship status, and the age at death for children who died collected in the birth histories from EDHS respondents.

Table 16 Early childhood mortality rates					
Neonatal, postneonatal, infant, child, and under-five mortality rates for five-year periods preceding the survey, Egypt 2014					
Years preceding the survey	Neonatal mortality (NN)	Post-neonatal mortality (PNN)[1]	Infant mortality $(_1q_0)$	Child mortality $(_4q_1)$	Under-five mortality $(_5q_0)$
0-4 years	14	8	22	5	27
5-9 years	19	11	30	3	33
10-14 years	19	13	33	7	39

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

During the five-year period prior to the survey (i.e., roughly the period April 2009-March 2014), the infant mortality rate was 22 deaths per 1,000 births and the neonatal mortality rate was 14 deaths per 1,000 births. A comparison of these rates with the overall level of under-five mortality (27 deaths per 1,000 births) indicates that almost 80 percent of early childhood deaths in Egypt take place before a child's first birthday, with half occurring during the first month of life.

Figure 5 compares the child mortality levels from the 2014 EDHS to the levels reported for the five-year period prior to the 2008 EDHS. The differences that are observed are minor, suggesting that both the levels and age patterns of early childhood mortality have remained largely unchanged in Egypt since 2008.

Figure 5 Trends in Early Childhood Mortality, Egypt 2008-2014
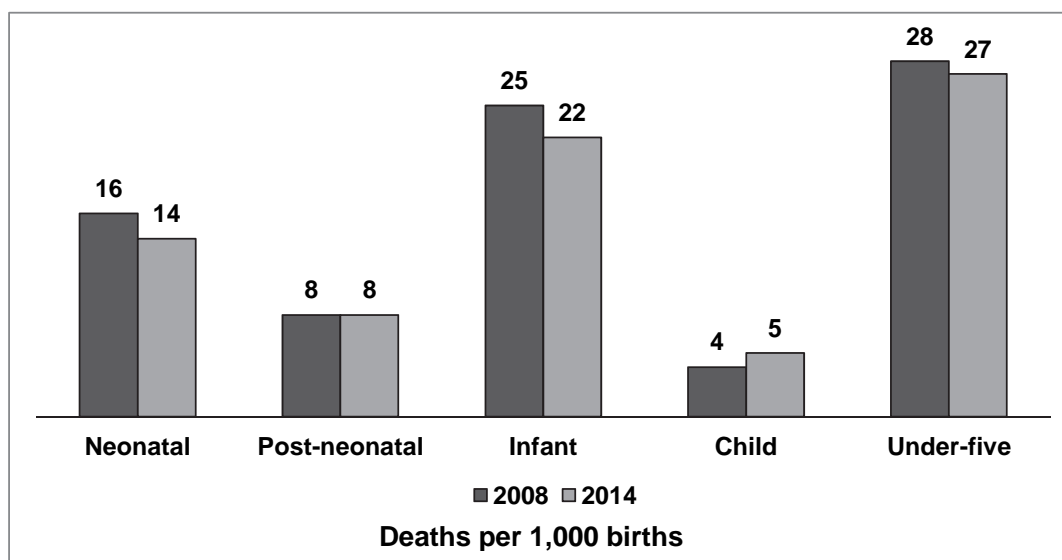
Table 17 presents residential differentials in mortality levels. The estimates are calculated for a ten-year period before the 2014 EDHS. The results indicate that under-five mortality is lower among urban children (23 deaths per 1,000) than rural children (34 deaths per 1,000). Considering place of residence, the Urban Governorates generally have the lowest rates followed by Lower Egypt. The differential in under-five mortality between children living in rural Lower Egypt and rural Upper Egypt is particularly marked (28 and 42 deaths per 1,000, respectively).

Table 17 Early childhood mortality rates by residence

Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by urban-rural residence and place of residence, Egypt 2008

Residence	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Urban-rural residence					
Urban	13	7	20	3	23
Rural	18	11	29	5	34
Place of residence					
Urban Governorates	14	4	17	2	20
Lower Egypt	14	9	23	3	26
Urban	10	9	19	2	21
Rural	16	8	24	4	28
Upper Egypt	19	13	32	6	38
Urban	14	8	23	5	27
Rural	21	14	35	7	42
Frontier Governorates[2]	12	8	19	6	25

[1] Computed as the difference between the infant and neonatal mortality rates
[2] Does not include North and South Sinai governorates

F.   Child Health

Information is available in the 2014 EDHS on a number of key child health indicators including vaccination rates among young children and treatment practices when a child is ill with diarrhea or an acute respiratory illness.

Vaccination of children

World Health Organization (WHO) guidelines for childhood immunizations call for all children to receive a BCG vaccination against tuberculosis; three doses of the DPT vaccine to prevent diphtheria, pertussis and tetanus; three doses of polio vaccine; and a measles vaccination. In addition to these vaccinations, Egypt's child immunization program also recommends that children receive three doses of the hepatitis B vaccine.

The 2014 EDHS collected information to assess if Egyptian children are being vaccinated according to the recommended guidelines. Two approaches were used to obtain the immunization coverage information. First, for each child born since January 2009, mothers were asked whether they had a health card and/or a birth certificate[4] for the child and, if so, to show the document(s) to the interviewer. When the mother was able to show the birth record and/or health card, dates of vaccinations were copied from the document(s) to the questionnaire. If the birth record (or health card) card) was not available (or a vaccination was not recorded), mothers were asked questions to determine whether the child had received each vaccine.

Table 18 shows immunization coverage information from the 2014 EDHS for children age 18-29 months. This age group differs from the 12-23 month age group for which immunization coverage figures have been presented in prior EDHS surveys. The 18-29 month age category has been adopted for the 2014 EDHS because Egypt's child immunization program is now employing the combined measles, mumps and rubella vaccine (MMR) vaccine for which the first dose is not given before age 12 months.

As the first column in Table 18 shows, interviewers saw a health card or birth registration form for 59 percent of children age 18-29 months; for the remainder of the children, information on immunizations was based solely on the mother's report.

According to results in Table 18, virtually all Egyptian children age 18-29 months have received at least some of the recommended vaccinations. Coverage levels for BCG are nearly universal. Ninety-seven percent of the children have received the recommended three doses of the DPT and polio vaccines. Ninety-six percent of children have been vaccinated against measles. Coverage levels are also high for the hepatitis B vaccine, with 95 percent of children reported as having received three doses of this vaccine.

Overall, 92 percent of children age 18-29 months are considered as immunized against all major preventable childhood diseases, i.e., they have received a BCG, three DPT and three polio immunizations, and a measles vaccination.

Table 18 also presents differentials in vaccination coverage. Given the widespread coverage of the immunization program in Egypt, the differences are relatively small between most subgroups. The largest differences are observed by place of residence, with the percentage receiving all basic vaccinations varying from 88 percent in rural Upper Egypt to 95 percent in the three surveyed Frontier Governorates.

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[4] In Egypt, immunizations may be recorded on a special health card, on a child's birth record (certificate), or on both documents.

Table 18 Vaccinations by background characteristics

Among children 18-29 months, the percentage who had vaccination records seen, percentage who received each vaccine (according to the vaccination cards or the mother's report) and percentage with a vaccination card, by selected background characteristics, Egypt 2014

Background Characteristic	Record seen	BCG	DPT 1[1]	DPT 2[1]	DPT 3[1]	Polio 0	Polio 1	Polio 2	Polio 3	Polio 4	HepB 1[1]	HepB 2[1]	HepB 3[1]	Measles/ MMR[2]	All basic vacci-nations[3]	No vacci-nations	Number of children
Sex																	
Male	60.6	99.2	99.4	99.1	97.1	94.5	98.2	97.5	96.4	91.9	99.0	98.3	95.4	95.5	91.4	0.0	1,580
Female	56.5	99.0	99.4	98.5	97.2	94.4	97.8	97.3	96.7	92.3	98.6	97.5	94.4	96.2	91.6	0.0	1,541
Birth order																	
1	58.7	98.9	99.6	98.9	97.4	94.5	98.5	98.0	97.4	93.4	98.5	97.7	95.1	96.0	92.4	0.0	1,614
2-3	57.1	99.3	99.2	98.7	96.8	94.2	97.5	96.9	95.6	90.5	98.9	98.2	94.7	96.2	90.9	0.0	1,040
4-5	62.8	99.2	99.2	98.4	96.7	94.2	96.8	96.1	95.4	90.8	99.2	97.7	95.1	94.6	89.2	0.2	389
6+	56.4	100.0	100.0	99.9	98.5	97.0	99.1	99.0	99.0	92.3	99.1	99.0	94.3	94.7	92.3	0.0	77
Urban-rural residence																	
Urban	53.7	99.6	99.7	99.4	98.2	93.7	98.0	97.4	96.8	91.1	99.0	98.6	96.3	95.2	91.7	0.1	938
Rural	60.7	98.9	99.3	98.6	96.6	94.7	98.0	97.4	96.5	92.5	98.7	97.6	94.4	96.1	91.4	0.0	2,183
Place of residence																	
Urban Governorates	51.6	100.0	100.0	99.1	97.5	94.0	99.4	98.4	97.5	91.5	98.6	97.7	95.6	95.3	93.3	0.0	301
Lower Egypt	61.8	99.1	99.6	99.4	98.3	93.7	98.6	98.3	97.8	92.6	98.9	98.2	95.9	96.2	93.0	0.0	1,520
Urban	58.3	98.8	99.4	99.4	98.4	91.7	96.8	96.1	95.7	88.4	98.3	98.3	95.9	94.0	89.0	0.2	309
Rural	62.7	99.2	99.6	99.5	98.3	94.2	99.0	98.8	98.4	93.6	99.0	98.2	95.9	96.8	94.1	0.0	1,211
Upper Egypt	56.6	98.9	99.1	98.0	95.5	95.4	96.9	96.1	94.8	91.4	98.6	97.6	93.6	95.5	89.2	0.0	1,268
Urban	51.0	100.0	99.9	99.8	98.7	95.4	97.8	97.6	97.3	93.1	100.0	99.8	97.2	96.1	92.5	0.0	311
Rural	58.4	98.6	98.8	97.4	94.5	95.4	96.6	95.7	94.0	90.9	98.2	96.8	92.5	95.3	88.1	0.0	957
Frontier Governorates[4]	53.5	99.2	99.2	98.8	98.6	96.9	98.9	98.2	97.0	97.2	99.0	98.8	93.8	97.4	95.2	0.1	31
Education																	
No education	60.9	99.2	98.3	96.4	93.0	94.3	98.1	97.3	96.0	91.1	98.0	96.2	91.8	94.3	88.3	0.1	533
Some primary	58.1	98.6	99.9	98.4	94.0	92.8	95.7	94.6	93.5	89.5	98.4	96.3	93.4	96.3	87.8	0.0	126
Primary complete/ some secondary	61.3	98.4	99.3	98.5	96.0	92.1	97.3	96.7	95.8	91.5	97.9	97.2	94.3	93.3	88.8	0.0	569
Secondary complete/ higher	57.2	99.3	99.7	99.6	98.8	95.3	98.3	97.9	97.2	92.6	99.3	98.7	96.1	97.0	93.5	0.0	1,894
Work status																	
Working for cash	53.9	98.6	99.1	99.1	97.4	94.1	98.3	98.0	97.7	91.8	99.1	98.5	97.0	96.6	93.1	0.2	337
Not working for cash	59.2	99.2	99.4	98.8	97.1	94.5	97.9	97.3	96.4	92.1	98.7	97.8	94.7	95.7	91.3	0.0	2,784
Total	58.6	99.1	99.4	98.8	97.1	94.4	98.0	97.4	96.6	92.1	98.8	97.9	94.9	95.8	91.5	0.0	3,121

Note: Polio 0 is the polio vaccination given at birth; HepB = Hepatitis B; MMR = Measles, mumps, and rubella
[1] Includes children who have received a pentavalent vaccination against diphtheria, pertussis, tetanus, hepatitis B, and haemophilus influenza type b
[2] Includes measles and MMR as reported on cards or by the mother
[3] BCG, a measles or MMR vaccination, three DPT vaccinations and three polio vaccinations (excluding polio 0 given at birth)
[4] Does not include North and South Sinai governorates

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Diarrhea among young children

Dehydration as a result of diarrhea is a frequent cause of death in young children. Mothers of children under age five were asked in the 2014 EDHS if their children had had diarrhea in the two-week period before the survey. If the child had had diarrhea, the mother was asked what had been done to treat the diarrhea. Since the prevalence of diarrhea varies seasonally, the results pertain only to the pattern during the period April-June 2014 when the survey interviewing took place.

Table 19 presents information on recent episodes of diarrhea among young children and the actions that the mother took to treat the illness. Overall, 14 percent of children under age five were reported to have had diarrhea in the two-week period before the survey. As expected, diarrhea is more prevalent among children age 6-11 months. This pattern is believed to be associated with increased exposure to the illness, as a result of both weaning and the greater mobility of the child, as well as the immature immune system of children in this age group.

Medical advice was sought in 55 percent of the reported cases of diarrhea among young children. Private medical providers were consulted more often than public health providers (42 percent and 15 percent, respectively). A medical provider was most likely to be consulted if the ill child was less than a year old or living in the Urban Governorates.

The administration of oral rehydration therapy (ORT) is a simple means of countering the effects of dehydration. It includes the use of a solution prepared from commercially produced packets of oral rehydration salts (ORS) or a homemade mixture prepared from sugar, salt, and water. Table 19 shows that 30 percent of the children ill with diarrhea in the two-week period before the survey received some type of ORT, with most given a solution prepared from an ORS packet.

Acute respiratory illness among young children

Acute respiratory infections (ARIs), particularly pneumonia, are another common cause of death among infants and young children. Early diagnosis and treatment with antibiotics can prevent a large proportion of the deaths due to pneumonia. The 2014 EDHS collected information on the prevalence of symptoms of ARI and on the treatment children with ARI symptoms received.

The prevalence of ARI was estimated by asking three questions of mothers of all children under five. The first question was used to identify children who had been ill with a cough in the two weeks before the survey. For the children who had had a cough, a second question was asked to determine if the child had breathed faster than usual during the illness with short rapid breaths or had had difficulty breathing. If the mother indicated that the child had experienced fast or difficult breathing, she was were asked whether it was the result of a problem in the chest or a blocked or runny nose.

Table 20 shows that 14 percent of children were reported to have been ill with ARI symptoms during the two-week period before the 2014 EDHS. As was the case with diarrheal illness, children age 6-11 months were more likely to have been ill with ARI symptoms than younger or older children.

Table 19 Prevalence and treatment of diarrhea

Percentage of children under age five ill with diarrhea during the two-week period before the survey and, among children ill with diarrhea, the percentage who received various treatments by selected background characteristics, Egypt 2008

| Background characteristic | Had diarrhea | Number of children | Health provider consulted | | | Oral rehydration therapy[1] | | | Number of children with diarrhea |
			Any	Public	Private	ORS packets	RHS	Either ORS/ RHS	
Age in months									
<6	16.2	1,489	62.8	14.9	50.3	26.5	0.5	27.0	241
6-11	26.1	1,817	60.8	13.5	48.3	34.2	1.9	35.7	474
12-23	20.6	3,197	56.7	14.3	44.1	32.7	3.0	34.6	659
24-35	12.7	3,089	52.2	13.6	39.0	25.7	2.3	26.9	393
36-47	8.0	3,079	45.3	14.8	31.8	20.0	2.4	21.6	246
48-59	5.1	2,623	43.3	22.0	21.3	13.2	1.2	13.2	134
Sex									
Male	14.4	8,038	57.3	14.1	44.5	29.8	2.8	31.4	1,159
Female	13.6	7,255	53.0	15.2	39.0	26.7	1.5	27.8	987
Urban-rural residence									
Urban	12.2	4,755	58.7	16.8	42.5	26.1	2.4	27.8	579
Rural	14.9	10,538	54.0	13.8	41.8	29.2	2.1	30.5	1,568
Place of residence									
Urban Governorates	11.1	1,571	65.5	14.8	50.7	22.4	1.7	22.7	175
Lower Egypt	12.7	7,278	53.7	14.2	41.1	33.1	1.8	34.0	928
Urban	12.7	1,408	53.1	15.5	38.4	34.8	2.3	37.1	179
Rural	12.8	5,870	53.8	13.9	41.7	32.7	1.7	33.2	749
Upper Egypt	16.3	6,292	55.2	14.9	41.4	25.3	2.6	27.3	1,029
Urban	12.7	1,693	58.6	19.6	39.6	22.5	2.8	24.3	216
Rural	17.7	4,599	54.3	13.6	41.9	26.0	2.5	28.0	813
Frontier Governorates[2]	10.1	151	42.9	14.3	31.7	16.2	6.3	22.5	15
Education									
No education	16.4	2,710	51.1	18.2	34.2	26.6	1.6	28.0	445
Some primary	15.5	716	48.3	13.6	34.7	24.6	2.0	25.6	111
Primary complete/some secondary	16.0	2,760	59.4	18.7	42.0	29.2	3.0	30.7	442
Secondary comp./ higher	12.6	9,107	56.0	11.7	45.6	29.1	2.1	30.5	1,148
Total	14.0	15,293	55.3	14.6	41.9	28.4	2.2	29.8	2,147

[1] Oral rehydration therapy (ORT) includes solutions prepared from ORS packets and recommended home solution (RHS), e.g., sugar-salt solutions.

[2] Does not include North and South Sinai governorates

A medical provider was consulted in the case of 68 percent of the children with ARI symptoms, with private providers consulted about three times as often as public providers (52 percent and 18 percent, respectively). Medical providers were consulted most often when the child was under age 12 months or lived in the Urban Governorates. Mothers reported that antibiotics were given to the majority of the children with ARI symptoms (63 percent).

Table 20 Prevalence and treatment of ARI

Percentage of children under age five with symptoms of acute respiratory illness (ARI) during the two-week period before the survey and, among children with symptoms of ARI, the percentage who received various treatments by selected background characteristics, Egypt 2014

Background characteristic	Had ARI symptoms[1]	Number of children	Health provider consulted			Percentage given antibiotics	Number of children with symptoms of ARI
			Any	Public	Private		
Age in months							
<6	8.9	1,489	71.8	20.4	53.0	47.6	133
6-11	18.3	1,817	76.5	18.6	58.7	63.0	332
12-23	15.3	3,197	69.7	15.0	55.6	62.8	488
24-35	14.4	3,089	63.3	16.5	48.8	68.0	446
36-47	12.4	3,079	68.7	18.2	51.7	63.5	383
48-59	11.3	2,623	61.0	20.5	40.9	60.6	297
Sex							
Male	14.9	8,038	69.6	16.6	54.1	63.5	1,195
Female	12.2	7,255	66.1	19.0	48.3	61.8	885
Urban-rural residence							
Urban	11.7	4,755	68.9	23.0	46.9	63.8	555
Rural	14.5	10,538	67.8	15.7	53.4	62.4	1,525
Place of residence							
Urban Governorates	11.2	1,571	72.5	25.3	47.9	59.7	176
Lower Egypt	14.1	7,278	69.4	14.4	55.9	66.5	1,029
Urban	14.1	1,408	65.7	22.9	43.6	66.2	199
Rural	14.1	5,870	70.3	12.4	58.9	66.6	830
Upper Egypt	13.8	6,292	65.8	19.8	47.4	59.2	866
Urban	10.3	1,693	69.5	20.5	50.1	65.4	175
Rural	15.0	4,599	64.8	19.6	46.8	57.6	691
Frontier Governorates[2]	5.1	151	60.4	24.4	38.8	47.6	8
Education							
No education	14.2	2,710	63.6	21.9	42.8	59.0	386
Some primary	13.6	716	65.7	18.0	47.7	46.4	98
Primary comp./some sec.	16.9	2,760	68.8	23.4	47.7	58.4	466
Secondary comp./higher	12.4	9,107	69.6	13.7	56.6	67.3	1,130
Total	13.6	15,293	68.1	17.6	51.7	62.8	2,079

[1] ARI is defined as cough with chest involvement reported

[2] Does not include North and South Sinai governorates

G.   Breastfeeding and Supplementation

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 six months of a child's life because it limits exposure to disease agents and provides all of the nutrients that are required for a baby.

Table 21 describes infant feeding practices of Egyptian mothers. Most babies are breastfed during the first six months of life; only 5 percent of babies age 0-3 months are not receiving breast milk, and only 10 percent of children age 4-5 months are not being breastfed. The proportion breastfed remains high into the second year of life; more than seven in ten children age 12-17 months are being breastfed.

Although most infants are breastfed, exclusive breastfeeding is not widely practiced. Only a little more than half of children age 0-3 months are exclusively breastfed. Supplements are introduced

rapidly after early infancy; among children age 4-5 months, only 13 percent are exclusively breastfed. Around one-third of children in this age group are receiving solid/mushy foods.

Finally, the results in Table 21 show that bottle-feeding is not common in Egypt. Nevertheless, 30 percent of children 0-5 months of age were fed with a bottle with a nipple during the 24 hours preceding the survey.

Table 21 Breastfeeding status by age

Percent distribution of youngest children under two years living with their mother, by breastfeeding status, the percentage currently breastfeeding, and the percentage of all children under two years of age using a bottle with a nipple, according to age in months, Egypt 2014

| Age in months | Not breast-feeding | Exclusively breastfed | Breastfeeding and consuming: | | | | Total percent | Percentage currently breast-feeding | Number of youngest living children under two years living with mother | Percentage using a bottle with a nipple | Number of all children under two years |
			Plain water only	Non-milk liquids[1]	Other milk	Comple-mentary foods					
0-1	3.4	70.6	5.8	9.6	10.7	0.0	100.0	96.6	397	25.8	460
2-3	5.6	43.0	21.7	9.0	16.8	4.0	100.0	94.4	531	28.3	590
4-5	10.4	13.3	24.8	10.2	9.5	31.9	100.0	89.6	532	34.3	592
6-8	9.1	3.2	12.4	4.2	3.0	68.1	100.0	90.9	960	25.2	998
9-11	13.6	1.3	3.6	1.8	1.2	78.5	100.0	86.4	836	23.1	862
12-17	27.5	0.5	2.1	1.1	0.3	68.4	100.0	72.5	1,500	14.0	1,528
18-23	72.3	0.1	0.4	0.1	0.0	27.1	100.0	27.7	1,448	8.1	1,472
0-3	4.6	54.8	14.9	9.2	14.2	2.3	100.0	95.4	928	27.2	1,049
0-5	6.7	39.7	18.5	9.6	12.5	13.1	100.0	93.3	1,460	29.7	1,641
6-9	9.0	3.0	10.6	3.7	2.6	71.1	100.0	91.0	1,281	24.2	1,330
12-15	20.0	0.7	2.5	0.6	0.2	75.9	100.0	80.0	996	14.6	1,009
12-23	49.5	0.3	1.3	0.6	0.2	48.1	100.0	50.5	2,948	11.1	3,000
20-23	79.6	0.0	0.1	0.0	0.0	20.3	100.0	20.4	982	6.8	1,002

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/juice, 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.
[1] Non-milk liquids include juice, juice drinks, clear broth or other liquids

H.   Nutritional Status of Children under Age 5

Nutritional status is a primary determinant of a child's health and well-being. To obtain information on the nutritional status of young children, the 2014 EDHS measured the height[5] and weight of all children in the household under age 5. Overall, valid anthropometric measures were obtained for 89 percent of children under age 5 in the 2014 EDHS.

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[5] Although the term "height" is used, children younger than 24 months were measured lying on a measuring board, while standing height was measured for older children. Weight data were obtained using a digital scale.

To assess the nutritional status of Egyptian children, three indices of physical growth—height-height-for-age, weight-for-height; and weight-for-age—were calculated from the 2014 EDHS results and compared against the WHO Child Growth standards (WHO, 2006). The WHO standards were derived from the study of the growth patterns in an international sample (from Brazil, Ghana, India, Norway, Oman, and the USA) of ethnically, culturally, and genetically diverse healthy children living under optimum conditions conducive to achieving a child's full genetic growth potential. The rationale rationale for adopting the 2006 WHO Child Growth population as a standard is based on the fact that well-nourished children of all population groups for which data exist follow very similar growth patterns before puberty.

Each of the indices of physical growth measures somewhat different aspects of nutritional status. The height-for-age index is used to identify linear growth retardation. Children whose height-for-age is below minus two standard deviations (-2 SD) from the median of the WHO Child Growth Standards reference population are considered short for their age, or *stunted*. Children who are below minus three standard deviations (-3 SD) from the reference population are considered *severely stunted*. Stunting of a child's growth may from a failure to receive adequate nutrition over a long period of time or the effects of recurrent or chronic illness.

The weight-for-height index measures body mass in relation to body length. Children whose weight-for-height measures are below minus two standard deviations (-2 SD) from the median of the WHO reference population are too thin for their height, or *wasted,* while those whose measures are below minus three standard deviations (-3 SD) from the reference population median are *severely wasted*. Wasting represents the failure to receive adequate nutrition during the period immediately before the survey. It may be the result of recent episodes of illness or acute food shortages.

Weight-for-age is a composite index of height-for-age and weight-for-height. Children whose weight-for-age measures are below minus two standard deviations (-2 SD) from the median of the WHO reference population are *underweight* for their age, while those whose measures are below minus three standard deviations (-3 SD) from the reference population median are *severely underweight*. A child can be underweight for his age, because the child is stunted, wasted, or both stunted and wasted.

As in many other countries, overweight and obesity are becoming more common among young children in Egypt. The percentage of children more than two standard deviations above the median for weight-for-height for the WHO reference population is the most frequently used measure of the problem. The percentage of children more than two standard deviations above the median for weight-for-age is another indicator of the extent of the population that is overweight.

The data on height-for-age in Table 22 indicate that there is considerable chronic malnutrition among Egyptian children. Based on comparisons with the WHO Child Growth Standards population, around one in five children under age five are stunted, and one in ten children is severely stunted. Considering age patterns, stunting peaks among children age 18-23 months (25 percent). Urban children are only slightly more likely to be stunted than rural children (23 percent and 21 percent, respectively). Considering place of residence, the percentage stunted is higher in urban Upper Egypt (30 percent) than in other areas. Children whose mothers never attended school or who attended but did not complete primary school are somewhat more likely to be stunted than children whose mothers have completed the primary level or higher.

Table 22 Nutritional status of children

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Egypt 2014

Background characteristic	Height-for-age[1]			Weight-for-height				Weight-for-age				Number of children
	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	
Age in months												
<6	8.7	19.6	-0.4	7.9	14.4	19.5	0.3	2.6	8.2	5.6	-0.2	1,198
6-8	7.7	16.4	-0.0	4.6	9.6	13.9	0.2	1.4	6.1	4.7	-0.0	822
9-11	10.2	18.9	-0.2	2.9	6.6	13.9	0.3	0.8	5.1	3.5	0.0	734
12-17	9.8	21.3	-0.4	2.8	9.0	12.9	0.3	0.9	5.5	4.7	0.0	1,402
18-23	12.9	24.6	-0.7	3.9	9.1	15.6	0.4	1.4	5.4	4.5	-0.0	1,470
24-35	11.1	21.6	-0.6	4.0	8.4	15.6	0.4	1.6	6.4	4.7	-0.0	2,810
36-47	8.7	22.5	-0.7	3.4	7.7	13.9	0.4	1.2	4.5	3.2	-0.1	2,826
48-59	8.6	21.5	-0.8	2.5	5.7	14.2	0.4	1.0	4.3	3.3	-0.2	2,340
Sex												
Male	10.7	22.8	-0.6	3.8	8.4	15.3	0.4	1.3	5.9	4.2	-0.1	7,034
Female	8.8	19.9	-0.5	3.8	8.5	14.3	0.4	1.3	5.1	4.0	-0.0	6,567
Urban-rural residence												
Urban	10.9	23.0	-0.6	3.9	8.8	16.1	0.4	1.4	5.7	4.9	-0.1	4,181
Rural	9.3	20.7	-0.6	3.7	8.2	14.3	0.4	1.3	5.4	3.8	-0.1	9,420
Place of residence												
Urban Gov.	8.1	19.0	-0.3	3.6	8.6	14.7	0.3	0.7	4.3	5.9	0.0	1,376
Lower Egypt	8.3	17.9	-0.3	3.9	8.4	16.5	0.5	1.2	4.2	5.6	0.1	6,444
Urban	9.0	19.3	-0.4	4.7	8.9	17.3	0.4	1.8	4.3	7.1	0.1	1,209
Rural	8.1	17.6	-0.3	3.7	8.3	16.3	0.5	1.0	4.2	5.3	0.1	5,236
Upper Egypt	12.0	26.2	-1.0	3.7	8.3	13.2	0.3	1.7	7.3	1.9	-0.3	5,650
Urban	15.0	29.8	-1.0	3.6	9.0	16.8	0.4	1.8	8.1	2.4	-0.3	1,523
Rural	10.9	24.8	-1.0	3.8	8.0	11.9	0.3	1.6	6.9	1.8	-0.4	4,127
Frontier Gov.[3]	6.0	15.1	0.1	5.9	13.9	8.3	-0.2	0.9	6.7	5.0	-0.1	131
Mother's education												
No education	10.8	24.5	-0.7	4.3	9.4	13.3	0.3	1.1	6.5	2.9	-0.2	2,424
Some primary	12.1	26.9	-0.8	2.9	7.1	15.3	0.4	1.4	7.1	3.7	-0.2	1,178
Primary comp./some sec.	11.2	22.6	-0.6	4.1	9.5	14.7	0.3	1.8	6.7	3.6	-0.2	1,589
Secondary comp./higher	9.0	19.3	-0.5	3.7	7.9	15.1	0.4	1.1	4.7	4.4	-0.0	5,657
Total	9.8	21.4	-0.6	3.8	8.4	14.9	0.4	1.3	5.5	4.1	-0.1	13,601

Note: Table is based on children who stayed in the household on the night before the interview. Each index is expressed in standard deviation units (SD) from the median of the 2006 WHO Child Growth Standards. The indices in this table are NOT comparable to those based on the previously used NCHS/CDC/WHO reference. Table is based on children with valid birth dates (month and year) and valid measurement of both height and weight.

[1] Recumbent length is measured for children under age 2; standing height is measured for all other children.

[2] Includes children who are below -3 standard deviations (SD) from the WHO Child Growth standards population median
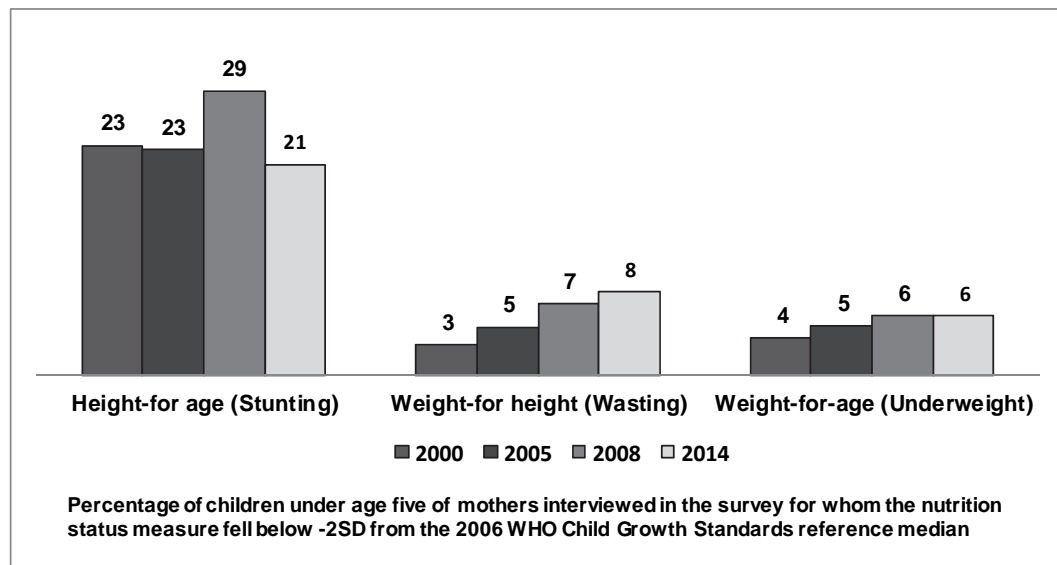
[3] Does not include North and South Sinai governorates

Table 22 also shows that 8 percent of Egyptian children are wasted. The highest levels of wasting are observed among children under 6 months of age and children in the three Frontier Governorates (14 percent each). At the other extreme, the percentage of children considered to be overweight or obese, i.e., whose weight-for-height was more than 2 standard deviations from the median of the WHO reference population was 15 percent.

Reflecting the effects of both chronic and short-term malnutrition, 6 percent of children under age five are underweight for their age. Looking at residential categories, the proportion underweight is somewhat higher in Upper Egypt and in the Frontier Governorates than in the Urban Governorates and Lower Egypt.

Figure 6 examines the trends in nutrition status during the period between the 2000 and 2014 EDHS surveys among children of women interviewed in the survey. The results show a reduction in the percentage stunted compared to the levels observed in the earlier EDHS surveys, particularly the 2008 Egypt DHS. However, the proportion of children who are wasted has increased gradually over time, from 3 percent in 2000 to 8 percent in 2014.

Figure 6 Trends in Nutritional Status of Young Children, Egypt 2000-2014

Percentage of children under age five of mothers interviewed in the survey for whom the nutrition status measure fell below -2SD from the 2006 WHO Child Growth Standards reference median

I.   Anemia Status of Children under Age 5

Anemia is a condition characterized by a decrease in the concentration of hemoglobin in the blood. Hemoglobin is necessary for transporting oxygen to tissues and organs in the body. The reduction in oxygen available to organs and tissues when hemoglobin levels are low is responsible for many of the symptoms experienced by anemic persons. The consequences of anemia include general body weakness, frequent tiredness, and lowered resistance to disease. It is of concern in children since anemia is associated with impaired mental and physical development. Overall, morbidity and mortality risks increase for individuals suffering from anemia.

The 2014 EDHS included direct measurement of hemoglobin levels in a subsample of one-third of all EDHS households. Young children were tested by trained health workers after consent was obtained from their parent or other adult caretaker to take a blood sample from the child's finger (or

heel). The HemoCue system was used for testing the hemoglobin level in the sample. The cutoffs used for classifying the child's anemia status in this report are mild: 10.0-10.9 g/dl; moderate: 7.0-9.9 g/dl; severe: < 7.0 g/dl; any: <11.0 g/dl.

Table 23 presents anemia levels for children 6-59 months by residence. Overall, more than one in four children in Egypt suffers from some degree of anemia. Ten percent were found to be moderately anemic, with the remainder classified as mildly anemic. Rural children are more likely to be anemic than urban children (29 percent and 23 percent, respectively). Children in the three Frontier Governorates and in rural Upper Egypt were more likely than children in other areas to be anemic (45 percent and 30 percent, respectively).

Table 23 Anemia among young children

Percentage of children 6-59 months classified as having anemia by residence, Egypt 2014, and trends in the percentage classified as having anemia, Egypt 2000-2014

| | Percentage with anemia | | | | Number |
Residence	Any	Mild	Moderate	Severe	of persons
Urban-rural residence					
Urban	23.1	16.8	6.3	0.0	1,460
Rural	29.2	18.2	11.0	0.0	3,057
Place of residence					
Urban Governorates	21.4	17.5	3.9	0.0	450
Lower Egypt	27.5	16.4	11.2	0.0	2,201
Urban	25.1	15.6	9.5	0.0	461
Rural	28.1	16.6	11.6	0.0	1,740
Upper Egypt	27.9	19.2	8.6	0.0	1,818
Urban	22.0	16.9	5.2	0.0	524
Rural	30.2	20.2	10.0	0.0	1,294
Frontier Governorates[1]	44.5	29.9	14.7	0.0	48
Total 2014 EDHS	27.2	17.8	9.5	0.0	4,517
Total 2005 EDHS	48.5	27.7	20.6	0.3	3.759
Total 2000 EDHS	30.3	18.8	11.3	0.2	4,045

Note: Table is based on children who stayed in the household the night before the interview. The cutoffs for specific anemia levels are: mild: 10.0-10.9 g/dl; moderate: 7.0-9.9 g/dl; severe: < 7.0 g/dl; any: <11.0 g/dl.
[1] Does not include North and South Sinai governorates

Table 23 also includes information on the anemia levels recorded at the time of the 2000 and 2005 Egypt DHS surveys. The proportion of children with any anemia in the 2014 EDHS is similar to the level at the time of the 2000 EDHS (30 percent) and considerably lower than the level reported in the 2005 EDHS (49 percent).

J.   Maternal Health

Proper care during pregnancy and childbirth are important to the health of both a mother and her baby. To obtain data on these issues, the 2014 EDHS included questions on antenatal care, tetanus toxoid vaccinations, and assistance received at delivery for births that a woman reported during the five-year period before the survey.

Antenatal care

Antenatal care from a trained provider is important in order to monitor the pregnancy and reduce the risks for the mother and child during pregnancy and at delivery. To be most effective, it is recommended that all mothers see a trained provider at least four times for antenatal checkups during pregnancy.

Table 24 shows two of the key Millennium Development Goal indicators in the area of maternal health, the proportion of mothers who had any antenatal care during pregnancy prior to the last birth, and the proportion of mothers who were seen by a medical provider four or more times during that pregnancy. It is important to note that these indicators are slightly different from the antenatal care figures published in the reports for prior EDHS surveys, which were based on ANC coverage of all births during the five-year period before the survey. ANC coverage measures based on the last live births are presented for prior EDHS surveys in the discussion of trends in maternal health indicators below.

According to the 2014 EDHS results, 90 percent of mothers received antenatal care from a trained provider prior to the last birth during the five-year period before the survey (Table 24). More than eight in ten mothers had at least four antenatal visits. Mothers age 35 and older are slightly less likely than younger mothers to get antenatal care. The percentage getting antenatal care declines directly with the child's birth order.

Urban mothers are somewhat more likely to receive antenatal care, especially regular care, than rural mothers. Considering place of residence, antenatal care coverage remains substantially lower in Upper Egypt and in the three Frontier Governorates than in the Urban Governorates and Lower Egypt. Education status is directly related to the likelihood of receiving antenatal care, with only 69 percent of mothers with no education receiving regular antenatal care compared with 88 percent of mothers who had a secondary or higher education.

Tetanus toxoid coverage

Tetanus toxoid injections are given to women during pregnancy to prevent deaths from neonatal tetanus. Neonatal tetanus can result when sterile procedures are not followed in cutting the umbilical cord after delivery.

Two tetanus toxoid (TT) coverage indicators are presented in Table 24. The first indicator is based on a question included in the 2014 EDHS on the number of tetanus toxoid injections that a mother received during pregnancy. For purposes of comparison with the ANC indicators shown in Table 24, the TT coverage indicator is based on the mother's receipt of at least one TT injection for the last live birth.

Table 24 also provides information on the proportion of last births that were considered to be protected from tetanus toxoid due to the mother's lifetime receipt of TT injections. The last birth was considered to be fully protected if the mother had: (1) two injections during the pregnancy of her last live birth; (2) two or more injections with the last injection received within 3 years of the last live birth); (3) three or more injections, with the last injection received within 5 years of the last live birth; (4) four or more injections, with the last injection received within ten years of the last live birth; or (5) five or more injections at any time prior to the last live birth. The 2008 EDHS also included questions on the woman's lifetime receipt of TT injections; however, the 2014 questions differ somewhat from those employed in the 2008 EDHS, and, thus, the 2014 results should not be compared to the figures presented in the 2008 EDHS report.

Table 24 Maternal care indicators by selected demographic and social characteristics

Percentage of mothers who prior to the last live birth in the five-year period before the survey received any and regular antenatal care from a trained medical provider and at least one tetanus toxoid injection during the pregnancy, percentage of mothers whose last live birth in the five-year period before the survey was protected from neonatal tetanus, and percentage of births in the five-year period prior to the survey who were delivered by a skilled provider, who were born in a health facility, and who were delivered by caesarean section, Egypt 2014

Background characteristic	Percentage of mothers who had prior to the last live birth:			Percentage of mothers whose last live birth was protected against neonatal tetanus[2]	Percentage of births in the five-year period before the survey delivered:				
	Any antenatal care	Regular antenatal care[1]	At least one tetanus toxoid injection		Number of mothers	By a skilled provider[3]	In a health facility	By caesarean section	Number of births
Mother's age at birth									
<20	93.3	87.1	85.8	80.0	822	90.7	84.7	45.7	1,468
20-34	90.8	83.3	77.0	75.3	9,371	91.7	87.2	52.4	12,868
35-49	84.7	76.6	60.0	63.5	1,197	90.8	84.4	52.7	1,332
Birth order									
1	96.5	93.0	85.7	76.9	2,588	95.8	92.3	59.5	4,828
2-3	90.9	83.0	76.8	75.1	6,170	91.7	87.2	52.2	7,806
4-5	84.8	75.0	66.8	72.2	2,174	86.0	78.3	39.6	2,496
6+	74.4	60.7	49.9	60.7	458	76.8	68.4	32.7	538
Urban-rural residence									
Urban	92.8	87.8	67.8	67.9	3,625	96.5	93.7	60.1	4,845
Rural	89.2	80.5	79.6	77.4	7,766	89.3	83.5	48.1	10,823
Place of residence									
Urban Governorates	94.1	90.9	65.5	63.8	1,231	97.4	95.0	62.0	1,599
Lower Egypt	93.7	87.1	78.5	75.1	5,513	95.1	91.0	60.3	7,431
Urban	95.4	90.1	69.1	66.8	1,071	98.1	96.4	70.6	1,430
Rural	93.3	86.3	80.8	77.1	4,442	94.4	89.7	57.8	6,001
Upper Egypt	85.3	75.6	75.7	76.6	4,540	86.1	79.8	39.7	6,484
Urban	89.3	82.9	69.2	72.9	1,263	94.4	90.5	50.2	1,733
Rural	83.8	72.8	78.2	78.0	3,277	83.1	75.9	35.9	4,751
Frontier Governorates[4]	86.9	78.7	60.8	64.6	107	89.2	84.1	41.1	154
Education									
No education	80.1	68.8	75.8	75.1	2,027	79.2	71.1	37.0	2,798
Some primary	82.9	75.3	68.5	71.2	554	86.8	81.9	43.5	734
Primary comp./some sec.	89.3	80.5	75.0	74.1	2,076	91.1	85.6	46.4	2,847
Secondary complete/higher	94.3	88.4	76.7	74.5	6,733	95.8	92.1	58.5	9,289
Work status									
Working for cash	94.4	88.0	73.0	72.3	1,256	94.6	90.7	55.9	1,681
Not working for cash	89.8	82.2	76.2	74.6	10,134	91.2	86.2	51.3	13,987
Total	90.3	82.8	75.8	74.4	11,391	91.5	86.7	51.8	15,668

Note: The antenatal care (ANC) indicators correspond to the Millennium Development Indicator 5.5: Antenatal care coverage (at least one visit and at least four visits). They refer to antenatal care that the mother received during pregnancy for the last live birth. Similarly, the proportion of mothers receiving at least one tetanus toxoid (TT) injection refers to the last live birth. Thus, the ANC and TT figures are not comparable to ANC and TT coverage indicators presented in reports for earlier EDHS surveys, which were based on all births in the five-year period before the survey. Finally, due to differences in the information collected on lifetime receipt of TT injections, the indicator referring the percentage of mothers whose last birth was protected from neonatal tetanus should not be compared to estimates of the last births protected from neonatal tetanus presented in the 2008 EDHS report.

[1] A woman is considered to have had regular antenatal care if she had four or more visits during the pregnancy.

[2] Includes mothers with two injections during the pregnancy of her last live birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last live birth), or four or more injections (the last within ten years of the last live birth), or five or more injections at any time prior to the last live birth.

[3] Skilled provider includes doctor or nurse/midwife

[4] Does not include North and South Sinai governorates

Table 24 shows that tetanus toxoid coverage is widespread but not universal among mothers in in Egypt; 76 percent of mothers received one dose of tetanus toxoid vaccine during pregnancy prior to the last live birth during the five-year period before the survey. Similarly, Table 24 shows that around three-quarters of last-born children during the five-year period before the survey were fully protected against neonatal tetanus. The last birth was least likely to be protected if the mother was 35 years or older, the child's birth order was six or higher, or the mother lived in the Urban Governorates or in the three Frontier Governorates included in the survey.

Assistance at delivery

A doctor or trained nurse/midwife assisted at the delivery of 92 percent of all births in the five-year period before the 2014 EDHS, with 87 percent occurring in a health facility (Table 24). The lowest proportions of medically assisted deliveries were observed for order six or higher birth (77 percent), births to mothers in rural Upper Egypt (83 percent), and births to women with no education (79 percent).

Caesarean deliveries

The 2014 EDHS also obtained information on the frequency of caesarean sections. Table 24 shows that more than one-half of deliveries in the five-year period before the survey were by caesarean section. The likelihood of a caesarean delivery increased with the age of the mother and decreased with the child's birth order. Caesarean deliveries were more common in urban areas than in rural areas (60 percent and 48 percent, respectively). Caesarean deliveries were less common in Upper Egypt, especially in rural areas, and in the Frontier Governorates than in the Lower Egypt and the Urban Governorates.

Maternal health indicators by governorates

Table 25 presents selected maternal health indicators by governorate. The results indicate that there is considerable variation by governorate in the coverage of maternal health services. For example, the percentage of mothers who received regular antenatal care, i.e., four or more visits, ranged from 60 percent in Matroh to 97 percent in Port Said. Births were least likely to be protected from neonatal tetanus in Suez (31 percent) and Matroh (36 percent) and most likely to be protected in Menoufia (94 percent) and New Valley (97 percent). Ninety percent or more of births were delivered by a skilled provider in 19 governorates. Medically-assisted deliveries were least common in Menya (74 percent) and Matroh (78 percent). The proportion of births delivered by caesarean section was lowest in Matroh (26 percent) and highest in Port Said (77 percent).

Table 25 Maternal care indicators by governorate

Percentage of mothers who prior to the last live birth in the five-year period before the survey received regular antenatal care from a trained medical provider, percentage of mothers whose last live birth in the five-year period before the survey was protected from neonatal tetanus, and percentage of births in the five-year period prior to the survey who were delivered by a skilled provider and who were delivered by caesarean section, by governorate, Egypt 2014

Governorate	Percentage of mothers who had regular antenatal care prior to the last birth[1]	Percentage of mothers whose last live birth was protected against neonatal tetanus[2]	Number of mothers	Percentage of births in the five-year period before the survey delivered by:		Number of births
				Skilled provider[3]	caesarean section	
Urban Governorates						
Cairo	89.9	64.4	825	97.8	58.6	1,060
Alexandria	92.7	62.0	354	96.0	68.0	472
Port Said	96.8	77.5	41	99.6	76.6	53
Suez	89.0	30.9	10	99.3	59.0	14
Lower Egypt						
Damietta	94.6	57.8	216	98.9	76.0	284
Dakahlia	93.1	69.2	814	98.9	65.5	1,088
Sharkia	83.5	68.9	1,036	92.2	53.1	1,390
Kalyubia	80.1	64.0	547	94.2	57.0	749
Kafr El-Sheikh	91.0	89.4	476	98.5	70.4	648
Gharbia	83.3	67.1	704	95.7	65.0	924
Menoufia	89.0	93.9	542	95.1	59.1	757
Behera	88.0	83.7	1,082	92.8	56.0	1,459
Ismailia	85.3	79.9	95	95.7	50.4	132
Upper Egypt						
Giza	79.6	71.0	1,029	93.1	43.1	1,396
Beni Suef	74.8	85.9	418	80.7	44.3	581
Fayoum	75.6	88.4	468	84.5	38.9	671
Menya	70.2	76.1	631	73.5	41.8	869
Assuit	76.7	76.0	628	82.4	34.8	981
Souhag	70.3	69.3	610	87.3	35.6	935
Qena	73.2	79.2	421	90.6	39.7	617
Aswan	85.7	71.4	210	98.1	39.7	270
Luxor	83.7	86.6	125	97.9	40.2	165
Frontier Governorates						
Red Sea	86.0	67.1	46	94.0	50.9	61
New Valley	90.2	96.9	27	98.3	47.7	37
Matroh	59.9	35.9	34	78.0	26.2	56
Total	82.8	74.4	11,391	91.5	51.8	15,668

[1] A woman is considered to have had regular antenatal care if she had four or more visits during the pregnancy.
[2] Includes mothers with two injections during the pregnancy of her last live birth, or two or more injections (the last within three years of the last live birth), or three or more injections (the last within five years of the last live birth), or four or more injections (the last within 10 years of the last live birth), or five or more injections at any time prior to the last live birth.
[3] Skilled provider includes doctor or nurse/midwife

Trends in maternal health indicators

     Figure 7 and Table 26 present the trends in key maternal health indicators by residence for the period between the 1988 and 2014 EDHS surveys. During that period, the coverage of maternal health services expanded substantially. For example, the percentage of medically-assisted births almost tripled between the 1988 and 2014 DHS surveys, from 35 percent to 92 percent.

     Focusing on the trends between the 2008 and 2014 EDHS surveys, there were increases in all of the maternal health indicators (Figure 7). The percentage of mothers who reported receiving any antenatal care rose from 74 percent in 2008 to 90 percent in 2014, and the percentage of mothers having regular antenatal care (i.e., at least four visits) rose from 67 percent in 2008 to 83 percent in 2014. More than 90 percent of deliveries were assisted by medical personnel (almost always a doctor) in 2014 compared to 79 percent in 2008. The caesarean delivery rate continued to increase, from 28 percent in 2008 to 52 percent in 2014.

     Table 26 shows that all residential categories shared in the improvements in maternal health indicators between the 2008 and 2014 surveys. Rural areas, however, continue to lag slightly behind urban areas in the level of regular antenatal care and in medically-assisted deliveries.

Figure 7 Trends in Maternal Health Indicators, Egypt 2008-2014

*Percentage of mothers receiving care for last live birth in the five-year period before the survey
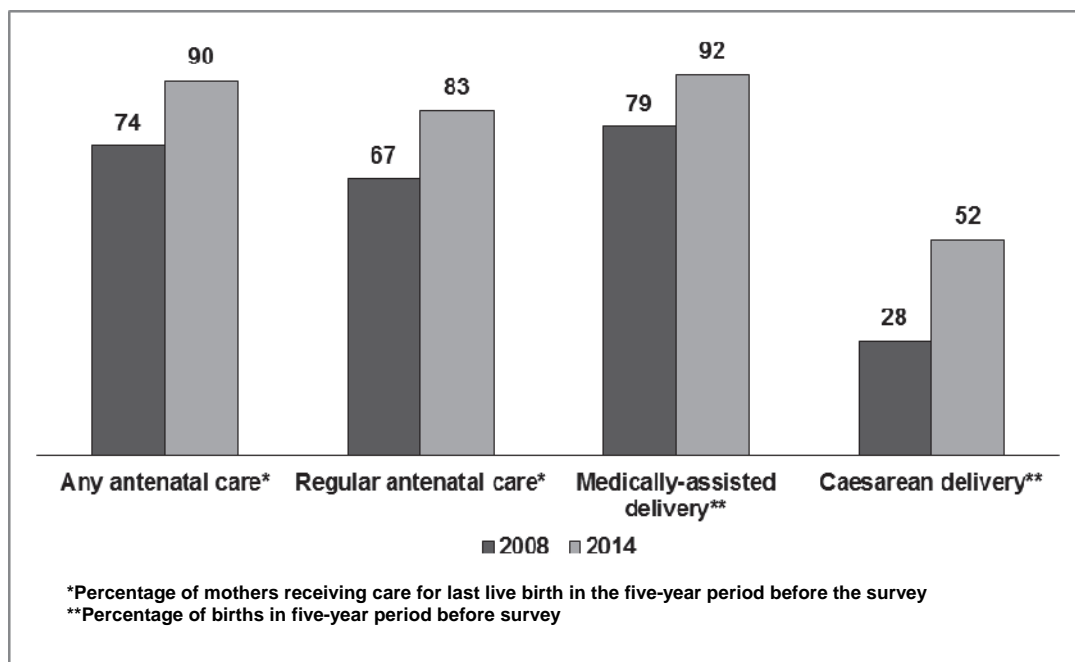**Percentage of births in five-year period before survey

Table 26 Trends in maternal health indicators by residence

Percentage of mothers who received any antenatal care, percentage who had regular antenatal care, and percentage who had at least one tetanus toxoid injection prior to the last live birth during the five-year period before the survey and percentage of births during the five-year period delivered with the assistance of a medical provider and percentage delivered by caesarean section by urban-rural residence and place of residence, Egypt, 1988-2014

Maternal health indicator	Urban	Rural	Urban Gover-norates	Lower Egypt			Upper Egypt			Frontier Gover-norates	Total
				Total	Urban	Rural	Total	Urban	Rural		
Any antenatal care											
1988	71.5	45.6	76.6	49.1	65.8	43.1	54.7	67.8	48.6	na	57.0
1992	72.7	46.4	78.2	53.2	69.2	47.5	50.6	65.5	45.4	na	57.1
1995	60.6	29.8	60.8	44.8	67.3	36.9	31.5	54.2	22.8	na	43.2
2000	71.9	44.7	75.9	55.2	70.9	49.2	48.0	68.2	39.9	36.4	55.7
2005	83.6	63.8	85.5	78.4	89.3	74.9	59.7	77.4	52.4	65.6	71.4
2008	85.1	67.5	90.1	74.7	81.7	72.6	66.9	81.7	61.0	72.9	74.2
2014	92.8	89.2	94.1	93.7	95.4	93.3	85.3	89.3	83.8	86.9	90.3
Regular antenatal care[1]											
1988	na	na	na	na	na	na	na	na	na	na	na
1992	43.3	12.0	51.3	20.1	37.8	13.7	16.1	33.3	10.2	na	24.7
1995	50.8	16.1	55.4	29.7	53.2	21.5	19.2	41.1	10.8	29.5	30.4
2000	54.8	28.3	56.9	40.7	56.0	34.9	29.8	51.7	21.1	23.7	39.0
2005	76.3	51.0	80.1	66.9	81.3	62.2	47.8	68.3	39.3	54.6	60.6
2008	80.5	57.9	85.6	67.2	78.5	63.9	57.5	75.6	50.3	66.0	66.5
2014	87.8	80.5	90.9	87.1	90.1	86.3	75.6	82.9	72.8	78.7	82.8
Tetanus toxoid injections											
1988	13.1	13.2	8.6	15.2	15.3	15.1	13.4	18.9	10.9	na	13.1
1992	61.5	62.1	55.9	68.4	72.3	67.0	58.1	61.1	57.1	na	61.9
1995	42.6	44.3	39.1	48.3	52.4	46.9	41.0	39.2	41.6	na	43.6
2000	65.3	71.4	63.0	75.0	69.4	77.0	65.9	65.1	66.2	59.1	68.9
2005	33.4	45.7	29.2	46.3	36.5	49.7	40.8	37.8	41.9	27.9	40.6
2008	68.8	74.3	61.5	78.1	73.2	80.0	70.3	74.7	68.5	65.0	72.1
2014	67.8	79.6	65.5	78.5	69.1	80.8	75.7	69.2	78.2	60.8	75.8
Medically-assisted deliveries											
1988	57.0	19.1	64.9	31.1	54.4	23.3	23.9	46.9	14.4	na	34.6
1992	62.5	27.5	68.3	39.7	62.9	32.5	29.7	51.8	23.0	na	40.7
1995	67.9	32.8	69.2	51.4	75.1	43.9	32.2	59.6	22.9	59.3	46.3
2000	81.4	48.0	83.7	65.1	84.7	58.1	47.8	74.7	38.2	60.4	60.9
2005	88.7	65.8	90.7	81.6	92.9	78.0	62.6	83.8	54.8	71.8	74.2
2008	90.2	72.2	92.3	85.3	92.0	83.4	66.4	85.6	59.2	79.1	78.9
2014	96.5	89.3	97.4	95.1	97.8	94.4	86.1	94.4	83.1	89.2	91.5
Caesarean deliveries											
1988	na	na	na	na	na	na	na	na	na	na	na
1992	na	na	na	na	na	na	na	na	na	na	na
1995	10.7	4.2	12.3	7.3	11.3	6.1	3.8	7.9	2.4	3.4	6.6
2000	16.7	6.3	19.3	11.2	17.7	8.9	6.1	12.6	3.8	5.3	10.3
2005	29.2	14.6	33.8	24.5	34.9	21.2	11.8	20.4	8.6	14.3	19.9
2008	37.1	22.0	38.5	30.9	43.2	27.4	19.9	30.9	15.8	20.0	27.6
2014	60.1	48.1	62.0	60.3	70.6	57.8	39.7	50.2	35.9	41.1[2]	51.8

Note: The antenatal care (ANC) indicators correspond to the Millennium Development Indicator 5.5: Antenatal care coverage (at least one visit and at least four visits). They refer to antenatal care that the mother received during pregnancy for the last live birth. Similarly, the proportion of mothers receiving at least one tetanus toxoid (TT) injection refers to the last live birth. In published reports for DHS surveys prior to 2014, the figures on ANC and TT coverage were based on all births during the five years before the survey. The ANC and TT figures for prior EDHS surveys presented in this table were recalculated based on the last live birth in the five-year period before the survey and, thus, are slightly different from the previously published figures.
na = Not available
[1] A woman is considered to have had regular antenatal care if she had 4 or more visits during the pregnancy.
[2] Does not include North and South Sinai governorates

References

Abdel-Azeem, F., Farid, S., and Khalifa, A. M. 1993. *Egypt Maternal and Child Health Survey*. Central Agency for Public Mobilization and Statistics [Arab Republic of Egypt] and the Pan Arab Program for Child Development [Arab League].

Bradley, Sarah E. K., Trevor N. Croft, Joy D. Fishel, and Charles F. Westoff. 2012. *Revising Unmet Need for Family Planning*. DHS Analytical Studies No. 25. Calverton, Maryland, USA: ICF International.

Central Agency for Public Mobilization and Statistics. 2013. *Statistical Yearbook 2013*. Cairo Egypt: Central Agency for Public Mobilization and Statistics [Arab Republic of Egypt].

El-Zanaty, Fatma and Ann A. Way. 2009. *Egypt Demographic and Health Survey 2008*. Calverton, Maryland: Ministry of Health and Population [Arab Republic of Egypt], El-Zanaty and Associates, and Macro International.

El-Zanaty, Fatma and Ann A. Way. 2006. *Egypt Demographic and Health Survey 2005*. Calverton, Maryland: Ministry of Health and Population [Arab Republic of Egypt], National Population Council [Arab Republic of Egypt], El-Zanaty and Associates, and ORC Macro.

El-Zanaty, Fatma and Ann A. Way. 2004. *Egypt Interim Demographic and Health Survey 2003*. Calverton, Maryland: Ministry of Health and Population [Arab Republic of Egypt], National Population Council [Arab Republic of Egypt], El-Zanaty and Associates, and ORC Macro.

El-Zanaty, Fatma and Ann A. Way. 2001. *Egypt Demographic and Health Survey 2000*. Calverton, Maryland: Ministry of Health and Population [Arab Republic of Egypt], National Population Council [Arab Republic of Egypt], and ORC Macro.

El-Zanaty and Associates and Macro International Inc. 1999. *Egypt Demographic and Health Survey, 1998*. Cairo Egypt: El-Zanaty and Associates [Arab Republic of Egypt] and Macro International Inc.

El-Zanaty and Associates and Macro International Inc. 1998. *Egypt Demographic and Health Survey, 1997*. Cairo Egypt: El-Zanaty and Associates [Arab Republic of Egypt] and Macro International Inc.

El-Zanaty, F., Hussein, Enas M., Shawky, Gihan A., Way, Ann and Kishor, Sunita. 1996. *Egypt Demographic and Health Survey 1995*. Calverton, Maryland: National Population Council [Arab Republic of Egypt] and Macro International Inc.

El-Zanaty, F. 1995. Contraceptive Use in Egypt: Trends and Determinants. In *Perspectives on Fertility and Family Planning in Egypt*, edited by M. Mahran, F. El-Zanaty and A. Way. Calverton, Maryland: National Population Council [Arab Republic of Egypt] and Macro International Inc.

El-Zanaty, F., Sayed, H. A. A., Zaky, H. and Way, Ann. 1993. *Egypt Demographic and Health Survey 1992*. Calverton, Maryland: National Population Council [Arab Republic of Egypt] and Macro International Inc.

Hallouda, A. M., Amin, S. Z., and Farid, S., editors. 1983. *The Egyptian Fertility Survey*. 4 vols. Cairo: Central Agency for Public Mobilization and Statistics.

Martorell, R. and Habicht, J. P. 1986. Growth in early childhood in developing countries. In *Human growth: A comprehensive treatise*, ed. F. Falkner and J. M. Tanner, Vol.3. New York: Plenum Press. 241-262.

Nafeh, Mohamed A., Medhat, Ahmed, Shehata, Magda, Mikhail, Nabil N. H., Swifee, Yousef, Abdel-Hamid, Mohamed, Watts, Susan, Fix, Alan D. Anwar, Wagida and Sallam, Ismail. 2000. Hepatitis C in A Community in Upper Egypt: I. Cross-sectional Survey, *American Journal of Tropical Medicine and Hygiene*, 63(5, 6), pp. 236–241.

Sayed, H. A. A., El-Khorazaty, M. N., and Way, A. A. 1985. *Fertility and Family Planning in Egypt*. Columbia, Maryland: Egypt National Population Council [Arab Republic of Egypt] and Westinghouse Public Applied Systems.

Sayed, H. A. A., Osman, M., El-Zanaty, F., and Way, Ann. 1989. *Egypt Demographic and Health Survey 1988*. Columbia, Maryland: National Population Council [Arab Republic of Egypt] and Institute for Resource Development/Macro Systems, Inc.

Sommerfelt, A. E. and Piani, A. L. 1997. *Childhood Immunization: 1990-1994.* DHS Comparative Studies No. 22. Calverton, Maryland: Macro International Inc.

World Health Organization (WHO). 2006. *WHO child growth standards: length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index-for-age: methods and development*. Geneva: World Health Organization.