



Bangladesh



Demographic and Health Survey

2017-18









Bangladesh Demographic and Health Survey 2017-18

National Institute of Population Research and Training Medical Education and Family Welfare Division Ministry of Health and Family Welfare Dhaka, Bangladesh

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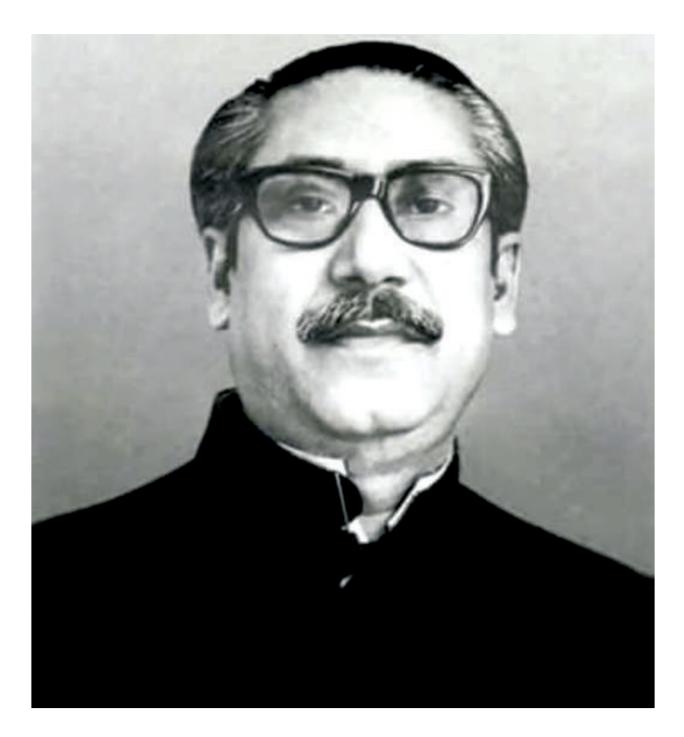
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Dedicated to Father of the Nation Bangabandhu Sheikh Mujibur Rahman on his 100th Birth Anniversary



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MESSAGE FROM THE MINISTER





Md. Zahid Maleque, MP Honorable Minister Ministry of Health and Family Welfare Government of the People's Republic of Bangladesh

t is encouraging to learn that the National Institute of Population Research and Training (NIPORT), with the support of the United States Agency for International Development (USAID), has carried out the eighth Bangladesh Demographic and Health Survey (2017-18 BDHS) as part of the worldwide Demographic and Health Surveys Program. The goal of the survey is to provide up-to-date data on health and demographic indicators, particularly maternal and child health, fertility, family planning, and nutrition, at the national and divisional levels to meet the monitoring and evaluation needs of the 4th Health, Population and Nutrition Sector Program (4th HPNSP) 2017-2022 of the Ministry of Health and Family Welfare (MOHFW).

Demographic data are a prerequisite for monitoring the progress of health and population sector development indicators in Bangladesh, and continuous data collection and timely dissemination serve this function well.

Nearly three decades ago, NIPORT with the support of USAID, launched the first BDHS (1993-94) with the vision of establishing a comprehensive health and demographic evidence database. It was a remarkable endeavor towards exploring the spectrum of health issues that affect the lives of women and children and enhancing monitoring and evaluation capacity to generate key information on these population groups.

This year the government of Bangladesh is celebrating birth centenary of father of the nation Bangabandhu Sheikh Mujibur Rahman and next year we will observe golden jubilee of our independence. Present Government is committed to improve health and family welfare related indicators. I hope the findings of the survey will assist in monitoring the target of health, population, and nutrition sector program. The findings of the 2017-18 BDHS indicate positive improvements in the socioeconomic, demographic, and health conditions of the people of the country in recent years due to the visionary leadership of the Honorable Prime Minister Sheikh Hasina. These findings will be instrumental in monitoring and evaluating the 4th HPNSP by providing estimates for 14 major indicators of the program's results framework as well as updates on the health-related Sustainable Development Goal (SDG) indicators.

I take this opportunity to acknowledge the valuable contributions of the many who worked to make the task possible, especially the Secretary of the Medical Education and Family Welfare Division, the Director General of NIPORT and his team, International Center for Diarrhoeal Disease Research, Bangladesh (icddr,b), ICF, and our longstanding development partner USAID, as well as all of the officials devoted to the fulfillment of the BDHS. Thanks are also due to the members of the Stakeholder Advisory Committee (SAC), the Technical Working Group (TWG), and the Sampling Committee for their contribution to the realization of the survey.

I hope that this evidence-based report focusing on every woman and every child will be useful to planners, policymakers, researchers, and other stakeholders for proper health and population sector planning in the country.

Joy Bangla, Joy Bangabandhu Long live Bangladesh

Kah.

Md. Zahid Maleque, MP

FOREWORD





Md. Ali Noor Secretary Medical Education and Family Welfare Division Ministry of Health and Family Welfare Government of the People's Republic of Bangladesh

t is my pleasure to congratulate the National Institute of Population Research and Training (NIPORT) on publishing the eighth Bangladesh Demographic and Health Survey (2017-18 BDHS) with the support of the United States Agency for International Development (USAID).

The survey highlights changes that have taken place in Bangladesh's demographic and health situation since the previous BDHS surveys. The survey provides important information for policymakers and program personnel in addressing the monitoring and evaluation needs of the 4th Health, Population and Nutrition Sector Program (4th HPNSP) of the Ministry of Health Family Welfare (MOHFW).

We know that socio-economic conditions including women's educational level has been continuing to improve. The fertility rate has declined over time, from 6.3 children per woman in 1975 to 2.3 in 2017-18. Of the eight divisions in Bangladesh, three (Khulna, Rajshahi, and Rangpur) have achieved a replacement-level fertility rate (2.1 or fewer children per woman). There has been a sharp increase in the percentage of women with at least four antenatal care (ANC) visits. As a result of the rise in health facility deliveries, more than half of deliveries are now attended by medically trained providers. BDHS data shows continuous improvements in the nutritional status of women and children. We urge all stakeholders to play active roles in implementing national priorities under the 4th HPNSP and global commitments such as the Sustainable Development Goals (SDGs) to improve health services for the Bangladeshi population.

I am glad to know that a technical committee was formed by the Medical Education and Family Welfare Division to review the childhood mortality estimates from the 2017-18 BDHS. The committee observed that the discrepancies between the childhood mortality estimates from the BDHS and the Sample Vital Registration System (SVRS) were attributable to differences in the methodologies used; however, the estimates from the 2019 Multiple Cluster Indicator Survey (MICS) were found to be similar to those from the BDHS.

The need for further detailed analyses of the BDHS data remains. I hope that such analyses will be carried out by policymakers, academicians, researchers, and program personnel to provide more in-depth knowledge for the future direction and effective implementation of the 4th HPNSP in the coming years.

I am greatly indebted and thankful to all who contributed to the survey. I would like to thank NIPORT for conducting the survey. I appreciate ICF, USA; the International Center for Diarrhoeal Disease Research, Bangladesh (icddr,b); and USAID/Bangladesh for providing technical assistance. In this regard, I deeply appreciate USAID for providing financial assistance that helped ensure the ultimate success of this important national survey.

map

(Md. Ali Noor)

PREFACE





Susanta Kumar Saha Director General National Institute of Population Research and Training (NIPORT) Medical Education and Family Welfare Division Ministry of Health and Family Welfare Government of the People's Republic of Bangladesh

he 2017-18 Bangladesh Demographic and Health Survey (BDHS) is the eighth survey of its kind. Started in 1993, the BDHS is the longest running series of health care surveys in Bangladesh. The 2017-18 BDHS was implemented through a collaborative effort of the National Institute of Population Research and Training (NIPORT) and ICF. Financial support for the survey was provided by the United States Agency for International Development (USAID)/Bangladesh.

The 2017-18 BDHS generates evidence on basic national indicators of social progress including fertility, childhood mortality, fertility preferences and fertility regulation, maternal and child health, and the nutritional status of mothers and children. It highlights the major changes that have taken place in Bangladesh's demographic and health situation since 1993-94. As a major source of data for program monitoring, the 2017-18 BDHS provides information for monitoring and evaluation of the performance of the 4th Health, Population and Nutrition Sector Program (4th HPNSP) and the attainment of the Sustainable Development Goals (SDGs) to improve health services for the Bangladeshi population. This report provides estimates for 14 indicators of the results framework of the 4th HPNSP. Several indicators have shown steady improvements in child nutritional status and coverage of antenatal care and skilled delivery services over the years.

Childhood mortality rates from the 2017-18 BDHS represent estimates for the year 2015, and these estimates differed from those reported in other available surveys. The Medical Education and Family Welfare Division of the Ministry of Health and Family Welfare (MOHFW) formed a technical committee to review childhood mortality estimates for 2015 from all available sources. The committee observed that the estimates of neonatal mortality rates and under-5 mortality rates from the Sample Vital Registration System (SVRS) were notably lower than all other available neonatal and under-5 mortality estimates in the country. However, the estimates from the 2019 Multiple Cluster Indicator Survey (MICS) were found to be similar to those from the BDHS. The review took some time to complete, resulting in delays in publishing the 2017-18 BDHS final report. Nevertheless, we are delighted to publish the report. I would like to thank the technical committee members for the valuable review and recommendations.

The 2017-18 BDHS was guided by the members of the Stakeholder Advisory Committee (SAC), which consisted of experts from government, nongovernmental, and international organizations as well as researchers and professionals working in the health, nutrition, and population sectors in Bangladesh. A Technical Working Group (TWG) with representatives from NIPORT; the MOHFW Program Management and Monitoring Unit (PMMU); MEASURE Evaluation; the University of Dhaka; the International Center for Diarrhoeal Disease Research, Bangladesh (icddr,b); USAID/Bangladesh; Save the Children; and ICF was formed to assist in designing the survey instruments and implementing the survey. I would like to put on record my sincere appreciation to the SAC and TWG members for their effort in all stages of the survey. In addition, I extend sincere thanks to the BBS for its support in selecting sample clusters and providing enumeration area maps for the survey.

I would like to congratulate the professionals of the NIPORT Research Unit for the successful completion of the survey. On this day I especially remember our colleague Subrata Kumar Bhadra, Senior Research Associate, NIPORT, who is no more with us; we remember his outstanding effort and pray to the almighty for his eternal soul. Mitra and Associates, a private research agency, was engaged to collect data; my sincere thanks to them. I also extend my thanks to ICF for completing the task in a professional manner. Finally, USAID/Bangladesh deserves special thanks for providing technical and financial support for the survey.

m

(Susanta Kumar Saha)

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ACRONYMS AND ABBREVIATIONS

ANC	antenatal care
ARI	acute respiratory infection
ASA	Association of Social Advancement
ASFR	age-specific fertility rate
BBS	Bangladesh Bureau of Statistics
BCG	bacille Calmette-Guérin vaccine against tuberculosis
BDHS	Bangladesh Demographic and Health Survey
BMI	body mass index
BMMS	Bangladesh Maternal Mortality Survey
BMRC	Bangladesh Medical Research Council
BP	blood pressure
BRAC	Bangladesh Rural Advancement Committee
BSIC	Bangladesh Small Industries Corporation
CBR	crude birth rate
CDC	Centers for Disease Control and Prevention
CHCP	community health care provider
CI	confidence interval
CNG	compressed natural gas
CPR	contraceptive prevalence rate
CSBA	community skilled birth attendant
CSPro	Census and Survey Processing System
DBP	diastolic blood pressure
DHS	Demographic and Health Survey
DPT	diphtheria, pertussis, and tetanus vaccine
DVD	digital versatile disc
EA	enumeration area
ECP	emergency contraceptive pill
EPI	Expanded Program on Immunization
FBG	fasting blood glucose
FP	family planning
FPG	fasting plasma glucose
FWV	family welfare visitor
GAR	gross attendance ratio
GFR	general fertility rate
GOB	government of Bangladesh
GPI	gender parity index
GPS	Global Positioning System
HA	health assistant
HepB	hepatitis B

Hib	Haemophilus influenzae type b
HPNSP	Health, Population and Nutrition Sector Program
ICD	International Classification of Diseases
icddr,b	International Center for Diarrhoeal Disease Research, Bangladesh
IMCI	integrated management of childhood illness
IPS	integrated power service
IPV	inactivated polio vaccine
IRB	institutional review board
IUD	intrauterine device
IYCF	infant and young child feeding
LAM	lactational amenorrhea method
LBW	low birth weight
LPG	liquid petroleum gas
MAD	minimum acceptable diet
MCH	maternal and child health
MDGs	Millennium Development Goals
MMR	maternal mortality ratio
MOHFW	Ministry of Health and Family Welfare
MR	measles and rubella
NAR	net attendance ratio
NCDs	noncommunicable diseases
NGO	nongovernmental organization
NID	national identification card
NIPORT	National Institute of Population Research and Training
NN	neonatal mortality
OPV	oral polio vaccine
ORS	oral rehydration salts
ORT	oral rehydration therapy
PCV	pneumococcal conjugate vaccine
PNC	postnatal care
PNN	postneonatal mortality
PPS	probability proportional to size
PSU	primary sampling unit
RHF SAC SACMO	recommended homemade fluids Stakeholder Advisory Committee sub-assistant community medical officer skilled birth attendant
SBA	skilled birth attendant
SBP	systolic blood pressure
SD	standard deviation
SDGs	Sustainable Development Goals
SDM	standard days method
SMC	Social Marketing Company
STI	sexually transmitted infection

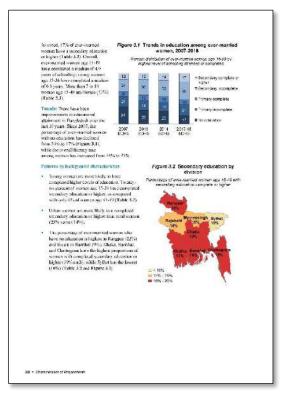
TBA	traditional birth assistant
TFR	total fertility rate
TWFR	total wanted fertility rate
UH&FWC	union health and family welfare center
UHC	union health center
UP	union parishad
USAID	United States Agency for International Development
VAD	vitamin A deficiency
VCD	video compact disc
VIP	ventilated improved pit
WHO	World Health Organization

READING AND UNDERSTANDING TABLES FROM THE 2017-18 BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY (BDHS)

The 2017-18 Bangladesh DHS final report is based on approximately 200 tables of data. For quick reference, they are located at the end of each chapter and can be accessed through links in the pertinent text (electronic version). Additionally, this more reader-friendly version features about 90 figures that clearly highlight trends, subnational patterns, and background characteristics. Large, colorful maps display breakdowns for divisions in Bangladesh. The text has been simplified to highlight key points in bullets and to clearly identify indicator definitions in boxes.

While the text and figures featured in each chapter highlight some of the most important findings from the tables, not every finding can be discussed or displayed graphically. For this reason, BDHS data users should be comfortable reading and interpreting tables.

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



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

3 Background characteristic	Reads a newspaper or magazine at 2 least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
						Wollion
Age 15-19	1.6	54.8	3.9	0.4	44.3	2.062
20-24			3.9			2,063
20-24 25-29	3.1 3.7	60.3 58.5	3.3 2.7	0.5 0.5	38.6 40.5	3,556
						3,579
30-34	3.4	55.9	1.2	0.3	43.3	3,470
35-39	3.6	51.9	1.2	0.4	47.7	2,879
40-44	3.5	49.3	0.9	0.1	50.1	2,296
45-49	3.0	49.4	1.1	0.4	50.2	2,285
Residence						
Urban	7.5	74.2	3.0	0.9	24.9	5,729
Rural	1.5	47.3	1.7	0.2	52.0	14,398
Division						
Barishal	2.5	32.6	1.7	0.1	66.3	1,125
Chattogram	2.8	54.1	1.7	0.4	45.2	3,622
Dhaka	5.2	68.5	2.6	0.8	30.7	5,123
Khulna	3.1	58.8	2.6	0.3	40.0	2,336
Mymensingh	1.9	44.5	0.9	0.1	55.1	1,546
Rajshahi	2.5	61.5	2.2	0.2	37.9	2,802
Rangpur	2.2	42.0	2.0	0.2	57.0	2,380
Sylhet	2.8	36.8	1.1	0.2	62.6	1,192
Education						, -
No education	0.0	36.9	0.3	0.0	63.0	3,333
Primary incomplete	0.0	46.8	1.3	0.0	52.9	4,250
Primary complete ¹	0.0	48.2	1.0	0.0	51.4	2.040
Secondary incomplete	1.6	60.5	2.0	— 0.1	38.7	7,135
Secondary complete or higher ²	15.5	75.5	5.4	5 (1.9)	22.2	3,369
, . <u>.</u>			•••			-,
Vealth quintile Lowest	0.1	14.0	0.7	0.0	85.4	3.743
Second	0.5	37.0	1.0	0.0	62.5	3,743
Middle	1.0	60.4	1.0	0.0	62.5 38.9	3,957 4,059
Fourth	2.6	71.8	2.6	0.1	27.0	4,059 4,184
Highest	11.3	86.5	2.6 3.8	0.3 1.4	12.6	4,184 4,184
-		-				
Total	3.2	(55.0)	(2.1)	0.4	44.3	20,127

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

Step 2: Scan the column headings—highlighted in green in Example 1. They describe how the information is categorized. In this table, the first three columns of data show different types of media that ever-married women access at least once a week. The fourth column shows ever-married women who access all three types of media, while the fifth column shows ever-married women who do not access any of the three types of media on a weekly basis. The last column lists the number of ever-married women age 15-49 interviewed in the survey.

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

Step 4: Look at the row at the bottom of the table highlighted in red. These percentages represent the totals of all ever-married women age 15-49 and their weekly access to different types of media. In this case, 3.2% * of ever-married women age 15-49 read a newspaper or magazine at least once a week, 55.0% watch television at least weekly, and 2.1% listen to the radio on a weekly basis.

Step 5: To find out what percentage of ever-married women with a secondary education or higher access all three types of media, draw two imaginary lines, as shown on the table. This shows that 1.9% of evermarried women age 15-49 with a secondary education or higher access all three types of media at least once a week.

By looking at patterns by background characteristics, we can see how exposure to mass media varies across Bangladesh. Mass media are often used to communicate health messages. Knowing how mass media exposure varies among different groups can help program planners and policymakers determine how to most effectively reach their target populations.

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

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

a) What percentage of ever-married women do not access any of the three types of media once a week?

b) Which age group of ever-married women are most likely to watch television at least once a week?

c) Compare ever-married women in urban and rural areas – which group is more likely to watch television at least once a week?

d) What are the lowest and highest percentages (range) of ever-married women who do not access any media by division?

e) Is there a clear pattern in weekly exposure to newspapers or magazines by educational level?

f) Is there a clear pattern in weekly exposure to television by household wealth?

 Yes, weekly exposure to television increases with household wealth, from 14.0% among ever-matried women in the poorest households to 86.5% among ever-matried women in the wealthiest households.

e) Yes, weekly exposure to a newspaper or magazine increases as women's level of education increases; less than 1% of ever-matried women with no education, an incomplete primary education, or a primary education or higher.

d) Access to none of the three media ranges from a low of 30.7% in Dhaka to a high of 66.3% in Barishal.

with 47.3% of ever-married women in rural areas.

c) Ever-matried women in urban areas: 74.2% of ever-matried women in urban areas watch television on a weekly basis, as compared

b) Ever-matried women age 20-24: 60.3% of ever-matried women in this age group watch television on a weekly basis.

%£.44 (6

Answers:

Example 2: Prevalence and Treatment of Symptoms of ARI A Question Asked of a Subgroup of Survey Respondents

	Among children	under age 5:	Among children	under age 5 with sym	ptoms of ARI:
Background characteristic	Percentage with symptoms of ARI ¹	Number of children	Percentage for whom advice or treatment was sought ²	Percentage for whom treatment was sought same or next day	Number of children
Age in months					
-6 6-11 12-23	$2^{2.8}_{4.1}$	963 826 1,679	(62.8) (53.4) 36.9	(30.9) (25.3) 24.4	27 42 69
24-35 36-47 48-59	2.1 2.9 2.0	1,685 1,618 1,650	(45.3) (25.6) (27.7)	(29.1) (12.8) (8.3)	35 47 33
48-59 Sex	2.0	1,030	(27.7)	(8.3)	55
Male Female	3.6 2.3	4,389 4,032	46.0 30.8	23.7 18.2	159 95
Cooking fuel Electricity or gas Kerosene	2.0	1,727 2	(42.8)	(23.1)	35 0
Charcoal Wood/straw ³ Animal dung	* 3.4 2.3	13 6,064 596	* 39.2 *	* 20.8 *	0 205 13
Other fuel No food cooked in household	*	11 1	*	*	0 0
Residence Urban Rural	2.6 3.2	2,307 6,113	44.9 38.9	22.9 21.3	61 193
Division		-,			
Barishal Chattogram Dhaka	4.3 2.7 2.1	464 1,761 2,170	(56.2) (50.0) (25.4)	(26.1) (19.8) (10.7)	20 48 45
Khulna Mymensingh	1.7 2.4	774 708	$\overset{\star}{\checkmark}$	*	13 17
Rajshahi	3.9	977	(35.3)	(19.9)	38
Rangpur Sylhet	5.9 2.9	885 683	42.5 (41.3)	27.0 (31.4)	53 20
Education No education	1.8	611	*	*	11
Primary incomplete	3.6	1,520	27.8	14.2	54
Primary complete ⁴ Secondary incomplete	3.5 3.2	887 3,650	(25.8) 43.7	(8.2) 25.0	31 118
Secondary complete or higher ⁵	2.3	1,753	(57.1)	(30.2)	40
Vealth quintile Lowest	4.5	1,793	36.7	16.1	80
Second	3.3	1,710	35.1	20.4	56
Middle Fourth	2.5 2.7	1,587 1,691	(41.9) (42.1)	(22.8) 24.2	40 46
Highest	1.9	1,640	(54.4)	(32.9)	31
otal	3 3.0	8,421	40.3	21.6	254

⁵ Secondary complete is defined as completing grade 0.

Step 1: Read the title and subtitle. In this case, the table is about two separate groups of children: all children under age 5 (a) and children under age 5 with symptoms of acute respiratory infection (ARI) in the 2 weeks before the survey (b).

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

Step 3: Look at the first panel. What percentage of children under age 5 had symptoms of ARI in the 2 weeks before the survey? It's 3.0%. Now look at the second panel. How many children under age 5 had symptoms of ARI in the 2 weeks before the survey? It's 254 children, or 3.0% of the 8,421 children under age 5 (with rounding). The second panel is a subset of the first panel.

Step 4: Only 3.0% of children under age 5 had ARI symptoms in the 2 weeks before the survey. Once these children are further divided into the background characteristic categories, there may be too few cases for the percentages to be reliable.

- What percentage of children age 36-47 months with recent ARI symptoms had advice or treatment sought? It's 25.6%. This percentage is in parentheses because there are between 25 and 49 children (unweighted) in this category. Readers should use this number with caution—it may not be reliable. (For more information on weighted and unweighted numbers, see Example 3.)
- What percentage of children under age 5 with recent ARI symptoms in Khulna had treatment or advice sought? There is no number in this cell—only an asterisk. This is because there are fewer than 25 children (unweighted) in this group. Results for this group are not reported. The subgroup is too small, and therefore the data are not reliable.

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

Example 3: Understanding Sampling Weights in BDHS Tables

A sample is a group of people who have been selected for a survey. In the BDHS, the sample is designed to represent the national population age 15-49. In addition to national data, most countries want to collect and report data on smaller geographical or administrative areas. However, doing so requires a large enough sample size in each area. For the 2017-18 BDHS, the survey sample is representative at the national level, for urban and rural areas, and for the country's eight divisions.

To generate statistics that are representative of Bangladesh as a whole and the eight divisions, the number of ever-married women surveyed in each division should contribute to the size of the total (national) sample in proportion to size of the division. However, if some divisions have small populations, then a sample allocated in proportion to each division's population may not include sufficient ever-married women from each division for analysis. To solve this problem, divisions with small populations are oversampled. For example, let's say that you have enough money to interview' 20,127 ever-married women and want to produce

Table 3.1 Background characteristics of respondents										
Percent distribution of ever-married women age 15-49 by selected background characteristics, Bangladesh DHS 2017-18										
Background	Weighted	Weighted	1 Unweighted							
characteristic	D percent	🚄 number	1 number							
Division										
Barishal	5.6	1,125	2,154							
Chattogram	18.0	3,622	2,905							
Dhaka	25.5	5,123	2,974							
Khulna	11.6	2,336	2,630							
Mymensingh	7.7	1,546	2,167							
Rajshahi	13.9	2,802	2,576							
Rangpur	11.8	2,380	2,492							
Sylhet	5.9	1,192	2,229							
Total	100.0	20,127	20,127							

results that are representative of Bangladesh as a whole and its divisions (as in Table 3.1). However, the total population of Bangladesh is not evenly distributed among the divisions: some divisions, such as Dhaka, are heavily populated while others, such as Barishal, are not. Thus, Barishal must be oversampled.

A sampling statistician determines how many ever-married women should be interviewed in each division in order to get reliable statistics. The **blue column** (1) in the table above shows the actual number of evermarried women interviewed in each division. Within the divisions, the number of ever-married women interviewed ranges from 2,154 in Barishal to 2,974 in Dhaka. The number of interviews is sufficient to get reliable results in each division.

With this distribution of interviews, some divisions are overrepresented and some divisions are underrepresented. For example, the population in Dhaka is about 26% of the population in Bangladesh, while Barishal's population contributes only 6% of the population in Bangladesh. But as the blue column shows, the number of ever-married women interviewed in Dhaka accounts for only about 15% of the total sample of ever-married women interviewed (2,974/20,127) and the number of ever-married women interviewed in Barishal accounts for 11% of the ever-married women interviewed (2,154/20,127). This unweighted distribution of ever-married women does not accurately represent the population.

In order to get statistics that are representative of Bangladesh, the distribution of the ever-married women in the sample needs to be weighted (or mathematically adjusted) such that it resembles the true distribution in the country. Ever-married women from a smaller division, like Barishal, should contribute only a small amount to the national total. Ever-married women from a large division, like Dhaka, should contribute much more. Therefore, DHS statisticians mathematically calculate a "weight" that is used to adjust the number of ever-married women from each division so that each division's contribution to the total is proportional to the actual population of the division. The numbers in the **purple column (2)** represent the "weighted" values. The weighted values can be smaller or larger than the unweighted values at the division level. The total national sample size of 20,127 ever-married women has not changed after weighting, but the distribution of the ever-married women in the divisions has been changed to represent their contribution to the total population size.

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

distribution of Bangladesh, you would see that ever-married women in each division are contributing to the total sample with the same weight that they contribute to the population of the country. The weighted number of ever-married women in the survey now accurately represents the proportion of ever-married women who live in Barishal and the proportion of ever-married women who live in Dhaka.

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

SUSTAINABLE DEVELOPMENT GOAL INDICATORS

Sustainable Development Goal Indicators—Bangladesh DHS 2017-18

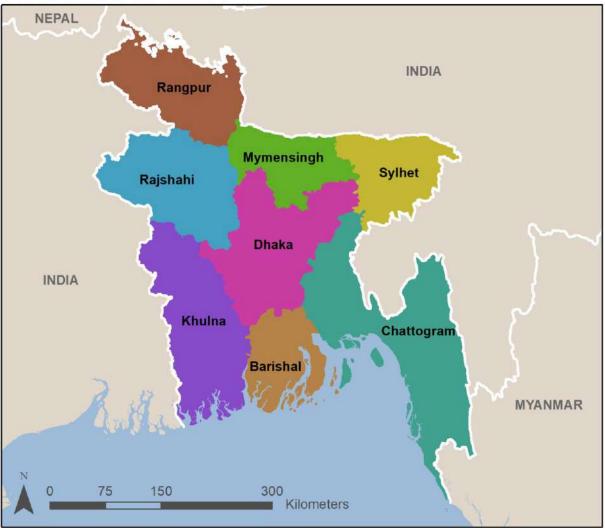
		Sex			DHS table
ndicato	r	Male	Female	Total	number
2. Zer	o hunger				
22	1 Prevalence of stunting among children under 5 years of age	30.8	30.9	30.8	11.1
	2 Prevalence of malnutrition among children under 5 years of age	11.8	9.3	10.6	na
	a) Prevalence of wasting among children under 5 years of age	9.2	7.6	8.4	11.1
	b) Prevalence of overweight among children under 5 years of age	2.6	1.8	2.2	11.1
. Goo	bd health and well-being				
3.1.	2 Proportion of births attended by skilled health personnel	na	na	52.7	9.8
3.2.		48	41	45	8.2
3.2.	2 Neonatal mortality rate ¹	34	26	30	8.2
3.7.					
	family planning satisfied with modern methods	na	70.3	na	7.15
3.7.	2 Adolescent birth rates per 1,000 women				
	a) Girls aged 10-14 years ²	na	5.0	na	5.1
	b) Women aged 15-19 years ³	na	108.0	na	5.1
3.b.	1 Proportion of the target population covered by all vaccines included in their national program				
	a) Coverage of DPT containing vaccine (3rd dose) ⁴	96.0	95.8	95.9	10.3
	b) Coverage of measles containing vaccine (2nd dose)⁵	81.1	85.5	83.1	10.3
	c) Coverage of pneumococcal conjugate vaccine (last dose in schedule) ⁶	92.0	92.0	92.0	10.3
. Ger	ider equality				
5.3.	1 Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18				
	a) Before age 15	na	19.3	na	4.3
	b) Before age 18	na	58.9	na	4.3
5.6.	1 Proportion of women aged 15-49 years who make their own informed decisions				
	regarding sexual relations, contraceptive use and reproductive health care ⁷	na	63.8	na	na
5.b.	1 Proportion of individuals who own a mobile telephone ⁸	na	60.2	na	12.3
		Resi	dence		
. Affe	ordable clean energy	Urban	Rural	Total	
7.1.	1 Proportion of population with access to electricity	96.5	90.0	91.8	2.5
7.1.		54.5	5.3	18.9	2.4
			Sex		
. Dec	ent work and economic growth	Male	Female	Total	
8.10	0.2 Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider ¹⁰	na	12.3	na	12.3
6. Pea	ce, justice, and strong institutions				
16 9	0.1 Proportion of children under 5 years of age whose births have been registered with a				
	civil authority	25.4	25.0	25.2	2.13

na = Not applicable ¹ Expressed in terms of deaths per 1,000 live births for the 5-year period preceding the survey ² Equivalent to the age-specific fertility rate for girls age 10-14 for the 3-year period preceding the survey, expressed in terms of births per 1,000 girls age 10-14 ³ Equivalent to the age-specific fertility rate for women age 15-19 for the 3-year period preceding the survey, expressed in terms of births per

³ Equivalent to the age-specific fertility rate for women age 15-19 for the 3-year period preceding the survey, expressed in terms of births per 1,000 women age 15-19
⁴ The percentage of children age 12-23 months who received three doses of DPT-HepB-Hib (pentavalent) vaccine
⁵ The percentage of children age 24-35 months who received two doses of measles/rubella vaccine
⁶ The percentage of children age 12-23 months who received three doses of pneumococcal conjugate vaccine
⁷ Data are available for currently married women who are not pregnant only.
⁸ Data are available for women age 15-49 only.
⁹ Measured as the percentage of the population using clean fuel for cooking
¹⁰ Data are available for women age 15-49 who have and use an account at a bank or other financial institution; information on use of a mobile-more provider k not available

money-service provider Is not available.

BANGLADESH



INTRODUCTION AND SURVEY METHODOLOGY

The 2017-18 Bangladesh Demographic and Health Survey (2017-18 BDHS) is the eighth national survey to report on the demographic and health status of women and children. The main objective of the 2017-18 BDHS is to provide up-to-date information on fertility and fertility preferences; childhood mortality levels and causes of death; awareness, approval, and use of family planning methods; maternal and child health, including breastfeeding practices and nutritional status; newborn care; women's empowerment; selected noncommunicable diseases (NCDS); and availability and accessibility of health and family planning services at the community level. This information is intended to assist policymakers and program managers in monitoring and evaluating the 4th Health, Population and Nutrition Sector Program (4th HPNSP) 2017-2022 of the Ministry of Health and Family Welfare (MOHFW) and to provide estimates for 14 major indicators of the HPNSP Results Framework (MOHFW 2017).

The 2017-18 BDHS was conducted under the authority of the National Institute of Population Research and Training (NIPORT), Health Education and Family Welfare Division of the Ministry of Health and Family Welfare under Training, Research and Development operational plan of 4th HPNSP. Mitra and Associates, a Bangladeshi research firm located in Dhaka, implemented the survey. The International Center for Diarrhoeal Disease Research, Bangladesh (icddr,b) provided technical assistance on verbal autopsies to determine the causes of under-5 deaths. ICF provided technical assistance as part of its Demographic and Health Surveys (DHS) Program. The survey received financial support from the United States Agency for International Development (USAID).

Members of the Stakeholder Advisory Committee (SAC), which included experts from government (including MOHFW), nongovernmental, and international organizations as well as researchers and professionals who work in the health, nutrition, and population sectors, contributed their expert opinions and endorsement during survey implementation. In addition, the Technical Working Group (TWG), with representatives from NIPORT, ICF, icddr,b, and USAID/Bangladesh, provided technical guidance in all aspects of the survey implementation. The Sampling Committee, with representatives from NIPORT, the Bangladesh Bureau of Statistics (BBS), ICF, the University of Dhaka, the World University of Bangladesh, and MEASURE Evaluation, provided technical guidance in finalizing the sampling design.

1.1 SURVEY OBJECTIVES

The specific objectives of the 2017-18 BDHS are as follows:

- Provide up-to-date data on demographic rates, particularly fertility rates, and infant and child mortality rates at the national and divisional levels
- Analyze the direct and indirect factors that determine levels of and trends in fertility and infant and child mortality
- Measure levels of contraceptive use among currently married women
- Provide data on maternal and child health, including antenatal care, assistance at delivery, postnatal care, newborn care, breastfeeding, immunizations, and prevalence and treatment of acute respiratory infections (ARIs), diarrhea, and other diseases among children under age 5
- Provide information on the empowerment of women
- Assess the nutritional status of children (under age 5), women, and men using anthropometric measurements (weight and height) and assess infant and child feeding practices
- Measure biomarkers such as blood pressure and blood glucose among women and men age 18 and older
- Provide information on causes of death among children under age 5

• Provide community-level data on the accessibility and availability of health and family planning services

1.2 SAMPLE DESIGN

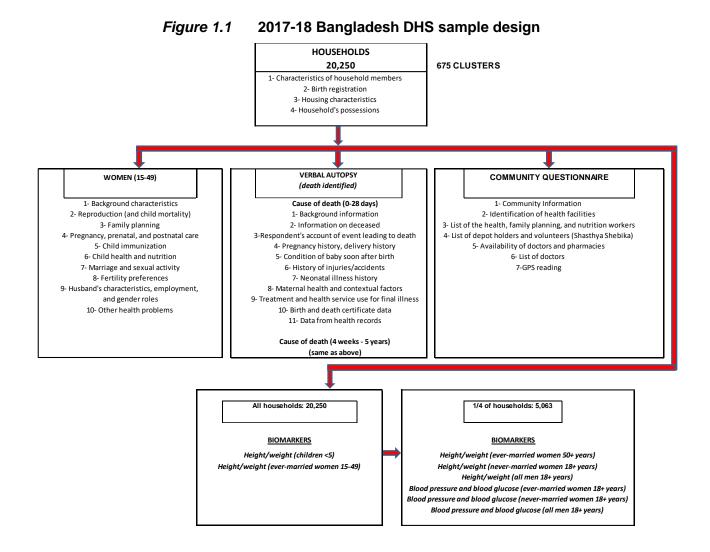
The sample for the 2017-18 BDHS is nationally representative and covers the entire population residing in non-institutional dwelling units in the country. The survey used a list of enumeration areas (EAs) from the 2011 Population and Housing Census of the People's Republic of Bangladesh, provided by the Bangladesh Bureau of Statistics (BBS), as a sampling frame (BBS 2011). The primary sampling unit (PSU) of the survey is an EA with an average of about 120 households.

Bangladesh consists of eight administrative divisions: Barishal, Chattogram, Dhaka, Khulna, Mymensingh, Rajshahi, Rangpur, and Sylhet. Each division is divided into zilas and each zila into upazilas. Each urban area in an upazila is divided into wards, which are further subdivided into mohallas. A rural area in an upazila is divided into union parishads (UPs) and, within UPs, into mouzas. These divisions allow the country as a whole to be separated into rural and urban areas.

The survey is based on a two-stage stratified sample of households. In the first stage, 675 EAs (250 in urban areas and 425 in rural areas) were selected with probability proportional to EA size. The sample in that stage was drawn by BBS, following the specifications provided by ICF that include cluster allocation and instructions on sample selection. A complete household listing operation was then carried out in all selected EAs to provide a sampling frame for the second-stage selection of households. In the second stage of sampling, a systematic sample of an average of 30 households per EA was selected to provide statistically reliable estimates of key demographic and health variables for the country as a whole, for urban and rural areas separately, and for each of the eight divisions. Based on this design, 20,250 residential households were selected. Completed interviews were expected from about 20,100 ever-married women age 15-49. In addition, in a subsample of one-fourth of the households (about 7-8 households per EA), all ever-married women age 50 and older, never-married women age 18 and older, and men age 18 and older were weighed and had their height measured. In the same households, blood pressure and blood glucose testing were conducted for all adult men and women age 18 and older. **Figure 1.1** shows the household members eligible for the various biomarker samples.

The survey was successfully carried out in 672 clusters after elimination of three clusters (one urban and two rural) that were completely eroded by floodwater. These clusters were in Dhaka (one urban cluster), Rajshahi (one rural cluster), and Rangpur (one rural cluster). A total of 20,160 households were selected for the survey.

Any analysis using the 2017-18 BDHS data requires application of sampling weights to ensure the actual representation of the survey results at the national and division levels. The 2017-18 BDHS sampling weights are not expected to lead to any significant differences in the overall survey indicators.



1.3 QUESTIONNAIRES

The 2017-18 BDHS used six types of questionnaires: (1) the Household Questionnaire, (2) the Woman's Questionnaire (completed by ever-married women age 15-49), (3) the Biomarker Questionnaire, (4) two verbal autopsy questionnaires to collect data on causes of death among children under age 5, (5) the Community Questionnaire, and the Fieldworker Questionnaire. The first three questionnaires were based on the model questionnaires developed for the DHS-7 Program, adapted to the situation and needs in Bangladesh and taking into account the content of the instruments employed in prior BDHS surveys. The verbal autopsy module was replicated from the questionnaires used in the 2011 BDHS, as the objectives of the 2011 BDHS and the 2017-18 BDHS were the same. The module was adapted from the standardized WHO 2016 verbal autopsy module. The Community Questionnaire was adapted from the version used in the 2014 BDHS. The adaptation process for the 2017-18 BDHS involved a series of meetings with a technical working group. Additionally, draft questionnaires were developed in English and then translated into and printed in Bangla. Back translations were conducted by people not involved with the Bangla translations.

Household Questionnaire: The Household Questionnaire listed all of the usual members of and visitors to the selected households. Basic information was collected on the characteristics of each person listed, including age, sex, marital status, education, current work status, birth registration, and individual possession of a mobile phone. The main purpose of the Household Questionnaire was to identify women

who were eligible for individual interviews and for biomarker component assessments. Information was also collected on the dwelling unit, such as the source of water, type of toilet facilities, materials used to construct the floor and walls, ownership of various consumer goods, and availability of handwashing facilities.

Woman's Questionnaire: The Woman's Questionnaire collected information from ever-married women age 15-49. Women responded to questions on the following topics:

- Background characteristics (for example, age, education, religion, and media exposure)
- Reproductive history
- Use and source of family planning methods
- Antenatal, delivery, postnatal, and newborn care and breastfeeding
- Child immunizations
- Infant feeding practices and illness
- Marriage and sexual activities
- Fertility preferences
- Husbands' background characteristics and women's work

Biomarker Questionnaire: The biomarkers collected in the 2017-18 BDHS included anthropometric (height and weight), blood pressure, and blood glucose measurements. ICF, along with local experts, assisted with the development of the biomarker testing protocol.

Verbal autopsy questionnaires: Two verbal autopsy questionnaires were used to collect information related to causes of death among young children; the first questionnaire collected data on neonatal deaths (deaths at 0-28 days), and the second collected data on deaths between 4 weeks and 5 years. These questionnaires were administered to mothers who reported the death of a child under age 5 in the 5-year period prior to the 2017-18 BDHS.

Community Questionnaire: The Community Questionnaire, administered in each selected cluster during the household listing operation, asked questions about the existence of development organizations in the community and the availability and accessibility of health services and other facilities. During the household listing operation, the geographic coordinates and altitude at the center of each cluster were recorded using Garmin eTrex Legend H units. A list of health facilities and health service providers in each selected EA was provided to the interviewing teams to verify information gathered in the Woman's Questionnaire on the types of facilities accessed and health service personnel seen. The Community Questionnaire was administered to a group of four to six key individuals who were knowledgeable about socioeconomic conditions and the availability of health and family planning services/facilities in the cluster. These key individuals included such persons as community leaders, teachers, government officials, social workers, religious leaders, traditional healers, and health care providers.

Fieldworker Questionnaire: The Fieldworker Questionnaire, used to collect data on the basic characteristics of fieldworkers, served as a tool in conducting analyses of data quality. Field supervisors, editors, interviewers, and health technicians filled out a two-page self-administered questionnaire on their general background characteristics. ICF distributed and collected the questionnaires before the fieldworkers entered the field. No personal identifiers were attached to the BDHS fieldworkers' data files.

The protocols for survey methodology, biomarker measurements, and all other instruments related to the survey were approved by institutional review boards (IRBs) at ICF and the Bangladesh Medical Research Council (BMRC). Both IRBs and BMRC approved the protocols before the commencement of data collection activities.

1.4 ANTHROPOMETRY, BLOOD PRESSURE MEASUREMENT, AND BLOOD GLUCOSE TESTING

The 2017-18 BDHS incorporated three biomarkers: anthropometry, blood pressure measurement, and blood glucose testing. All data related to coverage of the anthropometric measures and the results of the blood pressure and blood glucose testing were recorded in the Biomarker Questionnaire.

1.4.1 Anthropometry Measurements

Height and weight measures were collected for children under age 5 and ever-married women age 15-49 in all of the households sampled. Also, in the subsample of one-fourth of the households, these measures were obtained for never-married women age 18 and above, ever-married women age 50 and above, and men age 18 and above. Weight measurements were obtained using lightweight, electronic SECA 878 scales with a digital screen and the mother and child function. Height measurements were carried out with measuring boards made by Shorr Productions. Children younger than age 24 months were measured lying down (recumbent) on the board, while standing height was measured for older children. One male health technician and one female technician from each team were deployed to take both measurements.

1.4.2 Blood Pressure Measurements and Glucose Testing

Blood pressure (BP) measures and blood specimens for glucose testing were collected from all women and men age 18 and above (regardless of marital status) in the subsample of one-fourth of the households. All women and men identified as eligible for blood pressure measurements and glucose testing were contacted and had the test explained to them. Blood pressure measures and blood specimens for glucose testing were taken for those who consented. Those consenting to glucose testing were asked to fast overnight for 8 hours and were visited early the next day (the second day of fieldwork) to ensure that they had not broken their fast before the test. Individuals failing to take the test for any reason were requested again to fast overnight and take the test on the following day (the third day of fieldwork). Collection of blood specimens for glucose testing required two visits to a household in most cases. One male health technician and one female technician from each team were engaged for biomarker testing.

The LIFE SOURCE® UA-767 Plus BP monitor was used to measure blood pressure. This automatic device includes separate cuffs (small, medium, and large). Two health technicians were trained per team according to the recommended protocol. Three blood pressure measurements were taken at intervals of approximately 10 minutes. The average of the second and third measurements was used to report respondents' blood pressure values.

The HemoCue 201 RT analyzer was used for measurement of blood glucose. Capillary whole blood was obtained from the middle or ring finger after respondents had fasted overnight. The first two drops were wiped away, and the third drop was taken for measurement. Blood glucose was measured in millimoles per liter (mmol/L). World Health Organization cut-off points were used for fasting plasma blood glucose measurements. Individuals with fasting plasma glucose values of 7.0 mmol/L or above are classified as having diabetes.

1.5 PRETEST

Four supervisors and 16 interviewers, including three biomarker staff, were trained for the pretest. The pretest training and fieldwork took place from August 16-30, 2017. The questionnaires were pretested in 100 households. Interviews were conducted with 100 ever-married women, and six verbal autopsies were completed in two rural clusters in Manikgonj and two urban clusters in Dhaka. Based on observations in the field and suggestions made by the pretest teams, revisions were made in the wording and translations of the questionnaires.

1.6 TRAINING OF FIELD STAFF

A total of 62 field staff were recruited and trained for the listing/mapping operation. Training of the household listers/mappers took place from September 17-21, 2017. For the main survey, two training programs were organized: one on the Household Questionnaire and the Woman's Questionnaire for interviewers, team supervisors, and quality control officers and another on biomarker components for health technicians. Training of fieldworkers was conducted from September 24 to October 22, 2017. The trainees split into four classrooms, each with about 50-55 trainees. A total of 210 field staff were recruited based on their educational level, prior survey experience, maturity, and willingness to spend 4 months on the project. Training included lectures on how to complete the questionnaires, mock interviews between participants, and field practice. All of the key survey personnel and other senior professionals from Mitra and Associates were engaged in the training. Representatives of ICF and NIPORT attended the training as resource persons. In addition, an official from MOHFW's Directorate General of Health Services gave a talk on the Expanded Program on Immunization (EPI) and infant/childhood vaccines. Training on the verbal autopsy questionnaires was provided by staff from icddr,b.

1.7 FIELDWORK

The household listing operation was carried out in all selected EAs from September 27 to December 5, 2017, in three phases. Each phase was about 4 weeks in duration. Twenty-six teams of two persons each carried out the listing of households and administered the Community Questionnaire. In addition, six supervisors checked and verified the work of the listing teams. The number of teams declined with each subsequent phase, starting with 26 teams in the first phase and ending with 24 teams in the final phase.

Fieldwork for the main survey was carried out by several interviewing teams, with each team consisting of one male supervisor, one female field editor, five female interviewers, two health technicians, and one logistics staff person. Data collection occurred in five phases, each about 4 weeks in duration. Data collection started on October 24, 2017 and was completed on March 15, 2018. The number of teams declined with each subsequent phase, starting with 20 teams in the first phase and ending with 17 teams at the completion of data collection.

Several activities involved the use of data quality measures. Four quality control teams from Mitra and Associates, each with one male and one female staff person, traveled to the field to visit the interviewing teams throughout the data collection period. In addition, NIPORT monitored fieldwork by using extra quality control teams. The teams went into the field in tours of about 3 weeks in each phase. They oversaw use of the household listings and mapping, observed one household and one individual interview conducted by each interviewer, and spot-checked completed questionnaires. The teams also revisited half of the households from one completed cluster for each survey team and checked whether selected households were visited, and eligible respondents were properly identified and interviewed. At the end of each phase, a debriefing session was held to address problems encountered in the field, clarifications, and administrative matters. Field check tables, generated on a weekly basis by the data processing specialist, allowed the quality control teams to advise field teams of problems detected during data entry. Fieldwork was also monitored through visits by representatives from ICF, NIPORT, and MOHFW as well as other Technical Review Committee members.

1.8 DATA PROCESSING

Completed BDHS questionnaires were returned to Dhaka every 2 weeks for data processing at Mitra and Associates offices. Data processing began shortly after fieldwork commenced and consisted of office editing, coding of open-ended questions, data entry, and editing of inconsistencies found by the computer program. The field teams were alerted regarding any inconsistencies or errors found during data processing. Eight data entry operators and two data entry supervisors performed the work, which commenced on November 17, 2017, and ended on March 27, 2018. Data processing was accomplished using

Census and Survey Processing System (CSPro) software, jointly developed by the United States Census Bureau, ICF, and Serpro S.A.

1.9 RESPONSE RATES

Table 1.1 shows the results of the household and individual women's interviews. Among the 20,160 households selected, 19,584 were occupied. Interviews were successfully completed in 19,457 (99%) of the occupied households. Among the 20,376 ever-married women age 15-49 eligible for interviews, 20,127 were interviewed, yielding a response rate of 99%. The principal reason for non-response among women was their absence from home despite repeated visits. Response rates did not vary notably by urbanrural residence.

Table 1.1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Bangladesh DHS 2017-18 $\,$

	Resi		
Result	Urban	Rural	Total
Household interviews			
Households selected	7,470	12,690	20,160
Households occupied	7,198	12,386	19,584
Households interviewed	7,103	12,354	19,457
Household response rate ¹	98.7	99.7	99.4
Interviews with women age 15-49			
Number of eligible women	7,494	12,882	20,376
Number of eligible women interviewed	7,374	12,753	20,127
Eligible women response rate ²	98.4	99.0	98.8

¹ Households interviewed/households occupied

² Respondents interviewed/eligible respondents

Key Findings

- Drinking water: 98% of households have access to an improved source of drinking water. Only 1 in 10 households treat their drinking water using an appropriate method.
- Sanitation: 65% of households have improved sanitation facilities (75% in urban areas and 62% in rural areas).
 Overall, 47% of the population has basic sanitation, a proportion that has not improved since 2014 (48%).
- Handwashing: 39% of the population has a basic handwashing facility, while 56% has a limited facility.
- Electricity: 91% of households have access to electricity through the national grid or solar power, an improvement from 73% in 2014.
- Mobile phones: Almost all households (94%) have a mobile phone. Fifty-nine percent of residents age 13 and over own a mobile phone (74% of male residents and 47% of female residents).
- Birth registration: 25% of children under age 5 have had their birth registered, and 20% have a birth certificate. The percentage of children whose births were registered declined from 31% in 2011 to 20% in 2014 before increasing to 25% in 2017-18.
- *Education:* 21% of females and 18% of males have no education. These percentages represent an improvement since 2014 (27% and 23%, respectively).
- School attendance: Net attendance ratios (NARs) are 86% for primary school and 55% for secondary school.
- National identification card: 84% of adults age 18 and older have a national identification card (NID).

nformation on the socioeconomic characteristics of the household population in the 2017-18 BDHS provides a context to interpret demographic and health indicators and can furnish an approximate indication of the representativeness of the survey. In addition, this information sheds light on the living conditions of the population.

This chapter presents information on sources of drinking water, sanitation, exposure to smoke inside the home, wealth, handwashing, household population and composition, educational attainment, school attendance, birth registration, and family living arrangements.

2.1 **DRINKING WATER SOURCES AND TREATMENT**

Improved sources of drinking water

Include piped water, public taps, standpipes, tube wells, boreholes, protected dug wells and springs, rainwater, water delivered via a tanker truck or a cart with a small tank, and bottled water.

Sample: Households

Improved sources of drinking water protect against outside contamination so that water is more likely to be safe to drink. In Bangladesh, access to improved sources of drinking water is almost universal in both urban (99%) and rural (98%) areas (Table 2.1.1). Tube wells and boreholes are the major source of improved drinking water for rural (97%) as well as urban (73%) households (Figure 2.1). Although use of improved sources of drinking water is high in all divisions. 8% of household members in Khulna use

Percent distribution of households by source of drinking water 2 2 <1 Unimproved <1 <1 source Protected well or spring 73 Tube well or 90 borehole 97 Public tap/ standpipe 2 Piped water into dwelling/yard/plot/ 23 neighbor's yard - 1 Total Urban Rural

unimproved sources (Table 2.1.2). Four percent of de jure residents in the lowest wealth quintile use water from an unimproved source, as compared with less than 1% of those in the highest quintile.

Appropriate methods of water treatment include boiling, bleaching, filtering, and solar disinfecting. Only 10% of households use an appropriate treatment method before drinking water (Table 2.2). Urban households are more likely to use an appropriate treatment method (25%) than rural households (4%). Boiling is the most common water treatment method used in urban households (18%), followed by use of ceramic, sand, and other filters (10%). Three percent of households in rural areas use ceramic, sand, and other filters, which is the most common practice.

Trends: The percentage of households using an appropriate water treatment method has stagnated at 10% since 2011. There has been a decline in urban areas (from 31% to 25%) and a minimal increase in rural areas (from 3% to 4%).

2.2 **SANITATION**

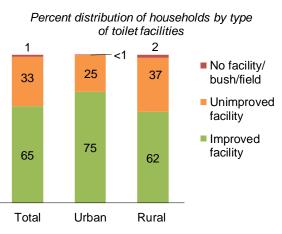
Improved toilet facilities

Include flush/pour flush toilets that flush water and waste to a piped sewer system, septic tank, pit latrine, or unknown destination; ventilated improved pit (VIP) latrines; pit latrines with slabs; or composting toilets. Sample: Households

Figure 2.1 Household drinking water by residence

Use of improved sanitation facilities prevents people from coming into contact with human waste and helps reduce the transmission of communicable diseases such as diarrhea, dysentery, and typhoid. In Bangladesh, 65% of households have improved sanitation facilities (75% in urban areas and 62% in rural areas) (**Table 2.3.1** and **Figure 2.2**). The most common type of toilet facility in rural areas is a pit latrine without a slab (35%). By contrast, the most common facility in urban areas is a flush or pour flush toilet that flushes to a septic tank (30%) (**Table 2.3.1**).

Figure 2.2 Household toilet facilities by residence



Basic sanitation service Use of improved facilities that are not shared with other households. **Sample:** De jure population

Limited sanitation service

Use of improved facilities shared by two or more households. *Sample:* De jure population

Overall, 47% of de jure household members have basic sanitation service, while 19% have limited service. The proportion of the population with basic sanitation service has not improved since 2014, when it was 48%.

Patterns by background characteristics

- The percentage of the population with limited sanitation service is higher in urban (26%) than in rural (16%) areas (**Table 2.3.1**).
- By division, Khulna, Dhaka, and Chattogram have the highest percentages of de jure residents who use improved sanitation facilities (73%, 71%, and 70%, respectively). In Mymensingh, Barishal, and Sylhet, more than two-fifths of residents use unimproved facilities (46%, 45%, and 41%, respectively).
- The percentage of the de jure population with improved sanitation facilities increases with increasing wealth, from 33% in the lowest quintile to 88% in the highest quintile (**Table 2.3.2**). Similarly, the percentage of the population with basic sanitation service increases from 19% in the lowest wealth quintile to 75% in the highest quintile.

2.3 EXPOSURE TO SMOKE INSIDE THE HOME

Exposure to smoke inside the home, for example from cooking with solid fuels (coal/lignite, charcoal, wood, straw/shrubs/grass, agricultural crops, and animal dung), has potentially harmful health effects. Eighty percent of households use solid fuel for cooking, while 20% use clean fuel (electricity, and liquid petroleum gas/natural gas/biogas) (**Table 2.4**). Use of clean fuel for cooking is more common in urban areas than in rural areas (56% and 6%, respectively). Wood is the most common type of solid fuel for cooking, used by 44% of households.

Other Housing Characteristics

The survey also collected data on electricity, flooring materials, roof materials, wall materials, and number of rooms used for sleeping. Ninety-one percent of households in Bangladesh (97% in urban and 89% in rural areas) have access to electricity through the national grid or solar power (**Table 2.5**). This is an improvement from 73% in 2014.

Cement is the most commonly used flooring material in urban households (63%), while earth, sand, and dung are most common in rural areas (77%). Eighty-five percent of households use tin as a roofing material, while 14% use cement. The most common materials used for walls are tin (49%) and cement or cement blocks (30%).

2.4 HOUSEHOLD WEALTH

Household Durable Goods

Information about household effects, means of transportation, ownership of agricultural land, and ownership of farm animals is shown in **Table 2.6**. Forty-seven percent of households own a television (70% in urban areas and 38% in rural areas). Only 6% of households own a computer (12% of urban and 3% of rural households). Almost all households (94%) have a mobile phone. Seventy-four percent of male residents and 47% of female residents age 13 and older have a mobile phone (**Table 2.7**).

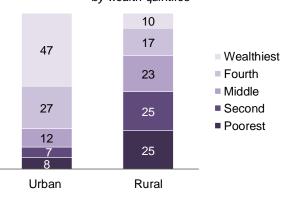
Wealth Index

Wealth index

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

About half of the urban de jure population (47%) belongs to the wealthiest quintile, as compared with only 10% of the rural population (Table 2.8). Differences in the wealth distribution are more skewed in urban than rural areas; in rural areas, 50% of the population falls in the two lowest wealth quintiles (Figure 2.3). Twenty-five percent of the rural population is in the lowest quintile, compared with 8% of the urban population. Among divisions, Dhaka has the highest proportion of residents in the wealthiest quintile (35%) and the lowest proportion in the lowest quintile (9%), whereas Barishal and Rangpur have the highest percentage of residents in the lowest quintile (34% and 38%, respectively) and the lowest percentage in the highest quintile (8% each).

Figure 2.3 Household wealth by residence



Percent distribution of de jure population by wealth quintiles

2.5 HANDWASHING

Handwashing is the most effective way to prevent germs from spreading. In the 2017-18 BDHS, a place for handwashing was observed for 97% of the de jure population. Ninety-four percent of the population had a fixed place for handwashing, while 3% had a mobile handwashing place. Among de jure residents for whom a place for handwashing was observed, 40% had soap available and 11% had other cleaning agents available. Thirty-nine percent of the population had a basic handwashing facility, and 56% had a limited facility (**Table 2.9**). Among households in which a place for washing hands was observed, 33% had a covered space, 27% had an unshared open space, and 40% had a shared open space (**Table 2.10**).

Trends: The percentage of de jure residents living in households with a basic handwashing facility increased from 23% in 2011 to 28% in 2014 and 39% in 2017-18 (**Figure 2.4**).

Patterns by background characteristics

- Urban populations are more likely to have soap than rural populations (58% versus 33%) (Table 2.9).
- By division, the percentage of the population with soap available is lowest in Barishal (19%) and highest in Dhaka (50%).
- The proportion of the population with a basic BD handwashing facility increases from 11% in the lowest wealth quintile to 85% in the highest wealth quintile.

2.6 HOUSEHOLD POPULATION AND COMPOSITION

Household

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

De facto population

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

De jure population

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

How data are calculated

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

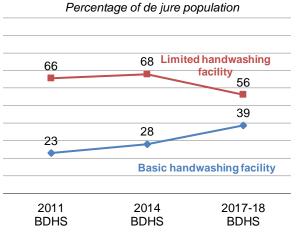


Figure 2.4 Trends in access to basic and

limited handwashing facilities

The de facto population for the 2017-18 BDHS consisted of 84,084 individuals; 48% were male and 52% were female, yielding a sex ratio of 91 (number of males per 100 females)¹. Thirty-two percent of the population is under age 15 (**Table 2.11** and **Figure 2.5**), and 6% is age 65 and over. Sixteen percent of households are headed by women. On average, households have 4.3 members (**Table 2.12**).

Trends: The percentage of femaleheaded households increased from 13% in 2014 to 16% in 2017-18, possibly as a result of male labor migration in recent years. Over the same period, average household size decreased slightly from 4.5 to 4.3.

2.7 BIRTH REGISTRATION

Registered birth

Child has a birth certificate or child does not have a birth certificate, but his/her birth is registered with the civil authorities. **Sample:** De jure children under age 5

Birth registration helps ensure access to basic services, including immunizations, health care, and school enrollment at the appropriate age (UNICEF 2006). Twenty-five percent of children under age 5 have had their birth registered, and 20% have a birth certificate (**Table 2.13**).

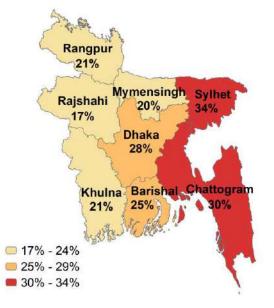
Trends: The percentage of children whose births were registered declined from 31% in 2011 to 20% in 2014 before increasing to 25% in 2017-18.

Patterns by background characteristics

• The percentage of de jure children whose births are registered with the civil authorities ranges from a low of 17% in Rajshahi to a high of 34% in Sylhet (**Figure 2.6**).

Figure 2.6 Birth registration by division

Percentage of de jure children under age 5 whose births are registered with the civil authorities



¹ This is lower than the sex ratio of 100.3 males per 100 females obtained in the 2011 Census. This could be because the census's sex ratio is based on the de jure population, while the sex ratio obtained from the BDHS surveys is based on the de facto household population.

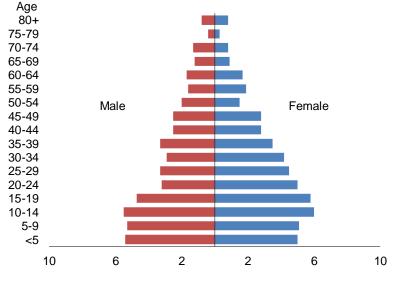


Figure 2.5 Population pyramid

Percent distribution of the household population

• Children in the highest wealth quintile are more likely to have their births registered than those in the lowest quintile (31% versus 21%).

2.8 EDUCATION

2.8.1 Educational Attainment

Median educational attainment

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

In Bangladesh, 21% of females and 18% of males age 6 and above have no education. Thirty-one percent of females have some secondary education, while 13% have a secondary education or higher (**Table 2.14.1**). Similarly, 26% of males have some secondary education, and 18% have completed schooling at a secondary or higher level (**Table 2.14.2**). There is a slight difference by sex in the median number of years of education completed (4.1 years among women versus 4.2 years among men) (**Tables 2.14.1** and **2.14.2**).

Trends: The percentage of females with no education has decreased since 2014, from 27% to 21%. A similar pattern is observed among males, with a reduction from 23% to 18%. The median number of years of schooling has increased since 2014 from 3.5 to 4.1 among women and from 3.8 to 4.2 among men.

Patterns by background characteristics

- Urban women and men (16% and 21%, respectively) are more likely than rural women and men (8% and 12%, respectively) to have more than a secondary education (Tables 2.14.1 and 2.14.2).
- Similarly, rural women (23%) and men (20%) are more likely to have no education than urban women (18%) and men (14%).
- Educational attainment is associated with wealth. Thirty-one percent of women and 30% of men in the lowest wealth quintile have no education, as compared with 12% of women and 8% of men in the highest wealth quintile.

2.8.2 School Attendance

Net attendance ratio (NAR)

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

Sample: Children age 6-10 for primary school NAR and children age 11-17 for secondary school NAR

Gross attendance ratio (GAR)

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

Sample: Children age 6-10 for primary school GAR and children age 11-17 for secondary school GAR

Table 2.15 shows that net attendance ratios are 86% for primary school and 55% for secondary school. Primary and secondary NARs are slightly higher among girls (87% and 57%, respectively) than among boys (84% and 51%, respectively).

Gender parity index (GPI)

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

Sample: Primary school students and secondary school students

A gender parity index (GPI) of 1 indicates parity or equality between school participation ratios. A GPI lower than 1 indicates a gender disparity in favor of males, with a higher proportion of males than females attending the specified level of schooling. A GPI higher than 1 indicates a gender disparity in favor of females. The GPI at the primary and secondary levels is generally higher than 1.00 indicating that gender difference in schools are in favor of girls.

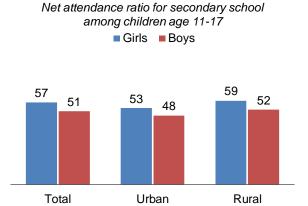
Patterns by background characteristics

- Both the primary school and the secondary school NAR are higher in rural areas (87% and 56%, respectively) than in with urban areas (82% and 51%, respectively).
- The secondary school NAR is higher among rural girls and boys (59% and 52%, respectively) than among urban girls and boys (53% and 48%, respectively) (Figure 2.7).
- By district, the primary school NAR ranges from 83% in Dhaka to 89% in Rangpur. The secondary school NAR ranges from 51% in Sylhet to 59% in Barishal.
- The primary school NAR is highest in the second wealth quintile (87%) and lowest in the fourth quintile (83%).

2.9 OWNERSHIP OF NID CARD

All Bangladeshi citizens age 18 and older are issued a national identity card (NID). In the 2017-18 BDHS, respondents were asked whether they had the NID card. More than four-fifths of household members age 18 and older (85% of men and 82% of women) reported having the card (**Table 2.16**). Eighty-six percent of men and 83% of women in rural areas had an NID card, as compared with 84% of men and 80% of women in urban areas. Respondents age 18-19 (10%) were less likely to have an NID card than those in the older age groups (66%-99%).

Figure 2.7 Secondary school attendance by residence



LIST OF TABLES

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

- Table 2.1.1 Household drinking water
- Table 2.1.2 Drinking water according to division and wealth
- Table 2.2
 Treatment of household drinking water
- Table 2.3.1 Household sanitation facilities
- **Table 2.3.2** Sanitation facility type according to division and wealth
- Table 2.4 Cooking amenities
- Table 2.5 Household characteristics
- Table 2.6 Household possessions
- Table 2.7 Ownership of mobile phones
- Table 2.8 Wealth quintiles
- Table 2.9 Handwashing
- Table 2.10 Handwashing: Location
- Table 2.11 Household population by age, sex, and residence
- Table 2.12 Household composition
- Table 2.13 Birth registration of children under age 5
- Table 2.14.1 Educational attainment of the female household population
- Table 2.14.2 Educational attainment of the male household population
- Table 2.15 School attendance ratios
- Table 2.16 Ownership of NID card

Table 2.1.1 Household drinking water

Percent distribution of households and de jure population by source of drinking water, according to residence, Bangladesh DHS 2017-18

		Households			Population	
Source of drinking water	Urban	Rural	Total	Urban	Rural	Total
Improved source	99.4	97.9	98.4	99.3	97.9	98.3
Piped into dwelling/yard/plot	22.2	0.4	6.6	22.2	0.3	6.4
Piped to neighbor	0.6	0.1	0.2	0.6	0.1	0.2
Public tap/standpipe	2.3	0.1	0.7	2.2	0.1	0.7
Tube well or borehole	73.2	96.6	90.0	73.2	96.6	90.1
Protected dug well	0.1	0.2	0.2	0.1	0.2	0.2
Rainwater	0.3	0.6	0.5	0.3	0.5	0.5
Tanker truck/cart with small tank	0.1	0.0	0.0	0.1	0.0	0.0
Bottled water	0.7	0.1	0.2	0.7	0.1	0.2
Inimproved source	0.6	2.1	1.6	0.7	2.1	1.7
Unprotected dug well	0.4	0.4	0.4	0.5	0.4	0.4
Surface water	0.2	1.7	1.3	0.2	1.7	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	5,505	13,952	19,457	23,045	60,326	83,371

Table 2.1.2 Drinking water according to division and wealth

Percent distribution of de jure population by drinking water source, according to region and wealth quintile, Bangladesh DHS 2017-18

Background characteristic	Improved source of drinking water ¹	Unimproved source of drinking water ²	Total	Number of persons
Division				
Barishal	97.7	2.3	100.0	4,712
Chattogram	99.2	0.8	100.0	15,322
Dhaka	100.0	0.0	100.0	20,598
Khulna	91.6	8.4	100.0	9,252
Mymensingh	100.0	0.0	100.0	6,780
Rajshahi	98.7	1.3	100.0	11,105
Rangpur	99.9	0.1	100.0	9,719
Sylhet	95.8	4.2	100.0	5,883
Wealth guintile				
Lowest	96.2	3.8	100.0	16,674
Second	97.8	2.2	100.0	16,675
Middle	98.6	1.4	100.0	16,674
Fourth	99.1	0.9	100.0	16,674
Highest	99.8	0.2	100.0	16,674
Total	98.3	1.7	100.0	83,371

¹ See Table 2.1.1 for definition of an improved source.

² See Table 2.1.1 for definition of an unimproved source.

Table 2.2 Treatment of household drinking water

Percentage of households and de jure population using various methods to treat drinking water, and percentage using an appropriate treatment method, according to residence, Bangladesh DHS 2017-18

	Households			Population		
Water treatment method	Urban	Rural	Total	Urban	Rural	Total
Boil	17.8	0.8	5.6	17.6	0.8	5.4
Bleach/chlorine added	0.2	0.2	0.2	0.2	0.2	0.2
Strain through cloth	4.5	0.5	1.6	4.5	0.5	1.6
Ceramic, sand, or other filter	10.3	3.4	5.4	10.9	3.4	5.5
Let stand and settle	0.2	0.2	0.2	0.2	0.2	0.2
Other	0.3	0.2	0.2	0.3	0.2	0.2
No treatment	75.1	95.2	89.5	74.7	95.2	89.6
Percentage using an appropriate						
treatment method ¹	24.5	4.3	10.0	24.9	4.2	9.9
Number of households/population	5,505	13,952	19,457	23,045	60,326	83,371

Note: Respondents may report multiple treatment methods, so the sum of treatment may exceed 100%.

¹ Appropriate water treatment methods include boiling, bleaching, filtering, and solar disinfecting.

Table 2.3.1 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities, percent distribution of households and de jure population with a toilet/latrine facility by location of the facility, percentage of households and de jure population with basic sanitation service, and percentage with limited sanitation service, according to residence, Bangladesh DHS 2017-18

		Households			Population	
Type and location of toilet/latrine facility	Urban	Rural	Total	Urban	Rural	Total
mproved sanitation facility	75.1	61.5	65.3	74.4	62.1	65.5
Flush/pour flush to piped sewer						
system	10.7	0.0	3.0	10.6	0.0	2.9
Flush/pour flush to septic tank	29.7	11.1	16.4	29.3	11.6	16.5
Flush/pour flush to pit latrine	3.6	3.7	3.7	3.7	3.7	3.7
Flush/pour flush, don't know where	9.5	0.1	2.8	9.0	0.1	2.6
Ventilated improved pit (VIP) latrine	9.5	16.4	14.4	9.6	16.6	14.7
Pit latrine with slab	12.0	30.2	25.0	12.1	30.1	25.1
Composting toilet	0.0	0.0	0.0	0.0	0.0	0.0
Unimproved facility						
Unimproved sanitation facility	24.8	36.6	33.2	25.5	36.2	33.3
Flush/pour flush not to sewer/septic						
tank/pit latrine	11.8	0.6	3.8	11.9	0.7	3.8
Pit latrine without slab/open pit	12.6	35.1	28.7	13.1	34.7	28.7
Hanging toilet/hanging latrine	0.4	0.9	0.7	0.5	0.9	0.8
Open defecation (no facility/bush/						
field)	0.1	1.9	1.4	0.1	1.6	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	5,505	13,952	19,457	23,045	60,326	83,371
Location of toilet facility						
In own dwelling	34.8	9.0	16.4	35.8	9.3	16.7
In own yard/plot	62.7	84.1	78.0	61.8	84.1	77.8
Elsewhere	2.4	6.9	5.6	2.5	6.6	5.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population with						
a toilet/latrine facility	5,500	13,681	19,181	23,024	59,355	82,379
Percentage with basic sanitation						
service ¹	45.3	43.5	44.0	48.5	46.4	47.0
Percentage with limited sanitation						
service ²	29.7	18.0	21.3	25.8	15.7	18.5
Number of households/population	5,505	13,952	19,457	23,045	60,326	83,371

¹ Defined as use of improved facilities that are not shared with other households. Includes safely managed sanitation service, which is not shown ² Defined as use of improved facilities shared by 2 or more households

Table 2.3.2 Sanitation facility type according to division and wealth

Percent distribution of de jure population by type of sanitation, percentage of de jure population with basic sanitation service, and percentage with limited sanitation service, according to region and wealth quintile, Bangladesh DHS 2017-18

		Type of sanitation			Percentage with	Percentage with	
Background characteristic	Improved Unimproved sanitation facility ¹ sanitation facility ²		Open defecation	Total	basic sanitation service ³	limited sanitation service ⁴	Number of persons
Division							
Barishal	55.4	44.5	0.1	100.0	48.6	6.8	4,712
Chattogram	69.9	29.9	0.2	100.0	56.1	13.6	15,322
Dhaka	70.5	29.3	0.2	100.0	44.9	25.6	20,598
Khulna	72.5	27.4	0.1	100.0	53.1	19.3	9,252
Mymensingh	52.8	46.4	0.8	100.0	35.5	17.3	6,780
Rajshahi	65.1	33.6	1.4	100.0	43.6	21.5	11,105
Rangpur	60.0	32.9	7.1	100.0	41.8	18.1	9,719
Sylhet	58.8	41.0	0.3	100.0	47.6	11.0	5,883
Wealth guintile							
Lowest	32.7	62.9	4.4	100.0	18.8	13.8	16,674
Second	50.7	48.1	1.2	100.0	32.7	17.9	16,675
Middle	72.7	26.9	0.3	100.0	52.9	19.8	16,674
Fourth	83.3	16.7	0.0	100.0	55.5	27.8	16,674
Highest	88.3	11.7	0.0	100.0	75.0	13.2	16,674
Total	65.5	33.3	1.2	100.0	47.0	18.5	83,371

¹ See Table 2.3.1 for definition of an improved facility.

² See Table 2.3.1 for definition of an unimproved facility.

³ Defined as use of improved facilities that are not shared with other households. Includes safely managed sanitation service, which is not shown separately.
 ⁴ Defined as use of improved facilities shared by 2 or more households

Table 2.4 Cooking amenities

Percent distribution of households and de jure population by place for cooking and type of cooking fuel, percentage using solid fuel for cooking, and percentage using clean fuel for cooking, according to residence, Bangladesh DHS 2017-18

		Households			Population	
Housing characteristic	Urban	Rural	Total	Urban	Rural	Total
Place for cooking						
In the house	4.3	2.0	2.6	3.9	1.9	2.4
In a separate building	81.4	70.2	73.3	82.4	71.6	74.6
Outdoors	14.2	27.8	24.0	13.7	26.5	22.9
No food cooked in household	0.1	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Cooking fuel						
Electricity	0.8	0.2	0.4	0.8	0.1	0.3
LPG/natural gas/biogas	55.4	5.7	19.8	53.6	5.2	18.6
Kerosene	0.1	0.0	0.0	0.1	0.0	0.0
Charcoal	0.1	0.1	0.1	0.1	0.1	0.1
Wood	30.3	49.2	43.8	31.8	50.8	45.6
Straw/shrubs/grass	0.6	0.6	0.6	0.7	0.6	0.6
Agricultural crop	10.0	35.0	27.9	10.2	33.7	27.2
Animal dung	2.3	9.0	7.1	2.4	9.4	7.4
Other	0.1	0.1	0.1	0.1	0.1	0.1
No food cooked in household	0.1	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage using solid fuel for cooking ¹	43.4	94.0	79.6	45.2	94.6	80.9
Percentage using clean fuel for cooking ²	56.2	5.9	20.1	54.5	5.3	18.9
Number of households/population	5,505	13,952	19,457	23,045	60,326	83,371

LPG = Liquefied petroleum gas ¹ Includes charcoal, wood, straw/shrubs/grass, agricultural crops, and animal dung ² Includes electricity and LPG/natural gas/biogas

Table 2.5 Household characteristics

Percent distribution of households and de jure population by housing characteristics, according to residence, Bangladesh DHS 2017-18

_		Households			Population	
Housing characteristic	Urban	Rural	Total	Urban	Rural	Total
Electricity						
National grid or solar	96.5	88.7	90.9	96.5	90.0	91.8
National grid	94.2	76.4	81.5	93.9	77.0	81.7
Solar	4.8	19.2	15.1	5.5	20.9	16.6
No electricity	3.5	11.3	9.1	3.5	10.0	8.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Flooring material						
Earth, sand, dung	27.2	76.7	62.7	28.0	75.9	62.6
Wood planks, palm, bamboo	0.3	0.8	0.7	0.3	0.8	0.7
Ceramic tiles	9.1	0.6	3.0	9.4	0.7	3.1
Cement	63.3	21.8	33.5	62.2	22.6	33.5
Other	0.1	0.1	0.1	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Roof material						
Thatch/palm leaf/sod/mat	0.3	1.0	0.8	0.3	0.9	0.8
Wood planks/palm/bamboo	0.1	0.0	0.0	0.1	0.0	0.0
Tin	68.7	90.9	84.6	67.9	90.5	84.3
Wood	0.1	0.1	0.1	0.1	0.1	0.1
Ceramic tiles	0.1	0.0	0.0	0.1	0.0	0.0
Cement	30.5	6.8	13.5	31.3	7.3	14.0
Roofing shingles	0.2	0.9	0.7	0.2	0.8	0.6
Other	0.0	0.3	0.2	0.0	0.3	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Wall materials						
Cane/palm/trunks	0.2	1.3	1.0	0.2	1.2	0.9
Dirt	2.8	11.4	9.0	2.7	10.7	8.5
Bamboo with mud/stone with mud	2.5	4.4	3.9	3.0	4.5	4.1
Tin	30.9	55.5	48.6	30.7	55.4	48.6
Cement, cement blocks	58.9	18.7	30.1	58.8	19.5	30.4
Stone with lime/cement	0.0	0.0	0.0	0.0	0.0	0.0
Bricks	4.2	7.5	6.6	4.2	7.5	6.6
Wood planks/shingles/reused wood	0.3	0.9	0.8	0.3	1.0	0.8
Other	0.1	0.2	0.2	0.1	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Rooms used for sleeping						
One	39.4	27.9	31.1	31.9	22.0	24.7
Two	34.6	38.9	37.7	35.6	38.1	37.4
Three or more	26.1	33.2	31.2	32.5	40.0	37.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households/population	5,505	13,952	19,457	23,045	60,326	83,371

Table 2.6 Household possessions

Percentage of households possessing various household effects, means of transportation, agricultural land, and livestock/farm animals, by residence, Bangladesh DHS 2017-18

	Res	idence	
Possession	Urban	Rural	Total
Household effects			
Radio	0.9	1.1	1.0
Television	69.9	38.4	47.3
Mobile telephone	96.6	93.6	94.4
Non-mobile telephone	1.2	0.2	0.5
Refrigerator	48.2	21.5	29.1
Almirah/wardrobe	55.5	30.2	37.3
Electric fan	91.9	75.6	80.2
DVD/VCD player	4.8	1.8	2.6
Water pump	15.7	10.5	12.0
IPS/generator	4.8	0.9	2.0
Air conditioner	1.9	0.1	0.6
Computer	12.3	3.0	5.7
Means of transport			
Car/truck/microbus	1.8	0.5	0.8
Autobike/tempo/CNG vehicle	1.5	2.2	2.0
Rickshaw/van	5.6	5.7	5.7
Bicycle	17.9	31.5	27.6
Motorcycle/scooter	8.5	7.2	7.6
Boat with a motor	0.1	0.6	0.4
Canoe or boat without a motor	0.3	1.3	1.0
Ownership of agricultural land			
Homestead	91.5	96.7	95.2
Other land	38.8	49.8	46.7
Neither	8.0	3.0	4.4
Ownership of farm animals			
Buffaloes	0.1	0.4	0.3
Cows	10.7	39.4	31.3
Goats/sheep	6.7	23.5	18.8
Chickens/ducks	26.1	68.4	56.4
Other farm animals	4.7	8.3	7.3
Number	5,505	13,952	19,457

DVD = Digital versatile disc VCD = Video compact disc IPS = Integrated power service

CNG = Compressed natural gas

Table 2.7 Ownership of mobile phones

Percentage of de-facto household members age 13 or more who have a mobile phone by age and sex, according to residence, Bangladesh DHS 2017-18

			Rural		_				
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
13-14	17.2	3.1	9.4	13.7	2.5	7.7	14.6	2.6	8.1
15-19	65.1	38.9	50.8	63.8	31.9	46.1	64.1	33.8	47.4
20-29	92.8	75.3	82.5	92.6	62.7	74.6	92.6	66.6	77.1
30-39	96.0	74.5	84.7	93.0	59.6	74.1	93.9	63.9	77.3
40-49	91.0	61.0	76.2	81.7	44.7	61.6	84.6	49.1	65.9
50+	72.8	39.3	57.6	54.0	23.6	39.8	58.6	27.3	44.1
Total	80.9	57.4	68.6	70.8	42.7	55.6	73.7	46.8	59.3
Number of persons	8,146	9,040	17,186	19,983	23,558	43,542	28,129	32,598	60,727

Table 2.8 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles, and the Gini coefficient, according to residence and division, Bangladesh DHS 2017-18

			Wealth quintile				Number of	
Residence/division	Lowest	Second	Middle	Fourth	Highest	Total	persons	Gini coefficien
Residence								
Urban	7.5	6.8	11.8	27.0	46.8	100.0	23,045	0.24
Rural	24.8	25.0	23.1	17.3	9.7	100.0	60,326	0.33
Division								
Barishal	34.0	24.4	20.3	13.6	7.8	100.0	4,712	0.30
Chattogram	15.4	17.0	23.1	19.8	24.7	100.0	15,322	0.32
Dhaka	9.3	12.9	16.4	26.8	34.7	100.0	20,598	0.33
Khulna	13.3	23.0	24.8	22.2	16.8	100.0	9,252	0.33
Mymensingh	30.6	25.8	19.8	14.5	9.3	100.0	6,780	0.32
Rajshahi	20.3	24.0	24.1	19.6	11.9	100.0	11,105	0.33
Rangpur	38.2	25.4	16.3	12.2	7.9	100.0	9,719	0.32
Sylhet	26.0	21.2	15.4	18.5	18.9	100.0	5,883	0.38
Total	20.0	20.0	20.0	20.0	20.0	100.0	83,371	0.31

Table 2.9 Handwashing

Percentage of the de jure population for whom the place most often used for washing hands was observed, by whether the location was fixed or mobile; total percentage of the de jure population for whom the place for handwashing was observed; among the de jure population for whom the place for handwashing was observed, percentage with water available, percentage with soap available, and percentage with a cleansing agent other than soap available; percentage of the de jure population with a basic handwashing facility; and percentage with a limited handwashing facility, according to background characteristics, Bangladesh DHS 2017-18

Background	whom plac	e of de jure pop e for washing h observed: Place for handwashin g was mobile		- Number of persons	Place for ha Water available	undwashing of Soap available ¹	oserved and: Cleansing agent other than soap available ²	Number of persons for whom place for handwashin g was observed	Percentage of the de jure population with a basic handwashin g facility ³	Percentage of the de jure population with a limited handwashin g facility ⁴	persons for whom a place for handwashin g was observed or with no place for handwashin g in the dwelling, yard, or plot
Residence	•			· ·					<u> </u>	<u> </u>	<u> </u>
Urban	97.1	1.8	98.9	23,045	98.6	58.3	5.2	22,781	57.6	41.3	23,026
Rural	92.5	3.8	96.3	60,326	97.7	32.9	12.9	58,108	31.6	64.8	60,234
Division											
Barishal	85.3	7.1	92.3	4,712	98.3	18.6	8.9	4,351	17.2	69.3	4,688
Chattogram	92.6	3.9	96.5	15,322	98.1	42.1	9.9	14,787	40.7	56.1	15,277
Dhaka	97.2	1.8	99.0	20,598	98.2	50.2	7.2	20,384	49.4	49.5	20,587
Khulna	96.3	2.1	98.4	9,252	98.0	34.6	9.4	9,105	33.9	64.7	9,240
Mymensingh	93.0	5.3	98.3	6,780	97.6	27.1	8.8	6,662	26.5	71.7	6,779
Rajshahi	94.8	2.6	97.4	11,105	97.6	41.4	16.0	10,819	40.2	57.1	11,104
Rangpur	96.9	2.5	99.4	9,719	98.2	40.8	19.4	9,661	40.6	58.9	9,717
Sylhet	82.0	5.0	87.0	5,883	96.9	34.9	5.9	5,120	30.4	56.9	5,868
Wealth quintile											
Lowest	85.9	7.0	92.9	16,674	95.7	11.3	12.0	15,495	10.5	82.6	16,659
Second	90.3	5.3	95.6	16,675	96.6	19.0	14.5	15,943	18.0	77.7	16,639
Middle	95.4	2.5	97.9	16,674	98.5	33.7	14.8	16,320	32.9	65.0	16,659
Fourth	97.7	1.2	98.9	16,674	99.0	48.4	9.1	16,494	47.9	51.2	16,645
Highest	99.6	0.1	99.8	16,674	99.8	85.1	3.4	16,637	84.8	15.0	16,658
Total	93.8	3.2	97.0	83,371	97.9	40.1	10.7	80,889	38.8	58.3	83,260

¹ Soap includes soap or detergent in bar, liquid, powder, or paste form.
² Cleansing agents other than soap include locally available materials such as ash, mud, or sand.

³ The availability of a handwashing facility on premises with soap and water

⁴ The availability of a handwashing facility on premises without soap and/or water

Number of

Table 2.10 Handwashing: Location

Among households in which the place for washing hands was observed, percent distribution by type of place for handwashing, by background characteristics, Bangladesh DHS 2017-18

Background characteristic	Covered space (inside dwelling)	Open space, not shared	Open space, shared	Total	Number of households in which a place for handwashing was observed
Residence					
Urban	52.2	14.7	33.1	100.0	5,437
Rural	25.2	31.7	43.2	100.0	13,466
Division					
Barishal	11.0	30.0	58.9	100.0	1,008
Chattogram	32.5	27.1	40.5	100.0	3,188
Dhaka	40.2	23.2	36.6	100.0	4,875
Khulna	20.7	34.2	45.1	100.0	2,218
Mymensingh	33.3	18.9	47.8	100.0	1,569
Rajshahi	34.4	29.2	36.4	100.0	2,709
Rangpur	39.0	30.5	30.5	100.0	2,361
Sylhet	29.0	20.8	50.2	100.0	974
Wealth guintile					
Lowest	15.6	26.2	58.2	100.0	3,789
Second	16.2	31.6	52.2	100.0	3,800
Middle	23.6	34.4	42.0	100.0	3,721
Fourth	34.4	28.9	36.7	100.0	3,837
Highest	75.0	12.8	12.2	100.0	3,755
Total	32.9	26.8	40.3	100.0	18,903

Table 2.11 Household population by age, sex, and residence

Percent distribution of the de facto household population by various age groups and percentage of the de facto household population age 10-19, according to sex and residence, Bangladesh DHS 2017-18

		Urban			Rural				
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	10.3	9.5	9.9	11.6	9.4	10.5	11.3	9.4	10.3
5-9	10.6	9.2	9.8	11.4	10.0	10.7	11.2	9.8	10.5
10-14	10.0	10.7	10.3	12.2	11.6	11.9	11.5	11.4	11.5
15-19	10.1	11.2	10.7	9.8	10.9	10.4	9.9	11.0	10.5
20-24	7.6	10.7	9.2	6.3	9.1	7.8	6.6	9.6	8.2
25-29	8.0	9.9	9.0	6.5	8.2	7.4	6.9	8.6	7.8
30-34	7.5	8.6	8.1	5.6	7.7	6.7	6.1	8.0	7.1
35-39	7.6	6.9	7.3	6.7	6.6	6.6	6.9	6.7	6.8
40-44	5.8	5.3	5.6	5.0	5.3	5.1	5.2	5.3	5.3
45-49	5.9	5.2	5.5	5.0	5.4	5.2	5.3	5.4	5.3
50-54	4.2	2.6	3.4	4.2	2.9	3.6	4.2	2.8	3.5
55-59	3.2	3.3	3.3	3.4	3.6	3.5	3.3	3.5	3.4
60-64	3.3	2.6	2.9	3.8	3.5	3.6	3.7	3.2	3.4
65-69	2.2	1.4	1.8	2.7	1.8	2.3	2.6	1.7	2.1
70-74	1.9	1.1	1.5	2.9	1.6	2.2	2.6	1.5	2.0
75-79	0.7	0.6	0.6	1.0	0.5	0.7	0.9	0.5	0.7
80+	1.1	1.1	1.1	1.8	1.7	1.8	1.6	1.6	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Dependency age group									
0-14	30.9	29.3	30.1	35.2	31.1	33.1	34.0	30.6	32.2
15-64	63.3	66.5	65.0	56.3	63.3	60.0	58.3	64.1	61.4
65+	5.8	4.2	5.0	8.4	5.6	7.0	7.7	5.2	6.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Child and adult populations									
0-17	37.3	35.5	36.4	41.6	37.3	39.4	40.4	36.8	38.5
18+	62.7	64.5	63.6	58.4	62.7	60.6	59.6	63.2	61.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Adolescents 10-19	20.1	21.9	21.1	22.0	22.6	22.3	21.4	22.4	21.9
Number of persons	11,181	12,062	23,243	28,838	32,002	60,841	40,020	44,064	84,084

Table 2.12 Household composition

Percent distribution of households by sex of head of household and by household size, and mean size of household, according to residence, Bangladesh DHS 2017-18

	Resi	_		
Characteristic	Urban	Rural	Total	
Household headship				
Male	86.7	83.1	84.2	
Female	13.3	16.9	15.8	
Total	100.0	100.0	100.0	
Number of usual members				
1	1.7	2.5	2.3	
2	13.0	10.8	11.4	
3	22.4	20.2	20.9	
4	27.2	27.0	27.0	
5	18.1	18.9	18.7	
6	9.2	10.4	10.1	
7	3.8	5.0	4.6	
8	2.3	2.4	2.3	
9+	2.3	2.8	2.7	
Total	100.0	100.0	100.0	
Mean size of households	4.2	4.3	4.3	
Number of households	5,505	13,952	19,457	

Note: Table is based on de jure household members, i.e., usual residents.

Table 2.13 Birth registration of children under age 5

Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Bangladesh DHS 2017-18

	Percentage of ch	ildren whose births are re	gistered and who:	
			otal percentage of children whose	
Background characteristic	Had a birth certificate	Did not have a birth certificate	births are registered	Number of children
Age				
<2	12.3	3.9	16.2	3,346
2-4	24.7	6.6	31.2	5,001
Sex				
Male	19.8	5.6	25.4	4,322
Female	19.6	5.4	25.0	4,025
Residence				
Urban	21.0	5.0	26.1	2,235
Rural	19.2	5.7	24.9	6,112
Division				
Barishal	16.9	8.2	25.1	465
Chattogram	23.2	6.8	30.0	1,702
Dhaka	22.0	5.9	27.9	2,087
Khulna	17.6	3.4	21.0	788
Mymensingh	17.3	2.8	20.1	718
Rajshahi	11.9	4.9	16.7	1,002
Rangpur	16.4	4.7	21.1	920
Sylhet	27.1	6.5	33.5	666
Wealth quintile				
Lowest	15.9	5.3	21.2	1,808
Second	18.8	4.7	23.5	1,670
Middle	20.7	5.5	26.2	1,581
Fourth	19.2	5.8	25.1	1,654
Highest	24.3	6.2	30.5	1,634
Total	19.7	5.5	25.2	8,347

Table 2.14.1 Educational attainment of the female household population

Percent distribution of the de facto female household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic	No education	Primary incomplete	Completed primary ¹	Secondary incomplete	Completed secondary ²	More than secondary	Total	Number	Median years completed
Age									
6-9	13.6	86.1	0.0	0.2	0.0	0.0	100.0	3,487	0.4
10-14	1.2	42.5	3.3	52.9	0.0	0.0	100.0	5,010	4.3
15-19	1.8	8.9	6.2	58.4	4.1	20.5	100.0	4,858	7.7
20-24	3.7	13.1	9.1	39.8	5.3	29.0	100.0	4,222	7.5
25-29	6.7	16.5	11.3	44.7	4.2	16.6	100.0	3,800	6.5
30-34	13.3	22.8	10.2	37.4	4.2	12.2	100.0	3,517	5.0
35-39	23.6	26.8	10.6	25.9	3.0	10.1	100.0	2,948	3.9
40-44	34.6	28.4	10.2	17.4	2.5	7.0	100.0	2,335	1.9
45-49	44.0	27.1	8.4	14.1	2.1	4.2	100.0	2,358	0.1
50-54	48.9	25.1	8.1	12.8	1.6	3.5	100.0	1,252	0.0
55-59	60.3	19.2	8.3	8.3	1.8	2.2	100.0	1,562	0.0
60-64	66.6	15.6	8.0	6.5	1.1	2.1	100.0	1,414	0.0
65+	77.3	12.0	6.4	3.5	0.3	0.3	100.0	2,313	0.0
Residence									
Urban	17.6	25.3	7.5	30.4	3.6	15.6	100.0	10,702	4.6
Rural	22.7	28.4	7.3	31.4	2.1	8.0	100.0	28,373	3.9
Division									
Barishal	15.5	30.3	10.9	30.1	3.0	10.3	100.0	2,224	4.3
Chattogram	19.3	25.7	7.6	34.0	3.6	9.8	100.0	7,389	4.4
Dhaka	20.0	26.4	7.5	31.4	3.1	11.5	100.0	9,594	4.3
Khulna	21.0	26.3	6.3	33.0	2.7	10.7	100.0	4,358	4.3
Mymensingh	24.5	29.7	8.2	26.9	1.6	9.0	100.0	3,075	3.5
Rajshahi	23.1	28.2	5.9	31.9	1.5	9.3	100.0	5,139	3.8
Rangpur	25.3	29.7	4.9	28.5	1.7	9.9	100.0	4,531	3.3
Sylhet	22.5	29.0	11.0	27.6	1.8	8.1	100.0	2,765	3.8
Wealth quintile									
Lowest	31.2	36.4	6.8	23.1	0.6	1.9	100.0	7,707	1.7
Second	25.8	30.8	7.9	29.5	1.2	4.8	100.0	7,711	3.1
Middle	19.7	27.2	7.5	35.6	2.1	7.9	100.0	7,823	4.3
Fourth	17.8	24.9	8.1	34.0	3.5	11.7	100.0	7,790	4.6
Highest	12.3	18.8	6.6	33.3	5.3	23.7	100.0	8,043	6.6
Total	21.3	27.5	7.4	31.1	2.5	10.1	100.0	39,075	4.1

¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 2.14.2 Educational attainment of the male household population

Percent distribution of the de facto male household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic	No education	Primary incomplete	Completed primary ¹	Secondary incomplete	Completed secondary ²	More than secondary	Don't know/ missing	Total	Number	Median years completed
Age										
6-9	19.2	80.7	0.0	0.1	0.0	0.0	0.0	100.0	3,627	0.1
10-14	2.8	52.4	3.3	41.4	0.0	0.0	0.0	100.0	4,621	3.7
15-19	3.0	15.0	7.4	51.1	2.2	21.3	0.0	100.0	3,961	7.5
20-24	6.1	16.2	11.2	25.8	3.4	37.4	0.0	100.0	2,659	7.7
25-29	8.1	20.4	15.1	29.1	3.7	23.6	0.1	100.0	2,776	6.0
30-34	13.0	19.5	12.1	29.4	5.4	20.5	0.1	100.0	2,459	6.0
35-39	16.8	20.7	13.3	25.8	5.2	17.9	0.2	100.0	2,773	4.8
40-44	26.4	20.0	12.4	19.8	3.8	17.7	0.0	100.0	2,087	4.3
45-49	30.4	20.4	10.3	19.0	4.3	15.5	0.0	100.0	2,114	3.9
50-54	35.3	21.1	8.6	18.3	4.1	12.5	0.1	100.0	1,696	2.3
55-59	36.9	20.4	7.6	17.9	5.7	11.5	0.0	100.0	1,338	2.6
60-64	40.4	21.0	8.0	15.6	5.3	9.7	0.0	100.0	1,465	1.5
65+	44.2	18.4	9.4	13.5	4.6	9.6	0.3	100.0	3,079	0.8
Residence										
Urban	14.4	25.9	9.1	25.1	4.4	21.1	0.1	100.0	9,788	4.8
Rural	19.9	31.4	8.3	25.8	2.7	11.8	0.0	100.0	24,867	3.8
Division										
Barishal	15.9	31.8	9.9	25.1	3.0	14.3	0.0	100.0	1,920	4.2
Chattogram	15.7	30.8	8.7	28.7	3.4	12.6	0.1	100.0	6,140	4.3
Dhaka	17.4	27.4	9.3	25.3	4.0	16.7	0.1	100.0	8,626	4.4
Khulna	17.9	27.9	7.0	27.7	3.0	16.4	0.0	100.0	3,926	4.4
Mymensingh	22.2	31.1	8.2	23.7	2.7	12.0	0.1	100.0	2,838	3.5
Rajshahi	21.3	30.4	7.0	24.7	2.1	14.3	0.0	100.0	4,753	3.7
Rangpur	19.8	30.8	8.4	22.9	3.2	14.8	0.0	100.0	4,093	3.9
Sylhet	18.4	34.1	10.4	24.8	2.3	9.9	0.1	100.0	2,358	3.7
Wealth quintile										
Lowest	29.6	39.4	9.2	17.6	0.9	3.2	0.0	100.0	6,731	1.6
Second	22.7	35.3	8.9	24.9	1.5	6.7	0.1	100.0	7,009	3.1
Middle	17.7	30.0	9.1	28.9	2.5	11.8	0.0	100.0	6,953	4.2
Fourth	14.4	26.4	8.8	29.9	4.3	16.0	0.1	100.0	6,959	4.8
Highest	7.9	18.6	6.6	26.6	6.5	33.9	0.1	100.0	7,003	8.0
Total	18.4	29.9	8.5	25.6	3.2	14.4	0.1	100.0	34,655	4.2

¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 2.15 School attendance ratios

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household population by sex and level of schooling, and the gender parity index (GPI), according to background characteristics, Bangladesh DHS 2017-18

		Net attend	ance ratio ¹			Gross atten	dance ratio ²	
Background characteristic	Male	Female	Total	Gender parity index ³	Male	Female	Total	Gender parity index ³
			PRIMAR	SCHOOL				
Residence								
Urban	81.0	83.2	82.1	1.03	108.4	107.4	107.9	0.99
Rural	85.2	88.2	86.7	1.04	116.3	117.4	116.9	1.01
Division								
Barishal	86.7	87.0	86.9	1.00	110.3	114.6	112.4	1.04
Chattogram	84.2	85.4	84.8	1.01	115.7	114.8	115.2	0.99
Dhaka	81.4	84.4	82.9	1.04	111.4	112.3	111.8	1.01
Khulna	84.8	91.0	87.8	1.07	116.1	115.7	115.9	1.00
Mymensingh	84.7	86.0	85.3	1.02	115.1	113.8	114.5	0.99
Rajshahi	81.5	86.8	84.0	1.06	109.0	114.7	111.7	1.05
Rangpur	88.3	90.3	89.3	1.02	120.3	117.1	118.6	0.97
Sylhet	86.3	89.6	88.0	1.04	120.0	119.7	119.3	1.01
Wealth quintile								
Lowest	84.4	86.6	85.5	1.03	118.1	117.2	117.6	0.99
Second	84.9	89.0	86.9	1.05	115.0	119.8	117.3	1.04
Middle			85.7	1.05	119.7			
	83.2	88.0				118.4	119.0	0.99
Fourth	81.8	84.5	83.1	1.03	108.1	108.8	108.4	1.01
Highest	86.2	86.5	86.3	1.00	109.5	108.3	108.9	0.99
Total	84.1	87.0	85.5	1.03	114.3	114.8	114.6	1.00
			SECONDA	RY SCHOOL				
Residence								
Urban	48.3	53.4	51.0	1.10	53.7	60.2	57.2	1.12
Rural	52.3	58.7	55.7	1.12	57.5	63.7	60.7	1.11
Division								
Barishal	56.3	61.4	59.0	1.09	62.0	68.2	65.3	1.10
Chattogram	49.2	57.4	53.6	1.17	55.8	62.7	59.6	1.12
Dhaka	48.6	54.9	51.9	1.13	53.5	61.3	57.6	1.14
Khulna	52.7	61.8	57.5	1.17	58.7	66.2	62.6	1.13
Mymensingh	53.7	59.3	56.4	1.10	58.9	65.3	62.0	1.11
Rajshahi	54.0	59.1	56.6	1.09	58.9	63.7	61.4	1.08
Rangpur	54.3	56.4	55.4	1.04	57.8	61.7	59.8	1.07
Sylhet	47.6	53.5	50.8	1.12	52.5	57.4	55.2	1.09
Wealth quintile								
Lowest	41.6	50.0	45.9	1.20	44.8	56.8	50.9	1.27
Second	49.6	57.2	53.5	1.15	55.0	61.0	58.0	1.11
Middle	53.3	61.5	57.7	1.16	59.4	66.4	63.2	1.12
Fourth	54.4	55.8	55.1	1.03	60.8	61.9	61.4	1.02
Highest	59.4	62.1	60.8	1.05	64.7	67.8	66.4	1.05
Total	51.3	57.4	54.5	1.12	56.5	62.8	59.8	1.11

¹ The NAR for primary school is the percentage of the primary school-age (6-10 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary school-age (11-17 years) population that is attending secondary school. By

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

parity index for secondary school is the ratio of the secondary school NAR (GAR) for females to the NAR (GAR) for males.

Table 2.16 Ownership of NID card

Percentage of de facto household members age 18 and over who have an NID card, by age, sex, and residence, Bangladesh DHS 2017-18

Age			Rural		_				
	Male	Female	Total	Male	Female	Total	Male	Female	Total
18-19	8.6	10.5	9.7	10.6	10.2	10.3	10.0	10.2	10.1
20-29	66.0	65.2	65.5	66.2	65.3	65.7	66.1	65.3	65.6
30-39	95.4	96.5	96.0	96.0	98.5	97.4	95.8	97.9	97.0
40-49	97.5	98.7	98.1	98.1	99.4	98.8	97.9	99.2	98.6
50+	98.5	97.6	98.1	98.6	98.2	98.4	98.6	98.1	98.4
Total	84.2	80.3	82.1	85.8	82.7	84.1	85.3	82.0	83.5
Number of persons	7,006	7,783	14,790	16,829	20,069	36,898	23,835	27,852	51,688

Key Findings

- Marital status: 94% of ever-married women age 15-49 are currently married.
- Education: The percentage of ever-married women with no education has decreased since 2007, from 34% to 17%.
- *Literacy:* About 7 in 10 ever-married women are literate.
- Exposure to mass media: Television is the most accessed form of media, which increased from 47% in 2007 to 55%. Listening to the radio has decreased markedly since 2007, from 19% to 2%. Forty-four percent of ever-married women have no regular exposure to any mass media.
- Employment: Almost half of ever-married women are currently employed, an increase from 13% in 2011 to 33% in 2014 and 48% in 2017-18.
- Occupation: The majority of ever-married women who are employed are involved in poultry farming or cattle rising (61%).

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

3.1 BASIC CHARACTERISTICS OF SURVEY RESPONDENTS

The 2017-18 BDHS interviewed 20,127 ever-married women age 15-49 (**Table 3.1**). Almost two-thirds of the respondents (63%) are under age 35, and most are currently married (94%). About 7 in 10 respondents (72%) reside in rural areas. There are variations in the distribution of respondents across geographic divisions; Dhaka has the highest proportion of respondents (26%), while Barishal and Sylhet have the lowest (6% each).

Seventeen percent of women have no education, and the same percentage have a secondary education or higher. Most respondents (91%) are Muslim, and 9% are Hindu.

3.2 EDUCATION AND LITERACY

Literacy

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

Sample: Women age 15-49

As noted, 17% of ever-married women have a secondary education or higher (**Table 3.2**). Overall, ever-married women age 15-49 have completed a median of 4.9 years of schooling; young women age 15-24 have completed a median of 6.9 years. More than 7 in 10 women age 15-49 are literate (73%) (**Table 3.3**).

Trends: There have been improvements in educational attainment in Bangladesh over the last 10 years. Since 2007, the percentage of ever-married women with no education has declined from 34% to 17% (**Figure 3.1**), while the overall literacy rate

among women has increased from 55% to 73%.

Patterns by background characteristics

- Young women are more likely to have completed higher levels of education. Twentysix percent of women age 15-24 have completed secondary education or higher, as compared with only 6% of women age 45-49 (Table 3.2).
- Urban women are more likely to completed secondary education or higher than rural women (25% versus 14%).
- The percentage of ever-married women who have no education is highest in Rangpur (22%) and lowest in Barishal (9%). Dhaka, Barishal, and Chattogram have the highest proportions of women with completed secondary education or higher (19% each), while Sylhet has the lowest (10%) (Table 3.2 and Figure 3.2).

Figure 3.1 Trends in education among ever-married women, 2007-2018

Percent distribution of ever-married women age 15-49 by highest level of schooling attended or completed

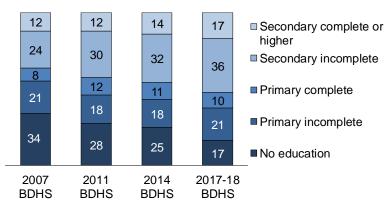
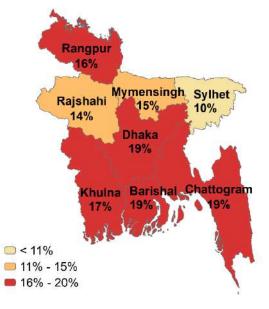


Figure 3.2 Secondary education by division

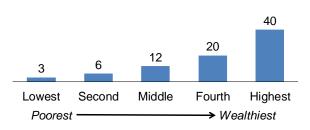
Percentage of ever-married women age 15-49 with secondary education complete or higher



- The proportion of women with completed secondary education or higher is highest among those in the highest wealth quintile and lowest among those in the lowest quintile (40% and 3%, respectively) (Figure 3.3).
- Literacy decreases with increasing age, from 93% among women age 15-19 to 40% among women age 45-49 (Table 3.3).
- Literacy also varies by residence and division. Urban women are more likely to be literate than rural women (77% versus 72%). By division, the proportion of women who are literate is highest in Chattogram (79%) and lowest in Rangpur (66%).

Figure 3.3 Secondary education by household wealth

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



• The literacy rate increases with increasing wealth, from 54% among women in the lowest wealth quintile to 89% among those in the highest quintile.

3.3 MASS MEDIA EXPOSURE

Exposure to mass media

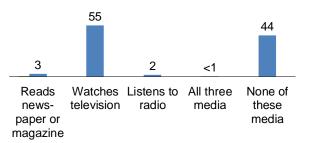
Respondents were asked how often they read a newspaper, listened to the radio, or watched television. Those who responded *at least once a week* are considered regularly exposed to that form of media. *Sample:* Women age 15-49

Ever-married women age 15-49 were asked about their exposure to three types of mass media: television, radio, and newspapers or magazines. More than half (55%) of women reported watching television at least once a week. About two in five women (44%) are not regularly exposed to any of these forms of media (**Table 3.4** and **Figure 3.4**).

Trends: The percentage of women who report listening to the radio at least once a week has decreased markedly since 2007, from 19% to 2%. The percentage who report reading a newspaper or magazine has also decreased, from 7% to 3%. Conversely, the proportion of women who report watching television has increased from 47% to 55%.

Figure 3.4 Exposure to mass media

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



Patterns by background characteristics

- Rural women are more likely than urban women to have no access to any of the media sources on a weekly basis (52% versus 25%).
- The proportion of women with no access to any of the three media is highest in Barishal (66%) and lowest in Dhaka (31%).
- Exposure to mass media increases sharply with increasing educational attainment and wealth. For example, 76% of women with women who have completed secondary education or higher and 87% of

women in the highest wealth quintile report watching television at least once a week, as compared with 37% of women with no education and 14% of women in the lowest wealth quintile.

3.4 EMPLOYMENT

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

Forty-eight percent of ever-married women age 15-49 are currently employed (Table 3.5).

Trends: The proportion of women age 15-49 who are currently employed has increased over time, from 13% in 2011 to 33% in 2014 and 48% in 2017-18.

Patterns by background characteristics

- Older women are generally more likely to be employed than younger women. Twenty-four percent of women age 15-19 are currently employed, as compared with 58% of women age 40-44.
- Divorced, separated, or widowed women are more likely to be employed than currently married women (60% versus 47%).
- The percentage of women who are employed increases as the number of living children increases. Twenty-nine percent of women without any living children are currently employed, compared with 59% of women with five or more living children.
- Rural women are more likely to be employed than urban women (51% versus 40%).
- The proportion of currently employed women is highest in Rangpur (69%) and lowest in Sylhet (33%).
- The percentage of women who are employed decreases with increasing educational attainment (from 61% to 34%) and household wealth (from 62% to 30%) (Figure 3.5).

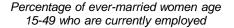
3.5 OCCUPATION

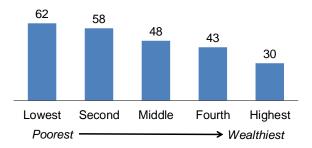
Occupation

Categorized as professional/technical, business, factory work or blue-collar service, semi-skilled labor/service, unskilled labor, farming/agricultural work, poultry or cattle raising, home-based manufacturing, domestic service, and other.

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

Figure 3.5 Employment status by wealth





Sixty-one percent of ever-married women age 15-49 who were employed in the 12 months preceding the survey were involved in poultry farming or cattle raising, while only 4% were engaged in professional or technical work (**Table 3.6** and **Figure 3.6**).

Trends: The proportion of women engaged in agricultural work (farming and poultry/cattle raising) increased from 46% in 2014 to 65% in 2017-18. The microcredit system for rural Bangladeshi women encourages women's contribution in the agricultural sector (Debnath et al. 2019).

Patterns by background characteristics

Currently married women are more likely than divorced, separated, or widowed women to be engaged in poultry or cattle raising (64% versus 30%). Conversely, divorced, separated, or widowed women are more likely to be engaged in factory work/blue-collar service (16% versus 8%) and domestic service (13% versus 3%).

Figure 3.6 Occupation

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



- Rural women are more likely than urban women to be engaged in farming or agricultural work (5% versus 1%) and poultry or cattle raising (72% versus 27%). In contrast, women in urban areas are more likely to be engaged in factory work or bluecollar service (23% versus 4%), semi-skilled labor/service (19% versus 8%), and domestic service (10% versus 2%).
- The percentages of women engaged in professional or technical work (29%), business (7%), and semiskilled labor/service (21%) are highest among those having completed secondary education or higher.
 Women with no education are mostly engaged in poultry/cattle raising (62%).

Among women who are employed, 76% earn cash only and 7% receive cash and in-kind remuneration. Sixteen percent of women are not paid for their work. The proportion of women in the agricultural sector who work without being paid (22%) is more than five times higher than the proportion among women in the nonagricultural sector (4%). Overall, one in five (20%) ever-married women are self-employed. Women in the agricultural sector are more likely than those in the nonagricultural sector to be employed by family members (79% versus 19%). Eighty-nine percent of employed women work year-round (**Table 3.7**).

LIST OF TABLES

For more information on the characteristics of survey respondents, see the following tables:

- Table 3.1 Background characteristics of respondents
- Table 3.2 Educational attainment
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Table 3.1 Background characteristics of respondents

Percent distribution of ever-married women age 15-49 by selected background characteristics, Bangladesh DHS 2017-18

_	Women						
Background	Weighted	Weighted	Unweighted				
characteristic	percent	number	number				
Age							
15-19	10.2	2,063	1,951				
20-24	17.7	3,556	3,514				
25-29	17.8	3,579	3,572				
30-34	17.2	3,470	3,462				
35-39	14.3	2,879	2,953				
40-44	11.4	2,296	2,329				
45-49	11.4	2,285	2,346				
Marital status							
Currently married	94.3	18,984	18,895				
Divorced/separated	2.6	528	569				
Widowed	3.1	614	663				
	0	0	000				
Residence Urban	28.5	5,729	7,374				
Rural	71.5	14,398	12,753				
	71.5	14,390	12,755				
Division							
Barishal	5.6	1,125	2,154				
Chattogram	18.0	3,622	2,905				
Dhaka	25.5	5,123	2,974				
Khulna	11.6	2,336	2,630				
Mymensingh	7.7	1,546	2,167				
Rajshahi	13.9	2,802	2,576				
Rangpur	11.8	2,380	2,492				
Sylhet	5.9	1,192	2,229				
Education							
No education	16.6	3,333	3,202				
Primary incomplete	21.1	4,250	4,224				
Primary complete ¹	10.1	2,040	2,116				
Secondary incomplete	35.5	7,135	6,914				
Secondary complete or higher ²	16.7	3,369	3,671				
Religion							
Islam	90.7	18,250	18,136				
Hinduism	8.6	1,727	1,861				
Buddhism	0.5	107	84				
Christianity	0.2	43	46				
Wealth quintile							
Lowest	18.6	3,743	3,826				
Second	19.7	3,957	3,833				
Middle	20.2	4,059	3,883				
Fourth	20.8	4,184	4,088				
Highest	20.8	4,184	4,497				
Total	100.0	20,127	20,127				

Note: Education categories refer to the highest level of education attended, whether or not that level was completed. ¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 3.2 Educational attainment

Percent distribution of ever-married women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Bangladesh DHS 2017-18

			Highest leve	l of schooling				Median	
Background characteristic	No education	Primary incomplete	Primary complete ¹	Secondary incomplete	Secondary complete ²	More than secondary	Total	years completed	Number of women
Age									
15-24	3.1	13.8	9.4	48.2	6.4	19.1	100.0	6.9	5,619
15-19	2.2	12.6	9.6	55.0	7.1	13.5	100.0	6.8	2,063
20-24	3.7	14.6	9.3	44.2	5.9	22.3	100.0	7.0	3,556
25-29	6.3	17.0	11.8	46.1	4.1	14.6	100.0	6.4	3,579
30-34	13.3	23.1	10.4	37.4	4.2	11.6	100.0	5.0	3,470
35-39	23.5	27.1	10.4	26.1	3.2	9.7	100.0	3.9	2,879
40-44	34.5	28.4	10.1	17.7	2.4	6.8	100.0	1.8	2,296
45-49	43.7	27.5	8.6	14.1	1.8	4.2	100.0	0.1	2,285
Residence									
Urban	14.1	18.3	9.3	33.6	5.5	19.2	100.0	6.1	5,729
Rural	17.5	22.2	10.5	36.2	3.7	9.9	100.0	4.7	14,398
Division									
Barishal	9.4	23.6	15.3	33.0	5.0	13.6	100.0	4.9	1,125
Chattogram	13.2	17.2	10.7	40.0	6.0	12.8	100.0	6.1	3,622
Dhaka	16.3	19.9	10.1	34.8	4.8	14.2	100.0	5.2	5,123
Khulna	13.6	21.3	8.4	39.3	4.6	12.7	100.0	5.5	2,336
Mymensingh	20.6	23.5	11.5	29.9	2.8	11.7	100.0	4.4	1,546
Rajshahi	18.7	23.2	7.7	36.7	2.6	11.1	100.0	4.6	2,802
Rangpur	21.7	23.1	7.0	32.5	2.7	12.9	100.0	4.5	2,380
Sylhet	20.1	23.4	17.3	29.2	2.6	7.4	100.0	4.3	1,192
Wealth quintile									
Lowest	29.2	30.9	11.2	25.4	1.1	2.2	100.0	2.8	3,743
Second	21.5	26.7	12.1	33.5	1.9	4.3	100.0	4.1	3,957
Middle	14.8	21.7	10.6	41.1	3.5	8.4	100.0	5.0	4,059
Fourth	12.3	17.7	10.2	39.5	5.5	14.8	100.0	6.2	4,184
Highest	6.6	9.9	6.8	36.8	8.4	31.5	100.0	8.3	4,184
Total	16.6	21.1	10.1	35.5	4.2	12.6	100.0	4.9	20,127

¹ Primary complete is defined as completing grade 5.
 ² Secondary complete is defined as completing grade 10.

Table 3.3 Literacy

Percent distribution of ever-married women age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Bangladesh DHS 2017-18

		_	No schoo	ling or prima	ry school				
Background characteristic	Secondary school or higher	Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Blind/ visually impaired	Total	Percent- age literate ¹	Number of women
Age									
15-24	73.6	9.1	8.8	8.4	0.0	0.0	100.0	91.6	5,619
15-19	75.6	9.5	8.1	6.8	0.0	0.0	100.0	93.2	2,063
20-24	72.5	9.0	9.2	9.3	0.0	0.0	100.0	90.6	3,556
25-29	64.9	10.4	11.2	13.5	0.0	0.0	100.0	86.5	3,579
30-34	53.2	9.7	13.2	23.9	0.0	0.0	100.0	76.1	3,470
35-39	39.0	9.0	14.3	37.7	0.0	0.1	100.0	62.3	2,879
40-44	26.9	8.8	14.9	49.2	0.1	0.2	100.0	50.5	2,296
45-49	20.1	7.6	12.6	59.7	0.0	0.0	100.0	40.3	2,285
Residence									
Urban	58.3	8.7	10.4	22.6	0.0	0.0	100.0	77.4	5,729
Rural	49.8	9.4	12.5	28.3	0.0	0.0	100.0	71.7	14,398
Division									
Barishal	51.6	11.9	14.8	21.6	0.1	0.0	100.0	78.3	1,125
Chattogram	58.9	7.7	12.4	21.0	0.0	0.0	100.0	79.0	3,622
Dhaka	53.7	9.7	11.4	25.2	0.0	0.0	100.0	74.8	5,123
Khulna	56.7	7.7	12.0	23.6	0.0	0.1	100.0	76.3	2,336
Mymensingh	44.4	12.7	11.5	31.3	0.0	0.1	100.0	68.6	1,546
Rajshahi	50.4	7.8	11.2	30.6	0.0	0.0	100.0	69.4	2,802
Rangpur	48.2	7.2	11.0	33.4	0.1	0.1	100.0	66.4	2,380
Sylhet	39.2	15.0	13.6	32.2	0.0	0.0	100.0	67.8	1,192
Wealth quintile									
Lowest	28.7	10.0	15.2	45.9	0.0	0.1	100.0	54.0	3,743
Second	39.7	10.8	15.2	34.2	0.0	0.0	100.0	65.8	3,957
Middle	53.0	9.8	12.8	24.4	0.1	0.0	100.0	75.6	4,059
Fourth	59.8	9.5	10.7	20.1	0.0	0.0	100.0	79.9	4,184
Highest	76.7	6.1	6.1	11.0	0.0	0.0	100.0	89.0	4,184
Total	52.2	9.2	11.9	26.6	0.0	0.0	100.0	73.3	20,127

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

Table 3.4 Exposure to mass media

Percentage of ever-married women age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic	Reads a newspaper or magazine at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	1.6	54.8	3.9	0.4	44.3	2,063
20-24	3.1	60.3	3.3	0.5	38.6	3,556
25-29	3.7	58.5	2.7	0.5	40.5	3,579
30-34	3.4	55.9	1.2	0.3	43.3	3,470
35-39	3.6	51.9	1.2	0.4	47.7	2,879
40-44	3.5	49.3	0.9	0.1	50.1	2,296
45-49	3.0	49.4	1.1	0.4	50.2	2,285
Residence						
Urban	7.5	74.2	3.0	0.9	24.9	5,729
Rural	1.5	47.3	1.7	0.2	52.0	14,398
Division						
Barishal	2.5	32.6	1.7	0.1	66.3	1,125
Chattogram	2.8	54.1	1.7	0.4	45.2	3,622
Dhaka	5.2	68.5	2.6	0.8	30.7	5,123
Khulna	3.1	58.8	2.6	0.3	40.0	2,336
Mymensingh	1.9	44.5	0.9	0.1	55.1	1,546
Rajshahi	2.5	61.5	2.2	0.2	37.9	2,802
Rangpur	2.2	42.0	2.0	0.2	57.0	2,380
Sylhet	2.8	36.8	1.1	0.2	62.6	1,192
Education						
No education	0.0	36.9	0.3	0.0	63.0	3,333
Primary incomplete	0.0	46.8	1.3	0.0	52.9	4,250
Primary complete ¹	0.4	48.2	1.2	0.1	51.4	2,040
Secondary incomplete	1.6	60.5	2.0	0.1	38.7	7,135
Secondary complete or higher ²	15.5	75.5	5.4	1.9	22.2	3,369
Vealth quintile						
Lowest	0.1	14.0	0.7	0.0	85.4	3,743
Second	0.5	37.0	1.0	0.0	62.5	3,957
Middle	1.0	60.4	1.9	0.1	38.9	4,059
Fourth	2.6	71.8	2.6	0.3	27.0	4,184
Highest	11.3	86.5	3.8	1.4	12.6	4,184
Fotal	3.2	55.0	2.1	0.4	44.3	20,127

¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 3.5 Employment status

Percent distribution of ever-married women age 15-49 by employment status, according to background characteristics, Bangladesh DHS 2017-18

		the 12 months	Not employed		
	preceding	the survey	in the 12 months		
Background	Currently	Not currently	preceding the		Number of
characteristic	employed ¹	employed	survey	Total	women
Age					
15-19	24.1	2.5	73.4	100.0	2,063
20-24	37.9	2.8	59.3	100.0	3,556
25-29	47.3	2.8	49.9	100.0	3,579
30-34	53.9	2.5	43.6	100.0	3,470
35-39	55.7	2.6	41.7	100.0	2,879
40-44	58.0	1.7	40.3	100.0	2,296
45-49	55.2	2.0	42.8	100.0	2,285
Marital status					
Married	47.0	2.4	50.6	100.0	18,984
Divorced/separated/widowed	59.9	3.4	36.6	100.0	1,143
Number of living children					
0	29.4	3.6	67.0	100.0	2,138
1-2	46.2	2.5	51.4	100.0	10,779
3-4	54.8	2.1	43.0	100.0	5,916
5+	58.5	1.9	39.6	100.0	1,294
Residence					
Urban	39.5	2.7	57.8	100.0	5,729
Rural	51.0	2.4	46.7	100.0	14,398
Division					
Barishal	46.7	3.1	50.2	100.0	1,125
Chattogram	34.2	1.6	64.2	100.0	3,622
Dhaka	35.9	2.3	61.8	100.0	5,123
Khulna	61.9	2.3	35.7	100.0	2,336
Mymensingh	56.4	3.2	40.4	100.0	1,546
Rajshahi	58.7	3.6	37.7	100.0	2,802
Rangpur	69.2	2.4	28.4	100.0	2,380
Sylhet	32.9	1.8	65.3	100.0	1,192
Education			00 F	100.0	0.000
No education	61.1	2.4	36.5	100.0	3,333
Primary incomplete	56.9	2.7	40.4	100.0	4,250
Primary complete ²	48.3	2.0	49.7	100.0	2,040
Secondary incomplete Secondary complete or higher ³	42.4 33.9	2.4 2.6	55.2 63.5	100.0 100.0	7,135 3,369
, , , ,	00.0	2.0	00.0	100.0	0,000
Wealth quintile Lowest	62.0	3.0	35.0	100.0	3,743
Second	58.0	2.5	39.5	100.0	3,957
Middle	48.0	2.2	49.8	100.0	4,059
Fourth	42.8	2.7	54.5	100.0	4,184
Highest	29.9	2.0	68.1	100.0	4,184
Total	47.7	2.5	49.8	100.0	20,127

¹ "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.
 ² Primary complete is defined as completing grade 5.
 ³ Secondary complete is defined as completing grade 10.

Table 3.6 Occupation

Percent distribution of ever-married women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic	Professi onal/ technical	Business	Factory work, blue- collar service	Semi- skilled labor/ service	Unskilled labor	Farming/ agricultu ral work	Poultry, cattle raising	Home- based manufac turing	Domes- tic service	Other	Missing	Total	Number of women
Age													
15-19	1.9	4.7	13.3	10.8	0.6	0.6	62.3	4.7	1.0	0.0	0.1	100.0	548
20-24	2.8	3.7	12.3	16.2	1.0	2.2	55.2	4.2	2.1	0.0	0.1	100.0	1,448
25-29	4.8	2.7	11.1	16.4	1.4	2.0	55.5	2.9	3.2	0.0	0.1	100.0	1,793
30-34	4.8	2.7	8.1	10.8	2.2	3.7	60.3	3.2	4.1	0.2	0.0	100.0	1,957
35-39	4.4	3.2	6.5	7.7	1.8	5.4	62.9	4.2	3.6	0.2	0.0	100.0	1,677
40-44	2.8	3.4	7.1	5.8	2.2	5.5	65.9	2.7	4.3	0.2	0.0	100.0	1,371
45-49	2.2	2.8	4.2	4.9	2.3	5.5	70.8	1.5	5.5	0.4	0.0	100.0	1,307
Marital status													
Married	3.7	3.0	8.1	10.3	1.4	3.4	63.8	3.3	2.9	0.1	0.0	100.0	9,376
Divorced/separated/	0.1	0.0	0.1	10.0	1.4	0.4	00.0	0.0	2.5	0.1	0.0	100.0	5,570
widowed	3.5	5.0	15.5	13.8	6.2	8.7	30.4	2.8	13.0	0.8	0.3	100.0	724
Number of living	0.0	5.0	10.0	10.0	0.2	0.7	50.4	2.0	15.0	0.0	0.5	100.0	124
children													
0	10.3	6.4	17.5	17.5	1.6	1.1	39.2	3.0	3.4	0.0	0.1	100.0	706
1-2	5.0	3.1	9.8	13.1	1.6	3.4	57.0	3.7	3.1	0.2	0.1	100.0	5,244
3-4	1.0	2.5	5.8	6.8	1.9	4.4	70.6	2.7	3.9	0.2	0.1	100.0	3,369
5+	0.3	3.2	4.2	4.2	2.5	6.1	71.1	2.8	5.6	0.0	0.0	100.0	782
Residence													
Urban	7.7	5.7	23.3	19.1	2.1	1.0	27.2	3.6	10.1	0.0	0.1	100.0	2,419
Rural	2.4	2.4	4.0	7.9	1.6	4.6	72.1	3.1	1.6	0.2	0.1	100.0	7,682
Division													
Barishal	3.7	3.4	2.7	9.3	0.9	2.7	72.1	3.4	1.7	0.2	0.0	100.0	560
Chattogram	4.2	3.6	7.8	11.8	2.0	5.9	56.5	4.5	3.4	0.3	0.1	100.0	1,296
Dhaka	5.9	4.7	22.1	16.4	2.7	3.6	31.8	3.5	9.1	0.2	0.1	100.0	1,959
Khulna	2.3	2.9	4.9	10.9	2.0	1.7	70.7	3.4	1.2	0.0	0.0	100.0	1,501
Mymensingh	3.2	2.9	5.2	6.3	1.4	2.1	72.1	4.0	2.8	0.0	0.1	100.0	921
Rajshahi	3.1	3.2	6.8	12.0	0.8	2.6	66.0	3.7	1.6	0.1	0.0	100.0	1,745
Rangpur	2.8	1.5	3.2	4.5	1.7	6.8	76.8	0.6	1.9	0.1	0.1	100.0	1,704
Sylhet	3.9	2.2	6.1	8.5	1.8	3.4	61.7	5.1	7.2	0.2	0.0	100.0	413
Education													
No education	0.1	3.0	8.0	3.2	4.1	7.9	61.9	2.8	8.7	0.4	0.0	100.0	2,115
Primary incomplete	0.0	2.6	10.7	6.4	2.0	3.6	65.8	3.9	4.8	0.1	0.1	100.0	2,534
Primary complete ¹ Secondary	0.1	1.6	10.5	9.2	1.6	2.8	67.1	3.2	3.6	0.2	0.0	100.0	1,026
incomplete Secondary complete	0.5	2.6	8.7	15.3	0.6	2.6	65.2	3.6	0.7	0.0	0.1	100.0	3,194
or higher ²	28.7	7.3	3.4	20.8	0.1	0.8	36.7	2.0	0.0	0.1	0.1	100.0	1,231
Wealth guintile													
Lowest	0.2	2.0	4.6	5.1	3.7	6.8	71.2	2.7	3.4	0.2	0.0	100.0	2,432
Second	0.6	1.7	3.5	6.8	1.3	5.1	75.1	3.6	2.2	0.0	0.2	100.0	2,395
Middle	2.4	3.2	6.3	10.8	0.8	2.7	67.5	3.9	2.2	0.2	0.0	100.0	2,036
Fourth	4.2	4.3	17.5	14.1	1.5	1.5	47.6	2.9	6.2	0.2	0.0	100.0	1,902
Highest	16.7	6.2	15.9	22.2	0.6	0.8	29.3	3.2	4.9	0.2	0.1	100.0	1,335
-													
Total	3.7	3.2	8.6	10.6	1.7	3.8	61.4	3.3	3.6	0.1	0.1	100.0	10,100

¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 3.7 Type of employment

Percent distribution of ever-married women age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Bangladesh DHS 2017-18

Employment characteristic	Agricultural work	Nonagricultural work	Total
	WOIN	WOIK	Total
Type of earnings			
Cash only	67.1	92.8	76.0
Cash and in-kind	10.1	2.2	7.4
In-kind only	0.8	0.7	0.7
Not paid	21.9	4.2	15.7
Missing	0.2	0.1	0.1
Total	100.0	100.0	100.0
Type of employer			
Employed by family member	79.2	19.3	58.4
Employed by non-family member	3.3	56.9	21.9
Self-employed	17.4	23.7	19.6
Missing	0.2	0.1	0.1
Total	100.0	100.0	100.0
Continuity of employment			
All year	93.0	81.2	88.8
Seasonal	2.1	4.1	2.8
Occasional	4.8	14.6	8.2
Missing	0.2	0.1	0.1
Total Number of women employed during the	100.0	100.0	100.0
last 12 months	6,580	3,512	10,100

Note: Total includes 9 women with missing information on type of employment who are not shown separately.

Key Findings

- Age at first marriage: The median age at first marriage among women age 20-49 has continued to rise slowly, increasing from 15.3 years in 2007 to 16.3 years in 2017-18. It is higher in the eastern divisions (18.1 years in Sylhet and 16.9 years in Chattogram) and lower in the western divisions (15.8 years in Khulna and 15.6 years each in Rajshahi and Rangpur). Fifty-nine percent of women age 20-24 marry before age 18 (legal age of marriage).
- Sexual activity: Overall, 75% of ever-married women were sexually active in the 4 weeks preceding the survey.
- Spousal separation: 17% of currently married women report that their husbands live elsewhere.
- Education and work after marriage: Three-fourths of women dropped out of school after marriage. Similarly, 43% of women did not continue to work after marriage.

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

4.1 MARITAL STATUS

Currently married

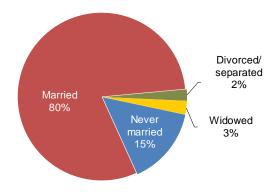
Women who report being married at the time of the survey. *Sample:* Women age 15-49

Table 4.1 presents information on the current marital status of women by age. In Bangladesh, 80% of women are currently married. Two percent of women are divorced or separated, and 3% are widowed (**Figure 4.1**). The proportion of women who are widowed increases gradually with age and is highest among those age 45-49 (11%) and those age 40-44 (6%).

Fifteen percent of women age 15-49 have never been married. The proportion of never-married women falls sharply with increasing age, from 57% among those age 15-19 to less than 1% among those age 35

Figure 4.1 Marital status

Percent distribution of women age 15-49



or older. The low proportion of women age 25-29 who have never been married (3%) indicates that marriage is nearly universal in Bangladesh (**Table 4.1**).

4.2 AGE AT FIRST MARRIAGE

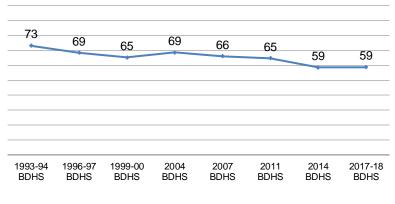
Median age at first marriage

Age by which half of respondents have been married. *Sample:* Women age 20-49 and 25-49

Although the legal age of marriage for women in Bangladesh is 18, a large proportion of marriages still take place before women reach their legal age. The median age at first marriage among women age 20-49 is 16.3 years (Table 4.2). Marriage occurs early for women in Bangladesh. Seventy-one percent of women age 20-49 were married by age 18, and 85% were married by age 20. Nearly one-third (31%) of women age 20-49 reported that they had married by age 15. Among women age 20-24, 59% were married before age 18.

Figure 4.2 Trends in age at first marriage

Percentage of women age 20-24 who were first married by age 18



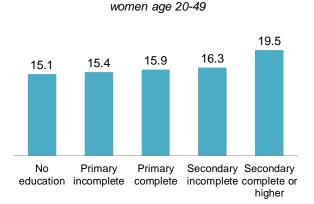
Trends: There has been a slow but steady increase over time in the median age at first marriage among women age 20-49, from 14.4 years in 1993-94 to 15.3 years in 2007 and 16.3 years in 2017-18. The proportion of women age 20-24 who were married by age 18 declined from 73% in 1993-94 to 65% in 2011 and 59% in 2014 and 2017-18 (**Figure 4.2**).

Patterns by background characteristics

- The median age at first marriage among women age 20-49 is relatively higher in the eastern divisions (18.1 years in Sylhet and 16.9 years in Chattogram) and lower in the western divisions (15.8 years in Khulna and 15.6 years each in Rajshahi and Rangpur) (Table 4.3).
- The median age at first marriage increases with increasing education and wealth. Women with a secondary education or higher marry 4.4 years later than women with no education (19.5 years versus 15.1 years) (Figure 4.3). Similarly, women in the highest wealth quintile marry 2 years later than women in the lowest quintile (17.6 years versus 15.6 years).

Figure 4.3 Women's median age at marriage by education

Median age at first marriage among



Among women age 20-24, those with no education are more likely than those with a secondary education or higher to have married before age 18 (75% versus 31%) (Table 4.4).

- The percentage of women age 20-24 who married before age 18 is slightly higher in rural areas (61%) than in urban areas (55%).
- About 3 out of 10 women with at least a secondary education were married by age 18, as compared with approximately 7 out of 10 women at lower levels of education.

4.3 AGE AT FIRST SEXUAL INTERCOURSE

Median age at first sexual intercourse

Age by which half of respondents have had sexual intercourse. *Sample:* Women age 20-49 and 25-49

In Bangladesh, the median age at first sexual intercourse among women age 20-49 (16.5 years) is slightly higher than the median age at first marriage (16.3 years) (**Figure 4.4**). These findings suggest that women in Bangladesh first have sexual intercourse after they are married. Twenty-nine percent of women age 20-49 had sexual intercourse by age 15, 69% by age 18, and 85% by age 20 (**Table 4.5**).

Patterns by background characteristics

- On average, women living in rural areas initiate sexual intercourse about a year earlier than women from urban areas (16.2 years versus 17.1 years) (Table 4.6).
- Women with a secondary education or higher initiate sex approximately 5 years later than women with no education (19.8 years versus 15.2 years).

4.4 RECENT SEXUAL ACTIVITY

Sexual intercourse without use of contraception can increase a woman's risk of becoming pregnant. Thus, information on recent sexual intercourse is important for refining measurement of exposure to pregnancy. All ever-married women were asked how long ago their last sexual contact occurred.

Seventy-five percent of women had sexual intercourse within the 4 weeks preceding the survey. An additional 14% were sexually active in the 12 months preceding the survey, while 11% had their last sexual intercourse 1 or more years prior to the survey (**Table 4.7**).

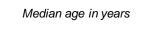
Patterns by background characteristics

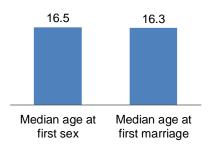
- Seventy-four percent of women age 15-19 and 78% of women age 35-39 had been sexually active in the past 4 weeks, as compared with 65% of women age 45-49 (**Table 4.7**).
- There are variations in recent sexual activity by administrative divisions. The proportion of women who reported being sexually active in the past 4 weeks ranges from 65% in Chattogram to 83% in Mymensingh.

4.5 SPOUSAL SEPARATION

The effect of spousal separation in reducing fertility varies with the length of separation. The cumulative impact of spousal separation would be expected to be greatest in areas of relatively high fertility and low

Figure 4.4 Median age at first sex and first marriage





prevalence of modern contraceptive use. Overall, 17% of currently married women in Bangladesh report that their husbands live elsewhere (**Table 4.8**).

Patterns by background characteristics

- Twenty-five percent of women age 15-19 and 26% of women who have been married less than 5 years report that their husband lives elsewhere (**Table 4.8**).
- Spousal separation is higher among rural women (19%) than among urban women (12%).
- Nearly 3 in 10 women (29%) in Chattogram have husbands who live elsewhere, as compared with 11% of women in Rangpur and 12% each in Khulna, Mymensingh, and Rajshahi.
- The proportion of women whose husbands live elsewhere increases with increasing education. Only 9% of women with no education live apart from their husbands, compared with 24% of those with a secondary education or higher.

4.6 PERCEPTIONS REGARDING AGE AT FIRST MARRIAGE

Overall, 47% of women think that their marriage took place at an appropriate age. However, 34% would have preferred to marry later, and 19% would have preferred to marry at an earlier age (**Table 4.9**).

Patterns by background characteristics

- Younger women age 15-17 are less likely than women age 21-49 to say that their marriage took place at the right time (16% versus 48%). Fifty-seven percent of women age 15-17 report that they would have preferred to marry later, as compared with 33% of women age 21-49.
- The proportion of women who think that their marriage took place at the right age varies from a high of 65% in Sylhet to a low of 37% in Khulna. Forty-six percent of women in Mymensingh would have preferred to marry earlier.
- Women with a secondary education or higher (70%) are more likely than women in the other education categories (43% or less) to think that they married at the right age.

4.7 CONTINUATION OF EDUCATION AND WORK AFTER MARRIAGE

Studying and working outside the home after marriage are important for women's autonomy. The 2017-18 BDHS results showed that 75% of women dropped out of school after marriage, while only 3% continued their education for 5 years or more (**Table 4.10**). Similarly, 43% of women did not continue to work after marriage, and only 28% continued to work for 5 or more years (**Table 4.11**).

Patterns by background characteristics

- Women in rural areas are more likely to discontinue their education after marriage than urban women (79% versus 65%).
- Women with a secondary education or higher (43%) are less likely than women in the other education categories (90% or above) to discontinue education after marriage (**Table 4.10**).
- The percentage of women who reported discontinuing education after marriage is highest among those in the lowest wealth quintile (89%) and lowest among those in the highest quintile (61%).
- Rural women are more likely to stop working after marriage than urban women (48% versus 37%) (Table 4.11).

• Thirty-six percent of women with no education reported that they did not continue to work after marriage, as compared with 47% of those who attended but did not complete schooling at the secondary level.

LIST OF TABLES

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

- Table 4.1 Current marital status
- Table 4.2 Age at first marriage
- Table 4.3 Median age at first marriage by background characteristics
- Table 4.4 Marriage before age 18
- Table 4.5 Age at first sexual intercourse
- Table 4.6 Median age at first sexual intercourse according to background characteristics
- Table 4.7 Recent sexual activity
- Table 4.8 Spousal separation
- Table 4.9 Preferred age at first marriage
- Table 4.10 Continuation of education after marriage
- Table 4.11 Continuation of work after marriage

Table 4.1 Current marital status

Percent distribution of women age 15-49 by current marital status, according to age, Bangladesh DHS 2017-18

Age	Never married	Married	Divorced	Separated	Widowed	Total	Number of respondents
15-19	56.9	42.0	0.6	0.6	0.0	100.0	4,782
20-24	14.4	82.7	1.5	1.1	0.4	100.0	4,155
25-29	3.4	93.0	1.7	1.0	0.9	100.0	3,704
30-34	1.0	94.3	1.2	1.3	2.1	100.0	3,507
35-39	0.2	93.5	1.6	0.5	4.1	100.0	2,885
40-44	0.6	91.3	1.7	0.9	5.6	100.0	2,310
45-49	0.6	86.3	1.2	1.4	10.6	100.0	2,299
Total	14.9	80.3	1.3	0.9	2.6	100.0	23,642

Table 4.2 Age at first marriage

Percentage of women age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Bangladesh DHS 2017-18

		Percentage	first married b	y exact age:		Percentage		Median age at first marriage
Current age	15	18	20	22	25	never married	Number of respondents	
15-19	12.4	na	na	na	na	56.9	4,782	а
20-24	19.3	58.9	76.2	na	na	14.4	4,155	17.3
25-29	25.9	66.4	82.9	90.4	94.9	3.4	3,704	16.7
30-34	33.6	73.1	87.1	93.0	96.1	1.0	3,507	16.0
35-39	34.8	76.1	89.9	94.9	97.4	0.2	2,885	16.0
40-44	40.0	78.0	90.5	95.0	97.4	0.6	2,310	15.7
45-49	43.3	80.2	92.4	96.3	97.8	0.6	2,299	15.5
20-49	31.1	70.6	85.4	na	na	4.2	18,860	16.3
25-49	34.4	73.9	88.0	93.5	96.5	1.3	14,705	16.0

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

Table 4.3 Median age at first marriage by background characteristics

Median age at first marriage among women age 20-49 and age 25-49, according to background characteristics, Bangladesh DHS 2017-18

	Wome	en age
Background characteristic	20-49	25-49
	20-49	23-49
Residence		
Urban	16.9	16.7
Rural	16.1	15.8
Division		
Barishal	16.0	15.8
Chattogram	16.9	16.7
Dhaka	16.7	16.4
Khulna	15.8	15.5
Mymensingh	15.9	15.6
Rajshahi	15.6	15.4
Rangpur	15.6	15.3
Sylhet	18.1	17.8
Education		
No education	15.1	15.1
Primary incomplete	15.4	15.3
Primary complete ¹	15.9	15.8
Secondary incomplete	16.3	16.3
Secondary complete or higher ²	19.5	19.5
Wealth quintile		
Lowest	15.6	15.5
Second	15.9	15.7
Middle	16.0	15.8
Fourth	16.5	16.1
Highest	17.6	17.4
Total	16.3	16.0

Note: The age at first marriage is defined as the age at which the

respondent began living with her first spouse.

¹ Primary complete is defined as completing grade 5.

² Secondary complete is defined as completing grade 10.

Table 4.4 Marriage before age 18

Percentage of women age 20-24 who married before age 18, according to background characteristics, Bangladesh DHS 2017-18

	Among women a	ge 20-24:
Background characteristic	Percentage who married before age 18	Number of women
Residence		
Urban	54.6	1,275
Rural	60.7	2,881
Division		
Barishal	64.6	209
Chattogram	54.1	814
Dhaka	57.6	1,139
Khulna	61.6	391
Mymensingh	64.4	306
Rajshahi	70.1	520
Rangpur	67.0	433
Sylhet	35.4	344
Education		
No education	75.0	145
Primary incomplete	75.1	555
Primary complete ¹	70.5	354
Secondary incomplete	73.5	1,671
Secondary complete or higher ²	30.8	1,436
Wealth quintile		
Lowest	74.2	678
Second	63.9	769
Middle	60.4	821
Fourth	55.7	938
Highest	45.4	952
Total	58.9	4,155

¹ Primary complete is defined as completing grade 5.

² Secondary complete is defined as completing grade 10.

Table 4.5 Age at first sexual intercourse

Percentage of women age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, Bangladesh DHS 2017-18

	Percen	tage who had	first sexual inte	Percentage who never		Median age		
Current age	15	18	20	22	25	had intercourse	Number	at first intercourse
15-19	9.8	na	na	na	na	57.1	4,782	а
20-24	16.5	54.9	74.7	na	na	14.7	4,155	17.6
25-29	23.0	64.4	82.4	90.0	94.7	3.4	3,704	16.8
30-34	31.5	70.8	86.0	92.2	95.5	1.1	3,507	16.2
35-39	33.7	74.9	89.1	94.5	97.3	0.2	2,885	16.1
40-44	39.5	77.0	90.1	94.6	97.1	0.7	2,310	15.7
45-49	42.7	79.5	92.1	96.1	97.5	0.7	2,299	15.5
20-49	29.2	68.5	84.5	na	na	4.3	18,860	16.5
25-49	32.8	72.3	87.3	93.1	96.2	1.4	14,705	16.2
15-24	12.9	na	na	na	na	37.4	8,937	а

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

Table 4.6 Median age at first sexual intercourse according to background characteristics

Median age at first sexual intercourse among women age 20-49 and age 25-49, according to background characteristics, Bangladesh DHS 2017-18

	Wome	en age
Background		
characteristic	20-49	25-49
Residence		
Urban	17.1	16.8
Rural	16.2	15.9
Division		
Barishal	16.2	15.9
Chattogram	17.1	16.8
Dhaka	16.8	16.6
Khulna	16.0	15.7
Mymensingh	16.0	15.7
Rajshahi	15.7	15.5
Rangpur	15.7	15.4
Sylhet	18.2	17.9
Education		
No education	15.2	15.1
Primary incomplete	15.4	15.3
Primary complete ¹	16.0	15.8
Secondary incomplete	16.5	16.5
Secondary complete or higher ²	19.8	19.7
Wealth guintile		
Lowest	15.7	15.5
Second	16.1	15.8
Middle	16.2	15.9
Fourth	16.6	16.2
Highest	17.9	17.7
Total	16.5	16.2

¹ Primary complete is defined as completing grade 5.

² Secondary complete is defined as completing grade 10.

Table 4.7 Recent sexual activity

Percent distribution of ever-married women age 15-49 by timing of last sexual intercourse, according to background characteristics, Bangladesh DHS 2017-18

	Timing of	last sexual ir	itercourse	Never had		Number of women	
Background characteristic	Within the past 4 weeks	Within 1 year ¹	One or more years	sexual intercourse	Total		
Age							
15-19	74.4	18.6	6.6	0.4	100.0	2,063	
20-24	74.9	16.0	8.7	0.4	100.0	3,556	
25-29	76.8	13.4	9.7	0.1	100.0	3,579	
30-34	76.8	12.3	10.9	0.0	100.0	3,470	
35-39	77.6	11.1	11.3	0.0	100.0	2,879	
40-44	74.6	12.7	12.6	0.0	100.0	2,296	
45-49	64.7	16.4	18.8	0.0	100.0	2,285	
	04.1	10.4	10.0	0.0	100.0	2,200	
Marital status	70.0				100.0	40.004	
Married	79.2	14.3	6.4	0.1	100.0	18,984	
Divorced/separated/widowed	0.3	11.7	87.3	0.7	100.0	1,143	
Marital duration ²							
0-4 years	76.4	17.4	5.8	0.5	100.0	3,526	
5-9 years	78.0	15.1	6.8	0.0	100.0	3,154	
10-14 years	80.0	12.8	7.1	0.1	100.0	2,943	
15-19 years	82.0	11.2	6.8	0.0	100.0	2,860	
20-24 years	83.6	10.7	5.8	0.0	100.0	2,217	
25+ years	76.9	16.6	6.5	0.0	100.0	3,472	
Married more than once	81.2	13.8	5.0	0.0	100.0	813	
Residence							
Urban	77.6	11.9	10.3	0.2	100.0	5,729	
Rural	73.5	15.0	11.3	0.1	100.0	14,398	
Division							
Barishal	69.9	20.3	9.5	0.2	100.0	1,125	
Chattogram	65.1	17.4	17.4	0.2	100.0	3,622	
Dhaka	75.2	17.4	11.1	0.2	100.0		
						5,123	
Khulna	77.3	14.0	8.5	0.1	100.0	2,336	
Mymensingh	82.5	10.7	6.7	0.0	100.0	1,546	
Rajshahi	79.3	11.4	9.1	0.1	100.0	2,802	
Rangpur	80.0	13.5	6.4	0.2	100.0	2,380	
Sylhet	69.8	13.9	16.3	0.0	100.0	1,192	
Education							
No education	71.8	12.6	15.5	0.0	100.0	3,333	
Primary incomplete	74.9	14.0	11.1	0.1	100.0	4,250	
Primary complete ³	79.1	11.3	9.5	0.1	100.0	2,040	
Secondary incomplete	74.6	14.6	10.5	0.2	100.0	7,135	
Secondary complete or							
higher ⁴	74.9	16.5	8.3	0.2	100.0	3,369	
Wealth quintile							
Lowest	77.5	12.8	9.6	0.1	100.0	3,743	
Second	77.6	13.3	9.0	0.1	100.0	3,957	
Middle	72.9	15.3	11.5	0.2	100.0	4,059	
Fourth	72.6	15.7	11.4	0.2	100.0	4,184	
Highest	73.3	13.4	13.1	0.2	100.0	4,184	

¹ Excludes women who had sexual intercourse within the last 4 weeks
 ² Excludes women who are not currently married
 ³ Primary complete is defined as completing grade 5.
 ⁴ Secondary complete is defined as completing grade 10.

Table 4.8 Spousal separation

Percentage of currently married women age 15-49 whose husband lives elsewhere, according to background characteristics, Bangladesh DHS 2017-18

Background	Percentage of women whose husband lives	
characteristic	elsewhere	Number of women
Age		
15-19	25.3	2,006
20-24	24.3	3,435
25-29	19.3	3,445
30-34	17.0	3,308
35-39	13.2	2,699
40-44	9.8	2,109
45-49	7.0	1,983
Marital duration		
0-4 years	26.3	3,526
5-9 years	21.4	3,154
10-14 years	18.7	2,943
15-19 years	16.2	2,860
20-24 years	12.4	2,217
25+ years	8.0	3,472
Married more than once	13.1	813
Residence		
Urban	12.3	5,378
Rural	19.2	13,607
Division		
Barishal	22.1	1,056
Chattogram	29.2	3,414
Dhaka	17.2	4,864
Khulna	12.1	2,205
Mymensingh	12.3	1,468
Rajshahi	12.4	2,645
Rangpur	11.2	2,248
Sylhet	16.3	1,085
Education		
No education	9.0	2,947
Primary incomplete	12.6	3,949
Primary complete ¹	16.0	1,955
Secondary incomplete	20.4	6,864
Secondary complete or higher ²	24.3	3,269
Wealth guintile		
Lowest	11.7	3,473
Second	15.0	3,730
Middle	19.7	3,846
Fourth	19.6	3,985
Highest	19.4	3,951
Total	17.2	18,984
ισιαι	17.2	10,904

¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 4.9 Preferred age at first marriage

Percent distribution of ever-married women age 15-49 by preferred time of first marriage, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic	Married at right time	Preferred to marry earlier	Preferred to marry later	Total	Number of women
	light time	ounior	lator	Total	womon
Current age					
15-17	15.6	27.1	57.3	100.0	686
18-20	43.4	19.1	37.6	100.0	2,029
21-49	48.4	18.5	33.1	100.0	17,412
Actual age at first marriage					
<18	32.1	23.9	44.0	100.0	15,165
18-20	92.7	2.6	4.7	100.0	3,743
21+	88.4	5.9	5.6	100.0	1,219
Residence					
Urban	49.5	22.2	28.4	100.0	5,729
Rural	45.7	17.6	36.7	100.0	14,398
Division					
Barishal	42.2	11.6	46.2	100.0	1,125
Chattogram	53.9	1.0	40.2	100.0	3,622
Dhaka	49.3	30.4	20.2	100.0	5,123
Khulna	36.6	14.8	48.6	100.0	2,336
Mymensingh	42.6	46.4	11.0	100.0	1,546
Rajshahi	43.5	17.0	39.5	100.0	2.802
Rangpur	39.8	14.1	46.0	100.0	2,380
Sylhet	65.3	16.7	18.0	100.0	1,192
,					.,
Education	40.4	04.0	05.0	400.0	0.000
No education	43.1 40.6	21.6 22.0	35.3 37.4	100.0 100.0	3,333
Primary incomplete	40.6	22.0 18.4	37.4 38.4	100.0	4,250
Primary complete ¹ Secondary incomplete	43.2 42.1	18.4	38.4 38.4	100.0	2,040 7,135
Secondary complete or higher ²	70.2	19.4	30.4 18.4	100.0	3,369
, , , , , , , , , , , , , , , , , , , ,	10.2	11.4	10.4	100.0	3,303
Wealth quintile					
Lowest	42.4	19.3	38.3	100.0	3,743
Second	44.8	20.7	34.5	100.0	3,957
Middle	43.6	17.7	38.7	100.0	4,059
Fourth	46.7	18.7	34.7	100.0	4,184
Highest	55.8	18.1	26.1	100.0	4,184
Total	46.8	18.9	34.3	100.0	20,127

¹ Primary complete is defined as completing grade 5.
 ² Secondary complete is defined as completing grade 10.

Table 4.10 Continuation of education after marriage

Percent distribution of women age 15-49 who were studying or attending school just before getting married by whether or not they continued their education after marriage, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic	Did not continue	Continued for less than a year	Continued for 1-2 years	Continued for 3-4 years	Continued for 5+ years	Don't know/ missing	Total	Number o women
Current age								
15-17	72.9	20.6	4.8	1.7	0.0	0.0	100.0	498
18-20	68.9	16.0	10.8	3.7	0.6	0.0	100.0	1,225
21-49	76.4	8.4	7.4	4.4	3.4	0.1	100.0	6,397
Actual age at first marriage								
<18	80.5	8.9	5.9	2.6	2.0	0.0	100.0	6,146
18-20	62.8	13.2	10.6	8.2	5.3	0.0	100.0	1,425
21+	45.0	17.9	20.5	11.0	5.3	0.3	100.0	549
Residence								
Urban	65.3	11.4	11.3	6.6	5.2	0.1	100.0	2,401
Rural	79.1	9.8	6.2	3.1	1.8	0.0	100.0	5,719
Division								
Barishal	70.5	12.2	8.8	5.3	3.2	0.0	100.0	493
Chattogram	81.6	8.8	4.6	2.4	2.5	0.0	100.0	1,390
Dhaka	71.1	11.8	8.1	5.6	3.3	0.2	100.0	2,082
Khulna	74.7	9.3	9.0	4.1	2.9	0.0	100.0	1,158
Mymensingh	73.0	8.2	9.9	5.6	3.2	0.0	100.0	531
Rajshahi	77.2	10.6	7.1	3.2	1.9	0.0	100.0	1,284
Rangpur	74.3	10.3	9.0	3.5	2.9	0.0	100.0	962
Sylhet	77.2	8.9	7.6	4.2	2.1	0.0	100.0	221
Education								
Primary incomplete	96.9	2.2	0.6	0.0	0.0	0.3	100.0	501
Primary complete ¹	97.0	1.4	0.4	0.8	0.4	0.0	100.0	470
Secondary incomplete Secondary complete or	90.1	6.7	2.3	0.8	0.2	0.0	100.0	4,413
higher ²	42.9	19.0	19.1	11.0	8.0	0.1	100.0	2,731
Wealth guintile								
Lowest	89.4	6.2	2.8	1.0	0.6	0.0	100.0	891
Second	85.9	8.4	3.8	1.1	0.7	0.0	100.0	1,254
Middle	80.5	10.4	5.4	2.4	1.3	0.0	100.0	1,723
Fourth	73.8	9.8	9.2	5.1	2.1	0.1	100.0	1,941
Highest	60.6	13.2	12.2	7.6	6.4	0.1	100.0	2,311
Total	75.0	10.3	7.7	4.2	2.8	0.0	100.0	8,120

¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 4.11 Continuation of work after marriage

Percent distribution of women age 15-49 who were working outside the home just before getting married by whether or not they continued working after marriage, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic	Did not continue	Continued for less than a year	Continued for 1-2 years	Continued for 3-4 years	Continued for 5+ years	Don't know/ missing	Total	Number of women
Current age								
15-17	47.8	39.8	6.4	6.0	0.0	0.0	100.0	31
18-20	46.0	18.5	26.7	4.3	4.5	0.0	100.0	122
21-49	42.0	9.8	9.2	7.4	31.5	0.1	100.0	1,074
Actual age at first marriage								
<18	41.7	12.0	8.5	5.6	31.9	0.2	100.0	584
18-20	46.0	9.1	13.2	8.7	23.0	0.0	100.0	337
21+	40.4	13.0	12.8	7.9	25.9	0.0	100.0	307
Residence								
Urban	36.7	11.0	12.2	8.9	31.2	0.0	100.0	578
Rural	47.7	11.8	9.7	5.4	25.2	0.2	100.0	649
Division								
Barishal	42.4	14.4	12.0	6.0	25.2	0.0	100.0	61
Chattogram	47.9	11.6	6.2	6.9	27.3	0.0	100.0	186
Dhaka	37.2	10.9	14.0	8.2	29.7	0.0	100.0	446
Khulna	48.1	11.7	10.1	4.5	25.5	0.0	100.0	110
Mymensingh	41.4	14.1	13.1	7.1	24.2	0.0	100.0	103
Rajshahi	47.6	13.4	6.8	5.6	25.7	0.8	100.0	153
Rangpur	43.4	7.8	10.8	6.3	31.7	0.0	100.0	116
Sylhet	43.2	8.6	8.7	9.2	30.2	0.0	100.0	53
Education								
No education	35.8	7.2	5.7	2.3	49.0	0.0	100.0	178
Primary incomplete	46.2	12.4	8.0	6.7	26.7	0.0	100.0	255
Primary complete ¹	38.0	12.6	15.8	6.6	27.0	0.0	100.0	90
Secondary incomplete Secondary complete or	47.4	13.3	11.5	7.4	19.9	0.5	100.0	270
higher ²	41.1	11.3	13.3	9.0	25.4	0.0	100.0	435
Wealth guintile								
Lowest	44.9	8.5	8.6	3.3	34.6	0.0	100.0	160
Second	53.0	10.7	6.6	3.6	25.3	0.7	100.0	171
Middle	49.2	13.0	8.6	4.6	24.7	0.0	100.0	198
Fourth	39.7	12.7	15.7	9.6	22.3	0.0	100.0	312
Highest	35.8	11.2	10.9	9.3	32.8	0.0	100.0	385
Total	42.5	11.5	10.9	7.0	28.0	0.1	100.0	1,227

¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Key Findings

- Total fertility rate: The total fertility rate (TFR) for 3 years preceding the survey (2015-17) is 2.3 children per woman, also shown by the 2019 MICS survey of BBS. The TFR has not changed since 2011. The objective of the 4th Health, Population and Nutrition Sector Program (HPNSP) is to reduce TFR of 2.0 by 2022. Three divisions, Khulna, Rajshahi, and Rangpur, have achieved a replacement-level fertility rate of 2.1 or fewer children per woman. Women in urban areas and those in the upper three wealth quintiles have achieved replacement-level fertility.
- Birth intervals: The median birth interval is 55.7 months, an increase of 12 months since 2007. Eleven percent of births occur within 24 months after the preceding birth.
- Postpartum insusceptibility: The median duration of insusceptibility is 5.1 months. The median duration of postpartum amenorrhea decreased from 5.8 months in 2007 to 4.5 months in 2017-18.
- Age at first birth: The median age at first birth among women age 20-49 is 18.6 years. Forty-three percent of women gave birth before age 18.
- Teenage childbearing: 28% of women age 15-19 have begun childbearing, a decline of 3 percentage points since 2014. The 4th HPNSP aims to reduce teenage childbearing to 25% by 2022.

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

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

5.1 CURRENT FERTILITY

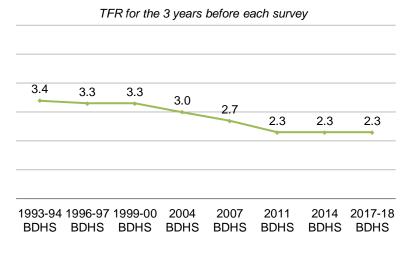
Total fertility rate

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

Sample: Women age 15-49

The total fertility rate (TFR) in Bangladesh is 2.3 children per woman (Table 5.1). Bangladeshi women have a pattern of early childbearing. The age-specific fertility rate rises from 108 births per 1,000 women in the 15-19 age group to a peak of 143 births per 1,000 women in the 20-24 age group and declines thereafter. The TFR is lower in urban areas (2.0 births per woman) than in rural areas (2.3 births per woman). The urban-rural difference in fertility is most pronounced among women age 20-24 (125 births per 1,000 women in urban areas versus 151 births per 1,000 women in rural areas).

Figure 5.1 Trends in fertility

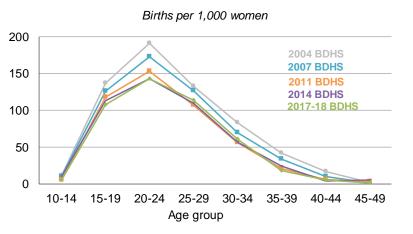


Trends: The trends in TFRs from BDHS and other comparable sample surveys since 1975 reflect an overall decline in fertility that began in the 1970s. The TFR declined sharply from 6.3 births per woman in 1975 to 5.1 births in 1989 (Huq and Cleland 1990). **Figure 5.1** shows that after a decade-long stall in fertility during the 1990s, the TFR declined by one child to 2.3 births per woman in 2011 and has since remained stable, also indicated by the 2019 MICS survey of BBS. The objective of the 4th Health, Population and Nutrition Sector Program (HPNSP) is to reduce TFR of 2.0 births per woman by 2022.

Trends in the age-specific fertility rate indicate that the rate has remained highest in the 20-24 age group (**Table 5.2.1**). The largest absolute change in fertility has also occurred in this age group, with the rate declining from 191 births per 1,000 women in 2004 to 143 births per 1,000 women in 2014 and 2017-18 (**Table 5.2.2** and **Figure 5.2**).

Patterns by background characteristics

Figure 5.2 Trends in age-specific fertility

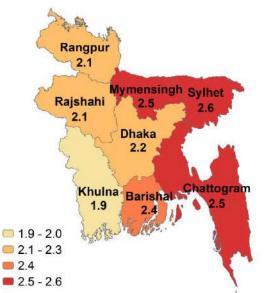


• The TFR decreases with increasing education. Women with no education or an incomplete primary education have an average of 2.6 children, whereas women with a secondary education or higher have an average of 2.2 children (**Table 5.3.1**).

- Of the eight divisions in Bangladesh, three (Khulna, Rajshahi, and Rangpur) have achieved a replacement-level fertility rate (2.1 or fewer children) based on population estimates from the United Nations World Population Prospects 2017 Revision. This report estimated that the replacement level of fertility in Bangladesh is 2.145 children per woman (United Nations 2017). The total fertility rate is lowest in Khulna (1.9 births per woman), followed by Rangpur and Rajshahi (both at 2.1 births per woman). The highest rate is in Sylhet (2.6 births per woman) (Figure 5.3).
- The age-specific fertility rate is highest among women age 20-24 in all divisions other than Rajshahi, where the rate is highest among women age 15-19 (Table 5.3.2).

Figure 5.3 Fertility by division

Total fertility rate for the 3 years before the survey



• The number of children per woman decreases with increasing wealth. Women in the lowest wealth quintile have 0.6 more children than those in the highest quintile (**Table 5.3.1**).

5.2 CHILDREN EVER BORN AND LIVING

Among all women, the mean number of children ever born is 2.0; among currently married women, the mean is 2.4. Currently married women have an average of 2.2 living children. Number of children ever born increases with women's age; on average, women age 45-49 have given birth to 4.0 children, of whom 3.5 were still living at the time of the survey (**Table 5.4**). In Bangladesh, 1% of currently married women age 45-49 have never given birth. Since voluntary childlessness is rare, this is often viewed as a measure of primary sterility (**Table 5.4**).

5.3 BIRTH INTERVALS

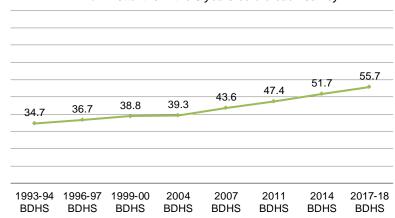
Median birth interval

Number of months since the preceding birth by which half of children are born. *Sample:* Non-first births in the 5 years before the survey

Birth intervals are generally long in Bangladesh, with a median interval of 55.7 months. Three quarters (75%) of non-first births occur 36 or more months after the previous birth, while 15% take place within 24-35 months. Eleven percent of non-first births occur within 24 months after the previous birth (**Table 5.5**).

Trends: A comparison with earlier surveys shows that the median birth interval has increased markedly over time, from 34.7 months in

Figure 5.4 Trends in median birth intervals



Non-first births in the 5 years before each survey

1993-1994 to 43.6 months in 2007, 51.7 months in 2014, and 55.7 months in 2017-18. The median interval has increased by 21 months since 1993-94 and by 12 months since 2007 (**Figure 5.4**).

Patterns by background characteristics

- The percentage of non-first births occurring 7-17 months after the preceding birth is higher among women age 15-19 (31%) than among women age 20-29 (5%) (**Table 5.5**).
- There is a close association between birth interval length and the survival status of the previous sibling. The median birth interval is shorter when the previous sibling has died than when the previous sibling is still alive (29.0 and 58.0 months, respectively). The percentage of births occurring within a very short interval (7-17 months) is 10 times higher when the previous sibling died than when the previous sibling survived (31% and 3%, respectively).
- There are differences in median birth intervals by administrative divisions. The median birth interval is longest in Rajshahi (69.1 months) and shortest in Sylhet (37.9 months).

5.4 INSUSCEPTIBILITY TO PREGNANCY

Postpartum amenorrhea

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

Postpartum abstinence

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

Postpartum insusceptibility

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

Median duration of postpartum amenorrhea

Number of months after childbirth by which time half of women have begun menstruating.

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

Median duration of postpartum insusceptibility

Number of months after childbirth by which time half of women are no longer protected against pregnancy by either postpartum amenorrhea or abstinence from sexual intercourse.

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

The median duration of postpartum amenorrhea among women who gave birth in the 3 years before the survey is 4.5 months, while the median durations of abstinence and insusceptibility are 2.8 months and 5.1 months, respectively (**Table 5.6**).

The proportion of births in the 3 years preceding the survey for which mothers are insusceptible decreases with the number of months since delivery, from 94% in the first 2 months after birth to 2% at 34-35 months. The period of postpartum amenorrhea is considerably longer than the period of postpartum abstinence and is by far the major determinant of the length of postpartum insusceptibility to pregnancy. At 6 to 7 months after birth, one-third (33%) of women are still amenorrheic, while only 8% are abstaining.

Trends: The median duration of postpartum amenorrhea has steadily decreased over time, from 10.4 months in 1993-1994 to 5.8 months in 2007 and to 4.5 months in 2017-18. The median duration of insusceptibility fell from 10.9 months in 1993-94 to 4.0 months in 2014 before increasing to 5.1 months in 2017-18.

Patterns by background characteristics

- The median durations of postpartum amenorrhea and postpartum insusceptibility are 1.5 months longer among women age 30-49 than among women age 15-29 (**Table 5.7**).
- The median duration of insusceptibility varies substantially by administrative division, from 4.0 months in Mymensingh to 6.7 months in Sylhet.
- The median duration of postpartum abstinence is longer among women in the highest wealth quintile than among women in the lowest quintile (3.3 months and 2.4 months, respectively).

Menopause

Women are considered to have reached menopause if they are neither pregnant nor postpartum amenorrheic and have not had a menstrual period in the 6 months before the survey, if they report being menopausal or having had a hysterectomy, or if they have never menstruated. **Sample:** Women age 30-49

In Bangladesh, 23% of women age 30-49 are menopausal. The proportion of menopausal women increases with age, from 7% among those age 30-34 to 65% among those age 48-49 (**Table 5.8**). The proportion of women who are menopausal has increased since 2011 (from 20% to 23%).

5.5 AGE AT FIRST BIRTH

Median age at first birth

Age by which half of women have had their first child. **Sample:** Women age 20-49 and 25-49

Bearing children at a young age involves substantial risks to the health of both the mother and the child. Early childbearing also tends to restrict educational and economic opportunities for women. In Bangladesh, the median age at first birth among women age 20-49 is 18.6 years. Forty-three percent of women gave birth before age 18, while 66% gave birth before age 20 (**Table 5.9**).

Patterns by background characteristics

- Among women age 20-49, the median age at first birth is 0.9 years higher in urban areas than in rural areas (19.2 years versus 18.3 years) (**Table 5.10**).
- The median age at first birth is 18.4 years among women who attended but did not complete schooling at the secondary level, as compared with 17.6 years among those who did not complete a primary education and those with no education.
- The median age at first birth is lowest among women in the lowest wealth quintile (17.8 years) and highest among those in the fourth quintile (18.8 years).

5.6 TEENAGE CHILDBEARING

Teenage childbearing

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

Sample: Women age 15-19

In Bangladesh, 28% of women age 15-19 have begun childbearing; 22% have given birth, and another 6% are pregnant with their first child (**Table 5.11**). One of the objectives of the 4th HPNSP is to reduce the proportion of teenagers who have begun childbearing to 25% by 2022.

Trends: The proportion of women age 15-19 who have begun childbearing decreased from 33% in 2004 and 2007 to 31% in 2014 and 28% in 2017-18 (**Figure 5.5**).

Patterns by background characteristics

- As expected, the proportion of women age 15-19 who have begun childbearing rises rapidly with age, from 6% among those age 15 to 56% among those age 19 (Table 5.11).
- Childbearing is more common among rural teenagers than among urban teenagers (29% versus 23%).
- The proportion of young women who have begun childbearing is lowest in Sylhet (14%) and highest in Rajshahi (33%) (Figure 5.6).
- Teenage childbearing decreases with increasing education. Only 19% of young women with a secondary education or higher have begun childbearing, as compared with almost half (47%) of those with a primary education.
- Thirty-seven percent of young women in the lowest wealth quintile have begun childbearing, compared with 18% of those in the highest wealth quintile.

Figure 5.5 Trends in teenage pregnancy

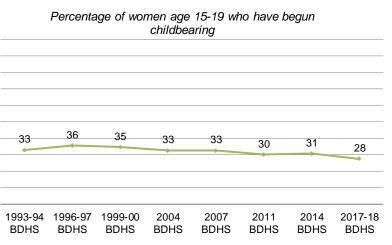
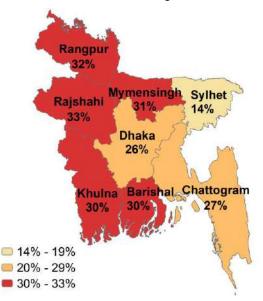


Figure 5.6 Teenage pregnancy and motherhood by division

Percentage of women age 15-19 who have begun childbearing



Ten percent of women age 15-19 initiated sexual intercourse before age 15. Within this same age group, 12% of women were married before age 15, and 3% had given birth (**Table 5.12**).

LIST OF TABLES

For more information on fertility levels and some of the determinants of fertility, see the following tables:

- Table 5.1 Current fertility
- Table 5.2.1 Trends in age-specific fertility rates
- Table 5.2.2 Trends in age-specific and total fertility rates
- Table 5.3.1 Fertility by background characteristics
- Table 5.3.2 Current fertility by division
- Table 5.4
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- Table 5.5
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- Table 5.6 Postpartum amenorrhea, abstinence, and insusceptibility
- Table 5.7 Median duration of amenorrhea, postpartum abstinence, and postpartum insusceptibility
- Table 5.8 Menopause
- Table 5.9 Age at first birth
- Table 5.10 Median age at first birth
- Table 5.11 Teenage pregnancy and motherhood
- Table 5.12 Sexual and reproductive health behaviors before age 15

Table 5.1 Current fertility

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the 3 years preceding the survey, by residence, Bangladesh DHS 2017-18

	Resid	_	
Age group	Urban	Rural	Total
10-14	[3]	[5]	[5]
15-19	93	114	108
20-24	125	151	143
25-29	100	120	114
30-34	59	62	61
35-39	20	18	18
40-44	7	4	5
45-49	[3]	[0]	[1]
TFR (15-49) GFR CBR	2.0 78 21.1	2.3 89 22.3	2.3 86 21.9

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates are for the period 1-36 months prior to the interview. Rates for the 10-14 age group are based on retrospective data

From women age 15-17. TFR: Total fertility rate, expressed per woman GFR: General fertility rate, expressed per 1,000 women age 15-44 CBR: Crude birth rate, expressed per 1,000 population

Table 5.2.1 Trends in age-specific fertility rates

Age-specific fertility rates for 5-year periods preceding the survey, according to age group, Bangladesh DHS 2017-18

	Number of years preceding survey								
Age group	0-4	5-9	10-14	15-19					
10-14	[5]	11	15	22					
15-19	112	136	167	191					
20-24	145	159	192	214					
25-29	110	119	146	166					
30-34	60	67	97	[112]					
35-39	20	27	[51]						
40-44	5	[8]							
45-49	[1]								

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

Table 5.2.2 Trends in age-specific and total fertility rates

Age-specific and total fertility rates for the 3-year period preceding several surveys, according to mother's age at time of birth, Bangladesh DHS 2017-18

	2004 BDHS	2007 BDHS	2011 BDHS	2014 BDHS	2017-18 BDHS
Mother's age at birth	2001 to 2004	2004 to 2007	2008 to 2011	2011 to 2014	2014-15 to 2017-18
10-14	[11]	[10]	[5]	[10]	[5]
15-19	137	126	118	113	108
20-24	191	173	153	143	143
25-29	133	127	107	110	114
30-34	83	70	56	57	61
35-39	42	34	21	24	18
40-44	17	10	6	4	5
45-49	[2]	[1]	[3]	[5]	[1]
TFR (15-49)	3.0	2.7	2.3	2.3	2.3

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

Table 5.3.1 Fertility by background characteristics

Total fertility rate for the 3 years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Residence Urban	2.0	4.5	3.4
Rural	2.3	4.9	3.8
Division			
Barishal	2.4	4.8	4.0
Chattogram	2.5	5.0	4.3
Dhaka	2.2	5.1	3.6
Khulna	1.9	4.2	3.1
Mymensingh	2.5	5.8	3.9
Rajshahi	2.1	4.3	3.3
Rangpur	2.1	4.1	3.6
Sylhet	2.6	5.3	4.5
Education			
No education	2.6	1.4	4.0
Primary incomplete	2.6	4.2	3.9
Primary complete ¹	2.4	5.3	3.7
Secondary incomplete	2.3	5.6	3.2
Secondary complete or higher ²	2.2	6.1	2.4
Wealth quintile			
Lowest	2.6	5.2	4.1
Second	2.5	5.2	4.0
Middle	2.1	4.7	3.8
Fourth	2.1	4.8	3.7
Highest	2.0	4.2	3.1
Total	2.3	4.8	3.7

Note: Total fertility rates are for the period 1-36 months prior to the interview.

¹ Primary complete is defined as completing grade 5.

² Secondary complete is defined as completing grade 10.

Table 5.3.2 Current fertility by division

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the 3 years preceding the survey, by division, Bangladesh DHS 2017-18

	Division										
Age group	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet			
10-14	[1]	[4]	[6]	[1]	[4]	[6]	[8]	[2]			
15-19	111	111	99	108	121	130	110	83			
20-24	176	164	131	130	168	115	127	174			
25-29	122	128	115	85	130	96	106	137			
30-34	53	75	63	40	70	54	54	83			
35-39	18	19	22	16	13	14	14	37			
40-44	2	6	7	2	5	3	4	8			
45-49	[0]	[0]	[3]	[0]	[1]	[0]	[0]	[0]			
TFR (15-49)	2.4	2.5	2.2	1.9	2.5	2.1	2.1	2.6			
GFR	89	98	85	69	97	76	78	101			
CBR	22.3	25.3	22.6	17.8	23.1	19.1	19.2	25.7			

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates are for the period 1-36 months prior TFR: Total fertility rate, expressed per 1,000 women age 15-44 CBR: Crude birth rate, expressed per 1,000 women age 15-44

Table 5.4 Children ever born and living

Percent distribution of all women and currently married women age 15-49 by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, Bangladesh DHS 2017-18

					Number	of children	ever bor	'n						Mean number of	Mean number
Age	0	1	2	3	4	5	6	7	8	9	10+	Total	Number of women	children ever born	of living children
							ALL V	VOMEN							
15-19 20-24	78.3 28.7	19.2 42.8	2.4 23.9	0.1 4.1	0.0 0.5	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	0.0 0.0	100.0 100.0	4,782 4,155	0.24 1.05	0.23 1.01
25-29 30-34	9.0 3.0	23.8 10.0	43.3 37.7	17.6 29.7	4.9 12.9	1.2 4.9	0.1 1.4	0.0 0.4	0.0 0.0	0.0 0.1	0.0 0.0	100.0 100.0	3,704 3,507	1.90 2.62	1.80 2.43
35-39 40-44 45-49	2.1 2.6 2.0	5.8 4.4 4.1	27.6 20.6 16.8	31.9 27.2 22.3	18.7 19.4 23.5	8.6 13.8 13.0	3.2 6.6 9.0	1.7 3.6 5.4	0.2 1.3 2.2	0.2 0.4 0.9	0.0 0.1 0.7	100.0 100.0 100.0	2,885 2,310 2,299	3.09 3.53 3.89	2.86 3.16 3.40
Total	2.0	4.1 18.2	24.1	22.3 16.6	23.5 9.2	4.6	9.0 2.1	5.4 1.1	0.4	0.9	0.7	100.0	2,299	2.02	3.40 1.85
						CURRE	ENTLY M	ARRIED	WOMEN						
15-19 20-24 25-29 30-34 35-39	49.6 16.0 5.3 1.7 1.6	44.5 50.0 23.7 9.2 5.0	5.6 28.4 45.9 38.1 27.7	0.2 4.9 18.5 30.4 32.4	0.0 0.6 5.2 13.4 18.9	0.0 0.0 1.3 5.1 8.9	0.0 0.0 1.5 3.3	0.0 0.0 0.4 1.7	0.0 0.0 0.0 0.0 0.2	0.0 0.0 0.1 0.2	0.0 0.0 0.0 0.0 0.0	100.0 100.0 100.0 100.0 100.0	2,006 3,435 3,445 3,308 2,699	0.57 1.24 1.99 2.68 3.13 2.60	0.53 1.19 1.89 2.49 2.90
40-44 45-49 Total	1.5 1.2 9.9	3.5 3.5 21.1	20.9 16.6 28.7	28.0 22.9 19.7	19.9 23.9 10.8	14.1 13.4 5.4	6.6 9.0 2.4	3.9 5.8 1.3	1.2 2.2 0.4	0.4 0.8 0.2	0.1 0.9 0.1	100.0 100.0 100.0	2,109 1,983 18,984	3.60 3.96 2.37	3.23 3.46 2.18

Table 5.5 Birth intervals

Percent distribution of non-first births in the 5 years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Bangladesh DHS 2017-18

		N	lantha ainaa i	aroooding hi	-th				Median number of months
Background characteristic	7-17	18-23	lonths since 24-35	36-47	48-59	60+	– Total	Number of non-first births	since preceding birth
Mother's age									
15-19	30.9	16.3	26.3	21.8	3.5	1.0	100.0	114	25.3
20-29	5.1	6.3	17.5	18.8	17.7	34.7	100.0	3,189	49.4
30-39	3.7	3.5	9.5	10.4	10.3	62.7	100.0	1,907	а
40-49	0.4	4.8	5.8	5.8	7.6	75.6	100.0	143	a
Sex of preceding birth									
Male	5.7	5.4	14.1	16.4	13.2	45.2	100.0	2,570	55.6
Female	4.4	5.6	14.8	14.7	15.7	44.8	100.0	2,783	55.8
		0.0	11.0		10.1	11.0	100.0	2,700	00.0
Survival of preceding birth Living	3.0	5.3	13.8	15.5	15.0	47.4	100.0	4,971	58.0
Dead	3.0 31.0	5.3 8.3	23.8	15.5	6.9	47.4 14.8	100.0	4,971 382	58.0 29.0
	31.0	0.3	23.8	15.2	6.9	14.8	100.0	362	29.0
Birth order									
2-3	4.9	5.0	14.0	15.2	14.9	46.0	100.0	4,267	56.9
4-6	5.5	7.1	16.3	16.6	12.5	41.9	100.0	1,021	52.5
7+	5.3	10.5	22.8	20.1	13.6	27.8	100.0	64	42.8
Residence									
Urban	4.6	5.2	13.1	13.9	15.7	47.5	100.0	1,387	58.1
Rural	5.2	5.6	15.0	16.1	14.0	44.2	100.0	3,966	54.5
Division									
Barishal	4.3	6.4	9.5	15.6	16.9	47.3	100.0	303	57.1
Chattogram	4.2	5.8	18.3	19.0	16.6	36.1	100.0	1,179	49.7
Dhaka	5.1	4.7	12.1	15.3	15.4	47.4	100.0	1,311	58.5
Khulna	2.8	3.8	11.0	10.6	14.1	57.8	100.0	460	68.1
Mymensingh	3.9	5.2	18.6	16.8	12.7	42.8	100.0	451	51.8
Rajshahi	4.7	4.1	9.4	10.2	10.7	61.0	100.0	586	69.1
Rangpur	6.3	3.6	11.3	13.2	14.8	50.8	100.0	585	61.8
Sylhet	9.1	12.0	24.8	20.2	11.4	22.5	100.0	478	37.9
Nother's education									
No education	4.8	6.1	16.2	15.2	11.1	46.6	100.0	541	57.3
Primary incomplete	5.8	5.6	15.7	15.3	14.1	43.6	100.0	1,169	53.3
Primary complete ¹	4.3	6.3	18.5	14.8	13.1	43.1	100.0	635	53.6
Secondary incomplete	4.8	4.8	12.8	15.8	15.2	46.6	100.0	2,268	57.4
Secondary complete or	4.0	4.0	12.0	15.0	10.2	40.0	100.0	2,200	57.4
higher ²	5.2	6.2	13.2	15.8	16.6	43.0	100.0	739	54.3
Vealth quintile									
Lowest	6.0	6.7	15.8	18.4	15.3	37.9	100.0	1,315	50.5
Second	4.7	5.2	17.5	14.5	14.8	43.3	100.0	1,145	54.8
Middle		5.2 4.7	17.5		14.8				54.8 59.4
	4.9	4.7 5.7	13.8	15.0 14.0	12.2	49.3	100.0 100.0	959 999	59.4 58.9
Fourth	5.3					48.2			
Highest	3.8	4.8	11.4	14.8	15.8	49.4	100.0	935	59.4
Fotal	5.0	5.5	14.5	15.5	14.5	45.0	100.0	5,353	55.7

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

a = Omitted because less than 50% of women had a birth before reaching the beginning of the age group
 Primary complete is defined as completing grade 5.
 ² Secondary complete is defined as completing grade 10.

Table 5.6 Postpartum amenorrhea, abstinence, and insusceptibility

Percentage of births in the 3 years preceding the survey for which mothers are postpartum amenorrheic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Bangladesh DHS 2017-18

	Percentage	Percentage of births for which the mother is:							
Months since birth	Amenorrheic	Abstaining	Insusceptible ¹	Number of births					
<2	90.6	82.8	93.5	350					
2-3	52.6	30.9	61.4	332					
4-5	47.2	17.2	52.9	294					
6-7	32.7	8.3	35.6	267					
8-9	18.7	11.5	25.8	316					
10-11	17.2	8.0	23.4	258					
12-13	8.3	5.5	13.6	282					
14-15	5.9	6.8	12.2	314					
16-17	4.8	6.0	10.8	287					
8-19	3.4	4.9	8.2	281					
20-21	1.0	5.6	6.6	283					
22-23	0.2	2.9	3.2	286					
24-25	1.8	2.4	4.1	336					
26-27	1.1	3.0	4.1	313					
28-29	0.9	6.6	7.5	265					
30-31	0.9	2.0	2.8	261					
32-33	0.0	2.4	2.4	280					
34-35	0.5	1.4	1.9	279					
Total	17.1	12.6	21.7	5,284					
Median	4.5	2.8	5.1	na					
Mean	6.8	5.2	8.4	na					

Note: Estimates are based on status at the time of the survey. na = Not applicable ¹ Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth

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

Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility following births in the 3 years preceding the survey, according to background characteristics, Bangladesh DHS 2017-18

Background	Postpartum	Postpartum	Postpartum
characteristic	amenorrhea	abstinence	insusceptibility ¹
Mother's age			
15-29	4.3	2.8	4.9
30-49	5.8	2.6	6.4
Residence			
Urban	4.2	2.7	4.9
Rural	4.6	2.8	5.2
Division			
Barishal	3.6	3.1	4.3
Chattogram	4.3	3.1	5.7
Dhaka	4.6	(2.6)	5.0
Khulna	4.8	(2.8)	5.9
Mymensingh	3.7	(2.3)	4.0
Rajshahi	4.9	(2.7)	5.4
Rangpur	4.9	(2.9)	5.2
Sylhet	5.3	2.7	6.7
Education			
No education	5.0	*	5.3
Primary incomplete	4.6	2.3	5.0
Primary complete ²	4.3	(2.2)	4.4
Secondary incomplete	4.4	3.0	5.3
Secondary complete or higher ³	4.6	3.1	5.3
Wealth quintile			
Lowest	4.5	2.4	4.8
Second	4.1	2.3	4.5
Middle	4.7	3.2	5.0
Fourth	4.9	3.0	6.0
Highest	4.1	3.3	5.5
Total	4.5	2.8	5.1

Note: Medians are based on status at the time of the survey (current status). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes births for which mothers are either still amenorrheic or still abstaining (or both) following ² Primary complete is defined as completing grade 5.

³ Secondary complete is defined as completing grade 10.

Table 5.8 Menopause

Percentage of women age 30-49 who are menopausal, according to age, Bangladesh DHS 2017-18

Age	Percentage menopausal ¹	Number of women
30-34	6.9	3,470
35-39	12.9	2,879
40-41	21.1	956
42-43	26.6	900
44-45	40.1	932
46-47	50.4	942
48-49	65.4	850
Total	22.5	10,930

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

Table 5.9 Age at first birth

Percentage of women age 15-49 who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, Bangladesh DHS 2017-18

		Percentage v	who gave birth	by exact age	Percentage who have			
Current age	15	18	20	22	25	never given birth	Number of women	Median age at first birth
15-19	2.7	na	na	na	na	78.3	4,782	а
20-24	5.6	32.1	56.2	na	na	28.7	4,155	19.5
25-29	8.1	40.4	64.2	78.3	87.6	9.0	3,704	18.8
30-34	10.9	48.9	70.2	82.7	91.2	3.0	3,507	18.1
35-39	9.3	47.7	72.0	84.6	92.6	2.1	2,885	18.2
40-44	11.5	47.7	69.8	82.9	91.5	2.6	2,310	18.2
45-49	10.0	46.1	67.4	82.1	91.6	2.0	2,299	18.3
20-49	8.9	42.9	65.8	na	na	9.5	18,860	18.6
25-49	9.8	45.9	68.6	81.9	90.7	4.1	14,705	18.3

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

Table 5.10 Median age at first birth

Median age at first birth among women age 20-49 and age 25-49, according to background characteristics, Bangladesh DHS 2017-18

	Wome	en age
Background characteristic	20-49	25-49
Residence		
Urban	19.2	19.0
Rural	18.3	18.1
Division		
Barishal	18.4	18.2
Chattogram	18.7	18.5
Dhaka	19.0	18.8
Khulna	18.3	18.1
Mymensingh	18.2	18.1
Rajshahi	17.9	17.7
Rangpur	17.8	17.6
Sylhet	19.9	19.6
Education		
No education	17.6	17.6
Primary incomplete	17.6	17.6
Primary complete ¹	18.1	18.0
Secondary incomplete	18.4	18.3
Secondary complete or higher ²	а	22.2
Wealth quintile		
Lowest	17.8	17.7
Second	18.1	17.9
Middle	18.3	18.0
Fourth	18.8	18.4
Highest	а	19.8
Total	18.6	18.3

a = Omitted because less than 50% of women had a birth before reaching the beginning of the age group ¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade

10.

Table 5.11 Teenage pregnancy and motherhood

Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, according to background characteristics, Bangladesh DHS 2017-18

	Percentage of wo	omen age 15-19 who:	Percentage who	
Background characteristic	Have had a live birth	Are pregnant with first child	have begun childbearing	Number of women
Age				
15-17	8.7	4.6	13.3	2,662
15	3.4	2.3	5.7	926
16	9.1	3.9	13.0	891
17	13.9	7.9	21.8	845
18	29.9	8.2	38.2	1,206
19	48.8	6.8	55.6	914
Residence				
Urban	19.0	4.4	23.4	1,332
Rural	22.8	6.5	29.3	3,450
Division				
Barishal	23.6	6.2	29.8	266
Chattogram	20.8	6.0	26.7	1,011
Dhaka	19.9	6.0	25.9	1,207
Khulna	23.9	6.6	30.4	506
Mymensingh	23.2	7.4	30.6	369
Rajshahi	26.3	6.3	32.7	551
Rangpur	27.0	5.0	32.0	492
Sylhet	10.1	3.9	14.1	393
Education				
No education	(31.3)	(6.9)	(38.2)	82
Primary incomplete	40.2	7.7	47.8	424
Primary complete ¹	39.4	7.4	46.7	314
Secondary incomplete	20.5	5.6	26.0	2,761
Secondary complete or higher ²	12.7	5.8	18.5	1,201
Wealth quintile				
Lowest	29.8	6.7	36.5	806
Second	23.9	6.5	30.3	965
Middle	21.9	6.4	28.3	1,071
Fourth	20.9	5.8	26.7	983
Highest	13.2	4.4	17.7	962
Total	21.7	6.0	27.7	4,782

Note: As the survey was based on an ever-married sample, the number of women was increased using a factor based on all de facto women listed in the household who had never been married. The "all women" factors were based on age in the household and background information available at the household level. Women who have never been married are assumed to have never been pregnant. Because the number of all women is not normalized, the weighted numbers will not necessarily sum to the total. Figures in parentheses are based on 25-49 unweighted cases. ¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 5.12 Sexual and reproductive health behaviors before age 15

Among women age 15-19, percentage who initiated sexual intercourse, were married, and had a live birth before age 15, Bangladesh DHS 2017-18

Women	Had sexual intercourse before age 15	Married before age 15	Gave birth before age 15	Number
Total 15-19	9.8	12.4	2.7	4,782

Key Findings

- Desire for another child: 12% of currently married women want to have another child within 2 years, and 21% want to wait at least 2 years.
- Limiting childbearing: 60% of currently married women do not want another child or are sterilized. The percentage of women who want no more children has declined since 2011 (from 65% to 60%).
- Ideal family size: Women report 2.3 children as their ideal family size.
- Unwanted births: Overall, 79% of births in the past 5 years were wanted, 13% were mistimed, and 8% were unwanted.
- Wanted fertility: The total wanted fertility rate is 1.7 children while the actual total fertility rate (TFR) is 2.3 children. On average, women have 0.6 children more than they want.

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

This chapter presents information on whether and when married women want more children, ideal family size, whether the last birth was wanted, and the theoretical fertility rate if all unwanted births were prevented.

6.1 DESIRE FOR ANOTHER CHILD

Desire for another child

Women were asked whether they wanted more children and, if so, how long they would prefer to wait before the birth of the next child. Women who are sterilized are assumed not to want any more children. *Sample:* Currently married women age 15-49

Only 12% of currently married women age 15-49 want to have another child within 2 years; 21% would prefer to wait 2 or more years, and 60% want no more children or are sterilized (**Table 6.1**).

The desire to stop childbearing increases rapidly with the number of living children, from 12% among women with one child to 76% among women with two children and over 80% among women with three or more children (**Table 6.2**). Conversely, the proportion of women who want to have another child decrease with the number of living children. For example, 65% of currently married women with no children want to have a child within 2 years, as compared with less than 1% of women with four or more children (**Table 6.1**).

Trends: The proportion of currently married women age 15-49 who want no more children has declined over time, from 65% in 2011 to 60% in 2017-18 (**Figure 6.1**). The proportion of women with two children who want no more children increased from 68% in 2004 to 82% in 2011 before declining to 76% in 2017-18. The proportion of women with three children who want to limit childbearing has decreased by 3 percentage points since 2011 (**Figure 6.2**).

Patterns by background characteristics

 Overall, rural women are more likely than urban women to want no more children (61% versus 58%). Among women with two children, 78% of those in urban areas want no more children, as

compared with 75% of those in rural areas (**Table 6.2**).

- The desire to limit childbearing varies by administrative division among currently married women with two living children. For example, 64% of currently married women with two children in Chattogram do not want to have another child, compared with 83% of women in Khulna.
- The percentage of currently married women who want no

more children decreases gradually with increasing education. Seventy-nine percent of women with no education want to limit childbearing, as compared with 38% of those with a secondary education or higher.

 Women in the lowest wealth quintile are more likely than women in the highest quintile to want to limit childbearing (66% versus 54%).

6.2 IDEAL FAMILY SIZE

Ideal family size

Respondents with no children were asked "If you could choose exactly the number of children to have in your whole life, how many would that be?" Respondents who had children were asked "If you could go back to the time when you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?" **Sample:** Women age 15-49

The mean ideal number of children is 2.3 among both currently married and ever-married women. Seventy-three percent of ever-married women consider two children to be ideal. The more children respondents already have, the more children they consider ideal. Ever-married women who have no

Figure 6.1 Trends in desire to limit childbearing

Percentage of currently married women age 15-49 who want no more children

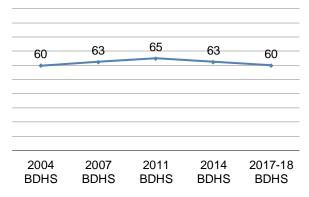
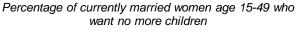
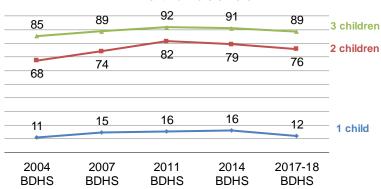


Figure 6.2 Trends in desire to limit childbearing by number of living children





children consider 2.0 children to be ideal on average. In contrast, women with six or more children consider 3.1 children to be ideal (**Table 6.3**).

Trends: The mean ideal number of children among ever-married women decreased from 2.4 in 2004 to 2.2 in 2014 before increasing slightly to 2.3 in 2017-18.

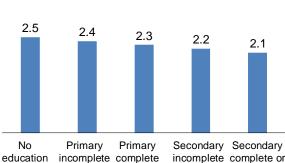
Patterns by background characteristics

- Mean ideal family size generally increases with age, from 2.1 children among women age 15-19 to 2.6 children among women age 45-49 (Table 6.4).
- Mean ideal number of children varies only minimally by division, ranging from 2.1 in Khulna to 2.6 in Sylhet.
- Mean ideal family size is higher among women with no education (2.5 children) than among women with a secondary education or higher (2.1 children) (Figure 6.3).

6.3 FERTILITY PLANNING STATUS

Figure 6.3 Ideal family size by education

Mean ideal number of children



incomplete complete or higher

Planning status of births/pregnancies

Women reported whether their births/pregnancies were wanted at the time (planned birth), at a later time (mistimed birth), or not at all (unwanted birth). *Sample:* Current pregnancies and births in the 5 years before the survey to women age 15-49

Seventy-nine percent of births in the 5 years preceding the survey were wanted at the time of conception; 13% were mistimed, and 8% were unwanted (**Figure 6.4**).

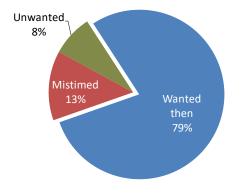
Trends: There is an increasing trend in Bangladesh towards pregnancy planning. Planned births increased steadily from 70% in 2004 to 71% in 2007, 72% in 2011, 74% in 2014, and 79% in 2017-18.

Patterns by background characteristics

 The percentage of unwanted births increases with birth order, from less than 1% among firstorder births to 39% among fourth- or higherorder births (Table 6.5).

Figure 6.4 Fertility planning status

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



- Similarly, the proportion of unwanted births increases with mother's age, from 1% among women age 15-19 to 34% among women age 35-39.
- The percentage of mistimed births declines with age, from 16% among women less than age 20 to 5% among women age 35-39.

6.4 WANTED FERTILITY RATES

Unwanted birth

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

Wanted birth

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

Wanted fertility rate

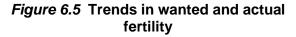
The average number of children a woman would have by the end of her childbearing years if she bore children at the current agespecific fertility rates, excluding unwanted births. *Sample:* Women age 15-49

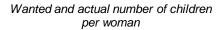
The total wanted fertility rate in Bangladesh is 1.7 children, while the actual total fertility rate (TFR) is 2.3 children. This implies that, on average, Bangladeshi women have 0.6 children more than they want (**Table 6.6**).

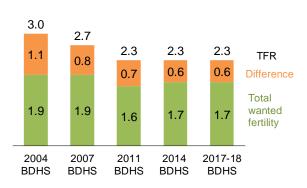
Trends: The total wanted fertility rate in Bangladesh decreased from 1.9 children in 2004 and 2007 to 1.7 children in 2017-18. The gap between wanted and actual fertility has narrowed slightly since 2007, from 0.8 children to 0.6 children (**Figure 6.5**).

Patterns by background characteristics

- The gap between wanted and actual fertility is slightly larger among women who live in rural areas (0.5 children) than among women who live in urban areas (0.4 children) (**Table 6.6**).
- The gap between wanted and actual fertility decreases from 0.7 children among women with no education to 0.3 children among women with a secondary education or higher.







• Similarly, the gap between wanted and actual fertility declines from 0.8 children among women in the lowest wealth quintile to 0.3 children among those in the highest wealth quintile.

6.5 SPOUSAL AGREEMENT REGARDING DESIRED NUMBER OF CHILDREN

Overall, 79% of currently married women report that their husbands want the same number of children as they do. Eleven percent of women say that their husbands want more children than they want, and 6% say that their husbands want fewer children (**Table 6.7**).

Patterns by background characteristics

- Spousal agreement on desired number of children increases from 69% among women with no
 education to 86% among women with a secondary education or higher.
- Spousal agreement on desired number of children is higher among women in the highest wealth quintile (82%) than among those in the lowest quintile (75%).

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- Table 6.1 Fertility preferences by number of living children
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- Table 6.5 Fertility planning status
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- Table 6.7 Spousal agreement on desired number of children

Table 6.1 Fertility preferences by number of living children

Percent distribution of currently married women age 15-49 by desire for children, according to number of living children, Bangladesh DHS 2017-18

	Number of living children ¹							
Desire for children	0	1	2	3	4	5	6+	
Have another soon ²	65.4	19.8	5.2	2.0	0.4	0.3	0.0	11.9
Have another later ³	28.1	61.4	11.6	2.6	0.7	0.2	0.4	20.7
Have another, undecided when	1.7	2.1	0.5	0.2	0.1	0.1	0.0	0.8
Undecided	1.1	3.1	3.6	1.0	0.4	0.3	0.1	2.2
Want no more	0.7	11.2	71.6	77.0	77.8	75.5	73.1	54.0
Sterilized ⁴	0.5	1.0	4.2	11.7	11.9	12.2	9.3	5.9
Declared infecund	2.5	1.4	3.3	5.6	8.7	11.4	17.1	4.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,500	4,369	6,121	3,978	1,799	767	451	18,984

¹ The number of living children includes the current pregnancy.
 ² Wants next birth within 2 years
 ³ Wants to delay next birth for 2 or more years
 ⁴ Includes both female and male sterilization

Table 6.2 Desire to limit childbearing

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Bangladesh DHS 2017-18

			Numbe	r of living o	children ¹			
Background		_	_	_	_	_	_	
characteristic	0	1	2	3	4	5	6+	Total
Residence								
Urban	0.9	13.6	78.2	89.2	90.4	89.5	81.6	57.5
Rural	1.3	11.5	74.8	88.5	89.5	87.2	82.6	60.9
Division								
Barishal	0.9	12.5	73.9	89.0	85.8	77.9	77.0	60.4
Chattogram	0.0	7.0	63.7	85.5	92.0	91.0	85.9	58.1
Dhaka	1.2	9.9	78.2	90.0	92.6	91.6	89.5	58.0
Khulna	2.9	19.8	83.3	90.5	92.4	(87.8)	*	63.4
Mymensingh	0.3	10.6	69.4	86.4	90.0	88.5	65.4	57.7
Rajshahi	0.9	17.9	79.0	88.4	83.5	82.6	*	60.6
Rangpur	1.8	11.5	81.2	92.6	84.9	80.1	(74.5)	63.9
Sylhet	1.6	9.4	66.4	84.3	89.7	87.7	87.1	59.6
Education								
No education	11.5	40.7	79.9	87.5	87.3	85.8	82.8	78.9
Primary incomplete	0.7	15.8	74.2	88.7	89.0	89.5	81.7	71.0
Primary complete ²	0.4	10.6	76.7	88.7	92.2	88.9	79.7	66.2
Secondary incomplete	0.1	9.8	76.1	89.5	91.8	88.2	(84.8)	53.9
Secondary complete or higher ³	0.9	9.2	73.7	88.6	95.8	*	*	38.2
Wealth quintile								
Lowest	2.7	12.1	75.4	90.7	91.7	91.2	81.1	65.8
Second	0.3	12.1	75.4	87.0	88.6	83.9	87.6	63.2
Middle	2.1	14.0	74.1	89.9	92.8	86.8	74.7	60.3
Fourth	1.3	10.6	78.3	89.9	88.8	91.5	82.3	57.4
Highest	0.2	12.3	75.7	85.8	85.2	81.7	(89.7)	53.8
Total	1.2	12.2	75.8	88.7	89.7	87.7	82.4	59.9

Note: Women who have been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been ¹ The number of living children includes the current pregnancy.
 ² Primary complete is defined as completing grade 5.
 ³ Secondary complete is defined as completing grade 10.

Table 6.3 Ideal number of children by number of living children

Percent distribution of ever-married women age 15-49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to number of living children, Bangladesh DHS 2017-18

			Numb	er of living o	children ¹			
Ideal number of children	0	1	2	3	4	5	6+	Total
0	0.5	0.1	0.0	0.1	0.0	0.2	0.4	0.1
1	7.9	7.4	3.1	1.8	0.7	0.1	0.4	3.8
2	81.3	82.8	81.2	65.6	56.1	42.1	31.9	73.2
3	6.1	7.2	11.5	22.9	21.7	29.6	26.4	14.5
4	3.2	1.9	3.7	8.4	19.6	21.7	33.1	7.2
5	0.1	0.1	0.1	0.4	0.5	3.7	1.7	0.4
6+	0.2	0.0	0.1	0.1	0.2	0.7	2.3	0.2
Non-numeric responses	0.7	0.5	0.2	0.6	1.2	2.0	4.0	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,659	4,670	6,403	4,182	1,902	818	495	20,127
Mean ideal number of children for: ²								
Ever-married women	2.0	2.0	2.2	2.4	2.6	2.9	3.1	2.3
Number of ever-married women	1,647	4,647	6,389	4,158	1,879	801	475	19,996
Currently married women	2.1	2.0	2.2	2.4	2.6	2.9	3.1	2.3
Number of currently married women	1,488	4,348	6,110	3,957	1,779	751	433	18,867

¹ The number of living children includes the current pregnancy.
 ² Means are calculated excluding respondents who gave non-numeric responses.

Table 6.4 Mean ideal number of children according to background characteristics

Mean ideal number of children for ever-married women age 15-49 according to background characteristics, Bangladesh DHS 2017-18

Background characteristic	Mean	Number of women ¹
Age 15-19 20-24 25-29 30-34 35-39 40-44 45-49	2.1 2.1 2.2 2.3 2.3 2.5 2.6	2,054 3,544 3,567 3,457 2,865 2,271 2,238
Residence Urban Rural	2.2 2.3	5,702 14,294
Division Barishal Chattogram Dhaka Khulna Mymensingh Rajshahi Rangpur Sylhet	2.3 2.4 2.2 2.1 2.3 2.2 2.2 2.2 2.6	1,114 3,599 5,095 2,321 1,544 2,789 2,366 1,168
Education No education Primary incomplete Primary complete ² Secondary incomplete Secondary complete or higher ³	2.5 2.4 2.3 2.2 2.1	3,284 4,213 2,028 7,107 3,364
Wealth quintile Lowest Second Middle Fourth Highest Total	2.3 2.3 2.2 2.2 2.2 2.3	3,704 3,936 4,025 4,161 4,169 19,996

¹ Number of women who gave a numeric response

² Primary complete is defined as completing grade 5.
 ³ Secondary complete is defined as completing grade 10.

Table 6.5 Fertility planning status

Percent distribution of births to women age 15-49 in the 3 years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, Bangladesh DHS 2017-18

	Plan	ning status o	of birth		
	Wanted	Wanted	Wanted no		Number of
Birth order and mother's age at birth	then	later	more	Total	births
Birth order					
1	89.8	10.0	0.2	100.0	2,551
2	79.0	19.4	1.6	100.0	2,098
3	70.6	12.9	16.6	100.0	1,065
4+	53.3	8.2	38.5	100.0	759
Mother's age at birth					
<20	83.6	15.9	0.5	100.0	1,892
20-24	79.9	16.9	3.3	100.0	2,092
25-29	79.6	9.9	10.6	100.0	1,522
30-34	68.8	6.5	24.7	100.0	754
35-39	61.3	4.9	33.8	100.0	173
40-44	(40.9)	(2.7)	(56.4)	100.0	38
45-49	*	`*´	*	*	3
Total	78.8	13.3	7.9	100.0	6,474

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

Table 6.6 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the 3 years preceding the survey, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	1.6	2.0
Rural	1.8	2.3
Division		
Barishal	1.8	2.4
Chattogram	1.9	2.5
Dhaka	1.7	2.2
Khulna	1.5	1.9
Mymensingh	1.8	2.5
Rajshahi	1.7	2.1
Rangpur	1.6	2.1
Sylhet	1.9	2.6
Education		
No education	1.9	2.6
Primary incomplete	1.8	2.6
Primary complete ¹	1.8	2.4
Secondary incomplete	1.8	2.3
Secondary complete or higher ²	1.9	2.2
Wealth quintile		
Lowest	1.8	2.6
Second	1.8	2.5
Middle	1.7	2.1
Fourth	1.7	2.1
Highest	1.7	2.0
Total	1.7	2.3

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

¹ Primary complete is defined as completing grade 5.

² Secondary complete is defined as completing grade 10.

Table 6.7 Spousal agreement on desired number of children

Percent distribution of currently married, non-sterilized women by whether or not they think their husband wants the same number of children as they want, according to background characteristics, Bangladesh DHS 2017-18

		Husband	wants			
Background characteristic	Same number of children	More children	Fewer children	Don't know	Total	Number of women
Residence						
Urban	80.9	10.1	5.6	3.4	100.0	5,091
Rural	78.3	11.2	6.3	4.2	100.0	12,775
Division						
Barishal	78.5	11.8	6.9	2.8	100.0	1,024
Chattogram	79.1	11.6	4.9	4.3	100.0	3,266
Dhaka	80.7	10.1	5.5	3.7	100.0	4,576
Khulna	79.1	9.6	6.2	5.1	100.0	2,070
Mymensingh	77.7	11.7	5.9	4.7	100.0	1,399
Rajshahi	79.8	10.2	6.4	3.5	100.0	2,455
Rangpur	78.5	9.5	9.4	2.6	100.0	2,054
Sylhet	72.6	16.6	4.6	6.1	100.0	1,021
Education						
No education	69.4	16.9	6.2	7.4	100.0	2,591
Primary incomplete	76.0	12.5	6.6	4.8	100.0	3,613
Primary complete ¹	77.1	13.3	5.8	3.9	100.0	1,839
Secondary incomplete	81.8	8.8	6.5	2.9	100.0	6,636
Secondary complete or higher ²	85.5	7.0	4.8	2.7	100.0	3,187
Wealth quintile						
Lowest	74.5	13.8	6.3	5.3	100.0	3,220
Second	78.8	11.0	6.4	3.8	100.0	3,486
Middle	79.2	10.2	6.2	4.3	100.0	3,619
Fourth	79.7	9.9	6.8	3.6	100.0	3,768
Highest	82.2	9.8	4.9	3.1	100.0	3,773
Total	79.0	10.9	6.1	4.0	100.0	17,865

Note: Non-sterilized women refer to women in couples in which neither the wife nor the husband is sterilized. ¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Key Findings

- Contraceptive use: The contraceptive prevalence rate is 62% among currently married women age 15-49; 52% of women use modern contraceptive methods, and 10% use traditional methods. The pill is by far the most widely used method (25%), followed by injectables (11%).
- Modern contraceptive use: Over the last 7 years, there have been only minimal changes in the percentage of women using modern contraceptives (52% in 2011, 54% in 2014, and 52% in 2017-18). By division, use of modern contraceptives is highest in Rangpur (59%) and lowest in Chattogram and Sylhet (45% each).
- Sources of modern methods: The percentage of women who obtain their contraceptive method from the private sector increased from 38% in 2007 to 43% in 2014 and 49% in 2017-18. The private sector has surpassed the public sector as the dominant source of contraceptive methods.
- Contraceptive discontinuation: In the 5 years preceding the survey, 37% of contraceptive users discontinued their method within 12 months. The most common reason for stopping a method was the desire to become pregnant (29%), followed by method-related health concerns or side effects (26%).
- Unmet need for family planning: 12% of currently married women in Bangladesh have an unmet need for family planning, 5% for spacing and 7% for limiting.
- Exposure to family planning messages through the mass media: 26% of currently married women reported having heard or seen family planning messages through any mass media sources within a month prior to the survey.

ouples can use contraceptive methods to limit or space the number of children they have. This chapter presents information on use and sources of contraceptive methods, use of socially marketed brands of pills and condoms, contraceptive discontinuation, unmet need for family planning, and intention to use family planning in the future. It also examines knowledge of the fertile period, knowledge and use of the emergency contraceptive pill and menstrual regulation, contact with family planning workers, exposure to family planning messages in the media, and other issues associated with family planning.

The 4th Health, Population and Nutrition Sector Program (HPNSP) 2017-22 aims to increase the contraceptive prevalence rate (CPR) from 62% to 75% by 2022, with an emphasis on increasing the use of

modern methods in lagging divisions (Sylhet and Chattogram). In alignment with the 4th HPNSP, Family Planning 2020 (FP2020) updated its commitment to increasing the use of long-acting and permanent methods from 8% to 20%, reducing unmet need for family planning from 12% to 10%, and reducing the contraceptive discontinuation rate from 30% to 20% by 2021 (Government of Bangladesh 2017).

7.1 CONTRACEPTIVE USE

Use of family planning helps women avoid unintended and unplanned pregnancies and reduces the risk of unsafe abortions. Contraceptives also help women space the births of their children, which directly benefits the health of both the mother and the infant.

Contraceptive prevalence rate

Percentage of currently married women who use any contraceptive method. *Sample:* Currently married women age 15-49

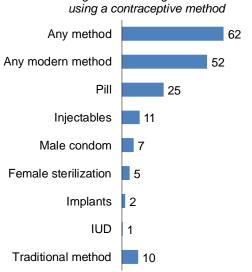
The contraceptive prevalence rate among currently married women age 15-49 is 62%; 52% of women are using modern contraceptive methods, and 10% are using traditional methods (**Table 7.1**).

Modern methods

Include male and female sterilization, injectables, intrauterine devices (IUDs), contraceptive pills, implants, male condoms, and the lactational amenorrhea method.

The pill is by far the most widely used method (25%), followed by injectables (11%). Nine percent of currently married women use a long-acting or permanent method such as female or male sterilization, implants, or IUDs (**Figure 7.1**). Among women using traditional methods, the majority (7%) use the rhythm method (**Table 7.1**).

Figure 7.1 Contraceptive use

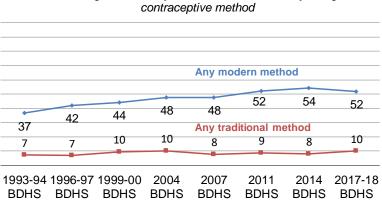


Percentage of women age 15-49 currently

Trends: There have been only minimal changes over the last 7 years in the percentage of women using modern contraceptives (52% in 2011, 54% in 2014, and 52% in 2017-18) (Figure 7.2). The contraceptive prevalence rate increased from 45% in 1993-94 to 62% in 2014 and 2017-18. The 4th HPNSP aims to reach a CPR of 75% by 2022. Note that use of modern methods declined from 54% to 52% between 2014 and 2017-18, mainly due to the decline in use of oral pills and injectables.

Figure 7.2 Trends in contraceptive use

Percentage of currently married women currently using a



Patterns by background characteristics

- Modern method use varies by age; the percentage of women using modern methods is highest among those age 30-34 (63%) and age 35-39 (61%). The oral pill is the most widely used method among all age groups except women age 45-49. As expected, women in older groups (age 30-49) are more likely to be sterilized than younger women (Table 7.1).
- Use of any contraceptive method is higher among urban couples than among rural couples (65% versus 60%). Similarly, urban couples (12%) are more likely than rural couples (5%) to use male condoms (Table 7.2).
- By division, modern method use is highest in Rangpur (59%) and lowest in Chattogram and Sylhet (45% each) (Figure 7.3). The 4th HPNSP aims to reach a modern contraceptive use rate of 60% in Chattogram and Sylhet by 2022.

Figure 7.4 Use of modern methods by household wealth

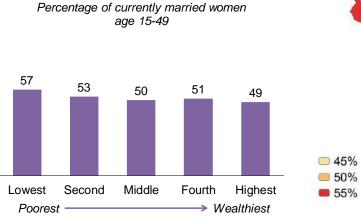
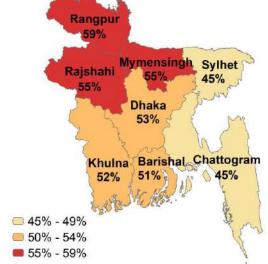


Figure 7.3 Modern contraceptive use by division

Percentage of currently married women age 15-49



In general, modern method use decreases with increasing wealth. Fifty-seven percent of women in the lowest wealth quintile use a modern method, as compared with 49% of women in the highest quintile (Figure 7.4).

Timing of Female Sterilization

Women who decide to get sterilized generally undergo the procedure early in their reproductive years. Almost 6 in 10 sterilized women had the procedure done before age 30, and about one-fourth of women were sterilized before age 25. The median age at sterilization was 28 years in 2014 and 29 years in 2017-18 (**Table 7.3**).

Knowledge of the Fertile Period

Around half of rhythm method users (51%) correctly know the fertile period during a woman's ovulatory cycle, as compared with approximately one-third of ever-married women overall (34%) (**Table 7.4**).

7.2 KNOWLEDGE AND USE OF MENSTRUAL REGULATION

Menstrual regulation

Menstrual regulation is a procedure used to bring on menses in women who have missed their menstrual cycle. Existing polices in Bangladesh allow a woman to go through menstrual regulation within 8 weeks from the first day of the last menstrual period by a paramedic (that is, a trained family welfare visitor) or within 10 weeks from the first day of the last period by a trained medical doctor.

Table 7.5 shows that 71% of ever-married women and 72% of currently married women know about menstrual regulation. Among those who have heard of menstrual regulation, 7% of ever-married and 8% of currently married women have used it. Among both ever-married and currently married women, use of menstrual regulation generally increases with increasing age.

7.3 KNOWLEDGE AND USE OF THE ECP AND LAM

Emergency contraceptive pill (ECP)

The ECP is a form of contraception that women can use within 72 hours after unprotected intercourse.

Eighteen percent of ever-married women know about the ECP (**Table 7.6**). Among those who have ever heard of the ECP, 11% have used it, and 3% used it within the last 12 months. Urban women are almost twice as likely as rural women to have heard of the ECP. Awareness of the ECP increases with increasing education and wealth. Six percent of women with no education have heard of the ECP, as compared with 44% of women with a secondary education or higher. Similarly, 7% of women in the lowest wealth quintile are aware of the ECP, compared with 37% of those in the highest wealth quintile. Similar patterns are observed in use of the ECP.

Lactational amenorrhea method (LAM)

The LAM is a short-term family planning method based on the natural effect of breastfeeding on fertility. The act of breastfeeding, particularly exclusive breastfeeding, suppresses the release of hormones that are necessary for ovulation.

Only 5% of ever-married women know about the LAM (**Table 7.7**). Among those who have ever heard of the LAM, 10% reported having used it.¹ Rural women (12%) are more likely than urban women (6%) to have used the LAM.

¹ This refers to self-reported use of LAM, with no checks on whether the requirements for LAM use are fulfilled.

7.4 SOURCE OF MODERN CONTRACEPTIVE METHODS

Source of modern contraceptives

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

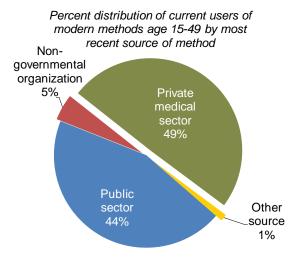
Sample: Women age 15-49 currently using a modern contraceptive method

Close to half (49%) of modern contraceptive users obtained their method from the private sector (mostly pharmacy or drug store), 44% from the public sector, 5% from a nongovernmental organization (NGO), and 1% from another source (**Table 7.8** and **Figure 7.5**).

The source of modern contraceptive methods varies greatly by the specific method. Long-acting or permanent methods such as sterilization, implants, and IUDs are usually obtained from public sector facilities, particularly upazila health complexes and union health and family welfare centers (**Table 7.8**).

Table 7.8 shows that one-third of currently married women age 15-49 who currently use injectables obtained the injection from a pharmacy (contribution of Blue Star or Green Star providers), the only formal private source of this method.

Figure 7.5 Source of modern contraceptive methods



The 2017-18 BDHS asked women who have never used family planning whether they know a source of family planning services. **Table 7.9** shows that 83% of never users know a public sector source, 80% know a private medical sector source, 11% know about an NGO source, and 6% know of another source.

Trends: The percentage of women who obtain their contraceptive method from the private sector increased from 38% in 2007 to 43% in 2014 and 49% in 2017. The private sector has surpassed the public sector as the dominant source of contraceptive methods. There has been a slow increase over time in the proportion of female sterilization procedures that occur in private medical sector facilities (from 21% in 2011 to 29% in 2014 and 32% in 2017-18).

7.5 Use of Social Marketing Brands

Bangladesh has an active social marketing program that distributes family planning methods including pills, condoms, injectables, IUDs, and implants as well as other health and nutrition products. These items are distributed through a network of retail outlets such as pharmacies, small shops, kiosks, non-graduate private health providers (Blue Star, Green Star), graduate health providers (Pink Star), and NGOs. The Social Marketing Company (SMC) currently carries several brands of oral contraceptives, including Femicon, Femipil, Noret-28, Mypil, Ovacon Gold, and the progestin-only pill Minicon.

SMC distributes the injectable brands SOMA-JECT (intramuscular) and Sayana PRESS (subcutaneous) through a network of private sector health providers called the Blue Star Program. Also, as part of its Green Start Program, SMC distributes SOMA-JECT through selected pharmacy drug sellers and providers (SMC 2018).

As shown in **Table 7.10**, 47% of pill users use social marketing brands, and the same percentage use the government-supplied brand, Shuki. The percentage of pill users using a social marketing brand has increased since 1993-94 (from 14% to 47%).

Over three in five condom users buy social marketing brands: 29% use Panther, 11% each use Raja and Hero, 9% use Sensation, 2% use U & ME, and 1% use Xtreme (**Table 7.11**). The percentage of condom users who used social marketing brands has remained the same over the past 3 years (63% in 2014 and 62% in 2017-18).

7.6 DECISION MAKING ABOUT FAMILY PLANNING

The survey collected information regarding decision making about family planning from currently married women age 15-49. Seventy-eight percent of women reported that the decision to use a family planning method was made jointly with their husband, while only 16% reported that they made the decision mainly by themselves; 7% reported that their husband mainly made the decision (**Table 7.12**). Among women who are not using a family planning method, 63% made the decision not to use family planning jointly with their husband, 31% decided themselves, and 5% reported that the decision was mainly made by their husband.

7.7 DISCONTINUATION OF CONTRACEPTIVES

Contraceptive discontinuation rate

Percentage of contraceptive use episodes discontinued within 12 months. **Sample:** Episodes of contraceptive use in the 5 years before the survey experienced by women who are currently age 15-49 (one woman may contribute more than one episode)

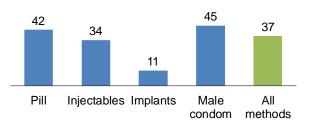
Thirty-seven percent of contraceptive users discontinue their method within 12 months of starting (**Table 7.13**). As expected, discontinuation rates are much higher for temporary methods such as male condoms (45%), pills (42%), and injectables (34%) than for long-term methods such as implants (11%) (**Figure 7.6**).

FP2020, the global partnership that supports the right of women to decide on childbearing, has set as a target reducing the discontinuation rate to 20% by 2021 (Government of Bangladesh 2017). However, the all-method discontinuation rate increased from 30% in 2014 to 37% in 2017-18.

The most common reason for discontinuation is the

Figure 7.6 Contraceptive discontinuation rates

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



desire to become pregnant (29%), followed by side effects and health concerns (26%). Twelve percent of women each reported accidental pregnancies and infrequent sex/husband away as the reason for method discontinuation (**Table 7.14**).

7.8 DEMAND FOR FAMILY PLANNING

Unmet need for family planning

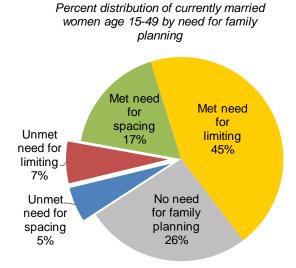
Proportion of currently married women who (1) are not pregnant and not postpartum amenorrheic and are considered fecund and want to postpone their next birth for 2 or more years or stop childbearing altogether but are not using a contraceptive method, or (2) have a mistimed or unwanted current pregnancy,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

Sample: Currently married women age 15-49

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

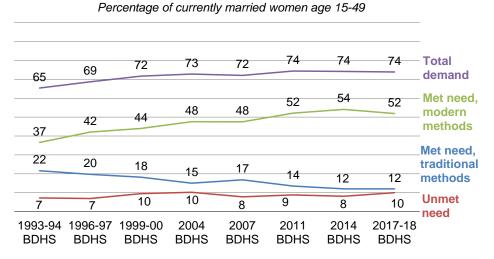
Overall, 12% of currently married women in Bangladesh have an unmet need for family planning services, 5% for spacing and 7% for limiting (**Table 7.15** and **Figure 7.7**). The total demand for family planning in Bangladesh is 74%, of which 70% is satisfied through the use of modern methods (**Table 7.15**).

Figure 7.7 Demand for family planning



Trends: Unmet need for family planning in Bangladesh decreased from 14% in 2011 to 12% in 2014 and 2017-18 (Figure 7.8). Total demand for family planning remained almost constant over the same period.

Figure 7.8 Trends in demand for family planning



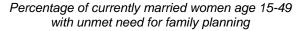
Patterns by background characteristics

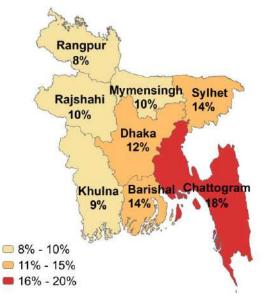
- Unmet need for family planning decreases with increasing age, from 16% among women age 15-19 to 5% among women age 45-49.
- Unmet need is higher among women in rural areas than among those in urban areas (13% versus 9%).
- Across divisions, unmet need is highest in Chattogram (18%), followed by Sylhet and Barishal (14% each), and lowest in Rangpur and Khulna (8% and 9%, respectively) (Figure 7.9).
- Unmet need generally increases with increasing education; 7% of women with no education have an unmet need for family planning, as compared with 14% of women with an incomplete secondary education (Table 7.15).

Future Use of Contraception

More than two-thirds (70%) of currently married women age 15-49 who are not using contraception intend to use family planning in the future (**Table 7.16**). Almost one-third (29%) of women do not intend to use family planning in the future, and 1% are unsure.

Figure 7.9 Unmet need by division





In addition, the survey assessed future demand for

specific contraceptive methods among currently married women who are not using contraception but who say that they intend to use a method in the future. Forty-four percent of prospective users reported they prefer the pill, while 13% prefer injectables. More than one-third of nonusers (35%) reported that they were not sure what method they wanted to use (**Table 7.17**).

Trends: The proportion of women who intend to use family planning in the future decreased consistently from 73% in 2004 to 70% in 2007, 65% in 2011, and 58% in 2014 before increasing to 70% in 2017-18.

Patterns by background characteristics

- The proportion of women who do not intend to use family planning in the future generally rises with the number of living children, from 10% among those with one child to 67% among those with four or more children (**Table 7.16**).
- The proportion of nonusers who say that they intend to use family planning in the future is highest among women with one child (89%) and lowest among those with four or more children (32%).

Reasons for Not Intending to Use Contraception

Table 7.18 shows the main reasons why women who are not using a family planning method do not intend to use one in the future. More than 8 in 10 women do not plan to use a method in the future for reasons related to fertility. The most common reasons cited are menopause/hysterectomy (54%) and infrequent sex or no sex (17%). Nine percent of women do not intend to use a contraceptive method because they are sub-fecund or infecund. Only 6% of women do not intend to use contraception because they want more children.

Six percent of married women do not intend to use family planning in the future because of method-related reasons, mainly concerns regarding interference with the body's normal process. Three percent of women do not intend to use contraceptives because of opposition to family planning.

Exposure to Family Planning Messages in the Media

To assess the reach of family planning messages, the 2017-18 BDHS asked women whether they had heard or seen a message about family planning on the radio, television, in a newspaper or magazine, on a mobile phone, or in other media sources (e.g., billboard, poster, or leaflet; social media/internet; or community event) in the month before the survey. Only 26% of currently married women reported having heard or seen family planning messages through at least one of these media sources. Television is the most popular source for family planning messages in Bangladesh, with 16% of currently married women age 15-49 having seen a family planning message on television in the past month (**Table 7.19**).

Trends: Exposure to family planning messages in the mass media among women age 15-49 has declined over the last 6 years. For example, the percentage of women who saw a family planning message on television declined from 24% in 2011 to 16% in 2017-18.

Patterns by background characteristics

- Not surprisingly, women residing in urban areas are much more likely to have been exposed to family planning messages than their rural counterparts. This is especially true for messages on television and in print media. Women in rural areas are more exposed to family planning messages through government community health workers (10%) than those in urban areas (5%) (Table 7.19).
- Education has a positive influence on media exposure. For example, 7% of women with no education are exposed to family planning information on television, as compared with 30% of women with a secondary education or higher. Exposure to family planning messages generally increases with increasing wealth (**Table 7.19**).

7.9 CONTACT WITH FIELDWORKERS

Contact with fieldworkers

Respondent discussed family planning in the 6 months before the survey with a fieldworker.

Sample: Women age 15-49

In the 2017-18 BDHS, women were asked whether a fieldworker had visited them in the 6 months prior to the survey. **Table 7.20** shows that 20% of currently married women reported a visit by a fieldworker in the past 6 months, the same proportion as in 2014. One-fourth of women visited by a fieldworker received a family planning method from the worker, while 12% both discussed and received a family planning method. Sixty-three percent of women discussed family planning but did not receive a method.

Among women who were visited by a fieldworker in the 6 months before the survey, 70% were visited by a government family planning fieldworker, while 5% were visited by a government health worker and 25% by an NGO fieldworker (**Table 7.21**).

7.10 SATELLITE AND COMMUNITY CLINICS

Ninety-two percent of ever-married women age 15-49 were aware of satellite clinics in their community (**Table 7.22**). Of these women, 18% reported visiting such a clinic in the 3 months before the 2017-18 BDHS. Forty-two percent of women who visited a satellite clinic received immunization services for their children, 38% obtained vitamin A for their children, and 18% received family planning methods (**Table 7.22**).

Currently, 13,094 community clinics are operating to provide health services (MOHFW 2017). These clinics offer comprehensive primary health care, family planning, nutritional, and health education services from a single center.

Six in 10 ever-married women are aware of a community clinic in their locality. Awareness of community clinics is lower among women in Dhaka, Sylhet, and Chattogram divisions. Similarly, awareness of community clinics is lower among women in the highest wealth quintile (36%) than among those in the second wealth quintile (74%) (**Table 7.23**).

Sixteen percent of women who were aware of community clinics reported visiting such a clinic in the 3 months before the survey. Of these women, 30% visited to obtain family planning methods, 11% visited for child health, 6% visited for immunizations, and 5% visited for antenatal care (**Table 7.23**).

7.11 POSTPARTUM COUNSELING AND FAMILY PLANNING

Among women age 15-49 who had given birth at a health facility in the 3 years prior to the survey and received postnatal care, 87% received counseling about exclusive breastfeeding, 21% received information on family planning methods, 14% received information on the importance of spacing and limiting births, and 10% received information on sources of family planning methods (**Table 7.24**). With respect to other types of counseling, 7% of women received information on immediate tubal ligation; 5% each on progesterone-only pills, immediate IUD insertion, and immediate implant insertion; and 2% on use of the LAM.

LIST OF TABLES

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

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- Table 7.2 Current use of contraception according to background characteristics
- Table 7.3 Timing of sterilization
- Table 7.4 Knowledge of fertile period
- Table 7.5 Knowledge and use of menstrual regulation
- Table 7.6 Knowledge and use of the emergency contraceptive pill by background characteristics
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- Table 7.8 Source of modern contraception methods
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Table 7.1 Current use of contraception by age

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to age, Bangladesh DHS 2017-18

						Modern	method				Anv	Trad	itional me	ethod			
Age	Any method	Any modern method	Pill	Inject- ables	Male con- doms	Female sterili- zation	Male sterili- zation	IUD	Implants	Other ¹	tradi- tional method	Rhythm	With- drawal	Other	Not currently using	Total	Number of women
15-19	48.9	43.7	27.3	6.3	8.1	0.1	0.1	0.0	1.8	0.1	5.2	2.1	3.0	0.1	51.1	100.0	2,006
20-24	55.6	50.9	28.2	11.5	7.9	0.4	0.1	0.3	2.3	0.1	4.7	2.2	2.5	0.0	44.4	100.0	3,435
25-29	63.5	56.8	29.2	12.6	8.5	2.6	0.7	0.6	2.6	0.0	6.7	3.7	2.8	0.1	36.5	100.0	3,445
30-34	71.0	62.7	30.4	13.8	7.7	6.0	1.4	0.7	2.6	0.0	8.3	5.4	2.6	0.3	29.0	100.0	3,308
35-39	75.4	61.4	26.4	13.0	7.7	8.9	2.1	0.6	2.7	0.0	13.9	11.3	2.4	0.2	24.6	100.0	2,699
40-44	66.2	46.0	18.9	8.3	5.1	9.2	1.9	1.1	1.4	0.0	20.2	15.7	3.8	0.7	33.8	100.0	2,109
45-49	44.6	28.7	8.7	5.2	3.2	9.0	1.6	0.5	0.6	0.0	15.8	13.0	2.5	0.4	55.4	100.0	1,983
Total	61.9	51.9	25.4	10.7	7.2	4.8	1.1	0.6	2.1	0.0	10.0	7.0	2.8	0.2	38.1	100.0	18,984

Note: If more than one method is used, only the most effective method is considered in this tabulation. ¹ Other modern methods include the lactational amenorrhea method and emergency contraception.

Table 7.2 Current use of contraception according to background characteristics

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to background characteristics, Bangladesh DHS 2017-18

						Modern	method				Any	Trad	itional me	thod	_		
Background characteristic	Any method	Any modern method	Pill	Inject- ables	Male con- doms	Female sterili- zation	Male sterili- zation	IUD	Implants	Other ¹	tradi- tional method	Rhythm	With- drawal	Other	Not currently using	Total	Number of women
Number of living children																	
0	24.9	20.8	12.7	0.3	7.3	0.2	0.2	0.0	0.0	0.1	4.1	1.5	2.5	0.0	75.1	100.0	1,978
1-2	64.6	56.0	29.6	11.5	9.1	2.3	0.7	0.5	2.3	0.0	8.6	5.4	3.0	0.1	35.4	100.0	10,196
3-4 5+	69.7 62.5	56.7 45.4	24.0 16.4	12.9 11.3	4.5 3.1	10.2 9.3	1.9 2.0	0.8 0.4	2.4 2.8	0.0 0.1	13.0 17.1	10.1 14.4	2.5 2.4	0.5 0.3	30.3 37.5	100.0 100.0	5,609 1,201
Residence	02.0	40.4	10.4	11.0	0.1	5.5	2.0	0.4	2.0	0.1	17.1	14.4	2.7	0.0	07.0	100.0	1,201
Urban	65.4	54.9	24.9	10.0	12.4	4.5	0.8	0.7	1.5	0.0	10.5	6.8	3.5	0.2	34.6	100.0	5,378
Rural	60.4	50.7	25.5	11.0	5.1	5.0	1.1	0.5	2.4	0.0	9.7	7.0	2.5	0.3	39.6	100.0	13,607
Division																	
Barishal	61.6	50.9	25.6	13.9	5.4	1.7	1.4	0.4	2.3	0.3	10.7	8.4	2.2	0.1	38.4	100.0	1,056
Chattogram	53.7	44.8	22.5	10.8	5.3	3.8	0.5	0.6	1.3	0.0	9.0	6.6	2.4	0.0	46.3	100.0	3,414
Dhaka	62.2	52.6	25.0	9.0	10.2	5.1	0.8	0.8	1.7	0.0	9.5	6.3	3.0	0.3	37.8	100.0	4,864
Khulna	64.6	52.2	23.4	11.9	8.0	5.2	1.0	0.7	2.0	0.0	12.5	8.6	3.4	0.5	35.4	100.0	2,205
Mymensingh	63.4	55.1	32.4	10.3	5.0	3.3	1.4	0.4	2.3	0.0	8.2	5.6	2.4	0.2	36.6	100.0	1,468
Rajshahi	64.7	55.0	25.5	11.4	7.8	6.3	0.8	0.5	2.7	0.0	9.6	6.0	3.4	0.2	35.3	100.0	2,645
Rangpur	69.8	59.0	28.0	13.9	4.3	6.0	2.6	0.1	4.1	0.0	10.8	8.2	2.2	0.3	30.2	100.0	2,248
Sylhet	55.4	44.8	24.6	5.5	7.0	5.3	0.5	0.4	1.4	0.0	10.6	7.6	2.6	0.4	44.6	100.0	1,085
Education No																	
education	62.5	48.7	18.3	12.9	1.9	9.4	2.7	0.8	2.6	0.0	13.8	11.2	1.8	0.9	37.5	100.0	2,947
Primary incomplete	64.4	53.2	24.0	13.9	3.3	6.7	1.8	0.6	2.8	0.0	11.3	8.4	2.6	0.2	35.6	100.0	3,949
Primary																	,
complete ² Secondary	65.1	54.7	27.4	13.6	5.0	5.0	0.9	0.4	2.3	0.1	10.4	8.0	2.2	0.2	34.9	100.0	1,955
incomplete Secondary	60.4	52.9	29.3	10.2	7.3	2.9	0.4	0.5	2.1	0.0	7.5	4.8	2.7	0.1	39.6	100.0	6,864
complete																	
or higher ³	59.2	49.5	23.8	4.3	17.6	2.4	0.1	0.5	0.7	0.1	9.7	5.2	4.4	0.1	40.8	100.0	3,269
Wealth quintile																	
Lowest	66.3	57.2	26.6	16.4	2.4	5.4	1.9	0.5	4.0	0.0	9.1	6.7	1.9	0.4	33.7	100.0	3,473
Second	63.5	52.6	25.6	13.2	3.9	5.0	1.6	0.4	2.9	0.0	10.9	7.9	2.7	0.4	36.5	100.0	3,730
Middle	59.2	50.2	26.1	10.2	5.1	5.0	0.9	0.7	2.1	0.1	8.9	6.6	2.2	0.1	40.8	100.0	3,846
Fourth	61.1	51.3	27.4	9.1	7.5	4.8	0.7	0.6	1.3	0.0	9.8	6.5	3.1	0.2	38.9	100.0	3,985
Highest	59.8	48.8	21.3	5.8	16.2	4.1	0.4	0.6	0.5	0.0	11.0	7.0	3.8	0.1	40.2	100.0	3,951
Total	61.9	51.9	25.4	10.7	7.2	4.8	1.1	0.6	2.1	0.0	10.0	7.0	2.8	0.2	38.1	100.0	18,984

Note: If more than one method is used, only the most effective method is considered in this tabulation. ¹ Other modern methods include the lactational amenorrhea method and emergency contraception.

² Primary complete is defined as completing grade 5.

³ Secondary complete is defined as completing grade 10.

Table 7.3 Timing of sterilization

Percent distribution of sterilized women age 15-49 by age at the time of sterilization and median age at sterilization, according to the number of years since the operation, Bangladesh DHS 2017-18

		A		Number of	Median				
Years since operation	<25	25-29	30-34	35-39	40-44	45-49	Total	women	age1
<2	15.3	29.7	40.3	10.8	1.6	2.3	100.0	106	30.6
2-3	9.4	34.5	37.9	11.6	4.1	2.5	100.0	127	30.4
4-5	16.1	39.0	25.2	17.2	2.6	0.0	100.0	104	29.3
6-7	17.6	35.3	28.2	15.2	3.8	0.0	100.0	155	29.6
8-9	20.5	31.0	31.5	15.5	1.5	0.0	100.0	97	29.4
10+	39.1	35.6	20.4	4.8	0.0	0.0	100.0	329	а
Total	24.1	34.6	28.1	10.7	1.8	0.6	100.0	918	28.7

a = Not calculated due to censoring ¹ Median age at sterilization is calculated only for women sterilized before age 40 to avoid problems of censoring.

Table 7.4 Knowledge of fertile period

Percent distribution of rhythm users and all ever-married women age 15-49 by knowledge of the fertile period during the ovulatory cycle, Bangladesh DHS 2017-18

Perceived fertile period	Users of rhythm method	All ever- married women
Just before her menstrual period begins	1.6	2.0
During her menstrual period	1.4	1.8
Right after her menstrual period has		
ended	38.8	45.4
Halfway between two menstrual periods	50.8	33.8
Other	0.0	0.0
No specific time	4.1	7.3
Don't know	3.1	9.6
Total	100.0	100.0
Number of women	1,319	20,127

Table 7.5 Knowledge and use of menstrual regulation

Percentage of ever-married and currently married women who know of menstrual regulation and percentage who have ever used menstrual regulation, by age group, Bangladesh DHS 2017-18

		Ever-ma	rried women			Currently m	narried women	
Age	Percentage who have ever heard of menstrual regulation	Number of women	Percentage who have ever used menstrual regulation among women who have heard of menstrual regulation	Number of women who have ever heard of menstrual regulation	Percentage who have ever heard of menstrual regulation	Number of women	Percentage who have ever used menstrual regulation among women who have heard of menstrual regulation	Number of women who have ever heard of menstrual regulation
15-19	55.3	2,063	1.6	1.141	55.7	2,006	1.5	1,118
20-24	70.5	3,556	3.8	2,505	70.8	3,435	3.8	2,430
25-29	76.6	3,579	6.3	2,740	76.6	3,445	6.5	2,639
30-34	75.3	3,470	9.4	2,613	75.6	3,308	9.5	2,502
35-39	73.3	2,879	9.0	2,109	73.7	2,699	9.2	1,990
40-44	72.7	2,296	11.2	1,669	73.3	2,109	11.6	1,546
45-49	68.6	2,285	9.5	1,568	69.7	1,983	9.8	1,381
Total	71.3	20,127	7.4	14,346	71.7	18,984	7.5	13,607

Table 7.6 Knowledge and use of the emergency contraceptive pill by background characteristics

Percentage of ever-married women age 15-49 who have heard of the emergency contraceptive pill (ECP), and among women who have heard of the ECP, percentage who have ever used the ECP and percentage who used the ECP in the last 12 months, according to background characteristics, Bangladesh DHS 2017-18

			Among t	hose who ha of the ECP:	ve heard
Background characteristic	Percentage who have ever heard of the ECP	Number of women	Percentage who have ever used the ECP	Percentage who used the ECP in the last 12 months	Number of
Number of living children					
0	24.7	2,138	11.1	5.6	527
1-2	21.7	10,779	11.0	2.7	2,336
3-4	12.4	5,916	8.8	1.7	732
5+	66.7	20,127	38.9	12.0	3,699
Residence					
Urban	27.2	5,729	12.8	3.2	1,559
Rural	14.9	14,398	8.8	2.6	2,140
Division					
Barishal	18.2	1,125	9.9	3.5	205
Chattogram	17.3	3,622	7.4	2.5	627
Dhaka	27.0	5,123	14.4	3.3	1,381
Khulna	17.4	2,336	8.3	2.6	407
Mymensingh	15.9	1,546	6.2	2.2	246
Rajshahi	13.6	2,802	9.6	3.1	380
Rangpur	12.7	2,380	7.5	2.3	301
Sylhet	12.7	1,192	8.4	1.6	152
Education					
No education	5.6	3,333	3.0	0.2	188
Primary incomplete	9.3	4,250	5.9	1.9	397
Primary complete ¹	13.5	2,040	7.8	1.6	275
Secondary incomplete	19.1	7,135	8.6	2.6	1,366
Secondary complete or					
higher ²	43.7	3,369	14.8	4.0	1,473
Wealth quintile					
Lowest	6.6	3,743	4.5	2.4	246
Second	10.4	3,957	5.9	1.4	412
Middle	15.6	4,059	6.1	2.5	632
Fourth	20.5	4,184	10.2	2.9	856
Highest	37.1	4,184	14.5	3.5	1,552
Total	18.4	20,127	10.5	2.9	3,699

¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 7.7 Knowledge and use of the lactational amenorrhea method by background characteristics

Percentage of ever-married women age 15-49 who have heard of the LAM, and among women who have heard of the LAM, percentage who have ever used the LAM, according to background characteristics, Bangladesh DHS 2017-18

				se who have the LAM:
	Percentage who have		Percentage who have	Number of women who
Background	ever heard	Number of	ever used	have heard
characteristic	of the LAM	women	the LAM	of the LAM
Number of living children				
0	3.9	2,138	0.0	83
1-2	6.2	10,779	11.0	672
3-4	14.5	18,833	20.8	1,017
5+	2.2	1,294	(2.2)	29
Residence				
Urban	6.4	5,729	5.7	368
Rural	4.7	14,398	11.7	677
Division				
Barishal	5.0	1,125	10.5	57
Chattogram	4.9	3,622	9.7	178
Dhaka	6.9	5,123	7.4	352
Khulna	5.6	2,336	11.5	131
Mymensingh	5.0	1,546	7.5	77
Rajshahi	3.7	2,802	10.2	103
Rangpur	4.1	2,380	13.6	97
Sylhet	4.3	1,192	12.5	51
Education				
No education	2.1	3,333	7.3	70
Primary incomplete	2.8	4,250	10.2	118
Primary complete ¹	4.7	2,040	6.7	95
Secondary incomplete Secondary complete or	5.4	7,135	8.4	382
higher ²	11.3	3,369	11.7	380
Wealth quintile				
Lowest	2.6	3,743	13.0	96
Second	3.3	3,957	8.2	129
Middle	5.0	4,059	13.8	205
Fourth	6.5	4,184	8.7	273
Highest	8.2	4,184	7.4	343
Total	5.2	20,127	9.6	1,045

Note: Figures in parentheses are based on 25-49 unweighted cases. LAM = Lactational amenorrhea method ¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 7.8 Source of modern contraception methods

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method, Bangladesh DHS 2017-18

Source	Female	Male sterilization	IUD	Iniantahlan	Implanta	Pill	Male condom	Total
Source	Sterilization	Sterilization	IUD	Injectables	Implants	FIII	CONDOLL	TOLA
Public sector	62.9	87.5	78.8	51.2	87.8	39.4	17.8	44.4
Medical college hospital	6.0	4.6	1.5	0.0	0.3	0.0	0.1	0.7
Specialized government								
hospital	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
District hospital	8.8	16.1	10.8	0.2	0.5	0.1	0.1	1.4
Mother and child welfare								
center	9.2	9.3	8.8	0.9	12.6	0.3	0.3	2.0
Upazila health complex	35.8	54.1	29.0	3.0	52.4	1.3	1.2	8.3
Union health and family								
health center	2.5	1.1	24.2	7.1	19.6	2.9	1.4	4.4
Community clinic	0.0	0.0	3.7	11.5	0.8	7.8	3.4	6.8
Satellite clinic/EPI outreach	0.0	0.0	0.0	10.5	0.0	4.5	0.8	4.5
Government fieldworker	0.0	0.0	0.0	18.0	0.2	22.4	9.7	16.0
Other public sector	0.5	2.3	0.8	0.1	1.4	0.0	0.8	0.3
Nongovernmental								
organization	3.9	2.4	14.7	8.9	10.6	3.1	1.8	4.6
NGO static clinic	3.9	2.4	14.7	3.6	10.5	0.7	0.8	2.2
NGO satellite clinic	0.0	0.0	0.0	2.3	0.0	0.4	0.2	0.7
NGO depot holder	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
NGO fieldworker	0.0	0.0	0.0	3.1	0.0	1.9	0.7	1.7
Other NGO sector	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Private medical sector	32.3	3.5	6.5	39.4	1.3	55.5	78.2	49.3
Private medical college	02.0	0.0	0.0	00.1	1.0	00.0	10.2	10.0
hospital	0.6	0.0	0.8	0.1	0.0	0.0	0.0	0.1
Private hospital	6.9	2.2	1.2	0.1	0.0	0.1	0.0	0.8
Private clinic	24.8	1.3	4.4	0.4	1.1	0.0	0.2	2.5
Qualified doctor's chamber	0.0	0.0	0.0	1.7	0.3	0.1	0.2	0.4
Non-qualified doctor's								
chamber	0.0	0.0	0.0	3.7	0.0	0.4	0.1	1.0
Pharmacy/drug store	0.0	0.0	0.0	33.4	0.0	54.9	77.7	44.5
Other source	0.0	0.0	0.0	0.1	0.0	1.9	1.9	1.2
Shop	0.0	0.0	0.0	0.1	0.0	0.3	1.9	0.3
Friend/relative	0.0	0.0	0.0	0.0	0.0	0.3 1.6	0.4	0.3
Other	0.0	0.0	0.0	0.1	0.0	0.1	0.4	0.9
Don't know	0.5	5.8	0.0	0.2	0.0	0.1	0.0	0.2
Missing	0.3	0.8	0.0	0.0	0.0	0.0	0.0	0.2
5								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	918	201	105	2,041	405	4,814	1,363	9,850

Note: Total includes other modern methods but excludes the lactational amenorrhea method (LAM). EPI = Expanded program on immunization

Table 7.9 Knowledge of specific sources of family planning services

Percentage of ever-married women age 15-49 who have never used family planning by known sources of family planning services, Bangladesh DHS 2017-18

Source	Percentage of women
Public sector	83.0
Medical college hospital	2.0
Specialized government hospital	0.1
District hospital	7.5
Mother and child welfare center	4.5
Upazila health complex	27.3
Union health and family health center	16.1
Community clinic	24.8
Satellite clinic/EPI outreach	13.5
Government fieldworker	42.1
Other public sector	0.3
Nongovernmental organization	10.7
NGO static clinic	4.9
NGO satellite clinic	1.4
NGO depot holder	0.0
NGO fieldworker	5.1
Private medical sector	79.7
Private medical college hospital	0.3
Private hospital	1.2
Private clinic	3.1
Qualified doctor's chamber	1.4
Non-qualified doctor's chamber	2.7
Pharmacy/drug store	77.6
Other source	5.8
Shop	5.8
Friend/relative	0.1
Other	0.0
Total	100.0
Number of women	2,271

EPI = Expanded program on immunization

Table 7.10 Use of pill brands by residence

Percent distribution of currently married pill users by brand of pill used, according to residence, Bangladesh DHS 2017-18

	Resi	_	
Brand name	Urban	Rural	Total
Social marketing	53.4	44.4	46.9
Nordette-28	4.5	3.0	3.4
Femicon	36.4	27.8	30.2
Minicon	7.0	6.2	6.4
Femipil	5.5	7.4	6.9
Government	37.9	50.6	47.0
Shuki	37.9	50.6	47.0
Private	8.7	5.0	6.1
Ovostat	3.3	1.7	2.1
Desolon	0.6	0.5	0.6
Bredicon	0.2	0.2	0.2
Lynes	0.3	0.4	0.4
Marvelon	2.7	1.0	1.5
Rosen	0.1	0.1	0.1
Apan	0.4	0.6	0.6
Other	1.1	0.5	0.6
Total	100.0	100.0	100.0
Number of women	1,341	3,463	4,805

Note: Pill users who do not know the brand are excluded from the table.

Table 7.11 Use of male condom brands by residence

Percent distribution of currently married male condom users by brand of condom used, according to residence, Bangladesh DHS 2017-18

	_		
Brand name	Urban	Rural	Total
Social marketing	65.2	58.7	61.8
Raja	7.8	13.4	10.7
Panther	32.0	25.6	28.7
Hero	8.9	13.1	11.1
Sensation	14.6	3.1	8.6
U & ME	1.8	2.5	2.1
Xtreme	0.0	1.2	0.6
Government	16.2	27.4	22.0
Nirapad	16.2	27.4	22.0
Private	18.6	13.8	16.1
Moods	0.3	0.4	0.3
Gamy	1.1	0.7	0.9
Wonder life	0.5	0.2	0.3
Romantex	0.1	0.7	0.4
Durex	2.1	0.5	1.3
Love guard	2.0	0.6	1.3
Coral	2.7	1.3	2.0
Jippy	0.3	1.4	0.9
Green love	1.2	1.0	1.1
Carex	4.0	3.4	3.7
Deluxe Nirodh	1.1	0.6	0.8
Super guard	0.8	1.0	0.9
Other	2.4	2.1	2.3
Total	100.0	100.0	100.0
Number of women	613	657	1,270

Note: Condom users who do not know the brand are excluded from the table.

Table 7.12 Decision making about family planning

Among currently married women age 15-49 who are current users of family planning, percent distribution by who makes the decision to use family planning, and among currently married women who are not currently using family planning, percent distribution by who makes the decision not to use family planning, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic		urrently ma ent users of						urrently ma urrently usir				
	Mainly wife	Wife and husband jointly	Mainly husband	Other/ don't know/ missing	Total	Number of women	Mainly wife	Wife and husband jointly	Mainly husband	Other/ don't know/ missing	Total	Number of women
Age												
15-19	8.6	80.6	10.8	0.0	100.0	981	20.8	70.0	8.5	0.7	100.0	687
20-24	12.6	80.0	7.1	0.2	100.0	1,909	23.9	71.4	4.3	0.4	100.0	1,146
25-29	14.9	78.8	6.1	0.3	100.0	2,189	26.4	69.1	4.5	0.1	100.0	1,011
30-34	16.7	77.0	6.3	0.0	100.0	2,348	32.8	62.3	4.2	0.7	100.0	814
35-39	16.4	76.5	6.9	0.2	100.0	2,034	33.2	61.7	3.4	1.7	100.0	645
40-44	19.6	74.7	5.4	0.3	100.0	1,396	39.7	54.7	3.8	1.9	100.0	706
45-49	19.7	74.1	6.3	0.0	100.0	884	41.5	51.7	5.7	1.1	100.0	1,099
Number of living children												
0	3.9	84.7	11.3	0.0	100.0	492	13.2	79.1	6.7	1.1	100.0	1,008
1-2	13.8	79.3	6.8	0.1	100.0	6,588	29.8	64.9	4.5	0.7	100.0	3,040
3-4	18.5	75.4	5.9	0.2	100.0	3,912	41.9	52.8	4.3	1.0	100.0	1,621
5+	23.2	68.9	7.7	0.2	100.0	750	41.1	52.1	5.8	1.0	100.0	438
Residence												
Urban	13.0	79.6	7.2	0.1	100.0	3,520	30.7	64.3	4.1	0.9	100.0	1,546
Rural	16.6	76.7	6.6	0.2	100.0	8,223	31.2	62.7	5.2	0.9	100.0	4,561
Division												
Barishal	20.5	71.5	7.9	0.1	100.0	651	33.5	59.7	6.2	0.5	100.0	342
Chattogram	14.6	76.4	8.8	0.2	100.0	1,834	28.5	63.5	7.3	0.6	100.0	1,359
Dhaka	16.2	77.3	6.4	0.1	100.0	3,023	30.6	64.4	4.2	0.8	100.0	1,537
Khulna	16.8	77.3	5.7	0.1	100.0	1,425	34.9	59.1	3.3	2.7	100.0	668
Mymensingh	13.7	82.8	3.5	0.0	100.0	930	30.1	66.9	3.0	0.0	100.0	435
Rajshahi	13.1	80.5	6.0	0.3	100.0	1,710	31.3	63.4	4.6	0.6	100.0	799
Rangpur	15.8	75.9	8.1	0.2	100.0	1,568	33.4	61.8	4.2	0.6	100.0	568
Sylhet	15.9	77.4	6.8	0.0	100.0	600	30.6	63.7	4.7	1.0	100.0	399
Education	04 5	71.7	6.6	0.2	100.0	1 0 4 0	40.9	52.3	4.7	2.1	100.0	1,057
No education Primary	21.5	/1./	0.0	0.2	100.0	1,842	40.9	52.3	4.7	2.1	100.0	1,057
incomplete	18.1	74.3	7.5	0.0	100.0	2,545	35.3	59.7	4.3	0.7	100.0	1,217
Primary complete ¹ Secondary	16.0	77.9	5.9	0.2	100.0	1,273	33.1	61.0	5.3	0.5	100.0	567
incomplete Secondary complete or	14.0	79.2	6.7	0.1	100.0	4,148	27.2	66.7	5.4	0.7	100.0	2,221
higher ²	9.4	83.6	6.7	0.3	100.0	1,935	23.5	71.8	4.5	0.2	100.0	1,046
Wealth quintile												
Lowest	16.4	76.9	6.7	0.1	100.0	2,301	35.1	60.0	3.8	1.0	100.0	954
Second	17.8	76.5	5.6	0.1	100.0	2,369	32.9	61.1	5.1	0.9	100.0	1,124
Middle	16.3	77.3	6.2	0.1	100.0	2,275	30.5	62.7	5.7	1.1	100.0	1,343
Fourth	16.6	75.5	7.7	0.3	100.0	2,434	31.2	62.7	5.7	0.4	100.0	1,316
Highest	10.6	81.6	7.5	0.2	100.0	2,363	27.4	67.8	3.9	0.8	100.0	1,371
Total	15.5	77.6	6.8	0.2	100.0	11,742	31.1	63.1	4.9	0.9	100.0	6,107

Note: Table excludes women who are currently pregnant. ¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 7.13 Twelve-month contraceptive discontinuation rates

Among episodes of contraceptive use experienced within the 5 years preceding the survey, percentage of episodes discontinued within 12 months, according to reason for discontinuation and specific method, Bangladesh DHS 2017-18

	Reason for discontinuation										
Method	Method failure	Desire to become pregnant	Other fertility- related reasons ¹	Side effects/ health concerns	Wanted more effective method	Other method- related reasons ²	Other reasons	Any reason ³	Switched to another method ⁴	Number of episodes of use ⁵	
Female sterilization	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	318	
Injectables	1.1	4.0	5.4	20.1	1.2	1.6	0.7	34.1	19.1	2,988	
Implants	0.0	0.1	0.3	10.8	0.0	0.0	0.0	11.2	8.3	540	
Pill	4.5	10.5	11.8	10.8	2.3	1.0	0.7	41.6	13.0	8,256	
Male condom	5.8	10.7	5.6	6.0	4.5	10.3	2.0	44.7	21.1	2,369	
Rhythm	4.7	4.8	3.5	1.0	9.0	2.9	1.8	27.7	14.3	1,274	
Withdrawal	6.4	5.7	6.1	1.7	5.1	2.1	3.7	30.9	12.3	597	
Other ⁶	(0.0)	(1.7)	(1.0)	(8.4)	(4.9)	(1.4)	(1.0)	(18.3)	(14.1)	224	
All methods	3.9	8.1	8.2	10.5	3.0	2.6	1.0	37.1	15.0	16,566	

Note: Figures are based on life table calculations using information on episodes of use that occurred 3-62 months preceding the survey. Figures in parentheses are based on 125-249 unweighted cases.

¹ Includes infrequent sex/husband away, difficult to get pregnant/menopausal, and marital dissolution/separation

² Includes lack of access/too far, costs too much, and inconvenient to use

³ Reasons for discontinuation are mutually exclusive and add to the total given in this column.

⁴ A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she gave "wanted a more effective method" as the reason for discontinuation and started another method within 2 months of discontinuation.

⁵ All episodes of use that occurred within the 5 years preceding the survey are included. Episodes of use include both episodes that were discontinued during the period of observation and episodes that were not discontinued during the period of observation. ⁶ Includes male sterilization, IUD, and emergency contraception

Table 7.14 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the 5 years preceding the survey by main reason stated for discontinuation, according to specific method, Bangladesh DHS 2017-18

Reason	IUD	Injectables	Implants	Pill	Male condom	Emergency contra- ception	Rhythm	Withdrawal	Other ¹	All methods
Reason	100	Injectables	Implanto	1 111	condom	copilon	Tanyann	Withdrawa	Other	methods
Became pregnant while using	0.0	3.9	0.0	13.8	15.0	(7.8)	17.4	18.5	*	12.0
Wanted to become pregnant	6.4	24.1	14.3	32.8	30.1	(11.8)	20.1	26.9	*	29.2
Husband/partner disapproved	4.1	0.2	0.9	0.2	2.9	(7.7)	2.5	4.5	*	0.8
Wanted a more effective method	0.6	3.9	3.9	5.4	8.6	(22.5)	22.6	17.7	*	6.9
Side effects/health concerns	58.8	49.3	65.7	23.4	9.4	(39.6)	2.1	3.6	*	26.0
Lack of access/too far	0.0	1.9	1.4	0.4	0.4	(1.9)	0.0	0.0	*	0.7
Cost too much	0.0	0.4	0.3	0.1	0.1	(0.0)	0.0	0.0	*	0.2
Inconvenient to use	2.4	1.4	1.0	2.2	19.2	(2.9)	6.5	6.9	*	4.5
Up to God/fatalistic	0.0	0.0	0.0	0.0	0.2	(0.0)	0.0	0.0	*	0.0
Difficult to get pregnant/menopausal	3.2	3.2	1.7	3.0	1.4	(0.0)	16.0	5.1	*	3.7
Infrequent sex/husband away	4.1	7.7	2.4	15.2	8.7	(5.7)	6.7	10.6	*	11.9
Marital dissolution/separation	2.5	1.4	2.2	1.5	1.3	(0.0)	2.3	1.2	*	1.6
Other	16.9	1.2	5.8	0.8	0.6	(0.0)	1.6	1.5	*	1.1
Don't know	0.0	0.0	0.0	0.0	0.1	(0.0)	0.0	0.0	*	0.0
Missing	1.2	1.4	0.3	1.1	1.9	(0.0)	2.3	3.5	*	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	66	2,787	335	8,049	1,744	22	944	364	21	14,332

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

¹ Includes female and male sterilization

Table 7.15 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, total demand for family planning, and percentage of the demand for family planning that is satisfied, according to background characteristics, Bangladesh DHS 2017-18

	Unme	et need for planning	family		need for fa g (currently		Total d	emand for planning ¹	family	_	Percent-	Percent- age of demand satisfied
Background characteristic	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total	Number of women	age of demand satisfied ²	by modern methods ³
Age												
15-19	15.0	0.6	15.5	45.6	3.3	48.9	60.6	3.9	64.4	2,006	75.9	67.9
20-24	13.0	2.7	15.7	38.0	17.6	55.6	50.9	20.4	71.3	3,435	78.0	71.3
25-29	5.5	7.8	13.3	20.9	42.6	63.5	26.4	50.4	76.8	3,445	82.7	74.0
30-34	2.0	10.9	12.9	8.3	62.7	71.0	10.2	73.6	83.9	3,308	84.6	74.7
35-39	0.7	9.6	10.3	2.3	73.0	75.4	3.0	82.6	85.7	2,699	88.0	71.7
40-44	0.1	7.8	7.9	0.6	65.6	66.2	0.7	73.4	74.1	2,109	89.4	62.1
45-49	0.0	4.8	4.8	0.0	44.6	44.6	0.1	49.3	49.4	1,983	90.3	58.2
Residence												
Urban	4.0	5.1	9.2	20.7	44.8	65.4	24.7	49.9	74.6	5,378	87.7	73.6
Rural	5.9	7.2	13.1	16.0	44.4	60.4	21.9	51.6	73.5	13,607	82.2	69.0
Division												
Barishal	6.3	7.6	13.9	17.1	44.5	61.6	23.4	52.1	75.6	1,056	81.6	67.4
Chattogram	7.4	10.7	18.0	15.7	38.0	53.7	23.1	48.7	71.8	3.414	74.9	62.4
Dhaka	5.9	6.4	12.3	19.3	42.8	62.2	25.2	49.3	74.5	4,864	83.5	70.7
Khulna	3.9	4.6	8.5	16.7	47.9	64.6	20.6	52.5	73.2	2,205	88.3	71.3
Mymensingh	3.9	5.6	9.5	19.0	44.3	63.4	23.0	50.0	72.9	1,468	86.9	75.6
Rajshahi	4.2	5.3	9.6	17.0	47.6	64.7	21.3	53.0	74.2	2,645	87.1	74.1
Rangpur	4.2	3.9	8.1	16.7	53.1	69.8	20.8	57.0	77.9	2,248	89.6	75.7
Sylhet	6.0	7.7	13.8	14.7	40.6	55.4	20.8	48.3	69.1	1,085	80.1	64.8
Education												
No education	0.9	6.2	7.1	3.8	58.7	62.5	4.6	64.9	69.5	2,947	89.8	70.0
Primary incomplete	3.6	7.5	11.1	10.7	53.8	64.4	14.3	61.2	75.6	3,949	85.3	70.4
Primary complete ⁴ Secondary	4.1	7.9	12.0	15.5	49.6	65.1	19.6	57.5	77.1	1,955	84.4	70.9
incomplete Secondary complete or	7.2	7.1	14.3	21.1	39.3	60.4	28.4	46.3	74.7	6,864	80.9	70.8
higher ⁵	8.4	4.2	12.6	30.7	28.5	59.2	39.1	32.7	71.8	3,269	82.5	68.9
Wealth quintile												
Lowest	4.0	5.9	9.9	15.7	50.6	66.3	19.7	56.5	76.2	3,473	87.0	75.1
Second	5.0	6.5	11.5	15.7	47.8	63.5	20.7	54.3	75.0	3,730	84.6	70.1
Middle	6.3	6.5	12.8	15.3	43.9	59.2	21.6	50.4	72.0	3,846	82.2	69.8
Fourth	6.1	7.2	13.3	19.6	41.5	61.1	25.7	48.7	74.4	3,985	82.1	69.0
Highest	5.3	6.8	12.1	19.9	39.9	59.8	25.2	46.7	71.9	3,951	83.2	67.9
Total	5.4	6.6	12.0	17.3	44.5	61.9	22.7	51.1	73.8	18,984	83.8	70.3

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012.

¹ Total demand is the sum of unmet need and met need.
 ² Percentage of demand satisfied is met need divided by total demand.
 ³ Modern methods include female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, emergency contraception, standard days method (SDM), lactational amenorrhea method (LAM), and other modern methods.
 ⁴ Primary complete is defined as completing grade 5.
 ⁵ Secondary complete is defined as completing grade 10.

Table 7.16 Future use of contraception

		Numbe	er of living	children ¹		
Intention to use in the future	0	1	2	3	4+	Tota
Intends to use	86.2	88.7	71.4	59.1	32.4	70.2
Unsure	2.2	1.3	1.1	0.8	0.6	1.2
Does not intend to use	11.5	9.9	27.3	39.9	67.0	28.6
Missing	0.1	0.1	0.2	0.2	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,008	1,974	1,928	1,226	1,106	7,242

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

¹ Includes current pregnancy

Table 7.17 Preferred method of contraception for future use

Percent distribution of currently married women age 15-49 who are not using a contraceptive method but intend to do so in the future by preferred method, according to age, Bangladesh DHS 2017-18

	A	ge	_
Method	15-29	30-49	Total
Female sterilization	1.0	2.7	1.5
Male sterilization	0.0	0.1	0.0
IUD	0.1	0.1	0.1
Injectables	12.5	12.6	12.5
Implants	1.3	1.0	1.2
Pill	43.1	44.8	43.6
Male condom	3.4	4.0	3.6
Unsure	37.0	31.5	35.4
Rhythm	0.9	2.4	1.3
Withdrawal	0.6	0.7	0.6
Other ¹	0.1	0.1	0.1
Total	100.0	99.9	100.0
Number of women	3,480	1,395	4,875

Table 7.18 Reason for not intending to use contraception

Percent distribution of currently married women age 15-49 who are not using a contraceptive method and who do not intend to use in the future by main reason for not intending to use, according to age, Bangladesh DHS 2017-18

	A	ge	
Reason	15-29	30-49	Total
Fertility-related reasons	84.4	85.7	85.2
Infrequent sex/no sex	16.6	16.9	16.8
Menopausal/had hysterectomy	53.1	53.9	53.6
Sub-fecund/infecund	8.6	9.1	8.9
Wants as many children as possible	6.2	5.8	5.9
Opposition to use	3.2	2.8	2.9
Respondent opposed	1.5	1.7	1.6
Husband/partner opposed	1.2	0.9	1.0
Others opposed	0.0	0.0	0.0
Religious prohibition	0.4	0.2	0.2
Method-related reasons	5.5	5.8	5.7
Health concerns	1.1	1.2	1.2
Fear of side effects	0.9	1.0	1.0
Inconvenient to use	0.1	0.0	0.0
Interfere with body's normal process	3.4	3.5	3.5
Other	4.8	4.0	4.3
Don't know	2.1	1.8	1.9
Total	100.0	100.0	100.0
Number of women	5,236	8,784	14,020

Table 7.19 Exposure to family planning messages

Percentage of currently married women age 15-49 who heard or saw a family planning message on radio, on television, in a newspaper or magazine, or from other sources in the past month, according to background characteristics, Bangladesh DHS 2017-18

					None of			Social media (Face-			iity health rker	At least	
Background characteristic	Radio	Tele- vision	News- paper/ magazine	Mobile phone	these four media sources	Poster, billboard, or leaflet	Commu- nity event	trace- book, Twitter, etc.)	Website/ internet	Govern- ment	Non- govern- ment	one of these sources	Number of women
Age													
15-19	0.8	13.4	0.7	1.3	85.2	3.9	0.6	0.7	0.5	6.0	1.6	23.0	2,006
20-24	1.4	17.1	1.9	1.4	81.4	4.3	0.8	1.0	1.1	8.0	2.5	28.4	3,435
25-29	0.9	20.6	1.4	1.5	78.3	4.4	0.7	0.8	0.7	9.4	2.5	32.0	3,445
30-34	0.5	16.9	1.6	0.5	82.7	3.4	1.1	0.8	0.4	9.8	2.0	27.7	3,308
35-39	0.5	14.9	1.7	0.4	84.6	3.6	0.9	0.2	0.3	10.0	1.8	26.2	2,699
40-44	0.7	12.6	1.2	0.1	86.9	2.0	0.7	0.2	0.0	8.4	1.6	22.4	2,109
45-49	0.4	10.8	0.9	0.2	88.9	1.7	0.5	0.2	0.1	6.6	1.1	18.8	1,983
Residence													
Urban	1.0	22.7	3.2	1.4	75.9	5.2	0.8	1.4	1.0	4.7	2.1	30.9	5,378
Rural	0.7	13.1	0.7	0.6	86.2	2.8	0.8	0.3	0.3	10.0	1.9	24.6	13,607
Division													
Barishal	1.2	10.0	0.8	0.6	89.0	2.6	0.8	0.5	0.4	6.0	3.0	19.8	1,056
Chattogram	0.9	21.2	1.8	1.3	77.8	6.5	1.1	0.8	0.7	9.4	1.1	32.1	3,414
Dhaka	1.0	19.5	2.1	0.8	79.6	3.0	0.6	0.9	0.5	6.7	1.8	27.5	4,864
Khulna	0.7	13.4	1.2	0.7	85.4	3.7	1.0	0.5	0.6	9.8	2.2	26.2	2,205
Mymensingh	0.2	14.6	1.2	0.7	85.1	3.4	0.7	0.4	0.3	10.5	1.8	26.2	1,468
Rajshahi	0.6	13.0	0.8	0.3	86.5	1.8	0.3	0.3	0.4	9.6	1.3	23.6	2,645
Rangpur	0.7	12.4	0.8	1.2	86.6	2.7	1.2	0.5	0.4	10.1	3.4	26.1	2,248
Sylhet	0.3	8.5	1.3	0.8	90.5	2.3	0.7	0.4	0.6	5.3	2.7	17.9	1,085
Education													
No education	0.1	6.6	0.0	0.0	93.3	0.5	0.3	0.0	0.0	7.4	2.1	15.6	2,947
Primary incomplete	0.3	9.3	0.1	0.0	90.5	1.1	0.6	0.1	0.0	8.9	1.6	19.4	3,949
Primary complete ¹ Secondary	0.5	12.1	0.3	0.1	87.5	1.7	0.5	0.0	0.1	10.4	2.2	23.4	1,955
incomplete Secondary complete	0.7	17.9	1.0	0.6	81.3	3.6	1.0	0.3	0.2	9.2	2.1	29.2	6,864
or higher ²	2.2	29.8	6.1	3.5	67.4	9.7	1.3	2.8	2.5	6.5	1.8	40.4	3,269
Wealth quintile													
Lowest	0.3	2.6	0.1	0.2	97.1	1.2	0.4	0.0	0.0	10.9	2.4	16.2	3,473
Second	0.5	8.4	0.2	0.3	91.2	1.5	0.7	0.1	0.0	9.8	2.0	19.8	3,730
Middle	0.7	14.6	0.5	0.5	84.7	2.9	1.0	0.2	0.2	10.3	2.1	25.8	3,846
Fourth	1.1	21.0	1.2	0.7	78.0	4.3	0.9	0.4	0.3	7.6	1.8	30.2	3,985
Highest	1.3	30.4	4.9	2.4	67.7	7.0	1.0	2.3	2.0	4.5	1.5	38.2	3,951
Total	0.8	15.8	1.4	0.8	83.3	3.5	0.8	0.6	0.5	8.5	2.0	26.4	18,984

¹ Primary complete is defined as completing grade 5.
 ² Secondary complete is defined as completing grade 10.

Table 7.20 Contact with family planning providers

Among currently married women age 15-49 who reported being visited by a fieldworker in the past 6 months, percent distribution of various types of services provided by the fieldworker, according to background characteristics, Bangladesh DHS 2017-18

	Percentage of women who		Services	provided by the	fieldworker:		
Background characteristic	reported being visited by a fieldworker in the past 6 months	Number of women	Discussed family planning methods	Gave family planning method	Discussed and gave family planning method	Total	Number of women
Age							
15-19	14.8	2,006	73.2	18.8	8.0	100.0	298
20-24	20.5	3,435	71.6	16.9	11.5	100.0	704
25-29	22.4	3,445	64.7	23.5	11.8	100.0	772
30-34	23.9	3,308	60.2	28.0	11.8	100.0	792
35-39	22.1	2,699	53.7	31.5	14.9	100.0	597
40-44	18.2	2,109	57.1	29.9	12.9	100.0	383
45-49	13.0	1,983	64.5	25.3	10.2	100.0	258
Residence							
Urban	14.3	5,378	66.7	23.6	9.7	100.0	769
Rural	22.3	13,607	62.3	25.2	12.5	100.0	3,034
Division							
Barishal	17.8	1,056	79.4	16.5	4.1	100.0	188
Chattogram	18.6	3,414	70.2	22.7	7.1	100.0	636
Dhaka	14.9	4,864	63.3	24.2	12.5	100.0	725
Khulna	24.3	2,205	63.7	23.8	12.5	100.0	536
Mymensingh	28.6	1,468	58.1	30.4	11.4	100.0	420
Rajshahi	21.4	2,645	54.6	27.6	17.9	100.0	567
Rangpur	24.5	2,248	59.4	27.5	13.1	100.0	550
Sylhet	16.7	1,085	70.7	17.1	12.2	100.0	181
Education							
No education	16.8	2,947	56.4	31.8	11.8	100.0	496
Primary incomplete	20.7	3,949	62.2	24.9	13.0	100.0	819
Primary complete ¹	21.9	1,955	62.0	27.7	10.3	100.0	428
Secondary incomplete Secondary complete or	21.9	6,864	63.2	24.8	12.0	100.0	1,500
higher ²	17.1	3,269	71.6	16.7	11.7	100.0	560
Wealth quintile							
Lowest	24.9	3,473	60.0	28.8	11.2	100.0	864
Second	22.7	3,730	63.0	25.5	11.5	100.0	846
Middle	21.8	3,846	60.8	26.0	13.2	100.0	840
Fourth	18.3	3,985	63.1	23.9	13.0	100.0	731
Highest	13.2	3,951	72.8	16.7	10.5	100.0	522
Total	20.0	18,984	63.2	24.9	12.0	100.0	3,803

¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 7.21 Contact with family planning providers: Type of fieldworker

Percentage of currently married women age 15-49 who reported being visited by a fieldworker in the past 6 months, by type of fieldworker, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic	Government family planning worker	Government health worker	NGO worker	Other	Missing	Number of women
Characteristic	WOIKEI	Health WORKER	NGO WUREI	Other	wissing	women
Age						
15-19	64.7	7.6	28.3	0.0	0.0	218
20-24	68.4	4.9	27.6	0.5	0.0	504
25-29	67.5	4.8	28.8	0.3	0.3	499
30-34	73.9	3.8	22.7	0.2	0.1	477
35-39	69.7	7.7	23.0	0.2	0.5	320
40-44	75.1	2.8	21.8	1.0	0.7	219
45-49	75.1	5.3	20.6	1.1	0.0	166
Residence						
Urban	52.6	4.1	44.6	0.6	0.0	513
Rural	75.0	5.4	20.1	0.3	0.3	1,890
Division						
Barishal	54.1	11.9	33.9	1.4	0.4	149
Chattogram	75.6	3.9	21.5	0.0	0.4	447
Dhaka	67.1	4.6	29.6	0.3	0.0	459
Khulna	72.2	5.2	23.8	0.3	0.0	341
Mymensingh	79.9	2.5	18.0	1.0	0.0	244
Rajshahi	83.6	2.2	13.6	0.2	0.9	309
Rangpur	62.8	3.4	34.4	0.4	0.0	327
Sylhet	44.0	19.8	36.2	0.5	0.0	128
	0	15.0	00.2	0.0	0.0	120
Education						
No education	66.9	7.6	26.4	0.9	0.5	280
Primary incomplete	71.5	3.1	25.6	0.5	0.0	509
Primary complete ¹	69.4	7.7	24.3	0.5	0.0	265
Secondary incomplete	70.5	4.6	25.7	0.2	0.2	948
Secondary complete or						
higher ²	70.6	5.4	23.9	0.5	0.3	401
Wealth quintile						
Lowest	73.8	5.4	22.2	0.1	0.0	519
Second	74.6	4.0	22.1	0.2	0.3	533
Middle	72.7	5.0	22.6	0.7	0.4	511
Fourth	67.1	5.9	28.0	0.4	0.0	461
Highest	59.6	5.6	34.4	0.8	0.3	380
Total	70.2	5.1	25.3	0.4	0.2	2,403

¹ Primary complete is defined as completing grade 5.
 ² Secondary complete is defined as completing grade 10.

	Percentage reporting a satellite clinic		Of those reporting a satellite clinic in the community in the last 3 months			Of th	ose who visited	a satellite clinic,	percentage repo	Of those who visited a satellite clinic, percentage reporting availability of various services	of various sen	rices	
Background characteristic	in the community in the last 3 months	Number of women	Percentage who visited a clinic	Number of women	Family planning methods	Immunizations	Child growth monitoring	Tetanus toxoid injections	Antenatal care	Vitamin A for children	Other	Don't know/ missing	Number of women
Age 15-10	6 78	2 063	78 F	1 700	7 5	58 F	2 7	8 O L	0	080	6	2.0	£12
20-24	07.0 92.0	3,556	29.2	3.270	10.2	20.3 46.4	0.1 0.0	5.0	3.0 2.6	43.2	- 0 -	0.6	956
25-29	92.2	3,579	25.1	3,301	15.2	39.8	1.7	4.1	2.1	45.3	1.0	0.3	827
30-34	93.2	3,470	17.3	3,235	25.3	37.7	2.5	3.1	1.6	38.4	0.9	0.7	561
35-39 40-44	93.4 93.5	2,879 2,296	10.8 6.5	2,690 2 147	39.5 46.8	26.3 22 7	0.8	3.7 2.7	1.0	31.9 16.8	4.C 4.C	2:1	291 140
45-49	93.4	2,285	3.6	2,133	36.6	31.5	0.0	0.0	0.0	30.3	1.7	0.0	11
Residence Urban Rural	84.8 95.3	5,729 14,398	16.9 18.5	4,857 13,719	18.5 18.1	42.5 41.9	0.9 1.6	3.5 5.3	2.1	39.6 37.8	0.9 1.0	0.7 0.7	823 2,543
Division Barishal	7 TO	1 1 25	20.0	1 052	20 F	0 67	۲ 0	7.2	2.0	311	90	9 U	010
Chattogram	92.8	3,622	16.3	3,362	14.0	51.6	1.5	5.3	1.5	29.8	0.8	1.5	548
Dhaka Khulna	87.1 04 6	5,123 2 336	18.7 16.0	4,461 2 211	18.8 22.3	43.8 37 5	- 6 4 6	ω α	1.1	45.0 24.8	0.9 8 F	0.0	835 355
Mymensingh	96.1	1,546	21.6	1,486	17.2	38.0	1.0	2.6	3.0	48.3	0.5	0.3	321
Rajshahi	93.4 01 1	2,802	18.3	2,616	23.8	31.2	0.2	5.7	1.0	37.9	1.6 7	0.5	478
Sylhet	93.1 93.1	2,300 1,192	17.2	2,273 1,109	10.3	42.0 42.0	0.1	4.4 4.4	3.4 2.8	39.9 46.5	0.0	0.8	4 I 0 191
Education													
No education Primary incomplete	94.0 93.4	3,333 4.250	9.9 1 5 8	3,132 3 060	35.4 25.9	30.4 38.3	0.1	4.1 7 C	0.9	33.5 37 8	0.9	1.3	309 620
Primary complete ¹	92.8	2,040	18.3	1,893	19.6	42.7	0.2	3.6	2.1	34.6	<u>i 0</u>	1.2	346
Secondary incomplete		7,135	22.0	6,601	15.8	44.6	1.4	5.5	2.2	38.0	0.9	0.8	1,450
bigher ²	88.5	3,369	21.2	2,980	6.7	45.5	2.6	6.9	2.9	43.5	0.9	0.4	632
Wealth quintile													
Lowest	95.3 06.0	3,743 2 057	21.5	3,567	20.3 10 E	37.6	0.0	4.6	2.4	44.5 25 4	0.7	0.4 4 0	760
Middle	90.0 95.6	4.059	17.9	3.881	20.3	37.9		0.4	2.1	35.5	0.0 1.9	0.7	693
Fourth	90.1	4,184	16.7	3,769	18.8	45.5	1.9	5.1	2.4	34.9	0.7	0.8	629
Highest	85.1	4,184	14.5	3,559	11.0	46.4	2.3	4.9	1.2	41.0	0.6	1.3	518
Total	92.3	20,127	18.1	18,576	18.2	42.1	1.4	4.9	2.1	38.2	1.0	0.7	3.366

clinic, by background characteristics, bangladesh DHS 2017-18 Of the commu	aracteristics, bar	igiadesn DHS	o 2017-18 Of those reporting a community clinic in the community	eporting a clinic in the nunity			Of those who	o visited a co	mmunity clinic,	percentage	reporting avail	Of those who visited a community clinic, percentage reporting availability of various services	s services		
Background characteristic	Percentage reporting a community clinic in the community	Number of women	Percentage who visited a clinic in the last 3 months	Number of women	Family planning methods	Immuni- zations	Child growth monitoring	Tetanus toxoid injections	Antenatal care	Child health	Vitamin A for children	Non- communicab le disease treatment	Other	Don't know/ missing	Number of women
Age 15-19	56.8	2,063	13.3	1,171	22.4	12.2	1.7	6.5	10.4	12.3	0.9	0.6	9.9	0.0	155
20-24 25-29	60.3 59.5	3,556 3.579	17.4 17.9	2,143 2.128	30.0 31.3	11.5 6.8	1.6 0.4	2.4	11.7 5.3	17.3 18.3	3.5 2.4	0.3	7.1 4.8	0.5 0.7	373 381
30-34	59.8	3,470	16.5	2,074	34.4	4.3	0.6	4.0	2.2	10.2	2.1	0.7	6.7	0.7	341
35-39 40-44 45-49	60.9 60.4 62.1	2,879 2,296 2,285	16.0 14.7 11.0	1,754 1,387 1,419	34.0 27.2 15.9	3.8 0.8 0.8	0.0	0.0	0.0 0.6	0.0 0.5	0.7 0.0	2.1 1.1 2.0	τ. 5.0 3.8 3.8	0.1 0.0	204 204 156
Residence Urban Rural	26.4 73.4	5,729 14,398	13.2 16.0	1,512 10,565	26.0 30.1	6.4 6.1	1.0 0.6	1.4 1.6	6.8 4.7	12.4 10.7	1.7 2.0	0.6	7.9 5.3	0.2 0.5	199 1,691
Division Barishal	61.3	1,125	12.7	689	37.2	3.9	1.2	3.0	1.5	8.2	2.9	0.0	3.0	0.7	87
Chattogram Dhaka	58.3 44.8	3,622 5,123	17.4 9.3	2,112 2,297	23.3 37.1	12.5 6.0	0.0	0.7	4.5 8.8	10.1 16.4	2.3	0.0	5.4 8.9	0.0	368 215
Khulna Mymensingh	67.8 60.0	2,336 1,546	20.3 13.5	1,583 927	27.7 39.4	6.0 2.5	0.4 1.4	3.8 0.3	4.2 3.1	8.9 7.0	1.6 2.4	1.7 0.0	7.9 4.8	0.7 0.6	321 125
Rajshahi Rangpur Svlhet	69.4 77.4 57.1	2,802 2,380	17.7 16.5 18.6	1,944 1,843 681	22.5 34.8 32.5	3.2 3.4 0	0.8 1.7 0.0	0.8 1.6 8	3.5 6.5	11.1 10.9	4. 1. 6. 4. 0. 6.	0 7 0 0 - 0	3.3 5.0	0.4 0.7	343 303 127
Education No education Primary incomplete Primary complete Secondary incomplete	59.9 62.3 61.3	3,333 4,250 2,040 7 135	12.3 16.9 6.9	1,995 2,647 1,249 4 41	29.6 31.0 37.9	2.4.4.7 7.5.8	0.0 0.0 0.6	0.0	7.6 7.6 7	3.3 9.2 12.0	0.8 0.8 7.5 7	1.5 0.0 1	4 4 ເ ເບິ 4 8 ແ ເບິ 4 8 ແ	0.5 0.3 0.3	245 445 211 750
Secondary complete or higher ²		3,369	13.7	1,744	17.5	10.5	1.3	3.5	10.5	18.0	4.1	1.9	4.8	0.6	239
Wealth quintile Lowest Second Middle Fourth Highest	70.1 74.2 69.6 35.5	3,743 3,957 4,059 4,184 4,184	17.3 18.1 13.7 9.4	2,625 2,934 2,827 1,484	33.0 31.5 27.5 24.3	4.8 5.7 8.5 11.5	0.3 0.4 1.2 0.1	1.1 1.1 3.7	5.0 5.6 5.6	10.4 13.2 9.6 7.0	1.3 2.3 3.4	0.8 0.5 2.2 2.2	0.04 0.0 0.0 0.0 0.0	0.0 0.3 0.4 0.7	453 531 303 139
Total	60.0	20,127	15.7	12,076	29.6	6.2	0.6	1.6	4.9	10.9	1.9	1.0	5.5	0.5	1,890

Table 7.23 Community clinics

¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

planning	
family	
Postpartum	
Table 7.24	

Among ever-married women who gave birth at a health facility in the 3 years before the survey and received postnatal care while in the facility, percentage who were counseled about specific issues, by harknowing characteristics. Bandadesh DHS 2017-18

				Typ	Types of counseling	ing				
Background characteristic	Information on 5 family planning fan methods	Sources of family planning methods	Importance of spacing and limiting births	Immediate IUD insertion	Immediate implant insertion	Immediate tubal ligation	Use of LAM	Progesterone- only pills (Apan)	Exclusive breastfeeding	Number of women
Residence Urban	24.4	12.2	17.1	6.4	63	8.0	3.3		86.0	849
Rural	19.9	8.4	12.8	3.9	3.6	5.9	1.9	4.8	87.0	1,636
Division										
Barishal	19.0	9.0	24.4	6.0	7.0	0.0	3.7	9.2	90.6	111
Chattogram	20.4	8.6	10.0	4.9	4.9	5.8	1.8	3.5	85.3	487
Dhaka	23.9	11.9	14.8	6.1	5.6	7.2	2.9	6.0	85.9	734
Khulna	15.0	5.7	11.9	3.2	2.1	5.4	2.8	5.2	86.6	279
Mymensingh	19.0	7.8	13.5	5.7	3.8	5.9	4.5	6.4	93.2	167
Rajshahi	15.1	7.3	14.0	2.3	2.7	4.1	0.0	2.5	82.2	306
Rangpur	30.5	11.9	15.2	3.3	5.5	7.9	2.9	4.9	89.5	253
Sylhet	27.1	14.2	22.8	5.6	2.9	10.9	2.0	5.0	88.8	148
Education										
No education	28.3	6.4	1.8	4.4	0.9	7.4	2.1	2.2	88.7	81
Primary incomplete	25.8	10.8	13.6	6.4	6.1	11.4	0.8	4.7	84.6	264
Primary complete ¹	23.0	11.8	12.8	7.2	5.5	8.2	0.7	4.2	86.0	178
Secondary incomplete	18.1	8.8	14.2	4.2	3.8	6.7	2.0	4.3	85.5	1,102
Secondary complete or higher ²	23.3	10.5	16.1	4.4	5.0	4.7	3.8	6.3	88.7	861
Wealth quintile										
Lowest	21.9	11.1	12.4	2.2	4.6	7.3	0.7		89.4	270
Second	18.3	6.9	14.1	3.5	3.7	6.2	1.6		85.3	382
Middle	17.4	8.1	13.8	3.6	3.7	5.9	1.1	4.9	86.4	464
Fourth	21.0	8.8	12.8	5.4	4.4	6.2	3.4		84.5	598
Highest	25.6	12.3	16.5	6.4	5.3	7.4	3.4		88.2	771
Total	21.4	9.7	14.3	4.7	4.5	6.6	2.4	5.0	86.7	2,485

 1 Primary complete is defined as completing grade 5. 2 Secondary complete is defined as completing grade 10.

I

Key Findings

- Current levels: The under-5 mortality for the 5-year period preceding the survey was 45 deaths per 1,000 live births. The infant mortality rate was 38 deaths per 1,000 live births, and the child mortality rate was 7 deaths per 1,000 children. The neonatal mortality rate was 30 deaths per 1,000 live births, and these deaths accounted for 67% of all under-5 deaths.
- Trends: The under-5 mortality rate has declined gradually over the last 2 decades. Between 2014 and 2017-18, however, the decline slowed noticeably. Infant and neonatal mortality rates remained stable from 2014 to 2017-18.
- Regional differences: By division, Sylhet has the highest under-5 (60 deaths per 1,000 live births) and infant (52 deaths per 1,000 live births) mortality rates, while Rangpur has the highest neonatal mortality rate (37 deaths per 1,000 live births).
- Short birth intervals: Under-5 mortality is approximately twice as high (77 deaths per 1,000 live births) among children born after a birth interval of less than 2 years as among children born after a birth interval of 2 years or more.
- High-risk fertility behavior: 57% of currently married women would have belonged to an avoidable high-risk category if they had conceived at the time of the survey.

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

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

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

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

- The displacement of birth dates, which may distort mortality trends. This can occur if an interviewer knowingly records a birth as occurring in a different year than the one in which it occurred. This may happen if an interviewer is trying to cut down on his or her overall workload, because live births occurring during the 5 years before the interview are the subject of a lengthy set of additional questions.
- The quality of reporting of age at death. Misreporting the child's age at death may distort the age pattern of mortality, especially if the net effect of the age misreporting is to transfer deaths from one age bracket to another.
- Any method of measuring childhood mortality that relies on mothers' reports (e.g., birth histories) assumes that female adult mortality is not high or, if it is high, that there is little or no correlation between the mortality risks of mothers and those of their children.

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

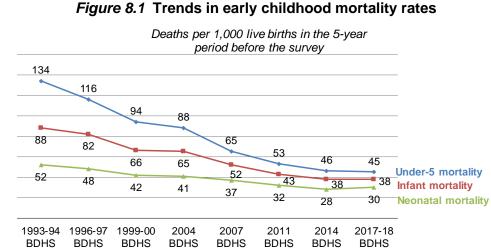
8.1 INFANT AND CHILD MORTALITY

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

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

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

In Bangladesh, the under-5 mortality rate in the 5 years preceding the survey (which corresponds approximately to calendar years 2014 through 2018) was 45 deaths per 1,000 live births (**Table 8.1**). The infant mortality rate was 38 deaths per



1,000 live births, and the child mortality rate was 7 deaths per 1,000 children. During infancy, the risk of dying in the first month of life (30 deaths per 1,000 live births) is nearly four times greater than the risk in the subsequent 11 months (8 deaths per 1,000 live births). It is also notable that deaths in the neonatal period account for 67% of all under-5 deaths. The 2019 MICS survey of BBS reported similar findings with under-5 mortality being 40 deaths per 1,000 live births, infant mortality rate being 34 deaths per 1,000 live births, and the neonatal mortality rate being 26 deaths per 1,000 live births.

Trends: The under-5, infant, and neonatal mortality rates declined by 66%, 57%, and 42%, respectively, between 1993-94 and 2017-18. However, declines were notably slow or absent between 2014 and 2017-18

(**Figure 8.1**). Attaining the aim of the 4th Health, Population and Nutrition Sector Program (HPNSP) will require additional efforts, namely achieving a further 24% reduction in under-5 mortality (from 45 to 34 deaths per 1,000 live births) and a further 53% reduction in infant mortality (from 38 to 18 deaths per 1,000 live births) by 2022.

8.2 BIODEMOGRAPHIC AND SOCIODEMOGRAPHIC RISK FACTORS

Researchers have identified multiple risk factors for early childhood mortality, including biodemographic and sociodemographic factors, based on the characteristics of the mother and child and the circumstances of the birth. The biodemographic factors included in the analysis were sex of the child, mother's age at birth, birth order, and previous birth interval. The sociodemographic factors included were place of residence, division, mother's education, and wealth quintile. Mortality estimates (**Table 8.2** and **Table 8.3**) were calculated for the 5-year period before the survey, which corresponds approximately to calendar years 2014 through 2018.

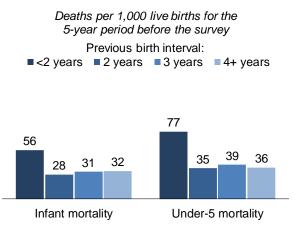
Patterns by sex and residence

- Boys are more likely than girls to die in the first month of their lives. The neonatal mortality rate is 34 deaths per 1,000 live births among male infants and 26 deaths per 1,000 live births among female infants. Similarly, infant and under-5 mortality rates are higher among male than female children (by 7 deaths per 1,000 live births) (Table 8.2).
- Neonatal, infant, and under-5 mortality rates are higher in urban areas than in rural areas by 5 to 7 deaths per 1,000 live births.

Patterns by additional background characteristics

- Generally, mortality rates are higher for children born to women below age 20 than for children born to older women. For example, under-5 mortality is 54 deaths per 1,000 live births among children of mothers who were less than age 20 at the time of the birth, as compared with 39 and 47 deaths per 1,000 live births, respectively, among children of mothers who were age 20-29 and age 30-39 (Table 8.3).
- Neonatal mortality (39 deaths per 1,000 live births) and infant mortality (45 deaths per 1,000 live births) are highest for first-order births, while under-5 mortality (56 deaths per 1,000 live births) is highest for births of order 4-6.
- Mortality rates are generally higher among children born after a short birth interval (less than 2 years) than among children born after longer intervals. For example, infant mortality and under-5 mortality are higher among children born after a birth interval of less than 2 years (56 deaths per 1,000 live births and 77 deaths per 1,000 live births, respectively) than among children born after a birth interval of 2 or more years (Figure 8.2).

Figure 8.2 Childhood mortality by previous birth interval



The under-5 mortality rate varies by division. Sylhet has the highest under-5 mortality (60 deaths per 1,000 live births), while Khulna has the lowest (36 deaths per 1,000 live births) (Figure 8.3).

Figure 8.3 Under-5 mortality by division Deaths per 1,000 live births for the 5-year period

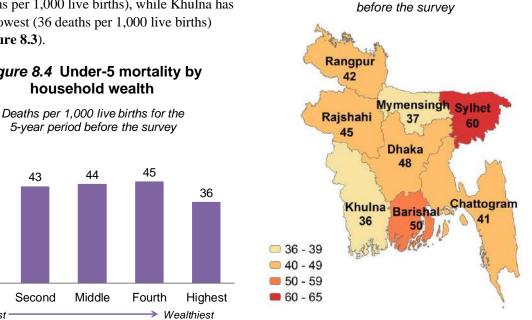


Figure 8.4 Under-5 mortality by household wealth

44

Middle

43

Second

Overall, mortality rates are higher among children from families in the lowest wealth quintile than among children from families in the other quintiles. For instance, under-5 mortality is 55 deaths per 1,000 live births among children in the lowest wealth quintile and 36 deaths per 1,000 live births among children in the highest quintile (Figure 8.4).

8.3 **PERINATAL MORTALITY**

55

Lowest

Poorest

Perinatal mortality rate

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

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

Table 8.4 shows the number of stillbirths, the number of early neonatal deaths, and the perinatal mortality rate for the 5-year period prior to the 2017-18 BDHS by selected background characteristics. Overall, the perinatal mortality rate in Bangladesh is 48 deaths per 1,000 pregnancies.

Patterns by background characteristics

- By age, perinatal mortality is highest for the youngest mothers (62 deaths per 1,000 pregnancies), that is, women who gave birth before age 20 (Table 8.4).
- Perinatal mortality is higher for women who become pregnant less than 15 months after a previous pregnancy (62 deaths per 1,000 pregnancies) than for those who become pregnant 39 months or more after a previous pregnancy (37 deaths per 1,000 pregnancies).
- By division, perinatal mortality ranges from 41 deaths per 1,000 pregnancies in Khulna and Sylhet to 53 deaths per 1,000 pregnancies in Chattogram and Rajshahi.

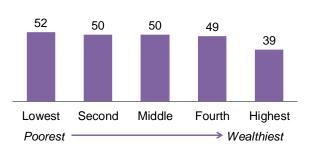
 The perinatal mortality rate is lower for mothers in the highest wealth quintile (39 deaths per 1,000 pregnancies) than for those in the lowest quintile (52 deaths per 1,000 pregnancies) (Figure 8.5).

8.4 HIGH-RISK FERTILITY BEHAVIOR

Childhood mortality depends on the magnitude of several known risk factors, such as mother's age at birth, previous birth interval, and parity. Child mortality is likely to be higher for mothers with one or more risk factors. **Table 8.5** gives the percent distribution of children born in the 5 years preceding the survey by category of elevated risk of mortality (along with risk ratios) and the percent distribution of currently married women by their category of risk if they were to conceive a child at the time of the survey.

Figure 8.5 Perinatal mortality by household wealth

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



Forty-two percent of births in the 5 years preceding the survey were not in any high-risk category. Twenty-five percent of births were in the unavoidable risk category (first births to women between age 18 and age 34). Twenty-eight percent of births were in a single high-risk category (mother's age less than 18 years, mother's age more than 34 years, birth interval less than 24 months, and birth order more than three), and 4% were in multiple high-risk categories.

Risk ratios indicate the relationship between risk factors and child mortality. Among the single high-risk categories, the risk ratio is highest (1.81) for births that occur within 24 months of a previous birth. However, risk ratios are much higher among births in multiple risk categories, at 1.91.

Table 8.5 also shows that 57% of currently married women in Bangladesh would have belonged to an avoidable high-risk category if they had conceived at the time of the survey; 28% would have belonged to a multiple high-risk category, and 29% would have belonged to a single high-risk category. Thirty-five percent of women would not have belonged to any high-risk category, while 8% would have belonged to an unavoidable risk category.

LIST OF TABLES

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

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

Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates for 5-year periods preceding the survey, Bangladesh DHS 2017-18

Years preceding the survey	Neonatal mortality (NN)	Postneonatal mortality (PNN) ¹	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
0-4	30	8	38	7	45
5-9	34	10	43	9	52
10-14	40	16	56	10	66

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

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

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 5-year period preceding the survey, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN) ¹	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (₅q₀)
Child's sex					
Male	34	7	41	7	48
Female	26	8	34	7	41
Residence					
Urban	35	7	42	7	48
Rural	28	8	36	7	43
Total	30	8	38	7	45

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

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

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 5-year period preceding the survey, according to additional characteristics, Bangladesh DHS 2017-18

Characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN) ¹	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (₅q₀)
Mother's age at birth					
<20	41	7	48	6	54
20-29	25	7	32	8	39
30-39	28	13	41	7	47
Birth order					
1	39	5	45	6	50
2-3	23	8	32	7	38
4-6	29	14	43	13	56
Previous birth interval ²					
<2 years	45	10	56	23	77
2 years	19	9	28	7	35
3 years	24	7	31	8	39
4+ years	22	10	32	5	36
Division					
Barishal	32	9	41	9	50
Chattogram	31	2	33	9	41
Dhaka	33	8	41	8	48
Khulna	24	8	32	4	36
Mymensingh	24	9	32	5	37
Rajshahi	26	10	37	9	45
Rangpur	37	3	40	3	42
Sylhet	31	21	52	9	60
Mother's education					
No education	35	8	43	12	55
Primary incomplete	40	10	50	8	57
Primary complete ³	27	16	43	5	47
Secondary incomplete	29	7	36	8	44
Secondary complete or higher ⁴	25	2	27	4	31
Wealth quintile					
Lowest	34	9	43	12	55
Second	27	10	37	7	43
Middle	32	5	37	7	44
Fourth	31	9	40	5	45
Highest	27	5	32	4	36

¹ Computed as the difference between the infant and neonatal mortality rates
 ² Excludes first-order births
 ³ Primary complete is defined as completing grade 5.
 ⁴ Secondary complete is defined as completing grade 10.

Table 8.4 Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the 5-year period preceding the survey, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic	Number of stillbirths ¹	Number of early neonatal deaths ²	Perinatal mortality rate ³	Number of pregnancies of 7+ months' duration
Mother's age at birth				
<20	77	93	62	2,720
20-29	106	85	39	4,910
30-39	38	27	52	1,244
40-49	1	2	52	57
Previous pregnancy interval in months ⁴				
First pregnancy	94	101	61	3,175
<15	29	26	62	875
15-26	9	18	35	763
27-38	13	14	35	753
39+	78	48	37	3,365
Residence				
Urban	51	68	49	2,445
Rural	172	138	48	6,485
Division				
Barishal	11	11	45	494
Chattogram	56	43	53	1,871
Dhaka	53	56	47	2,309
Khulna	18	15	41	813
Mymensingh	25	14	52	750
Rajshahi	30	25	53	1,045
Rangpur	16	26	45	922
Sylhet	14	15	41	727
Mother's education				
No education	17	10	40	655
Primary incomplete	53	50	63	1,648
Primary complete ⁵	30	19	51	946
Secondary incomplete	85	86	44	3,853
Secondary complete or higher ⁶	38	41	43	1,828
Wealth quintile				
Lowest	51	49	52	1,920
Second	51	39	50	1,819
Middle	46	38	50	1,681
Fourth	44	44	49	1,798
Highest	29	37	39	1,712
Total	222	206	48	8,931

¹ Stillbirths are fetal deaths in pregnancies lasting 7 or more months.

¹ Stillbirths are fetal deaths in pregnancies lasting 7 or more months.
² Early neonatal deaths are deaths at age 0-6 days among live-born children.
³ The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of 7 or more months' duration, expressed per 1,000.
⁴ Categories correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months.
⁵ Primary complete is defined as completing grade 5.
⁶ Secondary complete is defined as completing grade 10.

Table 8.5 High-risk fertility behavior

Percent distribution of children born in the 5 years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Bangladesh DHS 2017-18

	Births in th preceding t		Percentage of
Risk category	Percentage of births	Risk ratio	currently married women ¹
Not in any high-risk category	42.0	1.00	35.3ª
Unavoidable risk category First-order births between age 18 and age 34	25.4	1.36	7.8
In any avoidable high-risk category	32.6	1.69	56.8
Single high-risk category Mother's age <18 only Mother's age >34 only Birth interval <24 months only Birth order >3 only	14.0 1.4 4.2 8.7	1.78 0.62 1.81 1.55	1.8 10.4 7.7 9.3
Subtotal	28.3	1.66	29.1
Multiple high-risk category Age <18 and birth interval <24 months ² Age >34 and birth interval <24 months Age >34 and birth order >3 Age >34 and birth interval <24 months and birth order >3 Birth interval <24 months and birth order >3	0.6 0.0 2.1 0.1 1.5	(5.34) * 1.12 * 1.89	0.5 0.1 23.8 0.5 2.7
Subtotal	4.3	1.91	27.7
Total	100.0	na	100.0
Subtotals by individual avoidable high-risk category Mother's age <18 Mother's age >34 Birth interval <24 months Birth order >3 Number of births/women	14.6 3.6 6.4 12.4 8.772	1.91 0.89 2.10 1.50 na	2.3 34.8 11.6 36.3 18,984
	0,112	IId	10,904

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. na = Not applicable ¹ Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher

being of order 3 or higher. 2 Includes the category age <18 and birth order >3

^a Includes sterilized women

Key Findings

- Antenatal care: The percentage of women receiving antenatal care (ANC) from a medically trained provider has increased sharply since 2014, from 64% to 82%. There has also been an increase in the percentage of women with four or more ANC visits during pregnancy, from 31% to 47%. Bangladesh aims to reach 50% coverage of at least four ANC visits by 2022.
- Assistance at delivery: Medical personnel attended 53% of deliveries in the 3 years before the survey. The goal of the 4th HPNSP is to increase the percentage of deliveries attended by medically trained providers to 65% by 2022.
- Place of delivery: 49% of births in the 3 years before the survey were delivered at a health facility (32% at private facilities, 14% at public facilities, and 4% at nongovernmental organization facilities). Between 2014 and 2017-18, facility deliveries increased by 12 percentage points (from 37% to 49%).
- Place of delivery by wealth: Births to women in the highest wealth quintile were three times more likely to be delivered at a health facility than births to women in the lowest quintile. The aim of the 4th HPNSP of reducing the ratio between the percentages of births in the lowest and highest wealth quintiles delivered in a health facility from 1:4.7 in 2014 to 1:3.5 by 2022 has been achieved.
- Cesarean section: One-third of deliveries occur via cesarean section (C-section). The percentage of Csection births increased from 23% to 33% between 2014 and 2017-18.
- Postnatal care: More than half of mothers and newborns received postnatal care from a medically trained provider within 2 days of delivery. In the case of non-institutional deliveries, it is only 7%. The 4th HPNSP aims to increase this coverage from 5% in 2014 to 10% by 2022.
- Essential newborn care: The five recommended essential newborn care practices were instituted for only 7% of newborns among non-institutional deliveries. The aim of the 4th HPNSP is to increase this coverage from 6% in 2014 to 25% by 2022.

health care system striving to reduce morbidity and mortality related to pregnancy must focus on maternal and newborn health. The health care that a woman receives during pregnancy, at the time of delivery, and soon after delivery is important for the survival and well-being of both the mother and the infant. The government of Bangladesh is committed to achieving the targets for Sustainable Development Goal (SDG) 2 and SDG 3. Bangladesh aims to achieve the goals of the 4th Health, Population and Nutrition Sector Program (4th HPNSP) of reducing the MMR to 121 deaths per 100,000 live births, reducing the under-5 mortality rate to 34 deaths per 1,000 live births, and reducing the neonatal mortality rate to 18 deaths per 1,000 live births by 2022 (MOHFW 2017).

This chapter provides information from the 2017-18 BDHS on several aspects of maternal and newborn health, including antenatal care, delivery, postnatal care, and newborn care. Information was also collected on place of delivery and attendance at birth for all births in the 3 years preceding the survey. In addition, questions on newborn care, including cord cutting and drying and bathing of the newborn following birth, were asked about the most recent live birth in the 3 years preceding the survey. This information will assist planners and other collaborators in the health sector in formulating appropriate strategies and interventions to provide good-quality health services and a series of well-timed interventions that should further improve maternal and newborn health.

9.1 ANTENATAL CARE COVERAGE AND CONTENT

Antenatal care (ANC) from a medically trained provider is important to monitor the status of a pregnancy, identify complications associated with the pregnancy, and prevent adverse pregnancy outcomes. To be most effective, there should be regular ANC visits/contacts throughout the pregnancy.

9.1.1 Skilled Providers

Antenatal care (ANC) from a medically trained provider

Pregnancy care received from medically trained providers, such as qualified doctors, nurses, midwives, or paramedics; family welfare visitors (FWVs); community skilled birth attendants (CSBAs); and sub-assistant community medical officers (SACMOs).

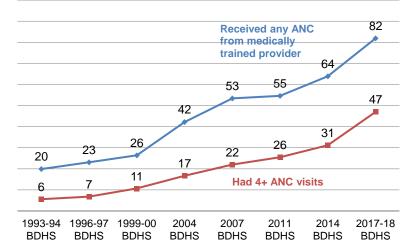
Sample: Women age 15-49 who had a live birth in the 3 years before the survey

Eighty-two percent of women with a live birth in the 3 years preceding the survey received antenatal care at least once from a medically trained provider for the most recent birth. Seventy-six percent reported receiving ANC from a qualified doctor. Overall, 92% of women with a live birth in the 3 years preceding the survey received antenatal care at least once from a provider (**Table 9.1**).

Trends: The proportion of women receiving ANC from a medically trained provider has increased noticeably over the last two decades, from 20% in 1993-94 to 82% in 2017-18 (**Figure 9.1**). This increase is due mostly to a rise in ANC from qualified doctors.

Figure 9.1 Trends in antenatal care coverage

Percentage of women age 15-49 who had a live birth in the 3 years before the survey (for the most recent birth)



Patterns by background characteristics

- Women below age 20 (84%), women with first-order births (89%), and women living in urban areas (90%) are more likely to receive ANC from a medically trained provider than women age 35-49 (77%), women with sixth- or higher-order births (45%), and women residing in rural areas (79%) (Table 9.1).
- The proportion of women receiving ANC from a medically trained provider is highest in Khulna (91%) and lowest in Sylhet (71%).
- The likelihood of receiving ANC from a medically trained provider increases with increasing education and wealth. For example, the percentage of women receiving ANC from a medically trained provider ranges from 64% among those in the lowest wealth quintile to 97% among those in the highest quintile.

9.1.2 Place of Antenatal Care

The place where a woman receives antenatal care influences the frequency and quality of care received. Information on source of ANC also assists policymakers with decisions on how to allocate resources. Women who had a live birth in the 3 years preceding the survey were asked whether they received ANC for their most recent birth and where they received ANC. As women may visit more than one type of facility for ANC during the same pregnancy, the facility categories are not mutually exclusive and do not sum to 100%. The private sector is the leading source for ANC (64%). More than one-third of women received ANC from either public sector health facilities or at home (36% each). Only 9% received ANC from nongovernmental organization (NGO) facilities (**Table 9.2**).

Trends: The proportion of women receiving ANC from the public sector remained constant at 36% between 2014 and 2017-18, while the proportion receiving ANC from the private sector increased from 52% to 64% over the same period. The proportion of women receiving ANC at home has increased by 20 percentage points since 2014, from 16% to 36%.

Patterns by background characteristics

- Women in urban areas (67%), women with a secondary education or higher (79%), and women in the highest wealth quintile (78%) are more likely than their counterparts to receive ANC from the private sector (**Table 9.2**).
- Women in the lowest and second wealth quintiles are more likely to receive ANC at home (45% and 44%, respectively) and from the public sector (46% and 40%, respectively) than women in the highest wealth quintile (23% and 26%, respectively).

9.1.3 Timing and Number of ANC Visits

Forty-seven percent of women with a live birth in the 3 years before the survey made four or more ANC visits during their pregnancy. Women have been pregnant for a median of 4.7 months at their first ANC visit (**Table 9.3**). Urban women are more likely than rural women to have made four or more antenatal visits (59% versus 43%).

Trends: Since 1993-94, the proportion of women with four or more ANC visits has increased from 6% to 31% in 2014 to 47% in 2017-18 (**Figure 9.1**). The 4th HPNSP aims to reach 50% coverage of at least four ANC visits by 2022.

9.2 COMPONENTS OF ANC VISITS

The content of ANC is an essential component of service quality. The proportions of pregnant women who sought ANC and had their weight and blood pressure measured were 88% and 93%, respectively. Overall, 72% of women reported providing a urine sample for testing, and 66% reported providing a blood sample (**Table 9.4**). Remarkably, 80% of women underwent an ultrasonogram. Forty percent of mothers who received ANC reported that providers informed them of signs of possible pregnancy complications during the visit. Seventy-six percent of women said that they took iron supplements (tablets or syrup) (**Table 9.4**).

Trends: Coverage of ANC components has improved since 2014. Between 2014 and 2017-18, the proportion of women who provided urine and blood samples and underwent an ultrasonogram as part of ANC visits increased by 7, 11, and 9 percentage points, respectively. However, the proportion of pregnant women who were informed of signs of pregnancy complications decreased from 57% in 2014 to 40% in 2017-18.

Patterns by background characteristics

- The proportion of women who underwent an ultrasonogram is highest among those with first-order births (86%) and lowest among those with sixth- or higher-order births (51%) (**Table 9.4**).
- By division, the proportion of women undergoing an ultrasonogram ranges from 65% in Rangpur to 90% in Dhaka.
- Women with a secondary education or higher (94%) and women in the highest wealth quintile (96%) are more likely to have undergone an ultrasonogram than women with no education (64%) and women in the lowest wealth quintile (59%).
- Women residing in urban areas (45%) are more likely to be informed about signs of pregnancy complications than women in rural areas (38%).

9.3 QUALITY OF ANTENATAL CARE

The 2017-18 BDHS defines quality ANC as follows: a woman has four or more ANC visits, of which at least one is with a medically trained provider, and receives all of the basic components of ANC (weight and blood pressure measurements, urine and blood tests, and information on signs of possible complications) at least once. The results showed that 44% of women had four or more ANC visits, at least one with a medically trained provider, and 25% received all basic components of ANC. According to the 2017-18 BDHS definition, only 18% of women received quality ANC (**Table 9.5**).

Patterns by background characteristics

- Women in urban areas are more likely to receive quality ANC services than those in rural areas (27% versus 14%).
- One in three women (33%) with a secondary education or higher receive quality ANC services, as compared with only 6% of women with no education.
- The quality of ANC relates closely to wealth. Only 7% of women from the lowest wealth quintile receive quality ANC, compared with 37% of women from the highest wealth quintile.

9.4 DELIVERY SERVICES

Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that can cause death or serious illness for the mother or the newborn. Hence, it is important to increase the proportion of births delivered in a safe, clean environment and under the supervision of health

professionals. The Bangladesh Maternal Health Strategy, which encourages women to deliver under the care of medically trained birth attendants, promotes safe motherhood through various activities, especially delivery by a skilled birth attendant (SBA) (MOHFW 2019).

Institutional Deliveries 9.4.1

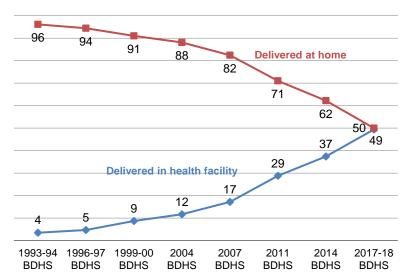
Institutional deliveries

Deliveries that occur in a health facility. Sample: All live births in the 3 years before the survey

Forty-nine percent of live births in the 3 years before the survey were delivered at a health facility. Overall, 32% of births were delivered in a private facility, 14% were delivered in a public facility, and 4% were delivered in an NGO facility. Fifty percent of births were delivered at home (Table 9.6).

Twenty-seven percent of women reported using a mobile phone to seek information or services related to their most recent pregnancy or delivery in the 3 years preceding the survey (Table 9.7). Fifteen percent of women used a mobile phone to contact a health provider.

Percentage of live births in the 3 years before the survey



Trends: The likelihood of delivering in a health facility has increased over time. Between 1993-94 and 2017-18, facility deliveries rose from 4% to 49% (Figure 9.2), primarily as a result of the rapid increase in private sector deliveries since 2007. The percentage of women delivering in a private facility increased from 8% in 2007 to 22% in 2014 and 32% in 2017-18. In case of the public facilities, it increased from 7% in 2007 to 13% in 2014 to 14% in 2017-18.

Patterns by background characteristics

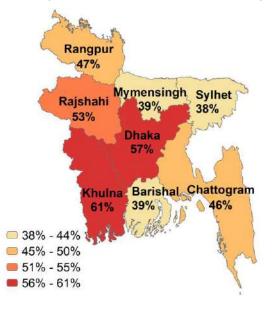
- Births to women age 35-49 are less likely to be delivered in a health facility than births to women below age 20 (44% versus 50%) (Table 9.6).
- Only 14% of sixth- and higher-order births are delivered in health facilities, as compared with 60% of first-order births.
- Sixty-three percent of births in urban areas are delivered at health facilities, compared with 45% in rural areas.

Figure 9.2 Trends in place of birth

- Across divisions, the proportion of births delivered at a health facility is highest in Khulna (61%) and lowest in Sylhet (38%) (Figure 9.3).
- The ratio between the percentage of births in the lowest wealth quintile and the percentage of births in the highest wealth quintile delivered in a health facility is 1:3 (26% versus 78%). Thus, the aim of the 4th HPNSP of reducing the ratio between the percentages of births in the lowest and highest wealth quintiles delivered in a health facility from 1:4.7 (as reported in the 2014 BDHS) to 1:3.5 by 2022 seems to have been achieved (MOHFW 2017).

Figure 9.3 Health facility births by division

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



9.4.2 Skilled Assistance during Delivery

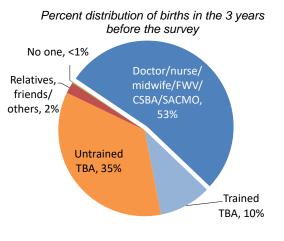
Delivery by a medically trained provider

Births delivered with the assistance of qualified doctors, nurses, midwives, or paramedics; family welfare visitors (FWVs); community skilled birth attendants (CSBAs); and sub-assistant community medical officers (SACMOs). *Sample:* All live births in the 3 years before the survey

Obstetric care from a trained provider during delivery is a critical factor in reducing maternal and neonatal mortality. The aim of the 4th HPNSP is to increase the percentage of deliveries by medically trained providers also known as skilled birth attendants to 65% by 2022. Slightly more than half of deliveries (53%) in the 3 years preceding the survey were attended by medically trained providers. Another 35% of births were assisted by untrained traditional birth attendants (TBAs), 10% by trained traditional birth attendants, and 2% by relatives, friends, or others (**Table 9.8** and **Figure 9.4**).

Trends: The proportion of births delivered by a medically trained provider has increased rapidly over time, from 21% in 2007 to 32% in 2011, 42% in 2014, and 53% in 2017-18 (**Figure 9.5**).

Figure 9.4 Assistance during delivery



An increase in facility deliveries has been the major driving factor in the rapid rise in deliveries by medically trained providers. Between 2007 and 2017-18, the proportion of non-institutional deliveries by medically trained providers remained at 5% or less (**Figure 9.5**).

Patterns by background characteristics

- First-order births (64%) are more likely to be assisted by a medically trained provider than sixth- or higher-order births (20%) (Table 9.8).
- Births in urban areas are more likely (68%) than those in rural areas (47%) to be assisted by medically trained providers.
- By division, the proportion of births assisted by medically trained providers is highest in Khulna (64%) and lowest in Sylhet (39%).
- Births to mothers in the highest wealth quintile (83%) are more likely to be delivered by medically trained personnel than births to mothers in the lowest wealth quintile (28%) (Figure 9.6).

9.4.3 Delivery by Cesarean

Access to cesarean sections (C-sections) can reduce maternal and neonatal mortality and complications such as obstetric fistula. However, use of C-sections without medical need can put women at risk of short-term and long-term health problems. WHO advises that C-sections be done when medically necessary but does not recommend a specific rate for countries to achieve at the population level (WHO 2015a). However, the percentage of C-section births is sometimes considered to be a proxy indicator of women's access to skilled care for complicated deliveries.

One-third of all births were delivered via C-section (**Table 9.9**). For 19% of births, the decision to deliver by C-section was made before the onset of labor pains. Thirty-one percent of C-sections were carried out because of malpresentation and 30% because of failure to progress in labor (**Table 9.10**). Eleven percent were carried out for reasons of convenience.

Figure 9.5 Trends in skilled assistance at delivery

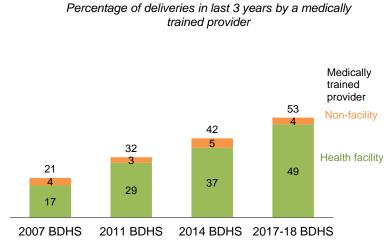
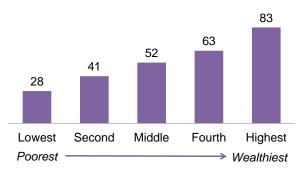


Figure 9.6 Skilled assistance at delivery by household wealth

Percentage of live births in the 3 years before the survey assisted by a medically trained provider



Trends: The percentage of women with C-section deliveries has continued to increase, from 3% in 1999-2000 to 9% in 2007, 17% in 2011, 23% in 2014, and 33% in 2017-18 (**Figure 9.7**).

Patterns by background characteristics

- C-section rates are higher for first-order births (40%) than for sixth- or higher-order births (7%) (Table 9.9).
- Eighty-three percent of births in private facilities are delivered by C-section, as compared with 35% in public facilities (Figure 9.8). Similarly, 48% of C-sections taking place in private facilities were decided on before the onset of labor pains, compared with only 19% of C-sections occurring in public facilities.
- The C-section rate is higher in urban areas (44%) than in rural areas (29%).
- C-section deliveries before the onset of labor are more likely among women in the highest wealth quintile (40%) than among those in the lowest wealth quintile (6%).

9.4.4 Duration of Stay at Health Facility

Twenty-eight percent of women who had a vaginal delivery at a health facility were discharged within 6 hours after delivery, and 46% stayed less than 24

Figure 9.7 Trends in delivery by C-section

Percentage of live births in the 3 years before the survey

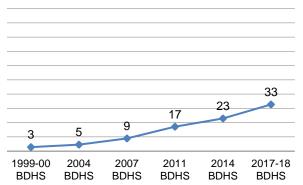
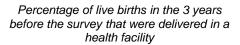
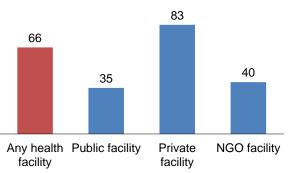


Figure 9.8 Delivery by C-section according to type of health facility





hours (**Table 9.11**). Among women who gave birth by C-section, 74% stayed at the hospital for 3-6 days and 24% for 7 days or more (**Table 9.12**). Hospital stays after C-section deliveries varied by type of facility. Women who delivered in a public sector health facility were more likely to stay for 7 days or more (38%) than those who delivered in an NGO facility (15%) or a private facility (22%).

Cost of Delivery

Information on cost of delivery was collected from the survey respondents. The costs of deliveries in private facilities are higher than the costs of those in public facilities. For instance, 93% of C-section deliveries in private facilities cost 10,000 takas or more, as compared with 67% in public facilities. The situation is similar for normal deliveries (31% versus 9%) (**Table 9.13**). Financial support for deliveries is derived mostly from family funds (84%) and relatives (19%) (**Table 9.14**). Twelve percent of respondents reported having to take a loan or mortgage.

9.5 POSTNATAL CARE

Postnatal care (PNC) is a crucial component of safe motherhood and neonatal health. Postnatal checkups provide an opportunity to assess and treat delivery complications and to counsel mothers on how to care for themselves and their newborn infant. A large proportion of maternal and neonatal deaths occur during the 24 hours following delivery (UNICEF 2012). The World Health Organization (WHO) recommends that women receive a postnatal health check within 24 hours after delivery (WHO 2015b). In addition, the first 2 days following delivery are critical for monitoring complications among both mothers and their newborns.

The 4th HPNSP aims to increase coverage of PNC from a medically trained provider within 2 days of birth for non-institutional deliveries from 5% (the figure reported in the 2014 BDHS) to 10% by 2022.

9.5.1 Postnatal Health Check for Mothers

Fifty-two percent of mothers in Bangladesh received postnatal care from a medically trained provider within 2 days after delivery. Nearly half (49%) of women received a postnatal checkup within the first 4 hours after delivery, 2% received a checkup between 4 and 23 hours after delivery, and 1% received a checkup 1 to 2 days following delivery (**Table 9.15**). Thirty-three percent of women received care from a qualified doctor within 2 days after birth, while 19% received care from a nurse, midwife, paramedic, or family welfare visitor (FWV) (**Table 9.16**).

Trends: The percentage of mothers receiving a postnatal checkup from a medically trained provider within 2 days of delivery increased from 16% in 2004 to 52% in 2017-18 (**Figure 9.9**).

Patterns by background characteristics

- The proportion of women receiving postnatal care from a medically trained provider varies considerably by place of delivery. Nearly all mothers (97%) who delivered at a health facility received PNC within 2 days, as compared with only 7% of mothers who delivered elsewhere (Figure 9.10).
- Women in urban areas (66%) are more likely to receive a postnatal checkup within 2 days of delivery than women in rural areas (47%) (Table 9.16).
- By division, the proportion of women receiving postnatal checkups in the 2 days after delivery from a medically trained provider varies from a high of 63% in Khulna division to a low of 40% in Sylhet.

Figure 9.9 Trends in postnatal care from medically trained providers

Percentage of last births in the 3 years before the survey for which women and newborns received a postnatal check during the first 2 days after birth

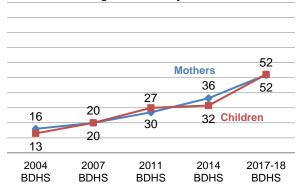
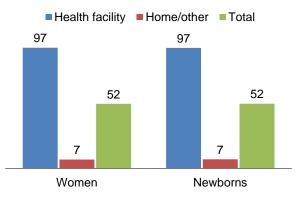


Figure 9.10 Postnatal care by place of delivery from medically trained provider

Percentage of last births in the 3 years before the survey for which women and newborns received a postnatal check during the first 2 days after birth



Women with a secondary education or higher (57%) and women in the highest wealth quintile (62%) are much more likely to receive postnatal checkups from qualified doctors than from other providers (Table 9.16).

9.5.2 Postnatal Health Check for Newborns

Fifty-two percent of newborns received a postnatal checkup from a medically trained provider within 2 days after delivery. Thirty-eight percent had a postnatal checkup within an hour. However, 46% of newborns did not receive any postnatal checkup (**Table 9.17**). Thirty-five percent of infants received postnatal care from qualified doctors (**Table 9.18**).

The 2017-18 BDHS collected information on whether selected signal functions were performed during the first 2 days of delivery for the most recent live births in the 3 years preceding the survey. Eighty-eight percent of infants had their temperature measured, and 85% had their umbilical cord examined. Eighty percent of mothers were counseled on breastfeeding, but only 31% were counseled on danger signs. A majority of infants (91%) had at least two signal functions performed during the first 2 days after birth (**Table 9.19**).

Trends: The percentage of newborns who received a postnatal checkup from a medically trained provider within the first 2 days after birth increased from 13% in 2004 to 52% in 2017-18 (**Figure 9.9**).

Patterns by background characteristics

- Newborns delivered in a health facility are more likely to receive a postnatal check within 2 days of birth than those delivered elsewhere (97% versus 7%) (Figure 9.10).
- Postnatal checkups from a medically trained provider are less common among sixth- or higher-order births than among first-order births (20% versus 64%) (**Table 9.17**).
- Postnatal checkups for newborns are least common in Mymensingh and Sylhet (41% each) and most common in Khulna (64%).
- Babies born to mothers with a secondary education or higher are more likely to receive a postnatal checkup from a medically trained provider than babies born to mothers with no education (78% versus 29%).
- Newborns delivered in health facilities are more likely than newborns delivered elsewhere to have each of the selected signal functions performed during the first 2 days after birth (**Table 9.19**).

9.6 NEWBORN CARE

Newborn primary care focuses on the use of clean instruments to cut the umbilical cord, cord care, bathing delays, prevention of hypothermia, and keeping the newborn warm. Newborns should be dried within minutes after birth and placed on the mother's bare chest, and they should not be bathed in the first 24 hours in order to reduce the risk of hypothermia (WHO 2012). The National Neonatal Health Strategy and Guidelines for Bangladesh recommends a set of essential newborn care practices (MOHFW 2009). Essential newborn care focuses on using clean instruments to cut the umbilical cord, not applying any substances to the cord, immediate drying (within 5 minutes) to keep the baby warm, delaying bathing until 72 hours after birth, and initiating breastfeeding within 1 hour of delivery.

9.6.1 Care of the Umbilical Cord

Table 9.20 shows that in non-institutional births, a blade was the most common instrument used to cut the umbilical cord (97%); a blade from a delivery kit was used in 21% of births, and a blade from another source was used in 77%.

In 7% of births chlorhexidine was applied to the cord after it was cut (in line with the current recommendation), and in nearly half of births (49%) nothing was applied (which was the previous recommendation). Other substances applied to the cord were mustard oil with garlic (18%), antibiotics (14%), antiseptic (9%), and boric powder (5%). The use of materials such as turmeric juice or powder, chewed rice, vermillion (shidur), gentian violet, and ginger juice was not widespread (**Table 9.21**).

Patterns by background characteristics

• Use of chlorhexidine is slightly more common in urban areas (9%) than in rural areas (6%).

 By division, use of chlorhexidine ranges from 3% each in Mymensingh and Rangpur to 11% in Chattogram (Table 9.21).

9.6.2 Drying and Bathing the Newborn

The 2017-18 BDHS asked mothers who had non-institutional deliveries in the past 3 years about all three components of newborn thermal care: when the newborn was first dried, whether the newborn was given skin-to-skin care, and when the newborn was first bathed. Fourteen percent of newborns were put on their mother's chest to allow skin-to-skin contact. Sixty-three percent of newborns were dried within the recommended 5 minutes of birth, 85% were dried within 10 minutes, and 12% were dried after 10 minutes. Only 1% of newborns were not dried (**Table 9.22**). Forty-six percent of newborns were first bathed 72 hours or more following birth, which is the recommended practice in Bangladesh. Twenty percent of infants were bathed within the first 6 hours of birth, while 23% were bathed in the first 24 hours (**Table 9.23**).

Trends: The percentage of newborns dried within 5 minutes of birth has decreased since 2014, from 67% to 63%. Adherence to recommended practices regarding delayed bathing of newborns has improved over time. The percentage of babies for whom bathing was delayed until at least 72 hours after birth increased from 17% in 2007 to 28% in 2011, 34% in 2014, and 46% in 2017-18.

Patterns by background characteristics

- The practice of skin-to-skin contact is most common among babies born to mothers in the highest wealth quintile (19%) and those born to mothers with a secondary education or higher (16%) (Table 9.22).
- The recommended practice of bathing newborns 72 hours or more after birth is most common in Barishal (59%) and least common in Mymensingh (36%) (**Table 9.23**).

9.6.3 Essential Newborn Care

The survey assessed essential newborn care practices (use of a safe delivery kit or boiled blade to cut the umbilical cord, applying nothing or only chlorhexidine to the cord, immediate drying after birth, bathing delayed 72 hours or more, and immediate breastfeeding) among non-institutional deliveries. The results showed that the five recommended essential newborn care practices were instituted for only a small percentage of newborns (7%) (**Table 9.24**). The aim of the 4th HPNSP is to increase coverage of essential newborn care practices from 6% in 2014 to 25% by 2022.

9.7 PROBLEMS IN ACCESSING HEALTH CARE

Problems in accessing health care

Women were asked whether each of the following factors would be a big problem in seeking medical advice or treatment for themselves when they are sick:

- Getting permission to go to the doctor
- Getting money for advice or treatment
- Distance to a health facility
- Not wanting to go alone

Sample: Women age 15-49

Many factors can prevent women from getting medical advice or treatment for themselves when they are sick. Information on such factors is particularly important in understanding and addressing the barriers women face in seeking care during pregnancy and at the time of delivery.

Sixty-seven percent of women age 15-49 report having at least one of the specified problems in accessing health care. The most frequently reported problems were not wanting to go alone (45%), getting money for treatment (44%), and distance to a health facility (41%) (**Table 9.25**).

Patterns by background characteristics

- Women who are employed but do not earn cash are more likely to report having at least one problem in accessing health care (75%) than those who earn cash for employment (70%) and those who are not employed (63%).
- More women in rural areas (71%) than urban areas (58%) have problems in accessing health care.
- Women in the lowest wealth quintile are more likely to have problems in accessing health care than women in the highest quintile (80% versus 50%).

LIST OF TABLES

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

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- Table 9.3 Number of antenatal care visits and timing of first visit
- Table 9.4 Components of antenatal care
- Table 9.5 Quality of antenatal care
- Table 9.6 Place of delivery
- Table 9.7 Use of mobile phones during pregnancy and delivery
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- Table 9.9
 Cesarean section
- Table 9.10 Reason for C-section
- Table 9.11 Duration of stay in health facility after birth
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- Table 9.13 Cost of delivery
- Table 9.14 Source of delivery funds
- Table 9.15 Timing of first postnatal checkup for the mother
- Table 9.16 Type of provider of first postnatal check for the mother
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- Table 9.24 Essential newborn care
- Table 9.25 Problems in accessing health care

Table 9.1 Antenatal care

Percent distribution of women age 15-49 who had a live birth in the 3 years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth and percentage receiving antenatal care from a medically trained provider for the most recent birth, according to background characteristics, Bangladesh DHS 2017-18

		Medically	rtrained	d provide	r				Un-	Un-						Percent- age receiving antenatal care	
Background characteristic	Quali- fied doctor	Nurse/ midwife/ para- medic	FWV	CSBA	SACMO	СНСР	HA/ FWA	Trained birth atten- dant	-	quali- fied pro- vider	NGO worker	Other	No ANC	Total	Any ANC	from a medically trained provider ¹	Number of women
Age at birth																	
<20 20-34	77.6 75.6	3.4 2.5	2.9 2.5	0.3 0.3	0.1 0.2	1.9 1.5	2.5 2.0	0.2 0.0	0.1 0.1	0.7 0.9	4.5 5.5	0.0 0.2	5.9	100.0	94.1 91.4	84.3 81.1	1,466
20-34 35-49	75.6	2.5 2.6	2.5 3.1	0.3	0.2	1.5 1.1	2.0 1.8	0.0	0.1	0.9	5.5 4.2	0.2	8.6 14.7	100.0 100.0	91.4 85.3	76.9	3,407 179
Birth order																	
1	83.1	3.2	2.3	0.2	0.2	1.4	1.8	0.1	0.1	0.4	3.3	0.0	4.0	100.0	96.0	88.9	1,947
2-3	75.4	2.3	2.6	0.4	0.2	1.5	1.9	0.1	0.1	0.9	6.1	0.1	8.5	100.0	91.5	80.8	2,499
4-5 6+	58.8 42.8	4.4 1.4	4.7 0.7	0.0 0.0	0.0 0.0	3.0 2.8	4.1 4.3	0.0 0.0	0.2 0.0	1.5 3.2	6.0 14.4	0.9 0.0	16.6 30.5	100.0 100.0	83.4 69.5	67.8 44.8	506 99
•	42.0	1.4	0.7	0.0	0.0	2.0	4.5	0.0	0.0	5.2	14.4	0.0	50.5	100.0	03.5	44.0	33
Residence Urban	85.6	3.3	0.9	0.0	0.0	0.2	1.1	0.1	0.1	0.4	2.9	0.1	5.2	100.0	94.8	89.8	1,356
Rural	72.5	2.6	3.3	0.0	0.0	2.1	2.5	0.1	0.1	1.0	2.9 6.0	0.1	9.0	100.0	94.0 91.0	79.0	3,695
Division																	-,
Barishal	70.8	3.7	2.0	0.0	0.0	1.3	1.5	0.2	0.3	1.4	3.8	0.0	15.0	100.0	85.0	76.5	288
Chattogram	77.4	2.7	2.5	0.3	0.4	1.1	2.0	0.2	0.4	0.9	3.3	0.0	9.0	100.0	91.0	83.2	1,071
Dhaka	83.0	2.2	1.7	0.0	0.2	0.3	0.9	0.0	0.0	0.6	4.2	0.1	6.9	100.0	93.1	87.0	1,293
Khulna	84.1	3.0	2.8	0.6	0.2	0.8	2.0	0.0	0.0	0.3	2.2	0.0	4.0	100.0	96.0	90.7	464
Mymensingh	68.0	1.6	2.4	0.2	0.0	1.9	4.9	0.0	0.0	1.3	9.3	0.3	10.1	100.0	89.9	72.2	431
Rajshahi	81.0 62.4	2.0 5.0	1.5 6.1	0.0 1.2	0.0 0.0	2.5 5.0	1.9 3.0	0.0 0.0	0.0 0.1	0.6 1.1	5.1 10.7	0.2 0.3	5.2 5.1	100.0 100.0	94.8 94.9	84.5 74.6	587 534
Rangpur Sylhet	62.4 63.5	5.0 3.6	6.1 3.6	0.2	0.0	5.0 2.5	3.0 3.2	0.0	0.1	1.1	6.0	0.3	5.1 14.5	100.0	94.9 85.5	74.6 71.4	383
Education																	
No education	50.5	5.5	3.9	0.4	0.0	1.6	3.9	0.0	0.0	1.1	6.6	0.0	26.6	100.0	73.4	60.3	318
Primary	60.7	2.4	4.4	0.4	0.1	1.0	2.4	0.0	0.0	1.2		0.0	10.0	100.0	06.7	70.7	879
incomplete Primary	62.7	3.4	4.1	0.4	0.1	1.8	3.4	0.2	0.2	1.2	8.9	0.3	13.3	100.0	86.7	70.7	879
complete ²	66.3	3.2	3.9	0.5	0.0	1.7	2.6	0.0	0.3	2.2	7.8	0.1	11.5	100.0	88.5	73.9	516
Secondary incomplete	78.6	2.6	2.4	0.2	0.4	2.2	2.0	0.0	0.1	0.6	4.9	0.2	5.8	100.0	94.2	84.2	2,209
Secondary																	_,
complete or				~ /													
higher ³	93.0	1.8	1.0	0.1	0.0	0.3	0.6	0.1	0.0	0.3	1.3	0.0	1.4	100.0	98.6	96.0	1,129
Wealth																	
quintile Lowest	53.2	4.7	4.9	0.7	0.1	3.3	3.4	0.1	0.3	1.4	9.9	0.3	17.6	100.0	82.4	63.6	1,042
Second	66.1	3.0	4.9 4.5	0.7	0.1	3.3 2.0	3.4 3.6	0.1	0.3	1.4	9.9 7.9	0.3	10.3	100.0	89.7	74.3	1,042
Middle	78.8	3.0	2.0	0.2	0.2	1.9	2.1	0.0	0.0	0.9	4.5	0.1	6.4	100.0	93.6	84.1	969
Fourth	88.6	1.6	0.9	0.2	0.1	0.4	1.2	0.1	0.0	0.4	2.3	0.2	4.1	100.0	95.9	91.5	1,018
Highest	94.8	1.7	0.6	0.1	0.0	0.3	0.1	0.0	0.0	0.3	1.0	0.0	1.1	100.0	98.9	97.2	986
Total	76.0	2.8	2.6	0.3	0.2	1.6	2.1	0.1	0.1	0.8	5.2	0.1	8.0	100.0	92.0	81.9	5,051

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation. FWV = family welfare visitor CSBA = community skilled birth assistant

SACMO = sub-assistant community medical officer

HA = health assistant

FWA = family welfare assistant

CHCP = community health care provider ¹ Medically trained provider includes qualified doctor, nurse/midwife/paramedic, FWV, CSBA, and SACMO. ² Primary complete is defined as completing grade 5. ³ Secondary complete is defined as completing grade 10.

Table 9.2 Place of antenatal care

Among women age 15-49 who had a live birth in the 3 years preceding the survey, percentage who received antenatal care (ANC) during the pregnancy of the most recent birth by place of ANC care, according to background characteristics, Bangladesh DHS 2017-18

		Plac	e of antenatal	care		
Background		Public	Private	NGO		Number o
characteristic	Home	sector	sector	sector	Other	women
Age at birth						
<20	39.3	36.3	63.9	7.8	0.4	1,380
20-34	35.3	36.2	64.5	9.3	0.3	3,114
35-49	32.4	36.1	64.4	10.1	0.0	153
Birth order						
1	36.8	36.0	69.0	8.8	0.2	1,869
2-3	36.3	36.0	63.1	9.0	0.4	2,286
4-5	34.2	37.9	52.9	8.7	0.6	422
6+	44.7	38.7	49.5	7.5	0.0	69
Residence						
Urban	28.7	32.1	67.1	17.3	0.2	1,285
Rural	39.4	37.8	63.3	5.7	0.4	3,362
Division						
Barishal	35.9	38.7	61.2	6.8	0.0	245
Chattogram	23.3	29.7	68.3	7.4	0.4	974
Dhaka	30.9	33.5	70.0	11.9	0.1	1,204
Khulna	41.0	43.2	65.0	11.6	0.3	446
Mymensingh	52.0	38.2	57.1	4.5	0.8	388
Rajshahi	43.5	36.6	70.2	5.5	0.0	556
Rangpur	59.1	45.7	46.4	12.1	0.5	507
Sylhet	24.6	36.7	59.3	6.1	0.9	327
Education						
No education	33.7	40.0	48.7	11.0	0.5	234
Primary incomplete	40.9	39.7	51.5	10.2	0.4	762
Primary complete ¹	40.0	42.0	55.1	7.9	0.6	457
Secondary incomplete Secondary complete	38.4	35.7	64.9	8.4	0.3	2,081
or higher ²	28.8	31.6	79.1	8.9	0.1	1,113
Wealth guintile						
Lowest	45.3	45.5	46.8	6.8	0.5	858
Second	43.7	39.8	56.5	6.3	0.3	929
Middle	38.8	38.0	65.4	5.8	0.3	908
Fourth	32.9	32.9	72.4	11.5	0.4	977
Highest	22.9	26.2	78.2	13.4	0.2	975
Total	36.4	36.2	64.3	8.9	0.3	4,647

¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 9.3 Number of antenatal care visits and timing of first visit

Percent distribution of women age 15-49 who had a live birth in the 3 years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, Bangladesh DHS 2017-18

	Resi	dence	_
Number of ANC visits and timing of first visit	Urban	Rural	Total
Number of ANC visits			
None	5.2	9.0	8.0
1	9.6	14.4	13.1
2-3	26.4	33.9	31.9
4+	58.7	42.7	47.0
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	5.2	9.0	8.0
<4	47.2	33.4	37.1
4-5	25.3	28.1	27.3
6-7	16.9	21.6	20.3
8+	5.3	7.9	7.2
Total	100.0	100.0	100.0
Number of women	1,356	3,695	5,051
Median months pregnant at first visit (for			
those with ANC)	4.0	4.9	4.7
Number of women with ANC	1,285	3,362	4,647

Table 9.4 Components of antenatal care

Among women age 15-49 with a live birth in the 3 years preceding the survey, percentage who took iron tablets or syrup during the pregnancy of the most recent live birth, and among women receiving antenatal care (ANC) for the most recent live birth in the 3 years preceding the survey, percentage receiving specific antenatal services, according to background characteristics, Bangladesh DHS 2017-18

Background	live birth 3 years, p who du pregnancy	omen with a in the past percentage uring the of their most ive birth:	Among women who received antenatal care for their most recent birth in the past 3 years, percentage with selected services							
	Took iron tablets or syrup	Number of women with a live birth in the past 3 years	Weighed	Blood pressure measured	Urine sample taken	Blood sample taken	Ultra- sonogram done	Informed of signs of pregnancy compli- cations	Number of women with ANC for their most recent birth	
Age at birth <20	78.9	1,466	87.1	92.8	69.9	63.6	80.5	37.5	1,380	
<20 20-34	78.9	3,407	88.5	92.8 93.4	69.9 73.3	63.6 66.7	80.5 80.2	37.5 40.7		
20-34 35-49	75.3	3,407 179	88.5 91.3	93.4 93.3	73.3 69.4	60.7 62.1	80.2 79.2	40.7 38.5	3,114 153	
55-49	72.0	179	91.5	93.3	09.4	02.1	19.2	30.5	155	
Birth order										
1	82.1	1,947	90.5	95.0	76.2	71.5	85.6	41.1	1,869	
2-3	74.5	2,499	87.5	92.9	71.6	64.6	79.4	40.0	2,286	
4-5	65.2	506	82.8	88.5	58.8	48.7	65.5	35.0	422	
6+	62.9	99	80.4	87.0	61.2	46.2	51.3	21.5	69	
Residence										
Urban	80.4	1,356	92.1	95.6	81.0	75.8	88.8	45.1	1,285	
Rural	74.7	3,695	86.6	92.3	68.7	61.8	77.0	37.6	3,362	
		-,							-,	
Division	67.0	200	00.0	04.6	74.6	74.0	70.4	20.4	245	
Barishal	67.8	288	88.2	94.6	74.6	71.2	79.4	39.1	245	
Chattogram Dhaka	76.0 77.0	1,071 1,293	87.8 87.5	92.5 92.6	76.1 75.8	68.4 72.9	77.3 90.2	35.9 42.5	974	
Khulna	78.2	464	92.6	92.0 94.5	75.6	69.3	90.2 86.9	42.5	1,204 446	
Mymensingh	76.2	404 431	92.0 82.3	94.5 93.7	61.8	55.6	71.0	39.1	388	
Rajshahi	74.0	587	87.1	90.7	65.7	58.5	85.9	38.1	556	
Rangpur	85.6	534	91.5	95.6	64.4	53.7	65.1	44.4	507	
Sylhet	65.5	383	89.0	95.0 95.0	76.9	64.4	68.8	35.3	327	
	05.5	303	09.0	93.0	70.9	04.4	00.0	55.5	521	
Education										
No education	57.1	318	79.5	85.9	58.3	47.1	63.6	31.3	234	
Primary incomplete	68.1	879	82.8	90.9	61.2	50.3	69.1	32.0	762	
Primary complete ¹	72.0	516	81.3	89.9	65.3	56.3	69.4	36.2	457	
Secondary										
incomplete	76.6	2,209	88.4	92.9	71.3	65.9	81.3	38.8	2,081	
Secondary complete	00.4	1 4 0 0	00.0	00.4	07.0	00.4	00.0	40.7	4.440	
or higher ²	89.4	1,129	96.0	98.4	87.0	83.4	93.9	49.7	1,113	
Wealth quintile										
Lowest	66.8	1,042	82.8	90.7	58.6	47.1	59.3	34.5	858	
Second	72.3	1,036	82.1	90.9	60.5	54.1	71.3	33.6	929	
Middle	76.2	969	87.5	91.1	70.2	62.3	81.4	37.0	908	
Fourth	80.8	1,018	91.5	94.1	77.7	73.0	90.2	42.4	977	
Highest	85.9	986	95.9	98.9	91.3	88.7	96.1	49.8	975	
Total	76.3	5,051	88.1	93.2	72.1	65.7	80.2	39.7	4,647	

¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 9.5 Quality of antenatal care

Percentage of women age 15-49 with a live birth in the 3 years preceding the survey who had four or more antenatal care (ANC) visits for the most recent birth, of which at least one was with a medically trained provider; percentage who received all basic ANC components; and percentage who had four or more ANC visits and received all basic ANC components, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic	Percentage with 4+ ANC visits, at least one with a medically trained provider ¹	Percentage receiving all basic components of ANC ²	Percentage with 4+ ANC visits and all components of ANC	Number of women
Residence				
Urban	56.6	34.6	26.8	1,356
Rural	39.0	21.5	14.3	3,695
Division				
Barishal	35.8	22.6	15.7	288
Chattogram	36.3	23.9	14.9	1,071
Dhaka	49.6	29.6	22.6	1,293
Khulna	54.8	28.7	20.5	464
Mymensingh	38.1	20.1	15.6	431
Rajshahi	45.0	22.6	15.4	587
Rangpur	50.7	24.8	19.1	534
Sylhet	31.8	19.7	10.8	383
Education				
No education	15.8	11.4	5.5	318
Primary incomplete	28.1	14.1	7.4	879
Primary complete ³	31.0	18.4	11.3	516
Secondary incomplete	45.8	24.2	17.1	2,209
Secondary complete or higher4	65.4	42.0	33.2	1,129
Wealth quintile				
Lowest	25.1	12.2	6.5	1,042
Second	31.6	16.2	9.0	1,036
Middle	41.9	23.7	15.3	969
Fourth	50.5	29.9	21.6	1,018
Highest	70.9	44.1	36.7	986
Total	43.7	25.0	17.7	5,051

¹ Medically trained provider includes qualified doctor, nurse/midwife/paramedic, family welfare visitor, community

² Weighed, blood pressure measured, urine and blood samples taken, and informed of danger signs during pregnancy
 ³ Primary complete is defined as completing grade 5.
 ⁴ Secondary complete is defined as completing grade 10.

Table 9.6 Place of delivery

Percent distribution of live births in the 3 years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic		Health facility		_			Percentage delivered in	
	Public sector	Private sector	NGO	Home	Other	Total	a health facility	Number of births
Mother's age at birth								
<20	15.6	31.0	3.3	49.8	0.3	100.0	49.9	1,573
20-34	13.7	31.9	3.8	49.8	0.7	100.0	49.4	3,582
35-49	14.9	27.4	1.5	56.3	0.0	100.0	43.7	183
Birth order								
1	16.9	39.4	4.0	39.2	0.4	100.0	60.4	2,098
2-3	13.0	29.9	3.4	52.9	0.7	100.0	46.3	2,597
4-5	11.3	13.6	3.1	71.1	0.9	100.0	28.0	540
6+	9.3	4.1	0.2	86.3	0.0	100.0	13.7	102
Antenatal care visits ¹								
None	5.8	6.6	0.2	87.3	0.2	100.0	12.5	405
1-3	13.5	24.2	2.3	59.5	0.4	100.0	40.1	2,272
4+	16.5	42.9	5.7	34.1	0.8	100.0	65.1	2,374
Residence								
Urban	18.6	37.6	6.3	36.5	1.0	100.0	62.5	1,427
Rural	12.7	29.3	2.6	55.0	0.5	100.0	44.6	3,911
Division								
Barishal	11.6	25.2	2.0	60.6	0.6	100.0	38.8	303
Chattogram	13.0	29.9	3.1	53.8	0.2	100.0	46.0	1,141
Dhaka	14.6	37.4	4.8	42.1	1.1	100.0	56.7	1,359
Khulna	17.1	40.7	3.0	39.0	0.2	100.0	60.8	481
Mymensingh	11.8	25.3	1.9	60.6	0.3	100.0	39.0	451
Rajshahi	14.4	36.2	2.2	46.9	0.3	100.0	52.8	622
Rangpur	13.9	27.1	6.2	51.6	1.2	100.0	47.3	555
Sylhet	18.3	16.5	3.3	61.5	0.4	100.0	38.1	425
Mother's education								
No education	11.1	13.2	1.8	73.6	0.3	100.0	26.0	351
Primary incomplete	11.9	13.8	3.5	69.4	1.4	100.0	29.2	931
Primary complete ²	11.8	20.4	3.1	64.3	0.4	100.0	35.3	540
Secondary incomplete	15.2	32.1	3.3	49.0	0.5	100.0	50.6	2,333
Secondary complete or	10.2	02.1	0.0	10.0	0.0	100.0	00.0	2,000
higher ³	16.5	54.8	5.0	23.3	0.3	100.0	76.3	1,183
Wealth quintile								
Lowest	10.7	14.1	1.4	73.2	0.5	100.0	26.3	1,108
Second	13.1	22.1	2.4	62.0	0.4	100.0	37.6	1,106
Middle	14.5	30.7	3.2	50.9	0.7	100.0	48.4	1,020
Fourth	16.6	37.3	5.0	40.3	0.8	100.0	58.9	1,071
Highest	16.8	54.9	6.1	21.5	0.0	100.0	77.9	1,034
Total	14.3	31.5	3.6	50.0	0.6	100.0	49.4	5,338

Note: Bangladesh Rural Advancement Committee (BRAC) maternity/delivery centers (also known as birthing huts) are included in the "other" category. Deliveries in these centers are not considered to be facility births in this report.
 ¹ Includes only the most recent births in the 3 years preceding the survey
 ² Primary complete is defined as completing grade 5.

³ Secondary complete is defined as completing grade 10.

Table 9.7 Use of mobile phones during pregnancy and delivery

Percentage of women age 15-49 with a live birth in the 3 years preceding the survey who used a mobile phone for health services during their most recent pregnancy or delivery, by reason for use of mobile phone and person contacted, Bangladesh DHS 2017-18

Reason and person contacted	Percentage who used a mobile phone
Reason for using mobile phone	
Ask what to do	15.7
Communicate with service provider	12.8
Arrange transportation	1.8
Arrange money	1.2
Arrange place of delivery	1.9
Other	0.2
Person contacted ¹	
Health care provider ²	14.5
Untrained provider	4.7
Relatives/other	11.1
Percentage mobile phone used	26.6
Number of births	5,051

¹ Multiple responses were possible. ² Health care provider includes doctor, nurse, midwife, paramedic, family welfare visitor, community skilled birth assistant, community health care provider, health assistant, family welfare assistant, and NGO worker.

Table 9.8 Assistance during delivery

Percent distribution of live births in the 3 years preceding the survey by person providing assistance during delivery and percentage of births assisted by a medically trained provider, according to background characteristics, Bangladesh DHS 2017-18

					Pe	rson provi	ding ass	istance d	uring delive						_	
Background characteristic	Doctor	Nurse/ midwife/ para- medic	FWV	CSBA	SACMO	СНСР	HA/ FWA	NGO worker	Trained trad- tional birth atten- dant	Un- trained trad- tional birth atten- dant	Un- quali- fied doctor	Relative or friend	No one	Total	Percent- age delivered by a medically trained provider ¹	Number of births
Mother's age at																
birth																
<20	36.7	15.3	0.9	0.6	0.1	0.1	0.2	1.2	9.4	35.2	0.0	0.2	0.0	100.0	53.6	1,573
20-34 35-49	39.4 33.4	11.9 15.6	0.7 0.0	0.5 0.0	0.0 0.0	0.0 0.0	0.3 0.0	1.1 1.2	10.0 8.4	35.0 38.3	0.1 0.0	0.8 2.0	0.2 1.0	100.0 100.0	52.5 49.0	3,582 183
	33.4	15.0	0.0	0.0	0.0	0.0	0.0	1.2	0.4	30.3	0.0	2.0	1.0	100.0	49.0	103
Birth order		45.0	o 7											400.0		0.000
1	47.4	15.3	0.7	0.6	0.1	0.1	0.2	1.0	8.0	26.3	0.0	0.3	0.0	100.0	64.2	2,098
2-3	36.3	11.7	0.9	0.4	0.0	0.0	0.3	1.3	10.8	37.5	0.1	0.6	0.1	100.0	49.4	2,597
4-5	18.3	11.7	0.3	0.3	0.0	0.0	0.6	1.5	11.3	53.5	0.0	1.8	0.9	100.0	30.5	540
6+	9.7	10.4	0.0	0.0	0.0	0.0	0.0	1.5	11.5	61.6	0.6	2.9	1.7	100.0	20.1	102
Antenatal care visits ²																
None	7.6	6.4	0.4	0.8	0.0	0.0	0.0	0.0	10.0	71.6	0.2	2.6	0.4	100.0	15.2	405
1-3	28.6	13.2	0.7	0.4	0.1	0.1	0.2	1.0	11.4	43.4	0.1	0.5	0.3	100.0	43.0	2,272
4+	53.8	13.8	0.7	0.5	0.0	0.0	0.3	1.7	8.4	20.4	0.0	0.2	0.1	100.0	68.8	2,374
Place of delivery																
Health facility	77.0	21.5	0.8	0.3	0.0	0.1	0.0	0.2	0.0	0.1	0.0	0.0	0.0	100.0	99.6	2,650
Public facility	51.1	44.4	2.9	0.9	0.0	0.2	0.1	0.0	0.0	0.3	0.0	0.0	0.1	100.0	99.3	763
Private facility	90.7	9.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	100.0	99.9	1,681
NGO facility	61.1	36.5	0.0	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	100.0	97.6	205
Elsewhere	0.3	4.8	0.7	0.7	0.1	0.0	0.5	2.1	19.4	69.7	0.1	1.3	0.3	100.0	6.5	2,688
Residence																
Urban	51.9	14.5	0.7	0.5	0.0	0.0	0.0	0.9	8.4	22.2	0.1	0.3	0.2	100.0	67.8	1,427
Rural	33.4	12.5	0.7	0.5	0.0	0.0	0.3	1.3	10.3	39.9	0.1	0.7	0.2	100.0	47.2	3,911
Division																
Barishal	30.0	16.0	0.7	0.5	0.0	0.0	0.6	0.8	10.1	41.2	0.0	0.2	0.0	100.0	47.1	303
Chattogram	34.8	14.3	0.6	0.5	0.0	0.1	0.3	0.2	8.1	40.3	0.1	0.6	0.1	100.0	50.2	1,141
Dhaka	48.2	11.0	0.7	0.5	0.1	0.0	0.0	1.2	8.8	28.6	0.0	0.7	0.2	100.0	60.5	1,359
Khulna	46.8	15.2	1.1	0.6	0.0	0.0	0.5	1.0	8.3	25.4	0.1	0.8	0.3	100.0	63.6	481
Mymensingh	28.3	12.5	0.6	0.3	0.0	0.0	0.0	3.7	13.9	39.7	0.0	0.3	0.5	100.0	41.8	451
Rajshahi	39.6	14.7	0.2	0.1	0.0	0.0	0.7	0.5	8.3	35.3	0.1	0.4	0.0	100.0	54.7	622
Rangpur	33.6	13.0	1.3	1.2	0.0	0.0	0.1	2.7	15.1	31.6	0.0	1.0	0.4	100.0	49.1	555
Sylhet	27.9	10.1	1.2	0.2	0.0	0.0	0.5	0.4	9.9	49.0	0.3	0.6	0.0	100.0	39.3	425
Mother's education																
No education Primary	20.5	8.3	0.0	0.2	0.0	0.0	0.0	1.4	8.7	56.3	0.2	2.4	1.9	100.0	29.1	351
incomplete Primary	19.3	11.6	0.6	0.2	0.0	0.0	0.2	1.1	13.3	53.0	0.1	0.3	0.3	100.0	31.8	931
complete ³ Secondary	24.5	12.5	0.6	0.4	0.0	0.0	0.9	1.3	10.5	48.0	0.4	1.0	0.0	100.0	38.0	540
incomplete Secondary complete or	38.2	14.5	0.8	0.7	0.1	0.0	0.3	1.4	10.3	33.1	0.0	0.5	0.0	100.0	54.3	2,333
higher ⁴	65.3	13.0	0.9	0.4	0.0	0.1	0.1	0.5	6.0	13.0	0.0	0.4	0.0	100.0	79.7	1,183
Wealth quintile	40.0	10.5			0.0		. ·		40.4	50 ·	. ·		o -	100.0	07.0	4 4 6 6
Lowest	16.2	10.2	0.8	0.6	0.0	0.0	0.4	1.7	12.4	56.4	0.1	0.8	0.5	100.0	27.8	1,108
Second	26.7	12.2	0.9	0.8	0.0	0.1	0.4	1.3	13.0	43.9	0.1	0.4	0.1	100.0	40.6	1,106
Middle	34.6	16.6	0.7	0.4	0.0	0.0	0.2	1.3	9.0	36.2	0.0	1.0	0.0	100.0	52.3	1,020
Fourth	46.6	14.3	0.8	0.6	0.2	0.0	0.1	0.8	9.0	26.5	0.1	0.7	0.1	100.0	62.5	1,071
Highest	69.7	12.3	0.6	0.0	0.0	0.0	0.1	0.7	5.1	11.1	0.2	0.1	0.2	100.0	82.6	1,034
Total	38.4	13.1	0.7	0.5	0.0	0.0	0.2	1.2	9.8	35.2	0.1	0.6	0.2	100.0	52.7	5,338

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation. Total includes 6 births with missing information on ANC visits and 22 births delivered in a delivery hut.

FWV = family welfare visitor CSBA = community skilled birth assistant

SACMO = sub-assistant community medical officer

HA = health assistant

FWA = family welfare assistant CHCP = community health care provider

¹ Medically trained provider includes doctor, nurse, midwife, paramedic, family welfare visitor, community skilled birth assistant, and sub-assistant community medical officer. ² Includes only the most recent births in the 3 years preceding the survey

³ Primary complete is defined as completing grade 5.
 ⁴ Secondary complete is defined as completing grade 10.

Table 9.9 Cesarean section

Percentage of live births in the 3 years preceding the survey delivered by cesarean section (C-section), percentage delivered by C-section planned before the onset of labor pains, and percentage delivered by C-section decided on after the onset of labor pains, according to background characteristics, Bangladesh DHS 2017-18

	Percentage	Timing of decision	to conduct C-section	
Background characteristic	delivered by C-section	Before onset of labor pains	After onset of labor pains	Number of births
Mother's age at birth				
<20	30.5	13.2	17.4	1,573
20-34	33.9	21.1	12.8	3,582
35-49	29.1	18.1	11.0	183
Birth order				
1	40.4	19.0	21.4	2,098
2-3	31.5	21.4	10.1	2,597
4-5	13.6	7.1	6.5	540
6+	7.4	2.2	5.2	102
Antenatal care visits ¹				
None	6.0	3.4	2.6	405
1-3	23.7	12.8	10.9	2,272
4+	46.8	27.2	19.6	2,374
Place of delivery				
Health facility	65.9	37.6	28.3	2,650
Public facility	35.1	18.8	16.3	763
Private facility	83.1	47.5	35.6	1,681
NGO facility	39.5	26.5	13.1	205
Residence				
Urban	43.7	26.9	16.8	1,427
Rural	28.7	15.6	13.1	3,911
Division				
Barishal	24.5	14.3	10.2	303
Chattogram	26.0	15.1	11.0	1,141
Dhaka	42.7	25.6	17.1	1,359
Khulna	42.7	23.7	19.0	481
Mymensingh	26.1	13.7	12.3	451
Rajshahi	35.6	18.7	16.8	622
Rangpur	27.8	15.7	12.2	555
Sylhet	22.6	12.6	10.0	425
Mother's education				
No education	16.4	7.8	8.7	351
Primary incomplete	16.1	8.6	7.5	931
Primary complete ²	21.0	10.0	10.9	540
Secondary incomplete	32.2	17.2	15.0	2,333
Secondary complete or higher ³	57.1	36.7	20.4	1,183
Wealth quintile				
Lowest	13.0	6.0	7.0	1,108
Second	22.3	10.6	11.7	1,106
Middle	30.8	14.6	16.2	1,020
Fourth	38.1	22.9	15.2	1,071
Highest	61.3	40.3	20.9	1,034
Total	32.7	18.7	14.1	5,338

Note: The question on C-section was asked only of women who delivered in a health facility. In this table, it is assumed that women who did not give birth in a health facility did not receive a C-section. ¹ Includes only the most recent birth in the 3 years preceding the survey

² Primary complete is defined as completing grade 5.
 ³ Secondary complete is defined as completing grade 10.

Table 9.10 Reason for C-section

Percentage of most recent live births in the 3 years preceding the survey delivered by C-section by reasons for C-section, Bangladesh DHS 2017-18

Reason for C-section	Percentage of births by C-section
Avoid labor pain	6.4
Malpresentation	31.1
Premature baby	1.0
Cord prolapsed	1.1
Multiple births	0.8
Failure to progress in labor	30.3
Pre-eclampsia	2.3
Diabetes	0.9
Less pressure on baby's brain	6.2
Convenience	11.2
Other complications	39.7
Water broke/dried up	3.9
Other	10.5
Number of births by C-section	1,204

Note: In the case of 478 C-section births, the mother delivered a previous birth by C-section. These 478 births are not included in the table.

Table 9.11 Duration of stay in health facility after birth

Among women with a birth in the 3 years preceding the survey who delivered their most recent live birth in a health facility, percent distribution by duration of stay in the health facility following their most recent live birth, according to type of delivery, Bangladesh DHS 2017-18

Type of delivery	<6 hours	6-11 hours	12-23 hours	1-2 days	3+ days	Missing	Total	Number of women
Vaginal birth Cesarean section	28.3 0.2	12.5 0.2	5.2 0.1	44.1 1.7	9.8 97.7	0.0 0.1	100.0 100.0	836 1,676
All births	9.5	4.3	1.8	15.8	68.3	0.3	100.0	2,519

Note: All births include 5 women with missing information on type of delivery.

Table 9.12 Duration of stay in facility after C-section

Among women with a birth in the 3 years preceding the survey who delivered their most recent birth by C-section, percent distribution by duration of stay in the health facility following their most recent live birth, according to type of facility, Bangladesh DHS 2017-18

Type of health facility							
	Within one day	1-2 days	3-6 days	7 days or more	Don't know	Total	Number of women
Public sector NGO Private sector	0.0 0.0 0.5	3.0 2.6 1.4	59.3 82.1 76.0	37.7 15.3 21.9	0.0 0.0 0.1	100.0 100.0 100.0	260 80 1,321
Total	0.4	1.7	73.7	24.0	0.1	100.0	1,661

Table 9.13 Cost of delivery

Percent distribution of most recent births in the 3 years preceding the survey by total amount spent for delivery, according to type of delivery and type of facility, Bangladesh DHS 2017-18

Background characteristic	No cost	<500	500-999	1,000-4,999	5,000-9,999	10,000 or more	Don't know/ missing	Total	Number of births
Normal delivery									
Public facility	0.9	1.3	5.4	56.4	23.7	8.9	3.4	100.0	457
Private facility	0.0	0.0	0.0	24.7	40.9	31.2	3.2	100.0	257
NGO facility	0.0	7.1	2.3	56.0	28.8	5.8	0.0	100.0	112
Home/other	1.2	28.1	22.9	40.6	4.6	0.8	1.8	100.0	2,499
C-section ¹									
Public facility	1.5	0.3	0.5	8.7	19.9	66.8	2.3	100.0	260
Private facility	0.1	0.1	0.0	1.1	3.8	93.0	2.0	100.0	1,321
NGO facility	0.0	0.5	2.9	1.4	14.9	76.9	3.5	100.0	80
All deliveries									
Public facility	1.1	0.9	3.6	39.3	22.3	29.8	3.0	100.0	718
Private facility	0.1	0.1	0.0	5.0	9.8	82.9	2.2	100.0	1,578
NGO facility	0.0	4.2	2.4	33.2	22.4	36.3	1.4	100.0	198
Home/other	1.2	28.1	22.9	40.6	4.6	0.8	1.8	100.0	2,499
Total	0.8	14.4	12.1	28.9	9.5	32.3	2.0	100.0	4,994

¹Excludes non-institutional deliveries

Table 9.14 Source of delivery funds

Percentage of most recent births in the 3 years preceding the survey for which money was spent for delivery, by source of funds, Bangladesh DHS 2017-18

Source of funds	Percent
Family fund	84.1
Loan	10.5
Mortgage asset	1.0
Relatives	19.2
Gift from friends	3.3
Voucher/insurance	0.0
Other	0.0
Total	4,954

Table 9.15 Timing of first postnatal checkup for the mother

Percent distribution of women age 15-49 who gave birth in the 3 years preceding the survey by time after delivery of the mother's first postnatal checkup for the last live birth from a medically trained provider, and percentage of women age 15-49 with no postnatal checkup, according to background characteristics, Bangladesh DHS 2017-18

									Percentage of women with a postnatal check during the first 2 days		
	Tir	me after del	ivery of mot	_		after birth from a					
Background characteristic	Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know/ missing	No postnatal check ¹	Total	medically trained provider	Number of women	
Age at birth											
<20	49.4	2.1	1.4	0.1	0.3	0.4	46.2	100.0	52.9	1,466	
20-34	48.7	2.5	0.8	0.2	0.1	0.2	47.4	100.0	52.1	3,407	
35-49	45.5	0.4	1.1	0.0	0.0	0.0	53.0	100.0	47.0	179	
Birth order											
1	59.1	3.1	1.3	0.1	0.3	0.5	35.5	100.0	63.5	1,947	
2-3	45.9	2.0	1.0	0.2	0.1	0.1	50.6	100.0	48.9	2,499	
4-5	29.2	1.7	0.2	0.0	0.0	0.0	68.9	100.0	31.1	506	
6+	18.1	0.0	0.0	0.0	0.0	0.0	81.9	100.0	18.1	99	
Place of delivery											
Health facility	91.6	4.1	1.7	0.2	0.2	0.5	1.7	100.0	97.4	2,519	
Elsewhere	6.1	0.6	0.4	0.2	0.2	0.0	92.6	100.0	7.1	2,533	
Residence											
Urban	62.7	2.3	1.1	0.3	0.0	0.3	33.4	100.0	66.0	1,356	
Rural	43.7	2.3	1.0	0.2	0.2	0.2	52.4	100.0	47.0	3,695	
Division											
Barishal	42.5	3.0	0.9	0.4	0.3	0.0	52.8	100.0	46.5	288	
Chattogram	46.0	2.2	1.9	0.3	0.3	0.1	49.2	100.0	50.1	1,071	
Dhaka	54.7	2.6	1.3	0.2	0.2	0.4	40.6	100.0	58.6	1,293	
Khulna	58.9	3.5	0.9	0.0	0.2	0.7	35.8	100.0	63.2	464	
Mymensingh	39.0	1.7	0.5	0.0	0.0	0.2	58.5	100.0	41.3	431	
Rajshahi	51.7	2.6	0.4	0.0	0.0	0.1	45.2	100.0	54.7	587	
Rangpur	47.1	0.8	0.4	0.1	0.0	0.2	51.3	100.0	48.3	534	
Sylhet	37.4	2.4	0.3	0.3	0.6	0.1	58.9	100.0	40.1	383	
Education											
No education	27.1	1.3	0.6	0.0	0.0	0.0	70.9	100.0	29.1	318	
Primary incomplete	29.9	1.3	0.4	0.2	0.2	0.0	68.0	100.0	31.6	879	
Primary complete ²	34.8	1.3	0.6	0.0	0.6	0.4	62.3	100.0	36.7	516	
Secondary incomplete	49.9	2.7	1.4	0.1	0.2	0.4	45.3	100.0	54.0	2,209	
Secondary complete or										,	
higher ³	73.6	3.2	1.1	0.4	0.1	0.3	21.4	100.0	77.9	1,129	
Wealth guintile											
Lowest	26.5	0.9	0.6	0.2	0.1	0.2	71.5	100.0	28.0	1,042	
Second	36.8	2.2	0.4	0.1	0.2	0.3	60.0	100.0	39.4	1,036	
Middle	48.8	2.3	1.1	0.2	0.0	0.3	47.2	100.0	52.2	969	
Fourth	56.4	3.1	1.4	0.2	0.6	0.3	37.9	100.0	61.0	1,018	
Highest	76.9	3.1	1.7	0.2	0.0	0.2	17.9	100.0	81.7	986	
Total	48.8	2.3	1.0	0.2	0.2	0.3	47.3	100.0	52.1	5,051	

Note: Medically trained provider includes qualified doctor, nurse, midwife, paramedic, family welfare visitor, community skilled birth attendant, and sub-assistant community medical officer.

¹ Includes women who received a checkup after 41 days and women who received a checkup from a non-medically trained provider.

² Primary complete is defined as completing grade 5.
 ³ Secondary complete is defined as completing grade 10.

Table 9.16 Type of provider of first postnatal check for the mother

Among women age 15-49 giving birth in the 3 years preceding the survey, percent distribution by type of provider of the mother's first postnatal health check during the 2 days after the most recent live birth, according to background characteristics, Bangladesh DHS 2017-18

		Percentage of women with a postnatal check during						
Background characteristic	Qualified doctor	Nurse/ midwife/ paramedic/ FWV	CSBA/ SACMO	Other's first po Other non- medically trained provider ¹	No postnatal check during the first 2 days after birth	Total	the first 2 days after birth from a medically trained provider	Number of women
Age at birth <20 20-34 35-49	30.2 34.4 31.3	21.9 17.3 15.7	0.8 0.4 0.0	37.0 38.9 40.1	10.1 9.0 12.9	100.0 100.0 100.0	52.9 52.1 47.0	1,466 3,407 179
Birth order 1 2-3 4-5 6+	40.0 32.2 15.7 6.8	22.9 16.3 14.9 11.3	0.7 0.3 0.4 0.0	28.9 41.0 56.5 65.9	7.6 10.1 12.4 16.0	100.0 100.0 100.0 100.0	63.5 48.9 31.1 18.1	1,947 2,499 506 99
Place of delivery Health facility Elsewhere	65.0 1.3	32.1 5.1	0.3 0.7	0.4 76.2	2.2 16.7	100.0 100.0	97.4 7.1	2,519 2,533
Residence Urban Rural	45.1 28.6	20.5 17.9	0.4 0.5	26.0 43.0	8.0 10.0	100.0 100.0	66.0 47.0	1,356 3,695
Division Barishal Chattogram Dhaka Khulna Mymensingh Rajshahi Rangpur Sylhet	29.0 32.5 41.9 34.7 22.6 34.5 24.7 27.0	16.9 17.1 16.3 28.2 18.4 20.1 22.4 12.9	0.5 0.6 0.4 0.3 0.1 1.2 0.2	43.0 40.9 30.0 29.9 52.0 32.0 47.2 49.2	10.6 9.0 11.4 6.9 6.7 13.3 4.5 10.7	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	46.5 50.1 58.6 63.2 41.3 54.7 48.3 40.1	288 1,071 1,293 464 431 587 534 383
Education No education Primary incomplete Primary complete ² Secondary incomplete Secondary complete or higher ³	18.9 15.7 20.1 32.9 56.8	9.9 15.6 16.1 20.5 20.8	0.2 0.3 0.5 0.7 0.2	55.8 58.9 50.2 36.0 17.0	15.1 9.5 13.1 10.0 5.1	100.0 100.0 100.0 100.0 100.0	29.1 31.6 36.7 54.0 77.9	318 879 516 2,209 1,129
Wealth quintile Lowest Second Middle Fourth Highest Total	13.5 21.7 30.5 39.4 61.6 33.1	13.8 17.0 21.3 21.0 20.1 18.6	0.7 0.6 0.5 0.6 0.0 0.5	61.8 48.9 37.5 28.6 13.8 38.4	10.2 11.7 10.4 10.4 4.5 9.5	100.0 100.0 100.0 100.0 100.0 100.0	28.0 39.4 52.2 61.0 81.7 52.1	1,042 1,036 969 1,018 986 5,051

Note: Medically trained provider includes qualified doctor, nurse, midwife, paramedic, family welfare visitor, community skilled birth attendant, and sub-assistant community medical officer. FWV = family welfare visitor

CSBA = community skilled birth assistant

SACMO = sub-assistant community medical officer ¹ Other non-medically trained provider includes community health care provider, health assistant, family welfare assistant, NGO worker, trained traditional

birth attendant (TBA), untrained TBA, unqualified doctor, and "other." ² Primary complete is defined as completing grade 5. ³ Secondary complete is defined as completing grade 10.

Table 9.17 Timing of first postnatal check for the newborn

Percent distribution of most recent live births in the 3 years preceding the survey by time after birth of first postnatal check from a medically trained provider, and percentage of births with a postnatal check during the first 2 days after birth, according to background characteristics, Bangladesh DHS 2017-18

Percent-

										age of births with a postnata check during the first 2 days	
		Time af	ter delivery c	of newborn's	first postnat	al check				after birth from a	
Background characteristic	Less than 1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know	No postnatal check ¹	Total	medically trained provider	Number of births
Mother's age at birth											
<20	38.2	12.4	1.4	1.3	0.3	0.5	0.6	45.3	100.0	53.3	1,466
20-34	37.7	11.8	1.6	0.9	0.3	0.6	0.4	46.7	100.0	52.0	3,407
35-49	37.7	7.8	0.4	1.1	0.2	1.9	0.0	50.9	100.0	47.0	179
Birth order											
1	46.7	14.1	2.1	1.1	0.2	0.5	0.6	34.8	100.0	63.9	1,947
2-3	34.8	11.5	1.3	1.2	0.5	0.7	0.4	49.7	100.0	48.7	2,499
4-5	22.8	6.6	0.8	0.3	0.0	0.9	0.0	68.5	100.0	30.5	506
6+	16.9	2.7	0.0	0.0	0.4	0.0	0.0	80.0	100.0	19.6	99
Place of delivery											
Health facility	71.1	22.6	2.4	1.3	0.0	0.3	0.9	1.5	100.0	97.3	2,519
Elsewhere	4.7	1.2	0.6	0.8	0.6	1.0	0.0	91.1	100.0	7.3	2,533
Residence											
Urban	51.9	11.9	1.0	0.9	0.3	0.4	0.7	33.0	100.0	65.6	1,356
Rural	32.7	11.8	1.7	1.1	0.3	0.7	0.3	51.3	100.0	47.3	3,695
Division											
Barishal	33.6	9.1	1.6	1.1	0.8	1.4	0.5	51.9	100.0	45.4	288
Chattogram	31.9	14.6	1.7	2.1	0.0	0.8	0.4	48.2	100.0	50.2	1,071
Dhaka	44.9	11.5	1.2	1.1	0.4	0.7	0.5	39.6	100.0	58.8	1,293
Khulna	45.3	15.6	2.1	0.7	0.4	0.8	0.8	34.4	100.0	63.6	464
Mymensingh	34.4	5.3	0.7	0.2	0.0	0.3	0.8	58.3	100.0	40.6	431
Rajshahi	39.8	12.2	1.9	0.8	0.4	0.3	0.2	44.3	100.0	54.8	587
Rangpur	36.2	11.2	0.7	0.4	0.0	0.0	0.0	51.5	100.0	48.5	534
Sylhet	27.6	10.4	2.5	0.4	0.3	1.2	0.1	57.6	100.0	40.9	383
Mother's education											
No education	22.2	4.8	1.4	0.6	0.1	1.2	0.3	69.4	100.0	28.9	318
Primary incomplete	22.4	7.6	0.5	0.7	0.4	0.7	0.1	67.7	100.0	31.2	879
Primary complete ²	27.4	9.2	0.9	1.0	0.0	0.4	0.9	60.3	100.0	38.4	516
Secondary incomplete	38.3	12.5	1.8	1.3	0.4	0.5	0.5	44.8	100.0	53.8	2,209
Secondary complete or											
higher ³	58.2	17.1	2.0	1.0	0.4	0.8	0.4	20.2	100.0	78.3	1,129
Wealth guintile											
Lowest	20.4	6.4	0.3	0.7	0.6	0.3	0.2	71.1	100.0	27.8	1,042
Second	27.9	9.2	2.2	0.7	0.1	0.5	0.4	59.0	100.0	40.1	1,036
Middle	35.7	14.3	1.2	1.2	0.4	1.0	0.5	45.7	100.0	52.5	969
Fourth	45.9	12.8	1.5	1.7	0.5	0.9	0.3	36.4	100.0	61.9	1,018
Highest	60.3	16.9	2.2	0.9	0.0	0.6	0.7	18.2	100.0	80.4	986
Total	37.8	11.8	1.5	1.0	0.3	0.6	0.4	46.4	100.0	52.2	5,051

Note: Medically trained provider includes qualified doctor, nurse, midwife, paramedic, family welfare visitor, community skilled birth attendant, and sub-assistant ¹ Includes newborns who received a checkup after the first week of life from non-medically trained providers.

² Primary complete is defined as completing grade 5.
 ³ Secondary complete is defined as completing grade 10.

Table 9.18 Type of provider of first postnatal check for the newborn

Percent distribution of most recent live births in the 3 years preceding the survey by type of provider of the newborn's first postnatal health check during the 2 days after the most recent live birth, according to background characteristics, Bangladesh DHS 2017-18

							Percentage of births with a postnatal	
		Type of health	provider of ne	wborn's first po	ostnatal check		check during the first 2	
Background characteristic	Qualified doctor	Nurse/ midwife/ paramedic/ FWV	CSBA/ SACMO	Other non- medically trained provider ¹	No postnatal check during the first 2 days after birth	Total	days after birth from a medically trained provider	Number of births
Mother's age at birth								
<20	32.1	20.3	0.8	37.0	9.7	100.0	53.3	1,466
20-34	35.7	16.0	0.4	38.6	9.4	100.0	52.0	3,407
35-49	31.9	15.1	0.0	41.8	11.2	100.0	47.0	179
Birth order								
1	42.0	21.1	0.8	28.5	7.6	100.0	63.9	1,947
2-3	33.7	14.8	0.3	41.0	10.3	100.0	48.7	2,499
4-5	15.0	15.3	0.3	56.7	12.8	100.0	30.5	506
6+	6.8	12.8	0.0	68.0	12.4	100.0	19.6	99
Place of delivery								
Health facility	67.2	29.8	0.3	0.4	2.2	100.0	97.3	2.519
Elsewhere	1.9	4.7	0.7	75.9	16.8	100.0	7.3	2,533
Residence								
Urban	46.6	18.6	0.4	26.2	8.1	100.0	65.6	1,356
Rural	30.0	16.7	0.5	42.7	10.0	100.0	47.3	3,695
Division								
Barishal	30.2	15.0	0.3	40.9	13.7	100.0	45.4	288
Chattogram	34.5	15.2	0.6	39.4	10.4	100.0	50.2	1,071
Dhaka	43.1	15.2	0.6	29.5	11.7	100.0	58.8	1,293
Khulna	37.7	25.6	0.4	29.4	7.0	100.0	63.6	464
Mymensingh	23.0	17.3	0.4	54.3	5.0	100.0	40.6	431
Rajshahi	36.2	18.4	0.0	34.8	10.4	100.0	54.8	587
Rangpur	25.3	21.9	1.4	46.1	5.4	100.0	48.5	534
Sylhet	27.8	12.9	0.2	49.7	9.4	100.0	40.9	383
Mother's education								
No education	18.4	10.3	0.2	55.8	15.2	100.0	28.9	318
Primary incomplete	16.9	14.0	0.2	59.2	9.7	100.0	31.2	879
Primary incomplete ²	22.6	14.0	0.2	50.4	11.2	100.0	38.4	516
Secondary incomplete	34.0	19.2	0.5	36.1	10.1	100.0	53.8	2,209
Secondary complete or	34.0	19.2	0.7	30.1	10.1	100.0	55.0	2,209
higher ³	59.2	18.6	0.5	15.8	6.0	100.0	78.3	1,129
5								.,.==
Wealth quintile Lowest	13.4	13.8	0.6	62.4	9.7	100.0	27.8	1,042
Second	23.2	16.2	0.6	49.9	9.7 10.0	100.0	40.1	1,042
Middle	32.2	19.8	0.6	49.9 37.0	10.0	100.0	40.1 52.5	969
Fourth	32.2 41.5	19.8	0.5	27.2		100.0	52.5 61.9	
Highest	41.5 63.5	19.5	0.8	13.1	10.9 6.5	100.0	61.9 80.4	1,018 986
0								
Total	34.5	17.2	0.5	38.3	9.5	100.0	52.2	5,051

Note: Medically trained provider includes qualified doctor, nurse, midwife, paramedic, family welfare visitor, community skilled birth attendant, and sub-assistant community medical officer. FWV = family welfare visitor

CSBA = community skilled birth assistant

SACMO = sub-assistant community medical officer ¹ Other non-medically trained provider includes community health care provider, health assistant, family welfare assistant, NGO worker, trained traditional birth attendant (TBA), untrained TBA, unqualified doctor, and "other." ² Primary complete is defined as completing grade 5.

³ Secondary complete is defined as completing grade 10.

Table 9.19 Content of postnatal care for newborns

Among most recent live births in the 3 years preceding the survey, percentage for whom selected functions were performed during the first 2 days after birth and percentage with at least two signal functions performed during the first 2 days after birth, according to background characteristics, Bangladesh DHS 2017-18

		ost recent live bi					Percentage with at least two signal functions	
Background characteristic	Cord examined	Temperature measured	Counseling on danger signs	Counseling on breast- feeding	Observation of breast- feeding	Weighed ¹	 performed during the first 2 days after birth 	Number of births
Mother's age at birth								
<20	83.3	86.2	29.4	79.7	51.9	46.3	90.5	1,466
20-34	86.3	87.9	32.3	79.8	52.2	45.5	91.4	3,407
35-49	86.9	89.0	30.7	78.8	46.2	41.6	91.8	179
Birth order								
1	86.5	89.1	33.2	81.8	55.4	56.9	92.9	1,947
2-3	85.0	87.2	31.2	80.4	50.7	42.4	90.6	2,499
4-5	84.4	83.5	27.6	71.6	45.2	23.6	87.5	506
6+	81.6	83.9	19.6	64.4	48.6	15.3	88.4	99
Place of delivery								
Health facility	91.4	93.2	40.8	87.4	57.9	82.4	96.2	2,519
Elsewhere	79.5	81.7	22.0	72.2	45.9	9.0	86.1	2,533
Type of provider Medically trained								
provider ²	91.4	93.2	40.8	87.4	57.9	82.5	96.2	2,509
Non-medically trained provider ³	79.6	81.8	22.1	72.2	45.9	9.2	86.2	2,543
Residence								
Urban	88.2	89.9	36.0	81.7	53.5	58.6	92.5	1,356
Rural	84.4	86.6	29.7	79.0	51.3	40.8	90.7	3,695
Division								
Barishal	82.5	85.2	28.8	78.1	49.7	35.5	88.8	288
Chattogram	89.1	90.3	33.0	76.9	50.4	39.3	92.8	1,071
Dhaka	81.9	85.9	28.8	78.7	49.3	54.8	88.5	1,293
Khulna	89.3	90.3	35.4	82.8	53.6	57.6	94.1	464
Mymensingh	90.2	89.8	21.1	83.1	62.2	40.0	93.9	431
Rajshahi	80.0	84.0	29.4	78.7	46.7	44.6	88.5	587
Rangpur	85.1	85.2	40.5	84.5	61.3	51.3	94.1	534
Sylhet	88.3	88.9	34.3	79.9	47.6	24.9	90.7	383
Mother's education								
No education	81.5	82.0	21.5	67.4	44.6	22.0	85.5	318
Primary incomplete	83.1	85.8	25.3	75.8	47.9	24.3	90.0	879
Primary complete ⁴	84.0	84.8	25.9	76.1	49.1	30.2	89.4	516
Secondary incomplete Secondary complete	83.9	86.6	31.4	80.1	50.6	46.4	90.7	2,209
or higher⁵	92.2	93.2	41.3	87.1	60.9	74.3	95.4	1,129
Wealth quintile	_						-	
Lowest	83.5	83.6	26.9	76.1	50.2	24.0	89.2	1,042
Second	83.7	86.7	28.3	77.9	48.5	32.1	90.6	1,036
Middle	85.3	87.5	28.2	78.0	51.3	45.1	90.3	969
Fourth Highest	83.3 91.7	87.0 92.8	31.8 42.0	79.5 87.4	50.7 59.0	54.1 74.3	90.2 95.6	1,018 986
0								
Total	85.4	87.5	31.4	79.7	51.9	45.6	91.2	5,051

¹ Captures newborns who were weighed "at birth." May exclude some newborns who were weighed during the 2 days after birth.
 ² Medically trained provider includes qualified doctor, nurse, midwife, paramedic, family welfare visitor, community skilled birth attendant, and sub-assistant community medical officer.
 ³ Non-medically trained provider includes community health care provider, health assistant, family welfare assistant, NGO worker, trained traditional birth attendant (TBA), untrained TBA, unqualified doctor, and "other."

⁴ Primary complete is defined as completing grade 5.
 ⁵ Secondary complete is defined as completing grade 10.

Table 9.20 Type of instrument used to cut the umbilical cord

Percent distribution of most recent noninstitutional births in the 3 years preceding the survey by type of instrument used to cut the umbilical cord, according to background characteristics, Bangladesh DHS 2017-18

		Instrur	nent used to c	ut the umbilic	al cord		_
Background	Blade from	Blade from	Bamboo				Number of
characteristic	delivery kit	other source	strips	Scissors	Don't know	Total	births
Mother's age at birth							
<20	21.7	75.0	0.1	0.9	2.3	100.0	722
20-34	20.4	77.4	0.2	1.1	1.0	100.0	1,660
35-49	20.3	78.5	0.0	0.6	0.6	100.0	101
Birth order							
1	24.4	71.9	0.0	1.1	2.6	100.0	743
2-3	19.3	78.6	0.1	1.2	0.9	100.0	1,297
4-5	19.3	80.0	0.3	0.0	0.4	100.0	358
6+	17.1	76.5	3.0	2.8	0.7	100.0	86
Residence							
Urban	22.9	73.7	0.0	1.0	2.4	100.0	485
Rural	20.2	77.4	0.2	1.0	1.1	100.0	1,998
Division							
Barishal	26.2	71.1	0.0	2.5	0.2	100.0	172
Chattogram	19.3	78.2	0.3	0.8	1.4	100.0	561
Dhaka	19.2	78.9	0.0	0.3	1.6	100.0	540
Khulna	18.8	76.1	1.2	1.6	2.2	100.0	178
Mymensingh	20.9	73.8	0.3	2.9	2.0	100.0	260
Rajshahi	15.6	82.1	0.0	0.3	2.0	100.0	272
Rangpur	31.4	67.7	0.0	0.8	0.0	100.0	271
Sylhet	18.3	80.4	0.0	0.7	0.5	100.0	228
Nother's education							
No education	14.3	84.5	0.4	0.6	0.3	100.0	231
Primary incomplete	14.9	83.3	0.4	0.4	1.1	100.0	601
Primary complete ¹	21.3	76.3	0.0	1.5	0.9	100.0	332
Secondary incomplete	22.8	74.0	0.2	1.0	2.1	100.0	1,063
Secondary complete or higher ²	31.1	66.4	0.0	2.2	0.3	100.0	255
Wealth quintile							
Lowest	14.7	83.0	0.3	0.9	1.1	100.0	753
Second	21.1	76.4	0.0	1.1	1.4	100.0	640
Middle	21.4	77.3	0.3	0.3	0.5	100.0	481
Fourth	25.5	70.4	0.3	1.9	1.9	100.0	404
Highest	30.8	65.4	0.0	1.0	2.7	100.0	205
Total	20.7	76.7	0.2	1.0	1.3	100.0	2,483

¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 9.21 Application of material after cutting of the umbilical cord

Percentage of most recent non-institutional births in the 3 years preceding the survey by material applied to the umbilical cord immediately after cutting and tying it, according to background characteristics, Bangladesh DHS 2017-18

				Material	applied to	the cord				
Background characteristic	Antibiotics	Antiseptic	Mustard oil with garlic	Vermillion (shidur)	Boric powder	Chlor- hexidine	Other ¹	Don't know	Nothing applied to the cord	Number of births
Mother's age at birth										
<20	12.9	7.5	17.7	0.8	5.8	6.5	4.8	1.7	49.8	726
20-34	15.0	9.1	18.5	1.0	3.8	7.0	4.2	0.7	48.8	1,673
35-49	5.9	11.6	20.9	1.1	8.8	7.4	9.5	2.0	41.3	101
Birth order										
1	14.2	7.3	16.8	0.8	5.2	6.5	4.7	1.6	50.0	748
2-3	13.5	9.1	18.5	0.8	4.0	7.4	4.1	0.9	49.6	1,305
4-5	15.1	9.9	20.7	1.9	5.4	5.6	4.9	0.8	43.4	361
6+	14.2	10.8	20.1	0.0	4.3	7.3	9.6	0.0	48.5	86
Residence										
Urban	14.7	9.4	16.5	0.1	4.1	9.1	4.4	1.9	49.9	487
Rural	13.8	8.6	18.8	1.2	4.7	6.3	4.6	0.9	48.5	2,012
Division										
Barishal	9.9	10.7	43.7	0.0	1.5	8.8	3.2	0.5	33.5	173
Chattogram	11.1	11.1	27.2	0.5	4.0	10.6	4.4	1.6	41.5	562
Dhaka	14.4	8.7	17.6	0.7	8.0	7.8	4.1	1.4	46.6	546
Khulna	22.9	9.2	16.2	2.6	2.2	7.7	5.3	0.4	39.3	178
Mymensingh	17.3	7.7	7.2	1.9	9.4	2.9	5.1	1.1	53.5	261
Rajshahi	11.2	7.6	12.8	0.0	2.4	5.5	2.2	1.0	60.8	274
Rangpur	17.6	5.3	4.9	1.9	1.4	3.3	2.5	0.4	66.0	276
Sylhet	11.4	7.7	16.9	0.9	2.8	3.8	11.5	0.8	50.6	228
Mother's education										
No education	14.6	7.1	19.6	2.1	5.2	5.6	8.5	1.3	46.4	232
Primary incomplete	14.4	6.9	15.6	1.1	6.2	5.6	4.0	0.4	52.9	604
Primary complete ²	13.0	9.1	21.5	0.4	4.4	7.3	5.5	2.1	44.8	333
Secondary incomplete	14.1	8.9	19.1	1.0	4.1	7.1	4.1	1.1	48.3	1,072
Secondary complete or higher ³	13.5	13.4	17.0	0.3	2.4	9.3	3.0	1.2	48.7	257
Wealth quintile										
Lowest	15.6	7.7	19.1	1.1	3.8	4.4	4.8	0.6	49.4	758
Second	12.9	7.6	19.0	1.1	5.5	5.7	4.6	0.8	48.8	643
Middle	13.3	7.8	17.2	1.3	4.9	8.9	4.6	1.3	49.7	487
Fourth	13.5	11.0	19.0	0.3	4.0	11.0	4.3	2.1	45.3	405
Highest	14.0	13.8	15.2	0.4	4.8	6.6	4.3	1.2	51.1	207
Total	14.0	8.7	18.4	1.0	4.6	6.9	4.6	1.1	48.8	2,499

¹ Other includes spirit/alcohol, chewed rice, turmeric juice/powder, ginger juice, gentian violet, talcum powder, and "other."
 ² Primary complete is defined as completing grade 5.
 ³ Secondary complete is defined as completing grade 10.

Table 9.22 Newborn care practices: Timing of drying

Percentage of births with skin-to-skin contact and percent distribution of most recent non-institutional births in the 3 years preceding the survey by timing of drying the newborn, according to background characteristics, Bangladesh DHS 2017-18

	Percentage			Timing of dryin	g after deliver	у		
	of births with				Newborn not			_
Background	skin-to-skin				dried before	Don't know/		Number o
characteristic	contact	0-4 minutes	5-9 minutes	10+ minutes	washing	missing	Total	births
Mother's age at birth								
<20	14.2	61.5	21.2	14.2	0.5	2.7	100.0	722
20-34	13.4	63.6	22.4	11.4	0.9	1.7	100.0	1,660
35-49	9.4	66.4	20.7	9.8	2.0	1.1	100.0	101
Birth order								
1	15.0	59.6	22.3	15.2	0.5	2.4	100.0	743
2-3	12.3	66.4	20.6	10.4	0.7	1.8	100.0	1,297
4-5	15.0	57.7	24.9	13.6	1.5	2.3	100.0	358
6+	11.4	65.5	26.6	5.0	2.8	0.0	100.0	86
Residence								
Urban	13.2	63.1	19.2	13.5	1.2	3.1	100.0	485
Rural	13.6	63.1	22.6	11.8	0.8	1.7	100.0	1,998
Division								
Barishal	15.3	66.8	20.5	9.3	0.6	2.8	100.0	172
Chattogram	13.2	64.0	23.4	9.5	0.4	2.7	100.0	561
Dhaka	14.4	62.0	18.4	15.3	1.8	2.5	100.0	540
Khulna	13.8	61.3	31.0	5.8	0.0	1.8	100.0	178
Mymensingh	15.2	64.5	18.9	13.8	1.6	1.2	100.0	260
Rajshahi	7.5	59.2	24.9	14.7	0.3	1.0	100.0	272
Rangpur	17.1	63.2	23.0	13.0	0.0	0.8	100.0	271
Sylhet	11.3	64.7	19.8	12.2	1.5	1.8	100.0	228
Nother's education								
No education	12.1	65.3	18.2	11.4	2.5	2.7	100.0	231
Primary incomplete	11.3	61.6	22.2	13.0	1.0	2.2	100.0	601
Primary complete ¹	12.2	59.2	24.6	12.7	1.3	2.2	100.0	332
Secondary incomplete	14.8	63.3	22.5	11.9	0.5	1.8	100.0	1,063
Secondary complete or higher ²	16.0	68.8	19.0	11.0	0.0	1.3	100.0	255
Vealth quintile								
Lowest	13.4	63.9	21.6	12.0	0.5	2.0	100.0	753
Second	10.5	61.0	25.2	11.8	0.9	1.2	100.0	640
Middle	11.9	65.1	22.1	9.3	1.2	2.3	100.0	481
Fourth	17.5	63.8	18.3	15.4	1.1	1.4	100.0	404
Highest	18.9	60.2	20.3	13.9	0.7	5.0	100.0	205
Fotal	13.5	63.1	22.0	12.1	0.9	2.0	100.0	2,483

¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 9.23 Newborn care practices: Timing of first bath

Percent distribution of most recent non-institutional births in the 3 years preceding the survey by timing of first bath, according to background characteristics, Bangladesh DHS 2017-18

			Ti	ming of first ba	th after delive	ery			
Background characteristic	0-5 hours	6-11 hours	12-23 hours	24-71 hours	72+ hours	Baby not bathed ¹	Don't know/ missing	Total	Number of births
Mother's age at birth									
<20	19.0	2.4	0.9	32.6	43.9	0.7	0.5	100.0	722
20-34	20.0	2.3	1.3	28.1	46.6	1.4	0.3	100.0	1,660
35-49	20.8	0.0	1.1	35.7	42.4	0.0	0.0	100.0	101
Birth order									
1	19.4	2.1	0.5	31.1	44.9	1.6	0.4	100.0	743
2-3	18.1	2.8	1.6	29.4	47.0	0.8	0.3	100.0	1,297
4-5	23.7	0.8	1.4	28.5	45.1	0.6	0.0	100.0	358
6+	31.0	2.2	0.0	27.0	32.9	4.4	2.5	100.0	86
Residence									
Urban	20.6	1.4	1.1	31.7	44.3	0.7	0.2	100.0	485
Rural	19.6	2.5	1.2	29.3	46.0	1.2	0.3	100.0	1,998
Division									
Barishal	9.1	0.0	0.4	29.7	58.5	1.8	0.5	100.0	172
Chattogram	24.2	3.0	1.6	29.8	39.9	1.1	0.4	100.0	561
Dhaka	22.7	2.5	1.2	31.6	40.8	0.8	0.4	100.0	540
Khulna	14.0	6.0	2.0	29.6	46.7	1.0	0.7	100.0	178
Mymensingh	28.5	2.5	1.0	30.4	35.6	1.7	0.3	100.0	260
Rajshahi	12.8	2.5	0.1	35.2	49.0	0.5	0.0	100.0	272
Rangpur	9.9	0.4	1.6	30.6	57.0	0.5	0.0	100.0	271
Sylhet	24.3	0.4	0.8	17.0	54.9	2.3	0.3	100.0	228
Mother's education									
No education	26.4	1.0	0.0	34.2	37.7	0.6	0.0	100.0	231
Primary incomplete	19.7	2.2	1.5	32.2	43.1	1.1	0.2	100.0	601
Primary complete ²	21.2	2.8	0.7	23.0	51.3	0.8	0.2	100.0	332
Secondary incomplete	18.7	2.5	1.6	29.7	46.3	0.6	0.5	100.0	1,063
Secondary complete or higher ³	16.2	1.6	0.4	28.6	48.8	4.0	0.5	100.0	255
Wealth quintile									
Lowest	18.5	2.3	1.0	29.4	47.8	0.7	0.2	100.0	753
Second	19.5	2.4	1.1	30.3	45.8	0.8	0.1	100.0	640
Middle	21.3	2.3	1.5	29.1	43.6	2.1	0.1	100.0	481
Fourth	19.9	2.4	1.5	31.6	42.6	1.1	0.8	100.0	404
Highest	21.0	1.2	0.7	26.9	47.8	1.6	0.7	100.0	205
Total	19.8	2.3	1.2	29.7	45.6	1.1	0.3	100.0	2,483

¹ Includes cases of early neonatal deaths
 ² Primary complete is defined as completing grade 5.
 ³ Secondary complete is defined as completing grade 10.

Table 9.24 Essential newborn care

Percentage of most recent non-institutional births in the 3 years preceding the survey by essential newborn care received, according to background characteristics, Bangladesh 2017-18

Background characteristic	Used safe delivery kit/bag or boiled blade during delivery	Applied chlorhexidine after umbilical cord was cut and tied	Nothing applied to the umbilical cord or only chlorhexidine applied	Dried within 0-4 minutes after birth	Delayed bathing (72+ hours after delivery)	Immediate breastfeeding (within 1 hour after birth)	All essential newborn care practices ¹	Number of non- institutional births
Mother's age at birth								
<20	80.9	6.5	46.4	61.5	43.8	68.0	5.8	731
20-34	87.6	6.9	47.8	63.1	46.5	68.9	8.3	1,701
35-49	88.4	7.4	42.5	66.2	42.6	69.9	4.2	101
Birth order								
1	82.7	6.5	46.0	59.8	45.1	66.2	6.5	756
2-3	86.9	7.4	49.4	65.9	47.0	70.2	8.3	1,326
4-5	87.8	5.6	42.4	56.7	44.2	66.7	6.7	365
6+	83.9	7.2	43.2	65.5	33.0	77.2	5.0	87
Residence								
Urban	84.8	9.0	46.3	63.2	44.5	67.7	5.1	495
Rural	85.9	6.3	47.4	62.7	45.8	68.9	8.0	2,038
Division								
Barisal	87.4	8.7	29.8	67.0	58.7	73.1	6.3	176
Chittagong	87.6	10.4	41.3	63.3	39.8	65.1	5.3	571
Dhaka	85.4	7.7	43.7	61.6	40.7	66.6	4.4	550
Khulna	85.8	8.3	40.2	61.8	46.1	64.2	4.1	181
Mymensingh	86.1	2.9	52.1	64.7	35.3	68.6	7.2	264
Rajshahi	72.1	5.5	57.1	58.7	48.8	70.7	7.4	278
Rangpur	90.8	3.3	66.6	63.2	57.0	73.9	17.7	280
Sylhet	90.0	3.7	47.7	64.0	54.8	74.1	11.1	233
Mother's education								
No education	82.5	5.5	44.5	64.9	37.5	64.9	6.7	234
Primary incomplete	85.4	5.6	50.4	61.2	43.0	69.2	6.2	611
Primary complete ²	87.3	7.3	45.4	59.0	51.0	69.6	6.7	335
Secondary incomplete	85.7	7.1	46.9	63.0	46.1	70.0	8.3	1,094
Secondary complete or								
higher ³	87.2	9.2	45.5	68.2	49.4	64.6	8.1	259
Wealth quintile								
Lowest	84.3	4.3	47.4	63.2	47.5	72.9	8.3	767
Second	86.5	5.7	48.4	61.3	45.9	70.0	7.1	649
Middle	85.8	9.0	47.8	64.7	43.7	64.0	7.6	496
Fourth	84.5	10.9	45.5	63.6	42.3	64.1	6.8	408
Highest	90.5	6.4	44.8	59.4	48.2	69.6	5.6	212
Total	85.7	6.8	47.2	62.8	45.6	68.7	7.4	2,533

¹ All essential newborn care includes use of clean delivery kit/bag or boiled blade, nothing applied to cord or only chlorhexidine applied, dried within 5 minutes after birth, bathing delayed until 72 hours or more, and immediate breastfeeding.
 ² Primary complete is defined as completing grade 5.
 ³ Secondary complete is defined as completing grade 10.

Table 9.25 Problems in accessing health care

Percentage of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Bangladesh DHS 2017-18

			Problems in acc	essing health care		
Background	Getting permission to go	Getting money	Distance to	Not wanting to	At least one problem accessing	Number of
characteristic	for treatment	for treatment	health facility	go alone	health care	women
Age						
15-19	15.5	35.7	40.4	53.2	68.6	2,063
20-34	11.3	41.6	40.7	43.6	64.8	10,605
35-49	11.5	49.2	42.4	44.6	69.4	7,460
Number of living children						
0	12.1	32.3	37.0	47.2	62.8	2,138
1-2	11.7	41.3	39.7	43.8	64.6	10,779
3-4	11.4	49.4	44.0	45.1	70.4	5,916
5+	14.0	58.0	49.3	50.8	76.3	1,294
Marital status						
Married	11.7	42.9	41.2	45.2	66.6	18,984
Divorced/separated/widowed	13.1	58.8	42.6	41.2	71.3	1,143
Employed last 12 months						
Not employed	13.4	37.9	38.9	44.5	63.1	10,027
Employed for cash	10.3	50.0	42.7	44.1	69.9	8,425
Employed not for cash	9.7	47.8	49.2	52.8	74.8	1,661
Residence						
Urban	8.9	37.8	31.3	37.3	57.9	5,729
Rural	13.0	46.2	45.3	48.0	70.5	14,398
Division						
Barishal	9.6	46.4	48.5	48.9	71.1	1,125
Chattogram	12.7	39.5	38.2	42.5	61.5	3,622
Dhaka	13.2	41.9	40.7	44.5	65.3	5,123
Khulna	10.2	45.9	44.4	49.3	71.9	2,336
Mymensingh	7.9	50.7	41.6	44.7	67.9	1,546
Rajshahi	10.2	38.1	35.7	40.8	63.5	2,802
Rangpur	14.5	52.5	45.1	47.5	74.0	2,380
Sylhet	12.0	45.7	45.9	47.8	68.6	1,192
Education						
No education	14.0	61.4	49.7	49.4	77.4	3,333
Primary incomplete	12.7	55.2	46.3	49.3	75.1	4,250
Primary complete ¹	12.9	47.5	42.2	45.1	69.3	2,040
Secondary incomplete	12.2	38.9	40.2	45.4	65.5	7,135
Secondary complete or higher ²	7.2	20.2	28.6	34.1	47.5	3,369
Wealth quintile						
Lowest	14.2	65.3	54.5	51.9	80.1	3,743
Second	12.5	54.4	47.4	49.0	75.5	3,957
Middle	13.5	42.8	42.3	46.8	68.0	4,059
Fourth	11.5	34.8	36.6	44.2	62.9	4,184
Highest	7.8	24.6	27.6	34.0	49.9	4,184
Total	11.8	43.8	41.3	45.0	66.9	20,127

Note: Total includes 14 women with missing information on employment status in the last 12 months. ¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Key Findings

- Vaccinations: Overall, 86% of children age 12-23 months received all basic vaccines (BCG, three doses of pentavalent, three doses of polio, and one dose of measles-containing vaccine) before their first birthday. Coverage of all basic vaccinations by 12 months has increased by 10 percentage points since 2007. Eightyeight percent of children received measles rubella vaccine by 12 months. The 4th HPNSP aims to increase the coverage of measles rubella vaccine to 90% by 2022. Over 90% of children age 12-23 months received one to three doses of pneumococcal vaccine, but only 32% received inactivated polio vaccine (IPV) at appropriate age.
- Symptoms of acute respiratory infection (ARI): Advice or treatment was sought from health facilities or qualified health providers for 40% of children under age 5 who had symptoms of ARI in the 2 weeks before the survey.
- Fever: Advice or treatment was sought from health facilities or qualified health providers for 27% of children under age 5 who had a fever in the 2 weeks before the survey.
- Diarrhea: Advice or treatment was sought for 38% of children under age 5 who had diarrhea in the 2 weeks before the survey. Eighty-seven percent of children with diarrhea received oral rehydration therapy (ORT). In 2017-18, 44% of children with diarrhea were treated with ORT and zinc, as compared with 20% in 2007.

nformation on child health and survival can help policymakers and program managers assess the efficacy of current strategies, formulate appropriate interventions to prevent deaths from childhood illnesses, and improve the health of children in Bangladesh.

This chapter presents information on birth weight and vaccination status for young children. It also looks at the prevalence of, and treatment practices for, three common childhood illnesses: symptoms of acute respiratory infection (ARI), fever, and diarrhea.

10.1 BIRTH WEIGHT

Low birth weight

Percentage of births with a reported birth weight below 2.5 kilograms regardless of gestational age.

Sample: Live births in the 5 years before the survey that have a reported birth weight, from either a written record or the mother's report

A child's birth weight is an important indicator of the child's vulnerability to the risk of childhood illnesses and chances of survival. Children whose birth weight is less than 2.5 kilograms (i.e., children of low birth weight) have a higher than average risk of early childhood death.

Only 45% of live births in the 3 years preceding the survey had a reported birth weight. Among infants with a reported birth weight, 16% had a low birth weight (less than 2.5 kg) (**Table 10.1**).

Patterns by background characteristics

- The percentage of births with low birth weights increases with increasing mother's age at birth, from 18% among births to mothers who were less than age 20 at childbirth to 21% among births to mothers age 35-49.
- Babies born to mothers with no education (32%) are more likely to have a low birth weight than babies born to mothers with a secondary education or higher (14%).
- Similarly, children born to mothers in the lowest wealth quintile are more likely to have a low birth weight (22%) than children born to mothers in the highest wealth quintile (14%).

10.2 VACCINATION OF CHILDREN

Universal immunization of children against the major vaccine-preventable diseases is globally recognized as one of the most cost-effective means of reducing infant and child morbidity and mortality. In 1979, the government of Bangladesh initiated the Expanded Program on Immunization (EPI) against six preventable diseases: tuberculosis, especially the extrapulmonary forms (bacille Calmette-Guérin [BCG] vaccine); diphtheria, pertussis, and tetanus (DPT vaccine); poliomyelitis (oral polio vaccine [OPV]); and measles (measles vaccine). Efforts intensified after 1985, when Bangladesh committed itself to reaching universal child immunization by 1990 (Jamil et al. 1999).

The EPI incorporated the hepatitis B (HepB) vaccine in 2003 (EPI 2004). This vaccine was initially distributed in seven districts and one city corporation and then gradually expanded to all districts of Bangladesh by October 2005. The *Haemophilus influenzae* type b (Hib) vaccine was introduced in Bangladesh in 2009, in the form of a pentavalent vaccine (DPT, HepB, and Hib). The measles and rubella vaccine was introduced in 2012 (EPI 2013). In 2015, Bangladesh introduced the inactivated polio vaccine (IPV) in parallel with a global initiative to put an end to this crippling and debilitating disease (EPI 2016). In 2017, Bangladesh added two doses of fractional IPV (fIPV), given intradermally at 6 and 14 weeks, to the routine immunization schedule for children.

The EPI is a priority program of the government of Bangladesh. It follows the international guidelines recommended by the World Health Organization (WHO) of administering children all of the vaccines just described before their first birthday and recording the vaccinations on a vaccination card given to parents.

All basic vaccinations coverage

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report). To have received all basic vaccinations, a child must receive at least:

- One dose of BCG vaccine, which protects against tuberculosis
- Three doses of DPT-containing vaccine, which protects against diphtheria, pertussis (whooping cough), and tetanus
- Three doses of polio vaccine
- One dose of measles-containing vaccine

Sample: Living children age 12-23 months

Historically, an important measure of vaccination coverage has been the proportion of children age 12-23 months receiving all "basic" vaccinations. Children are considered to have received all basic vaccinations if they have received the BCG vaccine, three doses each of the DPT and polio vaccines, and a single dose of measles. In Bangladesh, following the World Health Organization guidelines, the BCG vaccine is usually given at birth or at the first clinic contact, while the DPT vaccine is given at approximately age 6, 10, and 14 weeks in combination with HepB and Hib (DPT-HepB-Hib). The polio vaccine is given as OPV on the same schedule as the DPT-HepB-Hib. The first measles vaccine should be given at or soon after age 9 months.

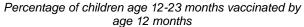
A second, more critical measure of vaccination coverage is the proportion of children age 12-23 months and 24-35 months who have received all age-appropriate vaccinations. A child age 12-23 months is considered to have received all age-appropriate vaccinations if the child has received all basic vaccinations along with one dose of inactivated polio vaccine and three doses of pneumococcal vaccine (also given at age 6, 10, and 14 weeks). (It should be noted that, as the fractional IPV was introduced in 2017, children age 12-23 months in the 2017-18 BDHS were not eligible for the vaccine during the survey period and therefore were not included in calculations of age-appropriate vaccinations). Similarly, a child age 24-35 months is considered to have received all age-appropriate vaccinations if the child has received a second dose of measles-containing vaccine (measles and rubella) given at 15 months in addition to all of the age-appropriate vaccinations relevant for a child age 12-23 months.

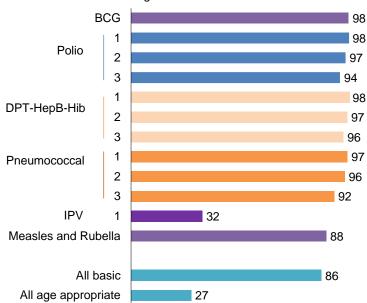
The 2017-18 BDHS collected information on vaccination coverage in two ways: from vaccination cards shown to the interviewers and from mothers' verbal reports. If the cards were available, the interviewers copied the vaccination dates directly into the questionnaire. When there was no vaccination card for the child or if a vaccine had not been recorded on the vaccination card as being given, the respondent was asked to recall the vaccines given to her child.

Eighty-six percent of children age 12-23 months and 85% of children age 24-35 months received all basic vaccinations by age 12 months (**Table 10.2** and **Figure 10.1**)). Twenty-seven percent of children age 12-23 months and 50% of those age 24-35 months received the vaccines appropriate for their age by age 12 months and by age 24 months, respectively, as recommended. Only 33% of children age 12-23 months received all age-appropriate vaccinations, as compared with 53% of children age 24-35 months.

Regarding specific vaccinations, 98% of children age 12-23 months received the BCG vaccine, and 88% were vaccinated against measles and rubella by age 12 months (Table 10.2). The 4th HPNSP aims to increase the coverage of measles and rubella (MR) to 90% by 2022. Vaccination coverage for the first doses of DPT-HepB-Hib and oral polio vaccine was high (98% and 98%, respectively). However, the percentages of children who received the third doses of the DPT-HepB-Hib and oral polio vaccines decreased to 96% and 94%, respectively (Figure 10.1).

Figure 10.1 Childhood vaccinations

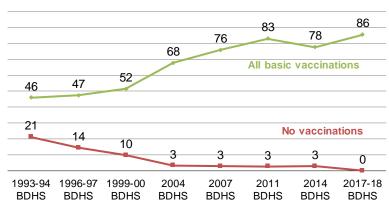




Trends: The percentage of children age 12-23 months who received all basic vaccinations by age 12 months increased from 46% in 1993-94 to 86% in 2017-18 (**Figure 10.2**). The percentage of children who received no vaccinations decreased from 21% to 0% over the same period.

Figure 10.2 Trends in childhood vaccinations

Percentage of children age 12-23 months who received all basic vaccinations by age 12 months



Patterns by background characteristics

- Basic vaccination coverage by age 12 months differs only slightly by sex of the child (86% for girls and 85% for boys); however, there is a marked difference between the percentages of girls and boys receiving all age-appropriate vaccinations any time before the survey (37% and 29%, respectively) (Table 10.3).
- By division, the percentage of children age 12-23 months who received all basic vaccinations by age 12 months is highest in Rajshahi (91%) and lowest in Sylhet (78%) (Figure 10.3).

Figure 10.4 Vaccination coverage by mother's education

Percentage of children age 12-23 months who received all basic vaccines by age 12 months

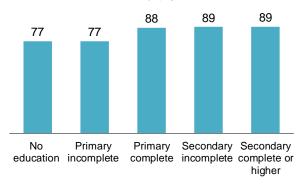
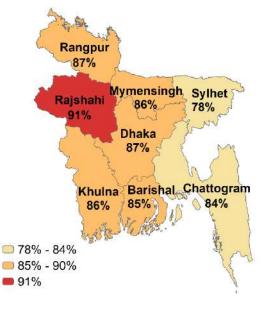


Figure 10.3 Vaccination coverage by division

Percentage of children age 12-23 months who received all basic vaccines by age 12 months



There are marked variations by mother's education in the percentage of children age 12-23 months who received all basic vaccinations by age 12 months. Children whose mothers have no education or have an incomplete primary education (77% each) are less likely to receive all basic vaccinations than those whose mothers have a secondary education or higher (89%) (Figure 10.4).

Vaccination Card Ownership and Availability

Table 10.4 shows the percentage of children who ever had a vaccination card and the percentage with a vaccination card seen. Ninety-six percent of children age 12-23 months and 97% of children age 24-35 months were reported to have ever had a vaccination card. However, a card was seen for only 74% of children age 12-23 months and 67% of children age 24-35 months.

10.3 SYMPTOMS OF ACUTE RESPIRATORY INFECTION

Acute respiratory infection (ARI) is one of the most common childhood illnesses. Most ARI-related deaths occur in low- and middle-income countries where health service coverage is low and the quality of care is sub-optimum. Early diagnosis and treatment with antibiotics can reduce the number of deaths caused by ARI, particularly deaths resulting from pneumonia.

The government of Bangladesh adopted the Integrated Management of Childhood Illness (IMCI) strategy in 1998, and facility-based IMCI had been scaled up in all districts and more than 420 upazilas (subdistricts) by 2014 (DGHS 2017). In the majority of union health and family welfare centers (primary care facilities with outpatient services only), IMCI is performed by sub-assistant community medical officers (SACMOs) who have 13 days of IMCI in-service training. In addition, IMCI is practiced in most outpatient departments of union health centers (primary care referral hospitals with in-patient care). The 4th HPNSP (2017-2022) envisions improving the quality of IMCI services through strengthening of existing systems and innovations.

Treatment of symptoms of acute respiratory infection (ARI)

Children with symptoms of ARI for whom advice or treatment was sought. ARI symptoms consist of short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.

Sample: Children under age 5 with symptoms of ARI in the 2 weeks before the survey

Table 10.5 shows that 3% of children under age 5 had symptoms of ARI in the 2 weeks preceding the survey. Forty percent of children with symptoms of ARI were taken to a health facility or qualified provider for advice, and 22% were taken on the same or next day.

Advice or treatment for children with ARI symptoms was more likely to be sought from the private sector including pharmacies and unqualified providers (74%) than from the public sector (18%). The most common private sector providers were pharmacies (43%), qualified doctor's chambers (20%), and non-qualified doctor's chambers (11%). Within the public sector, 7% of children with symptoms of ARI were taken to an upazila health complex (**Table 10.6**).

Patterns by background characteristics

- The prevalence of ARI symptoms among children under age 5 was highest among those age 6-11 months (5%) (**Table 10.5**).
- Male children (4%) are more likely than female children (2%) to have symptoms of ARI.
- By division, the prevalence of ARI symptoms was highest among children in Rangpur (6%) and lowest among children in Khulna and Dhaka (2% each).
- Among children with ARI symptoms, boys were more likely than girls to be taken to a health facility or provider (46% and 31%, respectively).
- Children from households in the lowest wealth quintile more often suffer from ARI symptoms than those from households in the highest quintile (5% versus 2%).

10.4 FEVER

Fever is the most common symptom of childhood illness in Bangladesh. It can result from mild illnesses such as the common cold or more severe diseases such as malaria or dengue hemorrhagic fever.

Treatment of fever Children with fever for whom advice or treatment was sought. **Sample:** Children under age 5 with a fever in the 2 weeks before the survey

Thirty-three percent of children under age 5 had a fever in the 2 weeks preceding the survey. Twentyseven percent of these children were taken to a health facility or qualified health provider for advice or treatment, a figure substantially lower than that reported in 2014 (55%), and 17% received advice or treatment on the same or the next day. Eight percent received antibiotics (**Table 10.7**).

Seventy-five percent of children under age 5 who had a fever in the 2 weeks preceding the survey were taken to a private sector provider for care, including pharmacies and unqualified providers (75%), while 10% were taken to a public sector provider. The predominant private sector sources were pharmacies or drug stores (48%) and qualified doctor's chambers (14%) (**Table 10.8**). The private sector was the first source of treatment among 76% of children (**Table 10.9**).

Patterns by background characteristics

- The prevalence of fever increases from 28% among children less than age 6 months to 45% among those age 6-11 months before dropping to 27% among children age 48-59 months (**Table 10.7**).
- By division, the percentage of children with a fever in the 2 weeks preceding the survey was highest in Barishal (38%), followed by Rangpur (36%).
- Among children with a fever, boys were more likely than girls to be taken to a health facility or qualified health provider (30% and 25%, respectively).
- Care seeking for children with fever is higher in urban areas (34%) than in rural areas (25%).
- Children of mothers with a secondary education or higher (38%) are more likely to be taken to a health facility or qualified health provider than children of mothers with no education (20%).
- The percentage of children with a fever who are taken to a health facility or qualified health provider increases substantially with increasing household wealth, from 19% among those living in households in the lowest quintile to 39% among those living in households in the highest quintile.

10.5 DIARRHEAL DISEASE

10.5.1 Prevalence of Diarrhea

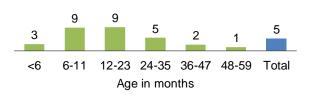
Diarrheal diseases are the second leading cause of death among children under age 5. Diarrhea results in approximately 500,000 deaths every year, or 1,400 every day—more than AIDS, malaria, and measles combined. According to the 2017-18 BDHS results, diarrhea is the second most prevalent cause of death (14%) among children age 29 days to 11 months (see Chapter 14). Five percent of children under age 5 had diarrhea in the 2 weeks preceding the survey (**Table 10.10**).

Patterns by background characteristics

- The prevalence of diarrhea was highest among children age 6-23 months, followed by those age 24-35 months (**Figure 10.5**).
- By division, the prevalence of diarrhea was highest in Barishal and Rajshahi (6% each) and lowest in Dhaka and Khulna (4% each).

Figure 10.5 Diarrhea prevalence by age

Percentage of children under age 5 who had diarrhea in the 2 weeks before the survey



10.5.2 Feeding Practices

Appropriate feeding practices

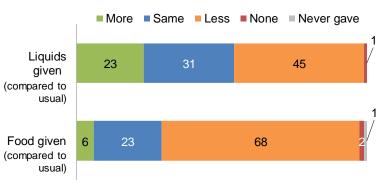
Children with diarrhea are given more liquids than usual and as much food or more than usual.

Sample: Children under age 5 with diarrhea in the 2 weeks before the survey

To reduce dehydration and minimize the effects of diarrhea on nutritional status, mothers are encouraged to continue normal feeding of children with diarrhea and to increase the amount of fluids given. Overall, 23% of children who had diarrhea in the 2 weeks preceding the survey were given increased fluids, while 6% were given more than the usual amount of food. Thirty-one percent of children were given the same amount of fluid as usual, and 45%

Figure 10.6 Feeding practices during diarrhea

Percentage of children under age 5 with diarrhea in the 2 weeks before the survey



were given somewhat less or much less fluid than usual. Twenty-three percent of children given the same amount of food as usual, while 68% were given somewhat less or much less food (**Table 10.11** and **Figure 10.6**).

10.5.3 Treatment of Diarrhea

Dehydration from diarrhea is an important contributing cause of childhood mortality. Administration of oral rehydration therapy (ORT) is a simple means of countering the effects of dehydration. ORT has a long history of use in Bangladesh, having been developed more than four decades ago by icddr,b. Currently, oral rehydration salt (ORS) packets are available through health facilities and at shops and pharmacies, and many of these ORS products are marketed by the Social Marketing Company and other pharmaceutical companies. Research has shown that zinc is a very effective treatment for diarrhea among children under age 5. Zinc treatment reduces the severity and duration of diarrhea as well as the likelihood of future episodes and the need for hospitalization. Studies conducted by icddr,b have helped to build an evidence base for integrating zinc treatment into current child health practices and policies (icddr,b 2008).

Oral rehydration therapy

- Children with diarrhea are given increased fluids, a fluid made from a special packet of oral rehydration salts (ORS), or government-recommended homemade fluids (RHF).
- Sample: Children under age 5 with diarrhea in the 2 weeks before the survey

Thirty-eight percent of children under age 5 who had diarrhea in the 2 weeks preceding the survey were taken to a health facility or qualified health provider for advice or treatment (**Table 10.10**). **Table 10.12** shows that 87% of children with diarrhea in the 2 weeks before the survey received some form of ORT (ORS packets, recommended home fluids, or increased fluids). Half of children (50%) with diarrhea were given zinc, and 43% received a combination of ORS and zinc. Overall, 62% of children under age 5 who had diarrhea in the 2-week period preceding the survey were given ORT and received continued feeding (**Table 10.12**).

Three in four children under age 5 with diarrhea who received ORS were taken to a private health sector provider for advice or treatment (75%), with 45% taken to a pharmacy or drug store (**Table 10.14**). Sixteen percent of children were taken to a public sector facility.

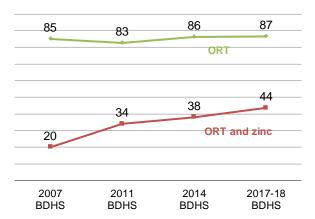
Trends: The percentage of children under age 5 given ORS during diarrhea has increased over the years, from 48% in 1996-97 to 83% in 2017-18. Similarly, the percentage of children receiving ORT or increased fluids increased from 85% in 2007 to 87% in 2017-18. Over the same period, the percentage of children receiving ORT and zinc increased from 20% to 44% (**Figure 10.7**).

Patterns by background characteristics

- Advice or treatment is more likely to be sought for younger children (6-11 months) with diarrhea than for older children (24-35 months) (43% versus 35%) (Table 10.10).
- The percentage of children with diarrhea for whom advice or treatment is sought from a health facility or qualified health provider is higher in urban areas (43%) than in rural areas (36%).

Figure 10.7 Trends in treatment of diarrhea

Percentage of children under age 5 with diarrhea in the 2 weeks before the survey



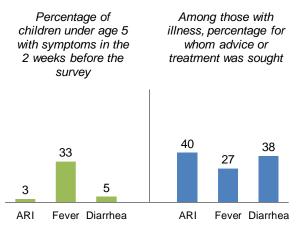
Note: In the 2017-18 BDHS, ORT is defined as ORS packets, recommended home fluids, or increased fluids.

- The percentage of children with diarrhea for whom advice or treatment is sought increases with increasing mother's education. Only 20% of children whose mothers attended but did not complete primary school were taken for advice or treatment, as compared with 54% of those whose mothers have a secondary education or higher.
- Care seeking for diarrhea also increases substantially with increasing household wealth. Twenty-three percent of children from households in the lowest wealth quintile were taken for advice or treatment, compared with 56% of children from households in the highest quintile (Table 10.10). A similar pattern was observed for treatment of diarrhea with ORT and zinc (42% versus 51%) (Table 10.13).

10.6 TREATMENT OF CHILDHOOD ILLNESS

Early care seeking for a sick child is an important first step in reducing childhood mortality, and knowledge of the symptoms of the illness influences early care seeking. During the 2 weeks before the survey, 3% of children under age 5 had symptoms of ARI, while 33% had a fever and 5% had diarrhea. Advice or treatment was sought from a health facility or qualified health provider for 40% of children with ARI, 27% of children with a fever, and 38% of children with diarrhea (**Figure 10.8**).

Figure 10.8 Prevalence and treatment of childhood illness



LIST OF TABLES

For more information on low birth weight, vaccinations, and childhood illness, see the following tables:

- Table 10.1 Child's weight at birth
- Table 10.2 Vaccinations by source of information
- Table 10.3 Vaccinations by background characteristics
- Table 10.4 Possession and observation of vaccination cards, according to background characteristics
- Table 10.5 Prevalence and treatment of symptoms of ARI
- Table 10.6 Source of advice or treatment for children with symptoms of ARI
- Table 10.7 Prevalence and treatment of fever
- Table 10.8 Source of advice or treatment for children with fever
- **Table 10.9** First source of treatment of fever
- Table 10.10 Prevalence and treatment of diarrhea
- Table 10.11 Feeding practices during diarrhea
- Table 10.12 Oral rehydration therapy, zinc, and other treatments for diarrhea
- **Table 10.13** Diarrhea treatment with ORT and zinc
- Table 10.14 Source of advice or treatment for children with diarrhea

Table 10.1 Child's weight at birth

Percentage of live births in the 3 years preceding the survey that have a reported birth weight, and among live births in the 3 years preceding the survey with a reported birth weight, percentage less than 2.5 kg, according to background characteristics, Bangladesh DHS 2017-18

	Percentage of births		Among births with a re	eported birth weight1
Background	that have a reported		Percentage less than	
characteristic	birth weight1	Number of births	2.5 kg	Number of births
Mother's age at birth				
<20	45.4	1,573	17.7	714
20-34	45.2	3,582	15.4	1,618
35-49	41.6	183	20.6	76
Birth order				
1	55.9	2,098	17.3	1,173
2-3	42.1	2,597	14.3	1,094
4-5	23.2	540	23.7	125
6+	14.8	102	*	15
Residence				
Urban	58.3	1,427	16.5	831
Rural	40.3	3,911	16.2	1,577
Division				
Barishal	35.7	303	15.5	108
Chattogram	38.5	1,141	20.9	440
Dhaka	54.7	1,359	15.6	743
Khulna	57.4	481	15.4	276
Mymensingh	39.7	451	11.2	179
Rajshahi	44.3	622	16.0	276
Rangpur	51.1	555	13.8	284
Sylhet	24.2	425	20.3	103
Mother's education				
No education	20.8	351	32.2	73
Primary incomplete	24.0	931	19.6	223
Primary complete ²	30.4	540	19.4	164
Secondary incomplete	46.1	2,333	15.6	1,076
Secondary complete or higher ³	73.7	1,183	14.3	871
Wealth guintile				
Lowest	23.6	1,108	22.4	261
Second	32.0	1,106	15.6	354
Middle	44.9	1,020	18.1	458
Fourth	53.3	1,071	15.4	570
Highest	73.9	1,034	14.1	764
Total	45.1	5,338	16.3	2,408

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. ¹ Based on either a written record or the mother's recall ² Primary complete is defined as completing grade 5. ³ Secondary complete is defined as completing grade 10.

Table 10.2 Vaccinations by source of information

Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage who received specific vaccines by the appropriate age, Bangladesh DHS 2017-18

		Children age			Children age	e 24-35 months		
Vaccine	Vaccination card ¹	Mother's report	Either source	Vaccinated by appropriate age ^{2,3}	Vaccination card ¹	Mother's report	Either source	Vaccinated by appropriate age ^{3,4}
BCG	74.0	24.3	98.3	97.9	67.1	31.7	98.7	98.6
DPT-HepB-Hib								
1 2 3	74.2 73.6 73.3	24.3 23.9 22.6	98.5 97.5 95.9	98.4 97.3 95.6	67.0 66.6 65.9	31.4 30.9 30.2	98.3 97.6 96.1	98.2 96.8 94.1
Polio								
1 2 3 IPV	74.1 73.6 73.1 20.5	24.2 23.3 21.4 16.1	98.3 96.8 94.5 36.6	98.2 96.6 94.1 32.1	67.1 66.6 65.6 44.0	31.4 30.6 29.2 21.3	98.5 97.2 94.8 65.3	98.3 96.5 93.0 63.4
Pneumococcal								
1 2 3	73.8 73.4 70.9	23.7 23.0 21.1	97.5 96.4 92.0	97.4 96.2 91.5	65.6 65.1 63.5	30.5 30.0 29.0	96.2 95.1 92.4	96.0 94.2 90.8
Measles and rubella								
1 2	69.3 na	21.7 na	91.0 na	87.9 na	64.0 58.0	28.8 25.2	92.7 83.1	87.9 81.8
All basic vaccinations ⁵ All age-appropriate	68.9	20.1	89.1	85.6	63.2	27.2	90.4	84.6
vaccinations ⁶ No vaccinations Number of children	19.3 0.0 1,245	13.7 1.4 433	33.0 1.4 1,679	27.1 na 1,679	37.1 0.0 1,130	16.2 1.3 555	53.4 1.3 1,685	49.7 na 1,685

na = Not applicable

BCG = Bacille Calmette-Guérin

DPT = Diphtheria-pertussis-tetanus

HepB = Hepatitis B Hib = Haemophilus influenzae type b IPV = Inactivated polio vaccine ¹ Vaccination card, booklet, or other home-based record

² Received by age 12 months

³ For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination. ⁴ Received by age 12 months for all vaccines except measles and rubella - 2, which should be received by age 24 months

⁵ BCG, three doses of pentavalent (DPT-HepB-Hib), three doses of oral polio vaccine (excluding polio vaccine given at birth), and one dose of

measles and rubella vaccine ⁶ For children age 12-23 months: BCG, three doses of pentavalent (DPT-HepB-Hib), three doses of oral polio vaccine, one dose of inactivated polio vaccine (IPV), three doses of pneumococcal vaccine, and one dose of measles and rubella vaccine. For children age 24-35 months, all of the justmentioned vaccinations plus a second dose of measles and rubella vaccine.

Table 10.3 Vaccinations by background characteristics

Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), percentage with all basic vaccinations, and percentage with all age-appropriate vaccinations, by background characteristics, Bangladesh DHS 2017-18

								J	hildren a	Children age 12-23 months:	months:							Childrer	Children age 24-35 months:	months:
	-	Db.	DPT-HepB-Hib	dit		Po	Polio		Pn	Pneumococcal	cal						-		All age- appro-	-
Background characteristic	BCG	-	7	т	-	7	ო	٨d	-	7	т	MR	All basic vacci- nations ¹	: by appro priate age ²	 priate vacci- nations³ 	No vacci- nations	- of children	MR 2	priate vacci- nations ⁴	Number of children
Sex Male Female	98.6 98.0	98.9 98.1	97.8 97.2	96.0 95.8	98.8 97.7	97.1 96.6	94.6 94.5	32.6 40.7	97.9 97.1	97.0 95.9	92.0 92.0	90.2 91.8	88.1 90.0	85.0 86.2	28.8 37.3	1.0 1.8	841 838	81.1 85.5	51.8 55.1	903 782
Birth order																				
1 2.3	99.2 а7 в	99.2 08.0	98.0 07.2	96.2 05.8	98.8 07.8	96.8 06.7	94.5 04.4	40.1 36.2	98.1 07.0	96.7 06.2	91.2 07.6	91.5 90.4	89.5 88.3	85.9 85.1	35.8 32.7	0.8 1 8	638 842	84.6 83.8	55.4 52.3	720
4-5 6+	97.7 (95.8)	98.7 (95.8)	97.7 (95.8)	95.5 (95.8)	98.7 (95.8)	97.7 (95.8)	95.5 93.7)	27.2 (27.2)	97.4 (95.8)	96.4 (95.8)	92.1 (91.4)	92.0 (91.8)	91.0 (89.7)	87.8 (81.6)	26.0 (23.2)	1.3 (4.2)	167 31	74.7 (75.9)	50.3 (46.8)	163 31
Residence Urban Rural	98.1 98.3	98.5 98.5	97.4 97.6	95.1 96.2	98.1 98.3	97.2 96.7	94.1 94.7	45.6 33.4	97.2 97.6	96.1 96.5	90.5 92.6	91.2 90.9	89.6 88.9	85.1 85.8	41.2 30.0	1.5 1.4	450 1,229	80.4 84.1	54.7 52.9	455 1,230
Division Barishal	97.9	97.2	97.2	95.7	95.9	95.9	95.1	19.7	96.0	96.0	93.3	86.8	86.1	85.4	19.0	2.1	94	81.3	43.6	84
Chattogram	98.0 07 F	98.8 07 0	98.1 06 6	97.1 04.1	98.8 07.5	96.9 06.6	94.4 03 4	30.7 45.1	98.3 06 7	97.2 04 0	93.1 80.0	91.0 91.0	87.2 80.6	83.6 86 F	26.5 41 0	1.2	354 125	83.3 82.0	51.9 53.2	375 135
Khulna	100.0	100.0	90.3 99.3	97.9	99.3 99.3	98.7	96.5	32.0	99.3 99.3	99.3 99.3	94.4	93.7	92.3	86.1	28.6	0.0	144	87.8	62.0	146
Mymensingh Raishahi	98.8 100.0	98.2 100.0	96.4 100.0	93.0 99.0	98.2 100.0	95.0 99.4	93.0 98.3	42.6 37.6	97.5 99.3	95.7 99.3	91.4 96.5	88.4 95.0	87.1 93.1	85.9 91.2	38.4 34.9	1.2 0.0	141 188	81.8 80.4	52.9 52.0	139 209
Rangpur Sylhet	99.4 95.3	99.4 95.8	98.1 94.6	97.8 92.8	99.4 95.8	97.8 93.7	95.9 90.6	27.3 47.0	99.1 95.1	97.1 92.6	91.9 89.7	92.3 87.4	90.2 85.9	86.8 78.3	22.7 42.5	0.6 4.2	190 143	87.9 82.2	52.5 58.3	166 130
Mother's education	06.7	07.0	07.1	03 2	07.8	7 90	0.00	1 00	05 8	06.7	K QQ	0 YO	a ca	76 8	010	с с с	01	с) F	27.0	410
Primary incomplete	95.5	95.7	93.0	90.9	95.2	93.0	90.6 90.6	27.5	94.1	91.7	87.1	83.4	82.2	76.7	26.0	4.3	312	80.0	48.2	286
Primary complete ⁵ Secondary incomplete	99.5 98.8	99.5 98.8	99.3 97.9	98.4 96.4	99.5 98.5	98.7 96.9	95.0 94.8	38.4 38.4	98.5 97.8	97.6 97.1	91.2 92.5	92.8 93.1	89.3 91.3	88.0 88.6	33.7 34.3	0.5 1.0	166 705	74.4 86.6	41.8 56.6	181 761
Secondary complete or higher ⁶	99.4	99.8	99.8	98.6	99.8	99.2	97.6	41.8	99.5	98.9	96.3	94.1	91.9	88.7	38.3	0.2	394	89.7	62.2	339
Wealth quintile	97.4	07.4	06 <i>4</i>	94 5	07.0	05 R	0 00	070	06 <i>4</i>	95.7	91.7	88.8	86.8	אן ה ג	100	26	340	75 8	£ 67	354
Second	98.7	0.06	97.4	95.7	98.8	96.7	94.9	36.3	97.2	95.4	91.7	88.9	87.3	85.7	32.8	0.7	348	85.7	53.7	341
Middle	98.3	98.1	97.3	96.4	97.8	0.96	95.4	31.7	97.8	96.4	92.2	91.9	90.4	88.3	28.5	1.7	321	84.6	51.7	317
Fourth	97.9	98.3	97.7	95.4	97.8	97.7	94.3	37.6	97.4	96.7	91.1	90.1	88.0	83.0	32.7	1.7	336	82.4	57.1	328
Highest	99.2	99.7	98.8	97.7	99.7	98.0	95.1	52.7	98.7	97.9	93.3	95.5	93.0	89.7	48.9	0.3	333	87.4	62.2	345
Total	98.3	98.5	97.5	95.9	98.3	96.8	94.5	36.6	97.5	96.4	92.0	91.0	89.1	85.6	33.0	1.4	1,679	83.1	53.4	1,685

not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination. Figures in parentheses are based on 25-49 unweighted cases. BCG = Bacille Calmete-Guérin DPT = Diphtheria-pertussis-tetanus HepB = Hepatitis B

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Table 10.4 Possession and observation of vaccination cards, according to background characteristics

Percentage of children age 12-23 months and children age 24-35 months who ever had a vaccination card, and percentage with a vaccination card seen, according to background characteristics, Bangladesh DHS 2017-18

	Chi	ildren age 12-23 mont	Chi	ldren age 24-35 mont	hs	
Background characteristic	Percentage who ever had a vaccination card ¹	Percentage with a vaccination card seen ¹	Number of children	Percentage who ever had a vaccination card ¹	Percentage with a vaccination card seen ¹	Number of children
Sex						
Male	97.4	77.7	841	96.1	68.0	903
Female	95.2	70.7	838	97.2	66.0	782
Birth order						
1	97.5	72.6	638	97.3	64.4	720
2-3	95.7	74.3	842	96.7	68.5	771
4-5	95.4	80.1	167	93.4	69.6	163
6+	(91.6)	(74.2)	31	(98.0)	(79.1)	31
Residence						
Urban	97.4	72.3	450	97.6	62.3	455
Rural	95.9	74.9	1,229	96.3	68.8	1,230
Division						
Barishal	97.8	78.8	94	95.4	59.6	84
Chattogram	96.7	68.9	354	95.9	58.3	375
Dhaka	96.2	74.4	425	97.7	62.2	435
Khulna	99.3	76.6	144	97.9	75.9	146
Mymensingh	94.7	71.0	141	93.9	72.3	139
Rajshahi	96.9	78.1	188	97.0	71.7	209
Rangpur	98.3	79.5	190	96.7	80.7	166
Sylhet	89.6	72.1	143	96.8	72.7	130
Mother's education						
No education	93.2	73.3	102	91.0	63.6	118
Primary incomplete	92.0	77.7	312	93.4	65.0	286
Primary complete ²	99.1	72.6	166	95.4	73.2	181
Secondary incomplete Secondary complete or	96.8	75.4	705	97.8	67.7	761
higher ³	98.5	70.2	394	99.4	65.1	339
Wealth guintile						
Lowest	94.9	78.8	340	94.4	67.4	354
Second	96.6	74.0	348	97.8	72.0	341
Middle	96.0	79.5	321	95.2	64.0	317
Fourth	96.1	69.8	336	97.3	67.3	328
Highest	98.0	68.9	333	98.6	64.4	345
Total	96.3	74.2	1,679	96.6	67.1	1,685

Note: Figures in parentheses are based on 25-49 unweighted cases. ¹ Vaccination card, booklet, or other home-based record ² Primary complete is defined as completing grade 5.

³ Secondary complete is defined as completing grade 10.

Table 10.5 Prevalence and treatment of symptoms of ARI

Among children under age 5, percentage who had symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey, and among children with symptoms of ARI in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic Age in months <6 6-11 12-23 24-35 36-47 48-59 Sex Male Female	Percentage with symptoms of ARI ¹ 2.8 5.1 4.1 2.1 2.9 2.0 3.6	Number of children 963 826 1,679 1,685 1,618 1,650	Percentage for whom advice or treatment was sought ² (62.8) (53.4) 36.9 (45.3) (25.6)	Percentage for whom treatment was sought same or next day (30.9) (25.3) 24.4 (29.1)	Number of children 27 42 69
<6 6-11 12-23 24-35 36-47 48-59 Sex Male	5.1 4.1 2.9 2.0 3.6	826 1,679 1,685 1,618	(53.4) 36.9 (45.3)	(25.3) 24.4	42
<6 6-11 12-23 24-35 36-47 48-59 Sex Male	5.1 4.1 2.9 2.0 3.6	826 1,679 1,685 1,618	(53.4) 36.9 (45.3)	(25.3) 24.4	42
6-11 12-23 24-35 36-47 48-59 Sex Male	5.1 4.1 2.9 2.0 3.6	826 1,679 1,685 1,618	(53.4) 36.9 (45.3)	(25.3) 24.4	42
12-23 24-35 36-47 48-59 Sex Male	4.1 2.1 2.9 2.0 3.6	1,679 1,685 1,618	36.9 (45.3)	24.4	69
36-47 48-59 Sex Male	2.9 2.0 3.6	1,618		(29.1)	
48-59 Sex Male	2.0 3.6	1,618			35
Sex Male	3.6	1,650		(12.8)	47
Male			(27.7)	(8.3)	33
Male					
		4,389	46.0	23.7	159
	2.3	4,032	30.8	18.2	95
Cooking fuel					
Electricity or gas	2.0	1,727	(42.8)	(23.1)	35
Kerosene	*	2	(42.0)	(20.1)	0
Charcoal	*	13	*	*	0
Wood/straw ³	3.4	6,064	39.2	20.8	205
Animal dung	2.3	596	*	*	13
Other fuel	*	11	*	*	0
No food cooked in household	*	1	*	*	õ
Residence					
Urban	2.6	2,307	44.9	22.9	61
Rural	3.2	6,113	38.9	21.3	193
Division					
Barishal	4.3	464	(56.2)	(26.1)	20
Chattogram	2.7	1,761	(50.0)	(19.8)	48
Dhaka	2.1	2,170	(25.4)	(10.7)	45
Khulna	1.7	774	(20.1)	(10.1)	13
Mymensingh	2.4	708	*	*	17
Rajshahi	3.9	977	(35.3)	(19.9)	38
Rangpur	5.9	885	42.5	27.0	53
Sylhet	2.9	683	(41.3)	(31.4)	20
Education					
No education	1.8	611	*	*	11
Primary incomplete	3.6	1,520	27.8	14.2	54
Primary complete ⁴	3.5	887	(25.8)	(8.2)	31
Secondary incomplete	3.2	3,650	43.7	25.0	118
Secondary complete or higher ⁵	2.3	1,753	(57.1)	(30.2)	40
Wealth quintile					
Lowest	4.5	1,793	36.7	16.1	80
Second	3.3	1,710	35.1	20.4	56
Middle	2.5	1,587	(41.9)	(22.8)	40
Fourth	2.7	1,691	(42.1)	24.2	46
Highest	1.9	1,640	(54.4)	(32.9)	31
Total	3.0	8,421	40.3	21.6	254

Note: Total includes 7 children with missing information on cooking fuel in the household. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. ¹ Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related. ² Includes advice or treatment from the following sources: public sector, NGO sector, and private medical sector. Excludes advice or treatment from a private pharmacy, a non-qualified doctor's chamber, and other sources.

³ Includes grass, shrubs, and crop residues

⁴ Primary complete is defined as completing grade 5.

⁵ Secondary complete is defined as completing grade 10.

Table 10.6 Source of advice or treatment for children with symptoms of ARI

Percentage of children under age 5 with symptoms of ARI in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with symptoms of ARI in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources, Bangladesh DHS 2017-18

	Percentage for whom advice or treatment was sought from each source:						
Source	Among children with symptoms of ARI ¹	Among children with symptoms of ARI for whom advice or treatment was sought ¹					
Public sector	17.9	19.9					
Medical college hospital	2.6	2.9					
District hospital	1.1	1.2					
Mother and child welfare center	0.3	0.3					
Upazila health complex	6.6	7.3					
Union health and family welfare center	3.8	4.2					
Community clinic	2.8	3.1					
Other public sector	1.2	1.3					
NGO sector	0.2	0.2					
NGO static clinic	0.2	0.2					
Private sector	74.1	82.0					
Private medical college hospital	0.3	0.3					
Private hospital	1.9	2.1					
Private clinic	3.9	4.4					
Qualified doctor's chamber	19.5	21.6					
Non-qualified doctor's chamber	10.9	12.0					
Pharmacy/drug store	43.0	47.6					
Other	0.5	0.5					
Number of children	254	229					

¹ Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest related.

Table 10.7 Prevalence and treatment of fever

Among children under age 5, percentage who had a fever in the 2 weeks preceding the survey, and among children with a fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought and percentage who received antibiotics as treatment, according to background characteristics, Bangladesh DHS 2017-18

	Among children	under age 5:	Among children under age 5 with fever:						
Background characteristic	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought ¹	Percentage for whom treatment was sought same or next day	Percentage who took antibiotic drugs	Number of children with fever			
Age in months									
<6	28.1	963	30.4	16.3	6.7	270			
6-11	45.0	826	34.8	22.3	7.9	372			
12-23	40.5	1,679	29.1	17.4	10.4	680			
24-35	32.8	1,685	28.5	19.7	8.1	552			
36-47	29.2	1,618	21.7	12.8	6.8	472			
48-59	26.5	1,650	21.3 10.3		5.7	438			
Sex									
Male	34.2	4,389	29.5	17.9	7.4	1,502			
Female	31.8	4,032	24.9	14.9	8.5	1,282			
Residence									
Urban	31.0	2,307	33.6	21.4	5.9	714			
Rural	33.9	6,113	25.2	14.8	8.6	2,070			
Division									
Barishal	38.4	464	26.7	12.7	3.8	178			
Chattogram	32.5	1,761	28.7	16.6	7.6	572			
Dhaka	30.7	2,170	28.6	16.7	8.2	667			
Khulna	31.3	774	30.4	18.1	7.2	242			
Mymensingh	33.4	708	16.2	9.5	9.9	236			
Rajshahi	34.6	977	27.2	17.9	11.2	338			
Rangpur	36.2	885	25.1	17.8	6.4	321			
Sylhet	33.8	683	33.2	20.3	6.8	231			
Mother's education									
No education	30.1	611	19.9	10.9	6.7	184			
Primary incomplete	33.0	1,520	20.3	11.9	6.5	502			
Primary complete ²	34.8	887	24.3	13.1	8.9	308			
Secondary incomplete	34.9	3,650	27.7	17.1	8.1	1,275			
Secondary complete or higher ³	29.4	1,753	38.1	23.5	8.7	515			
Wealth quintile									
Lowest	34.2	1,793	19.1	10.5	9.3	613			
Second	33.3	1,710	20.7	11.9	7.0	569			
Middle	34.5	1,587	27.2	15.4	8.6	548			
Fourth	35.1	1,691	33.6	21.5	9.0	594			
Highest	28.1	1,640	38.8	25.1	4.9	461			
Total	33.1	8,421	27.4	16.5	7.9	2,784			

¹ Includes advice or treatment from the following sources: public sector, NGO sector, and private medical sector. Excludes advice or treatment from a private pharmacy, a non-qualified doctor's chamber, and other sources.
 ² Primary complete is defined as completing grade 5.
 ³ Secondary complete is defined as completing grade 10.

Table 10.8 Source of advice or treatment for children with fever

Percentage of children under age 5 with a fever in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with a fever in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources, Bangladesh DHS 2017-18

	Percentage for whom advice or treatment was sought from each source:						
Source	Among children with fever	Among children with fever for whom advice or treatment was sought					
Public sector	9.9	11.5					
Medical college hospital	0.5	0.5					
Specialized government hospital	0.3	0.3					
District hospital	1.0	1.2					
Mother and child welfare center	0.5	0.6					
Upazila health complex	4.2	4.9					
Union health and family welfare center	0.9	1.1					
Community clinic	2.3	2.7					
Satellite clinic/EPI outreach	0.1	0.1					
Health assistant Other public sector	0.1 0.2	0.1 0.3					
NGO sector	0.3	0.3					
NGO static clinic	0.3	0.2					
NGO fieldworker	0.2	0.2					
Private sector	74.6	87.0					
Private medical college hospital	0.2	0.2					
Private hospital	1.1	1.3					
Private clinic	2.6	3.0					
Qualified doctor's chamber	14.1	16.4					
Non-qualified doctor's chamber	10.9	12.8					
Pharmacy/drug store	48.1	56.1					
Other	0.2	0.3					
Number of children	2,784	2,387					

Table 10.9 First source of treatment of fever

Percent distribution of children under age 5 who had a fever in the 2 weeks preceding the survey by the first source of treatment, according to background characteristics, Bangladesh DHS 2017-18

				Private sector					
Background characteristic	Public sector	- NGO sector	Private medical sector	Pharmacy	Unqualified provider	- Other source	No treatment sought	Total	Number of children with fever
Age in months									
<6	9.1	0.0	29.8	35.5	8.4	0.4	16.9	100.0	270
6-11	12.2	0.0	24.1	42.7	13.0	0.3	7.8	100.0	372
12-23	9.1	0.2	21.6	44.9	10.0	0.0	14.3	100.0	680
24-35	7.1	1.0	20.4	47.5	10.6	0.0	13.5	100.0	552
36-47	9.8	0.0	12.5	49.3	11.4	0.2	16.7	100.0	472
48-59	8.5	0.0	13.7	50.7	9.8	0.8	16.5	100.0	438
Sex									
Male	9.4	0.3	21.2	44.6	11.0	0.2	13.3	100.0	1,502
Female	8.8	0.2	17.9	47.3	10.0	0.3	15.4	100.0	1,282
Residence									
Urban	11.7	0.3	22.8	46.6	6.5	0.5	11.6	100.0	714
Rural	8.3	0.2	18.6	45.6	11.9	0.2	15.2	100.0	2,070
Division									
Barishal	11.9	0.3	14.3	45.2	10.9	0.2	17.2	100.0	178
Chattogram	6.8	0.0	21.1	51.4	8.5	0.2	12.0	100.0	572
Dhaka	7.7	0.3	22.1	47.2	6.7	0.2	15.8	100.0	667
Khulna	13.7	0.6	21.4	38.2	15.2	0.3	10.4	100.0	242
Mymensingh	8.8	0.3	9.3	53.4	6.5	0.0	21.6	100.0	236
Rajshahi	11.6	0.0	16.6	35.7	20.5	0.0	15.6	100.0	338
Rangpur	9.0	0.6	20.1	47.3	12.2	1.0	9.7	100.0	321
Sylhet	9.3	0.0	26.0	41.8	8.8	0.0	14.1	100.0	231
Mother's education									
No education	9.4	0.0	13.4	47.0	9.2	0.6	20.4	100.0	184
Primary incomplete	8.5	0.2	12.9	48.3	8.8	0.6	20.8	100.0	502
Primary complete ¹ Secondary	9.8	0.7	15.9	49.0	12.7	0.0	12.0	100.0	308
incomplete Secondary complete or	9.5	0.3	20.1	46.5	11.7	0.1	11.9	100.0	1,275
higher ²	8.5	0.1	29.8	39.7	8.7	0.4	12.9	100.0	515
Wealth quintile									
Lowest	9.1	0.4	11.3	49.1	13.6	0.7	15.8	100.0	613
Second	9.8	0.0	14.2	47.1	12.9	0.0	16.0	100.0	569
Middle	9.8	0.1	19.2	46.1	10.4	0.0	14.3	100.0	548
Fourth	8.6	0.3	25.1	44.5	8.9	0.2	12.5	100.0	594
Highest	8.2	0.3	31.4	41.4	6.0	0.4	12.3	100.0	461
Total	9.1	0.2	19.7	45.9	10.5	0.2	14.3	100.0	2,784

Note: Advice or treatment from the following sources is included: public sector, NGO sector, private medical sector, private pharmacy, non-qualified doctor's chamber, or other. ¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 10.10 Prevalence and treatment of diarrhea

Percentage of children under age 5 who had diarrhea in the 2 weeks preceding the survey, and among children with diarrhea in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Bangladesh DHS 2017-18

			Among children under age 5 with diarrhea:			
Background characteristic	Percentage with diarrhea	Number of children	Percentage for whom advice or treatment was sought ¹	Number of children with diarrhea		
Age in months						
<6	2.6	963	24.1	25		
6-11	8.9	826	42.6	74		
12-23	9.0	1,679	42.0	152		
24-35	4.9	1,685	34.7	83		
36-47	2.4	1,618	(36.8)	39		
48-59	1.4	1,650	(18.7)	24		
Sex						
Male	5.1	4,389	36.0	222		
Female	4.3	4,032	39.5	174		
Source of drinking water ²						
Improved	4.7	8,287	37.4	392		
Unimproved	2.6	133	*	3		
Type of toilet facility ³						
Improved facility	4.6	5,424	46.0	252		
Unimproved facility	4.8	2,909	23.4	141		
Open defecation	3.8	88	*	3		
Residence						
Urban	4.4	2,307	43.4	102		
Rural	4.8	6,113	35.5	293		
Division						
Barishal	6.4	464	40.9	30		
Chattogram	5.1	1,761	41.8	89		
Dhaka	3.8	2,170	(32.3)	83		
Khulna	3.9	774	(40.5)	30		
Mymensingh	5.3	708	25.7	38		
Rajshahi	5.7	977	48.9	56		
Rangpur	4.4	885	(25.2)	39		
Sylhet	4.6	683	43.0	31		
Mother's education						
No education	6.2	611	(28.9)	38		
Primary incomplete	4.5	1,520	19.9	69		
Primary complete ⁴	4.6	887	(26.7)	41		
Secondary incomplete	4.6	3,650	41.5	167		
Secondary complete or higher ⁵	4.6	1,753	53.9	81		
Wealth quintile						
Lowest	4.9	1,793	22.8	88		
Second	4.6	1,710	31.7	79		
Middle	5.9	1,587	34.4	94		
Fourth	3.3	1,691	49.1	56		
Highest	4.8	1,640	55.5	79		
Total	4.7	8,421	37.6	396		

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

¹ Includes advice or treatment from the following sources: public sector, NGO sector, and private medical sector. Excludes advice or treatment from a private pharmacy, a non-qualified doctor's chamber, and other sources.
 ² See Table 2.1.1 for definition of categories.

³ See Table 2.3.1 for definition of categories.

⁴ Primary complete is defined as completing grade 5.
 ⁵ Secondary complete is defined as completing grade 10.

Table 10.11 Feeding practices during diarrhea

Percent distribution of children under age 5 who had diarrhea in the 2 weeks preceding the survey by amount of liquids and food offered compared with normal practice, according to background characteristics, Bangladesh DHS 2017-18

			Amoun	t of liquid	s given			Amount of food given							Number of	
Background characteristic	More	Same as usual	Some- what less	Much less	None	Don't know/ missing	Total	More	Same as usual	Some- what less	Much less	None	Never gave food	Don't know/ missing	Total	children with diar- rhea
Age in months																
<6 6-11 12-23 24-35 36-47 48-59	(1.2) 15.5 25.8 29.8 (27.6) (21.8)	(50.3) 27.5 27.0 38.5 (26.5) (28.6)	(18.1) 39.7 28.9 22.0 (31.4) (43.5)	(19.3) 15.5 18.0 9.7 (14.4) (6.1)	(11.1) 1.8 0.0 0.0 (0.0) (0.0)	(0.0) 0.0 0.4 0.0 (0.0) (0.0)	100.0 100.0 100.0 100.0 100.0 100.0	(1.2) 5.5 5.6 6.2 (8.5) (9.2)	(36.1) 28.3 16.3 30.0 (19.2) (21.7)	(17.8) 34.8 46.5 42.0 (42.8) (55.2)	(29.6) 26.7 30.7 19.1 (29.5) (14.0)	(0.0) 4.6 0.4 2.7 (0.0) (0.0)	(15.2) 0.0 0.0 (0.0) (0.0) (0.0)	(0.0) 0.0 0.4 0.0 (0.0) (0.0)	100.0 100.0 100.0 100.0 100.0 100.0	25 74 152 83 39 24
Sex Male Female	22.1 24.4	34.1 27.1	27.9 32.3	14.7 15.0	0.9 1.2	0.3 0.0	100.0 100.0	8.8 2.2	19.6 28.0	41.0 42.7	27.0 25.5	2.2 0.8	1.1 0.8	0.3 0.0	100.0 100.0	222 174
Breastfeeding status Breastfeeding Not breastfeeding	20.7 29.3	30.8 31.5	31.2 26.6	15.9 12.0	1.4 0.0	0.0 0.6	100.0 100.0	5.1 8.0	23.4 22.9	42.0 41.1	26.7 25.4	1.4 2.0	1.3 0.0	0.0 0.6	100.0 100.0	283 112
Residence Urban Rural	24.0 22.8	33.6 30.1	27.5 30.7	13.6 15.2	0.7 1.2	0.6 0.0	100.0 100.0	4.2 6.5	22.9 23.4	40.1 42.3	31.2 24.7	0.0 2.1	1.0 1.0	0.6 0.0	100.0 100.0	102 293
Division Barishal Chattogram Dhaka Khulna Mymensingh Rajshahi Rangpur Sylhet	16.2 15.9 (17.3) (17.7) 23.4 31.4 (39.8) 34.7	37.9 27.6 (39.8) (26.8) 29.0 25.8 (26.1) 32.8	32.5 33.1 (31.9) (31.8) 31.4 27.0 (27.0) 17.9	11.3 21.7 (11.0) (17.1) 16.3 14.6 (7.1) 14.6	2.1 1.6 (0.0) (4.5) 0.0 1.2 (0.0) 0.0	0.0 0.0 (0.0) (2.1) 0.0 0.0 (0.0) 0.0	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	4.0 4.1 (5.3) (2.1) 1.0 10.8 (12.7) 7.0	25.7 21.2 (29.8) (15.8) 17.9 25.5 (18.8) 24.9	48.3 42.9 (36.1) (54.9) 48.4 35.7 (41.6) 37.1	19.8 30.1 (23.6) (22.8) 30.8 25.6 (26.8) 28.0	0.0 0.0 (5.1) (0.0) 0.0 2.4 (0.0) 2.0	2.1 1.6 (0.0) (2.3) 1.9 0.0 (0.0) 1.0	0.0 0.0 (0.0) (2.1) 0.0 0.0 (0.0) 0.0	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	30 89 83 30 38 56 39 31
Mother's																
education No education Primary	(5.7)	(29.2)	(47.1)	(18.0)	(0.0)	(0.0)	100.0	(0.6)	(23.6)	(47.6)	(28.2)	(0.0)	(0.0)	(0.0)	100.0	38
incomplete Primary	27.8	36.0	21.3	14.9	0.0	0.0	100.0	4.7	18.0	42.6	30.6	3.0	1.0	0.0	100.0	69
complete ¹ Secondary incomplete Secondary complete or higher ²	(28.6) 21.7 27.5	(37.9) 28.9 28.5	(28.9) 31.1 26.9	(4.6) 15.8 16.2	(0.0) 2.0 0.8	(0.0) 0.4 0.0	100.0 100.0 100.0	(16.2) 4.0 8.3	(23.3) 21.6 31.0	(47.5) 41.9 35.0	(12.1) 28.3 25.0	(0.0) 2.5 0.0	(0.8) 1.3 0.8	(0.0) 0.4 0.0	100.0 100.0 100.0	41 167 81
Wealth quintile	21.0	20.0		10.2	0.0	0.0	100.0	0.0	01.0	00.0	20.0	0.0	0.0	0.0	100.0	01
Lowest Second Middle Fourth Highest	17.3 24.5 22.5 25.5 27.3	35.6 31.6 24.2 22.0 39.8	31.4 24.9 37.5 36.1 19.7	15.7 18.2 12.8 14.0 13.2	0.0 0.8 2.3 2.4 0.0	0.0 0.0 0.7 0.0 0.0	100.0 100.0 100.0 100.0 100.0	5.8 4.2 6.4 8.1 5.7	25.6 20.4 23.9 15.7 28.2	44.1 47.2 38.3 42.6 37.0	24.5 24.7 26.2 28.6 28.7	0.0 2.6 2.3 3.6 0.0	0.0 0.9 2.2 1.3 0.4	0.0 0.0 0.7 0.0 0.0	100.0 100.0 100.0 100.0 100.0	88 79 94 56 79
Total	23.1	31.0	29.9	14.8	1.0	0.2	100.0	5.9	23.3	41.7	26.4	1.6	1.0	0.2	100.0	396

Note: It is recommended that children be given more liquids to drink during diarrhea and that food not be reduced. Figures in parentheses are based on 25-49 unweighted ¹ Primary complete is defined as completing grade 5.
 ² Secondary complete is defined as completing grade 10.

Table 10.12 Oral rehydration therapy, zinc, and other treatments for diarrhea

Among children under age 5 who had diarrhea in the 2 weeks preceding the survey, percentage given fluid from an ORS packet or pre-packaged ORS fluid, recommended homemade fluids (RHF), ORS or RHF, zinc, ORS and zinc, ORS or increased fluids, oral rehydration therapy (ORT), and continued feeding and ORT, and percentage given no treatment, according to background characteristics, Bangladesh DHS 2017-18

	_		Percentage of	children wit	h diarrhea wh	o were given	:			
Background characteristic	Fluid from ORS packets	Recom- mended home fluids (RHF)	Either ORS or RHF	Zinc	ORS and zinc	ORS or increased fluids	ORT (ORS, RHF, or increased fluids)	Continued feeding and ORT ¹	No treatment	Number of children with diarrhea
Age in months <6 6-11 12-23 24-35 36-47 48-59 Sex	(23.4) 77.9 86.9 91.5 (93.6) (95.5)	(0.0) 7.4 12.5 9.2 (4.6) (25.1)	(23.4) 77.9 89.3 94.9 (95.3) (95.5)	(50.2) 52.7 54.0 45.1 (43.9) (49.0)	(13.5) 42.6 49.3 41.5 (40.6) (44.5)	(23.4) 79.0 89.3 94.0 (95.0) (95.5)	(23.4) 79.0 91.0 97.5 (96.7) (95.5)	(9.1) 53.2 61.1 75.9 (67.2) (86.0)	(39.9) 12.0 7.5 0.7 (0.0) (0.0)	25 74 152 83 39 24
Male Female	85.0 81.3	10.1 10.0	85.4 84.8	54.3 45.4	45.5 39.8	87.2 82.4	87.2 86.0	59.9 63.7	6.0 9.9	222 174
Residence Urban Rural	87.2 82.0	4.4 12.0	88.2 84.1	48.0 51.2	42.3 43.3	88.2 84.1	88.2 86.2	59.6 62.3	7.0 8.0	102 293
Division Barishal Chattogram Dhaka Khulna Mymensingh Rajshahi Rangpur Sylhet	82.0 87.1 (88.1) (81.2) 77.8 80.9 (75.1) 84.8	8.8 11.3 (2.4) (9.5) 16.1 9.9 (18.9) 10.2	84.2 89.8 (90.5) (81.2) 80.2 80.9 (78.1) 84.8	46.0 52.4 (40.7) (59.1) 62.9 52.2 (53.9) 43.4	39.2 45.5 (40.7) (48.5) 52.9 41.4 (39.0) 36.3	83.9 91.5 (88.1) (81.2) 80.0 80.9 (78.0) 86.7	86.0 93.2 (90.5) (81.2) 82.4 80.9 (81.0) 86.7	71.0 64.3 (63.0) (56.3) 51.8 61.5 (60.1) 60.0	7.2 4.5 (9.5) (8.2) 9.8 8.3 (10.0) 6.2	30 89 83 30 38 56 39 31
Education No education Primary incomplete Primary complete ² Secondary incomplete Secondary complete or higher ³	(77.5) 81.0 (92.2) 82.7 84.9	(16.4) 21.5 (23.3) 3.3 4.6	(80.5) 86.1 (92.2) 83.3 86.8	(51.5) 32.6 (53.5) 52.5 58.8	(45.1) 24.8 (51.0) 44.5 50.3	(77.5) 83.5 (95.7) 84.2 86.8	(80.5) 88.5 (95.7) 84.2 88.7	(55.4) 56.4 (85.2) 56.7 66.9	(16.1) 5.3 (3.8) 9.3 4.7	38 69 41 167 81
Wealth quintile Lowest Second Middle Fourth Highest Total	76.9 81.0 88.5 78.5 90.2 83.3	17.2 11.8 13.2 3.7 0.9 10.0	78.6 85.6 90.6 78.5 90.2 85.1	50.1 43.6 47.3 58.8 55.2 50.4	42.3 34.7 40.8 48.3 51.1 43.0	78.8 83.3 88.5 82.2 92.1 85.1	80.5 86.6 90.6 82.2 92.1 86.7	60.7 61.1 62.2 55.9 66.3 61.6	13.1 6.8 4.1 9.9 5.7 7.8	88 79 94 56 79 396

Note: Figures in parentheses are based on 25-49 unweighted cases. ORS = Oral rehydration salts ORT = oral rehydration therapy RHF = recommended homemade fluids

¹ Continued feeding includes children who were given more, the same as usual, or somewhat less food during the diarrhea episode.

² Primary complete is defined as completing grade 5.

³ Secondary complete is defined as completing grade 10.

Table 10.13 Diarrhea treatment with ORT and zinc

Among children under age 5 who had diarrhea in the 2 weeks preceding the survey, percentage who received oral rehydration therapy (ORT) but not zinc syrup or tablets, percentage who received zinc but not ORT, and percentage who received both ORT and zinc, by background characteristics, Bangladesh DHS 2017-18

Background characteristic	ORT but not zinc	Zinc syrup/ tablets but not ORT	ORT and zinc	Number of children with diarrhea
Age in months	-	-		
<pre><6</pre>	(9.9)	(36.7)	(13.5)	25
6-11	35.3	10.1	42.6	74
12-23	38.5	3.3	50.7	152
24-35	53.4	3.6	41.5	83
36-47	(54.7)	(3.3)	(40.6)	39
48-59	(51.0)	(4.5)	(44.5)	24
Sex				
Male	39.4	8.3	46.0	222
Female	44.4	4.9	40.4	174
Residence				
Urban	44.9	4.8	43.2	102
Rural	40.4	7.5	43.7	293
Division				
Barishal	45.0	6.8	39.2	30
Chattogram	43.1	5.7	46.7	89
Dhaka	(49.8)	(0.0)	(40.7)	83
Khulna	(32.7)	(10.6)	(48.5)	30
Mymensingh	27.3	10.0	52.9	38
Rajshahi	39.5	10.8	41.4	56
Rangpur	(36.2)	(11.9)	(41.9)	39
Sylhet	48.5	7.1	36.3	31
Mother's education	(22.2)	(2, 1)	(10.1)	
No education	(32.3)	(3.4)	(48.1)	38
Primary incomplete	61.3	7.8	24.8	69
Primary complete ¹	(41.2)	(2.5)	(51.0)	41
Secondary incomplete	38.2	7.4	45.1	167
Secondary complete or higher ²	36.5	8.5	50.3	81
Wealth quintile	20.0	7 7	40.0	00
Lowest	36.2	7.7	42.3	88
Second	49.6 48.6	7.6 5.3	36.0 42.0	79 94
Middle Fourth	48.6 30.2	5.3 10.6	42.0 48.3	94 56
Highest	30.2 39.1	4.2	40.3 51.1	56 79
Total	41.6	6.8	43.6	396
	41.0	0.0	43.0	290

Note: ORT includes fluid prepared from oral rehydration salt (ORS) packets, pre-packaged ORS fluid,

and recommended home fluids (RHF). Figures in parentheses are based on 25-49 unweighted cases.
 ¹ Primary complete is defined as completing grade 5.
 ² Secondary complete is defined as completing grade 10.

Table 10.14 Source of advice or treatment for children with diarrhea

Percentage of children under age 5 with diarrhea in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources; among children under age 5 with diarrhea in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources; and among children with diarrhea who received ORS, percentage for whom advice or treatment was sought from specific sources, Bangladesh DHS 2017-18

	Percentage for whom	advice or treatment was sou	ight from each source:
Source	Among children with diarrhea	Among children with diarrhea for whom advice or treatment was sought	Among children with diarrhea who received ORS ¹
Public sector	13.3	15.4	15.5
Medical college hospital	0.6	0.7	0.7
Specialized government hospital	0.3	0.3	0.3
District hospital	3.5	4.0	4.2
Mother and child welfare center	0.6	0.7	0.8
Upazila health complex	6.7	7.8	7.5
Union health and family welfare center	1.2	1.4	1.5
Community clinic	0.5	0.6	0.6
NGO sector	1.2	1.3	1.4
NGO static clinic	1.2	1.3	1.4
Private sector	72.7	84.0	75.0
Private medical college hospital	0.2	0.3	0.3
Private hospital	1.3	1.6	1.2
Private clinic	3.4	3.9	3.5
Qualified doctor's chamber	18.3	21.2	19.5
Non-qualified doctor's chamber	8.9	10.3	8.0
Pharmacy/drug store	43.8	50.6	45.3
Other private medical sector	0.2	0.2	0.2
Other	1.4	1.6	0.6
Number of children	396	343	330

¹ Fluids from ORS packet

Key Findings

- Nutritional status of children: 31% of children under age 5 are stunted (short for their age), 8% are wasted (thin for their height), 22% are underweight, and 2% are overweight (heavy for their height). Between 2007 and 2017-18, stunting among children declined by 12 percentage points. The aim of the 4th Health, Population and Nutrition Sector Program (HPNSP) is to reduce stunting from 36% in 2014 to 25% by 2022.
- Exclusive breastfeeding: 65% of infants under age 6 months are exclusively breastfed, an increase since 2014 (55%).
- Minimum acceptable diet: 35% of children age 6-23 months were fed a minimum acceptable diet in the 24 hours before the survey, an increase from 21% in 2011 and 23% in 2014. The aim of the 4th HPNSP is to increase the proportion of children fed a minimum acceptable diet to 45% by 2022.
- Vitamin A supplementation among children: 79% of children age 6-59 months received vitamin A supplements in the 6 months before the survey, an increase from 61% in 2014.
- Nutritional status of women: The proportion of evermarried women who are undernourished (a body mass index [BMI] below 18.5) has decreased since 2007, from 30% to 12%. On the other hand, the proportion of women who are overweight or obese (a BMI of 25.0 or above) has increased from 12% to 32%.

his chapter focuses on the nutritional status of children and adults. It reports on infant and young child feeding practices, including breastfeeding and complementary feeding; deworming for children; and micronutrient supplementation among children and pregnant women.

11.1 NUTRITIONAL STATUS OF CHILDREN

The distribution of height and weight among children under age 5 was compared against the WHO Child Growth Standards reference population (WHO 2006a). A well-nourished population will be similar to the reference population, while a poorly nourished population will differ from the reference population. Three indices—height-for-age, weight-for-height, and weight-for-age—can be expressed in standard deviation units (Z-scores) from the median of the reference population, and values greater than two standard deviations from the median of the WHO Child Growth Standards are used to define malnutrition.

Stunting, or low height-for-age, is a measure of growth faltering. The most direct causes of stunting are inadequate nutrition (not eating enough or eating foods that lack growth-promoting nutrients) and recurrent infections or chronic diseases that cause poor nutrient intake, absorption, and utilization.

Wasting, or low weight-for-height, is a measure of acute weight loss. Wasting may result from inadequate food intake or from a recent episode of illness or infection.

Overweight, or high weight-for-height, is a measure of excessive weight and results from an imbalance between energy consumed (too much) and energy expended (too little).

Underweight, or low weight-for-age, is a composite index of weight-for-height and height-for-age reflecting wasting, stunting, or both.

Stunting (assessed via height-for-age)

Height-for-age is a measure of linear growth retardation and cumulative growth deficits. Children whose height-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered short for their age (stunted). Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely stunted.

Sample: Children under age 5

Wasting (assessed via weight-for-height)

The weight-for-height index measures body mass in relation to body height or length and describes acute weight loss. Children whose weight-for-height Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered thin (wasted). Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely wasted.

Sample: Children under age 5

Underweight (assessed via weight-for-age)

Weight-for-age is a composite index of height-for-age and weight-for-height. Children whose weight-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are classified as underweight. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely underweight.

Sample: Children under age 5

Overweight (assessed via weight-for-height)

Children whose weight-for-height Z-score is more than two standard deviations (+2 SD) above the median of the reference population are considered overweight.

Sample: Children under age 5

The means of the Z-scores for height-for-age, weight-for-height, and weight-for-age are also calculated as summary statistics representing the nutritional status of children in a population. These mean scores describe the nutritional status of the entire population of children without the use of a cut-off point. A mean Z-score of less than 0 (i.e., a negative mean value for stunting, wasting, or underweight) suggests a downward shift in the entire sample population's nutritional status relative to the reference population. The farther away mean Z-scores are from 0, the higher the prevalence of malnutrition.

11.1.1 Anthropometry Training and Data Collection

Health technicians were trained to measure the height and weight of children and adults. Training on child height measurement included standardization exercises. Children younger than age 24 months were

measured lying down (recumbent length); older children and adults were measured standing up (height). Weight measurements were taken using SECA scales with a digital display (model number SECA 878U). Height and length were measured with a ShorrBoard® measuring board.

The survey identified a total of 8,653 children under age 5 who were eligible for height and weight measurements. Valid height-for-age measurements were obtained for 94% of eligible children (0.7% of the invalid data was the result of implausible values). Similarly, valid weight-for-height measurements were obtained for 94% of eligible children (0.9% of the invalid data was the result of implausible values), and valid weight-for-age measurements were obtained for 96% of eligible children (0.1% of the invalid data was the result of implausible values). Appendix Table C.7 provides additional information on the completeness and quality of anthropometry data for children.

11.1.2 Levels of Child Malnutrition

The 2017-18 BDHS results showed that 31% of children under age 5 are stunted (short for their age) and 9% are severely stunted. Eight percent are wasted (thin for their height), with 2% being severely wasted. Twenty-two percent of children are underweight, and 4% are severely underweight (**Table 11.1**). Two percent of children under age 5 are overweight.

Trends: The nutritional status of children has improved steadily over the past decade (**Figure 11.1**). The percentage of children under age 5 who are stunted declined from 43% in 2007 to 31% in 2017-18. The

aim of the 4th HPNSP is to reduce stunting among children under age 5 to 25% by 2022 (MOHFW 2017). Similarly, the percentage of children who are underweight fell from 41% in 2007 to 22% in 2017-18. After years at critically high levels (14%-17%), wasting decreased to 8% in 2017-18.

Patterns by background characteristics

- There is a rural-urban gap in stunting, with a higher prevalence among rural (33%) than urban (25%) children.
- The proportion of children who are stunted is highest in Sylhet (43%) and lowest in Dhaka and Khulna (26% each) (**Figure 11.2**).

Figure 11.1 Trends in nutritional status

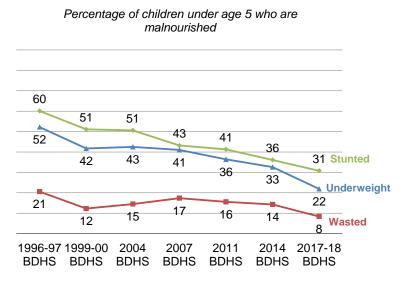
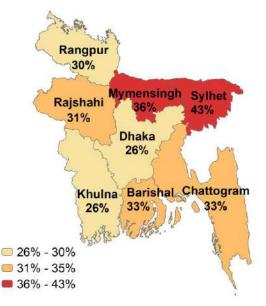


Figure 11.2 Stunting in children by division

Percentage of children under age 5 who are stunted



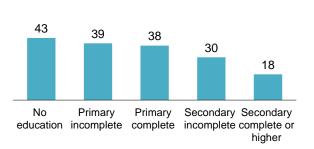
- Children whose mothers have no education are more likely to be stunted than children whose mothers have a secondary education or higher (43% versus 18%) (Figure 11.3).
- Stunting is least common among children in the highest wealth quintile and most common among those in the lowest quintile (17% and 40%, respectively) (Table 11.1).

11.2 INFANT AND YOUNG CHILD FEEDING PRACTICES

Appropriate infant and young child feeding (IYCF) practices include early initiation of breastfeeding (within the first hour of life), exclusive breastfeeding

Figure 11.3 Stunting in children by mother's education

Percentage of children under age 5 who are stunted



in the first 6 months of life, continued breastfeeding for 2 years or more, and introduction of safe, appropriate, and adequate complementary foods at age 6 months (WHO 2008).

11.2.1 Early Initiation of Breastfeeding

Initiation of breastfeeding within the first hour of life is important for both the mother and the child. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn from diseases. Early initiation of breastfeeding also encourages bonding between the mother and her newborn, facilitating the production of regular breast milk.

Early initiation of breastfeeding Initiation of breastfeeding within 1 hour of birth. Sample: Last-born children who were born in the 2 years before the survey

Table 11.2 shows that 99% of children under age 2 had been breastfed at some point. Six in 10 (60%) children were breastfed within the first hour of birth, and 94% were breastfed within 1 day of birth. Twenty-nine percent of children received a prelacteal feed.

Trends: There has been a continuous increase over time in the percentage of children breastfed within the first hour of birth, from 25% in 2004 to 60% in 2017-18. The percentage of children receiving a prelacteal feed declined appreciably from 60% in 2007 to 27% in 2014 before increasing slightly to 29% in 2017-18.

Patterns by background characteristics

- Children born at home were much more likely than those born at a health facility to be breastfed within the first hour of birth (70% versus 50%).
- Early initiation of breastfeeding was more common among children whose deliveries were assisted by traditional birth attendants than children whose deliveries were assisted by health personnel (69% versus 52%).
- The proportion of children who received a prelacteal feed was lowest in Sylhet (13%) and highest in Khulna (39%) (Table 11.2).

11.2.2 Exclusive Breastfeeding

In the first 6 months of life, children should be exclusively breastfed; that is, they should be given nothing but breast milk. Exclusive breastfeeding for 6 months prevents infections such as diarrhea and respiratory

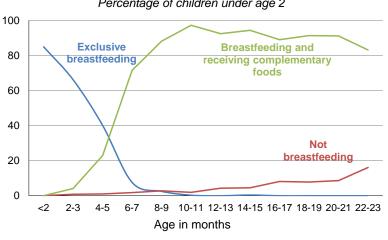
illnesses and provides all of the nutrients and liquid an infant requires for optimal growth and development. Feeding complementary foods within the first 6 months will have the adverse effect of reducing breast milk output because the production and release of breast milk are modulated by the frequency and intensity of suckling.

Exclusive breastfeeding

Proportion of children age 0-5 months who are fed exclusively with breast milk. **Sample:** Last-born children who were born in the 2 years before the survey

Breastfeeding status was assessed for last-born children under age 2 who are currently living with their mother. Sixty-five percent of children under age 6 months are exclusively breastfed. Exclusive breastfeeding declines with age, from 85% among children age 0-1 months to 66% among those age 2-3 months and 40% among those age 4-5 months. Ten percent of children age 0-5 months are breastfeeding and consuming water only, 13% are consuming other milk in addition to breast milk, 3% are consuming non-milk liquids and breast milk,

Figure 11.4 Breastfeeding practices by age Percentage of children under age 2



and 8% are consuming complementary foods and breast milk. Ninety-six percent of children are breastfeeding at 1 year, and 88% are breastfeeding at 2 years (**Table 11.3**, **Table 11.4**, and **Figure 11.4**).

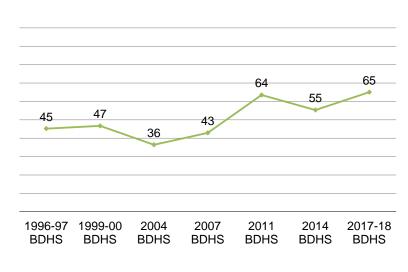
Trends: After declining from 64% in 2011 to 55% in 2014, exclusive breastfeeding among children age 0-5 months increased to 65% in 2017-18 (**Figure 11.5**).

11.2.3 Median Duration of Breastfeeding

Table 11.5 shows that the median duration of any breastfeeding among children born in the 3 years before the survey is 28.8 months. The median duration of exclusive breastfeeding is 4.1 months, and the median duration of predominant breastfeeding (either exclusively breastfed or breastfed and receiving plain water and/or non-milk liquids) is 5.2 months.

Figure 11.5 Trends in exclusive breastfeeding

Percentage of children age 0-5 months



Trends: Between 2014 and 2017-18, the median duration of exclusive breastfeeding increased from 2.8 months to 4.1 months, while the median duration of predominant breastfeeding increased from 4.2 months to 5.2 months.

Patterns by background characteristics

- The median duration of any breastfeeding is 31.1 months among children in rural areas, as compared with 27.4 months among children in urban areas.
- The median duration of exclusive breastfeeding is highest in Chattogram (5.2 months) and lowest in Dhaka (3.0 months).
- The median duration of any breastfeeding is 33.8 months among children in the lowest wealth quintile, compared with 26.8 months among those in the highest quintile.

11.2.4 Bottle Feeding

The nipple on a feeding bottle is susceptible to contamination and increases disease risk among children. Thus, bottle feeding is not recommended for children under age 2 (WHO 2005).

Bottle feeding

Proportion of children age 0-23 months who are fed from a bottle with a nipple. *Sample:* Last-born children who were born in the 2 years before the survey

Table 11.4 shows that 16% of children age 0-23 months are fed from a bottle with a nipple. The percentage increases from 8% among children age 0-1 months to a peak of 22% among those age 6-8 months and decreases thereafter (**Table 11.3**).

11.2.5 Introduction of Complementary Foods

After the first 6 months, breast milk alone is no longer sufficient to meet the nutritional needs of an infant. After 6 months, appropriate complementary foods should be introduced while breastfeeding is continued until age 2 or older. The transition from exclusive breastfeeding to complementing breastfeeding with family foods is when children are most vulnerable to becoming undernourished, and during this time it is important that they receive solid, semisolid, or soft foods.

Appropriate complementary feeding should include feeding children a variety of foods to ensure that nutrient requirements are met. Fruits and vegetables rich in vitamin A should be consumed daily. Eating a range of fruits and vegetables, in addition to those rich in vitamin A, is also important. Studies have shown that plant-based complementary foods by themselves are insufficient to meet the needs for certain micronutrients. Therefore, it has been recommended that meat, poultry, fish, or eggs be part of the daily diet or eaten as often as possible (WHO 2003).

Table 11.6 shows the types of foods and liquids consumed by children under age 2 during the day and night before the interview by their age and breastfeeding status.

The most common foods given to children age 6-23 months are foods made from grains (88% among breastfeeding children and 92% among nonbreastfeeding children). Sixty percent of breastfed children and 68% of nonbreastfed children are given foods made from roots and tubers, and 54% of breastfed children and 71% of nonbreastfed children consume meat, fish, and poultry. Forty-one percent of breastfeeding children consume eggs, as compared with 54% of nonbreastfeeding children.

11.2.6 Minimum Dietary Diversity, Minimum Meal Frequency, and Minimum Acceptable Diet

Infants and young children should be fed a minimum acceptable diet to ensure appropriate growth and development. Without adequate diversity and meal frequency, infants and young children are vulnerable to undernutrition, especially stunting and micronutrient deficiencies, and to increased morbidity and

mortality. The WHO minimum acceptable diet recommendation is a combination of minimum dietary diversity and minimum meal frequency. The three indicators are defined in the box below.

Minimum dietary diversity is a proxy for adequate micronutrient density of foods (WHO 2008). Consumption of food from at least five groups means that the child has a high likelihood of consuming at least one animal source of food and at least one fruit or vegetable in addition to a staple food such as grains, roots, or tubers. The five groups should come from a list of eight food groups: breast milk; grains, roots, and tubers; legumes and nuts; dairy products (milk, yogurt, and cheese); flesh foods (meat, fish, poultry, and liver/organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables.

Minimum meal frequency is a proxy for meeting energy requirements. Breastfed children age 6-8 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least twice a day. Breastfed children age 6-23 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least three times a day. Nonbreastfed children age 6-23 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least three times a day. Nonbreastfed children age 6-23 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods or milk feeds at least four times a day and if at least one of the feeds is a solid, semisolid, or soft food.

Minimum dietary diversity

Proportion of children age 6-23 months who received a minimum of five out of eight food groups during the previous day.

Minimum meal frequency

Proportion of children age 6-23 months who received solid, semisolid, or soft food (including milk feeds for nonbreastfed children) the minimum number of times or more during the previous day.

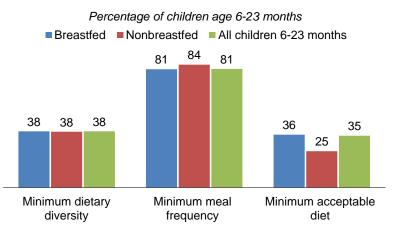
Minimum acceptable diet

Proportion of children age 6-23 months who receive a minimum acceptable diet. This indicator is a composite of children fed with a minimum dietary diversity and a minimum meal frequency.

Sample: Youngest children age 6-23 months living with their mother

Minimum dietary diversity, minimum meal frequency, and appropriate milk feeds together constitute a child's minimum acceptable diet. Thirty-five percent of children age 6-23 months living with their mother were fed a minimum acceptable diet in the 24 hours preceding the survey. Thirtyeight percent of children had an adequately diverse diet in which they had been given foods from at least five food groups, and 81% had been fed the minimum number of times appropriate for their age (Table 11.7 and Figure 11.6).

Figure 11.6 IYCF indicators on minimum acceptable diet



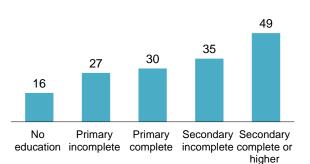
Trends: The proportion of children age 6-23 months who were fed with an adequately diverse diet increased from 24% in 2011 and 27% in 2014 to 38% in 2017-18. Similarly, the proportion of children fed the minimum number of times appropriate for their age increased from 64% each in 2011 and 2014 to 81% in 2017-18. Overall, the proportion of children fed a minimum acceptable diet increased from 21% in 2011

and 23% in 2014 to 35% in 2017-18. The aim of the 4th HPNSP is to increase the proportion of children fed a minimum acceptable diet to 45% by 2022.

Patterns by background characteristics

- Only 13% of children age 6-8 months are fed a minimum acceptable diet, as compared with 30% of children age 9-11 months and more than 40% of children age 12-23 months.
- Urban children are more likely than rural children to be fed a minimum acceptable diet (40% and 34%, respectively).
- By division, the proportion of children fed a minimum acceptable diet ranges from 28% in Sylhet to 45% in Rangpur.
- The proportion of children fed a minimum acceptable diet increases with increasing mother's education, from 16% among children whose mothers have no education to 49% among children whose mothers have a secondary education or higher (**Figure 11.7**).

Figure 11.7 Minimum acceptable diet by mother's education



Percentage of children age 6-23 months

11.3 MICRONUTRIENT INTAKE AND SUPPLEMENTATION AMONG CHILDREN

Micronutrient deficiency is a major contributor to childhood morbidity and mortality. Micronutrients are available in foods and can also be provided through direct supplementation.

The information collected on food consumption among children age 6-23 months is useful in assessing the extent to which children are consuming food groups rich in two key micronutrients in their daily diet: iron and vitamin A. Iron plays an important role in numerous biological systems and iron deficiency is one of the primary causes of anemia, which has serious health consequences for children. Vitamin A supports the immune system and plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency (VAD) can cause eye damage and is the leading cause of childhood blindness. VAD also increases the severity of infections such as measles and diarrheal disease and slows recovery from illness.

Table 11.8 shows that 77% of children age 6-23 months consumed foods rich in vitamin A in the 24 hours preceding the survey, while 70% consumed foods rich in iron.

Among children age 6-59 months, 6% were given iron supplements in the 7 days before the survey, 79% were given vitamin A supplements in the 6 months before the survey, and 46% were given deworming medication in the 6 months before the survey.

Trends: There have been noticeable improvements since 2014 in the proportions of children receiving micronutrients through food and supplements. Among children age 6-23 months, the proportion consuming food rich in vitamin A in the past 24 hours has increased from 67% to 77%, while the proportion consuming food rich in iron has increased from 55% to 70%. Similarly, there have been increases in the proportions of children age 6-59 months given vitamin A supplements (from 61% to 79%) and deworming medication (from 30% to 46%) in the 6 months prior to the survey.

Patterns by background characteristics

- Mother's education influences children's intake of micronutrients. For instance, among children age 6-23 months, those whose mothers had no education were less likely to receive foods rich in vitamin A and iron (55% and 44%, respectively) than those whose mothers had a secondary education or higher (80% and 74%, respectively) (Table 11.8).
- Thirty-nine percent of children whose mothers had no education were given deworming medication, as compared with 51% of children whose mothers had a secondary education or higher.

11.4 ADULTS' NUTRITIONAL STATUS

Height and weight data were used to calculate body mass index (BMI), a composite measure of adult nutritional status. Calculations of BMI excluded women and men for whom there was no information on height and/or weight. Women who were pregnant on the day of the survey visit or had given birth during the preceding 2 months were also excluded.

Body mass index (BMI)

BMI is calculated by dividing weight in kilograms by height in meters squared (kg/m²).

Status	ВМІ
Too thin for height	Less than 18.5
Normal	Between 18.5 and 24.9
Overweight	Between 25.0 and 29.9
Obese	Greater than or equal to 30.0

Sample: Women age 15-49 who are not pregnant and who have not had a birth in the 2 months before the survey and men age 15-49

Short stature

Proportion of women with height under 145 cm. *Sample:* Women age 15-49

11.4.1 Nutritional Status of Women

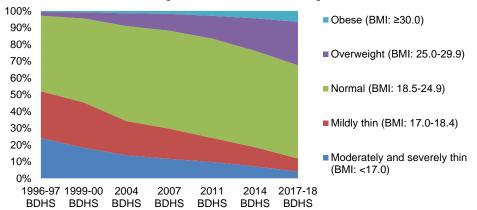
Chronic energy deficiency is caused by eating too little or having an unbalanced diet that lacks adequate nutrients. Women of reproductive age (15-49 years) are especially vulnerable to chronic energy deficiency and malnutrition, which are major risk factors for adverse birth outcomes. The 2017-18 BDHS collected information on height and weight for all ever-married women age 15-49.¹

Table 11.9.1 shows that 56% of women have a normal BMI, while 12% are thin and 32% are overweight or obese. The mean BMI among women is 23.3. Fourteen percent of women are of short stature.

¹ In the 2017-18 BDHS, height and weight information was also collected for never-married women age 18 and older and ever-married women age 50 and older. However, to maintain data comparability with previous surveys, Table 11.9.1 includes only ever-married women age 15-49. The results for other women are included in Chapter 13.

Figure 11.8 Trends in nutritional status of women

Percentage of ever-married women age 15-49



Trends: Figure 11.8 shows that there have been shifts in women's nutritional status over the years. The proportion of women who are thin decreased from 52% in 1996-97 to 30% in 2007 and 12% in 2017-18. On the other hand, the proportion of women who are overweight or obese increased from 3% in 1996-97 and 12% in 2007 to 32% in 2017-18.

Patterns by background characteristics

- Ever-married women age 15-19 are twice as likely to be undernourished (BMI below 18.5) as women age 20-29 (24% versus 12%). About one in nine women age 15-19 are overweight or obese, as compared with two in five women age 30-49.
- Thirteen percent of rural women and 9% of urban women are thin. Conversely, 28% of rural women and 43% of urban women are overweight or obese.
- The proportion of women who are thin is highest in Sylhet (22%) and lowest in Chattogram (8%).
 Thirty-nine percent of women in Chattogram are overweight or obese.
- Women with no education are less likely to be overweight or obese than women with a secondary education or higher (25% versus 41%).
- Twenty-one percent of women in the lowest wealth quintile are thin, as compared with only 4% in the highest wealth quintile. Over half of women in the highest wealth quintile are overweight or obese.

11.4.2 Nutritional Status of Men

The 2017-18 BDHS collected information on height and weight for men age 18 and older (**Table 11.9.2**). The results showed that 20% of men are thin, while 18% are overweight or obese. The mean BMI among men is 21.6.

Patterns by background characteristics

- The proportion of men who are overweight or obese is highest among those age 30-39 (24%) and 40-49 (22%) and lowest among those age 18-19 (7%) and 70 or older (10%).
- Twenty-four percent of urban men are overweight or obese, as compared with only 15% of rural men.
- The proportion of men who are overweight or obese increases with increasing education, from 10% among those with no education to 32% among those with a secondary education or higher.

11.5 MICRONUTRIENT SUPPLEMENTATION DURING PREGNANCY

Nearly half (46%) of women with a birth in the 3 years preceding the survey took iron tablets or syrup for at least 90 days during their most recent pregnancy. About a quarter of women (26%) never took iron tablets or syrup during their most recent pregnancy (**Table 11.10**).

Patterns by background characteristics

- The proportion of women who took iron tablets or syrup for 90 days or more during their last pregnancy is lowest in Barishal and Sylhet (33% each) and highest in Rangpur (54%).
- Women with a secondary education or higher were three times more likely than women with no education to take iron tablets or syrup for at least 90 days during their last pregnancy (69% versus 23%).
- Women in the highest wealth quintile were more likely to take iron tablets or syrup for at least 90 days during their last pregnancy than women in the lowest wealth quintile (64% versus 34%).

LIST OF TABLES

For more information on nutrition of children and adults, see the following tables:

- Table 11.1 Nutritional status of children
- Table 11.2 Initial breastfeeding
- Table 11.3 Breastfeeding status by age
- Table 11.4 Infant and young child feeding (IYCF) indicators on breastfeeding status
- Table 11.5 Median duration of breastfeeding
- Table 11.6 Foods and liquids consumed by children in the day or night preceding the interview
- Table 11.7 Minimum acceptable diet
- Table 11.8 Micronutrient intake among children
- Table 11.9.1 Nutritional status of ever-married women
- Table 11.9.2 Nutritional status of men
- Table 11.10 Micronutrient intake among mothers

Table 11.1 Nutritional status of children

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, according to background characteristics, Bangladesh DHS 2017-18

		Height-f	or-age1			We	eight-for-hei	ght			N	/eight-for-a	ge	
	Percent- age	Percent- age	Mean	Number	Percent- age	Percent- age	Percent- age	Mean	Number	Percent- age	Percent- age	Percent- age	Mean	Number
Background characteristic	below -3 SD	below -2 SD ²	Z-score (SD)	of children	below -3 SD	below -2 SD ²	above +2 SD	Z-score (SD)	of children	below -3 SD	below -2 SD ²	above +2 SD	Z-score (SD)	of children
Age in months														
<6	5.0	19.7	-1.0	917	2.4	9.5	3.2	-0.3	899	4.2	15.8	0.4	-0.9	944
6-8	5.1	19.8	-0.9	399	1.0	5.8	2.9	-0.2	398	2.0	13.3	0.7	-0.7	402
9-11	6.0	20.2	-1.1	396	0.7	7.1	4.9	-0.3	399	3.5	14.7	1.3	-0.9	401
12-17	8.9	29.9	-1.4	851	1.9	9.6	1.9	-0.5	860	4.4	18.3	0.4	-1.0	867
18-23	12.6	39.2	-1.6	796	1.6	6.8	2.5	-0.5	802	3.2	19.1	1.0	-1.1	818
24-35 36-47	13.0 8.1	38.8 33.1	-1.6 -1.5	1,595 1,551	2.2 1.0	8.4 8.4	1.5 1.6	-0.5 -0.6	1,591 1,555	5.5 3.6	24.5 25.0	0.9 0.6	-1.2 -1.3	1,674 1,602
48-59	7.8	28.8	-1.4	1,604	0.6	9.1	2.0	-0.8	1,608	3.9	27.0	0.0	-1.3	1,627
Sex														
Male	9.0	30.8	-1.4	4,221	1.6	9.2	2.6	-0.5	4,223	3.9	21.7	0.9	-1.2	4,339
Female	8.8	30.9	-1.4	3,887	1.3	7.6	1.8	-0.5	3,890	4.2	22.1	0.5	-1.2	3,995
Birth interval in months ³														
First birth ⁴	7.5	28.9	-1.3	2,998	1.5	8.5	2.8	-0.5	3,001	3.7	20.0	1.0	-1.1	3,085
<24	13.7	38.2	-1.7	489	0.8	7.7	1.7	-0.5	485	6.7	25.6	0.6	-1.3	503
24-47	12.3	36.4	-1.5	1,462	1.9	9.0	1.8	-0.6	1,459	5.7	27.0	0.3	-1.3	1,494
48+	7.8	28.5	-1.3	2,871	1.4	8.2	1.9	-0.6	2,861	3.1	20.5	0.6	-1.1	2,960
Mother's interview status														
Interviewed Not interviewed	8.9	30.7	-1.4	7,819	1.5	8.5	2.2	-0.5	7,805	4.1	21.8	0.7	-1.2	8,042
but in household	9.4	33.4	-1.4	289	0.6	7.8	1.6	-0.6	308	4.1	24.1	1.5	-1.2	292
Residence														
Urban Rural	7.6 9.4	25.4 32.8	-1.1 -1.5	2,118 5,991	1.7 1.4	8.9 8.2	3.1 1.9	-0.5 -0.5	2,108 6,005	3.8 4.1	19.2 22.9	1.3 0.5	-1.0 -1.2	2,181 6,154
Division	5.4	52.0	-1.5	5,551	1.4	0.2	1.5	-0.5	0,005	4.1	22.5	0.5	-1.2	0,134
Barishal	8.8	32.5	-1.3	463	2.9	9.0	2.8	-0.6	460	4.0	22.5	0.6	-1.2	470
Chattogram	9.3	32.8	-1.4	1,644	1.7	7.9	1.9	-0.5	1,655	4.3	21.3	0.4	-1.2	1,707
Dhaka	8.8	25.6	-1.2	1,999	1.3	8.8	4.0	-0.4	1,991	3.2	18.5	1.3	-0.9	2,056
Khulna	5.6	25.5	-1.3	769	1.3	8.0	1.7	-0.5	769	3.7	19.2	0.8	-1.1	785
Mymensingh	10.8	35.6	-1.5	691	1.7	9.0	1.8	-0.6	692	5.8	25.9	0.9	-1.3	710
Rajshahi	7.2	30.6	-1.4	967	1.0	8.0	1.1	-0.6	967	3.1	23.0	0.4	-1.2	1,009
Rangpur	7.4	30.4	-1.5	912	0.8	7.3	1.1	-0.6	915	3.1	20.6	0.4	-1.2	923
Sylhet Mother's	14.7	42.7	-1.7	663	1.7	10.4	0.9	-0.7	663	7.3	32.7	0.2	-1.5	673
education ⁵														
No education	16.5	43.0	-1.8	559	1.8	12.0	1.5	-0.7	560	6.6	36.0	0.6	-1.5	571
Primary incomplete Primary	12.5	39.3	-1.6	1,408	1.6	8.7	2.0	-0.6	1,404	5.3	26.6	0.2	-1.4	1,446
complete ⁶ Secondary	11.3	37.7	-1.6	833	1.4	9.5	0.7	-0.6	833	5.6	26.8	0.3	-1.4	853
incomplete Secondary	7.9	29.6	-1.4	3,422	1.6	8.2	2.4	-0.5	3,414	3.7	20.5	0.6	-1.1	3,515
complete or higher ⁷	4.1	17.8	-0.9	1,597	1.1	7.0	3.0	-0.3	1,593	2.1	13.1	1.4	-0.8	1,657
Wealth guintile														
Lowest	13.0	40.2	-1.7	1,796	1.7	10.0	1.8	-0.6	1,798	5.9	28.9	0.4	-1.4	1,831
Second	11.3	37.3	-1.6	1,683	1.0	7.9	1.0	-0.6	1,682	5.1	25.6	0.1	-1.3	1,723
Middle	7.7	30.2	-1.4	1,554	1.4	7.9	1.4	-0.6	1,560	3.4	20.2	0.2	-1.2	1,602
Fourth	7.4	26.9	-1.3	1,606	1.6	8.8	3.2	-0.5	1,607	3.1	20.7	1.1	-1.1	1,647
Highest	4.2	17.1	-0.8	1,469	1.6	7.2	3.8	-0.3	1,466	2.3	12.5	1.8	-0.7	1,532
Total	8.9	30.8	-1.4	8,108	1.5	8.4	2.2	-0.5	8,113	4.1	21.9	0.7	-1.2	8,335

Note: Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards.

¹ Recumbent length is measured for children under age 2; standing height is measured for all other children.
 ² Includes children who are below -3 standard deviations (SD) from the WHO Child Growth Standards population median
 ³ Excludes children whose mothers were not interviewed
 ⁴ First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

⁵ For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

⁶ Primary complete is defined as completing grade 5.

⁷ Secondary complete is defined as completing grade 10.

Table 11.2 Initial breastfeeding

Among last-born children who were born in the 2 years preceding the survey, percentage who were ever breastfed and percentages who started breastfeeding within 1 hour and within 1 day of birth, and among last-born children born in the 2 years preceding the survey who were ever breastfed, percentage who received a prelacteal feed, according to background characteristics, Bangladesh DHS 2017-18

	Amo	ng last-born childrer	born in the past 2 y	ears:	past 2 years	children born in the who were ever stfed:
Background characteristic	Percentage ever breastfed	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth ¹	Number of last- born children	Percentage who received a prelacteal feed ²	Number of last- born children ever breastfed
Sex						
Male	98.6	59.6	93.5	1,812	28.4	1,787
Female	98.8	59.9	93.6	1,685	29.4	1,665
Assistance at delivery						
Health personnel ³	98.2	52.0	90.5	1,915	29.2	1,881
Traditional birth attendant	99.3	69.0	97.4	1,552	28.3	1,542
Other	*	*	*	24	*	23
No one	*	*	*	6	*	6
Place of delivery						
Health facility	98.1	50.3	90.0	1,764	29.8	1,731
At home	99.4	69.6	97.3	1,721	27.9	1,710
Other	*	*	*	12	*	11
Residence						
Urban	97.9	57.2	92.0	928	28.0	908
Rural	99.0	60.7	94.1	2,569	29.2	2,544
Division						
Barishal	98.8	61.0	91.6	208	25.2	206
Chattogram	99.0	54.5	95.2	738	20.0	731
Dhaka	98.3	61.4	92.4	887	37.0	872
Khulna	99.1	51.0	89.7	322	39.0	319
Mymensingh	99.3	64.4	94.9	298	31.6	296
Rajshahi	98.6	58.0	92.8	387	35.6	381
Rangpur	99.1	66.1	96.0	379	23.6	375
Sylhet	98.1	66.7	95.2	278	12.7	272
Mother's education						
No education	99.5	61.9	94.4	222	33.7	221
Primary incomplete	96.8	64.4	92.8	622	28.4	601
Primary complete ⁴	99.2	66.0	95.1	347	25.5	344
Secondary incomplete	99.3	60.0	93.7	1,500	29.5	1,489
Secondary complete or higher ⁵	98.7	52.4	93.0	807	28.3	796
Wealth quintile						
Lowest	98.9	66.7	94.7	721	27.9	713
Second	99.1	65.8	96.0	736	27.5	729
Middle	98.7	56.0	92.3	672	30.6	663
Fourth	98.1	53.7	91.8	710	31.3	696
Highest	98.8	55.8	92.7	658	27.3	650
Total	98.7	59.8	93.6	3,497	28.9	3,452

Note: Table is based on last-born children born in the 2 years preceding the survey regardless of whether the children are living or dead at the time of the interview. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. ¹ Includes children who started breastfeeding within 1 hour of birth

² Children given something other than breast milk during the first 3 days of life

³ Doctor, nurse/midwife, family welfare visitor, community skilled birth assistant, sub-assistant community medical officer, community health care provider,

health assistant, family welfare assistant, or NGO worker ⁴ Primary complete is defined as completing grade 5. ⁵ Secondary complete is defined as completing grade 10.

Table 11.3 Breastfeeding status by age

Percent distribution of youngest children under age 2 who are living with their mother by breastfeeding status and percentage currently breastfeeding, and percentage of all children under age 2 using a bottle with a nipple, according to age in months, Bangladesh DHS 2017-18

			Bre	eastfeeding sta	atus						
Age in months	Not breast- feeding	Exclusively breastfed	Breast- feeding and consuming plain water only	Breast- feeding and consuming non-milk liquids ¹	Breast- feeding and consuming other milk	Breast- feeding and consuming comple- mentary foods	Total	Percentage currently breast- feeding	Number of youngest children under age 2 living with their mother	Percentage using a bottle with a nipple	Number of all children under age 2
0-1	0.0	84.9	5.4	0.5	9.1	0.0	100.0	100.0	342	8.4	342
2-3	0.8	66.1	13.6	2.2	13.3	4.1	100.0	99.2	322	16.4	327
4-5	1.0	40.1	12.5	6.4	17.1	22.9	100.0	99.0	289	18.9	294
6-8	1.7	5.8	6.8	2.0	6.5	77.1	100.0	98.3	406	22.1	410
9-11	2.7	1.1	1.4	0.0	0.8	94.1	100.0	97.3	411	19.4	416
12-17	5.6	0.1	1.2	0.1	1.1	91.9	100.0	94.4	843	16.3	859
18-23	10.8	0.0	0.4	0.0	0.3	88.5	100.0	89.2	788	13.4	819
0-3	0.4	75.8	9.4	1.3	11.1	2.0	100.0	99.6	664	12.3	668
0-5	0.6	65.0	10.3	2.9	13.0	8.3	100.0	99.4	954	14.3	963
6-9	2.3	4.8	5.6	1.4	5.3	80.6	100.0	97.7	567	20.9	573
12-15	4.4	0.2	1.2	0.1	0.7	93.4	100.0	95.6	565	16.7	572
12-23	8.1	0.1	0.8	0.0	0.7	90.3	100.0	91.9	1,631	14.9	1,679
20-23	12.3	0.0	0.6	0.0	0.0	87.1	100.0	87.7	526	12.7	549

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 breastfeed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semisolids) are hierarchical and mutually exclusive, and their percentages add to 100%. Thus, children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

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

Table 11.4 Infant and young child feeding (IYCF) indicators on breastfeeding status

Percentage of children fed according to various IYCF practices, Bangladesh DHS 2017-18

Indicator	Percentage	Number
Exclusive breastfeeding under 6 months	65.0	954
Exclusive breastfeeding at 4-5 months	40.1	289
Continued breastfeeding at 1 year	95.6	565
Introduction of solid, semisolid, or soft foods (6-8 months)	78.5	406
Continued breastfeeding at 2 years	87.7	526
Age-appropriate breastfeeding (0-23 months) ¹	82.1	3,402
Predominant breastfeeding (0-5 months) ²	78.2	954
Mixed breast and non-breast milk feeding (0-5 months)	15.5	954
Bottle feeding (0-23 months)	16.1	3,467

¹ For children age 0-5 months: exclusively breastfed; for children age 6-23 months: receiving breast milk
 ² Either exclusively breastfed or received breast milk and plain water and/or non-milk liquids only

Table 11.5 Median duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the 3 years preceding the survey, according to background characteristics, Bangladesh DHS 2017-18

		n (months) of breas n born in the past 3	
Background characteristic	Any breastfeeding	Exclusive breastfeeding	Predominant breastfeeding ²
Sex			
Male	28.9	4.0	5.2
Female	28.7	4.1	5.3
Residence			
Urban	27.4	3.7	5.0
Rural	31.1	4.2	5.3
Division			
Barishal	30.0	3.7	4.8
Chattogram	24.7	5.2	6.3
Dhaka	27.8	3.0	4.8
Khulna	а	(2.9)	4.4
Mymensingh	32.1	3.1	4.4
Rajshahi	34.7	4.7	5.3
Rangpur	а	4.4	5.2
Sylhet	31.1	4.7	6.0
Mother's education			
No education	32.0	4.0	5.3
Primary incomplete	31.6	3.7	5.5
Primary complete ³	28.7	4.8	5.5
Secondary incomplete	28.8	3.9	5.0
Secondary complete or higher ⁴	27.6	4.3	5.3
Wealth quintile			
Lowest	33.8	3.8	5.3
Second	29.9	4.2	5.4
Middle	29.9	4.1	5.2
Fourth	27.5	4.3	5.4
Highest	26.8	4.0	4.8
Total	28.8	4.1	5.2
Mean for all children	28.8	5.1	6.2

Note: Median and mean durations are based on breastfeeding status of the child at the time of the survey (current status). Includes living and deceased children. Figures in parentheses are based on 25-49 unweighted cases. a = Omitted because less than 50% of the children in this group were exclusively or

¹ For last-born children under age 24 months who live with their mother and are breastfeeding.

information to determine exclusive and predominant breastfeeding comes from a 24-hour dietary recall. Tabulations assume that last-born children age 24 months or older who live with their mother and are breastfeeding are neither exclusively nor predominantly breastfed. It is assumed that last-born children not currently living with their mother and all non-last-born children are not currently breastfeeding. ² Either exclusively breastfeed or received breast milk and plain water and/or non-milk liquids

only ³ Primary complete is defined as completing grade 5.

⁴ Secondary complete is defined as completing grade 10.

Table 11.6 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under age 2 who are living with their mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Bangladesh DHS 2017-18

		Liquids					Solid of	or semisolio	d foods					
Age in months	Infant formula	Other milk ¹	Other liquids ²	Fortified baby foods	Food made from grains ³	Fruits and vege- tables rich in vitamin A ⁴	Other fruits and vege- tables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry	Eggs	Cheese, yogurt, other milk products	Any solid or semi- solid food	Number of children under age 2
					E	BREASTFI	EEDING CH	HILDREN						
0-1 2-3 4-5 6-8 9-11 12-17 18-23 6-23 Total	7.9 10.5 15.9 13.8 7.3 6.3 2.8 6.7 8.0	1.2 4.6 9.3 15.6 23.9 23.2 24.8 22.5 17.3	0.6 4.0 13.4 24.4 22.8 19.8 18.3 20.6 16.2	0.0 0.0 1.9 11.3 9.5 7.5 4.0 7.4 5.4	0.0 1.4 12.0 62.2 90.9 92.0 96.5 88.0 63.5	0.0 0.5 1.9 17.2 34.2 43.6 47.5 38.6 27.5 NBREAS	0.0 0.1 2.9 14.5 23.2 31.3 33.1 27.5 19.7	0.0 0.0 3.2 33.0 60.2 63.7 71.7 60.2 42.9 CHILDREN	0.0 0.0 0.2 11.6 21.9 25.4 24.2 22.0 15.6	0.0 0.5 3.3 21.3 43.9 60.8 72.1 54.4 38.9	0.0 0.0 2.4 25.5 36.0 47.4 45.2 41.0 29.2	0.0 0.3 1.1 3.6 4.5 4.5 5.8 4.7 3.5	0.0 4.1 23.1 78.5 96.6 97.4 99.3 94.6 69.4	342 320 286 399 400 796 702 2,297 3,246
0-11	*	*	*	*	*	*	*	*	*	*	*	*	*	23
12-17 18-23	(20.5) 13.0	(40.2) 38.9	(29.5) 29.5	(22.8) 7.2	(95.6) 94.0	(64.0) 43.4	(32.2) 42.5	(63.8) 72.0	(27.9) 35.0	(61.5) 83.3	(47.5) 56.1	(13.5) 5.0	(100.0) 98.3	47 85
6-23	19.5	37.0	31.0	12.5	91.7	48.9	37.0	68.1	30.3	71.4	53.6	9.2	98.1	151
Total	19.7	36.9	30.0	12.1	88.6	47.2	35.7	65.7	29.2	69.0	51.7	8.9	94.7	156

Note: Breastfeeding status and food consumed refer to a "24-hour" period (yesterday and last night). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. ¹ Other milk includes fresh, tinned, and powdered cow or other animal milk.

² Does not include plain water. Includes juice, juice drinks, clear broth, or other non-milk liquids.

^a Includes fortified baby food
 ⁴ Includes dark green leafy vegetables; pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside; ripe mangoes; papayas; and vitamin A-rich

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Percentage of youngest children age 6-23 months living with their mother who are fed a minimum acceptable diet based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, according to background characteristics, Bangladesh DHS 2017-18

	Among t	Among breastfed children age 6-23 months, percentage fed:	fed children age 6-23 percentage fed:	months,	Among nonb	reastfed child	Among nonbreastfed children age 6-23 months, percentage fed:	months, perc	entage fed:	Among	j all children	Among all children age 6-23 months, percentage fed:	hs, percentaç	e fed:
Background characteristic	Minimum dietary diversitv ¹	Minimum meal frequencv ²	Minimum acceptable diet ³	Number of breastfed children age 6-23 months	Minimum milk feeding frequencv ⁴	Minimum dietary diversitv ¹	Minimum meal frequencv ⁵	Minimum acceptable diet ⁶	Number of non- breastfed children age 6-23 months	Breast milk, milk, or milk products ⁷	Minimum dietary diversitv ¹	Minimum meal frequencv ⁸	Minimum acceptable diet ⁹	Number of all children age 6-23 months
Age in months ₆₋₈	13.7	69.5	13.3	300	*	*	*	*	7	6 66	13.5	69.3	13.1	406
9-11 9-11	32.0	76.5	30.1	400	*	*	*	*	. +	98.7	32.2	77.1	30.4	411
12-17	46.0	84.1	43.2	796	(56.1)	(35.7)	(84.8)	(29.7)	47	97.5	45.4	84.2	42.5	843
18-23	47.6	86.0	44.3	702	33.9	42.1	83.7	22.0	85	92.8	47.0	85.8	41.9	788
Sex Male	38.1	80.7	35.6	1,193	47.7	40.5	87.3	23.1	76	96.9	38.2	81.1	34.9	1,269
Female	38.8	81.0	36.6	1,104	38.5	35.7	80.5	26.6	75	96.1	38.6	80.9	35.9	1,179
Residence Urban	45.5	82.7	42.4	571	41.3	40.5	87.5	23.5	89	93.8	45.0	83.2	40.4	639
Rural	36.1	80.2	34.0	1,727	44.6	36.1	80.9	26.0	83	97.5	36.1	80.3	33.6	1,810
Division Barishal	7 PE	75 7	30 F	134	*	*	*	*	7	07 4	34.1	76.5	31 4	141
Chattooram	38.5	76.0	34.7	469	(33.6)	(31.0)	(84.1)	(26.5)	35	95.4	38.0	76.5	34.1	504
Dhaka	41.0	81.5	38.9	561	(37.8)	(34.0)	(83.0)	(18.3)	62	93.8	40.3	81.6	36.9	623
Khulna	37.7	87.1	35.3	213	*	`*	`*	*	5	98.8	36.8	87.3	34.5	218
Mymensingh	35.0	86.3	34.2	196	*	*	*	*	14	97.1	36.8	86.6	35.1	210
Rajshahi	34.4	77.2	32.9	266	*	*	*	*	15	98.7	35.5	77.9	33.7	281
Rangpur	46.9	86.6	45.2	273	*	*	*	*	4	0.06	47.3	86.2	44.7	278
Sylhet	31.1	78.7	27.8	184	*	*	*	*	10	97.2	31.5	78.2	27.6	194
Mother's education														
No education	18.9	74.5	16.9	147	*	*	*	*	7	96.7	18.5	74.1	16.1	154
Primary incomplete	31.0	78.1	28.3	392	(35.3)	(24.7)	(75.1)	(11.6)	28	95.6	30.6	77.9	27.2	420
Primary complete ¹⁰	30.8	80.8	30.1	233	*	*	*	*	8	97.8	30.7	80.2	29.7	241
Secondary incomplete	38.7	79.8	36.2	1,010	32.4	27.3	80.7	17.9	54	96.6	38.2	79.8	35.2	1,064
Secondary complete or higher ¹¹	52.5	86.8	50.0	515	(61.9)	(61.1)	(97.2)	(42.7)	54	96.4	53.3	87.8	49.4	569

Continued...

Table 11.7 —Continued														
	Among	Among breastfed children age 6-23 months, percentage fed:	tren age 6-23 age fed:	months,	Among nonb	reastfed chil	Among nonbreastfed children age 6-23 months, percentage fed:	} months, per	centage fed:	Among	t all children ;	Among all children age 6-23 months, percentage fed	ths, percentaç	je fed:
Background characteristic	Minimum dietary diversity ¹	Minimum meal frequency ²	Minimum acceptable diet ³	Number of breastfed children age 6-23 months	Minimum milk feeding frequency ⁴	Minimum dietary diversity ¹	Minimum meal frequency ⁵	Minimum acceptable diet ⁶	Number of non- breastfed children age 6-23 months	Breast milk, milk, or milk products ⁷	Minimum dietary diversity ¹	Minimum meal frequency ⁸	Minimum acceptable diet ⁹	Number of all children age 6-23 months
Wealth auintile														
Lowest	27.0	78.1	25.3	494	*	*	*	*	13	98.2	26.6	77.6	25.0	507
Second	34.5	81.3	32.5	507	*	*	*	*	17	98.3	34.5	81.2	32.0	525
Middle	37.7	79.5	34.8	424	(43.0)	(31.4)	(20.6)	(21.6)	26	96.7	37.3	79.5	34.0	450
Fourth	40.3	80.6	38.1	459	(45.7)	(34.1)	(87.8)	(27.0)	35	96.1	39.8	81.1	37.3	495
Highest	55.7	85.3	52.5	413	42.7	49.0	90.7	29.3	59	92.9	54.9	86.0	49.6	472
Total	38.4	80.8	36.1	2,297	43.1	38.1	83.9	24.8	151	96.5	38.4	81.0	35.4	2,448
Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk ¹ Children received foods from five or more of the following eight food groups: a. b including porridge and fortified baby food from grains; d. vitamin A-rich fruits and ² For breastfed children, minimum meal frequency is receiving solid, semisolid, on ³ Breastfed children, minimum meal frequency is receiving solid, semisolid, on ⁴ Includes two or more feedings of commercial infant formula, fresh, tinned, and p	s are based on m five or more ed baby food fru imum meal frec 3 months are cu ugs of commere	25-49 unweigh of the following om grains; d. v quency is recei onsidered to bi cial infant form	nted cases. A g eight food gu itamin A-rich ving solid, seu e fed a minimu ula; fresh, tinr	n asterisk indic roups: a. breas fruits and vege misolid, or soft um acceptable od, and powde	indicates that a figure is based on indicates that a figure is based on wegetables; e. other fruits and ve soft food at least wice a day for table diet if they are fed the minim bowdered animal milk; and yogurt	ure is based t formula, mil r fruits and v wice a day fc fed the mini ilk; and yogu	on fewer than Ik other than b /egetables; f. é or infants age i imum dietary or irt	i 25 unweight breast milk, cr eggs; g. meat 6-8 months a diversity as d	ed cases and f neese or yogur poultry, fish, nd at least thre escribed in foc	indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. preast milk; b. infant formula, milk other than breast milk, cheese or yogurt or other milk products; c. foods made from grains, roots, and tubers, vegetables; e. other fruits and vegetables; f. eggs; g. meat, poultry, fish, and shellfish (and organ meats); h. legumes and nuts. r soft food at least twice a day for infants age 6-8 months and at least three times a day for children age 9-23 months. table diet if they are fed the minimum dietary diversity as described in footnote 1 and the minimum meal frequency as defined in footnote 2. bowdered animal milk; and yogurt	ressed. products; c. fc ind organ me for children a minimum m	ods made fro ats); h. legum ge 9-23 montt eal frequency	m grains, root es and nuts. ٦s. as defined in	s, and tubers, footnote 2.
⁵ For nonbreastfed children age 6-23 months, minimum meal frequency is receiving solid, semisolid, or soft food or milk feeds at least four times a day. At least one of the feeds must be a solid, semisolid, or soft feed. ⁶ Nonbreastfed children age 6-23 months are considered to be fed a minimum acceptable diet (they receive other milk or milk products at least twice a day, receive the minimum meal frequency as defined in footnote 5, and	6-23 months au	re considered 1	to be fed a min	/ is receiving sc nimum accepts	alid, semisolid, able diet if they	receive oth	or milk feeds er milk or milk	at least four t products at le	imes a day. At east twice a da	ng solid, semisolid, or soft food or milk feeds at least four times a day. At least one of the feeds must be a solid, semisolid, or soft feed ceptable diet if they receive ther milk or milk products at least twice a day, receive the minimum meal frequency as defined in footnote the milk produce food account.	e feeds must ninimum mea	be a solid, se al frequency a	misolid, or so s defined in fo	ft feed. otnote 5, and

⁷ receive solid, semisolid, or soft foods from at least four food groups not including the milk or mulk; receive solid, semisolid, or soft foods from at least four food groups not including the milk or mole freeding on the member of times and yogutt. ⁸ Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in footnotes 2 and 5. ⁹ Children are fed the minimum meal frequency as described infortunts, receive other milk or milk products as described in footnotes 7, are fed the minimum dietary diversity as described in footnote 1, and are fed the minimum meal frequency as described in footnotes 2 and 5. ¹⁰ Primary complete is defined as completing grade 5. ¹¹ Secondary complete is defined as completing grade 5.

Table 11.8 Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, percentages who consumed vitamin A-rich and iron-rich foods in the 24 hours preceding the survey, and among all children age 6-59 months, percentages who were given vitamin A supplements in the 6 months preceding the survey, who were given iron supplements in the 7 days preceding the survey, and who were given deworming medication in the 6 months preceding the survey, according to background characteristics, Bangladesh DHS 2017-18

	Among youngest	children age 6-23 m their mother:	onths living with		Among all childre	n age 6-59 months:	
Background characteristic	Percentage who consumed foods rich in vitamin A in last 24 hours ¹	Percentage who consumed foods rich in iron in last 24 hours ²	Number of children	Percentage given iron supplements in past 7 days ³	Percentage given vitamin A supplements in past 6 months ⁴	Percentage given deworming medication in past 6 months ^{3,5}	Number of children
Age in months							
6-8	43.3	38.1	406	7.7	60.5	2.3	410
9-11	68.3	59.2	411	5.8	79.2	9.8	416
12-17	83.5	75.9	843	7.2	83.2	26.0	859
18-23	90.7	84.3	788	7.4	81.9	43.2	819
24-35	na	na	na	6.3	82.2	55.1	1,685
36-47	na	na	na	5.4	79.1	58.2	1,618
48-59	na	na	na	4.7	77.8	55.5	1,650
Sex							
Male	76.7	68.6	1,269	6.8	79.9	46.4	3,887
Female	76.5	70.5	1,179	5.2	78.6	45.1	3,571
Breastfeeding status							
Breastfeeding	75.7	68.6	2,297	na	na	na	na
Not breastfeeding	90.0	83.1	149	na	na	na	na
Mother's age							
15-19	75.0	68.7	472	6.1	75.9	37.1	852
20-29	77.4	70.4	1,469	6.2	80.1	47.3	4,706
30-39	75.7	67.5	485	5.5	78.9	46.0	1,765
40-49	*	*	22	6.4	77.4	43.5	135
Residence							
Urban	78.8	73.0	639	6.4	78.6	47.7	2,046
Rural	75.8	68.3	1,810	5.9	79.5	45.1	5,412
Division							
Barishal	77.5	70.7	141	4.8	76.0	46.9	402
Chattogram	74.0	68.0	504	7.9	81.9	54.0	1,540
Dhaka	75.0	66.1	623	6.6	75.6	46.0	1,935
Khulna	80.8	78.7	218	4.9	80.4	40.5	679
Mymensingh	71.6	64.0	210	4.3	81.1	54.1	625
Rajshahi	79.1	72.2	281	4.1	79.3	34.9	880
Rangpur	84.9	77.6	278	7.0	83.7	42.4	789
Sylhet	72.9	63.7	194	5.0	77.9	41.0	608
Mother's education							
No education	54.7	43.8	154	2.5	72.2	38.9	551
Primary incomplete	75.6	68.0	420	4.2	75.5	43.0	1,350
Primary complete ⁶	73.9	67.8	241	4.9	73.3	49.1	789
Secondary incomplete	78.8	72.0	1,064	5.8	79.8	45.0	3,244
Secondary complete or			.,				-,
higher ⁷	80.4	73.7	569	10.0	84.9	50.6	1,524
Wealth quintile							
Lowest	74.4	66.1	507	3.7	78.9	42.9	1,594
Second	74.8	67.2	525	4.4	79.3	43.3	1,523
Middle	79.5	72.3	450	5.0	78.9	46.2	1,382
Fourth	74.3	68.7	495	7.1	76.5	47.2	1,497
Highest	80.7	73.9	472	10.1	82.9	49.7	1,462
Total	76.6	69.5	2,448	6.0	79.3	45.8	7,458
Total	70.0	09.5	2,440	0.0	79.5	40.0	7,450

Note: Total includes 2 children with missing information on breastfeeding status. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. na = Not applicable

¹ Includes meat (and organ meat), fish, poultry, eggs, pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, dark green leafy vegetables, mango, papaya, and other locally grown fruits and vegetables that are rich in vitamin A ² Includes meat (and organ meat), fish, poultry, and eggs

³ Based on mother's recall

⁴ Based on both mother's recall and the vaccination card

⁵ Deworming for intestinal parasites is commonly done for helminthes and for schistosomiasis.

⁶ Primary complete is defined as completing grade 5.
 ⁷ Secondary complete is defined as completing grade 10.

Table 11.9.1 Nutritional status of ever-married women

Among women age 15-49, percentage with height under 145 cm, mean body mass index (BMI), and percentage with specific BMI levels, according to background characteristics, Bangladesh DHS 2017-18

	Hei	ight				Bo	ody mass inde	ex ¹			
Background characteristic	Percentage below 145 cm	Number of women	Mean body mass index (BMI)	18.5-24.9 (total normal)	<18.5 (total thin)	17.0-18.4 (mildly thin)	<17 (moderately and severely thin)	≥25.0 (total over- weight or obese)	25.0-29.9 (over- weight)	≥30.0 (obese)	Number of women
Age											
15-19	10.7	2.024	20.8	64.1	24.3	15.3	9.0	11.6	10.7	0.9	1.620
20-29	12.9	7,008	22.9	60.2	12.4	8.4	4.0	27.4	22.6	4.8	6,188
30-39	13.5	6.241	24.0	52.1	8.8	5.9	2.8	39.1	30.8	8.3	6,022
40-49	16.6	4,504	23.8	51.4	10.8	6.7	4.2	37.8	29.2	8.6	4,498
Residence											
Urban	12.8	5,563	24.5	47.9	8.6	5.6	3.0	43.4	32.7	10.8	5,170
Rural	14.0	14,213	22.9	58.8	13.2	8.6	4.5	28.1	23.2	4.9	13,159
Division											
Barishal	14.2	1,107	23.2	56.9	11.4	7.7	3.7	31.7	26.9	4.8	1,024
Chattogram	11.9	3,544	24.1	53.5	7.6	4.9	2.7	38.9	30.5	8.4	3,248
Dhaka	13.4	4,972	23.9	53.0	9.7	6.2	3.5	37.3	28.8	8.5	4,611
Khulna	10.0	2,310	23.6	54.4	10.9	7.4	3.5	34.7	27.7	7.0	2,163
Mymensingh	15.6	1,532	22.2	58.8	18.1	12.5	5.5	23.2	19.5	3.7	1,401
Rajshahi	15.1	2,779	23.0	57.2	12.7	8.4	4.3	30.1	24.3	5.8	2,607
Rangpur	16.9	2,360	22.5	61.4	14.3	9.5	4.8	24.3	19.8	4.5	2,211
Sylhet	14.4	1,173	21.9	56.0	21.7	12.5	9.2	22.3	18.9	3.4	1,063
Education											
No education	19.9	3,286	22.5	59.9	15.1	9.1	5.9	25.0	21.0	4.1	3,220
Primary incomplete	17.1	4,203	23.0	55.9	13.8	9.0	4.8	30.3	24.2	6.1	3,952
Primary complete ² Secondary	14.8	2,009	23.3	56.0	11.4	8.6	2.8	32.6	26.5	6.1	1,863
incomplete Secondary complete or	10.9	7,034	23.4	55.6	11.1	7.2	3.9	33.3	26.5	6.8	6,404
higher ³	8.2	3,245	24.4	50.7	7.8	5.3	2.5	41.4	31.6	9.8	2,890
Wealth quintile											
Lowest	17.0	3,693	21.5	63.2	20.5	13.5	7.0	16.3	14.5	1.8	3,408
Second	15.3	3,918	22.2	61.8	16.0	10.3	5.8	22.2	19.2	2.9	3,625
Middle	14.5	4,017	23.2	58.9	10.6	7.0	3.6	30.6	25.7	4.8	3,705
Fourth	12.5	4,125	23.8	54.0	9.0	6.1	2.9	37.0	29.9	7.2	3,830
Highest	9.4	4,022	25.7	41.7	4.4	2.7	1.7	53.9	38.5	15.4	3,761
Total	13.7	19,776	23.3	55.7	11.9	7.8	4.1	32.4	25.9	6.5	18,328

Note: Body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²). ¹ Excludes pregnant women and women with a birth in the preceding 2 months ² Primary complete is defined as completing grade 5. ³ Secondary complete is defined as completing grade 10.

Table 11.9.2 Nutritional status of men

Among men age 18 and older, mean body mass index (BMI) and percentage with specific BMI levels, according to background characteristics, Bangladesh DHS 2017-18

				Bo	ody mass inde	ex			
Background characteristic	Mean body mass index (BMI)	18.5-24.9 (total normal)	<18.5 (total thin)	17.0-18.4 (mildly thin)	<17 (moderately and severely thin)	≥25.0 (total overweight or obese)	25.0-29.9 (over- weight)	≥30.0 (obese)	Number of men
Age									
18-19	20.3	60.4	32.7	24.4	8.3	6.9	5.9	1.0	298
20-29	21.2	66.2	20.4	14.7	5.7	13.3	11.7	1.7	1,204
30-39	22.4	64.0	12.5	9.1	3.4	23.5	22.2	1.4	1,281
40-49	22.2	61.8	16.6	11.7	4.8	21.6	19.0	2.6	976
50-59	21.9	61.2	19.1	12.5	6.7	19.6	16.9	2.7	716
60-69	21.3	60.4	24.5	15.1	9.4	15.1	13.5	1.7	605
70+	20.4	58.2	31.4	16.3	15.2	10.3	8.9	1.4	454
Residence									
Urban	22.5	61.4	14.1	9.4	4.7	24.4	21.0	3.4	1,565
Rural	21.3	63.2	22.0	14.8	7.1	14.9	13.7	1.2	3,968
Division									
Barishal	21.5	66.1	18.9	14.3	4.6	15.0	13.7	1.3	306
Chattogram	22.2	61.2	17.0	11.4	5.7	21.7	19.1	2.6	867
Dhaka	22.1	57.9	19.1	12.5	6.6	23.0	19.9	3.1	1,354
Khulna	21.8	64.6	17.7	12.2	5.5	17.7	16.5	1.1	699
Mymensingh	20.7	62.9	27.3	18.2	9.1	9.8	8.7	1.1	457
Rajshahi	21.3	66.1	19.9	12.0	8.0	14.0	13.0	1.0	793
Rangpur	21.4	65.9	19.6	15.1	4.5	14.5	13.3	1.2	689
Sylhet	21.0	63.7	23.5	15.2	8.2	12.8	11.7	1.1	368
Education									
No education	20.7	63.0	26.7	19.3	7.5	10.2	9.6	0.6	815
Primary incomplete	20.8	62.9	25.6	16.1	9.6	11.4	10.4	1.0	1,084
Primary complete ¹	21.2	64.4	22.3	15.7	6.6	13.3	12.1	1.2	575
Secondary incomplete Secondary complete or	21.8	64.6	17.6	12.0	5.6	17.8	15.9	2.0	2,043
higher ²	23.2	57.4	10.7	6.7	4.0	31.9	28.1	3.8	1,016
Wealth quintile									
Lowest	20.1	62.4	30.7	21.2	9.5	6.9	6.7	0.2	1,015
Second	20.7	64.0	25.8	17.1	8.6	10.2	9.8	0.4	1,080
Middle	21.3	67.4	20.3	14.5	5.8	12.3	11.7	0.6	1,153
Fourth	22.1	64.1	15.6	9.0	6.6	20.3	18.5	1.9	1,116
Highest	23.7	55.6	8.1	5.8	2.3	36.2	30.5	5.8	1,168
Total	21.6	62.7	19.7	13.3	6.4	17.6	15.7	1.8	5,533

Note: Body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²). ¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 11.10 Micronutrient intake among mothers

Among women age 15-49 with a child born in the 3 years preceding the survey, percent distribution by number of days they took iron tablets or syrup during the pregnancy of the last child, according to background characteristics, Bangladesh DHS 2017-18

	Number of da	ays women to	ook iron tablet	s or syrup d	uring pregnancy	y of last birt	h
Background		00	00.00		Don't know/	T	Number of
characteristic	None	<60	60-89	90+	missing	Total	women
Age							
15-19	23.8	22.3	9.0	43.9	1.0	100.0	904
20-29	26.0	17.4	8.3	47.8	0.6	100.0	3,086
30-39	28.4	17.2	11.2	42.3	0.8	100.0	1,006
40-49	26.2	14.5	15.7	43.6	0.0	100.0	55
Residence							
Urban	21.7	17.4	8.8	51.2	0.9	100.0	1,356
Rural	27.6	18.5	9.2	44.0	0.6	100.0	3,695
Division							
Barishal	33.9	23.7	8.1	33.3	1.0	100.0	288
Chattogram	24.6	13.0	10.6	50.7	1.1	100.0	1,071
Dhaka	25.8	19.9	7.4	46.0	0.8	100.0	1,293
Khulna	26.1	19.1	9.3	45.5	0.0	100.0	464
Mymensingh	27.6	17.1	8.0	46.4	1.0	100.0	431
Rajshahi	24.2	19.1	11.7	44.7	0.3	100.0	587
Rangpur	18.9	18.6	8.7	53.5	0.3	100.0	534
Sylhet	36.1	21.0	8.8	33.4	0.7	100.0	383
Education							
No education	47.2	22.5	6.4	22.7	1.2	100.0	318
Primary incomplete	34.5	23.6	11.8	29.7	0.4	100.0	879
Primary complete ¹	30.5	22.5	9.8	36.2	0.9	100.0	516
Secondary incomplete	26.0	18.0	9.0	46.3	0.6	100.0	2,209
Secondary complete or higher ²	11.5	11.2	7.5	68.9	0.8	100.0	1,129
Wealth quintile							
Lowest	36.4	19.7	9.8	33.9	0.2	100.0	1,042
Second	29.5	21.3	7.9	40.5	0.7	100.0	1,036
Middle	27.5	20.0	8.7	43.1	0.7	100.0	969
Fourth	21.1	18.2	11.2	49.0	0.5	100.0	1,018
Highest	15.1	11.7	7.7	64.1	1.4	100.0	986
Total	26.1	18.2	9.1	46.0	0.7	100.0	5,051

¹ Primary complete is defined as completing grade 5.
 ² Secondary complete is defined as completing grade 10.

Key Findings

- Employment and control over earnings: Almost half (49%) of currently married women age 15-49 were employed in the 12 months before the survey. Sixteen percent of employed women did not receive payment for their work.
- Control over earnings: About one-third (32%) of currently married women with cash earnings decide independently on how their earnings will be used, while 60% decide jointly with their husband.
- Ownership and use of bank accounts and mobile phones: 12% of women age 15-49 have a bank account that they use, and 60% own a mobile phone. Among women with a mobile phone, 15% use their phone for financial transactions.
- **Ownership of national identity card (NID):** More than three-fourths of women age 15-49 (78%) have NID card.
- Participation in decision making: Overall, 59% of currently married women participate in all three specified household decisions (regarding their own health care, household purchases, and visits to family or relatives), whereas 12% are not involved in any of these decisions.
- Attitudes towards wife beating: 20% of women agree that wife beating is justified for at least one of five specified reasons (she burns food, argues with her him, goes out without telling him, neglects children, and refuses sex with him) a decline from 28% in 2014.

his chapter explores women's empowerment in terms of employment, earnings, control over earnings, and magnitude of earnings relative to those of their partners. In addition, responses to specific questions are used to define two different indicators of women's empowerment: their participation in household decision making and their attitudes towards wife beating.

12.1 MARRIED WOMEN'S EMPLOYMENT

Employment

Respondents are considered to be employed if they have done any work other than their housework in the 12 months before the survey. *Sample:* Currently married women age 15-49

Earning cash for employment

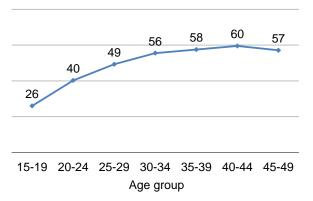
Respondents are asked if they are paid for their labor in cash or in-kind. Only those who receive payment in cash only or in cash and in-kind are considered to earn cash for their employment.

Sample: Currently married women age 15-49 employed in the 12 months before the survey

Employment, particularly employment for cash, and control over how earnings are used are important indicators of women's empowerment. Almost half (49%) of currently married women age 15-49 reported that they were employed in the 12 months preceding the survey (**Table 12.1**). More than three-fourths of women (76%) are paid in cash only, whereas 16% do not receive any payment for their work. Overall, 83% of women who are employed have cash earnings (including those earning cash and those paid in-kind). By age, employment increases from 26% among women age 15-19 to 60% among women age 45-49 (**Table 12.1** and **Figure 12.1**).

Figure 12.1 Employment by age

Percentage of currently married women who were employed at any time in the 12 months before the survey



Trends: The percentage of currently married women

age 15-49 who reported some sort of employment in the past 12 months increased from 34% in 2014 to 49% in 2017-2018. However, the proportion of employed women with earnings (including cash and inkind payments) declined from 91% to 83% over the same period.

12.2 CONTROL OVER WOMEN'S EARNINGS

Control over one's own cash earnings

Respondents are considered to have control over their own earnings if they participate in decisions alone or jointly with their spouse about how their own earnings will be used.

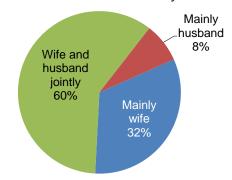
Sample: Currently married women age 15-49 who received cash earnings for employment during the 12 months before the survey

A major indicator of women's empowerment is whether they have control over their own earnings. To assess control over earnings, currently married women age 15-49 who were paid in cash for employment in the 12 months before the survey were asked about who makes the decisions about the use of their earnings. In Bangladesh, around onethird (32%) of currently married women who received cash earnings for employment decide independently on how their earnings are used, while 60% make such decisions jointly with their husbands. Only 8% say that their husbands mainly decide on the use of their cash earnings (**Table 12.2.1** and **Figure 12.2**).

Patterns by background characteristics

Figure 12.2 Control over women's earnings

Percent distribution of currently married women with cash earnings in the 12 months before the survey



The proportion of women who decide on the use of their earnings jointly with their husband increases from 50% among those age 15-19 to 62% among those age 40-44 before declining after age 44. Women age 15-19 were most likely to report that their husband mainly decides on the use of their earnings (15%) (Table 12.2.1).

- The percentage of women who decide alone on the use of their cash earnings decreases from 37% among those with no children to 30% among those with five or more children.
- The proportion of women who decide on their own about how their earnings are used is highest in Barishal (44%) and lowest in Rangpur (20%).
- The percentage of women who make independent decisions regarding how their cash earnings will be used increases with increasing education, from 26% among those with no education to 42% among those with a secondary education or higher.
- Women in the lowest wealth quintile are less likely to make decisions alone on the use of their earnings than women in the highest wealth quintile (25% versus 41%).

12.3 CONTROL OVER MEN'S EARNINGS

Currently married women age 15-49 were asked about the primary decision maker regarding the use of their husband's earnings. Two-thirds of women report that they jointly decide with their husband on the use of his earnings, while 26% say that their husband makes such decisions alone (**Table 12.2.2**). Only 4% of women report that they are the primary decision maker regarding the use of their husband's earnings.

Patterns by background characteristics

- Younger women age 15-19 (34%) are more likely than women age 25 or older (22%-25%) to report that their husband makes decisions alone on the use of his earnings.
- The percentage of women who say that they make joint decisions with their husband on the use of his earnings is highest in Mymensingh (73%) and lowest in Sylhet (59%).

12.4 WOMEN'S OWNERSHIP AND USE OF BANK ACCOUNTS, MOBILE PHONES, AND NATIONAL IDENTITY CARDS (NIDS)

Bank Accounts and Mobile Phones

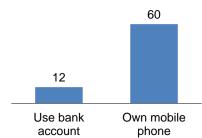
Ownership of a bank account and a mobile phone are reflections of autonomy, social functioning, and financial independence. Twelve percent of ever-married women age 15-49 have an account in a bank or other financial institution that they use, and 60% own a mobile phone. Among women with a mobile phone, 15% use their phone for financial transactions (**Table 12.3** and **Figure 12.3**).

Patterns by background characteristics

- The percentage of women who own a mobile phone is highest in Chattogram (70%) and lowest in Rangpur (47%) (**Table 12.3**).
- The percentage of women who have a bank account increases with increasing education, from 6% among those with no education to 25% among those with a secondary education or higher. In addition, women with a secondary education or higher are more likely to own a mobile phone than those who have no education (86% versus 38%).
- Women in the highest wealth quintile are much more likely to have a mobile phone and a bank account (84% and 27%, respectively) than women in the lowest quintile (39% and 2%, respectively).

Figure 12.3 Ownership and use of assets

Percentage of women age 15-49 by ownership and use of specific items



National Identity Cards

More than three-fourths of women age 15-49 have an NID card (78%). The percentage of women with an NID card declines with increasing education, from 95% among those with no education to 66% among those with a secondary education or higher (**Table 12.3**).

12.5 WOMEN'S PARTICIPATION IN DECISION MAKING

Participation in major household decisions

Women are considered to participate in household decisions if they make decisions alone or jointly with their husband in all three of the following areas: (1) their own health care, (2) major household purchases, and (3) visits to their family or relatives.

Sample: Currently married women age 15-49

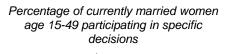
Participation in household decision making is an important aspect of women's ability to have control over their own lives. About two-thirds of currently married women age 15-49 make decisions jointly with their husbands regarding their own health care, major household purchases, and visits to their family or relatives (**Table 12.4**).

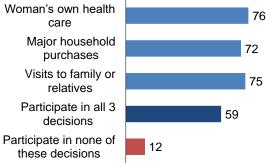
Overall, three-fourths of women (76%) participate in decisions (alone or jointly with their husband) regarding their own health care, 72% participate in decisions on major household purchases, and 75% participate in decisions about visits to their family or relatives (**Table 12.5** and **Figure 12.4**). Fifty-nine percent of women participate in all three specified decisions independently or jointly with their husband, whereas 12% do not participate in any of the decisions.

Patterns by background characteristics

The percentage of women who participate in the three specified decisions increases from 32% among those age 15-19 to 68% among those age 35-39 and 40-44 before declining among those age 45-49 (Table 12.5).

Figure 12.4 Women's participation in decision making





- Women who are employed for cash are more likely to participate in all three decisions (68%) than unemployed women (54%) and those who are employed but do not earn cash (52%).
- Women with no children (38%) are less likely than women with one or more children (60% or above) to participate in all three decisions.
- The percentage of women who participate in all three decisions is lower in rural areas than in urban areas (57% versus 66%).
- By division, the percentage of women who participate in the three specified decisions is lowest in Sylhet (48%) and highest in Mymensingh (68%).

12.6 ATTITUDES TOWARD WIFE BEATING

Attitudes toward wife beating

Respondents are asked if they agree that a husband is justified in hitting or beating his wife under each of the following five circumstances: she burns the food, she argues with him, she goes out without telling him, she neglects the children, and she refuses to have sex with him. If respondents answer "yes" in at least one circumstance, they are considered to have attitudes justifying wife beating.

Sample: Women age 15-49

Another measure of women's empowerment derives from the idea that gender equity is essential for empowerment. Attitudes in which the hitting or beating of wives by husbands is seen as justified are indicative of women's lower status and can disempower women in their household and intimate relationships. In Bangladesh, 14% of women agree that wife beating is justified if a wife argues with her husband, 10% agree that it is justified if the wife neglects the children, and 8% agree that it is justified if the wife goes out without telling her husband. Only 3% and 1% of women, respectively, believe that wife beating is justified if the wife refuses to have sexual intercourse with her husband and if she burns the food. Overall, 20% of women agree that wife hitting or beating is justified for at least one of the five specified reasons (**Table 12.6**).

Trends: The percentage of women who agree that wife hitting or beating is justified for at least one of the five specified reasons decreased from 33% in 2011 to 28% in 2014 to 20% in 2017-18.

Patterns by background characteristics

- Wife beating is more acceptable among women with more children. For instance, 26% of women with five or more children agree that wife beating is justified for at least one of the specified reasons, as compared with 17% of women with no children (**Table 12.6**).
- Twenty-two percent of women in rural areas agree that wife beating is justified for at least one of the specified reasons, compared with 17% of women in urban areas.
- Women's acceptance of wife beating varies by division, ranging from a low of 18% in Sylhet to a high of 27% in Barishal.
- Acceptance of wife beating declines with increasing education, from 26% among women with no education to 10% among women with a secondary education or higher.
- Women in the highest wealth quintile are less likely to agree that wife beating is justified for at least one of the specified reasons than those in the lowest wealth quintile (14% versus 25%).

12.7 NEGOTIATING SEXUAL RELATIONS

To assess attitudes toward negotiating safer sexual relations with husbands, ever-married women age 15-49 were asked whether they thought that a wife is justified in refusing to have sexual intercourse with her husband if she knows he has sex with other women or asking that he use a condom if she knows he has a sexually transmitted infection (STI).

Eighty percent of ever-married women agree that a wife is justified in refusing sex if her husband has other partners, and 96% believe that she is justified in asking her husband to use a condom if he has an STI (**Table 12.7**).

To assess the ability of women to negotiate safer sexual relations with their husbands, currently married women age 15-49 were asked whether they could say no to their husband if they do not want to have

sexual intercourse. Women were also asked whether they could ask their husband to use a condom. Eightysix percent of women said that they can say no to their husband if they do not want to have sexual intercourse, and 80% said that they can ask their husband to use a condom (**Table 12.8**).

Patterns by background characteristics

- Urban women are more likely than rural women to say that they can ask their husband to use a condom (85% versus 78%) (**Table 12.8**).
- Women's ability to negotiate sexual relations increases with increasing education. Ninety-three
 percent of women with a secondary education or higher report that they can say no their husband if
 they do not want to have sexual intercourse, as compared with 80% of women with no education.
 Similarly, 92% of women with a secondary education or higher can ask their husband to use a
 condom, compared with 65% of women with no education.
- The percentage of women who say that they can ask their husband to use a condom is lowest among those in the lowest wealth quintile (73%) and highest among those in the highest quintile (88%).

12.8 WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES

The two sets of empowerment indicators, namely women's participation in household decisions and women's attitudes toward wife beating, can be summarized in two separate indices. The first index, which ranges in value from 0 to 3, shows the number of decisions (see **Table 12.5** for the list of decisions) in which women participate alone or jointly with their husbands. The second indicator, which ranges in value from 0 to 5, is the total number of reasons (see **Table 12.6** for the list of reasons) for which the woman feels that a husband is justified in beating his wife. A lower score on this indicator is interpreted as reflecting a greater sense of entitlement and self-esteem and higher status for women. **Table 12.9** shows that the percentage of women who disagree with all of the five specified reasons given for wife beating increases from 76% among those who do not participate in any of the three specified decisions to 82% among those who participate in all three decisions. Women who do not agree with any reason justifying wife beating (61%) are more likely to participate in all three decisions than women who agree with one or more reasons (52%-59%).

Tables 12.10 to **12.13** show how women's contraceptive use, mean ideal number of children, unmet need for family planning, and reproductive health care vary by the two empowerment indices. A woman's ability to control her fertility and use a method of contraception is likely to be affected by her sense of empowerment and her own belief in her ability to control her sexual life and fertility. Sixty-four percent of women who participate in all three of the three specified decisions use contraceptives, as compared with 54% of women who do not participate in any of the decisions (**Table 12.10**). Unmet need for spacing decreases greatly as women's decision-making power increases, from 11% among women who do not participate in any of the three decisions to 4% among women who participate in all of the decisions (**Table 12.11**).

Women's access to antenatal care, postnatal care, and delivery assistance from a medically trained provider decreases as their agreement with reasons for which wife beating is justified increases (**Table 12.12**). For instance, 54% of women who do not justify wife beating for any reason received a postnatal check during the first 2 days after their most recent birth, as compared with 33% of women who justify wife beating for three to four reasons.

Although differences are minimal, child mortality is another demographic indicator that varies by women's empowerment. For example, under-5 mortality declines from 48 deaths per 1,000 live births in the 5 years preceding the survey among women who do not participate in any of the three decisions to 44 deaths per 1,000 live births among women who participate in one or more decisions (**Table 12.13**).

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Table 12.1 Employment and cash earnings of currently married women

Percentage of currently married women age 15-49 who were employed at any time in the past 12 months and percent distribution of currently married women employed in the past 12 months by type of earnings, according to age, Bangladesh DHS 2017-18

	Among currei wom	,	Percent distribu		married women e by type of earnings		past 12 months,		
Age	Percentage employed in past 12 months	Number of employed women	Cash only	Cash and in- kind	In-kind only	Not paid	Missing/don't know	Total	Number of women
15-19	26.1	2,006	61.0	4.8	0.7	33.3	0.2	100.0	525
20-24	40.3	3,435	75.5	6.1	0.6	17.7	0.2	100.0	1,383
25-29	49.2	3,445	79.3	6.7	0.7	13.1	0.1	100.0	1,695
30-34	55.5	3,308	75.9	8.4	0.5	15.1	0.1	100.0	1,836
35-39	57.5	2,699	75.7	8.3	1.0	15.0	0.1	100.0	1,552
40-44	59.5	2,109	76.7	7.6	0.5	15.1	0.1	100.0	1,254
45-49	57.1	1,983	74.1	7.8	0.5	17.5	0.2	100.0	1,131
Total	49.4	18,984	75.5	7.3	0.7	16.4	0.1	100.0	9,376

Table 12.2.1 Control over women's cash earnings

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how the wife's cash earnings are used, according to background characteristics, Bangladesh DHS 2017-18

	Person who	decides how the w	ife's cash earnir	ngs are used:		Number of
Background characteristic	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	employed women with cash earnings
Age						
15-19	34.3	49.6	15.0	1.2	100.0	345
20-24	34.3	56.2	9.0	0.5	100.0	1,128
25-29	33.8	58.9	7.1	0.2	100.0	1,459
30-34	31.8	61.2	6.9	0.0	100.0	1,547
35-39	31.6	61.9	6.5	0.0	100.0	1,303
40-44	30.0	62.0	7.7	0.3	100.0	1,057
45-49	31.8	59.4	8.6	0.0	100.0	926
Number of living children						
0	36.9	52.4	10.3	0.4	100.0	496
1-2	32.6	59.6	7.5	0.2	100.0	4,004
3-4	31.7	60.4	7.7	0.1	100.0	2,660
5+	30.1	60.9	9.0	0.0	100.0	604
Residence						
Urban	35.0	58.4	6.4	0.1	100.0	1,951
Rural	31.5	59.9	8.3	0.2	100.0	5,813
Division						
Barishal	44.1	46.3	9.3	0.1	100.0	453
Chattogram	43.0	49.7	7.2	0.1	100.0	1,023
Dhaka	34.0	57.6	8.1	0.2	100.0	1,617
Khulna	34.4	58.0	7.4	0.2	100.0	1,073
Mymensingh	29.6	64.2	6.1	0.1	100.0	729
Rajshahi	30.2	63.5	6.0	0.2	100.0	1,301
Rangpur	20.2	69.0	10.6	0.2	100.0	1,290
Sylhet	30.8	60.2	8.3	0.7	100.0	278
Education						
No education	26.0	64.1	9.7	0.2	100.0	1,548
Primary incomplete	30.4	62.0	7.2	0.3	100.0	1,950
Primary complete ¹	32.6	59.0	8.4	0.1	100.0	796
Secondary incomplete	34.1	57.6	8.0	0.1	100.0	2,453
Secondary complete or higher ²	41.6	52.9	5.4	0.2	100.0	1,018
Wealth quintile						
Lowest	24.8	65.8	9.2	0.1	100.0	1,852
Second	29.2	60.8	9.8	0.1	100.0	1,794
Middle	34.6	57.6	7.5	0.3	100.0	1,558
Fourth	37.3	56.9	5.6	0.1	100.0	1,498
Highest	40.7	53.0	5.7	0.4	100.0	1,061
Total	32.4	59.5	7.8	0.2	100.0	7,764

¹ Primary complete is defined as completing grade 5.

² Secondary complete is defined as completing grade 10.

Table 12.2.2 Control over men's cash earnings

Percent distribution of currently married women age 15-49 whose husbands receive cash earnings by person who decides how husband's cash earnings are used, according to background characteristics, Bangladesh DHS 2017-18

	Person who d	ecides how husba	and's cash earn	ings are used:		
Background characteristic	Mainly wife	Husband and wife jointly	Mainly husband	Other	Total	Number
Age						
15-19	1.8	45.5	33.8	18.9	100.0	1,979
20-24	2.3	60.4	29.0	8.4	100.0	3,401
25-29	4.3	66.8	25.4	3.5	100.0	3,422
30-34	5.0	71.4	22.2	1.4	100.0	3,287
35-39	5.3	70.9	23.2	0.5	100.0	2,663
40-44	4.6	73.2	21.8	0.3	100.0	2,034
45-49	5.6	68.8	24.8	0.7	100.0	1,860
Number of living children						
0	1.8	49.8	32.7	15.7	100.0	1,937
1-2	3.8	65.9	25.3	5.0	100.0	10,071
3-4	5.4	70.0	23.7	0.9	100.0	5,489
5+	4.2	70.0	25.6	0.3	100.0	1,148
Residence						
Urban	5.2	66.2	25.2	3.3	100.0	5,264
Rural	3.7	65.4	25.8	5.1	100.0	13,381
Division						
Barishal	5.1	60.7	30.6	3.5	100.0	1,034
Chattogram	6.2	60.9	26.3	6.5	100.0	3,335
Dhaka	5.0	65.9	25.3	3.8	100.0	4,768
Khulna	2.9	64.9	27.9	4.4	100.0	2,178
Mymensingh	2.4	72.5	21.1	4.0	100.0	1,454
Rajshahi	3.4	68.7	24.0	3.9	100.0	2,610
Rangpur	1.8	70.8	23.4	4.0	100.0	2,216
Sylhet	3.6	58.6	30.4	7.4	100.0	1,051
Education						
No education	4.7	68.1	26.4	0.7	100.0	2,863
Primary incomplete	4.4	68.7	24.0	2.9	100.0	3,873
Primary complete ¹	4.3	69.0	23.4	3.3	100.0	1,924
Secondary incomplete	4.2	62.8	26.4	6.5	100.0	6,773
Secondary complete or higher ²	2.8	63.8	26.7	6.8	100.0	3,211
Wealth quintile						
Lowest	2.4	71.1	22.9	3.5	100.0	3,414
Second	3.7	66.1	26.1	4.1	100.0	3,686
Middle	4.5	64.2	25.9	5.4	100.0	3,788
Fourth	5.0	62.4	27.5	5.1	100.0	3,907
Highest	4.8	65.1	25.5	4.6	100.0	3,850
Total	4.1	65.7	25.6	4.6	100.0	18,646

¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 12.3 Ownership and use of NID cards, bank accounts, and mobile phones

Percentage of women age 15-49 who have an NID card, use an account in a bank or other financial institution, and own a mobile phone, and among women who own a mobile phone, percentage who use it for financial transactions, according to background characteristics, Bangladesh DHS 2017-18

Background	Have NID card	Have and use a bank account	Own a mobile phone	Number of women	Use mobile phone for financial transactions	Number of women who own a mobile phone
Age						1
15-19	7.9	2.6	50.1	2,063	8.8	1,034
20-24	46.1	8.1	64.8	3,556	12.8	2,303
25-29	88.8	14.6	68.6	3,579	16.1	2,303
30-34	97.9	15.7	67.5	3,470	16.9	2,341
35-39	98.7	16.1	59.3	2,879	16.5	1,706
40-44	99.7	14.3	52.1	2,296	15.0	1,197
45-49	99.3	12.2	46.9	2,285	10.7	1,072
Residence				,		,-
Urban	78.2	17.5	69.9	5.729	14.3	4,007
Rural	78.4	10.3	56.3	14,398	14.5	8,102
		1010	0010	1,000		0,102
Division Barishal	78.6	12.2	63.3	4 4 9 5	21.8	712
	78.6	12.2	63.3 70.2	1,125 3,622	10.6	
Chattogram Dhaka	75.8 77.6	15.1	69.2	3,622 5,123	10.6	2,541 3,545
Khulna	78.3	12.6	55.1	2,336	14.4	3,545 1,288
Mymensingh	76.8	7.5	53.5	1,546	12.7	828
Rajshahi	80.5	7.5 11.0	53.5 50.8	2,802	12.7	828 1,424
	81.1	6.9	46.6	2,380	15.8	1,424
Rangpur	81.5	0.9 11.4	46.6 55.6	2,380	7.1	663
Sylhet	61.5	11.4	55.6	1,192	7.1	003
Education	05.4	5.0	07.5	0.000		4.050
No education	95.1	5.6	37.5	3,333	9.6	1,250
Primary incomplete	86.2	8.2	49.0	4,250	12.9	2,083
Primary complete ¹	81.7	10.6	59.2	2,040	13.0	1,208
Secondary incomplete	70.8	12.4	65.6	7,135	14.0	4,682
Secondary complete or higher ²	66.0	24.8	85.6	3,369	19.0	2,885
Wealth quintile						
Lowest	79.6	2.3	39.1	3,743	11.3	1,465
Second	77.9	4.9	48.1	3,957	13.8	1,902
Middle	77.7	11.8	59.8	4,059	16.2	2,426
Fourth	76.6	13.7	67.5	4,184	13.9	2,823
Highest	80.2	27.4	83.5	4,184	15.4	3,493
Total	78.4	12.3	60.2	20,127	14.5	12,109

¹ Primary complete is defined as completing grade 5.
 ² Secondary complete is defined as completing grade 10.

Table 12.4 Participation in decision making

Percent distribution of currently married women age 15-49 by person who usually makes decisions about various issues, Bangladesh DHS 2017-18

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Total	Number of women
Own health care	9.7	66.7	19.0	4.0	0.5	100.0	18,984
Major household purchases	4.9	66.9	18.0	9.1	1.1	100.0	18,984
Visits to her family or relatives	8.4	66.1	18.7	6.1	0.7	100.0	18,984

Table 12.5 Women's participation in decision making by background characteristics

Percentage of currently married women age 15-49 who usually make specific decisions either by themselves or jointly with their husband, by background characteristics, Bangladesh DHS 2017-18

	Specific decisions					
Background characteristic	Woman's own health care	Making major household purchases	Visits to her family or relatives	All three decisions	None of the three decisions	Number of women
Age		-				
15-19	57.0	43.3	48.7	32.4	30.9	2,006
20-24	71.8	63.5	67.4	51.8	16.2	3,435
25-29	78.5	74.0	76.3	61.2	10.0	3,445
30-34	81.7	78.5	81.4	66.3	6.7	3,308
35-39	82.4	79.9	81.1	67.5	7.8	2,699
40-44	81.7	81.3	82.0	67.6	6.7	2,109
45-49	78.1	78.7	81.2	65.4	8.4	1,983
Employment (past 12 months)						
Not employed	73.1	66.3	69.8	53.7	14.7	9,608
Employed for cash	81.9	79.9	81.5	67.9	7.4	7,764
Employed not for cash	69.9	65.0	68.7	52.1	17.2	1,600
Number of living children						
0	61.6	49.0	55.6	38.0	25.8	1,979
1-2	77.2	71.6	74.6	59.7	11.7	10,196
3-4	79.9	79.0	80.1	65.4	8.2	5,609
5+	78.2	76.6	78.8	63.6	8.5	1,201
Residence						
Urban	80.4	76.2	78.7	65.7	9.8	5,378
Rural	74.9	70.0	72.8	56.9	12.7	13,607
Division						
Barishal	72.5	70.0	71.2	54.7	13.2	1,056
Chattogram	75.6	69.5	73.2	58.4	13.4	3,414
Dhaka	79.0	72.6	75.0	61.3	10.6	4,864
Khulna	76.6	72.1	74.5	58.7	11.9	2,205
Mymensingh	80.5	78.1	80.1	68.4	10.5	1,468
Rajshahi	77.0	72.5	74.3	59.8	11.6	2,645
Rangpur	75.8	73.9	76.6	58.6	10.3	2,248
Sylhet	65.7	61.5	68.5	48.2	18.0	1,085
Education						
No education	77.9	77.8	78.6	63.8	9.3	2,947
Primary incomplete	77.3	75.0	76.1	61.9	11.2	3,949
Primary complete ¹	78.1	73.4	76.3	62.6	10.5	1,955
Secondary incomplete	74.7	68.3	71.9	55.8	13.6	6,864
Secondary complete or higher ²	76.8	68.8	73.3	58.0	12.3	3,269
Wealth quintile						
Lowest	77.4	75.1	76.0	61.7	10.6	3,473
Second	75.1	71.4	74.0	57.6	12.2	3,730
Middle	74.5	70.2	72.0	57.0	13.2	3,846
Fourth	76.4	69.4	72.9	57.6	12.4	3,985
Highest	78.9	73.1	77.7	63.0	11.1	3,951
Total	76.4	71.8	74.5	59.4	11.9	18,984

Note: Total includes 12 women with missing information on employment status in the past 12 months. ¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 12.6 Attitude toward wife beating

Percentage of ever-married women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Bangladesh DHS 2017-18

		Husband is justif	ied in hitting or beatir	ng his wife if she:	Husband is justified in hitting or beating his wife if she:					
Background characteristic	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him	agree with at least one specified reason	Number of women			
Age										
15-19	0.6	13.9	7.6	9.8	2.7	19.8	2,063			
20-24	0.9	11.6	6.2	9.2	2.7	17.2	3,556			
25-29	0.8	12.6	5.6	9.1	1.8	19.1	3,579			
30-34	1.2	13.2	8.7	9.1	3.1	20.4	3,470			
35-39	1.7	15.4	9.1	10.4	4.0	22.3	2,879			
40-44	1.2	14.5	8.6	10.6	3.2	20.8	2,296			
45-49	1.9	16.8	9.3	11.0	3.1	22.7	2,285			
Employment (past 12 months)										
Not employed	1.4	12.9	7.5	9.3	2.9	19.4	10,027			
Employed for cash	0.9	14.4	7.6	9.9	2.8	20.4	8,425			
Employed not for							, -			
cash	1.3	15.3	9.8	11.9	3.2	22.5	1,661			
Number of living children										
	0.0	40.0	0.0	0.4	0.4	40.7	0.400			
0	0.8	10.8	6.6	8.4	2.1	16.7	2,138			
1-2	0.9	12.5	6.9	9.1	2.5	18.7	10,779			
3-4	1.5	16.0	9.3	10.8	3.5	22.7	5,916			
5+	2.1	18.7	9.7	13.3	4.3	25.7	1,294			
Marital status										
Married	1.1	13.8	7.7	9.9	2.8	20.3	18,984			
Divorced/separated/										
widowed	2.0	13.1	7.5	8.4	3.6	17.4	1,143			
Residence										
Urban	0.9	10.7	5.6	8.5	1.8	16.7	5,729			
Rural	1.3	15.0	8.6	10.3	3.3	21.5	14,398			
	1.0	10.0	0.0	10.0	0.0	21.0	11,000			
Division Barishal	2.3	20.3	14.2	13.7	4.0	26.6	1,125			
Chattogram	1.4	14.0	6.5	8.7	3.1	20.0	3,622			
Dhaka	0.9	11.4	6.6	9.2	2.4	18.7	5,123			
Khulna	1.2	16.0	8.7	8.9	2.8	20.9	2,336			
Mymensingh	1.2	12.2	8.0	10.8	3.0	18.6	1,546			
Rajshahi	0.9	15.6	8.5	9.7	2.9	21.8	2,802			
Rangpur	1.0	12.3	7.2	10.8	3.0	19.5	2,380			
Sylhet	1.4	12.9	7.1	10.3	3.1	18.4	1,192			
Education										
No education	2.8	18.5	10.9	12.9	5.0	25.7	3,333			
	2.0 1.4	17.2	9.5	12.9	3.7	23.7				
Primary incomplete							4,250			
Primary complete ¹ Secondary	1.2	15.7	9.1	11.2	3.6	22.9	2,040			
incomplete Secondary complete	0.7	12.4	7.0	9.6	2.1	19.1	7,135			
or higher ²	0.4	6.3	3.1	4.2	0.9	9.8	3,369			
Ū	0.1	0.0	0.1		0.0	0.0	0,000			
Wealth quintile Lowest	1.6	17.7	10.7	12.7	3.9	24.6	3,743			
Second	1.7	15.1	9.4	11.1	3.4	22.4	3,957			
Middle	1.0	14.3	8.1	9.8	2.9	20.9	4,059			
Fourth	1.1	13.0	6.3	9.4	2.7	19.3	4,184			
Highest	0.6	9.0	4.5	6.3	1.6	14.0	4,184			
Total	1.2	13.7	7.7	9.8	2.9	20.1	20,127			

Note: Total includes 14 women with missing information on employment status in the past 12 months. ¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 12.7 Attitudes toward negotiating safer sexual relations with husband

Percentage of ever-married women age 15-49 who believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows that he has sexual intercourse with other women, and percentage who believe that a woman is justified in asking that they use a condom if she knows that her husband has a sexually transmitted infection (STI), according to background characteristics, Bangladesh DHS 2017-18

Background characteristic	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of women
Age			
15-24	81.1	96.0	5,619
15-19	81.0	95.0	2,063
20-24	81.2	96.6	3,556
25-29	80.3	96.9	3,579
30-39	79.4	95.9	6,349
40-49	76.8	93.8	4,581
Marital status			
Married	79.6	95.9	18,984
Divorced/separated/widowed	76.7	91.7	1,143
Residence			
Urban	82.2	96.7	5,729
Rural	78.4	95.2	14,398
Division			
Barishal	71.9	96.0	1,125
Chattogram	76.9	95.0	3,622
Dhaka	79.6	95.1	5,123
Khulna	79.4	97.3	2,336
Mymensingh	90.7	98.3	1,546
Rajshahi	83.4	95.2	2,802
Rangpur	80.4	94.8	2,380
Sylhet	68.0	94.9	1,192
Education			
No education	75.2	92.3	3,333
Primary incomplete	79.9	94.2	4,250
Primary complete ¹	78.2	96.7	2,040
Secondary incomplete	80.0	96.5	7,135
Secondary complete or higher ²	82.9	98.1	3,369
Wealth quintile			
Lowest	79.8	94.5	3,743
Second	79.5	95.3	3,957
Middle	79.1	95.5	4,059
Fourth	77.3	95.5	4,184
Highest	81.6	97.2	4,184
Total	79.5	95.6	20,127

Primary complete is defined as completing grade 5.
 ² Secondary complete is defined as completing grade 10.

Table 12.8 Ability to negotiate sexual relations with husband

Percentage of currently married women age 15-49 who can say no to their husband if they do not want to have sexual intercourse, and percentage who can ask their husband to use a condom, according to background characteristics, Bangladesh DHS 2017-18

Background characteristic	Percentage who can say no to their husband if they do not want to have sexual intercourse	Percentage who can ask their husband to use a condom	Number of currently married women
Age			
15-24	87.3	84.7	5,441
15-19	85.9	82.8	2,006
20-24	88.2	85.9	3,435
25-29	88.3	85.8	3,445
30-39	85.5	79.5	6,007
40-49	83.4	69.5	4,091
Residence			
Urban	88.1	84.9	5,378
Rural	85.3	78.1	13,607
Division			
Barishal	86.3	81.3	1,056
Chattogram	86.3	77.1	3,414
Dhaka	88.4	83.3	4,864
Khulna	84.0	79.7	2,205
Mymensingh	89.2	81.0	1,468
Rajshahi	82.3	80.0	2,645
Rangpur	85.1	77.9	2,248
Sylhet	85.8	76.7	1,085
Education			
No education	80.1	64.6	2,947
Primary incomplete	83.6	73.8	3,949
Primary complete ¹	84.3	77.9	1,955
Secondary incomplete	87.4	84.8	6,864
Secondary complete or higher ²	92.9	92.4	3,269
Wealth quintile			
Lowest	82.9	73.3	3,473
Second	85.1	76.8	3,730
Middle	86.0	78.5	3,846
Fourth	86.1	82.1	3,985
Highest	89.9	88.2	3,951
Fotal	86.1	80.0	18,984

¹ Primary complete is defined as completing grade 5.
 ² Secondary complete is defined as completing grade 10.

Table 12.9 Indicators of women's empowerment

Percentage of currently married women age 15-49 who participate in all decision making and percentage who disagree with all of the reasons justifying wife beating, by value on each of the indicators of women's empowerment, Bangladesh DHS 2017-18

Empowerment indicator	Percentage who participate in all decision making	Percentage who disagree with all of the reasons justifying wife beating	Number of currently married women	
Number of decisions in which women				
participate ¹				
0	na	75.9	2,263	
1-2	na	77.5	5,451	
3	na	81.6	11,270	
Number of reasons for which wife beating is justified ²				
0	60.7	na	15,135	
1-2	54.4	na	3,093	
3-4	51.6	na	680	
5	58.6	na	77	

na = Not applicable ¹ See Table 12.5 for the list of decisions.

² See Table 12.6 for the list of reasons.

Table 12.10 Current use of contraception by women's empowerment

Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indicators of women's status, Bangladesh DHS 2017-18

				Modern	methods					
Empowerment indicator	Any method	Any modern method ¹	Female sterilization	Male sterilization	Temporary modern female methods ²	Male condom	Any traditional method	Not currently using	Total	Number of women
Number of decisions in which women participate ³										
0	54.1	46.9	3.3	0.4	35.8	7.4	7.2	45.9	100.0	2,263
1-2	60.4	50.8	4.5	0.8	39.2	6.3	9.5	39.6	100.0	5,451
3	64.1	53.4	5.3	1.3	39.2	7.5	10.7	35.9	100.0	11,270
Number of reasons for which wife beating is justified ⁴										
0	61.9	51.9	4.8	0.9	38.4	7.7	10.0	38.1	100.0	15,135
1-2	60.9	51.3	5.0	1.4	39.5	5.3	9.6	39.1	100.0	3,093
3-4	65.7	54.8	4.1	2.2	43.6	4.9	10.9	34.3	100.0	680
5	61.9	56.2	3.8	1.6	47.4	3.4	5.7	38.1	100.0	77
Total	61.9	51.9	4.8	1.1	38.8	7.2	10.0	38.1	100.0	18,984

Note: If more than one method is used, only the most effective method is considered in this tabulation. ¹ Female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhea method (LAM), and other modern methods ² Pill, IUD, injectables, implants, female condom, emergency contraception, standard days method, lactational amenorrhea method, and other modern method the modern method (LAM) is a standard days method.

methods

³ See Table 12.5 for the list of decisions.

⁴ See Table 12.6 for the list of reasons.

Table 12.11 Ideal number of children and unmet need for family planning by women's empowerment

Mean ideal number of children for ever-married women age 15-49 and percentage of currently married women age 15-49 with an unmet need for family planning, by indicators of women's empowerment, Bangladesh DHS 2017-18

	Mean ideal number of	Number of ever-married	Percentage of currently married women with an unmet need for family planning ²			Number of currently
Empowerment indicator	children ¹	women	For spacing	For limiting	Total	married women
Number of decisions in which women participate ³						
0	2.2	2,250	10.5	4.3	14.8	2,263
1-2	2.3	5,409	6.6	5.6	12.2	5,451
3	2.3	11,207	3.8	7.6	11.3	11,270
Number of reasons for which wife beating is justified ⁴						
0	2.3	15,967	5.4	6.6	11.9	15,135
1-2	2.3	3,224	5.8	6.7	12.6	3,093
3-4	2.4	719	4.3	6.8	11.1	680
5	2.5	85	4.2	4.0	8.2	77
Total	2.3	19,996	5.4	6.6	12.0	18,984

¹ Mean excludes respondents who gave non-numeric responses.

² Figures for unmet need correspond to the revised definition described in Bradley et al. 2012.

³ Restricted to currently married women. See Table 12.5 for the list of decisions.

⁴ See Table 12.6 for the list of reasons.

Table 12.12 Reproductive health care by women's empowerment

Percentage of ever-married women age 15-49 with a live birth in the 3 years preceding the survey who received antenatal care, delivery assistance, and postnatal care from health personnel for the most recent birth, according to indicators of women's empowerment, Bangladesh DHS 2017-18

Empowerment indicator	Percentage receiving antenatal care from a medically trained provider ¹	Percentage receiving delivery care from a medically trained provider ¹	Percentage with a postnatal check during the first 2 days after birth ²	Number of women with a child born in the last 3 years
Number of decisions in which women participate ³				
0	83.5	50.5	50.1	754
1-2	83.0	54.4	53.0	1,523
3	81.1	53.0	52.4	2,711
Number of reasons for which wife beating is justified ⁴				
0	82.6	54.6	53.7	4,140
1-2	80.5	47.9	47.8	744
3-4	70.2	33.4	33.2	147
5	*	*	*	21
Total	81.9	52.9	52.2	5,051

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

¹ Medically trained provider includes doctor, nurse, midwife, paramedic, family welfare visitor, community skilled birth attendant, and sub-assistant community medical officer. ² Includes women who received a postnatal checkup from a doctor, nurse, midwife, paramedic, family welfare visitor,

community skilled birth attendant, or sub-assistant community medical officer in the first 2 days after the birth. Includes women who gave birth in a health facility and those who did not give birth in a health facility. ³ Restricted to currently married women. See Table 12.5 for the list of decisions.

⁴ See Table 12.6 for the list of reasons.

Table 12.13 Early childhood mortality rates by women's status

Infant, child, and under-5 mortality rates for the 5-year period preceding the survey, according to indicators of women's empowerment, Bangladesh DHS 2017-18

Empowerment indicator	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (₅q₀)
Number of decisions in which women participate ¹			
0	41	8	48
1-2	37	8	44
3	38	7	44
Number of reasons for which wife beating is justified ²			
0	39	8	49
1-2	36	10	47
3-4	(28)	(4)	(32)
5	*	*	*

Note: Figures in parentheses are based on 250-499 unweighted person-years of exposure to the risk of death. An asterisk indicates that a rate is based on fewer than 250 unweighted person-years of exposure to the risk of death and has been suppressed. Restricted to currently married women. See Table 12.5 for the list of decisions.

² See Table 12.6 for the list of reasons.

Key Findings

- Raised blood pressure or hypertension: More than one in four adults (age 18 and older) are suffering from raised blood pressure. In general, the prevalence of hypertension increases as age and body mass index (BMI) increase.
- Awareness of hypertension: Half of hypertensive women and two-thirds of hypertensive men are unaware of their elevated blood pressure level. Only 15% of women and 9% of men are aware of their condition, report taking prescribed medication, and have their blood pressure under control. However, 28% of women and 20% of men are aware of their condition and taking prescribed medicine but have been unsuccessful in controlling their elevated blood pressure.
- Trends in hypertension: Between 2011 and 2017-18, the prevalence of hypertension increased notably among both women (from 32% to 45%) and men (from 20% to 34%) age 35 and older.
- Raised blood glucose/diabetes: 1 in 10 adults (age 18 and older) have raised blood glucose. The prevalence is higher in urban areas, and it increases steeply as age and BMI increase.
- Awareness of diabetes: 6 in 10 women and men age 18 and older with diabetes are unaware of their elevated blood glucose level. Though 25% of women and 22% of men are aware of their condition and taking prescribed medicine, they do not have their blood glucose under control.
- Trends in diabetes: From 2011 to 2017-18, the prevalence of diabetes increased among both women (from 12% to 14%) and men (from 11% to 14%) age 35 and older.

oncommunicable diseases (NCDs) are a significant and growing health burden worldwide. It creates a major public health challenge that threatens to destabilize social and economic development around the world. The NCDs are responsible for more than three in five deaths worldwide and more than half of the global disease burden (KFF 2019). Contrary to the Millennium Development Goals (MDGs), the Sustainable Development Goals (SDGs) included a specific target for NCDs and a number of associated targets (WHO 2018a). The causal factor for NCD epidemics is the increase in lifestyle-related risk factors such as unhealthy food habits, physical inactivity, high body mass indexes, and substance abuse, which operate through intermediate risk factors such as high blood pressure and elevated blood glucose and plasma lipid levels. These are the most prevalent NCD risk factors around

the world. Early identification of high blood pressure and elevated plasma lipid and blood glucose levels can reduce the risk of adult mortality due to NCDs (CDC 2009).

A recent national study on NCD risk factors in Bangladesh revealed that 97% of the population age 18-69 had at least one risk factor: raised blood pressure, raised plasma blood glucose, high body mass index (BMI), alcohol consumption, tobacco use, use of salt, low intake of fruits and vegetables, or inadequate physical activity (WHO 2018b). To meet this health challenge, the government of Bangladesh has identified NCDs as a new and continuing challenge and has taken steps to prioritize expansion of services related to NCD control activities. The current sector-wide program, the 4th Health, Population and Nutrition Sector Program (HPNSP) 2017-2022, includes a component focusing on prevention, control, and management of NCDs in Bangladesh.

The 2017-18 BDHS is the second Bangladesh DHS survey to collect blood pressure and fasting blood glucose biomarker measurements. Prior to this, in 2011, the BDHS collected similar information among a subsample of women and men age 35 and older residing in one-third of the households selected for the survey. In the 2017-18 BDHS, biomarkers and relevant information were collected from all women and men age 18 and older in one-fourth of the households selected for the survey. The biomarkers were collected to provide relevant national information on the prevalence of raised blood pressure (i.e., hypertension) and raised blood glucose (i.e., diabetes). Information on management of hypertension and diabetes was also collected.

13.1 COVERAGE OF TESTING FOR BLOOD PRESSURE AND BLOOD GLUCOSE MEASUREMENT

Table 13.1 shows that 8,013 women and 6,691 men age 18 and older were eligible for blood pressure and blood glucose measurements. Among these individuals, 93% of women and 85% of men had their blood pressure measured and 87% of women and 79% of men had their blood glucose tested.

Raised blood pressure or hypertension

Individuals were classified as having hypertension if, at the time of the survey, they had an average systolic blood pressure (SBP) level of 140 mmHg or above, they had an average diastolic blood pressure (DBP) level of 90 mmHg or above, or they were currently taking antihypertensive medication.

Sample: Women and men age 18 and older with valid blood pressure measurements

13.2 RAISED BLOOD PRESSURE OR HYPERTENSION

Blood pressure rises and falls throughout the day. When blood pressure stays elevated over time, it is called high blood pressure. The medical term for high blood pressure is hypertension. Raised or high blood pressure is a risk factor for developing coronary heart disease, stroke, and kidney disease.

Three measurements of systolic and diastolic blood pressure (measured in millimeters of mercury [mmHg]) were taken during the survey interview, with an interval of at least 5 minutes between measurements, using a digital oscillometric blood pressure measuring device with automatic upper-arm inflation and an automatic pressure release. The average of the second and third measurements was used to classify individuals with respect to hypertension. Respondents whose blood pressure fell into two different categories based on their average systolic and average diastolic levels were classified according to the highest blood pressure category in which they fell on either of the two measures. If the third blood pressure measurement was missing, the second measurement was considered the average.

Elevated blood pressure was classified as mild, moderate, or severe according to the cut-off points recommended by the World Health Organization (WHO/ISH 1999; Whitworth 2003).

Blood pressure category	Systolic (mmHg)	Diastolic (mmHg)	
Optimal	<120	AND	<80
Normal	120-129	OR	80-84
High normal	130-139	OR	85-89
Level of hypertension			
Grade 1, mildly elevated	140-159	OR	90-99
Grade 2, moderately elevated	160-179	OR	100-109
Grade 3, severely elevated	180+	OR	110+

For convenience of reporting and to allow an assessment of trends, the "normal" and "high normal" blood pressure categories, as well as the "Grade 2 (moderately elevated)" and "Grade 3 (severely elevated)" categories, are grouped together in **Tables 13.3.1** through **13.3.6** to match the corresponding categories in the 2011 BDHS report.¹

The blood pressure measurements taken in both the surveys were not intended to provide a medical diagnosis of the disease; rather, they provide a cross-sectional assessment of the prevalence of high blood pressure in the population at the time of the survey.

13.2.1 History of Blood Pressure Measurement

Table 13.2 shows that, overall, 75% of men and women age 18 and older had their blood pressure measured prior to the survey. Women are more likely than men to have had their blood pressure measured (83% versus 65%). In addition, adults age 35 and over are more likely than their younger counterparts age 18-34 to have had their blood pressure measured (80% versus 70%).

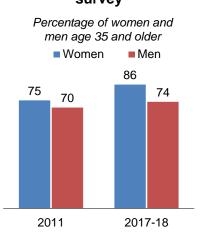
Trends: The proportion of women and men age 35 and older who had their blood pressure measured prior to the survey increased slightly from 2011 to 2017-18 (from 73% to 80%). The increase was more prevalent among women (from 75% to 86%) than men (from 70% to 74%) (**Figure 13.1**).

13.2.2 Prevalence of Hypertension

Table 13.3.1 shows that 28% of women age 18 and older have raised blood pressure (hypertension). The prevalence is 13% among younger women (age 18-34) and 45% among older women (age 35 and older). Sixteen percent of women age 18 and older have elevated blood pressure and are not taking medication.

Twenty-six percent of men age 18 and older are hypertensive (**Table 13.3.4**). The prevalence is 13% among men age 18-34 and 34% among men age 35 and older. Nineteen percent of men age 18 and older have elevated blood pressure and are not taking medication.

Figure 13.1 Trends in blood pressure measurement prior to the survey

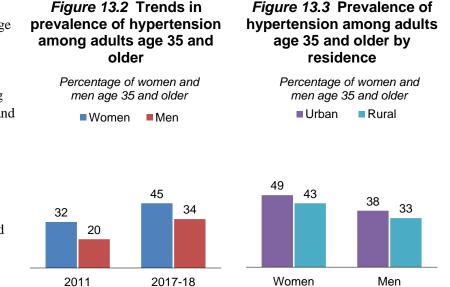


¹ In the 2011 BDHS, blood pressure measurements were classified using the Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure of the United States National Institutes of Health (NIH 2004).

Trends: The prevalence of hypertension among adults age 35 and older increased by 13 percentage points between 2011 and 2017-18. The increases were similar among women (from 32% to 45%) and men (from 20% to 34%) (**Figure 13.2**).²

Patterns by background characteristics

 Among adults age 35 and older, the prevalence of hypertension is higher in urban areas than in rural areas. Patterns are similar



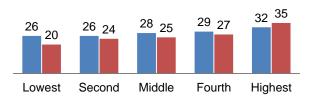
among women (49% versus 43%) and men (38% versus 33%) (**Table 13.3.3**, **Table 13.3.6**, and **Figure 13.3**).

- Across divisions, the percentage of women age 18 and older with hypertension ranges from 23% in Dhaka to 34% in Barishal (Table 13.3.1). Among men age 18 and older, the prevalence ranges from 21% in Mymensingh to 31% in Barishal (Table 13.3.4).
- Among women age 18 and older, those with no education are more likely to be hypertensive (43%) than those with a secondary education or higher (16%) (**Table 13.3.1**). No such pattern is observed among men age 18 and older (**Table 13.3.4**).
- Women age 18 and older in the two lowest wealth quintiles are less likely to be hypertensive (26%) than women in the highest quintile (32%). The same pattern is observed among men age 18 and older, and the difference is more pronounced (20% versus 35%) (Figure 13.4).

Figure 13.4 Prevalence of hypertension among adults age 18 and older by wealth quintiles

Percentage of women and men age 18 and older

■Women ■Men



² Age-adjusted values were calculated for the 2011 BDHS trend analysis.

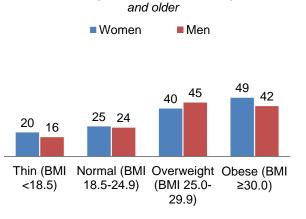
 The proportions of women and men age 18 and older with hypertension increase as BMI increases. For example, overweight and obese women (40% and 49%, respectively) are much more likely to be hypertensive than women with a normal BMI (25%). The pattern is similar among men (Figure 13.5).

13.2.3 Awareness, Medication, and Control of Hypertension

The first step for individuals to bring their blood pressure under control is to be aware of their condition. Data on levels of awareness and treatment status among hypertensive women and men are presented in **Figure 13.6**. The results show that over

Figure 13.5 Prevalence of hypertension among adults age 18 and older by BMI

Percentage of women and men age 18



half of hypertensive women are not aware that they have elevated blood pressure (51%). Only 15% of hypertensive women are aware of their condition, report taking medicine, and have their blood pressure controlled within the normal range. Another 28% of women are aware of their condition and taking medication but do not have their blood pressure controlled.

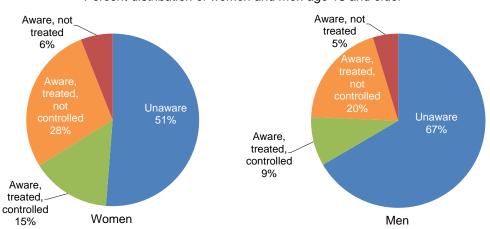


Figure 13.6 Awareness of hypertension and treatment status

Percent distribution of women and men age 18 and older

Two-thirds of hypertensive men are not aware that they have elevated blood pressure (67%). Nine percent of hypertensive men are aware of their condition, report taking medicine, and have their blood pressure controlled within the normal range. Another 20% of men are aware of their condition and taking medication but have been unsuccessful in controlling their elevated blood pressure.

13.3 DIABETES

Diabetes/raised blood glucose

Individuals were considered as having raised blood glucose or diabetes if they had a fasting blood glucose (FBG) equivalent level of 7 mmol/L or above at the time of the survey or reported currently taking prescribed medication for their high blood glucose or diabetes.

Sample: Women and men age 18 and older

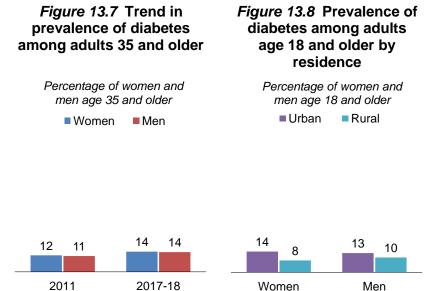
Diabetes has serious consequences for individuals and poses a large burden on health service systems, especially in developing countries such as Bangladesh (IDF 2019). For this report, blood glucose cut-offs

were taken from the World Health Organization classification scheme (WHO 2006b). A fasting plasma glucose value equal to or greater than 7.0 mmol/L is classified as diabetes.

The data in **Tables 13.5.1** through **13.5.6** are presented according to respondents' fasting plasma glucose equivalent (FPG) values. Respondents were asked not to eat or drink anything other than plain water for at least 8 hours prior to testing. The HemoCue Glucose 201 DM system with plasma conversion was used to test a drop of capillary blood obtained from consenting eligible respondents. The system automatically converted the fasting whole blood glucose measurements taken in the survey to fasting plasma glucose equivalent values. These estimates provide a cross-sectional assessment of FPG values in the surveyed population at the time of the BDHS interviews. The prevalence of raised FPG/diabetes does not represent a clinical diagnosis of diabetes because "FPG alone cannot be used to diagnose diabetes, as it fails to diagnose approximate 30% of cases of previously undiagnosed diabetes" (WHO 2006b). The diagnosis of diabetes is usually made when classic diabetes signs and symptoms are associated with abnormal blood glucose (Pippitt et al. 2016). In the survey setting, an individual's fasting plasma glucose equivalent was taken for 1 day only, and the value was recorded to provide information on the national burden associated with this important NCD.

13.3.1 History of Blood Glucose Measurement

Table 13.4 shows that, overall,only 24% of men and womenage 18 and older had theirblood glucose measured priorto the survey. Women are morelikely than men to have hadtheir blood glucose measured(26% versus 21%). Also, adultsage 35 and older are morelikely to have had their bloodglucose measured (31%) thantheir younger counterparts age18-34 (16%).



13.3.2 Prevalence of Diabetes

Table 13.5.1 shows that 10% of Bangladeshi women age 18 and older have diabetes. The prevalence is 5% among younger women (age 18-34) and 14% among older women (age 35 and older). Six percent of women age 18 and older have elevated plasma glucose levels and are not taking medication.

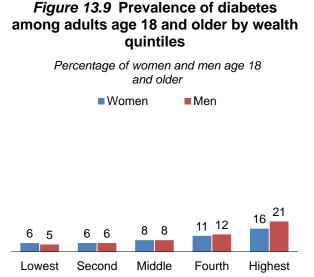
Eleven percent of men age 18 and older have diabetes (**Table 13.5.4**). The prevalence is 5% among men age 18-34 and 14% among men age 35 and older. Seven percent of men age 18 and older have elevated plasma glucose levels and are not taking medication.

Trends: In 2011, the BDHS collected biomarkers from men and women age 35 and older. **Figure 13.7** shows that the prevalence of diabetes increased slightly from 2011 to 2017-18 among both women (from 12% to 14%) and men (from 11% to 14%) in this age group.³

³ Age-adjusted values were calculated for the 2011 BDHS trend analysis.

Patterns by background characteristics

- Among those age 18 and older, the prevalence of diabetes is higher in urban areas than in rural areas among both women (14% versus 8%) and men (13% versus 10%) (**Figure 13.8**).
- Across divisions, the percentage of women age 18 and older with diabetes ranges from 5% in Rangpur to 13% in Dhaka (Table 13.5.1). Among men age 18 and older, the prevalence ranges from 6% in Rangpur to 16% in Dhaka (Table 13.5.4).
- Among women age 18 and older, those with no education are more likely to have diabetes (11%) than those with a secondary education or higher (8%) (Table 13.5.1). However, the reverse is true among men age 18 and older; 9% of men with no education have diabetes, as compared with 14% of men with a primary education and 13% of those with a secondary education or higher (Table 13.5.4).
- Women age 18 and older in the highest wealth quintile (16%) are more likely to have diabetes than women in the two lowest quintiles (6% each). The pattern is similar among men age 18 and older, and the difference is more pronounced; 21% of men in the highest wealth quintile have diabetes, compared with 5% of those in the lowest quintile (**Figure 13.9**).
- Among women and men age 18 and older, the prevalence of diabetes increases as body mass index increases. Overweight and obese adults are much more likely to have diabetes as those of normal weight (Table 13.5.1 and Table 13.5.4).



13.3.3 Awareness about and Treatment of Diabetes

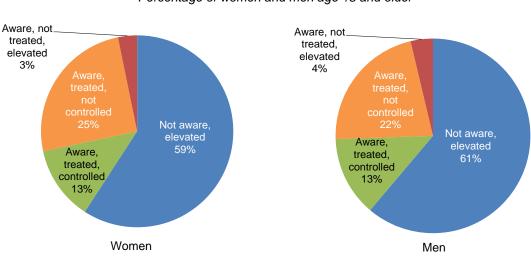


Figure 13.10 Awareness of diabetes and treatment status Percentage of women and men age 18 and older

Data on levels of awareness and treatment status among women and men age 18 and older with diabetes are presented in **Figure 13.10**. The results show that approximately 6 in 10 adults with diabetes (59% of

women and 61% of men) are not aware that they have elevated blood glucose. In addition, only 13% each of women and men with diabetes are aware of their condition, report taking prescribed medicine, and have their blood glucose within the normal range. Another 25% of women and 22% of men are aware of their condition and taking prescribed medicine but do not have their blood glucose under control.

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For more information on blood pressure and diabetes, see the following tables:

•	Table 13.1	Coverage of testing for blood pressure and fasting blood glucose measurement among women and men age 18 and older
•	Table 13.2	History of hypertension and actions taken to lower blood pressure
•	Table 13.3.1	Blood pressure levels and treatment status by background characteristics: Women age 18 and older
•	Table 13.3.2	Blood pressure levels and treatment status by background characteristics: Women age 18-34
•	Table 13.3.3	Blood pressure levels and treatment status by background characteristics: Women age 35 and older
•	Table 13.3.4	Blood pressure levels and treatment status by background characteristics: Men age 18 and older
•	Table 13.3.5	Blood pressure levels and treatment status by background characteristics: Men age 18-34
•	Table 13.3.6	Blood pressure levels and treatment status by background characteristics: Men age 35 and older
•	Table 13.4	History of diabetes and actions taken to lower blood sugar
•	Table 13.5.1	Fasting plasma glucose equivalent values and treatment status: Women age 18 and older
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•	Table 13.5.4	Fasting plasma glucose equivalent values and treatment status: Men age 18 and older
•	Table 13.5.5	Fasting plasma glucose equivalent values and treatment status: Men age 18-34
•	Table 13.5.6	Fasting plasma glucose equivalent values and treatment status: Men age 35 and older

Table 13.1 Coverage of testing for blood pressure and fasting blood glucose measurement among women and men age 18 and older

Percentage of women and men age 18 and older eligible for blood pressure and blood glucose measurement, by testing status, according to selected background characteristics (unweighted), Bangladesh DHS 2017-18

		Women		Men			
Background characteristic	Percentage measured for blood pressure	Percentage measured for fasting blood glucose	Number of women	Percentage measured for blood pressure	Percentage measured for fasting blood glucose	Number of men	
Age							
18-34	92.1	87.3	3,997	82.8	76.6	2,596	
18-19	90.1	85.0	659	83.8	77.4	376	
20-24	90.0	84.7	1,234	81.0	76.0	733	
25-29	92.8	87.3	1,097	81.9	75.2	766	
30-34	95.3	91.9	1,007	85.0	78.2	721	
35+	93.2	87.5	4,016	86.8	80.8	4,095	
35-39	94.8	89.3	826	87.5	82.9	811	
40-44	95.9	89.2	639	83.3	77.7	623	
45-49	95.3	89.6	656	83.1	76.7	579	
50-54	95.9	88.8	366	86.0	77.4	464	
55-59	93.2	86.4	442	89.9	84.9	378	
60-64	89.1	84.2	393	87.3	80.4	448	
65-69	88.8	85.7	224	90.1	84.2	272	
70+	87.0	82.1	470	90.4	84.8	520	
Residence							
Urban	90.6	83.3	2,934	82.2	75.6	2,577	
Rural	93.9	89.7	5,079	87.1	81.4	4,114	
Division			-,			,	
Barishal	93.0	87.3	845	84.8	78.0	696	
Chattogram	90.8	84.6	1,191	80.9	74.9	881	
Dhaka	87.9	78.7	1,146	78.3	69.6	1,009	
Khulna	94.9	91.0	1,039	88.4	83.4	911	
Mymensingh	94.2	88.3	899	87.8	80.9	745	
Rajshahi	95.2	91.7	992	88.1	83.3	843	
Rangpur	95.7	93.6	947	90.7	87.8	793	
Sylhet	91.0	85.6	954	84.9	77.7	813	
Education							
No education	92.9	87.8	2,130	86.3	79.6	1,477	
Primary incomplete	92.9 96.3	91.9	1,507	87.0	80.8	1,477	
Primary complete ¹	93.4	87.9	763	85.3	78.2	756	
Secondary incomplete	93.8	88.7	2,158	84.9	80.0	1,487	
Secondary complete or higher ²	93.8 86.5	79.6	1,455	83.2	77.3	1,467	
, , , ,	00.0	73.0	1,400	00.2	11.5	1,001	
Wealth quintile	05 F		4 500		70 7	4 0.57	
Lowest	95.5	91.4	1,520	84.8	79.7	1,257	
Second	95.8	90.9	1,458	89.7	83.7	1,206	
Middle	94.0	90.7	1,512	88.0	82.5	1,287	
Fourth	93.2	88.4	1,536	87.4	81.9	1,293	
Highest	86.7	78.3	1,987	78.5	70.7	1,648	
Total	92.7	87.4	8,013	85.2	79.2	6,691	

Note: Table is based on respondents who consented to blood pressure measurement and those who consented to fasting blood sugar measurement. ¹ Primary complete is defined as completing grade 5. ² Secondary complete is defined as completing grade 10.

Table 13.2 History of hypertension and actions taken to lower blood pressure

Percent distribution of women and men age 18 and older by history of hypertension (high blood pressure), and among those told they had high blood pressure or hypertension, percentage taking various actions to treat the illness, Bangladesh DHS 2017-18

		Women			Men		A	ll responde	ents
History of high blood pressure or hypertension and actions taken to treat hypertension	18-34	35+	Total	18-34	35+	Total	18-34	35+	Tota
Blood pressure measured									
Had blood pressure measured	80.7	85.9	83.3	50.7	73.8	65.1	69.8	80.0	75.4
Never had blood pressure measured	19.3	14.1	16.7	49.3	26.2	34.9	30.2	20.0	24.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents	3,689	3,669	7,359	2,118	3,499	5,616	5,807	7,168	12,975
Among those who had blood pressure measured, high blood pressure or hypertension diagnosed by a doctor or nurse Percentage who were told they had high blood									
pressure or hypertension by a doctor or nurse Percentage never told they had high blood pressure	7.3	29.0	18.4	6.4	17.8	14.4	7.0	23.9	16.9
or hypertension	92.7	70.9	81.5	93.6	82.2	85.6	92.9	76.0	83.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents	2,979	3,153	6,132	1,073	2,580	3,654	4,052	5,733	9,785
Among those told they had high blood pressure or hypertension Currently receiving prescribed medication to control									
blood pressure	56.4	84.4	79.1	57.2	83.0	79.6	56.6	83.9	79.2
Not currently receiving prescribed medication to									
control blood pressure	43.3	15.1	20.5	42.8	16.7	20.1	43.2	15.6	20.4
Missing	0.3	0.5	0.5	0.0	0.3	0.2	0.2	0.4	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents told they have high blood									
pressure or hypertension by a doctor or nurse	216	914	1,130	69	459	528	285	1,373	1,658

Table 13.3.1 Blood pressure levels and treatment status by background characteristics: Women age 18 and older

Among women age 18 and older, prevalence of raised blood pressure (hypertension), percent distribution of blood pressure values and treatment with antihypertensive medication, and percentage having normal blood pressure and currently taking antihypertensive medication, according to background characteristics, Bangladesh DHS 2017-18

		BI	ood pressure	e values and	l current trea	tment with a	antihypertens	sive medicat	tion			
			Noi	rmal			Elev	ated			Blood	
	Prevalence of raised	(SBP <1	imal 20 mmHg ⊲80 mmHg)	(SBP 120-	igh normal 139 mmHg -89 mmHg)	(Gra (SBP 140-	elevated ade 1) -159 mmHg I-99 mmHg)	severely (Grades (SBP 160	ately and y elevated s 2 and 3) + mmHg or)+ mmHg)		pressure less than SBP 140/ DBP 90 mmHg and currently	
Background characteristic	blood pressure (hyper- tension) ¹	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Total	taking antihyper- tensive medication	Number of women ²
Age												
18-34	12.5	0.6	57.0	1.2	30.6	0.8	7.4	0.7	1.8	100.0	1.8	3,685
18-19	4.6	0.4	70.1	0.5	25.3	0.0	3.4	0.0	0.3	100.0	1.0	605
20-24	7.9	0.5	64.0	0.8	28.1	0.2	5.2	0.1	1.1	100.0	1.3	1,112
25-29	14.1	0.8	52.7	0.9	33.2	0.8	8.1	1.2	2.2	100.0	1.7	1,019
30-34	21.0	0.6	44.9	2.3	34.1	2.1	11.8	1.4	2.9	100.0	2.9	950
35+	44.6	1.7	26.7	5.1	28.7	6.5	16.3	7.9	7.2	100.0	6.7	3,655
35-39	31.3	1.6	35.3	3.0	33.4	2.3	17.0	3.9	3.6	100.0	4.6	771
40-44	37.3	2.2	31.2	4.0	31.5	4.3	16.1	5.4	5.4	100.0	6.1	618
45-49	43.7	1.1	23.3	4.9	33.1	8.1	16.9	7.1	5.5	100.0	6.0	603
50-54	47.6	2.1	26.4	5.2	26.0	7.0	17.9	7.6	7.9	100.0	7.3	346
55-59	51.1	1.6	26.6	9.5	22.3	8.3	14.7	8.5	8.4	100.0	11.1	398
60-64	54.0	2.7	21.0	7.0	24.9	9.3	12.8	14.2	8.1	100.0	9.7	347
65-69	55.0	0.9	20.8	6.3	24.1	10.5	17.0	13.0	7.3	100.0	7.2	180
70+	61.0	0.8	16.0	4.1	23.0	9.7	17.0	12.4	17.0	100.0	4.9	394
Residence												
Urban	28.9	1.3	40.9	3.8	30.2	4.4	10.4	4.7	4.3	100.0	5.2	1,969
Rural	28.3	1.0	42.2	2.9	29.5	3.4	12.4	4.1	4.5	100.0	3.9	5,371
Division												
Barishal	34.2	1.5	38.0	3.8	27.8	5.1	14.2	5.4	4.2	100.0	5.3	410
Chattogram	31.3	1.9	38.8	4.1	29.9	3.2	12.9	4.7	4.4	100.0	6.0	1,357
Dhaka	23.3	0.9	48.8	3.2	27.9	3.4	8.2	4.0	3.7	100.0	4.1	1,734
Khulna	30.9	0.7	35.4	3.1	33.7	4.7	12.4	5.2	4.9	100.0	3.8	879
Mymensingh	25.9	1.6	44.6	3.5	29.5	3.0	11.5	3.1	3.3	100.0	5.0	605
Rajshahi	28.1	0.4	42.0	1.6	29.9	3.9	13.0	4.1	5.1	100.0	2.0	1,025
Rangpur	31.7	0.8	38.3	2.0	30.1	2.9	15.7	3.7	6.6	100.0	2.8	859
Sylhet	27.7	1.7	43.8	4.3	28.5	5.0	9.6	4.3	3.0	100.0	5.9	471
Education	40.6	1.0	00 F	2.0	20.0	FC	10.0	7.0	7.0	100.0	4.0	0.005
No education Primary incomplete	42.6 30.5	1.0 1.5	28.5 39.4	3.9 3.4	28.9 30.2	5.6 5.0	16.6 11.9	7.6 4.2	7.9 4.4	100.0 100.0	4.9 4.9	2,025 1,432
Primary incomplete ³	30.5 27.4	1.5	39.4 42.5	3.4 3.7	30.2 30.1	5.0 4.6	10.9	4.2 3.7	4.4 3.3	100.0	4.9 4.8	675
Secondary incomplete		1.1	42.5 49.2	3.7 2.4	30.1	4.6 1.8	9.7	3.7 2.7	3.3 2.7	100.0	4.8 3.4	2,075
Secondary complete	20.5	1.0	43.2	2.4	50.5	1.0	5.1	2.1	2.1	100.0	0.4	2,075
or higher ⁴	16.2	0.9	55.2	2.3	28.6	1.4	7.7	1.6	2.3	100.0	3.3	1,133
Wealth guintile												
Lowest	26.4	0.9	43.6	1.9	30.0	1.8	13.0	3.9	4.9	100.0	2.8	1,432
Second	26.4	0.9	44.3	2.4	29.3	2.9	12.4	3.1	4.7	100.0	3.3	1,437
Middle	28.4	1.7	39.9	2.4	31.8	4.3	12.4	4.0	3.7	100.0	4.3	1,472
Fourth	29.2	1.2	43.4	3.7	27.4	3.3	11.2	5.1	4.7	100.0	4.9	1,431
Highest	31.6	0.8	38.6	4.9	29.8	5.9	10.5	5.2	4.4	100.0	5.7	1,569

Continued...

Table 13.3.1—Continued

		Bl	ood pressure	e values and	l current trea	tment with a	antihypertens	sive medicat	ion			
			Nor	mal			Elev	ated			Blood	
	Prevalence of raised	(SBP <12	imal 20 mmHg :80 mmHg)	(SBP 120-	igh normal 139 mmHg -89 mmHg)	(Gra (SBP 140-	elevated ide 1) 159 mmHg -99 mmHg)	severely (Grades (SBP 160-	ttely and elevated 2 and 3) + mmHg or + mmHg)		pressure less than SBP 140/ DBP 90 mmHg and currently	
Background characteristic	blood pressure (hyper- tension) ¹	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Total	taking antihyper- tensive medication	Number of women ²
Nutritional status (body mass index ⁵)												
Thin (BMI <18.5) Normal (BMI 18.5-	19.7	0.7	58.2	1.2	22.1	2.1	8.9	2.6	4.1	100.0	2.0	1,074
24.9) Overweight (BMI 25.0-	24.9	1.0	44.4	2.6	30.7	2.8	10.6	3.7	4.2	100.0	3.6	3,828
29.9)	40.2	1.6	26.1	5.0	33.7	6.3	16.5	6.3	4.6	100.0	6.5	1,637
Obesé (BMI ≥30.0) Not eligible (pregnant	48.5	1.6	17.8	7.7	33.8	7.2	17.3	7.2	7.4	100.0	9.3	414
or recent birth)	6.9	0.6	77.4	0.7	15.8	0.2	3.0	0.6	1.8	100.0	1.3	294
Total	28.4	1.1	41.9	3.1	29.7	3.7	11.8	4.3	4.5	100.0	4.2	7,341

Note: The blood pressure measurements taken in the survey provide a cross-sectional assessment of the prevalence of blood pressure in the surveyed population at the time of the BDHS interviews; the prevalence of raised blood pressure does not represent a clinical diagnosis of hypertension. When a respondent's SBP and DBP fell into different categories, the respondent was grouped in the higher blood pressure classification. If blood pressure was measured three times, the average of the second and third measurements was used to classify individuals with respect to hypertension. If the third blood pressure measurement was missing, the second measurement was considered the average. If both the second and third measurements were missing, the first measurement was considered the average. Total includes 94 women with outof-range or missing data on nutritional status.

SBP = Systolic blood pressure, the degree of force when the heart is pumping (contracting)

DBP = Diastolic blood pressure, the degree of force when the heart is relaxed

¹ Individuals were classified as having raised blood pressure if, at the time of the survey, they had an average blood pressure level of ≥140 mmHg SBP or ≥90 mmHg DBP ² Includes pregnant women
 ³ Primary complete is defined as completing grade 5.
 ⁴ Secondary complete is defined as completing grade 10.
 ⁵ Body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²).

Table 13.3.2 Blood pressure levels and treatment status by background characteristics: Women age 18-34

Among women age 18-34, prevalence of raised blood pressure (hypertension), percent distribution of blood pressure values and treatment with antihypertensive medication, and percentage having normal blood pressure and currently taking antihypertensive medication, according to background characteristics, Bangladesh DHS 2017-18

		Bl	ood pressure	e values and	d current trea	tment with a	antihypertens	sive medicat	ion			
				mal				vated			Blood	
	Prevalence of raised	(SBP <1)	imal 20 mmHg ⊲80 mmHg)	(SBP 120-	igh normal -139 mmHg -89 mmHg)	(Gra (SBP 140-	elevated ade 1) -159 mmHg)-99 mmHg)	severely (Grades (SBP 160	tely and elevated 2 and 3) + mmHg or + mmHg)		pressure less than SBP 140/ DBP 90 mmHg and currently	
Background characteristic	blood pressure (hyper- tension) ¹	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Total	taking antihyper- tensive medication	Number of women ²
Age												
18-19 20-24 25-29	4.6 7.9 14.1	0.4 0.5 0.8	70.1 64.0 52.7	0.5 0.8 0.9	25.3 28.1 33.2	0.0 0.2 0.8	3.4 5.2 8.1	0.0 0.1 1.2	0.3 1.1 2.2	100.0 100.0 100.0	1.0 1.3 1.7	605 1,112 1,019
30-34	21.0	0.6	44.9	2.3	34.1	2.1	11.8	1.4	2.9	100.0	2.9	950
Residence Urban Rural	12.5 12.4	0.3 0.7	56.3 57.2	1.6 1.0	31.2 30.3	0.9 0.8	6.5 7.8	1.1 0.6	2.1 1.6	100.0 100.0	1.9 1.7	1,072 2,613
		0.11	02		0010	0.0		0.0				2,010
Division Barishal Chattogram	14.5 16.4	0.4 1.5	55.1 52.6	2.1 1.8	30.4 31.1	1.0 0.5	9.3 10.1	0.4 1.1	1.3 1.4	100.0 100.0	2.4 3.2	191 718
Dhaka	9.8	0.0	62.6	1.6	27.6	0.9	4.3	0.9	2.0	100.0	1.6	957
Khulna Mymensingh Rajshahi	11.7 9.1 12.6	0.8 0.6 0.2	53.7 58.1 58.7	1.3 0.7 0.3	34.6 32.8 28.7	1.7 0.1 0.8	6.0 6.0 8.8	0.3 0.5 0.5	1.6 1.1 1.9	100.0 100.0 100.0	2.1 1.4 0.6	392 281 504
Rangpur Sylhet	14.8 10.8	0.2 0.0 1.7	51.7 58.2	0.3 0.9	33.5 31.1	0.8 0.6 1.1	10.5 5.9	0.3 0.4 0.6	3.0 0.6	100.0 100.0 100.0	0.0 0.3 2.6	405 239
Education												
No education	16.0	0.2	53.4	0.0	30.6	1.1	10.3	0.9	3.4	100.0	0.2	239
Primary incomplete	13.5	0.6	52.7	1.2	33.8	1.9	7.2	0.4	2.1	100.0	1.9	579
Primary complete ³ Secondary incomplete Secondary complete	13.5 12.3	1.0 0.6	55.2 56.6	1.5 1.2	31.3 31.1	0.6 0.6	8.4 7.5	0.3 1.0	1.8 1.5	100.0 100.0	2.4 1.8	363 1,588
or higher ⁴	10.8	0.5	61.9	1.4	27.3	0.6	6.2	0.6	1.5	100.0	1.9	916
Wealth quintile												
Lowest Second	10.4 12.4	0.6 0.4	57.1 57.6	0.2 1.1	32.5 30.0	0.3 0.5	7.9 8.9	0.1 0.7	1.4 1.0	100.0 100.0	0.7 1.4	684 698
Middle	11.2	1.0	54.6	1.2	34.2	1.1	5.5	1.0	1.3	100.0	2.2	722
Fourth Highest	14.3 13.6	0.6 0.4	60.0 55.5	1.1 2.2	25.6 30.9	1.2 0.9	7.7 7.1	0.8 0.9	2.9 2.0	100.0 100.0	1.7 2.6	766 816
Nutritional status (body mass index ⁵)												
Thin (BMI <18.5) Normal (BMI 18.5-	5.8	0.1	74.0	0.3	20.2	0.4	3.7	0.4	1.0	100.0	0.5	494
24.9) Overweight (BMI 25.0-	9.8	0.4	58.1	0.7	32.1	0.5	6.3	0.6	1.4	100.0	1.1	1,985
29.9)	22.1	1.4	41.3	1.9	36.5	2.1	13.2	1.2	2.3	100.0	3.3	741
Obese (BMI ≥30.0) Not eligible (pregnant	29.7	0.6	26.9	6.8	43.4	1.5	12.7	1.6	6.3	100.0	7.5	168
or recent birth)	7.1	0.6	77.7	0.7	15.2	0.2	3.1	0.6	1.9	100.0	1.4	284
Total	12.5	0.6	57.0	1.2	30.6	0.8	7.4	0.7	1.8	100.0	1.8	3,685

Note: The blood pressure measurements taken in the survey provide a cross-sectional assessment of the prevalence of blood pressure in the surveyed population at the time of the BDHS interviews; the prevalence of raised blood pressure does not represent a clinical diagnosis of hypertension. When a respondent's SBP and DBP fell into different categories, the respondent was grouped in the higher blood pressure classification. If blood pressure was measured three times, the average of the second and third measurements was used to classify individuals with respect to hypertension. If the third blood pressure measurement was missing, the second measurement was considered the average. If both the second and third measurements were missing, the first measurement was considered the average. Total includes 13 women with missing information on nutritional status.

SBP = Systolic blood pressure, the degree of force when the heart is pumping (contracting)

DBP = Diastolic blood pressure, the degree of force when the heart is relaxed

¹ Individuals were classified as having raised blood pressure if, at the time of the survey, they had an average blood pressure level of ≥140 mmHg SBP or ≥90 mmHg DBP or they were currently taking antihypertensive medication. ² Includes pregnant women

³ Primary complete is defined as completing grade 5.

⁴ Secondary complete is defined as completing grade 10.

⁵ Body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²).

Table 13.3.3 Blood pressure levels and treatment status by background characteristics: Women age 35 and older

Among women age 35 and older, prevalence of raised blood pressure (hypertension), percent distribution of blood pressure values and treatment with antihypertensive medication, and percentage having normal blood pressure and currently taking antihypertensive medication, according to background characteristics, Bangladesh DHS 2017-18

		Blo	od pressure	values and	current trea	tment with a	antihyperten	sive medica	tion			
			Nor	mal			Elev	ated			Blood	
	Prevalence of raised	(SBP <12 and DI	imal 20 mmHg BP <80 iHg)	(SBP 1 mmHg or	gh normal 20-139 DBP 80-89 iHg)	(Gra (SBP 1 mmHg or	elevated ide 1) I40-159 DBP 90-99 iHg)	severely (Grades (SBP 160-	tely and elevated 2 and 3) + mmHg or + mmHg)		pressure less than SBP 140/ DBP 90 mmHg and currently	
Background	blood pressure (hyper-	Taking antihyper- tensive	Not taking	Taking antihyper- tensive	Not taking	Taking antihyper- tensive	Not taking	Taking antihyper- tensive	Not taking		taking antihyper- tensive	Number of
characteristic	tension)1	medicine	medicine	medicine	medicine	medicine	medicine	medicine	medicine	Total	medication	women ²
Age							47.0					
35-39	31.3	1.6	35.3	3.0	33.4	2.3	17.0	3.9	3.6	100.0	4.6	771
40-44	37.3	2.2	31.2	4.0	31.5	4.3	16.1	5.4	5.4	100.0	6.1	618
45-49	43.7	1.1	23.3	4.9	33.1	8.1	16.9	7.1	5.5	100.0	6.0	603
50-54	47.6	2.1	26.4	5.2	26.0	7.0	17.9	7.6	7.9	100.0	7.3	346
55-59	51.1	1.6	26.6	9.5	22.3	8.3	14.7	8.5	8.4	100.0	11.1	398
60-64	54.0	2.7	21.0	7.0	24.9	9.3	12.8	14.2	8.1	100.0	9.7	347
65-69	55.0	0.9	20.8	6.3	24.1	10.5	17.0	13.0	7.3	100.0	7.2	180
70+	61.0	0.8	16.0	4.1	23.0	9.7	17.0	12.4	17.0	100.0	4.9	394
Residence												
Urban	48.5	2.6	22.5	6.5	28.9	8.6	15.0	9.0	6.9	100.0	9.0	897
Rural	43.3	1.4	28.0	4.6	28.7	5.9	16.7	7.5	7.3	100.0	5.9	2,758
Division												
Barishal	51.3	2.5	23.1	5.3	25.6	8.7	18.4	9.7	6.7	100.0	7.8	219
Chattogram	48.1	2.4	23.3	6.7	28.6	6.3	16.0	8.8	7.9	100.0	9.1	640
Dhaka	40.0	1.9	31.7	5.2	28.3	6.3	13.0	7.8	5.7	100.0	7.2	778
Khulna	46.3	0.6	20.7	4.5	33.0	7.1	17.6	9.0	7.5	100.0	5.1	487
Mymensingh	40.5	2.4	32.8	5.9	26.7	5.4	16.4	5.3	5.2	100.0	8.2	324
Rajshahi	43.1	0.6	25.8	2.8	31.1	6.9	17.1	7.5	8.2	100.0	3.5	521
Rangpur	46.7	1.5	26.3	3.4	27.0	4.9	20.4	6.7	9.8	100.0	5.0	454
Sylhet	45.2	1.6	28.9	7.7	25.9	8.9	13.4	8.1	5.4	100.0	9.3	232
Education												
No education	46.2	1.1	25.2	4.4	28.6	6.2	17.4	8.5	8.5	100.0	5.5	1,786
Primary incomplete	42.0	2.1	30.3	4.8	20.0	7.1	15.2	6.8	6.0	100.0	6.9	853
Primary complete ³	42.0	1.4	27.8	6.3	28.7	9.3	13.2	7.7	5.0	100.0	7.6	312
Secondary incomplete	45.6	2.4	24.9	6.4	28.7	9.3 5.8	16.8	8.3	5.0 6.6	100.0	8.9	487
	40.4	2.4	24.9	0.4	20.7	5.6	10.0	0.3	0.0	100.0	0.9	407
Secondary complete or higher ⁴	39.2	2.7	26.8	6.5	34.0	4.6	13.9	5.9	5.7	100.0	9.2	218
Ū	00.2	2.1	20.0	0.0	01.0	1.0	10.0	0.0	0.1	100.0	0.2	210
Wealth quintile Lowest	41.0	1.2	31.2	3.4	27.8	3.2	17.7	7.3	8.2	100.0	4.6	749
Second	39.7	1.4	31.7	3.7	28.7	5.2	15.7	5.5	8.2	100.0	5.1	739
Middle	44.9	2.4	25.7	3.8	29.4	7.2	18.5	5.5 6.9	6.0	100.0	6.3	750
	44.9	2.4	23.7	3.0 6.7	29.4	5.7		10.0	6.6	100.0		665
Fourth Highest	40.3 51.1	2.0 1.3	24.3	7.8	29.4 28.5	11.3	15.3 14.1	9.8	6.9	100.0	8.7 9.1	753
Nutritional status (body mass index ⁵)					_5.0						5	
Thin (BMI <18.5) Normal (BMI 18.5-	31.4	1.3	44.7	1.9	23.8	3.6	13.3	4.5	6.8	100.0	3.2	579
24.9)	41.1	1.7	29.7	4.5	29.2	5.4	15.2	7.1	7.3	100.0	6.2	1,843
Overweight (BMI 25.0-	/											
29.9)	55.1	1.7	13.5	7.5	31.4	9.7	19.2	10.5	6.4	100.0	9.3	896
Obese (BMI ≥30.0)	61.4	2.3	11.5	8.2	27.2	11.1	20.5	11.1	8.2	100.0	10.5	246
Not eligible (pregnant or recent birth)	*	*	*	*	*	*	*	*	*	*	*	10
of recent birtin)												

Note: The blood pressure measurements taken in the survey provide a cross-sectional assessment of the prevalence of blood pressure in the surveyed population at the time of the BDHS interviews; the prevalence of raised blood pressure does not represent a clinical diagnosis of hypertension. When a respondent's SBP and DBP fell into different categories, the respondent was grouped in the higher blood pressure classification. If blood pressure was measured three times, the average of the second and third measurements was used to classify individuals with respect to hypertension. If the third blood pressure measurement was missing, the second measurement was considered the average. If both the second and third measurements were missing, the first measurement was considered the average. Total includes 81 women with missing information on nutritional status. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. SBP = Systolic blood pressure, the degree of force when the heart is pumping (contracting)

DBP = Diastolic blood pressure, the degree of force when the heart is relaxed

¹ Individuals were classified as having raised blood pressure if, at the time of the survey, they had an average blood pressure level of ≥140 mmHg SBP or ≥90 mmHg DBP or they were currently taking antihypertensive medication.

² Includes pregnant women
 ³ Primary complete is defined as completing grade 5.

⁴ Secondary complete is defined as completing grade 10.

⁵ Body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²).

Table 13.3.4 Blood pressure levels and treatment status by background characteristics: Men age 18 and older

Among men age 18 and older, prevalence of raised blood pressure (hypertension), percent distribution of blood pressure values and treatment with antihypertensive medication, and percentage having normal blood pressure and currently taking antihypertensive medication, according to background characteristics, Bangladesh DHS 2017-18

		Bl	ood pressure	e values and	current trea	tment with a	antihypertens	sive medicat	ion			
			No	rmal			Elev	rated			Blood	
	Prevalence of raised	(SBP <12	imal 20 mmHg <80 mmHg)	(SBP 120-	gh normal 139 mmHg -89 mmHg)	(Gra (SBP 140-	elevated ide 1) 159 mmHg -99 mmHg)	severely (Grades (SBP 160	ately and r elevated 2 and 3) + mmHg or)+ mmHg)		pressure less than SBP 140/ DBP 90 mmHg and currently	
Background characteristic	blood pressure (hyper- tension) ¹	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Total	taking antihyper- tensive medication	Number of men
Age	40.0	0.5	44.0	0.5	40.0	0.0	0.7	0.0	4.0	400.0	4.0	0.405
18-34 18-19	13.2 10.5	0.5 0.0	44.0 49.3	0.5 0.0	42.8 40.1	0.6 0.0	9.7 9.9	0.3 0.0	1.6	100.0 100.0	1.0 0.0	2,105 300
20-24	10.5	0.0	49.3 44.2	0.0	40.1	0.0	9.9 11.0	0.0	0.6 1.3	100.0	0.0	300 585
25-29	12.9	1.2	44.2	0.2	42.9	0.1	7.5	0.0	1.3	100.0	0.4 1.9	618
30-34	16.7	0.3	38.7	1.0	44.6	1.1	10.7	0.2	2.9	100.0	1.9	602
35+	34.0	0.3	31.8	2.5	34.2	2.8	16.2	5.0	6.9	100.0	3.2	3,478
35-39	22.1	0.3	37.6	1.2	40.3	0.6	14.9	1.7	3.5	100.0	1.5	687
40-44	22.0	0.5	39.1	1.2	38.9	1.5	13.0	2.5	3.0	100.0	2.0	508
45-49	28.3	0.4	38.5	2.2	33.2	2.8	15.4	2.9	4.5	100.0	2.6	469
50-54	35.0	1.1	29.7	2.7	35.4	3.1	15.7	4.4	8.0	100.0	3.8	392
55-59	37.5	0.5	29.1	2.3	33.4	4.8	18.5	6.2	5.2	100.0	2.8	329
60-64	43.5	1.8	25.8	4.0	30.7	3.3	20.7	5.6	8.1	100.0	5.8	381
65-69	48.3	1.7	19.7	3.4	32.0	4.7	12.8	9.0	16.4	100.0	5.1	233
70+	51.8	0.9	23.2	3.4	25.0	4.1	19.1	11.3	12.9	100.0	4.3	479
Residence												
Urban	28.0	0.6	34.4	2.5	37.7	2.7	14.6	2.9	4.7	100.0	3.1	1,573
Rural	25.5	0.7	37.1	1.4	37.3	1.6	13.4	3.3	5.0	100.0	2.1	4,009
Division												
Barishal	30.6	1.0	34.7	2.4	34.7	2.7	15.9	2.6	6.0	100.0	3.4	309
Chattogram	27.4	0.7	34.1	3.0	38.5	2.2	14.5	3.6	3.4	100.0	3.7	880
Dhaka	23.9	0.5	40.7	1.5	35.4	2.1	11.9	3.2	4.7	100.0	2.0	1,361
Khulna	28.6	0.3	31.5	1.2	39.9	2.9	15.2	3.2	5.8	100.0	1.6	707
Mymensingh	20.6	0.8	42.7	3.0	36.8	1.1	10.7	1.8	3.1	100.0	3.7	462
Rajshahi	26.8	0.7	32.9	0.9	40.3	1.1	14.9	3.7	5.6	100.0	1.6	801
Rangpur	29.0	0.7	32.8	0.9	38.2	1.2	16.0	3.7	6.4	100.0	1.6	693
Sylhet	24.1	0.9	42.9	2.2	33.0	2.6	11.0	2.5	5.0	100.0	3.0	369
Education												
No education	25.6	0.6	37.6	1.3	36.8	1.5	13.3	4.0	4.9	100.0	1.9	1,307
Primary incomplete	22.2	0.5	43.8	1.0	34.0	1.3	12.5	2.1	4.8	100.0	1.5	1,132
Primary complete ²	26.8	0.7	37.8	2.6	35.4	1.3	13.3	2.6	6.3	100.0	3.3	615
Secondary incomplete Secondary complete	27.0	0.6	34.6	1.7	38.4	2.6	14.1	3.4	4.5	100.0	2.4	1,248
or higher ³	29.3	0.8	29.6	2.5	41.1	2.6	15.3	3.4	4.8	100.0	3.2	1,281
Wealth quintile												
Lowest	20.0	0.3	43.4	0.9	36.5	0.4	11.7	2.4	4.3	100.0	1.2	1,027
Second	23.5	0.3	41.5	0.3	35.0	1.1	12.9	2.4	5.3	100.0	1.4	1,027
Middle	24.7	0.6	34.9	1.2	40.4	1.9	13.9	3.1	4.1	100.0	1.8	1,162
Fourth	27.1	0.9	35.0	2.6	37.9	2.3	13.4	3.0	5.0	100.0	3.5	1,128
Highest	34.7	0.6	28.1	3.2	37.1	3.8	16.5	4.7	5.9	100.0	3.8	1,168
Nutritional status (body mass index⁴) Thin (BMI <18.5)	15.8	0.5	54.0	0.6	30.1	0.5	9.9	1.2	3.3	100.0	1.1	1,092
Normal (BMI 18.5-	00.0	0.0	20.7		20.0					100.0	0.0	0.450
24.9) Overweight (BMI	23.9	0.6	36.7	1.4	39.3	1.7	12.7	3.1	4.4	100.0	2.0	3,459
25.0-29.9)	45.2	0.8	16.6	3.8	38.2	4.4	21.6	5.6	8.9	100.0	4.7	868
Obese (BMI ≥30.0)	42.4	0.7	6.0	5.8	51.6	5.2	21.9	5.1	3.7	100.0	6.5	102
	26.2	0.6	36.4	1.7	37.4	1.9	13.7	3.2	4.9	100.0	2.4	5,583

Note: The blood pressure measurements taken in the survey provide a cross-sectional assessment of the prevalence of blood pressure in the surveyed population at the time of the BDHS interviews; the prevalence of raised blood pressure does not represent a clinical diagnosis of hypertension. When a respondent's SBP and DBP fell into different categories, the respondent was grouped in the higher blood pressure classification. If blood pressure was measured three times, the average of the second and third measurements was used to classify individuals with respect to hypertension. If the third blood pressure measurement was missing, the second measurement was considered the average. If both the second and third measurements were missing, the first measurement was considered the average. Total includes 62 men with missing information on nutritional status.

SBP = Systolic blood pressure, the degree of force when the heart is pumping (contracting)

SBP = System blood pressure, the degree of force when the heart is paragraphic (contracting) DBP = Diastolic blood pressure, the degree of force when the heart is relaxed ¹ Individuals were classified as having raised blood pressure if, at the time of the survey, they had an average blood pressure level of ≥140 mmHg SBP or ≥90 mmHg DBP or they were currently taking antihypertensive medication. ² Primary complete is defined as completing grade 5.

³ Secondary complete is defined as completing grade 10.

⁴ Body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²).

Table 13.3.5 Blood pressure levels and treatment status by background characteristics: Men age 18-34

Among men age 18-34, prevalence of raised blood pressure (hypertension), percent distribution of blood pressure values and treatment with antihypertensive medication, and percentage having normal blood pressure and currently taking antihypertensive medication, according to background characteristics, Bangladesh DHS 2017-18

		Ble	ood pressure	e values and	l current trea	tment with a	antihypertens	sive medicat	ion			
			Nor	mal			Elev	ated			Blood	
	Prevalence of raised	(SBP <12	imal 20 mmHg :80 mmHg)	(SBP 120-	gh normal 139 mmHg -89 mmHg)	(Gra (SBP 140-	elevated ide 1) 159 mmHg -99 mmHg)	severely (Grades (SBP 160-	tely and elevated 2 and 3) + mmHg or + mmHg)		pressure less than SBP 140/ DBP 90 mmHg and currently	
Background characteristic	blood pressure (hyper- tension) ¹	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Total	taking antihyper- tensive medication	Number of men
Age												
18-19	10.5	0.0	49.3	0.0	40.1	0.0	9.9	0.0	0.6	100.0	0.0	300
20-24	12.9	0.2	44.2	0.2	42.9	0.1	11.0	0.0	1.3	100.0	0.4	585
25-29	11.5	1.2	46.3	0.6	42.2	0.7	7.5	0.2	1.2	100.0	1.9	618
30-34	16.7	0.3	38.7	1.0	44.6	1.1	10.7	0.8	2.9	100.0	1.2	602
Residence												
Urban	14.8	0.5	42.4	1.1	42.8	0.6	10.9	0.1	1.6	100.0	1.6	665
Rural	12.5	0.5	44.7	0.3	42.7	0.5	9.2	0.4	1.7	100.0	0.7	1,440
Division												
Barishal	11.4	0.6	49.8	0.7	38.8	0.0	9.1	0.0	1.1	100.0	1.3	102
Chattogram	14.8	0.0	37.2	0.8	48.0	0.3	10.4	0.4	2.5	100.0	1.0	349
Dhaka	10.8	0.4	48.6	0.8	40.6	0.5	7.1	0.4	1.8	100.0	1.2	564
Khulna	14.9	0.0	40.4	0.0	44.7	1.2	11.5	0.4	1.3	100.0	0.4	225
Mymensingh	10.5	0.0	48.9	0.4	40.6	0.0	9.4	0.0	0.4	100.0	0.4	165
Rajshahi	15.1	0.2	42.5	0.0	42.4	0.4	12.8	0.6	0.5	100.0	0.8	305
Rangpur	15.5	0.5	40.1	0.2	44.4	0.6	10.8	1.0	2.5	100.0	0.7	237
Sylhet	13.1	0.8	47.5	0.7	39.4	0.9	8.5	0.0	2.3	100.0	1.5	157
•												
Education No education	5.9	1.2	54.2	0.0	39.9	0.4	3.5	0.0	0.7	100.0	1.2	159
Primary incomplete	10.2	0.4	54.2	0.0	35.4	0.4	8.5	0.0	0.7	100.0	0.7	409
Primary complete ²	10.2	1.4	46.4	0.4	42.7	0.3	8.4	0.0	0.3	100.0	1.9	249
Secondary incomplete		0.3	41.4	0.3	45.9	0.5	8.9	0.0	1.9	100.0	0.5	603
Secondary complete	12.7	0.0		0.2	10.0	0.7	0.0	0.1	1.0	100.0	0.0	000
or higher ³	18.1	0.2	36.8	1.0	45.1	0.6	13.1	0.3	2.8	100.0	1.2	686
Wealth quintile												
Lowest	6.0	0.0	49.0	0.0	44.9	0.2	4.9	0.3	0.6	100.0	0.0	345
Second	13.5	1.0	51.6	0.4	35.0	0.3	10.6	0.0	1.2	100.0	1.3	380
Middle	11.5	0.3	43.5	0.0	45.0	0.2	8.9	0.6	1.5	100.0	0.3	441
Fourth	16.2	0.8	41.7	1.1	42.0	0.8	10.9	0.4	2.3	100.0	1.9	479
Highest	17.0	0.4	36.8	1.0	46.2	1.0	12.2	0.1	2.3	100.0	1.4	459
Nutritional status (body mass index⁴) Thin (BMI <18.5)	7.1	0.1	60.9	0.0	32.0	0.2	6.2	0.0	0.5	100.0	0.1	415
Normal (BMI 18.5- 24.9)	10.6	0.6	45.0	0.6	44.3	0.3	8.0	0.2	1.0	100.0	1.2	1,355
Overweight (BMI 25.0- 29.9)		0.6	19.8	0.8	47.7	2.3	21.6	1.4	5.8	100.0	1.5	292
29.9) Obese (BMI ≥30.0)	(27.7)	(0.0)	(9.9)	(1.2)	(62.4)	(0.0)	(25.3)	(0.0)	(1.2)	(100.0)	(1.2)	31
Total	13.2	0.5	44.0	0.5	42.8	0.6	9.7	0.3	1.6	100.0	1.0	2,105

Note: The blood pressure measurements taken in the survey provide a cross-sectional assessment of the prevalence of blood pressure in the surveyed population at the time of the BDHS interviews; the prevalence of raised blood pressure does not represent a clinical diagnosis of hypertension. When a respondent's SBP and DBP fell into different categories, the respondent was grouped in the higher blood pressure classification. If blood pressure was measured three times, the average of the second and third measurements was used to classify individuals with respect to hypertension. If the third blood pressure measurement was missing, the second measurement was considered the average. If both the second and third measurements were missing, the first measurement was considered the average. Total includes 12 men with missing information on nutritional status. Figures in parentheses are based on 25-49 unweighted cases.

SBP = Systolic blood pressure, the degree of force when the heart is pumping (contracting)

DBP = Diastolic blood pressure, the degree of force when the heart is relaxed

¹ Individuals were classified as having raised blood pressure if, at the time of the survey, they had an average blood pressure level of ≥140 mmHg SBP or ≥90 mmHg DBP or they were currently taking antihypertensive medication. ² Primary complete is defined as completing grade 5.

⁴ Body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²).

Table 13.3.6 Blood pressure levels and treatment status by background characteristics: Men age 35 and older

Among men age 35 and older, prevalence of raised blood pressure (hypertension), percent distribution of blood pressure values and treatment with antihypertensive medication, and percentage having normal blood pressure and currently taking antihypertensive medication, according to background characteristics, Bangladesh DHS 2017-18

		BI	ood pressure	values and	current trea	tment with a	antihypertens	sive medicat	ion			
			Nor	mal			Elev	ated			Blood	
	Prevalence of raised	(SBP <1	imal 20 mmHg <80 mmHg)	(SBP 120-	gh normal 139 mmHg -89 mmHg)	(Gra (SBP 140-	elevated de 1) 159 mmHg -99 mmHg)	severely (Grades (SBP 160	ately and r elevated 2 and 3) + mmHg or)+ mmHg)		pressure less than SBP 140/ DBP 90 mmHg and currently	
Background characteristic	blood pressure (hyper- tension) ¹	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Taking antihyper- tensive medicine	Not taking medicine	Total	taking antihyper- tensive medication	Number of men
Age								. –				
35-39	22.1	0.3	37.6	1.2	40.3	0.6	14.9	1.7	3.5	100.0	1.5	687
40-44	22.0	0.1	39.1	1.9	38.9	1.5	13.0	2.5	3.0	100.0	2.0	508
45-49	28.3	0.4	38.5	2.2	33.2	2.8	15.4	2.9	4.5	100.0	2.6	469
50-54	35.0	1.1	29.7	2.7	35.4	3.1	15.7	4.4	8.0	100.0	3.8	392
55-59 60-64	37.5 43.5	0.5 1.8	29.1 25.8	2.3 4.0	33.4 30.7	4.8 3.3	18.5 20.7	6.2 5.6	5.2 8.1	100.0 100.0	2.8 5.8	329 381
	43.5 48.3	1.8	25.8 19.7		30.7	3.3 4.7		5.6 9.0		100.0		
65-69 70+	48.3 51.8	0.9	23.2	3.4 3.4	32.0 25.0	4.7	12.8 19.1	9.0 11.3	16.4 12.9	100.0	5.1 4.3	233 479
Residence												
Urban	37.6	0.7	28.5	3.5	33.9	4.3	17.2	4.9	7.0	100.0	4.2	908
Rural	32.8	0.8	32.9	2.1	34.3	2.2	15.8	5.0	6.9	100.0	2.9	2,569
Division												
Barishal	40.1	1.2	27.2	3.2	32.7	4.0	19.2	4.0	8.5	100.0	4.4	206
Chattogram	35.6	0.9	32.1	4.4	32.3	3.5	17.2	5.6	4.0	100.0	5.3	531
Dhaka	33.2	0.5	35.1	2.0	31.7	3.1	15.4	5.5	6.7	100.0	2.4	797
Khulna	35.0	0.5	27.4	1.6	37.6	3.6	16.9	4.5	7.8	100.0	2.1	482
Mymensingh	26.2	1.1	39.2	4.4	34.6	1.7	11.4	2.8	4.6	100.0	5.4	297
Rajshahi	34.0	0.7	27.0	1.4	39.0	1.5	16.2	5.6	8.7	100.0	2.1	496
Rangpur	36.0	0.7	29.0	1.3	35.0	1.5	18.7	5.2	8.5	100.0	2.1	456
Sylhet	32.2	0.9	39.5	3.3	28.3	3.8	12.9	4.3	7.0	100.0	4.2	212
Education												
No education	28.3	0.5	35.4	1.5	36.3	1.6	14.7	4.6	5.4	100.0	2.0	1,148
Primary incomplete	28.9	0.6	37.8	1.3	33.2	1.8	14.8	3.3	7.2	100.0	1.9	723
Primary complete ²	37.6	0.2	31.9	4.0	30.5	2.0	16.6	4.3	10.4	100.0	4.2	366
Secondary incomplete Secondary complete	40.4	1.0	28.2	3.1	31.4	4.4	18.8	6.0	7.0	100.0	4.1	645
or higher ³	42.2	1.4	21.3	4.2	36.6	4.9	17.7	6.9	7.1	100.0	5.5	596
Wealth quintile												
Lowest	27.1	0.5	40.6	1.3	32.3	0.5	15.2	3.5	6.1	100.0	1.8	682
Second	28.8	0.6	36.1	0.9	35.0	1.5	14.1	4.2	7.5	100.0	1.5	717
Middle	32.8	0.8	29.6	1.9	37.6	2.9	16.9	4.6	5.7	100.0	2.7	721
Fourth	35.1	1.0	30.1	3.7	34.8	3.3	15.2	4.9	7.0	100.0	4.7	649
Highest	46.2	0.8	22.6	4.6	31.2	5.6	19.3	7.6	8.2	100.0	5.4	709
Nutritional status (body mass index ⁴) Thin (BMI <18.5)	21.2	0.7	49.8	0.9	29.0	0.6	12.2	1.9	4.9	100.0	1.6	677
Normal (BMI 18.5- 24.9)	32.5	0.6	31.4	1.9	36.1	2.6	15.7	5.0	6.6	100.0	2.6	2,104
Overweight (BMI 25.0-												
29.9)	51.7	0.9	14.9	5.4	33.4	5.5	21.7	7.7	10.5	100.0	6.3	576
Obese (BMI ≥30.0)	48.8	1.0	4.4	7.8	46.8	7.5	20.5	7.3	4.7	100.0	8.8	71
Total	34.0	0.7	31.8	2.5	34.2	2.8	16.2	5.0	6.9	100.0	3.2	3,478

Note: The blood pressure measurements taken in the survey provide a cross-sectional assessment of the prevalence of blood pressure in the surveyed population at the time of the BDHS interviews; the prevalence of raised blood pressure does not represent a clinical diagnosis of hypertension. When a respondent's SBP and DBP fell into different categories, the respondent was grouped in the higher blood pressure classification. If blood pressure was measured three times, the average of the second and third measurements was used to classify individuals with respect to hypertension. If the third blood pressure measurement was missing, the second measurement was considered the average. If both the second and third measurements were missing, the first measurement was considered the average. Total includes 50 men with missing information on nutritional status.

SBP = Systolic blood pressure, the degree of force when the heart is pumping (contracting)

DBP = Diastolic blood pressure, the degree of force when the heart is relaxed

BP = blood pressure

¹ Individuals were classified as having raised blood pressure if, at the time of the survey, they had an average blood pressure level of ≥140 mmHg SBP or ≥90 mmHg DBP or they were currently taking antihypertensive medication.

² Primary complete is defined as completing grade 5.

³ Secondary complete is defined as completing grade 10.
 ⁴ Body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²).

Table 13.4 History of diabetes and actions taken to lower blood sugar

Percent distribution of women and men age 18 and older by history of having high blood sugar or diabetes, and among those told they had high blood sugar or diabetes, percentage taking various actions to treat the illness, Bangladesh DHS 2017-18

		Women			Men		A	Il responde	ents
History of high blood sugar or diabetes and actions taken									
to lower blood sugar	18-34	35+	Total	18-34	35+	Total	18-34	35+	Tota
Blood glucose measured									
Had blood sugar measured	19.6	32.6	26.1	10.2	28.2	21.4	16.1	30.5	24.1
Never had blood sugar measured	80.4	67.3	73.9	89.7	71.7	78.5	83.8	69.5	75.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents	3,686	3,663	7,348	2,107	3,491	5,598	5,792	7,154	12,946
Among those who had blood glucose measured, high blood sugar or diabetes diagnosed by a doctor or nurse									
Percentage who were told they had high blood sugar or									
diabetes by a doctor or nurse	8.2	23.7	17.9	5.9	23.3	20.2	7.6	23.5	18.8
Percentage never told they had blood sugar or diabetes	91.8	76.1	82.0	94.1	76.7	79.8	92.4	76.4	81.2
Missing	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents	721	1,194	1,915	214	985	1,199	935	2,180	3,114
Among those told they had blood sugar or diabetes Currently receiving prescribed medication for high blood									
glucose or diabetes	50.7	78.5	73.7	52.4	83.1	81.5	51.0	80.6	77.0
Currently not receiving prescribed medication for high									
blood glucose or diabetes	48.2	21.3	25.9	47.6	16.9	18.5	48.1	19.3	22.8
Missing	1.1	0.2	0.4	0.0	0.0	0.0	0.9	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents told they have high blood sugar									
or diabetes by a doctor or nurse	59	284	342	13	229	242	71	513	584

Table 13.5.1 Fasting plasma glucose equivalent values and treatment status: Women age 18 and older

Among women age 18 and older, prevalence of raised blood glucose/diabetes, percent distribution of fasting plasma glucose (FPG) values and treatment status, and percentage having fasting plasma glucose level below 7.0 mmol/L and taking medication, by background characteristics, Bangladesh DHS 2017-18

				Fa	sting plasma	glucose val	Jes					
		Hypogl	ycemia	Normog	lycemia		Hyperg	lycemia				
			nmol/L	3.9-6.0	mmol/L	(impaire) intermedi	mmol/L d FPG or ate hyper- emia)		mol/L ed FPG)		FPG <7.00 mmol/L and currently	
Background characteristic	Prevalence of diabetes ¹	prescribed	Not taking medication			Taking prescribed medication		Taking prescribed medication		Total	taking prescribed medication	Number of women ²
Age												
18-34	5.3	0.0	1.5	0.1	80.5	0.1	12.7	0.6	4.4	100.0	0.2	3,480
18-19	2.9	0.0	2.4	0.0	83.0	0.0	11.8	0.0	2.9	100.0	0.0	566
20-24	3.6	0.0	1.9	0.1	83.9	0.0	10.6	0.1	3.4	100.0	0.1	1,044
25-29	5.9	0.0	1.4	0.3	78.9	0.1	13.9	0.7	4.8	100.0	0.4	957
30-34	8.2	0.0	0.7	0.1	76.7	0.2	14.4	1.6	6.3	100.0	0.3	913
35+	13.8	0.0	1.3	1.2	69.6	0.6	15.3	4.2	7.7	100.0	1.9	3,437
35-39	11.2	0.0	1.1	0.5	72.1	0.3	15.7	2.8	7.6	100.0	0.8	728
40-44	12.0	0.0	0.9	0.9	70.5	0.3	16.5	3.5	7.3	100.0	1.2	576
45-49	14.9	0.0	1.1	1.9	69.8	0.7	14.2	4.9	7.3	100.0	2.6	569
50-54	16.6	0.0	0.8	0.5	70.3	1.4	12.2	7.2	7.6	100.0	1.9	321
55-59	16.4	0.0	1.1	1.5	65.3	0.5	17.2	5.3	9.1	100.0	2.0	372
60-64	15.0	0.0	1.1	1.7	69.0	0.6	14.8	5.1	7.6	100.0	2.3	327
65-69	13.3	0.0	2.5	1.4	68.8	2.3	15.4	3.8	5.9	100.0	3.7	173
70+	13.7	0.2	2.7	1.8	67.9	0.3	15.8	3.2	8.2	100.0	2.2	370
Residence												
Urban	13.5	0.0	0.7	0.7	68.7	0.6	17.1	3.6	8.6	100.0	1.3	1,787
Rural	8.1	0.0	1.7	0.7	77.3	0.3	12.9	2.0	5.1	100.0	0.9	5,130
Division												
Barishal	9.5	0.0	1.6	1.0	71.6	0.3	17.3	1.7	6.4	100.0	1.4	384
Chattogram	10.6	0.0	1.3	1.2	73.1	0.1	15.0	3.3	6.0	100.0	1.3	1,266
Dhaka	13.3	0.0	0.4	0.3	64.9	0.4	21.4	2.7	9.9	100.0	0.7	1,571
Khulna	7.8	0.0	2.0	0.9	79.8	0.4	10.4	2.5	4.0	100.0	1.3	846
Mymensingh	8.5	0.0	2.0	0.9	79.0	0.4	10.4	1.7	5.8	100.0	1.0	564
Rajshahi	7.5	0.0	1.3	0.0	80.5	0.4	10.5	2.2	4.3	100.0	1.0	993
	7.5 5.0	0.1	2.1	0.5	83.8	0.3	9.1		4.3 2.7	100.0	0.4	993 843
Rangpur Sylhet	10.2	0.0	2.1	0.4	63.6 77.3	1.2	10.4	1.9 1.9	6.5	100.0	0.4 1.9	643 450
-	1012	0.0		0.1					0.0			
Education No education	10.6	0.0	1.4	1.1	73.3	0.4	14.6	3.0	6.1	100.0	1.5	1,912
				0.6			13.8	2.3	6.5	100.0		1,372
Primary incomplete	9.8	0.0 0.0	1.9		74.5	0.4					1.0	
Primary complete ³ Secondary	9.7	0.0	0.9	0.8	74.6	0.2	14.9	1.4	7.3	100.0	1.0	635
incomplete	8.9	0.0	1.2	0.4	76.0	0.1	13.8	2.7	5.8	100.0	0.5	1,961
Secondary complete												,
or higher ⁴	8.1	0.0	1.3	0.4	77.7	0.8	12.8	1.8	5.2	100.0	1.2	1,038
Wealth quintile												
Lowest	6.3	0.1	2.0	0.6	79.9	0.2	11.7	1.4	4.2	100.0	0.8	1,374
Second	5.7	0.0	2.0	0.5	81.5	0.1	10.7	1.0	4.1	100.0	0.6	1,366
Middle	7.8	0.0	1.3	0.4	80.1	0.3	10.9	1.6	5.4	100.0	0.7	1,409
Fourth	11.3	0.0	1.4	0.7	70.7	0.4	16.6	2.7	7.6	100.0	1.1	1,352
Highest	16.3	0.0	0.4	1.2	63.4	0.7	20.0	5.5	8.9	100.0	1.9	1,417
Nutritional status												
(body mass index ⁵) Thin (BMI <18.5)	6.2	0.0	2.1	0.4	79.0	0.0	12.6	0.6	5.2	100.0	0.4	1,023
Normal (BMI 18.5-												
24.9) Overweight (BMI	7.9	0.0	1.3	0.5	77.2	0.5	13.6	2.2	4.7	100.0	1.0	3,628
25.0-29.9)	13.9	0.0	0.4	1.0	69.3	0.3	16.5	3.8	8.9	100.0	1.2	1,524
Obese (BMI ≥30.0)	19.2	0.0	0.4	1.4	61.6	0.3	18.8	6.3	10.8	100.0	2.1	379
Not eligible (pregnant		0.0	0.4	1.4	01.0	0.7	10.0	0.5	10.0	100.0	2.1	513
or recent birth)	3.2	0.0	6.7	0.5	85.2	0.0	4.9	0.0	2.7	100.0	0.5	281
Total	9.5	0.0	1.4	0.7	75.1	0.3	14.0	2.4	6.0	100.0	1.0	6,918
												-,

Note: The fasting whole blood glucose measurements taken in the survey converted to fasting plasma glucose equivalent values provide a cross-sectional assessment of fasting plasma glucose equivalent values in the surveyed population at the time of the BDHS interviews. The prevalence of raised fasting glucose does not represent a clinical diagnosis of diabetes, as FPG alone is not used for a clinical diagnosis. Total includes 83 women with missing information on nutritional status.

¹ Individuals were classified as having diabetes if they reported taking medication for diabetes or had a fasting blood glucose of ≥7.0 mmol/L.

¹ Individuals were classified as having diabetes if they reported taking medication of diabetes of had a fasting size
 ² Includes pregnant women
 ³ Primary complete is defined as completing grade 5.
 ⁴ Secondary complete is defined as completing grade 10.
 ⁵ Body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²).

Table 13.5.2 Fasting plasma glucose equivalent values and treatment status: Women age 18-34

Among women age 18-34, prevalence of raised blood glucose/diabetes, percent distribution of fasting plasma glucose (FPG) values and treatment status, and percentage having fasting plasma glucose level below 7.0 mmol/L and taking medication, by background characteristics, Bangladesh DHS 2017-18

				Fasting p	lasma gluco	se values					
		Hypogly- cemia	Normog	lycemia		Hyperg	lycemia				
		<3.9 mmol/L ²	3.9-6.0	mmol/L	(impaire intermedi	mmol/L d FPG or ate hyper- emia)		mol/L ed FPG)		FPG <7.00 mmol/L and currently	
Background characteristic	Prevalence of diabetes ¹	Not taking	Taking prescribed medication		Taking prescribed medication				Total	taking	Number of women ³
Age											
18-19	2.9	2.4	0.0	83.0	0.0	11.8	0.0	2.9	100.0	0.0	566
20-24	3.6	1.9	0.1	83.9	0.0	10.6	0.1	3.4	100.0	0.1	1,044
25-29	5.9	1.4	0.3	78.9	0.1	13.9	0.7	4.8	100.0	0.4	957
30-34	8.2	0.7	0.1	76.7	0.2	14.4	1.6	6.3	100.0	0.3	913
Residence											
Urban	7.7	0.9	0.2	75.3	0.0	16.1	0.9	6.6	100.0	0.2	979
Rural	4.4	1.8	0.1	82.5	0.1	11.3	0.5	3.6	100.0	0.2	2,501
Division											
Barishal	6.8	1.1	0.0	78.9	0.4	13.3	0.8	5.6	100.0	0.4	180
Chattogram	5.0	1.3	0.3	80.6	0.0	13.2	0.7	4.0	100.0	0.3	675
Dhaka	8.2	0.5	0.1	70.5	0.0	20.8	0.5	7.6	100.0	0.1	866
Khulna	3.2	1.4	0.3	86.4	0.0	9.1	0.8	2.1	100.0	0.3	379
Mymensingh	4.5	3.6	0.0	83.8	0.0	8.0	0.6	3.9	100.0	0.0	262
Rajshahi	4.0	2.2	0.0	85.5	0.2	8.3	0.9	2.9	100.0	0.2	487
Rangpur	2.0	1.7	0.0	88.6	0.0	7.7	0.6	1.4	100.0	0.0	401
Sylhet	7.0	2.5	0.3	81.2	0.3	9.3	0.3	6.1	100.0	0.6	230
Education											
No education	2.5	0.6	0.0	82.2	0.6	14.7	0.0	1.9	100.0	0.6	232
Primary incomplete	5.5	2.3	0.1	80.3	0.0	11.9	0.6	4.7	100.0	0.1	557
Primary complete ⁴	5.4	1.0	0.0	81.8	0.0	11.8	0.8	4.6	100.0	0.0	349
Secondary incomplete	5.8	1.5	0.1	79.4	0.0	13.3	0.9	4.7	100.0	0.1	1,499
Secondary complete or higher ⁵	5.1	1.5	0.2	81.5	0.1	11.9	0.4	4.4	100.0	0.4	843
Wealth quintile											
Lowest	3.9	1.7	0.2	84.6	0.1	9.8	0.7	2.9	100.0	0.3	661
Second	3.0	2.7	0.0	85.0	0.0	9.3	0.0	3.0	100.0	0.0	669
Middle	4.6	1.2	0.0	86.2	0.1	8.1	0.4	4.1	100.0	0.1	693
Fourth	6.7	1.9	0.2	75.3	0.2	16.1	0.8	5.5	100.0	0.4	719
Highest	8.1	0.2	0.3	72.5	0.0	19.3	1.3	6.5	100.0	0.3	739
Nutritional status (body mass											
index ⁶)	4.0	1.0	0.0	00.4	0.0	44.0	0.0	2.0	400.0	0.0	170
Thin (BMI <18.5)	4.0	1.9	0.0	80.1	0.0	14.0 12.1	0.2	3.8	100.0	0.0	472
Normal (BMI 18.5-24.9)	4.3 8.6	1.2 0.4	0.1 0.3	82.4 75.8	0.1 0.0	12.1	0.7 0.8	3.4 7.5	100.0 100.0	0.2 0.3	1,884 686
Overweight (BMI 25.0-29.9) Obese (BMI ≥30.0)	8.6 10.1	0.4	0.3	75.8 71.2	0.0	15.2	0.8 1.7	7.5 8.4	100.0	0.3	686 157
Not eligible (pregnant or recent	10.1	0.0	0.0	11.2	0.0	10.7	1.7	0.4	100.0	0.0	157
birth)	3.3	6.4	0.5	85.2	0.0	5.1	0.0	2.7	100.0	0.5	272
,											
Total	5.3	1.5	0.1	80.5	0.1	12.7	0.6	4.4	100.0	0.2	3,480

Note: The fasting whole blood glucose measurements taken in the survey converted to fasting plasma glucose equivalent values provide a cross-sectional assessment of fasting plasma glucose equivalent values in the surveyed population at the time of the BDHS interviews. The prevalence of raised fasting glucose one represent a clinical diagnosis of diabetes, as FPG alone is not used for a clinical diagnosis. Total includes 9 women with missing information on nutritional status. ¹ Individuals were classified as having diabetes if they reported taking medication for diabetes or had a fasting blood glucose of \geq 7.0 mmol/L. ² No women with an FPG value of <3.9 mmol/L (below normal) took medication, so these data are not shown.

³ Includes pregnant women

⁴ Primary complete is defined as completing grade 5.

⁵ Secondary complete is defined as completing grade 10.

⁶ Body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²).

Table 13.5.3 Fasting plasma glucose equivalent values and treatment status: Women age 35 and older

Among women age 35 and older, prevalence of raised blood glucose/diabetes, percent distribution of fasting plasma glucose (FPG) values and treatment status, and percentage having fasting plasma glucose level below 7.0 mmol/L and taking medication, by background characteristics, Bangladesh DHS 2017-18

				Fas	sting plasma	glucose val	ues					
		Hypog	lycemia	Normog	lycemia		Hyperg	lycemia				
		<3.9 n	nmol/L	3.9-6.0	mmol/L	6.1-6.9 (impaired intermedia glyce	d FPG or ate hyper-	≥7 m (elevate			FPG <7.00 mmol/L and currently	
Background characteristic	Prevalence of diabetes ¹		Not taking medication	Taking prescribed medication	Not taking medication					Total	taking prescribed medication	Number of women ²
Age												
35-39	11.2	0.0	1.1	0.5	72.1	0.3	15.7	2.8	7.6	100.0	0.8	728
40-44	12.0	0.0	0.9	0.9	70.5	0.3	16.5	3.5	7.3	100.0	1.2	576
45-49	14.9	0.0	1.1	1.9	69.8	0.7	14.2	4.9	7.3	100.0	2.6	569
50-54	16.6	0.0	0.8	0.5	70.3	1.4	12.2	7.2	7.6	100.0	1.9	321
55-59	16.4	0.0	1.1	1.5	65.3	0.5 0.6	17.2	5.3	9.1	100.0	2.0	372
60-64 65-69	15.0 13.3	0.0 0.0	1.1 2.5	1.7 1.4	69.0 68.8	2.3	14.8 15.4	5.1 3.8	7.6 5.9	100.0 100.0	2.3 3.7	327 173
70+	13.7	0.0	2.3	1.4	67.9	0.3	15.8	3.2	8.2	100.0	2.2	370
Residence		•						•	•			
Urban	20.6	0.1	0.4	1.3	60.7	1.2	18.3	6.8	11.1	100.0	2.7	808
Rural	11.7	0.0	1.6	1.2	72.4	0.4	14.4	3.5	6.6	100.0	1.6	2,629
Division												
Barishal	11.9	0.0	2.2	2.0	65.1	0.3	20.9	2.5	7.1	100.0	2.2	204
Chattogram	17.0	0.0	1.2	2.1	64.7	0.3	17.0	6.3	8.4	100.0	2.4	591
Dhaka	19.6	0.0	0.3	0.5	58.0	0.9	22.1	5.4	12.8	100.0	1.4	705
Khulna	11.6	0.0	2.4	1.5	74.5	0.7	11.5	3.9	5.5	100.0	2.1	467
Mymensingh	12.0	0.0	0.8	1.2	74.8	0.7	12.3	2.7	7.4	100.0	1.9	302
Rajshahi	10.9	0.2	0.5	1.0	75.8	0.5	12.9	3.5	5.7	100.0	1.7	507
Rangpur	7.7	0.0	2.5	0.7	79.4	0.1	10.4	3.1	3.8	100.0	0.8	442
Sylhet	13.6	0.0	1.6	1.2	73.3	2.0	11.5	3.5	6.9	100.0	3.2	220
Education												
No education	11.7	0.0	1.6	1.2	72.1	0.4	14.6	3.4	6.7	100.0	1.6	1,680
Primary incomplete	12.8	0.0	1.6	1.0	70.5	0.7	15.1	3.4	7.7	100.0	1.7	815
Primary complete ³	14.9	0.0	0.7	1.7	65.7	0.5	18.7	2.2	10.5	100.0	2.2	286
Secondary incomplete	19.2	0.0	0.4	1.3	64.9	0.2	15.5	8.6	9.1	100.0	1.5	461
Secondary	13.2	0.0	0.4	1.5	04.3	0.2	10.0	0.0	5.1	100.0	1.5	401
complete or												
higher ⁴	21.1	0.0	0.5	1.1	61.4	3.5	16.9	8.0	8.6	100.0	4.6	195
Wealth quintile												
Lowest	8.6	0.1	2.4	0.9	75.6	0.3	13.4	2.0	5.4	100.0	1.3	713
Second	8.3	0.0	1.4	0.9	78.2	0.2	12.1	2.0	5.2	100.0	1.1	696
Middle	10.8	0.0	1.3	0.8	74.3	0.6	13.6	2.8	6.7	100.0	1.3	716
Fourth	16.5	0.0	0.8	1.2	65.6	0.7	17.1	4.8	9.9	100.0	1.9	633
Highest	25.2	0.0	0.5	2.3	53.5	1.5	20.7	10.0	11.5	100.0	3.7	679
Nutritional status (body mass index ⁵)												
Thin (BMI <18.5) Normal (BMI 18.5-	8.1	0.0	2.4	0.8	78.1	0.0	11.3	0.9	6.5	100.0	0.8	551
24.9) Overweight (BMI	11.8	0.0	1.3	1.1	71.7	0.8	15.1	3.8	6.2	100.0	1.9	1,744
25.0-29.9)	18.2	0.0	0.3	1.5	63.9	0.5	17.5	6.2	10.0	100.0	2.0	839
Obese (BMI ≥30.0) Not eligible	25.6	0.0	0.7	2.3	54.9	1.2	18.8	9.6	12.5	100.0	3.5	222
(pregnant or recent birth)	*	*	*	*	*	*	*	*	*	*	*	8
Total	13.8	0.0	1.3	1.2	69.6	0.6	15.3	4.2	7.7	100.0	1.9	3,437
												·

Note: The fasting whole blood glucose measurements taken in the survey converted to fasting plasma glucose equivalent values provide a cross-sectional assessment of fasting plasma values in the surveyed population at the time of the BDHS interviews. The prevalence of raised fasting glucose does not represent a clinical diagnosis of diabetes, as FPG alone is not used for a clinical diagnosis. Total includes 73 women with missing information on nutritional status. An asterisk indicates that a figure is based on fewer than 25 unveinted cases and has been supressed

based on fewer than 25 unweighted cases and has been suppressed. ¹ Individuals were classified as having diabetes if they reported taking medication for diabetes or had a fasting blood glucose of ≥7.0 mmol/L.

² Includes pregnant women

³ Primary complete is defined as completing grade 5.

⁴ Secondary complete is defined as completing grade 10.

⁵ Body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²).

Table 13.5.4 Fasting plasma glucose equivalent values and treatment status: Men age 18 and older

Among men age 18 and older, prevalence of raised blood glucose/diabetes, percent distribution of fasting plasma glucose (FPG) values and treatment status, and percentage having fasting plasma glucose level below 7.0 mmol/L and taking medication, by background characteristics, Bangladesh DHS 2017-18

		Fasting plasma glucose values										
		Hypog	lycemia	Normog	lycemia		Hyperg	lycemia				
Background characteristic	Prevalence of diabetes ¹	<3.9 mmol/L		3.9-6.0 mmol/L		6.1-6.9 mmol/L (impaired FPG or intermediate hyper- glycemia		≥7 mmol/L (elevated FPG)			FPG <7.00 mmol/L and currently	
		prescribed		Taking prescribed medication			Not taking medication		Not taking medication	Total	taking prescribed medication	Number of men
Age												
18-34	5.2	0.0	2.5	0.0	79.9	0.0	12.4	0.3	4.9	100.0	0.0	1,939
18-19	5.6	0.0	4.0	0.0	80.9	0.0	9.5	0.0	5.6	100.0	0.0	280
20-24 25-29	5.0 3.6	0.0 0.0	2.9 2.1	0.0 0.0	81.6 82.5	0.0 0.0	10.4 11.7	0.0 0.1	5.0 3.5	100.0 100.0	0.0 0.0	546 563
30-34	5.0 6.9	0.0	1.6	0.0	62.5 74.8	0.0	16.7	0.1	5.5 6.0	100.0	0.0	550
35+	13.7	0.0	2.0	0.1	74.8	0.0	13.9	3.6	8.3	100.0	1.8	3,242
35-39	8.7	0.0	1.2	0.9	75.0	0.9	15.1	1.8	6.5	100.0	0.4	650
40-44	13.1	0.0	1.2	0.4	73.0	0.0	13.6	1.8	10.6	100.0	0.4	473
45-49	11.2	0.0	2.3	0.2	72.5	1.0	16.0	2.3	7.1	100.0	1.8	434
43-49 50-54	17.7	0.0	1.7	1.1	67.0	1.0	13.7	3.4	12.1	100.0	2.1	356
55-59	13.6	0.0	3.1	1.1	71.3	1.0	12.0	6.4	5.2	100.0	2.1	313
60-64	17.7	0.0	2.5	2.0	64.4	1.0	12.0	6.4	8.1	100.0	3.2	352
65-69	16.2	0.0	1.7	0.8	72.5	1.1	9.6	9.6	4.7	100.0	1.9	213
70+	16.4	0.0	3.2	1.3	67.5	1.8	12.9	2.6	10.5	100.0	3.2	451
	10.1	0.2	0.2	1.0	01.0	1.0	12.0	2.0	10.0	100.0	0.2	101
Residence	40.0	0.4		0.0	<u> </u>	0.5	47.4		0.0	400.0		4 404
Urban	12.9	0.1	1.4	0.6	68.6	0.5	17.1	2.9	9.0	100.0	1.1	1,424
Rural	9.6	0.0	2.5	0.6	76.0	0.6	11.9	2.2	6.3	100.0	1.1	3,758
Division												
Barishal	9.8	0.0	1.9	1.5	74.0	0.1	14.2	2.4	5.9	100.0	1.6	283
Chattogram	12.1	0.0	3.1	0.9	71.8	0.8	13.0	3.6	6.8	100.0	1.7	817
Dhaka	15.6	0.0	1.1	0.4	62.0	0.7	21.3	2.5	12.1	100.0	1.1	1,221
Khulna	8.9	0.0	2.5	0.3	78.5	0.4	10.1	2.1	6.1	100.0	0.7	666
Mymensingh	7.0	0.0	1.5	0.4	78.2	1.0	13.4	0.8	4.7	100.0	1.4	425
Rajshahi	8.7	0.1	2.3	0.4	81.5	0.3	7.4	2.6	5.4	100.0	0.7	757
Rangpur	6.3	0.0	3.3	1.1	81.4	0.2	9.0	2.0	3.0	100.0	1.3	673
Sylhet	9.1	0.0	1.3	0.3	76.4	0.4	13.2	1.8	6.6	100.0	0.6	339
Education												
No education	8.7	0.0	3.0	0.5	74.3	0.4	14.0	1.6	6.3	100.0	0.9	1,206
Primary incomplete	9.3	0.0	2.5	0.6	78.0	0.5	10.2	0.5	7.6	100.0	1.1	1,046
Primary complete ²	13.5	0.0	1.3	0.5	71.2	0.6	14.1	2.8	9.5	100.0	1.2	567
Secondary												
incomplete	9.2	0.1	1.6	0.2	75.4	0.7	13.7	2.6	5.7	100.0	0.9	1,176
Secondary complete or higher ³	13.3	0.0	2.0	1.1	69.9	0.6	14.8	4.3	7.3	100.0	1.7	1,187
5	13.5	0.0	2.0	1.1	09.9	0.0	14.0	4.5	7.5	100.0	1.7	1,107
Wealth quintile												
Lowest	4.9	0.0	3.4	0.3	80.1	0.5	11.6	0.2	3.9	100.0	0.9	965
Second	6.3	0.0	2.8	0.1	81.6	0.1	9.3	0.6	5.5	100.0	0.2	1,025
Middle	8.2	0.0	2.7	0.8	77.2	0.5	12.0	1.4	5.5	100.0	1.3	1,085
Fourth	11.6	0.1	1.4	0.8	72.0	0.1	15.0	3.1	7.5	100.0	1.0	1,058
Highest	21.1	0.0	0.7	0.9	59.5	1.4	18.7	6.3	12.5	100.0	2.3	1,048
Nutritional status (body mass index ⁴) Thin (BMI <18.5)	6.3	0.0	2.8	0.4	79.0	0.5	11.9	0.4	4.9	100.0	1.0	1,029
Normal (BMI 18.5- 24.9)	9.7	0.0	2.0	0.4	75.2	0.3	12.9	2.0	6.8	100.0	0.9	3,201
Overweight (BMI	5.7	0.0		0.0		0.0		2.0	0.0		5.0	0,201
25.0-29.9)	17.3	0.0	1.8	0.6	65.8	1.2	15.1	5.6	9.8	100.0	1.8	804
Obese (BMI ≥30.0)	24.4	0.0	0.3	1.6	44.2	4.5	31.2	5.3	13.0	100.0	6.1	92
Total	10.5	0.0	2.2	0.6	73.9	0.5	13.4	2.4	7.0	100.0	1.1	5,181
	10.0	0.0	<i>L.L</i>	0.0	10.0	0.0	10.4	2.7	1.0	100.0	1.1	0,101

Note: The fasting whole blood glucose measurements taken in the survey converted to fasting plasma glucose equivalent values provide a cross-sectional assessment of fasting plasma glucose equivalent values in the surveyed population at the time of the BDHS interviews. The prevalence of raised blood glucose does not represent a clinical diagnosis of diabetes, as FPG alone is not used for a clinical diagnosis. Total includes 56 men with missing information on nutritional status.

¹ Individuals were classified as having diabetes if they reported taking medication for diabetes or had a fasting blood glucose of ≥7.0 mmol/L.

² Primary complete is defined as completing grade 5.

³ Secondary complete is defined as completing grade 10.
 ⁴ Body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²).

Table 13.5.5 Fasting plasma glucose equivalent values and treatment status: Men age 18-34

Among men age 18-34, prevalence of raised blood glucose/diabetes, percent distribution of fasting plasma glucose (FPG) values and treatment status, and percentage having fasting plasma glucose level below 7.0 mmol/L and taking medication, by background characteristics, Bangladesh DHS 2017-18 aating plaama gluaaaa

			Fa							
		Hypogly-	Narraa	du comio						
		cemia	Νοιπιοξ	lycemia		lyperglycemi	a			
					6.1-6.9 mmol/L (impaired FPG or inter- mediate				FPG <7.00	
		<3.9 mmol/L ²	3.9-6.0	mmol/L	hyper- glycemia) ³		mol/L ed FPG)		mmol/L and	
Background characteristic	Prevalence of diabetes ¹	Not taking medication	Taking prescribed medication	Not taking medication	Not taking medication	Taking prescribed medication	Not taking medication	Total	currently taking medication	Number of men
<u> </u>										
Age 18-19 20-24 25-29 30-34	5.6 5.0 3.6 6.9	4.0 2.9 2.1 1.6	0.0 0.0 0.0 0.1	80.9 81.6 82.5 74.8	9.5 10.4 11.7 16.7	0.0 0.0 0.1 0.9	5.6 5.0 3.5 6.0	100.0 100.0 100.0 100.0	0.0 0.0 0.0 0.1	280 546 563 550
Residence Urban Rural	7.1 4.4	1.4 2.9	0.0 0.0	74.3 82.3	17.3 10.3	0.1 0.3	6.9 4.0	100.0 100.0	0.0 0.0	593 1,346
Division										
Barishal	4.8	3.1	0.6	82.9	9.3	0.0	4.1	100.0	0.6	92
Chattogram	3.8	2.5	0.0	80.6	13.0	0.4	3.4	100.0	0.0	324
Dhaka	7.8	1.6	0.0	71.3	19.4 9.2	0.0	7.8	100.0	0.0	495 212
Khulna Mymensingh	5.0 6.2	3.2 1.6	0.0 0.0	82.5 80.3	9.2 11.9	0.0 0.0	5.0 6.2	100.0 100.0	0.0 0.0	155
Rajshahi	3.9	1.8	0.0	86.5	7.9	0.0	3.6	100.0	0.0	289
Rangpur	2.7	5.3	0.0	84.0	8.0	1.5	1.2	100.0	0.0	227
Sylhet	5.7	1.8	0.0	81.6	11.0	0.0	5.7	100.0	0.0	144
Education										
No education	6.6	4.2	0.0	77.1	12.1	0.0	6.6	100.0	0.0	144
Primary incomplete	4.9	2.3	0.0	82.4	10.4	0.0	4.9	100.0	0.0	369
Primary complete ⁴	7.5	2.4	0.0	76.3	13.8	0.0	7.5	100.0	0.0	229
Secondary incomplete Secondary complete or	4.0	1.6	0.0	81.1	13.3	0.6	3.4	100.0	0.0	559
higher ⁵	5.4	3.0	0.1	79.2	12.4	0.3	5.0	100.0	0.1	637
Wealth quintile										
Lowest	3.2	3.3	0.2	82.0	11.5	0.0	3.0	100.0	0.2	318
Second	4.8	4.1	0.0	85.3	5.8	0.0	4.8	100.0	0.0	352
Middle	3.0 6.5	2.8 1.3	0.0	83.2 79.5	11.0	0.7 0.6	2.3 5.9	100.0	0.0	421 451
Fourth Highest	8.1	1.3	0.0 0.0	79.5	12.7 20.4	0.0	5.9 8.1	100.0 100.0	0.0 0.0	397
Nutritional status (body mass index ⁶) Thin (BMI <18.5)	4.3	1.2	0.0	84.8	9.7	0.0	4.3	100.0	0.0	389
Normal (BMI 18.5-24.9) Overweight (BMI 25.0-	5.1	2.6	0.0	80.0	12.2	0.3	4.8	100.0	0.0	1,244
29.9) Obese (BMI ≥30.0)	7.1 (6.4)	3.8 (0.8)	0.0 (0.0)	72.9 (64.4)	16.2 (28.3)	0.7 (0.0)	6.4 (6.4)	100.0 100.0	0.0 (0.0)	268 29
Total	5.2	2.5	0.0	79.9	12.4	0.3	4.9	100.0	0.0	1,939

Note: The fasting whole blood glucose measurements taken in the survey converted to fasting plasma glucose equivalent values provide a cross-sectional Since the stating whole block glockse measurements taken in the surveyed population at the time of the BDHS interviews. The prevalence of raised block gluckse does not represent a clinical diagnosis of diabetes, as FPG alone is not used for a clinical diagnosis. Total includes 10 men with missing information on nutritional status. Figures in parentheses are based on 25-49 unweighted cases.

² No men with an FPG value of <3.9 mmol/L (below normal) took medication, so these data are not shown.

³ No men with FPG values of 6.1-6.9 mmol/L (impaired FPG or intermediate hyperglycemia) took medication, so these data are not shown.

⁴ Primary complete is defined as completing grade 5.

⁵ Secondary complete is defined as completing grade 10.

⁶ Body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²).

Table 13.5.6 Fasting plasma glucose equivalent values and treatment status: Men age 35 and older

Among men age 35 and older, prevalence of raised blood glucose/diabetes, percent distribution of fasting plasma glucose (FPG) values and treatment status, and percentage having fasting plasma glucose level below 7.0 mmol/L and taking medication, by background characteristics, Bangladesh DHS 2017-18

		Fasting plasma glucose values										
		Hypog	lycemia	Normog	Normoglycemia Hyperglycemia							
		<3.9 mmol/L		3.9-6.0 mmol/L		6.1-6.9 mmol/L (impaired FPG or intermediate hyper- glycemia)		≥7 mmol/L (elevated FPG)			FPG <7.00 mmol/L and currently	
Background characteristic	Prevalence of diabetes ¹		Not taking medication		Not taking medication		Not taking medication	Taking prescribed medication		Total	taking	Number of men
Age												
35-39	8.7	0.0	1.2	0.4	75.0	0.0	15.1	1.8	6.5	100.0	0.4	650
40-44	13.1	0.0	1.0	0.2	72.3	0.5	13.6	1.8	10.6	100.0	0.8	473
45-49	11.2	0.0	2.3	0.8	70.5	1.0	16.0	2.3	7.1	100.0	1.8	434
50-54	17.7	0.0	1.7	1.1	67.0	1.0	13.7	3.4	12.1	100.0	2.1	356
55-59	13.6	0.0	3.1	1.1	71.3	1.0	12.0	6.4	5.2	100.0	2.1	313
60-64	17.7	0.0	2.5	2.0	64.4	1.1	15.3	6.4	8.1	100.0	3.2	352
65-69	16.2	0.0	1.7	0.8	72.5	1.1	9.6	9.6	4.7	100.0	1.9	213
70+	16.4	0.2	3.2	1.3	67.5	1.8	12.9	2.6	10.5	100.0	3.2	451
Residence												
Urban	17.1	0.1	1.3	1.1	64.6	0.8	17.0	4.8	10.4	100.0	2.0	830
Rural	12.5	0.0	2.2	0.9	72.4	0.9	12.8	3.2	7.5	100.0	1.7	2,412
Division												
Barishal	12.3	0.0	1.4	1.9	69.8	0.2	16.5	3.5	6.7	100.0	2.1	191
Chattogram	17.5	0.0	3.5	1.5	66.0	1.4	13.0	5.6	9.0	100.0	2.9	493
Dhaka	20.9	0.0	0.9	0.6	55.7	1.2	22.5	4.2	15.0	100.0	1.8	726
Khulna	10.6	0.0	2.2	0.4	76.6	0.6	10.6	3.1	6.6	100.0	1.0	454
Mymensingh	7.4	0.0	1.4	0.6	77.0	1.6	14.3	1.2	3.9	100.0	2.3	270
Rajshahi	11.8	0.2	2.7	0.6	78.4	0.4	7.2	4.0	6.5	100.0	1.2	467
Rangpur	8.1	0.0	2.3	1.6	80.1	0.4	9.4	2.3	3.9	100.0	1.9	445
Sylhet	11.6	0.0	1.0	0.5	72.6	0.6	14.9	3.2	7.3	100.0	1.1	195
Education												
No education	9.0	0.0	2.8	0.5	74.0	0.4	14.2	1.8	6.3	100.0	1.0	1,062
Primary incomplete	11.7	0.0	2.7	0.9	75.5	0.8	10.1	0.8	9.1	100.0	1.7	677
Primary complete ² Secondary	17.5	0.0	0.5	0.9	67.7	1.1	14.2	4.7	10.8	100.0	1.9	338
incomplete Secondary complete or	14.0	0.1	1.6	0.3	70.3	1.3	14.1	4.5	7.9	100.0	1.7	617
higher ³	22.5	0.0	0.9	2.3	59.0	1.2	17.6	9.0	9.9	100.0	3.6	550
Wealth quintile												
Lowest	5.7	0.0	3.5	0.4	79.1	0.8	11.7	0.3	4.3	100.0	1.2	647
Second	7.1	0.0	2.1	0.2	79.7	0.2	11.1	1.0	5.8	100.0	0.3	673
Middle	11.5	0.0	2.6	1.3	73.3	0.8	12.6	1.9	7.6	100.0	2.1	664
Fourth	15.4	0.1	1.5	1.3	66.4	0.2	16.7	5.0	8.7	100.0	1.7	607
Highest	29.0	0.0	0.4	1.4	52.9	2.3	17.7	10.1	15.1	100.0	3.7	651
Nutritional status (body mass index⁴) Thin (BMI <18.5)	7.5	0.0	3.8	0.7	75.5	0.9	13.3	0.7	5.3	100.0	1.6	640
Normal (BMI 18.5-												
24.9) Overweight (BMI	12.6	0.0	1.9	1.0	72.1	0.5	13.4	3.2	8.1	100.0	1.4	1,957
25.0-29.9)	22.3	0.0	0.8	0.9	62.3	1.8	14.6	8.1	11.5	100.0	2.7	536
Obese (BMI ≥30.0)	32.5	0.0	0.0	2.3	35.0	6.5	32.4	7.7	16.0	100.0	8.8	64
Total	13.7	0.0	2.0	0.9	70.4	0.9	13.9	3.6	8.3	100.0	1.8	3,242

Note: The fasting whole blood glucose measurements taken in the survey converted to fasting plasma glucose equivalent values provide a cross-sectional assessment of fasting plasma glucose equivalent values in the surveyed population at the time of the BDHS interviews. The prevalence of raised blood glucose does not represent a clinical diagnosis of diabetes, as FPG alone is not used for a clinical diagnosis. Total includes 46 men with missing information on nutritional status.

¹ Individuals were classified as having diabetes if they reported taking medication for diabetes or had a fasting blood glucose of ≥7.0 mmol/L.

² Primary complete is defined as completing grade 5.

³ Secondary complete is defined as completing grade 10.

⁴ Body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²).

Key Findings

- Causes of death among children under age 5: Among children under age 5, the major causes of death are pneumonia (18%), birth asphyxia (16%), prematurity (13%), drowning (9%), and possible serious infections (9%).
- Causes of death among neonates: The major cause of death among neonates is birth asphyxia (24%), followed by prematurity (19%), pneumonia (13%), and possible serious infections (12%).
- Causes of death among children age 12-59 months: Drowning is the most prominent cause of death among children age 12-59 months (58%), followed by pneumonia (13%).
- Trends in cause-specific mortality rates: Among children under age 5, mortality due to pneumonia decreased from 12 deaths per 1,000 live births in 2011 to 8 deaths per 1,000 live births in 2017-18.

ata on causes of death are crucial in health policy planning and program monitoring (WHO 2016). Although cause of death estimates are useful in prioritizing interventions, the availability of such data is somewhat limited in resource-constrained settings, including Bangladesh. Verbal autopsy is a method of determining cause of death based on an interview with the next of kin or caregivers who were present at the time of death or who have knowledge about the events leading to the death. This method has been commonly used to determine causes of death in settings with limited resources where the vital registration system is weak and the majority of deaths occur outside the reach of health services.

The 2017-18 BDHS adopted the verbal autopsy method for estimation of causes of deaths among children under age 5 in Bangladesh. Previously, verbal autopsies were conducted in the 1993-94 BDHS, 1996-97 BDHS, 2004 BDHS, and 2011 BDHS. However, the 1993-94 BDHS, 1996-97 BDHS, and 2004 BDHS assigned causes of death using computer algorithms involving a hierarchical process that followed several mutually exclusive tiers applied in sequence, whereas the 2011 BDHS and 2017-18 BDHS used comparable instruments and assigned causes of death through physician reviews. Therefore, the results are comparable between the 2011 BDHS and the 2017-18 BDHS.

14.1 VERBAL AUTOPSY INSTRUMENTS

The 2017-18 BDHS verbal autopsy instruments were adapted from the standardized 2016 WHO and 2011 BDHS instruments. Separate instruments were used for neonatal deaths (age 0-28 days) and child deaths (age 2-59 months). The questionnaires included both open-ended and closed-ended questions and gathered detailed information on signs and symptoms leading to death. They also collected data on the antenatal history of the mother and health care received by the deceased child. The questionnaires were adapted to the local context and culture and translated into Bengali, the most commonly spoken language in Bangladesh.

14.2 DATA COLLECTION METHODS

In addition to the month-long training of field staff for the 2017-18 BDHS, dedicated training was organized for the team responsible for conducting verbal autopsy interviews. The verbal autopsy team included one trained interviewer and one field editor from each of the 20 data collection teams. Supervisors and quality control officers also received the training to clarify their roles and duties. The training included extensive classroom lectures and practical sessions with role-playing. At the end of the training, the data collectors were sent for practice in the field, where they interviewed mothers who had lost their children within the 5 years preceding the survey. The verbal autopsy instruments were updated based on feedback from the field practice.

Before the questionnaires were administered, informed consent was obtained from the mother who was present at the time of death or who had knowledge about the events leading to the death. Efforts were made to maintain the privacy of respondents during interviews. Out of 471 (unweighted) eligible cases, verbal autopsy interviews were successfully conducted in all except one in which the respondent refused to participate.

14.3 QUALITY ASSURANCE

Four quality control officers were engaged as the focal persons to ensure the quality of verbal autopsy data collection. The focal persons were extensively trained by icddr,b on the verbal autopsy instruments, the data collection process, interviewing techniques, and monitoring and supervision principles. During the fieldwork, the focal persons were informed about the cases screened for verbal autopsy by the team supervisors, and they conducted onsite visits in most cases to supervise data collection and provide additional technical support when required. Any issues faced were promptly resolved in the field before the next cluster was visited. Additionally, periodic field monitoring and supervision were done by the 2017-18 BDHS core team, quality controllers, and representatives from the Ministry of Health and Family Welfare. Four separate review meetings were held with the verbal autopsy data collection team during the survey to address any problems they faced. At the conclusion of the survey, all of the completed verbal autopsy questionnaires were reviewed by the research officer before computer entry. Double entry was done by two separate data entry personnel to avoid inconsistencies.

14.4 CAUSE OF DEATH CERTIFICATION AND CODING

Three physicians were assigned to review the verbal autopsy questionnaires and determine causes of death. The physicians received 4-week-long training on the verbal autopsy instruments, international death certification, and cause of death assignment by reviewing verbal autopsy instruments and International Classification of Diseases (10th version; ICD-10) codes. The training consisted of theoretical classes for 2 weeks and practical sessions for 2 weeks. During the practical sessions, the physicians reviewed completed verbal autopsy questionnaire forms from previous studies adopting similar instruments and assigned causes of death based on the ICD-10 codes. After each practical session round, a supervised discussion took place among the physicians that focused on the review process and logic for assigning causes of death when there were disagreements regarding underlying causes.

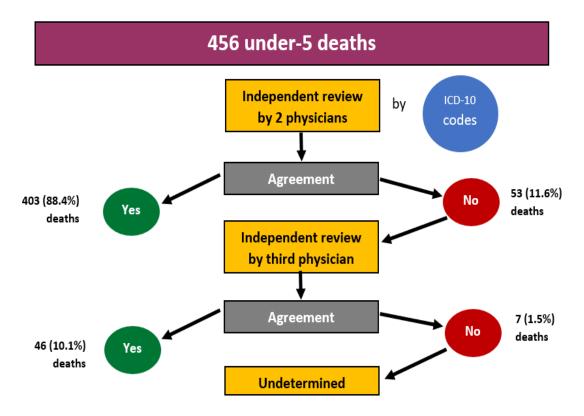


Figure 14.1 Physician review process for verbal autopsies

In the 2017-18 BDHS, each questionnaire was independently reviewed by two physicians. The physicians were blinded regarding the order of the review through allocation of different codes to the verbal autopsy forms. The codes were generated and maintained by a statistician who reallocated the forms with different codes to the next reviewer after the completion of each review. The physicians assigned immediate, underlying, and contributory causes of death based on the 2016 online version of the ICD-10. When the two physicians agreed on the underlying cause, it was considered to be the final cause of death. In the absence of agreement, an additional review was conducted by a third physician. If the underlying cause was agreed upon by any two of the three physicians, it was considered the final cause of death. If no agreement was reached after the third physician review, the cause of death was recorded as "undetermined." In 53 cases in which two physicians had assigned identical causes of death but disagreed on whether these were immediate or underlying causes, a discussion was arranged to reconcile the differences in the presence of a trained verbal autopsy expert. The review process is summarized with unweighted numbers in **Figure 14.1**.

14.5 CAUSES OF DEATH AMONG CHILDREN UNDER AGE 5

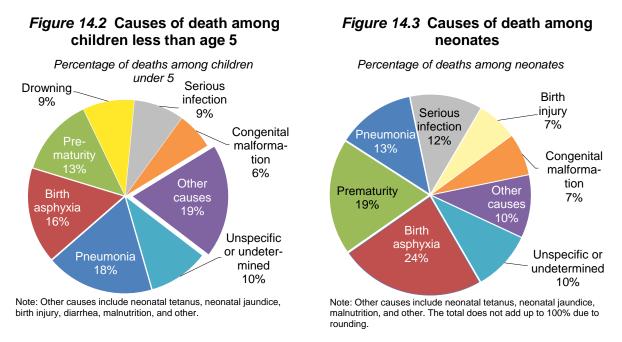


Table 14.1 presents the percent distribution of childhood deaths in Bangladesh by cause and age group. Pneumonia is the most prominent cause of death among children under age 5 (18%), followed by birth asphyxia (16%), prematurity (13%), drowning (9%), and possible serious infections (9%). Causes of death could not be ascertained in 10% of cases (8% because of a lack of adequate information and 2% because of a lack of agreement between the reviewing physicians) (**Figure 14.2**).

Among neonates (age 0-28 days), birth asphyxia (24%) and prematurity (19%) are the major causes of death. Pneumonia (13%) and possible serious infections (12%) together account for one quarter of deaths. Congenital malformations are the cause of 7% of all neonatal deaths (**Figure 14.3**).

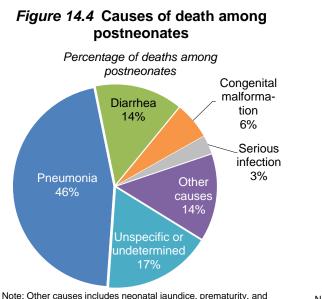
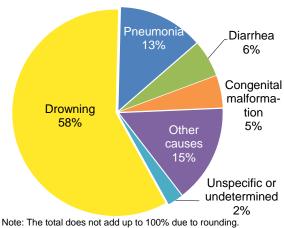


Figure 14.5 Causes of death among children age 12-59 months

Percentage of deaths among children



Pneumonia accounts for 45% of deaths among postneonates (age 29 days to age 11 months). Diarrhea accounts for 14% of deaths among these children (Figure 14.4).

other.

Among children age 12-59 months, 58% of deaths are due to drowning and 13% to pneumonia (**Figure 14.5**). In all age groups, pneumonia is among the three major causes of death.

Patterns by background characteristics

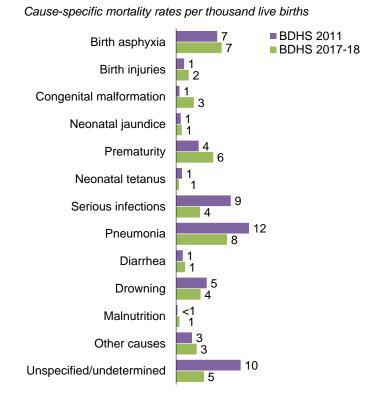
- Ten percent of deaths among female children occur as a result of possible serious infections, as compared with 7% of deaths among male children. Congenital malformations account for 7% of deaths among male children and 5% of deaths among female children (Table 14.2).
- Children in urban areas are more likely than children in rural areas to die as a result of birth injuries (9% versus 3%), congenital malformations (10% versus 5%), and pneumonia (21% versus 17%) (Table 14.2).
- Children in rural areas are more likely than those in urban areas to die from possible serious infections (10% versus 6%) and birth asphyxia (17% versus 14%).
- Children whose mothers have at least some primary education (15%) are more likely to die due to
 prematurity than those whose mothers have at least some secondary education (11%) (Table 14.3).
- Birth asphyxia is the predominant cause of death among children in Rajshahi and Rangpur, with 30% of deaths attributable to this cause (**Table 14.4**).

14.6 CAUSE-SPECIFIC MORTALITY RATES

The cause-specific mortality rate is calculated by applying the cause of death distribution in the survey to the estimated number of deaths among children under age 5. Figure 14.6 compares causespecific mortality rates per 1,000 live births between 2011 and 2017-18. The mortality rate for possible serious infections has decreased substantially since 2011, from 9 deaths per 1,000 live births to 4 deaths per 1,000 live births. Mortality due to pneumonia has decreased from 12 deaths per 1,000 live births to 8 deaths per 1,000 live births.

The mortality rate for premature births has increased since 2011, from 4 deaths per 1,000 live births to 6 deaths per 1,000 live births. Mortality due to birth asphyxia has remained unchanged at 7 deaths per 1,000 live births.

Figure 14.6 Trends in cause-specific mortality rates



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For more information on causes of death among children under age 5, see the following tables:

- Table 14.1 Cause of death among children under age 5 by age group
- Table 14.2 Cause of death among children under age 5 by sex of child and residence
- Table 14.3 Cause of death among children under age 5 by mother's education
- Table 14.4 Cause of death among children under age 5 by division

Table 14.1 Causes of death among children under age 5 by age group

Percent distribution of deaths among children under age 5 since January 2012 by cause of death, according to age group, Bangladesh DHS 2017-18

		Age g	roup	
		Postneonatal		
	Neonatal	(29 days-	12-59	Under
Cause of death	(0-28 days)	11 months)	months	5 years
Neonatal tetanus	1.5	0.0	0.0	1.0
Congenital malformation	6.8	5.9	5.0	6.3
Drowning	0.0	0.0	58.4	8.7
Birth asphyxia	23.6	0.0	0.0	16.2
Birth injury	6.5	0.0	0.0	4.5
Diarrhea	0.0	14.1	5.7	3.2
neumonia	12.6	45.7	13.2	18.1
leonatal jaundice	2.7	0.9	0.0	2.0
Prematurity	18.8	1.6	0.0	13.2
Possible serious infection	11.7	3.0	0.0	8.5
<i>Malnutrition</i>	1.4	0.0	1.4	1.2
Other causes	4.9	11.5	13.8	7.3
Jnspecific	7.6	14.4	2.4	8.0
Indetermined	2.1	2.9	0.0	1.9
otal	100.0	100.0	100.0	100.0
lumber	314	75	68	457

Table 14.2 Causes of death among children under age 5 by sex of child and residence

Percent distribution of deaths among children under age 5 since January 2012 by cause of death, according to sex of child and residence, Bangladesh DHS 2017-18

	Child	d's sex	Resi	dence
Cause of death	Male	Female	Urban	Rural
Neonatal tetanus	0.4	1.7	1.3	0.9
Congenital malformation	7.1	5.4	9.5	5.1
Drowning	8.2	9.4	7.1	9.4
Birth asphyxia	16.7	15.6	14.3	16.9
Birth injury	5.0	3.9	8.7	2.8
Diarrhea	3.1	3.3	2.9	3.3
Pneumonia	18.8	17.3	20.8	17.1
Neonatal jaundice	3.3	0.3	0.0	2.7
Prematurity	12.8	13.6	15.4	12.3
Possible serious infection	6.9	10.4	5.8	9.6
Malnutrition	1.0	1.3	1.0	1.2
Other causes	6.4	8.3	6.0	7.8
Unspecific	7.9	8.1	5.4	9.0
Undetermined	2.4	1.3	1.7	2.0
Total	100.0	100.0	100.0	100.0
Number	248	209	128	329

Table 14.3 Causes of death among children under age 5 by mother's education

Percent distribution of deaths among children under age 5 since January 2012 by cause of death, according to mother's level of education, Bangladesh DHS 2017-18

		Mother's education	
Cause of death	No education	Primary incomplete and primary complete	Secondary incomplete, secondary complete, and higher than secondary
Neonatal tetanus	(0.0)	0.5	1.6
Congenital malformation	(0.0)	4.2	8.9
Drowning	(13.5)	6.3	9.7
Birth asphyxia	(12.1)	13.7	18.6
Birth injury	(0.0)	5.0	4.8
Diarrhea	(8.7)	3.7	1.9
Pneumonia	(19.3)	18.9	17.4
Neonatal jaundice	(0.0)	1.7	2.5
Prematurity	(20.7)	15.0	10.7
Possible serious infection	(10.0)	10.0	7.2
Malnutrition	(1.7)	2.0	0.5
Other causes	(7.3)	10.2	5.2
Unspecific	(6.7)	8.0	8.1
Undetermined	(0.0)	0.9	2.9
Total	100.0	100.0	100.0
Number	39	175	243

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

Table 14.4 Causes of death among children under age 5 by division

Percent distribution of deaths among children under age 5 since January 2012 by cause of death, according to division, Bangladesh DHS 2017-18

			Division		
Cause of death	Barishal and Khulna	Chattogram	Dhaka and Mymensingh	Rajshahi and Rangpur	Sylhet
Neonatal tetanus	0.0	0.0	1.5	2.3	0.0
Congenital malformation	8.6	7.2	7.0	3.0	6.5
Drowning	9.7	11.8	9.0	4.7	8.9
Birth asphyxia	14.2	15.1	11.4	29.9	9.6
Birth injury	2.5	7.4	6.5	1.1	1.3
Diarrhea	0.0	1.1	4.1	3.7	6.6
Pneumonia	18.3	21.6	17.4	17.5	15.4
Neonatal jaundice	0.0	3.5	1.7	1.1	3.9
Prematurity	11.2	8.0	17.2	13.5	10.6
Possible serious infection	9.7	11.2	5.0	11.9	7.4
Malnutrition	3.0	2.9	0.0	0.0	2.0
Other causes	11.6	4.0	6.4	5.0	15.8
Unspecific	9.0	2.8	10.1	6.4	11.9
Undetermined	2.3	3.3	2.7	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0
Number	57	88	165	97	49

Key Findings

- General services: 33% of urban women age 15-49 and 24% of rural women live less than 1 km away from a post office.
- Education facility: 83% of women have access to a primary school within their village or mohalla, and 65% have access to a madrasa (religious school).
- Income-generating organizations: Women in rural areas are more likely than women in urban areas to have access to Grameen Bank (91% versus 77%), the Bangladesh Rural Advancement Committee (94% versus 83%), and the Association of Social Advancement (91% versus 84%).
- Availability of family planning and health services:
 96% of women have access to a satellite clinic where they can get family planning and health services.
- Transport to upazila headquarters: 30% each of rural cluster residents use a baby taxi and an auto/easy bike to travel to the upazila headquarters. Overall, 19% of residents use a car, bus, or tempo.
- Transport to district headquarters: 60% of people in rural clusters travel to the district headquarters by car, bus, or tempo.
- *Health facility:* 86% of clusters have a health facility within their village or mohalla.
- Health and family planning workers: 91% of sample clusters have government-affiliated health and family planning workers available. The percentage of sample cluster residents with access to allopathic practitioners or MBBS doctors has increased since 2014, from 43% to 72%.

n the 2017-18 BDHS, the Community Questionnaire was administered in each of the selected clusters during the household listing operation. The community survey collected data on characteristics of the selected sample clusters, such as distance to the upazila headquarters, schools, and post offices, as well as information on the accessibility of health and family planning services located within or near the cluster. Another aim of the community survey was to generate a list of health facilities in the sample clusters and a list of health and family planning fieldworkers covering the cluster, including an identification of their affiliation (government or nongovernment). These lists were later provided to the main survey interviewing teams to help identify the specific sources of services used by respondents.

The Community Questionnaire was administered to a group of four to six key informants who were knowledgeable about socioeconomic conditions and the availability of health and family planning services

or facilities in the cluster. These key informants included community leaders, teachers, government officials, social workers, religious leaders, traditional healers, and health care providers. Distance to facilities was measured in kilometers (km) from the center of each sample cluster. Distances to facilities were assumed to be the same for all interviewed women in the sample area.

15.1 AVAILABILITY OF GENERAL SERVICES

Table 15.1 presents the percent distribution of ever-married women age 15-49 by distance to various general services. Twenty-seven percent of women live less than 1 km from the nearest post office, while 61% live 1-4 km away from a post office. Overall, the median distance to a post office is 2.2 km. Cinema halls are less widespread; only 3% of women have access to a cinema hall within less than 1 km, and 25% live 1-4 km from the nearest cinema hall. The median distance to the nearest cinema hall is 10.0 km (**Table 15.1**).

Patterns by background characteristics

- Thirty-three percent of women in urban areas and 24% of women in rural areas live less than 1 km from the nearest post office. The majority of women in both urban and rural areas live 1-4 km away from a post office (60% and 62%, respectively).
- Only 2% of rural women live less than 1 km from a cinema hall, as compared with 8% of urban women.
- In rural areas, 37% of women have access to a weekly market less than 1 km away, and 57% have access within 1-4 km. The median distance to a weekly market in rural areas is 1.7 km.

15.2 AVAILABILITY OF EDUCATION FACILITIES

Madrasas (religious schools) are widespread in Bangladesh. Sixty-five percent of women have access to a madrasa within their village or mohalla, and 34% have access to a madrasa within 1-4 km. Eighty-three percent of women have access to a primary school within their own village, while 17% have access within 1-4 km. Coeducational high schools are much more widespread than either boys' or girls' high schools. Overall, 39% of women live in a village where there is a coeducational high school, while only 8% live in a village with a boys' high school and 10% live in a village with a girls' high school (**Table 15.2**).

Patterns by background characteristics

- Urban women (88%) are more likely to have a primary school within their village/mohalla than rural women (81%).
- Sixteen percent of urban women have a boys' high school located within their village or mohalla, as compared with only 4% of rural women. Similarly, 20% of urban women have a girls' high school within their village or mohalla, compared with 6% of rural women.

15.3 ACCESS TO INCOME-GENERATING ORGANIZATIONS

Because the availability of income-generating organizations may influence women's reproductive behavior, respondents to the Community Questionnaire were asked whether specific income-generating organizations such as the Grameen Bank, the Bangladesh Rural Advancement Committee (BRAC), Proshika, and the Association of Social Advancement (ASA) are available in their village or mohalla. Eighty-seven percent of ever-married women age 15-49 have access to Grameen Bank, 91% have access to BRAC income-generating activities, and 89% have access to ASA (**Table 15.3**).

Trends: Women's access to BRAC income-generating activities increased from 80% to 91% between 2014 and 2017-18. Similarly, women's access to ASA increased from 74% to 89%.

Patterns by background characteristics

- Women in rural areas are more likely than women in urban areas to have access to Grameen Bank (91% versus 77%), BRAC (94% versus 83%), and ASA (91% versus 84%) (Table 15.3).
- Twenty-three percent of women in urban areas have access to cottage industries of the Bangladesh Small Industries Corporation (BSIC), as compared with only 4% of women in rural areas.
- Rural women are more than twice as likely as urban women to have access to Akti Bari Akti Khamar, a Bangladesh government social welfare program (63% versus 30%).

15.4 ACCESS TO FAMILY PLANNING AND HEALTH SERVICES

Respondents to the Community Questionnaire were also asked about access to family planning (FP) and other health services. **Figure 15.1** shows that the majority of ever-married women (96%) have access to a satellite clinic where they can get health services, especially family planning services. Seventy-six percent of women have access to shops/pharmacies that sell family planning methods (**Table 15.4** and **Figure 15.1**).

Trends: Between 2014 and 2017-18, the availability of shops/pharmacies that sell family planning methods increased from 65% to 76%.

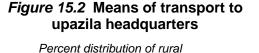
Patterns by background characteristics

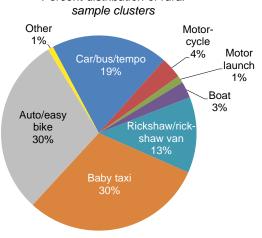
- Urban women are much more likely than rural women to have access to a shops/pharmacies that sell family planning methods (88% and 71%, respectively) (Table 15.4).
- Ninety-two percent of urban women have access to a satellite clinic, as compared with 98% of rural women.

15.5 MEANS OF TRANSPORT TO UPAZILA HEADQUARTERS

Figure 15.2 shows the percent distribution of rural sample clusters by the most common means of transport used by village residents to travel to the upazila headquarters in each division. Residents of rural sample clusters are most likely to use a baby taxi or an auto/easy bike (30% each) as their means of transport. Overall, 19% of residents use a car, bus, or tempo (**Table 15.5**).

Patterns by background characteristics



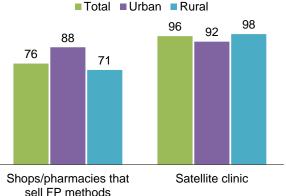


Note: The total does not add up to 100% due to rounding.

 In rural clusters of Dhaka, the most common means of transport to the upazila headquarters is an auto or easy bike (34%), followed by a car/bus/tempo (33%) and a baby taxi (20%) (Table 15.5).

Figure 15.1 Access to family planning and health services

Percentage of ever-married women age 15-49 who have access



- Baby taxis are the most common means of travel to the upazila headquarters in Chattogram (73%) and Sylhet (64%).
- An auto/easy bike is the most common means of travel to the upazila headquarters in Rangpur (57%), Barishal (46%), and Mymensingh (42%).

15.6 MEANS OF TRANSPORT TO DISTRICT HEADQUARTERS

Table 15.6 shows that 60% of residents in rural sample clusters use a car, bus, or tempo to travel to the district headquarters. This is the most common mode of transport in all divisions. Twenty-three percent of rural residents use a baby taxi, and 11% use an auto/easy bike.

Patterns by background characteristics

- By division, use of a car, bus, or tempo is most common in Khulna (76%) and least common in Mymensingh (44%) (**Table 15.6**).
- In Barishal, 16% of rural residents use a motor launch to travel to the district headquarters.

15.7 AVAILABILITY OF HEALTH FACILITY

Table 15.7 shows that 86% of the 2017-18 BDHS sample clusters have a health facility within their village or mohalla; 44% have a government health facility, 9% each have an NGO facility and a private facility, and 77% have a satellite clinic. Four percent of sample clusters have no satellite clinic available.

Patterns by background characteristics

- The availability of health facilities within villages/mohallas is slightly higher in urban clusters (90%) than in rural clusters (84%).
- Rural clusters are more likely to have a government facility within their village or mohalla than urban clusters (47% versus 34%).
- Urban clusters (25%) are more than eight times as likely as rural clusters (3%) to have an NGO facility within their village/mohalla.
- Twenty-two percent of urban clusters have a private facility within their village or mohalla, as compared with 3% of rural clusters.
- Similar proportions of urban and rural clusters have a satellite clinic within their village or mohalla (78% and 77%, respectively). Eight percent of urban sample clusters and 2% of rural sample clusters have no satellite clinic facility.

15.8 AVAILABILITY OF HEALTH AND FAMILY PLANNING WORKERS

Table 15.8 shows that family planning and health providers are available within almost all sample clusters (98%). Government-affiliated health and family planning workers are available in 91% of sample clusters, while 23% of clusters have NGO health and family planning fieldworkers available. Seventy-two percent of sample cluster residents have access to allopathic practitioners or doctors with MBBS degree, 68% have access to homeopathic practitioners, and 25% have access to Unani or Ayurvedic practitioners.

Trends: The percentage of sample cluster residents with access to allopathic practitioners or MBBS doctors increased from 43% in 2014 to 72% in 2017-18. Similarly, the percentage of residents with access to homeopathic practitioners increased from 58% to 68%. However, the percentage of residents with access to Unani or Ayurvedic practitioners has declined since 2014, from 39% to 25%.

Patterns by background characteristics

- Rural clusters are more likely to have government health and family planning workers available than urban clusters (99% and 71%, respectively).
- The availability of allopathic practitioners or MBBS doctors is higher in urban clusters than in rural clusters (85% versus 67%).
- Homeopathic practitioners are more likely to be available in urban clusters than in rural clusters (79% versus 63%).
- Urban clusters are more than twice as likely as rural clusters to have Unani or Ayurvedic medical practitioners available (43% versus 18%).

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For more information on access to health services, see the following tables:

- Table 15.1 Distance to nearest general services
- Table 15.2 Distance to nearest education facility
- Table 15.3 Availability of income-generating organizations
- Table 15.4 Availability of family planning and health services
- Table 15.5 Means of transport to upazila headquarters
- Table 15.6 Means of transport to district headquarters
- Table 15.7 Availability of health facility
- Table 15.8 Availability of health and family planning workers

Table 15.1 Distance to nearest general services

Percent distribution of ever-married women age 15-49 by distance to nearest specified service location, according to type of service, Bangladesh DHS 2017-18

	Ur	ban		Rural	Т	Total		
Distance	Post office	Cinema hall	Weekly market	Post office	Cinema hall	Post office	Cinema hall	
<1 km	33.0	7.7	36.9	24.3	1.6	26.7	3.4	
1-4 km	60.3	60.7	57.2	61.8	11.2	61.4	25.3	
5-9 km	6.7	14.4	5.8	12.2	23.8	10.6	21.1	
≥10 km	0.0	17.1	0.1	1.7	63.1	1.2	50.0	
Missing	0.0	0.0	0.0	0.0	0.3	0.0	0.2	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number of women	5,729	5,729	14,398	14,398	14,398	20,127	20,127	
Median distance	1.6	3.6	1.7	2.4	12.3	2.2	10.0	

Note: Because of the relative lack of weekly markets in urban areas, information on access to these markets was not collected in urban clusters, and weekly markets are not included in the total column.

Table 15.2 Distance to nearest education facility

Percent distribution of ever-married women age 15-49 by distance to the nearest education facility, according to type of education facility, Bangladesh DHS 2017-18

			Urban					Rural					Total		
Distance	Ma- drasa ¹	Primary school	Boys' high school	Girls' high school	Co- edu- cational high school	Ma- drasa ¹	Primary school	Boys' high school	Girls' high school	Co- edu- cational high school	Ma- drasa ¹	Primary school	Boys' high school	Girls' high school	Co- edu- cational high school
Within village/															
mohalla	81.3	87.6	16.1	20.0	45.6	57.8	80.8	4.4	6.4	36.4	64.5	82.7	7.7	10.3	39.0
1-4 km	18.4	12.4	55.6	64.7	50.7	39.5	18.6	20.7	37.8	59.7	33.5	16.8	30.7	45.5	57.1
5-9 km	0.3	0.0	10.1	8.9	3.7	1.8	0.3	17.5	28.0	2.0	1.3	0.2	15.4	22.6	2.5
≥10 km	0.0	0.0	17.9	6.3	0.0	0.9	0.4	56.8	27.4	1.9	0.7	0.3	45.7	21.4	1.4
Don't know/															
missing	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.6	0.4	0.0	0.0	0.0	0.5	0.3	0.0
Total Number of	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
women	5,729	5,729	5,729	5,729	5,729	14,398	14,398	14,398	14,398	14,398	20,127	20,127	20,127	20,127	20,127
Median distance	а	а	2.6	2.3	1.1	а	а	10.8	5.6	1.7	а	а	8.0	4.0	1.5

a = Unknown; median distance cannot be calculated because more than 50% of the cases are in the "within village" and "within mohalla" categories. ¹ Religious school

Table 15.3 Availability of income-generating organizations

Percentage of ever-married women age 15-49 who have access to specific income-generating organizations, by residence, Bangladesh DHS 2017-18

	Res	idence	_
Income-generating organization	Urban	Rural	Total
Mother's club or ladies' association	27.8	14.6	18.4
Grameen Bank	77.4	91.3	87.3
BRAC	82.6	94.4	91.0
Proshika	18.5	15.4	16.3
ASA	84.1	90.8	88.9
Cottage industries of BSIC	22.5	4.4	9.6
Cooperative society	82.7	70.3	73.8
Akti Bari Akti Khamar	29.9	62.5	53.2
Other NGO	67.9	67.7	67.7
Number of women	5,729	14,398	20,127

BRAC = Bangladesh Rural Advancement Committee

ASA = Association of Social Advancement

BSIC = Bangladesh Small Industries Corporation

Table 15.4 Availability of family planning and health services

Percentage of ever-married women age 15-49 who have access to specific family planning and health services, by residence, Bangladesh DHS 2017-18

	Res	Residence				
Service provider	Urban	Rural	Total			
Shops/pharmacies that sells family planning methods Satellite clinic	87.9 92.1	70.9 97.8	75.7 96.2			
Number of women	5,729	14,398	20,127			

Table 15.5 Means of transport to upazila headquarters

Percent distribution of rural sample clusters by most common means of transport to upazila headquarters, according to division, Bangladesh DHS 2017-18

				I	Most comn	non transpor	t					
Division	Rickshaw/ Car/bus/ Motor- Motor rickshaw Auto/ tempo cycle launch Boat Path van Train Baby taxi easy bike Other								Total	Number of clusters		
Barishal	22.8	8.8	7.0	4.0	0.0	8.5	0.0	3.2	45.7	0.0	100.0	32
Chattogram	17.8	1.9	0.0	3.3	0.0	0.0	0.0	73.2	3.7	0.0	100.0	83
Dhaka	32.8	2.6	2.9	5.2	0.0	2.5	0.0	20.3	33.8	0.0	100.0	83
Khulna	24.4	7.4	1.9	0.0	0.0	28.2	0.0	10.8	23.6	3.7	100.0	61
Mymensingh	24.5	3.8	0.0	1.7	1.8	5.8	1.8	18.9	41.7	0.0	100.0	47
Rajshahi	3.0	0.0	0.0	0.0	0.0	34.7	0.0	32.3	30.0	0.0	100.0	75
Rangpur	15.9	1.6	0.0	1.8	0.0	13.2	0.0	10.3	57.1	0.0	100.0	69
Sylhet	14.8	8.5	0.0	8.7	0.0	2.2	0.0	63.5	2.3	0.0	100.0	31
Total	19.4	3.5	1.2	2.7	0.2	12.6	0.2	30.2	29.5	0.5	100.0	480

Table 15.6 Means of transport to district headquarters

Percent distribution of rural sample clusters by most common means of transport to district headquarters, according to division, Bangladesh DHS 2017-18

				Ν	/lost comr	mon transport						
Division	Car/bus/ tempo	Motor- cycle	Motor launch	Bicycle	Boat	Rickshaw/ rickshaw van	Train	Baby taxi	Auto/ easy bike	Other	Total	Number of clusters
Barishal	72.0	0.0	15.5	0.0	2.1	0.0	0.0	2.0	8.3	0.0	100.0	32
Chattogram	50.5	0.0	3.7	0.0	3.3	0.0	1.6	39.0	1.8	0.0	100.0	83
Dhaka	72.7	0.0	0.0	0.0	5.2	0.0	0.0	7.6	14.6	0.0	100.0	83
Khulna	76.3	0.0	0.0	0.0	0.0	0.0	0.0	7.3	16.4	0.0	100.0	61
Mymensingh	44.1	1.6	1.7	0.0	0.0	1.5	3.4	35.9	11.8	0.0	100.0	47
Rajshahi	52.9	0.0	0.0	0.0	0.0	1.7	0.0	41.7	3.7	0.0	100.0	75
Rangpur	62.6	0.0	0.0	1.6	1.8	0.0	0.0	10.1	22.2	1.7	100.0	69
Sylhet	49.3	4.3	2.2	0.0	2.0	0.0	0.0	39.7	2.5	0.0	100.0	31
Total	60.4	0.4	2.0	0.2	2.0	0.4	0.6	23.2	10.5	0.2	100.0	480

Table 15.7 Availability of health facility

Percent distribution of sample clusters by availability of health facility, according to type of facility and residence, Bangladesh DHS 2017-18

				Type of facility			
		Government			Rural	-	
Distance	Any facility	facility ¹	NGO facility	Private facility	dispensaries	Satellite clinics	Delivery hut
			URBAN				
In village/mohalla	89.7	34.0	25.3	21.7	0.3	78.2	2.3
1 km	7.4	23.7	19.3	19.3	0.9	9.5	3.5
2-4 km	1.9	34.4	37.9	20.7	2.4	3.7	1.4
5 km or more	0.9	7.9	17.5	14.8	2.6	0.6	0.0
Don't know/missing	0.0	0.0	0.0	0.0	0.0	0.0	0.0
No facility	0.0	0.0	0.0	23.4	93.8	8.0	92.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of clusters	192	192	192	192	192	192	192
			RURAL				
In village/mohalla	83.9	47.2	2.5	3.3	1.4	76.9	1.0
1 km	10.1	25.3	2.2	3.2	0.9	12.2	0.1
2-4 km	5.9	26.1	18.6	15.4	1.9	8.2	0.3
5 km or more	0.1	1.4	75.8	41.0	1.7	0.5	0.4
Don't know/missing	0.0	0.0	0.2	0.0	0.0	0.0	0.0
No facility	0.0	0.0	0.8	37.1	94.2	2.3	98.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of clusters	480	480	480	480	480	480	480
			TOTAL				
In village/mohalla	85.6	43.5	9.0	8.6	1.1	77.3	1.4
1 km	9.3	24.8	7.1	7.8	0.9	11.4	1.1
2-4 km	4.8	28.5	24.1	16.9	2.0	6.9	0.6
5 km or more	0.3	3.2	59.1	33.5	1.9	0.5	0.3
Don't know/missing	0.0	0.0	0.1	0.0	0.0	0.0	0.0
No facility	0.0	0.0	0.6	33.2	94.0	3.9	96.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of clusters	672	672	672	672	672	672	672

¹ Government facility includes government hospital, upazila health complex, family welfare center, maternal and child welfare center, and community clinic.

Table 15.8 Availability of health and family planning workers

Percentage of sample clusters by availability of health and family planning workers, according to type of worker and residence, Bangladesh DHS 2017-18

	Resid	dence	
Type of worker	Urban	Rural	Total
Health and family planning field worker			
Government	71.0	99.3	91.2
NGO	36.2	17.7	23.0
Private	1.7	0.2	0.6
Other	2.9	0.4	1.1
Any worker	92.6	99.8	97.8
Medical practitioner			
Allopathic/MBBS	85.2	66.6	71.9
Homeopath	79.1	63.4	67.9
Unani/Ayurvedic	42.6	18.4	25.3
Number of clusters	192	480	672

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A.1 INTRODUCTION

This appendix describes the objectives of the survey, the overall sample size, and survey domains used. The 2017-18 Bangladesh Demographic and Health Survey (2017-18 BDHS) is a nationwide survey with a nationally representative sample of approximately 20,250 selected households. All ever-married women age 15-49 who are usual members of the selected households or who spent the night before the survey in the selected households were eligible for individual interviews. The survey was designed to produce reliable estimates for key indicators at the national level as well as for urban and rural areas and each of the country's eight divisions: Barishal, Chattogram, Dhaka, Khulna, Mymensingh, Rajshahi, Rangpur, and Sylhet.

A.2 SAMPLE FRAME

The sampling frame used for the 2017-18 BDHS is based on the complete list of enumeration areas (EAs) covering the entire country prepared by the Bangladesh Bureau of Statistics for the 2011 population census of the People's Republic of Bangladesh. The sampling frame contains information about EA location, type of residence (urban or rural), and the estimated number of residential households. A sketch map that delineates the EA geographic boundaries is available for each EA. Administratively, Bangladesh is divided into eight divisions. Each division is further sub-divided into progressively smaller zilas, thanas, unions, wards, and villages. An EA is a village, a group of small villages, or part of a large village. These divisions allow the country as a whole to be easily separated into small geographical area units with an urban-rural designation. Urban areas were further classified into two groups: city corporations and areas other than city corporations. Table A.1 gives the percentage distribution of households by division and by type of residence according to the 2011 population census. Division size varies from 5.6% (Sylhet, the smallest division) to 25.8% (Dhaka, the largest division). In Bangladesh, 23.3% of households are in urban areas, 8% are in city corporations, and 15.3% are in areas other than city corporations.

		Type of re	sidence			
		Urban				
Division	City corporation	Other than city corporation	Total	Rural	Total	Overall urban-rural percentage
Barishal	3.9	12.3	16.2	83.8	100.0	5.8
Chattogram	9.9	15.3	25.1	74.9	100.0	17.5
Dhaka	19.0	19.7	38.7	61.3	100.0	25.8
Khulna	4.2	13.6	17.8	82.2	100.0	11.6
Mymensingh	0.0	14.4	14.4	85.6	100.0	7.9
Rajshahi	2.2	15.0	17.2	82.8	100.0	13.9
Rangpur	0.0	12.7	12.7	87.3	100.0	11.9
Sylhet	5.4	10.2	15.6	84.4	100.0	5.6
Bangladesh	8.0	15.3	23.3	76.7	100.0	100.0

Source: Sampling frame of the 2011 population census

A.3 SAMPLE DESIGN AND IMPLEMENTATION

The 2017-18 BDHS sample was stratified and selected in two stages. Each division was stratified into urban city corporations, urban areas other than city corporations, and rural areas, yielding a total of 22 sampling strata. Samples of EAs were selected independently in each stratum in two

stages. Implicit stratification and proportional allocation were achieved at each of the lower administrative levels by sorting the sampling frame within each stratum before sample selection, according to administrative units in different levels, and by using a probability proportional to size selection at the first stage of sampling.

In the first stage, 675 EAs were selected with probability proportional to EA size and with independent selection in each sampling stratum. The sample allocation is given in Table A.2. A household listing operation was carried out in all of the selected sample EAs, and the resulting lists of households served as a sampling frame for the selection of households in the next stage. In the second stage of selection, a fixed number of 30 households per cluster were selected with an equal probability systematic selection from the newly created household listing. The survey interviewers interviewed only the pre-selected households. No replacements and no changes of the pre-selected households were allowed in the implementing stages in order to prevent bias. All ever-married women age 15-49 who are usual members of the selected households or who spent the night before the survey in the selected households were eligible to be interviewed.

Table A.3 shows the allocation of households according to division and type of residence, and Table A.4 shows the expected number of completed interviews with women according to division and type of residence. To ensure that survey precision was comparable across divisions, the sample allocation was based on a power allocation between divisions and between different types of residences within each division. Based on a fixed sample take of 30 households per cluster, the survey selected 675 EAs, 227 in urban areas and 448 in rural areas. The survey was conducted in 20,250 residential households, 6,810 in urban areas and 13,440 in rural areas. The sample was expected to result in about 20,108 completed interviews with ever-married women age 15-49, 6,763 in urban areas and 13,345 in rural areas.

Table A.2 Sample	e allocation of	f clusters by d	ivision		
Sample allocation	of clusters by	division, accord	ling to residenc	e, Bangladesh	DHS 2017-18
		Number of clu	sters allocated		
-		Urban		_	
Division	City corporation	Other than city corporation	Total urban	Rural	Total
Barishal	7	15	22	49	71
Chattogram	16	17	33	59	92
Dhaka	26	26	52	52	104
Khulna	9	19	28	58	86
Mymensingh	0	19	19	58	77
Rajshahi	6	21	27	62	89
Rangpur	0	24	24	61	85
Sylhet	9	13	22	49	71
Bangladesh	73	154	227	448	675

Table A.3 Sample allocation of selected households by division

Sample allocation of selected households by division, according to residence, Bangladesh DHS 2017-18

	N	umber of hous	eholds allocate	ed	
		Urban		_	
Division	City City City	Other than city corporation	Total urban	Rural	Total
Barishal	210	450	660	1,470	2,130
Chattogram	480	510	990	1,770	2,760
Dhaka	780	780	1,560	1,560	3,120
Khulna	270	570	840	1,740	2,580
Mymensingh	0	570	570	1,740	2,310
Rajshahi	180	630	810	1,860	2,670
Rangpur	0	720	720	1,830	2,550
Sylhet	270	390	660	1,470	2,130
Bangladesh	2,190	4,620	6,810	13,440	20,250

	-				
	Number of inte	erviews with ev	er-married wo	men age 15-49	
		Urban			
	,	Other than city			
Division	corporation	corporation	Total urban	Rural	Total
Barishal Chattogram Dhaka Khulna Mymensingh Rajshahi	209 476 774 268 0 178	448 506 774 566 566 626	657 982 1548 834 566 804	1,460 1,758 1,549 1,728 1,728 1,846 1,846	2,117 2,740 3,097 2,562 2,294 2,650
Rangpur	0	716	716	1,817	2,533
Sylhet Bangladesh	268 2,175	387 4,588	655 6,763	1,460 13,345	2,115 20,108

Table A.4 Sample allocation of expected completed interviews with ever-married women by division

Sample allocation of expected completed interviews with ever-married women by division, according to residence, Bangladesh DHS 2017-18

The sample allocations were derived using information obtained from the 2014 BDHS. Based on the 2014 data, the average number of ever-married women age 15-49 per household is 1.06 in urban areas and 1.05 in rural areas. The household completion rate is 95.5% in urban areas and 96.5% in rural areas, and women's individual completion rate is 97.5% in urban areas and 98.1% in rural areas.

After selection of the sample clusters according to the cluster allocation in Table A.2 and during the fieldwork, a total of 23 rural clusters in six divisions were observed in the field as areas other than city corporations; these six divisions were Chattogram, Dhaka, Khulna, Rajshahi, Rangpur, and Sylhet. Residence types for the 23 clusters were modified according to the field observation; the modified allocation can be found in Table A.5.

Table A.5 Samp	le allocation o	f clusters by d	livision accord	ling to the fiel	d observation
Sample allocation Bangladesh DHS		division by type	e of residence a	according to fie	ld observation,
		Number of clu	sters allocated		
		Urban			
Division	City corporation	Other than city corporation	Total urban	Rural	Total
Barishal	7	15	22	49	71
Chattogram	16	19	35	57	92
Dhaka	26	38	64	40	104
Khulna	9	22	31	55	86
Mymensingh	0	19	19	58	77
Rajshahi	6	24	30	59	89
Rangpur	0	25	25	60	85
Sylhet	9	15	24	47	71
Bangladesh	73	177	250	425	675

Table A.6 presents response rates for ever-married women by urban-rural residence and by division.

	Resid	Residence				Div	Division				
Result	Urban	Rural	Barishal	Chattogram	Dhaka	Khulna	Mymensingh	Rajshahi	Rangpur	Sylhet	Total
Selected households	0E 1	07.4	06.4	05.8	c 10	07.6	0 90	07.1	070	07.8	06 5
Compreted (C) Household present but no competent	30.1	4.12	4.06	9 0 .0	24.4	0.16	30.0	91.1	91.9	0.16	90°.0
respondent at home (HP)	0.4	0.2	0.1	0.3	0.6	0.1	0.2	0.3	0.2	0.1	0.3
Refused (R)	0.7	0.1	0.0	0.7		0.0	0.0	0.1	0.2	0.1	0.3
Dwelling not found (DNF)	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Household absent (HA)	2.0	1.5	2.0	1.6	2.3	1.8	2.1	1.4	1.0	1.4	1.7
Dwelling vacant/address not a dwelling (DV)	1.2	0.6	1.2	1.1	1.2	0.4	1.5	0.6	0.4	0.4	0.9
Dwelling destroyed (DD)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other (O)	0.3	0.3	0.2	0.5	0.5	0.1	0.2	0.3	0.3	0.1	0.3
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 sampled households	7,470	12,690	2,130	2,760	3,090	2,580	2,310	2,640	2,520	2,130	20,160
Household response rate (HRR) ¹	98.7	99.7	99.8	98.9	98.2	99.8	99.7	99.5	99.6	99.7	99.4
Eliaible women											
Completed (EWC)	98.4	0.99	99.3	98.9	97.3	99.1	98.9	98.9	99.3	98.8	98.8
Not at home (EWNH)	1.1	0.8	0.5	0.8	2.2	0.6	0.9	0.9	0.4	0.9	0.9
Refused (EWR)	0.2	0.0	0.0	0.1	0.2	0.0	0.0	0.1	0.1	0.2	0.1
Partly completed (EWPC)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incapacitated (EWI)	0.2	0.1	0.2	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.2
Other (EWO)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	7,494	12,882	2,169	2,936	3,057	2,654	2,190	2,604	2,509	2,257	20,376
Eligible women response rate (EWRR) ²	98.4	0.06	99.3	98.9	97.3	99.1	98.9	98.9	99.3	98.8	98.8
Overall women response rate (OWRR) ³	97.1	98.7	99.1	97.9	95.5	98.9	98.7	98.4	98.9	98.5	98.1
¹ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as	ecific respons	e categories, th	e household re	sponse rate (HR	R) is calculate	d as:					
				100 * C	U						
				C + HP + R + DNF	۲ + DNF						

Table A.6 Sample implementation

² The eligible women response rate (EWRR) is equivalent to the percentage of interviews completed (EWC). ³ The overall women response rate (OWRR) is calculated as:

OWRR = HRR * EWRR/100

A.4 SAMPLE PROBABILITIES AND SAMPLING WEIGHTS

Due to the non-proportional allocation of the sample to different divisions and their urban and rural areas and the possible differences in response rates, sampling weights will be required for any analysis using the 2017-18 BDHS data to ensure the actual representativeness of the survey results at the national level and as well as the domain level. Since the 2017-18 BDHS sample was a two-stage stratified cluster sample, sampling weights were calculated based on sampling probabilities separately for each sampling stage and for each cluster. The following notations were used:

 P_{1hi} : first-stage sampling probability of the *i*th cluster in stratum *h*

 P_{2hi} : second-stage sampling probability within the *i*th cluster (households)

 P_{hi} : overall sampling probability for any households within the *i*th cluster of stratum *h*

Let a_h be the number of EAs selected in stratum h, M_{hi} the number of households according to the sampling frame in the *i*th EA, and $\sum M_{hi}$ the total number of households in the stratum. The probability of selecting the *i*th EA in the 2017-18 BDHS sample is calculated as follows:

$$\frac{a_h M_{hi}}{\sum M_{hi}}$$

Let b_{hi} be the proportion of households in the selected cluster relative to the total number of households in EA *i* in stratum *h* if the EA is segmented; otherwise, $b_{hi} = 1$. Then the probability of selecting cluster *i* in the sample is:

$$P_{1hi} = \frac{a_h M_{hi}}{\sum M_{hi}} \times b_{hi}$$

Let L_{hi} be the number of households listed in the household listing operation in cluster *i* in stratum *h*, and let g_{hi} be the number of households selected in the cluster. The second stage's selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{g_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster i of stratum h is therefore the product of the two stages' selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

The sampling weight for each household in cluster i of stratum h is the inverse of its overall selection probability:

$$W_{hi} = 1/P_{hi}$$

The design weights were adjusted for household non-response and individual non-response to obtain the sampling weights for households and for women, respectively. Non-response was adjusted at the sampling stratum level. For the household sampling weight, the household design weight was multiplied by the inverse of the household response rate by stratum. For women's individual sampling weight, the household sampling weight was multiplied by the inverse of women's individual response rate by stratum. After adjusting for non-response, the sampling weights were normalized to obtain the final standard weights that appear in the data files. The

normalization process was done to obtain a total number of unweighted cases equal to the total number of weighted cases at the national level for the total number of households and women. Normalization was done by multiplying the sampling weight by the estimated sampling fraction obtained from the survey for the household weight and the individual women's weights. The normalized weights are relative weights that are valid for estimating means, proportions, ratios, and rates but are not valid for estimating population totals or for pooled data. The estimates from a sample survey are affected by two types of errors: nonsampling errors and sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2017-18 Bangladesh Demographic and Health Survey (BDHS) to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2017-18 BDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability among all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

Sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95% of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2017-18 BDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulas. Sampling errors are computed in SAS, using programs developed by ICF. These programs use the Taylor linearization method to estimate variances for survey estimates that are means, proportions, or ratios. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, r = y/x, where y represents the total sample value for variable y and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^{2}(r) = var(r) = \frac{1-f}{x^{2}} \sum_{h=1}^{H} \left[\frac{m_{h}}{m_{h}-1} \left(\sum_{i=1}^{m_{h}} z_{hi}^{2} - \frac{z_{h}^{2}}{m_{h}} \right) \right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}$$
, and $z_h = y_h - rx_h$

where h represents the stratum, which varies from 1 to H; m_h is the total number of clusters selected in the h^{th} stratum; y_{hi} is the sum of the weighted values of variable y in the i^{th} cluster in the h^{th} stratum; x_{hi} is the sum of the weighted number of cases in the i^{th} cluster in the h^{th} stratum; and f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample and calculates standard errors for these estimates using simple formulas. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2017-18 BDHS, there were 672 non-empty clusters. Hence, 672 replications were created. The variance of a rate r is calculated as follows:

$$SE^{2}(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_{i} - r)^{2}$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where r

- ris the estimate computed from the full sample of 672 clusters, $r_{(i)}$ is the estimate computed from the reduced sample of 671 clusters (i^{th} cluster excluded),and
- *k* is the total number of clusters.

In addition to the standard error, the design effect (DEFT) for each estimate is calculated. The design effect is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. Relative standard errors and confidence limits for the estimates are also calculated.

Sampling errors for the 2017-18 BDHS are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for each of the eight divisions. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 through B.12 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95% confidence limits (R \pm 2SE) for each selected variable. The DEFT is considered undefined when the standard error considering a simple random sample is zero (when the estimate is close to 0 or 1).

The confidence interval (e.g., as calculated for *ideal number of children*) can be interpreted as follows: the overall average from the national sample is 2.271, and its standard error is 0.009. Therefore, to obtain the 95% confidence limits, one adds and subtracts twice the standard error to the sample estimate, that is, $2.271 \pm 2 \times 0.009$. There is a high probability (95%) that the true ideal number of children is between 2.253 and 2.290.

For the total sample, the value of the DEFT, averaged over all indicators in this appendix, is about 1.4. This means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.4 over that in an equivalent simple random sample.

Variable	Estimate	Base population
Urban residence	Proportion	Women 15-49
Literacy	Proportion	Women 15-49
No education	Proportion	Women 15-49
Secondary or higher education	Proportion	Women 15-49
Currently married	Proportion	Women 15-49
Married before age 18	Proportion	Women 20-49
Had sexual intercourse before age 18	Proportion	Women 20-49
Currently pregnant	Proportion	Women 15-49
Currently using any method	Proportion	Currently married women 15-49
Currently using a modern method	Proportion	Currently married women 15-49
Currently using pill	Proportion	Currently married women 15-49
Currently using male condoms	Proportion	Currently married women 15-49
Currently using injectables	Proportion	Currently married women 15-49
Currently using implants	Proportion	Currently married women 15-49
Currently using female sterilization	Proportion	Currently married women 15-49
Currently using withdrawal	Proportion	Currently married women 15-49
Currently using rhythm	Proportion	Currently married women 15-49
Jsed public sector source	Proportion	Current users of modern method
Vant no more children	Proportion	Currently married women 15-49
Vant to delay next birth at least 2 years	Proportion	Currently married women 15-49
deal number of children	Mean	Women 15-49
Births with skilled attendant at delivery	Proportion	Births occurring 1-59 months before survey
Freated with ORS	Proportion	Children under 5 with diarrhea in past 2 weeks
Sought medical treatment for diarrhea	Proportion	Children under 5 with diarrhea in past 2 weeks
Ever had vaccination card	Proportion	Children 12-23 months
Received BCG vaccination	Proportion	Children 12-23 months
Received DPT-HepB-Hib vaccination (3 doses)	Proportion	Children 12-23 months
Received polio vaccination (3 doses)	Proportion	Children 12-23 months
Received policy vaccination (3 doses)	Proportion	Children 12-23 months
Received measles/rubella vaccination	Proportion	Children 12-23 months
Received all basic vaccinations (12-23 months)	Proportion	Children 12-23 months
Received all age-appropriate vaccinations (12-23 months)	Proportion	Children 12-23 months
Received measles/rubella 2 vaccination	Proportion	Children 24-35 months
Received all age-appropriate vaccinations (24-35 months)	Proportion	Children 24-35 months
	Proportion	Children under 5 who were measured
leight-for-age (-2SD)		
Neight-for-height (-2SD)	Proportion	Children under 5 who were measured
Neight-for-age (-2SD)	Proportion	Children under 5 who were measured
Body mass index (BMI) <18.5	Proportion	Women 15-49 who were measured
Body mass index (BMI) ≥25	Proportion	Women 15-49 who were measured
Prevalence of hypertension (women 18+)	Proportion	Women 18+ who were measured
Prevalence of diabetes (women 18+)	Proportion	Women 18+ who were tested
otal fertility rate (3 years)	Rate	Women-years of exposure to childbearing
Neonatal mortality rate ¹	Rate	Children exposed to the risk of mortality
Postneonatal mortality rate ¹	Rate	Children exposed to the risk of mortality
nfant mortality rate ¹	Rate	Children exposed to the risk of mortality
Child mortality rate ¹	Rate	Children exposed to the risk of mortality
Jnder-5 mortality rate ¹	Rate	Children exposed to the risk of mortality

¹ Mortality rates are calculated for the 5 years before the survey for the national sample and division samples.

Table B.2 Sampling errors: Total sample, Bangladesh DHS 2017-18

			Number	of cases			Confide	nce limits
		Standard	Un-		Design	Relative		
	Value	error	weighted	Weighted	effect	error	Lower	Upper
Variable	(R)	(SE)	(Ň)	(ŴN)	(DEFT)	(SE/R)	(R-2SE)	(R+2SE)
Urban residence	0.285	0.004	20,127	20,127	1.332	0.015	0.276	0.293
Literacy	0.733	0.006	20,127	20,127	1.779	0.008	0.722	0.744
No education	0.166	0.004	20,127	20,127	1.670	0.026	0.157	0.174
Secondary or higher education	0.522	0.007	20,127	20,127	1.910	0.013	0.508	0.535
Currently married	0.803	0.004	23,471	23,642	1.230	0.005	0.795	0.811
Married before age 18	0.706	0.005	18,962	18,860	1.672	0.008	0.695	0.716
Had sexual intercourse before age 18	0.685	0.005	18,962	18,860	1.683	0.008	0.674	0.696
Currently pregnant	0.048	0.002	23,471	23,642	1.129	0.032	0.045	0.051
Currently using any method	0.619	0.005	18,895	18,984	1.491	0.009	0.608	0.629
Currently using a modern method	0.519	0.006	18,895	18.984	1.527	0.011	0.508	0.530
Currently using pill	0.254	0.005	18,895	18,984	1.548	0.019	0.244	0.263
Currently using male condoms	0.072	0.003	18,895	18,984	1.332	0.035	0.067	0.077
Currently using injectables	0.107	0.004	18,895	18,984	1.640	0.034	0.100	0.115
Currently using implants	0.021	0.002	18,895	18,984	1.440	0.071	0.018	0.024
Currently using female sterilization	0.048	0.002	18,895	18,984	1.476	0.048	0.044	0.053
Currently using withdrawal	0.028	0.001	18,895	18,984	1.151	0.050	0.025	0.030
Currently using rhythm	0.070	0.002	18,895	18,984	1.196	0.032	0.065	0.074
Using public sector source	0.444	0.002	9,887	9,850	1.663	0.019	0.427	0.461
Want no more children	0.599	0.005	18,895	18,984	1.292	0.008	0.590	0.608
Want to delay next birth at least 2 years	0.333	0.003	18,895	18,984	1.170	0.000	0.200	0.214
Ideal number of children	2.271	0.003	19,986	19,996	1.856	0.004	2.253	2.290
Births with skilled attendant at delivery	0.527	0.003	5,304	5,338	1.723	0.023	0.503	0.552
Treated with ORS	0.833	0.012	412	396	1.104	0.025	0.792	0.875
Sought medical treatment for diarrhea	0.833	0.021	412	396	1.177	0.023	0.317	0.434
Ever had vaccination card	0.963	0.025	1,666	1,679	1.136	0.005	0.952	0.974
Received BCG vaccination	0.903	0.003	1,666	1,679	1.353	0.003	0.952	0.974
Received DPT-HepB-Hib vaccination (3 doses)	0.953	0.004	1,666	1.679	1.238	0.004	0.974	0.991
Received polio vaccination (3 doses)	0.959	0.008	1,666	1,679	1.235	0.008	0.947	0.971
Received pneumococcal vaccination (3 doses)	0.943	0.007	1,666	1,679	1.233	0.007	0.932	0.939
Received measles/rubella vaccination	0.920	0.009	1,666	1,679	1.290	0.009	0.903	0.937
	0.891	0.009	1,666	1,679	1.290	0.010	0.892	0.928
Received all basic vaccinations (12-23 months)	0.891	0.010	1,666	1,679	1.274	0.011	0.871	0.359
Received all age-appropriate vaccinations (12-23 months)		0.014				0.044	0.809	0.359
Received measles/rubella 2 vaccination	0.831 0.534	0.011	1,655 1,655	1,685 1,685	1.232 1.291	0.014	0.809	0.854
Received all age-appropriate vaccinations (24-35 months)			,	,				
Height-for-age (-2SD)	0.308	0.007	8,111	8,108	1.326	0.023	0.294	0.323
Weight-for-height (-2SD)	0.084	0.004	8,110	8,113	1.228	0.045	0.077	0.092
Weight-for-age (-2SD)	0.219	0.006	8,314	8,335	1.327	0.029	0.207	0.232
Body mass index (BMI) <18.5	0.119	0.003	18,332	18,328	1.329	0.027	0.113	0.125
Body mass index (BMI) ≥25	0.324	0.005	18,332	18,328	1.566	0.017	0.313	0.335
Prevalence of hypertension (women 18+)	0.284	0.006	7,425	7,341	1.113	0.020	0.273	0.296
Prevalence of diabetes (women 18+)	0.095	0.004	7,000	6,918	1.255	0.047	0.086	0.104
Total fertility rate (last 3 years)	2.251	0.037	66,471	66,686	1.296	0.017	2.176	2.326
Neonatal mortality (last 0-4 years)	30.210	2.085	8,759	8,770	1.085	0.069	26.040	34.379
Postneonatal mortality (last 0-4 years)	7.711	1.037	8,723	8,726	1.078	0.135	5.637	9.786
Infant mortality (last 0-4 years)	37.921	2.335	8,762	8,772	1.090	0.062	33.251	42.591
Child mortality (last 0-4 years)	7.148	1.083	8,670	8,684	1.161	0.151	4.983	9.314
Under-5 mortality (last 0-4 years)	44.798	2.574	8,788	8,798	1.112	0.057	39.650	49.946

Table B.3 Sampling errors: Urban sample, Bangladesh DHS 2017-18

			Number	of cases			Confide	nce limits
		Standard	Un-		Design	Relative		
Variable	Value (R)	error (SE)	weighted (N)	Weighted (WN)	effect (DEFT)	error (SE/R)	Lower (R-2SE)	Upper (R+2SE
Urban residence	1.000	0.000	7,374	5,729	na	0.000	1.000	1.000
	0.774	0.000	7,374	5,729	2.101	0.000	0.754	0.795
Literacy No education	0.774	0.010	7,374	5,729	1.945	0.013	0.754	0.790
Secondary or higher education	0.141	0.008	7,374	5,729	2.350	0.030	0.125	0.137
Currently married	0.585	0.014	8,833	6,881	1.293	0.023	0.556	0.810
	0.782			5,550			0.766	0.798
Married before age 18	0.630	0.010	7,161		1.790	0.015		0.64
Had sexual intercourse before age 18		0.010	7,161	5,550	1.815	0.017	0.585	
Currently pregnant	0.045	0.003	8,833	6,881	1.236	0.060	0.040	0.051
Currently using any method	0.654	0.008	6,881	5,378	1.410	0.012	0.638	0.671
Currently using a modern method	0.549	0.009	6,881	5,378	1.433	0.016	0.532	0.566
Currently using pill	0.249	0.009	6,881	5,378	1.634	0.034	0.232	0.266
Currently using male condoms	0.124	0.006	6,881	5,378	1.409	0.045	0.113	0.135
Currently using injectables	0.100	0.006	6,881	5,378	1.764	0.064	0.087	0.113
Currently using implants	0.015	0.002	6,881	5,378	1.379	0.133	0.011	0.020
Currently using female sterilization	0.045	0.003	6,881	5,378	1.256	0.070	0.039	0.05
Currently using withdrawal	0.035	0.003	6,881	5,378	1.185	0.075	0.030	0.040
Currently using rhythm	0.068	0.004	6,881	5,378	1.192	0.053	0.061	0.075
Jsing public sector source	0.283	0.013	3,771	2,954	1.822	0.047	0.256	0.310
Vant no more children	0.575	0.008	6,881	5,378	1.392	0.014	0.558	0.59
Vant to delay next birth at least 2 years	0.214	0.006	6,881	5,378	1.264	0.029	0.202	0.227
deal number of children	2.185	0.012	7,332	5,702	1.507	0.005	2.162	2.208
Births with skilled attendant at delivery	0.678	0.019	1,817	1,427	1.667	0.028	0.640	0.71
Freated with ORS	0.872	0.032	145	102	1.112	0.037	0.807	0.93
Sought medical treatment for diarrhea	0.434	0.057	145	102	1.289	0.130	0.321	0.548
Ever had vaccination card	0.974	0.007	569	450	1.104	0.008	0.959	0.988
Received BCG vaccination	0.981	0.007	569	450	1.245	0.007	0.967	0.995
Received DPT-HepB-Hib vaccination (3 doses)	0.951	0.013	569	450	1.432	0.013	0.926	0.97
Received polio vaccination (3 doses)	0.941	0.014	569	450	1.405	0.015	0.914	0.968
Received pneumococcal vaccination (3 doses)	0.905	0.016	569	450	1.287	0.017	0.873	0.936
Received measles/rubella vaccination	0.912	0.015	569	450	1.302	0.017	0.882	0.943
Received all basic vaccinations (12-23 months)	0.896	0.016	569	450	1.284	0.018	0.863	0.928
Received all age-appropriate vaccinations (12-23 months)	0.030	0.010	569	450	1.404	0.070	0.354	0.320
Received measles/rubella 2 vaccination	0.804	0.023	576	455	1.317	0.027	0.761	0.847
Received all age-appropriate vaccinations (24-35 months)	0.804	0.022	576	455	1.317	0.027	0.492	0.601
	0.347	0.027		2,118	1.517	0.050	0.492	0.80
leight-for-age (-2SD)	0.254	0.013	2,754 2,743	2,118	1.392	0.052	0.228	0.28
Veight-for-height (-2SD)			,	,				
Veight-for-age (-2SD)	0.192	0.011	2,828	2,181	1.394	0.056	0.171	0.214
Body mass index (BMI) <18.5	0.086	0.004	6,680	5,170	1.256	0.050	0.078	0.09
Body mass index (BMI) ≥25	0.434	0.010	6,680	5,170	1.634	0.023	0.415	0.454
Prevalence of hypertension (women 18+)	0.289	0.010	2,657	1,969	1.141	0.034	0.269	0.309
Prevalence of diabetes (women 18+)	0.135	0.010	2,444	1,787	1.369	0.073	0.115	0.155
otal fertility rate (last 3 years)	2.031	0.061	25,151	19,612	1.369	0.030	1.909	2.154
leonatal mortality (last 0-4 years)	35.354	4.391	3,061	2,415	1.172	0.124	26.571	44.137
Postneonatal mortality (last 0-4 years)	6.598	1.951	3,063	2,410	1.344	0.296	2.697	10.499
nfant mortality (last 0-4 years)	41.952	4.756	3,062	2,416	1.181	0.113	32.440	51.464
Child mortality (last 0-4 years)	6.807	1.980	3,059	2,410	1.317	0.291	2.846	10.768
Jnder-5 mortality (last 0-4 years)	48.473	5.094	3,074	2,426	1.205	0.105	38.285	58.66

na = Not applicable

Table B.4 Sampling errors: Rural sample, Bangladesh DHS 2017-18

			Number	of cases			Confide	nce limits
		Standard	Un-		Design	Relative		
	Value	error	weighted		effect	error	Lower	Upper
Variable	(R)	(SE)	(N)	(WN)	(DEFT)	(SE/R)	(R-2SE)	(R+2SE
Urban residence	0.000	0.000	12,753	14,398	na	na	0.000	0.000
Literacy	0.717	0.007	12,753	14,398	1.650	0.009	0.703	0.730
No education	0.175	0.005	12,753	14,398	1.556	0.030	0.165	0.186
Secondary or higher education	0.498	0.008	12,753	14,398	1.737	0.015	0.482	0.513
Currently married	0.812	0.005	14,786	16,764	1.172	0.006	0.802	0.821
Married before age 18	0.737	0.006	11,837	13,314	1.614	0.009	0.725	0.750
Had sexual intercourse before age 18	0.718	0.006	11,837	13,314	1.620	0.009	0.705	0.731
Currently pregnant	0.049	0.002	14,786	16,764	1.081	0.039	0.045	0.053
Currently using any method	0.604	0.007	12,014	13,607	1.477	0.011	0.591	0.617
Currently using a modern method	0.507	0.007	12,014	13,607	1.521	0.014	0.493	0.521
Currently using pill	0.255	0.006	12,014	13,607	1.496	0.023	0.243	0.267
Currently using male condoms	0.051	0.003	12.014	13.607	1.308	0.051	0.046	0.057
Currently using injectables	0.110	0.004	12,014	13,607	1.571	0.041	0.101	0.119
Currently using implants	0.024	0.004	12,014	13,607	1.406	0.082	0.020	0.028
Currently using female sterilization	0.024	0.002	12,014	13,607	1.496	0.062	0.020	0.020
Currently using withdrawal	0.030	0.003	12,014	13,607	1.137	0.065	0.044	0.028
Currently using rhythm	0.023	0.002	12,014	13,607	1.174	0.003	0.021	0.028
	0.070	0.003	,	6,896	1.601	0.039	0.005	0.534
Jsing public sector source			6,116					
Nant no more children	0.609	0.006	12,014	13,607	1.242	0.009	0.598	0.620
Nant to delay next birth at least 2 years	0.204	0.004	12,014	13,607	1.123	0.020	0.196	0.212
deal number of children	2.305	0.012	12,654	14,294	1.876	0.005	2.281	2.329
Births with skilled attendant at delivery	0.472	0.015	3,487	3,911	1.675	0.031	0.443	0.502
Treated with ORS	0.820	0.025	267	293	1.065	0.031	0.769	0.871
Sought medical treatment for diarrhea	0.355	0.034	267	293	1.127	0.096	0.287	0.423
Ever had vaccination card	0.959	0.007	1,097	1,229	1.101	0.007	0.946	0.972
Received BCG vaccination	0.983	0.005	1,097	1,229	1.360	0.005	0.973	0.994
Received DPT-HepB-Hib vaccination (3 doses)	0.962	0.007	1,097	1,229	1.157	0.007	0.949	0.975
Received polio vaccination (3 doses)	0.947	0.008	1,097	1,229	1.163	0.008	0.931	0.963
Received pneumococcal vaccination (3 doses)	0.926	0.010	1,097	1,229	1.290	0.011	0.905	0.946
Received measles/rubella vaccination	0.909	0.011	1,097	1,229	1.258	0.012	0.887	0.931
Received all basic vaccinations (12-23 months)	0.889	0.012	1,097	1,229	1.241	0.013	0.865	0.913
Received all age-appropriate vaccinations (12-23 months)	0.300	0.016	1,097	1,229	1.174	0.055	0.267	0.333
Received measles/rubella 2 vaccination	0.841	0.013	1,079	1,230	1.185	0.016	0.815	0.868
Received all age-appropriate vaccinations (24-35 months)	0.529	0.019	1,079	1,230	1.257	0.036	0.490	0.567
Height-for-age (-2SD)	0.328	0.008	5,357	5,991	1.247	0.026	0.311	0.344
Neight-for-height (-2SD)	0.082	0.004	5,367	6,005	1.156	0.054	0.074	0.091
Weight-for-age (-2SD)	0.229	0.008	5,486	6,154	1.280	0.033	0.213	0.244
Body mass index (BMI) <18.5	0.132	0.004	11,652	13,159	1.300	0.031	0.123	0.140
Body mass index (BMI) ≥25	0.281	0.006	11,652	13,159	1.523	0.023	0.268	0.293
Prevalence of hypertension (women 18+)	0.283	0.007	4,768	5,371	1.081	0.025	0.269	0.297
Prevalence of diabetes (women 18+)	0.081	0.005	4,556	5,130	1.216	0.061	0.071	0.091
Fotal fertility rate (last 3 years)	2.347	0.046	41,644	47,108	1.254	0.020	2.255	2.440
Neonatal mortality (last 0-4 years)	28.250	2.334	5,698	6,355	1.048	0.083	23.583	32.918
Postneonatal mortality (last 0-4 years)	8.138	1.227	5,660	6,315	0.982	0.003	5.684	10.592
nfant mortality (last 0-4 years)	36.389	2.665	5,700	6,356	1.048	0.073	31.058	41.719
Child mortality (last 0-4 years)	7.288	1.295	5,611	6,274	1.048	0.073	4.698	9.878
Under-5 mortality (last 0-4 years)	43.411	2.980	5,714	6,372	1.093	0.069	37.452	49.371
muero monanty (last 0-4 years)	43.411	2.300	5,714	0,572	1.000	0.009	51.452	43.37

na = Not applicable

Table B.5 Sampling errors: Barishal sample, Bangladesh DHS 2017-18

			Number	of cases			Confide	nce limits
Variable	Value (R)	Standard error (SE)	Un- weighted (N)	Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Lower (R-2SE)	Upper (R+2SE)
Urban residence	0.176	0.009	2,154	1,125	1.061	0.049	0.159	0.194
Literacy	0.783	0.018	2,154	1,125	1.972	0.022	0.748	0.819
No education	0.094	0.011	2,154	1,125	1.749	0.117	0.072	0.116
Secondary or higher education	0.516	0.020	2,154	1,125	1.889	0.039	0.476	0.557
Currently married	0.808	0.011	2,492	1,307	1.080	0.014	0.786	0.831
Married before age 18	0.756	0.013	2,003	1.041	1.423	0.017	0.730	0.782
Had sexual intercourse before age 18	0.736	0.015	2,003	1,041	1.547	0.020	0.706	0.765
Currently pregnant	0.048	0.005	2,492	1,307	1.243	0.109	0.038	0.059
Currently using any method	0.616	0.015	2,012	1,056	1.357	0.024	0.587	0.646
Currently using a modern method	0.509	0.016	2,012	1,056	1.456	0.032	0.477	0.542
Currently using pill	0.256	0.015	2,012	1,056	1.514	0.058	0.226	0.285
Currently using male condoms	0.054	0.007	2,012	1,056	1.300	0.121	0.041	0.067
Currently using injectables	0.139	0.007	2,012	1,056	1.756	0.097	0.112	0.007
Currently using implants	0.023	0.004	2,012	1,056	1.189	0.037	0.012	0.031
Currently using female sterilization	0.023	0.004	2,012	1,056	1.283	0.219	0.013	0.031
Currently using withdrawal	0.017	0.004	2,012	1,056	1.102	0.219	0.009	0.024
Currently using multinawal	0.022	0.004	2,012	1,056	0.988	0.072	0.072	0.023
Using public sector source	0.084	0.008	1,038	537	1.679	0.072	0.072	0.097
					1.679		0.339	0.441
Want no more children	0.604	0.013	2,012	1,056		0.022		
Want to delay next birth at least 2 years	0.219	0.012	2,012	1,056	1.257	0.053	0.196	0.242
Ideal number of children	2.276	0.029	2,133	1,114	1.945	0.013	2.218	2.334
Births with skilled attendant at delivery	0.471	0.032	561	303	1.478	0.067	0.408	0.535
Treated with ORS	0.820	0.051	55	30	0.991	0.062	0.719	0.922
Sought medical treatment for diarrhea	0.409	0.061	55	30	0.900	0.148	0.288	0.530
Ever had vaccination card	0.978	0.011	176	94	0.999	0.011	0.956	1.000
Received BCG vaccination	0.979	0.012	176	94	1.096	0.012	0.956	1.003
Received DPT-HepB-Hib vaccination (3 doses)	0.957	0.016	176	94	1.048	0.017	0.926	0.989
Received polio vaccination (3 doses)	0.951	0.017	176	94	1.033	0.018	0.918	0.984
Received pneumococcal vaccination (3 doses)	0.933	0.018	176	94	0.988	0.020	0.897	0.970
Received measles/rubella vaccination	0.868	0.029	176	94	1.155	0.034	0.810	0.927
Received all basic vaccinations (12-23 months)	0.861	0.030	176	94	1.153	0.035	0.802	0.921
Received all age-appropriate vaccinations (12-23 months)	0.190	0.032	176	94	1.099	0.170	0.125	0.254
Received measles/rubella 2 vaccination	0.813	0.032	156	84	1.026	0.039	0.750	0.876
Received all age-appropriate vaccinations (24-35 months)	0.436	0.048	156	84	1.238	0.111	0.340	0.533
Height-for-age (-2SD)	0.325	0.018	857	463	1.098	0.056	0.289	0.362
Weight-for-height (-2SD)	0.090	0.012	853	460	1.252	0.139	0.065	0.115
Weight-for-age (-2SD)	0.225	0.017	870	470	1.176	0.076	0.191	0.259
Body mass index (BMI) <18.5	0.114	0.009	1,972	1,024	1.228	0.077	0.096	0.131
Body mass index (BMI) ≥25	0.317	0.013	1,972	1,024	1.227	0.041	0.291	0.343
Prevalence of hypertension (women 18+)	0.342	0.019	786	410	1.144	0.057	0.303	0.381
Prevalence of diabetes (women 18+)	0.095	0.014	738	384	1.204	0.143	0.068	0.122
Total fertility rate (last 3 years)	2.409	0.088	7,025	3,671	1.066	0.037	2.233	2.585
Neonatal mortality (last 0-4 years)	32.330	6.092	902	483	1.017	0.188	20.147	44.513
Postneonatal mortality (last 0-4 years)	9.165	2.919	892	476	0.928	0.319	3.326	15.004
Infant mortality (last 0-4 years)	41.495	6.236	902	483	0.941	0.150	29.023	53.968
Child mortality (last 0-4 years)	9.010	3.388	867	461	1.076	0.376	2.233	15.787
Under-5 mortality (last 0-4 years)	50.132	6.918	904	484	0.964	0.138	36.296	63.968

Table B.6 Sampling errors: Chattogram sample, Bangladesh DHS 2017-18

			Number	of cases			Confide	nce limits
) (- lu -	Standard	Un-	\A/=:=b+= d	Design	Relative	1	Linnen
Variable	Value (R)	error (SE)	weighted (N)	Weighted (WN)	effect (DEFT)	error (SE/R)	Lower (R-2SE)	Upper (R+2SE)
Urban residence	0.272	0.008	2,905	3,622	0.991	0.030	0.256	0.289
Literacy	0.790	0.015	2,905	3,622	2.005	0.019	0.760	0.820
No education	0.132	0.012	2,905	3,622	1.892	0.090	0.108	0.156
Secondary or higher education	0.589	0.019	2,905	3,622	2.049	0.032	0.551	0.626
Currently married	0.776	0.013	3,502	4,398	1.226	0.017	0.750	0.802
Married before age 18	0.651	0.014	2,728	3,387	1.601	0.022	0.623	0.679
Had sexual intercourse before age 18	0.622	0.014	2,728	3,387	1.585	0.023	0.594	0.651
Currently pregnant	0.050	0.003	3,502	4,398	0.952	0.069	0.043	0.057
Currently using any method	0.537	0.014	2,731	3,414	1.469	0.026	0.509	0.565
Currently using a modern method	0.448	0.015	2,731	3,414	1.586	0.034	0.418	0.478
Currently using pill	0.225	0.012	2,731	3,414	1.505	0.054	0.201	0.249
Currently using male condoms	0.053	0.005	2,731	3,414	1.268	0.103	0.042	0.063
Currently using injectables	0.108	0.010	2,731	3,414	1.657	0.091	0.088	0.128
Currently using implants	0.013	0.003	2,731	3,414	1.306	0.218	0.007	0.019
Currently using female sterilization	0.038	0.005	2,731	3,414	1.276	0.123	0.029	0.047
Currently using withdrawal	0.024	0.003	2,731	3,414	1.101	0.136	0.017	0.030
Currently using rhythm	0.066	0.006	2,731	3,414	1.235	0.089	0.054	0.077
Using public sector source	0.381	0.021	1,252	1,529	1.564	0.056	0.338	0.424
Want no more children	0.581	0.012	2,731	3,414	1.230	0.020	0.558	0.604
Want to delay next birth at least 2 years	0.212	0.009	2,731	3,414	1.159	0.043	0.194	0.230
Ideal number of children	2.442	0.026	2,888	3,599	1.746	0.040	2.390	2.493
Births with skilled attendant at delivery	0.502	0.031	890	1,141	1.777	0.061	0.441	0.564
Treated with ORS	0.871	0.043	71	89	1.087	0.049	0.785	0.956
Sought medical treatment for diarrhea	0.418	0.067	71	89	1.095	0.160	0.284	0.551
Ever had vaccination card	0.967	0.010	274	354	0.988	0.011	0.946	0.988
Received BCG vaccination	0.980	0.010	274	354	1.272	0.011	0.959	1.001
Received DPT-HepB-Hib vaccination (3 doses)	0.900	0.011	274	354	1.182	0.011	0.933	0.994
Received polio vaccination (3 doses)	0.971	0.012	274	354	1.202	0.012	0.947	0.994
Received pneumococcal vaccination (3 doses)	0.944	0.010	274	354	1.326	0.017	0.892	0.971
Received measles/rubella vaccination	0.931	0.020	274	354	1.446	0.021	0.861	0.959
Received all basic vaccinations (12-23 months)	0.910	0.023	274	354	1.361	0.027	0.818	0.939
Received all age-appropriate vaccinations (12-23 months)	0.265	0.027	274	354	1.056	0.105	0.209	0.320
Received measles/rubella 2 vaccinations (12-23 months)	0.203	0.028	292	375	1.030	0.028	0.209	0.321
Received all age-appropriate vaccinations (24-35 months)	0.833	0.023	292	375	1.040	0.028	0.787	0.879
Height-for-age (-2SD)	0.319	0.030	1,289	1,644	1.382	0.070	0.440	0.366
Weight-for-height (-2SD)	0.328	0.019	1,209	1,644	1.362	0.058	0.290	0.366
			,	1,000	1.241			0.097
Weight-for-age (-2SD) Body mass index (BMI) <18.5	0.213 0.076	0.014 0.007	1,338 2,607	3,248	1.238	0.068 0.093	0.184 0.062	0.241
Body mass index (BMI) <18.5 Body mass index (BMI) \geq 25	0.076	0.007	2,607	3,248	1.307	0.093	0.062	0.090
Prevalence of hypertension (women 18+)	0.313	0.015	1,081	1,357 1,266	1.081 1.171	0.047	0.284 0.084	0.343 0.129
Prevalence of diabetes (women 18+)	0.106	0.011	1,007			0.106		
Total fertility rate (last 3 years)	2.510	0.096	9,846	12,315	1.327	0.038	2.319	2.701
Neonatal mortality (last 0-4 years)	30.715	4.272	1,442	1,821	0.894	0.139	22.171	39.259
Postneonatal mortality (last 0-4 years)	2.105	1.495	1,434	1,810	0.980	0.710	0.000	5.095
Infant mortality (last 0-4 years)	32.820	4.591	1,442	1,821	0.920	0.140	23.639	42.002
Child mortality (last 0-4 years)	8.613	2.782	1,438	1,811	1.114	0.323	3.048	14.177
Under-5 mortality (last 0-4 years)	41.150	5.802	1,448	1,829	1.019	0.141	29.546	52.754

Table B.7 Sampling errors: Dhaka sample, Bangladesh DHS 2017-18

			Number	of cases			Confide	nce limits
		Standard	Un-		Design	Relative		
Variable	Value (R)	error (SE)	weighted (N)	Weighted (WN)	effect (DEFT)	error (SE/R)	Lower (R-2SE)	Upper (R+2SE)
Urban residence	0.516	0.010	2,974	5,123	1.126	0.020	0.495	0.537
Literacy	0.748	0.014	2,974	5,123	1.749	0.019	0.720	0.776
No education	0.163	0.010	2,974	5,123	1.546	0.064	0.142	0.184
Secondary or higher education	0.537	0.017	2,974	5,123	1.821	0.031	0.504	0.571
Currently married	0.808	0.010	3,469	6,019	1.150	0.012	0.789	0.827
Married before age 18	0.660	0.014	2,802	4,812	1.613	0.021	0.632	0.688
Had sexual intercourse before age 18	0.635	0.014	2,802	4,812	1.602	0.022	0.607	0.663
Currently pregnant	0.051	0.004	3,469	6.019	0.988	0.072	0.043	0.058
Currently using any method	0.622	0.013	2,822	4,864	1.428	0.021	0.595	0.648
Currently using a modern method	0.526	0.013	2,822	4,864	1.392	0.025	0.500	0.553
Currently using pill	0.250	0.012	2,822	4,864	1.522	0.050	0.225	0.274
Currently using male condoms	0.102	0.007	2,822	4,864	1.155	0.064	0.089	0.115
Currently using injectables	0.090	0.007	2,822	4,864	1.342	0.080	0.076	0.105
Currently using implants	0.017	0.003	2,822	4,864	1.430	0.204	0.010	0.024
Currently using female sterilization	0.051	0.005	2,822	4,864	1.225	0.100	0.041	0.061
Currently using withdrawal	0.030	0.003	2,822	4,864	0.944	0.102	0.024	0.036
Currently using rhythm	0.063	0.005	2,822	4,864	1.038	0.075	0.053	0.000
Using public sector source	0.003	0.003	1,508	2,558	1.465	0.073	0.033	0.388
Want no more children	0.532	0.018	2,822	4,864	1.223	0.020	0.558	0.603
	0.380	0.001	2,822	4,864	1.223	0.020	0.558	0.803
Want to delay next birth at least 2 years Ideal number of children	2.223	0.008	2,822 2,957	4,864 5,095	1.055	0.037	2.185	2.269
	0.605	0.021	2,957	1,359	1.601	0.009	0.548	0.663
Births with skilled attendant at delivery				,				0.863
Treated with ORS	0.881	0.047	48	83	1.000	0.053	0.787	
Sought medical treatment for diarrhea	0.323	0.069	48	83	1.023	0.214	0.185	0.461
Ever had vaccination card	0.962	0.014	243	425	1.168	0.015	0.934	0.991
Received BCG vaccination	0.975	0.012	243	425	1.251	0.013	0.951	1.000
Received DPT-HepB-Hib vaccination (3 doses)	0.941	0.017	243	425	1.122	0.018	0.907	0.975
Received polio vaccination (3 doses)	0.934	0.017	243	425	1.101	0.019	0.899	0.968
Received pneumococcal vaccination (3 doses)	0.890	0.022	243	425	1.105	0.025	0.846	0.934
Received measles/rubella vaccination	0.907	0.021	243	425	1.128	0.023	0.866	0.949
Received all basic vaccinations (12-23 months)	0.896	0.021	243	425	1.106	0.024	0.853	0.939
Received all age-appropriate vaccinations (12-23 months)	0.419	0.037	243	425	1.189	0.089	0.344	0.494
Received measles/rubella 2 vaccination	0.820	0.027	249	435	1.127	0.033	0.765	0.874
Received all age-appropriate vaccinations (24-35 months)	0.532	0.036	249	435	1.134	0.067	0.461	0.603
Height-for-age (-2SD)	0.256	0.017	1,152	1,999	1.298	0.068	0.221	0.291
Weight-for-height (-2SD)	0.088	0.010	1,148	1,991	1.197	0.115	0.068	0.108
Weight-for-age (-2SD)	0.185	0.015	1,184	2,056	1.325	0.083	0.154	0.216
Body mass index (BMI) <18.5	0.097	0.007	2,667	4,611	1.202	0.071	0.083	0.111
Body mass index (BMI) ≥25	0.373	0.014	2,667	4,611	1.448	0.036	0.345	0.400
Prevalence of hypertension (women 18+)	0.233	0.013	1,007	1,734	0.975	0.055	0.208	0.259
Prevalence of diabetes (women 18+)	0.133	0.014	902	1,571	1.210	0.104	0.105	0.161
Total fertility rate (last 3 years)	2.199	0.079	9,886	17,061	1.069	0.036	2.040	2.357
Neonatal mortality (last 0-4 years)	32.553	5.002	1,306	2,266	0.947	0.154	22.549	42.556
Postneonatal mortality (last 0-4 years)	8.153	2.601	1,302	2,258	1.071	0.319	2.951	13.355
Infant mortality (last 0-4 years)	40.705	5.769	1,306	2,266	0.971	0.142	29.168	52.243
Child mortality (last 0-4 years)	7.928	2.873	1,286	2,238	1.050	0.362	2.181	13.674
Under-5 mortality (last 0-4 years)	48.310	6.138	1,312	2,276	0.969	0.127	36.035	60.586

Table B.8 Sampling errors: Khulna sample, Bangladesh DHS 2017-18

			Number	of cases			Confide	nce limits
		Standard	Un-		Design	Relative		
	Value	error	weighted	Weighted	effect	error	Lower	Upper
Variable	(R)	(SE)	(N)	(WN)	(DEFT)	(SE/R)	(R-2SE)	(R+2SE
Urban residence	0.225	0.008	2,630	2,336	0.922	0.033	0.210	0.240
Literacy	0.763	0.011	2,630	2,336	1.359	0.015	0.741	0.786
No education	0.136	0.009	2,630	2,336	1.307	0.064	0.118	0.153
Secondary or higher education	0.567	0.014	2,630	2,336	1.432	0.024	0.539	0.594
Currently married	0.825	0.010	2,992	2,673	1.229	0.013	0.804	0.846
Married before age 18	0.766	0.013	2,455	2,167	1.600	0.017	0.740	0.792
Had sexual intercourse before age 18	0.753	0.013	2,455	2,167	1.603	0.018	0.726	0.780
Currently pregnant	0.042	0.004	2,992	2,673	1.116	0.097	0.034	0.050
Currently using any method	0.646	0.010	2,480	2,205	1.042	0.015	0.626	0.666
Currently using a modern method	0.522	0.012	2,480	2,205	1.171	0.023	0.498	0.545
Currently using pill	0.234	0.011	2,480	2,205	1.252	0.045	0.213	0.256
Currently using male condoms	0.080	0.006	2,480	2,205	1.178	0.080	0.067	0.093
Currently using injectables	0.119	0.010	2,480	2,205	1.546	0.084	0.099	0.139
Currently using implants	0.020	0.004	2,480	2,205	1.322	0.188	0.012	0.027
Currently using female sterilization	0.052	0.006	2,480	2,205	1.398	0.120	0.039	0.064
Currently using withdrawal	0.034	0.004	2,480	2,205	1.192	0.128	0.025	0.042
Currently using rhythm	0.086	0.007	2,480	2,205	1.196	0.078	0.073	0.100
Using public sector source	0.493	0.022	1,300	1,150	1.599	0.045	0.449	0.538
Want no more children	0.634	0.009	2,480	2,205	0.916	0.014	0.616	0.652
Want to delay next birth at least 2 years	0.189	0.008	2,480	2,205	1.012	0.042	0.173	0.204
deal number of children	2.120	0.000	2,615	2,321	1.543	0.009	2.083	2.156
Births with skilled attendant at delivery	0.636	0.026	545	481	1.215	0.040	0.585	0.688
Treated with ORS	0.812	0.020	35	30	0.957	0.079	0.683	0.941
Sought medical treatment for diarrhea	0.405	0.004	35	30	1.155	0.242	0.209	0.600
Ever had vaccination card	0.993	0.007	160	144	1.037	0.242	0.203	1.007
Received BCG vaccination	1.000	0.007	160	144	na	0.007	1.000	1.007
Received DPT-HepB-Hib vaccination (3 doses)	0.979	0.000	160	144	1.036	0.000	0.956	1.000
Received polio vaccination (3 doses)	0.979	0.012	160	144	1.000	0.012	0.936	0.994
Received pneumococcal vaccination (3 doses)	0.903	0.014	160	144	1.127	0.013	0.930	0.994
Received measles/rubella vaccination	0.944	0.020	160	144	1.127	0.022	0.903	0.985
	0.937	0.022	160	144	1.202	0.024	0.872	0.973
Received all basic vaccinations (12-23 months)	0.923	0.025	160	144	0.970	0.027	0.872	0.973
Received all age-appropriate vaccinations (12-23 months)	0.200	0.035	160	144	0.970	0.122	0.210	0.355
Received measles/rubella 2 vaccination	0.878	0.024 0.042	168	146	1.101	0.027 0.067	0.831	0.926
Received all age-appropriate vaccinations (24-35 months)		0.042	861	769		0.007	0.330	
Height-for-age (-2SD)	0.255				1.195			0.291
Weight-for-height (-2SD)	0.080	0.009	860	769	1.033	0.119	0.061	0.099
Weight-for-age (-2SD)	0.192	0.015	878	785	1.128	0.078	0.162	0.222
Body mass index (BMI) <18.5	0.109	0.008	2,441	2,163	1.237	0.072	0.093	0.125
Body mass index (BMI) ≥25	0.347	0.014	2,441	2,163	1.477	0.041	0.319	0.376
Prevalence of hypertension (women 18+)	0.309	0.016	986	879	1.101	0.052	0.277	0.341
Prevalence of diabetes (women 18+)	0.078	0.009	946	846	0.976	0.112	0.061	0.096
Total fertility rate (last 3 years)	1.901	0.075	8,536	7,589	1.080	0.040	1.751	2.052
Neonatal mortality (last 0-4 years)	23.704	5.309	907	805	1.031	0.224	13.086	34.321
Postneonatal mortality (last 0-4 years)	8.044	3.024	903	801	1.016	0.376	1.996	14.092
nfant mortality (last 0-4 years)	31.748	5.683	907	805	0.970	0.179	20.383	43.113
Child mortality (last 0-4 years)	4.154	2.185	885	784	1.060	0.526	0.000	8.524
Under-5 mortality (last 0-4 years)	35.770	5.945	908	806	0.974	0.166	23.880	47.661

na = Not applicable

Table B.9 Sampling errors: Mymensingh sample, Bangladesh DHS 2017-18

			Number	of cases			Confide	nce limits
		Standard	Un-		Design	Relative		
Variable	Value (R)	error (SE)	weighted (N)	Weighted (WN)	effect (DEFT)	error (SE/R)	Lower (R-2SE)	Upper (R+2SE)
Urban residence	0.166	0.024	2,167	1,546	2.991	0.144	0.118	0.214
Literacy	0.686	0.015	2,167	1,546	1.456	0.021	0.657	0.715
No education	0.206	0.013	2,167	1,546	1.513	0.064	0.180	0.232
Secondary or higher education	0.444	0.018	2,167	1,546	1.640	0.039	0.409	0.480
Currently married	0.825	0.013	2,484	1,778	1.264	0.016	0.799	0.852
Married before age 18	0.759	0.011	1,987	1,410	1.192	0.015	0.737	0.782
Had sexual intercourse before age 18	0.747	0.011	1,987	1,410	1.200	0.015	0.725	0.770
Currently pregnant	0.058	0.006	2,484	1,778	1.324	0.106	0.045	0.070
Currently using any method	0.634	0.012	2,053	1,468	1.174	0.020	0.609	0.659
Currently using a modern method	0.551	0.013	2,053	1,468	1.207	0.024	0.525	0.578
Currently using pill	0.324	0.014	2,053	1,468	1.346	0.043	0.296	0.352
Currently using male condoms	0.050	0.006	2,053	1,468	1.347	0.130	0.037	0.063
Currently using injectables	0.103	0.012	2,053	1,468	1.777	0.116	0.079	0.127
Currently using implants	0.023	0.004	2,053	1,468	1.283	0.186	0.014	0.031
Currently using female sterilization	0.033	0.005	2,053	1,468	1.356	0.161	0.023	0.044
Currently using withdrawal	0.024	0.004	2,053	1,468	1.198	0.168	0.016	0.032
Currently using rhythm	0.056	0.005	2,053	1,468	1.077	0.098	0.045	0.067
Using public sector source	0.545	0.028	1,154	809	1.934	0.052	0.488	0.602
Want no more children	0.577	0.011	2,053	1,468	1.027	0.019	0.554	0.599
Want to delay next birth at least 2 years	0.217	0.009	2,053	1,468	1.029	0.043	0.198	0.236
Ideal number of children	2.298	0.024	2,164	1,544	1.510	0.010	2.250	2.345
Births with skilled attendant at delivery	0.418	0.026	633	451	1.280	0.061	0.366	0.469
Treated with ORS	0.778	0.062	54	38	1.081	0.079	0.655	0.901
Sought medical treatment for diarrhea	0.257	0.056	54	38	0.929	0.217	0.146	0.368
Ever had vaccination card	0.947	0.017	200	141	1.059	0.018	0.913	0.981
Received BCG vaccination	0.988	0.008	200	141	1.080	0.008	0.971	1.005
Received DPT-HepB-Hib vaccination (3 doses)	0.930	0.020	200	141	1.075	0.021	0.891	0.969
Received polio vaccination (3 doses)	0.930	0.020	200	141	1.075	0.021	0.891	0.969
Received pneumococcal vaccination (3 doses)	0.914	0.021	200	141	1.075	0.024	0.871	0.957
Received measles/rubella vaccination	0.884	0.029	200	141	1.262	0.033	0.826	0.941
Received all basic vaccinations (12-23 months)	0.871	0.030	200	141	1.253	0.034	0.811	0.931
Received all age-appropriate vaccinations (12-23 months)	0.384	0.033	200	141	0.923	0.086	0.318	0.449
Received measles/rubella 2 vaccination	0.818	0.038	196	139	1.369	0.046	0.742	0.894
Received all age-appropriate vaccinations (24-35 months)	0.529	0.049	196	139	1.366	0.093	0.430	0.628
Height-for-age (-2SD)	0.356	0.018	966	691	1.139	0.051	0.319	0.392
Weight-for-height (-2SD)	0.090	0.010	966	692	1.062	0.109	0.070	0.109
Weight-for-age (-2SD)	0.259	0.015	988	710	1.063	0.060	0.228	0.289
Body mass index (BMI) <18.5	0.181	0.012	1,959	1,401	1.347	0.065	0.157	0.204
Body mass index (BMI) ≥25	0.232	0.014	1,959	1,401	1.486	0.061	0.203	0.260
Prevalence of hypertension (women 18+)	0.259	0.015	847	605	1.040	0.059	0.229	0.289
Prevalence of diabetes (women 18+)	0.085	0.011	794	564	1.075	0.126	0.064	0.107
Total fertility rate (last 3 years)	2.541	0.097	7,026	5,016	1.118	0.038	2.347	2.736
Neonatal mortality (last 0-4 years)	23.790	4.623	1,028	734	0.952	0.194	14.545	33.035
Postneonatal mortality (last 0-4 years)	8.698	2.945	1,031	734	1.013	0.339	2.808	14.588
Infant mortality (last 0-4 years)	32.488	4.793	1,029	735	0.873	0.148	22.902	42.074
Child mortality (last 0-4 years)	4.812	2.167	1,003	713	1.069	0.450	0.479	9.145
Under-5 mortality (last 0-4 years)	37.144	5.101	1,030	736	0.873	0.137	26.942	47.347

Table B.10 Sampling errors: Rajshahi sample, Bangladesh DHS 2017-18

			Number	of cases			Confidence limits	
		Standard	Un-		Design	Relative		
	Value	error	weighted	Weighted	effect	error	Lower	Upper
Variable	(R)	(SE)	(N)	(WN)	(DEFT)	(SE/R)	(R-2SE)	(R+2SE
Jrban residence	0.201	0.007	2,576	2,802	0.915	0.036	0.187	0.216
Literacy	0.694	0.012	2,576	2,802	1.359	0.018	0.670	0.719
No education	0.187	0.011	2,576	2,802	1.419	0.058	0.165	0.208
Secondary or higher education	0.504	0.016	2,576	2,802	1.618	0.032	0.472	0.536
Currently married	0.837	0.008	2,890	3,159	1.139	0.010	0.821	0.854
Married before age 18	0.796	0.009	2,410	2,608	1.176	0.011	0.778	0.814
Had sexual intercourse before age 18	0.776	0.010	2,410	2,608	1.275	0.013	0.756	0.796
Currently pregnant	0.043	0.004	2,890	3,159	1.167	0.101	0.034	0.052
Currently using any method	0.647	0.015	2,426	2,645	1.525	0.023	0.617	0.676
Currently using a modern method	0.550	0.016	2,426	2,645	1.561	0.029	0.519	0.582
Currently using pill	0.255	0.013	2,426	2,645	1.472	0.051	0.229	0.281
Currently using male condoms	0.078	0.007	2,426	2,645	1.236	0.086	0.065	0.092
Currently using injectables	0.114	0.010	2,426	2,645	1.537	0.087	0.094	0.134
Currently using implants	0.027	0.004	2,426	2,645	1.360	0.167	0.018	0.036
Currently using female sterilization	0.063	0.007	2,426	2,645	1.439	0.112	0.049	0.078
Currently using withdrawal	0.034	0.004	2,426	2,645	1.061	0.115	0.026	0.042
Currently using rhythm	0.060	0.005	2,426	2,645	1.079	0.086	0.050	0.071
Jsing public sector source	0.503	0.022	1,346	1,456	1.604	0.044	0.459	0.546
Vant no more children	0.606	0.013	2,426	2,645	1.334	0.022	0.580	0.633
Vant to delay next birth at least 2 years	0.194	0.009	2,426	2,645	1.059	0.044	0.177	0.211
deal number of children	2.154	0.029	2,565	2,789	2.324	0.014	2.095	2.212
Births with skilled attendant at delivery	0.547	0.029	554	622	1.354	0.053	0.489	0.606
Freated with ORS	0.809	0.063	50	56	1.146	0.078	0.683	0.936
Sought medical treatment for diarrhea	0.489	0.087	50	56	1.225	0.179	0.314	0.664
Ever had vaccination card	0.969	0.013	173	188	0.988	0.013	0.943	0.995
Received BCG vaccination	1.000	0.000	173	188	na	0.000	1.000	1.000
Received DPT-HepB-Hib vaccination (3 doses)	0.990	0.007	173	188	0.943	0.007	0.976	1.004
Received polio vaccination (3 doses)	0.983	0.013	173	188	1.362	0.013	0.957	1.010
Received pneumococcal vaccination (3 doses)	0.965	0.017	173	188	1.220	0.018	0.930	0.999
Received measles/rubella vaccination	0.950	0.015	173	188	0.913	0.016	0.919	0.980
Received all basic vaccinations (12-23 months)	0.931	0.019	173	188	1.006	0.021	0.892	0.970
Received all age-appropriate vaccinations (12-23 months)	0.349	0.049	173	188	1.342	0.142	0.250	0.448
Received measles/rubella 2 vaccination	0.804	0.035	182	209	1.234	0.044	0.733	0.875
Received all age-appropriate vaccinations (24-35 months)	0.520	0.040	182	209	1.119	0.078	0.439	0.601
Height-for-age (-2SD)	0.306	0.017	858	967	1.072	0.055	0.273	0.340
Veight-for-height (-2SD)	0.080	0.010	858	967	1.047	0.122	0.060	0.099
Veight-for-age (-2SD)	0.230	0.019	894	1.009	1.317	0.081	0.193	0.268
Body mass index (BMI) <18.5	0.127	0.013	2,402	2,607	1.203	0.065	0.133	0.200
Body mass index (BMI) ≥25	0.301	0.013	2,402	2,607	1.414	0.000	0.274	0.327
Prevalence of hypertension (women 18+)	0.281	0.010	944	1,025	1.225	0.044	0.246	0.316
Prevalence of diabetes (women 18+)	0.281	0.009	944 910	993	1.225	0.062	0.240	0.094
Fotal fertility rate (last 3 years)	2.057	0.009	8,187	8,917	1.299	0.124	1.871	2.244
Veonatal mortality (last 0-4 years)	2.057	6.125	910	1,019	1.299	0.045	13.867	38.369
	10.403	3.788	908	1,019	1.105		2.828	17.978
Postneonatal mortality (last 0-4 years)	36.522	3.788 7.855	908 910	, -	1.172	0.364 0.215	2.828	52.232
nfant mortality (last 0-4 years)				1,019				
Child mortality (last 0-4 years)	8.896	3.095	916	1,022	1.013	0.348	2.707	15.086
Jnder-5 mortality (last 0-4 years)	45.093	8.736	911	1,020	1.210	0.194	27.621	62.564

na = Not applicable

Table B.11 Sampling errors: Rangpur sample, Bangladesh DHS 2017-18

			Number	of cases			Confide	nce limits
		Standard	Un-		Design	Relative		
Variable	Value (R)	error (SE)	weighted (N)	Weighted (WN)	effect (DEFT)	error (SE/R)	Lower (R-2SE)	Upper (R+2SE)
Urban residence	0.144	0.005	2,492	2,380	0.774	0.038	0.133	0.155
Literacy	0.664	0.013	2,492	2,380	1.374	0.020	0.638	0.690
No education	0.217	0.011	2,492	2,380	1.379	0.052	0.194	0.240
Secondary or higher education	0.482	0.014	2,492	2.380	1.441	0.030	0.453	0.511
Currently married	0.831	0.008	2,821	2,704	1.033	0.010	0.815	0.847
Married before age 18	0.787	0.012	2,329	2,212	1.449	0.015	0.764	0.811
Had sexual intercourse before age 18	0.773	0.013	2,329	2,212	1.505	0.016	0.748	0.798
Currently pregnant	0.041	0.004	2,821	2,704	1.087	0.098	0.033	0.049
Currently using any method	0.698	0.012	2,346	2,248	1.232	0.017	0.674	0.721
Currently using a modern method	0.590	0.014	2,346	2,248	1.347	0.023	0.562	0.617
Currently using pill	0.280	0.011	2,346	2,248	1.208	0.040	0.257	0.302
Currently using male condoms	0.043	0.005	2,346	2,248	1.134	0.111	0.033	0.052
Currently using injectables	0.139	0.000	2,346	2,248	1.665	0.086	0.115	0.163
Currently using implants	0.041	0.006	2,346	2,248	1.400	0.000	0.029	0.052
Currently using female sterilization	0.041	0.000	2,346	2,240	1.785	0.146	0.023	0.032
Currently using withdrawal	0.000	0.003	2,346	2,240	1.237	0.140	0.045	0.030
Currently using multitawal	0.022	0.004	2,346	2,240	1.296	0.089	0.013	0.097
Using public sector source	0.082	0.007	1,362	1,325	1.290	0.089	0.008	0.590
Want no more children	0.544	0.023	2,346	2,248	1.221	0.042	0.498	0.663
			,					
Want to delay next birth at least 2 years	0.189 2.232	0.009 0.016	2,346	2,248	1.143 1.340	0.049 0.007	0.171 2.199	0.207 2.265
Ideal number of children			2,478	2,366				
Births with skilled attendant at delivery	0.491	0.038	580	555	1.786	0.077	0.415	0.567
Treated with ORS	0.751	0.080	39 39	39	1.191	0.107	0.590	0.912
Sought medical treatment for diarrhea	0.252	0.090		39	1.324	0.357	0.072	0.432
Ever had vaccination card	0.983	0.009	192	190	0.987	0.009	0.965	1.001
Received BCG vaccination	0.994	0.006	192	190	1.114	0.006	0.982	1.006
Received DPT-HepB-Hib vaccination (3 doses)	0.978	0.011	192	190	1.061	0.011	0.955	1.000
Received polio vaccination (3 doses)	0.959	0.015	192	190	1.061	0.016	0.930	0.989
Received pneumococcal vaccination (3 doses)	0.919	0.025	192	190	1.305	0.027	0.869	0.970
Received measles/rubella vaccination	0.923	0.024	192	190	1.159	0.026	0.876	0.971
Received all basic vaccinations (12-23 months)	0.902	0.025	192	190	1.126	0.028	0.851	0.952
Received all age-appropriate vaccinations (12-23 months)	0.227	0.034	192	190	1.151	0.151	0.158	0.295
Received measles/rubella 2 vaccination	0.879	0.031	176	166	1.258	0.035	0.817	0.941
Received all age-appropriate vaccinations (24-35 months)	0.525	0.052	176	166	1.357	0.099	0.421	0.628
Height-for-age (-2SD)	0.304	0.017	950	912	1.104	0.054	0.271	0.337
Weight-for-height (-2SD)	0.073	0.009	952	915	1.085	0.125	0.055	0.091
Weight-for-age (-2SD)	0.206	0.015	963	923	1.102	0.071	0.176	0.235
Body mass index (BMI) <18.5	0.143	0.011	2,298	2,211	1.449	0.074	0.122	0.164
Body mass index (BMI) ≥25	0.243	0.013	2,298	2,211	1.413	0.052	0.218	0.268
Prevalence of hypertension (women 18+)	0.317	0.014	906	859	0.932	0.045	0.288	0.345
Prevalence of diabetes (women 18+)	0.050	0.008	886	843	1.052	0.157	0.034	0.066
Total fertility rate (last 3 years)	2.073	0.093	7,998	7,657	1.213	0.045	1.887	2.259
Neonatal mortality (last 0-4 years)	37.276	7.658	970	919	1.219	0.205	21.961	52.592
Postneonatal mortality (last 0-4 years)	2.548	1.335	968	918	0.807	0.524	0.000	5.217
Infant mortality (last 0-4 years)	39.824	7.707	971	920	1.211	0.194	24.411	55.238
Child mortality (last 0-4 years)	2.591	1.635	982	935	0.855	0.631	0.000	5.860
Under-5 mortality (last 0-4 years)	42.312	7.774	972	920	1.181	0.184	26.764	57.859

Table B.12 Sampling errors: Sylhet sample, Bangladesh DHS 2017-18

			Number	of cases			Confide	nce limits
		Standard	Un-		Design	Relative		
Variable	Value (R)	error (SE)	weighted (N)	Weighted (WN)	effect (DEFT)	error (SE/R)	Lower (R-2SE)	Upper (R+2SE)
Urban residence	0.178	0.008	2,229	1,192	0.993	0.045	0.162	0.194
Literacy	0.678	0.019	2,229	1,192	1.949	0.028	0.640	0.717
No education	0.201	0.015	2,229	1,192	1.782	0.075	0.171	0.231
Secondary or higher education	0.392	0.022	2,229	1,192	2.143	0.057	0.348	0.437
Currently married	0.667	0.019	3,056	1,627	0.947	0.028	0.629	0.705
Married before age 18	0.479	0.019	2,300	1,234	1.866	0.039	0.442	0.517
Had sexual intercourse before age 18	0.460	0.019	2,300	1,234	1.926	0.042	0.421	0.499
Currently pregnant	0.053	0.005	3,056	1,627	1.134	0.090	0.043	0.062
Currently using any method	0.554	0.016	2,025	1,085	1.402	0.028	0.523	0.585
Currently using a modern method	0.448	0.016	2,025	1,085	1.454	0.036	0.416	0.480
Currently using pill	0.246	0.014	2,025	1,085	1.460	0.057	0.218	0.274
Currently using male condoms	0.070	0.007	2,025	1,085	1.311	0.106	0.055	0.085
Currently using injectables	0.055	0.010	2,025	1,085	1.903	0.176	0.036	0.074
Currently using implants	0.014	0.003	2,025	1,085	1.322	0.249	0.007	0.021
Currently using female sterilization	0.053	0.006	2,025	1,085	1.217	0.114	0.041	0.065
Currently using withdrawal	0.026	0.005	2,025	1,085	1.320	0.181	0.016	0.035
Currently using rhythm	0.076	0.006	2,025	1,085	0.997	0.077	0.064	0.088
Using public sector source	0.453	0.024	927	486	1.450	0.052	0.406	0.501
Want no more children	0.596	0.013	2,025	1,085	1.161	0.021	0.571	0.622
Want to delay next birth at least 2 years	0.199	0.011	2,025	1,085	1.184	0.053	0.178	0.220
Ideal number of children	2.559	0.039	2,186	1,168	1.916	0.015	2.481	2.636
Births with skilled attendant at delivery	0.393	0.036	762	425	1.931	0.091	0.321	0.465
Treated with ORS	0.848	0.038	60	31	0.795	0.044	0.772	0.923
Sought medical treatment for diarrhea	0.430	0.080	60	31	1.188	0.186	0.270	0.590
Ever had vaccination card	0.896	0.023	248	143	1.158	0.025	0.851	0.941
Received BCG vaccination	0.953	0.018	248	143	1.358	0.018	0.918	0.988
Received DPT-HepB-Hib vaccination (3 doses)	0.928	0.024	248	143	1.503	0.026	0.880	0.976
Received polio vaccination (3 doses)	0.906	0.027	248	143	1.484	0.029	0.852	0.959
Received pneumococcal vaccination (3 doses)	0.897	0.027	248	143	1.445	0.030	0.843	0.950
Received measles/rubella vaccination	0.874	0.028	248	143	1.354	0.032	0.819	0.929
Received all basic vaccinations (12-23 months)	0.859	0.029	248	143	1.353	0.034	0.801	0.917
Received all age-appropriate vaccinations (12-23 months)	0.425	0.041	248	143	1.311	0.095	0.344	0.506
Received measles/rubella 2 vaccination	0.822	0.030	236	130	1.208	0.036	0.762	0.881
Received all age-appropriate vaccinations (24-35 months)	0.583	0.042	236	130	1.334	0.073	0.498	0.668
Height-for-age (-2SD)	0.427	0.016	1,178	663	1.075	0.038	0.395	0.459
Weight-for-height (-2SD)	0.104	0.009	1,176	663	0.997	0.084	0.087	0.122
Weight-for-age (-2SD)	0.327	0.019	1,199	673	1.362	0.058	0.289	0.364
Body mass index (BMI) <18.5	0.217	0.015	1,986	1,063	1.570	0.067	0.188	0.246
Body mass index (BMI) ≥25	0.223	0.017	1,986	1,063	1.783	0.075	0.190	0.257
Prevalence of hypertension (women 18+)	0.277	0.017	868	471	1.138	0.062	0.243	0.312
Prevalence of diabetes (women 18+)	0.102	0.014	817	450	1.400	0.141	0.073	0.131
Total fertility rate (last 3 years)	2.613	0.143	8,378	4,517	1.586	0.055	2.327	2.899
Neonatal mortality (last 0-4 years)	30.725	6.227	1,294	722	1.238	0.203	18.271	43.178
Postneonatal mortality (last 0-4 years)	20.951	4.156	1,285	715	1.021	0.198	12.638	29.263
Infant mortality (last 0-4 years)	51.675	6.630	1,295	722	1.057	0.128	38.415	64.936
Child mortality (last 0-4 years)	9.224	2.511	1,293	721	0.983	0.272	4.203	14.246
Under-5 mortality (last 0-4 years)	60.423	7.432	1,303	726	1.088	0.123	45.560	75.286

DATA QUALITY TABLES

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Bangladesh DHS 2017-18

Age 0 1 2 3 4 5 5 5 6 7 7 8 9 10 11 12 13	Number 840 858 815 809 842 826 849 866 903 869 1,056	Percent 1.9 1.8 1.8 1.9 1.9 1.9 1.9 2.0 2.0 2.0	Number 961 870 921 881 875 856 934 967 940	Percent 2.4 2.2 2.3 2.2 2.2 2.2 2.1 2.3	Age 37 38 39 40 41 42	Number 561 558 548 562 444 448	Percent 1.3 1.3 1.2 1.3 1.0	Number 229 517 125 1,412 84	Percent 0.6 1.3 0.3 3.5
1 2 3 4 5 5 6 7 7 8 9 10 11 11 12	858 815 809 842 826 849 866 903 869 1,056	1.9 1.8 1.9 1.9 1.9 2.0 2.0	870 921 881 875 856 934 967	2.2 2.3 2.2 2.2 2.1 2.3	38 39 40 41 42	558 548 562 444	1.3 1.2 1.3	517 125 1,412	1.3 0.3 3.5
2 3 4 5 5 7 3 9 10 11 12	815 809 842 826 849 866 903 869 1,056	1.8 1.9 1.9 1.9 2.0 2.0	921 881 875 856 934 967	2.3 2.2 2.2 2.1 2.3	39 40 41 42	548 562 444	1.2 1.3	125 1,412	0.3 3.5
3 4 5 7 3 9 10 11	809 842 826 849 866 903 869 1,056	1.8 1.9 1.9 2.0 2.0	881 875 856 934 967	2.2 2.2 2.1 2.3	40 41 42	562 444	1.3	1,412	3.5
4 5 6 7 9 0 1 2	842 826 849 866 903 869 1,056	1.9 1.9 2.0 2.0	875 856 934 967	2.2 2.1 2.3	41 42	444			
5 5 7 9 0 1 2	826 849 866 903 869 1,056	1.9 1.9 2.0 2.0	856 934 967	2.1 2.3	42		1.0	84	0.0
0 1 2	849 866 903 869 1,056	1.9 2.0 2.0	934 967	2.3		440		01	0.2
, 0 1 2	866 903 869 1,056	2.0 2.0	967			448	1.0	351	0.9
8 0 1 2	903 869 1,056	2.0			43	447	1.0	107	0.3
0 1 2	869 1,056		040	2.4	44	434	1.0	132	0.3
0 1 2	1,056	2.0	848	2.1	45	544	1.2	1,088	2.7
1			878	2.2	46	462	1.0	306	0.8
1 2		2.4	965	2.4	47	492	1.1	276	0.7
	912	2.1	916	2.3	48	442	1.0	334	0.8
	1,022	2.3	1,019	2.5	49	417	0.9	110	0.3
3	995	2.3	834	2.1	50	133	0.3	1,176	2.9
4	1,026	2.3	888	2.2	51	241	0.5	83	0.2
5	936	2.1	884	2.2	52	280	0.6	243	0.6
6	909	2.1	882	2.2	53	315	0.7	99	0.2
7	879	2.0	807	2.0	54	283	0.6	95	0.2
8	1,233	2.8	885	2.2	55	386	0.9	800	2.0
9	901	2.0	504	1.3	56	336	0.8	172	0.4
20	941	2.1	751	1.9	57	259	0.6	99	0.2
21	826	1.9	440	1.1	58	312	0.7	184	0.5
22	907	2.1	632	1.6	59	269	0.6	83	0.2
23	738	1.7	400	1.0	60	669	1.5	1,087	2.7
24	810	1.8	437	1.1	61	237	0.5	76	0.2
25	829	1.9	846	2.1	62	231	0.5	157	0.4
26	765	1.7	563	1.4	63	138	0.3	70	0.2
27	738	1.7	451	1.1	64	139	0.3	75	0.2
28	735	1.7	635	1.6	65	425	1.0	781	2.0
29	731	1.7	281	0.7	66	122	0.3	57	0.1
80	836	1.9	1,236	3.1	67	106	0.2	86	0.2
31	690	1.6	185	0.5	68	55	0.1	73	0.2
2	677	1.5	606	1.5	69	42	0.1	34	0.1
33	661	1.5	236	0.6	70+	1,562	3.5	2,047	5.1
34	653	1.5	197	0.5		1,002	0.0	2,011	0.1
35	675	1.5	1,577	3.9					
36	606	1.4	327	0.8	Total	44,064	100.0	40,020	100.0

Table C.2 Age distribution of eligible and interviewed women

De facto household population of women age 10-54, number and percent distribution of interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), by 5-year age groups, Bangladesh DHS 2017-18

	Household population of women	Ever-married women	Interviewed w	omen age 15-49	Percentage of eligible women
Age group	age 10-54	age 10-54	Number	Percentage	interviewed
10-14	5,010	0	na	na	na
15-19	4,858	2,082	2,049	10.2	98.4
20-24	4,222	3,610	3,551	17.6	98.4
25-29	3,800	3,670	3,612	17.9	98.4
30-34	3,517	3,485	3,455	17.1	99.2
35-39	2,948	2,935	2,897	14.4	98.7
40-44	2,335	2,318	2,294	11.4	99.0
45-49	2,358	2,345	2,314	11.5	98.7
50-54	1,252	1,249	na	na	na
15-49	24,037	20,444	20,172	100.0	98.7

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of women and interviewed women are household weights. Age is based on the Household Questionnaire. na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Bangladesh DHS 2017-18

Subject	Reference group	Percentage with information missing	Number of cases
Birth date	Births in the 15 years preceding the survey		
Day only		31.48	27,314
Day and month		0.08	27,314
Day, month and year		0.00	27,314
Age at death	Deceased children born in the 15 years preceding the survey	0.00	1,473
Age/date at first union ¹	Ever-married women age 15-49	0.05	20,127
Respondent's education	All women age 15-49	0.00	20,127
Diarrhea in last 2 weeks	Living children age 0-59 months	0.33	8,421
Anthropometry of children	Living children age 0-59 months from the Biomarker Questionnaire		
Height	5 5	5.76	8,692
Weight		3.82	8,692
Height or weight		5.76	8,692
Anthropometry of women	Women age 15-49 from the Biomarker guestionnaire		
Height		2.85	20,444
Weight		2.84	20,444
Height or weight		2.85	20,444

Table C.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living, dead, and total children (weighted), Bangladesh DHS 2017-18

	Number of births			Percentage with year and month of birth given		Sex ratio at birth ¹			Calendar year ratio ²			
Calendar year	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total
2018	69	3	72	100.0	100.0	100.0	101.9	0.0	110.3	na	na	na
2017	1,683	51	1,734	100.0	100.0	100.0	114.3	105.1	114.0	na	na	na
2016	1,704	66	1,769	100.0	100.0	100.0	102.1	115.9	102.5	101.7	111.2	102.0
2015	1,667	67	1,734	100.0	100.0	100.0	111.7	114.7	111.8	99.8	91.1	99.5
2014	1,636	81	1,717	100.0	100.0	100.0	115.8	168.5	117.8	99.2	103.5	99.4
2013	1,631	89	1,721	100.0	100.0	100.0	99.9	118.3	100.8	99.4	115.2	100.1
2012	1,647	74	1,721	100.0	100.0	100.0	106.8	104.7	106.7	99.2	83.0	98.4
2011	1,689	90	1,779	100.0	100.0	100.0	104.5	116.1	105.1	99.3	104.0	99.6
2010	1,754	98	1,852	99.7	100.0	99.7	108.2	141.5	109.8	104.8	105.4	104.8
2009	1,658	96	1,754	99.9	100.0	99.9	99.9	177.0	103.0	95.8	94.9	95.7
2014-2018	6,760	267	7,027	100.0	100.0	100.0	110.7	129.3	111.3	na	na	na
2009-2013	8,379	447	8,826	99.9	100.0	99.9	103.9	130.7	105.1	na	na	na
2004-2008	8,918	627	9,546	99.9	99.4	99.9	99.2	116.7	100.3	na	na	na
1999-2003	8,411	756	9,167	99.9	99.6	99.8	101.6	105.8	101.9	na	na	na
<1999	11,345	1,869	13,214	99.9	99.6	99.9	106.2	126.9	108.9	na	na	na
All	43,813	3,966	47,779	99.9	99.7	99.9	104.1	121.5	105.4	na	na	na

na = Not applicable 1 (Bm/Bf)x100, where Bm and Bf are the numbers of male and female births, respectively 2 [2Bx/(Bx-1+Bx+1)]x100, where Bx is the number of births in calendar year x

Table C.5 Reporting of age at death in days

Distribution of reported deaths under age 1 month by age at death in days and percentage of neonatal deaths reported to occur at age 0-6 days, for 5-year periods preceding the survey (weighted), Bangladesh DHS 2017-18

Dangiadesin Drie 2017 10	Numb		rs precec vey	ling the	Total
Age at death (days)	0-4	5-9	10-14	15-19	0-19
<1	107	140	142	162	551
1	21	35	61	58	175
2	19	14	21	18	72
3	33	29	58	38	157
4	11	9	10	7	37
5	9	7	10	18	44
6	6	11	6	7	30
7	8	15	19	27	69
8	4	1	6	12	24
9	3	2	1	5	11
10 11	3 5	2 3	5	2 4	13 15
12	э 1	3 1	2	4 11	15
12	1	0	2 2 3	3	7
13	2	2	0	3	7
15	4	5	2	9	20
16	5	6	3	5	18
17	1	Ő	1	0	2
18	Ö	õ	3	2	5
19	2	4	6	1	12
20	2	0	3	6	12
21	1	1	2	6	10
22	1	2	4	5	12
23	3	1	0	0	5
24	2	0	2	1	6
25	0	2	4	1	6
26	2	0	3	0	5
27	3	2	2	0	7
28	2	0	2	1	5
29	0	3	1	2	6
30	0	0	2	0	2
Total 0-30	260	297	385	416	1,359
Percentage early neonatal ¹	79.2	82.1	79.7	74.3	78.5
¹ 0-6 days/0-30 days					

Table C.6 Reporting of age at death in months

Distribution of reported deaths under age 2 by age at death in months and percentage of infant deaths reported to occur under age 1 month, for 5-year periods preceding the survey (weighted), Bangladesh DHS 2017-18

	Number of years preceding the survey T						
Age at death (months)	0-4	5-9	10-14	15-19	0-19		
<1 ^a	260	297	385	416	1,359		
1	19	18	34	50	121		
2	12	9	17	20	59		
3	6	12	28	31	77		
4	4	7	9	10	31		
5	5	5	4	14	28		
6	5	5	10	14	34		
7	3	7	16	9	35		
8	2	8	3	8	21		
9	2	7	4	11	24		
10	1	2	3	2	9		
11	1	1	6	3	12		
12	0	5	7	5	17		
13	0	0	2	3	5		
14	0	3	5	0	7		
15	1	1	1	0	3		
16	4	1	4	7	16		
17	2	4	2	2	10		
18	3	8	15	17	43		
19	0	2	0	4	5		
20	3	2	3	4	13		
21	3	0	0	2	5		
22	0	0	1	1	2		
23	0	0	1	0	1		
24+	0	0	2	0	2		
Total 0-11	321	379	520	588	1,809		
Percentage neonatal ¹	80.9	78.5	74.0	70.7	75.1		

^a Includes deaths under 1 month reported in days
 ¹ Under 1 month/under 1 year

Table C.7 Height and weight data completeness and quality fo	a complete	ness and qu	<u> </u>	<u>children</u>										
Among children under age 5 (age 0-59 months) who were eligible for anthropometry, percentage with incomplete or missing height and/or weight measurements and/or date of birth; percentage with implausible height-for-age, and/or weight-for-height, and/or weight-for-age data; and percentage with valid data, according to background characteristics (unweighted), Bangladesh DHS 2017-18)-59 months ight, and/or	s) who were e r weight-for-aç	ligible for ar ge data; anc	thropometry percentage	, percentage with valid da	with incomplita, according	ete or missin to backgrou	r anthropometry, percentage with incomplete or missing height and/or weight measurements and/or date of birth; and percentage with valid data, according to background characteristics (unweighted), Bangladesh DHS 2017-18	/or weight m istics (unwei	easurement; ghted), Banç	s and/or date jladesh DHS	t of birth; perc 2017-18	entage with	implausible
	Percenta	Percentage with data missing		or incomplete:		Percer	ntage with im	Percentage with implausible data for:	a for:		Pei	Percentage with valid data for8:	valid data fo	r ⁸ .
Background characteristic	Height ¹	Weight ²	Month and/or year ³	Number of children	Height-for- age ⁴	Number of children with complete height and age ⁵	Weight-for- height ⁶	Number of children with complete weight and height	Weight-for- age ⁷	Number of children with complete weight and age ⁵	Height-for- age	Weight-for- Weight-for- height age	Weight-for- age	Number of children
Age in months														
<6	4.3	2.8	0.0	992	0.7	949	2.5	949	0.2	964	95.0	93.2	97.0	992
6-11	3.5	3.3	0.5	823	1.1	794	1.0	794	0.5	796	95.4	95.5	96.2	823
12-23	3.4	2.2	0.4	1,712	1.0	1,649	0.5	1,653	0.1	1,671	95.3	96.0	97.5	1,712
24-35	6.9	3.3	0.6	1,706	0.6	1,587	1.0	1,589	0.1	1,648	92.5	92.2	96.5	1,706
36-47 48-59	6.6 7.7	4.7 2.6	0.7	1,659 1 761	0.4	1,543 1,643	0.5	1,550 1,647	0.1	1,581 1.663	92.6 03.0	92.9 03 1	95.2 94.4	1,659 1 761
PO-04	0.0	0.0		107,1	t. 0	040	t.0	1,041	0.0	con'i	30.0		04.4	1071
Sex Male Female	5.1 5.8	3.4 3.8	0.4 0.6	4,491 4,162	0.8 0.5	4,253 3,912	1.1 0.6	4,261 3,921	0.1	4,330 3,993	93.9 93.5	93.8 93.7	96.3 95.8	4,491 4,162
Mother's interview status Interviewed	4.5	2.6	0.0	8,256	0.7	7,884	0.9	7,884	0.1	8,040	94.9	94.6	97.3	8,256
Not interviewed but in household	24.9	24.4	11.1	397	0.4	281	0.3	298	0.4	283	70.5	74.8	71.0	397
Residence Urban Rural	6.6 4.9	4.3 3.2	0.5 0.5	2,967 5,686	0.5 0.8	2,767 5,398	1.0 0.8	2,772 5,410	0.2	2,833 5,490	92.8 94.2	92.5 94.4	95.3 96.5	2,967 5,686
Mother's education	0	Ċ		001	Ċ	L L L	Ċ	5	Ċ	6.40	0	2	0 90	002
Driman, incomplete	יי מיי	- C 0		1 460	0.0 8	000 1 4 1 8	-	1418		010	90.Z	90.4 05 5	90.9 07 0	1 460
Primary complete ⁹		1.7	0.0	896	0.6	868	6.0	868	0.1	881	96.3	0.00 96.0	98.2	896
Secondary incomplete	4.3	2.4	0.0	3,477	0.6	3,328	0.8	3,328	0.0	3,394	95.1	94.9	97.6	3,477
Secondary complete or higher ¹⁰	6.6	3.9	0.0	1,826	0.6	1,705	0.9	1,705	0.2	1,755	92.8	92.6	95.9	1,826
Total	5.4	3.6	0.5	8,653	0.7	8,165	0.9	8,182	0.1	8,323	93.7	93.7	96.1	8,653
¹ Child's height in centimeters is missing, child was not present, child refused, and " ² Child's weight in kilograms is missing, child was not present, child refused, and "ot ³ Incomplete date of birth; a complete date of birth is month/day/year or month/year.	ssing, child ing, child w te date of b	was not pres as not preser irth is month/	ent, child rei ıt, child refu day/year or	d refused, and "other" result codes refused, and "other" result codes ır or month/year.	ther" result c ier" result coc	odes des								

^o Incomplete date of birth; a complete date of birth is month/day/year or month/year. ^o Incomplete date of birth date date of birth data as more than 6 standard deviations (SD) above or below the standard population median (Z-scores) based on the WHO Child Growth Standards among children with complete bieght and month/year of birth data. ⁶ Complete age is calculated from month and year of birth.

weight and height data. 7 Implausible cases for weight-for-age are defined as more than 6 SD below or 5 SD above the standard population median (Z-scores) based on the WHO Child Growth Standards among children with complete

weight and month/year of birth data.

⁸ No missing data, incomplete data, or implausible data ⁹ Primary complete is defined as completing grade 5. ¹⁰ Secondary completed is defined as completing grade 10.

MORTALITY CLASSIFICATION AND INTERNATIONAL CLASSIFICATION OF DISEASE (ICD) 10 CODES



	ICD-10		ICD-10
Mortality classification groups (under 5 years)	codes	Mortality classification groups (under 5 years)	codes
		Birth asphyxia (respiratory and cardiovascular	
Birth injuries	D 40.0	disorder)	D 00.0
Birth injury to scalp, unspecified	P12.9	Intrauterine hypoxia, unspecified	P20.9
Other birth injuries to skull	P13.1	Birth asphyxia	P21.9
Birth injury to skeleton, unspecified	P13.9	Respiratory distress of newborn, unspecified	P22.9
Birth injury	P15.9	Meconium aspiration syndrome	P24.0
Umbilical hemorrhage of newborn, unspecified	P51.9	Neonatal aspiration of milk and regurgitated food	P24.3
		Neonatal aspiration syndrome, unspecified	P24.9
Disorders related to length of gestation and fetal growth			
Prematurity	P07.3		
Possible serious infection		Other major causes	
			P59.9
Convulsions of newborn	P90	Neonatal jaundice	R17
Neonatal sepsis	P36.9	Neonatal tetanus	A33
•			W70
Sepsis, unspecified	A41.9	Drowning	W73
		Malnutrition	E46
			A05.9
		Diarrhea	A09.0
			J17.1
		Pneumonia	J18.9
Congenital malfo	ormations	and deformations	
Anencephaly	Q00.0	Congenital malformation of intestine, unspecified	Q43.9
Microcephaly	Q02	Unspecified congenital malformation of limb(s)	Q74.9
		Congenital malformation of skull and face bones,	
Malformations of aqueduct of Sylvius	Q03	unspecified	Q75.9
Congenital hydrocephalus, unspecified	Q03.9	Congenital malformation of bony thorax, unspecified	Q76.9
Congenital malformation of heart, unspecified	Q24.9	Other congenital malformations of abdominal wall	Q79.5
Congenital absence, atresia and stenosis of anus without fistula	Q42.3	Congenital malformations, unspecified	Q89.9
c	Other caus	ses	
Intestinal tract, part unspecified	C26.0	Fetus and newborn affected by chorioamnionitis	P02.7
Leukemia, unspecified	C95.9	Umbilical hemorrhage of newborn	P51
Thalassemia, unspecified	D56.9	Neonatal diabetes mellitus	P70.2
Other disorders of blood	D77	Intestinal obstruction of newborn	P76.9
Unspecified disorder of psychological development	F89	Acquired hydrocephalus of newborn	P91.7
Epilepsy, unspecified	G40.9	Acute abdomen	R10.0
Heart disease, unspecified	151.9	Fever, unspecified	R50.9
Lesions of oral mucosa	K13.7	Febrile convulsions	R56.0
Liver disease	K76.9	Other and unspecified convulsions	R56.8
Unspecified hydronephrosis	N13.3	Snake venom	T63.0
Acute renal failure	N17.9	Unspecified fall	W19
Urinary calculus	N20.9	Exposure to unspecified electric current	W87
Complication of labor and delivery	O75.9	Assault by unspecified means	Y09
Fetus and newborn affected by maternal condition	P00.9	Failure in suture or ligature during surgical operation	Y65.2
retus and newborn anected by maternal condition		Condition originating in the perinatal period	
Fetus and newborn affected by inaternal condition	P01.2	Condition originating in the perinatal period, unspecified	P96.9

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SUMMARY INDICATORS



	Bang	gladesh Demo	ographic and H	ealth Survey				
Indicator	1993-1994	1996-1997	1999-2000	2004	2007	2011	2014	2017-2018
<u>Fertility</u>								
Total fertility rate (TFR) 15-49	3.4	3.3	3.3	3.0	2.7	2.3	2.3	2.3
Adolescent fertility (15-19) ^a	33	36	35	33	33	30	31	27.7
Contraceptive prevalence rate (CPR) ^b		40.0	50.0	50.4			00.4	04.0
Any method Any modern method	44.6 36.2	49.2 41.5	53.8 43.4	58.1 47.3	55.8 47.5	61.2 52.1	62.4 54.1	61.9 51.9
Pill	17.4	20.8	23.0	26.2	28.5	27.2	27.0	25.4
Injectables	4.5	6.2	7.2	9.7	7.0	11.2	12.4	10.7
Condom	3.0	3.9	4.3	4.2	4.5	5.5	6.4	7.2
Female sterilization	8.1	7.6	6.7	5.2	5.0	5.0	4.6	4.8
Male sterilization	1.1 2.2	1.1 1.8	0.5 1.2	0.6 0.6	0.7 0.9	1.2 0.7	1.2 0.6	1.1 0.6
Implants	Na	0.1	0.5	0.0	0.5	1.1	1.7	2.1
Contraceptive prevalence rate (modern								
methods) among married adolescents								
Age 15-19	19.6	27.8	31.2	34.1	37.6	42.4	46.7	43.7
Contraceptive prevalence rate (modern								
methods) in low performing divisions ^b								
Sylhet	na	16.0	25.0	22.0	24.7	35.2	40.9	44.8
Chattogram	23.4	30.8	34.9	37.4	38.2	44.5	47.2	44.8
Unmet need for family planning ^b								
Percentage of currently married women with		10.7	10.0	45.0	10.0	10 5	10.0	40.0
unmet need for family planning	21.6	19.7	18.2	15.0	16.8	13.5	12.0	12.0
<u>Fertility preference</u> ^b Percentage of currently married women age								
15-49 who want no more children ^c	57.9	58.8	60.0	60.1	62.5	64.9	62.5	59.9
	0110	00.0	0010	0011	0210	0.110	02.0	0010
Antenatal coverage Percentage of last live births in the three								
<u>vears preceding the survey</u> for which women								
received at least one ANC from a medically								
trained provider	na	na	na	50.5	53.4	54.6	63.9	81.9
Antenatal care visit 4+								
Percentage of last live births in the three								
years preceding the survey for which women								
received four or more ANC from any provider	na	na	na	16.7	22.0	25.5	31.2	47.0
Quality of antenatal care	na	Πά	na	10.7	22.0	20.0	01.2	-11.0
Percentage of last live births in the three								
vears preceding the survey for which women								
received quality ANC ^d	na	na	na	na	na	na	Na	17.7
Skilled assistance at delivery								
Percentage of live births in the three years								
preceding the survey attended by medically trained provider	na	na	na	15.6	20.9	31.7	42.1	52.7
I	na	Па	na	10.0	20.3	51.7	72.1	52.7
Percentage of births in the <u>three years</u> preceding the survey delivered in health								
facilities by wealth guintile								
Lowest quintile	na	na	na	2.5	6.3	9.9	15.0	26.3
Highest quintile	na	na	na	37.6	48.5	59.8	69.5	77.9
Total	3.5	4.7	8.7	11.7	17.2	28.8	37.4	49.4
Postnatal care (within two days of delivery)								
Percentage of last live births in the <u>three</u> years preceding the survey where								
mother/child received PNC from a medically								
trained provider within two days of delivery								
Mother	na	na	na	15.8	20.1	27.1	33.9	52.1
Child	na	na	na	13.0	20.1	29.6	31.5	52.2
Percentage of last live births delivered at								
home in the three years preceding the survey where mother/child received PNC								
from a medically trained provider within two								
days of delivery								
Mother	na	na	na	na	na	na	na	7.1
Child	na	na	na	na	na	na	na	7.3

	Ban	gladesh Demo	ographic and H	ealth Survey				
Indicator	1993-1994	1996-1997	1999-2000	2004	2007	2011	2014	2017-2018
Childhood mortality (five-year period preceding								
the survey)								
Neonatal mortality rate	52	48	42	41	37	32	28	30
Postnatal mortality rates	35	34	24	24	15	10	10	8
Infant mortality rate	87	82	66	65	52	43	38	38
Child mortality rate	50	37	30	24	14	11	8	7
Under-5 mortality rate	133	116	94	88	65	53	46	45
Percentage of children who received specific								
vaccines by 12 months								
BCG	79.4	84.2	90.0	93.3	96.8	97.8	97.8	97.9
Pentavalent3 ^e	59.0	66.5	70.2	80.3	90.0	93.2	90.9	95.6
Polio3	59.7	60.1	69.1	81.6	89.7	93.2	91.1	94.1
Measles	55.0	61.2	62.1	70.3	77.2	84.0	79.9	87.9
Pneumococcal ^f	na	na	na	na	na	na	na	91.5
All vaccines (not including Pneumococcal)	46.2	46.9	52.8	68.4	76.0	82.5	78.0	85.6
Treatment for diarrhea								
Percentage of children under 5 with diarrhea								
treated with ORS or homemade solution	58.3	61.0	73.6	74.6	81.2	80.6	84.3	85.1
Percentage of children under 5 with diarrhea								
treated with ORT and zinc	na	na	na	na	na	34.1	38.1	43.6
Nutritional status of children								
Percentage of children under 5 clarified as								
malnourished according to three								
anthropometric indices of nutritional status ^g								
Height-for-age (stunting)								
Severe	na	na	na	22.1	16.1	15.3	11.6	8.9
Moderate or severe	na	na	na	50.6	43.2	41.3	36.1	30.8
Weight for-height (wasting)								
Severe	na	na	na	3.4	2.9	4.0	3.1	1.5
Moderate or severe	na	na	na	14.5	17.4	15.6	14.3	8.4
	na	na	na	11.0		10.0	11.0	0.1
Weight-for-age (underweight)				10.0	44.0	40.4		
Severe	na	na	na	13.6	11.8	10.4	7.7	4.1
Moderate or severe	na	na	na	42.5	41.0	36.4	32.6	21.9
Exclusive breastfeeding								
Percent of children under 6 months who are								
exclusively breastfed (based on 24 hour								
recall)	45.9	45.1	46.1	42.2	42.9	63.5	55.3	65.0
Infant and Young Child Feeding (IYCF)								
Percentage of children 6-23 months fed with								
appropriate infant and young child feeding								
practices	na	na	na	na	na	20.9	22.8	35.4
Vitamin A supplementation								
Percentage of children age <u>6-59 months</u>								
receiving vitamin-A supplementation in the 6					00 F	50 F	60.4	70.0
months preceding the survey	na	na	na	na	83.5	59.5	62.1	79.3
Percentage of children age 9-59 months								
receiving vitamin-A supplementation in the 6								
months preceding the survey	na	na	80.4	81.8	88.3	61.6	63.2	80.3

na = Not applicable

^a Percentage of women age 15-19 who had children or currently pregnant

^b Rates for 2007, 2011, and 2014 are for currently married women age 15-49.

° Wanted no more children or have been sterilized

⁶ Wanted no more children of have been stemized ^d Quality ANC is defined as when a woman has received four or more ANC of which at least one ANC is from a medically trained provider and she has received all the basic components of ANC, which are weight and blood pressure measurements, urine and blood tests and information on risks of danger signs during pregnancy. ^e Rates for 1993-94, 1996-97, 1999-2000, 2004, and 2007 are for DPT3. ^e Methods and tools used in 2011 and 2014 were different.

^a Rate for Pneumococcal Conjugate Vaccine (PCV) is for PCV3.
 ^a Based on WHO Child Growth Standards adopted in 2006



BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY 2017-18 HOUSEHOLD QUESTIONNAIRE

NIPORT, MOHFW MITRA AND ASSOCIATES

		IDENTIFICA	TION	
VILLAGE/MOHALLA/BL CLUSTER NUMBER HOUSEHOLD NUMBER RURAL=1, CITY CORPO NAME OF THE HOUSE	OCK CRATION=2, OTHER UP	RBAN=3	· · · · · · · · · · · · · · · · · · ·	
		INTERVIEWER	RVISITS	
	1	2	3	FINAL VISIT
DATE INTERVIEWER'S NAME RESULT*				DAY MONTH YEAR INT. NO. RESULT*
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
AT HOME 3 ENTIRE HOL 4 POSTPONEE 5 REFUSED 6 DWELLING V 7 DWELLING N 9 OTHER	OLD MEMBER AT HOM AT TIME OF VISIT ISEHOLD ABSENT FOR ACANT OR ADDRESS DESTROYED IOT FOUND (SF	TOTAL PERSONS IN HOUSEHOLD TOTAL EVER MARRIED WOMEN 15-49 YRS TOTAL NUMBER OF CHILDREN 0-5 YRS TOTAL WOMEN AND MEN 18+ YRS LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE		
			NUMBER	OFFICE EDITOR KEYED BY

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Introductory statement:

My name is ______. I am working for Mitra and Associates, a private research organization located in Dhaka. We are conducting a survey about health all over Bangladesh under the authority of the National Institute of Population Research and Training (NIPORT), Medical Education and Family Welfare Division, Ministry of Health and Family Welfare (MOHFW). The information we collect will help the government to plan health and family planning services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 30 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

Why is the study being done?

The survey aims to provide information to address the monitoring and evaluation needs of the Fourth Health, Population and Nutrition Sector Program (HPNSP) and to provide managers and policy makers involved in this program with the information that they need to effectively plan and execute future interventions.

What is involved in the study?

You have been selected as a respondent in this survey. I would like to ask you some questions about your household and household members.

What will you have to do if you agree to participate?

Since you have been selected as a respondent in this study, I shall be thankful if you provide your valuable response on certain issues. If some questions cause you embarrassment or make you feel uncomfortable, you can refuse to answer them. What are the risks and benefits of this study?

By providing information you will not have any risk whatsoever, rather this will help the government and policy planners to evaluate, strengthen and refocus national effort to improve health, population and nutrition programs.

Confidentiality:

Whatever information you provide will be kept strictly confidential. It will be used for research purposes and will be seen only by staff and researchers at the organizations mentioned.

Is there any compensation for participating in the study?

Your participation in the study is voluntary and promises no financial benefit.

Right to refuse or withdraw:

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

Who do I contact if I have a question or problem?

If you wish to know more about your rights as a participant in this study you may write the Bangladesh Medical Research Council (BMRC), Mohakhali, Dhaka or Mitra and Associates, Main Road 1, House 35, Senpara Parbata, Mirpur 10, Dhaka or Phone 9025410, 9025412. If you have further questions regarding the nature of this study you may also contact NIPORT, 13/1 Sheikh Shaheb Bazar, Azimpur, Dhaka-1205 or Phone 9662495, 58611206.

At this time, do you want to ask me anything about the survey?

	DATE
RESPONDENT AGREES TO BE INTERVIEWED 1	RESPONDENT DOES NOT AGREE TO BE INTERVIEWED 2> END
RECORD THE TIME.	HOURS

							IF AGE 15 OR OLDER	IF AGE 5 YEARS OR OLDER		
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIF TO HEAD OF HOUSEHOLD	> SEX	RESI	DENCE	AGE	MARITAL STATUS	EV	ER ATTENDED SCHOOL	
1	2	3	4	5	6	7	8	9	10	
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.	What is the relationship of (NAME) to the head of the household?	Is (NAME) male or female ?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)?	What is (NAME)'s current marital status?	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended? What is the highest class (NAME) completed at that level?	
	AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE.					IF 95 OR MORE, RECORD '95'.	1 = CURRENTLY MARRIED 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER- MARRIED		SEE CODES BELOW.	
	THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.									
01			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		Y N 1 2 ↓ COL. (13)	LEVEL CLASS	
02			12	12	12			1 2 ↓ COL. (13)		
03			12	12	12			1 2 ↓ COL. (13)		
04			12	12	12			1 2 ↓ COL. (13)		
05			12	12	12			1 2 ↓ COL. (13)		
06			12	12	12			1 2 ↓ COL. (13)		
07			12	12	12			1 2 ↓ COL. (13)		
08			12	12	12			1 2 ↓ COL. (13)		
09			12	12	12			1 2 ↓ COL. (13)		
10			12	12	12			1 2 ↓ COL. (13)		
	ust to make sure that I have a c						CODES FOR Q. 3: RE		O HEAD OF HOUSEHOLD	
th 2B) Ai yc fri 2C) Ai	ere any other people such as si at we have not listed? re there any other people who n our family, such as domestic sei iends who usually live here? re there any guests or tempora	nay not be member rvants, lodgers, or ry visitors staying h	rs of YES ere,	6	 ADD TO TABLE ADD TO TABLE ADD TO 		01 = HEAD 02 = WIFE OR HUS 03 = SON OR DAUC 04 = SON-IN-LAW (DAUGHTER-IN-L	BAND 08 = GHTER 09 = DR 10 = AW S	PARENT-IN-LAW BROTHER OR SISTER OTHER RELATIVE ADOPTED/FOSTER/ TEPCHILD NOT DELATED	
	r anyone else who stayed here l een listed?	ast night, who have	e not YES	3	 ADD TO TABLE 	NO	05 = GRANDCHILD 06 = PARENT		NOT RELATED DON'T KNOW	

							IF AGE 15 OR OLDER	IF AGE	5 YEARS OR OLDER
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIF TO HEAD OF HOUSEHOLD	> SEX	RESIDENCE		AGE	MARITAL STATUS	EV	ER ATTENDED SCHOOL
1	2	3	4	5	6	7	8	9	10
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.	What is the relationship of (NAME) to the head of the household?	Is (NAME) male or female ?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)?	What is (NAME)'s current marital status?	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended? What is the highest class (NAME) completed at that level?
	AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.					IF 95 OR MORE, RECORD '95'.	1 = CURRENTLY MARRIED 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER- MARRIED		SEE CODES BELOW.

							IF AGE 15 OR OLDER	IF AGE	5 YEARS OR OLDER	
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	9 SEX	RESI	DENCE	AGE	MARITAL STATUS	EV	ER ATTENDED SCHOOL	
1	2	3	4	5	6	7	8	9	10	
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.		Is Does (NAME (NAME) male) or usually female live ? here?		Did (NAME) stay here last night?	How old is (NAME)?	What is (NAME)'s current marital status?	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended? What is the highest class (NAME) completed at that level?	
	AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE.					IF 95 OR MORE, RECORD '95'.	1 = CURRENTLY MARRIED 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER- MARRIED		SEE CODES BELOW.	
	THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.									
11			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		Y N 1 2 ↓ COL. (13)	LEVEL CLASS	
12			12	12	12			1 2 ↓ COL. (13)		
13			12	12	12			1 2 ↓ COL. (13)		
14			12	12	12			1 2 ↓ COL. (13)		
15			12	12	12			1 2 ↓ COL. (13)		
16			12	12	12			1 2 ↓ COL. (13)		
17			12	12	12			1 2 ↓ COL. (13)		
18			12	12	12			1 2 ↓ COL. (13)		
19			12	12	12			1 2 ↓ COL. (13)		
20			12	12	1 2			1 2 ↓ COL. (13)		

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD 02 = WIFE OR HUSBAND 03 = SON OR DAUGHTER 04 = SON-IN-LAW OR DAUGHTER-IN-LAW 07 = PARENT-IN-LAW 08 = BROTHER OR SISTER 09 = OTHER RELATIVE

10 = ADOPTED/FOSTER/ STEPCHILD

							IF AGE 15 OR OLDER	IF AGE	5 YEARS OR OLDER
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIF TO HEAD OF HOUSEHOLD	> SEX	RESID	DENCE	AGE	MARITAL STATUS	EV	ER ATTENDED SCHOOL
1	2	3	4	5	6	7	8	9	10
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.	What is the relationship of (NAME) to the head of the household?	Is (NAME) male or female ?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)?	What is (NAME)'s current marital status?	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended? What is the highest class (NAME) completed at that level?
	AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS	SEE CODES				IF 95 OR MORE, RECORD '95'.	1 = CURRENTLY MARRIED 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER- MARRIED		SEE CODES BELOW.

		HOUSE	EHOLD SCH	EDULE							BIO	MARKER TE	STING	
	IF A	GE 5-24 YEARS	IF AGE	IF AGE 0-4		AGE 1		IF AGE 13		HOUSEHO	-		ECTED HOUSE	
LINE NO.	CUF	RRENT/RECENT OL ATTENDANCE	8 OR OLDER CURRENT WORK STATUS	BIRTH EGISTRATIO	N	ATION CARI	IAL	OR OLDER MOBILE PHONE	WOMEN		CHILDREN WEIGHT HEIGHT	BP GLUCOSE	DMEN WEIGHT HEIGHT BP GLUCOSE	MEN WEIGHT HEIGHT BP GLUCOSE
	11	12	13	14	1	I4A		15	15B	16	17	18	19	20
	Did (NAME) attend school at any time during the 2017 school year?	During [this/that] school year, what level and class [is/was] (NAME) attending? SEE CODES BELOW.	Is (NAME) currently working?	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFI- CATE 2 = REGIS- TERED 3 = NEITHER 8 = DON'T KNOW				Does (NAME) have a mobile phone?	CIRCLE LINE NUMBER OF ALL EVER- MARRIE D WOMEN AGE 15- 49 IF COLUMN 4 IS 2 AND IF COLUMN 7 IS 15- 49, AND IF COLUMN 8 IS 1-3	CIRCLE LINE NUMBER OF ALL EVER- MARRIE D WOMEN AGE 15- 49 IF COLUMN 7 IS 15- 49, AND IF COLUMN 8 IS 1-3	CIRCLE LINE NUMBER OF ALL CHILD- REN AGE 0-5 YEARS IF COLUMN 7 IS 0-5	AGE 18-	CIRCLE LINE NUMBER OF EVER- MARRIED WOMEN AGE 50+ IF COLUMN 4 IS 2 AND IF COLUMN 7 IS 50+, AND IF COLUMN 8 IS 1-3, NEVER- MARRIED WOMEN AGE 18+ IF COLUMN 4 IS 2 AND IF COLUMN 7 IS 18+, AND IF COLUMN 7	CIRCLE LINE NUMBER OF ALL MEN AGE 18+ IF COLUMN 4 IS 1 AND IF COLUMN 7 IS 18+.
01	Y N 1 2 ↓ COL. (13)	LEVEL CLASS	Y N 1 2		Y 1	N 2	DK 8	Y N 1 2	01	01	01	01	01	01
02	1 2 ↓ COL. (13)		1 2		1	2	8	1 2	02	02	02	02	02	02
03	1 2 ↓ COL. (13)		1 2		1	2	8	1 2	03	03	03	03	03	03
04	1 2 ↓ COL. (13)		1 2		1	2	8	1 2	04	04	04	04	04	04
05	1 2 ↓ COL. (13)		1 2		1	2	8	1 2	05	05	05	05	05	05
06	1 2 ↓ COL. (13)		1 2		1	2	8	1 2	06	06	06	06	06	06
07	1 2 ↓ COL. (13)		1 2		1	2	8	1 2	07	07	07	07	07	07
08	1 2 ↓ COL. (13)		1 2		1	2	8	1 2	08	08	08	08	08	08
09	1 2 ↓ COL. (13)		1 2		1	2	8	1 2	09	09	09	09	09	09
10	1 2 ↓ COL. (13)		1 2		1	2	8	1 2	10	10	10	10	10	10

CODES FOR Qs. 10 AND 12: EDUCATION

LEVEL

 LEVEL
 CLASS

 1 = PRIMARY
 00 = LESS THAN 1 YEAR COMPLETED

 2 = SECONDARY
 (USE '00' FOR Q. 10 ONLY.

 3 = HIGHER
 THIS CODE IS NOT ALLOWED

CLASS

3 = HIGHER THIS CODE IS N 6 = PRE-PRIMARY FOR Q. 12.) 8 = DON'T KNOW 98 = DON'T KNOW

			EHOLD SCH						BIO	MARKER TE	STING	
	15.4		IF AGE	IF AGE 0-4	IF AGE 18	IF AGE 13	ALL	HOUSEHO	LDS	SEL	ECTED HOUSI	EHOLDS
	IF A	GE 5-24 YEARS	8 OR OLDER	YEARS	OR OLDER	OR OLDER	WOMEN	WOMEN	CHILDREN	W	OMEN	MEN
LINE NO.		RRENT/RECENT IOL ATTENDANCE	CURRENT WORK STATUS	BIRTH EGISTRATIO	NATIONAL ID CARD		INTERVIEW	WEIGHT HEIGHT	WEIGHT HEIGHT	BP GLUCOSE	WEIGHT HEIGHT BP GLUCOSE	WEIGHT HEIGHT BP GLUCOSE
	11	12	13	14	14A	15	15B	16	17	18	19	20
	Did (NAME) attend school at any time during the 2017 school year?	During [this/that] school year, what level and class [is/was] (NAME) attending? SEE CODES BELOW.	Is (NAME) currently working?	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFI- CATE 2 = REGIS- TERED 3 = NEITHER 8 = DON'T KNOW		Does (NAME) have a mobile phone?	CIRCLE LINE NUMBER OF ALL EVER- MARRIE D WOMEN AGE 15- 49 IF COLUMN 4 IS 2 AND IF COLUMN 7 IS 15- 49, AND IF COLUMN 8 IS 1-3	CIRCLE LINE NUMBER OF ALL EVER- MARRIE D WOMEN AGE 15- 49 IF COLUMN 4 IS 2 AND IF COLUMN 7 IS 15- 49, AND IF COLUMN 8 IS 1-3		CIRCLE LINE NUMBER OF EVER- MARRIED WOMEN AGE 18- 49 IF COLUMN 4 IS 2 AND IF COLUMN 7 IS 18- 49, AND IF COLUMN 8 IS 1-3	CIRCLE LINE NUMBER OF EVER- MARRIED WOMEN AGE 50+ IF COLUMN 4 IS 2 AND IF COLUMN 7 IS 50+, AND IF COLUMN 8 IS 1-3, NEVER- MARRIED WOMEN AGE 18+ IF COLUMN 4 IS 2 AND IF COLUMN 4 IS 2 AND IF COLUMN 8	CIRCLE LINE NUMBER OF ALL MEN AGE 18+ IF COLUMN 7 IS 18+.

		HOUSE	EHOLD SCH	EDULE					BIC	MARKER TE	STING	
	IF A	GE 5-24 YEARS	IF AGE	IF AGE 0-4	IF AGE 18	IF AGE 13		HOUSEHO	-		ECTED HOUSE	HOLDS
	I A		8 OR OLDER	YEARS	OR OLDER	OR OLDER	WOMEN	WOMEN	CHILDREN	W	OMEN	MEN
LINE NO.		RRENT/RECENT OL ATTENDANCE	CURRENT WORK STATUS	BIRTH EGISTRATIO	NATIONAL ID CARD	MOBILE PHONE	INTERVIEW	WEIGHT HEIGHT	WEIGHT HEIGHT	BP GLUCOSE	WEIGHT HEIGHT BP GLUCOSE	WEIGHT HEIGHT BP GLUCOSE
	11	12	13	14	14A	15	15B	16	17	18	19	20
	Did (NAME) attend school at any time during the 2017 school year?	During [this/that] school year, what level and class [is/was] (NAME) attending? SEE CODES BELOW.	Is (NAME) currently working?	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFI- CATE 2 = REGIS- TERED 3 = NEITHER 8 = DON'T KNOW		Does (NAME) have a mobile phone?	CIRCLE LINE NUMBER OF ALL EVER- MARRIE D WOMEN AGE 15- 49 IF COLUMN 4 IS 2 AND IF COLUMN 7 IS 15- 49, AND IF COLUMN 8 IS 1-3	CIRCLE LINE NUMBER OF ALL EVER- MARRIE D WOMEN AGE 15- 49 IF COLUMN 7 IS 15- 49, AND IF COLUMN 8 IS 1-3	CIRCLE LINE NUMBER OF ALL CHILD- REN AGE 0-5 YEARS IF COLUMN 7 IS 0-5	CIRCLE LINE NUMBER OF EVER- MARRIED WOMEN AGE 18- 49 IF COLUMN 4 IS 2 AND IF COLUMN 7 IS 18- 49, AND IF COLUMN 8 IS 1-3	CIRCLE LINE NUMBER OF EVER- MARRIED WOMEN AGE 50+ IF COLUMN 4 IS 2 AND IF COLUMN 7 IS 50+, AND IF COLUMN 8 IS 1-3, NEVER- MARRIED WOMEN AGE 18+ IF COLUMN 4 IS 2 AND IF COLUMN 7 IS 18+, AND IF COLUMN 7	CIRCLE LINE NUMBER OF ALL MEN AGE 18+ IF COLUMN 4 IS 1 AND IF COLUMN 7 IS 18+.
11	Y N 1 2 ↓ COL. (13)	LEVEL CLASS	Y N 1 2			Y N 1 2	11	11	11	11	11	11
12	1 2 ↓ COL. (13)		1 2			1 2	12	12	12	12	12	12
13	1 2 ↓ COL. (13)		1 2			1 2	13	13	13	13	13	13
14	1 2 ↓ COL. (13)		1 2			1 2	14	14	14	14	14	14
15	1 2 ↓ COL. (13)		1 2			1 2	15	15	15	15	15	15
16	1 2 ↓ COL. (13)		1 2			1 2	16	16	16	16	16	16
17	1 2 ↓ COL. (13)		1 2			1 2	17	17	17	17	17	17
18	1 2 ↓ COL. (13)		1 2			1 2	18	18	18	18	18	18
19	1 2 ↓ COL. (13)		1 2			1 2	19	19	19	19	19	19
20	1 2 ↓ COL. (13)		1 2			1 2	20	20	20	20	20	20

CODES FOR Qs. 10 AND 12: EDUCATION

LEVELCLASS1 = PRIMARY00 = LESS THAN 1 YEAR COMPLETED2 = SECONDARY(USE '00' FOR Q. 10 ONLY.3 = HIGHERTHIS CODE IS NOT ALLOWED6 = PRE-PRIMARYFOR Q. 12.)

			EHOLD SCH						BIO	MARKER TE	STING	
	15.4		IF AGE	IF AGE 0-4	IF AGE 18	IF AGE 13	ALL	HOUSEHO	LDS	SELECTED HOUSEHOLDS		
	IF A	GE 5-24 YEARS	8 OR OLDER	YEARS	OR OLDER	OR OLDER	WOMEN	WOMEN	CHILDREN	W	OMEN	MEN
LINE NO.		RRENT/RECENT IOL ATTENDANCE	CURRENT WORK STATUS	BIRTH EGISTRATIO	NATIONAL ID CARD		INTERVIEW	WEIGHT HEIGHT	WEIGHT HEIGHT	BP GLUCOSE	WEIGHT HEIGHT BP GLUCOSE	WEIGHT HEIGHT BP GLUCOSE
	11	12	13	14	14A	15	15B	16	17	18	19	20
	Did (NAME) attend school at any time during the 2017 school year?	During [this/that] school year, what level and class [is/was] (NAME) attending? SEE CODES BELOW.	Is (NAME) currently working?	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFI- CATE 2 = REGIS- TERED 3 = NEITHER 8 = DON'T KNOW		Does (NAME) have a mobile phone?	CIRCLE LINE NUMBER OF ALL EVER- MARRIE D WOMEN AGE 15- 49 IF COLUMN 4 IS 2 AND IF COLUMN 7 IS 15- 49, AND IF COLUMN 8 IS 1-3	CIRCLE LINE NUMBER OF ALL EVER- MARRIE D WOMEN AGE 15- 49 IF COLUMN 4 IS 2 AND IF COLUMN 7 IS 15- 49, AND IF COLUMN 8 IS 1-3		CIRCLE LINE NUMBER OF EVER- MARRIED WOMEN AGE 18- 49 IF COLUMN 7 IS 18- 49, AND IF COLUMN 8 IS 1-3	CIRCLE LINE NUMBER OF EVER- MARRIED WOMEN AGE 50+ IF COLUMN 4 IS 2 AND IF COLUMN 7 IS 50+, AND IF COLUMN 8 IS 1-3, NEVER- MARRIED WOMEN AGE 18+ IF COLUMN 4 IS 2 AND IF COLUMN 7 IS 18+, AND IF COLUMN 8	CIRCLE LINE NUMBER OF ALL MEN AGE 18+ IF COLUMN 7 IS 18+.

8 = DON'T KNOW 98 = DON'T KNOW

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	What is the main source of drinking water for members of your household?	PIPED WATER PIPED INTO DWELLING 11 PIPED TO YARD/PLOT 12 PIPED TO NEIGHBOR 13 PUBLIC TAP/STANDPIPE 14 TUBE WELL OR BOREHOLE 21 DUG WELL 14	107
		PROTECTED WELL 31 UNPROTECTED WELL 32 WATER FROM SPRING 41 UNPROTECTED SPRING 42	
		RAINWATER 51 TANKER TRUCK 61 CART WITH SMALL TANK 71 SURFACE WATER (RIVER/DAM/ 71 LAKE/POND/STREAM/CANAL/ 81 BOTTLED WATER 91	→ 107 → 107
		OTHER96 (SPECIFY)	2 107
103	Where is that water source located?	IN OWN DWELLING	
107	Do you do anything to the water to make it safer to drink?	YES]→ 109
108	What do you usually do to make the water safer to drink? Anything else? RECORD ALL MENTIONED.	BOIL A ADD BLEACH/CHLORINE B STRAIN THROUGH A CLOTH C USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC) D SOLAR DISINFECTION E LET IT STAND AND SETTLE F OTHER X (SPECIFY) Z	
109	What kind of toilet facility do members of your household usually use? IF NOT POSSIBLE TO DETERMINE, ASK PERMISSION TO OBSERVE THE FACILITY.	FLUSH OR POUR FLUSH TOILETFLUSH TO PIPED SEWER SYSTEM11FLUSH TO SEPTIC TANK12FLUSH TO PIT LATRINE13FLUSH TO SOMEWHERE ELSE14FLUSH, DON'T KNOW WHERE15PIT LATRINE15PIT LATRINE21PIT LATRINE WITH SLAB22PIT LATRINE WITHOUT SLAB/OPEN PI123	
		COMPOSTING TOILET	
110	Do you share this toilet facility with other households?	YES 1 NO 2	→ 112

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
111	Including your own household, how many households use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10	
		10 OR MORE HOUSEHOLDS	
112	Where is this toilet facility located?	IN OWN DWELLING	
113	What type of fuel does your household mainly use for cooking?	ELECTRICITY 01 LPG 02 NATURAL GAS 03 BIOGAS 04 KEROSENE 05 COAL, LIGNITE 06 CHARCOAL 07 WOOD 08 STRAW/SHRUBS/GRASS 09 AGRICULTURAL CROP 10 ANIMAL DUNG 11	
		NO FOOD COOKED IN HOUSEHOLD	
114	Is the cooking usually done in the house, in a separate building, or outdoors?	IN THE HOUSE 1 IN A SEPARATE BUILDING 2 OUTDOORS 3 OTHER 6 (SPECIFY)]→ 116
115	Do you have a separate room which is used as a kitchen?	YES 1 NO 2	
116	How many rooms in this household are used for sleeping?	ROOMS	
117	Does this household own any livestock, herds, other farm animals, or poultry?	YES 1 NO 2	
118	How many of the following animals does this household own? IF NONE, RECORD '00'. IF 95 OR MORE, RECORD '95'. IF UNKNOWN, RECORD '98'.		
	a) Buffaloes?	a) BUFFALOES	
	b) Millk cows or bulls?	b) MILK COWS/BULLS	
	c) Goats or sheep?	c) GOATS/SHEEP	
	d) Chickens or ducks?	d) CHICKEN/DUCKS	
	e) Other farm animals?	e) OTHER FARM ANIMALS	ļ
119	Does any member of this household own any homestead? IF 'NO' PROBE: Does your household own homestead in any other places?	YES 1 NO 2	
119A	Does your household own any land other than the homestead land?	YES 1 NO 2	→ 121

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
120	How much land do members of this household own other than the homestead land? AMOUNT SPECIFY LOCAL UNIT 1 LOCAL UNIT =ACRES IF 95 OR MORE, CIRCLE '950'.	ACRES DECIMAL AREA	
121	Does your household have: a) Electricity? b) Solar electricity? c) A radio? d) A television? e) A mobile phone? f) A non-mobile telephone? g) A computer/laptop? h) A refrigerator? i) An almirah/wardrobe? j) An electric fan? k) A DVD/VCD player? l) A water pump? m) An IPS/generator? n) An air conditioner?	YES NO a) ELECTRICITY 1 2 b) SOLAR ELECTRICITY 1 2 c) RADIO 1 2 d) TELEVISION 1 2 e) MOBILE TELEPHONE 1 2 f) NON-MOBILE TELEPHONE 1 2 g) COMPUTER/LAPTOP 1 2 h) REFRIGERATOR 1 2 j) ELECTRIC FAN 1 2 j) ELECTRIC FAN 1 2 l) WATER PUMP 1 2 m) IPS/GENERATOR 1 2 n) AIR CONDITIONER 1 2	
122	Does any member of this household own: a) A car/truck/microbus? b) An autobike/tempo/CNG? c) A rickshaw/van? d) A bicycle? e) A motorcycle or motor scooter? f) A boat with a motor? g) A canoe or boat without a motor?	YES NO a) CAR/TRUCK/MICROBUS 1 2 b) AUTOBIKE/TEMPO/CNG 1 2 c) RICKSHAW/VAN 1 2 d) BICYCLE 1 2 e) MOTORCYCLE/MOTOR 3 2 f) BOAT WITH MOTOR 1 2 g) CANOE/BOAT 3 3 WITHOUT MOTOR 1 2	
123	Does any member of this household have a bank account?	YES 1 NO 2	

	ADDITIONAL HOUSEHOLD CHARACTERISTICS					
NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP			
125	WE WOULD LIKE TO LEARN ABOUT THE PLACES THAT HOUSEHOLDS USE TO WASH THEIR HANDS. CAN YOU PLEASE SHOW ME WHERE MEMBERS OF YOUR HOUSEHOLD MOST OFTEN WASH THEIR HANDS?	OBSERVED, FIXED PLACE WITHIN DWELLING1OBSERVED, FIXED PLACE NOT IN DWELLING2OBSERVED, NO FIXED PLACE3NOT OBSERVED,4NOT IN DWELLING/YARD/PLOT4NOT OBSERVED, NO PERMISSION TO SEF5NOT OBSERVED, OTHER REASON7	128			
126	OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING. RECORD OBSERVATION.	WATER IS AVAILABLE				
127	OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT AT THE PLACE FOR HANDWASHING. RECORD OBSERVATION.	SOAP OR DETERGENT (BAR, LIQUID, POWDER, PASTE) A ASH, MUD, SAND B NONE Y				
127A	OBSERVATION ONLY: OBSERVE TYPE OF PLACE FOR HAND WASHING	COVERED SPACE (INSIDE DWELLING) 1 OPEN SPACE, NOT SHARED 2 OPEN SPACE, SHARED 3				
128	OBSERVE MAIN MATERIAL OF THE FLOOR OF THE DWELLING. RECORD OBSERVATION.	NATURAL FLOOR 11 EARTH/SAND 11 DUNG 12 RUDIMENTARY FLOOR 21 PALM/BAMBOO 22 FINISHED FLOOR 22 PARQUET OR POLISHED WOOD 31 VINYL OR ASPHALT STRIPS 32 CERAMIC TILES 33 CEMENT 34 CARPET 35 OTHER 96				
129	OBSERVE MAIN MATERIAL OF THE ROOF OF THE DWELLING. RECORD OBSERVATION.	NATURAL ROOFING 11 NO ROOF 11 THATCH/PALM LEAF 12 SOD 13 RUDIMENTARY ROOFING 11 RUSTIC MAT 21 PALM/BAMBOO 22 WOOD PLANKS 23 CARDBOARD 24 FINISHED ROOFING 31 WOOD 22 CARDBOARD 24 FINISHED ROOFING 31 WOOD 32 CALAMINE/CEMENT FIBER 33 CERAMIC TILES 34 CEMENT 35 ROOFING SHINGLES 36 OTHER				

NO.	QUESTIONS AND FILTERS		SKIP
NU.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIF
130	OBSERVE MAIN MATERIAL OF THE EXTERIOR WALLS OF THE DWELLING. RECORD OBSERVATION.	NATURAL WALLS 11 CANE/PALM/TRUNKS 12 DIRT 13 RUDIMENTARY WALLS 14 BAMBOO WITH MUD 21 STONE WITH MUD 21 UNCOVERED ADOBE 23 PLYWOOD 24 CARDBOARD 25 REUSED WOOD 26 FINISHED WALLS 31 CEMENT 32 STONE WITH LIME/CEMENT 33 BRICKS 34 CEMENT BLOCKS 35 WOOD PLANKS/SHINGLES 36 OTHER 96	
131	RECORD THE TIME.	HOURS	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY 2017-18 WOMAN'S QUESTIONNAIRE

NIPORT, ME&FWD, MOHFW MITRA AND ASSOCIATES

IDENTIFICATION							
CLUSTER NUMBE							
	1	2	3	FINAL VISIT			
DATE INTERVIEWER'S NAME RESULT* NEXT VISIT:DATE TIME				DAY MONTH YEAR 201 INT. CODE RESULT* TOTAL NUMBER OF VISITS			
*RESULT CODES: 1 COMPLETED 4 REFUSED 2 NOT AT HOME 5 PARTLY COMPLETED 7 OTHER 3 POSTPONED 6 INCAPACITATED SPECIFY							
SUPERV NA	ME	NA	DEDITOR ME JMBER	OFFICE EDITOR KEYED BY			

INTRODUCTION AND CONSENT

Introductory statement:

My name is _______. I am working for Mitra and Associates, a private research organization located in Dhaka. We are conducting a survey about health all over Bangladesh under the authority of the National Institute of Population Research and Training (NIPORT), Medical Education and Family Welfare Division, Ministry of Health and Family Welfare (MOHFW). The information we collect will help the government to plan health and family planning services. Your household was selected for the survey. The questions usually take about 30-60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

Why is the study being done?

The survey aims to provide information to address the monitoring and evaluation needs of the Fourth Health, Population and Nutrition Sector Program (HPNSP) and to provide managers and policy makers involved in this program with the information that they need to effectively plan and execute future interventions.

What is involved in the study?

You have been selected as a respondent in this survey. I would like to ask you some questions about you and your children.

What will you have to do if you agree to participate?

Since you have been selected as a respondent in this study, I shall be thankful if you provide your valuable response on certain issues. If some questions cause you embarrassment or make you feel uncomfortable, you can refuse to answer them.

What are the risks and benefits of this study?

By providing information you will not have any risk <u>whatsoever</u>, rather this will help the government and policy planners to evaluate, strengthen and refocus national effort to improve health, population and nutrition programs.

Confidentiality:

Whatever information you provide will be kept strictly confidential. It will be used for research purposes and will be seen only by staff and researchers at the organizations mentioned.

Is there any compensation for participating in the study?

Your participation in the study is voluntary and promises no financial benefit.

Right to refuse or withdraw:

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

Who do I contact if I have a question or problem?

If you wish to know more about your rights as a participant in this study you may write the Bangladesh Medical Research Council (BMRC), Mohakhali, Dhaka or Mitra and Associates, Main Road 1, House 35, Senpara Parbata, Mirpur 10, Dhaka or Phone 9025410, 9025412. If you have further questions regarding the nature of this study you may also contact NIPORT, 13/1 Sheikh Shaheb Bazar, Azimpur, Dhaka-1205 or

At this time, do you want to ask me anything about the survey?

May I begin the interview now?	Yes	1 No ↓	2 🛶	END	
Participant's Name: Date: Signature (or thumb print): Date: or legal guardian if participant is a minor – note relationship):					
Name of witness:		Signature	:	Date:	
Name of person obtaining consent: (Must be study investigator or individ				Date:	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOURS	
102	How long have you been living continuously in (NAME OF CURRENT CITY, TOWN OR VILLAGE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS] → 104A
103	Just before you moved here, did you live in a city, in a town, or in a rural area?	CITY CORPORATION1OTHER TOWN2RURAL AREA3	
104	Before you moved here, which DIVISION did you	BARISAL 01 CHITTAGONG 02 DHAKA 03 KHULNA 04 MYMENSINGH 05 RAJSHAHI 06 RANGPUR 07 SYLHET 08 OUTSIDE OF BANGLADESF 96	
104A	Do you have a national ID card?	YES 1 NO 2	→ 105
104B	Would you please show me your national ID	CARD SEEN BY INTERVIEWEF 1 CARD NOT SEEN BY INTERVIEWER 2	
105	In what month and year were you born?	MONTH 98 DON'T KNOW MONTH 98 YEAR 998 DON'T KNOW YEAR 9998	
106	How old were you at your last birthday? COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT.	AGE IN COMPLETED YEAR:	
106A	Are you now married, separated, deserted, divorced, widowed, or have you never been married?	CURRENTLY MARRIED1SEPARATED2DESERTED3DIVORCED4WIDOWED5NEVER MARRIED6	→ END
107	Have you ever attended school/madrasha?	YES 1 NO 2	
107A	What type of school have you last attended?	SCHOOL 1 MADRASHA 2	
108	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY1SECONDARY2HIGHER3	
109	What is the highest class you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	CLASS	

SECTION 1. RESPONDENT'S BACKGROUND

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
110		DARY OR	→ 113
111	Now I would like you to read this sentence to me. SHOW CARD TO RESPONDENT. IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me?	CANNOT READ AT ALL1ABLE TO READ ONLY PART OF2THE SENTENC2ABLE TO READ WHOLE SENTEN(
112		1' OR '5'	─ → 114
113	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEE1LESS THAN ONCE A WEEK2NOT AT ALL3	
114	Do you listen to the radio (including FM and community radio) at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEE1LESS THAN ONCE A WEEK2NOT AT ALL3	
115	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEE	
116	Do you own a mobile phone?	YES 1 NO 2	→ 118
117	Do you use your mobile phone for any financial transactions?	YES 1 NO 2	
118	Do you have an account in a bank or other financial institution that you yourself use?	YES 1 NO 2	
122	What is your religion?	ISLAM 1 HINDUISM 2 BUDDHISM 3 CHRISTIANITY 4 OTHER 6 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES 1 NO 2	→ 206
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES 1 NO 2	→ 204
203	a) How many sons live with you?b) And how many daughters live with you?IF NONE, RECORD '00'.	a) SONS AT HOMI	
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with	YES 1 NO 2	→ 206
205	 a) How many sons are alive but do not live with you? b) And how many daughters are alive but do not live with you? IF NONE, RECORD '00'. 	a) SONS ELSEWHERE	
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very	YES 1 NO 2	→ 208
207	a) How many boys have died?b) And how many girls have died?IF NONE, RECORD '00'.	a) BOYS DEADb) GIRLS DEAD	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL BIRTHS	
209		NO PROBE AND RECESSARY.	
210	CHECK 208: ONE OR MORE NO BIRTHS	BIRTHS	→ 226

REC	11 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had. RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE ROWS. IF THERE ARE MORE THAN 10 BIRTHS, USE AN ADDITIONAL QUESTIONNAIRE, STARTING WITH THE SECOND ROW.								
212	213	214	215	216	217 IF ALIVE:	218 IF ALIVE	219 : IF ALIVE:	220 IF DEAD:	221
What name was given to your (first/ next) baby?	Is (NAME) a boy or a girl?	Were any of these births twins?	On what day, month, and year was (NAME) born?	Is (NAME) still alive?	How old was (NAME) at (NAME)'s last birthday?	Is (NAME) living with you?	RECORD HOUSEHOL D LINE NUMBER OF CHILD. RECORD '00' IF CHILD NOT LISTED IN HOUSEHOL D.	How old was (NAME) when (he/she) died? IF '12 MONTHS' OR '1 YR', ASK: Did (NAME) have (his/her) first birthday? THEN ASK: Exactly how many months old was (NAME)	Were there any other live births between (NAME OF PREVIOU S BIRTH) and (NAME), including any children who died
D NAME. BIRTH HISTOR Y					RECORD AGE IN COMP- LETED YEARS.			RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR	after birth?
01	BOY 1	SING 1	DAY	YES 1	AGE IN YEARS	YES 1	HOUSEHOLD	DAYS 1	
	GIRL 2	MULT 2	MONTH	NO 2 ↓		NO 2		MONTHS 2	
			YEAR	(SKIP TO			(NEXT BIRTH)	YEARS 3	
02	BOY 1	SING 1	DAY	YES 1	AGE IN YEARS	YES 1	HOUSEHOLD LINE NUMBEF	DAYS 1	YES 1 (ADD BIRTH
	GIRL 2	MULT 2	MONTH	NO 2 ↓		NO 2		MONTHS 2	١
			YEAR	(SKIP TO			¥ (SKIP TO 221)	YEARS 3	NO 2 (NEXT
03	BOY 1	SING 1	DAY	YES 1	AGE IN YEARS	YES 1	HOUSEHOLD		YES 1 (ADD J BIRTH
	GIRL 2	MULT 2	MONTH	NO 2 ↓ (SKIP		NO 2		MONTHS 2	١
			YEAR	TO			(SKIP TO 221)	YEARS 3	NO 2 (NEXT
04	BOY 1	SING 1	DAY	YES 1	AGE IN YEARS	YES 1	HOUSEHOLD	DAYS 1	YES 1 (ADD J BIRTH
	GIRL 2	MULT 2	MONTH	NO 2 ↓		NO 2		MONTHS 2	١
			YEAR	(SKIP TO			¥ (SKIP TO 221)	YEARS 3	NO 2 (NEXT
05	BOY 1	SING 1	DAY	YES 1	AGE IN YEARS	YES 1	HOUSEHOLD		YES 1 (ADD BIRTH
	GIRL 2	MULT 2	MONTH	NO 2 ↓		NO 2		MONTHS 2	١
			YEAR	(SKIP TO			¥ (SKIP TO 221)	YEARS 3	NO 2 (NEXT

212	213	214	215	216	217 IF ALIVE:	218 IF ALIVE	219 : IF ALIVE:	220 IF DEAD:	221
What name was given to your (first/ next) baby? RECOR D NAME. BIRTH HISTOR Y	Is (NAME) a boy or a girl?	Were any of these births twins?	On what day, month, and year was (NAME) born?	Is (NAME) still alive?	How old was (NAME) at (NAME)'s last birthday? RECORD AGE IN COMP- LETED YEARS.	Is (NAME) living with you?	RECORD HOUSEHOL D LINE NUMBER OF CHILD. RECORD '00' IF CHILD NOT LISTED IN HOUSEHOL D.	How old was (NAME) when (he/she) died? IF '12 MONTHS' OR '1 YR', ASK: Did (NAME) have (his/her) first birthday? THEN ASK: Exactly how many months old was (NAME) RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR	Were there any other live births between (NAME OF PREVIOU S BIRTH) and (NAME), including any children who died after birth?
06	BOY 1 GIRL 2	SING 1 MULT 2	DAY MONTH YEAR	YES 1 NO 2 ↓ (SKIP TO	AGE IN YEARS	YES 1 NO 2	HOUSEHOLD LINE NUMBEF	DAYS 1 MONTHS 2 YEARS 3	YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH
07	BOY 1 GIRL 2	SING 1 MULT 2	DAY MONTH YEAR	YES 1 NO 2 ↓ (SKIP TO	AGE IN YEARS	YES 1 NO 2	HOUSEHOLD LINE NUMBEF	DAYS 1 MONTHS 2 YEARS 3	YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH
08	BOY 1 GIRL 2	SING 1 MULT 2	DAY MONTH YEAR	YES 1 NO 2 ∳ (SKIP TO	AGE IN YEARS	YES 1 NO 2	HOUSEHOLD LINE NUMBER		YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH
09	BOY 1 GIRL 2	SING 1 MULT 2	DAY MONTH YEAR	YES 1 NO 2 ↓ (SKIP TO	AGE IN YEARS	YES 1 NO 2	HOUSEHOLD LINE NUMBER	DAYS 1 MONTHS 2 YEARS 3	YES 1 (ADD BIRTH NO 2 (NEXT BIRTH
10	BOY 1 GIRL 2	SING 1 MULT 2	DAY MONTH YEAR	YES 1 NO 2 ↓ (SKIP TO	AGE IN YEARS	YES 1 NO 2	HOUSEHOLD LINE NUMBER	DAYS 1	YES 1 (ADD BIRTH) NO 2 (NEXT BIRTH

	SECTION 2. R	REPRODUCTION	
NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
222	Have you had any live births since the birth of	YES	
	(NAME OF LAST BIRTH)?	(RECORD BIRTH(S) IN TABLE) ← NO 2	
0.00			
223	COMPARE 208 WITH NUMBER OF BIRTHS IN BIRTH		
	NUMBERS ARE SAME		
		/	
	↓	(PROBE AND RECONCILE) ←	
224	CHECK 215: ENTER THE NUMBER OF BIRTHS IN		
	2012 OR LATER		
		NONE 0	→ 226
225	FOR EACH BIRTH IN 2012 OR LATER, ENT	ER 'B' IN THE MONTH OF BIRTH IN THE	
	CALENDAR. WRITE THE NAME OF THE C	HILD TO THE LEFT OF THE 'B' CODE. FOR EACH	
		D MONTHS THE PREGNANCY LASTED AND MONTHS ACCORDING TO THE DURATION OF	
		's MUST BE ONE LESS THAN THE NUMBER OF	
226	Are you pregnant now?	YES 1	
220		NO 2	→ 229C
		UNSURE 8	
227	How many months pregnant are you?		
	RECORD NUMBER OF COMPLETED MONTHS.	MONTHS	
	ENTER 'P'S IN THE CALENDAR, BEGINNING WITH THE MONTH OF		
	INTERVIEW AND FOR THE TOTAL		
	NUMBER OF COMPLETED MONTHS.		
228	When you got pregnant, did you want to get	YES 1	→229C
	pregnant at that time?	NO 2	
229	CHECK 208: TOTAL NUMBER OF BIRTHS		
	¥ ¥ a) Did you want to have b) Did you want to have	LATER 1	
	a baby later on or did a baby later on or did		
	you not want any you not want any more children? children?	NO MORE/NONE 2	
229C	Have you ever heard of menstrual regulation (MR)?	YES 1 NO	→ 230
		VEO (
229D	Have you ever used MR?	YES	→ 229G
229E	In the last three years did you use MR?	YES	
		···• ········· ·	

NO.	QUESTIONS AND FILTERS	CODING CA	SKIP	
229G	Have you heard about drugs available for MR?	YES NO	1 2	→ 230
229H	Have you ever used drugs for MR?	YES NO	1 2	→230
2291	Did you use any MR drug in the last three years?	YES NO	1 2	
230	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?		1 2	→239
231	When did the last such pregnancy end?	MONTH		
		YEAR		
232	CHECK 231:			
				00.4
	ENDED IN 2012 OR LATER			→ 234
		LAST PREGNANCY ENDED IN 2011 OR		→ 239
		EARLIER	1	
	233	234	235	
	In what month and year did the preceding such pregnancy end?	How many months pregnant were you	Since January 2012, have you had any	
LINE NO.		when that pregnancy ended?	other pregnancies that did not result in a live	
01			YES 1	→ NEXT
		NUMBER OF MONTHS	NO 2	LINE 236
02			YES 1	→ NEXT
	MONTH YEAR	NUMBER OF MONTHS	NO 2	LINE 236
03			YES 1	→ NEXT
	MONTH YEAR	NUMBER OF MONTHS	NO 2	LINE 236
04			YES 1	٦
	MONTH YEAR	NUMBER OF MONTHS	NO 2	→ 236
236	FOR EACH PREGNANCY THAT DID NOT E			
	IN THE CALENDAR IN THE MONTH THAT T REMAINING NUMBER OF COMPLETED MO		ATED AND P FUR THE	
	IF THERE ARE MORE THAN FOUR PREGN AN ADDITIONAL QUESTIONNAIRE START			
237	Did you have any miscarriages, abortions or stillbirths that ended before 2012?	YES NO	1 	→239
238	When did the last such pregnancy that terminated before 2012 end?	MONTH	·····	
		YEAR		
			i	L

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
239	When did your last menstrual period start? (DATE, IF GIVEN)	DAYS AGO1WEEKS AGO2MONTHS AGO3YEARS AGO4IN MENOPAUSE/ HAS HAD HYSTERECTOMY994BEFORE LAST BIRTH995NEVER MENSTRUATED996	
240	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	YES 1 NO 2 DON'T KNOW 8]→ 242
241	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS 1 DURING HER PERIOL	
242	After the birth of a child, can a woman become pregnant before her menstrual period has returned?	YES 1 NO 2 DON'T KNOW 8	

243	CHEC	< 215 ANE	0 216:					
	ANY CHILD(REN) NO CHILD BORN IN BORN IN 2007 OR 2007 OR LATER							
	LATE	301						
244	COPY	INFORMA	TION IN 212, 213	215, AND 220 FOR E	ACH CHILD BORN IN 2	007 OR LATER WH	O DIED	
212		213	215	220	246	247	248	
NAME DECE CHILI	ASED	IS (NAME) A BOY OR A GIRL?	(NAME)'S DAY, MONTH AND YEAR OF BIRTH	(NAME)'S AGE AT DEATH IN DAYS, MONTHS, OR YEAR	CHECK 220: AGE AT DEATH RECORDED IN DAYS, MONTHS, OR 2-4 YEARS	Now I would like to ask further questions about your child(ren) who died. On what day, month and year did (NAME) die?	CHECK 247: YEAR OF DEATH	
		BOY 1	DAY	DAYS	DAYS, MONTHS OR 2- 4 YEARS (GO TO 247)	DAY	YEAR 2012 OR LATER	
		GIRL 2	MONTH	MONTHS	5 OR MORE YEARS	MONTH		
			YEAR	YEARS	(GO TO NEXT LINE. IF NO MORE CHILDREN SKIP TO 249)	YEAR	YEAR 2011 OR EARLIER	
				1	DAYS,		YEAR 2012	
		BOY 1	DAY	DAYS	MONTHS OR 2- 4 YEARS (GO	DAY	OR LATER	
		GIRL 2	MONTH	MONTHS	TO 247) 5 OR MORE YEARS	MONTH		
			YEAR	YEARS 3	(GO TO NEXT LINE. IF NO MORE CHILDREN SKIP TO 249)	YEAR	YEAR 2011 OR EARLIER	
		BOY 1	DAY	DAYS 1	DAYS, MONTHS OR 2- 4 YEARS (GO	DAY	YEAR 2012 OR LATER	
		GIRL 2	MONTH	MONTHS 2	TO 247) 5 OR MORE YEARS	MONTH		
			YEAR	YEARS	(GO TO NEXT LINE. IF NO MORE CHILDREN SKIP TO 249)	YEAR	YEAR 2011 OR EARLIER	
249	CHEC	(248 [.] FN		R OF DEATHS SINCE	,			
	249 CHECK 248: ENTER THE NUMBER OF DEATHS SINCE JANUARY 2012 (CODE 1).							
250	CHEC	(249: IF (ONE OR MORE, R	EAD THE FOLLOWING	G STATEMENT:			
	CHECK 249: IF ONE OR MORE, READ THE FOLLOWING STATEMENT: YES We would like to get more information on the circumstances around the deaths of young children so that the government can provide services to help reduce these deaths. We would like to come back and talk with you about your child(ren's) death. Is this okay? YES							

NO.	QUESTIONS AND FILTERS		CODING CATEGORIES		SKIP
301	Now I would like to talk about family planning - the varion pregnancy.	ous ways or	methods that a couple can use to delay o	or avo	id a
301A	Have you heard about EMERGENCY CONTRACEPTIC PILLS (ECP)?. As an emergency measure after unproto sexual intercourse, women can take special pills at any within three days to prevent pregnancy?	ected	YES NO	1 2—	→ 301D
301B	Have you ever used ECP?		YES NO	1 2—	→ 301D
301C	Did you use ECP in last 12 months?		YES NO	1 2	
301D	Have you heard about LACTATIONAL AMENORRHEA METHOD (LAM)? Up to 6 months after child birth, a wo can use a method that requires she breastfeeds freque and night, and that her menstrual period has not returne	oman ently, day	YES NO	1 2—	→ 302
301E	Have you ever used LAM?		YES NO	1 2	
302		ATED/DESE RCED/WID(→ 312
302A	CHECK 226: NOT PREGNANT OR UNSURE		PREGNANT		→ 312
303	Are you or your husband currently doing something or using any method to delay or avoid getting			1 2	→ 312
304	Which method are you using? RECORD ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.	MALE ST IUD INJECTA IMPLANT PILL CONDOM EMERGE LACTATI SAFE PE WITHDR OTHER M	BLES	A B C D E F G I K L M X Y	307 309 309 309 309 305 306 309 307
305	What is the brand name of the pills you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE. IF PACKAGE NOT SEEN, SHOW THE BRAND CHART AND CIRCLE THE BRAND NAME OF PILLS.	FEMICON MINICON FEMIPILI NORET-2 SHUK OVOSTA DESOLO BRIDICO BRIDICO LYNES MARVEL COMBIN/ MENORE ROSEN GIANCE APAN OTHER	28 T N N ON ATION 3 (C 3 ST 	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 17 96 98	→ 309

SECTION 3. CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
306	What is the brand name of the condoms you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE. IF PACKAGE NOT SEEN, SHOW THE BRAND CHART AND CIRCLE THE BRAND NAME OF PILLS.	RAJA 01 PANTHEI 02 HERC 03 SENSATION 04 U & ME 05 MOODS 06 GAMY 07 WONDER LIFE 08 ROMANTEX 09 DUREX 10 LOVE GUARD 11 CORAL 12 JIPPY 13 NIRAPAE 14 GREEN LOVE 15 CAREX 16 DELUXE NIRODH 17 XTREME 18 SUPER GUARE 19 OTHER 96 (SPECIFY) 98	→ ₃₀₉
307	In what facility did the sterilization take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.	PUBLIC SECTOR 11 MEDICAL COLLEGE HOSPITAL 11 SPECIALIZED GOVT HOSPITAI 12 DISTRICT HOSPITAL 13 MCWC 14 UPAZILA HEALTH COMPLEX 15 UH & FAMILY WELFARE CENTI 17 OTHER PUBLIC 16 (SPECIFY)	
	(NAME OF PLACE)	NGO SECTOR 21 NGO STATIC CLINIC 21 OTHER NGO SECTOR 26 (SPECIFY) 26 PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE 31 PRIVATE HOSPITAL 32 PRIVATE CLINIC 33 QUALIFIED DOCTOR'S CHAMBER 34 OTHER PRIVATE MEDICAL SECTOR 36 (SPECIFY)	
		OTHER96 (SPECIFY) DON'T KNOW	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
308	In what month and year was the sterilization performed	? MONTH	→ 310
309	Since what month and year have you been using (CURRENT METHOD) without stopping? PROBE: For how long have you been using (CURRENT METHOD) now without stopping?	MONTH	
310	YEAR AT ST		

311	CHECK 308 AND 309:			
	YEAR IS 2012 OR	YEAR IS 2011 OR EARLIER		
	ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING.	ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2012		
	THEN CONTINUE	THEN -		
	↓	(SKIP TO 314) -		
312	I would like to ask you some questions about the times you pregnant during the last few years.	u or your husband may have used a method to avoid getting		
	USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2012. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS.			
	IN COLUMN 1, ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH.			
	ILLUSTRATIVE QUESTIONS:a) When was the last time you used a method? Which method was that?b) When did you start using that method? How long after the birth of (NAME)?c) How long did you use the method then?			
	IN COLUMN 2 , ENTER CODES FOR DISCONTINUATION NEXT TO THE LAST MONTH OF USE. NUMBER OF CODES IN COLUMN 2 MUST BE SAME AS NUMBER OF INTERRUPTIONS OF METHOD USE IN COLUMN 1.			
		DD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE IILE USING THE METHOD OR DELIBERATELY STOPPED		
	 ILLUSTRATIVE QUESTIONS: d) Why did you stop using the (METHOD)? Did you become pregnant while using (METHOD), or d you stop to get pregnant, or did you stop for some other reason? e) IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK: How many months did it take y to get pregnant after you stopped using (METHOD)? AND ENTER '0' IN EACH SUCH MONTH I COLUMN 1. 			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
313	CHECK THE CALENDAR FOR USE OF ANY CONTRA NO METHOD USED	CEPTIVE METHOD IN ANY MONTH ANY METHOD USED	→ 315
314	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES 1 NO 2]→ 317
315	CHECK 304: CIRCLE METHOD CODE: F MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN	NO CODE CIRCLED00FEMALE STERILIZATION01MALE STERILIZATION02IUD03INJECTABLES04IMPLANTS05PILL06CONDON07EMERGENCY CONTRACEPTION PILL09LACTATIONAL AMENORRHEA METHOD11SAFE PERIOD12WITHDRAWAL13OTHER MODERN METHOD95OTHER TRADITIONAL METHOI96	$\rightarrow 317$ $\rightarrow 319$ $\rightarrow 319$ $\rightarrow 317$ $\rightarrow 317$
316	Where did you obtain (CURRENT METHOD) the last time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. (NAME OF PLACE)	PUBLIC SECTOR 11 SPECIALIZED GOVT HOSPITAL 12 DISTRICT HOSPITAL 13 MCWC 14 UPAZILA HEALTH COMPLEX 15 UH & FAMILY WELFARE CENTI 17 COMMUNITY CLINIC 18 SAT. CLINIC/EPI OUTREACH 19 GOVT. FIELD WORKER (FWA) 20 OTHER PUBLIC 16 SECTOR 16 NGO SECTOR 17 NGO STATIC CLINIC 21 NGO STATIC CLINIC 22 NGO DEPO HOLDER 23 NGO FIELD WORKER 24 OTHER NGO 26 SECTOR 26 (SPECIFY) 27 PRIVATE MEDICAL SECTOR 28 PRIVATE MEDICAL COLLEGE HOSPITAL 31 PRIVATE MEDICAL COLLEGE HOSPITAL 31 PRIVATE MEDICAL COLLEGE HOSPITAL 31 QUALIFIED DOCTOR'S CHAMBER 34 NON-QUALIFIED DOCTOR'S CHAMBER 35 PHARMACY/DRUG STORE 37 OTHER PRIVATE 36 MEDICAL SECTOR 36 SHOP 41 </td <td>→ 319</td>	→ 319

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
317	Do you know of a place where you can obtain a method of family planning?	YES NO	1 2	→ 319
318	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.	COMMUNITY CLINIC SAT. CLINIC/EPI OUTREACH GOVT. FIELD WORKER (FWA) OTHER PUBLIC	A B C D E F G H I	
	(NAME OF PLACE)	SECTOR (SPECIFY) NGO SECTOR NGO STATIC CLINIC NGO SATELLITE CLINIC	J K L	
	(NAME OF PLACE)	NGO DEPO HOLDER NGO FIELD WORKER OTHER NGO SECTOR(SPECIFY)	M N O	
	(NAME OF PLACE)	PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL PRIVATE HOSPITAL PRIVATE CLINIC QUALIFIED DOCTOR'S CHAMBER NON-QUALIFIED DOCTOR'S CHAMBE PHARMACY/DRUG STORE OTHER PRIVATE MEDICAL SECTOR (SPECIFY)	P Q R S T U V	
		OTHER SOURCE SHOP FRIEND/RELATIVE OTHER (SPECIFY)		
319	In some places, there is a clinic set up for a day or part of a day in someone's house or in a school. During the past three months, was there any such clinic in this village or mohalla?	YES NO DON'T KNOW	1 2 8]→ 322
320	Did you visit such a temporary health clinic in the past three months?	YES NO	1 2	→ 322
321	What services did you receive?	FAMILY PLANNING METHODS IMMUNIZATIONS CHILD GROWTH MONITORING TETANUS INJECTION ANTENATAL CARE VITAMIN A FOR CHILDREN OTHER	A B C D E F X Z	
322	Are you aware of any community clinic in your area?	YES	1 2	→ 325
323	Did you visit the community clinic in the past three months?	YES NO	1 2	→ 325

SECTION 3.	CONTRACEPTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
324	What services did you receive?	FAMILY PLANNING METHODS A IMMUNIZATIONS B CHILD GROWTH MONITORING C TETANUS INJECTION D ANTENATAL CARE E NORMAL DELIVEF F POSTNATAL CARE G CHILD HEALTH CA H VITAMIN A FOR CHILDREN I TUBERCULOSIS (TB) J NCD (HYPERTENSION, DIAI K OTHER X (SPECIFY) DON'T KNOW	
325	In the last 6 months, were you visited by a fieldworker who talked to you about family planning or gave you a family planning method?	TALKED 1 GAVE FAMILY PLANNING METHO 2 TALKED AND GAVE METHOD 3 NO 4	→ 401
326	Who visited you to talk about family planning or to give you family planning methods? Name Anyone else? Name	GOVT. FP WORKER A GOVT. HEALTH WORKEI B NGO WORKER C OTHER X (SPECIFY)	
327	During the last six months, how many times did a health worker or workers visit you to talk about family planning or to give you family planning	NUMBER OF TIMES 98	
328	When was the last time you were visited by a fieldworker who talked to you about family planning? IF MORE THAN ONE WORKER VISITED: When did the last worker visit you? IF LESS THAN ONE MONTH AGO WRITE '0'.	MONTHS AGO	

SECTION 4. PREGNANCY AND POSTNATAL CARE

401	CHECK 215:		
	ONE OR MORE BIRTHS IN 2014 OR LATER	IN 2014 OR	→ 601
402		HISTORY NUMBER IN 403 AND THE R LATER. ASK THE QUESTIONS A	
	Now I would like to ask some questic each separately.)	ns about your children born in the las	t three years. (We will talk about
403	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	LAST BIRTH BIRTH HISTORY NUMBER	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER
404	FROM 212 AND 216:		
405	When you got pregnant with (NAME), did you want to get pregnant at that time?	YES 1 (SKIP TO 408) ← NO 2	YES 1 (SKIP TO 427) ← 2
406	CHECK 208: ONLY ONE BIRTH a) Did you want to have a baby later on, or did you not want any children? MORE THAN ONE b) Did you want to have a baby later on, or did you not want any children?	LATER 1 NO MORE/NONE 2 (SKIP TO 408) ←	LATER 1 NO MORE/NONE 2 (SKIP TO 427) ←
407	How much longer did you want to wait?	MONTHS 1 YEARS 2 DON'T KNOW	MONTHS 1 YEARS 2 DON'T KNOW
408	Did you see anyone for antenatal care for this pregnancy?	YES 1 NO 2 SKIP TO 414B ←	
409	Whom did you see? Anyone else? PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED. IF YOU ARE NOT SURE OF THE DESIGNATION OF THE PERSON, WRITE HER/HIS NAME AND ASK THE SUPERVISOR TO FIND OUT. CIRCLE THE APPROPRIATE	HEALTH PERSONNEL QUALIFIED DOCTOR A NURSE/MIDWIFE/ PARAMEDIC B FAMILY WELFARE VISITOR (FWV) C COMMUNITY SKILLED BIRTH ATTENDANT (CSBA) D SUB-ASSISTANT COMMUNITY MEDICAL OFFICER (SACMO) E COMMUNITH HEALTH CARE PROVIDER (CHCP) F HEALTH ASSISTANT (HA) G FAMILY WELFARE ASSISTANT (EWA) H	
	NAME AND ASK THE SUPERVISOR TO FIND OUT. CIRCLE THE APPROPRIATE	CARE PROVIDER (CHCP) F HEALTH ASSISTANT (HA) G FAMILY WELFARE	

	NAME	NGO WORKER I OTHER PERSON TRAINED TBA (TTBA) J UNTRAINED TBA (UTBA) K UNQUALIFIED DOCTOR L OTHER X (SPECIFY) LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
410	Where did you receive antenatal care for this pregnancy? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. (NAME OF PLACE) Anywhere else?	HOME A PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL B SPECIALIZED GOVT HOSPITAL HOSPITAL C DISTRICT HOSPITA D MCWC E UPAZILA HEALTH COMPLEX COMPLEX F UH & FAMILY WELFARE CENTRE CENTRE G COMMUNITY CLINIC H SAT. CLINIC/EPI OUTREACH OTHER PUBLIC SECTOR SECTOR J (SPECIFY) NGO SECTOR J NGO STATIC CLINIK K NGO SAT CLINIC L PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL M PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL M PRIVATE MEDICAL COLLEGE HOSPITAL M PRIVATE MEDICAL COLLEGE HOSPITAL M PRIVATE HOSPITA N PRIVATE HOSPITA N PRIVATE CLINIC O QUALIFIED DOCTOR CHAMBER <t< th=""><th></th></t<>	
411	How many months pregnant were you when you first received antenatal care for this pregnancy?	MONTH:	
412	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES DON'T KNOW 98	

413	As part of your antenatal care during this pregnancy, were any of the following done at least once: a) Was your weight measured? b) Was your blood pressure c) Did you give a urine sample? d) Did you give a blood sample? e) Did you give a blood sample? e) Did you receive counselling about pregnancy danger signs? g) Did you receive counseling about a family planning method you can use immediately after you give hirth?	YES NO a) WEIGH1 1 2 b) BP 1 2 c) URINE 1 2 d) BLOOD 1 2 e) ULTRASON 1 2 f) DANGER SIGNS 1 2 g) FP METHOD AFTER BIRTH 1 2	
		LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
414A	During (any of) your antenatal care visit(s), were you told about signs of pregnancy complications?	YES	
414B	When you got pregnant with (NAME), did any fieldworker/ community worker visit you at your home to counsel you on healthy pregnancy or give you a checkup?	YES 1 NO 2 (SKIP TO 420) ←	
414C	Who visited you? IF YOU ARE NOT SURE OF THE DESIGNATION OF THE PERSON, WRITE HER/HIS NAME AND ASK THE SUPERVISOR TO FIND OUT. CIRCLE THE APPROPRIATE	COMMUNITY SKILLED BIRTH ATTENDANT (CSB4 A HEALTH ASSISTANT (HA. B FAMILY WELFARE ASSISTANT (FWA) C NGO WORKER D TRAINED TBA (TTBA) E UNTRAINED TBA (UTBA) F OTHER X (SPECIFY)	
414D	What did they do:	YES NO	
	 a) Was your weight measured? b) Was your blood pressure c) Did you give a urine sample? d) Did you give a blood sample? e) Did you receive counselling about pregnancy danger signs? 	a) WEIGH ¹ 1 2 b) BP 1 2 c) URINE 1 2 d) BLOOD 1 2 e) DANGER SIGNS 1 2	
414E	How many home visits did you receive during the last pregnancy?	NUMBER OF TIMES DON'T KNOW	
420	During this pregnancy, were you given or did you buy any iron tablets or iron syrup? SHOW TABLETS/SYRUP.	YES	
421	During the whole pregnancy, for how many days did you take the tablets or syrup? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS DON'T KNOW	

427	Was (NAME) weighed at birth?	YES 1 NO 2¬ (SKIP TO 429) ←	YES 1 NO 2− (SKIP TO 429) ←
		DON'T KNOW 8 ^{_1}	DON'T KNOW 8–
428	How much did (NAME) weigh? RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1	KG FROM CARD 1
		LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
429	Who assisted with the delivery of (NAME)? Anvone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY. IF YOU ARE NOT SURE OF THE DESIGNATION OF THE PERSON, WRITE HER/HIS NAME AND ASK THE SUPERVISOR TO FIND OUT. CIRCLE THE APPROPRIATE NAME	HEALTH PERSONNEL QUALIFIED DOCTOR A NURSE/MIDWIFE/ PARAMEDIC B FAMILY WELFARE VISITOR (FWV) C COMMUNITY SKILLED BIRTH ATTENDANT (CSBA) D SUB-ASSISTANT COMMUNITY MEDICAL OFFICER (SACMO) C COMMUNITH HEALTH CARE PROVIDER (CHCP) F HEALTH ASSISTANT (HA G FAMILY WELFARE ASSISTANT (FWA) H NGO WORKER 1 TRAINED TBA (TTBA) J UNTRAINED TBA (UTBA) K UNQUALIFIED DOCTOR L RELATIVES M NEIGHBOURS/ FRIENDS N CTHER X	HEALTH PERSONNEL QUALIFIED DOCTOR A NURSE/MIDWIFE/ PARAMEDIC B FAMILY WELFARE VISITOR (FWV) C COMMUNITY SKILLED BIRTH ATTENDANT (CSBA) D SUB-ASSISTANT COMMUNITY MEDICAL OFFICER (SACMO) C COMMUNITH HEALTH CARE PROVIDER (CHCP) F HEALTH ASSISTANT (HA G FAMILY WELFARE ASSISTANT (FWA) H NGO WORKER I TRAINED TBA (TTBA) J UNTRAINED TBA (UTBA) K UNQUALIFIED DOCTOR L RELATIVES M NEIGHBOURS/ FRIENDS N CTHER X
		(SPECIFY)	
430	Where did you give birth to (NAME)? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PI ACF (NAME OF PLACE) IF CODE 42 OR 43 IS CIRCLED, ASK THE NAME OF THE FACILITY (NAME OF PLACE)	HOME HOME 11- (SKIP TO 433I) ← PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL 21 SPECIALIZED GOVT HOSPITAL 22 DISTRICT HOSPITA 23 MCWC 24 UPAZILA HEALTH COMPLEX 25 UH & FAMILY WELFARE CENTRE 27 COMMUNITY CLINI 28 OTHER PUBLIC SECTOR 26 SPECIFY	HOME HOME 11 (SKIP TO 433I) PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL 21 SPECIALIZED GOVT HOSPITAL 22 DISTRICT HOSPITA 23 MCWC 24 UPAZILA HEALTH COMPLEX 25 UH & FAMILY WELFARE CENTRE 27 COMMUNITY CLINI 28 OTHER PUBLIC SECTOR 26 SPECIFY

	ADDRESS (CITY OR TOWN):	NGO SECTOR NGO STATIC CLINI ^I 31 DELIVERY HUT 32 PRIVATE MEDICAL SECTOR	NGO SECTOR NGO STATIC CLINI 31 DELIVERY HUT 32 PRIVATE MEDICAL SECTOR
	MOBILE / TELEPHONE NUMBER ASK FOR DISCHARGE LETTER OR OTHER DOCUMENT TO GET THIS INFORMATION.	46 SPECIFY 96 ¬	PRIVATE MEDICAL COLLEGE HOSPITAL 41 PRIVATE HOSPITA 42 PRIVATE CLINIC 43 OTHER PRIVATE MEDICAL 46 SPECIFY 96 –
		(SPECIFY) (SKIP TO 433I) <	(SPECIFY) (SKIP TO 433V) <
NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH
431	How long after (NAME) was delivered did you stay there? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 DAYS 2 WEEKS 3 DON'T KNOW 998	
432	Was (NAME) delivered by caesarean, that is, did they cut your belly open to take the baby	YES 1 NO 2 (SKIP TO 433I) ←	YES 1 NO 2 (SKIP TO 433V) ←
433	When was the decision made to have the caesarean section? Was it before or after your labor pains started?	BEFORI1 AFTER2 (SKIP TO 433D) ←	BEFORI
433A	How many days before the delivery was the decision to have caesarean section made?	DAY OF DELIVE!1DAY BEFORE DELIVE22 - 7 DAYS BEFORE2DELIVERY38 - 30 DAYS BEFORE2DELIVERY430+ DAYS BEFORE5	
433D	Who proposed first to have the birth delivered by caesarean section, you, a family member, or	RESPONDENT 1 (SKIP TO 433F) FAMILY MEMBER 2 DOCTOR 3	
433E	Were you or your family told the reasons for having the operation?	YES 1 NO 2_ (SKIP TO 433G) ←	
433F	What were the reasons for making the decision to have the caesarean section? Anv other reason? CIRCLE ALL MENTIONED.	CONVENIENCEADO NOT WANT TO GOTHROUGH LABOR PAINMALPRESENTATIOCORD PROLAPSELEMULTIPLE BIRTHSFAILURE TO PROGRESSIN LABORGPRE-ECLAMPSI/HDIABETESJLESS PRESSURE ONBABY'S BRAINK	

		OTHER COMPLICATIONS DURING DELIVERY L OTHER X	
433G	CHECK		
	CHILD NOT CHILD FIF FIRST BIRTH	RST	
433H	Did you have a caesarean section before this birth?	YES 1 NO 2	
		LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
4331	Did you or any of your family members ever use a mobile phone to get health services or advice for you or (NAME) during your pregnancy or delivery?	YES 1 NO 2 (SKIP TO 433L) ←	
433J	What was the reason the mobile phone was used? Any other reason? CIRCLE ALL MENTIONED.	TO ASK WHAT TO I A TO CONTACT SERVICE PROVIDER B TO ARRANGE TRANSPORT C TO ARRANGE FOR MONEY D TO ARRANGE FOR DELIVEI E OTHER X SPECIFY	
433K	Who did you call?	HEALTH PERSONNEL	
	Any other person? CIRCLE ALL MENTIONED. IF YOU ARE NOT SURE OF THE DESIGNATION OF THE PERSON, WRITE HER/HIS NAME AND ASK THE SUPERVISOR TO FIND OUT. CIRCLE THE APPROPRIATE CODE. NAME NAME	QUALIFIED DOCTOR A NURSE/MIDWIFE/ PARAMEDIC B FAMILY WELFARE VISITOR (FWV) C COMMUNITY SKILLED BIRTH ATTENDANT (CSBA) D SUB-ASSISTANT COMMUNITY MEDICAL OFFICER (SACMO) E COMMUNITH HEALTH CARE PROVIDER (CHCP) F HEALTH ASSISTANT (HA G FAMILY WELFARE ASSISTANT (FWA) H NGO WORKER 1 NGO WORKER 1 KUNQUALIFIED DOCTC L RELATIVES M NEIGHBORS/FRIENDS N	
433L	How much did you pay in total for your last delivery? IF MORE THAN 999995, WRITE 999995.	TAKA NOTHING	

433M	Where did you get the money for (NAME'S) delivery?	FAMILY FUNE A BORROWED B SOLD ASSESTS/ C MORTGAGE C GIFT FROM FAMIL1 D GIFT FROM NEIGHBOUR/ FRIEND FRIEND E VOUCHER F INSURANCE G OTHER X SPECIFY X	
433N	CHECK 430: PLACE 0F	CODE OTHER 11' OR '96' CIRCLED (SKIP TO 433R)	
		LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
4330	Now I would like to ask you some specific questions about what was done with (NAME) during and immeditely following delivery. Was a Clean Delivery Kit used during the delivery of (NAME)? SHOW PICTURE OF DELIVERY KIT	YES 1 NO 2 DON'T KNOW 8	
433P	What was used to cut the cord?	BLADE FROM DELIVERY KI KIT	
433Q	Was the (INSTRUMENT IN 433P) boiled before the cord was cut?	YES 1 NO 2 DON'T KNOW 8	
433R	Was anything applied to the cord immediately after cutting and tying it?	YES 1 NO 2¬ (SKIP TO 433U) ← DON'T KNOW 8-	
433S	Did you or anyone else put chlorhexidine on the cord stump? SHOW GOVERNMENT SUPPLIED SAMPLE AND	YES 1 NO 2 DON'T KNOW 8	

433T	Other than chlorhexidine, what was applied to the cord aftter it was cut and tied?	ANTIBIOTICS (POWDER/OINTM A ANTISEPTIC (DETOL/SAVLON/HEXISOL B SPIRIT/ALCOHOC MUSTARD OIL WITH GARLI D CHEWED RICE E TUMERIC JUICE/POWDER F GINGER JUICE/POWDER F GINGER JUICE/POWEG SHIDURH BORIC POWDEFH BORIC POWDEFI GENTIAN VIOLET (BLUE INK J TALCUM POWEIK OTHER X SPECIFY NOTHING OTHER THAN CHLORHEXIDINIL DON'T KNOWZ	
433U	How long after birth was (NAME) dried?	<5 MINUTES 1 5-9 MINUTES 2 10+ MINUTES 3 NOT DRIEL 4 DON'T KNOW 8	
433V	After the birth, was (NAME) put directly on the bare skin of your chest? SHOW PICTURE OF SKIN-TO- SKIN POSITION.	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
		LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
433W	How long after delivery was (NAME) bathed for the first time?	HOURS 1	
	IF LESS THAN ONE DAY, RECORD IN HOURS. IF LESS THAN ONE WEEK. RECORD IN	WEEKS 3 NOT BATHED	
434	CHECK 430: PLACE OF	CODE '11' OR '96' CIRCLED ☐ → 434I	
434A	To go to the facility where you gave birth to (NAME), did you move from another health facility, did you go there directly from your home, or from somewhere else that was not a health facility?	CAME FROM ANOTHER HEALTH FACILITY 1 CAME FROM HOME 2 CAME FROM NON-HEALTH FACILITY LOCATION 3 (SKIP TO 434F)	
434B	From which facility did you move to the facility where you gave birth to (NAME)? PROBE TO IDENTIFY THE TYPE OF SOURCE.	PUBLIC SECTORMEDICAL COLLEGEHOSPITALSPECIALIZED GOVTHOSPITALDISTRICT HOSPITA23MCWCUPAZILA HEALTHCOMPLEX25	

	IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. (NAME OF PLACE)	UH & FAMILY WELFARE CENTRE	
		(SPECIFY) (SKIP TO 434I) ←	
434C	Why did you move from one facility to the facility where you gave birth to (NAME)?	PROBLEM DURING LABOR/ EMERGENCY 1 NO APPROPRIATE HEALTH PROF. AVAILABI 2 FACILITY TOO CROWDED/ NO BED AVAILABLI 3 FACILITY NOT OPEN 4 REFERREI 5 EXPENSIVE SERVICE 7	
		OTHER 6 (SPECIFY) 6	
		LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
NO. 434D	QUESTIONS AND FILTERS Did a health worker go with you when you moved to the facility where you gave birth to (NAME)?	NAME 1 YES 1 NO 2 DON'T KNOW 8	NAME
	Did a health worker go with you when you moved to the facility	YES	
434D	Did a health worker go with you when you moved to the facility where you gave birth to (NAME)? What means of transport did you use to get from the previous facility to the facility where you	YES 1 NO 2 DON'T KNOW 8 MOTORISED AMBULANCE 21 CAR 22 CNG/BABY TAXI 23 EASY BIKE 24 PUBLIC BUS 25 BOAT WITH MOTOI 27 RCKSHAW WITH MOTOF 28 OTHER 26 SPECIFY (SKIP TO 434I) NOT MOTORISED 31 WALKING 32 OTHER 36	

434G	What means of transport did you use to get to the facility where you ave birth to (NAME)?	MOTORISED AMBULANCE 21 CAR 22 CNG/BABY TAXI 23 EASY BIKE 24 PUBLIC BUS 25 BOAT WITH MOTOI 27 RCKSHAW WITH MOTOF 28 OTHER 26 SPECIFY NOT MOTORISED RICKSHAW/VAN 31 WALKING 32 (SKIP TO 434I) - 36 SPECIFY 36	
434H	Who arranged transportation to the health facility?	PERSON FROM HEALTH FACILITY/CLINIC01 FAMILY WELFARE VISITOR 02 OTHER HEALTH PROFESSIONAL03 TRADITIONAL BIRTH ATTENDANT/DA04 HUSBAND05 OTHER FAMILY MEMBEF07 HERSELF06 (SPECIFY) DON'T KNOW08	
4341	CHECK 430: PLACE OF DELIVERY		
		CODE 11, OR 96	
	↓ \	(SKIP TO 449)	
	↓		NEXT-TO-LAST BIRTH
NO.	↓ QUESTIONS AND FILTERS	CIRCLED (SKIP TO 449)	NEXT-TO-LAST BIRTH
NO. 435	↓ QUESTIONS AND FILTERS I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health while you were still in the facility?	CIRCLED (SKIP TO 449) ← LAST BIRTH	-

436	How long after delivery did the first check take place?	HOURS 1	
	IF LESS THAN ONE DAY,	DAYS 2	
	RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	WEEKS 3	
		DON'T KNOW 998	
437	Who checked on your health at that time?	HEALTH PERSONNEL QUALIFIED DOCTOR . 11 NURSE/MIDWIFE/	
	PROBE FOR MOST QUALIFIED PERSON.	PARAMEDIC 12 FAMILY WELFARE VISITOR (FWV) 13 COMMUNITY SKILLED	
	IF YOU ARE NOT SURE OF THE DESIGNATION OF THE PERSON, WRITE HER/HIS NAME AND ASK THE SUPERVISOR TO FIND OUT. CIRCLE THE APPROPRIATE CODE.	BIRTH ATTENDANT (CSBA) 14 SUB-ASSISTANT COMMUNITY MEDICAL OFFICER (SACMO) 15 COMMUNITH HEALTH CARE PROVIDER (CHCP) 16 HEALTH ASSISTANT (HA) 17 FAMILY WELFARE	
	NAME	ASSISTANT (FWA) . 18 NGO WORKER	
	NAME	OTHER PERSON TRAINED TBA (TTBA) . 31 UNTRAINED TBA (UTBA) 32 UNQUALIFIED DOCTC. 33	
		OTHER96 (SPECIFY)	
438	Now I would like to talk to you about checks on (NAME)'s health after delivery – for example, someone examining (NAME), checking the cord, or seeing if (NAME) is OK. Did anyone check	YES	
	on (NAME)'s health while you were still in the facility?		
	on (NAME)'s health while you	LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	on (NAME)'s health while you		NEXT-TO-LAST BIRTH
NO. 439	on (NAME)'s health while you were still in the facility?	LAST BIRTH	
	on (NAME)'s health while you were still in the facility? QUESTIONS AND FILTERS How long after delivery was	LAST BIRTH	-
	on (NAME)'s health while you ware still in the facility? QUESTIONS AND FILTERS How long after delivery was (NAME)'s health first checked? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK,	LAST BIRTH NAME HOURS 1 DAYS 2 WEEKS 3	-

	IF YOU ARE NOT SURE OF THE DESIGNATION OF THE PERSON, WRITE HER/HIS NAME AND ASK THE SUPERVISOR TO FIND OUT. CIRCLE THE APPROPRIATE CODE.	BIRTH ATTENDANT (CSBA) 14 SUB-ASSISTANT COMMUNITY MEDICAL OFFICER (SACMO) . 15 COMMUNITH HEALTH CARE PROVIDER (CHCP) 16 HEALTH ASSISTANT (HA 17 FAMILY WELFARE ASSISTANT (FWA) . 18 NGO WORKER 21
	NAME	OTHER PERSON TRAINED TBA (TTBA) . 31 UNTRAINED TBA (UTBA) 32 UNQUALIFIED DOCTC . 33 OTHER96
		(SPECIFY)
441	Now I want to talk to you about what happened after you left the facility. Did anyone check on your health after you left the facility?	YES 1 NO 2 (SKIP TO 445) ←
442	How long after delivery did that check take place?	HOURS 1
		DAYS 2
	IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK,	WEEKS 3
	RECORD DAYS.	DOIN 1 KNOW
443	Who checked on your health at that time? PROBE FOR MOST QUALIFIED	HEALTH PERSONNEL QUALIFIED DOCTOR . 11 NURSE/MIDWIFE/ PARAMEDIC 12 FAMILY WELFARE VISITOR (FWV) 13
	PERSON. IF YOU ARE NOT SURE OF THE DESIGNATION OF THE PERSON, WRITE HER/HIS NAME AND ASK THE SUPERVISOR TO FIND OUT. CIRCLE THE APPROPRIATE CODE.	COMMUNITY SKILLED BIRTH ATTENDANT (CSBA) 14 SUB-ASSISTANT COMMUNITY MEDICAL OFFICER (SACMO) 15 COMMUNITH HEALTH CARE PROVIDER (CHCP) 16 HEALTH ASSISTANT (HA 17
	NAME	FAMILY WELFARE ASSISTANT (FWA) . 18
		NGO WORKER 21
	NAME	OTHER PERSON TRAINED TBA (TTBA) 31 UNTRAINED TBA (UTBA) 32 UNQUALIFIED DOCTOR 33
		OTHER96 (SPECIFY)
	-	

		LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
NO. 444	QUESTIONS AND FILTERS Where did the check take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. (NAME OF PLACE)	NAMEHOME11PUBLIC SECTOR11PUBLIC SECTOR11MEDICAL COLLEGE10HOSPITAL21SPECIALIZED GOVT22DISTRICT HOSPITAL23MCWC24UPAZILA HEALTH25UH & FAMILY WELFARE27COMMUNITY CLINI+28SAT. CLINIC/T1009EPI0UTREACHOTHER PUBLIC26SPECIFYNGO SECTORNGO STATIC CLINI+31NGO SAT CLINIC32	
		PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL	
445	I would like to talk to you about checks on (NAME)'s health after you left (FACILITY IN 430). Did any health care provider or a traditional birth attendant check on (NAME)'s health in the two months after you left (FACILITY IN 430)?	YES 1 NO2− (SKIP TO 457) ← DON'T KNOW	
446	How many hours, days or weeks after the birth of (NAME) did that check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 DAYS 2 WEEKS 3 DON'T KNOW 998	

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	QUEUTIONU AND TIETERU	NAME	NAME
447	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON. IF YOU ARE NOT SURE OF THE DESIGNATION OF THE PERSON, WRITE HER/HIS NAME AND ASK THE SUPERVISOR TO FIND OUT. CIRCLE THE APPROPRIATE CODE.	HEALTH PERSONNELQUALIFIED DOCTOR11NURSE/MIDWIFE/PARAMEDIC12FAMILY WELFAREVISITOR (FWV)13COMMUNITY SKILLEDBIRTH ATTENDANT(CSBA)14SUB-ASSISTANT COMMUNITYMEDICAL OFFICER(SACMO)15COMMUNITH HEALTHCARE PROVIDER(CHCP)16HEALTH ASSISTANT (HA 17FAMILY WELFAREASSISTANT (FWA)18NGO WORKER21	
	NAME	OTHER PERSON TRAINED TBA (TTBA) 31 UNTRAINED TBA (UTBA) 32 UNQUALIFIED DOCTOR 33 OTHER96 (SPECIFY)	
448	Where did this check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. (NAME OF PLACE)	HOME HOME 11 PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL 21 SPECIALIZED GOVT HOSPITAL 22 DISTRICT HOSPITA 23 MCWC 24 UPAZILLA HEALTH COMPLEX 25 UH & FAMILY WELFARE CENTRE 27 COMMUNITY CLINIC 28 SAT. CLINIC.EPI OUTREACH 29 OTHER PUBLIC SECTOR 26 SPECIFY NGO SECTOR NGO STATIC CLINI ^I 31 NGO SAT CLINIC 32 PRIVATE MEDICAL SECTOR - PRIVATE MEDICAL SECTOR - PRIVATE MEDICAL COLLEGE HOSPITAL 41 PRIVATE HOSPITA 42 PRIVATE CLINIC 43 QUALIFIED DOCTOR 44 UNQUALIFIED DOCTOR 44 UNQUALIFIED DOCTOR 45 PHARMACY 47 OTHER PRIVATE MEDICAL SECTOR 46 (SPECIFY)	

		OTHER96 (SPECIFY) (SKIP TO 457)	
		LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
449	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health after you dave birth to (NAME)?	YES 1 NO 2┐ (SKIP TO 453) ←	
450	How long after delivery did the first check take place?	HOURS 1	
	IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	DAYS 2 WEEKS 3 DON'T KNOW	
451	Who checked on your health at that time?	HEALTH PERSONNEL QUALIFIED DOCTOR . 11 NURSE/MIDWIFE/	
	PROBE FOR MOST QUALIFIED PERSON.	PARAMEDIC 12 FAMILY WELFARE VISITOR (FWV) 13 COMMUNITY SKILLED	
	IF YOU ARE NOT SURE OF THE DESIGNATION OF THE PERSON, WRITE HER/HIS NAME AND ASK THE SUPERVISOR TO FIND OUT. CIRCLE THE APPROPRIATE CODE.	BIRTH ATTENDANT (CSBA)	
	NAME	FAMILY WELFARE ASSISTANT (FWA) . 18	
	NAME	NGO WORKER 21 OTHER PERSON TRAINED TBA (TTBA) 31 UNTRAINED TBA (UTBA) 32 UNQUALIFIED DOCTOR 33	
		OTHER96 (SPECIFY)	
453	I would like to talk to you about checks on (NAME)'s health after delivery – for example, someone examining (NAME), checking the cord, or seeing if (NAME) is OK. In the two months after (NAME) was born, did any health care provider or a traditional birth attendant check on (NAME)'s health?	YES	

454	How many hours, days or weeks after the birth of (NAME) did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS; IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS AFTER BIRTH 1 DAYS AFTER BIRTH 2 WEEKS AFTER BIRTH 3 DON'T KNOW	
		LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
455	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON. IF YOU ARE NOT SURE OF THE DESIGNATION OF THE PERSON, WRITE HER/HIS NAME AND ASK THE SUPERVISOR TO FIND OUT. CIRCLE THE APPROPRIATE CODE. NAME NAME	HEALTH PERSONNEL QUALIFIED DOCTOR 11 NURSE/MIDWIFE/ PARAMEDIC 12 FAMILY WELFARE VISITOR (FWV) 13 COMMUNITY SKILLED BIRTH ATTENDANT (CSBA) 14 SUB-ASSISTANT COMMUNITY MEDICAL OFFICER (SACMO) 15 COMMUNITH HEALTH CARE PROVIDER (CHCP) 16 HEALTH ASSISTANT (HA 17 FAMILY WELFARE ASSISTANT (FWA) 16 NGO WORKE 21 OTHER PERSON TRAINED TBA (TTBA) 31 UNTRAINED TBA (UTBA) 32 UNQUALIFIED DOCTOR 33 OTHER 96 (SPECIFY)	
457	 During the first two days after (NAME)'s birth, did any health care provider do the following: a) Examine the cord? b) Measure (NAME)'s c) Counsel you on danger signs for newborns? d) Counsel you on breastfeeding? e) Observe (NAME) breastfeeding? 	YES NO DK a) CORD 1 2 8 b) TEMP 1 2 8 c) SIGNS 1 2 8 d) COUNSEL BREAST- FEED 1 2 8 e) OBSERVE BREAST- FEED 1 2 8	
457A	In the first two months after delivery, did you receive a vitamin A dose like (this/any of these)? SHOW COMMON TYPES OF CAPSULE/SYRUP.	YES	
458	Has your menstrual period returned since the birth of (NAME)?	YES 1 (SKIP TO 460) ← NO 2 (SKIP TO 461) ←	
459	Did your period return between the birth of (NAME) and your next pregnancy?		YES 1 NO 2 (SKIP TO 463) ←

		LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
460	For how many months after the birth of (NAME) did you not have a period?	MONTH:	MONTH:
461	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREGNANT PREGNANT OR UNSURE (SKIP TO 463) ←	
462	Have you had sexual intercourse since the birth of (NAME)?	YES 1 NO 2 (SKIP TO 464) ←	
463	For how many months after the birth of (NAME) did you not have sexual intercourse?	MONTH:	MONTH:
464	Did you ever breastfeed (NAME)?	YES 1 (SKIP TO 466) ← 1 NO 2	YES 1 NO 2
465	CHECK 404: IS CHILD LIVING?	LIVING DEAD SKIP TO 470) < (SKIP TO 471) <	
466	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS; IF LESS THAN 24 HOURS, RECORD HOURS; OTHERWISE. RECORD DAYS.	IMMEDIATEL	
467	In the first three days after delivery, was (NAME) given anything to drink other than breast	YES 1 NO 2	
468	CHECK 404: IS CHILD LIVING?	LIVING DEAD (SKIP TO 471)	LIVING DEAD (SKIP TO 471)
469	Are you still breastfeeding (NAME)?	YES 1- 470 ← 1 NO 2	
469A	For how many months did you breastfeed (NAME)?	MONTHS DON'T KNOW	
470	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
471		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501A.	GO BACK TO 405 IN NEXT-TO- LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501A.

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501A	CHECK 215 IN THE BIRTH HISTORY: ANY BIRTHS I ONE OR MORE BIRTHS IN 2014 OR LATER	N 2014 OR LATER? NO BIRTHS IN 2014 OR LATER	→ 601
502A	RECORD THE NAME AND BIRTH HISTORY NUMBER LATER. NAME OF LAST BIRTI	R FROM 212 OF THE LAST CHILD BORN IN 2014 OR BIRTH HISTORY NUMBE	
503A	CHECK 216 FOR CHILD:	DEAD	→ 501B
504A	Do you have a card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD 1 YES, HAS ONLY ANOTHER DOCUMENT 2 YES, HAS CARD AND OTHER DOCUMENT 3 NO, NO CARD AND NO OTHER DOCUMENT 4	→ 507A → 507A
505A	Did you ever have a vaccination card for (NAME)?	YES 1 NO 2	
506A	CHECK 504A: CODE '2' CIRCLED	CODE '4' CIRCLED	→ 511A
507A	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN	→ 511A

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF LAST BIRTI		
508A	COPY DATES FROM THE CARD. WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THA	T A DOSE WAS GIVEN, BUT NO DATE IS DAY MONTH YEAR	
	BCG		
	PENTA 1		
	PENTA 2		
	PENTA 3		
	OPV/POLIO 1		
	OPV/POLIO 2		
	OPV/POLIO 3		
	PCV/PNEUMOCOCCAL 1		
	PCV/PNEUMOCOCCAL 2		
	PCV/PNEUMOCOCCAL 3		
	IPV		
	fIPV 6 WEEKS		
	fIPV 14 WEEKS		
	MR AT 9 MONTHS		
	MR AT 15 MONTHS		
	VITAMIN A (MOST RECENT)		
509A	CHECK 508A: 'BCG' TO 'MR AT 15 MONTHS', ALL R	ECORDED?	
		YES	→ 525A
510A	In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in campaigns or immunization days or child health days? RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE	YES	
	VACCINATIONS IN 508A THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.	(WRITE '00' IN THE CORRESPONDING DAY COLUMN FOR ALL VACCINATIONS NOT (THEN SKIP TO 525A)	

SECTION 5A. CHILD IMMUNIZATION (LAST BIRTH)

NAME OF LAST BIRTI BIRTH HISTORY NUMBE Operating diseases, including vaccinations to prevent (NAME) from genting diseases, including vaccinations received in campaigns or immunization days or child health days? YES 1 511A Has (NAME) ever received a BCG vaccination against tubercucles, that is, an injection in the left upper arm or shoulder that usually causes a YES 1 512A Has (NAME) ever received a pentavient the high at the same time as polio drops and PCV? YES 1 514A Has (NAME) ever received a pentavient the high at the same time as polio drops and PCV? YES 1 515A How many times did (NAME) receive the pentavalent vaccine? NUMBER OF TIMES 1 516A Has (NAME) ever received aral polio vaccine, that is, an injection july caucine in the high at is, about two drops in the rough polio vaccine, that is, about two drops in the rough polio vaccine in the Tirst two weeks after birth or later? 1 + 519A 518A How many times did (NAME) receive the oral polio vaccine in the high to prevent pneumococcal vaccine? 1 1 + 519A 518A How many times did (NAME) receive the oral polio vaccination. that is, an injection in the thigh to prevent pneumococcal vaccine? 1 1 1 518A How many times did (NAME) receive pneumococcal vaccination. the thigh to prevent polio? NUMBER OF TIMES 1	NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
511A Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campagins or immunization days or hidd health days? YES 1 512A Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the left states are three aspective and the states are three aspective and the states are three aspectives and the state days? YES 1 512A Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection given in the thigh at the same three aspective drops and PCV? YES 1 514A Has (NAME) ever received a pentavalent vaccination, that is, an injection given in the thigh at is, about two drops in the mouth to prevent polio? YES 1 515A How many times did (NAME) receive the pentavalent vaccine? NUMBER OF TIMES 1 1 516A Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio? NO 2 > 519A 517A Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later? YES 1 1 518A How many times did (NAME) receive the oral polio vaccine? NUMBER OF TIMES 1 1 518A How many times did (NAME) receive perumococcal vaccine? NUMBER OF TIMES 1 1 > 5214 520A	110.			Civii
prevent (NAME) from getting diseases, including days or child health days? NO 2 > 525A 512A Agais or child health days? DONT KNOW 8 > 525A 512A Has (NAME) ever received a BGG vaccination in the left upper arm or shoulder that usually causes a YES 1 1 514A Has (NAME) ever received a pentavalent vaccination, that Is, an injection given in the thigh at vaccined/or divers and PCV? YES 1 2 > 516A 515A How many times did (NAME) receive the pentavalent vaccine? NUMBER OF TIMES 1 2 > 516A 515A How many times did (NAME) receive the pentavalent vaccine? YES 1 2 > 519A 516A Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio? YES 1 2 > 519A 517A Did (NAME) receive the first oral polio vaccine in the thigh to vaccine? 1 2 > 519A 518A How many times did (NAME) receive the oral polio vaccine in the thigh to prevent polio? NUMBER OF TIMES 1 2 519A Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the thigh to prevent polio? <td< td=""><td></td><td>NAME OF LAST BIRTI</td><td></td><td></td></td<>		NAME OF LAST BIRTI		
against tuberculosis, that is, an injection in the left upper arm or shoulder that usually causes a DON'T KNOW 2 514A Has (NAME) ever received a pertavalent the same time as polic drops and PCV? YES 1 515A How many times did (NAME) receive the pentavalent vaccine? NUMBER OF TIMES 1 516A Has (NAME) ever received or al polio vaccine, that is, about two drops in the mouth to prevent polio? YES 1 517A first two weeks after birth or later? DON'T KNOW 8 1 518A How many times did (NAME) receive the oral polio vaccine? NUMBER OF TIMES 1 1 518A How many times did (NAME) receive the oral polio vaccine? NUMBER OF TIMES 1 1 518A How many times did (NAME) receive the oral polio vaccination, that is, an injection in the thigh to vaccination? NUMBER OF TIMES 1 1 519A Has (NAME) ever received a neurococcal vaccination? NUMBER OF TIMES 1 521A 520A How many times did (NAME) receive pneumococcal vaccination? NUMBER OF TIMES 1 521A 521A Has (NAME) ever received a measles-rubella vaccination in the thigh to prevent polio? NO 2 1 521A 523A	511A	prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization	NO 2]→ 525A
vaccination, that is, an injection given in the thigh at the same time as polio drops and PCV? NO 2	512A	against tuberculosis, that is, an injection in the left	NO 2	
pertavalent vaccine? NUMBER OF TIMES ↓ 516A Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio? YES 1 517A Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later? FIRST TWO WEEKS 1 518A How many times did (NAME) receive the oral polio vaccine? NUMBER OF TIMES 1 519A Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the thigh to prevent pneumonia? YES 1 520A How many times did (NAME) receive pneumococcal vaccination? YES 1 521A Has (NAME) ever received a neumococcal vaccination? YES 1 520A How many times did (NAME) receive pneumococcal vaccination? NUMBER OF TIMES 1 521A Has (NAME) ever received an IPV vaccination, that is, an injection in the thigh to prevent polio? NUMBER OF TIMES 1 523A Has (NAME) ever received a measles-rubella vaccination, that is, an injection into the muscles of the left thigh to prevent measles? YES 1 525A 524A How many times did (NAME) receive the measles- rubella vaccine? NUMBER OF TIMES 1 525A 525A Did (NAME) receive any polio vaccine from the National Immuniz	514A	vaccination, that is, an injection given in the thigh at	NO 2] → 516A
is, about two drops in the mouth to prevent polio? NO 2 D= 519A 517A Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later? FIRST TWO WEEKS 1 518A How many times did (NAME) receive the oral polio vaccine in the first NOW waccination, that is, an injection in the thigh to prevent pneumonia? NUMBER OF TIMES 1 519A Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the thigh to prevent pneumonia? YES 1 520A How many times did (NAME) receive pneumococcal vaccination? NUMBER OF TIMES 1 521A Has (NAME) ever received an IPV vaccination, that is, an injection in the thigh to prevent polio? NUMBER OF TIMES 1 521A Has (NAME) ever received a measles-rubella vaccination, that is, an injection into the muscles of the left thigh to prevent polio? YES 1 523A Has (NAME) ever received a measles-rubella vaccine? YES 1 1 524A How many times did (NAME) receive the measles-rubella vaccine? NUMBER OF TIMES 1 1 524A How many times did (NAME) receive the measles-rubella vaccine? NUMBER OF TIMES 1 1 525A 525A Did (NAME) receive any polio vaccine from the National Immunization Days (NIDs)? <td>515A</td> <td></td> <td>NUMBER OF TIMES</td> <td></td>	515A		NUMBER OF TIMES	
first two weeks after birth or later? LATER 2 518A How many times did (NAME) receive the oral polio vaccine? NUMBER OF TIMES 2 519A Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the thigh to prevent pneumonia? YES 1 1 520A How many times did (NAME) receive pneumococcal vaccination? YES 1 1 521A 520A How many times did (NAME) receive pneumococcal vaccination? NUMBER OF TIMES 1 521A 521A Has (NAME) ever received an IPV vaccination, that is, an injection in the thigh to prevent polio? NUMBER OF TIMES 1 521A 521A Has (NAME) ever received an measles-rubella vaccination, that is, an injection into the muscles of the left thigh to prevent measles? YES 1 1 525A 524A How many times did (NAME) receive the measles-rubella vaccine? NUMBER OF TIMES 1 525A 525A 1 1 526A 526A At which national immunization day campaigns did (NAME) receive any measles-rubella vaccine from the National Immunization	516A		NO 2] → 519A
vaccine? NUMBER OF TIMES 1 519A Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the thigh to prevent pneumonia? YES 1 520A How many times did (NAME) receive pneumococcal vaccination? NUMBER OF TIMES 2 521A Has (NAME) ever received an IPV vaccination, that is, an injection in the thigh to prevent polio? YES 1 521A Has (NAME) ever received an IPV vaccination, that is, an injection in the thigh to prevent polio? YES 1 523A Has (NAME) ever received a measles-rubella vaccination, that is, an injection into the muscles of the left thigh to prevent measles? YES 1 524A How many times did (NAME) receive the measles-rubella vaccination? YES 1 + 525A 524A How many times did (NAME) receive the measles-rubella vaccine? YES 1 + 525A 524A How many times did (NAME) receive the measles-rubella vaccine? NUMBER OF TIMES 1 + 525A 525A Did (NAME) receive any polio vaccine from the National Immunization Days (NIDs)? NUMBER OF TIMES 1 + 527A 526A At which national immunization day campaigns did (NAME) receive any measles-rubella vaccine from the National Measles-Rubella Campaign? CAMPAIGN 1: NID (JAN 2014) 1 <td>517A</td> <td></td> <td></td> <td></td>	517A			
vaccination, that is, an injection in the thigh to prevent pneumonia? NO 2 521A 520A How many times did (NAME) receive pneumococcal vaccination? NUMBER OF TIMES Image: Constraint of the times of the ti	518A		NUMBER OF TIMES	
vaccination? NUMBER OF TIMES I 521A Has (NAME) ever received an IPV vaccination, that is, an injection in the thigh to prevent polio? YES 1 523A Has (NAME) ever received a measles-rubella vaccination, that is, an injection into the muscles of the left thigh to prevent measles? YES 1 524A How many times did (NAME) receive the measles- rubella vaccine? NUMBER OF TIMES I 525A Did (NAME) receive any polio vaccine from the National Immunization Days (NIDs)? YES 1 526A At which national immunization day campaigns did (NAME) receive vaccinations? CAMPAIGN 1: NID (JAN 2014) 1 527A Did (NAME) receive any measles-rubella vaccine from the National Measles-Rubella Campaign? YES 1 527A Did (NAME) receive any measles-rubella vaccine from the National Measles-Rubella Campaign? CAMPAIGN 2: NID (JAN 2014) 1 527A Did (NAME) receive any measles-rubella vaccine from the National Measles-Rubella Campaign? YES 1	519A	vaccination, that is, an injection in the thigh to	NO 2]→ 521A
is, an injection in the thigh to prevent polio? NO 2 523A Has (NAME) ever received a measles-rubella vaccination, that is, an injection into the muscles of the left thigh to prevent measles? YES 1 524A How many times did (NAME) receive the measles-rubella vaccine? NUMBER OF TIMES Image: Comparison of the left high to prevent measles 525A Did (NAME) receive any polio vaccine from the National Immunization Days (NIDs)? YES 1 526A At which national immunization day campaigns did (NAME) receive any measles-rubella vaccine from the National Immunization day campaigns did (NAME) receive any measles-rubella vaccine from the National Measles-Rubella Campaign? YES 1 527A Did (NAME) receive any measles-rubella vaccine from the National Measles-Rubella Campaign? YES 1 527A Did (NAME) receive any measles-rubella vaccine from the Rubella Campaign? YES 1 527A Did (NAME) receive any measles-rubella vaccine from the National Measles-Rubella Campaign? YES 1 527A Did (NAME) receive any measles-rubella vaccine from the National Measles-Rubella Campaign? YES 1	520A			
vaccination, that is, an injection into the muscles of the left thigh to prevent measles? NO 2 525A 524A How many times did (NAME) receive the measles- rubella vaccine? NUMBER OF TIMES Image: Comparison of the compar	521A		NO 2	
rubella vaccine? NUMBER OF TIMES Image: Constraint of the state of the sta	523A	vaccination, that is, an injection into the muscles of	NO 2]→ 525A
National Immunization Days (NIDs)? NO 2 → 527A 526A At which national immunization day campaigns did (NAME) receive vaccinations? CAMPAIGN 1: NID (JAN 2014) 1 527A Did (NAME) receive any measles-rubella vaccine from the National Measles-Rubella Campaign? YES 1 VES 00N'T KNOW 2	524A			
(NAME) receive vaccinations? CAMPAIGN 2: NID (FEB 2014)	525A		NO 2]→ 527A
from the National Measles-Rubella Campaign? NO 2 DON'T KNOW 8	526A			
528A CONTINUE WITH 501B.	527A		NO 2	
	528A	CONTINUE WITH 501B.		

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP	
501B	CHECK 215 IN THE BIRTH HISTORY: ANY BIRTHS IN 2014 OR LATER? MORE BIRTHS IN 2014 NO BIRTHS IN 2014 OR LATER OR LATER			
502B	RECORD THE NAME AND BIRTH HISTORY NUMBER FROM 212 OF THE LAST CHILD BORN IN 2014 OR LATER. NAME OF NEXT-TO- LAST BIRTH BIRTH HISTORY NUMBE			
503B	CHECK 216 FOR CHILD:	DEAD	→ 526B	
504B	Do you have a card or other document where (NAME)'s vaccinations are written down?	YES, HAS ONLY A CARD	→ 507B → 507B	
505B	Did you ever have a vaccination card for (NAME)?	YES 1 NO 2		
506B	CHECK 504B: CODE '2' CIRCLED	CODE '4' CIRCLED	→ 511B	
507B	May I see the card or other document where (NAME)'s vaccinations are written down?	YES, ONLY CARD SEEN	→ 511B	

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES							
	NAME OF NEXT-TO- LAST BIRTH								
508B	COPY DATES FROM THE CARD. WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THA	COPY DATES FROM THE CARD. WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS							
	P00	DAY	MONTH	YE	AR				
	BCG								
	PENTA 1								
	PENTA 2								
	PENTA 3								
	OPV/POLIO 1								
	OPV/POLIO 2								
	OPV/POLIO 3								
	PNEUMOCOCCAL 1								
	PNEUMOCOCCAL 2								
	PNEUMOCOCCAL 3								
	IPV								
	fIPV 6 WEEKS								
	fIPV 14 WEEKS								
	MR AT 9 MONTHS								
	MR AT 15 MONTHS								
	VITAMIN A (MOST RECENT)								
509B	CHECK 508A: 'BCG' TO MR AT 15 MONTHS, ALL RE	ECORDED?							
			→ 525B						
510B	In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in campaigns or immunization days or child health days? RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508B THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.	YES (PROBE FO IN THE CO CORRES NO DON'T KNO' (WRITE 'C COLU							
	RECORDED AS HAVING BEEN GIVEN.	COLU							

SECTION 5B. CHILD IMMUNIZATION (NEXT-TO-LAST BIRTH)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	NAME OF NEXT-TO- LAST BIRTH	BIRTH HISTORY NUMBE	
511B	Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in campaigns or immunization days or child health days?	YES]→ 525B
512B	Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES	
514B	Has (NAME) ever received a pentavalent vaccination, that is, an injection given in the thigh at the same time as polio drops and PCV?	YES]→ ^{516B}
515B	How many times did (NAME) receive the pentavalent vaccine?	NUMBER OF TIMES	
516B	Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio?	YES]→ 519B
517B	Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later?	FIRST TWO WEEKS 1 LATER 2	
518B	How many times did (NAME) receive the oral polio vaccine?	NUMBER OF TIMES	
519B	Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the thigh to prevent pneumonia?	YES 1 NO 2 DON'T KNOW 8]→ 521B
520B	How many times did (NAME) receive the pneumococcal vaccine?	NUMBER OF TIMES	
521B	Has (NAME) ever received an IPV vaccination, that is, an injection in the thigh to prevent polio?	YES 1 NO 2 DON'T KNOW 8	
523B	Has (NAME) ever received a measles-rubella vaccination, that is, an injection into the muscles of the left thigh to prevent measles?	YES	⊐→ ^{525B}
524B	How many times did (NAME) receive the measles- rubella vaccine?	NUMBER OF TIMES	
525B	Did (NAME) receive any polio vaccine from the National Immunization Days (NIDs)?	YES]→ ^{527B}
526B	At which national immunization day campaigns did (NAME) receive vaccinations?	CAMPAIGN 1: NID (JAN 2014) 1 CAMPAIGN 2: NID (FEB 2014) 2	
527B	Did (NAME) receive any measles-rubella vaccine from the National Measles-Rubella Campaign?	YES	
528B	CHECK 215 IN BIRTH HISTORY: ANY MORE BIRTHS MORE BIRTHS IN 2014 OR LATER (GO TO 502B IN AN ADDITIONAL QUESTIONNAIRE)	S IN 2014 OR LATER? NO MORE BIRTHS IN 2014	→ 601

601	CHECK 224:		
	ONE OR MORE BIRTHS IN 2012 OR		
602	CHECK 215: RECORD THE BIRTH HISTORY NUMBER IN 603 AND THE NAME AND SURVIVAL STATUS IN 604 FOR EACH BIRTH IN 2012 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S). Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately.)		
603	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY.	LAST BIRTH BIRTH HISTORY NUMBER	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER
604	FROM 212 AND 216:	NAME LIVING DEAD (SKIP TO 646)	NAME LIVING DEAD (SKIP TO 646)
605	In the last six months, was (NAME) given vitamin A dose like any of these? SHOW COMMON TYPES OF CAPSULES/SYRUPS.	YES	YES
606	In the last seven days, was (NAME) given iron pills, sprinkles with iron, or iron syrup like any of these? SHOW COMMON TYPES OF PILLS/SPRINKLES/SYRUPS.	YES 1 NO 2 DON'T KNOW 8	YES
607	Was (NAME) given any drug for intestinal worms in the last six months?	YES 1 NO 2 DON'T KNOW 8	YES 1 NO 2 DON'T KNOW 8
608	Has (NAME) had diarrhoea in the last 2 weeks?	YES	YES

		LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
609	CHECK 469: CURRENTLY BREASTFEEDING? YES NO/NOT a) Now I would like to know how much (NAME) was given to drink during the diarrhoea including breastmilk. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was (NAME) given usual to drink? IF LESS, PROBE: Was (NAME) given usual to drink? IF LESS, PROBE: Was (NAME) given usual to drink or somewhat	MUCH LESS. 1 SOMEWHAT LESS. 2 ABOUT THE SAME. 3 MORE 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS. 1 SOMEWHAT LESS. 2 ABOUT THE SAME. 3 MORE 4 NOTHING TO DRINK 5 DON'T KNOW 8
610	When (NAME) had diarrhoea, was (NAME) given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was (NAME) given much less than usual to eat or somewhat less?	MUCH LESS 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8
611	Did you seek advice or treatment for the diarrhoea from any source?	YES 1 NO 2 (SKIP TO 615) ←	YES 1 NO 2 (SKIP TO 615) ←

		LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
612	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE(S). (NAME OF PLACE(S))	PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL A SPECIALIZED GOVT HOSPITAL B DISTRICT HOSPITAL C MCWC D UPAZILA HEALTH COMPLEX COMPLEX E UH & FAMILY WELFARE F COMMUNITY CLINIC G SAT. CLINIC.EPI OUTREACH OUTREACH H HEALTH ASSISTANT (HA. I FAMILY WELFARE ASSISTANT (FWA) ASSISTANT (FWA) J OTHER PUBLIC SECTOR SECTOR M NGO STATIC CLINIC L NGO STATIC CLINIC L NGO STATIC CLINIC M NGO PEPO HOLDER N NGO FIELD WORKER O OTHER NGO SECTOR PRIVATE MEDICAL SECTOR P PRIVATE MEDICAL COLLEGE HOSPITAL HOSPITAL Q PRIVATE MEDICAL COLLEGE HOSPITAL HOSPITAL Q PRIVATE MEDICAL COLLEGE HOSPITAL HONN-QUALIFIED DOCTOR'	PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL A SPECIALIZED GOVT HOSPITAL B DISTRICT HOSPITAL C MCWC D UPAZILA HEALTH COMPLEX COMPLEX E UH & FAMILY WELFARE F COMMUNITY CLINIC G SAT. CLINIC.EPI OUTREACH OUTREACH H HEALTH ASSISTANT (HA I FAMILY WELFARE ASSISTANT (FWA) ASSISTANT (FWA) J OTHER PUBLIC SECTOR SECTOR MGO STATIC CLINIC L NGO STATIC CLINIC M NGO STATIC CLINIC N NGO FIELD WORKER O OTHER NGO SECTOR SECTOR P (SPECIFY) P PRIVATE MEDICAL SECTOR P NGO FIELD WORKER Q OTHER NGO SECTOR SECTOR P OTHER NGO SECTOR' PRIVATE MEDICAL SECTOR P PRIVATE MEDICAL COLLEGE H
615	 Was (NAME) given any of the following at any time since (NAME) started having the diarrhoea: a) A fluid made from a special packet called ORSaline PACKET? 	YES NO DK a) ORS PKT. 1 2 8	YES NO DK a) ORS PKT 1 2 8
	b) A home made sugar-salt-water solution (laban gur)?c) Zinc syrup?d) Zinc tablets?	 b) LABAN GUR. 1 2 8 c) ZINC SYRUP 1 2 8 d) ZINC TABLETS 1 2 8 	a) ONOTATION 1 2 3 b) LABAN GUR 1 2 8 c) ZINC SYRUP 1 2 8 d) ZINC TABLETS 1 2 8
618	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES	YES
620	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES	YES 1 NO 2 DON'T KNOW 8

		LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
621	Has (NAME) had fast, short, rapid breaths or difficulty breathing at any time in the last 2 weeks?	YES	YES
622	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY 1 NOSE ONLY 2 BOTH 3 OTHER 6 (SPECIFY) 6 DON'T KNOW 8 (SKIP TO 624) <	CHEST ONLY
623	CHECK 618: HAD FEVER?	YES NO OR DK ↓ (SKIP TO 646) ←	YES NO OR DK (SKIP TO 646)
624	Did you seek advice or treatment for the illness from any source?	YES 1 NO 2 (SKIP TO 646) ←	YES 1 NO 2 (SKIP TO 646) ←
625	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE(S). (NAME OF PLACE(S))	PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL A SPECIALIZED GOVT HOSPITAL B DISTRICT HOSPITAL C MCWC D UPAZILA HEALTH C COMPLEX E UH & FAMILY WELFARE F COMMUNITY CLINIC G SAT. CLINIC.EPI OUTREACH OUTREACH H HEALTH ASSISTANT (HA: I FAMILY WELFARE ASSISTANT (FWA) OTHER PUBLIC SPECIFY NGO SECTOR M NGO STATIC CLINIC M NGO DEPO HOLDER N NGO FIELD WORKER O OTHER NGO SECTOR P (SPECIFY) P	PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL A SPECIALIZED GOVT HOSPITAL B DISTRICT HOSPITAL C MCWC D UPAZILA HEALTH C COMPLEX E UH & FAMILY WELFARE F COMMUNITY CLINIC G SAT. CLINIC.EPI OUTREACH OUTREACH H HEALTH ASSISTANT (HA: I FAMILY WELFARE ASSISTANT (FWA) OTHER PUBLIC SPECIFY NGO SECTOR M NGO SATELLITE CLINIC M NGO DEPO HOLDER N NGO FIELD WORKER O OTHER NGO SECTOR P (SPECIFY) P
		PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL Q PRIVATE HOSPITAL R PRIVATE CLINIC S QUALIFIED DOCTOR'S CHAMBER T NON-QUALIFIED DOCTOR'S CHAMBER U PHARMACY/DRUG STOF. V OTHER PRIVATE MEDICAL SECTOR W (SPECIFY) OTHER X (SPECIFY)	PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL Q PRIVATE HOSPITAL R PRIVATE CLINIC S QUALIFIED DOCTOR'S CHAMBER T NON-QUALIFIED DOCTOR'S CHAMBER U PHARMACY/DRUG STOF. V OTHER PRIVATE MEDICAL SECTOR W (SPECIFY) OTHER X (SPECIFY)

		LAST BIRTH	NEXT-TO-LAST BIRTH
NO.	QUESTIONS AND FILTERS	NAME	NAME
626	CHECK 625:	TWO OR ONLY MORE ONE CODES CODES CODE CIRCLED CIRCLED (SKIP TO 628)	TWO OR ONLY MORE ONE CODES CODES CODE CIRCLED CIRCLED (SKIP TO 628)
627	Where did you first seek advice or treatment? USE LETTER CODE FROM 625.	FIRST PLACE	FIRST PLACE
628	How many days after the illness began did you first seek advice or treatment for (NAME)? IF THE SAME DAY RECORD '00'.	DAYS	DAYS
630	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED.	ANTIMALARIAL DRUGS SP/FANSIDAR A CHLOROQUINE B PRIMAQUINE C QUININE D COMBINATION WITH ARTEMISININ E OTHER ANTIMALARIAL F (SPECIFY) ANTIBIOTIC DRUGS BETA LACTUM G MACROLIDES H QUINOLONE J COTRIMOXAZOLE K GENTAMYCIN L METRONIDAZOLE M	ANTIMALARIAL DRUGS SP/FANSIDAR A CHLOROQUINE B PRIMAQUINE C QUININE D COMBINATION WITH ARTEMISININ E OTHER ANTIMALARIAL F (SPECIFY) ANTIBIOTIC DRUGS BETA LACTUM G MACROLIDES H QUINOLONE J COTRIMOXAZOLE K GENTAMYCIN L METRONIDAZOLE M OTHER DRUG
		(SPECIFY) DON'T KNOW Z	(SPECIFY) DON'T KNOW Z
646		GO BACK TO 604 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 649.	GO TO 604 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 649.

SECTION 6. CHILD HEALTH AND NUTRITION

NO.	QUESTIONS AND FILTERS	CODING CATE	GORIES	SKIP
649	CHECK 215 AND 218, ALL ROWS: NUMBER OF CHI RESPONDENT	LDREN BORN IN 2015 OR LATI	ER LIVING WITH THE	
				→ 701
	(NAME OF YOUNGEST CHILD LIVING WITH HER)			
650	Now I would like to ask you about liquids or foods that (NAME FROM 649) had yesterday during the day or at night. I am interested in whether your child had the item I mention even if it was combined with other foods. a) Plain water?	YES a) 1	NO DK 2 8	
	b) Juice or juice drinks?	b) 1	2 8	
	c) Clear broth?	c) 1	2 8	
	 d) Milk such as tinned, powdered, or fresh animal milk? IF YES: How many times did (NAME) drink milk? IF 7 OR MORE TIMES, RECORD '7'. 	d) 1 NUMBER OF TIMES DRANK	2 8	-
	e) Infant formula? IF YES: How many times did (NAME) drink infant formula? IF 7 OR MORE TIMES, RECORD '7'.	e) 1 NUMBER OF TIMES DRANK	2 8	
	f) Any other liquids?	f) 1	2 8	-1
	 g) Yogurt? IF YES: How many times did (NAME) eat yogurt? IF 7 OR MORE TIMES, RECORD '7'. 	g) 1 NUMBER OF TIMES ATE	2 8	
	h) Any [BRAND NAME OF COMMERCIALLY FORTIFIED BABY FOOD, E.G., Cerelac]?	h) 1	2 8	
	i) Bread, rice, noodles, porridge, or other foods made from grains?	i) 1	2 8	
	j) Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside?	j) 1	2 8	
	k) White potatoes, white yams, manioc, cassava, or any other foods made from roots?	k) 1	2 8	
	I) Any dark green, leafy vegetables?	l) 1	2 8	
	m) Ripe mangoes, papayas, or [INSERT ANY OTHER LOCALLY AVAILABLE VITAMIN A-	m) 1	2 8	
	n) Any other fruits or vegetables?	n) 1	2 8	_
	o) Liver, kidney, heart, or other organ meats?	o) 1	2 8	_
	p) Any meat, such as beef, pork, lamb, goat, chicken, or duck?	p) 1	2 8	
	q) Eggs?	q) 1	2 8	
	r) Fresh or dried fish or shellfish?	r) 1	2 8	
	s) Any foods made from beans, peas, lentils, or	s) 1	2 8	_]

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
-	t) Cheese or other food made from milk?	t) 1 2 8	
	u) Any other solid, semi-solid, or soft food?	u) 1 2 8	
651	CHECK 650 (CATEGORIES 'g' THROUGH 'u'): NOT A SINGLE 'YES' 🖵 AT LEA	AST ONE 'YES'	→ 653
652	Did (NAME FROM 649) eat any solid, semi-solid, or soft foods yesterday during the day or at night? IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME) eat?	YES	→ 701
653	How many times did (NAME FROM 649) eat solid, semi-solid, or soft foods yesterday during the last 24 hours, day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	CHECK 106A:		
	CURRENTLY SEPARATED/DE MARRIED DIVORCED/W		→ 709
704	Is your husband living with you now or is he staying elsewhere?	LIVING WITH HER	
705	RECORD THE HUSBAND'S NAME AND LINE	NAME	
	NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.		
709	Have you been married or lived with a man only once or more than once?	ONLY ONCE 1 MORE THAN ONCE 2	
710	CHECK 709:		
	MARRIED/ LIVED WITH A MAN ONLY ONCE	MONTH	
	a) In what month and b) Now I would like to year did you start ask about your first	DON'T KNOW MONTH	
	living with your husband. In what husband? month and year did you start living with	YEAR] → 711A
	him?	DON'T KNOW YEAR 9998	
711	How old were you when you first started living with him?	AGE	
711A	Do you think you got married at an age that was right for you, or would you have preferred to marry earlier or later?	EARLIER 1 RIGHT TIME 2 LATER 3	→ 711C
711B	At what age would you have preferred to get married?	AGE	
711C	Were you studying or attending school just before you got married?	YES 1 NO 2	→ 711E
711D	Did you continue your studies after marriage?	NO	
	IF YES: For how long?	YES, FOR 1-2 YEARS 2 YES, FOR 3-4 YEARS 3 YES, FOR 5+ YEARS 5	
711E	Were you working outside the home just before you got married?	YES 1 NO 2	→ 712
711F	Did you continue working after marriage? IF YES: For how long?	NO 1 YES, LESS THAN A YEAR 2 YES, FOR 1-2 YEARS 3 YES, FOR 3-4 YEARS 4 YES, FOR 5+ YEARS 5	

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
712	CHECK FOR PRESENCE OF OTHERS. BEFORE CO	NTINUING, MAKE EVERY EFFORT TO ENSURE	
Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question.			
713	How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE	
		AGE IN YEARS	
714	I would like to ask you about your recent sexual activity. When was the last time you had sexual intercourse?	DAYS AGO 1	
	IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	MONTHS AGO 3 YEARS AGO 4	
715	How many times during the last month did you have sexual intercourse?		
	IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, WRITE '95'.		

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 106A:		UT(II
		ED/DESERTED	→ ⁸¹³
801A	CHECK 304:		
	NEITHER STERILIZED	HE OR SHE	→ 811
802	CHECK 226:		
		OT PREGNANT	→ 804
803	Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD 1 NO MORE 2 UNDECIDED/DON'T KNOW 8	→ 805]→ 812
804	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD 1 NO MORE/NONE 2 SAYS SHE CAN'T GET PREGNAN' 3 UNDECIDED/DON'T KNOW 8	→ 807 → 813 → 811
805	CHECK 226:		
	NOT PREGNANT PREGNANT OR UNSURE b) After the birth of the	MONTHS 1 YEARS 2 SOON/NOW	→ 811
	like to wait from now child you are before the birth of expecting now, how	SOON/NOW	→ 813
	(a/another) child? Iong would you like to wait before the birth of another child?	OTHER 996 (SPECIFY) DON'T KNOW	811
806	CHECK 226:		1
	NOT PREGNANT OR UNSURE		→ 812
807	CHECK 303: USING A CONTRACEPTIVE		
	CURRENTLY USING		
808	CHECK 805:		
	'24' OR MORE MONTHS NOT OR '02' OR MORE YEARS ASKED	'00-23' MONTHS OR '00-01' YEAR	→ 812
809	CHECK 714:		
		ARS AGO	→ 811
	MONTHS AGO	NOT	× 044
			→ 811

SECTION 8. FERTILITY PREFERENCES				
NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP	
NO. 810			SKIP	
		OTHER X		
		DON'T KNOW Z		
811	CHECK 303: USING A CONTRACEPTIVE NOT NO, NOT ASKED CURRENTLY USING CU		→ 813	
812	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES	1 →812B	
812A	Which contraceptive method would you prefer to use?	FEMALE STERILIZATION 01 MALE STERILIZATION 02 IUD 03 INJECTABLES 04 IMPLANTS 05 PILL 06 CONDOM 07 EMERGENCY CONTRACEPTIVE PILL 08 LACTATIONAL AMEN. METHOE 11 SAFE PERIOD 12 WITHDRAWAL 13 OTHER 96 (SPECIFY) 98	▶ 813	

SECTION 8.	FERTILITY PREFERENCES
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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
812B	What is the main reason that you think you will not use a contraceptive method at any time in the future?	FERTILITY-RELATED REASONSNO SEX21INFREQUENT SEX22MENOPAUSAL/HYSTERECTOMY23SUBFECUND/INFECUND24WANTS AS MANY CHILDREN AS26	
		OPPOSITION TO USERESPONDENT OPPOSED31HUSBAND/PARTNER OPPOSE32OTHERS OPPOSED33RELIGIOUS PROHIBITIO34	
		LACK OF KNOWLEDGE KNOWS NO METHOD	
		METHOD-RELATED REASONSHEALTH CONCERNS51FEAR OF SIDE EFFECTS52LACK OF ACCESS/TOO FAF53COSTS TOO MUCH54INCONVENIENT TO USE55INTERFERES WITH BODY'S56	
		OTHER 96 (SPECIFY) 98	
813	CHECK 216: HAS LIVING NO LIVING CHILDREN	NONE 00	→ 815
	 a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE. 	NUMBER96 OTHER96 (SPECIFY)	─ → 815
814	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER OTHER96 (SPECIFY)	

SECTION 8. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
815	In the last month have you:	YES NO	
	a) Heard about family planning on the radio?	a) RADIO 1 2	
	 b) Seen family planning messages on the television? 	b) TELEVISION 1 2	
	c) Read about family planning in a newspaper or	c) NEWSPAPER OR MAGAZIN 1 2	
	magazine? d) Read about family planning in a poster, biiboard or leaflet?	d) POSTER, BILLBOARD OR LEAFLE . 1 2	
	e) Heard about family planning in community event?	e) COMMUNITY EVENT 1 2	
	f) Received a voice or text message about family	f) MOBILE PHONI 1 2	
	planning on a mobile phone (SMS)? g) Read about family planning in social media	g) SOCIAL MEDIA 1 2	
	(Facebook, Twitter, etc.) h) Read about family planning in a Website or on the Internet?	h) INTERNET 1 2	
816A	In the last month have you heard about family planning from any community health worker?	YES 1 NO 2	→ 817
816B	Were these government or non-government workers?	GOVERNMENT	
817	CHECK 701:		
		ATED/DESERTED	→ 901
818	CHECK 303: USING A CONTRACEPTIVE		
			→ 820
		USING	× 020
			→ 822
819	Would you say that using contraception is mainly your decision, mainly your husband's decision, or did you both decide together?	MAINLY RESPONDENT1MAINLY HUSBAND2JOINT DECISION3OTHER6	→ 821
		OTHER6 (SPECIFY)	
820	Would you say that not using contraception is mainly your decision, mainly your husband's decision, or did you both decide together?	MAINLY RESPONDENT 1 MAINLY HUSBAND 2 JOINT DECISION 3 OTHER 6 (SPECIFY)	
001			
821	CHECK 304: NEITHER ARE STERILIZED	HE OR SHE ARE	→ 901
822	Does your husband want the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBEF.1MORE CHILDREN2FEWER CHILDREI3DON'T KNOW8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901		ARATED/DESERTED	→ 909
902	How old was your husband on his last birthday?	AGE IN COMPLETED YEAR:	
903	Did your husband ever attend school?	YES 1 NO 2	→ 906
903A	What type of schooling did your husband last attend?	SCHOOL	
904	What was the highest level of school he attended: primary, secondary, or higher?	PRIMARY1SECONDARY2COLLEGE OR HIGHER3DON'T KNOW8	→ 906
905	What was the highest class he completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	CLASS	
906	Has your husband done any work in the last 7 days?	YES	→ 908
907	Has your husband done any work in the last 12 months?	YES 1 NO 2 DON'T KNOW 8]→ 909
908	What is your occupation? That is, what kind of work does he mainly do?		
909	Aside from your own housework, have you done any work in the last seven days?	YES 1 NO 2	→ 913
910	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES 1 NO 2	→ 913
911	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason?	YES 1 NO 2	→ 913
912	Have you done any work in the last 12 months?	YES 1 NO 2	→ 917
913	What is your occupation? That is, what kind of work do you mainly do?		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
914	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBEI1FOR SOMEONE ELSE2SELF-EMPLOYED3	
915	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR1SEASONALLY/PART OF THE YEAI2ONCE IN A WHILE3	
916	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY 1 CASH AND KIND 2 IN KIND ONLY 3 NOT PAID 4	
917		EPARATED/DESERTE	→ 931
918	CHECK 916: CODE '1' OR '2' CIRCLED		→ 921
919	Who usually decides how the money you earn will be used: you, your husband, or you and your husband jointly?	RESPONDENT 1 HUSBAND 2 RESPONDENT AND 3 HUSBAND JOINTLY 3 OTHER 6 (SPECIFY)	
921	Who usually decides how your husband's earnings will be used: you, your husband, or you and your husband jointly?	RESPONDENT 1 HUSBAND 2 RESPONDENT AND 4 HUSBAND JOINTLY 3 HUSBAND HAS 4 OTHER 6 (SPECIFY) 6	
922	Who usually makes decisions about health care for yourself: you, your husband, you and your husband jointly, or someone else?	RESPONDENT1HUSBAND2RESPONDENT AND1HUSBAND JOINTLY3SOMEONE ELSE4OTHER6	
923	Who usually makes decisions about making major household purchases?	RESPONDENT1HUSBANDR2RESPONDENT AND4HUSBANDR JOINTLY3SOMEONE ELSE4OTHER6	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
924	Who usually makes decisions about visits to your family or relatives?	RESPONDENT1HUSBAND2RESPONDENT AND1HUSBAND JOINTLY3SOMEONE ELSE4OTHER6	
931	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	PRES./ PRES./ NOT NOT LISTEN. LISTEN. PRES. CHILDREN < 1(1 2 3 HUSBAND 1 2 3 OTHER MALES 1 2 3 OTHER FEMALES 1 2 3	
932	 In your opinion, is a husband justified in hitting or beating his wife in the following situations: a) If she goes out without telling him? b) If she neglects the children? c) If she argues with him? d) If she refuses to have sex with him? e) If she burns the food? 	YES NO DK a) GOES OUT 1 2 8 b) NEGLECTS CHILDRE 1 2 8 c) ARGUES 1 2 8 d) REFUSES SEX 1 2 8 e) BURNS FOOD 1 2 8	
933	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES	
934	Is a wife justified in refusing to have sex with her husband when she knows he has sex with other women?	YES	
935		ARATED/DESERTED	→ 1001
936	Can you say no to your husband if you do not want to have sexual intercourse?	YES	
937	Could you ask your husband to use a condom if you wanted him to?	YES	

SECTION 10. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months?		
	IF YES: How many injections have you had?		
	IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NONE 00	→ 1008
1002	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker?		
	IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NONE 00	
1003	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES 1 NO 2 DON'T KNOW 8	
1008	Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not a big problem:	BIG NOT A BIG PROBLEM PROBLEM	
	a) Getting permission to go to the doctor?	a) PERMISSION TO GO 1 2	
	b) Getting money needed for advice or treatment?	b) GETTING MONEY 1 2	
	c) The distance to the health facility?	c) DISTANCE 1 2	
	d) Not wanting to go alone?	d) GO ALONE 1 2	
1009	Are you covered by any health insurance?	YES 1 NO 2	→ 1011
1010	What type of health insurance are you covered by?	MUTUAL HEALTH ORGANIZATION/ COMMUNITY-BASED HEALTH INSURANCE HEALTH INSURANCE THROUGH EMPLOYER B SOCIAL SECURITY COMMERCIAL HEALTH INSURANCE	
		OTHER X (SPECIFY)	
1011	Do you have a health card which provide free or subsidized health care services?	YES 1 NO 2	
1012	RECORD THE TIME.	HOURS	
		MINUTE\$	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

EDITOR'S OBSERVATIONS

INSTRUCTIONS:					COL. 1	COL. 2	
	2 0	06 05 04	JUN MAY APR	01 02 03			2 0
	1 8	03 02	MAR FEB	04 05			1 8
ONLY ONE CODE SHOULD APPEAR IN ANY BOX.	_	01	JAN DEC	06	-		
COLUMN 1 REQUIRES A CODE IN EVERY MONTH.		11 10	NOV OCT	08 09			
CODES FOR EACH COLUMN:	2 0	09 08	SEP AUG	10 11			2 0
COLUMN 1: <u>BIRTHS, PREGNANCIES, CONTRACEPTIVE USE</u> (2)	1 7	07 06	JUL JUN	12 13			1 7
B BIRTHS P PREGNANCIES T TERMINATIONS		05 04 03	MAY APR MAR	14 15 16			
0 NO METHOD		02 01	FEB JAN	17 18			
1 FEMALE STERILIZATION 2 MALE STERILIZATION		12 11	DEC NOV	19 20			
3 IUD 4 INJECTABLES	2 0	10 09	OCT SEP	21 22			2
5 IMPLANTS 6 PILL	1	08 07	AUG JUL	23 24			2 0 1
7 CONDOM 8 EMERGENCY CONTRACEPTION PILL	6	06 05	JUN MAY	25 26			6
9 LACTATIONAL AMENORRHEA METHOD J SAFE PERIOD/RHYTHM METHOD K WITHDRAWAL		04 03 02	APR MAR FEB	27 28 29			
X OTHER MODERN METHOD		01	JAN	30			
Y OTHER TRADITIONAL METHOD		12 11 10	DEC NOV OCT	31 32 33			
COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE	2 0	09 08	SEP AUG	34 35			2 0
0 INFREQUENT SEX/HUSBAND AWAY	1 5	07 06	JUL JUN	36 37			1 5
1 BECAME PREGNANT WHILE USING 2 WANTED TO BECOME PREGNANT		05 04	MAY APR	38 39			
 3 HUSBAND/PARTNER DISAPPROVED 4 WANTED MORE EFFECTIVE METHOD 5 SIDE EFFECTS/HEALTH CONCERNS 	_	03 02 01	MAR FEB JAN	40 41 42			
6 LACK OF ACCESS/TOO FAR 7 COSTS TOO MUCH		12 11	DEC NOV	43 44			
8 INCONVENIENT TO USE F UP TO GOD/FATALISTIC A DIFFICULT TO GET PREGNANT/MENOPAUSAL	2 0	10 09 08	OCT SEP AUG	45 46 47			2 0
D MARITAL DISSOLUTION/SEPARATION X OTHER	1 4	00 07 06	JUL JUN	48 49			1 4
(SPECIFY)		05 04	MAY APR	50 51			-
Z DON'T KNOW		03 02	MAR FEB JAN	52 53			
		01 12	DEC	54 55			
	2	11 10 09	NOV OCT SEP	56 57 58			2
	0 1	03 08 07	AUG	59 60			2 0 1 3
	3	06 05	JUN MAY	61 62			3
		04 03 02	APR MAR	63 64			
		01	FEB JAN	65 66			
		12 11 10	DEC NOV OCT	67 68			
	2 0	09 08	SEP	69 70 71			2 0
	1 2	07 06	JUL JUN	72 73			2 0 1 2
		05 04	MAY APR	74 75			
		03 02 01	MAR FEB	76 77 78			
		UI	JAN	78	1		

BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY 2017-18 BIOMARKER QUESTIONNAIRE

NIPORT, MOHFW MITRA AND ASSOCIATES

IDENTIFICATION					
PLACE NAME					
		HEALTH TECHNIC			
	1	2	3	FINAL VISIT	
DATE				DAY	
HEALTH TECHNICIAN'S				MONTH	
NAME				YEAR	
NUMBER					
NEXT VISIT:DATE				TOTAL NUMBER OF VISITS	
TIME					
NOTES: TOTAL EVER MARRIED WOMEN 15-49 YRS FOR HEIGHT AND WEIGHT SEE HH COL. 16 TOTAL CHILDREN 0-5 YRS FOR HEIGHT & WEIGHT SEE HH COL. 17 TOTAL EVER MARRIED WOMEN 18-49 YRS FOR BP AND GLUCOSE SEE HH COL. 18 TOTAL WOMEN EVER MARRIED 50+ YRS & NEVER MARRIED 18+ YRS FOR HEIGHT, WEIGHT, BP AND GLUCOSE SEE HH COL. 19 TOTAL MEN 18+ YRS FOR HEIGHT, WEIGHT, BP AND GLUCOSE SEE HH COL. 19 TOTAL MEN 18+ YRS FOR HEIGHT, WEIGHT, BP AND GLUCOSE SEE HH COL. 20					
SUPER	VISOR	FIEL	.D EDITOR	OFFICE EDITOR KE	EYED BY
NAME		NA	ME	NUMBER N	UMBER

101				CHECK COLUMNS 2 AND 17 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 102; IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).				
		CHILD 1	CHILD 2	CHILD 3				
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 17. NAME FROM COLUMN 2.	LINE NUMBER	LINE NUMBER	LINE NUMBER				
103	IF MOTHER INTERVIEWED: COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM BIRTH HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (NAME)'s date of birth?	DAY	DAY	DAY				
104	CHECK 103: CHILD BORN IN 2012- 2018?	YES1 NO2 (SKIP TO 109) ←	YES1 NO2 (SKIP TO 109) ←	YES1 NO2 (SKIP TO 109) ←				
105	WEIGHT IN KILOGRAMS.	KG	KG 9994 NOT PRESENT9994 REFUSED9995 OTHER	KG 9994 NOT PRESENT9994 REFUSED9995 OTHER				
106	HEIGHT IN CENTIMETERS.	CM	CM	CM				
107	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2				
108	MEASURER:	MEASURER NUMBER	MEASURER NUMBER	MEASURER NUMBER				
109	GO BACK TO 103 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 201.							

WEIGHT AND HEIGHT MEASUREMENT FOR CHILDREN AGE 0-5

		CHILD 4	CHILD 5	CHILD 6
102	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMN 17.	LINE NUMBER	LINE NUMBER	LINE NUMBER
103	IF MOTHER INTERVIEWED: COPY CHILD'S DATE OF BIRTH (DAY, MONTH, AND YEAR) FROM BIRTH HISTORY. IF MOTHER NOT INTERVIEWED ASK: What is (name)'ds date of birth?	DAY	DAY	DAY
104	CHECK 103: CHILD BORN IN 2012-2018?	YES	YES	YES
105	WEIGHT IN KILOGRAMS.	KG 9994 NOT PRESENT 9994 REFUSED 9995 OTHER	KG 9994 NOT PRESENT 9994 REFUSED	KG 9994 NOT PRESENT 9994 REFUSED 9995 OTHER 9996
106	HEIGHT IN CENTIMETERS.	CM 9994 - 9994 - 9995 - 0THER	CM 9994 - 9994 - 9995 - 0THER	CM 9994 NOT PRESENT 9994 REFUSED
107	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2	LYING DOWN 1 STANDING UP 2
108	MEASURER:	MEASURER NUMBER	MEASURER NUMBER	MEASURER NUMBER
109	GO BACK TO 103 IN NEXT COLUMN IF NO MORE CHILDREN, GO TO 201		N THE FIRST COLUMN OF AN AE	DDITIONAL QUESTIONNAIRE;

WEIGHT AND HEIGHT MEASUREMENT FOR EVER-MARRIED WOMEN AGE 15-49

201	CHECK COLUMN 16 IN HOUSEHOLD QUESTIONNAIRE. RECORD THE LINE NUMBER, NAME, AND MARITAL STATUS FOR ALL ELIGIBLE WOMEN IN 202 AND 203. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).				
		WOMAN 1	WOMAN 2	WOMAN 3	
202	CHECK HOUSEHOLD QUESTIONNAIRE:				
	LINE NUMBER FROM COLUMN 16.	LINE NUMBER	LINE NUMBER	LINE NUMBER	
	NAME FROM	NAME	NAME	NAME	
203	CHECK MARITAL STATUS IN	CODE 4 (NEVER MARRIED) 1 (SKIP TO 207)	CODE 4 (NEVER MARRIED) 1 (SKIP TO 207)	CODE 4 (NEVER MARRIED) 1 (SKIP TO 207) 4	
	HOUSEHOLD QUESTIONNAIRE COLUMN 8	CODE 1-3 2	CODE 1-3 2	CODE 1-3 2	
204	WEIGHT IN KILOGRAMS.	KG	KG	KG	
		NOT PRESENT 99994 REFUSED	NOT PRESENT 99994 REFUSED	NOT PRESENT 99994 REFUSED	
205	HEIGHT IN CENTIMETERS.	см	СМ	см	
		NOT PRESENT 9994 REFUSED 9995 OTHER	NOT PRESENT 9994 REFUSED 9995 OTHER	NOT PRESENT 9994 REFUSED 9995 OTHER	
206	MEASURER:				
		MEASURER NUMBER	MEASURER NUMBER	MEASURER NUMBER	
207	7 GO BACK TO 202 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE EVER-MARRIED WOMEN AGE 15-49, GO TO 300.				

BLOOD PRESSURE AND BLOOD GLUCOSE FOR ALL WOMEN AGE 18 AND OLDER IN SELECTED HOUSEHOLDS

ŀ	HOUSEHOLD SELECTED FOR BIO	OMARKER? YES	NO END			
300	CHECK COLUMN 18 IN HOUSEHOLD SCHEDULE . RECORD THE LINE NUMBER AND NAME OF EVER MARRIED WOMEN AGE 18-49 FOR BP AND GLUCOSE MEASUREMENTS. CHECK COLUMN 19 IN HOUSEHOLD SCHEDULE . RECORD THE LINE NUMBER AND NAME OF EVER MARRIED WOMEN AGE 50+ AND NEVER MARRIED WOMEN AGE 18+ FOR HEIGHT, WEIGHT, BP AND GLUCOSE MEASUREMENTS. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).					
		WOMAN 1	WOMAN 2	WOMAN 3		
301	CHECK HOUSEHOLD QUESTIONNAIRE: LINE NUMBER FROM COLUMNS 18 OR 19. NAME FROM COLUMN 2.					
302			s or tests. I will explain each measurement ents, I am going to ask a few questions ab	a 1		
303	AGE: CHECK WOMAN'S QUESTIONNAIRE Q. 106 OR ASK: How old were you at your last birthday?	YEARS	YEARS	YEARS		
304	MARITAL STATUS: CHECK HOUSEHOLD QUESTIONNAIR COLUMN 8	CODE 4 (NEVER MARRIED) 1 (GO TO 304C) ↓ CODE 1-3	CODE 4 (NEVER MARRIED) 1 (GO TO 304C) ↓ CODE 1-3 2	CODE 4 (NEVER MARRIED) 1 (GO TO 304C) ◀ CODE 1-3 2		
304A	CHECK 303: AGE	AGE IS 50+ 1	AGE IS 50+ 1	AGE IS 50+ 1		
		(GO TO 304C) ↓ AGE IS 18-49 2	(GO TO 304C) ↓ AGE IS 18-49 2	(GO TO 304C) ↓ AGE IS 18-49 2)		
304B	PREGNANCY STATUS: Are you pregnant?	YES	YES	YES 1 NO 2 DON'T KNOW 8 (SKIP TO 305)		
304C	WEIGHT IN KILOGRAMS. (IF NOT PRESENT IN THE 1ST APPOINTMENT, MAKE A 2ND APPOINTMENT, MAKE A 3RD APPOINTMENT)	KG	KG	KG		
304D	HEIGHT IN CENTIMETERS. IF NOT PRESENT IN THE 1ST APPOINTMENT, MAKE A 2ND APPOINTMENT, MAKE A THIRD APPOINTMENT	CM . 9994 REFUSED	CM	CM		
304E	MEASURER:	MEASURER NUMBER	MEASURER NUMBER	MEASURER NUMBER		
305	EDUCATION Have you ever attended school?	YES 1 NO 2 (GO TO 307) ↓J	YES 1 NO	YES 1 NO 2 (GO TO 307)↓		
306	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY 1 SECONDARY 2 HIGHER 3	PRIMARY 1 SECONDARY 2 HIGHER 3	PRIMARY 1 SECONDARY 2 HIGHER 3		
307	WORK Are you currently working?	YES	YES 1 NO 2 (GO TO 309)↓J	YES 1 NO 2 (GO TO 309)↓J		
308	What is your occupation, that is what is the kind of work do you mainly do?					

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2	NAME	NAME	NAME
309	ASK CONSENT FOR BLOOD F I would like to measure your blo This is a harmless procedure. It serious damage to the heart and The results of this blood pressur explain the meaning of your bloo cannot provide any further testin members of our survey team. You can say yes or no to having Do you have any questions about	PRESSURE MEASUREMENT od pressure. This will be done three times is used to find out if a person has high blo d may lead to stroke and death. re measurement will be given to you after to od pressure numbers. If your blood pressu ng or treatment during the survey. The resu the blood pressure measurement now. You ut the blood pressure measurement so far also contact the person(s) information that sure measurements?	during the interview with intervals of about od pressure. If it is not treated, high blood the measurement process is completed for re is high, we will suggest that you consult alt will be kept strictly confidential and will r ou can also decide at anytime not to partici ? If you have any questions about the proc	SRANTED
311	Before taking your blood pressure, I would like to ask a few questions about things that may affect these measurements Have you done any of the following within the past 30 min: Eaten anything? Had coffee, tea, cola or other drink that has caffeine? Smoked/used tobacco?	GO TO 400.	GO TO 400. YES NO EATEN 1 2 HAD CAFFEINATED DRINK 1 2 SMOKED/ USED TOBACCO 1 2	GO TO 400. YES NO EATEN 1 2 HAD CAFFEINATED DRINK 1 2 SMOKED/ USED TOBACCO 1 2
312	May I begin the process of measuring your blood pressure? I will begin by measuring the circumference of your arm to make sure that I use the right equipment. BEFORE TAKING THE FIRST BP READING, MEASURE RESPONDENT'S ARM CIRCUMFERENCE MIDWAY BETWEEN THE ELBOW AND THE SHOULDER RECORD MEASUREMENT IN CENTIMETRES.	ARM CIRCUMFERENCE (IN CENTIMETRES)	ARM CIRCUMFERENCE (IN CENTIMETRES)	ARM CIRCUMFERENCE (IN CENTIMETRES)
313	USE THE ARM CIRCUMFEREN MEASUREMENT TO SELECT THE APPROPRIATE BLOOD PRESSURE MONITOR CUFF SIZE. CIRCLE THE CODE FOR THE CUFF SIZE. RECORD TIME	CE SMALL: 16 CM – 24 CM 1 MEDIUM: 25 CM – 36 CM 2 LARGE: 37 CM – 45 CM 3 EXTRA LARGE: 46 CM - 60 CM 4	SMALL: 16 CM – 24 CM 1 MEDIUM: 25 CM – 36 CM 2 LARGE: 37 CM – 45 CM 3 EXTRA LARGE: 46 CM - 60 CM 4	SMALL: 16 CM – 24 CM 1 MEDIUM: 25 CM – 36 CM 2 LARGE: 37 CM – 45 CM 3 EXTRA LARGE: 46 CM - 60 CM 4
314		HOURS MINUTES	HOURS MINUTES	HOURS

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2	NAME	NAME	NAME
314A	May I take your blood pressure at this time?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
315	TAKE THE FIRST BLOOD PRESSURE READING. RECORD THE SYSTOLIC AND DIASTOLIC PRESSURE,	BLOOD PRESSURE MEASUREMENT	BLOOD PRESSURE MEASUREMENT	BLOOD PRESSURE MEASUREMENT
	IF YOU ARE UNABLE TO MEASURE RESPONDENT'S BLOOD PRESSURE, RECORD REASON BLOOD PRESSURE WAS NOT MEASURED	DIASTOLIC 994 REFUSED	DIASTOLIC	DIASTOLIC 994 REFUSED 994 TECHNICAL PROBLEMS 995 OTHER 996 (SPECIFY)
316	Before this survey, has your blood pressure ever been measured?	YES 1 NO2 (GO TO 319A) ↓ REFUSED	YES 1 NO 2 (GO TO 319A) ↓ REFUSED	YES
317	When did you check your blood pressure last?	DAYS AGO1WEEKS AGO2MONTHS AGO3YEARS AGO4	DAYS AGO1WEEKS AGO2MONTHS AGO3YEARS AGO4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2	NAME	NAME	NAME
317A	Where did you check your blood pressure last?	PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL 11 SPECIALIZED GOVT HOSPITAL 12 DISTRICT HOSPITAL 13 MCWC 14 UPAZILA HEALTH COMPLEX CENTER 17 COMMUNITY CLINIC 18 SATELLITE CLINIC 19 GOVT. FIELDWORKER (HA & FWA) 20 OTHER PUBLIC SECTOR 16	PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL 11 SPECIALIZED GOVT HOSPITAL 12 DISTRICT HOSPITAL 13 MCWC 14 UPAZILA HEALTH COMPLEX COMPLEX 15 UH & FAMILY WELFARE 17 COMMUNITY CLINIC 18 SATELLITE CLINIC 19 GOVT. FIELDWORKER (HA & FWA) 20 OTHER PUBLIC SECTOR 16 (SPECIFY) (SPECIFY) 16	PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL 11 SPECIALIZED GOVT HOSPITAL 12 DISTRICT HOSPITAL 13 MCWC 14 UPAZILA HEALTH COMPLEX CENTER 17 COMMUNITY CLINIC 18 SATELLITE CLINIC 19 GOVT. FIELDWORKER (HA & FWA) 20 OTHER PUBLIC SECTOR 16 (SPECIFY) (SPECIFY) 17
		NGO SECTOR NGO STATIC CLINIC 21 NGO SATELLITE CLINIC . 22 NGO DEPO HOLDER 23 NGO FIELD WORKER 24 OTHER NGO SECTOR26 (SPECIFY)	NGO SECTOR NGO STATIC CLINI ^{II} 21 NGO SATELLITE CLINIC 22 NGO DEPO HOLDER 23 NGO FIELD WORKER 24 OTHER NGO SECTOR26 (SPECIFY)	NGO SECTOR NGO STATIC CLINI ^{I,} 21 NGO SATELLITE CLINIC . 22 NGO DEPO HOLDER 23 NGO FIELD WORKER 24 OTHER NGO SECTOR26 (SPECIFY)
		PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL 31 PRIVATE HOSPITAL 32 PRIVATE CLINIC 33 QUALIFIED DOCTOR'S CHAMBER	PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL 31 PRIVATE HOSPITAL 32 PRIVATE CLINIC 33 QUALIFIED DOCTOR'S CHAMBER 34 NON-QUALIFIED DOCTOR'S CHAMBER 35 PHARMACY/DRUG STORE 37 OTHER PRIVATE MEDICAL SECTOR 36 (SPECIFY)	PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL 31 PRIVATE HOSPITAL 32 PRIVATE CLINIC 33 QUALIFIED DOCTOR'S CHAMBER
		OTHER SOURCE HOME 41 WORKPLACE 42 SHOP 43 TRADITIONAL 96 OTHER 96	OTHER SOURCE HOME 41 WORKPLACE 42 SHOP 43 TRADITIONAL PRACTITIONER 44 OTHER 96 (SPECIFY)	OTHER SOURCE HOME 41 WORKPLACE 42 SHOP 43 TRADITIONAL PRACTITIONER 44 OTHER 96 (SPECIFY)
317B	Have you ever been told by a doctor or other health worker that you have high blood pressure or hypertension?	YES 1 NO 2 (GO TO 319A)	YES 1 NO 2 (GO TO 319A)	YES 1 NO 2 (GO TO 319A)

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2	NAME	NAME	NAME
317C	Who told you?	HEALTH PERSONNEL QUALIFIED DOCTOR A NURSE/MIDWIFE/ PARAMEDIC PARAMEDIC B FAMILY WELFARE VISITOR (FWV) VISITOR (FWV) C COMMUNITY SKILLED BIRTH ATTENDANT (CSBA) D SUB-ASSISTANT COMMUNITY MEDICAL OFFICER (SACMO) E COMMUNITY HEALTH CARE PROVIDER (CHCP) F HEALTH ASSISTANT (HA) G FAMILY WELFARE ASSISTANT (FWA) H NGO WORKER I OTHER PERSON TRAINED TBA (TTBA) J UNTRAINED TBA (UTBA) K UNQUALIFIELD DOCTOR L RELATIVES M NEIGHBORS/FRIENDS N	HEALTH PERSONNEL QUALIFIED DOCTOR QUALIFIED DOCTOR ANURSE/MIDWIFE/ PARAMEDIC PARAMEDIC B FAMILY WELFARE VISITOR (FWV) C COMMUNITY SKILLED BIRTH ATTENDANT (CSBA) QUALFICER (SACMO) (SACMO) COMMUNITY HEALTH CARE PROVIDER (CHCP) (CHCP) BASSISTANT (HA) G FAMILY WELFARE ASSISTANT (FWA) HEALTH ASSISTANT (HA) G FAMILY WELFARE ASSISTANT (FWA) HOWORKER I OTHER PERSON TRAINED TBA (TTBA) JUNTRAINED TBA (UTBA) K UNQUALIFIELD DOCTOR RELATIVES M NEIGHBORS/FRIENDS N OTHER X	HEALTH PERSONNEL QUALIFIED DOCTOR A NURSE/MIDWIFE/ PARAMEDIC PARAMEDIC B FAMILY WELFARE VISITOR (FWV) VISITOR (FWV) C COMMUNITY SKILLED BIRTH ATTENDANT (CSBA) D SUB-ASSISTANT COMMUNITY MEDICAL OFFICER (SACMO) E COMMUNITY HEALTH CARE PROVIDER (CHCP) F HEALTH ASSISTANT (HA) G FAMILY WELFARE ASSISTANT (FWA) ASSISTANT (FWA) H NGO WORKER I OTHER PERSON TRAINED TBA (TTBA) J UNTRAINED TBA (UTBA) K UNQUALIFIELD DOCTOR L RELATIVES M NEIGHBORS/FRIENDS N OTHER X SPECIFY X
318	Are you currently receiving any of the following treatment/ advice by a doctor or other health worker to control your blood pressure?	YES NO	YES NO	YES NO
	Prescribed medication? Advice to reduce salt intake? Advice/treatment to lose weight? Advice/treatment to stop smoking? Advice to start/do more exercise?	PRESCR. MEDIC 1 2 REDUCE SALT 1 2 LOSE WEIGHT 1 2 STOP SMOKING 1 2 EXERCISE 1 2	PRESCR. MEDIC 1 2 REDUCE SALT 1 2 LOSE WEIGHT 1 2 STOP SMOKING 1 2 EXERCISE 1 2	PRESCR. MEDIC 1 2 REDUCE SALT 1 2 LOSE WEIGHT 1 2 STOP SMOKING 1 2 EXERCISE 1 2
319	Are you currently taking any herbal or traditional remedies for your high blood pressure?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
319A	CHECK 310: CONSENT FOR B MEASUREMENT	P 'GRANTED' 'REFUSED' CODE '1' CODE '2' CIRCLED CIRCLED (SKIP TO 324) ←	'GRANTED' 'REFUSED' CODE '1' CODE '2' CIRCLED CIRCLED (SKIP TO 324) ←	'GRANTED' 'REFUSED' CODE '1' CODE '2' CIRCLED CIRCLED (SKIP TO 324)
320	HEALTH TECHNICIAN: CHECK	THAT IT HAS BEEN AT LEAST 5 MINU	TES BEFORE TAKING THE SECOND BL	OOD PRESSURE MEASUREMENT.
321	RECORD TIME	HOURS	HOURS	HOURS
322	May I take your blood pressure this time?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2	NAME	NAME	NAME
323	TAKE THE SECOND BLOOD PRESSURE READING. RECORD THE SYSTOLIC AND DIASTOLIC PRESSURE, THEN PROCEED TO 324.	SYSTOLIC	BLOOD PRESSURE MEASUREMENT	BLOOD PRESSURE MEASUREMENT
	IF YOU ARE UNABLE TO MEASURE RESPONDENT'S BLOOD PRESSURE, RECORD REASON BLOOD	DIASTOLIC	DIASTOLIC	DIASTOLIC
	PRESSURE WAS NOT MEASURED	TECHNICAL PROBLEMS 995 OTHER	TECHNICAL PROBLEMS 995 OTHER	TECHNICAL PROBLEMS 995 OTHER
324	Have you ever heard of an illness called diabetes?	YES 1 NO 2 REFUSED 4	YES 1 1 NO 2 2 REFUSED 4	YES 1 NO 2 REFUSED 4
325	Before this survey, has your blood glucose ever been measured?	YES 1 NO 2 (GO TO 328A) J REFUSED 4 (GO TO 328A) J	YES 1 NO 2 (GO TO 328A) ↓ REFUSED	YES 1 NO 2 (GO TO 328A) ↓ REFUSED
326	When did you check your blood glucose last?	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2	NAME	NAME	NAME
326A	Where did you check your blood glucose last?	PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL 11 SPECIALIZED GOVT HOSPITAL 12 DISTRICT HOSPITAL 13 MCWC 14 UPAZILA HEALTH 15 UH & FAMILY WELFARE 17 COMMUNITY CLINIC 18 SATELLITE CLINIC 19 GOVT. FIELDWORKER (HA & FWA) 20 OTHER PUBLIC SECTOR 16 (SPECIFY)	PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL 11 SPECIALIZED GOVT HOSPITAL 12 DISTRICT HOSPITAL 13 MCWC 14 UPAZILA HEALTH 15 UH & FAMILY WELFARE 17 COMPLEX 18 SATELLITE CLINIC 18 SATELLITE CLINIC 19 GOVT. FIELDWORKER (HA & FWA) 20 OTHER PUBLIC 16 (SPECIFY)	PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL 11 SPECIALIZED GOVT HOSPITAL 12 DISTRICT HOSPITAL 13 MCWC 14 UPAZILA HEALTH 15 UH & FAMILY WELFARE 17 COMMUNITY CLINIC 18 SATELLITE CLINIC 19 GOVT. FIELDWORKER (HA & FWA) 20 OTHER PUBLIC SECTOR 16 (SPECIFY) (SPECIFY) 17
		NGO SECTOR NGO STATIC CLINIC 21 NGO SATELLITE CLINIC . 22 NGO DEPO HOLDER 23 NGO FIELD WORKER 24 OTHER NGO SECTOR 26 (SPECIFY)	NGO SECTOR NGO STATIC CLINI ^{II} 21 NGO SATELLITE CLINIC 22 NGO DEPO HOLDER 23 NGO FIELD WORKER 24 OTHER NGO SECTOR26 (SPECIFY)	NGO SECTOR 21 NGO STATIC CLINI·
		PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL 31 PRIVATE HOSPITAL 32 PRIVATE CLINIC 33 QUALIFIED DOCTOR'S 34 NON-QUALIFIED DOCTOR'S 35 CHAMBER 35 PHARMACY/DRUG STORE 37 OTHER PRIVATE MEDICAL 36 SECTOR 36	PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL 31 PRIVATE HOSPITAL 32 PRIVATE CLINIC 33 QUALIFIED DOCTOR'S CHAMBER	PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL 31 PRIVATE HOSPITAL 32 PRIVATE CLINIC 33 QUALIFIED DOCTOR'S 34 NON-QUALIFIED DOCTOR'S 35 PHARMACY/DRUG STORE 37 OTHER PRIVATE MEDICAL SECTOR SECTOR 36
		OTHER SOURCE 41 HOME 42 SHOP 43 TRADITIONAL PRACTITIONER PRACTITIONER 44 OTHER 96 (SPECIFY) 96	OTHER SOURCE HOME 41 WORKPLACE 42 SHOP 43 TRADITIONAL PRACTITIONER 44 OTHER 96 (SPECIFY) 96	OTHER SOURCE 41 HOME 42 SHOP 43 TRADITIONAL PRACTITIONER PRACTITIONER 44 OTHER 96 (SPECIFY) 96
326B	Have you ever been told by a doctor or other health worker that you have high blood sugar or diabetes?	YES 1 NO 2 (GO TO 328A) ←	YES 1 NO	YES 1 NO 2 (GO TO 328A) ←

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2	NAME	NAME	NAME
326C	Who told you?	HEALTH PERSONNEL QUALIFIED DOCTOR A NURSE/MIDWIFE/ PARAMEDIC B FAMILY WELFARE VISITOR (FWV) VISITOR (FWV) C COMMUNITY SKILLED BIRTH ATTENDANT (CSBA) D SUB-ASSISTANT COMMUNITY MEDICAL OFFICER (SACMO) E COMMUNITY HEALTH CARE PROVIDER (CHCP) F HEALTH ASSISTANT (HA) G FAMILY WELFARE ASSISTANT (FWA) ASSISTANT (FWA) H NGO WORKER I OTHER PERSON TRAINED TBA (TTBA) J UNTRAINED TBA (UTBA) K UNQUALIFIELD DOCTOR L RELATIVES M NEIGHBORS/FRIENDS N	HEALTH PERSONNEL QUALIFIED DOCTOR A NURSE/MIDWIFE/ PARAMEDIC B FAMILY WELFARE VISITOR (FWV) C COMMUNITY SKILLED BIRTH ATTENDANT C (CSBA) D D SUB-ASSISTANT COMMUNITY MEDICAL OFFICER COMMUNITY HEALTH CARE PROVIDER (CHCP) F HEALTH ASSISTANT (HA) G FAMILY WELFARE ASSISTANT (FWA) H NGO WORKER I OTHER PERSON TRAINED TBA (TTBA) J UNTRAINED TBA (UTBA) VINQUALIFIELD DOCTOR L RELATIVES M NEIGHBORS/FRIENDS N SPECIFY X	HEALTH PERSONNEL QUALIFIED DOCTOR A NURSE/MIDWIFE/ PARAMEDIC B PARAMEDIC B FAMILY WELFARE VISITOR (FWV) C COMMUNITY SKILLED BIRTH ATTENDANT C (CSBA) D SUB-ASSISTANT COMMUNITY MEDICAL OFFICER (SACMO) E COMMUNITY HEALTH CARE PROVIDER C (CHCP) F HEALTH ASSISTANT (HA) G FAMILY WELFARE ASSISTANT (FWA) H NGO WORKER I I OTHER PERSON TRAINED TBA (TTBA) J UNTRAINED TBA (UTBA) K UNQUALIFIELD DOCTOR L RELATIVES M NEIGHBORS/FRIENDS N OTHER X SPECIFY X
327	Are you currently receiving any of the following treatment/ advice by a doctor or other health worker for your high blood glucose or diabetes?	YES NO		
	Prescribed medication such as insulin?	PRESCR. MEDIC 1 2	YES NO	YES NO
	Advice on special diet?	SPECIAL DIET 1 2	SPECIAL DIET 1 2	SPECIAL DIET 1 2
	Advice on special diet?			
	weight?	LOSE WEIGHT 1 2	LOSE WEIGHT 1 2	LOSE WEIGHT 1 2
	Advice/treatment to stop smoking?	STOP SMOKING 1 2	STOP SMOKING 1 2	STOP SMOKING 1 2
	Advice to start/do more exercise?	EXERCISE 1 2	EXERCISE 1 2	EXERCISE 1 2

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2	NAME	NAME	NAME
328	Are you currently taking any herbal or traditional remedies for your high blood glucose or diabetes?	YES 1 NO 2	1 YES 1 NO 2	YES 1 NO 2
328A	CHECK 310: CONSENT FOR B MEASUREMENT	P 'GRANTED' 'REFUSED' CODE '1' CODE '2' CIRCLED CIRCLED (SKIP TO 333A) ←	'GRANTED' 'REFUSED' CODE '1' CODE '2' CIRCLED CIRCLED (SKIP TO 333A) ←	'GRANTED' 'REFUSED' CODE '1' CODE '2' CIRCLED CIRCLED (SKIP TO 333A) ←
329	HEALTH TECHNICIAN: CHECK	(THAT IT HAS BEEN AT LEAST 5 MINUT	TES BEFORE TAKING THE THIRD BLOO	D PRESSURE MEASUREMENT.
330	RECORD TIME	HOURS	HOURS	HOURS
331	May I take your blood pressure this time?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2
332	TAKE THE THIRD BLOOD PRESSURE READING. RECORD THE SYSTOLIC AND DIASTOLIC PRESSURE, THEN PROCEED TO 333A. IF YOU ARE UNABLE TO MEASURE RESPONDENT'S BLOOD PRESSURE, RECORD REASON BLOOD PRESSURE WAS NOT MEASURED	BLOOD PRESSURE MEASUREMENT SYSTOLIC DIASTOLIC DIASTOLIC PREFUSED SUBSECTION 994 TECHNICAL PROBLEMS 996	BLOOD PRESSURE MEASUREMENT SYSTOLIC DIASTOLIC REFUSED 994 TECHNICAL PROBLEMS 995 OTHER	BLOOD PRESSURE MEASUREMENT SYSTOLIC DIASTOLIC REFUSED YECHNICAL PROBLEMS YECHNICAL PROBLEMS
333A	AVERAGE. (2) IF THERE IS MORE THAN C THE FIRST FROM THE AVERA	C MEASURES: SYSTOLIC DIASTOLIC DIASTOLIC DIASTOLIC DIASTOLIC DIASTOLIC DIASTOLIC DIASTOLIC DIASTOLIC DIASTOLIC	AVERAGE OF 2 ND AND 3 RD MEASURES: SYSTOLIC DIASTOLIC	AVERAGE OF 2 ND AND 3 RD MEASURES: SYSTOLIC DIASTOLIC

		WOMAN 1	WOMAN 2	WOMAN 3	
	NAME FROM COLUMN 2	NAME	NAME	NAME	
333B	USE THE TABLE BELOW TO MAKE THE CORRECT REFERRAL BASED ON AVERAGE VALUES IN 333A				
	ADULT BLOOD PRESSURE VALUE BOX:				
	THE SYSTOLIC PRESSURE RO	2 3 4 2 3 4 3 3 4 4 4 4 5 5 5 6 6 6 DR THE DIASTOLIC AND THE SYSTOLIC DW AND A VERTICAL LINE IN THE DIAST	0-119 ≥120 5 6 5 6 5 6 5 6 5 6 6 6 BLOOD PRESSURE IN THE TABLE ABO TOLIC PRESSURE COLUMN. CIRCLE TH TING FORM AND GIVE IT TO THE RESPO	E VALUE WHERE THE LINES MEET.	
334A	ASK CONSENT FOR FASTING	BLOOD SUGAR TESTING			
	As part of this survey, we are asking people all over the country to take a blood glucose test. Your glucose level may is an indicator that can measure your risk associated with some non-communicable diseases such as diabetes. This survey will assist the government to develop programs to prevent and treat high and low glucose levels. For the blood glucose testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for glucose immediately, and the result will be told to you right away for further follow up, if necessary. The result will be kept strictly confidential and will not be shared with anyone other				
	than members of our survey team. The results will be given to you with an explanation of the meaning of your blood glucose numbers.If your blood glucose is high, we will suggest that you consult a health facility or doctor since we cannot provide any counselling, further testing or treatment during the survey.Do you have any questions? If you have any questions about the procedure at any time, please ask me now.				
	To obtain correct blood glucose measurement, we would ask that you do not eat or drink anything except plain water for at least 8 hours prior to my blood glucose testing visit. Would you allow me to return to take your blood glucose measurement before you break your fast?				
334B	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	1 ^{SI} APP. GRANTED 1— REFUSED 2 (SIGN AND GO TO 335B) ₄	1 ^{SI} APP. GRANTED 1 REFUSED 2 (SIGN AND GO TO 335B)	1 ^{SI} APP. GRANTED 1 REFUSED 2	
		SIGN	SIGN	(SIGN AND GO TO 335B) SIGN▲	
	(IF 'NOT PRESENT' IN THE 1 ⁵¹ APPOINTMENT, MAKE	RESP. NOT PRESENT 3 MAKE SECOND ↓ APPOINTMENT	RESP. NOT PRESENT 3 MAKE SECOND J APPOINTMENT	RESP. NOT PRESENT 3 MAKE SECONDJ APPOINTMENT	
	A 2 ^{№0} APPOINTMENT; MAKE A 3 ^{№0} APPOINTMENT.)	2 [№] APP. GRANTED 1 REFUSED 2	2 [№] APP. GRANTED 1 REFUSED 2 (SIGN AND GO TO 335B) 4	2 [№] APP. GRANTED 1 REFUSED 2 (SIGN AND GO TO 335B)	
		(SIGN AND GO TO 335B) ↓ SIGN	SIGN	SIGN	
		RESP. NOT PRESENT 3 MAKE THIRD ₄J APPOINTMENT	RESP. NOT PRESENT 3 MAKE THIRD ↓ APPOINTMENT	RESP. NOT PRESENT 3 MAKE THIRD ↓ APPOINTMENT	
		3 [™] APP. GRANTED 1 REFUSED2 (SIGN AND GO TO 335B) ←	3 [™] APP. GRANTED 1 REFUSED 2 (SIGN AND GO TO 335B) ↓	3 ^{ĸ⊎} APP. GRANTED 1 REFUSED 2 (SIGN AND GO TO 335B) ←	
		SIGN	SIGN	SIGN	
		RESP. NOT PRESENT 3 (AFTER TWO CALL _ BACKS, GO TO 301 IN NEXT COLUMN.	RESP. NOT PRESENT 3 (AFTER TWO CALL BACKS, GO TO 301 IN NEXT COLUMN.	RESP. NOT PRESENT 3 (AFTER TWO CALL J BACKS, GO TO 301 IN NEXT COLUMN.	

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2	NAME	NAME	NAME
334C	When can I come to test your blood glucose?	1 ST APP. DATE	1 ST APP. DATE	1 st APP. DATE
	RECORD APPOINTMENT FOR BLOOD GLUCOSE	HOUR	HOUR	HOUR
	TESTING AND PROCEED TO NEXT SECTION	MINUTES.	MINUTES.	MINUTES.
		2 ^{NU} APP. DATE	2 ^{NU} APP. DATE	2 ^{NU} APP. DATE
		HOUR	HOUR	HOUR
		MINUTES.	MINUTES.	MINUTES.
		3 ^{ĸυ} APP. DATE	3 ^{KU} APP. DATE	3 ^{KU} APP. DATE
		HOUR	HOUR	HOUR
		MINUTES.	MINUTES.	MINUTES.
334D	As I mentioned yesterday, we a a blood glucose test. Your gluco This survey will assist the gover	DOD GLUCOSE TESTING: ASK CONSENT are going to measure the level of sugar in bl ose level is an indicator that can measure y rnment to develop programs to prevent and	ood. As part of this survey, we are asking our risk associated with some non-commu t treat high and low glucose levels.	unicable diseases such as diabetes.
	It has never been used before a	we will need a few drops of blood from a fing and will be thrown away after each test.	ger. The equipment used to take the blood	is clean and completely safe.
	SHOW UNOPENED PACKAGE			
	strictly confidential and will not b of the meaning of your blood glu provide any counselling, further	cose immediately, and the result will be told be shared with anyone other than members ucose numbers. If your blood glucose is hig r testing or treatment during the survey. g the blood glucose measurement now.	s of our survey team. The results will be giv	ven to you with an explanation
		you have any questions about the procedur	e at any time, please ask me.	
	Would you allow me to proceed	d to take your measurement?		
334E	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME	GRANTED 1 E. REFUSED 2 (SIGN AND GO TO 335B)	GRANTED 1 REFUSED	GRANTED 1 REFUSED
	(IF 'NOT PRESENT' MAKE 2 MORE CALL BACKS TO FIND THE RESPONDENT)	SIGN	SIGN	SIGN
		RESP. NOT PRESENT 3 (AFTER TWO CALL BACKS, GO TO 301 IN NEXT COLUMN.	RESP. NOT PRESENT 3 (AFTER TWO CALL J BACKS, GO TO 301 IN NEXT COLUMN.	RESP. NOT PRESENT 3 (AFTER TWO CALL BACKS, GO TO 301 IN NEXT COLUMN.
334F	When was the last time you had something to eat?	HOURS MINUTES	HOURS MINUTES	HOURS MINUTES
	Ū.	1 ST APP.	1 ST APP.	1 ST APP.
		2 ND APP.	2 ND APP.	2 ND APP.
		3 RD APP.	3 RD APP.	3 RD APP.
334G	When was the last time you had something to drink	HOURS MINUTES	HOURS MINUTES	HOURS MINUTES
	other than plain water?	1 ST APP.	1 ST APP.	1 ST APP.
		2 ND APP.	2 ND APP.	2 ND APP.
		3 RD APP.	3 RD APP.	3 RD APP.

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2	NAME	NAME	NAME
334H	CHECK 334F: LAST TIME EAT	8 HOURS OR MORE 1 (SKIP TO 335) 🚽	8 HOURS OR MORE 1 (SKIP TO 335)	8 HOURS OR MORE 1 (SKIP TO 335) 🗸
		LESS THAN 8 HOURS 2	LESS THAN 8 HOURS 2	LESS THAN 8 HOURS 2
3341	READ TO RESPONDENT:	As mentioned before, in order to obtain correct blood glucose measurement, we need you to fast for at least 8 hours prior to testing. GO TO 334B TO MAKE NEXT APPOINTMENT	As mentioned before, in order to obtain correct blood glucose measurement, we need you to fast for at least 8 hours prior to testing. GO TO 334B TO MAKE NEXT APPOINTMENT	As mentioned before, in order to obtain correct blood glucose measurement, we need you to fast for at least 8 hours prior to testing. GO TO 334B TO MAKE NEXT APPOINTMENT
335	PREPARE EQUIPMENT AND SUPPLIES FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE BLOOD GLUCOSE TEST.			
335A	RECORD TIME FOR BLOOD GLUCOSE TESTING	DAY	DAY	DAY
335B	RECORD FASTING BLOOD SUGAR IN MMOL/L. IF YOUR ARE UNABLE TO MEASURE RESPONDENT'S (G BLOOD GLUCOSE RECORD REASON BLOOD GLUCOSE IS NOT MEASURED	MMOL/L CO TO 301 IN NEXT COLUMN) ← (G REFUSED	MMOL/L O TO 301 IN NEXT COLUMN) REFUSED	(GO TO 301 IN NEXT COLUMN) REFUSED

	BLOOD FRESSORE AND BLOOD GLOCOSE FOR MEN AGE 10 AND OLDER IN SELECTED HOUSEHOLDS						
F	IOUSEHOLD SELECTED FOR B	IOMARKER? YES	N				
400	400 CHECK COLUMN 20 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME OF ALL ELIGIBLE MEN AGE 18 AND OLDER FOR HEIGHT AND WEIGHT, BLOOD PRESSURE, AND BLOOD GLUCOSE MEASUREMENTS. IF THERE ARE MORE THAN THREE MEN, USE ADDITIONAL QUESTIONNAIRE(S).						
		MAN 1	MAN 2	MAN 3			
401	CHECK HOUSEHOLD QUESTIONNAIRE LINE NUMBER FROM COLUMN 20 NAME FROM COLUMN 2.						
402	a a y		nents or tests. I will explain each measure aking the measurements, I am going to as	5			
404B	WEIGHT IN KILOGRAMS.	KILOGRAM NOT PRESENT	KILOGRAM NOT PRESENT 99994 REFUSED 99995 OTHER 99996	KILOGRAM NOT PRESENT			
404C	HEIGHT IN CENTIMETERS.	CM	CM 9994 REFUSED 9995 OTHER 9996	CM 9994 NOT PRESENT 9994 REFUSED 9995 OTHER 9996			
404D	MEASURER:	MEASURER NUMBER	MEASURER NUMBER	MEASURER NUMBER			
405	EDUCATION Have you ever attended school?	YES 1 NO	YES	YES			
406	What is the highest level of school you attended: primary, secondary, or higher?	PRIMARY 1 SECONDARY 2 HIGHER 3	PRIMARY 1 SECONDARY 2 HIGHER 3	PRIMARY 1 SECONDARY 2 HIGHER 3			
407	WORK Are you currently working?	YES	YES 1 NO	YES 1 NO 2 (GO TO 409)↓			
408	What is your occupation, that is what is the kind of work you mainly do?						

BLOOD PRESSURE AND BLOOD GLUCOSE FOR MEN AGE 18 AND OLDER IN SELECTED HOUSEHOLDS

		MAN 1	MAN 2	MAN 3				
	NAME FROM COLUMN 2	NAME	NAME	NAME				
409	ASK CONSENT FOR BLOOD	PRESSURE MEASUREMENT						
	This is a harmless procedure. It	I would like to measure your blood pressure. This will be done three times during the interview with intervals of five minutes period This is a harmless procedure. It is used to find out if a person has high blood pressure. If it is not treated, high blood pressure may eventually cause serious damage to the heart and may lead to stroke and death.						
	explain the meaning of your bloo	od pressure numbers. If your blood pre	ter the measurement process is completed ssure is high, we will suggest that you cons result will be kept strictly confidential and wi	ult a health facility or doctor since we				
	You can say yes or no to having	yes or no to having the blood pressure measurement now. You can also decide at anytime not to participate in the blood pressure measures.						
	For more information, you may	also contact the person(s) information	far? If you have any questions about the pr that was given out at the beginning.	ocedure at any time, please ask me.				
	Will you undergo the blood pres							
410	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME	GRANTED	GRANTED 1 REFUSED 2 (SIGN AND GO TO 415)	GRANTED 1 REFUSED 2 (SIGN AND GO TO 415)				
	(IF 'NOT PRESENT' MAKE 2 MORE CALL BACKS	SIGN	SIGN	SIGN				
	TO FIND THE RESPONDENT)	RESP. NOT PRESENT	RESP. NOT PRESENT 3	RESP. NOT PRESENT 3				
		(AFTER 2 CALL BACKS,	(AFTER 2 CALL BACKS,	(AFTER 2 CALL BACKS,				
		GO TO 401 IN NEXT COLUMN. IF NO MORE RESPONDENT, END	GO TO 401 IN NEXT COLUMN	GO TO 401 IN NEXT COLUMN.				
411	Before taking your blood pressure, I would like to ask a few questions about things that may affect thee measurements.							
	Have you done any of the following within the past 30 min:	YES N	O YES NO	YES NO				
	Eaten anything?	EATEN 1	2 EATEN 1 2	EATEN 1 2				
	Had coffee, tea, cola or other drink that has caffeine?	HAD CAFFEINATED DRINK 1	HAD CAFFEINATED 2 DRINK	HAD CAFFEINATED DRINK				
	Smoked/used tobacco?	SMOKED/ USED TOBACCO 1	SMOKED/ 2 USED TOBACCO 1 2	SMOKED/ USED TOBACCO 1 2				
412	May I begin the process of measuring your blood pressure' I will begin by measuring the circumference of your arm to make sure that I use the right equipment. BEFORE TAKING THE FIRST BP READING, MEASURE RESPONDENT'S							
	ARM CIRCUMFERENCE MIDWAY BETWEEN THE ELBOW AND THE SHOULDEF RECORD MEASUREMENT IN CENTIMETRES.	(IN CENTIMETRES)	(IN CENTIMETRES)	(IN CENTIMETRES)				

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2	NAME	NAME	NAME
413	USE THE ARM CIRCUM.	SMALL: 16 CM – 24 CM 1	SMALL: 16 CM – 24 CM 1	SMALL: 16 CM – 24 CM 1
	MEASUREMENT TO SELECT THE APPROPRIATE BLOOD	MEDIUM: 25 CM – 36 CM 2	MEDIUM: 25 CM – 36 CM 2	MEDIUM: 25 CM – 36 CM 2
	PRESSURE MONITOR CUFF SIZE.	LARGE: 37 CM – 45 CM 3	LARGE: 37 CM – 45 CM 3	LARGE: 37 CM – 45 CM 3
	CIRCLE THE CODE FOR THE CUFF SIZE.	EXTRA LARGE: 46 CM - 60 CM	EXTRA LARGE: 46 CM - 60 CM	EXTRA LARGE: 46 CM - 60 CM
414	RECORD TIME	HOURS	HOURS	HOURS
		MINUTES	MINUTES	MINUTES
414A	May I take your blood pressure at this time?	YES 1	YES 1	YES 1
		NO 2	NO 2	NO 2
415	TAKE THE FIRST BLOOD PRESSURE READING.	BLOOD PRESSURE MEASUREMENT	BLOOD PRESSURE MEASUREMENT	BLOOD PRESSURE MEASUREMENT
	RECORD THE SYSTOLIC ANE DIASTOLIC PRESSURE, THEN PROCEED TO 417.	SYSTOLIC	SYSTOLIC	SYSTOLIC
	IF YOU ARE UNABLE TO MEASURE RESPONDENT'S BLOOD PRESSURE,	DIASTOLIC	DIASTOLIC	DIASTOLIC
	RECORD REASON BLOOD PRESSURE WAS NOT MEASURED	REFUSED 994	REFUSED 994	REFUSED 994
	MEASURED	TECHNICAL PROBLEMS 995	TECHNICAL PROBLEMS 995	TECHNICAL PROBLEMS 995
		OTHER 996	OTHER 996	OTHER 996
417	Before this survey, has your blood pressure ever been	YES 1	YES 1	YES 1
	measured?	NO 2 (GO TO 420A) ↓ REFUSED . 4 (GO TO 420A) ↓	NO2 (GO TO 420A) ↓ REFUSED . 4 (GO TO 420A) ↓	NO
417A	When did you check your blood pressure last?	DAYS AGO 1	DAYS AGO 1	DAYS AGO 1
		WEEKS AGO 2	WEEKS AGO 2	WEEKS AGO 2
		MONTHS AGC 3	MONTHS AGC 3	MONTHS AGC 3
		YEARS AGO 4	YEARS AGO 4	YEARS AGO 4

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2	NAME	NAME	NAME
417B	Where did you check your blood pressure last?	PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL 11 SPECIALIZED GOVT HOSPITAL 12 DISTRICT HOSPITAL 13 MCWC 14 UPAZILA HEALTH COMPLEX COMPLEX 15 UH & FAMILY WELFARE 17 COMMUNITY CLINIC 18 SATELLITE CLINIC 19 GOVT. FIELDWORKER (HA & FWA) 20 OTHER PUBLIC SECTOR 16	PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL 11 SPECIALIZED GOVT HOSPITAL 12 DISTRICT HOSPITAL 13 MCWC 14 UPAZILA HEALTH 15 UH & FAMILY WELFARE 17 COMMUNITY CLINIC 18 SATELLITE CLINIC 19 GOVT. FIELDWORKER 14 (HA & FWA) 20 OTHER PUBLIC 16 SECTOR 16	PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL HOSPITAL DISTRICT HOSPITAL 12 DISTRICT HOSPITAL 13 MCWC 14 UPAZILA HEALTH COMPLEX 15 UH & FAMILY WELFARE CENTER CMMUNITY CLINIC SATELLITE CLINIC (HA & FWA) OTHER PUBLIC SECTOR (SPECIFY)
		NGO SECTOR NGO STATIC CLINIC 21 NGO SATELLITE CLINIC 22 NGO DEPO HOLDER 23 NGO FIELD WORKER 24 OTHER NGO SECTOR 26 (SPECIFY) (SPECIFY)	NGO SECTOR NGO STATIC CLINIC	NGO SECTOR NGO STATIC CLINIC 21 NGO SATELLITE CLINIC 22 NGO DEPO HOLDER 23 NGO FIELD WORKER 24 OTHER NGO 26 SECTOR 26 (SPECIFY)
		PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL 31 PRIVATE HOSPITAL 32 PRIVATE CLINIC 33 QUALIFIED DOCTOR'S 34 NON-QUALIFIED DOCTOR'S 35 PHARMACY/DRUG STORE 37 OTHER PRIVATE MEDICAL SECTOR SECTOR 36	PRIVATE MEDICAL SECTORPRIVATE MEDICAL31COLLEGE HOSPITAL31PRIVATE HOSPITAL32PRIVATE CLINIC33QUALIFIED DOCTOR'S34NON-QUALIFIED DOCTOR'S35PHARMACY/DRUG STORE37OTHER PRIVATE MEDICAL36	PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL 31 PRIVATE HOSPITAL 32 PRIVATE CLINIC 33 QUALIFIED DOCTOR'S 34 NON-QUALIFIED DOCTOR'S 35 PHARMACY/DRUG STORE 37 OTHER PRIVATE MEDICAL 36
		(SPECIFY)	(SPECIFY)	(SPECIFY)
		OTHER SOURCE HOME 41 WORKPLACE 42 SHOP 43 TRADITIONAL PRACTITIONER PRACTITIONER 44	OTHER SOURCE 41 HOME 41 WORKPLACE 42 SHOP 43 TRADITIONAL PRACTITIONER OTHER 06	OTHER SOURCE 41 HOME 41 WORKPLACE 42 SHOP 43 TRADITIONAL 9 PRACTITIONER 44
		OTHER 96 (SPECIFY)	OTHER 96 (SPECIFY)	OTHER 96 (SPECIFY)
418	Have you ever been told by a doctor or other health worker that you have high blood pressure or hypertension?	YES 1 NO 2 (GO TO 420A)	YES 1 NO	YES 1 NO 2 (GO TO 420A)

		MAN 1	MAN 2	MAN 3		
	NAME FROM COLUMN 2	NAME	NAME	NAME		
418A	Who told you?	HEALTH PERSONNEL QUALIFIED DOCTOR A NURSE/MIDWIFE/ PARAMEDIC B FAMILY WELFARE VISITOR (FWV) C COMMUNITY SKILLED BIRTH ATTENDANT (CSBA) D SUB-ASSISTANT COMMUNITY MEDICAL OFFICER (SACMO) E COMMUNITY HEALTH CARE PROVIDER (CHCP) F HEALTH ASSISTANT (HA) G FAMILY WELFARE ASSISTANT (FWA) H NGO WORKER I OTHER PERSON UNQUALIFIELD DOCTOR	HEALTH PERSONNEL QUALIFIED DOCTOR A NURSE/MIDWIFE/ PARAMEDIC B FAMILY WELFARE VISITOR (FWV) C COMMUNITY SKILLED BIRTH ATTENDANT (CSBA) D SUB-ASSISTANT COMMUNITY MEDICAL OFFICER (SACMO) E COMMUNITY HEALTH CARE PROVIDER (CHCP) F HEALTH ASSISTANT (HA) G FAMILY WELFARE ASSISTANT (FWA) MGO WORKER I OTHER PERSON UNQUALIFIELD DOCTOR	HEALTH PERSONNEL QUALIFIED DOCTOR NURSE/MIDWIFE/ PARAMEDIC FAMILY WELFARE VISITOR (FWV) COMMUNITY SKILLED BIRTH ATTENDANT (CSBA) SUB-ASSISTANT COMMUNITY MEDICAL OFFICER (SACMO) COMMUNITY HEALTH CARE PROVIDER (CHCP) HEALTH ASSISTANT (HA) FAMILY WELFARE ASSISTANT (FWA) NGO WORKER UNQUALIFIELD DOCTOR		
		RELATIVES M NEIGHBORS/FRIENDS N OTHER X SPECIFY	RELATIVES M NEIGHBORS/FRIENDS N OTHER X SPECIFY	RELATIVES NEIGHBORS/FRIENDS OTHER SPECIFY		
419	Are you currently receiving any of the following treatment/ advice by a doctor or other health worker to control your blood pressure?	YES NO	YES NO	YES NO		
	Prescribed medication?	PRESCR. MEDIC 1 2	PRESCR. MEDIC 1 2	PRESCR. MEDIC 1 2		
	Advice to reduce salt intake?	REDUCE SALT 1 2	REDUCE SALT 1 2	REDUCE SALT 1 2		
	Advice/treatment to lose weight?	LOSE WEIGHT 1 2	LOSE WEIGHT 1 2	LOSE WEIGHT 1 2		
	Advice/treatment to stop smoking? Advice to start/do more	STOP SMOKING 1 2	STOP SMOKING 1 2	STOP SMOKING 1 2		
	exercise?	EXERCISE 1 2	EXERCISE 1 2	EXERCISE 1 2		
420	Are you currently taking any herbal or traditional remedies for your high blood pressure?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2		
420A	CHECK 410: CONSENT FOR BP MEASUREMENT	'GRANTED' 'REFUSED' CODE '1' CODE '2' CIRCLED CIRCLED ↓ (SKIP TO 426) ↓	'GRANTED' 'REFUSED' CODE '1' CODE '2' CIRCLED CIRCLED (SKIP TO 426) ←	'GRANTED' 'REFUSED' CODE '1' CODE '2' CIRCLED CIRCLED (SKIP TO 426)		

		MAN 1	MAN 2	MAN 3	
	NAME FROM COLUMN 2	NAME	NAME	NAME	
421	HEALTH TECHNICIAN: CHEC	K THAT IT HAS BEEN AT LEAST 5 MI	NUTES BEFORE TAKING THE SECOND	BLOOD PRESSURE MEASUREMENT.	
422	RECORD TIME	HOURS	HOURS	HOURS	
423	May I take your blood pressure this time?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2	
424	TAKE THE SECOND BLOOD PRESSURE READING. RECORD THE SYSTOLIC AND DIASTOLIC PRESSURE, THEN PROCEED TO 426.	SYSTOLIC	SYSTOLIC	BLOOD PRESSURE MEASUREMENT	
	IF YOU ARE UNABLE TO MEASURE RESPONDENT'S BLOOD PRESSURE, RECORD REASON BLOOD PRESSURE WAS NOT MEASURED	DIASTOLIC	DIASTOLIC	DIASTOLIC	
		OTHER	OTHER	OTHER	
426	Have you ever heard of an illness called diabetes?	YES 1 NO 2 REFUSED . 4	YES 1 1 NO 2 2 REFUSED . 4	YES1 NO	
427	Before this survey, has your blood glucose ever been measured?	YES 1 NO 2 (GO TO 431) 4 REFUSED 4 (GO TO 431) 4	YES 1 NO 2 (GO TO 431) REFUSED . 4 (GO TO 431)	YES 1 NO 2 (GO TO 431) REFUSED . 4 (GO TO 431) ↓	
427A	When did you check your blood glucose last?	DAYS AGO 1 WEEKS AGO 2 MONTHS AGC 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGC 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGC 3 YEARS AGO 4	

		MAN 1	MAN 2	MAN 3
	NAME FROM COLUMN 2	NAME	NAME	NAME
427B	Where did you check your blood glucose last?	PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL 11 SPECIALIZED GOVT HOSPITAL 12 DISTRICT HOSPITAL 13 MCWC 14 UPAZILA HEALTH 15 UH & FAMILY WELFARE 17 COMMUNITY CLINIC 18 SATELLITE CLINIC 19 GOVT. FIELDWORKER (HA & FWA) 20 OTHER PUBLIC SECTOR 16	PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL 11 SPECIALIZED GOVT HOSPITAL 12 DISTRICT HOSPITAL 13 MCWC 14 UPAZILA HEALTH 15 UH & FAMILY WELFARE 17 COMMUNITY CLINIC 18 SATELLITE CLINIC 19 GOVT. FIELDWORKER (HA & FWA) 20 OTHER PUBLIC SECTOR 16	PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL 11 SPECIALIZED GOVT HOSPITAL 12 DISTRICT HOSPITAL 13 MCWC 14 UPAZILA HEALTH COMPLEX COMPLEX 15 UH & FAMILY WELFARE 17 COMMUNITY CLINIC 18 SATELLITE CLINIC 19 GOVT. FIELDWORKER (HA & FWA) 20 OTHER PUBLIC SECTOR 16 (SPECIFY) 16
		NGO SECTOR NGO STATIC CLINIC	NGO SECTOR NGO STATIC CLINIC 21 NGO SATELLITE CLINIC 22 NGO DEPO HOLDER 23 NGO FIELD WORKER 24 OTHER NGO SECTOR26 (SPECIFY)	NGO SECTOR NGO STATIC CLINIC
		PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL . 31 PRIVATE HOSPITAL 32 PRIVATE CLINIC 33 QUALIFIED DOCTOR'S CHAMBER	PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL 31 PRIVATE HOSPITAL 32 PRIVATE CLINIC 33 QUALIFIED DOCTOR'S CHAMBER	PRIVATE MEDICAL SECTOR PRIVATE MEDICAL COLLEGE HOSPITAL
		OTHER SOURCE HOME 41 WORKPLACE 42 SHOP 43 TRADITIONAL PRACTITIONER 44	OTHER SOURCE HOME	OTHER SOURCE HOME 41 WORKPLACE 42 SHOP 43 TRADITIONAL PRACTITIONER 44
		OTHER 96 96	OTHER 96 96	OTHER 96 96
		OTHER 96 (SPECIFY) 96	OTHER 96 (SPECIFY)	OTHER(SPECIFY)
428	Have you ever been told by a doctor or other health worker	YES 1	YES 1	YES 1
	that you have high blood sugar or diabetes?	NO 2 (GO TO 431)	NO 2 (GO TO 431) ←	NO2 (GO TO 431) ← 2

		MAN 1	MAN 2	MAN 3			
	NAME FROM COLUMN 2	NAME	NAME	NAME			
428A	Who told you?	HEALTH PERSONNEL QUALIFIED DOCTOR A NURSE/MIDWIFE/ PARAMEDIC B FAMILY WELFARE VISITOR (FWV) C COMMUNITY SKILLED BIRTH ATTENDANT D SUB-ASSISTANT COMMUNITY MEDICAL OFFICER C (SACMO) E COMMUNITY HEALTH CARE PROVIDER (CHCP) F HEALTH ASSISTANT (HA) G FAMILY WELFARE ASSISTANT (FWA) H NGO WORKER I OTHER PERSON UNQUALIFIELD DOCTOR L RELATIVES M NEIGHBORS/FRIENDS N OTHER X	NURSE/MIDWIFE/ PARAMEDIC B FAMILY WELFARE VISITOR (FWV) C COMMUNITY KILLED BIRTH ATTENDANT (CSBA) D SUB-ASSISTANT COMMUNITY MEDICAL OFFICER (SACMO) E COMMUNITY HEALTH CARE PROVIDER (CHCP) F HEALTH ASSISTANT (HA) G FAMILY WELFARE ASSISTANT (FWA) H NGO WORKER I OTHER PERSON M UNQUALIFIELD DOCTOR L RELATIVES M NEIGHBORS/FRIENDS N	HEALTH PERSONNEL QUALIFIED DOCTOR A NURSE/MIDWIFE/ PARAMEDIC B FAMILY WELFARE VISITOR (FWV) C COMMUNITY SKILLED BIRTH ATTENDANT D SUB-ASSISTANT COMMUNITY MEDICAL OFFICER C (SACMO) E COMMUNITY HEALTH CARE PROVIDER (CHCP) F HEALTH ASSISTANT (HA) G FAMILY WELFARE ASSISTANT (FWA) H NGO WORKER I OTHER PERSON UNQUALIFIELD DOCTOR L RELATIVES M NEIGHBORS/FRIENDS N			
429	Are you currently receiving any of the following treatment/ advice by a doctor or other health worker for your high blood glucose or diabetes? Prescribed medication such as insulin? Advice on special diet? Advice/treatment to lose weight? Advice/treatment to stop smoking?	YES NO PRESCR. MEDIC 1 2 SPECIAL DIET 1 2 LOSE WEIGHT 1 2 STOP SMOKING 1 2	PRESCR. MEDIC12SPECIAL DIET12LOSE WEIGHT12STOP SMOKING12	YES NO PRESCR. MEDIC 1 2 SPECIAL DIET 1 2 LOSE WEIGHT 1 2 STOP SMOKING 1 2			
430	Advice to start/do more exercise? Are you currently taking any	EXERCISE 1 2	EXERCISE 1 2	EXERCISE 1 2			
430	herbal or traditional remedies for your high blood glucose or diabetes?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2			
431	HEALTH TECHNICIAN: CHEC	K THAT IT HAS BEEN AT LEAST 5 MINUTES BEFORE TAKING THE THIRD BLOOD PRESSURE MEASUREMENT.					
432	RECORD TIME	HOURS	HOURS	HOURS			
433	May I take your blood pressure this time?	YES 1 NO 2	YES 1 NO 2	YES 1 NO 2			

		MAN 1		MAN 2			MAN 3		
	NAME FROM COLUMN 2	NAME		NAME	NAME		NAME	NAME	
434	TAKE THE THIRD BLOOD PRESSURE READING.	BLOOD PRESSURE	MEASUREMEN	BLOOD P	RESSURE	IEASUREMENT	BLOOD PRESS	JRE MEASUREMENT	
	RECORD THE SYSTOLIC AND DIASTOLIC PRESSURE, THEN PROCEED TO 436A.	SYSTOLIC		SYSTOLIC			SYSTOLIC		
	IF YOU ARE UNABLE TO MEASURE RESPONDENT'S BLOOD PRESSURE,	DIASTOLIC		DIASTOLI			DIASTOLIC		
	RECORD REASON BLOOD PRESSURE WAS NOT	REFUSED	994	REFUSED		994	REFUSED		
	MEASURED.	TECHNICAL PROBL	EMS 995	TECHNIC	AL PROBLE	MS 995	TECHNICAL PR	OBLEMS 995	
		OTHER		OTHER .		996	OTHER		
435A	CALCULATE THE AVERAGE OF THE SYSTOLIC AND DIASTOLIC BP READINGS	AVERAGE OF 2 ND A MEASURES:	ND 3 RD	AVERAGE MEASURE	E OF 2 ND AN ES:	D 3 ^{KU}	AVERAGE OF 2 MEASURES:	ND 3 ^{KD}	
	FROM 424 AND 434. (1) CALCULATE THE SUM OF SYSTOLIC AND DIASTOLIC MEASURES IN 424 AND 434.	SYSTOLIC		SYSTOLIC	S		SYSTOLIC		
	(2) DIVIDE EACH SUM BY 2 AND RECORD THE AVERAGE.	DIASTOLIC		DIASTOLI	c		DIASTOLIC		
	PLEASE NOTE:								
	(1) IF THERE IS ONLY ONE B	P READING, RECORD	IT AS THE AVE	RAGE.					
	(2) IF THERE IS MORE THAN	ONE BP READING, AL	WAYS EXCLUD	E THE FIRS	T FROM TH	E AVERAGE.			
	(3) IF THERE ARE ONLY TWO	BP READINGS, THE	2ND IS THE AVE	ERAGE.					
	(4) IF ALL DIASTOLIC VALUES	ARE '0', THE AVERA	GE IS '0'.						
435B	USE THE TABLE BELOW T	O MAKE THE CORF	RECT REFERF	RAL BASED	ON AVER	AGE VALUES	IN 435A		
	A	OULT BLOOD PRES	SURE VALUE	BOX:					
	SYSTOLIC	DIAS	TOLIC						
		≤ 84 85-8		100-109	110-119	≥120			
	≤129 130-139	1 2 2 2		4 4	5 5	6 6			
	140-159	3 3	3 3	4	5 5	6			
	160-179	4 4	4	4	5	6			
	180-209	5 5	5	5	5	6			
	≥210	6 6	6	6	6	6			
	CIRCLE AVERAGE VALUES F A HORIZONTAL LINE IN THE S CIRCLE THE VALUE WHERE CIRCLE THE SAME VALUE CO	SYSTOLIC PRESSURE THE LINES MEET.	ROW AND A V	ERTICAL LIN	NE IN THE D	DIASTOLIC PRES	SURE COLUMN.		
436A	ASK CONSENT FOR FASTING	BLOOD SUGAR TES	TING						
	As part of this survey, we are as your risk associated with some to prevent and treat high and loo	non-communicable dise	-	-		-	-		
	For the blood glucose testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for glucose immediately, and the result will be told to you right away for further follow up, if necessary. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. The results will be given to you with an explanation of the meaning of your blood glucose numbers.					t will be other			
	If your blood glucose is high, we treatment during the survey.	e will suggest that you c	onsult a health fa	cility or docto	or since we c	annot provide an	y counselling, furthe	er testing or	
	Do you have any questions? If y	ou have any questions	about the proced	lure at any tir	ne, please a	sk me.			
	To obtain correct blood glucose my blood glucose testing visit.	measurement, we wou	ld ask that you d	o not eat or d	rink anything	g except plain wa	ter for at least 8 hou	urs prior to	
	Would you allow me to return to	take your blood glucos	e measurement	before you br	eak your fas	t?			

		MAN 1	MAN 2	MAN 3	
	NAME FROM COLUMN 2	NAME	NAME	NAME	
436B	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	1 ST APP. GRANTED 1 REFUSED 2 (SIGN AND GO TO 436K) ←	1 ST APP. GRANTED 1 REFUSED 2 (SIGN AND GO TO 436K)	1 ST APP. GRANTED 1 REFUSED 2 (SIGN AND GO TO 436K) ←	
	(IF 'NOT PRESENT' IN THE	SIGN	SIGN	SIGN	
	1 ^{SI} APPOINTMENT, MAKE A 2 ^{NU} APPOINTMENT; MAKE	RESP. NOT PRESENT 3 (MAKE SECOND J APPOINTMENT)	RESP. NOT PRESENT 3 (MAKE SECOND J APPOINTMENT)	RESP. NOT PRESENT 3 (MAKE SECOND ← J APPOINTMENT)	
	A 3 RD APPOINTMENT.)		2 ND APP. GRANTED 1 REFUSED 2 (SIGN AND GO TO 436K)	,	
		SIGN	SIGN	SIGN	
		RESP. NOT PRESENT 3 (MAKE THIRD 4 APPOINTMENT)	RESP. NOT PRESENT 3 (MAKE THIRD 4 APPOINTMENT)	RESP. NOT PRESENT 3 (MAKE THIRD J APPOINTMENT) —	
		3 RD APP. GRANTED 1 REFUSED 2 (SIGN AND GO TO 436K)	3 RD APP. GRANTED 1 REFUSED 2 (SIGN AND GO TO 436K) ←	3 RD APP. GRANTED 1 REFUSED 2 (SIGN AND GO TO 436K)	
		SIGN	SIGN	SIGN	
		RESP. NOT PRESENT 3 (GO TO 401 IN NEXT COLUMN. IF NO MORE RESPONDENT, END)	RESP. NOT PRESENT 3 (GO TO 401 IN NEXT J COLUMN. IF NO MORE RESPONDENT, END)	RESP. NOT PRESENT 3 (GO TO 401 IN NEXT – COLUMN. IF NO MORE RESPONDENT, END)	
436C	When can I come to test your blood glucose?	1 ST APP. DATE	1 ST APP. DATE	1 ST APP. DATE	
	RECORD APPOINTMENT FOR BLOOD GLUCOSE	HOUR	HOUR	HOUR	
	TESTING AND PROCEED TO NEXT SECTION	MINUTES.	MINUTES.	MINUTES.	
		2 [№] APP. DATE	2 ^{NU} APP. DATE	2 [№] APP. DATE	
		HOUR	HOUR	HOUR	
		MINUTES.	MINUTES.	MINUTES.	
		3 ^{ĸ⊔} APP. DATE	3 ^{KU} APP. DATE	3 ^{ĸ⊔} APP. DATE	
		HOUR	HOUR	HOUR	
		MINUTES.	MINUTES.	MINUTES.	

		MAN 1	MAN 2	MAN 3	
	NAME FROM COLUMN 2	NAME	NAME	NAME	
436D	As I mentioned yesterday, we a a blood glucose test. Your gluco This survey will assist the gover For the blood glucose testing, w It has never been used before a SHOW UNOPENED PACKAGE The blood will be tested for gluc strictly confidential and will not t of the meaning of your blood glu provide any counselling, further You can say yes or no to having	cose immediately, and the result will be told to you right away for further follow up, if necessary. The result will be kept othe be shared with anyone other than members of our survey team. The results will be given to you with an explanation ucose numbers. If your blood glucose is high, we will suggest that you consult a health facility or doctor since we cannot testing or treatment during the survey. g the blood glucose measurement now. you have any questions about the procedure at any time, please ask me.			
436E	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAMI (IF 'NOT PRESENT' MAKE 2 MORE CALL BACKS TO FIND THE RESPONDENT)	(SIGN AND GO TO 436K) SIGN	GRANTED 1 1 REFUSED 2 (SIGN AND GO TO 436K) 2 SIGN 3 RESP. NOT PRESENT 3 (AFTER TWO CALL 4 BACKS, GO TO 401 IN NEXT COLUMN. IF NO MORE RESPONDENT, END)		
436F	When was the last time you had something to eat?	HOURS MINUTES 1 ST APP. 2 ND APP. 3 RD APP.	HOURS MINUTES 1 ST APP.	HOURS MINUTES 1 ST APP.	

		MAN 1	MAN 2	MAN 3		
	NAME FROM COLUMN 2	NAME	NAME	NAME		
436G	When was the last time you had something to drink other than plain water?	HOURS MINUTES	HOURS MINUTES	HOURS MINUTES		
		2 ND APP.	2 ND APP.	2 ND APP.		
		3 RD APP.	3 RD APP.	3 RD APP.		
436H	CHECK436F: LAST TIME EAT	8 HOURS OR MORE 1 SKIP TO 436II 4 LESS THAN 8 HOURS 2	8 HOURS OR MORE 1 SKIP TO 436II J LESS THAN 8 HOURS 2	8 HOURS OR MORE 1 SKIP TO 436II J LESS THAN 8 HOURS 2		
4361	READ TO RESPONDENT:	As mentioned before, in order to obtain correct blood glucose measurement, we need you to fast for at least 8 hours prior to testing.	As mentioned before, in order to obtain correct blood glucose measurement, we need you to fast for at least 8 hours prior to testing.	As mentioned before, in order to obtain correct blood glucose measurement, we need you to fast for at least 8 hours prior to testing.		
		GO TO 436B TO MAKE NEXT APPOINTMENT	GO TO 436B TO MAKE NEXT APPOINTMENT	GO TO 436B TO MAKE NEXT APPOINTMENT		
436II	PREPARE EQUIPMENT AND	SUPPLIES FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE BLOOD GLUCOSE TEST.				
436J	RECORD TIME FOR BLOOD GLUCOSE TESTING	DAY	DAY	DAY		
		YEAR .	YEAR .	YEAF.		
		HOURS	HOURS	HOURS		
436K	RECORD FASTING BLOOD SUGAR IN MMOL/L.	MMOL/L	MMOL/L	MMOL/L		
	IF YOUR ARE UNABLE TO MEASURE RESPONDENT'S BLOOD GLUCOSE, RECORD REASON BLOOD GLUCOSE IS NOT MEASURED	(GO TO 401 IN NEXT COLUMN. IF NO MORE RESPONDENT, END) REFUSED	(GO TO 401 IN NEXT COLUMN. IF NO MORE RESPONDENT, END) REFUSED	(GO TO 401 IN NEXT COLUMN. IF NO MORE RESPONDENT, END) REFUSED		
		OTHER	OTHER	OTHER		

FIELDWORKER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING BIOMARKERS

<u>-</u>
SUPERVISOR'S OBSERVATIONS
EDITOR'S OBSERVATIONS

BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY 2017-18 VERBAL AUTOPSY FORM 1 FOR NEONATAL DEATHS (0-28 DAYS OF AGE)

NIPORT, MOHFW
icddr,b
Mitra and Associates

IDENTIFICATION			
CLUSTER NUMBER			
HOUSEHOLD NUMBER			
RURAL = 1, CITY CORPORATION (CC) = 2,	OTHER THAN CC = 3		
NAME OF HOUSEHOLD HEAD			
NAME AND LINE NUMBER OF RESPONDENT			
NAME AND LINE NUMBER OF DEAD CHILD			

INTERVIEWER VISITS					
1 2 3 FINAL VISIT				NAL VISIT	
DATE				DAY MONTH	2 0 1
INTERVIEWER'S NAME RESULT [*]				INT. NUMBER RESULT	
NEXT VISIT: DATE				IN TOTAL NUM OF VISITS	IT. NUMBER
*RESULT CODES: 1 COMPLETED 5 MOTHER OR KNOWLEDGABLE RESPONDENT REFUSED 2 NO HOUSEHOLD MEMBER AT HOME 6 DWELLING VACANT/DESTROYED/NOT FOUND 3 MOTHER/KNOWLEDGABLE RESPONDENT NOT PRESENT 4 MOTHER OR KNOWLEDGABLE RESPONDENT 7 OTHER POSTPONED (SPECIFY)					
SUPERVISOR				OFFICE EDITOR	KEYED BY
NAME DATE		DATE			

NTRODUCTION AND CONSENT

Introductory statement:

My name is _______. I am working for Mitra and Associates, a private research organization located in Dhaka. We are conducting a survey about health all over Bangladesh under the authority of the National Institute of Population Research and Training (NIPORT), Medical Education and Family Welfare Division, Ministry of Health and Family Welfare (MOHFW). Your household was selected for the survey.We are collecting information on the causes of death in the community. This information will help the government to plan health and family planning services. We would very much appreciate your participation in this survey. We learned during our earlier visit that (NAME) had died recently. As part of the survey we want to ask you about the circumstances leading to the death of the (NAME). The questions usually take about 30-45 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

Why is the study being done?

The survey aims to provide information to address the monitoring and evaluation needs of the Fourth Health, Population and Nutrition Sector Program (HPNSP) and to provide managers and policy makers involved in this program with the information that they need to effectively plan and execute future interventions.

What is involved in the study?

You have been selected as a respondent in this survey. I would like to ask you some questions about the circumstances leading to the death of your child.

What will you have to do if you agree to participate?

Since you have been selected as a respondent in this study, I shall be thankful if you provide your valuable response on certain issues. If some questions cause you embarrassment or make you feel uncomfortable, you can refuse to answer them.

What are the risks and benefits of this study?

By providing information you will not have any risk <u>whatsoever</u>, rather this will help the government and policy planners to evaluate, strengthen and refocus national effort to improve health, population and nutrition programs.

Confidentiality:

Whatever information you provide will be kept strictly confidential. It will be used for research purposes and will be seen only by staff and researchers at the organizations mentioned.

Is there any compensation for participating in the study?

Your participation in the study is voluntary and promises no financial benefit.

Right to refuse or withdraw:

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

Who do I contact if I have a question or problem?

If you wish to know more about your rights as a participant in this study you may write the Bangladesh Medical Research Council (BMRC), Mohakhali, Dhaka or Mitra and Associates, Main Road 1, House 35, Senpara Parbata, Mirpur 10, Dhaka or Phone 9025410, 9025412. If you have further questions regarding the nature of this study you may also contact NIPORT, 13/1 Sheikh Shaheb Bazar, Azimpur, Dhaka-1205 or Phone 9662495, 58611206.

At this time, do you want to ask me anything about the survey?

SIGNATURE OF INTERVIEWER

RESPONDENT AGREES TO BE INTERVIEWED . .

1

DATE

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . 2 -----> END

SECTION 2. BASIC INFORMATION ABOUT RESPONDENT 200 COPY NAME OF DECEASED CHILD FROM Q. 212 OF WOMAN'S QUESTIONNAIRE	NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP	
QUESTIONNARE (NAME) 201 RECORD THE TIME AT START OF INTERVIEW FILL BOTH BOXES HOURS 202 NAME OF THE RESPONDENT 203 What is your relationship to (NAME)? 204 Did you live with (NAME) in the period leading to her/his death? 204 Did you live with (NAME) in the period leading to her/his death? 205 SECTION 3. INFORMATION ON THE DECEASED AND DATE/PLACE OF DEATH 302 Was (NAME) female or male? 7 FEMALE 303 CHECK 215: NAME'S DATE OF BIRTH RECORD DATE OF BIRTH OF THE DECEASED FROM Q. 215 OF WOMAN'S QUESTIONNARE. 303A In what season did (NAME) die? 303A In what season did (NAME) die?	SECTION 2. BASIC INFORMATION ABOUT RESPONDENT				
(NAME) (NAME) (NAME) RECORD THE TIME AT START OF INTERVIEW FILL BOTH BOXES MINUTES MINUTES (NAME OF THE RESPONDENT (NAME) COLSPANE COLSPANE 202 NAME OF THE RESPONDENT (NAME) COLSPANE COLSPANE 203 What is your relationship to (NAME)? FATHER	200				
FILL BOTH BOXES HOURS 202 NAME OF THE RESPONDENT 203 What is your relationship to (NAME)? 204 Did you live with (NAME) in the period leading to her/his death? 204 Did you live with (NAME) in the period leading to her/his death? 204 Did you live with (NAME) in the period leading to her/his death? 205 SECTION 3. INFORMATION ON THE DECEASED AND DATE/PLACE OF DEATH 302 Was (NAME) female or male? FEMALE 1 303 CHECK 215: NAME'S DATE OF BIRTH RECORD DATE OF BIRTH OF THE DECEASED FROM Q. 215 DAY MONTH YEAR 303A In what season did (NAME) die? 303A In what season did (NAME) die?		QUESTIONNAIRE	(NAME)		
FILL BOTH BOXES MINUTES Image: Control of the cont	201	RECORD THE TIME AT START OF INTERVIEW			
202 NAME OF THE RESPONDENT (NAME) 203 What is your relationship to (NAME)? FATHER		FILL BOTH BOXES	HOURS		
203 What is your relationship to (NAME)? FATHER			MINUTES		
203 What is your relationship to (NAME)? FATHER	202	NAME OF THE RESPONDENT			
MOTHER 2 SIBLING 3 OTHER RELATION 4 OTHER RELATIVE 6 (SPECIFY) 6 204 Did you live with (NAME) in the period leading to her/his death? YES 204 Did you live with (NAME) in the period leading to her/his death? YES 302 Was (NAME) female or male? FEMALE 302 Was (NAME) female or male? FEMALE 303 CHECK 215: NAME'S DATE OF BIRTH 1 RECORD DATE OF BIRTH OF THE DECEASED FROM Q. 215 DAY MONTH OF WOMAN'S QUESTIONNARE. DAY MONTH YEAR 303A In what season did (NAME) die? SUMMER 1 303A In what season did (NAME) die? SUMMER 1 MONSOON 2 AUTUMN 3 LATE AUTUMN 4 WINTER 5 SPRING 6			(NAME)		
SIBLING	203	What is your relationship to (NAME)?			
OTHER RELATIVE			SIBLING 3		
(SPECIFY) (SPECIFY) (SPECIFY) 204 Did you live with (NAME) in the period leading to her/his death? YES					
NO 2 SECTION 3. INFORMATION ON THE DECEASED AND DATE/PLACE OF DEATH 302 Was (NAME) female or male? FEMALE 1 MALE 2 303 CHECK 215: NAME'S DATE OF BIRTH RECORD DATE OF BIRTH OF THE DECEASED FROM Q. 215 Image: Control of the deceased from Q. 215 OF WOMAN'S QUESTIONNARE. DAY RECORD '98' IF DON'T KNOW DAY OR MONTH DAY RECORD '998' IF DON'T KNOW YEAR SUMMER 303A In what season did (NAME) die? Juit UMN 3 LATE AUTUMN 4 WINTER 5 SPRING 6			OTHER RELATIVE6 (SPECIFY) 6		
SECTION 3. INFORMATION ON THE DECEASED AND DATE/PLACE OF DEATH 302 Was (NAME) female or male? FEMALE	204	Did you live with (NAME) in the period leading to her/his death?	YES 1		
302 Was (NAME) female or male? FEMALE			NO 2		
MALE 2 303 CHECK 215: NAME'S DATE OF BIRTH RECORD DATE OF BIRTH OF THE DECEASED FROM Q. 215 Image: Composition of the deceased from Q. 215 OF WOMAN'S QUESTIONNARE. DAY RECORD '98' IF DON'T KNOW DAY OR MONTH DAY MALE Image: Composition of the deceased from Q. 215 303A In what season did (NAME) die? SUMMER 1 MONSOON 2 AUTUMN 3 LATE AUTUMN 4 WINTER 5 SPRING 6	SECTI	ON 3. INFORMATION ON THE DECEASED AND DATE/PLACE OF D	EATH		
303 CHECK 215: NAME'S DATE OF BIRTH RECORD DATE OF BIRTH OF THE DECEASED FROM Q. 215 Image: Composition of the deceased from Q. 215 OF WOMAN'S QUESTIONNARE. DAY RECORD '98' IF DON'T KNOW DAY OR MONTH DAY MONTH YEAR 303A In what season did (NAME) die? SUMMER 1 MONSOON 2 AUTUMN 3 LATE AUTUMN 4 WINTER 5 SPRING 6	302	Was (NAME) female or male?	FEMALE 1		
RECORD DATE OF BIRTH OF THE DECEASED FROM Q. 215 OF WOMAN'S QUESTIONNARE. DAY MONTH YEAR RECORD '98' IF DON'T KNOW DAY OR MONTH RECORD '9998' IF DON'T KNOW YEAR DAY MONTH YEAR 303A In what season did (NAME) die? SUMMER 1 MONSOON 2 AUTUMN 3 LATE AUTUMN 4 WINTER 5 SPRING 6			MALE 2		
OF WOMAN'S QUESTIONNARE. DAY MONTH YEAR BAY MONTH YEAR SUMMER 1 303A In what season did (NAME) die? SUMMER 1 MONSOON AUTUMN 3 1 AUTUMN MONTH 4 WINTER 5 5 SPRING 6	303	CHECK 215: NAME'S DATE OF BIRTH			
RECORD '9998' IF DON'T KNOW YEAR SUMMER 1 303A In what season did (NAME) die? SUMMER 1 MONSOON 2 AUTUMN 3 LATE AUTUMN 4 WINTER 5 SPRING 6 5					
MONSOON 2 AUTUMN 3 LATE AUTUMN 4 WINTER 5 SPRING 6			DAY MONTH YEAR		
AUTUMN 3 LATE AUTUMN 4 WINTER 5 SPRING 6	303A	In what season did (NAME) die?	SUMMER 1		
LATE AUTUMN			MONSOON 2		
WINTER 5 SPRING 6			AUTUMN 3		
SPRING			LATE AUTUMN 4		
			WINTER 5		
DON'T KNOW			SPRING6		
			DON'T KNOW 8		
304 How old was (NAME) when s/he died?	304				
IF LESS THAN ONE DAY RECORD '00'		IF LESS THAN ONE DAY RECORD '00'	DAYS		
305 When did (NAME) die?	305	When did (NAME) die?			
RECORD '98' IF DON'T KNOW DAY OR MONTH DAY MONTH YEAR		RECORD '98' IF DON'T KNOW DAY OR MONTH			
RECORD '9998' IF DON'T KNOW YEAR		RECORD '9998' IF DON'T KNOW YEAR			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
306	CHECK 304: AGE AT DEATH AGE AT DEATH 29 DAYS 0-28 DAYS AND ABOVE	□,	USE VA
307	Where did (NAME) die?	HOSPITAL 1 OTHER HEALTH FACILITY 2 ON THE WAY TO A HEALTH FACILITY OR 3 TO A PROVIDER 3 HOME 4 OTHER 6 (SPECIFY) 8	FORM 2
SECT	ON 4. RESPONDENT'S ACCOUNT OF ILLNESS/EVENTS LEADING	TO DEATH	1
401	Could you tell me about the illness/events that led to (NAME)s death?		
402	CAUSE OF DEATH 1 ACCORDING TO RESPONDENT		
403	CAUSE OF DEATH 2 ACCORDING TO RESPONDENT		
403A	INCUBATOR LUNG PROBLEM	A B C D E	

	AND FILTERS
QUESTIONS	AND FILLERS

CODING CATEGORIES

SECT	ION 5. PREGNANCY HISTORY	
501	I would like to ask you some questions concerning you when you were pre- shortly after delivery of (NAME). Some of these questions may not appear to be directly related to (NAME's Please answer all the questions.The answers will help us to get a clear pice	s) death.
502	How many births, including stillbirths, did you have before (NAME)?	NUMBER OF BIRTHS/ STILLBIRTHS
503	How many months or weeks was the pregnancy when (NAME) was born?	MONTHS 1
		WEEKS
504	Did the pregnancy with (NAME) end earlier than expected?	YES
505	How many weeks before the expected date of delivery was (NAME) born?	WEEKS
		DON'T KNOW98
506	During the pregnancy with (NAME) did you suffer from:	YES NO DK
	 High blood pressure? Heart disease? Diabetes? Epilepsy/convulsion? Did she suffer from any other medically diagnosed illness? 	HIGH BLOOD PRESSURE 1 2 8 HEART DISEASE 1 2 8 DIABETES 1 2 8 EPILEPSY/CONVULSION 1 2 8 OTHER 1 2 8
507	During the last 3 months of pregnancy with (NAME) did you suffer from:	YES NO DK
	01 Vaginal bleeding?	VAGINAL BLEEDING 1 2 8
	02 Smelly vaginal discharge?	SMELLY VAGINAL DISCHARGE 1 2 8
	03 Puffy face?	PUFFY FACE 1 2 8
	04 Headache?	HEADACHE 1 2 8
	05 Blurred vision?	BLURRED VISION 1 2 8
	06 Convulsion?	CONVULSION 1 2 8
	07 Febrile illness?	FEBRILE ILLNESS 1 2 8
	08 Severe abdominal pain that was not labor pain?	SEVERE ABDOMINAL PAIN (NOT LABOR PAIN)
	09 Pallor and shortness of breath (both present)?	PALLOR/SHORTNESS OF BREATH (BOTH) 1 2 8
	10 Did she suffer from any other illness?	OTHER ILLNESS 1 2 8 (SPECIFY)
500		
508	Was (NAME) a single or multiple birth?	SINGLE 1 + 601 TWIN 2 TRIPLET OR MORE 3 DON'T KNOW 8 + 601
509	What was the birth order of (NAME)?	FIRST 1 SECOND 2 THIRD OR HIGHER 3 DON'T KNOW 8

QUESTIONS AND FILTERS

SKIP

SECT	ION 6. DELIVERY HISTORY	
601	Where was (NAME) born?	HOSPITAL 1 OTHER HEALTH FACILITY 2 HOME 3 OTHER 6 (SPECIFY) DON'T KNOW 8
602	Who assisted with the delivery? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT DURING THE DELIVERY.	HEALTH PERSONNEL QUALIFIED DOCTOR A NURSE/MIDWIFE/ PARAMEDIC B FAMILY WELFARE VISITOR (FWV) C COMMUNITY SKILLED BIRTH ATTENDANT D (CSBA) D SUB-ASSISTANT COMMUNITY MEDICAL D OFFICER (SACMO) E COMMUNITY HEALTH CARE F PROVIDER (CHCP) F HEALTH ASSTANT (HA) G FAMILY WELFARE ASSISTANT H NGO WORKER I OTHER PERSON J UNTRAINED TBA (TTBA) J UNTRAINED TBA (UTBA) K UNQUALIFIED DOCTOR L RELATIVES M NEIGHBOURS/FRIENDS N OTHER X (SPECIFY) Y
603	When did the water break?	BEFORE LABOUR STARTED
604	How many hours after the water broke was (NAME) born?	LESS THAN 24 HOURS 1 24 HOURS OR MORE 2 DON'T KNOW 8
605	Was the water foul smelling?	YES 1 NO 2 DON'T KNOW 8
606	Did (NAME) stop moving in the womb?	YES
607	When did (NAME) stop moving in the womb?	BEFORE LABOR STARTED 1 DURING LABOR 2 DON'T KNOW 8
608	Did (PERSON WHO ASSISTED DELIVERY IN 602) listen for fetal heart sounds during labor?	YES 1 NO 2 DON'T KNOW 8
609	Were fetal heart sounds present?	YES
610	Was there excess bleeding on the day labor started or during delivery?	YES
611	Did (NAME)'s mother have a fever on the day labor started?	YES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
612	How long did the labor pains last?	LESS THAN 12 HOURS 1 12-23 HOURS 2 24 HOURS OR MORE 3 DID NOT HAVE LABOR PAIN 4 DON'T KNOW 8	
613	Was it a normal vaginal delivery?	YES	↔ 615 ↔615
614	What type of delivery was it?	FORCEPS/VACUUM 1 CAESAREAN SECTION 2 OTHER 6 (SPECIFY) 8	→ 701
615	Which part of (NAME) came first?	HEAD 1 BOTTOM 2 FEET 3 ARM/HAND 4 OTHER 6 (SPECIFY) 8	
616	Did the umbilical cord come out before (NAME) was born?	YES 1 NO	
SECT	ION 7. CONDITION OF THE BABY SOON AFTER BIRTH		
701	At birth what was (NAME)'s size smaller than normal, normal or larger than normal?	SMALLER THAN NORMAL1NORMAL2LARGER THAN NORMAL3DON'T KNOW8	
701A	CHECK 505: (NAME) BORN MORE THAN FOUR WEEKS EARLY?	YES	- 703
702	Was (NAME) born prematurely? CHECK THE ANSWER FROM 504	YES] ∗ 704
703	How many months or weeks along was the pregnancy? CHECK THE ANSWER FROM 503	MONTHS 1 WEEKS 2 DON'T KNOW 998	
704	What was (NAME)'s birth weight?	KILOGRAMS	
705	Was anything applied to the umbilical cord stump after birth?	YES]∗ 707

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
706	What was it? Did (NAME) show any signs of injury or broken bones?	ANTIBIOTICS (POWDER/OINTMT.) A ANTISEPTIC (DETOL/SAVLON/ B HEXISOL) B SPIRIT/ALCOHOL C MUSTARD OIL WITH GARLIC D CHEWED RICE E TUMERIC JUICE/POWDER F GINGER JUICE G SHIDUR H BORIC POWDER I GENTIAN VIOLET (BLUE INK) J TALCUM POWDER K OTHER X SPECIFY DON'T KNOW Z YES YES 1	1
		DON'T KNOW	+ 709
708	Where were marks or signs of injury?		
709	Did (NAME) show any sign of paralysis?	YES	
710	Did (NAME) have any malformation?	YES	→ 712
711	What kind of malformation did (NAME) have?	SWELLING/DEFECT ON THE BACK A VERY LARGE HEAD B VERY SMALL HEAD C DEFECT OF LIP AND/OR PALATE D OTHER X (SPECIFY) Z	
712	What was the colour of (NAME) at birth?	NORMAL 1 PALE 2 BLUE 3 DON'T KNOW 8	
713	Did (NAME) breathe after birth, even a little?	YES	
714	Was (NAME) given assistance to breathe?	YES	
715	Did (NAME) ever cry after birth, even a little?	YES	
716	Did (NAME) ever move, even a little?	YES	
717	CHECK 713, 715, AND 716 FOR CODES 'NO': ALL THREE CODES 'NO': OTHER: THE BABY DIDN'T BREATHE, THE BABY DIDN'T CRY, THE BABY DIDN'T MOVE]	→ 801
718	If (NAME) did not cry, breathe or move, was (NAME) born dead?	YES	+ 801
719	Was (NAME) macerated, that is, showed signs of decay?	YES	1 001

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
SECT	ION 8. HISTORY OF INJURIES/ACCIDENTS		
801	Did (NAME) suffer from any injury or accident that led to her/his death?	YES	- * 804
802	What kind of injury or accident did (NAME) suffer?	ROAD TRAFFIC ACCIDENT 01 FALL 02 DROWNING 03 POISONING 04 BURNS 05 VIOLENCE/ASSAULT 06 FALL FROM HEIGHT 07 INJURED BY FIREARMS 08 STAB INJURY 09 HANGING/STRANGULATION 10 BLUNT FORCE INJURY 11 NATURAL CALAMITIES 12 ELECTROCUTION 13 OTHER 96 (SPECIFY) 98	- → 802C
802A	Where was (NAME) when the accident happened?	PEDESTRIAN 1 IN A CAR/SMALL VEHICLE 2 IN A BUS/LARGE VEHICLE 3 ON A MOTORISED CYCLE 4 ON A NON-MOTORISED CYCLE 5 OTHER 6 (SPECIFY)	
802B	With what other object/person did the road traffic accident happen?	PEDESTRIAN 1 IN A CAR/SMALL VEHICLE 2 IN A BUS/LARGE VEHICLE 3 ON A MOTORISED CYCLE 4 ON A NON-MOTORISED CYCLE 5 OTHER 6 (SPECIFY) 6	
802C	Was (NAME) injured in a non-road traffic accident?	YES	
803	Was the injury intentionally inflicted by someone else?	YES	
804	Did (NAME) suffer from any animal/insect bite that led to her/his death?	YES	-+ 901A
805	What type of animal/insect?	DOG 1 SNAKE 2 INSECT 3 OTHER 6 (SPECIFY) 8	

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IN	U	

QUESTIONS		
QUESTIONS	AND	FILIERS

SECT	ON 9. NEONATAL ILLNESS HISTORY		
901A	How old was (NAME) when the disease or event leading to her/his death started?	DAYS 98	
901B	Before the illness or event that led to her/his death, was (NAME) growing normally?	YES	
901C	For how many days was (NAME) ill before she/he died? IF LESS THAN ONE DAY RECORD '00'.	DAYS 98	
901	Was (NAME) ever able to suckle or bottle-feed?	YES	+∗ 905
902	How soon after birth did (NAME) suckle or bottle-feed?	HOURS	
903	Did (NAME) stop suckling or bottle-feeding?	YES	905
904	How many days after birth did (NAME) stop suckling or bottle-feeding? IF LESS THAN ONE DAY RECORD '00'.	DAYS	
905	Was (NAME) exclusively breastfed?	YES	
906	Did (NAME) have convulsions?	YES	908
907	How soon after birth did the convulsions start? IF LESS THAN ONE DAY RECORD '00'.	DAYS	
908	Did (NAME) become stiff and arched backwards?	YES	
909	Was the soft part at the top of (NAME)'s head (fontanelle) swollen or bulging?	YES] ∗ 910A
910	How many days after birth did (NAME) have the swelling or bulging?	DAYS	
910A	During the illness that led to death was the soft top part of (NAME)'s head (fontanelle) sunken?	YES 1 NO]+911

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
910B	How many days after birth did (NAME) have the sunken top of head?	DAYS	
	IF LESS THAN ONE DAY RECORD '00'.	DON'T KNOW	
911	Did (NAME) become unresponsive or unconscious after birth?	YES	-+912A
912	How many days after birth did (NAME) become unresponsive or unconscious?	DAYS	
	IF LESS THAN ONE DAY RECORD '00'.	DON'T KNOW	
912A	Did (NAME) become unresponsive or unconscious in last illness?	YES	
912B	Did (NAME) become unresponsive or unconscious in 24 hours before she/he died?	YES	
913	Did (NAME) have a fever?	YES	915
914	How many days after birth did (NAME) have a fever?	DAYS	
	IF LESS THAN ONE DAY RECORD '00'.	DON'T KNOW	
914A	Did the fever continue until death?	YES	
915	Did (NAME) become cold to the touch?	YES	917
916	How many days after birth did (NAME) become cold to the touch? IF LESS THAN ONE DAY RECORD '00'.	DAYS	
917	Did (NAME) have a cough?	YES	+919
918	How many days after birth did (NAME) start to cough?	DAYS	
	IF LESS THAN ONE DAY RECORD '00'.	DON'T KNOW	
919	Did (NAME) have fast breathing?	YES	- +921
920	How many days after birth did (NAME) start breathing fast?	DAYS	
	IF LESS THAN ONE DAY RECORD '00'.	DON'T KNOW	
921	Did (NAME) have difficulty breathing?	YES 1 NO 2 DON'T KNOW 8	-+922B
922	How many days after birth did (NAME) start having difficulty in breathing? IF LESS THAN ONE DAY RECORD '00'.	DAYS	
922A	For how many days did the difficulty breathing last?		
JEEN	many days do the annound broating last:	DAYS	
		DON'T KNOW 98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
922B	During the illness that led to death, did (NAME) become lethargic after a normal activity?	YES	
923	Did (NAME) have chest indrawing?	YES	
924	Did (NAME) have noisy breathing (grunting or wheezing)? DEMONSTRATE	YES	
925	Did (NAME) have flaring of the nostrils?	YES	
926	Did (NAME) have diarrhoea?	YES	930
927	How many days after birth did (NAME) have diarrhoea?	DAYS	
927A	How long did the diarrhoea last? IF LESS THAN ONE DAY RECORD '00'.	DAYS	
928	When the diarrhoea was most severe, how many times did (NAME) pass stools in a day?	NUMBER OF TIMES A DAY	
929	Was there blood in the stools?	YES	
930	Did (NAME) have vomiting?	YES	+ 933
931	How many days after birth did vomiting start?	DAYS	
932	When the vomiting was most severe, how many times did (NAME) vomit in a day?	NUMBER OF TIMES A DAY	
932A	Did (NAME) vomit in the week preceding death?	YES	
933	Did (NAME) have a more than usually protruding abdomen?	YES	935
934	How many days after birth did (NAME) have abdominal distension?	DAYS 98	
935	Did (NAME) have redness or discharge from the umbilical cord stump?	YES	
936	Did (NAME) have a pustular skin rash?	YES	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
937	Did (NAME) have yellow palms or soles?	YES	-+939A
938	How many days after birth did the yellow palms or soles begin?	DAYS	
	IF LESS THAN ONE DAY RECORD '00'.	DON'T KNOW	
939	For how many days did (NAME) have yellow palms or soles? IF LESS THAN ONE DAY RECORD '00'.	DAYS	
939A	Did (NAME) appear healthy and then died suddenly?	YES	

SECTION 10. MOTHER'S HEALTH AND CONTEXTUAL FACTORS

	ASK THE RESPONDENT ABOUT HER PREGNANCY WITH (NAME).		
1001	How old were you at the time (NAME) died?	YEARS	
1002	Did you receive antenatal care?	YES	
1002A	Did you have any complications in the last 3 months of the pregnancy before labor?	YES	
1002B	What was the color of the water when the water broke?	GREEN OR BROWN 1 CLEAR 2 WATER DID NOT BREAK 3 OTHER 6 DON'T KNOW 8	
1002C	Did you receive any vaccinations since reaching adulthood during this pregnancy?	YES	
1002D	During labor, did you have a fever?	YES	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1002E	During the last 3 months of pregnancy, labor, or delivery, did you have high blood pressure?	YES	
1002F	Did you have diabetes mellitus?	YES 1 NO 2 DON'T KNOW 8	
1002G	Did you have foul smelling vaginal discharge during pregnancy or after delivery?	YES 1 NO 2 DON'T KNOW 8	
1002H	During the last 3 months of pregnancy, labor or delivery did you mother suffer from convulsions?	YES	
10021	During the last 3 months of pregnancy (NAME), did you suffer from blurred vision?	YES 1 NO 2 DON'T KNOW 8	
1002J	Did you have severe anemia?	YES 1 NO 2 DON'T KNOW 8	
1002K	Did you have vaginal bleeding during the last 3 months of pregnancy but before labor started?	YES 1 NO 2 DON'T KNOW 8	
1003	Did you receive tetanus toxoid (TT) vaccine?	YES 1 NO 2 DON'T KNOW 8	→ 1005
1004	How many doses?	NUMBER OF DOSES 98	
1005	How is your health now?	HEALTHY 1 ILL 2 DON'T KNOW 8	
1005A	Have you ever been tested for HIV/AIDS?	YES 1 NO 2 DON'T KNOW 8	
1005B	Have you ever been told she had HIV/AIDS by a health worker?	YES	

	CODING CATEGORIES	SKIP
UN 11 IREATMENT AND HEALTH SERVICE USE FOR THE FINAL ILL	NE55	
Did (NAME) receive any treatment for the illness that led to death?	YES 1 NO 2 DON'T KNOW 8	1201
Did (NAME) receive oral rehydration salts?	YES	→ 1101C
Did (NAME) need oral rehydration salts?	YES 1 NO 2 DON'T KNOW 8	
Did (NAME) receive intravenous fluids (drops) treatment?	YES	→ 1101E
Did (NAME) need intravenous fluids (drops) treatment?	YES	
Did (NAME) receive a blood transfusion?	YES	→ 11010
Did (NAME) need a blood transfusion?	YES	
Did (NAME) receive treatment/food through a tube passed through the nose?	YES	→ 11011
Did (NAME) need treatment/food through a tube passed through the nose?	YES	
Did (NAME) receive injectable antibiotics?	YES 1 NO 2 DON'T KNOW 8	→ 1101k
Did (NAME) need injectable antibiotics?	YES	
Did (NAME) receive antiretroviral therapy (ART)?	YES	→ 1101N
Did (NAME) need antiretroviral therapy (ART)?	YES	
Did (NAME) have an operation for the illness?	YES	→ 1102
Did (NAME) need an operation for the illness?	YES	
Can you please list the treatments (NAME) was given for the illness that led to death?		
COPY FROM PRESCRIPTION/DISCHARGE NOTES IF AVAILABLE		
	N 11 TREATMENT AND HEALTH SERVICE USE FOR THE FINAL ILL Did (NAME) receive any treatment for the illness that led to death? Did (NAME) receive oral rehydration salts? Did (NAME) need intravenous fluids (drops) treatment? Did (NAME) need intravenous fluids (drops) treatment? Did (NAME) need a blood transfusion? Did (NAME) need a blood transfusion? Did (NAME) need treatment/food through a tube passed through the nose? Did (NAME) need treatment/food through a tube passed through the nose? Did (NAME) need injectable antibiotics? Did (NAME) need injectable antibiotics? Did (NAME) need antiretroviral therapy (ART)? Did (NAME) need an operation for the illness? Did (NAME) need an operation for the illness? Can you please list the treatments (NAME) was given for the illness that led to death? COPY FROM PRESCRIPTION/DISCHARGE NOTES	N11 TREATMENT AND HEALTH SERVICE USE FOR THE FINAL ILLNESS Did (NAME) receive any treatment for the illness YES 1 Ital ised to death? NO 2 DOK (NAME) receive any treatment for the illness YES 1 NO 2 DON'T KNOW 8 Did (NAME) receive oral rehydration salts? YES 1 NO 2 DON'T KNOW 8 Did (NAME) need oral rehydration salts? YES 1 NO 2 DON'T KNOW 8 Did (NAME) need oral rehydration salts? YES 1 NO 2 DON'T KNOW 8 Did (NAME) receive intravenous fluids (drops) treatment? YES 1 NO 2 DON'T KNOW 8 Did (NAME) receive a blood transfusion? YES 1 NO 2 DON'T KNOW 8 Did (NAME) need a blood transfusion? YES 1 NO 2 DON'T KNOW 8 Did (NAME) need a blood transfusion? YES 1 NO 2 DON'T KNOW 8 Did (NAME) need reatment/food throu

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1103	Please tell me at which of the following places or facilities (NAME) received treatment during the illness that led to death:	HOME YOUR HOME A OTHER HOME B	
		PUBLIC SECTOR MEDICAL COLLEGE HOSPITAL C SPECIALIZED GOVT HOSPITAL D DISTRICT HOSPITAL E MCWC F UPAZILLA HEALTH COMPLEX G UH & FAMILY WELFARE CENTRE H COMMUNITY CLINIC I SAT. CLINIC/EPI OUTREACH J	
		OTHER PUBLIC SECTOR K (SPECIFY) NGO SECTOR NGO STATIC CLINIC L NGO SAT CLINIC M	
		PRIVATE MED. SECTOR PVT. MED COLL. HOSPITAL N PVT. HOSPITAL O PVT. CLINIC P QUALIFIED DOCTOR Q UNQUALIFIED DOCTOR R PHARMACY S OTHER PRIVATE MEDICAL T	
		OTHER X (SPECIFY)	
1103A	CHECK Q.1103: CODE C TO T OTHER CODE CIRCLED CIRCLED		▶ 1201
1104	In the month before death, how many contacts with formal health services did (NAME) have?	NUMBER OF CONTACTS	
1104A	Record the name and address of any hospital, health centre or clinic where help was sought.		
	IF TREATMENT IS TAKEN FROM MORE THAN ONE FACILITY, MENTION THE NAME AND ADDRESS OF LAST FACILITY		
1104B	Was a motorised transport used to go to the hospital?	YES	
1104C	Were there any problems during admission to the hospital or health facility?	YES	
1104D	In the hospital or health facility, were there any problems with the way (NAME)was treated in terms of medical treatment, procedures, intrepersonal attitudes, respect or dignity?	YES	
1104E	In the hospital or health facility, were there any problems getting medications or diagnostic tests?	YES 1 NO 2 DON'T KNOW 8	
1104F	Did it take more than 2 hours to get from (NAME)'s house to the nearest hospital or health facility?	YES	
1104G	In the final days before death were there any doubts about whether medical care was needed?	YES 1 NO 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1104H	In the final days before death, was traditional medicine used?	YES	
11041	In the final days before death, did anyone use a telephone or cell phor to call for help?	Pe YES 1 NO 2 DON'T KNOW 8	
1104J	Over the course of the illness, did the total costs of care and treatment prohibit other household payments?	t YES 1 NO 2 DON'T KNOW 8	
1105	Did a health service provider tell you the cause of death?	YES] +1201
1106	What did the health service provider say?		
SECTIO	DN 12 DATA ABSTRACTED FROM BIRTH AND DEATH CERTIFICATE	ES	<u> </u>
1201	Was (NAME)'s birth registered?	YES 1 NO 2 DON'T KNOW 8	+1204
1202	WRITE BIRTH REGISTRATION NUMBER		
	FILL IN FROM RIGHT TO LEFT		
		DON'T KNOW 9999999999999999999	
1203	WRITE DATE OF BIRTH REGISTRATION		
	COPY DAY, MONTH AND YEAR OF BIRTH CERTIFICATE.	DAY MONTH YEAR	
1204	Was (NAME)'s dealth registered?	YES	* 1301
1205	WRITE DEATH REGISTRATION NUMBER		
	FILL IN FROM RIGHT TO LEFT	DON'T KNOW	
1206	WRITE DATE OF DEATH REGISTRATION		
1200			
	COPY DAY, MONTH AND YEAR OF DEATH CERTIFICATE.	DAY MONTH YEAR	
1207	RECORD THE CAUSE OF DEATH FROM THE FIRST (TOP) LINE	E OF THE DEATH CERTIFICATE:	
1208	RECORD THE CAUSE OF DEATH FROM THE SECOND LINE OF	THE DEATH CERTIFICATE (IF ANY):	
1209	RECORD THE CAUSE OF DEATH FROM THE THIRD LINE OF T	HE DEATH CERTIFICATE (IF ANY):	
1210	RECORD THE CAUSE OF DEATH FROM THE FOURTH LINE OF	THE DEATH CERTIFICATE (IF ANY):	
1211	RECORD THE CONTRIBUTORY CAUSE OF DEATH FROM THE	DEATH CERTIFICATE (CHAPTER 2):	

SECTION 13. DATA ABSTRACTED FROM OTHER HEALTH RECORDS						
1301	OTHER HEALTH RECORDS AVAILABLE	YES 1 NO 2 \longrightarrow 1311				
1302	FOR EACH TYPE OF HEALTH RECORD SUMMARIZE DETAILS FOR LAST 2 VISITS (IF MORE THAN 2) AND RECORD DATE OF ISSUE. (RECORD INFORMATION ABOUT MOTHER AND STILLBORN DECEASED CHILD)					
1303	BURIAL PERMIT (CAUSE OF DEATH)					
1304	POST MORTEM RESULTS (CAUSE OF DEATH)					
1305	VACCINATION/MCH/ANC CARD (RELEVANT INFORMATION)					
1306	HOSPITAL PRESCRIPTION (RELEVANT INFO	ORMATION)				
1307	TREATMENT CARDS (RELEVANT INFORMAT	TION)				
1308	HOSPITAL DISCHARGE (RELEVANT INFORM	MATION)				
1309	LABORATORY RESULTS (RELEVANT INFOR	RMATION)				
1310	OTHER HOSPITAL DOCUMENTS SPE	ECIFY:				
1311	RECORD THE TIME AT THE END OF INTERV	HOURS				

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF THE SUPERVISOR:

DATE:

BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY 2017-18 VERBAL AUTOPSY FORM 2 DEATH OF CHILD AGED 4 WEEKS TO 5 YEARS

NIPORT, MOHFW icddr,b Mitra and Associates

IDENTIFICATION	
CLUSTER NUMBER	
RURAL = 1, CITY CORPORATION = 2, OTHER THAN CC = 3	
NAME OF HOUSEHOLD HEAD	
NAME AND LINE NUMBER OF DEAD CHILD	

INTERVIEWING VISITS								
	1	2	3	FI	NAL VISIT			
DATE				DAY MONTH YEAR	2 0 1			
INTERVIEWER'S NAME				INTER- VIEWER'S ID				
RESULT*				RESULT				
NEXT VISIT: DATE TIME				TOTAL NUMBE OF VISITS	ER			
*RESULT CODES: 5 MOTHER OR KNOWLEDGABLE RESPONDENT REFUSED 1 COMPLETED 5 MOTHER OR KNOWLEDGABLE RESPONDENT REFUSED 2 NO HOUSEHOLD MEMBER AT HOME 6 DWELLING VACANT/DESTROYED/NOT FOUND 3 MOTHER/KNOWLEDGABLE RESPONDENT NOT PRESENT 7 OTHER 4 MOTHER OR KNOWLEDGABLE RESPONDENT 7 OTHER 9OSTPONED (SPECIFY) (SPECIFY)								
SUPERVI NAME DATE		FIELD EDITO		OFFICE EDITOR	KEYED BY			

Introductory statement:

My name is _______. I am working for Mitra and Associates, a private research organization located in Dhaka. We are conducting a survey about health all over Bangladesh under the authority of the National Institute of Population Research and Training (NIPORT), Medical Education and Family Welfare Division, Ministry of Health and Family Welfare (MOHFW). The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 30 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

Why the study being done?

The survey aims to provide information to address the monitoring and evaluation needs of the Fourth Health, Population and Nutrition Sector Program (HPNSP) and to provide managers and policy makers involved in this program with the information that they need to effectively plan and execute future interventions.

What is involved in the study?

You have been selected as respondents in this survey. I would like to ask you some questions about your household and household members.

What will you have to do if you agree to participate?

Since, you have been selected as respondents in this study. I shall be thankful if you provide your valuable response on certain issues. If some questions cause you embarrassment or make you feel uncomfortable, you can refuse to answer them. The survey usually takes about 30 minutes to complete.

What are the risks and benefits of this study?

By providing information you will not have any risk what so ever, rather this will help the government and policy planners to evaluate, strengthen and refocus national effort to improve health, population and nutrition programs.

Confidentiality:

Whatever information you provide will be kept strictly confidential. It will be used for research purposes and will be seen only by staff and researchers at the organizations mentioned.

Is there any compensation for participating in the study?

Your participation in the study is voluntary and promises no financial benefit.

Right to refuse or withdraw:

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

Who do I contact if I have a question or problem?

If you wish to know more about your rights as a participant in this study you may write the Bangladesh Medical Research Council (BMRC), Mohakhali, Dhaka or Mitra and Associates, Main Road 1, House 35, Senpara Parbata, Mirpur 10, Dhaka or Phone 9025410, 9025412. If you have further questions regarding the nature of this study you may also contact NIPORT, 13/1 Sheikh Shaheb Bazar, Azimpur, Dhaka-1205 or Phone 9662495, 58611206.

At this time, do you want to ask me anything about the survey?

May I begin the interview now?

Signature of respondent Date:

RESPONDENT AGREES TO BE INTERVIE	1 ↓	RESPONDENT DOES NOT AGREE TO BE INTERVIE\	2→ END
	•		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
SECT	ION 2. BASIC INFORMATION ABOUT RESPONDENT		
200	COPY NAME OF DECEASED CHILD FROM Q. 212 OF WOMAN'S QUESTIONNAIRE		
		(NAME)	
201	RECORD THE TIME AT THE START OF THE INTERVIEW	HOURS	
	FILL BOTH BOXES	MINUTES	
202	NAME OF THE RESPONDENT		
		(NAME)	
203	What is your relationship to (NAME) ?	FATHER	
		SIBLING	
		OTHER RELATIVE 6	
		(SPECIFY)	
204	Did you live with (NAME) in the period leading to her/his death?	YES 1 NO 2	
SECT	ION 3. INFORMATION ON THE DECEASED AND DATE/PLACE O	F DEATH	
302	Was (NAME) female or male?	FEMALE 1 MALE	
303	When was (NAME) born?		
	RECORD DATE OF BIRTH OF THE DISEASED FROM Q215 OF	DAY MONTH YEAR	
	WOMAN'S QUESTIONNAIRE		
303A	In what season did (NAME) die?	SUMMER 1	
		MONSOON	
		AUTUMN 3	
		LATE AUTUMN 4	
		WINTER 5	
		SPRING 6	
		DON'T KNOW	
304	How old was (NAME) when s/he died?	DAYS 1	
	EITHER ONE CODE	MONTHS 2	
305	When did (NAME) die?		
000	RECORD '98' IF DON'T KNOW DAY OR MONTH		
	RECORD '9998' IF DON'T KNOW YEAR	DAY MONTH YEAR	
306	CHECK 304: AGE AT DEA		USE VA
	AGE AT DEATH 29 DAYS	_ □	FORM 1
	TO LESS THAN 5 YEARS AGE AT DEA S YEARS AN TO LESS THAN 5 YEARS A		END
			I

NO.	QUE	STIONS AND FILTERS	CODING CATEGORIES	SKIP
307	Where did (NAME) die?		HOSPITAL 1 OTHER HEALTH FACILITY 2 ON THE WAY TO HEALTH FACILITY OR 2 TO A PROVIDER 3 HOME 4 OTHER 6 (SPECIFY) 0 DON'T KNOW 8	
SECT	ION 4. RESPONDENT'S	ACCOUNT OF ILLNESS/EVENTS LEADIN	IG TO DEATH	
401	Could you tell me about	the illness/events that led to (NAME)s deat	h?	
402	CAUSE OF DEATH 1 A	CCORDING TO RESPONDENT		
403	CAUSE OF DEATH 2 A	CCORDING TO RESPONDENT		
403A	ANY OF THE FOLLOW ABDOMEN CANCER DEHYDRATION DENGUE FEVER DIARRHEA FEVER HEART PROBLEMS JAUNDICE (YELLOW PNEUMONIA RASH NONE OF THE ABON	·	IN THE ABOVE NARRATIVE? A B C C C D E F G G H L L L K K	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
SECT	ION 5. HISTORY OF PREVIOUSLY KNOWN MEDICAL CONDITION	15	
501	I would like to ask you some questions concerning previously known injuries and accidents that the deceased suffered; and signs and sy s/he was ill. Some of these questions may not appear to be directly Please bear with me and answer all the questions. The answers wit that (NAME) had. Please tell me if the deceased suffer from any of the following illness	mptoms that (NAME) had/showed when related to his/her death. Il help us to get a clear picture of all possible symptoms	
502	Heart disease?	YES	
503	Diabetes?	YES	
504	Asthma?	YES	
505	Epilepsy?	YES	
506	Malnutrition?	YES 1 NO 2 DON'T KNOW 8	
507	Cancer?	YES	-+ 509
508	Can you specify the type or site of cancer?	TYPE/SITE	
509	Tuberculosis?	YES 1 NO 2 DON'T KNOW 8	
510	HIV/AIDS?	YES	
510A	Did (s)he have a recent positive test by a health professional for malaria?	YES	
510B	Did (s)he have a recent negative test by a health professional for malaria?	YES	
510C	Was there any diagnosis by a health professional of dengue fever?	YES	
510D	Was there any diagnosis by a health professional of measles?	YES	
510E	Was there any diagnosis by a health professional of sickle cell disease?	YES	
510F	Was there any diagnosis by a health professional of kidney disease	? YES	
510G	Was there any diagnosis by a health professional of liver disease?	YES	
511	Did s/he suffer from any other medically diagnosed illness?	YES	+ 601
512	Can you specify the illness?	ILLNESS	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
SECT	ON 6 HISTORY OF INJURIES/ACCIDENTS		
601	Did (NAME) suffer from any injury or accident that led to her/his death?	YES	- 606
602	What kind of injury or accident did (NAME) suffer?	ROAD TRAFFIC ACCIDENT 01 FALL 02 DROWNING 03 POISONING 04 BURNS 05 VIOLENCE/ASSAULT 06 FALL FROM HEIGHT 07 INJURED BY FIREARMS 08 STAB INJURY 09 HANGING STRANGULATION 10 BLUNT FORCE INJURY 11 NATURAL CALAMITIES 12 ELECTROCUTION 13 OTHER 96 (SPECIFY) 98	
602A	Where was (NAME) when the accident happened?	PEDESTRIAN1IN A CAR/SMALL VEHICLE2IN A BUS/LARGE VEHICLE3ON A MOTORISED CYCLE4ON A NON-MOTORISED CYCLE5OTHER6	
602B	With what other object/person did the road traffic accident happen?	PEDESTRIAN1IN A CAR/SMALL VEHICLE2IN A BUS/LARGE VEHICLE3ON A MOTORISED CYCLE4ON A NON-MOTORISED CYCLE5OTHER6	
602C	Was (NAME) injured in a non-road traffic accident?	YES	
603	Was the injury intentionally inflicted by someone else?	YES	
606	Did (NAME) suffer from any animal/insect bite that led to her/his death?	YES]+ 608
607	What type of animal/insect?	DOG 1 SNAKE 2 INSECT 3 OTHER 6 (SPECIFY) DON'T KNOW 8	
608	CHECK 304: FOR AGE AT DEATH UNDER ONE YEAR UNDER ONE YEAR		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
SECT	ION 7. SYMPTOMS AND SIGNS NOTED DURING THE FINAL ILLNESS OF	INFANTS	
701	At birth what was (NAME)'s size, smaller than normal, normal or larger than normal?	SMALLER THAN NORMAL1NORMAL2LARGER THAN NORMAL3DON'T KNOW8	
702	Was (NAME) born prematurely?	YES]⊷ 704
703	How many weeks or months premature?	WEEKS 1 MONTHS 2 DON'T KNOW 998	
704	Was (NAME) growing normally?	YES	
704A	What was (NAME)'s birth weight?	KILOGRAMS	
704B	Was any part of (NAME) physically abnormal at the time of delivery, for example a is body part too large or too small?	YES	
704C	Did (NAME) have a swelling or a defect on the back at time of birth?	YES	
704D	Did (NAME) have a very large head at time of birth?	YES	
704E	Did (NAME) have a very small head at time of birth?	YES	
705	Did the child have bulging of the fontanelle (soft part at the top of the head was swollen) ?	YES]₊ 801
706	For how many days before death did (NAME) have the bulging?	DAYS	

QUESTIONS AND FILTERS

CODING CATEGORIES

SECTION 8. STATUS OF MOTHER AND SYMPTOMS NOTED DURING THE FINAL ILLNESS FOR ALL CHILDREN

801	How is the mother's health now?	HEALTHY 1 ILL 2 DON'T KNOW 8	
801A	Did (NAME)'s mother receive professional assitance during the delivery?	YES 1 NO 2 DON'T KNOW 8	
801B	Has (NAME)'s biological mother ever been tested for HIV?	YES 1 NO 2 DON'T KNOW 8]- 802
801C	Has (NAME)'s biological mother ever been told she had HIV/AIDS by a health worker?	YES 1 NO 2 DON'T KNOW 8	
802	For how many days and months was (NAME) ill before (NAME) died?	DAYS 1 MONTHS 2 DON'T KNOW 998	
802A	Did (NAME) appear healthy and then died suddenly?	YES	
803	Did (NAME) have a fever?	YES 1 NO 2 DON'T KNOW 8] - 808
804	For how long did (NAME) have a fever?	DAYS 1 MONTHS 2 DON'T KNOW 998	
805	Was the fever severe?	YES 1 NO 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
806	Was the fever continuous or on and off?	CONTINUOUS 1 ON AND OFF 2 DON'T KNOW 8	
807	Did (NAME) have chills/rigor?	YES	
807A	Did (NAME) have night sweats?	YES	
808	Did (NAME) have a cough?	YES	- 812
809	For how long did (NAME) have a cough?	DAYS 1	
809A	Was the cough productive, with sputum?	YES	
809B	Did (NAME) cough up blood?	YES	
809C	Did (NAME) make a whooping sound when coughing?	YES	
810	Was the cough severe?	YES	
811	Did (NAME) vomit after he/she coughed?	YES	
812	Did (NAME) have fast breathing?	YES]+ 814
813	For how long did (NAME) have fast breathing?	DAYS	
814	Did (NAME) have difficulty in breathing?	YES] → 820
815	For how many days did (NAME) have difficulty in breathing?	DAYS	
816	Did (NAME) have chest indrawing?	YES]+ 818

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
817	For how long did (NAME) have chest indrawing?	DAYS	
040		YES 1	
818	Did (NAME) have noisy breathing (grunting or wheezing)? DEMONSTRATE	NO	
819	Did (NAME) have flaring of the nostrils?	YES	
820	Did (NAME) have diarrhoea?	YES] * 824
821	For how long did (NAME) have diarrhoea?	DAYS	
		98	
822	When the diarrhoea was most severe, how many times did (NAME) pass stool in a day?	NUMBER	
		DON'T KNOW	
823	At any time during the final illness was there blood in the stool?	YES	
824	Did (NAME) have vomiting?	YES] - 827
825	For how many days did (NAME) vomit?	DAYS	
826	When the vomiting was most severe, how many times		
	did (NAME) vomit in a day?	DAYS	
826A	Did she vomit blood?	YES 1	
020/1		NO	
826B	Was the vomit black?	YES	
827	Did (NAME) have abdominal pain?	YES]+ 830
828	For how many days or months did (NAME) have abdominal pain?	DAYS 1	
		DON'T KNOW	
829	Was the abdominal pain severe?	YES	
830	Did (NAME) have abdominal distension?	YES]+ 833A

831 For how many days or months did (NAME) have abdominal distension? DAYS 1 1 MONTHS 2 1 1 1 1 MONTHS 2 1 1 1 1 1 MONTHS 2 1 <th></th>	
B32 Did the distension develop rapidly within days or gradually over months? DON'T KNOW 9 9 8 832 Did the distension develop rapidly within days or gradually over months? RAPIDLY WITHIN DAYS 1 GRADUALLY OVER MONTHS 2 DON'T KNOW 8 833 Was there a period of a day or longer during which (NAME) did not pass any stool? YES 1 NO 00N'T KNOW 2 DON'T KNOW 2	
over months? GRADUALLY OVER MONTHS 2 DON'T KNOW 8 833 Was there a period of a day or longer during which (NAME) did not pass any stool? YES 1 NO 2 DON'T KNOW 2 DON'T KNOW 8 2	
(NAME) did not pass any stool? NO 2 DON'T KNOW 8	
833A Did (NAME) have a more than usually portruding abdomen? YES 1 NO 2 DON'T KNOW 8	834
833B For how many days or months did (NAME) have a more than usually portruding abdomen? DAYS 1	
MONTHS 2 DON'T KNOW 9 9 8	
834 Did (NAME) have any mass in the abdomen? YES 1 NO 2 DON'T KNOW 8	836
835 For how many days or months did (NAME) have the mass in the abdomen? DAYS 1	
MONTHS 2 DON'T KNOW 9 9 8	
836 Did (NAME) have headache? YES 1 NO 2 DON'T KNOW 8]+ 839
837 For how many days or months did (NAME) have headache? DAYS 1	
MONTHS 2 DON'T KNOW 9 9 8	
838 Was the headache severe? YES 1 NO 2 DON'T KNOW 8	
839 Did (NAME) have a stiff or painful neck? YES 1 NO 2 DON'T KNOW 8]+ 841
840 For how many days did (NAME) have a stiff or painful neck? DAYS DAYS DON'T KNOW 9 8	
841 Did (NAME) become unresponsive or unconscious? YES 1 NO 2 DON'T KNOW 8	- 844

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
842	For how many days was (NAME) unconscious?	DAYS	
843	Did the unconsciousness start suddenly, quickly within a single day, or slowly over many days?	SUDDENLY 1 FAST (IN A DAY) 2 SLOWLY (MANY DAYS) 3 DON'T KNOW 8	
844	Did (NAME) have convulsions?	YES	- 846
844A	Did the convulsions occur in the whole body?	YES	
845	For how many days or months did (NAME) have convulsions?	DAYS 1 MONTHS 2 DON'T KNOW 9 9 8	
846	Did (NAME) have paralysis of the lower limbs?	YES]→ 849
847	For how many days or months did (NAME) have paralysis of the lower limbs?	DAYS 1	
848	Did the paralysis of the lower limbs start suddenly, quickly within a single day, or slowly over many days?	SUDDENLY 1 FAST (IN A DAY) 2 SLOWLY (MANY DAYS) 3 DON'T KNOW 8	
849	Was there any change in the amount of urine (NAME) passed daily?	YES] → 851A
850	For how many days or months did (NAME) have the change in the amount of urine (NAME) passed daily?	DAYS 1	
851	How much urine did (NAME) pass?	TOO MUCH 1 TOO LITTLE 2 NO URINE AT ALL 3 DON'T KNOW 8	
851A	During the final illness, did (NAME) ever pass blood in the urine?	YES	
852	During the illness that led to death, did (NAME) have any skin rash?	YES]→ 856
853	For how many days did (NAME) have the skin rash?	DAYS	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
854	Was the rash located on:	YES NO DK	
	1 The face?	FACE 1 2 8	
	2 The trunk?	TRUNK 1 2 8	
	3 On the arms and legs?	ARMS AND LEGS 1 2 8	
	4 Any other place?	OTHER PLACE 1 2 8	
		SPECIFY 1 2 0	
855	What did the rash look like?	MEASLES RASH	
		DON'T KNOW	
856	Did (NAME) have red eyes?	YES	
857	Did (NAME) have bleeding from the nose, mouth, or anus?	YES	
858	Did (NAME) have weight loss?	YES	- 860
859	For how days or months before death did (NAME) have the weight loss?	DAYS 1	
		MONTHS 2 DON'T KNOW 9 9 8	
860	Did (NAME) look very thin and wasted?	YES	
860A	Did (NAME) have sores or ulcers anywhere in the body?	YES 1 NO 2 DON'T KNOW 8] → 861
860B	Did the sores have clear fluid or pus?	YES	
860C	Did (NAME) have an ulcer (pit) on the foot?	YES	861
860D	Did the ulcer on the foot ooze pus?	YES]₊ 861
860E	For how many days did the ulcer ooze pus?	DAYS	-
		DON'T KNOW	
861	Did (NAME) have mouth sores or white patches in the mouth or on the tongue?	YES]₊ 863
862	For how many days did (NAME) have mouth sores or white patches in the mouth or on the tongue?	DAYS	
863	Did (NAME) have any swelling?	YES 1 NO 2 DON'T KNOW 8	+ 864C

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
864	For how many days or months did (NAME) have the swelling?	DAYS 1	
864A	 Was the swelling on: 1 The face? 2 The joints? 3 The ankles? 4 The whole body? 5 Any other place? 	YES NO DK FACE 1 2 8 JOINTS 1 2 8 ANKLES 1 2 8 WHOLE BODY 1 2 8 OTHER PLACE 1 2 8	
864B	During the illness that led to death, did (NAME) have swollen legs or feet?	YES	
864C	During the illness that led to death, did (NAME) have areas of the skin that turned black?	YES	
864D	Did (NAME) have difficulty swallowing?	YES	866
864E	For how many days before death did (NAME) have difficulty swallowing? IF LESS THAN ONE DAY RECORD '00'.	DAYS	
864F	Was the difficulty in swallowing with solids, liquids or both?	SOLID 1 LIQUID 2 BOTH 3	
866	Did (NAME) have any lumps?	YES]+ 869
867	For how days or months did (NAME) have the lumps?	DAYS 1	
868	 Were the lumps on: 1 The neck? 2 The armpit? 3 The groin? 4 Any other place? 	YES NO DK NECK 1 2 8 ARMPIT 1 2 8 GROIN 1 2 8 OTHER PLACE 1 2 8 SPECIFY Image: specify model 1 2	
869	Did (NAME) have yellow discoloration of the eyes?	YES]- 871

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
870	For how many days or months did (NAME) have the yellow discoloration of the eyes?	DAYS 1	
871	Did (NAME)'s hair color change to reddish or yellowish?	YES]+ 873
872	For how many days or months did (NAME) have reddish/yellowish hair?	DAYS 1	
873	Did (NAME) look pale (thinning/lack of blood) or have pale palms, eyes or nail beds?	YES] + 875
874	For how many days did (NAME) look pale (thinning/lack of blood) or have pale palms, eyes, or nail beds?	DAYS	
875	Did (NAME) have sunken eyes?	YES]⊷ 901
876	For how many days did (NAME) have sunken eyes?	DAYS	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES		SKIP
SEC	TION 9. TREATMENT AND HEALTH SERVICE USE FOR THE FINA	LILINESS		
901	Was (NAME) vaccinated for measles?	YES		
901A	Do you have (NAME)'s vaccination card?	YES	1	- 902
901B	May I see the vaccination card?		_	
	NOTE THE VACCINES THE CHILD RECEIVED.		-	
			-	
			-	
			-	
902	Did (NAME) receive any treatment for the illness that led to death?	YES 1 NO 2 DON'T KNOW 8		- 909
903	Can you please list the drugs (NAME) was given for the ilness that led to death?		-	
	COPY FROM PRESCRIPTION/DISCHARGE NOTES IF AVAILABLE		-	
904	What type of treatment did (NAME) receive:	YES NO DI	К	
	1 Oral rehydration salts and/or intravenous fluids (drip) treatment	 ? ORS/DRIP TREATMENT		
	2 Blood transfusion?	BLOOD TRANSFUSION 1 2 8		
	3 Treatment/food through a tube passed through the nose?	THROUGH THE NOSE 1 2 8		
	4 Any other treatment?	OTHER 1 2 8 (SPECIFY)		
904A	Did (NAME) receive injectable antibiotics?	YES		→ 904C
904B	Did (NAME) need injectable antibiotics?	YES		
904C	Did (NAME) receive antiretroviraltherapy (ART)?	YES		→ 905
904D	Did (NAME) need antiretroviraltherapy (ART)?	YES		
904E	Did (NAME) receive treatment from health facility?	YES 1 NO 2		→ 905A

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
905	Did (NAME) ever receive treatment from any health facility? Any other facility? PROBE TO IDENTIFY THE TYPE OF SOURCE.	PUBLIC SECTORMEDICAL COLLEGE HOSPITALASPECIALIZED GOVT HOSPITALBDISTRICT HOSPITALCMCWCDUPAZILA HEALTH COMPLEXEUH & FAMILY WELFARE CENTREFCOMMUNITY CLINICGSAT. CLINIC/EPI OUTREACHHHEALTH ASSISTANT (HA)IFAMILY WELFATE ASSISTANT (FWA)J	
	IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE.	OTHER PUBLIC SECTOR K (SPECIFY) KGO SECTOR (SPECIFY) NGO STATIC CLINIC L NGO SATELLITE CLINIC M NGO DEPO HOLDER M NGO FIELD WORKER O OTHER NGO SECTOR P (SPECIFY) PRIVATE MEDICAL SECTOR P PRIVATE MEDICAL SECTOR Q PRIVATE MEDICAL COLLEGE HOSPITAL Q PRIVATE HOSPITAL R PRIVATE CLINIC S QUALIFIED DOCTOR'S CHAMBER U PHARMACY/DRUG STORE V OTHER PRIVATE MEDICAL SECTOR V (SPECIFY) X	
905A	In the final days before death, did (NAME) travel to a hospital or health facility?	YES]-905н
905B	Was a motorised transport used to go to the hospital?	YES	
905C	Were there any problems during admission to the hospital or health facility?	YES	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
905D	In the hospital or health facility, were there any problems with the way (NAME) was treated in terms of medical treatment, procedures, interpersonal attitudes, respect or dignity?	YES	
905E	In the hospital or health facility, were there any problems getting medications or diagnostic tests?	YES 1 NO 2 DON'T KNOW 8	
905F	Did it take more than 2 hours to get from (NAME)'s house to the nearest hospital or health facility?	YES	
905G	Was (NAME) discharged from hospital very ill?	YES	
905H	In the final days before death were there any doubts about whether medical care was needed?	YES	
9051	In the final days before death, was traditional medicine used?	YES	
905J	In the final days before death, did anyone use a telephone or cell phone to call for help?	YES	
905K	Over the course of the illness, did the total costs of care and treatment prohibit other household payments?	YES	
905L	CHECK 905: CODE A TO W CIRCLED		909
906	In the month before death, how many contacts with formal health services did (NAME) have?	NUMBER OF CONTACTS	
907	Did a health care worker tell you the cause of death?	YES]- ₉₀₉
908	What did the health care worker say?		
909	Did (NAME) have any operation for the illness?	YES] 1001
910	How many days before death did (NAME) have the operation?	DAYS	
911	On what part of the body was the operation?	ABDOMEN 1 CHEST 2 HEAD 3 OTHER 6 (SPECIFY) DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
SECTI	ON 10. DATA ABSTRACTED FROM BIRTH AND DEATH CERTIFIC	CATES	
1001	Was (NAME)'s birth registered?	YES] - 1004
1002	WRITE BIRTH REGISTRATION NUMBER		
	FILL IN FROM RIGHT TO LEFT	DON'T KNOW 999999999999999999	
1003	WRITE DATE OF BIRTH REGISTRATION NUMBER		
	COPY DAY, MONTH AND YEAR OF BIRTH CERTIFICATE.	DAY MONTH YEAR	
1004	Was (NAME)'s death registered?	YES] * 1101
1005	WRITE DEATH REGISTRATION NUMBER		
	FILL IN FROM RIGHT TO LEFT	DON'T KNOW	
1006	WRITE DATE OF DEATH REGISTRATION NUMBER		
	COPY DAY, MONTH AND YEAR OF DEATH CERTIFICATE.	DAY MONTH YEAR	
1007	RECORD THE CAUSE OF DEATH FROM THE FIRST (TOP) LINE OF THE DEATH CERTIFICATE:		
1008	RECORD THE CAUSE OF DEATH FROM THE SECOND LINE OF THE DEATH CERTIFICATE (IF ANY):		
1009	RECORD THE CAUSE OF DEATH FROM THE THIRD LINE OF THE DEATH CERTIFICATE (IF ANY):		
1010	RECORD THE CAUSE OF DEATH FROM THE FOURTH LINE OF THE DEATH CERTIFICATE (IF ANY):		
			1

SECTION 11. DATA ABSTRACTED FROM OTHER HEALTH RECORDS			
1101	OTHER HEALTH RECORDS AVAILABLE	YES 1 NO 2 → 1111	
1102	FOR EACH TYPE OF HEALTH RECORD SUM (IF MORE THAN 2) AND RECORD DATE OF I		
1103	BURIAL PERMIT (CAUSE OF DEATH)		
1104	POST MORTEM RESULTS (CAUSE OF DEAT	Ή)	
1105	MCH/ANC CARD (RELEVANT INFORMATION)	
1106	HOSPITAL PRESCRIPTION (RELEVANT INFO	DRMATION)	
1107	TREATMENT CARDS (RELEVANT INFORMA	ΓΙΟΝ)	
1108	HOSPITAL DISCHARGE (RELEVANT INFORM	/ATION)	
1109	LABORATORY RESULTS (RELEVANT INFOR	MATION)	
1110	OTHER HOSPITAL DOCUMENTS SPE	CIFY:	
1111	RECORD THE TIME AT THE END OF INTERV	HOURS	

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ON	SPECIFIC	QUESTIONS:
0011112110011		QOLOHIONO.

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF THE SUPERVISOR:

DATE:

BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY 2017-18

COMMUNITY QUESTIONNAIRE

Bangladesh Demographic and Health Survey 2017-18 COMMUNITY QUESTIONNAIRE

IDENTIFICATION			
DIVISION	YMENSINGH=5; RAJSHAHI=6;		
DISTRICT			
UPAZILA/THANA			
UNION/WARD			
VILLAGE/MOHALLA/BLOCK			
CLUSTER NUMBER			
TYPE OF AREA: 1 = RURAL AREA; 2 = CITY CORPOR 3 = OTHER URBAN	ATION;		
POST STRATIFICATION CRITERION			
GPS READING:	Degrees Minutes Thousandths N Degrees Minutes Thousandths Degrees Minutes Thousandths		
LONGITUDE			
WAYPOINT			
DATE OF VISIT	DAY		
RESULTS OF THE INTERVIEW: [COMPLETED =1, INCOMPLETE = 2, OTHER (SPECIFY) = 6] NAME OF INTERVIEWER	MONTH		
NAME OF PERSONS INTERVIEWED 1 2 3 4 5 6	POSITION SEX ELECTED OFFICIAL 01 MALE 1 RELIGIOUS LEADER 02 FEMALE 2 TEACHER/EDUCATOR 03 1 1 DOCTOR/HEALTH OFFICIAL 04 1 1 SERVICE HOLDER 05 1 1 BUSINESS PERSON 06 1 1 OTHER 96 1 1		
BEGINNING TIME:	HOUR		

1. Community information

INFORMED CONSENT

AFTER ASSEMBLING THE INFORMANTS, READ THE FOLLOWING GREETING:

My name is _______. I am working for Mitra and Associates, a private research organization located in Dhaka. We are conducting a survey about health all over Bangladesh under the authority of the National Institute of Population Research and Training (NIPORT), Medical Education and Family Welfare Division, Ministry of Health and Family Welfare (MOHFW). The information we collect will help the government to plan health services. We are carrying out a survey of communities to get a picture of services available to the communities and to understand when and why people use health services. I would like to ask you some questions about your community and about sources of health care in it and around it as a way of better understanding how to serve the population. Please be assured that this discussion is strictly confidential, and you may choose to stop the interview at any time. May I continue?

No.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
100	PERMISSION RECEIVED TO CONTINUE?	YES1 NO2	Stop
100A	CHECK RURAL AREA	URBAN AREA	→ 107
102	What is the most common type of transportation, i.e., most of the people use to go to the Upazila/Thana Headquarters?	CAR/BUS/TEMPO 01 MOTORCYCLE 02 MOTOR LAUNCH 03 BICYCLE 04 ANIMAL CART 05 BOAT 06 PATH 07 RICKSHAW/RICKSHAW VAN 08 TRAIN 09 CNG/BABY TAXI 10 AUTO/EASY BIKE 11 OTHER 96 (SPECIFY) 96	
103	How long does it take to go to the Upazila/Thana Headquarters using the transportation (MENTIONED IN Q 102)?	MINUTES	
103a	What is the transportation cost to go to the Upazila/thana headquarters using the transportation (MENTIONED IN Q102)? ONE WAY TRIP	тк	
105	Which is the most common type of transportation, i.e., most of the people use to go to the District Headquarters?	CAR/BUS/TEMPO 01 MOTORCYCLE 02 MOTOR LAUNCH 03 BICYCLE 04 ANIMAL CART 05 BOAT 06 PATH 07 RICKSHAW/RICKSHAW VAN 08 TRAIN 09 CNG/BABY TAXI 10 AUTO/EASY BIKE 11 OTHER	
106	How long does it take to go to the District Headquarters using the transportation (MENTIONED IN Q 105)?	MINUTES DON'T KNOW	
106a	What was the transportation cost for one way trip to go to the District headquarters using the transportation (MENTIONED IN Q105)?	тк	

No.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
107	What is the main access route to this village/mohalla ?	ALL WEATHER ROAD/ PACCA ROAD/MOTORABLE1 SEASONAL ROAD/EARTHEN2 WATERWAY	
108	What are the main economic activities in this area/village? (CIRCLE ALL MENTIONED)	AGRICULTURE A LIVESTOCK	
109A	CHECK RURAL AREA	URBAN	→ 111A
110	How far is the nearest weekly market from this village? IF LESS THAN ONE MILE/KILOMETER, RECORD "00". RECORD "97" IF DISTANCE IS MORE THAN 97 MILES/KILOMETERS. RECORD "98" IF DON'T KNOW.	MILE1 KILOMETER2	
111A	Is telephone service always accessible in this village?	YES1 NO2	
112A	Is electricity (national grid including <i>Palli Biduth</i>) available here?	YES	
112B	Is solar electricity available here?	YES1 NO2	
113	What is the primary source of water for the majority of people in this village?	PIPED 01 PUBLIC TAP 02 WELL 03 TUBE WELL 04 RIVER/STREAM/LAKE 05 RAINWATER 06 OTHER 96	
114	In this village/mohalla, are there any of the following : MOTHER'S CLUB OR LADIES ASSOCIATIONS? GRAMEEN BANK MEMBER ? BRAC INCOME GENERATING ACTIVITIES PROSHIKA ASA COTTAGE INDUSTRIES OF BSIC COOPERATIVE SOCIETY AKTI BARI AKTI KHAMAR OTHER NGO	YES NO MOTHERS CLUB 1 2 GRAMEEN BANK 1 2 BRAC 1 2 PROSHIKA 1 2 ASA 1 2 BSIC 1 2 COOPERATIVE SOCIETY 1 2 AKTI BARI AKTI KHAMAR 1 2 OTHER NGO 1 2	
115	Please tell me if the following things are in this village/mohalla. IF YES, WRITE '00'. IF NO, ASK: How far is it? IF DO NOT KNOW, PUT '98'. A. How far is the madrasa from this village/mohalla? B. How far is the primary school?	MILE	
	C. How far is the boy's high school from this village/mohalla?	KILOMETER2 MILE1 KILOMETER2	
	D. How far is the girl's high school from this village/mohalla?	MILE	
	E. How far is the high school (co-education)?	MILE1 KILOMETER2	
	F. How far is the post office from this village/mohalla?	MILE1 KILOMETER2	

	No.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP TO
		G. How far is the cinema hall from this village/mohalla?	MILE1 KILOMETER2	
_	117	Is there any shop or any person in this village/mohalla, that sells family planning methods?	YES1 NO2 DON'T KNOW8	

2. Identification of Health Facilities
Now we would like to ask you some questions about health facilities from which people in this village/mohalla can obtain services if they want. We would like for you to tell us about all of the facilities known by the general population of this village/mohalla that are of specific types. Please start with the ones that are closest to this village/mohalla.

village/mohalla.						
201. HEALTH FACILITY	202. Where is the (HEALTH FACILITY) located?	203. What is the (HEALTH FACILITY)'s operating authority?	204. How far in miles/kilometers is the (HEALTH FACILITY) located from the center of the village? IF LOCATED IN THE VILLAGE/MOHALLA, RECORD '00'.	205. How many minutes does it take to go to the (HEALTH FACILITY) using the most common type of transportation?	206. When did the (HEALTH FACILITY) first open?	207. Is the (HEALTH FACILITY) located in this thana/ union?
01A. ANY HOSPITAL (Nearest) NAME:98 DON'T KNOW98 NONE00	DISTRICT: UPAZILA/THANA: LOCATION:	GOVERNMENT 01 NGO02 PRIVATE 03 RELIGIOUS 04 OTHER 98 DK98	MILES	MINUTES	YEAR	YES 1→ 02A NO 2→ 01B
01B. DISTRICT SADAR HOSPITAL (DH) NAME:	DISTRICT: UPAZILA/THANA: LOCATION:	GOVERNMENT 01	MILES	MINUTES	YEAR	
02A. UPAZILA HEALTH COMPLEX (UHC) (nearest) NAME:98 DON'T KNOW98 NONE00	DISTRICT: UPAZILA/THANA: LOCATION:	GOVERNMENT 01	MILES	MINUTES	YEAR	YES 1→ 03A NO 2→ 02B
02B. UPAZILA HEALTH COMPLEX (UHC) (in this thana/upazila) NAME:98 DON'T KNOW00 NONE00	DISTRICT: UPAZILA/THANA: LOCATION:	GOVERNMENT 01	MILES	MINUTES 098	YEAR	

201. HEALTH FACILITY	202. Where is the (HEALTH FACILITY) located?	203. What is the (HEALTH FACILITY)'s operating authority?	204. How far in miles/kilometers is the (HEALTH FACILITY) located from the center of the village? IF LOCATED IN THE VILLAGE/MOHALLA, RECORD '00'.	205. How many minutes does it take to go to the (HEALTH FACILITY) using the most common type of transportation?	206. When did the (HEALTH FACILITY) first open?	207. Is the (HEALTH FACILITY) located in this thana/ union?
03A. UNION HEALTH & FAMILY WELFARE CENTER (nearest) NAME:98 DON'T KNOW98	DISTRICT: UPAZILA/THANA: LOCATION:	GOVERNMENT 01	MILES	MINUTES	YEAR	YES 1→ 04A NO 2→ 03B
03B. UNION HEALTH & FAMILY WELFARE CENTER (in this union) NAME:	DISTRICT: UPAZILA/THANA: LOCATION:	GOVERNMENT 01	MILES	MINUTES 098	YEAR	
04A. MATERNAL AND CHILD WELFARE CENTER (MCWC) (nearest) NAME:08 DON'T KNOW08 NONE00	DISTRICT: UPAZILA/THANA: LOCATION:	GOVERNMENT 01	MILES	MINUTES 098	YEAR	YES 1→ 06A NO 2→ 04B
04B. MATERNAL AND CHILD WELFARE CENTER (MCWC) (DISTRICT) NAME: DON'T KNOW98	DISTRICT: UPAZILA/THANA: LOCATION:	GOVERNMENT 01	MILES	MINUTES 00N'T KNOW	YEAR	

ш	202. Where is the (HEALTH FACILITY) located?	203. What is the (HEALTH FACILITY)'s operating authority?	204. How far in miles/kilometers is the (HEALTH FACILITY) located from the center of the village? IF LOCATED IN THE VILLAGE/MOHALLA, RECORD '00'.	205. How many minutes does it take to go to the (HEALTH FACILITY) using the most common type of transportation?	206. When did the (HEALTH FACILITY) first open?	207. Is the (HEALTH FACILITY) located in this thana/ union?
NONE00						
List all of the PRIVATE CLINICS that are available for people in this village/mohalla to use	CLINICS that are availa	tble for people in this v	/illage/mohalla to use.			
201. HEALTH FACILITY	202. Where is the (HEALTH FACILITY) located?	203. What is the (HEALTH FACILITY)'s operating authority?	204. How far in miles/kilometers is the (HEALTH FACILITY) located from the center of the village? IF LOCATED IN THE VILLAGE/MOHALLA, RECORD '00'.	205. How many minutes does it take to go to the (HEALTH FACILITY) using the most common type of transportation?	206. When did the (HEALTH FACILITY) first open?	207. Is the (HEALTH FACILITY) located in this thana?
06. A. PRIVATE CLINIC (nearest)	DISTRICT:		MILES1		YEAR	YES1
	UPAZILA/THANA:	RELIGIOUS	KILOME I EKS2 98 DON'T KNOW98	DON'T KNOW 998		
NAME:	LOCATION:	OTHER				
DON'T KNOW98 NONE00						
06. B. PRIVATE CLINIC	DISTRICT:		MILES1		YEAR	YES1
	UPAZILA/THANA:	PRIVATE	KILOMETERS2	DON'T KNOW 998	8999	
NAME	LOCATION:	01HER				
DON'T KNOW98 NONE00						
06. C. PRIVATE CLINIC	DISTRICT:		MILES1		YEAR	YES1
	UPAZILA/THANA:	PRIVATE03 RELIGIOUS04		DON'T KNOW 998		NO
NAME:	LOCATION:	OTHER			DON'T KNOW	
DON'T KNOW98 NONE00						
06. D. PRIVATE CLINIC	DISTRICT:		MILES1		YEAR	
NAME:	UPAZILA/THANA:	RELIGIOUS	KILOME I EKS2	DON'T KNOW 998	DON'T KNOW	

201. HEALTH FACILITY	202. Where is the (HEALTH FACILITY) located?	203. What is the (HEALTH FACILITY)'s operating authority?	204. How far in miles/kilometers is the (HEALTH FACILITY) located from the center of the village? IF LOCATED IN THE VILLAGE/MOHALLA, RECORD '00'.	205. How many minutes 206. When did the does it take to go to the (HEALTH FACILITY) (HEALTH FACILITY) open? using the most common type of transportation?	206. When did the (HEALTH FACILITY) first open?	207. Is the (HEALTH FACILITY) located in this thana?
DON'T KNOW98 NONE00	LOCATION:	DK				

201. HEALTH FACILITY	202. Where is the (HEALTH FACILITY) located?	203. What is the (HEALTH FACILITY)'s operating authority?	204. How far in miles/kilometers is the (HEALTH FACILITY) located	205. How many minutes does it take to go to the (HEALTH FACILITY)	206. When did the (HEALTH FACILITY) first open?	207. Is the (HEALTH FACILITY)
			from the center of the village? IF LOCATED IN THE VILLAGE/MOHALLA, RECORD '00'.	using the most common type of transportation?	-	located in this thana?
07. A. NGO CLINIC (nearest)	DISTRICT:		MILES		YEAR	YES 1 NO 2
	UPAZILA/THANA:		KILOMETERS2 4 DON'T KNOW	DON'T KNOW998		
	LOCATION:					
DON'T KNOW98 NONE00						
07. B. NGO CLINIC	DISTRICT:		MILES1	MINUTES	YEAR	
	UPAZILA/THANA:	NGO02		DON'T KNOW		NU
	LOCATION:		-		DON'T KNOW	
DON'T KNOW98 NONE00						
07. C. NGO CLINIC	DISTRICT:		MILES	MINUTES	YEAR	
	UPAZILA/THANA:	NGO02	KILOMETERS2 98	DON'T KNOW		NU
	LOCATION:				DON'T KNOW	
DON'T KNOW98						
00						
07. C. NGO CLINIC	DISTRICT:		MILES1		YEAR	
	UPAZILA/THANA:	NGO02	KILOMETERS2 4	DON'T KNOW		
	LOCATION:					
DON'T KNOW98 NONF						
· · · · · · · · · · · · · · · · · · ·				_		

List all of the OTHER NGO CLINICS (NON-RSDHP OR NON-UFHP) that are available for people in this village/mohalla to use.

List all of the COMMUNITY CLINICS that are available for people in this village/mohalla to use.

201. HEALTH FACILITY	202. Where is the (HEALTH FACILITY) located?	203. What is the (HEALTH FACILITY)'s operating authority?	204. How far in miles/kilometers is the (HEALTH FACILITY) located from the center of the village? IF LOCATED IN THE VILLAGE/MOHALLA, RECORD '00'.	205. How many minutes does it take to go to the (HEALTH FACILITY) using the most common type of transportation?	206. When did the (HEALTH FACILITY) first open?	207. Is the (HEALTH FACILITY) located in this thana ?
08. A. COMMUNITY CLINIC (nearest) NAME: DON'T KNOW98 NONE00	DISTRICT: UPAZILA/THANA: LOCATION:	GOVERNMENT 01	MILES	MINUTES	YEAR	YES
08. B. COMMUNITY CLINIC NAME:08 DON'T KNOW98 NONE00	DISTRICT: UPAZILA/THANA: LOCATION:	GOVERNMENT 01	MILES	MINUTES	YEAR	YES
08. C. COMMUNITY CLINIC NAME:	DISTRICT: UPAZILA/THANA: LOCATION:	GOVERNMENT 01	MILES	MINUTES	YEAR	YES
08. D. COMMUNITY CLINIC NAME:	DISTRICT: UPAZILA/THANA: LOCATION:	GOVERNMENT 01	MILES	MINUTES998 DON'T KNOW	YEAR	

207. Is the (HEALTH FACILITY) located in this thana ?	YES 1→ 10A NO2		YES 1 NO 2
206. When did the (HEALTH FACILITY) first open?	YEAR		YEAR
205. How many minutes does it take to go to the (HEALTH FACILITY) using the most common type of transportation?	MINUTES		MINUTES
204. How far in miles/kilometers is the (HEALTH FACILITY) located from the center of the village? IF LOCATED IN THE VILLAGE/MOHALLA, RECORD '00'.	MILES		MILES
203. What is the (HEALTH FACILITY)'s operating authority?	GOVERNMENT 01		GOVERNMENT 01 MILES
202. Where is the (HEALTH FACILITY) located?	DISTRICT: UPAZILA/THANA:	LOCATION:	DISTRICT: UPAZILA/THANA: LOCATION:
201. HEALTH FACILITY	09. A. UNION SUB- CENTER/RURAL DISPENSARY (nearest)	NAME:98 DON'T KNOW98 NONE00	09. B. UNION SUB- CENTER/RURAL DISPENSARY (union) NAME:08 DON'T KNOW00

List all of the RURAL DISPENSARIES that are available for people in this village/mohalla to use.

.....2 ΥΕS.....1 NO.....2 located in this (HEALTH FACILITY) 207. Is the village? YES.. NO ... 9998 9998 206. When did (HEALTH FACILITY) first open? DON'T KNOW DON'T KNOW ł YEAR... YEAR.. 205. How many minutes does it take to go to the (HEALTH FACILITY) using the most common type of transportation? 998 ..998 DON'T KNOW DON'T KNOW MINUTES .. MINUTES .. from the center of the village? miles/kilometers is the (HEALTH FACILITY) located ... 98 98 IF LOCATED IN THE VILLAGE/MOHALLA, RECORD '00'. KILOMETERS....2 DON'T KNOW DON'T KNOW 204. How far in MILES. 203. What is the (HEALTH FACILITY)'s operating authority? ... 02010203 04 96 98 GOVERNMENT 01 GOVERNMENT. DK **RELIGIOUS** RELIGIOUS PRIVATE OTHER NGO..... OTHER NGO..... **PRIVATE** DK 202. Where is the (HEALTH FACILITY) located? UPAZILA/THANA: UPAZILA/THANA: LOCATION: LOCATION: DISTRICT: DISTRICT: **10A. SATELLITE CLINIC 10B. SATELLITE CLINIC** 201. HEALTH FACILITY DON'T KNOW.....98 DON'T KNOW.....98 NONE.....00 NONE.....00 (Nearest) NAME: NAME:

YES		0000		
YEAR				
MINUTES	DON'T KNOW998			
 MILES1	DON'T KNOW			
 NGO02 OTHER	DK			
DISTRICT:	UPAZILA/THANA:	LOCATION:		
11A. DELIVERY HUT		NAME:	DON'T KNOW98	NONE00

List all of the SATELLITE CLINICS that provide services to individuals in this village/mohalla.

Name of the fieldworker 01. NAME (Known as): NONE 02. NAME (Known as): NONE NONE NONE NONE	301. What is the title/position of (NAME)? 01 FWV 02 FWV 02 FWA 03 FWA with CSBA 04 HEALTH ASSISTANT 05 HA with CSBA 06 COMMUNITY HEALTH 07 WORKER 07 COMMUNITY NUTRITION 08 PROVIDER 08 OTHER 07 COMMUNITY NUTRITION 08 PRONDTER 01 SACMO 03 FWV 07 COMMUNITY NUTRITION 06 DON'T KNOW 03 FWA 07 COMMUNITY HEALTH 07 VORKER 06 DON'T KNOW 07 FWA 07 PROMUNITY HEALTH 07 VORKER 06 COMMUNITY HEALTH 07 VORKER 07 PROVIDER 08 COMMUNITY HEALTH 07 VORMUNITY NUTRITION 07 PROVIDER 08 OTHER 06	302. Under what authority does (NAME) work ? GOVERNMENT 01 NGO 02 PRIVATE 03 RELIGIOUS 04 NHSDP 05 OTHER 96 DON'T KNOW 98 PON'T KNOW 01 RELIGIOUS 04 NHSDP 07 PON'T KNOW 03 RELIGIOUS 04 NHSDP 05 PRIVATE 04 NGO 05 OTHER 05 PRIVATE 04 NGO 05 OTHER 06 DON'T KNOW 05 PRIVATE 07 NGO 07 NGO <th>303: Does he/she live in this locality? (GO TO 305) ↓ NO</th> <th>304. Where does he/she live? UPAZILATHANA: UNION: VILLAGE: UPAZILATHANA: UPAZILATHANA: UNION: VILLAGE: UNION: UNION: UNION: UNION: UNION: UNION:</th> <th>s he/she ED PRO</th>	303: Does he/she live in this locality? (GO TO 305) ↓ NO	304. Where does he/she live? UPAZILATHANA: UNION: VILLAGE: UPAZILATHANA: UPAZILATHANA: UNION: VILLAGE: UNION: UNION: UNION: UNION: UNION: UNION:	s he/she ED PRO
NONE	SBA SISTAN' 3A Y HEAL'	RELIGIOUS		VILLAGE:	FAMILY PLANNING 1 2 NUTRITION

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Name of the fieldworker	301. What is the title/position of (NAME)?	302. Under what authority does (NAME) work ?	303: Does he/she live in this locality?	304. Where does he/she live?	305. What services does he/she provide?
	PROVIDER 03 COMMUNITY NUTRITION 09 PROMOTER 09 OTHER 96 DON'T KNOW 98				
04. NAME (Known as):	FWV	GOVERNMENT	YES	DISTRICT: UPAZILA/THANA:	UNPROMPTED PROMPTED NO HEALTH
NONE	FWA WILH CSBA	NHSDP		UNION: VILLAGE:	NUTRITION ORS 1 2 3 DON'T KNOW 1 2 3
	WORKER				
	PROMOTER 09 OTHER 96 DON'T KNOW 98				
05. NAME (Known as):	FWV	GOVERNMENT 01 NGO 02 PRIVATE 03 BELICIOLIS	YES	DISTRICT: UPAZILA/THANA:	UNPROMPTED PROMPTED NO HEALTH
NONE	FWA WITH CSBA	NHSDP		UNION: VILLAGE:	0 0
	WORKER				
	NO				

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to may work in this village, that is, a person who sells family planning or ORS from his or her house.	404. What services does he/she provide?
who sells family plann	403. Where does he/she live?
age, that is, a person v	402: Does he/she live in this locality?
who may work in this vill	401. Under what authority does (NAME) work ?
Please tell us about any depotholders w	400. Name of the depotholder

400. Name of the depotholder 401. Under what authority 402. Under what authority 403. NO 02. NAME (known as): 02. NGO	402: Does he/she live in	403. Where does			
(known as) GOVERNMENT 01 NGO NGO 02 PRIVATE 03 RELIGIOUS 04 NHSDP 05 OTHER 96 DONT KNOW 96 NGO 05 OTHER 06 NHSDP 06 NHSDP 07 NHSDP 06 OTHER 06 OKENMENT 01 (known as): 03 RELIGIOUS 03 RELIGIOUS 03	AME) work ? this locality?	he/she live?	404. What services does he/she provide?	he provide?	
(known as) NGO 02 PRIVATE 03 PRIVATE 03 RELIGIOUS 04 NHSDP 05 OTHER 96 DON'T KNOW 98 GOVERNMENT 01 (known as): 03 RELIGIOUS 03 RELIGIOUS 03 RELIGIOUS 03 PRIVATE 03 RELIGIOUS 03	RNMENT	DISTRICT	UNPROMPTED PROMPTED NO	ROMPTED	NO
(known as): 6000000000000000000000000000000000000			HEALTH1	2	ю
NHSDP 05 OTHER 96 DON'T KNOW 98 DON'T KNOW 98 ROVERNMENT 01 (known as): 03 RELIGIOUS 03	DUS	UPAZILA/THANA:	FAMILY PLANNING1	2	в
OTHER 96 DON'T KNOW 98 DON'T KNOW 98 OCHER 03 (known as): 02 RELIGIOUS 03	05	UNION:	NUTRITION1	2	З
DONT KNOW	96		DON'T KNOW1	2	ო
GOVERNMENT	KNOW	VILLAGE:			
ME (known as):02 PRIVATE02 RELIGIOUS	٨	DISTRICT	UNPROMPTED PROMPTED NO	ROMPTED	NO
RELIGIOUS			HEALTH1	7	ю
	OUS	UPAZILA/THANA:	FAMILY PLANNING1	2	в
NHSDP		UNION:	NUTRITION1	2	З
NONE 0THER 96	96		DON'T KNOW	2	e
DON'T KNOW		VILLAGE:			

	JSe.	
	this village, that is, a person who sells family planning, ORS and other drugs from his or her house.	
	, a person who sells family planning	- 1
	that is,	VES V
	village,	6
4A: List of Volunteers (e.g. Shastha Shebika).	Please tell us about any volunteers who may work in this	COVEDNMENT
4A: List of Vol	Please tell us a	

I ICAGO ICII AG ADOAL ALIY VOIALICOLO MIC	o may work in unis village	, tnat Is, a person wno	sells ramily planning	Please tell us about any volunteers who may work in this village, that is, a person who sells tamily planning , UKS and other drugs from his or her house	rom nis or r	er house
01	GOVERNMENT	YES1 –	DISTRICT	UNPROMPTED PROMPTED NO	ROMPTED N	0
	NGO02	(GO TO 404A)		HEALTH 1	с. С	
	PRIVATE03		UPAZII A/THANA		1	
	RELIGIOUS			FAMILY PLANNING1	2	
_			UNION:	NUTRITION1	2	
	OTHER 96			DON'T KNOW	с. С	
	DON'T KNOW		VILLAGE:		,	
60	GOVERNMENT	YES 1		UNPROMPTED PROMPTED NO	ROMPTED N	0
	NGO. 02	(GO TO 404A)			c	
NAME (known as):	03				N	
		2		FAMILY PLANNING1	0	
_	NHSDP		UNION:	NUTRITION1	2	
	OTHER 96			DON'T KNOW	2	
	DON'T KNOW98		VILLAGE:		1	

4C: List of Traditional Birth Attendant (TBA). Please provide us the name of all traditional birth attendant working in this cluster/village/mohalla

Name of TBA	303: Does she trained or untrained?
01. NAME (known as):	TRAINED1 UNTRAINED2
NONE	
02. NAME (known as):	TRAINED1 UNTRAINED2
NONE	
03. NAME (known as):	TRAINED1 UNTRAINED2
NONE	

Please tell us about the doctors and pharmacies working in this village/mohalla. QUESTIONS AND FILTERS **CODING CATEGORIES** SKIP TO No. Are there any allopathic/MBBS doctors in this village/mohalla? 501 YES 1 NO......2 ► 503 ONE 1 502 How many allopathic/MBBS doctors are in this village/mohalla? MORE THAN 5 3 DON'T KNOW 8 503 How far away is the nearest allopathic/MBBS doctor? MILE.....1 KILOMETER2 CIRCLE '00 » IF IN VILLAGE /MOHALLA. DK 98 IN THIS VILLAGE/ MOHALLA 00 Are there any homeopathic doctors in this village/mohalla? 504 YES 1 → NO.....2 506 ONE 1 505 How many homeopathic doctors are in this village/mohalla? MORE THAN 5 3 DON'T KNOW 8 506 How far away is the nearest homeopathic doctor? MILE.....1 KILOMETER2 DK98 CIRCLE '00 » IF IN VILLAGE /MOHALLA. IN THIS VILLAGE/ MOHALLA 00 507 YES 1 Are there any ayurvedic/unani doctors in this village/mohalla? NO.....2 ┢ 509 ONE 1 508 How many ayurvedic/unani doctors are in this village/mohalla? MORE THAN 5 3 DON'T K<u>NOW 8</u> 509 How far away is the nearest ayurvedic/unani doctor? MILE.....1 KILOMETER2 DK98 CIRCLE '00 » IF IN VILLAGE /MOHALLA. IN THIS VILLAGE/ MOHALLA ... 00 510 Are there any pharmacies in this village/mohalla? YES 1 ▶ 512 NO......2 ONE 1 511 How many pharmacies are in this village/mohalla? MORE THAN 5 3 DON'T KNOW 8 512 How far away is the nearest pharmacy? MILE.....1 KILOMETER2 CIRCLE '00 » IF IN VILLAGE /MOHALLA. DK98 IN THIS VILLAGE/ MOHALLA 00

5: Availability of Doctors (allopathic, homeopathic) and Pharmacies

6: List of doctors

601. Please provide us the name of all doctors working in this village/mohalla.

A. NAME OF DOCTOR (known as)	B. TYPE OF DOCTOR		C. Is the (NAME) qualified doctor?
	ALLOPATHIC	1	HAVE A CERTIFICATE 1
NAME			HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE 3
	ALLOPATHIC		HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE 3
	ALLOPATHIC		HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE 3
	ALLOPATHIC	1	HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE 3
	ALLOPATHIC		HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE
	ALLOPATHIC	1	HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE 3
	ALLOPATHIC		HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE 3
	ALLOPATHIC		HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE 3
	ALLOPATHIC		HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE
	ALLOPATHIC		HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE 3
	ALLOPATHIC	1	HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE 3
	ALLOPATHIC		HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI	3	NO CERTIFICATE 3
	ALLOPATHIC		HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE 3
	ALLOPATHIC		HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE 3
	ALLOPATHIC		HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI	3	NO CERTIFICATE 3
	ALLOPATHIC	1	HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE 3
	ALLOPATHIC	1	HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE 3
	ALLOPATHIC	1	HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE 3
	ALLOPATHIC		HAVE A CERTIFICATE 1
NAME	HOMEOPATHIC		HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI	3	NO CERTIFICATE
	ALLOPATHIC	1	HAVE A CERTIFICATE 1
NAME			HAVE A CERTIFICATE (PALLI DOCTOR) 2
	AYURVEDIC/UNANI		NO CERTIFICATE
ENDING TIME		HOUI	R
		MAINU	
		IVIINU	

BANGLADESH DEMOGRAPHIC AND HEALTH SURVEY 2017-18 FIELDWORKER QUESTIONNAIRE

BANGLADESH NIPORT, MOHSW MITRA AND ASSOCIATES

LANGUAGE OF QUESTIONNAIRE	
QUESTIONNAIRE	ENGLISH

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP			
100	What is your name?					
		NAME				
101	RECORD FIELDWORKER NUMBER	NUMBER				
INSTR	INSTRUCTIONS					
informa		rt of the BDHS survey. Please fill out the questions below. er, your name will be removed and will not be part of the da				
102	In what DIVISION do you live?	BARISAL 01 CHITTAGONG 02 DHAKA 03 KHULNA 04 MYMENSINGH 05 RAJSHAHI 06 RANGPUR 07 SYLHET 08				
103	Do you live in a city, town, or rural area?	CITY 1 TOWN 2 RURAL 3				
104	How old are you? RECORD AGE IN COMPLETED YEARS.	AGE				
105	Are you male or female?	MALE				
106	What is your current marital status?	CURRENTLY MARRIED 1 WIDOWED 3 DIVORCED 4 SEPARATEI 5 NEVER MARRIED 6	→ 109			
107	How many living children do you have? INCLUDE ONLY CHILDREN WHO ARE YOUR BIOLOGICAL CHILDREN.	LIVING CHILDREN				
108	Have you ever had a child who died?	YES 1 NO 2				
109	What is the highest level of school you attended: primary, secondary, or higher?	PRIMAR) 1 SECONDARY 2 HIGHER 3				
110	What is the highest CLASS you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	CLASS				

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
111	What is your religion?	ISLAM 01 HINDUISM 02 BUDDHISM 03 CHRISTIANITY 04 NO RELIGION 9 OTHER 96 (SPECIFY)	
113	What languages can you speak? RECORD ALL LANGUAGES YOU CAN SPEAK.	BANGLA A ENGLISH B HINDI C URDU D OTHER X (SPECIFY)	
114	What is your mother tongue/native language (language spoken at home growing up)?	BANGLA A ENGLISH B HINDI C URDU D OTHER 96 (SPECIFY)	
115	Have you ever worked on a DHS survey prior to this one?	YES 1 NO 2	
116	Have you ever worked on any other survey prior to this one (not a DHS)?	YES 1 NO 2	
117	Were you already working for MITRA AND ASSOCIATES at the time you were employed to work on this DHS?	YES 1 NO 3	→ 119
118	Are you a permanent or temporary employee of MITRA AND ASSOCIATES?	PERMANENT 1 TEMPORARY 2	
119	If you have comments, please write them here.		

ADDITIONAL DHS PROGRAM RESOURCES

The DHS Program Website – Download free DHS reports, standard documentation, key indicator data, and training tools, and view announcements.	DHSprogram.com	
STATcompiler – Build custom tables, graphs, and maps with data from 90 countries and thousands of indicators.	Statcompiler.com	
DHS Program Mobile App – Access key DHS indicators for 90 countries on your mobile device (Apple, Android, or Windows).	Search DHS Program in your iTunes or Google Play store	
DHS Program User Forum – Post questions about DHS data, and search our archive of FAQs.	userforum.DHSprogram.com	
Tutorial Videos – Watch interviews with experts and learn DHS basics, such as sampling and weighting, downloading datasets, and how to read DHS tables.	www.youtube.com/DHSProgram	
Datasets – Download DHS datasets for analysis.	DHSprogram.com/Data	
Spatial Data Repository – Download geographically- linked health and demographic data for mapping in a geographic information system (GIS).	spatialdata.DHSprogram.com	

Social Media – Follow The DHS Program and join the conversation. Stay up to date through:

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You Tube	YouTube www.youtube.com/DHSprogram		Blog Blog.DHSprogram.com	
y	Twitter www.twitter.com/ DHSprogram	■然回 3.75.55 ■新天		