



# Bangladesh



**Demographic and  
Health Survey**  
*Key Indicators Report*

**2022**



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## Demographic and Health Survey 2022

### Key Indicators Report

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

The DHS Program  
ICF  
Rockville, Maryland, USA

March 2023



The 2022 Bangladesh Demographic and Health Survey (2022 BDHS) was conducted 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. The survey was implemented by Mitra and Associates, a private research agency, from June 2022 to December 2022. The funding for the 2022 BDHS was provided by the Government of Bangladesh and the United States Agency for International Development (USAID). ICF provided technical assistance through The DHS Program, a USAID-funded project providing support and technical assistance in the implementation of population and health surveys in countries worldwide.

Additional information about the 2022 BDHS may be obtained from the National Institute of Population Research and Training (NIPORT), Azimpur, Dhaka, Bangladesh (telephone: +880-2-9612193; internet: [www.niport.gov.bd](http://www.niport.gov.bd)).

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Cover: The Warriors of Terracotta: The warriors are facing each other riding on chariots—from the terracotta works of Kantaji Temple. Erection of the temple started in the year 1704 and ended in 1752. Taken by Utpal Saha on November 22, 2009, at Kantaji Temple, Dinajpur, Bangladesh.

Recommended citation:

National Institute of Population Research and Training (NIPORT) and ICF. 2023. *Bangladesh Demographic and Health Survey 2022: Key Indicators Report*. Dhaka, Bangladesh, and Rockville, Maryland, USA: NIPORT and ICF.

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## ACRONYMS AND ABBREVIATIONS

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ANC	antenatal care
ARI	acute respiratory infection
ASFR	age-specific fertility rates
BBS	Bangladesh Bureau of Statistics
BMRC	Bangladesh Medical Research Council
BRAC	Building Resources Across Communities
CAPI	computer-assisted personal interviewing
CBR	crude birth rate
CHCP	community health care provider
CPR	contraceptive prevalence rate
CSBA	community skilled birth attendant
CSPro	Census and Survey Processing
D4I	Data for Impact
DFID	Department for International Development
DGFP	Directorate General of Family Planning
DGHS	Directorate General of Health Services
DHS	Demographic and Health Survey
EA	enumeration area
FWA	family welfare assistant
FWV	family welfare visitor
GFR	general fertility rate
GPS	Global Positioning System
HA	health assistant
HPNSP	Health, Population and Nutrition Sector Programme
icdd,rh	International Centre for Diarrhoeal Disease Research
ISRT	Institute of Statistical Research and Training
IUD	intrauterine contraceptive device
IYCF	infant and young child feeding
JICA	Japan International Cooperation Agency
LAM	lactational amenorrhea method
MA	medical assistant
MATC	Medical Assistance Training Course
MOHFW	Ministry of Health and Family Welfare
MoLGRD & C	Ministry of Local Government, Rural Development and Co-operatives
NIPORT	National Institute of Population Research and Training
NGO	nongovernmental organization

OPHNE	Office of Population, Health, Nutrition, and Education
ORS	oral rehydration salts
ORT	oral rehydration therapy
PMMU	Program Management and Monitoring Unit
PNC	postnatal care
SACMO	sub-assistant community medical officer
SD	standard deviation
SDG	Sustainable Development Goal
SDM	standard days method
SIDA	Swedish International Development Authority
TFR	total fertility rate
TWG	Technical Working Group
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UP	union parishad
UPHCSDP	Urban Primary Health Care Services Delivery Project
USAID	United States Agency for International Development
WHO	World Health Organization



**Director General**  
National Institute of Population Research and Training  
Medical Education and Family Welfare Division  
Ministry of Health and Family Welfare

## FOREWORD

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The 2022 Bangladesh Demographic and Health Survey (2022 BDHS) is the ninth survey of its kind conducted in Bangladesh. Initiated in 1993, the series of BDHS surveys is the longest-running series of health care surveys in Bangladesh. The 2022 BDHS was implemented through a collaborative effort of the National Institute of Population Research and Training (NIPORT), ICF, and Mitra and Associates. Financial support for the survey was provided by the Government of Bangladesh and the United States Agency for International Development (USAID), Bangladesh.

The multitude of demographic and health data that the 2022 BDHS provides is crucial and essential in monitoring and evaluating the performance of the 4th Health, Population and Nutrition Sector Programme (4th HPNSP), as well as developing the 5th HPNSP. The BDHS provides estimates for 14 indicators of the Results Framework of the 4th HPNSP. In addition, the BDHS surveys have always been a key source of information for national program monitoring. We expect that the 2022 survey data will support policymakers and program managers in monitoring and designing programs and strategies for improving health, family planning, and nutrition services in Bangladesh.

The 2022 BDHS was steered 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. Their proficient knowledge and expert opinions during various phases of the survey implementation improved the quality of the survey tremendously. A Technical Working Group (TWG) was formed with representatives from NIPORT; Program Management and Monitoring Unit, Ministry of Health and Family Welfare (PMMU-MOHFW); Data for Impact (D4I); the University of Dhaka; the International Center for Diarrhoeal Disease Research, Bangladesh (icddr,b); USAID/Bangladesh; ICF; and Mitra and Associates. This group was in charge of the design of the survey instruments and the technical implementation of the survey. I would like to express my sincere appreciation to the SAC and TWG members for their sincere effort in all stages of the survey.

In addition, I extend sincere thanks to the Bangladesh Bureau of Statistics (BBS) for its support in selecting sample clusters and providing enumeration area maps for the survey.

This report presents the key indicators from the survey results. A more comprehensive and detailed report is scheduled to be published in 2023.

I would like to congratulate all of the professionals of the NIPORT Research Unit for the successful completion of the survey. I also extend my thanks to ICF and Mitra and Associates for completing the task in a professional manner. Finally, USAID/Bangladesh deserves special thanks for providing technical and financial support for the survey.

Md. Shafiqul Islam



# 1 INTRODUCTION

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The 2022 Bangladesh Demographic and Health Survey (2022 BDHS) is the ninth national survey to report on the demographic and health conditions of women and their families in Bangladesh. The survey was conducted 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), Government of Bangladesh. Financial assistance was provided jointly by the Government of Bangladesh and the United States Agency for International Development (USAID). Mitra and Associates, a Bangladeshi research firm located in Dhaka, implemented the survey. Data collection took place from June 27 to December 12, 2022. ICF provided technical assistance through The Demographic and Health Surveys (DHS) Program, which is funded by USAID. The DHS Program offers financial support and technical assistance for population and health surveys in countries worldwide. The International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b) also provided technical assistance during the survey, especially on the verbal autopsy questionnaires aiming to determine causes of under-5 deaths.

This Key Indicators Report presents a first look at selected findings from the 2022 BDHS. A comprehensive analysis of the data will be presented in a final report in 2023. Although the data in the final report are not expected to differ substantially from the findings presented here, the results should be regarded as provisional and subject to modification.

## *Survey Objectives*

The primary objective of the 2022 BDHS is to provide up-to-date estimates of basic demographic and health indicators. Specifically, the BDHS collected information on:

- Fertility and childhood mortality levels
- Fertility preferences
- Awareness, approval, and use of family planning methods
- Maternal and child health, including breastfeeding practices
- Nutrition levels
- Newborn care

The information collected through the 2022 BDHS is intended to assist policymakers and program managers in designing and evaluating programs and strategies for improving the health of the population of Bangladesh. The survey also provides indicators relevant to the Sustainable Development Goals (SDGs) for Bangladesh.



## 2 SURVEY IMPLEMENTATION

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### 2.1 SAMPLE DESIGN

The sampling frame used for the 2022 BDHS is the Integrated Multi-Purpose Sampling Master Sample, selected from a complete list of enumeration areas (EAs) covering the whole country. It was prepared by the Bangladesh Bureau of Statistics (BBS) for the 2011 population census of the People's Republic of Bangladesh. The sampling frame contains information on EA location, type of residence (city corporation, other than city corporation, or rural), and the estimated number of residential households. A sketch map that delineates geographic boundaries is available for each EA.

Bangladesh contains 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 administrative divisions allow the country 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 (237 in urban areas and 438 in rural areas) were selected with probability proportional to EA size. The BBS drew the sample in the first stage following specifications provided by ICF. A complete household listing operation was then carried out by Mitra and Associates 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 45 households per EA was selected to provide statistically reliable estimates of key demographic and health variables for urban and rural areas separately and for each of the eight divisions in Bangladesh. Eligible women in each household were asked a set of core questions on background characteristics and reproductive history. Thirty of the 45 households in each EA were randomly selected for the long individual questionnaire administered to all eligible women within the household; in the remaining 15 households, a short version of the questionnaire was administered to all eligible women. Half of the households (15 of 30 households) selected in the long questionnaire subsample were systematically selected for biomarker measurements (also known as the biomarker subsample), specifically height and weight measurements among children under age 5 and ever-married women age 15–49. In addition, about half (8 of 15) of the households selected in the biomarker subsample were systematically selected for anthropometric measurements among ever-married women age 50 and above, never-married women age 18 and above, and all men age 18 and above; and blood pressure and blood glucose measurements were taken for all women and men age 18 and above.

Based on this design, a total of 30,375 residential households were selected (19,710 from rural areas and 10,665 from urban areas). Thirty-one listing teams, each consisting of two listers/mappers, were deployed in the field to complete the listing operation. In addition, 12 quality control officers were deployed in the field. Overall, 74 listers/mappers were deployed in the field to complete the listing work. Training for the household listers/mappers took place April 24–29, 2022. The household listing operation was carried out in two phases (each about 4 weeks in duration) in all selected EAs from May 25 to July 27, 2022.

### 2.2 QUESTIONNAIRES

Four types of questionnaires were used for the 2022 BDHS: the Household Questionnaire, the Woman's Questionnaire (completed by ever-married women age 15–49), the Biomarker Questionnaire, and two verbal autopsy questionnaires. The questionnaires, based on The DHS Program's model questionnaires, were adapted to reflect population and health issues relevant to Bangladesh. In addition, a self-administered Fieldworker Questionnaire collected information about the survey's fieldworkers. The questionnaires were adapted for use in Bangladesh after a series of meetings with a Technical Working Group (TWG). The questionnaires were developed in English and then translated to and printed in Bangla.

For each cluster, Global Positioning System (GPS) data were collected during interviews using a GPS USB dongle. The protocol for the 2022 BDHS received clearance from both the ICF Institutional Review Board ethics committee and the Bangladesh Medical Research Council (BMRC).

**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, 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 all individuals in the household who were eligible for biomarker component assessments. Additional information was collected about 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 answered 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
- Infant feeding practices and illness
- Marriage and sexual activities
- Fertility preferences
- Husbands' background characteristics and women's work
- Mental health and well-being

Ever-married women in two-thirds of selected households completed a long (full) questionnaire that included all of the topics mentioned above. Ever-married women in the other one-third of selected households were administered a short questionnaire and provided information only on background characteristics and reproductive history.

**Biomarker Questionnaire:** In addition to the data collected through interviews, data were collected for a biomarker subsample in the 2022 BDHS. The biomarkers collected included anthropometric (height and weight) and blood pressure measurements. ICF, along with local experts, assisted with the development of the biomarker testing protocol and arranged for the required approval by the ICF Institutional Review Board.

**Verbal autopsy questionnaires:** Two questionnaires collected 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 29 days and 59 months. Mothers who reported the death of a child under age 5 in the 5-year period prior to the 2022 BDHS answered verbal autopsy questions. Assistance with training of fieldworkers in implementing the verbal autopsy questionnaires was provided by icddr,b.

**Fieldworker Questionnaire:** The Fieldworker Questionnaire collected basic background information on the people collecting data in the field, including quality control officers, team supervisors, interviewers, and biomarker technicians.

### **2.3 ANTHROPOMETRY, BLOOD PRESSURE, AND BLOOD GLUCOSE MEASUREMENTS**

In the 2022 BDHS, not all households were eligible for biomarker measurement and testing. One-third of the 45 households in each cluster were selected for biomarker measurements (height and weight measurements for children age 0–59 months and ever-married women age 15 to 49). In addition, in half of the households selected for biomarker measurements (one-sixth of all households), 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. Blood pressure testing was also conducted among all adult men and women age 18 and older in these households.

**Anthropometry:** Weight measurements were taken using SECA scales with a digital display (model number SECA 874U). Height and length were measured with a ShorrBoard® measuring board. Children younger than age 24 months were measured lying down (recumbent length), while older children and adults were measured standing (height).

For children, anthropometric data are used to calculate three indices that reflect nutritional status: height-for-age, weight-for-height, and weight-for-age. In presenting the anthropometric results, the height and weight of children in the survey population were compared with the 2006 WHO Child Growth Standards, which are based on an international sample of ethnically, culturally, and genetically diverse, healthy children living under optimum conditions conducive to achieving a child's full genetic growth potential (WHO 2006b). Children who were severely malnourished were referred to a local health facility for assessment and treatment. Biomarker technicians provided all households with an informational pamphlet containing the height and weight of all eligible children and adults.

**Blood pressure:** Biomarker specialists measured systolic and diastolic blood pressure with the Multi-User Upper Arm Blood Pressure Monitor UA-767F/FAC. *Blood pressure measurements in the 2022 Bangladesh DHS are used for research purposes, to provide a statistical description of the survey population. Measurements taken in the BDHS do not constitute a medical diagnosis of disease.* Respondents found to have high blood pressure, identified as systolic pressure greater than 140 mmHg and/or diastolic pressure greater than 90 mmHg, received a referral to a local health facility. All households where biomarkers were collected were provided with an informational pamphlet on blood pressure.

**Glucose testing:** 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 cutoff points were used for fasting plasma blood glucose measurements. Individuals with fasting plasma glucose values of 7.0 mmol/L and above were classified as having diabetes and received a referral to a local health facility.

## 2.4 TRAINING OF TRAINERS AND PRETEST

The training of trainers and pretest were carried out simultaneously. Fourteen trainers (six from icddr,b and eight from Mitra and Associates) participated in the training of trainers. Three supervisors and 18 interviewers, including six biomarker staff, were trained for the pretest. The pretest training and pretest fieldwork took place from June 5 to June 25, 2022, in Dhaka. The questionnaires were pretested with 120 households; 131 women interviews, 40 biomarker measurements, and two verbal autopsies were conducted in three rural clusters in Manikgonj District and three 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.

## 2.5 TRAINING OF FIELD STAFF

Training for the 2022 BDHS fieldworkers was conducted from June 27 to July 30, 2022. 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. The trainees were split into four groups, each with about 40–50 trainees. A total of 178 field staff (46 men and 132 women) were recruited based on their educational level, prior survey experience, and willingness to spend 4 months on the project. Training included lectures on how to complete the questionnaires, mock interviews between participants, practical training using tablets, and

field practice. Representatives of ICF and NIPORT attended the training as resource persons. Training on the verbal autopsy questionnaires was provided by icddr,b staff members.

Biomarker technicians were trained to measure the height and weight of children and adults. To qualify for biomarker data collection, technicians had to have completed 3 years of the Medical Assistance Training Course (MATC), had to be nurses, or had to have a diploma with enough experience in biomarker data collection. Training on child height measurement included standardization exercises and restandardization exercises for those technicians who did not pass the standardization exercises.

## **2.6 FIELDWORK**

Fieldwork for the 2022 BDHS was carried out by 20 interviewing teams, each consisting of one male supervisor, one female lead interviewer, four female interviewers, two health technicians (one male and one female), and one logistics staff person. Data collection occurred in four phases (each about 4 weeks in duration) beginning on June 27, 2022, and ending on December 12, 2022.

Data quality measures were implemented through several activities. Nine quality control officers (three men and six women) from Mitra and Associates traveled to the field to visit the interviewing teams throughout the data collection period. In addition, NIPORT and icddr,b monitored fieldwork by using additional quality control teams. The quality control officers went to 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 quality control officers also revisited the households of completed clusters for each survey team and checked whether eligible respondents in selected households were visited and 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. Data quality was also monitored through field check tables generated concurrently with data processing. The main purpose of the tables was to allow the quality control officers and ICF to advise field teams of problems detected during the fieldwork.

## **2.7 DATA PROCESSING**

The survey data were collected using tablet PCs running Windows 10.1 and Census and Survey Processing System (CSPRO) software, jointly developed by the United States Census Bureau, ICF, and Serpro S.A. The Bangla language questionnaire was used for collecting data via computer-assisted personal interviewing (CAPI). The CAPI program accepted only valid responses, automatically performed checks on ranges of values, skipped to the appropriate question based on the responses given, and checked the consistency of the data collected. Answers to the survey questions were entered into the PC tablets by each interviewer. Supervisors downloaded interview data to their computer, checked the data for completeness, and monitored fieldwork progress

Each day, after completion of interviews, field supervisors submitted data to the servers. Data were sent to the central office via the internet or other modes of telecommunication allowing electronic transfer of files. The data processing manager monitored the quality of the data received and downloaded completed files into the system. ICF provided the CSPRO software for data processing and offered technical assistance in preparation of the data editing programs. Secondary editing was conducted simultaneously with data collection. All technical support for data processing and use of PC tablets was provided by ICF.

## 2.8 COVERAGE OF THE SAMPLE

**Table 2.1** presents the response rates for the 2022 BDHS. A total of 30,330 households were selected for the 2022 BDHS sample, of which 30,149 were found to be occupied. Of the occupied households, 30,018 were successfully interviewed, yielding a response rate of 99.6%. In the interviewed households, 30,358 ever-married women age 15–49 were identified as eligible for individual interviews. Interviews were completed with 30,078 women, yielding a response rate of 99.1%. A total of 20,217 women were eligible for the full questionnaire, and 19,987 were successfully interviewed. Response rates were 98.9% for the full questionnaire and 99.5% for the short questionnaire.

Result	Residence		
	Urban	Rural	Total
<b>Table 2.1 Results of the household and individual interviews</b>			
Number of households, number of interviews, and response rates, according to residence (unweighted), Bangladesh DHS 2022			
<b>Household interviews</b>			
Households selected	10,665	19,665	30,330
Households occupied	10,576	19,573	30,149
Households interviewed	10,508	19,510	30,018
<b>Household response rate<sup>1</sup></b>	<b>99.4</b>	<b>99.7</b>	<b>99.6</b>
<b>Interviews with women age 15–49: all households</b>			
Number of eligible women	10,711	19,647	30,358
Number of eligible women interviewed	10,571	19,507	30,078
<b>Eligible women response rate<sup>2</sup></b>	<b>98.7</b>	<b>99.3</b>	<b>99.1</b>
<b>Interviews with women age 15–49: full questionnaire households</b>			
Number of eligible women	7,131	13,086	20,217
Number of eligible women interviewed	7,007	12,980	19,987
<b>Eligible women response rate<sup>2</sup></b>	<b>98.3</b>	<b>99.2</b>	<b>98.9</b>
<b>Interviews with women age 15–49: short questionnaire households</b>			
Number of eligible women	3,580	6,561	10,141
Number of eligible women interviewed	3,564	6,527	10,091
<b>Eligible women response rate<sup>2</sup></b>	<b>99.6</b>	<b>99.5</b>	<b>99.5</b>
<sup>1</sup> Households interviewed/households occupied			
<sup>2</sup> Respondents interviewed/eligible respondents			



### 3 HOUSEHOLD AND RESPONDENT CHARACTERISTICS

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#### Key findings

- Economic conditions in Bangladesh continue to improve as evidenced by several socioeconomic indicators.
- Access to electricity is almost universal in both urban and rural households of Bangladesh. Between 2017-18 and 2022, household access to electricity increased from 91% to 99%.
- Housing quality has improved in terms of materials used for construction. Over the past decade, the proportion of houses with floors made of cement or ceramic tiles has almost doubled, from 26% in 2011 to 49% in 2022.
- Fifty-nine percent of households have improved sanitation facilities, as compared with 44% in 2017-18.
- Socioeconomic improvement is also reflected in household ownership of consumer durables. Between 2017-18 and 2022, household ownership of a refrigerator increased from 29% to 53%, ownership of a television rose from 47% to 50%, ownership of an electric fan increased from 80% to 96%, and ownership of a mobile phone increased from 94% to 98%.
- Sixty-eight percent of currently married women age 15–49 have a mobile phone, up from 60% in 2017-18. Young unmarried women age 15–19 are much less likely to have a mobile phone than young unmarried men in the same age group (29% versus 68%).
- Fifty-seven percent of the population has a handwashing facility with availability of water and soap. Availability of basic handwashing facilities increased from 39% to 57% between 2017-18 and 2022.
- Women’s educational attainment continues to improve. The proportion of ever-married women age 15–49 with a secondary education or higher has doubled since 2011, from 12% to 24%.

#### 3.1 CHARACTERISTICS OF HOUSEHOLDS

All selected households were asked a series of questions to determine socioeconomic conditions; ownership of consumer durables, land, livestock, and means of transport; availability of and access to improved water sources; and availability of sanitation, and handwashing facilities. **Tables 3.1** and **3.2** present findings on household characteristics.

- Almost all (99%) Bangladeshi households have access to electricity (**Table 3.1**).
- Almost half of household floors are made of cement/ceramic tiles. Urban households are much more likely to have cement/ceramic tile floors (82%) than rural households (37%).
- Nine of 10 households have walls made of tin, cement, stone, and/or brick.
- Fifty-nine percent of households have basic sanitation service (an improved sanitation facility that is not shared with another household). Improved sanitation facilities include flush/pour flush toilets that

flush water and waste to a piped sewer system, septic tank, or pit latrine; ventilated improved pit (VIP) latrine; and pit latrine with slab.

- Almost all households in both urban and rural areas own a mobile phone (**Table 3.2**).
- Ninety-six percent of households have an electric fan, 50% have a television, and 53% have a refrigerator.
- Ninety percent of households have homestead land (93% in rural areas and 83% in urban areas).

**Table 3.1 Household characteristics**

Percent distribution of households by access to electricity and selected housing characteristics, and percentage of households with an improved sanitation facility, according to residence, Bangladesh DHS 2022

Housing characteristic	Residence		Total
	Urban	Rural	
<b>Electricity</b>			
National grid or solar	99.8	99.0	99.2
National grid	99.1	97.5	98.0
Solar	5.8	16.1	13.2
No electricity	0.2	1.0	0.8
Total	100.0	100.0	100.0
<b>Flooring materials</b>			
Earth/sand/dung	17.6	62.9	50.1
Wood planks/palm/bamboo	0.4	0.4	0.4
Ceramic tiles	14.5	2.2	5.7
Cement	67.3	34.3	43.6
Other	0.2	0.2	0.2
Total	100.0	100.0	100.0
<b>Roof materials</b>			
Thatch/palm leaf/sod/rustic mat	0.2	0.2	0.2
Palm/bamboo	0.2	0.0	0.1
Wood planks	0.0	0.0	0.0
Tin/metal	58.6	86.4	78.5
Wood	0.1	0.2	0.2
Ceramic tiles	0.3	0.0	0.1
Cement	39.6	12.0	19.8
Roofing shingles	0.3	0.6	0.5
Other	0.6	0.5	0.5
Total	100.0	100.0	100.0
<b>Wall materials</b>			
Cane/palm/trunks	0.2	0.5	0.4
Dirt	1.3	8.3	6.3
Bamboo with mud/stone with mud	1.4	3.1	2.6
Tin	24.8	50.8	43.4
Cement/cement blocks	64.8	26.3	37.2
Stone with lime/cement	0.3	0.1	0.1
Bricks	7.0	10.2	9.3
Wood plunks/shingles/used wood	0.1	0.3	0.3
Other	0.2	0.5	0.4
Total	100.0	100.0	100.0
<b>Sanitation facility</b>			
Improved, not shared facility <sup>1</sup>	59.4	58.5	58.7
Number	8,511	21,507	30,018

<sup>1</sup> Improved sanitation facilities include flush/pour flush to piped sewer system/septic tank/pit latrine, ventilated improved pit (VIP) latrine, or pit latrine with slab.

**Table 3.2 Household possessions**

Percentage of households possessing various household effects, means of transportation, agricultural land, and livestock/farm animals, by residence, Bangladesh DHS 2022

Possession	Residence		Total
	Urban	Rural	
<b>Household effects</b>			
Radio	0.8	0.5	0.6
Television	68.3	43.2	50.3
Mobile telephone	99.0	97.4	97.9
Non-mobile telephone	1.7	0.3	0.7
Refrigerator	69.8	46.8	53.3
Almirah/wardrobe	73.9	52.7	58.7
Electric fan	97.3	95.8	96.2
DVD/VCD player	1.7	0.9	1.1
Water pump	21.9	24.0	23.4
IPS/generator	5.5	1.2	2.5
Air conditioning	4.0	0.4	1.4
Computer/laptop	13.8	3.5	6.4
<b>Means of transport</b>			
Car/truck/microbus	1.8	0.8	1.1
Auto bike/tempo/CNG	2.5	3.6	3.3
Rickshaw/van	4.4	5.6	5.3
Bicycle	17.8	28.8	25.7
Motorcycle/motor scooter	13.8	11.7	12.3
Boat with motor	0.7	1.0	0.9
Canoe/boat without motor	0.8	2.0	1.7
<b>Ownership of land</b>			
Homestead	83.0	92.6	89.9
Other land	29.1	40.0	36.9
Neither	15.4	6.4	9.0
<b>Ownership of farm animals</b>			
Buffaloes	0.3	1.0	0.8
Cows	8.2	37.3	29.1
Goats/sheep	7.0	27.4	21.6
Chickens/ducks	22.5	62.4	51.1
Other farm animals	5.9	9.8	8.7
Number	8,511	21,507	30,018

### 3.2 HANDWASHING

- Fifty-seven percent of the population has basic handwashing facilities, that is, a place for handwashing where water and soap are available (**Table 3.3**). In 2017-28, only 39% of the population had basic handwashing facilities (**Figure 3.1**).
- Residents of urban areas are more likely to have basic handwashing facilities than residents of rural areas (69% versus 52%).
- Availability of basic handwashing facilities varies by administrative division. Over 60% of the populations in Dhaka, Rajshahi, and Rangpur have access to basic handwashing facilities, as compared with only 37% and 46% of the populations in Barishal and Mymensingh, respectively (**Table 3.3**).

**Table 3.3 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, and 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 2022

Background characteristic	Percentage of de jure population for whom place for washing hands was observed:			Number of persons	Place for handwashing observed and:			Number of persons for whom place for handwashing was observed	Percentage of the de jure population with a basic handwashing facility <sup>3</sup>	Percentage of the de jure population with a limited handwashing facility <sup>4</sup>	Number of persons for whom a place for handwashing was observed or with no place for handwashing in the dwelling, yard, or plot
	Place for handwashing was a fixed place	Place for handwashing was mobile	Total		Water available	Soap available <sup>1</sup>	Cleansing agent other than soap available <sup>2</sup>				
<b>Residence</b>											
Urban	93.7	5.6	99.3	34,892	98.5	69.7	6.6	34,651	69.1	30.4	34,818
Rural	90.1	9.0	99.1	89,374	96.9	52.6	14.0	88,602	51.7	47.5	89,291
<b>Division</b>											
Barishal	88.9	10.1	99.0	7,520	97.6	37.9	11.2	7,444	37.3	61.7	7,516
Chattogram	89.0	8.9	97.9	23,357	98.0	58.0	9.1	22,864	56.7	41.3	23,332
Dhaka	93.3	6.2	99.4	30,762	98.6	61.9	8.0	30,592	61.5	38.1	30,707
Khulna	94.3	5.5	99.8	14,028	97.4	58.1	11.1	13,993	57.5	42.3	14,017
Mymensingh	91.0	8.2	99.2	9,978	94.5	47.4	16.1	9,988	46.2	53.2	9,957
Rajshahi	88.9	10.8	99.7	15,674	97.5	62.7	21.0	15,622	62.4	37.3	15,667
Rangpur	96.4	3.3	99.6	14,436	96.6	62.7	19.0	14,385	61.4	38.4	14,417
Sylhet	81.3	18.0	99.3	8,511	94.8	48.1	2.2	8,454	47.2	52.3	8,498
<b>Wealth quintile</b>											
Lowest	83.5	14.6	98.2	24,851	94.5	26.4	15.4	24,393	25.5	72.9	24,796
Second	88.6	10.5	99.2	24,857	96.6	41.4	16.2	24,647	40.5	58.7	24,841
Middle	91.6	7.9	99.5	24,850	97.6	55.3	14.4	24,722	54.7	44.8	24,842
Fourth	94.5	5.0	99.5	24,860	98.4	71.0	9.5	24,725	70.4	29.1	24,846
Highest	97.4	2.3	99.7	24,848	99.4	92.3	4.2	24,766	91.9	8.0	24,786
<b>Total</b>	<b>91.1</b>	<b>8.1</b>	<b>99.2</b>	<b>124,266</b>	<b>97.3</b>	<b>57.4</b>	<b>11.9</b>	<b>123,253</b>	<b>56.6</b>	<b>42.7</b>	<b>124,110</b>

<sup>1</sup> Soap includes soap or detergent in bar, liquid, powder, or paste form.

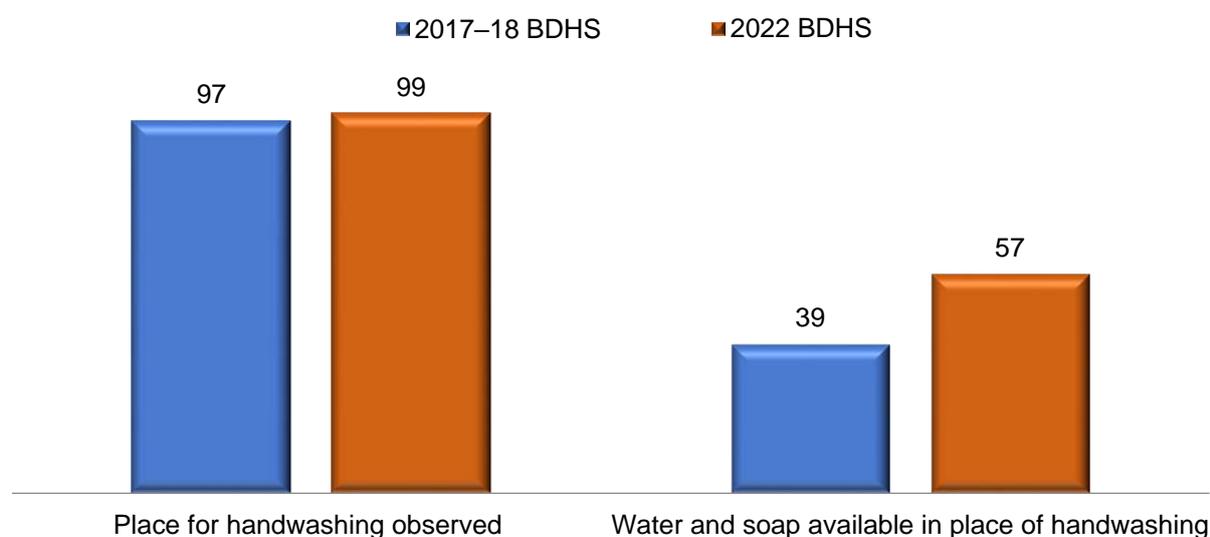
<sup>2</sup> Cleansing agents other than soap include locally available materials such as ash, mud, or sand.

<sup>3</sup> The availability of a handwashing facility on premises with soap and water

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

**Figure 3.1 Trends in availability of handwashing facilities: Bangladesh DHS 2017–2022**

Percentage of population with basic handwashing facilities



### 3.3 OWNERSHIP OF MOBILE PHONE

- Sixty-eight percent of currently married women age 15–49 own a mobile phone (**Table 3.4**).
- Young unmarried men age 15–19 are much more likely to have a mobile phone than young unmarried women in the same age group (68% versus 29%).
- Women in urban areas, both married and unmarried, are more likely to have a mobile phone than those in rural areas. There is no urban-rural difference among young men in ownership of a mobile phone.

**Trends:** A number of household- and population-level indicators reflect continued improvements in socioeconomic conditions in Bangladesh. Between 2011 and 2022, there were increases in the percentages of households with access to electricity (from 60% to 99%), households with improved sanitation facilities (from 34% to 59%), and residents with access to basic handwashing facilities (from 25% to 57%). Household ownership of consumer durables also increased notably during this period; ownership of a refrigerator increased from 14% to 53%, ownership of a television rose from 40% to 50%, and ownership of a mobile phone increased from 78% to 98%.

**Table 3.4 Ownership of mobile phone**

Percentage of de facto unmarried women age 15–19, unmarried men age 15–19, and married women age 15–49 who own a mobile phone, by residence and division, Bangladesh DHS 2022

Background characteristic	Unmarried men age 15–19		Unmarried women age 15–19		Currently married women age 15–49	
	Percent	Number	Percent	Number	Percent	Number
<b>Residence</b>						
Urban	68.0	1,467	40.4	1,303	78.2	8,149
Rural	67.5	3,821	23.4	2,921	64.0	20,696
<b>Division</b>						
Barishal	66.1	315	24.0	260	74.2	1,768
Chattogram	60.4	1,014	21.5	947	74.7	5,348
Dhaka	69.5	1,241	39.7	1,086	74.7	7,304
Khulna	72.8	545	32.9	352	63.6	3,450
Mymensingh	68.6	432	21.6	327	60.4	2,212
Rajshahi	73.1	650	32.5	415	61.7	3,806
Rangpur	70.3	637	27.3	384	58.2	3,337
Sylhet	61.7	455	19.0	454	63.8	1,618
Total	67.7	5,288	28.6	4,224	68.0	28,845

### 3.4 CHARACTERISTICS OF RESPONDENTS

**Table 3.5** shows the percent distribution of women (weighted and unweighted) age 15–49 interviewed in the 2022 Bangladesh DHS by background characteristics. Note that the results presented in this report are based on weighted data only, and thus are representative of the country as a whole, urban and rural areas, and the eight administrative divisions.

- Forty-two percent of ever-married women age 15–49 under are under age 30.
- Most respondents (90%) are Muslim. Eight percent are Hindu.
- Almost 60% of women have at least some secondary education, and 24% have a secondary education or higher.

**Trends:** In the past 11 years, the proportion of ever-married women age 15–49 with no education has declined from 28% to 14%, while the proportion with a secondary education or higher has increased from 12% to 24% (**Figure 3.2**).

**Table 3.5 Background characteristics of respondents**

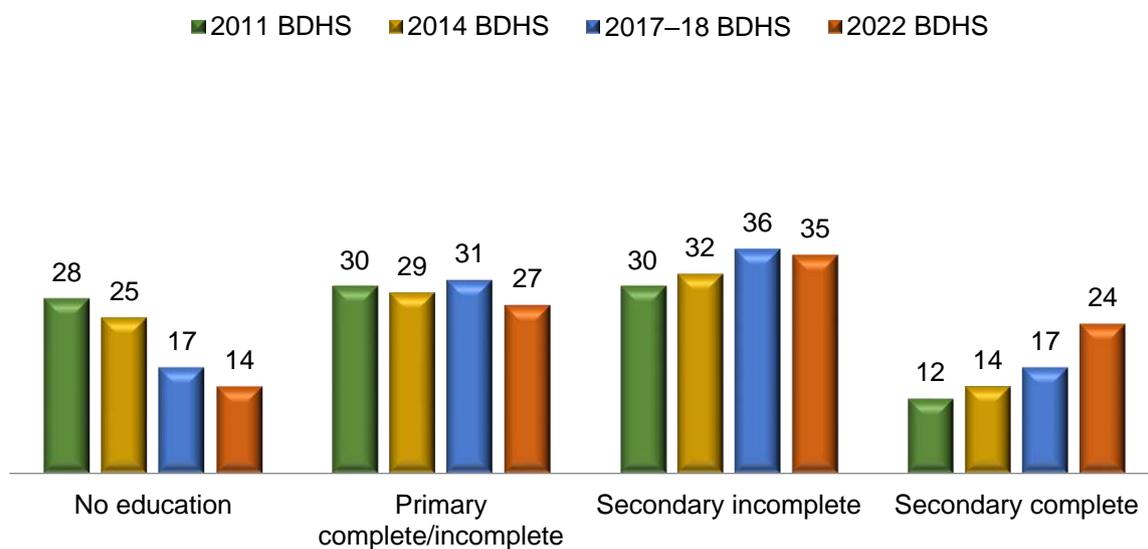
Percent distribution of women age 15–49 by selected background characteristics, Bangladesh DHS 2022

Background characteristic	Full sample		
	Weighted percent	Weighted number	Unweighted number
<b>Age</b>			
15–19	8.6	2,576	2,449
20–24	16.3	4,916	4,851
25–29	17.5	5,276	5,304
30–34	17.0	5,118	5,123
35–39	17.0	5,105	5,136
40–44	12.7	3,829	3,866
45–49	10.8	3,258	3,349
<b>Religion</b>			
Islam	90.3	27,152	26,958
Hinduism	8.3	2,499	2,749
Buddhism	1.2	363	295
Christianity	0.2	58	70
Other	0.0	5	6
<b>Marital status</b>			
Married	95.1	28,594	28,537
Divorced/separated	2.2	656	675
Widowed	2.8	828	866
<b>Residence</b>			
Urban	28.5	8,565	10,571
Rural	71.5	21,513	19,507
<b>Division</b>			
Barishal	6.1	1,825	3,232
Chattogram	18.6	5,585	4,461
Dhaka	25.4	7,637	4,554
Khulna	12.0	3,602	3,928
Mymensingh	7.7	2,305	3,255
Rajshahi	13.1	3,935	3,816
Rangpur	11.5	3,452	3,624
Sylhet	5.8	1,736	3,208
<b>Education</b>			
No education	14.1	4,229	4,168
Primary incomplete	13.1	3,926	3,834
Primary complete <sup>1</sup>	13.5	4,051	4,127
Secondary incomplete	35.1	10,558	10,182
Secondary complete or higher <sup>2</sup>	24.3	7,314	7,767
<b>Wealth quintile</b>			
Lowest	18.4	5,540	5,559
Second	20.0	6,029	5,855
Middle	20.5	6,167	5,926
Fourth	20.6	6,204	6,168
Highest	20.4	6,138	6,570
Total	100.0	30,078	30,078

<sup>1</sup> Primary complete is defined as completing grade 5.<sup>2</sup> Secondary complete is defined as completing grade 10.

**Figure 3.2 Trends in level of education among ever-married women age 15–49: Bangladesh DHS 2011–2022**

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





## 4 MARRIAGE, FERTILITY, AND FERTILITY REGULATION

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### Key findings

- Age at marriage is increasing slowly. Half of women age 20–24 marry before age 18 (the legal age of marriage), and more than one in four (27%) marry by age 16. The proportion of women who marry before age 18 declined from 65% in 2011 and 59% in 2017–18 to 50% in 2022.
- The total fertility rate (TFR) is 2.3 children per woman. The goal of the 4th Health, Population and Nutrition Sector Programme (4th HPNSP) is to achieve a TFR of 2.0 by 2023. However, the TFR has remained unchanged at 2.3 since 2011.
- Rajshahi has a TFR of 2.0, the only division to have a replacement-level fertility rate of 2.1 or below. In 2017–18, all three western divisions, Rajshahi, Khulna, and Rangpur, had replacement-level fertility.
- Between 2017–18 and 2022, the TFR increased in two western divisions, Rangpur (from 2.1 to 2.5) and Khulna (from 1.9 to 2.2).
- The TFR in Sylhet declined from 2.6 in 2017–18 to 2.3 in 2022. For the first time, Sylhet’s TFR is at par with Bangladesh’s national average.
- Twenty-three percent of women age 15–19 have begun childbearing (that is, they have had a child or are pregnant with their first child). Teenage childbearing has declined by 4 percentage points since 2017–18. The aim of the 4th HPNSP is to reduce teenage childbearing to 25% by 2023, and this has been achieved.
- Thirteen percent of currently married women want to have a child soon, while 19% want to wait at least 2 years.
- Fifty-seven percent of women want to limit childbearing (that is, they want no more children or are sterilized). The desire to limit childbearing has shown a gradual decline over time, from 65% in 2011 to 63% in 2014, 60% in 2017–18, and 57% in 2022.
- The contraceptive prevalence rate (CPR) is 64% among currently married women age 15–49; 55% of women are using modern methods of contraception, while 9% rely on traditional methods. The aim of the 4th HPNSP is to attain a CPR of 75% by 2023.
- The oral pill is the most widely used method (27%), followed by injectables (11%) and male condoms (8%). Only 8% of women use a long-acting and reversible contraceptive or permanent methods such as intrauterine devices (IUDs), implants, and male/female sterilization.
- Use of modern contraceptive methods increased from 52% to 55% between 2017–18 and 2022. Use of oral pills increased by 2 percentage points (25% to 27%), and use of male condoms increased by 1 percentage point (7% to 8%).

- Use of modern contraceptives is most frequent in Rajshahi and Rangpur (61% each) and least frequent in Chattogram and Sylhet (49% and 44%, respectively). The goal of the 4th HPNSP is to achieve more equitable use of modern contraception in the country's administrative divisions by 2023. Thus, the health sector program aims to reach 60% modern method use in Chattogram and Sylhet. However, both Chattogram and Sylhet are far (by 11 percentage points and 16 percentage points, respectively) from attaining 60% use of modern contraception.
- The private medical sector is most widely used by women to obtain modern family planning methods (60%). The dominance of the private sector (private medical sector and shops) as a source of contraceptive methods has increased steadily over time, from 42% in 2011 and 50% in 2017–18 to 57% in 2022. Pharmacies/drugstores are by far the predominant private sector source. The public sector is the source for 37% of modern method users.
- Unmet need for family planning among currently married women age 15–49 declined from 12% in 2017–18 to 10% in 2022.

#### 4.1 MARRIAGE

Evidence shows that early marriage leading to early pregnancy can have negative impacts on the health of women and their children. Historically, Bangladesh has one of the highest rates of teenage marriage among all countries in the world. **Table 4.1** shows the proportion of women age 20–24 who were married before age 18, the legal age of marriage for girls in Bangladesh. It also presents information on marriage before age 16.

- Half of women age 20–24 marry before age 18, and more than one in four (27%) marry before age 16.
- Early marriage is more common in rural areas than in urban areas.
- Women in Khulna, Rajshahi, Rangpur, and Barishal tend to marry earlier than those in Sylhet, Chattogram, Dhaka, and Mymensingh. The prevalence of early marriage is highest in Rajshahi, where almost two-thirds of women marry by age 18 and two-fifths marry before age 16. On the other hand, women in Sylhet are least likely to marry early; 23% marry before age 18 and 9% before age 16.
- Interestingly, 60% or more of women age 20–24 who have not completed secondary schooling marry before age 18, as compared with 32% of those who have completed secondary schooling or higher. Thus, the impact of education on delaying age of marriage mostly occurs when women complete secondary schooling.

**Trends:** Age at marriage is increasing slowly in Bangladesh. Between 2011 and 2022, the proportion of women age 20–24 marrying before age 18 declined from 65% to 50% (**Figure 4.1**).

**Table 4.1 Early marriage**

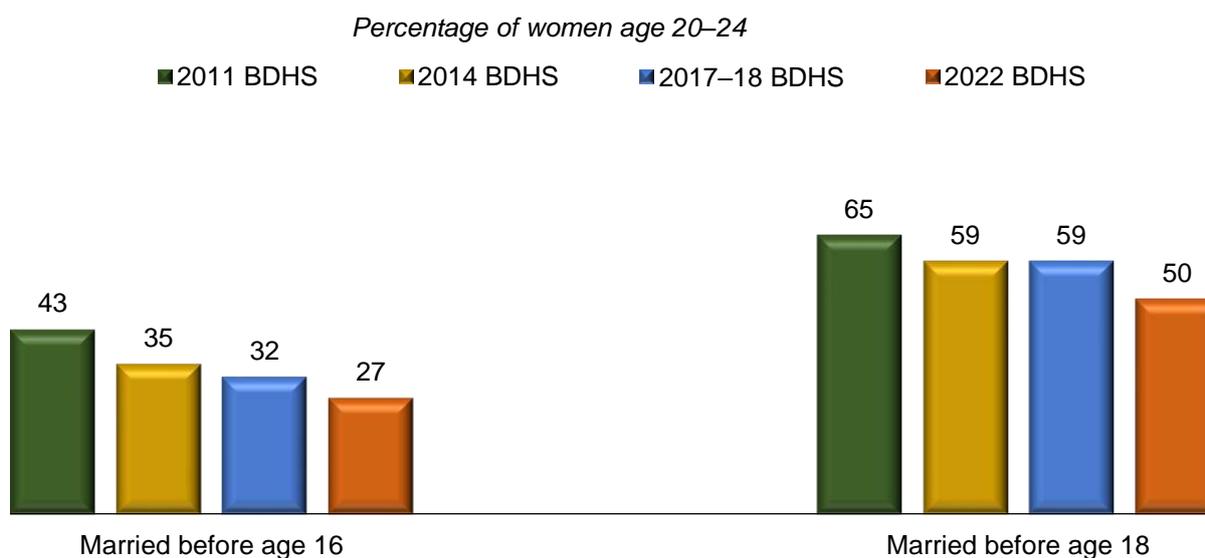
Percentage of women age 20–24 who married before age 16 and percentage who married before age 18, according to background characteristics, Bangladesh DHS 2022

Background characteristic	Among women age 20–24:		Number of women
	Percentage who married before age 16	Percentage who married before age 18	
<b>Residence</b>			
Urban	24.0	44.4	1,187
Rural	27.9	52.6	2,835
<b>Division</b>			
Barishal	29.7	56.0	229
Chattogram	19.5	44.8	841
Dhaka	26.8	50.7	1,040
Khulna	31.9	55.5	420
Mymensingh	23.8	48.7	309
Rajshahi	42.2	63.7	441
Rangpur	33.3	57.7	425
Sylhet	9.2	23.2	325
<b>Education</b>			
No education	49.0	68.9	107
Primary incomplete	37.3	61.6	338
Primary complete <sup>1</sup>	45.4	63.6	370
Secondary incomplete	36.3	60.3	1,665
Secondary complete or higher <sup>2</sup>	8.0	32.1	1,545
<b>Wealth quintile</b>			
Lowest	36.4	64.0	664
Second	32.2	58.1	840
Middle	26.4	50.1	847
Fourth	25.5	48.2	837
Highest	15.2	33.4	828
Total	26.7	50.1	4,025

<sup>1</sup> Primary complete is defined as completing grade 5.

<sup>2</sup> Secondary complete is defined as completing grade 10.

**Figure 4.1 Trends in percentage of women age 20–24 married before age 16 and age 18: Bangladesh DHS 2011–2022**



**Table 4.2** provides information on currently married women whose husbands live in a separate household.

- Sixteen percent of currently married women have husbands who live overseas or elsewhere within Bangladesh. This proportion is highest among those who live in Chattogram (28%), Barishal (20%), and Sylhet (18%).
- Married women in rural areas, better educated women, and women from wealthier households are more likely to have husbands living elsewhere.
- Thirty-eight percent of women whose husbands live elsewhere had no visit from their husband in the 12 months preceding the survey.

**Table 4.2 Husbands living elsewhere**

Percentage of currently married women age 15–49 whose husband lives elsewhere, and among currently married women whose husband lives elsewhere, percent distribution by frequency of husband's visits in the last 12 months, according to background characteristic, Bangladesh DHS 2022

Background characteristic	Percentage of women whose husband lives elsewhere	Number of women	Among currently married women whose husband lives elsewhere, frequency of husband's visits to the household in the past 12 months				Total	Number of women
			0	1–5	6–11	12+		
<b>Residence</b>								
Urban	12.5	5,385	35.9	38.5	11.2	14.4	100.0	674
Rural	17.5	13,675	38.3	41.1	10.7	9.9	100.0	2,386
<b>Division</b>								
Barishal	20.2	1,153	21.4	52.3	16.3	10.0	100.0	233
Chattogram	27.7	3,559	46.1	39.3	8.3	6.4	100.0	984
Dhaka	15.1	4,817	40.8	37.2	7.2	14.8	100.0	727
Khulna	12.4	2,281	36.0	39.4	11.8	12.8	100.0	283
Mymensingh	12.9	1,450	20.4	44.6	17.0	18.0	100.0	187
Rajshahi	9.8	2,521	32.3	36.2	17.7	13.9	100.0	247
Rangpur	9.3	2,197	12.2	55.6	19.4	12.7	100.0	205
Sylhet	18.0	1,082	56.5	32.3	5.9	5.3	100.0	195
<b>Education</b>								
No education	7.6	2,475	39.6	38.4	12.9	9.1	100.0	187
Primary incomplete	10.8	2,453	35.4	40.4	13.2	11.1	100.0	264
Primary complete <sup>1</sup>	12.1	2,534	42.3	36.5	11.1	10.1	100.0	306
Secondary incomplete	18.5	6,892	43.8	37.8	9.7	8.7	100.0	1,278
Secondary complete or higher <sup>2</sup>	21.8	4,705	29.0	45.5	11.3	14.2	100.0	1,025
<b>Wealth quintile</b>								
Lowest	9.9	3,363	23.6	43.2	21.3	11.9	100.0	334
Second	15.5	3,846	33.4	43.9	11.3	11.4	100.0	595
Middle	15.7	3,930	39.7	40.1	9.6	10.6	100.0	617
Fourth	17.5	3,991	42.6	36.7	10.0	10.8	100.0	699
Highest	20.7	3,930	41.1	40.5	8.0	10.5	100.0	815
Total	16.1	19,060	37.7	40.5	10.8	10.9	100.0	3,061

<sup>1</sup> Primary complete is defined as completing grade 5.

<sup>2</sup> Secondary complete is defined as completing grade 10.

## 4.2 FERTILITY

Under the 4th Health, Population and Nutrition Sector Programme (4th HPNSP), the goal of the Government of Bangladesh is to attain a total fertility rate of 2.0 births per woman by 2023. **Table 4.3** shows the total fertility rate (TFR) and age-specific fertility rates (ASFRs) among women by 5-year age groups for the 3-year period preceding the survey.

### Total fertility rate (TFR)

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

**Sample:** Women age 15–49

- If fertility were to remain constant at current levels, a woman in Bangladesh would bear an average of 2.3 children in her lifetime. The TFR is 2.1 in urban areas and 2.4 in rural areas (**Table 4.3**).
- Currently, Mymensingh has the highest TFR (2.7) and Rajshahi the lowest (2.0). Only Rajshahi has a TFR at a replacement level of 2.1 or below (**Table 4.4**).
- Four divisions, namely Barishal, Chattogram, Mymensingh, and Rangpur, have TFRs of 2.5 or above.

**Table 4.3 Current fertility**

Age-specific and total fertility rates, general fertility rate, and the crude birth rate for the 3 years preceding the survey, according to residence, Bangladesh DHS 2022

Age group	Residence		Total
	Urban	Rural	
10–14	[2]	[2]	[2]
15–19	79	97	92
20–24	133	163	154
25–29	113	123	121
30–34	67	74	72
35–39	26	23	24
40–44	3	4	4
45–49	[1]	[1]	[1]
<b>TFR (15–49)</b>	<b>2.1</b>	<b>2.4</b>	<b>2.3</b>
GFR	77	88	85
CBR	20.8	22.4	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 preceding 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 4.4 Current fertility by division and wealth quintile**

Total fertility rates for the 3 years preceding the survey, by division and wealth quintile, Bangladesh DHS 2022

Indicator	TFR (15–49)
<b>Division</b>	
Barishal	2.5
Chattogram	2.6
Dhaka	2.2
Khulna	2.2
Mymensingh	2.7
Rajshahi	2.0
Rangpur	2.5
Sylhet	2.3
<b>Wealth quintile</b>	
Lowest	2.8
Second	2.4
Middle	2.3
Fourth	2.1
Highest	2.0
Total	2.3

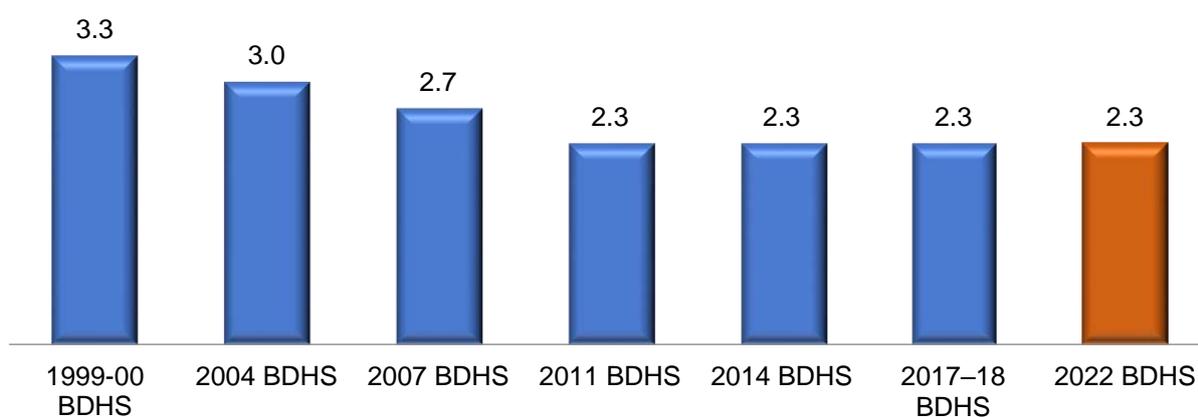
TFR: Total fertility rate, expressed per woman

### Trends:

- The TFR in Bangladesh has declined from 3.3 to 2.3 over the last 22 years. Since 2011, however, the TFR has remained unchanged (**Figure 4.2**).
- Between 2011 and 2022, the largest decline in TFR occurred in Sylhet (from 3.1 to 2.3). Rangpur’s TFR showed an unexpected increase from 2.1 to 2.5. Khulna’s TFR also increased, from 1.9 in 2011 to 2.2 in 2022 (**Figure 4.3**).

**Figure 4.2 Trends in total fertility rate (TFR): Bangladesh DHS 1999–2022**

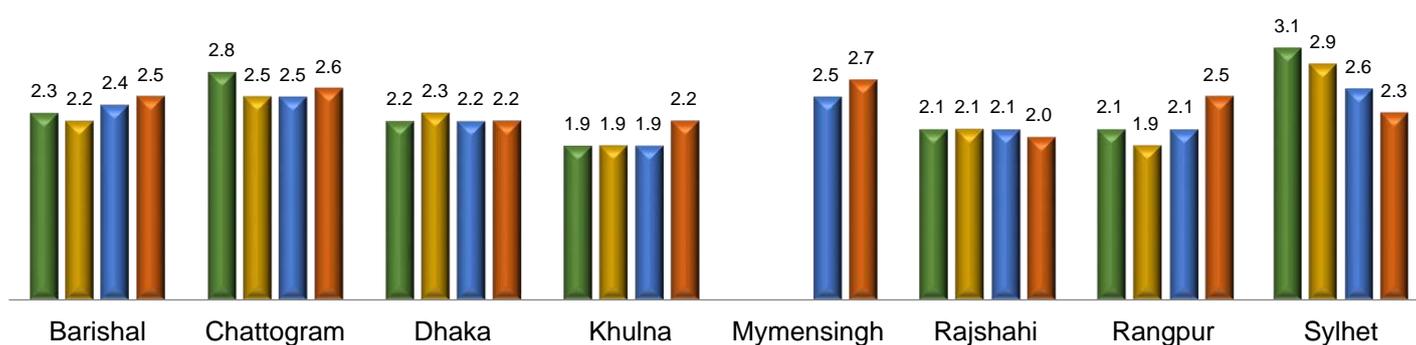
*TFR for the 3 years preceding each survey*



**Figure 4.3 Trends in total fertility rate (TFR) by division: Bangladesh DHS 2011–2022**

*TFR for the 3 years preceding each survey*

■ 2011 BDHS ■ 2014 BDHS ■ 2017–18 BDHS ■ 2022 BDHS



Note: In the 2011 BDHS and 2014 BDHS, Dhaka includes Mymensingh.

### 4.3 TEENAGE PREGNANCY

#### Teenage pregnancy

Percentage of women age 15–19 who have ever been pregnant.

**Sample:** Women age 15–19

**Table 4.5** presents the percentage of women age 15–19 who have ever been pregnant, according to background characteristics.

- One in four (24%) women age 15–19 have ever been pregnant, and almost one in five (18%) have had a live birth.
- Three percent of young women have had a pregnancy loss.
- Teenage pregnancy is highest in Rangpur and Khulna (31% each) and lowest in Sylhet (11%).

**Table 4.5 Teenage pregnancy**

Percentage of women age 15–19 who have ever had a live birth, percentage who have ever had a pregnancy loss, percentage who are currently pregnant, and percentage who have ever been pregnant, according to background characteristics, Bangladesh DHS 2022

Background characteristic	Percentage of women age 15–19 who:				Number of women
	Have ever had a live birth	Have ever had a pregnancy loss <sup>1</sup>	Are currently pregnant	Have ever been pregnant	
<b>Age</b>					
15	2.5	0.7	2.1	4.9	1,260
16	6.3	1.0	3.8	10.4	1,340
17	12.5	2.5	5.9	18.9	1,252
18	27.0	3.7	6.8	34.1	1,533
19	38.1	6.3	10.4	47.5	1,328
<b>Residence</b>					
Urban	15.2	3.2	3.9	19.8	1,874
Rural	18.8	2.8	6.6	25.2	4,841
<b>Division</b>					
Barishal	14.2	2.3	6.0	20.9	418
Chattogram	16.1	2.1	6.3	21.9	1,405
Dhaka	17.8	2.9	4.4	22.5	1,684
Khulna	23.2	4.9	7.5	31.1	681
Mymensingh	15.5	3.5	6.1	22.1	520
Rajshahi	20.9	2.9	7.0	27.8	773
Rangpur	24.7	3.1	6.6	30.8	707
Sylhet	6.6	1.6	4.2	10.8	526
<b>Education</b>					
No education	(16.1)	(1.7)	(2.4)	(17.7)	180
Primary incomplete	16.8	2.9	3.9	20.3	451
Primary complete <sup>2</sup>	15.8	2.5	3.5	19.2	804
Secondary incomplete	10.1	1.6	2.9	13.0	7,283
Secondary complete or higher <sup>3</sup>	10.7	1.9	6.1	17.0	2,137
<b>Wealth quintile</b>					
Lowest	23.1	3.3	7.0	29.1	1,210
Second	20.2	3.3	6.5	26.6	1,400
Middle	17.5	2.3	6.4	24.4	1,403
Fourth	18.2	3.7	5.5	24.5	1,396
Highest	10.1	1.9	3.8	13.8	1,310
Total	17.8	2.9	5.9	23.7	6,713

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.

<sup>1</sup> Stillbirth, miscarriage, or abortion.

<sup>2</sup> Primary complete is defined as completing grade 5.

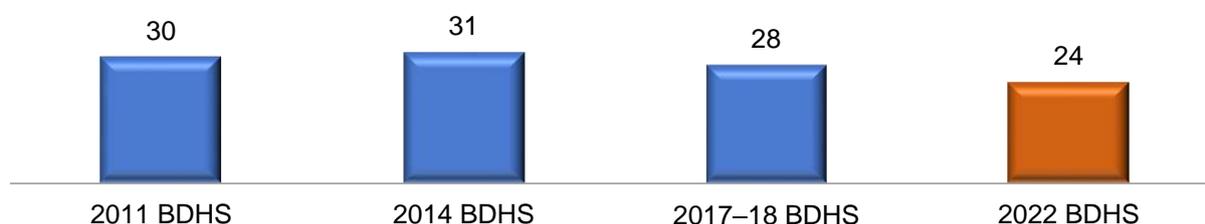
<sup>3</sup> Secondary complete is defined as completing grade 10.

### Trends:

- The proportion of women age 15–19 who have begun childbearing (including women who have had a live birth or are pregnant with their first child and excluding those who have had only a pregnancy loss) declined from 30% in 2011 and 28% in 2017–18 to 24% in 2022 (**Figure 4.4**).
- Bangladesh’s 4th HPNSP aims to reduce the proportion of young women who have begun childbearing to 25% by 2023, and this has been achieved.

**Figure 4.4 Trends in teenage childbearing: Bangladesh DHS 2011–2022**

*Percentage of women age 15–19 who have begun childbearing*



Note: Data exclude adolescents who have experienced only pregnancy loss.

## 4.4 FERTILITY PREFERENCES

### 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

Information on fertility preferences is used to assess the potential demand for family planning services for the purposes of spacing or limiting future childbearing. **Table 4.6** shows fertility preferences among currently married women age 15–49 by number of living children.

- Thirteen percent of currently married women want to have a child soon, while 19% want to wait at least 2 years.
- Fifty-seven percent of women want no more children or are sterilized.
- Seventy-two percent of women who have two living children do not want any more children. This proportion increases to 88% among those who have three living children.

**Trends:** The desire to limit children declined from 65% in 2011 to 57% in 2022, indicating an increase in the desire for more children (**Figure 4.5**).

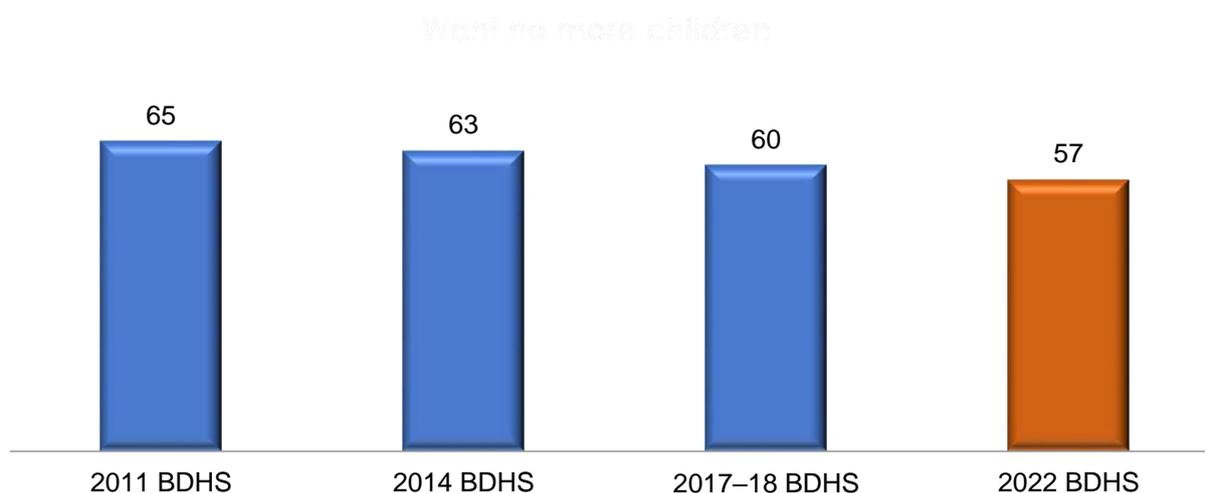
**Table 4.6 Fertility preferences by number of living children**

Percent distribution of currently married women age 15–49 by desire for children, according to number of living children, Bangladesh DHS 2022

Desire for children	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
Have another soon <sup>2</sup>	64.5	22.7	6.3	1.8	0.7	0.1	0.3	13.4
Have another later <sup>3</sup>	22.8	52.2	10.4	2.2	0.4	0.3	0.0	18.6
Have another, undecided when Undecided	2.6	2.9	0.8	0.2	0.1	0.1	0.2	1.3
Want no more	5.3	7.6	7.8	3.8	1.6	1.4	1.0	6.0
Sterilized <sup>4</sup>	1.4	11.7	68.0	76.2	76.7	76.2	75.4	51.7
Declared infecund	0.0	0.8	3.8	11.4	14.2	14.2	11.0	5.5
Total	3.5	2.0	2.9	4.4	6.3	7.7	12.0	3.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	1,534	4,580	6,895	4,007	1,355	466	223	19,060

<sup>1</sup> The number of living children includes a woman's current pregnancy.<sup>2</sup> Wants next birth within 2 years<sup>3</sup> Wants to delay next birth for 2 or more years<sup>4</sup> Includes both female and male sterilization**Figure 4.5 Trends in currently married women who want no more children: Bangladesh DHS 2011–2022**

Percentage of currently married women age 15–49



#### 4.5 FAMILY PLANNING

**Contraceptive prevalence**

Percentage of women who use any contraceptive method.

**Sample:** Currently married women age 15–49**Modern methods**

Include male and female sterilization, injectables, intrauterine contraceptive devices (IUCDs), contraceptive pills, implants, male condoms, emergency contraception, the standard days method, and the lactational amenorrhea method.

The Bangladesh 4th HPNSP aims to increase use of contraception to 75% by 2023. **Table 4.7** presents findings on contraceptive use among currently married women age 15–49.

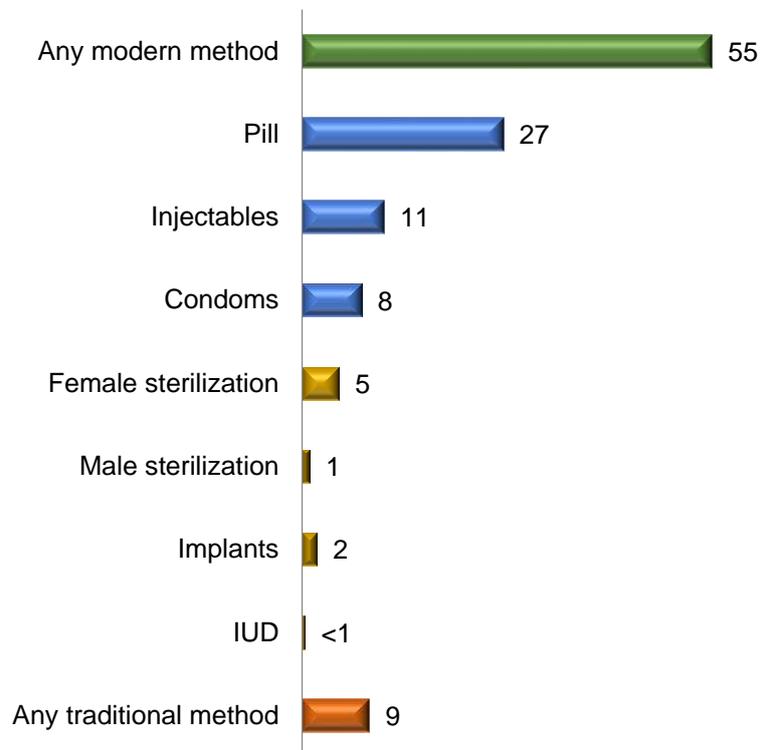
- The contraceptive prevalence rate (CPR) is 64% among currently married women age 15–49; 55% of women are using modern methods of contraception, while 9% rely on traditional methods.

- The most commonly used method is the oral pill (27%), followed by injectables (11%). Only 8% of women use a long-acting and reversible contraceptive or permanent methods such as IUDs, implants, and male/female sterilization (**Table 4.7** and **Figure 4.6**).
- Use of modern contraceptives is most frequent in Rajshahi and Rangpur (61% each) and least frequent in Chattogram and Sylhet (49% and 44%, respectively). The aim of the 4th HPNSP is to achieve 60% modern method use in Chattogram and Sylhet.
- Fifty-seven percent of modern contraceptive users obtain their method from the private sector, mostly from pharmacies/drugstores. The public sector is the source for 37% of modern contraceptive users, while the nongovernmental organization (NGO) sector provides methods to 3% of modern contraceptive users (**Table 4.8**).



**Figure 4.6 Contraceptive use by method: Bangladesh DHS 2022**

*Percentage of currently married women currently using a contraceptive method*



**Table 4.8 Source of supply of specific modern methods**

Percent distribution of current users of modern contraceptive methods among women age 15–49 by most recent source of method, according to specific method, Bangladesh DHS 2022

Source	Modern method							Total
	Pill	Injectables	Condoms	Female sterilization	Male sterilization	IUD	Implants	
<b>Public sector</b>	<b>34.1</b>	<b>40.6</b>	<b>15.5</b>	<b>47.0</b>	<b>78.0</b>	<b>74.0</b>	<b>87.9</b>	<b>36.5</b>
Medical college hospital	0.1	0.2	0.6	4.8	3.7	3.4	1.9	0.7
Specialized government hospital	0.0	0.3	0.0	1.1	1.8	3.6	0.4	0.2
District hospital	0.9	0.9	0.3	12.5	18.4	4.1	8.3	2.3
Maternal and child welfare center	0.7	1.5	0.4	5.1	4.6	11.0	9.4	1.6
Upazilla health complex	3.1	3.9	1.7	20.1	45.5	32.5	38.7	6.6
UH and family welfare center	4.5	6.9	2.3	2.7	3.9	15.5	20.0	5.1
Community clinic	8.3	9.2	3.2	0.0	0.0	2.6	8.3	6.8
Satellite clinic/EPI outreach	2.1	4.0	0.2	0.0	0.0	1.2	0.3	1.9
Government field worker (FWA)	14.4	13.6	6.9	0.0	0.0	0.0	0.5	11.1
Other public sector	0.1	0.1	0.1	0.7	0.0	0.0	0.0	0.1
<b>Private medical sector</b>	<b>60.1</b>	<b>51.7</b>	<b>77.6</b>	<b>51.4</b>	<b>9.5</b>	<b>20.7</b>	<b>6.1</b>	<b>57.3</b>
Private medical college hospital	0.0	0.0	0.0	0.3	0.1	1.2	0.0	0.0
Private hospital	0.1	0.4	0.2	16.4	3.2	6.1	1.9	1.7
Private clinic	0.2	1.4	0.2	34.5	5.5	13.4	3.3	3.6
Qualified doctor's chamber	0.4	2.2	0.3	0.2	0.8	0.0	0.4	0.7
Nonqualified doctor's chamber	0.3	2.2	0.6	0.0	0.0	0.0	0.0	0.7
Pharmacy/drugstore	59.1	45.5	76.3	0.0	0.0	0.0	0.5	50.6
Other private medical sector	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>NGO sector</b>	<b>1.5</b>	<b>5.8</b>	<b>1.1</b>	<b>0.9</b>	<b>2.0</b>	<b>5.4</b>	<b>5.6</b>	<b>2.5</b>
Static clinic	0.5	2.2	0.5	0.9	2.0	5.4	5.6	1.1
Satellite clinic	0.1	1.0	0.0	0.0	0.0	0.0	0.0	0.3
Depo holder	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.1
Fieldworker	0.7	2.4	0.7	0.0	0.0	0.0	0.0	0.9
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Other private source</b>	<b>4.2</b>	<b>1.6</b>	<b>5.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>3.2</b>
Shop	2.7	1.4	5.0	0.0	0.0	0.0	0.0	2.4
Friend/relatives	1.5	0.2	0.3	0.0	0.0	0.0	0.0	0.8
<b>Other</b>	<b>0.1</b>	<b>0.3</b>	<b>0.5</b>	<b>0.3</b>	<b>1.9</b>	<b>0.0</b>	<b>0.4</b>	<b>0.3</b>
<b>Don't know</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.4</b>	<b>8.6</b>	<b>0.0</b>	<b>0.0</b>	<b>0.2</b>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	5,231	2,169	1,547	859	180	85	326	10,396

UH = Union health

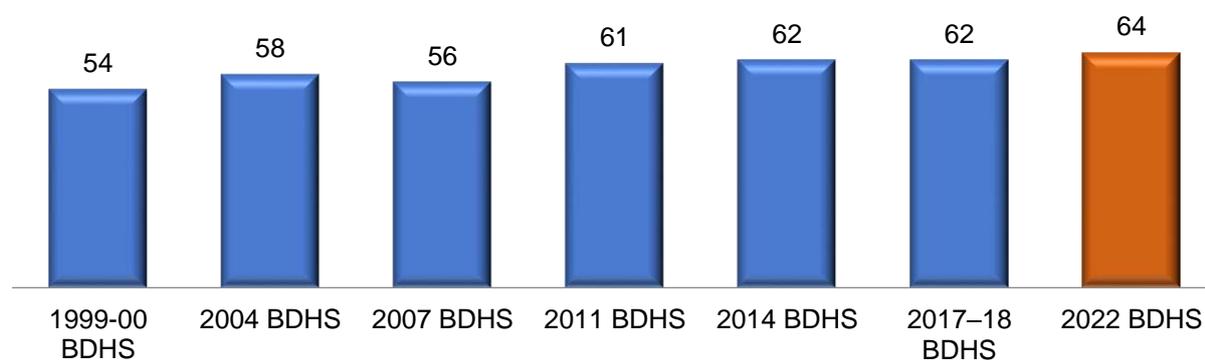
EPI = Expanded program on immunization

### Trends:

- Contraceptive use has increased by 10 percentage points since 1999-00, from 54% to 64% (**Figure 4.7**).
- Between 2017–18 and 2022, use of modern contraceptive methods increased from 52% to 55%, use of oral pills rose from 25% to 27%, and use of male condoms increased from 7% to 8%.
- The dominance of the private sector (private medical sector and shops) as a source of contraceptive methods has increased steadily over time, from 42% in 2011 and 50% in 2017–18 to 60% in 2022 (**Figure 4.8**).

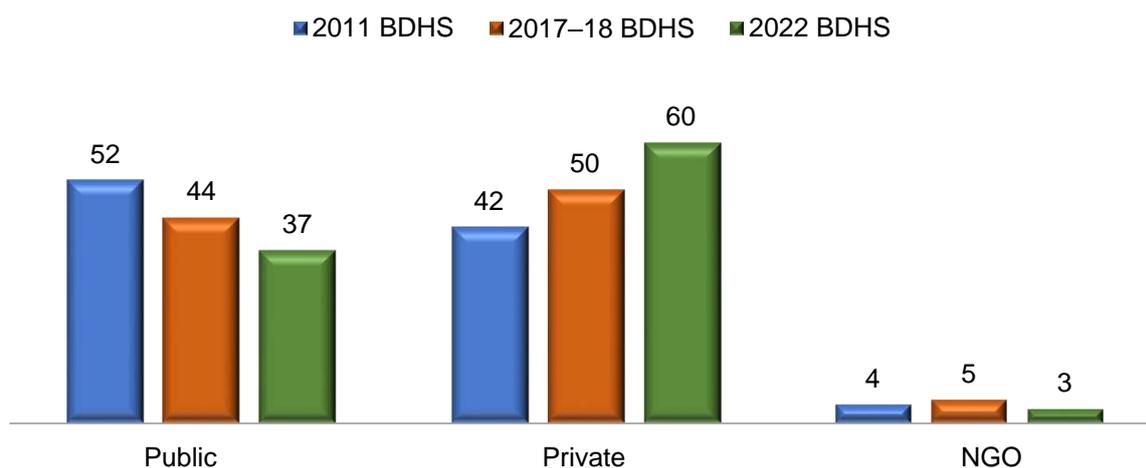
**Figure 4.7 Trends in contraceptive use among currently married women: Bangladesh DHS 1999–2022**

*Percentage of currently married women age 15–49 currently using a contraceptive method*



**Figure 4.8 Trends in sources of modern contraceptives: Bangladesh DHS 2011–2022**

*Percentage of current users of modern methods age 15–49 by most recent source of method*



Note: Private includes private medical sector plus shop.

#### 4.6 NEED AND DEMAND FOR FAMILY PLANNING

**Table 4.9** presents data on unmet need, met need, and total demand for family planning among currently married women. These indicators help evaluate the extent to which family planning programs in Bangladesh are meeting the demand for services.

**Need for family planning****Unmet need for family planning**

Proportion of 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, (2) have a mistimed or unwanted current pregnancy, or (3) are postpartum amenorrheic and their last birth in the last 2 years was mistimed or unwanted.

**Met need for family planning**

Current contraceptive use (any method).

**Sample:** Currently married women age 15–49

<b>Demand for family planning</b>	Unmet need for family planning + met need (current contraceptive use [any method])
<b>Proportion of demand satisfied</b>	$\frac{\text{Current contraceptive use (any method)}}{\text{Unmet need + current contraceptive use (any method)}}$
<b>Proportion of demand satisfied by modern methods</b>	$\frac{\text{Current contraceptive use (any modern method)}}{\text{Unmet need + current contraceptive use (any method)}}$

- Total demand for family planning in Bangladesh is 74%, and 55% of this demand is met using modern methods.
- Overall, 10% of currently married women have an unmet need for family planning.
- Unmet need for family planning decreases as age increases, and rural women have higher unmet need (11%) than urban women (8%).
- Unmet need is highest in Chattogram (16%) and lowest in Rajshahi (6%).

**Trends:** Unmet need for family planning among currently married women age 15–49 declined from 12% in 2017–18 to 10% in 2022.

**Table 4.9 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, percentage with met need for family planning who are using modern methods, percentage with demand for family planning, percentage of the demand for family planning that is satisfied, and percentage of the demand for family planning that is satisfied with modern methods, according to background characteristics, Bangladesh DHS 2022

Background characteristic	Unmet need for family planning	Met need for family planning (currently using)		Total demand for family planning <sup>3</sup>	Number of women	Percentage of demand satisfied <sup>1</sup>	
		All methods	Modern methods <sup>2</sup>			All methods	Modern methods <sup>2</sup>
<b>Age</b>							
15–19	12.7	53.9	48.1	66.5	1,696	81.0	72.3
20–24	12.7	58.3	52.5	71.1	3,206	82.1	73.9
25–29	11.9	64.0	57.7	75.9	3,430	84.3	76.0
30–34	11.9	69.6	62.5	81.5	3,302	85.4	76.7
35–39	8.4	74.5	63.1	82.9	3,183	89.9	76.2
40–44	6.1	69.4	53.1	75.5	2,335	91.9	70.4
45–49	4.2	48.5	33.2	52.7	1,907	92.1	63.1
<b>Residence</b>							
Urban	8.3	66.5	55.6	74.8	5,385	88.9	74.3
Rural	10.7	63.0	54.4	73.7	13,675	85.4	73.8
<b>Division</b>							
Barishal	10.2	64.8	54.0	75.0	1,153	86.4	72.0
Chattogram	15.6	57.5	49.0	73.2	3,559	78.7	67.0
Dhaka	10.1	63.0	53.2	73.1	4,817	86.2	72.8
Khulna	8.3	66.5	56.3	74.8	2,281	88.9	75.3
Mymensingh	8.1	66.1	59.0	74.2	1,450	89.1	79.5
Rajshahi	6.0	70.0	60.8	76.0	2,521	92.1	79.9
Rangpur	6.9	70.7	61.3	77.6	2,197	91.1	79.0
Sylhet	13.2	52.8	44.3	66.1	1,082	80.0	67.0
<b>Education</b>							
No education	6.1	62.6	50.9	68.7	2,475	91.1	74.1
Primary incomplete	7.8	70.2	60.0	78.0	2,453	90.0	76.9
Primary complete <sup>4</sup>	9.3	66.8	57.6	76.1	2,534	87.8	75.7
Secondary incomplete	11.9	64.4	56.6	76.3	6,892	84.4	74.2
Secondary complete or higher <sup>5</sup>	10.9	59.4	49.7	70.3	4,705	84.4	70.6
<b>Wealth quintile</b>							
Lowest	8.2	68.6	60.6	76.8	3,363	89.3	79.0
Second	10.3	65.2	56.5	75.6	3,846	86.3	74.7
Middle	9.6	64.5	55.3	74.1	3,930	87.1	74.6
Fourth	10.0	63.9	54.3	73.9	3,991	86.4	73.5
Highest	11.8	58.4	47.8	70.2	3,930	83.2	68.0
Total	10.0	64.0	54.7	74.0	19,060	86.4	73.9

<sup>1</sup> Percentage of demand satisfied is met need divided by total demand.

<sup>2</sup> Modern methods include female sterilization, male sterilization, IUD, injectables, implants, pill, male condom, female condom, emergency contraception, standard days method (SDM), lactational amenorrhea method (LAM), and other modern methods.

<sup>3</sup> Total demand is the sum of unmet need and met need.

<sup>4</sup> Primary complete is defined as completing grade 5.

<sup>5</sup> Secondary complete is defined as completing grade 10.

### Key findings

- Eighty-eight percent of women who gave births in the 2 years preceding the 2022 BDHS received at least one antenatal check-up from a medically trained provider, up from 82% in 2017–18. However, the percentage of women with four or more antenatal care (ANC) visits declined from 46% in 2017–18 to 41% in 2022. The 4th Health, Population and Nutrition Sector Programme (4th HPNSP) aims to reach 50% coverage of four or more ANC visits by 2023.
- Among mothers with at least one ANC visit, more than 90% had their blood pressure and weight measured; 80%, 81%, and 94% had a blood test, urine test, and ultrasound, respectively; 50% received information on pregnancy complications; and 27% received information on postpartum family planning.
- Twenty-one percent of women received quality ANC (defined as four or more antenatal visits with at least one to a medically trained provider, measurement of weight and blood pressure, testing of blood and urine, and receipt of information on potential danger signs during pregnancy). The proportion of women receiving quality ANC increased from 18% to 21% between 2017–18 and 2022.
- Seven of 10 births in the 2 years preceding the survey were attended by medically trained providers, predominantly doctors. Between 2011 and 2022, births attended by medically trained providers increased from 33% to 70%. The 4th HPNSP aims to reach 65% of births attended by medically trained providers by 2023, and this has been achieved.
- Nearly two-thirds of Bangladeshi mothers (65%) deliver at a health facility, 45% in private health facilities and 18% in public facilities. Only 2% of deliveries occur at nongovernmental organization (NGO) health facilities. Between 2017–18 and 2022, facility deliveries increased by 14 percentage points (from 51% to 65%). Deliveries in public health facilities increased from 15% to 18% and deliveries in private facilities from 32% to 45%. NGO deliveries declined from 4% to 2%.
- Forty-two percent of women in the lowest wealth quintile deliver in health facilities, as compared with 10% in 2011. Among women in the highest wealth quintile, facility deliveries increased from 61% in 2011 to 87% in 2022.

- Although there is still a large gap in facility deliveries between women in the poorest and richest wealth quintiles, the gap is decreasing. Two measures are used to assess improvements among economic groups in equitable use of health facilities for deliveries. The first is the ratio of facility deliveries among women in the lowest wealth quintile to the ratio among those in the highest wealth quintile. This ratio declined from 1:6 in 2011 and 1:4 in 2014 to 1:3 in 2017–18 and 1:2 in 2022. The second measure is the absolute difference in facility deliveries between women in the richest and poorest wealth quintiles; this difference remained above 50 percentage points between 2011 and 2017–18 but has since declined to 45 percentage points. Both measures indicate improvements in terms of more equitable use of facilities for deliveries. The aim of the 4th HPNSP to reduce the ratio of facility deliveries in the lowest and highest wealth quintiles to 1:3.5 by 2023 has been achieved.
- Forty-five percent of deliveries in the 2 years preceding the survey were conducted via cesarean section (C-section), an increase from 34% in 2017–18.
- Fifty-five percent of mothers reported receiving a postnatal check-up from a medically trained provider within 2 days of delivery, and another 6% received postnatal care (PNC) within 3 to 42 days. Between 2017–18 and 2022, the percentage of mothers receiving PNC from a medically trained provider within 2 days of delivery increased from 53% to 55%.
- Not all women delivering in health facilities received PNC from a trained provider within 2 days of delivery. Overall, only 78% of women who delivered in a health facility received PNC from a medically trained provider within 2 days of delivery.
- Thirteen percent of mothers who had non-institutional deliveries received PNC within 2 days of delivery from a medically trained provider, up from 7% in 2017–18. One aim of the HPNSP is to achieve 10% PNC coverage among women with noninstitutional deliveries by 2023, and this has been achieved.

Proper care during pregnancy and delivery is important for the health of both the mother and the baby. The 2022 BDHS reports indicators on maternal health for all births in the 2 years preceding the survey. Prior to 2022, the BDHS reported maternal health indicators based on all births occurring 3–5 years preceding the survey. For trend analyses, maternal health indicators prior to 2022 were reestimated for births in the 2 years preceding the survey so that the indicators are comparable over time.

## 5.1 ANTENATAL CARE

### Antenatal care (ANC) from a skilled provider

Pregnancy care received from skilled providers, such as doctors, nurses, and auxiliary nurses/midwives.

**Sample:** Women age 15–49 who had a live birth or stillbirth in the 2 years preceding the survey

### Quality ANC

Quality ANC is defined as four or more antenatal visits with at least one to a medically trained provider, measurement of weight and blood pressure, testing of blood and urine, and receipt of information on potential danger signs at least once during pregnancy.

Antenatal care (ANC) from a skilled provider is important to monitor pregnancy and reduce morbidity and mortality risks for the mother and child during pregnancy, at delivery, and during the postnatal period.

- Overall, 88% of women with a birth in the 2 years preceding the survey received ANC from a medically trained provider at least once during their pregnancy (**Table 5.1**).
- Women in rural areas are less likely to seek ANC than women in urban areas (86% versus 92%).
- Ninety-seven percent of women in the highest wealth quintile sought ANC from a medically trained provider, as compared with 76% of women in the lowest wealth quintile.
- Four of 10 women (41%) had the recommended four or more ANC visits during their pregnancy (**Table 5.2**). Women in urban areas (57%) were more likely to have four or more visits than women in rural areas (35%).
- Among mothers with at least one ANC visit, more than 90% had their blood pressure and weight measured; 80%, 81%, and 94% had a blood test, urine test, and ultrasound, respectively; 50% received information on danger signs during pregnancy; and 27% received information on postpartum family planning (**Table 5.3**).
- Twenty-one percent of women received quality ANC (**Table 5.4**).
- There are large gaps in the quality of ANC received according to women's background characteristics. For example, women in urban areas are twice as likely to receive quality ANC as women in rural areas (33% versus 17%). Only 8% of women in the lowest wealth quintile receive quality ANC, compared with 39% of women in the highest quintile.

**Table 5.1 Antenatal care**

Percent distribution of women who had a live birth in the 2 years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth, according to background characteristics, Bangladesh DHS 2022

Background characteristic	Antenatal care provider											Per-centage receiving antenatal care from a skilled provider <sup>1</sup>	Number of women					
	Received any ANC	Qualified doctor	Nurse/midwife/paramedic	FWV	CSBA	MA/SACMO	CHCP	HA/FWA	NGO worker	Trained birth attendant	Untrained birth attendant			Unqualified provider	Other	No one	Missing	Total
<b>Mother's age at birth</b>																		
<20	94.5	83.9	2.9	1.9	0.0	0.0	1.1	1.3	0.9	0.4	0.0	1.8	0.3	5.5	0.0	100.0	88.7	874
20-34	92.2	84.2	2.0	1.1	0.0	0.2	0.9	1.8	1.1	0.0	0.0	1.0	0.0	7.8	0.0	100.0	87.5	2,545
35-49	88.1	82.2	0.9	1.6	0.0	0.0	1.2	1.2	0.4	0.0	0.0	0.5	0.0	11.9	0.0	100.0	84.8	190
<b>Birth order</b>																		
1	96.1	87.9	2.0	1.4	0.0	0.0	0.9	1.2	0.9	0.2	0.0	1.5	0.2	3.9	0.0	100.0	91.2	1,432
2-3	92.1	83.3	2.3	1.3	0.0	0.2	1.0	2.1	1.0	0.1	0.0	0.8	0.0	7.9	0.0	100.0	87.1	1,858
4-5	79.7	71.2	2.0	1.9	0.0	0.0	0.6	1.1	1.2	0.0	0.0	1.7	0.0	20.3	0.0	100.0	75.1	296
6+	(75.3)	(65.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(6.4)	(3.1)	(0.0)	(0.0)	(0.0)	(0.0)	(24.7)	(0.0)	100.0	(65.8)	25
<b>Residence</b>																		
Urban	95.4	89.2	1.8	1.3	0.0	0.0	0.9	0.8	0.9	0.0	0.0	0.4	0.0	4.6	0.0	100.0	92.3	970
Rural	91.5	82.1	2.3	1.4	0.0	0.2	0.9	2.0	1.1	0.1	0.0	1.4	0.1	8.5	0.0	100.0	85.9	2,640
<b>Division</b>																		
Barishal	91.1	82.5	3.8	0.3	0.0	0.3	1.0	1.1	1.3	0.4	0.0	0.3	0.0	8.9	0.0	100.0	87.0	216
Chattogram	91.4	83.6	2.8	1.4	0.0	0.2	0.3	1.5	0.0	0.0	0.0	1.3	0.2	8.6	0.0	100.0	88.0	776
Dhaka	95.4	88.0	1.4	1.4	0.0	0.0	0.9	1.7	1.3	0.0	0.0	0.8	0.0	4.6	0.0	100.0	90.7	903
Khulna	95.4	88.8	2.1	0.3	0.0	0.2	0.9	1.1	0.9	0.0	0.0	0.9	0.3	4.6	0.0	100.0	91.4	374
Mymensingh	88.8	83.7	1.3	0.0	0.0	0.0	1.4	0.8	0.8	0.0	0.0	0.4	0.2	11.2	0.0	100.0	85.0	324
Rajshahi	95.1	84.1	1.5	2.2	0.0	0.4	1.7	1.4	0.4	0.3	0.0	3.1	0.0	4.9	0.0	100.0	88.2	378
Rangpur	91.7	75.6	3.3	3.6	0.0	0.0	1.6	3.5	3.0	0.0	0.0	1.2	0.0	8.3	0.0	100.0	82.5	409
Sylhet	84.5	78.1	1.5	0.5	0.0	0.0	0.9	1.2	0.8	0.7	0.0	0.8	0.0	15.5	0.0	100.0	80.1	230
<b>Education</b>																		
No education	75.7	68.3	3.3	0.7	0.0	0.9	0.8	0.4	0.4	0.0	0.0	0.9	0.0	24.3	0.0	100.0	73.3	179
Primary incomplete	84.9	71.1	3.3	1.1	0.0	0.2	0.7	4.7	2.7	0.1	0.1	1.1	0.0	15.1	0.0	100.0	75.6	369
Primary complete <sup>2</sup>	88.8	79.3	2.5	1.3	0.0	0.0	0.3	2.5	1.7	0.3	0.0	0.8	0.0	11.2	0.0	100.0	83.1	455
Secondary incomplete	93.9	84.5	2.1	1.7	0.0	0.1	1.4	1.6	0.7	0.0	0.0	1.5	0.2	6.1	0.0	100.0	88.4	1,475
Secondary complete or higher <sup>3</sup>	97.5	91.9	1.5	1.2	0.0	0.1	0.6	0.6	0.6	0.2	0.0	0.9	0.0	2.5	0.0	100.0	94.6	1,132
<b>Wealth quintile</b>																		
Lowest	83.6	70.4	2.4	2.6	0.0	0.2	1.3	3.4	1.3	0.1	0.0	1.8	0.0	16.4	0.0	100.0	75.7	730
Second	90.0	78.0	3.7	1.9	0.0	0.3	1.3	2.5	1.3	0.3	0.0	0.7	0.0	10.0	0.0	100.0	83.9	761
Middle	94.2	86.4	2.1	1.1	0.0	0.0	0.5	1.3	0.9	0.1	0.0	1.4	0.3	5.8	0.0	100.0	89.7	764
Fourth	97.1	91.4	1.2	0.9	0.0	0.1	1.0	0.7	0.9	0.0	0.0	0.8	0.1	2.9	0.0	100.0	93.7	708
Highest	98.9	95.4	1.0	0.1	0.0	0.0	0.6	0.2	0.7	0.0	0.0	1.0	0.0	1.1	0.0	100.0	96.5	646
Total	92.6	84.0	2.1	1.4	0.0	0.1	0.9	1.7	1.0	0.1	0.0	1.1	0.1	7.4	0.0	100.0	87.6	3,610

Note: If more than one source of antenatal care was mentioned, only the provider with the highest qualifications was considered. Figures in parentheses are based on 25-49 unweighted cases.

FWV = family welfare visitor, CSBA = community skilled birth attendant, MA = medical assistant, SACMO = sub-assistant community medical officer, CHCP = community health care provider, HA = health assistant, FWA = family welfare assistant

<sup>1</sup> Includes qualified doctor, nurse/midwife/paramedic, FWV, CSBA, and MA/SACMO

<sup>2</sup> Primary complete is defined as completing grade 5.

<sup>3</sup> Secondary complete is defined as completing grade 10.

**Table 5.2 Number of antenatal care visits**

Percent distribution of women who had a live birth in the 2 years preceding the survey by number of antenatal care (ANC) visits for the most recent birth, according to residence, Bangladesh DHS 2022

Number of ANC visits	Residence		Total
	Urban	Rural	
None	4.6	8.5	7.4
1	8.2	16.9	14.6
2	13.1	21.5	19.3
3	17.1	18.6	18.2
<b>4 or more</b>	<b>56.9</b>	<b>34.5</b>	<b>40.5</b>
Median	4.5	3.4	3.7
Total	100.0	100.0	100.0
Number of women	970	2,640	3,610

**Table 5.3 Components of antenatal care**

Percentage of women age 15–49 with a live birth in the 2 years preceding the survey who received specific antenatal care services for the most recent birth, according to background characteristics, Bangladesh DHS 2022

Background characteristic	Weighed	Among women who received antenatal care for their most recent birth in the past 2 years, percentage with selected services						
		Blood pressure measured	Urine sample taken	Blood sample taken	Ultra-sonogram	Informed of signs of pregnancy complications	Informed about post-partum family planning	Number of women with ANC for their most recent birth
<b>Residence</b>								
Urban	96.1	96.3	89.9	87.9	96.5	55.5	31.1	926
Rural	89.3	90.9	78.1	76.6	92.5	47.8	25.2	2,416
<b>Division</b>								
Barishal	89.7	93.7	84.9	85.6	95.5	55.0	34.2	196
Chattogram	94.0	94.0	81.7	80.4	93.6	49.0	23.7	710
Dhaka	92.4	92.2	84.6	84.3	93.1	51.3	26.8	861
Khulna	89.9	92.7	78.9	80.3	96.7	50.7	24.9	357
Mymensingh	88.5	91.8	82.1	76.9	95.4	53.0	33.6	288
Rajshahi	89.5	90.4	78.2	79.7	96.3	46.1	24.4	359
Rangpur	90.6	91.3	75.5	70.9	89.9	47.2	27.2	375
Sylhet	88.3	92.0	82.4	71.9	88.1	48.1	28.1	195
<b>Education</b>								
No education	80.5	83.8	72.3	64.6	90.9	41.4	22.2	135
Primary incomplete	81.9	88.8	69.7	66.7	86.2	35.4	26.5	314
Primary complete <sup>1</sup>	86.2	89.0	72.3	70.3	91.0	47.5	26.2	404
Secondary incomplete	92.0	91.6	80.8	79.9	93.9	48.7	26.1	1,385
Secondary complete or higher <sup>2</sup>	96.0	96.6	89.7	88.6	96.7	57.5	28.6	1,104
<b>Wealth quintile</b>								
Lowest	82.4	85.0	68.7	64.0	86.0	40.6	24.9	610
Second	88.1	92.2	73.6	72.5	92.9	47.6	23.0	684
Middle	90.4	91.5	80.1	79.8	95.7	51.3	26.7	720
Fourth	96.6	95.1	89.1	88.0	95.8	53.6	27.9	688
Highest	98.0	97.6	94.7	93.6	97.1	55.7	31.7	639
Total	91.2	92.4	81.4	79.8	93.6	49.9	26.8	3,341

<sup>1</sup> Primary complete is defined as completing grade 5.

<sup>2</sup> Secondary complete is defined as completing grade 10.

**Table 5.4 Quality of antenatal care**

Percentage of women age 15–49 with a live birth in the 2 years preceding the survey who had four or more antenatal care (ANC) visits with a skilled provider, percentage receiving all components of ANC, and percentage who had four or more ANC visits and received all components of ANC for the most recent birth, according to background characteristics, Bangladesh DHS 2022

Background characteristic	Percentage with 4+ANC visit with at least one to a skilled provider	Percentage receiving all components of ANC <sup>1</sup>	Percentage with 4+ ANC visits and all components of ANC	Number of women
<b>Residence</b>				
Urban	54.8	47.7	33.2	54.8
Rural	32.3	34.2	16.8	32.3
<b>Division</b>				
Barishal	28.3	43.5	17.7	28.3
Chattogram	36.8	37.1	20.9	36.8
Dhaka	45.9	41.4	26.4	45.9
Khulna	40.1	37.2	21.4	40.1
Mymensingh	44.9	38.1	23.6	44.9
Rajshahi	34.5	37.4	20.5	34.5
Rangpur	31.3	33.3	14.3	31.3
Sylhet	29.7	30.1	14.4	29.7
<b>Education</b>				
No education	22.7	23.3	12.2	22.7
Primary incomplete	18.3	22.4	8.9	18.3
Primary complete <sup>2</sup>	29.0	29.9	14.4	29.0
Secondary incomplete	35.6	36.7	18.5	35.6
Secondary complete or higher <sup>3</sup>	54.7	49.8	32.8	54.7
<b>Wealth quintile</b>				
Lowest	21.1	21.8	8.3	21.1
Second	26.8	33.1	13.8	26.8
Middle	35.4	39.0	19.4	35.4
Fourth	47.7	45.4	28.2	47.7
Highest	64.6	51.7	38.8	64.6
Total	38.3	37.8	21.2	38.3

<sup>1</sup> All components of ANC include measurement of weight and blood pressure, urine and blood testing, and being informed of signs of possible complications.

<sup>2</sup> Primary complete is defined as completing grade 5.

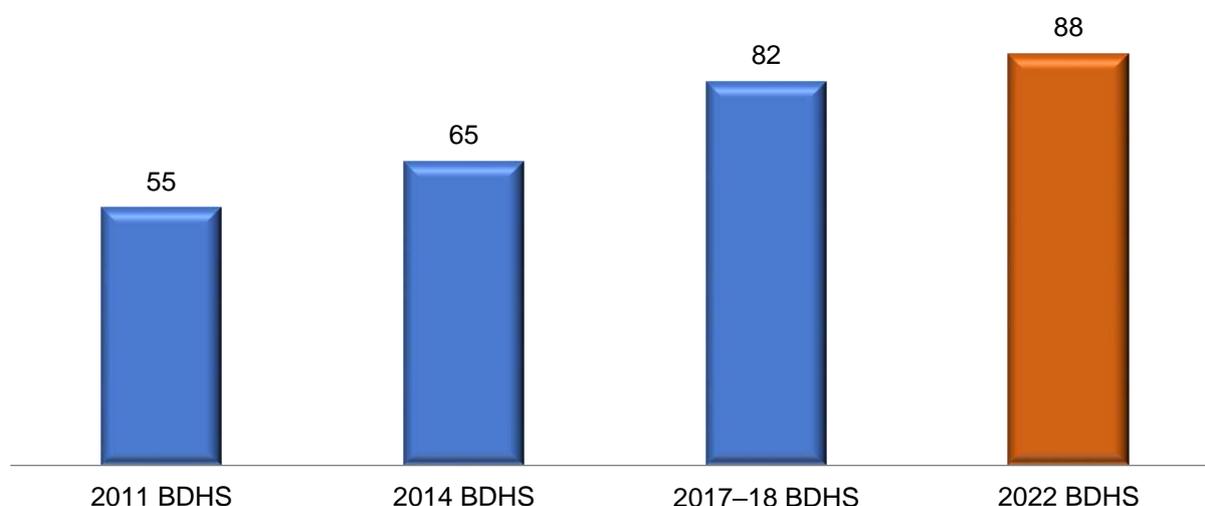
<sup>3</sup> Secondary complete is defined as completing grade 10.

### Trends:

- The proportion of women receiving ANC from a medically trained provider has increased over time, from 55% in 2011 to 88% in 2022 (**Figure 5.1**).
- The percentage of women with four or more ANC visits declined from 46% in 2017–18 to 41% in 2022. The 4th HPNSP aims to reach 50% coverage of four or more ANC visits by 2023.
- The proportion of women receiving quality ANC increased from 18% to 21% between 2017–18 and 2022.

**Figure 5.1 Trends in antenatal care coverage: Bangladesh DHS 2011–2022**

*Percentage of women with a birth in the 2 years preceding the survey who received ANC from a medically trained provider at least once*



## 5.2 DELIVERY CARE

Access to proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that could lead to death or serious illness for the mother and the baby (Van Lerberghe and De Brouwere 2001; WHO 2006a).

### **Institutional deliveries**

Deliveries that occur in a health facility.

**Sample:** All live births and/or stillbirths in the 2 years before the survey

### **Skilled assistance during delivery**

Births delivered with the assistance of doctors, nurses, midwives, paramedics, family welfare visitors (FWVs), community skilled birth assistants (CSBAs), and sub-assistant community medical officers (SACMOs).

**Sample:** All live births and/or stillbirths in the 2 years before the survey

- The BDHS results showed that 70% of deliveries in the 2 years preceding the survey were attended by a medically trained provider. Fifty-six percent of births were assisted by a qualified doctor; 13% by a nurse, midwife, or paramedic; and 1% by a CSBA, FWV, or medical assistant (MA)/SACMO (**Table 5.5**). The 4th HPNSP aims to reach 65% of deliveries assisted by skilled birth providers by 2023, and this target has been achieved.
- Women in rural areas are less likely to have their deliveries assisted by medically trained providers than women in urban areas (65% versus 82%). Relative to other births, first-order births are more likely to be assisted by a medically trained provider.
- Almost two-thirds (65%) of births in the 2 years preceding the survey were delivered at a health facility, with 45% occurring in private facilities, 18% in public facilities, and 2% in NGO facilities (**Table 5.6**).
- The percentage of health facility births is highest in Khulna (82%) and lowest in Barishal (51%) and Sylhet (52%).

- Women from the wealthiest households were twice as likely to deliver in a health facility as those from the poorest households (87% versus 42%). The aim of the 4th HPNSP is to reduce the ratio of facility deliveries between women in the lowest wealth quintile and those in the highest wealth quintile to 1:3.5 by 2023. According to the 2022 BDHS results, this ratio is now 1:2.
- Forty-five percent of all births are delivered via cesarean section (C-section).

**Table 5.5 Assistance during delivery**

Percent distribution of live births in the 2 years preceding the survey by person providing assistance during delivery, according to background characteristics, Bangladesh DHS 2022

Background characteristic	Assistance during delivery											Per-centage delivered by a medically trained provider <sup>1</sup>	Number of births				
	Qualified Doctor	Nurse/midwife/paramedic	FWV	CSBA	MA/SACMO	CHCP	NGO worker	HA/FWA	Trained traditional birth attendant	Untrained traditional birth attendant	Un-qualified doctor			Relatives/friends/others	No one	Missing	Total
<b>Mother's age at birth</b>																	
<20	56.8	13.6	0.7	0.0	0.1	0.1	0.2	0.4	8.9	16.7	0.4	1.9	0.0	0.0	100.0	71.1	890
20-34	56.1	12.7	0.9	0.4	0.1	0.2	0.6	0.5	6.4	19.0	0.6	2.4	0.0	0.0	100.0	70.1	2,608
35-49	45.7	13.3	0.3	0.0	0.0	0.0	0.0	0.9	7.2	27.3	0.4	5.0	0.0	0.0	100.0	59.3	194
<b>Birth order</b>																	
1	63.9	14.1	0.7	0.1	0.1	0.1	0.2	0.5	6.6	11.9	0.5	1.5	0.0	0.0	100.0	78.7	1,471
2-3	53.8	12.2	1.1	0.3	0.1	0.3	0.7	0.5	6.5	21.2	0.6	2.8	0.0	0.0	100.0	67.4	1,892
4-5	32.0	11.5	0.0	1.5	0.0	0.1	0.5	0.4	12.3	35.9	0.4	5.4	0.0	0.0	100.0	45.0	304
6+	(15.4)	(20.9)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(10.1)	(53.6)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(36.3)	25
<b>Residence</b>																	
Urban	68.3	12.7	0.5	0.7	0.0	0.2	0.1	0.2	5.4	9.8	0.3	1.9	0.0	0.0	100.0	82.2	997
Rural	51.1	13.0	1.0	0.1	0.1	0.1	0.7	0.6	7.6	22.3	0.6	2.7	0.0	0.0	100.0	65.2	2,695
<b>Division</b>																	
Barishal	44.5	15.4	0.4	0.5	0.0	0.0	0.0	0.3	8.0	27.8	0.0	2.6	0.3	0.0	100.0	60.9	219
Chattogram	47.3	18.0	1.1	0.0	0.0	0.2	0.8	0.4	5.7	25.0	0.7	0.9	0.0	0.0	100.0	66.4	793
Dhaka	63.9	10.4	0.8	1.0	0.1	0.2	0.2	0.5	7.2	12.9	0.2	2.2	0.0	0.0	100.0	76.0	926
Khulna	73.3	12.1	0.6	0.0	0.5	0.3	0.0	0.0	5.2	6.6	0.6	0.8	0.0	0.0	100.0	86.0	380
Mymensingh	46.8	10.2	0.1	0.0	0.0	0.0	0.2	0.0	11.9	26.1	0.9	3.5	0.0	0.0	100.0	57.1	333
Rajshahi	61.2	10.7	0.4	0.1	0.0	0.0	0.0	1.2	2.6	21.0	0.1	2.8	0.0	0.0	100.0	72.4	382
Rangpur	53.1	11.5	1.8	0.0	0.0	0.3	1.2	0.6	9.5	15.7	1.4	5.0	0.0	0.0	100.0	66.3	419
Sylhet	43.0	15.3	0.9	0.0	0.1	0.1	0.2	0.6	9.1	26.0	0.3	4.4	0.0	0.0	100.0	59.2	240
<b>Education</b>																	
No education	32.7	13.2	1.5	0.8	0.1	0.9	0.9	1.5	10.0	32.9	0.9	4.7	0.0	0.0	100.0	48.2	185
Primary incomplete	32.5	14.4	0.3	0.5	0.0	0.0	1.4	0.8	10.0	36.9	0.9	2.2	0.0	0.0	100.0	47.7	374
Primary complete <sup>2</sup>	41.4	13.3	1.0	0.2	0.4	0.0	0.3	0.7	10.2	27.7	0.5	4.2	0.0	0.0	100.0	55.9	469
Secondary incomplete	56.9	12.1	1.0	0.0	0.1	0.2	0.4	0.4	7.5	18.0	0.7	2.8	0.0	0.0	100.0	69.9	1,503
Secondary complete or higher <sup>3</sup>	71.2	13.4	0.7	0.5	0.0	0.2	0.4	0.2	3.8	8.5	0.2	1.0	0.0	0.0	100.0	85.8	1,161
<b>Wealth quintile</b>																	
Lowest	32.3	12.8	1.4	0.4	0.0	0.3	0.2	1.3	11.2	35.6	0.7	3.7	0.1	0.0	100.0	47.0	745
Second	46.2	13.3	0.7	0.0	0.0	0.2	0.7	0.2	6.6	27.6	1.0	3.4	0.0	0.0	100.0	60.3	781
Middle	57.2	15.1	0.8	0.2	0.1	0.0	1.0	0.3	6.5	16.0	0.3	2.4	0.0	0.0	100.0	73.3	787
Fourth	66.5	12.7	0.9	0.9	0.3	0.0	0.4	0.3	7.2	9.0	0.2	1.6	0.0	0.0	100.0	80.9	718
Highest	80.0	10.3	0.3	0.0	0.0	0.3	0.3	0.3	3.3	4.0	0.4	0.8	0.0	0.0	100.0	90.5	661
Total	55.7	12.9	0.8	0.3	0.1	0.2	0.5	0.5	7.0	18.9	0.5	2.4	0.0	0.0	100.0	69.8	3,692

Note: If more than one provider was mentioned, only the provider with the highest qualifications was considered. Figures in parentheses are based on 25-49 unweighted cases.

FWV = family welfare visitor, CSBA = community skilled birth attendant, MA = medical assistant, SACMO = sub-assistant community medical officer, CHCP = community health care provider, HA = health assistant, FWA = family welfare assistant

<sup>1</sup> Includes qualified doctor, nurse/midwife/paramedic, FWV, CSBA, and MA/SACMO

<sup>2</sup> Primary complete is defined as completing grade 5.

<sup>3</sup> Secondary complete is defined as completing grade 10.

**Table 5.6 Place of delivery**

Percent distribution of live births in the 2 years preceding the survey by place of delivery, according to background characteristics, Bangladesh DHS 2022

Background characteristic	Place of delivery					Total	Percent- age delivered in health facility	Percent- age delivered via C- section	Number of births
	Public	Private	NGO	Home	Other/ missing				
<b>Mother's age at birth</b>									
<20	19.4	44.0	1.7	34.5	0.4	100.0	65.0	44.3	890
20–34	17.6	46.0	1.8	34.2	0.4	100.0	65.4	45.2	2,608
35–49	15.8	37.4	1.0	45.3	0.5	100.0	54.2	35.4	194
<b>Birth order</b>									
1	20.0	51.0	1.7	27.0	0.3	100.0	72.8	51.0	1,471
2–3	17.2	44.3	1.6	36.6	0.3	100.0	63.1	43.6	1,892
4–5	13.3	23.6	2.7	58.8	1.5	100.0	39.7	20.8	304
6+	(9.3)	(16.4)	(0.0)	(74.3)	(0.0)	100.0	(25.7)	(12.6)	25
<b>Number of ANC visits<sup>1</sup></b>									
None	11.8	10.1	0.4	76.3	1.4	100.0	22.3	10.3	268
1	15.7	26.5	0.7	57.1	0.0	100.0	42.9	23.7	526
2	18.5	38.8	0.9	41.2	0.5	100.0	58.3	39.0	695
3	17.6	52.3	1.8	28.3	0.0	100.0	71.7	51.4	658
4 or more	19.5	58.0	2.8	19.2	0.5	100.0	80.3	57.9	1,462
Don't know/missing	22.8	43.0	0.0	34.2	0.0	100.0	65.8	39.5	82
<b>Residence</b>									
Urban	19.4	54.1	2.9	23.4	0.3	100.0	76.3	56.0	997
Rural	17.4	41.7	1.3	39.1	0.4	100.0	60.5	40.2	2,695
<b>Division</b>									
Barishal	13.2	36.8	1.1	48.9	0.0	100.0	51.1	35.0	219
Chattogram	21.3	36.7	2.9	38.9	0.2	100.0	60.9	31.0	793
Dhaka	17.5	50.6	2.3	29.2	0.4	100.0	70.4	53.1	926
Khulna	18.2	63.2	0.8	17.5	0.3	100.0	82.2	66.0	380
Mymensingh	18.5	35.2	0.7	45.4	0.3	100.0	54.3	38.9	333
Rajshahi	13.3	55.7	1.2	29.2	0.7	100.0	70.1	53.5	382
Rangpur	17.1	44.3	0.4	37.4	0.8	100.0	61.8	43.1	419
Sylhet	21.0	28.3	2.3	48.4	0.0	100.0	51.6	25.7	240
<b>Education</b>									
No education	19.8	22.6	2.3	55.3	0.0	100.0	44.7	23.9	185
Primary incomplete	15.2	24.2	2.0	58.4	0.3	100.0	41.3	21.4	374
Primary complete <sup>2</sup>	13.7	35.6	1.2	48.7	0.8	100.0	50.5	35.2	469
Secondary incomplete	18.9	44.7	1.6	34.5	0.3	100.0	65.2	44.8	1,503
Secondary complete or higher <sup>3</sup>	19.0	59.7	2.0	19.0	0.4	100.0	80.6	58.5	1,161
<b>Wealth quintile</b>									
Lowest	17.2	24.6	0.6	57.3	0.3	100.0	42.4	22.7	745
Second	18.8	34.4	1.0	45.4	0.3	100.0	54.3	35.0	781
Middle	18.9	46.2	2.6	31.6	0.6	100.0	67.8	45.9	787
Fourth	16.9	56.3	2.0	24.6	0.2	100.0	75.2	54.6	718
Highest	17.7	67.2	2.4	12.1	0.6	100.0	87.4	67.3	661
Total	17.9	45.1	1.7	34.9	0.4	100.0	64.8	44.5	3,692

Note: BRAC maternity/delivery centers (also known as birthing huts) are included in the category "other." Deliveries in these centers are not considered facility births in this report. Figures in parentheses are based on 25–49 unweighted cases.

<sup>1</sup> Includes only the most recent birth in the 3 years preceding the survey

<sup>2</sup> Primary complete is defined as completing grade 5.

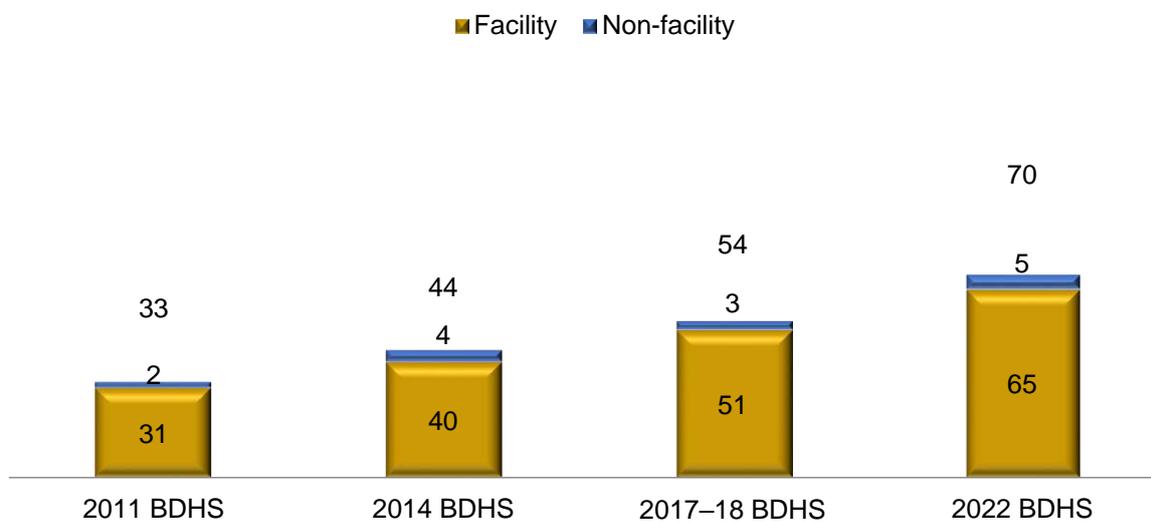
<sup>3</sup> Secondary complete is defined as completing grade 10.

## Trends:

- The percentage of deliveries attended by medically trained providers increased from 33% in 2011 to 70% in 2022 (**Figure 5.2**). This was due to a sharp rise in facility deliveries over that period, from 31% to 65%.
- Between 2017–18 and 2022, deliveries in private facilities increased from 32% to 45% and deliveries in public facilities from 15% to 18%. NGO facilities had a small market share of 4% in 2017–18, and this further declined to 2% in 2022 (**Figure 5.3**).
- C-sections increased from 18% in 2011 to 45% in 2022 (**Figure 5.4**).

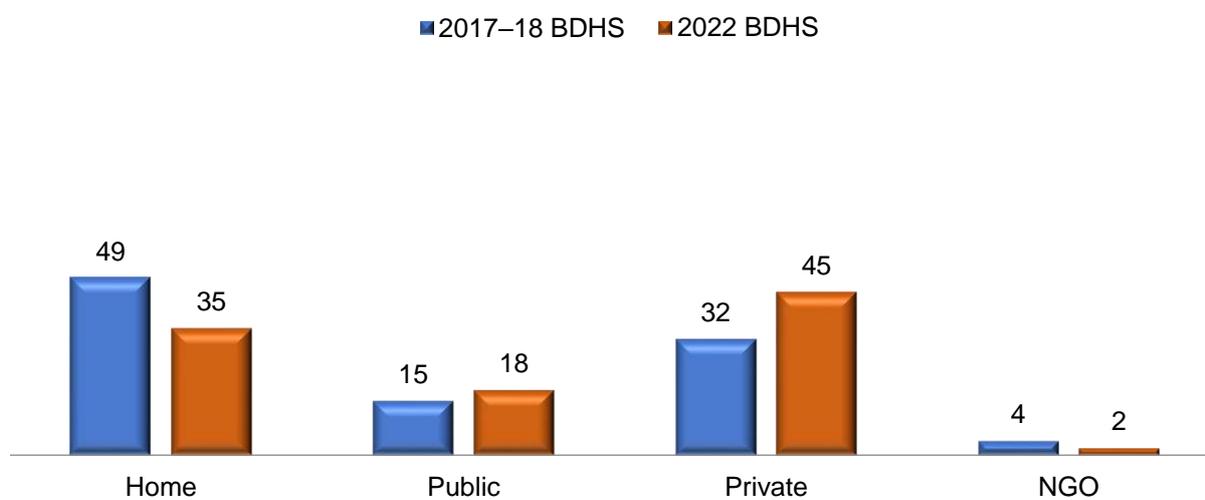
**Figure 5.2 Trends in births assisted by medically trained providers according to place of delivery: Bangladesh DHS 2011–2022**

*Percentage of deliveries in the 2 years preceding the survey by a medically trained provider*



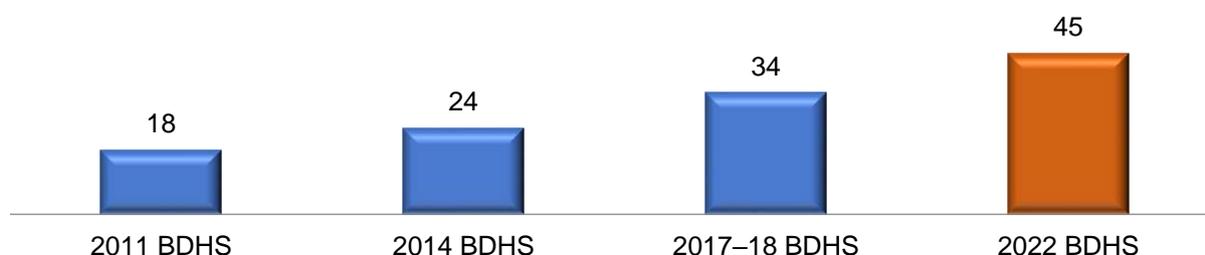
**Figure 5.3 Trends in place of delivery: Bangladesh DHS 2017-18–2022**

*Percentage of live births in the 2 years preceding the survey*



**Figure 5.4 Trends in cesarean section deliveries: Bangladesh DHS 2011–2022**

*Percentage of deliveries by C-section for births in the 2 years preceding the survey*



### 5.3 POSTNATAL CARE

A large proportion of maternal and neonatal deaths occur during the first 48 hours after delivery. Thus, prompt postnatal care (PNC) for both the mother and the child is important to treat any complications arising from the delivery, as well as to provide the mother with important information on how to care for herself and her child. Safe motherhood programs recommend that all women receive a check of their health during the first 2 days after birth.

- Fifty-six percent of infants in Bangladesh born in the 2 years preceding the survey received postnatal care from a medically trained provider within 2 days of delivery; 55% of mothers received such care (**Table 5.7**).
- It is important to note that while 65% of deliveries in the past 2 years occurred in health facilities, only 55% of mothers reported receiving PNC from a medically trained provider within 2 days of delivery for the most recent birth. And only 78% of mothers with institutional deliveries received PNC from a medically trained provider within 2 days of delivery (**Table 5.8**).
- Thirteen percent of women who had noninstitutional deliveries received PNC from a medically trained provider within 2 days of delivery (**Table 5.8**).

**Table 5.7 Postnatal care for mothers and children**

Percent distribution of last births in the 2 years preceding the survey for which the mothers and/or the children received postnatal care from a medically trained provider<sup>1</sup>, by timing of postnatal care, Bangladesh DHS 2022

Timing	Respondent	
	Women	Children
<b>Within 2 days of delivery</b>	<b>55.2</b>	<b>56.2</b>
3–6 days after delivery	3.3	2.7
7–41 days after delivery	2.3	1.1
Within 42 days of delivery	60.9	60.1
Did not receive postnatal check-up	38.8	39.1
Don't know/missing	0.3	0.8
Total	100.0	100.0
Number	3,610	3,610

Note: Women who received a check-up after 41 days are assumed to have not received postnatal care.

<sup>1</sup> Qualified doctor, nurse/midwife/paramedic, including family welfare visitor (FWV), community skilled birth attendant (CSBA), and sub-assistant community medical officer (SACMO).

**Table 5.8 Postnatal care for mothers by place of delivery**

Percent distribution of last births in the 2 years preceding the survey for which mothers received postnatal care from a medically trained provider<sup>1</sup>, by timing of postnatal care and place of delivery, Bangladesh DHS 2022

Timing	Place of delivery		Total
	Facility delivery	Home and other	
<b>Within 2 days of delivery</b>	<b>78.4</b>	<b>12.6</b>	<b>55.2</b>
3–6 days after delivery	4.9	0.4	3.3
7–41 days after delivery	3.0	1.2	2.3
Within 42 days of delivery	86.3	14.2	60.9
Did not receive postnatal check-up	13.1	85.8	38.8
Don't know/missing	0.5	0.0	0.3
Total	100.0	100.0	100.0
Number	2,337	1,273	3,610

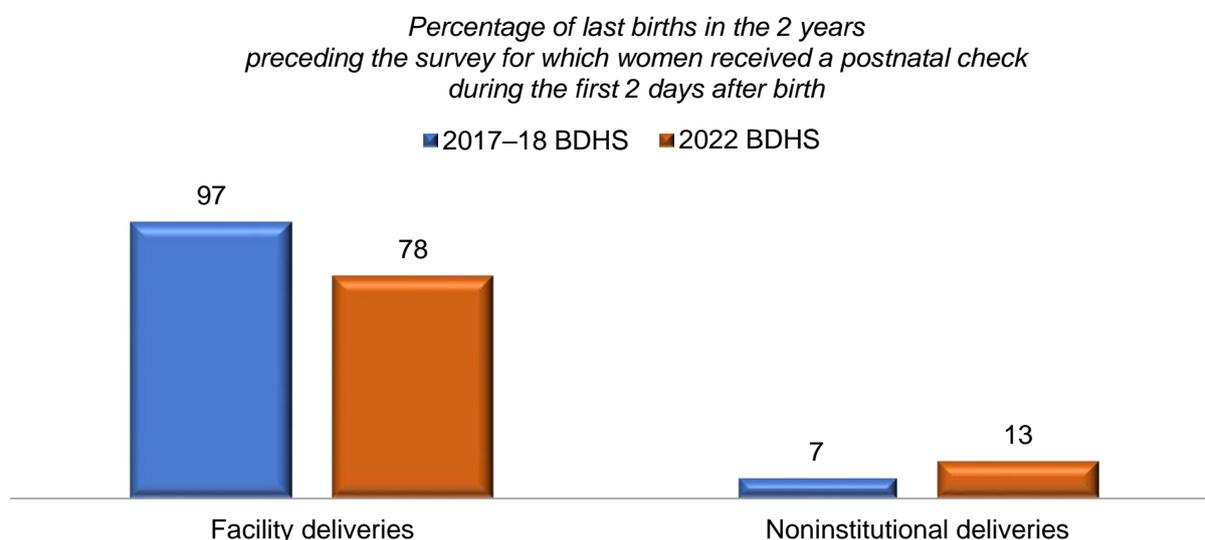
Note: Women who received a check-up after 41 days are assumed to have not received postnatal care.

<sup>1</sup> Qualified doctor, nurse/midwife/paramedic, including family welfare visitor (FWV), community skilled birth attendant (CSBA), and sub-assistant community medical officer (SACMO).

### Trends:

- The percentage of mothers receiving a check-up from a medically trained provider within 2 days after delivery has risen slightly over time, from 53% in 2017–18 to 55% in 2022. The percentage of children receiving such care has also increased, from 53% to 56%.
- The proportion of noninstitutional deliveries for which the mother received PNC from a medically trained provider within 2 days of delivery increased from 7% in 2017–18 to 13% in 2022 (**Figure 5.5**). The target of the 4th HPNSP is to reach 10% of mothers who have noninstitutional deliveries with PNC from a medically trained provider within 2 days of delivery.

**Figure 5.5 Trends in postnatal care by place of delivery: Bangladesh DHS 2017-18–2022**



## 5.4 ESSENTIAL NEWBORN CARE

The 2022 BDHS assessed newborn care practices among noninstitutional births and considered the following five practices as essential for newborn care: clean cutting of the cord using a sterile instrument, appropriate cord care (applying nothing or only chlorhexidine to the cord), early initiation of skin-to-skin care (establishing skin-to-skin contact between the baby and the mother within 1 hour of birth), immediate breastfeeding (within 1 hour of birth), and bathing delayed 72 hours or more. The 4th HPNSP aims to increase coverage of essential newborn care practices among noninstitutional births to 25% by 2023.

**Table 5.9** presents findings on essential newborn care among noninstitutional births.

- Clean cord cutting practices were used for 97% of noninstitutional deliveries.
- Appropriate cord care practices were used in 4 of 10 births (41%).
- Less than one-fifth of newborns (18%) received skin-to-skin care immediately after birth.
- Only 40% of newborns were breastfed within the first hour of birth.
- Bathing was delayed 72 hours or more for less than 3 of 10 newborns (27%).
- One percent of infants received all five components of essential newborn care.

**Table 5.9 Essential newborn care**

Percentage of most recent noninstitutional live births in the 2 years preceding the survey by essential newborn care received, according to background characteristics, Bangladesh DHS 2022

Background characteristic	Use of a safe delivery kit or boiled blade to cut the umbilical cord <sup>1</sup>	Nothing applied to the umbilical cord or only chlorhexidine applied	Bathing delayed 72 hours or more	Immediate breastfeeding (within 1 hour after delivery)	Skin-to-skin care immediately after birth	Four essential newborn care practices <sup>2</sup>	All five essential newborn care practices	Number of non-institutional births
<b>Mother's age at birth</b>								
<20	96.4	36.8	28.7	39.1	19.0	5.4	1.8	331
20–34	96.6	43.7	25.6	40.2	17.5	3.6	1.0	856
35–49	96.5	35.7	29.1	36.1	14.7	7.2	1.2	85
<b>Birth order</b>								
1	95.3	39.0	32.2	36.9	16.5	4.5	1.1	428
2–3	97.6	43.5	23.5	41.0	18.4	4.6	1.1	651
4–5	96.3	42.2	24.2	41.2	18.9	1.5	0.7	149
6+	(94.7)	(29.9)	(28.8)	(40.2)	(15.9)	(9.0)	(5.4)	44
<b>Residence</b>								
Urban	97.6	48.9	27.6	38.0	15.6	5.4	2.4	229
Rural	96.4	39.7	26.5	40.0	18.2	4.1	1.0	1,043
<b>Division</b>								
Barishal	96.3	25.7	25.8	38.7	18.8	2.0	0.0	105
Chattogram	97.6	30.5	31.4	35.7	19.8	4.3	0.6	305
Dhaka	93.0	51.3	22.6	38.5	7.8	3.6	1.2	267
Khulna	94.0	33.1	27.2	37.6	19.4	4.4	0.0	66
Mymensingh	98.4	49.6	14.6	36.3	16.6	2.1	0.0	147
Rajshahi	97.8	41.8	29.7	44.0	18.1	4.5	0.0	113
Rangpur	97.5	49.7	25.0	41.4	19.4	6.1	3.1	159
Sylhet	99.0	43.6	39.5	52.4	32.6	8.7	4.9	110
<b>Education</b>								
No education	96.8	49.1	17.9	34.1	12.0	3.8	0.2	96
Primary incomplete	95.8	39.4	20.9	39.4	16.9	2.6	1.1	217
Primary complete <sup>1</sup>	98.6	38.6	21.0	38.6	22.7	2.7	1.7	221
Secondary incomplete	95.8	42.4	29.1	41.5	18.7	5.1	1.1	517
Secondary complete or higher <sup>2</sup>	97.1	40.2	36.2	39.0	13.8	6.1	1.6	221
<b>Wealth quintile</b>								
Lowest	97.3	41.6	21.9	39.0	19.4	3.6	1.1	420
Second	97.2	39.1	26.8	42.4	19.5	3.2	0.5	345
Middle	95.3	41.2	34.3	36.6	13.6	5.2	1.6	246
Fourth	98.1	46.0	25.1	38.9	17.0	7.3	2.6	177
Highest	91.1	40.3	31.2	41.7	16.0	3.8	0.8	83
Total	96.6	41.4	26.7	39.6	17.7	4.3	1.2	1,272

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

<sup>1</sup> Razor blade/knife/scissors, either new or boiled

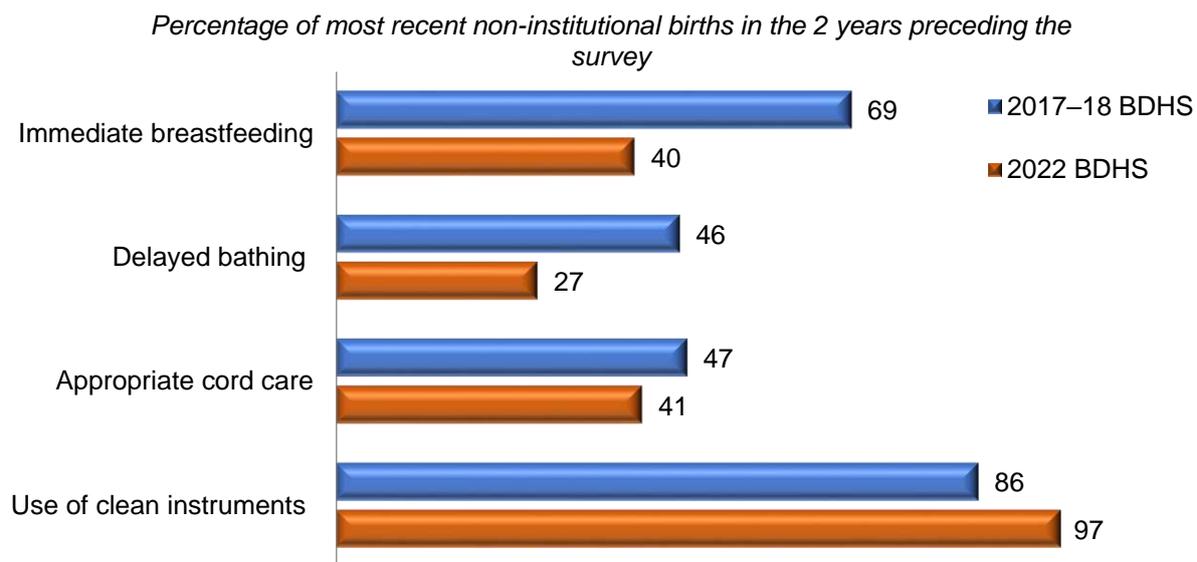
<sup>2</sup> New or boiled blade/knife/scissors used, nothing or only chlorhexidine applied, bathing delayed 72 hours or more, and immediate breastfeeding

### Trends:

Data are available from both the 2017–18 BDHS and the 2022 BDHS on four essential newborn care practices. Changes in practices over time are shown in **Figure 5.6**.

- Use of clean instruments increased from 86% to 97%.
- Use of the following three components of essential newborn care declined: appropriate cord care (from 47% to 41%), delayed bathing (from 46% to 27%), and immediate breastfeeding (from 69% to 40%).

**Figure 5.6 Trends in essential newborn care practices: Bangladesh DHS 2017-18–2022**





### Key findings

- The under-5 mortality rate during the 3 years preceding the 2022 BDHS was 31 deaths per 1,000 live births. The infant mortality rate was 25 deaths per 1,000 live births, and the child mortality rate was 6 deaths per 1,000 live births. The neonatal mortality rate was 20 deaths per 1,000 live births, and postneonatal mortality was 5 deaths per 1,000 live births.
- A goal of the 4th Health, Population and Nutrition Sector Programme (4th HPNSP) is to reduce under-5 mortality to 34 deaths per 1,000 live births by 2023, and this has been achieved. Another goal is to reduce neonatal mortality to 18 deaths per 1,000 live births by 2023, and meeting this goal is within close reach.
- Between 2017–18 and 2022, under-5 mortality for the preceding 3 years declined from 43 to 31 deaths per 1,000 live births. Infant mortality declined from 36 to 25 deaths per 1,000 births, neonatal mortality decreased from 27 to 20 deaths per 1,000 live births, and postneonatal mortality declined from 9 to 5 deaths per 1,000 live births.
- Advice or treatment was sought from health facilities or health providers for 55% of children under age 5 who had symptoms of acute respiratory infection (ARI) in the 2 weeks before the survey. In 2017–18, 40% of children with ARI symptoms were taken for advice or treatment.
- One-third of children under age 5 who had a fever in the 2 weeks preceding the survey were taken to a health facility or qualified health provider for advice or treatment. In 2017–18, this proportion was 27%.
- Three-quarters of children (76%) with diarrhea received oral rehydration therapy (ORT), that is, oral rehydration salts (ORS) or recommended homemade fluids. Use of ORT for diarrhea has declined since 2017–18, primarily due to a decrease in ORS use (from 83% to 74%).
- Forty-three percent of children with diarrhea were given both ORS and zinc supplements. Use of ORS and zinc did not improve between 2017–18 and 2022 (44% and 43%, respectively).

## 6.1 EARLY CHILDHOOD MORTALITY

The 2022 BDHS reports 3-year childhood mortality rates. All eight previous BDHS surveys reported 5-year rates. For trend analyses, 3-year childhood mortality rates were estimated for each of the nine BDHS surveys for data comparability.

**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.

**Table 6.1** presents estimates of childhood mortality for three successive 3-year periods prior to the 2022 BDHS. Rates were estimated directly from information collected as part of a retrospective pregnancy history in which female respondents listed all of the children to whom they have given birth, along with each child's date of birth, survivorship status, and current age or age at death.

- The under-5 mortality rate during the 3-year period preceding the survey was 31 deaths per 1,000 live births. The infant mortality rate was 25 deaths per 1,000 live births, and the child mortality rate was 6 deaths per 1,000 children (**Table 6.1**).
- The first month of life is the riskiest; the mortality rate during that period is 20 deaths per 1,000 live births, as compared with 5 deaths per 1,000 live births in the following 11 months.

**Table 6.1 Early childhood mortality rates**

Neonatal, postneonatal, infant, child and under-5 mortality rates for 3-year periods preceding the survey, Bangladesh DHS 2022

Years preceding the survey	Neonatal mortality (NN)	Postneonatal mortality (PNN) <sup>1</sup>	Infant mortality ( <sub>1</sub> Q <sub>0</sub> )	Child mortality ( <sub>4</sub> Q <sub>1</sub> )	Under-5 mortality ( <sub>5</sub> Q <sub>0</sub> )
0–2	20	5	25	6	31
3–5	25	6	31	5	35
6–8	31	9	40	7	47

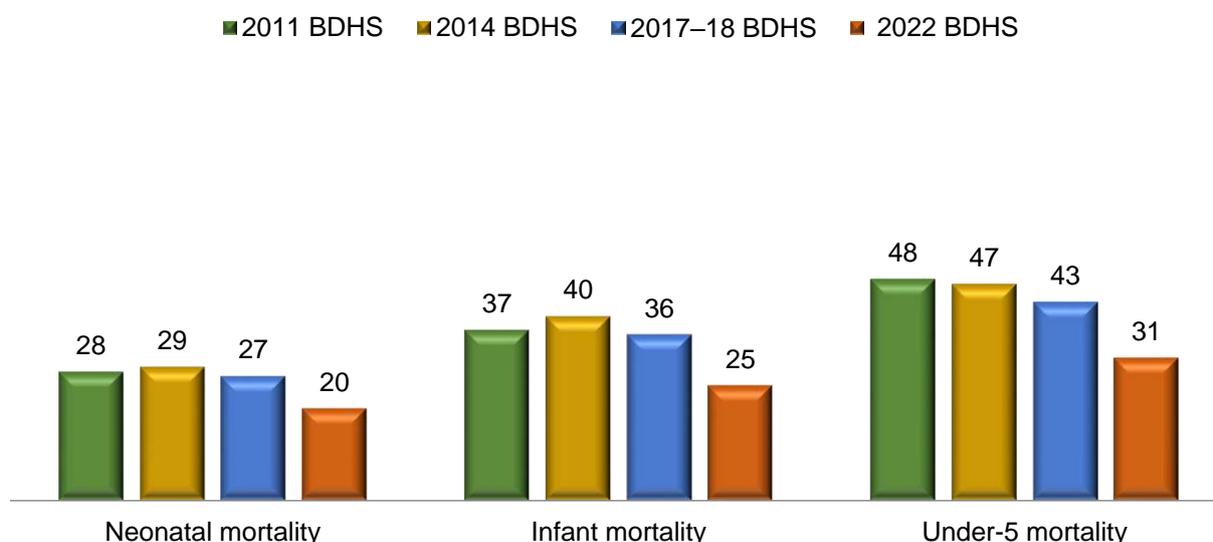
<sup>1</sup> Computed as the difference between the infant and neonatal mortality rates

### Trends:

- Over the past decade, under-5 mortality has declined from 48 deaths per 1,000 live births to 31 deaths per 1,000 live births. The largest decline occurred between 2017–18 and 2022, when under-5 mortality decreased from 43 deaths to 31 deaths per 1,000 live births (**Figure 6.1**).
- Neonatal deaths account for two-thirds of under-5 deaths, and changes in the under-5 mortality rate depend largely on changes in the death rate in the first month of life. Between 2011 and 2017–18, the neonatal mortality rate changed only minimally. Between 2017–18 and 2022, the rate fell from 27 to 20 deaths per 1,000 live births.

**Figure 6.1 Trends in childhood mortality rates (3-year average): Bangladesh DHS 2011–2022**

*Deaths per 1,000 live births*



## 6.2 CARE SEEKING AND TREATMENT OF CHILD ILLNESS

Acute respiratory infection (ARI), fever, and dehydration from diarrhea are important contributing causes of childhood morbidity and mortality in developing countries (WHO 2003). Prompt medical attention when a child has the symptoms of these illnesses is, therefore, crucial in reducing child deaths.

- During the 2 weeks preceding the survey, 31% of children under age 5 were reported to have had a fever, 5% had diarrhea, and 1% had ARI symptoms (**Table 6.2**).
- Fifty-five percent of children with symptoms of ARI were taken to a health facility or provider for advice or treatment (**Table 6.3**).
- Advice or treatment from a health facility or provider was sought for one-third of children who had a fever.
- Administration of oral rehydration therapy (ORT) is a simple way to counter the effects of dehydration caused by diarrhea. Seventy-six percent of children with diarrhea received oral rehydration salts (ORS) or recommended home fluids, 51% received zinc supplements, and 43% received both ORS and zinc supplements (**Table 6.4**).

**Table 6.2 Prevalence of acute respiratory infection, fever, and diarrhea**

Percentage of children under age 5 with symptoms of acute respiratory infection (ARI), fever, or diarrhea in the 2 weeks preceding the survey, Bangladesh DHS 2022

Illness	Percentage
ARI symptoms	1.4
Fever	30.5
Diarrhea	4.8
Number of children	8,573

Note: Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.

**Table 6.3 Treatment for acute respiratory infection, fever, and diarrhea**

Among children under age 5 who had symptoms of acute respiratory infection (ARI), fever, or diarrhea during the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, Bangladesh DHS 2022

Background characteristic	Children with symptoms of ARI <sup>1</sup>		Children with fever		Children with diarrhea	
	Percentage for whom advice or treatment was sought <sup>2</sup>	Number of children	Percentage for whom advice or treatment was sought <sup>2</sup>	Number of children	Percentage for whom advice or treatment was sought <sup>2</sup>	Number of children
<b>Age in months</b>						
<6	70.2	9	43.0	241	53.6	35
6–11	66.5	18	41.8	381	41.5	86
12–23	53.3	30	34.7	614	45.5	112
24–35	56.3	34	30.7	513	22.5	81
36–47	49.2	20	29.1	456	28.9	50
48–59	29.9	10	23.4	413	17.7	48
<b>Sex</b>						
Male	60.2	78	33.6	1,379	36.3	220
Female	45.1	43	32.2	1,239	34.7	192
<b>Residence</b>						
Urban	66.0	21	36.6	671	45.9	103
Rural	52.5	99	31.7	1,947	32.2	310
<b>Division</b>						
Barishal	59.9	7	33.2	178	34.0	27
Chattogram	54.8	26	32.1	635	28.0	114
Dhaka	67.6	19	31.1	542	50.7	64
Khulna	72.0	16	39.2	290	50.1	45
Mymensingh	87.2	6	29.7	231	37.6	45
Rajshahi	22.4	26	31.9	250	23.8	59
Rangpur	52.2	14	36.8	312	38.1	39
Sylhet	72.7	7	30.2	181	25.5	19
<b>Mother's education</b>						
No education	50.8	5	26.0	143	33.8	24
Primary incomplete	47.8	10	29.2	295	24.7	43
Primary complete <sup>3</sup>	40.7	17	29.7	374	32.1	45
Secondary incomplete	56.1	64	32.7	1,101	33.7	181
Secondary complete <sup>4</sup>	65.3	24	38.1	705	44.1	120
<b>Wealth quintile</b>						
Lowest	56.4	28	30.5	589	27.9	98
Second	37.8	29	30.9	564	24.5	103
Middle	48.9	27	32.8	560	48.6	76
Fourth	67.3	22	34.6	486	28.8	58
Highest	77.4	15	37.5	419	52.7	77
Total	54.8	120	33.0	2,618	35.6	412

<sup>1</sup> Symptoms of ARI include short, rapid breathing that is chest-related and/or difficult breathing that is chest-related.

<sup>2</sup> Includes advice or treatment from the following sources: public sector, private medical sector, and NGO sector. Excludes advice or treatment from a traditional practitioner or pharmacy.

<sup>3</sup> Primary complete is defined as completing grade 5.

<sup>4</sup> Secondary complete is defined as completing grade 10.

**Table 6.4 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 oral rehydration salt (ORS) packet or prepackaged ORS fluid, recommended homemade fluids (RHF), ORS or RHF, zinc, ORS and zinc, ORS or increased fluids, oral rehydration therapy (ORT) or increased fluids, and continued feeding and ORT or increased fluids, according to background characteristics, Bangladesh DHS 2022

Background characteristic	Percentage of children with diarrhea who were given:										Number of children with diarrhea	
	Fluid from ORS packets or pre-packaged ORS liquid	Recommended 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 or increased fluids <sup>1</sup>	Missing	No treatment		
<b>Age in months</b>												
<6	(26.5)	(2.9)	(29.3)	(57.1)	(21.5)	(78.4)	(78.4)	(15.6)	(0.0)	(6.7)	35	
6–11	70.4	15.5	72.7	49.7	40.7	98.1	98.1	54.0	0.0	1.9	86	
12–23	81.8	9.9	84.6	58.1	54.2	95.7	97.1	60.7	0.0	2.9	112	
24–35	78.7	12.8	79.2	58.4	54.6	95.0	95.0	57.2	0.0	5.0	81	
36–47	85.5	13.3	85.5	46.1	40.7	96.8	96.8	54.0	0.0	3.2	50	
48–59	(75.1)	(24.1)	(77.8)	(27.7)	(22.0)	(97.6)	(97.6)	(57.2)	(0.0)	(2.4)	48	
<b>Sex</b>												
Male	74.5	12.8	75.9	53.2	46.7	95.5	95.5	53.9	0.0	3.2	220	
Female	72.9	13.5	75.5	49.2	39.4	94.3	95.2	53.2	0.0	3.6	192	
<b>Residence</b>												
Urban	82.8	15.3	85.9	48.1	41.4	96.3	96.3	69.4	0.0	1.4	103	
Rural	70.8	12.4	72.3	52.4	43.9	94.5	95.0	48.3	0.0	4.1	310	
<b>Division</b>												
Barishal	(79.6)	(19.9)	(81.0)	(51.1)	(45.1)	(94.9)	(94.9)	(50.2)	(0.0)	(5.1)	27	
Chattogram	76.4	13.2	79.6	55.7	49.9	94.9	96.3	50.6	0.0	2.3	114	
Dhaka	86.1	18.9	86.1	57.7	53.9	93.4	93.4	72.0	0.0	2.9	64	
Khulna	(88.3)	(10.0)	(90.0)	(43.6)	(41.8)	(97.4)	(97.4)	(53.2)	(0.0)	(2.6)	45	
Mymensingh	(75.4)	(6.9)	(77.1)	(53.1)	(42.8)	(96.7)	(96.7)	(55.9)	(0.0)	(3.3)	45	
Rajshahi	59.0	13.7	61.1	45.6	28.7	95.4	95.4	56.7	0.0	4.6	59	
Rangpur	(48.0)	(12.8)	(50.5)	(46.5)	(33.9)	(93.9)	(93.9)	(29.0)	(0.0)	(3.1)	39	
Sylhet	*	*	*	*	*	*	*	*	*	*	19	
<b>Mother's education</b>												
No education	*	*	*	*	*	*	*	*	*	*	24	
Primary incomplete	(74.0)	(21.6)	(76.7)	(44.8)	(39.4)	(94.6)	(94.6)	(62.7)	(0.0)	(2.7)	43	
Primary complete <sup>2</sup>	(73.3)	(10.6)	(73.3)	(61.3)	(49.0)	(92.8)	(92.8)	(46.0)	(0.0)	(3.7)	45	
Secondary incomplete	72.3	12.7	75.0	48.7	41.6	95.5	96.4	56.8	0.0	3.6	181	
Secondary complete <sup>3</sup>	76.1	12.8	77.6	54.1	45.2	94.5	94.5	47.1	0.0	3.4	120	
<b>Wealth quintile</b>												
Lowest	67.0	14.2	67.0	48.6	43.7	96.7	96.7	45.6	0.0	3.3	98	
Second	74.2	19.8	77.4	52.4	46.4	95.3	95.3	50.4	0.0	4.7	103	
Middle	71.4	9.8	75.2	51.3	39.2	91.0	93.1	44.1	0.0	4.8	76	
Fourth	79.8	5.3	81.2	53.6	44.5	98.0	98.0	70.6	0.0	0.0	58	
Highest	79.8	11.9	80.8	51.9	41.8	93.9	93.9	64.5	0.0	2.9	77	
Total	73.8	13.1	75.7	51.3	43.3	95.0	95.3	53.6	0.0	3.4	412	

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.

<sup>1</sup> Continued feeding includes children who were given more, the same as usual, or somewhat less food during the diarrhea episode.

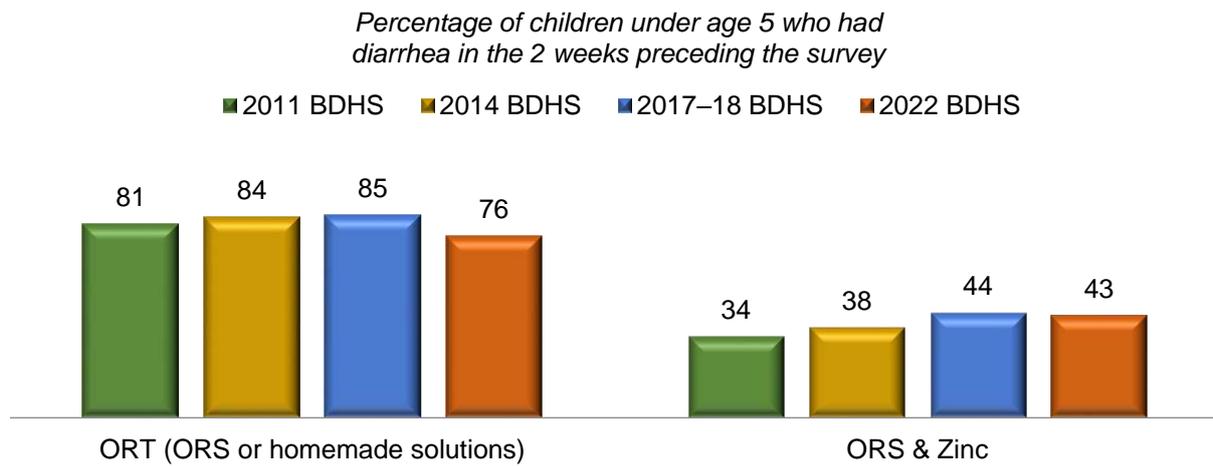
<sup>2</sup> Primary complete is defined as completing grade 5.

<sup>3</sup> Secondary complete is defined as completing grade 10.

### Trends:

- The percentage of children with ARI symptoms taken to a health facility/provider for advice or treatment increased from 40% in 2017–18 to 55% in 2022.
- Use of ORS and recommended home fluids (ORT) during diarrhea among children fell from 85% in 2017–18 to 76% in 2022, primarily due to a decrease in ORS use (from 83% to 74%). Also, there was no increase over this period in use of ORS and zinc supplements during diarrhea (**Figure 6.2**).

**Figure 6.2 Trends in treatment of diarrhea: Bangladesh DHS 2011–2022**



## 7 CHILD NUTRITION AND FEEDING PRACTICES

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### Key findings

- Twenty-four percent of children under age 5 are stunted, while 22% are underweight and 11% are wasted. The target of the 4th Health, Population and Nutrition Sector Programme (4th HPNSP) is to reduce the prevalence of stunting among children to 25% by 2023, and this has been achieved.
- Between 2017–18 and 2022, the proportion of children who are stunted declined from 31% to 24%. There was no change in the proportion of children who are underweight. Wasting increased slightly from 8% to 11%.
- Fifty-five percent of infants less than age 6 months are exclusively breastfed. Exclusive breastfeeding declined by 10 percentage points since 2017–18, from 65% to 55%.
- Twenty-nine percent of children age 6–23 months are fed appropriately according to recommended infant and young child feeding (IYCF) practices. The aim of the 4th HPNSP is for 45% of children to be fed a minimum acceptable diet.
- Between 2017–18 and 2022, the proportion of children fed a minimum acceptable diet declined from 35% to 29%. The proportion of children fed an adequately diverse diet remained almost the same between 2017–18 and 2022, while there was a notable drop (from 81% to 61%) in the proportion of children fed the minimum number of times each day.

### 7.1 CHILD NUTRITIONAL STATUS

Anthropometry is commonly used to measure child nutritional status. Anthropometric measurements are used to report on child growth indicators. The distribution of height and weight for children under age 5 was compared with the WHO Child Growth Standards reference population (WHO 2006b). The distribution of a well-nourished population will be similar to the reference population, while the distribution of a poorly nourished population will not. The 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. Values that are greater than two standard deviations below the median of the WHO Child Growth Standards are used to define malnutrition.

### **Stunting (assessed via height-for-age)**

Height-for-age is a measure of growth faltering. 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 undernutrition. 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 that takes into account both wasting and stunting. 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 2022 BDHS identified a total of 4,420 children under age 5 who were eligible for height and weight measurements. The percentages of children with valid data for height-for-age, weight-for-height, and weight-for-age were 96%, 96%, and 98%, respectively.

- Twenty-four percent of children under age 5 in Bangladesh are stunted, with 6% considered severely stunted (**Table 7.1**).
- There is a slight difference in the prevalence of stunting among children in urban (22%) and rural (24%) areas. Stunting among children is highest in Sylhet (34%) and lowest in Khulna (19%).
- Eleven percent of children under age 5 are wasted; only 2% are classified as severely wasted.
- Twenty-two percent of children under age 5 are underweight, with 4% considered severely underweight.

**Table 7.1 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 2022

Background characteristic	Height-for-age <sup>1</sup>				Weight-for-height				Weight-for-age				
	Percentage below -3 SD	Percentage below -2 SD <sup>2</sup>	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD <sup>2</sup>	Percentage above +2 SD	Mean Z-score (SD)	Number of children	Percentage below -3 SD	Percentage below -2 SD <sup>2</sup>	Mean Z-score (SD)	Number of children
<b>Age in months</b>													
<6	3.3	13.0	-0.7	453	1.2	11.5	1.1	-0.4	447	4.7	16.0	-0.9	470
6-11	2.3	15.9	-0.9	484	2.6	8.5	2.7	-0.4	488	2.8	14.0	-0.8	492
12-23	7.7	28.4	-1.3	830	1.1	9.1	1.4	-0.6	836	3.1	20.6	-1.1	847
24-35	7.0	27.3	-1.3	829	1.9	11.2	1.5	-0.8	831	5.5	24.9	-1.3	837
36-47	5.6	26.0	-1.3	819	2.5	12.4	1.5	-0.9	819	5.2	25.0	-1.3	828
48-59	5.9	22.9	-1.2	836	1.6	12.5	1.1	-0.9	834	4.6	27.1	-1.3	840
0-23	5.1	21.1	-1.1	1,767	1.5	9.5	1.7	-0.5	1,771	3.4	17.6	-1.0	1,809
24-59	6.2	25.4	-1.2	2,484	2.0	12.0	1.4	-0.9	2,483	5.1	25.7	-1.3	2,504
<b>Sex</b>													
Male	5.9	23.9	-1.1	2,149	1.7	10.6	1.3	-0.7	2,147	4.4	22.1	-1.1	2,175
Female	5.5	23.3	-1.2	2,103	1.9	11.4	1.7	-0.7	2,107	4.5	22.5	-1.2	2,138
<b>Mother's interview status</b>													
Interviewed	5.5	23.3	-1.2	4,076	1.7	11.0	1.5	-0.7	4,077	4.3	22.3	-1.2	4,134
Not interviewed but in household	9.6	30.6	-1.3	175	3.9	11.8	1.0	-0.7	177	6.3	22.8	-1.2	178
<b>Residence</b>													
Urban	4.8	22.0	-1.0	1,080	1.5	10.9	1.5	-0.7	1,086	4.6	20.9	-1.1	1,101
Rural	6.0	24.1	-1.2	3,172	1.9	11.0	1.5	-0.7	3,168	4.3	22.8	-1.2	3,212
<b>Division</b>													
Barisal	5.7	24.9	-1.2	295	2.0	14.1	1.7	-0.8	295	4.6	25.7	-1.2	297
Chattogram	6.7	24.9	-1.3	935	2.1	11.4	1.4	-0.8	935	5.3	23.4	-1.3	942
Dhaka	4.3	21.5	-1.0	1,012	1.0	8.9	2.1	-0.6	1,014	4.0	18.6	-1.0	1,035
Khulna	3.6	19.0	-1.0	422	1.6	10.3	1.4	-0.6	422	3.5	18.7	-1.0	426
Mymensingh	7.2	27.7	-1.3	373	1.7	12.8	0.6	-0.9	373	3.6	24.7	-1.3	375
Rajshahi	5.1	20.0	-1.1	430	2.0	11.0	1.8	-0.6	430	3.0	18.2	-1.0	440
Rangpur	5.0	22.1	-1.2	473	2.2	11.1	1.5	-0.8	474	4.4	24.6	-1.2	481
Sylhet	10.2	33.9	-1.4	312	2.3	12.2	0.5	-0.9	312	6.9	31.7	-1.4	317
<b>Mother's education<sup>3</sup></b>													
No education	14.9	39.9	-1.7	251	4.4	22.0	0.5	-1.2	255	12.9	43.4	-1.8	255
Primary incomplete	9.0	33.3	-1.5	399	2.9	12.0	1.0	-0.9	402	6.0	28.9	-1.5	403
Primary complete <sup>4</sup>	6.8	26.9	-1.4	481	1.1	9.8	1.1	-0.7	484	4.7	26.3	-1.3	489
Secondary incomplete	4.2	22.7	-1.2	1,741	1.4	10.3	1.6	-0.7	1,739	3.7	21.0	-1.1	1,766
Secondary complete <sup>5</sup>	3.8	16.0	-0.9	1,204	1.3	9.7	1.9	-0.6	1,198	2.8	15.9	-0.9	1,221
Missing	9.6	30.6	-1.3	175	3.9	11.8	1.0	-0.7	177	6.3	22.8	-1.2	178
<b>Wealth quintile</b>													
Lowest	9.5	34.5	-1.5	885	2.4	13.1	0.6	-0.9	886	7.1	32.4	-1.5	894
Second	5.9	27.2	-1.3	876	1.4	11.8	1.1	-0.8	880	3.8	25.7	-1.3	886
Middle	6.4	22.0	-1.2	883	2.3	10.6	1.2	-0.7	881	4.9	21.0	-1.0	890
Fourth	3.5	17.8	-1.0	820	1.3	9.3	2.0	-0.6	818	2.9	16.0	-1.0	839
Highest	2.7	15.2	-0.7	788	1.3	10.0	2.7	-0.5	789	3.1	15.2	-0.8	803
Total	5.7	23.6	-1.2	4,252	1.8	11.0	1.5	-0.7	4,254	4.4	22.3	-1.2	4,313

Note: Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards.

<sup>1</sup> Recumbent length is measured for children under age 2; standing height is measured for all other children.

<sup>2</sup> Includes children who are below -3 SD from the WHO Child Growth Standards population median

<sup>3</sup> For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

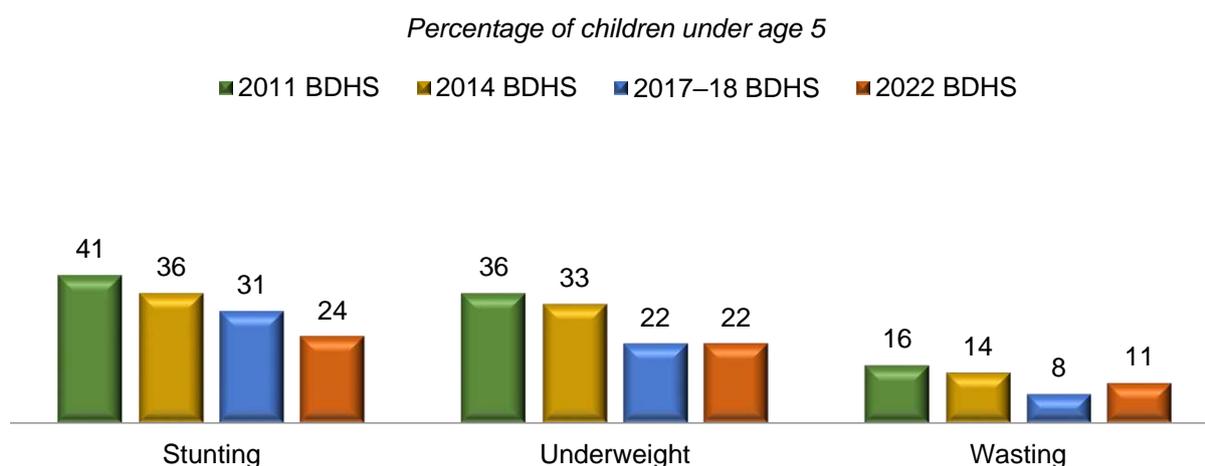
<sup>4</sup> Primary complete is defined as completing grade 5.

<sup>5</sup> Secondary complete is defined as completing grade 10.

**Trends:** The nutritional status of children has shown steady improvement over the past decade, as depicted in **Figure 7.1**.

- The prevalence of stunting among children under age 5 decreased from 41% in 2011 to 24% in 2022.
- The percentage of children who are underweight declined from 36% in 2011 to 22% in 2017–18 and 2022.
- The prevalence of wasting, which was critically high at 16% in 2011, fell to 8% in 2017–18 before increasing slightly to 11% in 2022.

**Figure 7.1 Trends in nutritional status of children: Bangladesh DHS 2011–2022**



## 7.2 INFANT AND YOUNG CHILD FEEDING

Optimal infant and young child feeding (IYCF) practices are critical to the health and survival of young children. Recommended IYCF practices include early initiation of breastfeeding (within the first hour of life), exclusive breastfeeding for the first 6 months of life, and feeding children a diet that meets a minimum diversity standard (WHO and UNICEF 2021).

### 7.2.1 Breastfeeding

Breastfeeding supports children’s growth and development and also benefits the mother’s health.

#### **Exclusive breastfeeding under 6 months**

Percentage of children age 0–5 months who were fed exclusively with breast milk during the previous day.

**Sample:** Youngest children age 0–5 months living with their mother

Fifty-five percent of infants under age 6 months are exclusively breastfed (**Table 7.2**).

#### **Trends:**

- Exclusive breastfeeding among children age 0–5 months decreased from 65% in 2017–18 to 55% in 2022. A similar decline was observed between 2011 and 2014 (**Figure 7.2**).

**Table 7.2 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 2022

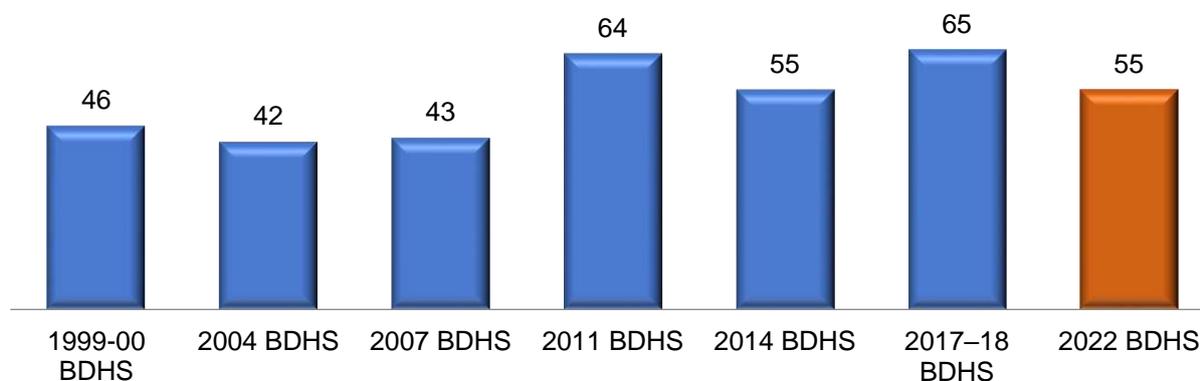
Age in months	Breastfeeding status										Number of youngest children under age 2 living with their mother	Percentage currently breastfeeding	Number of all children under age 2
	Not breast-feeding	Exclusively breastfeeding	Breastfeeding and consuming plain water only	Breastfeeding and consuming nonmilk liquids <sup>1</sup>	Breastfeeding and consuming other milk	Breastfeeding and consuming complementary foods	Total	Percentage currently breastfeeding	Percentage using a bottle with a nipple				
0-1	3.3	75.9	4.6	0.8	13.1	2.3	100.0	96.7	12.4	340	96.7	345	
2-3	2.0	61.1	10.8	1.4	18.8	5.9	100.0	98.0	22.5	295	98.0	299	
4-5	4.8	25.0	20.1	1.4	22.8	25.9	100.0	95.2	32.6	305	95.2	308	
6-8	4.8	4.6	10.7	0.3	5.7	73.9	100.0	95.2	28.9	474	95.2	479	
9-11	3.1	0.9	4.2	0.1	2.2	89.5	100.0	96.9	27.1	504	96.9	512	
12-17	5.5	0.4	2.6	0.2	1.3	90.1	100.0	94.5	21.2	749	94.5	770	
18-23	13.3	0.3	1.4	0.6	0.5	83.9	100.0	86.7	16.9	852	86.7	884	
0-3	2.7	69.1	7.4	1.1	15.8	4.0	100.0	97.3	17.1	636	97.3	645	
0-5	3.4	54.8	11.5	1.2	18.0	11.1	100.0	96.6	22.1	941	96.6	953	
6-9	3.7	3.6	8.4	0.3	4.9	79.2	100.0	96.3	28.5	658	96.3	666	
12-15	5.3	0.5	2.9	0.3	1.0	89.9	100.0	94.7	22.2	513	94.7	521	
12-23	9.6	0.3	2.0	0.4	0.8	86.8	100.0	90.4	18.9	1,601	90.4	1,654	
20-23	15.1	0.3	1.5	0.3	0.5	82.3	100.0	84.9	14.8	597	84.9	621	

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfeeding, breastfeeding and consuming plain water, nonmilk 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 nonmilk liquids and who do not receive other milk and who do not receive complementary foods are classified in the nonmilk 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.

<sup>1</sup> Nonmilk liquids include fruit juice or fruit-flavored drinks, sodas, clear broth or soup, tea, coffee, or other liquids.

**Figure 7.2 Trends in exclusive breastfeeding, Bangladesh DHS 1999–2022**

*Percentage of youngest children under age 2 living with their mother*



### 7.2.2 Minimum Dietary Diversity, Minimum Meal Frequency, and Minimum Acceptable Diet

Infants and young children should be fed a minimum acceptable diet, which means that they should be fed meals with appropriate frequency and a variety of foods to meet their energy and nutrient needs.

#### **Minimum dietary diversity**

Percentage of children age 6–23 months who were fed a minimum of five out of eight defined food groups during the previous day. The eight food groups are as follows: breast milk; grains, roots, and tubers; legumes and nuts; dairy products (milk, yogurt, and cheese); flesh foods (meat, fish, poultry, and organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables.

**Sample:** Youngest children age 6–23 months living with their mother

#### **Minimum meal frequency**

Percentage of children age 6–23 months who were fed solid, semisolid, or soft foods (including milk feeds for nonbreastfed children) the minimum number of times or more during the previous day.

**Sample:** Youngest children age 6–23 months living with their mother

#### **Minimum acceptable diet**

Percentage of children age 6–23 months who are fed 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

**Table 7.3** presents 2022 BDHS findings regarding several IYCF practices.

- Thirty-nine percent of children age 6–23 months had an adequately diverse diet, that is, they were fed a minimum of five of the eight defined food groups during the previous day.
- Three-fifths (61%) of children age 6–23 months were fed the minimum number of times according to the recommended IYCF practices.

- Twenty-nine percent of children age 6–23 months were fed a minimum acceptable diet according to IYCF recommendations. The target of the 4th HPNSP is to increase the proportion of children fed a minimum acceptable diet to 45% by 2023.
- Children in urban areas are more likely to be fed according to the recommended IYCF practices than those in rural areas (34% versus 27%).
- The proportion of children fed a minimum acceptable diet is highest in Khulna (45%) and lowest in Sylhet (19%) and Chattogram (20%).
- Feeding practices improve with household wealth. However, even in households in the highest wealth quintile, only 40% of children are fed a minimum acceptable diet.

**Table 7.3. Infant and young child feeding (IYCF) practices**

Percentage of youngest children age 6–23 months living with their mother who received minimum dietary diversity, minimum meal frequency, and minimum acceptable diet during the day or night preceding the survey, by breastfeeding status, according to background characteristics, Bangladesh DHS 2022

Background characteristic	Among youngest breastfed children age 6–23 months living with their mother, percentage who received:				Among youngest non-breastfed children age 6–23 months living with their mother, percentage who received:				Among youngest children age 6–23 months living with their mother, percentage who received:					
	Minimum dietary diversity <sup>1</sup>		Minimum meal frequency <sup>2</sup>		Minimum acceptable diet <sup>3</sup>		Number of breastfed children age 6–23 months		Minimum dietary diversity <sup>1</sup>		Minimum meal frequency <sup>4</sup>		Minimum acceptable diet <sup>5</sup>	
	Minimum dietary diversity <sup>1</sup>	Minimum meal frequency <sup>2</sup>	Minimum acceptable diet <sup>3</sup>	Number of breastfed children age 6–23 months	Minimum dietary diversity <sup>1</sup>	Minimum meal frequency <sup>4</sup>	Minimum acceptable diet <sup>5</sup>	Number of non-breastfed children age 6–23 months	Minimum dietary diversity <sup>1</sup>	Minimum meal frequency <sup>4</sup>	Minimum acceptable diet <sup>5</sup>	Number of children age 6–23 months		
<b>Age in months</b>														
6–8	16.0	62.3	15.5	451	10.6	59.4	14.8	23	15.7	59.4	14.8	474.1		
9–11	32.6	60.0	26.3	488	50.6	58.1	25.4	16	33.1	58.1	25.4	504.0		
12–17	43.7	66.6	34.2	708	49.1	62.9	32.3	41	43.9	62.9	32.3	749.3		
18–23	50.8	71.5	40.6	737	54.9	61.9	35.2	114	51.4	61.9	35.2	860.7		
<b>Sex</b>														
Male	38.6	67.3	31.1	1,188	44.9	61.7	28.5	108	39.1	61.7	28.5	1,295.5		
Female	38.1	64.6	30.9	1,197	52.2	60.3	28.9	85	39.1	60.3	28.9	1,282.5		
<b>Residence</b>														
Urban	44.3	70.9	36.6	622	49.6	65.1	33.6	56	44.7	65.1	33.6	677.7		
Rural	36.3	64.2	29.0	1,763	47.5	59.6	26.9	137	37.1	59.6	26.9	1,900.4		
<b>Division</b>														
Barisal	30.6	55.4	23.8	147	9.2	53.4	22.9	6	29.8	53.4	22.9	152.7		
Chattogram	30.0	51.0	22.0	502	37.3	45.6	19.6	60	30.8	45.6	19.6	562.4		
Dhaka	44.7	71.1	37.3	561	50.1	64.7	33.9	55	45.1	64.7	33.9	615.9		
Khulna	52.8	82.6	47.8	247	64.9	77.0	44.6	18	53.7	77.0	44.6	264.7		
Mymensingh	43.9	66.4	34.5	228	64.3	63.8	33.1	9	44.7	63.8	33.1	237.0		
Rajshahi	36.2	68.6	29.8	246	56.9	63.9	27.8	18	37.6	63.9	27.8	264.7		
Rangpur	36.1	73.2	27.9	291	73.8	70.1	26.7	13	37.7	70.1	26.7	303.9		
Sylhet	27.2	60.9	20.9	163	34.0	56.3	19.3	14	27.7	56.3	19.3	176.7		
<b>Education</b>														
No education	21.6	58.7	15.8	127	29.0	53.5	14.4	12	22.3	53.5	14.4	138.9		
Primary incomplete	29.7	62.0	24.0	242	30.0	56.8	22.0	22	29.7	56.8	22.0	263.5		
Primary complete <sup>6</sup>	28.3	63.0	22.9	301	64.4	59.8	21.7	16	30.1	59.8	21.7	317.4		
Secondary incomplete	37.3	64.5	30.3	993	49.1	59.6	28.0	82	38.2	59.6	28.0	1,075.7		
Secondary complete or higher <sup>7</sup>	49.8	71.8	40.4	723	52.7	66.3	37.3	60	50.0	66.3	37.3	782.5		
<b>Wealth quintile</b>														
Lowest	27.8	60.9	21.8	497	34.6	56.2	20.1	42	28.3	56.2	20.1	539.6		
Second	34.4	63.1	28.0	521	36.9	60.1	26.6	26	34.5	60.1	26.6	547.1		
Middle	35.1	69.1	28.8	488	52.8	64.0	26.7	39	36.4	64.0	26.7	526.9		
Fourth	42.8	65.8	35.0	458	55.6	60.2	32.0	42	43.9	60.2	32.0	500.5		
Highest	54.8	71.9	43.9	421	56.5	65.2	39.8	43	54.9	65.2	39.8	464.0		
Total	38.4	65.9	31.0	2,385	48.1	61.0	28.7	193	39.1	61.0	28.7	2,578.1		

<sup>1</sup> Minimum dietary diversity is receiving foods from five or more of the following eight food groups: a. breast milk; b. grains, white/pale starchy roots, tubers, and plantains; c. beans, peas, lentils, nuts, and seeds; d. dairy products (fresh, packaged, and powdered milk; infant formula; yogurt; cheese); e. flesh foods (meat, fish, poultry, organ meats); f. eggs; g. vitamin A-rich fruits and vegetables; h. other fruits and vegetables.

<sup>2</sup> For breastfed children, minimum meal frequency is receiving solid, semisolid, or 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.

<sup>3</sup> For breastfed children, minimum acceptable diet is being fed the minimum dietary diversity (footnote 1) and minimum meal frequency (footnote 2).

<sup>4</sup> Minimum meal frequency is receiving the minimum recommended number of feeds per day according to age and breastfeeding status as defined in footnote 2.

<sup>5</sup> Minimum acceptable diet is receiving minimum dietary diversity (footnote 1) and minimum meal frequency (footnote 2).

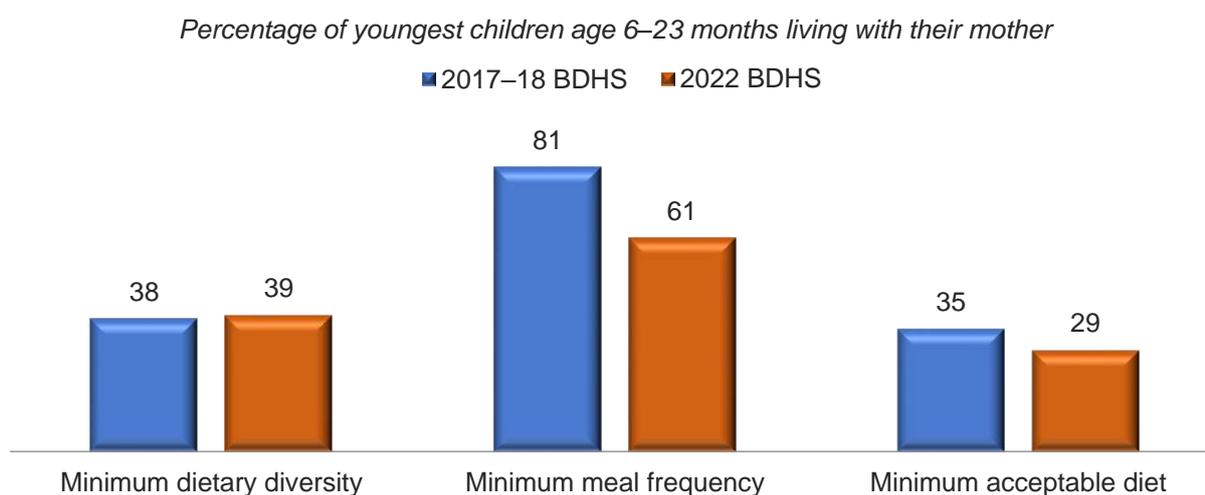
<sup>6</sup> Primary complete is defined as completing grade 5.

<sup>7</sup> Secondary complete is defined as completing grade 10.

## Trends:

- The proportion of children fed a minimum acceptable diet declined from 35% in 2017–18 to 29% in 2022 (Figure 7.3).
- The percentage of children fed an adequately diverse diet changed only minimally over this period, while there was a notable decline in the percentage of children fed the minimum number of times each day, from 81% to 61%.

Figure 7.3 Trends in IYCF practices, Bangladesh DHS 2017-18–2022



### 7.2.3 Sweet Beverage and Unhealthy Food Consumption

Unhealthy infant and young child feeding practices should be avoided because they can promote unhealthy weight gain and replace nutritious foods that provide important nutrients for children. For infants and young children, the consumption of sweet foods and beverages increases the risk of dental caries and childhood obesity. The indicator definition below for unhealthy food consumption describes sentinel unhealthy foods—foods that are high in sugar, salt, or unhealthy fats—that are commonly consumed by infants and young children (WHO and UNICEF 2021).

#### Sweet beverage consumption

Percentage of children age 6–23 months who were given a sweet beverage during the previous day.

#### Unhealthy food consumption

Percentage of children age 6–23 months who were fed sentinel unhealthy foods during the previous day.

**Sample:** Youngest children age 6–23 months living with their mother

Thirty-two percent of children age 6–23 months were fed a sweet beverage during the previous day, and 49% consumed unhealthy foods during the previous day.



## REFERENCES

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Van Lerberghe, W., and V. De Brouwere. 2001. “Of Blind Alleys and Things That Have Worked: History’s Lessons on Reducing Maternal Mortality.” In *Safe Motherhood Strategies: A Recent Review of the Evidence*, edited by V. De Brouwere and W. Van Lerberghe, 7–33. Antwerp: ITG Press.

World Health Organization (WHO). 2003. *World Health Report 2003*. Geneva: WHO. <https://apps.who.int/iris/handle/10665/42789>.

World Health Organization (WHO). 2006a. *Standards for Maternal and Neonatal Care*. Geneva: WHO. <https://www.who.int/publications/i/item/9789241511216>.

World Health Organization (WHO). 2006b. *Child Growth Standards*. Geneva: WHO.

World Health Organization (WHO) and United Nations Children’s Fund (UNICEF). 2021. *Indicators for Assessing Infant and Young Child Feeding Practices: Definitions and Measurement Methods*. Geneva: WHO. <https://www.who.int/publications/i/item/9789240018389>.



## APPENDIX A

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### STAKEHOLDERS ADVISORY COMMITTEE (SAC)

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# APPENDIX B

## SUMMARY INDICATORS

Indicator	Bangladesh Demographic and Health Survey								
	1993–94	1996–97	1999–00	2004	2007	2011	2014	2017–18	2022
<b>Fertility</b>									
Total fertility rate (TFR) 15–49	3.4	3.3	3.3	3.0	2.7	2.3	2.3	2.3	2.3
Adolescent fertility (15–19) <sup>a</sup>	33	36	35	33	33	30	31	27.7	23.7
<b>Contraceptive prevalence rate (CPR)<sup>b</sup></b>									
Any method	44.6	49.2	53.8	58.1	55.8	61.2	62.4	61.9	64.0
Any modern method	36.2	41.5	43.4	47.3	47.5	52.1	54.1	51.9	54.7
Pill	17.4	20.8	23.0	26.2	28.5	27.2	27.0	25.4	27.4
Injectables	4.5	6.2	7.2	9.7	7.0	11.2	12.4	10.7	11.4
Condom	3.0	3.9	4.3	4.2	4.5	5.5	6.4	7.2	8.1
Female sterilization	8.1	7.6	6.7	5.2	5.0	5.0	4.6	4.8	4.5
Male sterilization	1.1	1.1	0.5	0.6	0.7	1.2	1.2	1.1	0.9
IUD	2.2	1.8	1.2	0.6	0.9	0.7	0.6	0.6	0.4
Implants	na	0.1	0.5	0.8	0.7	1.1	1.7	2.1	1.7
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	48.1
Contraceptive prevalence rate (modern methods) in low-performing divisions <sup>b</sup>									
Sylhet	na	16.0	25.0	22.0	24.7	35.2	40.9	44.8	44.3
Chattogram	23.4	30.8	34.9	37.4	38.2	44.5	47.2	44.8	49.0
<b>Unmet need for family planning<sup>b</sup></b>									
Percentage of currently married women with unmet need for family planning	21.6	19.7	18.2	15.0	16.8	13.5	12.0	12.0	10.0
<b>Fertility preferences<sup>b</sup></b>									
Percentage of currently married women age 15–49 who want no more children <sup>c</sup>	57.9	58.8	60.0	60.1	62.5	64.9	62.5	59.9	57.2
<b>Antenatal coverage</b>									
Percentage of last live births in the 2 years preceding the survey for which women received ANC from a medically trained provider at least once	na	na	na	51.4	53.8	55.2	65.0	82.1	87.6
<b>Antenatal care visits (4+)</b>									
Percentage of last live births in the 2 years preceding the survey for which women had four or more ANC visits with any provider	na	na	na	16.8	22.9	26.9	31.5	45.8	40.5
<b>Quality of antenatal care<sup>d</sup></b>									
Percentage of last live births in the 2 years preceding the survey for which women received quality ANC	na	na	na	na	na	na	na	17.9	21.2
<b>Skilled assistance at delivery</b>									
Percentage of live births in the 2 years preceding the survey attended by a medically trained provider	na	na	na	16.1	22.7	33.1	44.4	53.9	69.8
Percentage of births in the 2 years preceding the survey delivered in health facilities by wealth quintile									
Lowest quintile	na	na	na	3.2	7.0	10.4	16.5	26.8	42.4
Highest quintile	na	na	na	38.6	52.1	60.8	72.0	78.7	87.4
Total	na	na	na	12.2	18.9	30.7	39.5	50.6	64.8

(Continued...)

Bangladesh Demographic and Health Survey									
Indicator	1993–94	1996–97	1999–00	2004	2007	2011	2014	2017–18	2022
<b>Postnatal care (within 2 days of delivery)</b>									
Percentage of last live births in the 2 years preceding the survey for which mother/child received PNC from a medically trained provider within 2 days of delivery									
Mother	na	na	na	na	na	28.4	37.3	52.5	55.2
Child	na	na	na	na	na	30.4	32.1	52.6	56.2
Percentage of last live births delivered at home in the 2 years preceding the survey for which mother/child received PNC from a medically trained provider within 2 days of delivery									
Mother	na	na	na	na	na	na	na	6.8	12.6
Child	na	na	na	na	na	na	na	7.0	12.2
<b>Childhood mortality (3-year period preceding the survey)</b>									
Neonatal mortality rate (NNMR)	48	44	43	40	29	28	29	27	20
Postneonatal mortality rate (PNNMR) <sup>e</sup>	33	35	24	25	16	9	11	9	5
Infant mortality rate ( <sup>1</sup> q <sup>0</sup> )	81	79	67	65	46	37	40	36	25
Child mortality rate ( <sup>4</sup> q <sup>1</sup> )	49	36	26	24	13	11	7	7	6
Under-5 mortality rate ( <sup>5</sup> q <sup>0</sup> )	126	112	91	88	58	48	47	43	31
<b>Treatment for diarrhea</b>									
Percentage of children under age 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	75.7
Percentage of children under age 5 with diarrhea treated with ORT and zinc									
	na	na	na	na	na	36.1	38.1	43.6	43.3
<b>Nutritional status of children</b>									
Percentage of children under age 5 clarified as malnourished according to three anthropometric indices of nutritional status <sup>f</sup>									
Height-for-age (stunting)									
Severe	na	na	na	22.1	16.1	15.3	11.6	8.9	5.7
Moderate or severe	na	na	na	50.6	43.2	41.3	36.1	30.8	23.6
Weight-for-height (wasting)									
Severe	na	na	na	3.4	2.9	4.0	3.1	1.5	1.8
Moderate or severe	na	na	na	14.5	17.4	15.6	14.3	8.4	11.0
Weight-for-age (underweight)									
Severe	na	na	na	13.6	11.8	10.4	7.7	4.1	4.4
Moderate or severe	na	na	na	42.5	41.0	36.4	32.6	21.9	22.3
<b>Exclusive breastfeeding</b>									
Percentage of children under age 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	54.8
<b>Infant and young child feeding (IYCF)</b>									
Percentage of children age 6–23 months fed with appropriate infant and young child feeding practices									
	na	na	na	na	na	20.9	22.8	35.4	28.7

na = not applicable

<sup>a</sup> Percentage of women age 15–19 who have children or are currently pregnant

<sup>b</sup> Rates for 2007, 2011, 2014 and 2017–18 are for currently married women age 15–49.

<sup>c</sup> Want no more children or have been sterilized

<sup>d</sup> Quality ANC is defined as four or more ANC visits with at least one to a medically trained provider, measurement of weight and blood pressure, testing of urine and blood, and receipt of information on danger signs during pregnancy.

<sup>e</sup> Computed as the difference between the infant and neonatal mortality rates

<sup>f</sup> Based on the WHO Child Growth Standards adopted in 2006

