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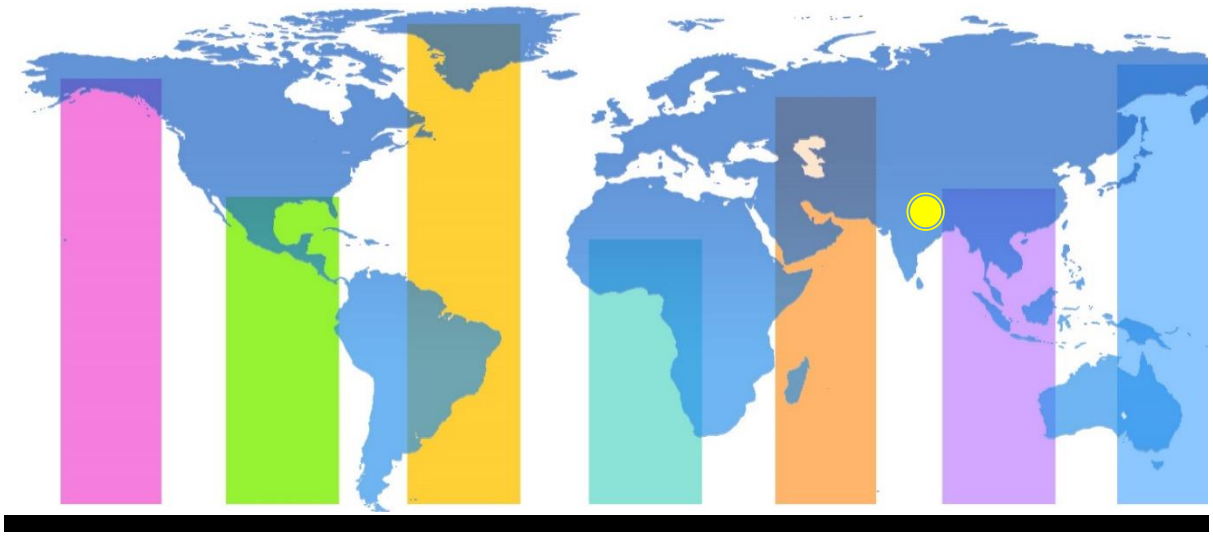

Demographic and Health Survey 2022

Key Indicators

Nepal

Demographic and Health Survey 2022

Key Indicators Report

Ministry of Health and Population
Ram Shah Path
Kathmandu, Nepal

New ERA
Kathmandu, Nepal

The DHS Program
ICF
Rockville, Maryland, USA

November 2022

USAID
FROM THE AMERICAN PEOPLE

New ERA

Ministry of Health and Population

The 2022 Nepal Demographic and Health Survey (2022 NDHS) was implemented by New ERA under the aegis of the Ministry of Health and Population of Nepal. The funding for the NDHS was provided by 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 NDHS may be obtained from the Ministry of Health and Population, Ram Shah Path, Kathmandu, Nepal; Telephone: +977-1-4262543/4262802; Internet: http://www.mohp.org.np; and New ERA, Rudramati Marg, Kalopul, P.O. Box 722, Kathmandu 44600, Nepal; Telephone: +977-1-4413603; Email: info@newera.com.np; Internet: http://www.newera.com.np.

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ACRONYMS AND ABBREVIATIONS

ANC	antenatal care
ARI	acute respiratory infection
ART	antiretroviral therapy
ASFR	age-specific fertility rate
BCG	bacillus Calmette-Guérin
CAPI	computer-assisted personal interviewing
CBR	crude birth rate
CDC	Center for Disease Control
COVID-19	coronavirus disease of 2019
CSPro	Census and Survey Processing
DHS	Demographic and Health Survey
DPT	diphtheria, pertussis, and tetanus vaccine
GFR	general fertility rate
GPS	global position system
HepB	hepatitis B
Hib	*Haemophilus influenzae* type B
HIV	human immunodeficiency virus
IFSS	internet file streaming system
fIPV	fractional inactivated poliomyelitis vaccine
IUCD	intrauterine contraceptive device
IYCF	infant and young child feeding
JE	Japanese Encephalitis
LAM	lactational amenorrhea method
MoHP	Ministry of Health and Population
MR	measles rubella
NDHS	Nepal Demographic and Health Survey
NFHS	Nepal Family Health Survey
NHSS	Nepal Health Sector Strategy
NN	neonatal mortality
NPC	National Planning Commission
NPHC	Nepal Population and Housing Census
OPV	oral polio vaccine
ORS	oral rehydration salts
PCV	pneumococcal conjugate vaccine
PNC	postnatal care
PNN	postneonatal mortality
PSU	primary sampling unit

RT-PCR	reverse transcription polymerase chain reaction
RV	rotavirus vaccine
SD	standard deviation
SDG	Sustainable Development Goal
STI	sexually transmitted infection
TFR	total fertility rate
TPO	Transcultural Psychosocial Organization
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WG	Washington Group
WHO	World Health Organization

FOREWORD

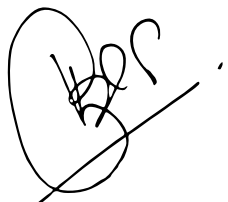
The 2022 Nepal Demographic and Health Survey (NDHS) was conducted as a periodic update of the demographic and health information regarding the people of Nepal. The 2022 NDHS was the sixth DHS survey conducted in Nepal in collaboration with the worldwide Demographic and Health Surveys Program. The survey was implemented by New ERA under the aegis of the Ministry of Health and Population (MoHP), Government of Nepal. The survey was funded by the United States Agency for International Development (USAID), and ICF provided technical support.

The purpose of the 2022 NDHS was to generate reliable information on fertility levels, marriage, fertility preferences, awareness and use of family planning methods, breastfeeding practices, nutrition, maternal and child health, childhood mortality, awareness and behavior regarding HIV/AIDS and other sexually transmitted infections (STIs), women's empowerment and domestic violence, fistula, mental health, accident and injury, disability, food insecurity, and other health-related issues such as smoking, knowledge of tuberculosis, and prevalence of hypertension. Data collection for the survey was carried out from January 5, 2022, to June 22, 2022. This report, which presents key findings from the 2022 NDHS, is intended to provide policymakers and program managers with a first glimpse of the survey results. A more comprehensive, detailed report is scheduled for 2023.

The MoHP wishes to acknowledge the efforts of many individuals and organizations that contributed substantially to the success of the survey. First, we would like to express our gratitude to the Government of the Nepal for granting permission to implement the country's sixth DHS survey. Second, we would like to acknowledge the financial support and assistance of USAID. We would also like to thank ICF for technical backstopping throughout the survey.

The MoHP greatly appreciated the efforts on the part of New ERA in implementing the 2022 Nepal DHS survey. The survey could not have been completed successfully without the dedicated staff of New ERA, who planned, participated in, and oversaw the entire survey process. We would like to extend our gratitude to all the field staff who undertook the vital task of carrying out data collection for the NDHS with commitment, dedication, and hard work.

Finally, we are grateful to the survey respondents who generously gave their time to provide the information that forms the basis of this report. Likewise, we acknowledge the support received from the respective local authorities, whose assistance was vital to the successful implementation of the fieldwork.



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Ministry of Health and Population

1 INTRODUCTION

The 2022 Nepal Demographic and Health Survey (NDHS) was implemented by New ERA under the aegis of the Ministry of Health and Population (MOHP). Data collection took place from January 5 to June 22, 2022. ICF provided technical assistance through The DHS Program, which is funded by the United States Agency for International Development (USAID) and offers financial support and technical assistance for population and health surveys in countries worldwide. Suaahara II, USAID's integrated nutrition activity,[1] supported the ethical review process of the survey in Nepal.

This Key Indicators Report presents a first look at selected findings from the 2022 NDHS. A comprehensive analysis of the data will be presented in a final report in 2023.

SURVEY OBJECTIVES

The primary objective of the 2022 NDHS is to present up-to-date estimates of basic demographic and health indicators. The NDHS provides a comprehensive overview of population, maternal, and child health issues in Nepal. Specifically, the 2022 NDHS collected information on fertility levels, marriage, fertility preferences, awareness and use of family planning methods, breastfeeding practices, nutrition, maternal and child health, childhood mortality, awareness and behavior regarding HIV and other sexually transmitted infections (STIs), women's empowerment and domestic violence, fistula, mental health, accident and injury, disability, food insecurity, and other health-related issues such as smoking, knowledge of tuberculosis, and prevalence of hypertension.

The information collected through the 2022 NDHS is intended to assist policymakers and program managers in designing and evaluating programs and strategies for improving the health of Nepal's population. The 2022 NDHS also provides indicators relevant to the Nepal Health Sector Strategy 2016–22, the next health sector strategic plan under development, and the Sustainable Development Goals (SDGs) for Nepal.

[1] The Suaahara II project is a 5-year (2016–21) integrated program in Nepal funded by USAID, which aims to improve the health and nutritional status of women and children who fall within the 1,000 days period, from conception until a child reaches 24 months of age.

2 SURVEY IMPLEMENTATION

2.1 SAMPLE DESIGN

The sampling frame used for the 2022 NDHS is an updated version of the frame of the Nepal Population and Housing Census (NPHC) conducted in 2011, provided by the Central Bureau of Statistics. The smallest administrative unit in Nepal is the sub-ward. The census frame includes a complete list of Nepal's 36,020 sub-wards. Each sub-ward has a residence type (urban or rural) and a measure of size is the number of households.

In September 2015, Nepal's Constituent Assembly declared changes in the administrative units and a re-classification of urban and rural areas in the country. Nepal is divided into seven provinces: Province 1, Madhesh Province, Bagmati Province, Gandaki Province, Lumbini Province, Karnali Province, and Sudurpashchim Province. Each province is divided into districts, districts into municipalities, municipalities into wards, and wards into sub-wards. Nepal has 77 districts, which include a total of 753 (local level) municipalities. Of the municipalities, 293 are urban and 460 are rural.

Originally, the 2011 NPHC included 58 urban municipalities. This number increased to 217 by 2015. On March 10, 2017, structural changes were made in the classification system for urban (Nagarpalika) and rural (Gaonpalika) locations. Nepal currently has 293 Nagarpalika, with 65% of the population living in these urban areas. The 2022 NDHS used this updated urban-rural classification system. The 2022 NDHS sample is a stratified sample selected in two stages. Stratification was achieved by dividing each of the seven provinces into urban and rural areas which together formed the sampling stratum for that province. A total of 14 sampling strata were created in this way. Implicit stratification with proportional allocation was achieved at each of the lower administrative levels by sorting the sampling frame within each sampling stratum before sample selection, according to administrative units in the different levels, and by using a probability-proportional-to-size selection at the first stage of sampling. In the first stage of sampling, 476 primary sampling units (PSUs) were selected with probability proportional to the PSU size and with independent selection in each sampling stratum within the sample allocation. Among the 476 PSUs, 248 were from urban areas and 228 were from rural areas. A household listing operation was carried out in all the selected PSUs before the main survey. The resulting list of households served as the sampling frame for the selection of sample households in the second stage. Thirty households were selected from each cluster, for a total sample size of 14,280 households. Of these, 7,440 households were in urban areas, and 6,840 households were in the rural areas. Some of the selected sub-wards were found to be overly large during the household listing operation. Selected sub-wards with an estimated number of households greater than 300 were segmented. Only one segment was selected for the survey with probability proportional to the segment size. Global positioning system (GPS) data was collected at the household level during the household listing and the individual interviews.

The survey interviewers were instructed to interview only the pre-selected households. To prevent bias, no replacements and no changes to the pre-selected households were allowed in the implementation stage. Because of the nonproportional sample allocation, the sample is not self-weighting at the national level. Weighting factors have been calculated, added to the data file, and applied, so the sample results are representative at the national level as well as at the provincial level.

All women age 15–49 who were permanent residents of the selected households or were visitors who stayed in the households the night before the survey, were eligible to be interviewed. In half of the households (every second household) selected, all men age 15–49 who were residents of the selected households or were visitors who stayed in the household the night before the survey, were eligible to be interviewed. The survey collected biomarker information from a subsample of the households.

2.2 QUESTIONNAIRES

Four questionnaires were used for the 2022 NDHS: the Household Questionnaire, the Woman's Questionnaire, the Man's Questionnaire, and the Biomarker Questionnaire. The questionnaires, based on The DHS Program's standard Demographic and Health Survey (DHS-8) questionnaires, were adapted to reflect the population and health issues relevant to Nepal. In addition, a self-administered Fieldworker Questionnaire collected information about the survey's fieldworkers. Input was solicited from various stakeholders representing government ministries and agencies, nongovernmental organizations, and international donors. The survey protocol was reviewed by the Nepal Health Research Council and the ICF Institutional Review Board. The 2022 NDHS required written consent from the household head to carry out the interviews and to test for anemia. Similarly, written consent/assent was required from individuals for anemia testing and from parents/guardians for children age 6–59 months.

After all questionnaires were finalized in English, they were translated into Nepali, Maithili, and Bhojpuri languages. The Household, Woman's, and Man's Questionnaires were programmed into tablet computers to facilitate computer-assisted personal interviewing (CAPI) for data collection purposes, with the capability to choose any of the three languages for each questionnaire. The Biomarker Questionnaire was completed on paper during the data collection and then entered in the CAPI system.

The Household Questionnaire was used to list all members of the households and visitors to selected households. Basic demographic information was collected on the characteristics of each person listed, including age, sex, marital status, education, and relationship to the head of the household. For children under age 18, the parents' survival status was determined. The data on age and sex of household members obtained in the Household Questionnaire were used to identify women and men who were eligible for the individual interviews. The Household Questionnaire also collected information on characteristics of the household dwelling unit, such as source of water, type of toilet facilities, materials used for the floor of the dwelling unit, and ownership of various durable goods. Additional modules on disability, accident and injury, and food insecurity were included in the household questionnaire.

The Woman's Questionnaire was used to collect information from all women age 15–49. These women were asked questions on the following topics:

- Background characteristics (including age, education, and media exposure)
- Pregnancy history and child mortality
- Knowledge, use, and source of family planning methods
- Fertility preferences (including desire for more children, ideal number of children)
- Antenatal, delivery, and postnatal care
- Vaccinations and childhood illnesses
- Breastfeeding and infant feeding practices
- Women's work and husbands' background characteristics
- Knowledge, awareness, and behavior regarding HIV and other sexually transmitted infections (STIs)
- Fistula
- Mental health
- Domestic violence
- Knowledge, attitudes, and behavior related to other health issues (for example, cancer, smoking, tuberculosis, and COVID-19)

The Man's Questionnaire was administered to all men age 15–49 in the subsample of households selected for the men's survey. The Man's Questionnaire collected much of the same information as the Woman's Questionnaire but was shorter because it did not contain a detailed reproductive history or questions on maternal and child health.

The Biomarker Questionnaire recorded the anthropometry measurements, anemia testing, and blood pressure measurements. These questionnaires were administered only in a subsample that was not selected

for the survey of men. All children age 0–59 months and all women age 15-49 in these households were eligible for height and weight measurements. Similarly, children age 6–59 months and women age 15–49 were eligible for anemia testing. Blood pressure was measured for all women and men age 15 and older in the subsample of households selected for biomarkers.

The Fieldworker Questionnaire recorded background information from the interviewers that will serve as a tool in conducting analyses of data quality. Each interviewer completed the self-administered Fieldworker Questionnaire after the final selection of interviewers and before the fieldworkers entered the field. No personal identifiers were attached to the 2022 NDHS fieldworker data file.

Tablet computers were used for data collection by the enumerators. The tablet computers were equipped with Bluetooth® technology to enable remote electronic transfer of files, such as assignments from the team supervisor to the interviewers, individual questionnaires to survey team members, and completed questionnaires from interviewers to team supervisors. The computer-assisted personal interviewing (CAPI) data collection system used in the 2022 NDHS was developed by The DHS Program with the mobile version of CSPro. The CSPro software was developed jointly by the U.S. Census Bureau, Serpro S.A., and The DHS Program.

2.3 ANTHROPOMETRY, ANEMIA TESTING, AND BLOOD PRESSURE MEASUREMENT

The 2022 NDHS biomarkers included anthropometric measurements, anemia testing, and measurement of blood pressure. Biomarker data was collected in half of the households that were not selected for the survey of men. Height and weight measurements were carried out for eligible women age 15–49 and children age 0–59 months in these households. Similarly, anemia testing was carried out for eligible women age 15–49 and children age 6–59 months in these households. Blood pressure measurements were collected for adults age 15 and above in half of the households selected for biomarkers, along with height and weight measurements.

Anthropometry. Weight measurements were taken using SECA scales with a digital display (model number SECA874U), designed and supplied by the United Nations Children's Fund (UNICEF). Height and length were measured with a measuring board (ShorrBoard®). Children younger than age 24 months were measured lying down (recumbent length), while older children and adults were measured standing (height).

To assess the precision of measurements, about 10% of children were randomly selected to be measured a second time. The DHS Program defines a difference of less than 1 centimeter between the two height measurements as an acceptable level of precision. Children with a *z* score of less than -3 or more than +3 for height-for-age, weight-for-height, or weight-for-age were flagged and measured a second time. The re-measurement of flagged cases was performed to ensure accurate reporting of height and weight measurements.

Children with a *z* score of less than -3 for weight-for-height were considered severely wasted (acute undernutrition) and were eligible for referral. The team supervisor or the biomarker specialist provided a referral form to the parent/responsible adult of the child identified with acute undernutrition. The referral form included the name, height (cm), weight (kg), and weight-for-height (*z* score) result for the child. The parent/responsible adult was informed about the effects of acute undernutrition and instructed to take the child to a local health facility to ensure the child receives proper assessment and treatment. They were instructed to take the referral form with them during such visits to the health facility.

Anemia. Blood specimens for anemia testing were collected from women age 15–49 who consented to be tested. Blood specimens were also collected from children age 6–59 months whose parents or guardians had given consent for the testing. Blood samples were drawn from a drop of blood taken from a finger prick (or a heel prick in the case of children age 6–11 months) and collected in a microcuvette. Hemoglobin analysis was carried out on-site using a battery-operated portable HemoCue® 201+ device.

Results were provided verbally and in writing to those being tested. Parents or guardians of children with a hemoglobin level below 7 g/dl were provided with a referral form and instructed to take the child to a health facility for follow-up care. Adults were also referred for follow-up care if their hemoglobin levels were below 7 g/dl.

Blood pressure. Blood pressure measurements were conducted on consenting women and men age 15 and above in the subsample of households selected for biomarkers. Blood pressure was measured using a Multi-User Upper Arm Blood Pressure Monitor with an automatic upper-arm inflation pressure release. Each team was equipped with three monitors having different cuff sizes: (a) UA-767F/FAC with medium cuff, (b) UA-767PVS with small cuff, and (c) UA-789AC with extra-large cuff. An additional cuff of each size was provided. Three blood pressure measurements were taken at intervals of 5 minutes or more. The average of the second and third measurements was used to classify the results of hypertension, according to internationally recommended categories (World Health Organization [WHO] 1999). Although electronic devices used in the survey do not contain mercury, blood pressure values were expressed in millimeters of mercury (mm Hg). The results of the blood pressure measurements, as well as information about the symptoms of high blood pressure and ways it can be prevented, were immediately provided to the respondent via the Blood Pressure Reporting Form. Respondents found to have high blood pressure, defined as systolic pressure greater than 140 mmHg and/or diastolic pressure greater than 90 mmHg, were provided a referral form to take to a local health facility.

2.4 TRAINING OF TRAINERS AND PRETEST

The orientation session for master trainers from the New ERA core team was held on September 19, 2021, followed by residential pretest training that took place from September 20 to October 4, 2021. The residential training adhered to the COVID-19 risk mitigation plan developed for the survey, which followed national guidelines. There was a total of 25 participants for the training (6 core team members, 4 data processing team members, 3 biomarker specialists, 9 female interviewers, and 3 male interviewers). The interviewers were recruited based on their experience working in household surveys, including the previous NDHS, and their language proficiency in the three local languages: Nepali, Maithili, and Bhojpuri. Training was facilitated by the ICF staff who focused on the technical components of the survey, biomarkers, and the CAPI system.

The training focused on key components of the survey including the following:

- Probing for age
- Interview techniques and procedures for completing the NDHS questionnaires
- Pregnancy history, family planning, and contraceptive calendar
- Completing the vaccination section
- Standardization procedures for anthropometry
- Blood pressure measurement, and anemia testing

The training adopted an integrated approach whereby discussions on technical content and instructions on navigating the CAPI system were conducted concurrently. This approach was facilitated by a mock interview that took the trainees step-by-step through the questionnaires during the different sessions. The participants also worked in groups using various training techniques, for example, interactive question-and-answer sessions, case studies, group work, and role play. Emphasis was placed on hands-on training and in-class exercises and becoming familiar with survey principles.

Representatives from the Ministry of Health and Population and USAID Nepal visited the training. Technical support for the Mental Health Module was provided by technical experts from Transcultural Psychosocial Organization Nepal (TPO Nepal) who supported the training. The anthropometry standardization exercise was conducted and completed successfully by all the biomarker specialists.

Fieldwork for the pretest was carried out from October 6 to October 10, 2021, in three locations featuring the three languages of Nepal (Maithili, Bhojpuri, and Nepali). Three teams were deployed, one for each language. The locations were in Sarlahi district for Maithili, Bara district for Bhojpuri, and Makwanpur district for Nepali. Each team carried out the fieldwork in an urban and a rural location, completing six clusters in total. Following the fieldwork, a debriefing session was held with the pretest field staff on October 11, 2021. Modifications were made to the questionnaires based on lessons drawn from the exercise.

2.5 TRAINING OF FIELD STAFF

The main training for the 2022 NDHS was held at a residential facility in Kathmandu from November 28 to December 23, 2021, followed by four days of field practice and a review session held on December 29, 2021. After an intense recruitment process that included a written test, a computer test, and a personal interview, the shortlisted candidates took RT-PCR tests for COVID-19. Those presenting negative results for the RT-PCR test were invited to join the training in the residential facility. Almost all the selected participants were fully vaccinated against COVID-19; a few received their second dose during the training. The training followed strict guidelines for COVID-19 risk mitigation that included:

- Daily symptom checks using a Google form developed and coordinated by New ERA
- Daily temperature checks at the venue
- Changing masks upon arrival at the venue and wearing those throughout the sessions
- Regular use of hand sanitizer
- Special seating arrangements
- Maintaining physical distance

Three training halls were used, two for training interviewers and one for training biomarker specialists.

Participants for the main training included 123 trainees (61 females and 62 males). Among these, 19 were assigned as male supervisors, 19 as male interviewers, 57 as female interviewers, and 20 males as biomarker specialists. Further, there were 4 male and 4 female quality control team members who participated during the main training. Most supervisors and interviewers had previous experience in conducting household surveys, including the previous rounds of the NDHS. The biomarker specialists had previous experience in collecting biomarker data.

The main training was facilitated by the research team of New ERA with technical backstopping from ICF staff. The training adopted the integrated training approach as was done during the pretest training. The first two weeks of training included all the participants (including the biomarker specialists). It focused on the technical content of the questionnaires and used the CAPI system as the data collection tool. The CAPI components were embedded throughout the sessions and the different options in the interviewer's menu and toolbars were introduced as necessary to enable efficiency while navigating the CAPI system. The training included role play, demonstrations, discussions, mock interviews, videos, practical exercises, and quizzes. Resource persons from the Ministry of Health and Population were invited provide technical background on key topics such as family planning and reproductive health, maternal and newborn health, child health and immunization, and nutrition. A resource person from TPO Nepal was invited to support and facilitate the training on mental health as it related to the Mental Health Module.

The biomarker training took place from December 12 to December 23, 2021. The training utilized a variety of different learning tools such as formal lectures on technical aspects of biomarker collection, target population and eligibility, videos to demonstrate the process of anthropometry and blood collection, hands-on demonstrations, group reading sessions, and in-house practice sessions.

Biomarker specialists were trained to measure the height and weight of children and adults using standard anthropometric procedures. The training for child height measurement included standardization exercises, and re-standardization exercises for those biomarker specialists who did not pass the standardization

exercises. This training involved three visits to a daycare center that New ERA had organized. The biomarker training included measurement of hemoglobin levels in women age 15–49 and children age 6–59 months through collection of capillary blood. Blood pressure measurements were taken for adults age15 and above.

A separate session was held for the supervisors and the quality control teams on December 17 and December 23, 2021, to provide training on fieldwork management and data quality monitoring. These sessions included discussions on roles and responsibilities, preparation and mobilization for fieldwork, managing assignments for biomarker specialists and facilitating remeasurements, completing biomarker checklists, conducting re-interviews in CAPI, and monitoring the progress and workload of team members.

On completion of the training, field practice was carried out in Chandranigahapur, in the terai ecological zone, about 100 miles from Kathmandu City, where all three languages could be practiced. The teams departed on December 24, 2021, and the field practice was carried out from December 25 to December 28, 2021. Nineteen teams, consisting of a supervisor, one male interviewer, three female interviewers, and one biomarker specialist carried out the field practice. A review session was held on December 29, 2021, to discuss the experience and feedback from the field practice. Overall, it was a fruitful exercise whereby the teams could experience real field conditions and be prepared before being mobilized for the actual data collection.

2.6 FIELDWORK

Data collection for the 2022 NDHS was carried out by 19 teams. Each team consisted of a supervisor, one male interviewer, three female interviewers, and one biomarker specialist. The teams were first deployed in locations away from Kathmandu because at that time the capital city was a COVID-19 hotspot. The fieldwork began on January 5, 2022, in two central locations—Itahari and Chitwan—under close supervision. On completion of the fieldwork in these first locations, a review session was held on January 9, 2022, and the teams departed to their respective assigned clusters on January 10, 2022, to continue with data collection for the survey. Caution was taken while mobilizing the teams throughout the data collection period to mitigate the risk of COVID-19. Except for few mild cases, there were no major impacts of COVID-19 during data collection. The fieldwork was slightly disrupted when local elections took place. The field teams had to go home to cast their votes, and the local people were engaged in election activities. Data collection activities were completed on June 22, 2022.

Fieldwork monitoring was an integral part of the 2022 NDHS, and several rounds of monitoring were carried out by the New ERA core team and quality control teams. ICF provided technical assistance during the data collection period through weekly virtual meetings. The technical teams from the Ministry of Health and Population, Nepal Health Research Council, and USAID Nepal made several field visits to ensure data collection was carried according to the protocol. Regular feedback was provided to the teams by the New ERA core team.

2.7 DATA PROCESSING

Data capture for the 2022 NDHS was carried out with Microsoft Surface Go 2 tablets running Windows 10.1. Software was prepared for the survey using the Census and Survey Processing System (CSPro). The processing of the 2022 NDHS data began shortly after the fieldwork started. When data collection was completed in each cluster, the electronic data files were transferred via the internet file streaming system (IFSS) to the New ERA central office in Kathmandu. The data files were registered and checked for inconsistencies, incompleteness, and outliers. Errors and inconsistencies were immediately communicated to the field teams for review so those problems would be mitigated going forward. Secondary editing, carried out in the central office at New ERA, involved resolving inconsistencies and coding the open-ended questions. The New ERA senior data processor coordinated the exercise at the central office. The NDHS core team members assisted with the secondary editing. The paper Biomarker Questionnaires were compared with the electronic data file to check for any inconsistencies in data entry. The pictures of

vaccination cards that were captured during data collection were verified with the data entered. Data processing and editing were carried out using the CSPro software package. The concurrent data collection and processing offered a distinct advantage because it maximized the likelihood of the data being error-free and accurate. Timely generation of field check tables allowed for effective monitoring. The secondary editing of the data was completed by July 2022 and the final cleaning of the data set was completed by the end of August 2022.

Throughout this report, numbers in the tables reflect weighted numbers. Percentages based on 25 to 49 unweighted cases are shown in parentheses and percentages based on fewer than 25 unweighted cases are suppressed and replaced with an asterisk. This is to caution readers when interpreting data that a percentage based on fewer than 50 cases might not be statistically reliable.

3 KEY FINDINGS

3.1 RESPONSE RATES

Table 1 shows the results of the household and individual interviews, and response rates, according to residence, for the 2022 NDHS. A total of 14,243 households were selected for the 2022 NDHS sample, of which 13,833 were found to be occupied. Of the occupied households, 13,786 were successfully interviewed, yielding a response rate of 99.7%. In the interviewed households, 15,238 women age 15–49 were identified as eligible for individual interview. Interviews were completed with 14,845 women, yielding a response rate of 97%. In the subsample of households selected for the men's survey, 5,185 men age 15–49 were identified as eligible for individual interview and 4,913 were successfully interviewed, yielding a response rate of 95%.

Table 1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Nepal DHS 2022

	Residence		
Result	Urban	Rural	Total
Household interviews			
Households selected	7,447	6,796	14,243
Households occupied	7,226	6,607	13,833
Households interviewed	7,195	6,591	13,786
Household response rate[1]	99.6	99.8	99.7
Interviews with women age 15–49			
Number of eligible women	8,260	6,978	15,238
Number of eligible women interviewed	8,019	6,826	14,845
Eligible women response rate[2]	97.1	97.8	97.4
Household interviews in subsample			
Households selected	3,721	3,399	7,120
Households occupied	3,602	3,296	6,898
Households interviewed	3,590	3,286	6,876
Household response rate in subsample[1]	99.7	99.7	99.7
Interviews with men age 15–49			
Number of eligible men	2,901	2,284	5,185
Number of eligible men interviewed	2,717	2,196	4,913
Eligible men response rate[2]	93.7	96.1	94.8

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

3.2 CHARACTERISTICS OF RESPONDENTS

Table 2 shows the percent distribution of weighted and unweighted women and men age 15–49 interviewed in the 2022 NDHS survey, by background characteristics. Results presented in this report are based on weighted data, so they are representative of the country as a whole, by urban and rural residence, by province, and by urban and rural residence within each province.

- More than half of the women and men interviewed were under age 30 (52% each).
- Women were less likely to report that they have good or very good health than men (34% and 48%, respectively).
- About four in five women and men are Hindu (83% and 82%, respectively) while 7% of women and 8% of men are Buddhist. Five percent of women and men are Muslim, 3% are Kirat, and 3% are Christian.
- Janajati are the dominant ethnic group (37% of women and 38% of men) followed by Brahmin/Chhetri (28% of women and 25% of men). Sixteen percent of women and 19% of men are Madhesi and 15% of women and 13% of men belong to Dalit ethnic group.

- Twenty-two percent of women and 36% of men have never been married. A majority of women (75%) and men (63%) are married.
- The majority of the women (69%) and men (71%) reside in urban areas.
- Twenty-one percent of women and 25% of men live in Bagmati Province followed by 20% each in Madhesh Province.
- Thirty-nine percent of women and 46% of men have at least some secondary education while 4% of women and 8% of men have more than secondary education.2 Twenty-six percent of women and 8% of men have no education.

Table 2 Background characteristics of respondents

Percent distribution of women and men age 15–49 by selected background characteristics, Nepal DHS 2022

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Age						
15–19	17.8	2,643	2,777	20.0	985	1,011
20–24	17.8	2,637	2,623	17.5	857	818
25–29	16.4	2,435	2,361	14.6	716	709
30–34	14.4	2,144	2,065	12.5	616	610
35–39	13.6	2,025	2,002	13.0	639	631
40–44	11.0	1,629	1,650	12.3	604	616
45–49	9.0	1,332	1,367	10.1	496	518
Self-reported health status						
Very good	5.6	826	672	8.6	423	347
Good	28.1	4,168	3,902	38.9	1,913	1,891
Moderate	56.7	8,423	8,683	47.8	2,348	2,417
Bad	9.0	1,335	1,490	4.4	216	243
Very bad	0.6	93	98	0.3	13	15
Religion						
Hindu	83.4	12,374	12,618	81.9	4,025	4,097
Buddhist	6.5	970	848	7.9	389	349
Muslim	4.6	682	523	4.7	231	179
Kirat	2.5	365	371	2.8	139	150
Christian	3.0	445	477	2.5	123	134
Other	0.1	8	8	0.1	6	4
Ethnic group						
Brahmin/Chhetri	28.0	4,152	4,843	25.1	1,232	1,438
Dalit	15.1	2,240	2,488	13.4	658	721
Janajati	36.6	5,428	5,091	38.0	1,869	1,805
Madhesi	15.7	2,333	1,892	18.7	917	767
Muslim	4.6	676	518	4.6	228	177
Others	0.1	15	13	0.2	8	5
Marital status						
Never married	21.6	3,203	3,123	36.0	1,768	1,679
Married or living together	75.3	11,180	11,258	62.9	3,090	3,179
Divorced/separated	1.1	170	155	0.6	31	33
Widowed	2.0	292	309	0.3	12	14
Residence						
Urban	68.6	10,178	8,019	70.5	3,462	2,717
Rural	31.4	4,667	6,826	29.5	1,451	2,196
Ecological zone						
Mountain	5.3	791	1,262	5.2	255	407
Hill	39.6	5,872	6,606	40.2	1,973	2,150
Terai	55.1	8,182	6,977	54.6	2,685	2,356

Continued…

[2] The education system in Nepal has been amended based on the Education Act Eight Amendment Bill 2016 (MoEST 2021). The 2022 NDHS refers to this amendment and differs from the previous NDHS surveys.

Table 2—*Continued*

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Province						
Province 1	16.8	2,493	2,209	18.0	882	795
Urban	11.0	1,640	1,135	12.3	604	431
Rural	5.7	853	1,074	5.7	278	364
Madhesh Province	20.3	3,010	2,499	20.3	997	882
Urban	15.0	2,226	1,422	14.7	722	487
Rural	5.3	783	1,077	5.6	275	395
Bagmati Province	20.6	3,062	2,106	24.7	1,214	831
Urban	16.6	2,464	1,274	20.7	1,016	535
Rural	4.0	599	832	4.0	198	296
Gandaki Province	9.4	1,401	1,682	7.9	387	505
Urban	6.7	992	897	5.4	264	246
Rural	2.8	409	785	2.5	123	259
Lumbini Province	18.1	2,691	2,266	16.5	812	718
Urban	10.5	1,553	1,214	9.5	468	386
Rural	7.7	1,138	1,052	7.0	344	332
Karnali Province	6.1	909	1,978	5.4	266	604
Urban	3.4	507	968	3.1	154	306
Rural	2.7	402	1,010	2.3	113	298
Sudurpashchim Province	8.6	1,279	2,105	7.2	355	578
Urban	5.4	796	1,109	4.7	233	326
Rural	3.3	484	996	2.5	122	252
Education						
No education	25.6	3,796	4,005	8.0	393	394
Basic education (1–8)	31.0	4,595	4,751	38.6	1,898	1,977
Lower basic education (1–5)	15.6	2,314	2,329	18.1	891	924
Upper basic education (6–8)	15.4	2,281	2,422	20.5	1,007	1,053
Secondary (9–12)	39.1	5,798	5,603	45.7	2,244	2,233
Lower secondary (9–10)	22.0	3,270	3,209	26.1	1,284	1,321
Higher secondary (11–12)	17.0	2,529	2,394	19.5	959	912
More than secondary (13 and above)	4.4	656	486	7.7	377	309
Wealth quintile						
Lowest	17.7	2,628	3,997	15.3	751	1,170
Second	19.2	2,857	3,029	19.0	933	997
Middle	20.4	3,028	2,965	19.5	957	965
Fourth	21.5	3,197	2,733	23.1	1,135	978
Highest	21.1	3,135	2,121	23.1	1,137	803
Total 15–49	100.0	14,845	14,845	100.0	4,913	4,913

Note: Education categories refer to the highest level of education attended, whether or not that level was completed. Education classification is based on the Education Act Eight Amendment Bill 2016.

3.3 FERTILITY

Under SDG 3.7.1 (b) the government of Nepal targets achieving a total fertility rate of 2.1 births per woman by 2030 (National Planning Commission, 2020). **Table 3** shows the total fertility rate (TFR) and the age-specific fertility rates (ASFRs) among women by 5-year age groups for the 3-year period preceding the survey.

Total fertility rate

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

Sample: Women age 15–49

- If fertility were to remain constant at current levels, a woman in Nepal would bear an average of 2.1 children in her lifetime.
- Fertility is low among adolescents (71 births per 1,000 women age 15–19), peaks at 160 births per 1,000 among women age 20–24, and then deceases thereafter.

Table 3 Current fertility

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

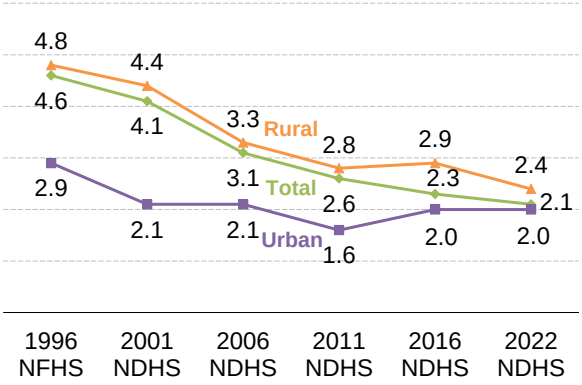
	Residence		
Age group	Urban	Rural	Total
10–14	[0]	[0]	[0]
15–19	64	86	71
20–24	149	184	160
25–29	104	124	110
30–34	55	60	57
35–39	16	20	17
40–44	4	6	5
45–49	[1]	[0]	[1]
TFR (15–49)	2.0	2.4	2.1
GFR	73	88	78
CBR	19.3	21.4	20.0

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

Trends: There has been a steady decline in the TFR from 4.8 births per woman in the 1996 NFHS to 2.1 births per woman in the 2022 NDHS (Figure 1). While the fertility rate has stagnated in urban areas, the decline is prominent in rural areas. The reclassification of urban and rural areas could have an impact on these rates.

Figure 1 **Trends in fertility by residence**

TFR for the 3 years before each survey



3.4 TEENAGE FERTILITY

Teenage pregnancy
Percentage of women age 15–19 who have ever been pregnant.
Sample: Women age 15–19

Table 4 shows the percentage of women age 15–19 who have ever been pregnant at the time of the survey, according to background characteristics.

- Overall, 14% of women age 15–19 have ever been pregnant, including 10% who have had a live birth, 2% who have had a pregnancy loss, and 4% who are currently pregnant.

- The percentage of women age 15–19 who have ever been pregnant rises with age, from 1% at age 15 to 32% by age 19.
- Teenage pregnancy is highest in Karnali Province (21%), followed by Madhesh Province (20%), and lowest in Bagmati Province (8%).
- Women age 15–19 with no education (33%) are more likely to start childbearing earlier than those with at least some secondary education (8%).

Table 4 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, Nepal DHS 2022

Background characteristic	Percentage of women age 15–19 who: Have ever had a live birth	Have ever had a pregnancy loss[1]	Are currently pregnant	Have ever been pregnant	Number of women
Age					
15	0.4	0.5	0.4	1.1	510
16	2.2	0.5	2.2	4.6	539
17	7.1	1.1	3.3	10.5	493
18	14.0	2.0	5.9	20.1	622
19	24.8	5.6	9.3	31.7	479
Ethnic group					
Brahmin/Chhetri	5.7	1.1	2.0	7.8	724
Dalit	15.5	3.8	5.3	20.7	471
Janajati	9.2	1.6	4.1	12.9	839
Madhesi	8.4	1.3	6.1	13.5	434
Muslim	15.5	3.1	6.5	22.2	171
Others	*	*	*	*	3
Residence					
Urban	8.6	1.8	4.5	12.9	1,758
Rural	11.6	2.1	3.7	14.9	885
Ecological zone					
Mountain	13.6	2.8	2.4	15.8	148
Hill	9.3	2.0	3.4	12.5	1,011
Terai	9.4	1.7	5.0	14.1	1,483
Province					
Province 1	10.9	1.2	2.4	12.8	409
Urban	8.7	1.2	2.1	9.9	244
Rural	14.2	1.2	2.9	17.1	164
Madhesh Province	12.4	2.6	8.0	19.8	619
Urban	11.8	1.9	7.9	19.3	450
Rural	13.9	4.5	8.3	21.0	168
Bagmati Province	4.8	0.8	3.2	7.8	489
Urban	3.4	0.5	3.6	6.9	377
Rural	9.4	1.7	1.9	10.6	112
Gandaki Province	11.5	2.3	2.5	12.9	238
Urban	10.6	2.6	3.1	12.6	177
Rural	13.9	1.6	1.0	13.9	61
Lumbini Province	6.3	1.8	3.1	9.8	434
Urban	6.6	1.9	3.5	10.5	249
Rural	5.7	1.6	2.6	8.9	185
Karnali Province	16.6	3.2	4.6	20.5	203
Urban	15.8	4.4	4.9	20.6	111
Rural	17.5	1.7	4.3	20.4	92
Sudurpashchim Province	8.8	2.1	3.1	12.5	250
Urban	8.0	2.6	3.6	12.2	149
Rural	10.1	1.4	2.3	12.9	101
Education					
No education	27.5	2.2	9.4	32.7	140
Basic education (1–8)	14.1	3.3	6.2	19.8	927
Lower basic education (1–5)	20.1	6.7	8.2	28.8	278
Upper basic education (6–8)	11.5	1.8	5.3	16.0	650
Secondary (9–12)	5.4	1.0	2.6	8.2	1,572
Lower secondary (9–10)	6.3	1.0	3.1	9.6	956
Higher secondary (11–12)	4.0	1.1	1.9	6.2	616
More than secondary (13 and above)	*	*	*	*	4

Continued…

Table 4—*Continued*

Background characteristic	Percentage of women age 15–19 who: Have ever had a live birth	Have ever had a pregnancy loss[1]	Are currently pregnant	Have ever been pregnant	Number of women
Wealth quintile					
Lowest	14.8	2.7	3.1	17.4	535
Second	13.3	2.4	4.9	18.5	568
Middle	10.5	1.8	5.2	13.9	533
Fourth	6.1	1.8	5.6	12.1	571
Highest	2.1	0.5	1.7	4.0	436
Total	9.6	1.9	4.2	13.6	2,643

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Stillbirth, miscarriage, or abortion

3.5 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 5** shows fertility preferences among currently married women age 15–49 by number of living children.

- Ten percent (10%) of women want another child soon (within the next 2 years), 13% want to have another child later (in 2 or more years), and 1% want another child but have not decided when.
- Fifty-three percent (53%) of women want no more children, 17% are sterilized, and 3% stated that they are infecund.
- The percentage of women who want another child soon decreases from 59% among those with no living children to 2% or less among those with three or more children. In general, the more children a woman has, the higher the likelihood that she does not want another child or is sterilized.

Table 5 Fertility preferences according to number of living children

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

Desire for children	Number of living children[1]: 0	1	2	3	4	5	6+	Total
Have another soon[2]	59.3	15.1	4.1	1.8	1.0	1.4	0.2	9.9
Have another later[3]	30.2	37.2	4.6	1.7	0.7	0.1	0.0	13.2
Have another, undecided when	2.3	1.9	0.4	0.2	0.1	0.0	0.0	0.8
Undecided	1.4	9.1	2.3	1.5	1.2	0.4	0.0	3.5
Want no more	1.8	33.2	69.7	59.0	59.3	59.7	69.5	52.5
Sterilized[4]	1.2	1.8	17.5	31.7	31.8	27.7	22.3	17.0
Declared infecund	3.9	1.6	1.5	4.1	5.8	10.6	8.0	3.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	818	2,714	3,905	2,140	1,046	353	205	11,180

[1] The number of living children includes a woman's current pregnancy
[2] Wants next birth within 2 years
[3] Wants to delay next birth for 2 or more years
[4] Includes both female and male sterilization

3.6 FAMILY PLANNING

3.6.1 Contraceptive use

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 device (IUCD), contraceptive pill, implants, male condoms, emergency contraception, the standard days method, and lactational amenorrhea method.

The government of Nepal's target under SDG 3.7.1 (a) includes specific targets for use of modern methods of contraception by women of reproductive age (15–49). The targets are 53% by 2022 and 60% by 2030 (Ministry of Health and Population 2022). **Table 6** shows current levels of contraceptive use among currently married women age 15–49.

- Fifty-seven (57%) of currently married women are using a method of contraception; 43% are using a modern method, and 15% are using a traditional method.
- The most popular modern methods used are female sterilization (13%), injectables (9%), and implants (6%).
- Withdrawal is by far the most common traditional method used; 13% of currently married women use this method compared with 2% who use the rhythm method.

Trends: Use of any family planning method among currently married women rose from 29% in 1996 to 57% in 2022. Over the same period, use of modern methods of contraception increased from 26% in 1996 to 44% in 2006. It has held steady at 43% from 2011 through 2022 (**Figure 2**).

Table 6 Current use of contraception according to background characteristics

Percent distribution of currently married women age 15–49 by contraceptive method currently used, according to background characteristics, Nepal DHS 2022

Background characteristic	Any method	Any modern method	Modern method								Any tradi-tional method	Traditional method		Not currently using	Total	Number of women
			Female sterilization	Male sterilization	IUCD	Injectables	Implants	Pill	Male condom	Other[1]		Rhythm	Withdrawal			
Number of living children																
0	20.9	8.3	0.2	0.8	0.0	0.6	0.1	0.7	6.0	0.1	12.6	0.9	11.7	79.1	100.0	1,055
1–2	57.3	40.1	8.6	2.8	1.3	10.4	6.0	5.5	5.5	0.1	17.1	1.7	15.4	42.7	100.0	6,449
3–4	68.3	57.2	26.4	5.9	1.5	9.7	7.5	3.9	2.3	0.1	11.1	2.8	8.3	31.7	100.0	3,133
5+	63.3	55.1	21.4	5.1	1.7	11.6	10.2	3.1	2.0	0.0	8.2	1.9	6.3	36.7	100.0	543
Age																
15–19	28.2	14.2	0.1	0.0	0.1	6.6	1.4	1.6	4.4	0.0	14.0	2.1	11.9	71.8	100.0	563
20–24	38.6	24.9	1.7	0.2	0.5	9.0	4.8	4.2	4.4	0.2	13.7	1.9	11.8	61.4	100.0	1,783
25–29	52.1	37.4	6.4	0.3	1.6	11.8	6.8	4.8	5.6	0.1	14.7	1.7	13.1	47.9	100.0	2,198
30–34	61.1	45.3	11.4	2.5	1.8	11.9	6.9	5.6	5.2	0.1	15.8	2.1	13.7	38.9	100.0	2,027
35–39	69.8	55.6	21.9	4.6	1.5	9.5	8.3	5.2	4.6	0.0	14.3	1.6	12.6	30.2	100.0	1,906
40–44	71.1	56.1	25.8	7.8	1.6	7.6	5.9	4.7	2.7	0.0	15.0	2.4	12.6	28.9	100.0	1,515
45–49	63.8	50.0	24.3	10.9	0.8	3.9	4.1	2.5	3.6	0.0	13.7	2.2	11.5	36.2	100.0	1,188
Ethnic group																
Brahmin/Chhetri	60.0	39.6	6.7	7.4	1.8	8.6	5.1	4.0	5.9	0.1	20.4	1.0	19.4	40.0	100.0	3,031
Dalit	52.6	44.0	16.5	3.6	0.9	10.8	6.9	3.2	2.2	0.1	8.6	1.5	6.9	47.4	100.0	1,734
Janajati	61.3	45.4	10.2	2.6	1.3	11.7	8.4	5.9	5.5	0.1	15.8	1.5	14.3	38.7	100.0	4,042
Madhesi	55.1	44.6	30.2	0.3	0.9	4.7	3.0	3.2	2.3	0.1	10.5	4.7	5.8	44.9	100.0	1,835
Muslim	33.2	27.6	8.3	0.5	1.3	6.6	2.2	4.8	3.5	0.3	5.6	2.1	3.5	66.8	100.0	528
Others	*	*	*	*	*	*	*	*	*	*	*	*	*	*	100.0	11
Residence																
Urban	56.9	40.7	13.7	3.4	1.4	8.0	4.6	4.4	5.1	0.1	16.2	1.9	14.3	43.1	100.0	7,553
Rural	58.0	46.8	12.8	3.8	1.1	12.1	9.1	4.7	3.2	0.1	11.2	2.1	9.1	42.0	100.0	3,627
Ecological zone																
Mountain	62.7	50.1	3.2	11.0	1.6	17.8	10.1	2.8	3.4	0.2	12.6	0.6	12.1	37.3	100.0	629
Hill	59.1	41.1	4.7	5.5	1.6	11.1	8.4	4.7	5.1	0.0	18.0	1.4	16.6	40.9	100.0	4,275
Terai	55.4	43.0	20.4	1.5	1.0	7.2	4.1	4.5	4.2	0.1	12.4	2.5	9.9	44.6	100.0	6,276
Province																
Province 1	61.5	43.5	12.0	1.3	1.3	12.1	7.7	5.6	3.6	0.0	18.0	2.7	15.3	38.5	100.0	1,887
Urban	62.3	42.9	12.8	1.5	1.2	10.6	7.1	5.5	4.2	0.0	19.4	2.7	16.7	37.7	100.0	1,242
Rural	60.1	44.9	10.5	0.9	1.4	14.8	9.0	5.7	2.4	0.1	15.2	2.8	12.4	39.9	100.0	645
Madhesh Province	49.0	40.5	28.3	0.5	0.7	4.8	1.8	2.6	1.7	0.1	8.5	4.3	4.1	51.0	100.0	2,419
Urban	46.5	38.1	27.5	0.6	0.9	3.7	1.5	1.8	2.0	0.1	8.4	4.2	4.2	53.5	100.0	1,789
Rural	56.0	47.4	30.5	0.2	0.1	8.0	2.7	4.8	0.9	0.1	8.6	4.6	4.0	44.0	100.0	630
Bagmati Province	66.2	44.6	5.7	6.4	1.4	12.3	7.1	5.0	6.7	0.0	21.5	1.4	20.1	33.8	100.0	2,156
Urban	65.9	42.3	6.3	5.9	1.4	10.5	4.5	5.7	7.9	0.0	23.6	1.4	22.2	34.1	100.0	1,700
Rural	67.1	53.5	3.3	8.4	1.5	19.3	16.8	2.3	2.0	0.0	13.6	1.4	12.2	32.9	100.0	456
Gandaki Province	51.5	35.1	5.4	6.3	1.4	6.2	6.1	5.0	4.7	0.0	16.4	0.5	15.9	48.5	100.0	1,046
Urban	49.9	32.7	6.2	5.2	1.2	4.8	5.5	4.2	5.5	0.0	17.2	0.6	16.6	50.1	100.0	729
Rural	55.3	40.8	3.4	8.9	1.6	9.6	7.5	6.8	2.9	0.0	14.6	0.3	14.2	44.7	100.0	317
Lumbini Province	56.5	43.0	12.8	1.6	1.9	8.2	7.1	5.5	5.8	0.1	13.6	1.1	12.4	43.5	100.0	2,020
Urban	57.4	40.5	11.4	1.4	2.3	7.6	5.1	5.9	6.7	0.0	16.9	0.3	16.4	42.6	100.0	1,119
Rural	55.5	46.1	14.6	1.8	1.3	9.0	9.6	4.9	4.8	0.2	9.4	2.1	7.3	44.5	100.0	900

Continued…

Table 6—*Continued*

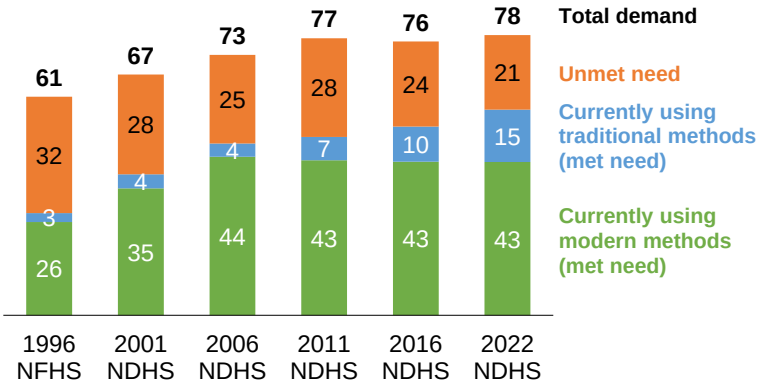
Background characteristic	Any method	Any modern method	Modern method								Any traditional method	Traditional method		Not currently using	Total	Number of women
			Female sterilization	Male sterilization	IUCD	Injectables	Implants	Pill	Male condom	Other[1]		Rhythm	Withdrawal			
Karnali Province	55.3	45.9	3.5	10.1	1.3	15.4	8.2	4.1	3.3	0.1	9.3	0.2	9.1	44.7	100.0	691
Urban	56.2	45.0	4.0	11.8	1.3	12.1	7.7	4.8	3.2	0.1	11.1	0.1	11.0	43.8	100.0	381
Rural	54.1	47.1	2.9	8.1	1.3	19.3	8.8	3.3	3.4	0.0	7.0	0.3	6.8	45.9	100.0	310
Sudurpashchim Province	58.6	47.0	13.1	5.6	1.0	9.7	7.4	3.6	6.0	0.4	11.6	0.3	11.4	41.4	100.0	960
Urban	59.0	46.5	15.2	5.3	1.5	9.9	5.0	3.2	6.0	0.3	12.5	0.4	12.1	41.0	100.0	591
Rural	58.0	47.8	9.9	6.2	0.4	9.5	11.3	4.4	5.9	0.4	10.2	0.0	10.2	42.0	100.0	369
Education																
No education	62.2	54.3	26.3	5.2	1.3	9.5	6.9	3.5	1.6	0.0	7.9	1.8	6.1	37.8	100.0	3,475
Basic education (1–8)	55.1	42.4	10.8	4.0	1.0	11.3	7.0	4.9	3.3	0.1	12.8	2.1	10.6	44.9	100.0	3,701
Lower basic education (1–5)	56.7	45.7	12.7	5.3	0.8	10.6	7.8	5.1	3.2	0.1	11.0	1.9	9.1	43.3	100.0	2,004
Upper basic education (6–8)	53.3	38.4	8.6	2.4	1.1	12.2	6.0	4.8	3.4	0.0	14.9	2.3	12.5	46.7	100.0	1,696
Secondary (9–12)	53.5	32.9	4.4	1.7	1.7	8.0	4.7	5.4	7.0	0.1	20.6	2.0	18.7	46.5	100.0	3,536
Lower secondary (9–10)	55.0	34.4	4.4	2.0	1.6	9.3	5.4	5.7	6.0	0.1	20.5	2.5	18.1	45.0	100.0	2,208
Higher secondary (11–12)	51.2	30.4	4.5	1.2	1.8	5.7	3.5	4.8	8.7	0.1	20.8	1.1	19.7	48.8	100.0	1,328
More than secondary (13 and above)	64.8	32.7	6.4	2.1	0.7	2.5	2.8	1.5	16.2	0.4	32.1	1.8	30.3	35.2	100.0	468
Wealth quintile																
Lowest	54.3	44.7	6.7	5.0	1.3	14.0	11.2	3.9	2.5	0.1	9.6	1.4	8.2	45.7	100.0	2,031
Second	56.4	46.9	19.1	3.0	1.0	10.0	7.4	4.1	2.4	0.0	9.5	1.6	7.9	43.6	100.0	2,217
Middle	56.2	44.4	17.5	3.1	1.3	10.1	5.3	3.9	3.1	0.0	11.8	2.1	9.7	43.8	100.0	2,323
Fourth	56.6	38.7	13.2	2.7	1.1	7.4	4.0	5.9	4.3	0.1	17.9	2.6	15.3	43.4	100.0	2,381
Highest	62.5	39.0	10.0	4.2	1.7	5.6	3.1	4.4	10.0	0.1	23.4	2.0	21.4	37.5	100.0	2,228
Total	57.2	42.7	13.4	3.6	1.3	9.3	6.1	4.5	4.5	0.1	14.6	1.9	12.6	42.8	100.0	11,180

Note: If more than one method is used, only the most effective method is considered in this tabulation. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Other traditional methods not shown separately due to only 2 cases.

[1] Other modern methods include lactational amenorrhea method (LAM) and emergency contraception

Figure 2 **Trends in use, need, and demand for family planning**

Percentage of currently married women age 15–49



3.6.2 Need and demand for family planning

Table 7 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 Nepal are meeting the demand for services. The government of Nepal's target for SDG 3.7.1, is that 74% of all women age 15–49 have a met need for family planning with modern methods by 2022 and 80% by 2030 (National Planning Commission 2020).

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, or (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

Demand for family planning:

$$\frac{\text{Unmet need for family planning}}{+ \text{ met need (current contraceptive use (any method))}}$$

Proportion of demand satisfied:

$$\frac{\text{Current contraceptive use (any method)}}{\text{Unmet need + current contraceptive use (any method)}}$$

Proportion of demand satisfied by modern methods:

$$\frac{\text{Current contraceptive use (any modern method)}}{\text{Unmet need + current contraceptive use (any method)}}$$

- Twenty-one percent (21%) of currently married women in Nepal have an unmet need for family planning services. Fifty-seven percent (57%) of currently married women are currently using a contraceptive method. Therefore, 78% of currently married women have a demand for family planning. Thus, if all married women who said they want to space or limit their children were to use family planning methods, the contraceptive prevalence rate would increase from 57% to 78%.

- The total demand for family planning that is satisfied is 73%; 55% of the total demand is satisfied by modern methods.

Table 7 Unmet need for family planning

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, Nepal DHS 2022

Background characteristic	Unmet need for family planning	Met need for family planning (currently using)		Total demand for family planning[3]	Number of women	Percentage of demand satisfied[1]	
		All methods	Modern methods[2]			All methods	Modern methods[2]
Age							
15–19	30.9	28.2	14.2	59.1	563	47.7	24.0
20–24	29.1	38.6	24.9	67.8	1,783	57.0	36.8
25–29	23.5	52.1	37.4	75.7	2,198	68.9	49.4
30–34	22.0	61.1	45.3	83.2	2,027	73.5	54.5
35–39	17.2	69.8	55.6	87.1	1,906	80.2	63.8
40–44	14.4	71.1	56.1	85.5	1,515	83.2	65.6
45–49	10.2	63.8	50.0	74.0	1,188	86.1	67.6
Ethnic group							
Brahmin/Chhetri	20.7	60.0	39.6	80.7	3,031	74.3	49.0
Dalit	25.5	52.6	44.0	78.1	1,734	67.3	56.4
Janajati	19.7	61.3	45.4	81.0	4,042	75.6	56.1
Madhesi	17.6	55.1	44.6	72.7	1,835	75.8	61.4
Muslim	24.7	33.2	27.6	58.0	528	57.3	47.6
Others	*	*	*	*	11	*	*
Residence							
Urban	20.7	56.9	40.7	77.5	7,553	73.4	52.4
Rural	21.1	58.0	46.8	79.1	3,627	73.3	59.2
Ecological zone							
Mountain	19.1	62.7	50.1	81.8	629	76.7	61.2
Hill	22.7	59.1	41.1	81.8	4,275	72.2	50.3
Terai	19.7	55.4	43.0	75.1	6,276	73.8	57.2
Province							
Province 1	17.6	61.5	43.5	79.1	1,887	77.8	55.1
Urban	16.9	62.3	42.9	79.2	1,242	78.7	54.2
Rural	18.9	60.1	44.9	79.0	645	76.1	56.8
Madhesh Province	21.1	49.0	40.5	70.1	2,419	69.9	57.8
Urban	22.2	46.5	38.1	68.7	1,789	67.7	55.4
Rural	17.9	56.0	47.4	73.9	630	75.7	64.1
Bagmati Province	16.0	66.2	44.6	82.2	2,156	80.5	54.3
Urban	16.0	65.9	42.3	81.9	1,700	80.4	51.6
Rural	15.9	67.1	53.5	83.0	456	80.9	64.5
Gandaki Province	28.1	51.5	35.1	79.6	1,046	64.7	44.2
Urban	28.2	49.9	32.7	78.1	729	63.9	41.9
Rural	27.7	55.3	40.8	83.1	317	66.6	49.1
Lumbini Province	23.3	56.5	43.0	79.9	2,020	70.8	53.8
Urban	23.0	57.4	40.5	80.3	1,119	71.4	50.4
Rural	23.8	55.5	46.1	79.3	900	70.0	58.2
Karnali Province	23.4	55.3	45.9	78.6	691	70.3	58.4
Urban	22.1	56.2	45.0	78.2	381	71.8	57.5
Rural	25.0	54.1	47.1	79.1	310	68.4	59.5
Sudurpashchim Province	22.1	58.6	47.0	80.7	960	72.6	58.2
Urban	22.6	59.0	46.5	81.6	591	72.3	57.0
Rural	21.3	58.0	47.8	79.2	369	73.2	60.3
Education							
No education	16.4	62.2	54.3	78.6	3,475	79.2	69.0
Basic education (1–8)	23.7	55.1	42.4	78.8	3,701	69.9	53.7
Lower basic education (1–5)	22.8	56.7	45.7	79.5	2,004	71.3	57.5
Upper basic education (6–8)	24.8	53.3	38.4	78.0	1,696	68.3	49.2
Secondary (9–12)	22.7	53.5	32.9	76.3	3,536	70.2	43.1
Lower secondary (9–10)	22.5	55.0	34.4	77.4	2,208	71.0	44.4
Higher secondary (11–12)	23.2	51.2	30.4	74.4	1,328	68.9	40.9
More than secondary (13 and above)	16.1	64.8	32.7	80.8	468	80.1	40.4
Wealth quintile							
Lowest	24.7	54.3	44.7	79.0	2,031	68.7	56.5
Second	21.4	56.4	46.9	77.7	2,217	72.5	60.3
Middle	20.4	56.2	44.4	76.6	2,323	73.3	58.0
Fourth	20.9	56.6	38.7	77.6	2,381	73.0	49.9
Highest	16.9	62.5	39.0	79.4	2,228	78.7	49.2
Total	20.8	57.2	42.7	78.0	11,180	73.3	54.7

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

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

[2] Modern methods include female sterilization, male sterilization, IUCD, injectables, implants, pill, male condom, emergency contraception, lactational amenorrhea method (LAM) and other modern methods.

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

Trends: There has been a decline in the unmet need for family planning from 32% in 1996 to 21% in 2022 (**Figure 2**). The decline in unmet need in the last decade is mainly due to the increased use of traditional methods.

3.7 EARLY CHILDHOOD MORTALITY

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

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

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

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

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

The government of Nepal's target for SDG 3.2.1, is to reduce the under-five mortality rate to 27 deaths per 1,000 live births by 2022 and to 20 deaths per 1,000 live births by 2030. Similarly, the government's target for SDG 3.2.2, is to reduce the neonatal mortality rate to 16 deaths per 1,000 live births by 2022 and to 12 deaths per 1,000 live births by 2030 (National Planning Commission, 2020).

Table 8 presents estimates of early childhood mortality rates for three successive 5-year periods prior to the 2022 NDHS. The rates are estimated directly from the information collected as part of a retrospective pregnancy history, in which female respondents list 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.

- During the 5 years immediately preceding the survey, the overall under-5 mortality rate was 33 deaths per 1,000 live births.
- The infant mortality rate was 28 deaths per 1,000 live births. The child mortality rate was 5 deaths per 1,000 children surviving to age 12 months.
- The neonatal mortality rate was 21 deaths per 1,000 live births, during the 5 years immediately preceding the survey.
- Eighty-five percent (85%) of all deaths among children under age 5 in Nepal take place before a child's first birthday, with 64% occurring during the first month of life.

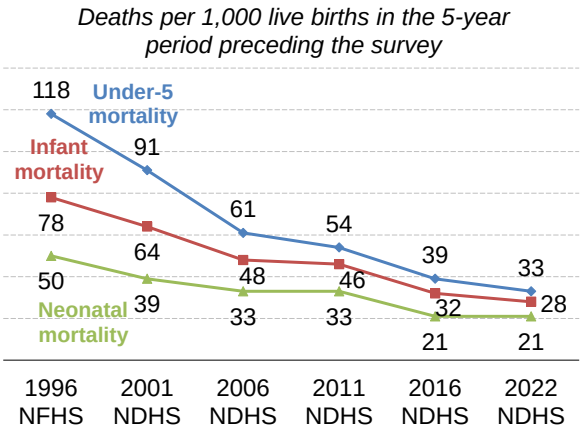
Table 8 Early childhood mortality rates

Neonatal, post-neonatal, infant, child, and under-5 mortality rates for 5-year periods preceding the survey, Nepal DHS 2022

Years preceding the survey	Neonatal mortality (NN)	Post-neonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
0–4	21	8	28	5	33
5–9	24	11	35	7	42
10–14	36	13	48	10	58

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

Figure 3 **Trends in early childhood mortality rates**



Trends: Between the 1996 NFHS and the 2022 NDHS surveys, under-5 mortality declined from 118 to 33 deaths per 1,000 live births, infant mortality declined from 78 to 28 deaths per 1,000 live births, and neonatal mortality declined from 50 to 21 deaths per 1,000 live births (**Figure 3**). Notably, however, between the 2016 and 2022 NDHS the neonatal mortality did not change.

3.8 MATERNAL CARE

Proper care during pregnancy and delivery is important for the health of both the mother and the baby. **Table 9** presents key indicators related to maternal care.

3.8.1 Antenatal care

Antenatal care (ANC) from a skilled provider

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

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

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.

- Ninety-four percent (94%) of women reported receiving antenatal care from a skilled provider for their most recent live birth or stillbirth in the 2-year period preceding the survey.
- Four in five women (81%) had at least four ANC visits for their most recent live birth.
- Overall, 96% of women took iron-containing supplements during their most recent pregnancy.

Trends: The percentage of women who received antenatal care from skilled provider for their most recent live birth in the 2 years preceding the survey increased from 25% in 1996 to 94% in 2022. Similarly, those who made four or more ANC visits increased from 9% in 1996 to 81% in 2022.

3.8.2 Tetanus toxoid

Protection against neonatal tetanus

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

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

Sample: Women age 15-49 with a live birth in the 2 years preceding the survey

Tetanus toxoid injections are given during pregnancy to prevent neonatal tetanus, a major cause of early infant death in many developing countries. Neonatal tetanus is often caused by failure to observe hygienic procedures during delivery.

- Overall, 93% of women with a live birth in the 2 years preceding the survey received sufficient doses of tetanus toxoid injections to protect their baby against neonatal tetanus.

Table 9 Maternal care indicators

Among women age 15–49 who had a live birth and/or a stillbirth in the 2 years preceding the survey, percentage who received antenatal care (ANC) from a skilled provider for the most recent live birth or stillbirth, percentage with four or more ANC visits for the most recent live birth or stillbirth, percentage who took any iron-containing supplements during pregnancy, and percentage whose most recent live birth was protected against neonatal tetanus; among all live births and stillbirths in the 2 years before the survey, percentage delivered by a skilled provider and percentage delivered in a health facility; and among women age 15–49 with a live birth or stillbirth in the 2 years preceding the survey, percentage who received a postnatal check during the first 2 days after giving birth, according to background characteristics, Nepal DHS 2022

	Women who had a live birth and/or a stillbirth in the 2 years preceding the survey					Live births and stillbirths in the 2 years preceding the survey			Women who had a live birth and/or a stillbirth in the 2 years preceding the survey	
Background characteristic	Percentage receiving antenatal care from a skilled provider[1]	Percentage with 4+ ANC visits	Percentage who took any iron-containing supple-ments during pregnancy[2]	Percentage whose most recent live birth was protected against neonatal tetanus[3]	Number of women	Percentage delivered by a skilled provider[1]	Percentage delivered in a health facility	Number of births	Percentage of women with a postnatal check during the first 2 days after birth[4]	Number of women
					LIVE BIRTHS					
Mother's age at birth										
<20	94.5	75.0	96.9	91.3	353	80.1	79.3	365	65.3	353
20–34	94.5	82.2	96.1	93.6	1,504	80.1	79.4	1,535	71.9	1,504
35–49	90.6	71.1	91.3	81.6	76	80.0	78.5	79	60.7	76
Ethnic group										
Brahmin/Chhetri	96.0	90.4	98.6	93.0	499	86.5	86.9	504	75.4	499
Dalit	92.0	71.4	94.5	93.7	359	70.9	70.1	373	64.2	359
Janajati	91.8	83.9	96.6	88.6	588	83.9	83.3	605	74.0	588
Madhesi	98.0	72.7	94.3	96.6	354	77.5	76.0	358	64.0	354
Muslim	96.3	73.3	93.0	96.2	131	70.8	67.3	136	66.4	131
Others	*	*	*	*	2	*	*	2	*	2
Residence										
Urban	94.2	79.5	96.0	92.8	1,266	81.4	80.9	1,295	71.6	1,266
Rural	94.6	82.4	96.2	92.5	666	77.5	76.4	684	67.6	666
Ecological zone										
Mountain	93.5	90.5	98.6	92.0	129	76.6	75.4	133	63.8	129
Hill	94.0	86.5	96.1	89.7	639	81.0	81.6	648	70.1	639
Terai	94.6	76.0	95.8	94.4	1,166	79.9	78.6	1,198	71.0	1,166

Continued…

Table 9—*Continued*

Background characteristic	Women who had a live birth and/or a stillbirth in the 2 years preceding the survey					Live births and stillbirths in the 2 years preceding the survey			Women who had a live birth and/or a stillbirth in the 2 years preceding the survey	
	Percentage receiving antenatal care from a skilled provider[1]	Percentage with 4+ ANC visits	Percentage who took any iron-containing supple-ments during pregnancy[2]	Percentage whose most recent live birth was protected against neonatal tetanus[3]	Number of women	Percentage delivered by a skilled provider[1]	Percentage delivered in a health facility	Number of births	Percentage of women with a postnatal check during the first 2 days after birth[4]	Number of women
Province										
Province 1	90.4	78.8	96.7	90.4	358	81.8	81.5	368	77.3	358
Urban	89.6	77.2	95.4	89.8	232	84.5	83.7	242	78.5	232
Rural	91.8	81.8	99.1	91.7	126	76.6	77.3	126	75.1	126
Madhesh Province	96.0	68.4	93.5	95.4	500	67.9	66.6	515	57.8	500
Urban	95.3	66.9	93.6	95.2	367	67.6	66.6	377	55.1	367
Rural	97.9	72.3	93.3	96.0	132	68.7	66.9	138	65.4	132
Bagmati Province	93.4	88.8	96.3	88.6	295	86.6	88.3	299	73.9	295
Urban	95.9	92.5	98.2	89.4	216	90.7	91.9	219	81.3	216
Rural	86.6	78.8	91.0	86.2	79	75.5	78.6	81	53.6	79
Gandaki Province	96.7	84.6	97.5	92.5	117	89.2	87.7	117	76.4	117
Urban	100.0	84.7	98.7	94.5	76	96.6	94.9	76	81.6	76
Rural	90.5	84.2	95.1	88.7	40	75.2	74.0	40	66.5	40
Lumbini Province	96.8	86.9	97.2	95.7	329	86.9	84.4	335	77.2	329
Urban	96.0	86.5	96.8	96.4	185	85.0	83.7	187	77.5	185
Rural	97.8	87.5	97.6	94.8	145	89.3	85.4	148	77.0	145
Karnali Province	91.0	79.1	95.4	91.8	149	72.3	72.5	153	57.9	149
Urban	88.0	74.5	93.3	92.1	73	76.1	75.8	75	63.3	73
Rural	94.0	83.6	97.4	91.6	76	68.6	69.3	78	52.7	76
Sudurpashchim Province	95.9	90.0	99.1	91.9	185	87.8	86.8	192	77.7	185
Urban	94.2	87.8	99.5	91.5	117	89.6	90.0	120	81.3	117
Rural	98.8	93.6	98.5	92.7	69	84.9	81.5	72	71.6	69
Mother's education										
No education	92.8	67.2	90.7	90.5	357	60.9	59.6	367	55.9	357
Basic education (1–8)	92.8	75.7	95.0	91.6	656	74.8	73.9	678	64.4	656
Lower basic education (1–5)	92.1	71.2	92.9	91.2	332	69.3	68.2	341	59.7	332
Upper basic education (6–8)	93.5	80.2	97.2	92.0	325	80.4	79.7	337	69.2	325
Secondary (9–12)	95.6	88.6	98.9	94.5	828	90.9	90.1	843	78.6	828
Lower secondary (9–10)	94.6	85.7	98.9	93.5	497	88.6	88.1	505	74.7	497
Higher secondary (11–12)	97.2	92.9	98.8	96.0	332	94.3	93.1	337	84.4	332
More than secondary (13 and above)	99.7	93.4	98.9	92.5	91	96.2	100.0	91	91.9	91
Wealth quintile										
Lowest	90.5	74.5	92.6	89.5	431	67.0	65.8	445	55.5	431
Second	92.9	76.7	96.1	92.2	432	73.1	73.2	443	65.4	432
Middle	97.0	77.7	96.0	91.3	381	81.2	79.6	388	71.4	381
Fourth	94.7	84.5	97.5	96.7	386	88.0	86.9	397	77.7	386
Highest	98.1	92.6	99.2	94.6	303	97.4	97.6	306	87.1	303
Total	94.3	80.5	96.1	92.7	1,933	80.1	79.3	1,979	70.2	1,933
STILLBIRTHS										
Total	*	*	*	na	17	*	*	17	*	17
LIVE BIRTHS AND STILLBIRTHS[5]										
Total	94.3	80.2	96.0	na	1,949	80.1	79.3	1,995	70.3	1,949

Note: If more than one source of assistance was mentioned, only the provider with the highest qualifications is considered in this tabulation. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = not applicable
[1] Skilled provider includes doctor, nurse, and auxiliary midwife.
[2] Iron tablets or syrup.
[3] Includes mothers with two injections during the pregnancy of her most recent live birth, or two or more injections (the last within 3 years of the most recent live birth), or three or more injections (the last within 5 years of the most recent live birth), or four or more injections (the last within 10 years of the most recent live birth), or five or more injections at any time prior to the last live birth.
[4] Includes women who received a check from a doctor, nurse, auxiliary nurse midwife, health assistant, auxiliary health worker, female community health worker, or traditional birth attendant.
[5] For women who had both a live birth and a stillbirth in the 2 years preceding the survey, data on antenatal care and postnatal checks are tabulated for the most recent birth only.

Trends: The percentage of women whose most recent live birth was protected against neonatal tetanus increased from 84% in 2006 to 93% in 2022.

3.8.3 Delivery care

Institutional deliveries
Deliveries that occur in a health facility.
Sample: All live births and/or stillbirths in the 2 years preceding the survey

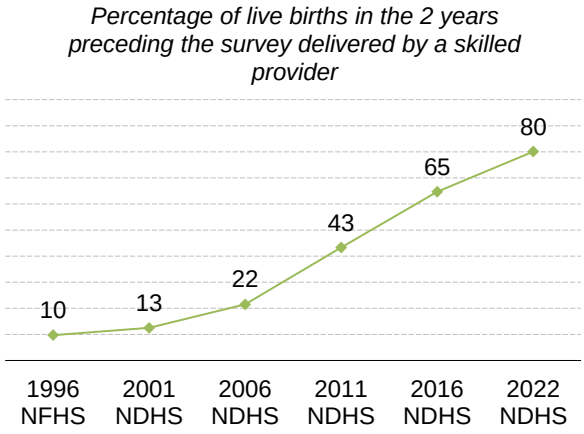
Skilled assistance during delivery
Births delivered with the assistance of a doctor, nurse, or midwife.
Sample: All live births and/or stillbirths in the 2 years preceding the survey

Access to proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that may lead to death or serious illness for the mother and/or baby (Van Lerberghe and De Brouwere 2001; WHO 2006a). The government of Nepal's target for SDG 3.1.2, is that 73% of births are delivered with assistance from skilled provider by 2022 and achieve 90% by 2030 (National Planning Commission 2020).

- Overall, 79% of live births and still births in the 2 years preceding the survey were delivered in health facilities.
- Four in five (80%) live births and stillbirths were delivered by skilled providers.

Trends: The percentage of live births that are assisted by a skilled provider has increased markedly, from 10% in 1996 to 80% in 2022) (**Figure 4**).

Figure 4 **Trends in delivery assistance**



3.8.4 Postnatal care for the mother

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 health check during the first 2 days after birth.

- Overall, 70% of women with a live birth or stillbirth in the 2 years preceding the survey received a postnatal check within the 2 days after delivery.
- Among women with a live birth, women in the lowest wealth quintile are less likely to receive postnatal check within 2 days after delivery than women in the highest wealth quintile (56% versus 87%).

3.9 VACCINATION COVERAGE

Universal immunization of children against common vaccine-preventable diseases is crucial to reducing infant and child morbidity and mortality. In Nepal, routine childhood vaccines include bacillus Calmette-Guérin (BCG) (tuberculosis); oral polio vaccine (OPV) and fractional inactivated poliomyelitis vaccine (fIPV); pentavalent or DPT-HepB-Hib (diphtheria, pertussis, tetanus, hepatitis B, and *Haemophilus influenzae* type b); pneumococcal conjugate vaccine (PCV); rotavirus vaccine (RV); Japanese encephalitis (JE) vaccine; and measles rubella (MR) vaccine. The rotavirus vaccine was introduced into the routine schedule in July 2020. The Nepal Health Sector Strategy 2016–22 target for vaccination coverage specifies that 95% of children age 12–23 months should be covered for all vaccines included in the national program by 2030 (Ministry of Health and Population, 2022).

Information on vaccination coverage was obtained in two ways in the 2022 NDHS: (1) written vaccination records, including vaccination or health cards, and (2) verbal reports from the mother. In the survey, the vaccination card was observed for 79% of children age 12–23 months (data not shown).

3.9.1 Basic antigen coverage

Fully vaccinated—basic antigens

Percentage of children who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report). To have received all the basic antigens in Nepal, a child must receive at least:

- One dose of BCG vaccine, which protects against tuberculosis
- Three doses of polio vaccine given as oral polio vaccine (OPV)
- Three doses of DPT-containing vaccine, which protects against diphtheria, pertussis (whooping cough), and tetanus
- One dose of measles-containing vaccine given as measles rubella (MR)

Sample: Children age 12–23 months

Historically, an important measure of vaccination coverage has been the proportion of children receiving all "basic" antigens. Children are considered fully vaccinated against all basic antigens if they have received the BCG vaccine, three doses each of polio vaccine and DTP-containing vaccine, and a single dose of measles-containing vaccine. In Nepal, the BCG vaccine is usually given at birth or at first clinic contact, while the polio and DPT-containing vaccines are given at approximately age 6, 10, and 14 weeks. A first measles-containing vaccination (MR) should be given at or soon after age 9 months.

- Overall, 80% of children age 12–23 months are fully vaccinated with basic antigens (**Table 10**).
- Ninety-five percent (95%) of children age 12–23 months received BCG vaccine, 89% received the third dose of DTP-HepB-Hib, 86% received the third dose of OPV, and 89% received a dose of MR.

3.9.2 Vaccination coverage according to the national schedule

A second measure of vaccination coverage is the percentage of children age 12–23 months who are fully vaccinated according to the national schedule. In this report, a child age 12–23 months is considered fully vaccinated according to the national schedule if the child has received all the basic antigens as well as two doses of fractional IPV (fIPV), three doses of HepB and Hib (given as part of DPT-containing vaccine), three doses PCV, two doses of RV, and one dose of JE vaccine.

- Slightly more than half of the children age 12–23 months (52%) are fully vaccinated according to the national schedule.
- Eighty-five percent (85%) of children received the second dose of fIPV, 81% received the third dose of PCV, 72% received the 2nd dose of RV, and 81% received a dose of JE vaccine.
- Four percent (4%) of children age 12–23 months have received no vaccinations.

Trends: The percentage of children age 12–23 months who are fully vaccinated (received all the basic antigens) has fluctuated over time, rising from 43% in 1996 to a peak of 87% in 2011, then decreasing to 78% in 2016, and increasing slightly to 80% in 2022 (**Figure 5**). The percentage of children age 12–23 months who did not receive any vaccinations has also fluctuated, notably increasing slightly from 1% in 2016 to 4% in 2022.

***Figure 5* Trends in childhood vaccinations**

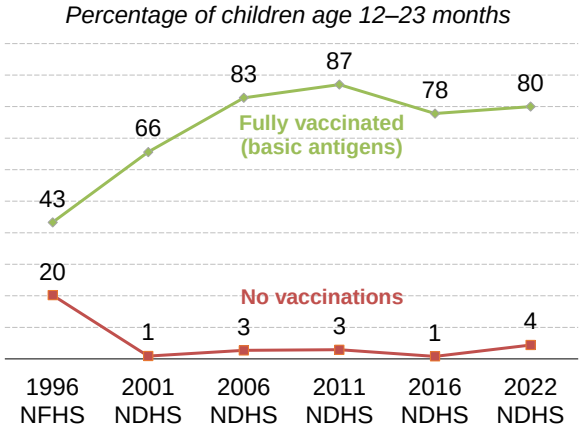


Table 10 Childhood vaccinations by background characteristics

Percentage of children age 12–23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), percentage fully vaccinated (basic antigens), percentage fully vaccinated (according to national schedule), and percentage who received no vaccinations, according to background characteristics, Nepal DHS 2022

Background characteristic	BCG	DPT-HepB-Hib 1	DPT-HepB-Hib 2	DPT-HepB-Hib 3	OPV[2] 1	OPV[2] 2	OPV[2] 3	fIPV 1	fIPV 2	Pneumococcal 1	Pneumococcal 2	Pneumococcal 3	Rotavirus 1	Rotavirus 2	Measles rubella 1	Japanese encepha-litis	Fully vacci-nated (basic antigens)[1]	Fully vacci-nated (according to national schedule)[2]	No vacci-nations	Number of children
Sex																				
Male	95.5	95.3	93.8	90.0	95.3	93.6	87.5	91.4	86.0	93.5	91.4	81.9	79.0	72.4	90.4	84.6	81.5	54.7	4.3	486
Female	94.8	94.1	93.1	88.2	94.6	92.2	83.6	91.7	84.2	93.1	90.3	79.0	76.6	71.1	86.6	77.1	78.4	49.4	4.5	474
Birth order																				
1	95.0	94.8	94.2	90.8	94.7	93.2	86.4	91.1	86.2	93.4	91.2	83.1	78.5	72.4	90.6	84.4	81.8	54.9	4.9	401
2–3	95.7	95.4	93.9	89.9	95.6	94.1	88.0	93.1	87.1	93.8	91.3	80.2	77.4	71.0	89.5	80.2	81.3	51.4	3.5	463
4–5	92.8	89.9	86.8	79.8	91.8	85.1	71.0	84.8	69.9	89.4	86.1	70.8	74.8	70.9	73.8	65.8	66.2	39.6	7.2	80
6+	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	15
Vaccination card[3]																				
Seen	99.4	99.4	98.5	95.4	99.3	97.8	92.1	96.4	89.1	99.2	97.4	88.6	83.5	76.8	93.9	85.2	87.9	58.1	0.2	752
Not seen or no longer has	82.9	80.9	78.4	69.4	82.3	78.7	64.7	77.8	74.1	74.9	70.1	53.3	59.7	55.8	72.0	67.8	53.6	31.3	17.1	195
Never had	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	11
Residence																				
Urban	94.8	94.8	93.7	89.0	95.1	93.2	85.3	92.1	85.8	93.1	91.2	81.1	78.7	71.8	89.1	81.6	79.8	52.6	4.7	623
Rural	95.9	94.5	93.0	89.2	94.7	92.3	86.1	90.4	83.9	93.7	90.1	79.2	76.3	71.8	87.4	79.6	80.3	51.1	3.8	336
Ecological zone																				
Mountain	99.3	98.6	98.6	95.3	98.0	97.4	92.6	94.7	92.6	95.3	93.1	87.4	80.4	74.5	94.4	85.6	89.1	60.3	0.7	68
Hill	93.6	92.6	92.2	90.3	93.0	92.2	87.9	90.6	87.2	92.0	91.0	85.3	77.9	73.3	90.6	84.7	84.3	58.7	6.0	301
Terai	95.5	95.3	93.5	87.8	95.5	92.8	83.6	91.7	83.2	93.7	90.5	77.2	77.5	70.7	86.8	78.4	76.7	47.7	4.0	591
Province																				
Province 1	94.3	93.2	93.2	91.9	93.3	89.9	81.5	89.4	84.2	88.9	85.7	75.7	72.4	68.4	91.8	78.7	80.8	45.0	5.7	168
Urban	93.9	93.9	93.9	92.6	93.9	89.9	84.3	90.1	86.1	89.4	86.4	74.8	73.7	71.8	91.5	78.8	83.3	49.6	6.1	106
Rural	95.2	91.9	91.9	90.8	92.3	89.9	76.7	88.0	81.1	88.0	84.5	77.4	70.0	62.6	92.3	78.6	76.7	37.2	4.8	61
Madhesh Province	95.0	94.8	90.8	82.4	95.4	91.6	76.7	89.2	76.5	93.1	88.1	70.4	77.6	68.0	80.9	74.4	67.7	41.9	4.0	269
Urban	95.1	95.2	92.0	84.3	96.0	93.4	76.6	90.5	78.3	92.9	88.8	72.4	80.6	70.2	83.4	77.0	68.9	42.4	4.0	206
Rural	94.8	93.5	86.9	76.0	93.4	85.8	77.2	84.8	70.6	93.5	85.6	63.9	67.8	60.7	72.8	65.7	63.7	40.5	4.0	63
Bagmati Province	90.7	90.1	89.6	87.9	90.1	89.6	89.1	89.1	87.0	89.6	88.6	84.1	75.0	69.9	85.0	81.4	83.4	60.3	9.3	134
Urban	(92.1)	(92.1)	(92.1)	(90.3)	(92.1)	(92.1)	(92.1)	(92.1)	(92.1)	(92.1)	(92.1)	(86.8)	(75.6)	(69.7)	(87.5)	(84.3)	(85.7)	(62.1)	(7.9)	90
Rural	87.8	86.1	84.4	83.1	86.1	84.4	83.1	82.9	76.5	84.5	81.5	78.5	73.9	70.2	79.8	75.5	78.5	56.6	12.2	44
Gandaki Province	100.0	99.0	99.0	99.0	100.0	100.0	96.8	99.0	98.0	99.0	99.0	93.5	89.8	89.8	97.6	95.2	93.4	79.2	0.0	51
Urban	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(96.8)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(87.9)	(87.9)	(100.0)	(94.7)	(96.8)	(82.0)	(0.0)	27
Rural	(100.0)	(97.9)	(97.9)	(97.9)	(100.0)	(100.0)	(96.7)	(97.9)	(95.8)	(97.9)	(97.9)	(86.0)	(92.0)	(92.0)	(94.8)	(95.8)	(89.4)	(75.9)	(0.0)	24
Lumbini Province	96.6	96.6	96.6	90.8	96.6	96.0	92.3	94.6	89.7	96.6	96.1	88.6	83.7	77.1	92.5	85.1	85.3	57.6	3.4	172
Urban	96.2	96.2	96.2	87.9	96.2	95.0	90.6	95.1	88.9	96.2	96.2	90.6	83.4	72.6	92.8	85.4	82.2	56.8	3.8	96
Rural	97.2	97.2	97.2	94.4	97.2	97.2	94.4	94.0	90.8	97.2	95.9	86.1	84.1	82.8	92.1	84.7	89.2	58.6	2.8	76
Karnali Province	96.5	95.4	94.9	92.1	95.5	93.4	87.8	90.8	86.2	93.6	91.8	83.9	74.4	71.2	91.9	83.2	84.3	55.8	2.9	79
Urban	92.9	91.8	90.7	89.6	92.0	89.8	86.1	87.2	82.8	88.1	88.1	83.8	74.0	69.4	92.9	85.8	85.0	60.0	5.9	39
Rural	100.0	98.9	98.9	94.5	98.9	96.9	89.3	94.3	89.4	98.9	95.3	84.1	74.8	72.9	90.9	80.8	83.6	51.7	0.0	40
Sudurpashchim Province	97.2	97.3	97.3	94.5	97.2	97.2	93.8	97.2	93.1	97.8	96.6	88.3	77.9	72.2	95.0	85.7	88.8	54.0	1.5	87
Urban	95.9	96.7	96.7	94.0	96.7	96.7	93.2	96.7	92.1	96.7	96.7	88.8	76.8	72.9	94.1	83.4	87.2	53.6	2.2	59
Rural	100.0	98.5	98.5	95.5	98.4	98.4	95.0	98.4	95.1	100.0	96.5	87.2	80.2	70.8	96.9	90.6	92.1	54.8	0.0	28

Continued…

Table 10—*Continued*

Background characteristic	BCG	DPT-HepB-Hib 1	DPT-HepB-Hib 2	DPT-HepB-Hib 3	OPV[2] 1	OPV[2] 2	OPV[2] 3	fIPV 1	fIPV 2	Pneumococcal 1	Pneumococcal 2	Pneumococcal 3	Rotavirus 1	Rotavirus 2	Measles rubella 1	Japanese encepha-litis	Fully vacci-nated (basic antigens)[1]	Fully vacci-nated (according to national schedule)[2]	No vacci-nations	Number of children
Mother's education																				
No education	92.6	92.0	89.7	79.7	93.2	89.0	76.0	87.8	76.7	89.2	85.3	66.2	76.7	68.6	75.9	68.6	65.8	38.8	6.1	197
Basic education (1–8)	94.5	93.8	92.5	88.6	93.7	91.9	85.4	90.4	83.5	92.5	90.0	81.7	76.7	71.1	88.0	78.9	80.5	50.6	5.3	338
Lower basic education (1–5)	93.8	92.8	90.2	84.2	92.3	89.5	82.7	90.0	83.3	92.1	88.0	79.7	76.0	67.1	84.6	73.6	77.1	47.7	5.9	168
Upper basic education (6–8)	95.2	94.7	94.7	93.1	95.0	94.3	88.0	90.8	83.8	92.9	91.9	83.8	77.4	75.1	91.3	84.2	83.8	53.5	4.8	171
Secondary (9–12)	97.4	97.1	96.8	94.4	97.2	96.3	90.4	94.9	90.5	96.5	95.1	86.3	79.5	74.2	95.1	88.3	86.3	58.8	2.3	385
Lower secondary (9–10)	97.2	97.0	97.0	93.5	96.7	95.3	88.9	94.1	89.5	96.0	94.2	87.5	78.2	71.8	96.1	87.9	85.7	56.6	2.5	234
Higher secondary (11–12)	97.6	97.3	96.3	95.8	97.9	97.9	92.9	96.1	92.0	97.3	96.3	84.5	81.5	78.0	93.6	88.9	87.2	62.2	2.1	150
More than secondary (13 and above)	(91.7)	(91.7)	(87.8)	(87.8)	(91.7)	(88.1)	(88.1)	(88.1)	(88.1)	(88.1)	(84.1)	(84.1)	(76.6)	(69.0)	(91.7)	(87.6)	(84.1)	(64.9)	(8.3)	39
Wealth quintile																				
Lowest	93.5	91.7	90.1	85.2	92.3	88.5	81.5	87.6	79.6	89.7	85.7	76.3	76.1	70.8	85.7	78.5	75.8	50.0	6.0	233
Second	92.6	92.9	90.8	85.6	92.9	91.0	79.9	89.3	83.0	91.7	89.0	77.5	76.9	69.1	84.0	73.1	74.1	45.1	6.7	224
Middle	98.1	97.9	97.5	92.9	97.9	96.7	89.3	93.9	85.5	95.3	93.7	85.2	81.4	73.0	92.9	82.6	85.0	55.1	1.7	180
Fourth	97.0	96.5	96.5	92.3	97.0	95.7	90.3	95.0	90.9	96.5	95.3	81.2	79.4	77.2	92.0	87.5	85.2	57.1	2.6	193
Highest	96.0	96.0	93.6	92.0	96.0	94.9	90.5	94.0	89.4	94.9	92.5	85.4	75.1	68.2	90.2	86.4	82.8	55.9	4.0	129
Total	95.2	94.7	93.4	89.1	94.9	92.9	85.6	91.5	85.1	93.3	90.8	80.5	77.8	71.8	88.5	80.9	80.0	52.1	4.4	959

Note: Children are considered to have received the vaccine if it was either written on the child's vaccination card or reported by the mother. For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination. This table does not present results for children age 24–35 months on their status on fully vaccinated according to national schedule as rotavirus vaccine was introduced in July 2020 and most of these children would not have received this vaccine. Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

BCG = Bacille Calmette-Guérin; DPT = Diphtheria-pertussis-tetanus; HepB = Hepatitis B; Hib = *Haemophilus influenzae* type b; OPV = Oral polio vaccine; fIPV = Fractional inactivated poliomyelitis vaccine

[1] BCG, three doses of DPT-HepB-Hib (pentavalent), three doses of OPV, and one dose of measles rubella

[2] BCG, three doses of DPT-HepB-Hib, three doses of OPV, two doses of fIPV, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, one dose of measles rubella, and one dose of Japanese encephalitis

[3] Vaccination card, booklet, or other home-based record

3.10 CARESEEKING 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. **Table 11** presents information on careseeking for ill children in Nepal. Overall, 1% of children under age 5 showed symptoms of an ARI, 23% exhibited fever, and 10% experienced diarrhea in the 2 weeks preceding the survey (data not shown).

- Advice or treatment was sought for 75% of children with symptoms of ARI in the 2 weeks before the survey (**Table 11**).
- Advice or treatment was sought for 78% of children with fever in the 2 weeks before the survey.
- Advice or treatment was sought for 57% of children with diarrhea in the 2 weeks before the survey.
- Thirty-eight percent (38%) of children with diarrhea received oral rehydration salts (ORS), 18% received zinc supplements, 11% received ORS and zinc supplements, and 10% received ORS, zinc supplements, and continued feeding.

Table 11 Treatment for ARI symptoms, fever, and diarrhea

Among children under age 5 who had symptoms of acute respiratory infection (ARI) or had fever during the 2 weeks preceding the survey, percentage for whom advice or treatment was sought; and among children under age 5 who had diarrhea during the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, percentage given a fluid made from oral rehydration salt (ORS) packet or given pre-packaged ORS fluid, percentage given zinc, percentage given ORS and zinc, and percentage given ORS, zinc, and continued feeding, according to background characteristics, Nepal DHS 2022

	Children with symptoms of ARI[1]		Children with fever		Children with diarrhea					
Background characteristic	Percentage for whom advice or treatment was sought[2]	Number of children	Percentage for whom advice or treatment was sought[2]	Number of children	Percentage for whom advice or treatment was sought[2]	Percentage given fluid from ORS packet or pre-packaged ORS fluid	Percentage given zinc	Percentage given ORS and zinc	Percentage given ORS, zinc, and continued feeding[3]	Number of children
Age in months										
<6	*	9	78.9	96	55.1	7.1	19.2	3.2	3.2	68
6–11	*	9	80.5	118	53.2	25.0	16.6	6.6	4.7	76
12–23	*	13	78.9	233	55.9	37.5	19.2	11.2	11.2	126
24–35	*	11	79.2	259	63.5	54.5	13.0	10.4	10.4	103
36–47	(70.5)	19	76.8	259	60.7	55.9	27.3	21.8	21.8	71
48–59	*	12	74.9	193	52.7	42.8	14.4	10.7	10.7	81
Sex										
Male	(83.5)	35	78.0	624	58.3	41.4	15.9	9.2	8.7	281
Female	(66.3)	38	77.9	535	55.6	35.0	20.3	12.4	12.4	243
Residence										
Urban	(71.4)	43	79.9	765	56.5	39.4	17.3	10.1	9.8	364
Rural	79.3	30	74.3	394	58.3	36.2	19.4	12.1	11.8	161
Ecological zone										
Mountain	*	4	71.3	64	(50.8)	(54.6)	(15.5)	(13.4)	(13.4)	22
Hill	(78.3)	31	69.2	455	53.2	47.3	15.2	12.8	12.5	166
Terai	(69.8)	38	84.9	639	59.4	32.9	19.4	9.5	9.2	336
Province										
Province 1	*	14	76.2	221	48.7	38.0	16.2	9.6	9.6	95
Urban	*	12	76.5	150	(52.0)	(42.3)	(18.9)	(11.1)	(11.1)	71
Rural	*	2	75.4	71	(38.7)	(25.0)	(8.1)	(4.9)	(4.9)	23
Madhesh Province	*	14	88.7	267	56.8	35.9	17.4	7.6	7.6	135
Urban	*	5	88.7	188	59.3	40.4	19.8	8.0	8.0	99
Rural	*	9	88.8	79	(49.9)	(23.5)	(10.8)	(6.4)	(6.4)	36
Bagmati Province	*	11	75.5	174	58.8	39.6	8.6	8.6	8.6	106
Urban	*	8	81.5	137	(60.0)	(38.7)	(7.0)	(7.0)	(7.0)	88
Rural	*	3	53.3	37	(52.8)	(44.0)	(16.3)	(16.3)	(16.3)	18
Gandaki Province	*	5	72.1	86	(48.7)	(23.1)	(2.3)	(0.0)	(0.0)	26
Urban	*	4	72.8	59	*	*	*	*	*	15
Rural	*	1	70.5	27	*	*	*	*	*	10
Lumbini Province	*	7	78.5	198	65.0	36.9	28.8	16.6	15.5	84
Urban	*	2	82.3	112	(52.2)	(33.9)	(22.6)	(14.5)	(12.3)	45
Rural	*	5	73.6	87	(79.7)	(40.4)	(35.9)	(19.1)	(19.1)	39
Karnali Province	(94.1)	14	70.2	104	56.4	53.9	23.8	18.0	18.0	38
Urban	*	6	70.0	52	(54.3)	(47.0)	(24.0)	(16.3)	(16.3)	22
Rural	*	8	70.4	52	(59.2)	(62.8)	(23.6)	(20.2)	(20.2)	17
Sudurpashchim Province	*	9	70.5	109	62.6	43.0	30.3	16.9	15.7	40
Urban	*	6	69.4	67	(67.2)	(44.3)	(36.0)	(19.6)	(19.6)	23
Rural	*	3	72.2	42	(56.3)	(41.3)	(22.6)	(13.2)	(10.4)	17

Continued…

Table 11–*Continued*

Background characteristic	Children with symptoms of ARI[1]		Children with fever		Children with diarrhea					
	Percentage for whom advice or treatment was sought[2]	Number of children	Percentage for whom advice or treatment was sought[2]	Number of children	Percentage for whom advice or treatment was sought[2]	Percentage given fluid from ORS packet or pre-packaged ORS fluid	Percentage given zinc	Percentage given ORS and zinc	Percentage given ORS, zinc, and continued feeding[3]	Number of children
Mother's education										
No education	*	14	82.0	218	59.8	38.1	16.2	7.6	7.2	124
Basic education (1–8)	(74.3)	28	77.0	400	55.0	42.2	19.1	12.1	12.1	191
Lower basic education (1–5)	*	13	77.2	201	54.0	37.6	18.8	11.6	11.6	100
Upper basic education (6–8)	*	14	76.8	199	56.0	47.3	19.4	12.7	12.7	91
Secondary (9–12)	(67.0)	28	77.5	490	54.7	33.5	18.9	12.1	11.6	194
Lower secondary (9–10)	*	17	78.6	290	53.3	28.3	17.9	9.5	9.5	125
Higher secondary (11–12)	*	11	76.0	200	57.1	43.1	20.6	17.0	15.6	68
More than secondary (13 and above)	*	3	(72.8)	50	*	*	*	*	*	16
Wealth quintile										
Lowest	(85.9)	23	68.4	264	49.0	43.5	17.7	14.4	14.0	107
Second	*	15	73.7	261	64.9	41.8	20.9	11.6	11.6	118
Middle	*	15	82.4	249	53.5	34.5	16.8	6.5	6.5	133
Fourth	*	11	88.5	228	56.0	30.7	15.0	8.0	7.0	107
Highest	*	10	79.1	156	(66.2)	(45.3)	(20.4)	(16.7)	(16.7)	59
Total	74.6	73	78.0	1,159	57.1	38.4	17.9	10.7	10.4	524

Note: Figures in parentheses are based on 25–49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Symptoms of ARI include short, rapid breathing which was chest-related and/or difficult breathing which was chest-related.
[2] Includes advice or treatment from the following sources: government sector, private sector, non-government sector, and shop. Excludes advice or treatment from a traditional practitioner.
[3] Continued feeding includes children who were given more, same as usual, or somewhat less food during the diarrhea episode.

3.11 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 is compared with the World Health Organization growth standard reference population (WHO 2006b). The distribution of children in a well-nourished population will be similar to the reference population, while the distribution of children in a poorly nourished population will not. In DHS surveys, the anthropometric indices height-for-age (stunting), weight-for-height (wasting), and weight-for-age (underweight) are used to measure nutritional status in young children. The three indices can be expressed in standard deviation units (*z* scores) from the median of the reference population. Values that are more than two standard deviations below (-2 *SD*) the median of the WHO Child Growth Standards population are used to define undernutrition. Each of the indices provides different information about growth and body composition that can be used to assess nutritional status.

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 who are below minus three standard deviations (-3 *SD*) 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 *z* score is below minus two standard deviations (-2 *SD*) from the median of the reference population are considered thin (wasted). Children whose weight-for-height *z* score is below minus three standard deviations (-3 *SD*) from the median of the reference population 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 weight-for-age *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

In the 2022 NDHS, height and weight measurements were obtained for 2,765 children under age 5; the percentages with valid data for height-for-age, weight-for-height, and weight-for-age were 97%, 97%, and 98%, respectively.

The government of Nepal's target for SDG 2.1.1 is that the prevalence of stunting (height-for-age) among children under 5 years be at or below 29% by 2022, and at or below 15% by 2030. Similarly, the target for SDG 2.2.2, the prevalence of wasting (height-for-weight) among children under 5 years, is 7% by 2022 and 4% by 2030 (National Planning Commission 2020).

Table 12 shows the nutritional status of children under age 5, according to the three anthropometric indices: 25% of children under age 5 are stunted, 8% are wasted, and 19% are underweight. One percent of children under 5 are overweight.

Trends: The prevalence of stunting has declined from 57% in 1996 to 25% in 2022 (**Figure 6**). During this same period, the prevalence of wasting declined from 15% to 8%, and the prevalence of overweight was steady at 1%.

Figure 6 **Trends in nutritional status of children**

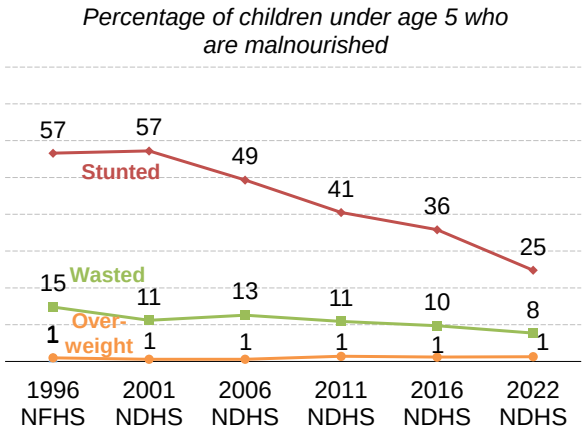


Table 12 Nutritional status of children

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of child growth: height-for-age, weight-for-height, and weight-for-age, according to background characteristics, Nepal DHS 2022

Background characteristic	Height-for-age[1]				Weight-for-height					Weight-for-age			
	Percentage below -3 *SD*	Percentage below -2 *SD*[2]	Mean *z* score (*SD*)	Number of children	Percentage below -3 *SD*	Percentage below -2 *SD*[2]	Percentage above +2 *SD*	Mean *z* score (*SD*)	Number of children	Percentage below -3 *SD*	Percentage below -2 *SD*[2]	Mean *z* score (*SD*)	Number of children
Age in months													
<6	5.8	18.3	-0.8	244	1.2	7.5	6.2	-0.0	240	3.4	11.1	-0.7	245
6–11	2.0	9.9	-0.6	215	1.8	8.7	3.0	-0.5	215	3.0	13.7	-0.7	215
12–23	6.7	28.5	-1.3	507	1.1	10.2	0.6	-0.6	507	3.9	19.9	-1.0	507
24–35	6.3	29.1	-1.4	573	0.6	8.0	0.2	-0.7	574	4.1	23.3	-1.2	583
36–47	6.0	26.8	-1.4	554	0.5	5.4	0.3	-0.5	555	2.3	17.2	-1.1	555
48–59	6.8	23.7	-1.3	537	0.8	7.2	1.1	-0.6	537	4.3	19.5	-1.2	537
0–23	5.4	21.8	-1.0	966	1.3	9.2	2.5	-0.4	962	3.6	16.3	-0.9	967
24–59	6.4	26.6	-1.4	1,664	0.6	6.9	0.5	-0.6	1,666	3.6	20.0	-1.2	1,675
Sex													
Male	5.3	24.7	-1.2	1,368	0.8	8.5	1.6	-0.5	1,366	3.3	16.6	-1.0	1,371
Female	6.8	25.0	-1.3	1,262	1.0	6.9	0.9	-0.6	1,262	3.9	20.9	-1.1	1,272
Mother's interview status													
Interviewed	6.1	25.2	-1.2	2,356	0.9	8.2	1.3	-0.6	2,352	3.8	19.3	-1.1	2,369
Not interviewed, but in household	6.2	21.5	-1.3	214	0.0	3.9	1.1	-0.3	214	2.1	14.5	-1.0	214
Not interviewed, not in household[3]	2.1	19.3	-0.9	60	2.2	3.8	0.9	-0.5	62	0.0	9.8	-0.9	60
Residence													
Urban	4.8	21.5	-1.1	1,707	0.9	7.9	1.5	-0.5	1,706	3.2	16.9	-1.0	1,715
Rural	8.2	31.0	-1.5	923	0.8	7.5	0.9	-0.5	922	4.3	21.9	-1.2	927
Ecological zone													
Mountain	10.2	41.7	-1.7	148	0.5	3.7	1.9	-0.2	148	3.8	19.1	-1.1	149
Hill	5.2	22.4	-1.2	922	0.2	3.9	1.2	-0.3	922	1.7	13.4	-0.9	926
Terai	6.1	24.7	-1.2	1,561	1.3	10.4	1.2	-0.7	1,558	4.7	21.7	-1.2	1,568
Province													
Province 1	4.3	20.0	-1.0	481	0.7	3.8	2.1	-0.4	480	1.7	13.0	-0.9	487
Urban	4.5	20.3	-1.0	303	1.2	3.7	2.8	-0.4	303	1.5	14.1	-0.8	305
Rural	3.9	19.4	-1.1	178	0.0	4.1	0.9	-0.4	177	1.9	11.1	-0.9	182
Madhesh Province	6.6	29.3	-1.4	687	0.2	10.1	0.0	-0.8	687	5.1	26.8	-1.4	691
Urban	6.6	27.2	-1.4	515	0.0	10.5	0.0	-0.8	515	5.2	24.1	-1.4	518
Rural	6.6	35.6	-1.6	172	1.0	9.1	0.0	-0.8	173	4.8	34.8	-1.5	173
Bagmati Province	4.7	17.6	-0.9	417	0.4	4.5	3.2	-0.2	417	2.9	10.5	-0.7	420
Urban	3.9	13.1	-0.7	313	0.5	5.4	3.3	-0.2	313	3.4	9.5	-0.6	316
Rural	7.1	31.1	-1.5	105	0.0	2.0	3.0	-0.2	105	1.4	13.7	-1.0	105
Gandaki Province	6.9	19.7	-1.2	182	0.0	4.0	0.8	-0.4	182	1.6	18.1	-1.0	182
Urban	4.0	15.0	-1.1	113	0.0	3.5	0.0	-0.4	113	1.7	15.2	-0.9	113
Rural	11.7	27.6	-1.4	68	0.0	4.7	2.1	-0.3	68	1.6	22.9	-1.0	68
Lumbini Province	7.4	25.1	-1.3	435	3.3	16.2	0.3	-0.8	431	6.1	23.3	-1.3	435
Urban	2.9	18.9	-1.1	224	3.7	17.8	0.0	-0.8	221	3.7	20.0	-1.2	224
Rural	12.1	31.8	-1.5	211	2.8	14.5	0.6	-0.8	210	8.6	26.9	-1.4	211
Karnali Province	8.6	35.8	-1.6	195	0.6	3.8	0.7	-0.4	195	2.3	17.7	-1.2	195
Urban	5.6	26.6	-1.4	96	1.0	2.9	1.0	-0.4	96	0.5	14.8	-1.1	96
Rural	11.5	44.9	-1.9	98	0.3	4.7	0.4	-0.4	98	4.1	20.5	-1.3	98
Sudurpashchim Province	5.0	28.4	-1.3	233	0.3	5.1	2.4	-0.3	236	2.3	13.9	-1.0	233
Urban	4.7	27.0	-1.3	143	0.4	4.5	3.9	-0.2	144	1.2	11.6	-0.9	143
Rural	5.4	30.7	-1.4	91	0.0	6.1	0.0	-0.4	92	3.9	17.6	-1.1	91
Mother's education[4]													
No education	12.4	36.3	-1.7	549	1.1	10.4	0.2	-0.8	549	8.4	29.7	-1.5	551
Basic education (1–8)	4.5	27.5	-1.3	922	0.5	7.6	1.1	-0.5	921	2.4	19.5	-1.1	924
Lower basic education (1–5)	5.7	28.2	-1.3	470	0.6	8.4	1.0	-0.5	470	2.9	20.2	-1.1	470
Upper basic education (6–8)	3.3	26.8	-1.3	452	0.4	6.8	1.3	-0.5	451	1.9	18.8	-1.1	454
Secondary (9–12)	4.4	17.6	-1.1	982	1.1	6.7	1.7	-0.5	980	2.5	13.7	-0.9	990
Lower secondary (9–10)	5.2	19.3	-1.1	635	1.1	6.7	0.7	-0.6	634	2.7	15.8	-1.0	642
Higher secondary (11–12)	2.9	14.6	-0.9	347	1.0	6.8	3.6	-0.3	346	2.1	9.8	-0.7	349
More than secondary (13 and above)	3.6	12.0	-0.5	117	0.0	6.7	3.1	-0.3	116	0.9	6.9	-0.5	117
Wealth quintile													
Lowest	10.2	36.9	-1.6	626	0.9	5.6	1.0	-0.5	627	4.7	20.4	-1.3	628
Second	5.7	28.4	-1.4	567	0.5	7.8	0.8	-0.6	567	3.9	22.8	-1.2	568
Middle	4.5	22.3	-1.2	547	0.4	8.5	1.7	-0.6	548	2.4	19.2	-1.1	551
Fourth	4.7	17.7	-1.1	479	1.4	8.4	0.5	-0.6	479	3.6	17.0	-1.0	480
Highest	3.6	13.1	-0.7	411	1.4	9.2	2.5	-0.4	407	2.8	11.7	-0.7	416
Total	6.0	24.8	-1.2	2,630	0.9	7.7	1.3	-0.5	2,628	3.6	18.7	-1.1	2,643

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

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

[2] Includes children who are below -3 *SD* from the WHO Child Growth Standards population median

[3] Includes children whose mothers are deceased

[4] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

3.12 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, exclusively breastfeeding for the first 6 months of life, and feeding children a diet that meets a minimum diversity (WHO and UNICEF 2021).

Early initiation of breastfeeding

Percentage of children age 0–23 months who were put to the breast within 1 hour of birth

Sample: Children age 0–23 months

Exclusive breastfeeding under 6 months

Percentage of children age 0–5 months who are fed exclusively with breastmilk during the previous day

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

Minimum dietary diversity 6–23 months

Percentage of children age 6–23 months who are fed a minimum of 5 out of 8 defined food groups during the previous day. The 8 food groups are as follows: breastmilk; grains, roots, and tubers; legumes and nuts; dairy products (milk yogurt, 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 the mother

Key IYCF indicators are presented in **Table 13**.

- Fifty-five percent (55%) of children age 0–23 months engaged in early initiation of breastfeeding.
- Seventy-eight percent (78%) of children age 6–23 months met the minimum dietary diversity requirement.
- Fifty-six percent (56%) of children under 6 months were exclusively breastfeed.

Table 13 Infant and young child feeding (IYCF) indicators

Percentage of children fed according to various IYCF practices, Nepal DHS 2022

Indicator	Indicator numerator and denominator	Value
Early initiation of breastfeeding	Percentage of children age 0–23 months who were put to the breast within 1 hour of birth	55.3
	Number of children age 0–23 months	1,926
Exclusive breastfeeding under 6 months	Percentage of children age 0–5 months who were fed exclusively with breastmilk during the previous day	56.4
	Number of youngest children age 0–5 months living with the mother	527
Minimum dietary diversity 6–23 months	Percentage of children age 6–23 months who were fed foods and beverages from at least 5 out of 8 defined food groups during the previous day	78.2
	Number of youngest children age 6–23 months living with the mother	1,366
Sweet beverage consumption 6–23 months	Percentage of children age 6–23 months who were given a sweet beverage during the previous day	43.3
	Number of youngest children age 6–23 months living with the mother	1,366
Unhealthy food consumption 6–23 months	Percentage of children age 6–23 months fed unhealthy foods during the previous day	68.7
	Number of youngest children age 6–23 months living with the mother	1,366

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

Sweet beverage consumption 6–23 months

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

Unhealthy food consumption 6–23 months

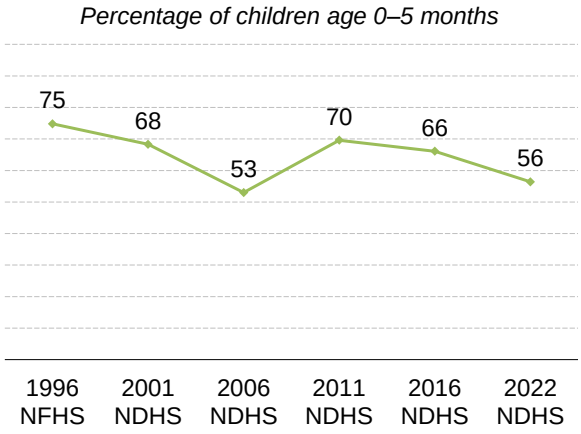
Percentage of children age 6–23 months who were fed sentinel unhealthy foods during the previous day

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

- Forty-three percent (43%) of children age 6–23 months were fed a sweet beverage.
- Sixty-nine percent (69%) of children age 6–23 months consumed unhealthy foods.

Trends: Exclusive breastfeeding among children age 0–5 months has fluctuated widely—declining from 75% in 1996 to 53% in 2006, then rising to 70% in 2011, and declining to 56% in 2022 (**Figure 7**).

Figure 7 **Trends in exclusive breastfeeding**



3.13 ANEMIA

3.13.1 Prevalence of anemia in children

Anemia is a condition that is marked by low levels of hemoglobin in the blood. Causes of anemia include iron deficiency and other nutritional deficiencies, malaria, infections with hookworm or other helminths, chronic infections, and genetic conditions such as sickle cell disease. Anemia is a serious concern for children because it can impair cognitive development and is associated with long-term health and economic consequences. Severe anemia leads to increased mortality (Chaparro and Suchdev 2019).

Anemia in children

Anemia status	Hemoglobin level in grams/deciliter
Anemic	<11.0
Mildly anemic	10.0–10.9
Moderately anemic	7.0–9.9
Severely anemic	<7.0
Not anemic	≥11.0

Note: Hemoglobin levels are adjusted for altitude in enumeration areas above 1,000 meters.

Sample: Children age 6–59 months

Of the 2,504 children age 6–59 months eligible for anemia testing in the survey, 96% were tested.

- As shown in **Table 14**, 43% of children age 6–59 months are anemic, including 25% who are mildly anemic, 18% who are moderately anemic, and less than 1% who are severely anemic.

Trends: The prevalence of anemia among children age 6–59 months has decreased from 48% in 2006 to 43% in 2022. However, the trend has not been consistently downward—in 2016, 53% of children were anemic.

Table 14 Prevalence of anemia in children

Percentage of children age 6–59 months classified as having anemia, according to background characteristics, Nepal DHS 2022

Background characteristic	Anemia status by hemoglobin level				Number of children age 6–59 months
	Any (<11.0 g/dl)	Mild (10.0–10.9 g/dl)	Moderate (7.0–9.9 g/dl)	Severe (<7.0 g/dl)	
Age in months					
6–11	70.0	30.8	38.5	0.7	214
12–23	63.9	32.1	30.6	1.2	493
24–35	43.1	24.5	18.1	0.4	573
36–47	31.2	20.7	10.4	0.2	540
48–59	26.0	19.5	6.5	0.0	524
6–23	65.7	31.7	33.0	1.0	707
24–59	33.7	21.6	11.8	0.2	1,637
Sex					
Male	43.9	26.2	17.3	0.4	1,206
Female	42.7	23.1	19.2	0.5	1,138
Residence					
Urban	43.7	24.3	18.9	0.5	1,507
Rural	42.7	25.4	17.0	0.4	837
Ecological zone					
Mountain	43.2	24.1	18.4	0.7	131
Hill	33.8	20.1	13.3	0.4	826
Terai	49.1	27.4	21.2	0.5	1,387
Province					
Province 1	33.9	19.9	14.0	0.0	422
Urban	33.2	18.9	14.3	0.0	261
Rural	35.1	21.7	13.5	0.0	161
Madhesh Province	50.6	28.0	21.9	0.6	619
Urban	50.5	27.9	21.9	0.7	463
Rural	50.8	28.4	22.0	0.4	156
Bagmati Province	42.5	23.8	18.6	0.0	359
Urban	44.4	25.1	19.3	0.0	268
Rural	36.8	20.1	16.8	0.0	92
Gandaki Province	30.7	19.6	11.1	0.0	168
Urban	25.9	16.3	9.6	0.0	104
Rural	38.5	25.1	13.4	0.0	64
Lumbini Province	48.9	27.7	20.4	0.8	392
Urban	49.8	25.3	23.4	1.0	198
Rural	48.0	30.2	17.3	0.5	194
Karnali Province	39.8	25.0	14.5	0.3	179
Urban	38.3	26.5	11.8	0.0	87
Rural	41.2	23.6	17.1	0.5	93
Sudurpashchim Province	45.4	23.7	20.2	1.6	204
Urban	47.9	23.6	22.4	1.9	126
Rural	41.4	23.7	16.5	1.1	78

Continued…

Table 14—*Continued*

Background characteristic	Anemia status by hemoglobin level				Number of children age 6–59 months
	Any (<11.0 g/dl)	Mild (10.0–10.9 g/dl)	Moderate (7.0–9.9 g/dl)	Severe (<7.0 g/dl)	
Wealth quintile					
Lowest	41.7	22.6	18.4	0.8	574
Second	45.5	24.3	21.2	0.0	513
Middle	45.9	29.8	15.9	0.2	485
Fourth	49.2	29.2	19.0	1.0	424
Highest	32.3	15.9	16.0	0.3	349
Total	43.4	24.7	18.2	0.5	2,344

Note: The table is based on children who stayed in the household on the night before the interview and who were tested for anemia. The prevalence of anemia, based on hemoglobin levels, is adjusted for altitude using CDC formulas (CDC 1998) and cutoffs defined by WHO (WHO 2017). Hemoglobin is measured in grams per deciliter (g/dl) using the HemoCue 201+ device.

3.13.2 Prevalence of anemia in women

Anemia in adults can cause fatigue, lethargy, reduced physical productivity, and poor work performance (Chaparro and Suchdev 2019). Anemia is a major concern among pregnant women because it can lead to increased maternal mortality and poor birth outcomes (Haider et al. 2013).

Hemoglobin levels below which women are considered anemic

Respondents	Hemoglobin level in grams/deciliter
Non-pregnant women age 15–49	Less than 12.0
Pregnant women age 15–49	Less than 11.0

Note: Hemoglobin levels are adjusted for cigarette smoking, and for altitude in enumeration areas above 1,000 meters.

Sample: Women age 15–49

Of the 7,403 women age 15–49 eligible for anemia testing in the survey, 99% were tested.

- As shown in **Table 15**, 34% of women are anemic, including 18% who are mildly anemic, 15% who are moderately anemic, and 1% who are severely anemic.
- Women living in the terai ecological zone are more likely to be anemic (45%) than those living in hills (20%) and mountain (23%) regions. More than half of the women (52%) are anemic in Madhesh Province, which is in the terai ecological zone.

Trends: The prevalence of anemia among women age 15–49 increased from 36% in 2006 to 41% in 2016 and declined to 34% in 2022.

Table 15 Prevalence of anemia in women

Percentage of women age 15–49 with anemia, according to background characteristics and pregnancy status, Nepal DHS 2022

Background characteristic	Non-pregnant / Pregnant	Anemia status by hemoglobin level: Any	Mild	Moderate	Severe	Number of women
		<12.0 g/dl / <11.0 g/dl	11.0–11.9 g/dl / 10.0–10.9 g/dl	8.0–10.9 g/dl / 7.0–9.9 g/dl	<8.0 g/dl / <7.0 g/dl	
Age						
5–19		39.4	21.3	16.2	2.0	1,305
20–29		34.5	20.4	13.4	0.7	2,514
30–39		30.2	15.9	13.4	0.8	2,070
40–49		33.5	16.1	16.5	0.9	1,440
Number of living children						
0		36.0	19.8	14.7	1.5	2,083
1		31.3	19.3	11.2	0.8	1,329
2–3		32.9	18.2	14.1	0.7	2,915
4–5		36.2	15.5	19.4	1.3	833
6+		36.4	14.8	21.0	0.6	169
Maternity status						
Pregnant		32.7	20.2	12.4	0.2	307
Not pregnant[1]		34.0	18.4	14.6	1.0	7,022
Ethnic group						
Brahmin/Chhetri		25.6	15.9	9.2	0.5	2,082
Dalit		36.3	20.2	15.4	0.7	1,108
Janajati		31.4	17.0	13.4	0.9	2,668
Madhesi		48.4	23.9	22.7	1.8	1,157
Muslim		50.0	21.2	25.7	3.0	309
Others		*	*	*	*	5
Residence						
Urban		33.8	17.9	14.9	1.0	5,030
Rural		34.2	19.6	13.7	1.0	2,299
Ecological zone						
Mountain		23.0	12.7	9.4	0.9	380
Hill		20.0	12.7	7.0	0.4	2,950
Terai		45.3	23.3	20.6	1.5	3,999
Province						
Province 1		27.6	15.3	11.4	0.9	1,235
Urban		28.5	14.6	12.9	1.1	807
Rural		25.8	16.8	8.5	0.5	428
Madhesh Province		52.4	25.2	25.3	1.9	1,458
Urban		52.4	24.9	25.8	1.6	1,087
Rural		52.6	26.1	23.8	2.8	371
Bagmati Province		23.1	14.6	8.0	0.5	1,546
Urban		22.6	14.0	7.9	0.7	1,266
Rural		25.1	17.0	8.1	0.0	280
Gandaki Province		25.1	15.8	8.9	0.4	689
Urban		24.1	16.1	7.5	0.6	485
Rural		27.4	15.1	12.3	0.0	203
Lumbini Province		44.4	23.4	19.5	1.5	1,318
Urban		46.0	22.6	21.7	1.6	749
Rural		42.4	24.4	16.7	1.3	569
Karnali Province		21.2	13.3	7.5	0.4	450
Urban		21.8	13.3	8.0	0.5	249
Rural		20.5	13.3	6.8	0.4	201
Sudurpashchim Province		27.3	14.6	12.6	0.2	634
Urban		25.9	14.0	11.8	0.0	387
Rural		29.6	15.4	13.8	0.4	246
Education						
No education		38.3	18.1	19.3	0.9	1,819
Basic education (1–8)		33.5	17.8	14.7	1.1	2,312
Lower basic education (1–5)		32.3	16.1	14.7	1.4	1,163
Upper basic education (6–8)		34.7	19.4	14.6	0.7	1,149
Secondary (9–12)		32.8	19.5	12.2	1.1	2,829
Lower secondary (9–10)		34.5	20.3	13.3	0.9	1,645
Higher secondary (11–12)		30.6	18.4	10.7	1.5	1,185
More than secondary (13 and above)		24.3	16.5	7.8	0.0	368
Wealth quintile						
Lowest		25.7	14.8	10.2	0.7	1,273
Second		35.4	19.1	15.8	0.5	1,464
Middle		41.2	21.1	18.8	1.3	1,486
Fourth		37.1	19.1	16.6	1.4	1,475
Highest		29.7	17.7	11.0	1.0	1,630
Total		34.0	18.4	14.5	1.0	7,329

Note: The prevalence of anemia, based on hemoglobin levels, is adjusted for altitude and for cigarette smoking, if known, using CDC formulas (CDC 1998) and cutoffs defined by WHO (WHO 2017). Hemoglobin is measured in grams per deciliter (g/dl) using the HemoCue 201+ device. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes women who do not know if they are pregnant

3.14 HIV

3.14.1 Knowledge of HIV prevention among young people

Knowledge about HIV prevention

Knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting two major misconceptions about HIV transmission: HIV can be transmitted by mosquito bites and a person can become infected by sharing food with a person who has HIV.

Sample: Women and men age 15–24

Knowledge of how HIV is transmitted is crucial to enabling people to avoid HIV infection. This is especially true for young people, who are often at greater risk because they may have shorter relationships with more partners or may engage in other risky behaviors.

- Sixty-five percent (65%) of young women and 88% of young men know that consistent use of condoms can reduce the risk of getting HIV (**Table 16**).
- Sixty-nine percent (69%) of young women and 85% of young men know that having just one uninfected partner can reduce the chance of getting HIV.
- Only 16% of young women and 27% of young men have a thorough knowledge of HIV prevention methods.

Table 16 Knowledge of HIV prevention methods among young people

Percentage of young women and young men age 15–24 who, in response to prompted questions, say that people can reduce the risk of getting HIV by using condoms every time they have sexual intercourse, and by having one sex partner who is not infected and has no other partners, and percentage who correctly identify both ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission, according to background characteristics, Nepal DHS 2022

	Women age 15–24				Men age 15–24			
Background characteristic	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Percentage with knowledge about HIV prevention[3]	Number of women	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Percentage with knowledge about HIV prevention[3]	Number of men
Age								
15–19	60.8	66.2	14.1	2,643	86.8	83.5	23.4	985
15–17	59.6	65.1	12.5	1,542	86.9	82.6	25.0	591
18–19	62.5	67.8	16.3	1,100	86.7	84.9	21.1	393
20–24	68.2	72.4	17.8	2,637	88.6	85.6	30.7	857
20–22	67.0	71.9	15.7	1,645	87.9	84.1	30.9	551
23–24	70.2	73.2	21.4	993	89.8	88.4	30.2	306
Marital status								
Never married	68.5	74.6	19.4	2,897	88.1	84.9	27.9	1,493
Ever had sex	(92.5)	(91.9)	(21.8)	54	93.2	90.6	30.5	373
Never had sex	68.0	74.2	19.3	2,843	86.4	83.0	27.1	1,120
Ever married	59.7	62.9	11.8	2,383	85.6	82.8	22.0	349
Ethnic group								
Brahmin/Chhetri	79.7	83.9	23.9	1,394	93.9	87.8	36.6	427
Dalit	51.9	58.0	11.2	879	83.6	77.3	17.0	270
Janajati	74.3	79.7	18.6	1,791	90.3	89.6	31.9	635
Madhesi	47.5	51.5	7.4	922	81.8	79.0	15.1	396
Muslim	22.3	24.1	3.1	284	78.3	79.6	22.8	110
Others	*	*	*	9	*	*	*	4
Residence								
Urban	66.0	70.1	17.3	3,595	88.7	85.0	29.0	1,321
Rural	61.4	67.6	13.2	1,685	85.0	83.3	21.1	521
Ecological zone								
Mountain	73.3	80.9	24.9	276	85.6	76.7	13.8	79
Hill	75.3	81.3	18.9	2,010	93.7	92.0	38.6	730
Terai	56.5	60.2	13.2	2,994	83.5	79.8	19.5	1,034
Province								
Province 1	69.0	73.0	15.3	854	84.3	83.1	24.7	312
Urban	72.9	75.1	18.0	530	85.7	83.6	24.2	207
Rural	62.5	69.7	10.9	324	81.5	82.2	25.7	105
Madhesh Province	35.5	39.1	5.1	1,217	77.0	74.6	10.0	430
Urban	35.1	38.8	4.9	912	77.6	75.8	11.4	312
Rural	36.7	40.0	6.0	306	75.3	71.5	6.3	118
Bagmati Province	77.1	81.5	25.9	967	93.4	90.1	38.0	456
Urban	80.0	84.5	27.9	755	94.1	90.1	40.0	397
Rural	66.6	70.8	18.7	212	88.8	90.1	24.5	59
Gandaki Province	75.1	84.3	18.6	463	92.2	91.5	40.4	123
Urban	74.9	82.5	19.7	343	93.5	93.4	43.8	86
Rural	75.7	89.3	15.5	120	89.0	87.3	32.3	37
Lumbini Province	69.7	74.5	15.9	915	91.3	88.8	25.8	277
Urban	73.3	77.6	17.4	538	91.8	85.6	30.1	160
Rural	64.6	70.0	13.8	377	90.6	93.2	19.9	116
Karnali Province	69.1	74.9	13.4	373	91.3	81.6	27.8	104
Urban	73.7	76.3	15.6	209	93.4	86.6	32.0	61
Rural	63.3	73.1	10.6	165	88.2	74.5	21.9	43
Sudurpashchim Province	80.9	85.7	23.8	490	95.2	87.4	36.0	140
Urban	83.3	87.5	24.9	309	95.8	87.3	34.6	98
Rural	76.8	82.7	22.1	182	93.7	87.8	39.3	42
Education								
No education	12.8	15.2	2.2	362	(43.1)	(44.6)	(3.3)	48
Basic education (1–8)	46.0	50.2	6.7	1,676	81.5	75.8	16.8	611
Lower basic education (1–5)	30.4	33.3	3.3	586	74.1	64.9	7.4	169
Upper basic education (6–8)	54.3	59.3	8.5	1,090	84.3	79.9	20.4	441
Secondary (9–12)	79.5	85.1	21.4	3,132	92.7	90.6	32.2	1,139
Lower secondary (9–10)	74.6	81.4	14.9	1,587	91.9	88.3	25.5	570
Higher secondary (11–12)	84.5	88.8	28.1	1,545	93.5	93.0	38.8	569
More than secondary (13 and above)	92.0	90.1	48.1	109	(90.5)	(90.9)	(52.1)	44
Wealth quintile								
Lowest	61.8	68.1	11.7	1,012	85.0	80.8	24.9	278
Second	54.6	59.4	10.5	1,075	83.9	80.2	19.0	365
Middle	59.1	64.9	13.3	1,059	86.2	78.9	18.9	355
Fourth	67.5	72.7	17.7	1,183	88.8	88.2	27.6	449
Highest	80.9	82.5	27.3	951	92.9	91.9	41.4	396
Total 15–24	64.5	69.3	16.0	5,280	87.6	84.5	26.8	1,842

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

[1] Using condoms every time they have sexual intercourse

[2] Partner who has no other partners

[3] Knowledge about HIV prevention means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, knowing that a healthy-looking person can have HIV, and rejecting two common misconceptions about transmission or prevention of HIV: HIV can be transmitted by mosquito bites and a person can become infected by sharing food with a person who has HIV.

3.14.2 Prior HIV testing

HIV testing programs diagnose people living with HIV so that they can be linked to care and access antiretroviral therapy (ART). Knowledge of HIV status helps HIV negative individuals reduce risk and remain negative.

- Overall, 10% of women and 13% of men age 15–49 have ever been tested for HIV (**Table 17.1** and **Table 17.2**, respectively). Almost all of those who were tested received the test results.

- Three percent (3%) of women and 2% of men age 15–49 were tested for HIV in the 12-month period preceding the survey and received the results of the last test they took.

Table 17.1 Coverage of prior HIV testing: Women

Percent distribution of women age 15–49 by HIV testing status and by whether they received the results of the last test, percentage of women ever tested, and percentage of women who were tested in the last 12 months and received the results of the last test, according to background characteristics, Nepal DHS 2022

Background characteristic	Percent distribution of women by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage tested for HIV in the past 12 months and received the results of the last test	Number of women
	Ever tested and received results	Ever tested, did not receive results	Never tested[1]				
Age							
15–24	6.3	0.1	93.5	100.0	6.5	2.4	5,280
15–19	1.6	0.1	98.2	100.0	1.8	1.0	2,643
20–24	11.0	0.1	88.8	100.0	11.2	3.8	2,637
25–29	17.5	0.3	82.2	100.0	17.8	4.7	2,435
30–39	13.9	0.4	85.7	100.0	14.3	2.9	4,169
40–49	5.7	0.3	94.0	100.0	6.0	1.0	2,961
Marital status							
Never married	1.9	0.1	98.0	100.0	2.0	0.4	3,203
Ever had sex	10.9	0.0	89.1	100.0	10.9	4.1	84
Never had sex	1.7	0.1	98.2	100.0	1.8	0.3	3,120
Married or living together	12.5	0.3	87.2	100.0	12.8	3.3	11,180
Divorced/separated/widowed	10.8	0.3	88.9	100.0	11.1	1.8	462
Ethnic group							
Brahmin/Chhetri	15.0	0.3	84.6	100.0	15.4	3.9	4,152
Dalit	8.2	0.4	91.5	100.0	8.5	2.1	2,240
Janajati	9.9	0.3	89.8	100.0	10.2	2.6	5,428
Madhesi	6.0	0.1	93.9	100.0	6.1	1.8	2,333
Muslim	2.7	0.0	97.3	100.0	2.7	0.4	676
Others	*	*	*	100.0	*	*	15
Residence							
Urban	11.3	0.2	88.5	100.0	11.5	3.0	10,178
Rural	7.8	0.3	91.9	100.0	8.1	1.9	4,667
Ecological zone							
Mountain	7.0	0.3	92.7	100.0	7.3	1.6	791
Hill	12.5	0.4	87.1	100.0	12.9	3.5	5,872
Terai	8.8	0.2	91.0	100.0	9.0	2.1	8,182
Province							
Province 1	9.7	0.2	90.1	100.0	9.9	2.3	2,493
Urban	10.5	0.1	89.4	100.0	10.6	2.5	1,640
Rural	8.3	0.3	91.4	100.0	8.6	2.0	853
Madhesh Province	3.6	0.0	96.4	100.0	3.6	1.0	3,010
Urban	3.9	0.0	96.1	100.0	3.9	1.1	2,226
Rural	2.7	0.0	97.3	100.0	2.7	0.9	783
Bagmati Province	14.5	0.2	85.3	100.0	14.7	3.8	3,062
Urban	16.6	0.2	83.3	100.0	16.7	4.4	2,464
Rural	5.8	0.5	93.6	100.0	6.4	1.3	599
Gandaki Province	10.6	0.4	89.0	100.0	11.0	2.9	1,401
Urban	11.7	0.6	87.8	100.0	12.2	3.4	992
Rural	8.1	0.1	91.8	100.0	8.2	1.7	409
Lumbini Province	12.0	0.2	87.8	100.0	12.2	2.9	2,691
Urban	13.0	0.3	86.7	100.0	13.3	3.3	1,553
Rural	10.6	0.2	89.3	100.0	10.7	2.4	1,138
Karnali Province	7.5	0.5	92.1	100.0	7.9	2.4	909
Urban	9.6	0.7	89.8	100.0	10.2	3.5	507
Rural	4.8	0.3	94.9	100.0	5.1	0.9	402
Sudurpashchim Province	13.8	0.7	85.5	100.0	14.5	3.6	1,279
Urban	14.1	0.6	85.4	100.0	14.6	3.2	796
Rural	13.3	1.1	85.7	100.0	14.3	4.2	484
Education							
No education	3.1	0.2	96.7	100.0	3.3	0.7	3,796
Basic education (1–8)	7.6	0.2	92.2	100.0	7.8	1.6	4,595
Lower basic education (1–5)	6.5	0.2	93.3	100.0	6.7	1.4	2,314
Upper basic education (6–8)	8.7	0.2	91.1	100.0	8.9	1.7	2,281
Secondary (9–12)	14.3	0.3	85.4	100.0	14.6	4.0	5,798
Lower secondary (9–10)	12.1	0.3	87.6	100.0	12.4	2.9	3,270
Higher secondary (11–12)	17.1	0.4	82.5	100.0	17.5	5.4	2,529
More than secondary (13 and above)	33.0	0.4	66.6	100.0	33.4	9.6	656
Wealth quintile							
Lowest	6.9	0.3	92.8	100.0	7.2	1.9	2,628
Second	5.8	0.3	93.8	100.0	6.2	1.3	2,857
Middle	8.3	0.2	91.5	100.0	8.5	1.7	3,028
Fourth	10.3	0.2	89.6	100.0	10.4	2.9	3,197
Highest	18.5	0.3	81.2	100.0	18.8	5.1	3,135
Total	10.2	0.3	89.6	100.0	10.4	2.6	14,845

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes respondents who have not heard of HIV or who refused to answer questions on testing

Table 17.2 Coverage of prior HIV testing: Men

Percent distribution of men age 15–49 by HIV testing status and by whether they received the results of the last test, percentage of men ever tested, and percentage of men who were tested in the last 12 months and received the results of the last test, according to background characteristics, Nepal DHS 2022

Background characteristic	Percent distribution of men by testing status and by whether they received the results of the last test			Total	Percentage ever tested	Percentage tested for HIV in the past 12 months and received the results of the last test	Number of men
	Ever tested and received results	Ever tested, did not receive results	Never tested[1]				
Age							
15–24	4.9	0.1	95.1	100.0	4.9	1.4	1,842
15–19	1.7	0.2	98.2	100.0	1.8	0.4	985
20–24	8.5	0.0	91.5	100.0	8.5	2.5	857
25–29	18.5	0.2	81.3	100.0	18.7	3.7	716
30–39	18.8	0.2	81.0	100.0	19.0	2.9	1,255
40–49	14.2	0.4	85.4	100.0	14.6	1.7	1,100
Marital status							
Never married	7.1	0.1	92.8	100.0	7.2	1.9	1,768
Ever had sex	15.6	0.0	84.4	100.0	15.6	4.6	539
Never had sex	3.3	0.1	96.5	100.0	3.5	0.8	1,229
Married or living together	15.6	0.3	84.2	100.0	15.8	2.2	3,101
Divorced/separated/widowed	(14.4)	(0.0)	(85.6)	100.0	(14.4)	(7.7)	44
Ethnic group							
Brahmin/Chhetri	15.7	0.1	84.3	100.0	15.7	3.2	1,232
Dalit	9.1	0.4	90.5	100.0	9.5	1.5	658
Janajati	13.5	0.4	86.2	100.0	13.8	2.2	1,869
Madhesi	9.4	0.0	90.6	100.0	9.4	1.6	917
Muslim	9.0	0.0	91.0	100.0	9.0	0.4	228
Others	*	*	*	100.0	*	*	8
Residence							
Urban	14.0	0.2	85.8	100.0	14.2	2.5	3,462
Rural	8.9	0.1	91.0	100.0	9.0	1.4	1,451
Ecological zone							
Mountain	9.8	0.3	89.9	100.0	10.1	0.4	255
Hill	14.0	0.2	85.9	100.0	14.1	2.6	1,973
Terai	11.7	0.2	88.1	100.0	11.9	2.0	2,685
Province							
Province 1	9.5	0.0	90.5	100.0	9.5	1.2	882
Urban	11.0	0.0	89.0	100.0	11.0	1.4	604
Rural	6.2	0.0	93.8	100.0	6.2	0.9	278
Madhesh Province	8.4	0.0	91.6	100.0	8.4	1.4	997
Urban	9.0	0.0	91.0	100.0	9.0	1.3	722
Rural	6.8	0.0	93.2	100.0	6.8	1.5	275
Bagmati Province	14.1	0.2	85.6	100.0	14.4	3.1	1,214
Urban	16.0	0.3	83.7	100.0	16.3	3.5	1,016
Rural	4.8	0.0	95.2	100.0	4.8	1.2	198
Gandaki Province	18.9	0.5	80.6	100.0	19.4	4.7	387
Urban	21.1	0.6	78.3	100.0	21.7	5.3	264
Rural	14.0	0.4	85.6	100.0	14.4	3.2	123
Lumbini Province	14.1	0.5	85.5	100.0	14.5	1.8	812
Urban	14.6	0.6	84.8	100.0	15.2	2.3	468
Rural	13.3	0.3	86.4	100.0	13.6	1.2	344
Karnali Province	10.1	0.1	89.8	100.0	10.2	1.3	266
Urban	13.0	0.0	87.0	100.0	13.0	1.1	154
Rural	6.1	0.2	93.7	100.0	6.3	1.5	113
Sudurpashchim Province	16.9	0.4	82.7	100.0	17.3	2.1	355
Urban	19.8	0.6	79.6	100.0	20.4	2.8	233
Rural	11.4	0.0	88.6	100.0	11.4	0.9	122
Education							
No education	4.3	0.2	95.4	100.0	4.6	0.0	393
Basic education (1–8)	9.9	0.2	89.9	100.0	10.1	2.0	1,898
Lower basic education (1–5)	10.0	0.0	90.0	100.0	10.0	2.5	891
Upper basic education (6–8)	9.8	0.4	89.8	100.0	10.2	1.6	1,007
Secondary (9–12)	14.1	0.3	85.6	100.0	14.4	2.3	2,244
Lower secondary (9–10)	12.7	0.3	87.0	100.0	13.0	1.5	1,284
Higher secondary (11–12)	16.0	0.2	83.8	100.0	16.2	3.4	959
More than secondary (13 and above)	24.4	0.0	75.6	100.0	24.4	4.2	377
Wealth quintile							
Lowest	6.7	0.3	93.0	100.0	7.0	1.2	751
Second	7.7	0.1	92.2	100.0	7.8	1.2	933
Middle	9.5	0.1	90.4	100.0	9.6	1.9	957
Fourth	14.4	0.2	85.4	100.0	14.6	2.1	1,135
Highest	20.8	0.4	78.8	100.0	21.2	4.0	1,137
Total 15–49	12.5	0.2	87.3	100.0	12.7	2.2	4,913

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

[1] Includes respondents who have not heard of HIV or who refused to answer questions on testing

3.15 DISABILITY

Functional domains

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

Sample: de facto household population age 5 and above

The 2022 NDHS included The DHS Program's Disability Module, a series of questions based on the Washington Group on Disability Statistics (WG) Short Set of questions, which in turn are based on the framework of the World Health Organization's International Classification of Functioning, Disability, and Health. The questions address six core functional domains and provide basic information on disability comparable to that being collected worldwide via the WG disability tools.

Respondents to the Household Questionnaire provided information for all the household members and visitors on disability status for each of the functional domains: whether they had no difficulty, some difficulty, a lot of difficulty, or no ability at all in the specified functional domain. **Table 18** shows the results for the de facto household population age 5 and older.

- Overall, 71% of the de facto household population age 5 or older have no difficulty in any of the functional domains.
- Among the de facto household population age 5 or older 23% have some difficulty in at least one functional domain, 5% have a lot of difficulty, and 1% cannot do at least one domain.
- Six percent (6%) of the de facto household members age 5 or older have a lot of difficulty or cannot function at all in at least one of the functional domains.
- Among the de facto household population age 5 and older, the most common disability reported is difficulty seeing (15%) followed by difficulty walking or climbing steps (12%).

Table 18 Disability by domain and age

Percent distribution of de facto household population age 5 and over by degree of difficulty in functioning according to domain, and percent distribution by the highest degree of difficulty in functioning in at least one domain by age, Nepal DHS 2022

	Degree of difficulty						
Domain and age	No difficulty	Some difficulty	A lot of difficulty	Cannot do at all	Total	A lot of difficulty, or cannot do at all	Number of persons
Domain							
Difficulty seeing	84.5	13.5	1.8	0.1	100.0	1.9	24,529
Difficulty hearing	92.3	6.2	1.3	0.2	100.0	1.5	24,529
Difficulty communicating	96.7	2.4	0.6	0.4	100.0	0.9	24,529
Difficulty remembering or concentrating	90.9	7.8	1.0	0.3	100.0	1.3	24,529
Difficulty walking or climbing steps	88.3	8.6	2.6	0.5	100.0	3.1	24,529
Difficulty washing all over or dressing	96.1	2.5	0.9	0.5	100.0	1.4	24,529
Difficulty in at least one domain[1]							
5–9	81.4	14.5	3.1	1.0	100.0	4.1	2,704
10–14	91.2	7.1	1.3	0.4	100.0	1.7	2,891
15–19	89.8	8.6	0.9	0.7	100.0	1.5	2,517
20–29	88.8	9.6	0.8	0.7	100.0	1.5	4,358
30–39	78.4	19.4	1.7	0.6	100.0	2.2	3,588
40–49	59.3	36.4	3.7	0.6	100.0	4.3	2,777
50–59	47.0	43.3	8.6	1.0	100.0	9.6	2,680
60+	25.7	47.2	23.9	3.2	100.0	27.1	3,014
Age 15 and over	66.7	26.0	6.2	1.1	100.0	7.3	18,934
Total	71.2	22.5	5.3	1.0	100.0	6.3	24,529

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

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