Nepal

2015 Health Facility Survey (NHFS)

Key Findings

Government of Nepal
Ministry of Health
2016

This report presents findings of the 2015 Nepal Health Facility Survey (2015 NHFS). The survey received funding from the United States Agency for International Development (USAID), the UK Department for International Development (DFID), and The World Health Organization (WHO). ICF provided technical assistance through the worldwide DHS Program, which assists countries in the collection of data to monitor and evaluate population, health, and nutrition programs. The Nepal Health Sector Support Program (NHSSP), a DFID-funded technical assistance program supporting MoH to implement the second Nepal Health Sector Program (NHSP-2), also provided technical assistance to the survey. New ERA, a private research firm, implemented the survey.

Additional information about the 2015 NHFS can be obtained from the Nepal Ministry of Health, Ramshah Path, Kathmandu; Telephone: +977-1-4262543/4262802; Internet: www.mohp.gov.np; and New ERA, Rudramati Marg, Kalopul, P.O. Box 722, Kathmandu 44600, Nepal; Telephone: +977-1-4413603; E-mail: info@newera.com.np; Internet: www.newera.com.np.

Information about The DHS Program can be obtained from ICF, 530 Gaither Road, Suite 500, Rockville, MD 20850 USA; Telephone: 301.407.6500; Fax: 301.407.6501; E-mail: reports@DHSprogram.com;
Internet: www.DHSprogram.com.

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Introduction

The 2015 Nepal Health Facility Survey (NHFS) is the first comprehensive assessment of health facilities in Nepal that harmonizes various health facility surveys among the Ministry of Health and health development partners. The survey was designed to collect information from health facilities in the country on the delivery of health care services and to examine the preparedness of facilities to provide quality health services in child health, family planning, maternal and newborn care, HIV, sexually transmitted infections, non-communicable diseases, and tuberculosis.

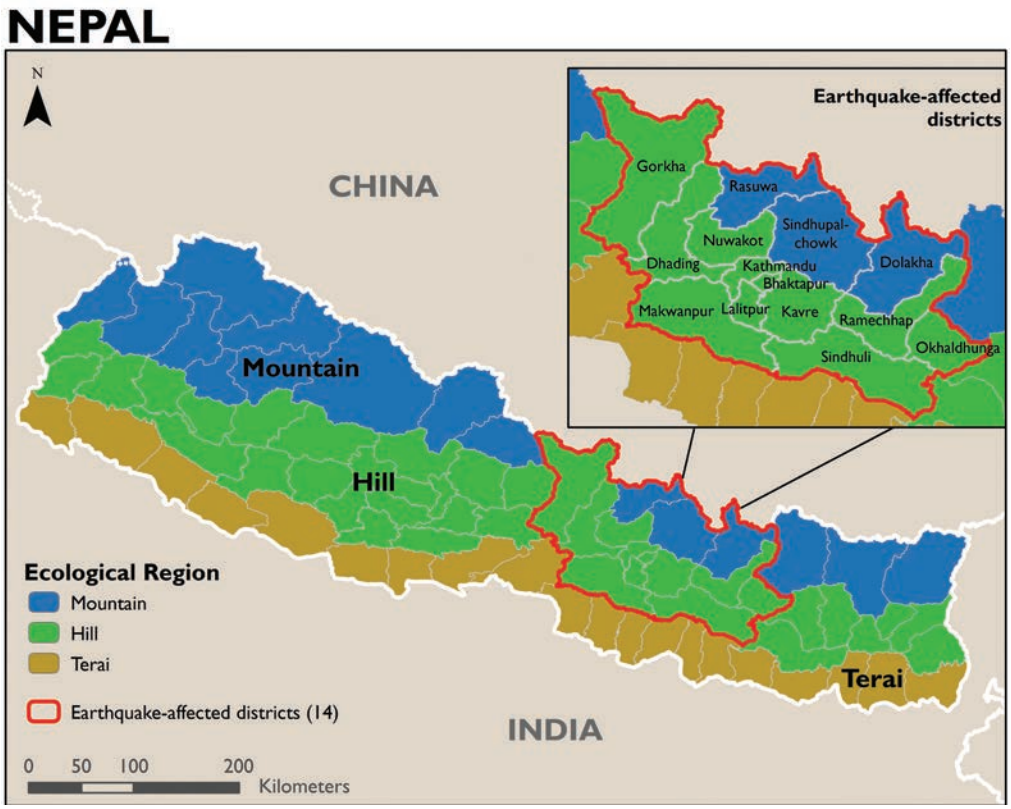
The 2015 NHFS used five types of questionnaires:

- Facility inventory questionnaire
- Health provider interview questionnaire
- Observation protocol of consultations and examination of sick children, antenatal care, and family planning
- Client exit interview questionnaires for women attending antenatal care, family planning clients, postpartum women, and caretakers of sick children
- Health Facility Operation and Management Committee/Hospital Development Committee member interview questionnaire

The 2015 NHFS sampled 1,000 facilities throughout Nepal. Of the 1,000 formal health facilities in Nepal that were visited during the assessment, 37 facilities were permanently closed, unreachable, duplicates of other facilities, or refused to participate. Data were successfully collected from a total of 963 facilities. The results of the survey are presented by facility type, managing authority, for three ecological regions, and 14 highly earthquake-affected districts.

Number of Facilities Surveyed in the 2015 NHFS	*Weighted*	*Unweighted*
Facility Type		
Zonal and above hospitals	6	27
District-level hospitals	16	76
Private hospitals	70	144
Primary health care centers (PHCCs)	42	200
Health posts (HPs)	775	423
Urban health centers (UHCs)	32	45
HIV testing and counseling (HTCs)	23	48
Managing Authority		
Private	871	771
Public	92	192
Ecological Region		
Mountain	118	135
Hill	492	457
Terai	353	371
Earthquake-affected Districts (14)		
Earthquake-affected districts	200	210
National Average	**963**	**963**

The NHFS interviewed 4,057 health service providers who were present in the facility on the day of the survey. Overall, 43% were paramedics, 39% were nurses, 9% were doctors, and 9% were technicians, and 1% were other clinical providers. For the observation component of the survey, antenatal care, family planning, and curative care for sick children clients were selected at each service site on the day of the survey. Overall, 2,186 sick children, 772 family planning clients, and 1,509 antenatal care clients were observed.



Understanding the 2015 Nepal HFS

This legend provides iconic description of the health service areas, if observations or client exit interviews were conducted, and number of facilities offering the type of service.

Observations of Consultations
Client Exit Interview
N = Number of Facilities Offering Service

All Health Facilities
N=963

Child Health

- Curative Care N=934
- Child Growth Monitoring N=872
- Child Vaccination N=816

Family Planning

- Family Planning N=919

Maternal Health

Antenatal Care

- Antenatal Care N=919
- Prevention of mother-to-child-transmission of HIV N=167

Delivery and Newborn Care

- Delivery and Newborn Care N=457

HIV/AIDS

- HIV Testing N=57
- HIV Care and Support N=35
- Antiretroviral Therapy N=15
- Sexually Transmitted Infection Diagnosis or Treatment N=692

Malaria

- Malaria Diagnosis or Treatment N=481

Non-communicable Diseases

- Diabetes N=198
- Cardiovascular Disease N=687
- Chronic Respiratory Disease N=885

Tuberculosis

- Tuberculosis Diagnosis or Treatment and/or Treatment Follow Up N=882

This report is organized by service area, but the same basic topics are covered in each section. Use the icons below to identify the main results within each section.

- **Availability of services, medication, and supplies**
- **Guidelines and equipment for services**
- **Infection control**
- **Laboratory diagnostic or testing capacity**
- **Training and supportive management**

Health Facilities in Nepal

Availability of Services

The availability of a basic package of health services and frequency of these services contribute to client utilization of services at a health facility. However, if a facility does not offer all services, it should not be assumed that the facility is substandard. More than 6 in 10 healthcare facilities (62%) offer all basic client services including curative care for sick children, child growth monitoring, child vaccination, any modern method of family planning (FP), antenatal care (ANC), and services for sexually-transmitted infections (STIs). The availability of all basic services is much higher in public facilities (65%) than in private facilities (25%). Availability of all basic client services is higher in Hill ecological region (70%) than in Terai (54%) or Mountain (53%).

Service availability varies by type of facility. For example, the availability of child growth monitoring is above 90% in HPs, PHCCs and district-level hospitals, compared to half of private hospitals (54%). Similarly, private hospitals are least likely to offer child vaccination services. All district-level hospitals, PHCCs, HPs, and UHCs offer any modern method of family planning, while only 7 in 10 private hospitals offer such service. Most facility types offer ANC services. More than 90% of zonal and above hospitals, district-level hospitals, private hospitals, and PHCCs offer services for STIs. PHCCs are most likely to offer all basic client services (91%).

Basic Amenities

Many health facilities in Nepal lack basic client amenities. Half of facilities lack regular electricity. Four in five facilities lack communication equipment. However, more than 80% of facilities have a client latrine (82%) and an improved water source (81%). In the majority of facilities, consultations may take place with visual and auditory privacy (79%). In addition, 59% of facilities have emergency transport. Overall, only 11% of facilities have all amenities (excluding computer with internet). Private hospitals are most likely to have all amenities (78%).

Infection Control

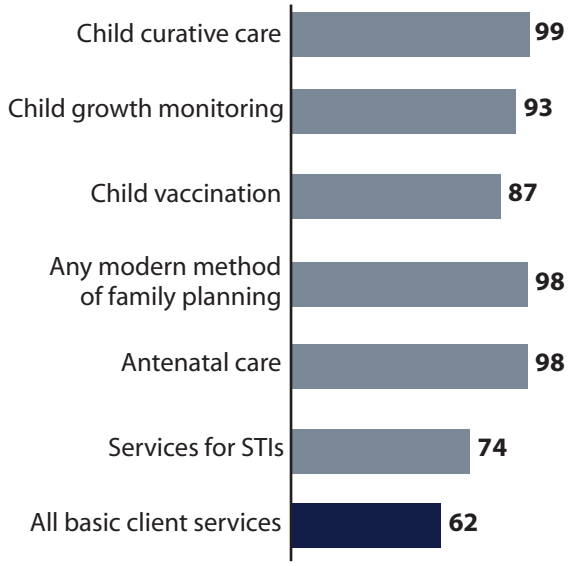
Eight in 10 facilities have any equipment for sterilization. The majority of zonal and above, district-level, and private hospitals have sterilization equipment. Eighty percent of facilities have latex gloves, while only 19% have medical masks. A little more than half of facilities have soap and running water or an alcohol-based hand disinfectant (56%).

NHFS Definition:

Available: Only observed items are classified as available. Items that are reported as being available but are not observed or seen by the interviewers are not considered available.

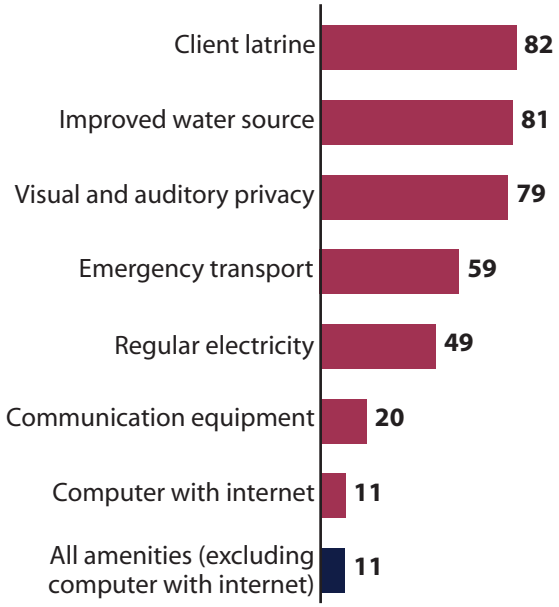
Availability of Basic Client Services

Among all facilities excluding HTCs (N=940), percent offering indicated basic client services



Availability of Basic Amenities for Client Services

Among all facilities, percent with indicated amenities considered basic for quality services (N=963)



Child Health

Availability of Child Health Services

All health facilities offer outpatient curative care for sick children, 93% offer growth monitoring services, and 87% offer child vaccination services. Eighty-five percent of health facilities offer all three basic child health services. The availability of all three basic child health services is higher in PHCCs (92%) than in UHCs (71%). Among managing authorities, nearly 90% of public facilities offer all three basic child health services compared to 26% of private facilities. Nearly 90% of health facilities in earthquake-affected districts offer all three basic child health services.

Guidelines and Equipment for Child Curative Care Services

Among health facilities offering outpatient curative care for sick children (N=934), 99% offer these services five days or more a week. Six in 10 facilities have visible Integrated Management of Childhood Illness (IMCI) or Integrated Management of Neonatal and Childhood Illness (IMNCI) guidelines. None of the facilities had all guidelines, trained staff, or necessary equipment such as weighing scales, thermometers, stethoscope, or child health cards.

Management Practices and Training

Of 3,296 interviewed providers of child health services, only 3 in 10 received any in-service training related to child health during the two years before the survey. Seven in ten where supervised in the six months before the survey.

Among child health providers, in-service training within the last two years covered a range of topics including National Immunization Program (NIP) or cold chain monitoring (11%), IMCI/IMNCI (11%), infant and young child feeding (IYCF) (7%), performing malaria rapid diagnostic testing (6%), essential nutrition action (5%), or iron deficiency disorder (2%).

Infection Control

Facilities offering outpatient curative care services for sick children have individual items for infection control. Child health facilities are more likely to have a safety box (81%) or latex gloves (79%). Fewer have soap and running water or else alcohol-based hand disinfectant (54%). Less than 1% of health facilities have all infection prevention items.

Laboratory Diagnostic Capacity

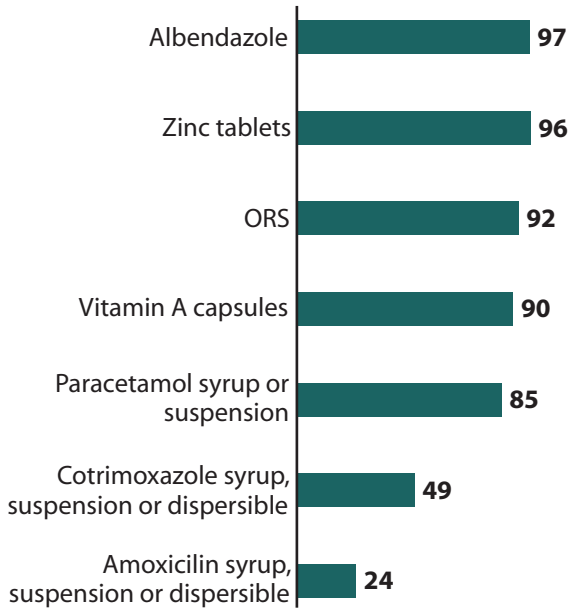
Among facilities offering outpatient curative care for sick children (N=934), 15% have the ability to measure hemoglobin to assess anemia, 22% can diagnose malaria, and 11% have the capacity to do a stool microscopy. Overall, less than 1 in 10 facilities have the diagnostic capacity to assess all three tests. Not surprisingly, hospitals (zonal and above, district-level, and private) have the highest diagnostic capacity for all three tests compared to other facility types. Private facilities have more laboratory diagnostic capacity than public facilities .

Availability of Essential Medicines

Nine in ten health facilities offering outpatient curative care services for sick children have Albendazole (97%) for worm infestation, zinc tablets (96%), oral rehydration salts (ORS) (92%) for dehydration, and vitamin A capsules (90%). Eighty-five percent of facilities have paracetamol, while half have co-trimoxazole. Only 24% of facilities have amoxicillin on the day of the survey.

Availability of Essential Medicines and Commodities

Among facilities offering outpatient curative care services for sick children (N=934), percent where essential medicines were observed to be available in the facility on the day of the survey



Assessment, Examination, and Treatment of Sick Children

A total of 2,186 sick child consultations were observed. Providers checked for all three major danger signs in only 2% of consultations: ability to eat or drink anything (22%), vomiting (21%), and convulsions (5%). Providers assessed all three main symptoms in one-quarter of observed consultations: fever (77%), cough/difficulty breathing (56%), and diarrhea (41%). Various aspects of the physical examinations were also missing—only 7% of sick children were assessed for dehydration. Only 24% of sick children had their respiratory rate assessed, and 56% of sick children had their temperature taken.

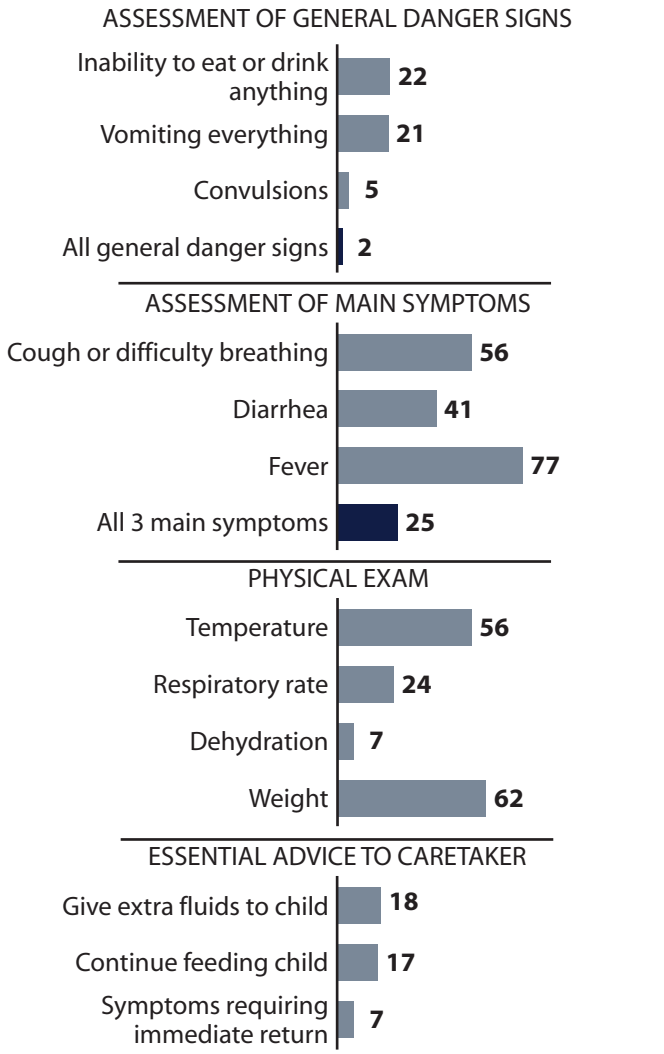
Caretakers of sick children must be informed how to take care of their children once they return home. Few providers in Nepal are advising caretakers how to increase fluids (18%), why to continue feeding the child (17%), and what symptoms require a return visit (7%).

Treatment by Diagnosis

Providers should follow IMCI/IMNCI guidelines for diagnosis and treatment of specific illnesses. Nearly 9 in 10 children with fever are given a medication for symptomatic treatment, such as a fever reducer. Almost half of children with fever were given an oral antibiotic. Half of children with diarrhea and no dehydration were given an oral antibiotic, compared to 35% of children with dehydration. Among children with diarrhea, those with dehydration were more likely to receive oral rehydration (ORS) and zinc (76%), compared to children without dehydration (42%). A majority of children with pneumonia were given oral antibiotics (86%), as were 43% of children with cough or other upper respiratory problems. This finding may indicate overuse of antibiotics, which can result in antibiotic resistance.

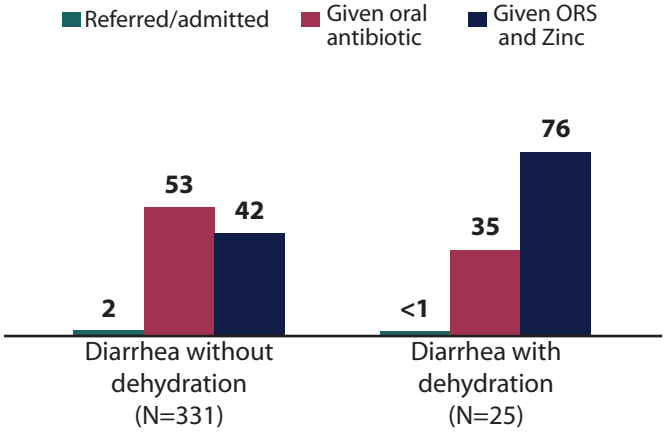
Observed Assessments and Examinations

Among observed consultations with sick children (N=2,186), percent that include:



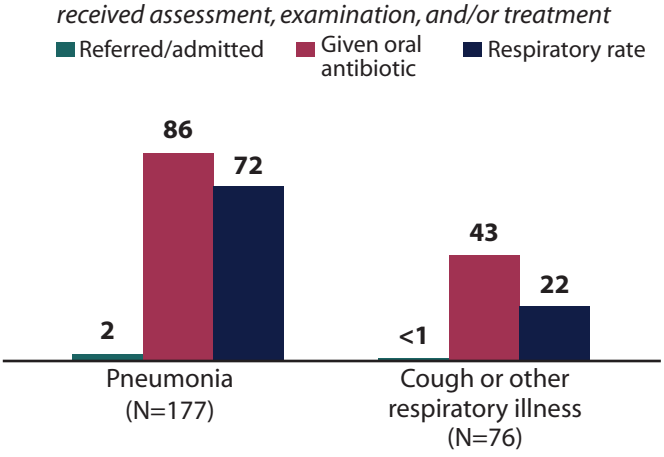
Treatment of Children with Diarrhea

Among observed children, percent diagnosed with illness who received assessment, examination, and/or treatment



Treatment of Children with Respiratory Illness

Among observed children, percent diagnosed with illness who received assessment, examination, and/or treatment



Child Health

Frequency and Availability of Vaccines

In Nepal, six vaccines—BCG, pentavalent, polio, measles-rubella, pneumococcal, and Japanese encephalitis—are routinely offered by health facilities. About 8 in 10 facilities offer each vaccine 1-2 days per month. Facilities are less likely to offer each of the six routine vaccines more than 5 days per month. UHCs, HPs, and PHCCs most frequently offer vaccination services 1-2 days per month. Nearly two-thirds of zonal and above hospitals offer the six routine vaccinations more than 5 days per month.

Overall, 10% of facilities routinely store vaccines compared to 71% of facilities that receive vaccines from a higher center and store for a short duration. District-hospitals, zonal and above hospitals, private hospitals, and PHCCs are more likely to routinely store vaccines while HPs and UHCs are more likely to receive and store vaccines for a short duration. Among managing authority, private facilities are more likely to routinely store vaccines, while public facilities are more likely to received all vaccine from a higher center and store for a short period.

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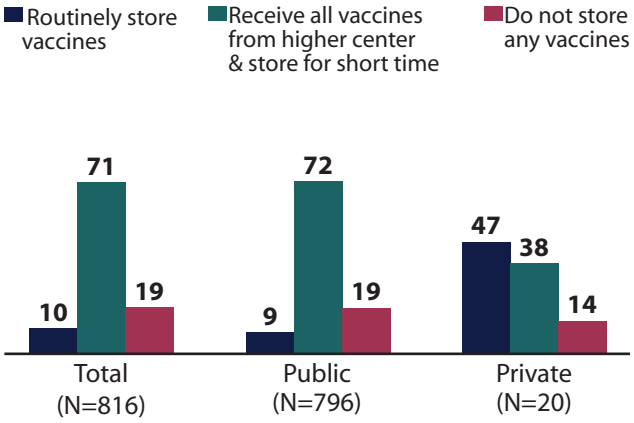
Vaccine Storage by Managing Authority

Among facilities offering child vaccination services (N=816), percent that:



Guidelines and Equipment for Vaccination Services

Among all health facilities offering child vaccination services (N=816), 55% have the National immunization manual for child vaccinations or other guidelines for vaccinations. Three-quarters have a vaccine carrier with ice pack. About 90% of facilities have a safety box or syringes and needles. Less than 10% of facilities have all items for vaccination services.

Infection Control

Among facilities offering child vaccination services (N=816), the availability of items for infection control varies. More than 80% of facilities have a safety box or latex gloves. Only half of facilities have soap and running water or else alcohol-based disinfectant.

Family Planning

Availability of Family Planning (FP) Services

Overall, 98% of all health facilities offer any modern method of FP such as the pill, Progestin-only injectables, implants, intrauterine contraceptive devices (IUCD), male condom, or female or male sterilization. The availability of any modern method of FP is much higher in public facilities compared to private facilities (>99% vs. 70%). Of the health facilities offering any modern method of FP services (N=919), all offer any FP services five or more days a week.

Family Planning Methods Provided

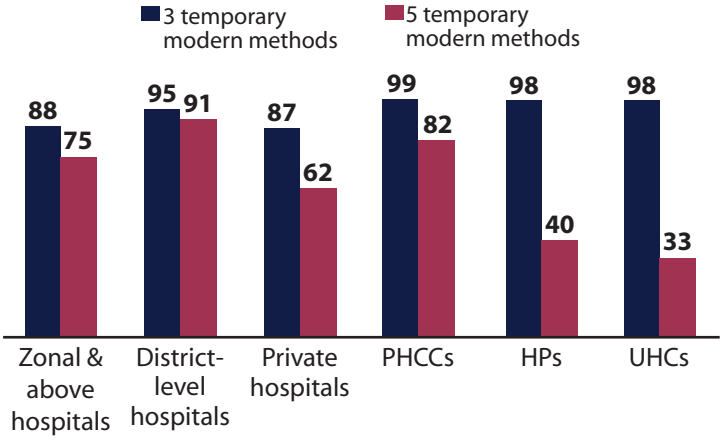
The majority of facilities offering any modern method of FP (N=919) provide the male condom (97%), Progestin-only injectables (95%), and combined oral contraceptive pills (95%). The IUCD (21%), implant (20%), tubal ligation (3%), and vasectomy (2%) are the least provided FP methods. Provision of IUCD and implant requires a higher level of skill and more developed infrastructure that may not be available. Emergency contraception is only provided at 1 in 10 facilities.

Family Planning Services Offered

The majority of facilities offering any modern method of FP (N=919) provide, prescribe, or counsel clients on the combined oral contraceptive pill, male condoms, and Progestin-only injectables. Less than half of facilities provide, prescribe, or counsel clients on implants, male sterilization, female sterilization, or emergency contraception. More than 90% of district-level hospitals, PHCCs, HPs, and UHCs offer three temporary modern methods. District-level hospitals are most likely to offer five temporary modern methods.

Family Planning Services Offered by Facility Type

Among facilities offering any modern method of FP (N=919), percent that provide, prescribe, or counsel clients



NHFS Definitions:

Provided: Facility reports that it stocks the method and makes it available to clients when they visit the facility. These clients can obtain the method without leaving the facility.

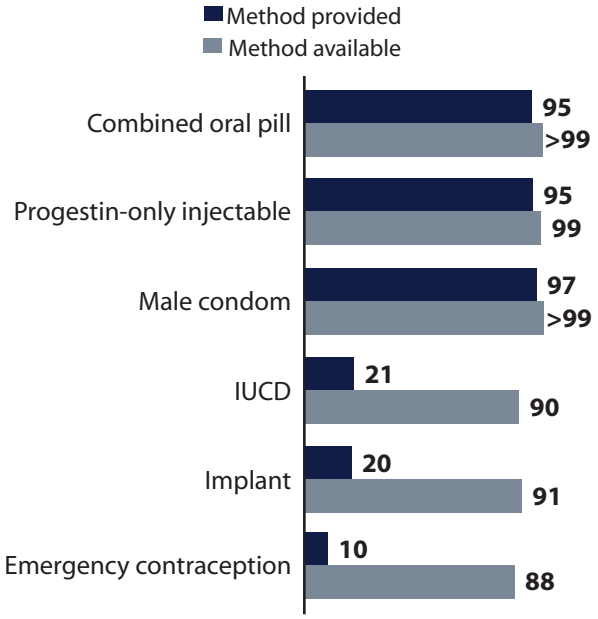
Offer: Facility provides the method, prescribes the method for clients to obtain elsewhere, or counsels clients on the method without actually making the method available to the client in the facility.

Availability of Family Planning Commodities

While many facilities report providing FP methods, the majority had the methods available on the day of the survey. Male condoms, injectables, and pills are among the most widely available methods in facilities. More than 90% of private hospitals, HPs, and UHCs had every method available on the day of the survey. Overall, 98% of facilities in earthquake-affected districts had every method available on the day of the survey.

Availability of Provided Family Planning Commodities

Among facilities offering any modern method of family planning, percent of facilities that provide FP methods and had FP methods available on the day of the survey



Family Planning

Observation of Family Planning Consultations

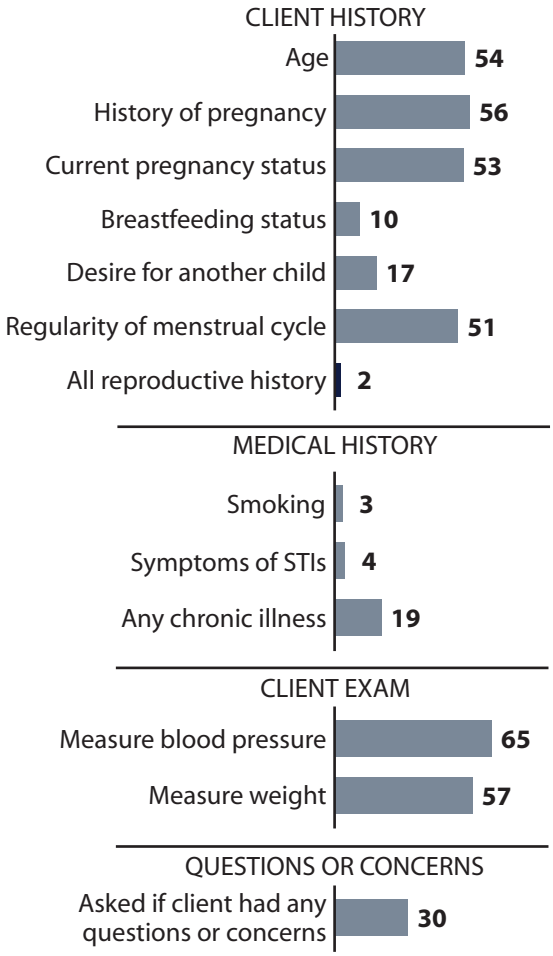
The NHFS observed FP consultations to assess how closely providers adhered to nationally recognized standards for quality service provision. Interviewers observed 768 FP consultations; 19% of the consultations were new FP clients and 81% of observed consultations were continuing FP clients.

According to the NHFS, FP counseling of new and continuing clients does not include all recommended elements, and providers miss opportunities to screen for STIs and chronic illnesses. Among consultations with new clients (N=147), only 2% had all elements of reproductive history (age, pregnancy history, current pregnancy status, the desired timing for the next or desire for another child, breastfeeding status, and regularity of menstrual cycle) as part of their consultation. Among new FP clients, 19% were asked about any chronic illness, 4% symptoms of STIs, and 3% smoking history, which is of major concern. Providers were most likely to measure blood pressure (65%) and weigh clients (57%).

One-third of FP consultations with all female FP clients (N=768) included discussions of client concerns about her contraceptive method; fewer included discussions about side effects (23%). Merely 1% of consultations had any discussion related to STIs. Lack of privacy may account for this. Only 6% of consultations took place under conditions of privacy and confidentiality.

Observed Elements of Client History for First-visit Family Planning Clients

Among observed consultations with first-visit FP clients (N=147), percent that include:



Client Knowledge about Contraceptive Method

Observed FP clients participated in exit interviews to assess their knowledge about their method. Nearly all clients who use the pill (97%) were able to correctly answer the question, "How often do you take the pill?" Almost all Progestin-only injectable users (96%) correctly answered the question, "How long does the injection provide protection against pregnancy?" Three-quarters of IUCD users correctly answered the question, "What can you do to make sure that your IUCD is in place?"

Infection Control

Facilities are more likely to have a safety box (87%) and latex gloves (86%) than other items. More than half of facilities have soap and running water or else alcohol-based hand disinfectant. The majority of facilities (>99%) do not have all infection prevention items.

Guidelines and Basic Equipment for Family Planning Services

Key items for the provision of quality FP services are missing from many health facilities in Nepal. Only 7% have a pelvic model for the IUCD and 10% have a model for showing condom use. More than 1 in 10 facilities have guidelines on FP (13%). Less than half of facilities have an examination light. Blood pressure apparatus (87%) and an examination bed or table (84%) are widely available.

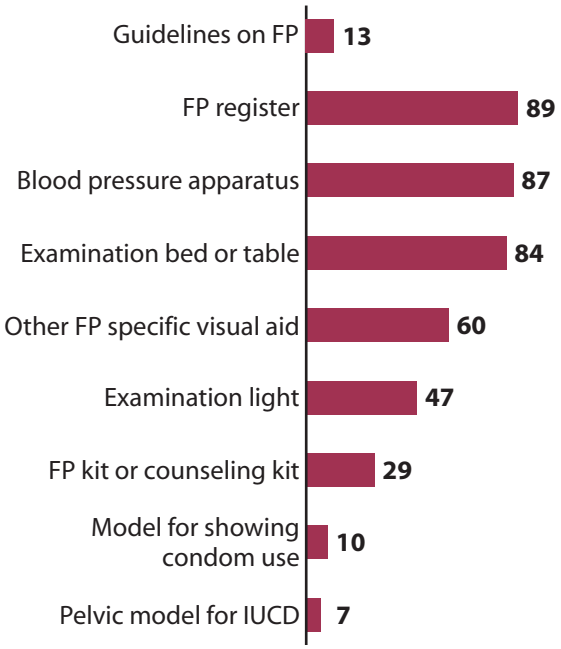
Management Practices and Training

The NHFS collected data on training and management of 2,928 FP service providers. Only 16% of FP providers received in-service training related to FP during the two years before the survey. Nearly three-quarters of FP personnel had personal supervision or technical support from a facility-based supervisor or visiting supervisor during the six months before the survey.

Among FP providers, in-service training within the last two years covered a range of topics including counseling for FP (11%), insertion/removal of implant (5%), and insertion/removal of IUCD (4%). Small percentages of FP providers have received training in non-scalpel vasectomy (<1%), minilap tubal ligation (<1%), FP for HIV-positive clients (2%), and post-partum FP (2%).

Guidelines and Basic Equipment for Family Planning Services

Among faciliites offering any modern method of FP (N=919), percent that have:



Maternal Health: Antenatal Care

Availability of Antenatal Care (ANC)

Overall, 98% of all health facilities in Nepal offer ANC services. Among facilities that offer ANC services (N=919), 85% offer ANC services five or more days per week. Private facilities (96%) and facilities in Mountain ecological zone (92%) are more likely to offer ANC services five or more days per week.

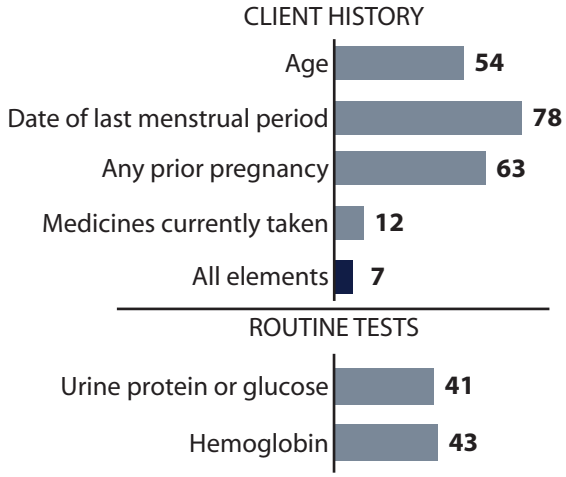
Observations of ANC Consultations

NHFS interviewers observed client-provider interactions of 1,502 ANC clients. Thirty-five percent of observed clients were visiting for the first time in their pregnancy, while the remaining 65% were coming for a follow-up visit. For half of ANC clients, this was their first pregnancy.

ANC providers were not thorough in taking client history or providing routine tests. Although 78% of first-visit ANC clients were asked the date of their last menstrual period, only 12% were asked about current medications. Less than 1 in 10 consultations had all elements of client history assessed. Four in ten first-visit ANC clients had a hemoglobin test (43%) or a urine protein or glucose test (41%), as recommended.

Observed Elements of Client History for First-visit ANC Clients

Among observed consulations with first-visit ANC clients (N=523), percent that include:



The components of the basic physical examination were performed in the majority of observed consultations for all ANC clients (N=1,502). In 91% of consultations the provider listened to the fetal heart, 87% of pregnant women had their blood pressure measured, and 82% were weighed. Among preventive interventions, the provider gave or prescribed iron or folic acid tablets in 63% of consultations. In comparison, in only 22% of consultations did the provider administer or prescribe the tetanus toxoid vaccine.

ANC providers did not routinely inform women of symptoms related to pregnancy complications. Severe lower abdominal pain and vaginal bleeding was discussed in only 4 in 10 consultations. One-third of consultations included discussion about loss of, excessive, or normal fetal movement. One-quarter of consultations included discussion of headache or blurred vision. Even fewer consultations included discussion of swollen hands, face, or body (23%); fever (7%); convulsion or loss of consciousness (7%), or tiredness, shortness of breath (5%). For two-thirds of the observed consultations, at least one risk symptom was discussed.

ANC Client Exit Interviews

Pregnant women attending ANC who were observed were also interviewed when they left the facility about the health education they received. One-third of pregnant women reported that the provider discussed or counselled on any pregnancy-related risk signs and symptoms. More than one-third of women (36%) reported that the provider discussed vaginal bleeding as dangerous and 17% reported that the provider discussed headaches or blurred vision. One-quarter of pregnant women reported that no advice was given on recommended actions to take if warning signs occurred.

Availability of Medicines

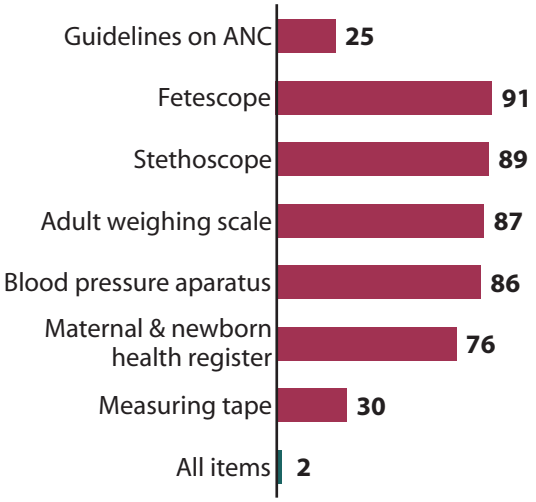
Nine in ten health facilities offering ANC services have all essential medicines including the combined iron and folic acid tablets and albendazole. Nearly all UHCs have all essential medicines compared to 70% of private hospitals. Health facilities in the Mountain region are more likely to have all essential medicines (95%), compared to 82% of facilities in Terai region.

Guidelines and Basic Equipment for ANC Services

One-quarter of facilities have guidelines on ANC. More than 90% of facilities offering ANC services have a fetescope. Nearly 90% of facilities have a stethoscope, adult weighting scale and blood pressure apparatus. Only 30% of facilities have measuring tape for assessing fundal height. Overall, only 2% of health facilities in Nepal have all ANC items.

Guidelines and Basic Equipment for Antenatal Care Services

Among facilities offering ANC services (N=919), percent that have:



Infection Control

Facilities are more likely to have a safety box (85%) or latex gloves (85%) than soap and running water or else alcohol-based hand disinfectant (53%). Less than 1% of facilities offering ANC services have all infection prevention items.

Testing Capacity

Among facilities offering ANC services, 15% of facilities can test urine protein, 13% can conduct a urine glucose test, and only 3% can test for HIV. Only 3% of facilities offering ANC services have all three basic tests. Zonal and above hospitals as well as district-level hospitals have the highest testing capacity.

Management Practices and Training

The NHFS collected information on training and supervision of 2,480 ANC service providers. About 1 in 5 ANC providers received training related to ANC in the two years before the survey. Three-quarters of providers received personal supervision during the six months before the survey.

Among ANC providers, in-service training within the last two years covered a range of topics including counseling for ANC on nutrition, FP, and newborn care (8%); ANC screening topics such as blood pressure monitoring, urine glucose, and urine protein (8%); complications of pregnancy and their management (8%); nutritional assessment of pregnant women (5%); Essential Nutrition Actions training (5%); and case management or treatment of malaria in pregnancy (2%). ANC providers at PHCCs are most likely to have received the various in-service trainings.

Maternal Health: Antenatal Care

Prevention of mother-to-child transmission (PMTCT) of HIV in ANC Facilities

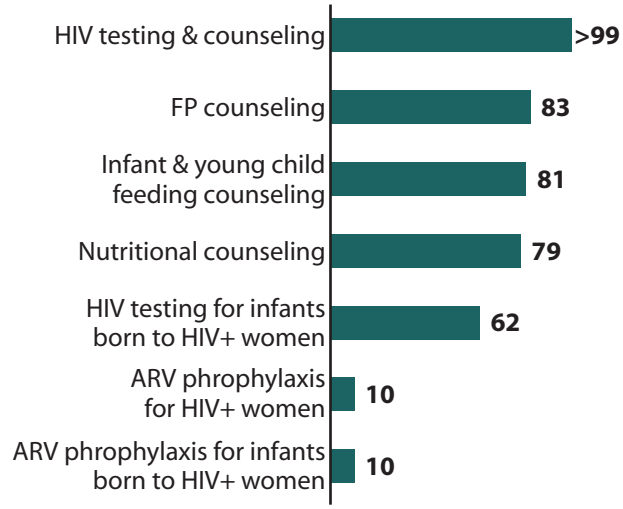
The prevention of mother-to-child transmission (PMTCT) of HIV program aims to reduce the risk of HIV transmission during pregnancy, delivery, or breastfeeding. PMTCT services include:

- Primary prevention of HIV among women
- Prevention of unintended pregnancies in HIV-positive women
- Lifelong antiretroviral therapy (ART) for HIV-positive pregnant and breastfeeding women
- Provision of comprehensive care to the mother, newborn, and family

Among facilities offering ANC, 18% offer PMTCT services. Zonal and above hospitals are most likely to offer PMTCT services. Among facilities offering ANC and PMTCT services (N=167), almost all provide HIV testing and counseling (HTC) for pregnant women, but only 10% provide antiretroviral (ARV) prophylaxis for HIV-positive women or infants born to HIV-positive women.

Availability of PMTCT Services

Among facilities offering ANC services and any PMTCT services (N=167), percent that provide:



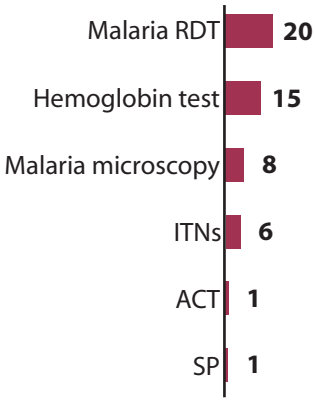
Facilities are not equipped to provide PMTCT services. Less than 10% of facilities offering ANC and PMTCT services have PMTCT guidelines. Twelve percent of facilities have adult HIV testing capacity, and only 13% prepare dried blood spot (DBS) for HIV testing. Less than 10% of facilities have any ARV medicines—AZT syrup, NMP syrup, or ARV for maternal prophylaxis.

Malaria Prevention and Treatment Services in ANC Facilities

Among facilities offering ANC services (N=919), 6% of facilities distribute insecticide-treated nets (ITNs) to pregnant women attending ANC. Merely 1% of facilities have antimalarial medicines available such as ACT and sulfadoxine/pyrimethamine (SP). One in five facilities have malaria rapid diagnostic testing (RDT). However, only 8% of facilities can perform malaria microscopy. Fifteen percent of facilities can test hemoglobin. Diagnostics such as malaria RDT, microscopy, and hemoglobin are more readily available in private facilities than in public facilities.

Equipment, Diagnostics, and Medicines for Malaria

Among facilities offering ANC services (N=919), percent that have:



Maternal Health: Delivery and Newborn Care

Availability of Normal Vaginal Delivery and Cesarean Delivery Services

Among all facilities, 49% offer normal vaginal delivery services and 5% offer Cesarean delivery. The majority of zonal and above hospitals (84%), district-level hospitals (>99%), and PHCCs (96%) offer normal vaginal delivery services. Only hospitals offer Cesarean deliveries.

Among facilities offering normal vaginal delivery services (N=457), one-quarter have a provider of delivery care available on-site or on-call 24 hours per day with an observed duty schedule. More than 80% of zonal and above hospitals and district-level hospitals have a provider available on-duty or on-call compared to only 12% of HPs. Private facilities are more likely to have an on-duty or on-call provider than public facilities.

Signal Functions for Emergency Obstetric and Neonatal Care

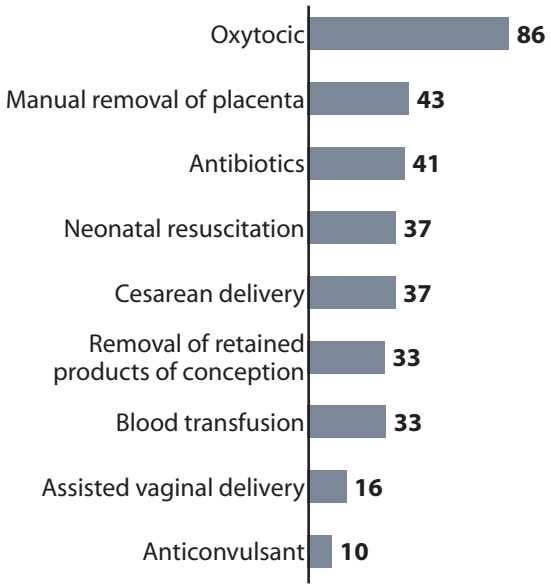
Facilities that offer normal vaginal delivery care should be prepared to provide the most important interventions—emergency obstetric and neonatal care (EmONC) signal functions—to manage delivery complications when they occur. Signal functions reflect the responsiveness of health services to the main obstetric complications at the basic and comprehensive levels.

Among signal functions performed in the last three months, the most commonly practiced is the administration of parenteral oxytocic (86%). Four in ten facilities administered parenteral antibiotics at least once during the same time period. However, only 10% administered anticonvulsants. Less than 20% of facilities providing normal vaginal delivery services carried out assisted vaginal deliveries at least once in the previous three months. Zonal and above hospitals are more likely to conduct assisted vaginal deliveries than HPs (>99% vs. 10%, respectively). One-third of facilities removed retained products of conception (MVA). Thirty-seven percent of facilities conducted neonatal resuscitation. One in three facilities offering normal vaginal delivery services had performed a blood transfusion at least once during the three months preceding the survey. More than one-third of facilities conducted a Cesarean section in the past three months.

Among hospitals and PHCCs offering normal vaginal delivery services (N=106), only 14% had performed all seven basic EmONC signal functions. Among hospitals offering normal vaginal deliveries (N=65), less than 1 in 5 hospitals had performed nine comprehensive EmONC signal functions including blood transfusion and Cesarean delivery.

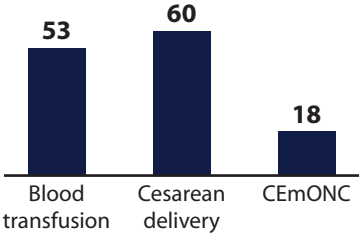
Signal Functions for Emergency Obstetric and Neonatal Care

Among facilities offering normal vaginal delivery services, percent that performed the following services at least once during the 3 months before the survey



Comprehensive Emergency Obstetric and Neonatal Care (EmONC) among Hospitals

Among hosptials offering normal vaginal delivery services (N=65), percent that performed the following services at least once during the 3 months before the survey



Maternal Health: Delivery and Newborn Care

Newborn Care Practices

Among facilities offering normal vaginal delivery services (N=457), more than 90% report the following routine components of newborn care: initiation of breastfeeding within the first hour, drying and wrapping newborns to keep warm, weighing the newborn immediately upon delivery, routine complete examination of newborns before discharge, kangaroo mother care, and delivery to abdomen (skin-to-skin). Nearly two-thirds report applying chlorhexidine ointment to an umbilical cord stump. About 1 in 10 facilities report applying tetracycline eye ointment, giving the BCG vaccine, or administering vitamin K to a newborn prior to discharge as routine newborn care. Routine newborn care practices are more commonly practiced in public facilities as compared to private facilities.

Availability of Medicine for Deliveries, Newborns, and Mothers

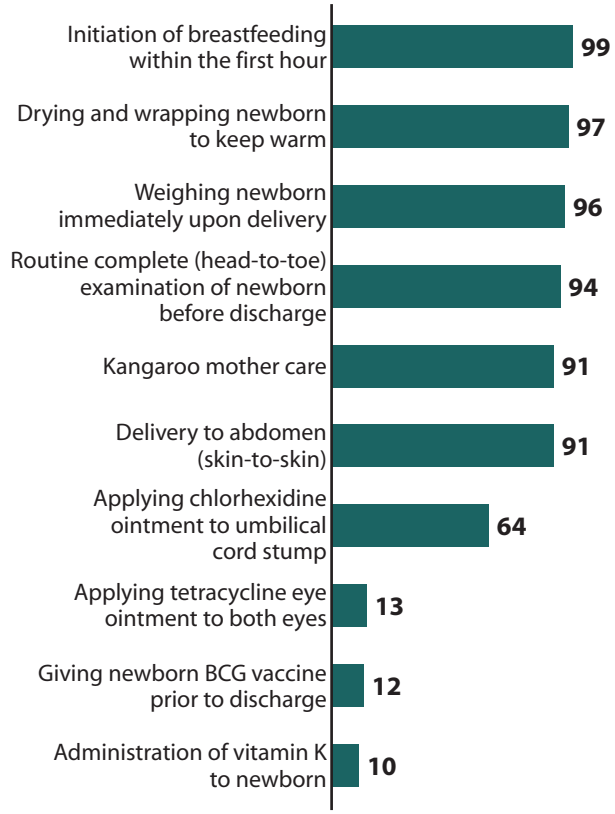
Among facilities offering normal vaginal delivery services, the majority of facilities (88%) do not have all four essential medicines for delivery—injectable uterotonic (oxytocin), injectable antibiotic, skin antiseptic, and intravenous fluids with infusion set. Availability of essential medicines for delivery is highest in zonal and above hospitals (77%) and lowest in HPs (5%).

Very few facilities offering normal vaginal delivery services have all five essential medicines for newborns—tetracycline eye ointment, 4% chlorhexidine ointment, injectable gentamicin, ceftriaxone powder for injection, and amoxicillin. District-level hospitals (12%) are most likely to offer the five essential medicines for newborns.

The eight priority medicines for mothers are not readily available at facilities. Only 3% of health facilities in Nepal have all eight medicines—sodium chloride injectable solution, injectable calcium gluconate, ampicillin powder for injection, injectable metronidazole, misoprostol, azithromycin, cefixime, and injectable bethamethasone or dexamethasone. Private hospitals (25%) and zonal and above hospitals (23%) are most likely to have all priority medicines for mothers available.

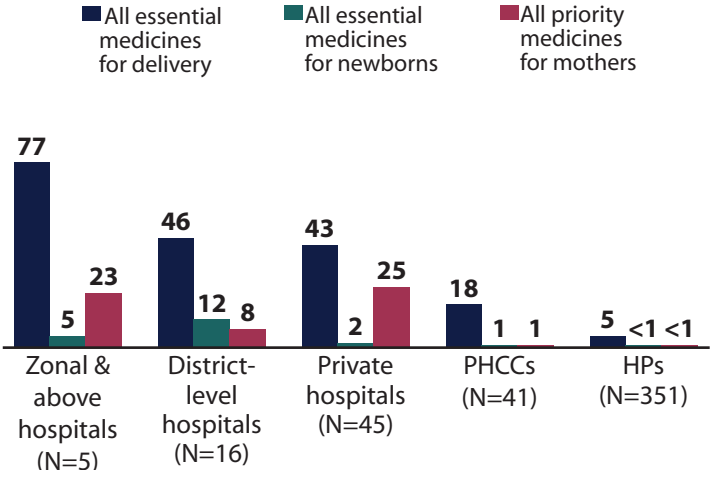
Newborn Care Practices

Among facilities offering normal vaginal delivery services (N=457), percent reporting the indicated practice is routine component of newborn care



Availability of Medicines for Deliveries, Newborns, and Mothers by Facility Type

Among facilities offering normal vaginal delivery services (N=457), percent that have:



Guidelines and Equipment for Delivery Services

Among facilities offering normal vaginal delivery services, 22% have guidelines for delivery care such as the Nepal Medical Standards volume III or Reproductive Health clinical guideline. Nearly all facilities have a delivery bed (96%), gloves (93%), and delivery pack (92%). Eight in ten facilities have a neonatal bag and mask (83%) and partograph (80%). Six in ten facilities have emergency transport. The availability of emergency transport is higher in private facilities (96%) than in public facilities (59%). Fewer facilities have a manual vacuum extractor (21%) and vacuum aspirator or MVA kit (19%).

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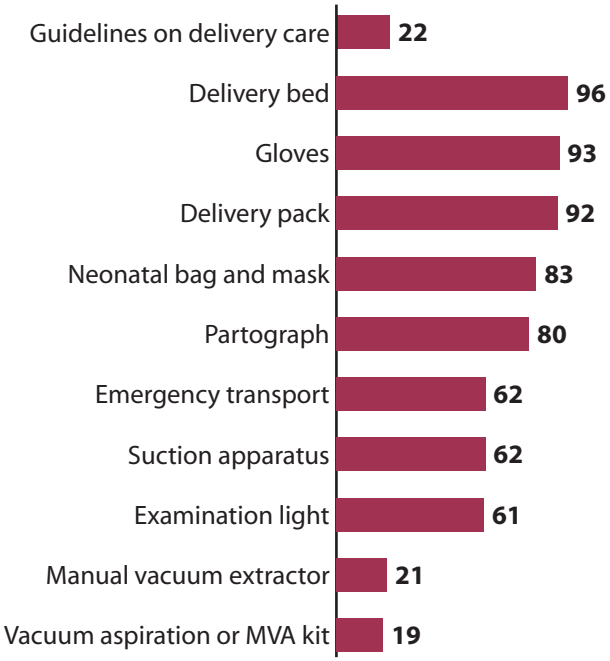
Guidelines and Equipment for Delivery Services

Among facilities offering normal vaginal delivery services (N=457), percent that have:



Infection Control

Facilities are more likely to have latex gloves (93%) and a safety box (86%). Overall, three-quarters of facilities have soap and running water or else alcohol-based disinfectant. Merely 1% of facilities offering delivery services have all infection prevention items.

Management Practices and Training

The NHFS collected information on training and supervision of 1,757 providers of normal vaginal delivery or newborn care services. One-quarter of providers received training related to delivery and/or newborn care in the two years before the survey. Three-quarters of providers received personal supervision during the six months before the survey.

Among providers, in-service training in delivery care within the last two years covered a range of topics including skilled birth attendant (SBA) (11%), routine care during labor and delivery (11%), active management of third stage of labor (11%), post-abortion care (11%), maternal nutrition and health update/emergency obstetric are/lifesaving skills (9%), advanced SBA (5%), and comprehensive abortion care (3%).

Among providers, in-service training in immediate newborn care within the last two years covered a range of topics including early and exclusive breastfeeding (13%), neonatal resuscitation (12%), sterile cord cutting and care (12%), kangaroo mother care for low birth weight babies (12%), thermal care (11%), and newborn infection management (8%).

HIV/AIDS

Availability of HIV Testing and Counseling Services

Few health facilities in Nepal have an HIV testing system. Among facilities with an HIV testing system (N=57), 81% have HIV testing capacity. District-level hospitals, PHCCs, and stand-alone HTC sites are more likely to have the capacity to test for HIV. More than 6 in 10 facilities have condoms available on the day of the survey. Eight in ten public facilities have condoms available compared to only half of private facilities. Overall, only 13% of facilities have all HIV testing items—HIV testing capacity, national HTC guidelines, trained provider, visual and auditory privacy, and condoms available at site.

Infection Control

Among facilities with HIV testing capacity (N=46), one-third of facilities have latex gloves and soap and running water or alcohol-based hand disinfectant. But only 2% have all infection prevention items.

Among facilities with HIV testing capacity with laboratories (N=40), nearly all have latex gloves and soap and running water or alcohol-based hand disinfectant. Still, only 3% have all infection prevention items.

Management Practices and Training

The NHFS interviewed 456 HTC service providers about their training and supervision. More than 1 in 10 providers received training related to HTC in the two years before the survey. Seven in ten providers received personal supervision during the six months before the survey.

HIV Care and Support Services

HIV care and support services are not readily available at health facilities in Nepal—only 5% of all health facilities offer services such as treatment for opportunistic infections, fungal infections, or Kaposi's sarcoma; palliative care; nutritional rehabilitation; fortified protein supplementation; care for pediatric patients; preventive treatment for tuberculosis (TB) or opportunistic infections; general FP counseling; or condoms.

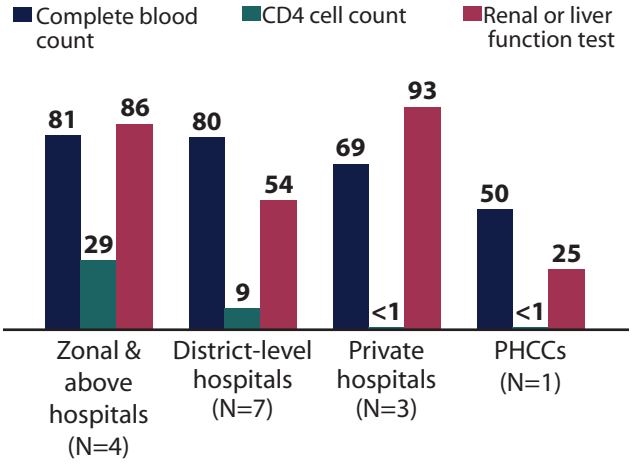
Among facilities offering HIV care and support services (N=45), one-quarter have a system for screening and testing HIV-positive clients for tuberculosis (TB). This is a major cause for concern because people living with HIV are at high risk for contracting TB. Most facilities providing HIV care and support services have male condoms (93%), cotrimoxazole tablets (76%) to treat infections, first-line treatment for TB (67%), and IV solution with infusion set (61%). Facilities are less likely to have pain management (39%) and fluconazole tablet or ointment (45%) for fungal infections.

Antiretroviral Therapy Services

Among hospitals and PHCCs (N=134), 12% offer antiretroviral therapy(ART) services such as prescribing ART, providing treatment follow-up services, or providing community-based services. Among facilities offering ART services (N=15), 43% have national ART guidelines. Laboratory diagnostic capacity is generally high for complete blood count (76%) and renal or liver function test (69%). However, only 12% of facilities offering ART services have the capacity to diagnose CD4 cell count. Zonal and above hospitals are more likely to have the capacity to test complete blood count (81%) and CD4 cell count (29%), while private hospitals are more likely to test renal or liver function (93%). Overall, 8 in 10 facilities have the first-line adult ART regimen available.

Diagnostic Capacity for Antiretroviral Services (ART) by Facility Type

Among facilities offering ART services (N=15), percent that have capacity for:



MALARIA

Availability of Malaria Services

Overall, half of health facilities in Nepal offer malaria diagnosis and/or treatment services. Private facilities are twice as likely to offer malaria diagnosis or treatment compared to public facilities (93% vs. 48%).

Availability of Malaria Medicines and Commodities

The 2015 NHFS assessed the availability of antimalarials and commodities in the facilities offering the malaria diagnosis and/or treatment services (N=481). Merely 2% of facilities have the first-line ACT antimalarial available while 60% have any first-line treatment such as ACT, quinine, chloroquine, or primaquine. Nearly all facilities have paracetamol tables or injection. One in 10 facilities have long-lasting insecticidal nets (LLINs) available on the day of the survey.

Guidelines and Diagnostics for Malaria Services

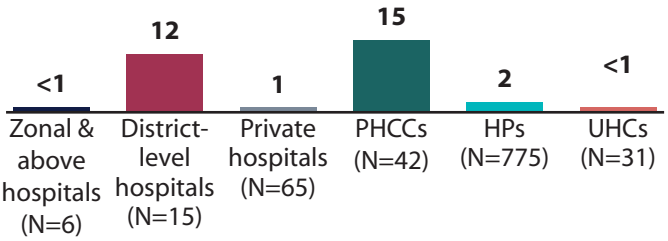
Among facilities offering malaria diagnosis and/or treatment (N=481), 1 in 5 have guidelines for malaria diagnosis and/or treatment services. Four in 10 of facilities have malaria rapid diagnostic test (RDT) kits while only 16% have malaria microscopy. Overall, 57% of facilities do not have any malaria diagnostics.

Malaria Diagnostic Capacity

Only 3% of facilities offering curative care for sick children (N = 934) have the capacity to diagnose malaria by having unexpired malaria RDT kits or a functioning microscope as well as staff member recently trained and malaria RDT protocol available in the facility. PHCCs and district-level hospitals are more likely to have malaria diagnostic capacity than other facility types. Health facilities in Terai region have higher malaria diagnostic capacity (5%) compared to Mountain and Hill (1% each).

Malaria Diagnostic Capacity by Facility Type

Among facilities offering curative care for sick children (N=934), percent that have malaria diagnostic capacity on the day of the survey



Malaria Service Readiness

Among facilities offering curative care for sick children (N=934), 8% have malaria treatment guidelines. Three in ten facilities have the first line treatment medicine, ACT, quinine, chloroquine, or primaquine tablets. Less than 1 in 5 facilities have staff trained in malaria diagnosis and/or treatment in the last two years.

The malaria service readiness index combines these indicators into one index, resulting in only 1% of facilities have malaria diagnostic capacity, malaria treatment guidelines, first-line medicine, as well as recently trained personnel. Malaria service readiness is highest in PHCCs (5%).

Non-communicable Diseases

Asian countries are experiencing growing rates of non-communicable diseases (NCDs) such as diabetes, cardiovascular disease (CVD), and chronic respiratory disease. It is important that the Nepal health care system have the capacity to appropriately diagnose and treat NCDs.

Diabetes Services

One in five health facilities in Nepal offer services for diabetes that include diagnosis, prescription of treatment, or management of diabetic patients. Diabetes services are most likely offered in hospitals. Among facilities offering services for diabetes (N=198), diagnostic capacity and availability of medicines are generally low. Only 12% of facilities have the capacity to test for blood glucose, 54% have capacity to test urine protein, and 55% have capacity to test for urine glucose. Various diabetes treatments are not readily available. Overall, 14% of facilities have glibenclamide, 20% have injectable insulin, 34% have Metformin, and 55% have injectable glucose solution.

Cardiovascular Disease Services

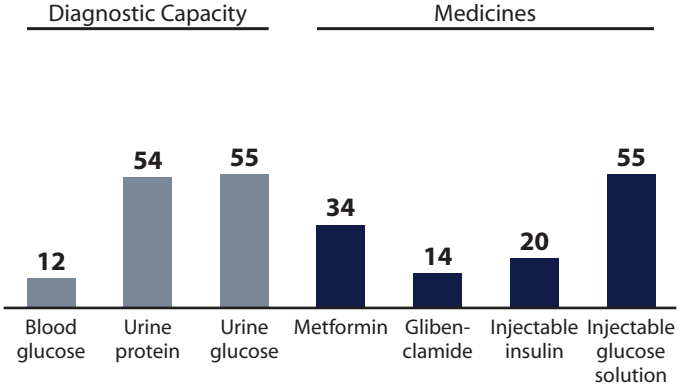
Among all health facilities in Nepal, nearly three-quarters offer services for CVD including diagnosis, prescription of treatment, and management of patients with CVD. However, among facilities offering CVD services (N=687), only 4% have Thiazide diuretic for reducing high blood pressure. Less than 10% of facilities have aspirin or oxygen. Only 11% have calcium channel blockers, while 18%have Beta blockers for angina or hypertension. Among managing authorities, private facilities are more likely to have all CVD medicines and commodities than public facilities.

Chronic Respiratory Disease Services

More than 90% of facilities in Nepal offer support services for chronic respiratory disease including diagnosis, prescription of treatment, or management of patients with chronic respiratory diseases. Availability of essential medicines and commodities in facilities offering services for chronic respiratory disease (N=885) is relatively low with the exception of salbutamol inhaler (79%). Even fewer facilities have other medications for treating irregular heart rhythm and lowering cholesterol. Private facilities are most likely to have all essential medicines and commodities for chronic respiratory disease.

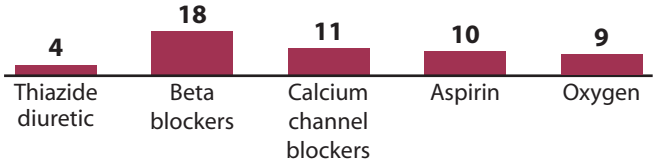
Diagnostic Capacity and Essential Medicines for Diabetes

Among facilities offering services for diabetes (N=198), percent that have:



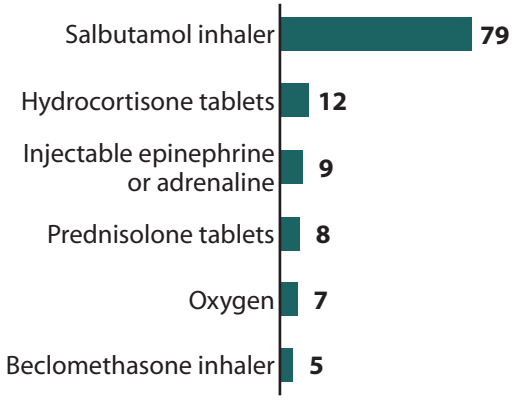
Availability of Essential Medicines and Commodities for Cardiovascular Disease

Among facilities offering services for cardiovascular disease (N=687), percent that have:



Availability of Essential Medicines and Commodities for Chronic Respiratory Disease

Among facilities offering services for chronic respiratory disease (N=885), percent that have:



TUBERCULOSIS

Tuberculosis Services

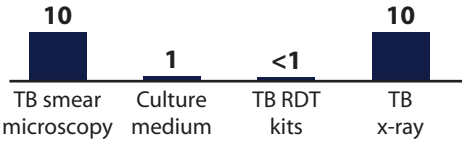
Nearly half of facilities (N=940) in Nepal offer screening and referrals for TB diagnosis. One-third offer any TB diagnostic service. About 9 in 10 facilities offer any TB treatment and/or treatment follow-up services. Three in ten health facilities offer TB diagnostic and treatment and/or treatment follow-up services. Overall, 94% of facilities offer any TB diagnostic or treatment and/or treatment follow-up services.

Among facilities offering TB diagnosis or treatment and/or treatment follow-up services (N=882), one-third of facilities have guidelines on the diagnosis and treatment of TB and 5% have guidelines on HIV and TB co-infection. Few facilities offering TB services have the equipment to diagnose TB. Among facilities that offer any TB services, only 10% have TB smear microscopy which includes a functioning microscope, slides, and all stains for the Ziehl-Neelson test. One in ten facilities has the capacity to conduct TB x-rays. Only 1% of facilities can test culture medium and less than 1% have TB RDT kits. Zonal and above hospitals are more likely than other facility types to have these capacities. Four percent facilities offering any TB services have HIV diagnostic capacity, and only 5% have a system for diagnosing HIV among TB clients. This system includes a record or register indicating TB clients who have been tested for HIV.

Among facilities offering TB diagnosis or treatment and/or treatment follow-up services (N=882), three-quarters have the first-line treatment for TB, four-drug fix dose combination. Three in ten facilities have injectable streptomycin. Public facilities are more likely to offer TB treatment than private facilities.

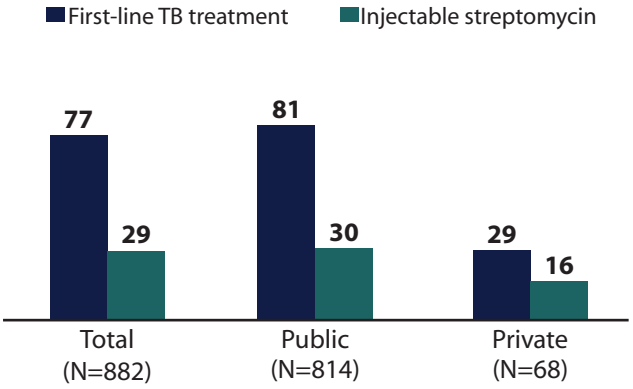
Tuberculosis Diagnostic Capacity

Among facilities offering TB diagnosis or treatment and/or treatment follow-up services (N=882), percent that have:



Availability of Medicines for Tuberculosis by Managing Authority

Among facilities offering TB diagnosis or treatment and/or treatment follow-up services (N=882), percent with:



Basic Service Readiness Indicators*

Availability of Basic Amenities for Client Services (%)	Ecological Region			Earthquake-affected districts
	Mountain	Hill	Terai	
Regular electricity[1]	69	53	37	46
Improved water source[2]	72	74	94	78
Visual and auditory privacy[3]	82	77	81	70
Client latrine[4]	78	84	79	85
Communication equipment[5]	10	21	23	25
Emergency transport[6]	41	56	70	68
Availability of Basic Equipment (%)				
Adult scale	86	93	84	90
Child scale[7]	49	42	30	33
Infant scale[8]	50	60	50	54
Thermometer	92	95	89	98
Stethoscope	98	99	96	99
Blood pressure apparatus[9]	94	96	92	97
Light source[10]	57	55	44	63
Standard Precautions for Infection Control (%)				
Sterilization equipment[11]	80	84	75	80
Disinfectant[12]	63	68	55	77
Syringes and needles[13]	81	84	81	85
Soap and running water or else alcohol-based hand disinfectant	51	61	50	63
Latex gloves[14]	81	83	75	88
Guidelines for standard precautions[15]	5	5	2	6
Laboratory Diagnostic Capacity (%)				
Hemoglobin	10	13	22	na
Blood glucose	4	7	11	na
Malaria diagnostic test	>99	98	97	na
Urine protein	8	12	19	na
HIV diagnostic test	2	5	8	na
Dried blood spot (DBS) collection	2	5	9	na
Tuberculosis microscopy	64	56	44	na
Availability of Essential Medicines (%)				
Amoxicillin tablets/capsules (1st line antibiotic for adults)	96	90	83	86
Cotrimoxazole (antibiotic for children)	49	53	42	48
Paracetamol tablet/injection (fever-reducer & analgesic for children)	99	99	96	97
Availability of Basic Clients Services (%)				
Child curative care	>99	>99	99	99
Child growth monitoring	99	97	85	94
Child vaccination[16]	89	89	83	90
Any modern methods of family planning[17]	>99	99	96	97
Antenatal care	>99	>99	95	99
Services for STIs	62	80	69	78
All basic client services[18]	53	70	54	68

[1]Facility is connected to a central power grid and there has not been an interruption in power supply lasting for more than 2 hours at a time during normal working hours in the 7 days before the survey. [2]Water is piped into facility or piped onto facility grounds, or else water from a public tap or standpipe, a tube well or borehole, a protected dug well, protected spring, or rain water, or bottled water and the outlet from this source is within 500 metres of the facility. [3]A private room or screened-off space available in the general outpatient service area that is a sufficient distance from other clients so that a normal conversation could be held without the client being seen or heard by others. [4]The facility had a functioning flush or pour-flush toilet, a ventilated improved pit latrine, or composting toilet. [5]The facility had a functioning landline telephone, functioning facility-owned cellular phone, a private cellular phone that is supported by the facility or a functioning short wave radio available at the facility. [6]The facility had a functioning ambulance or other vehicle for emergency transport that is stationed at another facility or that operates from another facility. [7]A scale with gradation of 250 grams, or a digital standing scale with a gradation of 250 grams or lower where an adult can hold a child to be weighed. [8]A scale with gradation of 100 grams, or a digital standing scale with a gradation of 100 grams

*The full list of general service readiness indicators is found in Chapter 3 of the NHFS final report.

Facility Type							Managing Authority		
Zonal & above hospitals	District-level hospitals	Private hospitals	PHCCs	HPs	UHCs	Stand-alone HTCs	Public	Private	Total
>99	95	99	73	42	24	71	44	93	49
97	93	89	94	79	75	94	80	91	81
86	90	96	93	76	58	99	77	97	79
93	96	98	95	79	80	91	80	97	82
>99	88	99	41	8	14	88	12	96	20
93	93	95	75	54	59	67	56	88	59
86	93	94	84	88	94	86	88	92	89
27	38	26	39	41	25	9	40	22	39
24	42	41	50	59	33	22	57	36	55
93	97	96	94	93	96	79	93	92	93
97	99	97	99	98	>99	91	98	95	98
90	97	96	98	93	>99	91	94	95	94
83	88	89	67	45	59	73	48	85	51
>99	96	98	95	78	66	64	79	90	80
55	51	63	43	64	55	67	62	64	63
55	55	60	64	86	92	75	84	64	82
93	70	86	65	51	51	82	53	85	56
76	74	83	63	81	77	71	80	80	80
10	7	5	5	3	3	16	3	8	4
97	97	93	75	4	<1	23	9	76	16
49	53	58	27	1	<1	15	4	47	8
>99	>99	97	>99	>99	98	7	>99	75	98
93	>99	91	64	2	<1	24	7	74	14
86	57	25	11	1	<1	69	3	36	6
27	9	7	2	na	na	na	6	7	7
73	80	41	55	na	na	na	62	41	51
73	99	71	93	89	95	na	90	71	88
38	63	23	53	51	36	na	51	23	49
97	99	73	99	>99	98	na	99	73	97
>99	99	93	>99	>99	98	na	>99	93	99
85	96	54	96	97	77	na	96	54	93
85	90	29	95	92	82	na	91	29	87
88	>99	70	>99	>99	>99	na	>99	70	98
96	99	86	>99	99	97	na	99	86	98
>99	99	93	98	71	51	na	72	93	74
81	86	25	91	64	33	na	65	25	62

where an adult can hold an infant to be weighed. [9]A digital blood pressure machine or a manual sphygmomanometre with a stethoscope. [10]A spotlight source that can be used for client exam or a functioning flashlight. [11]Facility reports that some instruments are processed in the facility and the facility has a functioning electric dry heat sterilizer, a functioning electric autoclave, or a non-electric autoclave with a functioning heat source available. [12]Chlorine-based or other country-specific disinfectants used for environmental disinfection available in the general outpatient area. [13]Single-use standard disposable syringes with needles or else auto-disable syringes with needles. [14]Non-latex equivalent gloves acceptable. [15]Any guideline for infection control in health facilities available. [16]Facility routinely provides BCG, pentavalent, polio, and measles-rubella (MR) vaccinations at the facility. [17]Facility provides, prescribes, or counsels clients on any of the following methods of family planning: combined oral contraceptive pills, progestin-only injectables, implants, IUCDs, male condom, male sterilization, or female sterilization. [18]Includes outpatient curative care for sick children, child growth monitoring, child vaccination services, any modern method of family planning, antenatal care, and services for STIs.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New ERA

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NHSSP
Nepal Health
Sector Support
Programme

UNFPA

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Organization
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