Glimpse of Annual Report

Department of Health Services
2073/74 (2016/17)

Government of Nepal
Ministry of Health and Population

Department of Health Services

Kathmandu, Nepal

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FY 2073/74 (2016/2017)

GOVERNMENT OF NEPAL
MINISTRY OF HEALTH AND POPULATION
DEPARTMENT OF HEALTH SERVICES
KATHMANDU

NATIONAL HEALTH POLICY, 2071 (2014)

Background

The relationship between health of general population and overall development of country is intertwined. Progress made in the health sector are considered the main indicators of development. Despite poverty and conflict in past decades, Nepal has achieved remarkable success in the health sector.

In the context of health as a fundamental right of the people established by Nepal's constitution, it is the responsibility of the nation to maintain the achievement made in controlling communicable diseases, to reduce infant and maternal mortality rate to the desired level, to control the ever increasing prevalence of non-communicable diseases and timely management of unpredictable health disasters, and to provide quality health services to senior citizens, physically and mentally impaired people, single women especially poor and marginalized and vulnerable communities.

This national health policy 2071, a complete revision of the national health policy 2048, has been introduced to promote, preserve, improve and rehabilitate the health of the people by preserving the earlier achievement, appropriately addressing the existing and newly emerging challenges and by optimally mobilizing all necessary resources through a publicly accountable efficient management.

Vision, Mission, Goal, Objectives and Policies of the National Health Policy 2071 are presented below:

Vision

All Nepalese citizens would be able to live productive and quality life; being physically, mentally, socially, and emotionally healthy.

Mission

Ensure the fundamental right of citizens to remain healthy through a strategic collaboration among service provider, beneficiaries, and stakeholders and optimum utilization of available resources.

Goal

To ensure health for all citizens as a fundamental human right by increasing access to quality health services through a provision of just and accountable health system.

Objectives

1. To make available the free basic health services that existed as citizen's fundamental right.
2. To establish an effective and accountable health system with required medicines, equipment, technologies and qualified health professional for easy access to acquire quality health services by each citizen.
3. To promote people's participation in extending health services. For this, promote ownership of the private and cooperative sector by augmenting and managing their involvement.

Policies

1. To make available in an effective manner the quality health services, established as a fundamental right, ensuring easy access within the reach of all citizens (universal health coverage) and provision of basic health services at free of cost.
2. To plan produce, acquire, develop, and utilize necessary human resources to make health services affordable and effective.
3. To develop the ayurvedic medicine system through the systematic management and utilization of available herbs in the country as well as safeguarding and systematic development of other existing complementary medicine systems.
4. To aim at becoming self-sufficient in quality medicine and medical equipment through effortless and effective importation and utilization with emphasis on internal production.

5. To utilize in policy formulation, program planning, medical and treatment system, the proven behaviors or practices obtained from researchers by enhancing the quality of research to international standard.
6. To promote public health by giving high priority to education, information, and communication programs for transforming into practice the access to information and messages about health as a right to information.
7. To reduce prevalence of malnutrition through promotion and usage of quality healthy foods.
8. To ensure availability of quality health services through competent and accountable mechanism and system for coordination, monitoring and regulation.
9. To ensure professional and quality service standard by making health related professional councils capable, professional, and accountable.
10. To mainstreaming health in every policy of state by reinforcing collaboration with health-related various stakeholders.
11. To ensure the right of citizens to live in healthy environment through effective control of environmental pollution for protection and promotion of health.
12. To maintain good governance in the health sector through necessary policy, structure and management for delivery of quality health services.
13. To promote public and private sectors partnership for systematic and quality development of health sector.
14. To increase the investment in the health sector by state to ensure quality and accessible health services and to provide financial security to citizens for medical cost and as well as effectively utilize and manage financial resources obtained from private and non-government sector.

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Executive Summary

The information and statistics used in this report is based on the information collected by the Health Management Information System (HMIS) of DoHS from the health institutions across the country. The main institutions that delivered basic health services in fiscal year2073/74 were the 123 public hospitals including other ministries, the 1,715 non-public health facilities, the 200 primary health care centres (PHCCs) and the 3,808 health posts. Primary health care services were also provided by 12,180 primary health care outreach clinic (PHCORC) sites. A total of 16,022 Expanded Programme of Immunization (EPI) clinics provided immunization services. These services were supported by 49,001 female community health volunteers (FCHV). The information on the achievements of the public health system, NGOs, INGOs and private health facilities were collected by DoHS's Health Management Information System (HMIS).

CHILD HEALTH

Immunization

National Immunization Program has included several underused and new vaccines in program and currently there are eleven antigens–BCG, DPT-HepB-Hib (penta), PCV, OPV (bOPV), Measles and Rubella (MR) and Japanese Encephalitis provided through 16,000 service delivery points in health facilities (fixed session), outreach sessions and mobile clinic (sessions). Government of Nepal procures BCG, OPV, Td, JE, measles/rubella 1st dose and co-finances to GAVI supported vaccines DPT-HepB-Hib (penta), PCV and measles component of MR2. Aiming to reach every child in country, some innovative activities have also been carried out in country like Full Immunization declaration initiative, Immunization Act, rule and immunization fund creation.

The coverage of all antigens increased in 2073/74 compare to 2072/073. The highest coverage was of BCG (91%), DPT-HepB-Hib3 (86%), oral polio vaccine3 (86%), which were all more than the previous year. The measles rubella second dose was introduced in 2072/73 and had the lowest coverage (57%) however it is more than previous year.

Nutrition

The national nutrition programme is priority programme of the government. It aims to achieve the nutritional well-being of all people so as they can maintain a healthy life and contributed to the country's socioeconomic development. There is high level commitment to improving the nutritional status especially of women and of young children.

In 2073/74 an average of 3 growth monitoring visit was carried out by 0- to 23 month's children at national level which is slightly decreased as of previous year. Sixty three percent children aged 0-23 months were registered for growth monitoring which is six percent more than 2072/73 and twenty-five percent of 0-6 months infants registered for growth monitoring who were exclusively breastfed for their first six months which is 6.65 percent less than 2072/73.

Integrated Management of Neonatal &Childhood Illness (IMNCI)

In October 2014 the childhood(CB-IMCI) and newborn (CBNCP) care programmes were merged into the Community Based Integrated Management of Childhood Illness (CB-IMNCI) programme to give a more integrated approach. It is an integrated package of child-survival interventions and addresses major newborn care conditions including birth asphyxia, bacterial infection, jaundice, hypothermia, low birth weight, and encouragement of breastfeeding. It addresses the major illnesses of 2 to 59 month old children — pneumonia, diarrhoea, malaria, measlesand malnutrition, in a holistic way.

In fiscal year 2073/74, 25,742 newborns cases (aged 0-28 days) were registered and treated at health facilities and PHC/ORCs of whom 12,295 were treated for local bacterial infections and 3,713 for possible infections (PSBI). In the same year, 31,098 infants (29-59 day old) were treated at health facilities and PHC/ORCs of whom

2,765 were treated for PSBI. At the national level 1.0 percent 0-59 day old (among expected number of live births) suffered from PSBI. And 58.3 percent of all PSBI cases were treated with a complete dose of gentamycin.

In the fiscal year 2073/74, 1,184,120 cases of Diarrhoea were reported of which 0.44 percent suffered from severe dehydration (increased from 0.2 percent the previous year). The national incidence of diarrhoea per 1,000 under-5 year olds decreased from 422/1,000 in 2072/73 to 400/1000 in FY 2073/74. In FY 2073/74, a total of 1,810,722 ARI cases were registered, out of which 10.5% were categorized as pneumonia cases and 0.29% were severe pneumonia cases. The incidence of pneumonia (both pneumonia and severe pneumonia at HF and PHC/ORC) at national level was 64 per 1000 under five children as compared to 147 per 1,000 under-five children in the previous fiscal year FY 2072/73.

FAMILY HEALTH

Family Planning

In order to provide the reproductive population with options to limit or space births, various modern contraceptive methods are made available under the national health services delivery system. Family planning services are provided through different health institutions at various levels through static clinics as well as mobile outreach services. The Contraceptive Prevalence Rate (CPR) is one of the main indicators for monitoring and evaluating the National Family Planning Program. The contraceptive prevalence rate (CPR) for modern family planning method is 44% at national level in fiscal year 2073/74. There has been a one percentage point increase in modern CPR at national level in FY 2073/74 than in FY 2072/73. There is wide variation in CPR at the province level with lowest 35% in Province 4 and highest 49% in Province 2

Safe Motherhood and Newborn Health

During the fiscal year 2073/74, the national level ANC 4th visit (as per protocol) as percentage of expected pregnancy has been increased to 52%. Similarly, the institutional delivery has slightly been increases to 57% in FY 2073/74 as compare to 55% in FY 2072/73. Percentage of mothers who received first postnatal care at the health facility among expected live births has also slightly decreased to 51% in FY 2073/74 from 57% of FY 2072/73. During FY 2073/74, a total of 96417 CAC service has been provided, out of which, 44% women had received medical abortion service. While about 70% women had received post abortion family planning services. Contribution of Long Acting FP service out of total post abortion FP is appeared to be only about 16% (a 2%-point increase in FY 2073/74 than in FY 2072/73.

Female Community Health Volunteers (FCHVs)

The major role of the Female Community Health Volunteers (FCHVs) is promotion of safe motherhood, child health, family planning, and other community based health services to promote health and healthy behavior of mothers and community people with support from health workers and health facilities. At present there are 51,470 FCHVs (47,328 FCHVs at rural/VDC level and 4,142 at urban/municipality level) actively working all over the country. FCHVs contributed significantly in the distribution of oral contraceptive Pills, Condoms and Oral Rehydration Solution (ORS) packets and counseling and referring to mothers in the health facilities for the service utilization. FCHVs have distributed a total of 9,983,370 packets of Condom in FY 2073/74. Service statistics also show that more than one half of the diarrhoea and ARI cases were treated by FCHVs.

Primary health care outreach (PHC/ORC)

Based on the local needs PHC/ORCs are conducted every month at fixed locations of the VDC on specific dates and time. The clinics are conducted within half an hour's walking distance for the population residing in that area. Primary health care outreach clinics (PHC/ORC) extend basic health care services to the community level. Total number of clinics expected to run in a year 159,764 (13,314 PHC/ORC Clinics x 12 times). However, only 83% clinics were conducted in FY 2073/74. On an average 19 clients were served per clinic during the fiscal year 2073/74 and it was slightly increased compared to FY 2072/73 (16%).

Adolescent sexual and reproductive health

The National ASRH program has been gradually scaled up to 70 of the 75 districts covering 1134 health facilities till the end of current fiscal year 2073/74. Different development partners such as UNFPA, UNICEF, WHO, Save the Children, Ipas, ADRA Nepal and MSI Nepal at national and sub-national level supported to Family Health Division (FHD) for scaling up and strengthening ASRH services in the health facilities in order to make those health facilities as adolescent friendly service sites. The remaining five districts (Manang, Mustang, Dolpa, Rasuwa and Sindhupalchowk) will be covered in the running FY 2074/75.

Demography and reproductive health research

Planning, monitoring and evaluation of reproductive health (RH) activities are the key functions of Program, Budget and Demography Section. This section conducts periodic and *ad hoc* studies and also coordinates reproductive health related research and studies carried out by other organizations in Nepal. In addition to the development of annual program and Budget, target population setting, and guideline/ documents, implementation of Maternal and Perinatal Death Surveillance and Response (MPDSR) was a major activity conducted in FY 2073/74 through Demography Section.

A total of 1,076 persons including health facility personnel and district stakeholders were trained in MPDSR during FY 2073/74. Furthermore, all FCHVs of Baitadi had also received MPDSR orientation. As per government commitment to count every maternal death, community-level MPDSR has been expanded in 6 districts by the end of FY 2073/74 and Ministry of Health has planned to gradually expand this to all 75 districts. In addition, facility-based MPDSR has already started in 42 hospitals in FY 2073/74.

DISEASE CONTROL

Malaria

Nepal has surpassed the Millennium Development Goal 6 by reducing malaria morbidity and mortality rates by more than 50% in 2010 as compared to 2000. Therefore, Government of Nepal has set a vision of Malaria free Nepal in 2025. Current National Malaria Strategic Plan (NMSP) 2014-2025 was developed based on the epidemiology of malaria derived from 2012 micro-stratification, the aim of NMSP is to attain "Malaria Free Nepal by 2026**".**

Total positive cases of malaria slightly increased to last fiscal year from 991 in FY 2072/73 to 1128 in 2073/74 where 492 cases are indigenous cases and 636 are imported casesdue to active surveillance. The proportion of *P. falciparum* infections is decreasing trend and reached 13.1 % in current FY 2073/74 as compared to the previous year, however still the proportion is high which may be due to high number of imported *P. falciparum* cases.The trend of indigenous pf malaria cases is decreasing while imported cases of pf are in increasing trend. The trend of clinically suspected malaria case, slide positivity rate, pf and pv malaria cases also decreasing year by year, mainly due to increased coverage of RDT, microscopic laboratory service at peripheral level, high coverage of LLINs in endemic districts and increased socio-economic status of community people.

Kala-azar

Kala-azar is a major public health problem in 18 districts of Nepal and to eliminate Kala azar in Nepal set goal to improving the health status of vulnerable groups and at risk populations living in kala-azar endemic areas of Nepal by eliminating kala-azar so that it is no longer a public health problem. The incidence of kala-azar at national and district level has been less than 1/10,000 population since 2013. The trend of KA cases has been decreasing significantly for the last several years. In FY 2073/74, total 225 native cases and 6 foreign cases were reported. 157 cases were reported from programme district while other cases were from other nonprogrammer district. The case fatality rate was 0.3 percent in 2073/74.

Lymphatic Filariasis (LF)

Lymphatic Filariasis (LF) is a public health problem in Nepal. The goal of national Lymphatic Filariasis programme is the people of Nepal no longer suffer from lymphatic filariasis. As of 2073/74, MDA has been stopped (phased out)

in 31 districts, post-MDA surveillance initiated in 20 districts and morbidity management partially initiated in all endemic districts. All endemic districts will complete the recommended six rounds of MDA by 2018.

The LF elimination programme has also indirectly contributed to strengthening of health system through trainings and capacity building activities.The transmission assessment survey in 31 districts in 2016 found that the prevalence of infection had significantly reduced. Since 2003 more than 100 million doses of lymphatic filariasis drugs have been administrated to at-risk population. 2,172 hydrocele surgeries have been performed in year 2073/74.

Dengue

Dengue, a mosquito-borne disease emerged in Nepal in since 2005. The goal of national Dengue control program is to reduce the morbidity and mortality due to dengue fever, dengue haemorrhagic fever (DHF) and dengue shock syndrome (DSS). The number of reported dengue cases has decreased significantly since 2010 but cases of dengue were increased in 2073/74 fiscal year. The majority of cases have been reported from Chitwan, Jhapa and Rupandehi with more than 46 percent of 2073/74 cases from Chitwan. Total 1,527 cases reported from 42 districts.

Zoonoses

Nepal has dual burden of disease and zoonotic diseases of epidemic, endemic and pandemic potentials are major public health concerns. Globally more than 300 Zoonotic diseases are identified among which about 60 have been identified in Nepal as emerging and re-emerging diseases. No Nepalese dies of rabies or poisonous snake bites due to the unavailability of anti-rabies vaccine (ARV) or anti-snake venom serum or timely health care services and to prevent, control and manage epidemic and outbreak of zoonoses is the goal of zoonoses program. Around 30,000 cases in pets and more than 100 human rabies cases occur each year with the highest risk are in the Terai. During the FY 2073/74, 39,744 dog and other animal bites cases has been reported including 8 deaths throughout the Nepal and 6,121 cases of Snake bite has been reported. 33 deaths due to snake bite have been reported this year.

Tuberculosis

Atotal of 4,344 DOTS treatment centers are providing TB treatment service throughout the country. In Fiscal Year 2073/74, total of 31,765 cases of TB were registered. Among them, 54.63% were pulmonary bacteriologically confirmed (PBC). Most cases were reported among the middle-aged group with the highest among 15-24 year of age (20%). The childhood TB (new and relapse) was 5.7%. The Case Notification Rate (CNR) all forms was 111 per 100,000 populations. The Midwest Region hold highest case (CNR 128) followed by central region (CNR 123), far western region (CNR 109), western region (CNR 106) and eastern region (CNR 83). Whereas in eco-terrain, CNR was highest in Terai zones followed by hill and mountain zones with rates of 123, 104 and 61 per 100,000 populations respectively.

The overall treatment success rates (all forms) of drug susceptible TB was 92.%. The treatment success rates of new and re-treatment Pulmonary Bacteriological Confirmed (PBC) was 90% compared 93 % in new Pulmonary Clinically Diagnosed (PCD) and Extra Pulmonary cases. Failure rate in new PBC was 1.2% compared to 2.2% in retreatment cases, 0.1% in new PCD cases and 0.16% in EP cases. National Tuberculosis program, Nepal was able to save 29,027 lives in FY 2073/74 nationally, but still 971 deaths were reported among general TB cases.

Leprosy

During the reporting year 2073/74, a total number of 3,215 new leprosy cases were detected and put under Multi Drug Therapy (MDT). 2,626 cases were under treatment and receiving MDT at the end of the fiscal year. Registered prevalence rate of 0.92 cases per 10,000 populations at national level was reported this year which is below the cut-off point of below 1 case per 10,000 population as per the standard set by WHO. 87 (2.71%) new leprosy cases of Grade 2 Disability (G2D), 220 (6.84%) new child leprosy cases and 1361 (42.33%) new female leprosy cases were recorded. The increasing trend of registered prevalence rate after the elimination in

2009 is a serious concern for leprosy control programme hence early and active case detection activities need to be amplified and records/reports of local health facility level needs to be verified and validated.

HIV/AIDS & STI

Making up 3.6% of the total estimated people living with HIV (PLHIV) (32,735), there are about 1,197 children aged up to 14 years who are living with HIV in Nepal in 2016, while the adults aged 15 years and above account for 96.4%. Almost 75% of total estimated infections (31,539) among population aged 15-49 years. By sex, males account for two-thirds (62%) of the infections and the remaining more than one-third (38%) of infections are in females. The prevalence of HIV among 15-49 years of age group is 0.17% in 2016. Total 14,544 PLHIV are on ART treatment by the end of FY 2073/74.

Eye care

Nepal's eye care programme is run by Nepal Netra Jyoti Sangh and is a successful example of an NGO-run eye care programme. The prevalence of blindness in Nepal has reduced at the current time. In 2073/74, Nepal's hospitals, eye care centres and outreach clinics provided 3,873,340 outpatient consultations and performed 317,901 eye surgeries.

Human Organ Transplant services

National Transplant Center's main objectives are to strengthen and expand organ transplantation services, provide specialized services beyond transplantation along with high quality health care at a low price/free of cost and produce high level human resources by providing structured training in various aspects of services to expand the services across the country. During this reporting year a total number of 22,473 OPD services, 518 minor and 1,101 major surgeries, 132 kidney transplantation and along with two liver transplantations (which was first of its kinds in the nation) services were provided.

Entomology

Entomology section/entomology lab is one of the integral parts of Epidemiology and Disease Control Division. It is accountable to plan, implement, monitor & supervise all entomological activities like surveillance, risk assessment & operational research of vectors borne diseases as well other emerging and re-emerging diseases having potential of outbreak and prone to be epidemic in nature. In FY 2073/74, investigations and an entomological survey was conducted in 12 different districts of five regions of Nepal. In that survey Anopheles mosquitoes were collected. These are the common species of anopheles' mosquito which were found in that survey.

Epidemiology and disease outbreak management

In Nepal communicable disease outbreak are common and occur in different district. Forty-one communicable disease outbreaks were recorded in Nepal in 2073/74, which affected 3,565 people and resulted in 29 deaths. There were major outbreaks of acute gastroenteritis and diarrhoea, cholera, leptospirosis, scrub typhus, influenza, food poisoning, mushroom poisoning and dog bite. The average case fatality rate was 0.81 percent. The Scrub Tyhus outbreak had the greatest morbidity. Mushroom poisoning also had a high case fatality rate (45%). Reported water and food-borne diseases were more prevalent this year.

Disaster management

This collaborative programme between MoH/DoHS/EDCD and WHO-EHA has been committed to enhancing health sector emergency preparedness, disaster response and epidemiology and outbreak management capabilities in close coordination & collaboration with key players in the country. In the fiscal year 2073/74, no any such disaster event was recorded which affected the health of people. District health sector contingency planning, Rapid Response training, Emergency and disaster preparedness planning activities were carried out for disaster preparedness.

Surveillance and research

The mission of the communicable diseases Surveillance program is to protect and improve the health of Nepalese citizens by tracking and responding to the occurrence of disease in the population across the country. In 2073/74 an additional 4 sentinel sites were trained on EWARS (Early Warning and Reporting System) (District hospital Khotang, District hospital Panchthar, District hospital Manang and Bayalpata hospital, Achham) bringing the number of EWARS sentinel sites to 64. Similarly, Water quality surveillance Central committee (WQSCC) meeting

with stakeholder and organized water quality surveillance workshop at Arghakhanchi, Baglung and Gorkha districts. Surveillance of reportable diseases is responsible for collecting, analyzing, interpreting, and reporting information for infectious diseases.

Curative services

In fiscal year 2073/74, curative health services were provided to outpatients, including emergency patients, and inpatients including free health services. Inpatient services were provided different level of hospitals including INGOs/NGOs, Private medical college hospitals, nursing homes, and private hospitals. In fiscal year 2073/74, 72% of the total population received outpatients (OPD) services, 1,322,816 patients were admitted for hospital services and 1,765,764 patients received emergency services from hospitals.

SUPPORTING PROGRAMS

HEALTH TRAINING

The National Health Training Centre is the apex body for human resource development in Nepal's health sector. The NHTC has five regional training centres, one sub-regional centre, 34 clinical training sites and 75 district training units. The Training Working Group ensures the efficient running of national health training programmes, maintains the quality of training and improves the coordination of all training provided under NHTC. In 2073/74 initiated a number of new training programmes including on primary trauma care management, on-the-job training for gynaecologists and obstetric fistula training.

Vector Borne Disease Research & Training

Vector Borne Disease Research & Training Center (VBDRTC) became semi-autonomous with the effect of Development Board Act from 24th January 2000. Now the center is being governed by the Development Board. Main objective of training center is to fulfill the knowledge and management gap between vector borne disease and program to the VBD focal persons. Mostly who were not trained before or newly recruited also enhance the level of knowledge and skills of the participant pertaining to prevalent and possible vector borne diseases. VBDRTC is responsible for research and training of VBDS including Malaria, Kala-azar, Dengue, Chikungunaya, Lymphatic Filariasis, Scrub typhus and Japanese encephalitis.

Health Education, Information and Communication

The National Health Education, Information and Communication Center(NHEICC) is the apex body under Ministry of Health for planning, implementing, monitoring and evaluating Nepal's health promotion, education and communication programmes including periodic surveys and research. The major achievements in 2073/74 at the central level were the development and implementation of health communication policies, strategies, development and broadcasting of health message through various methods and media. More over MERO BARSA 2074" Ma Swastha Mero,Desh Swastha" health promotion campaign was launched and implemented, Tobacco Control Intervention, Golden 1000 Days Communication Campaign and health information related Mobile SMS messages were delivered.

Logistic Management

The major function of LMD is to forecast, quantify, procure, store and distribute health commodities, equipment, instruments and repairing & maintaining of the bio-medical equipment/instruments and transportation vehicles. The quarterly LMIS and monthly Web-based LMIS have facilitated evidence based logistics decision making and initiatives in annual logistics planning, quarterly national pipeline review meetings, the consensus forecasting of health commodities and the implementation of the pull system. LMD carried out Regional Procurement and Supply Chain Workshop in all regions of the country to address the problems and issues faced by the districts in procurement and supply chain management of health commodities in the region and district.

Public Health Laboratory Services

The National Public health laboratory (NPHL) is the Nodal Institute for capacity building and for the development of public health laboratory sector. There are diagnostic health laboratories in 8 central hospitals, 3 regional hospitals, 3 sub-regional hospitals, 10 zonal hospitals, 62 district hospitals, 22 other district level hospitals, 204 PHCCs and more than 1,500 private health institutions. In 2073/74, NPHL provided various types

of routine and specialized laboratory services with more biochemistry, haematology, parasitology, immunology, virology, endocrinology, and microbiology test carried out more than in the previous year.

Primary Health Care Revitalization

The Primary Health Care Revitalization Division is responsible for strengthening Primary Health Care by increasing access to basic free health services especially for poor, disadvantaged and unreached population groups. Its main achievements in the fiscal year 2073/74 were related to increasing access to free basic health services, improving social health protection and strengthening urban health including non-communicable disease services.

Personnel Administration Management

The Personnel Administration Section is responsible for routine and programme administrative function. Its major functions include upgrading health institutions, the transfer of health workers, level upgrading of health workers up to 7th level, capacity building as well as internal management of human resources of personnel. MoH has more than 30,000 employees of whom more than 24,000 are technical personnel and 6,300 are administrative staff across the 196 sanctioned types of technical and administrative posts.

Financial Management

An effective financial support system is imperative for the efficient management of health services. DoHS's Finance Section is the focal point for financial management for all programmes under DoHS. In 2073/74 out of total national budget of Rs. 10,48,92,13,54,000 a sum of Rs. 40,56,30,27,000 (3.86%) was allocated for the health sector during the reporting year. Of the total health sector budget, Rs. 31,45,05,36,111 (77.53%) was allocated for the execution of programs under the Department of Health Services Network

Medico-legal services

Medico-legal services include forensic, pathology, autopsy, clinical forensic medicine and toxicology services. Medico-legal services have been neglected in Nepal's health system. The report presents five recommendations for improving medico-legal services in Nepal: recognizing the specific nature of the forensic/medico-legal service sector, training district medical officers and other health professionals to provide medico-legal services, providing facilities, providing incentives and remuneration and improving coordination between investigating authorities.

Monitoring and evaluation

As in previous years the Health Management Information System (HMIS) Section collected, collated and provided information on the activities undertaken at the district level to all DoHS divisions, centres, regional directorates, and the 75 district health and district public health offices. Annual performance review workshops were conducted in all districts and regions / national level. Several trainings were conducted on programme management to improve the skills of health workers. Ninety-two percent of targeted activities were carried out in 2073/74.

Health Service Management

The Management Division is responsible for DoHS's general management functions. The division's major ongoing activities were institutionalizing the use of geographic information systems for health service planning, developing the Health Infrastructure Information System (HIIS), the construction and maintenance of health facility buildings and other infrastructure, and health facility upgrading. Other activities included HMIS training for newly recruited health workers, arranging the supply of HMIS recording and reporting tools. Managed the provision of free treatment to impoverished citizens including 5,821 Cancer, 3,291 Heart disease and 5,888 Kidney free treatment services

PROGRESS OF OTHER DEPARTMENTS

Others Department of MoHP

The Department of Drug Administration (DoA) is responsible for regulating all functions related to modern, veterinary and traditional medicines. **Its** manages the delivery of Ayurveda health services. The department runs two Ayurveda hospitals, 14 zonal Ayurveda dispensaries, 61 district Ayurveda health centres and 305

Ayurveda dispensaries. In 2073/74, there were 1,034,029 outpatient consultations and a total of 1.2 million client-visits for Ayurveda treatment at DoA institutions.

Health Councils

The six professional health councils: Nepal Medical Council, Nepal Nursing Council, Nepal Ayurvedic Medical Council, Nepal Health Professional Council, Nepal Pharmacy Council and Nepal Health Research Council accredit health-related schools and training centres and regulate care providers.

Health Care Social Security

The Social Health Security Program was initiated in April 2016 in Kailali district and in June 2016 in Baglung and Ilam districts. As such, the program was rolled out to three districts in FY 2072/73. In the FY 2073/74, the program was expanded to additional 12 districts. By the end of this year 228,113 people have been enrolled to the program. More than 63 million annual contributions have been collected.

Development Partners Support

Development partners support the government health system through a sector-wide approach (SWAp). The SWAp now supports the implementation of the new Nepal Health Sector Strategy (NHSS, 2016–2021). The Joint Financing Arrangement (JFA) has been signed by various partners and the government. The JFA describes in detail the arrangement for partners' financing of the NHSS. The JFA elaborates the pool funding arrangement and parallel financing mechanism as bilaterally agreed between the government and the donor partners.

Trend of Health Service Coverage Fact Sheet

Fiscal Years 2071/72 to 2073/74 (2014/15 to 2016/17)

PROGRAMME INDICATORS	National level			Province level, FY 2073/74 Province No						
	2071/72 (2014/15)	2072/73 (2015/16)	2073/74 (2016/17)	1	2	3	4	5	6	7
REPORTING STATUS										
% of public hospitals reporting to HMIS	92	89	93	100	85	88	92	99	93	93
% of primary health care centres reporting to HMIS	99	100	98	97	97	100	94	100	99	100
% of health posts reporting to HMIS	99	99	100	99	99	100	99	100	99	100
% of PHC-ORC clinics reporting to HMIS	81	92	89	93	82	88	92	94	85	93
% of EPI clinics reporting to HMIS	92	88	100	97	100	97	98	98	97	97
% of female community health volunteers (FCHVs) reporting to HMIS	87	82	90	88	94	88	94	91	85	92
% of private health facilities reporting to HMIS	68	80	47	52	20	52	56	35	37	62
IMMUNIZATION										
% of children under one year immunized with BCG	94	87	91	92	103	85	75	92	101	87
% of children under one year immunized with DPT-HepB-Hib3	91	82	86	87	99	76	76	87	97	85
% of children under one year immunized with OPV 3	90	79	86	86	98	75	76	87	96	85
% of one-year-old children immunized against measles/rubella	85	77	84	84	91	76	75	86	96	85

PROGRAMME INDICATORS	National level			Province level, FY 2073/74 Province No						
	2071/72 (2014/15)	2072/73 (2015/16)	2073/74 (2016/17)	1	2	3	4	5	6	7
% of children 12-23 months immunized against Japanese encephalitis	53	63	67	73	65	59	71	72	64	71
Immunization programme: Dropout rate DPT-Hep B-Hib 1 vs 3 coverage	3.2	5.0	4.7	3.5	10.8	0.9	1.6	3.7	4.7	2.1
NUTRITION										
% of children aged 0-12 months registered for growth monitoring	97	78	85	83	75	68	84	100	127	91
Average number of visits among children aged 0-24 months registered for growth monitoring	3	3	3	4	2	3	4	3	3	4
% of children aged 0- 6 months registered for growth monitoring, exclusively breastfed for the first six months	29	32	25	21	3	41	14	37	36	26
% of children aged 6–8 months registered for growth monitoring received solid, semi-solid or soft foods	28	32	31	24	3	65	12	37	40	27
% of children aged 6-23 months, who received 1st dose of Baal Vita (MNP) in 15 programme districts	19	21	34	39	9	77	12	40	7	14

PROGRAMME INDICATORS	National level			Province level, FY 2073/74 Province No						
	2071/72 (2014/15)	2072/73 (2015/16)	2073/74 (2016/17)	1	2	3	4	5	6	7
Percentage of children aged 0-23 months registered for growth monitoring	78	64	69	64	63	56	69	79	110	77
Percentage of pregnant women received 180 tablets Iron	52	49	44	41	43	32	46	58	50	52
ACUTE RESPIRATORY INFECTION (ARI)										
Incidence of acute respiratory infection (ARI) per 1,000 children under five years (new visits)	765	648	612	717	472	439	597	576	927	992
Incidence of pneumonia among children under five years (per 1,000) Note*= HFs reporting only	188	147	*66	89	53	51	52	55	117	86
% of children under five years with ARI suffering pneumonia	25	22	10	12	11	11	9	9	12	8
Percentage of severe Pneumonia among new U5 yrs cases	0.4	0.3	0.3	0.3	0.3	0.3	0.1	0.2	1.5	0.3
DIARRHOEA										
Incidence of diarrhoea per 1,000 under five years children (new cases)	502	422	400	376	335	288	302	411	722	697
% of children under 5 with diarrhoea treated with zinc and ORS	93	87	92	86	95	92	97	89	96	94
% of children under five years with diarrhoea treated with IV fluid	0.64	0.8	0.7	0.1	0.2	0.1	0.02	0.1	0.1	0.1

PROGRAMME INDICATORS	National level			Province level, FY 2073/74 Province No						
	2071/72 (2014/15)	2072/73 (2015/16)	2073/74 (2016/17)	1	2	3	4	5	6	7
Percentage of children U5 years with diarrhea suffering from Severe dehydration	0.3	0.2	0.4	0.1	0.1	0.1	0.01	0.1	0.1	0.4
Percentage of children U5 years with Pneumonia treated with antibiotics	189	174	156	138	178	141	195	170	145	147
SAFE MOTHERHOOD										
% of pregnant women who received Td 2 and 2+	52	66	64	61	81	49	57	71	64	65
% of pregnant women attending first ANC visit	96	97	102	95	103	109	102	103	110	92
% of pregnant women attending four ANC visits	52	51	53	44	37	68	59	58	49	54
% of pregnant women receiving IFA tablets or syrup during their last pregnancy	52	49	40	32	40	24	32	55	66	56
% of postpartum mothers who received vitamin A supplements	49	51	72	64	87	46	67	84	95	81
% of institutional deliveries	52	55	55	49	44	53	46	69	60	68
% of deliveries conducted by a skilled birth attendant	51	54	52	48	45	52	46	65	51	60
% of postpartum women received PNC checkup within 24 hours of birth	48	52	51	42	44	48	65	59	49	67
% of women who had three PNC check-ups as per protocol	20	18	19	9	23	13	14	25	20	35

PROGRAMME INDICATORS	National level			Province level, FY 2073/74 Province No						
	2071/72 (2014/15)	2072/73 (2015/16)	2073/74 (2016/17)	1	2	3	4	5	6	7
FAMILY PLANNING										
FP Methods New acceptor among as % of MWRA	11	11	10	9	7	9	10	14	14	14
Contraceptive prevalence rate (CPR-unadjusted)	43	43	43.6	47.8	49.4	41.1	35.6	43.6	37.4	40.5
CPR method mix – condoms	3.5	3.5	3.6	2.5	2.0	2.4	3.7	5.7	4.9	6.2
CPR method mix - pills	3.0	3.0	3.0	3.7	1.6	2.4	2.9	4.5	2.4	3.5
CPR method mix - Depo	6.9	6.7	7.3	12.1	4.3	6.8	4.8	8.0	7.0	7.2
CPR method mix - IUCD	2.6	2.7	2.8	2.3	1.0	5.2	3.0	3.2	2.0	2.0
CPR method mix - implants	2.8	4.0	4.6	4.1	1.3	6.9	3.2	6.0	5.7	5.4
CPR method mix - sterilization	23.8	22.5	22.3	23	39	17	18	16	15	16
Sterilization (Tar vs Achiev.)	62	78	77	87	86	65	73	55	87	72
FEMALE COMMUNITY HEALTH VOLUNTEERS (FCHV)										
Total number of FCHVs (Note =*= HMIS source)	51470	51416	49101`*	8578	7073	9016	5767	8718	4102	5747
% of ARI cases managed by FCHVs among ARI cases in children under five years	57	41	59	53	55	58	52	57	49	63
% of mothers group meeting	100	94	86	83	91	81	86	88	80	92
% of PHC/ ORC conducted among planned PHC/ORC	84	82	89	93	82	88	92	94	85	93
MALARIA AND KALA-AZAR										
Malaria Blood Slide collection(target vs achieve)	69	78	77	38	45	38	112	125	83	140
Malaria Slide examination (collection vs. exam.)	126	112	101	100	100	107	102	101	105	100

PROGRAMME INDICATORS	National level			Province level, FY 2073/74 Province No						
	2071/72 (2014/15)	2072/73 (2015/16)	2073/74 (2016/17)	1	2	3	4	5	6	7
Annual blood slide examination rate (ABER) per 100	0.75	0.84	0.79	0.44	0.51	0.42	0.87	1.07	0.70	1.60
Annual parasite incidence (API) per 1,000 population at risk	0.10	0.07	0.08	0.02	0.04	0.03	0.03	0.08	0.13	0.03
Clinical malaria cases	20861	10642	3904	987	1377	421	62	723	39	295
Incidence of kala-azar per 10,000 population at risk	0.25	0.12	0.11							
TUBERCULOSIS										
Case notification rate (all forms of TB)	123	113	111	84	109	128	81	135	98	110
Treatment success rate	92	90	91	90	93	91	91	92	92	87
LEPROSY										
New case detection rate (NCDR) per 100,000 population	11	11	11	11	20	4	5	19	7	8
Prevalence rate (PR) per 10,000	0.9	0.9	0.9	0.8	1.5	0.3	0.5	1.6	0.6	0.7
HIV/AIDS AND STI										
Number of HIV testing	264081	122888	176228	31780	14245	39043	4530	45104	682	40844
Number of new positive cases	1480	2163	1781	207	273	630	108	134	9	208
% of positivity yield	0.6	1.8	1.0	0.7	1.9	1.6	2.4	0.3	1.3	0.5
CURATIVE SERVICES										
% of population utilizing outpatient (OPD) services	73	66	72	78	47	82	96	69	78	71
Average length of stay	3	4	3	3	2	4	3	3	3	3

Source: HMIS/DoHS

Abbreviations and Acronyms

AEFI	Adverse Effect Following Immunization
AFI	Annual Falciparum Incidence
AFP	Acute Flaccid Paralysis
AMR	Anti-Microbial Resistant
ARPS	At Risk Population
ART	Anti-Retroviral Treatment
ARTI	Annual Risk of Tuberculosis Infection
AVSC	Association for Voluntary Surgical Contraception
BCG	Bacille Calmette-Guerin
BPCR	Birth Preparedness and complication Readiness
CAC	Comprehensive Abortion Care
CB-IMCI	Community-based Integrated Management of Childhood Illness
CB-MNC	Community-based Maternal and Neonatal Care
CB-NCP	Community-Based New-born Care Programme
CEOC	Comprehensive Emergency Obstetric Care
CFR	Case Fatality Rate
CMAM	Community-based Management of Acute Malnutrition
CMI	Clinical Malaria Incidence
DACC	District AIDS Co-ordination Committee
DF	Dengue Fever
DHF	Dengue Hemorrhagic Fever
DOTS	Directly Observed Treatment, Short Course
DSS	Dengue Shock Syndrome
EDPCT	Early Diagnosis, Prompt and Complete Treatment
EHCS	Essential Health Care Services
EOC/EmOC	Emergency Obstetric Care
EWARS	Early Warning Reporting System
GFATM	Global Fund to Fight against AIDS, Tuberculosis and Malaria
HIV	Human Immuno-deficiency Virus
HSDPF	Health Sector Development Partner Forum
HuRDIS	Human Resources Development Information System
ICD-10	International Classification of Diseases & Related Health Problems, 10^{th} Revision
IMCI	Integrated Management of Childhood Illness
IPD	Immunization Preventable Diseases
ISSMAC	Iodized Salt Social Marketing Campaign
IUATLD	International Union Against Tuberculosis and Lung Disease
IUCD	Intra-uterine Contraceptive Device
KAI	Kala-azar Incidence
LEC-1	Leprosy Elimination Campaign -1
LF	Lymphatic Filariasis
LLIN	Long-Lasting Insecticide treated Nets
MARPs	Most At Risk Populations
MDA	Mass Drug Administration
MNH	Maternal and Neonatal Health
MNTE	Maternal and Neonatal Tetanus Elimination
MSM	Men having Sex with Men
MTD	Multi-drug Therapy
MVA	Manual Vacuum Aspiration
MWRA	Married Women of Reproductive Age

NCD	Non Communicable Diseases
NIH	Nuffield Institute for Health
NISN	National Influenza Surveillance Network
NML	National Medicines Laboratory
NPCS	Nutrition Promotion and Consultancy Services
NTAG-	National Technical advisory Group for Malaria
NTF-ELF	National Task Force for the Elimination of Lymphatic Filariasis
ORS	Oral Rehydration Solution, Oral Rehydration Salts
ORTC	Oral Rehydration Treatment Corner
PBL-CHIP	Prevention of Blindness and Community Health Intervention Programme
PEP	Post Exposure Prophylaxis
PHRC	Primary Health Care Revitalization
PLHA	People Living with HIV/AIDS
RBM	Roll Back Malaria
SDHS	Strengthening District Health Systems
SFR	Slide Falciparum Rate
VBD	Vector-Borne Disease
VCT	Voluntary Counseling and Test
VPD	Vaccine Preventable Diseases
VSC	Voluntary Surgical Contraception
WASH	Water and Sanitation Health
WCBA	Women of Child-Bearing Age

CHAPTER 1: INTRODUCTION

BACKGROUND

This Glimpse of Annual report is the byproduct of the comprehensive Annual Report published by the Department of Health services based on the annual performances of the major programmes carried out through the network of its health facilities from the community level to central levels during the fiscal year 2073/74 (2016/2017). The health facilities network comprises from the Health Post situated to VDC level to central level as shown in the organizational structures of the Department of Health Services.

Its publication with the primary objective of meeting the ever increasing demand of the readers especially for those who need to update the information on health service coverage with the help of selected indicators. The detail contents of the glimpse are provided in the table of content. Major programme performance during the fiscal year 2073/74 (2016/2017) were presented in successive tables based on selected indicators.

DEPARTMENT OF HEALTH SERVICES (DoHS)

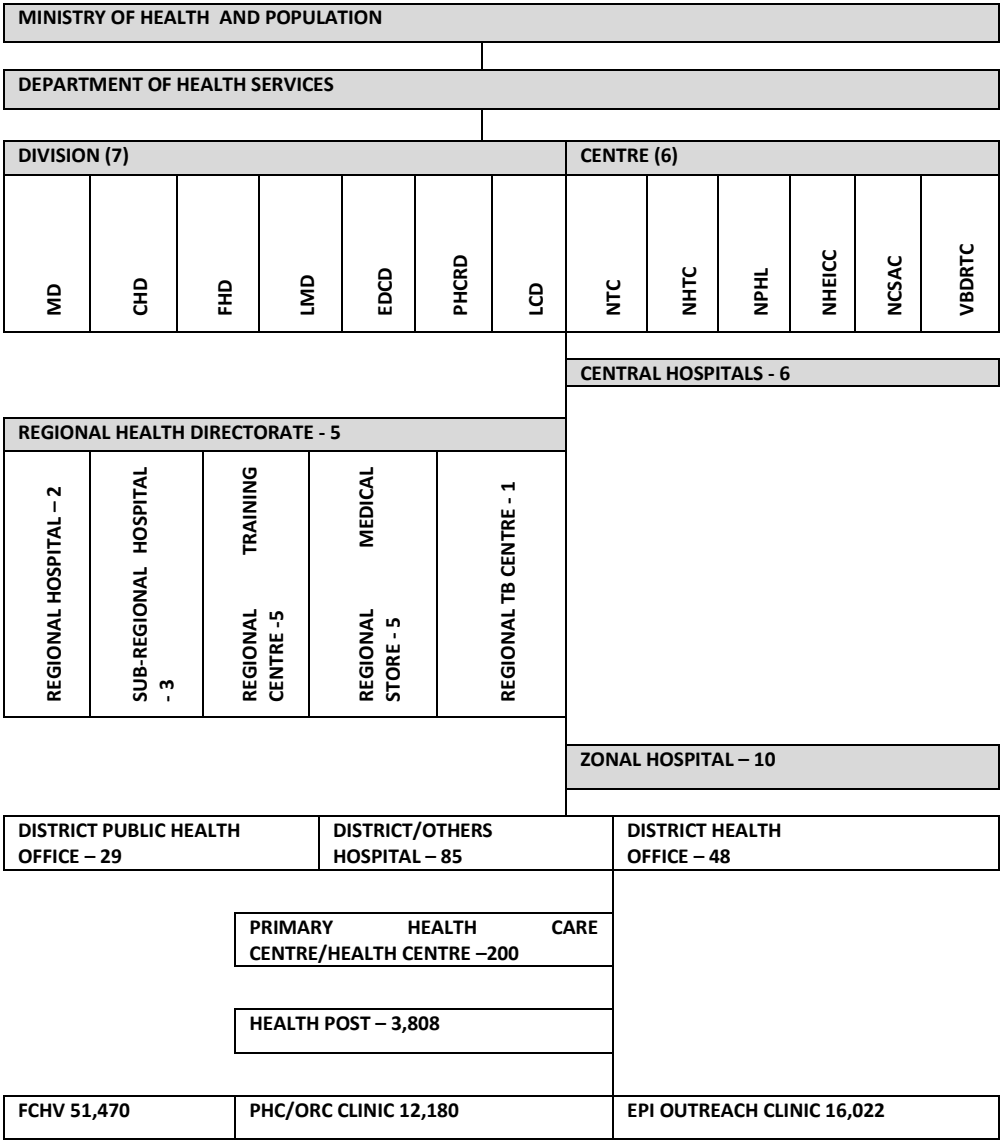
The DoHS is responsible for delivering preventive, promotive, diagnostic and curative health services. The director general is the organisational head. The DoHS has seven divisions

	Division	Areas of responsibility
1	Child Health Division (CHD)	The Expanded Programme on Immunization (EPI), Nutrition and Community-Based Integrated Management of Childhood Illness programme (CB-IMCI) and new-born care.
2	Family Health Division (FHD)	Reproductive health care (including safe motherhood and neonatal health), family planning and female community health volunteers (FCHVs)
3	Epidemiology and Disease Control Division (EDCD)	The control of epidemics, pandemic and endemic diseases and the treatment of animal bites.
4	Leprosy Control Division (LCD)	The prevention, early detection, treatment, referral, rehabilitation, management and follow-up through the community-based rehabilitation of all types of disability including leprosy.
5	Management Division	Infrastructure, budgeting and planning, monitoring and supervision (M&E), quality of care, management information system, information technology (IT), nursing services, oral and mental health, physical assets management (PAM), and free medication and treatment for impoverished citizens.
6	Logistics Management Division (LMD)	The procurement, supply and management of logistics, equipment and services required by DoHS and below levels.
7	Primary Health Care Revitalization Division (PHCRD)	Expanding the coverage of primary health services in an equitable way particularly by addressing the needs of disadvantaged and unreached population groups.

There are five Centres with a degree of autonomy in personnel and financial management: National Health Training Centre (NHTC), National Health Education, Information and Communication Centre (NHEICC), National

Tuberculosis Control Centre (NTC), National Centre for AIDS and STD Control (NCASC) and National Public Health Laboratory (NPHL). The NHTC coordinates all training programs of the respective Divisions and implements training by sharing common inputs and reducing the travelling time of care providers. Similarly, all IEC/BCC-related activities are coordinated by NHIECC. These centres support the delivery of EHCS and work in close coordination with the respective Divisions.

Organogram of the Department of Health Services (DoHS)



Source: HMIS, DoHS

SOURCES OF INFORMATION

The Health Management Information System (HMIS) provided the main source of information for this report. The report also uses information from other management information systems (MISs), disease surveillance systems, vital registration, censuses, sentinel reporting, surveys, rapid assessments and research. The main health sector MISs include the HMIS, the Logistics Management Information System (LMIS), the Financial Management Information System (FMIS), the Health Infrastructure Information System (HIIS), the Planning and Management of Assets in Health Care System (PLAMAHS), the Human Resource Information System (HuRIS), the Training Information Management System (TIMS), the Ayurveda Reporting System (ARS) and the Drug Information Network (DIN).

CHAPTER 2: CHILD HEALTH

IMMUNIZATION

Background

National Immunization Program (NIP) formerly Expanded Program on Immunization (EPI) was started in 2034 and is a priority 1 program. It is one of the successful public health interventions of Ministry of Health and Population It's has achieved several milestones and contributed in reduction of morbidity, mortality and disability associated with vaccine preventable diseases. It is the responsibility of the D/PHO to ensure that a successful immunization program is implemented at the district and below level. PHCCs and HPs implement immunization programs in their respective municipalities and Village Development Committees (VDCs) ensuring all target children receive immunization services especially marginalized and hard-to-reach population.

Goal

To reduce child mortality, morbidity and disability associated with vaccine preventable diseases.

Objectives and strategies

The objectives and strategies of the National Immunization Program are as follows:

- Achieve and maintain at least 90% vaccination coverage for all antigens at national and district level by 2016
- Ensure access to vaccines of assured quality and with appropriate waste management
- Achieve and maintain polio free status
- Maintain maternal and neonatal tetanus elimination status
- Initiate measles elimination
- Accelerate control of vaccine-preventable diseases through introduction of new and underused vaccines
- Strengthen and expand VPD surveillance
- Continue to expand immunization beyond infancy.

Major Achievements

The following were the major activities carried out during FY 2073/74.

Immunization coverage by antigens doses, FY 2073/74

SN	Antigens	Target population	Targets	Achievement	% Achieved
1	BCG	under 1 Year	623,929	569751	91.34
2	DPT-Hep B Hib 1	under 1 year	623,929	566098	90.73
3	DPT-Hep B Hib 2	under 1 year	623,929	552190	88.50
4	DPT-Hep B Hib 3	under 1 year	623,929	539698	86.49
5	Polio1	under 1 year	623,929	562452	90.14
6	Polio2	under 1 year	623,929	550544	88.23
7	Polio3	under 1 year	623,929	536191	85.93
8	IPV	under 1 year	623,929	100815	16.15
9	PCV1	under 1 year	623,929	550364	88.20
10	PCV2	under 1 year	623,929	534158	85.61
11	PCV3	under 1 year	623,929	484993	77.73

SN	Antigens	Target population	Targets	Achievement	% Achieved
12	Measles/Rubella 1st dos	under 1 year	623,929	524332	84.03
13	JE	12 months	623929	420494	67.39
14	Measles/Rubella 2nd dose	15 Months	626022	356878	57.00
15	3 dozes completion of DPT-HepB-Hib & OPV after 1 year	Completed after 1 year		32081	5.14
16	Td 2 & Td2 +	Pregnant women	756976	486466	64.26

Above table shows antigens wise coverage at national level of immunization coverage during FY 2073/74. Immunization coverage of all antigens except IPV was found increased in FY 2073/74 as compared to FY 2072/73. The highest coverage was 91.34% for BCG, 90.73% and 90.14% for DPTHepBHIb1 and OPV1 respectively. Similarly, the coverage of DPTHepBHib3 and OPV3 were 86.79% and 85.93 respectively. The children who have completed the 3rd dose of DPT-HepB-Hib and OPV after their first birthday is accounted 5.14% of the national coverage. If this coverage of 5.14% aggregated to DPTHepBHib3 and OPV3, the coverage reaches to above 90% for both antigens. The coverage of 1st, 2nd and 3rd dose of DPTHepBHib and OPV is different; since these doses are administered in same settings should be the same. The coverage of PCV1 was 88.20% and that of PCV3 was 77.73%. The IPV coverage is only 16% because there is shortage (globally and nationally) of IPV vaccine since October 2016. Measles rubella1 and MR2 coverage was 84.03% and 57% respectively. Since the 3rd dose of PCV and MR1 are given in same setting at the age of 9 months, the coverage should be the same.

Drop-out Rate

The dropout rate for BCG vs MR1, DPTHepHib1 vs DPTHepBHib3 and DPTHepBHib1 vs MR1. The dropout rate must not increase than 10%. The dropout rate has been found decreased. The dropout rate of BCG vs MR1 has lowered than the previous year by 3% whereas that for DPT-HepB-Hib1 vs 3 and DPT-HepB-Hib1 vs MR1 has lower by 0.5% and 1% respectively.

Vaccine wastage rate

Vaccine wastage rate of MDVP like DPTHepHib and is still higher than accepted rate of 15%. The wastage rate of DPTHepBHib, OPV and PCV has increased by 1% than previous year. The wastage rate of MR vaccine which was supposed to drop drastically after the introduction of 2nd dose still remains high which indicates that 2nd dose is still not given in all sessions

Province wise non polio AFP and adequate stool collection rate

The table below shows province wise non polio AFP and adequate stool collection rate. All the provinces have met the standard indicators of non-AFP rate more than 2 and adequate stool collection more than 80%.

NPAFP and Adequate Stool Collection Rate by Province, FY 2073/74

Province	NPAFP Cases	NPAFP Rate	Stool Adq
Province 1	76	5.36	100
Province 2	92	5.12	97
Province 3	56	3.06	98

Province 4	33	3.86	100
Province 5	68	5.05	99
Province 6	31	6.10	100
Province 7	31	3.68	81
Total	387	4.50	97

Source: CHD/WHO/IPD Nepal

Note: the non-polio AFP and adequate stool collection rate of Nawalparasi and Rukum have been calculated as for previous structure

NUTRITION

Background

Nutrition section under Child Health Division is responsible for national nutrition program for improving the nutritional status of children, pregnant women and adolescents. Its goal is to achieve nutritional well-being of all people to maintain a healthy life to contribute in the socio-economic development of the country, through improved nutrition program implementation in collaboration with relevant sectors. Nutrition interventions are cost effective investments for attaining many of the Sustainable Development Goals. In alignment with international and national declarations and national health policies, the Government of Nepal is committed to ensuring that its citizens have adequate food, health and nutrition. The Constitution (2015) ensures the right to food, health and nutrition to all citizens. Hunger and under-nutrition often results in the vicious cycle of malnutrition and infections that leads to poor cognitive and intellectual development, less productivity and compromised socioeconomic development.

Targets

Current Global Nutrition Targets

a. Sustainable Development Goal

Goal 2 — End hunger, achieve food security and improved nutrition and promote sustainable agriculture

- By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round;
- By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons;
- By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment;

b. Global Nutrition Target by 2025 (World Health Assembly [WHA])

- Reduce the global number of children under five who are stunted by 40 percent
- Reduce anaemia in women of reproductive age by 50 percent
- Reduce low birth weight by 30 percent
- No increase in childhood overweight
- Increase the rate of exclusive breastfeeding in the first six months up to at least 50 percent
- Reduce and maintain childhood wasting to less than 5 percent.

National Nutritional Status and Targets

Nepal's progress against the MSNP 2 targets (2001–2016)

Indicators	Status (%)				Target (%)		
	NDHS 2001	NDHS 2006	NDHS 2011	NDHS 2016	MSNP 2022	WHA 2025	SDG 2030
Stunting among U5 children	57	49	41	36	28	24	15
Wasting among U5 children	11	13	11	10	7	<5	4
Underweight among U5 children	43	39	29	27	20	15	10
Percentage of LBW	-	14	12	24	10	≤1.4	≤1.4
Exclusive breastfed	-	53	70	66	80	85	90
Fed according to recommended IYCF	-	-	24	36	60	70	80

Indicators	Status (%)				Target (%)		
	NDHS 2001	NDHS 2006	NDHS 2011	NDHS 2016	MSNP 2022	WHA 2025	SDG 2030
practices							
Over-weight and obesity among U5 children	-	-	-	2.1	1.4	1	<1
Anaemia among U5 children	-	48	46	53	28	20	<15
Anaemia among children under 6-23 months	-	78	69	68	-	60	<50
Anaemia among women (15-49)	-	36	35	41	24	20	<15
Anaemia among pregnant women	-	42	48	46	-	35	<25
Anaemia in adolescent women (15-19)	-	39	38.5	43.6	25 (for 10-19)	35	<25
Body mass index (<18.5kg/m^2) among women	26	24	18.2	17	12	8	<5
overweight or obese among women	-	9	14	22	18	15	<12

Major achievements, FY 2073/74

Growth monitoring and promotion

In FY 2073/74, the percentage of new-borns with low birth weight (<2.5 kg) was increased to 11% at national level from that as 9% in FY 2072/73. It was similar across the provinces with the highest rate in the province 1 (15.4 percent) while lowest rate at province 6 (6.9 percent). Nationally, there was an average of 3 visits per child in FY 2073/74 and it was slightly decreased from the previous year. As far as provinces are concerned, the provinces 1, 4 and 7 had average visits more than that of the national average whereas the province 2 had the lowest average visits across the provinces.

The percentage of children aged 0 to 23 months registered for growth monitoring in 2073/74 (69 per cents) was sharply increased from the previous fiscal year, however, it was still less than that in FY 2071/72. Across the provinces, the province 7 had the highest percentage while province 3 had the lowest percentage of children aged 0 to 23 months registered for growth monitoring in 2073/74.

Prevention and control of iron deficiency anaemia

MoH has provided supplementary iron folic acid (IFA) to pregnant and post-partum women since 1998 to reduce maternal anaemia. The protocol is to provide 60 mg elemental ironand400 micrograms folic acid to pregnant women for 225 days from their second trimester. To improve access, in 2003, the Intensification of Maternal and Neonatal Micronutrient Programme (IMNMP) began IFA supplementation through female community health volunteers (FCHVs). This programme covered all 75 districts by 2014. The intensification programme improved coverage, although compliance with taking 180 tablets during pregnancy and 45 tablets post-partum remains an issue.

The coverage of first time iron distribution is high at 74 percent nationally with the highest coverage in province 5,6, and 7 (98 percent, 100 percent, and 81 percent respectively), but the compliance of taking 180 tablets throughout the pregnancy (44 percent) and 45 days' post-partum (40 percent) is substantially low. Province 3 has the lowest coverage amongst all for all three indicators.

Control of vitamin A deficiency disorders

The government initiated the National Vitamin A Programme in 1993 to improve the vitamin A status of children aged 6-59 months and reduce child mortality. This programme is recognized as a global public health success story. It initially covered 8 districts and was scaled up nationwide by 2002. FCHVs distribute the capsules to the targeted children twice a year through a campaign-style activity.

NiE interventions in 14 Earthquake districts

During FY 2073/074, NiE interventions were continued in 14 districts (Kathmandu, Lalitpur, Bhaktapur, Kavrepalanchowk, Dhading, Rasuwa, Nuwakot, Makawanpur, Sinchdupalchowk, Sindhuli, Dolakha, Ramechhap, Gorkha, and Okhaldhunga), highly affected by the Mega Earthquake in Baisakh of FY 2071/72 with the recovery phase interventions. The progress in this regard is given below.

Achievement of nutrition in emergency in 14 earthquake affected districts (2015/16)

SN	Intervention areas	Achievement (%)
1	Mothers and caretakers of children aged 0-23 months counselled on breastfeeding and risks of artificial feeding	68
2	Mothers and caretakers of children age 6-23 months counselled on complementary feeding	72
3	Children aged 6-59 months with moderate acute malnutrition admitted to targeted supplementary feeding centres (TSFC)	51
4	Supplementary feeding of pregnant and lactating women	196
5	Children aged 6-59 months received multiple micronutrient powders (Baal Vita)	85
6	Children aged 6-59 months received vitamin A capsules	79
7	Children aged 12-59 months received deworming tablets	76
8	Pregnant and Lactating Women receiving IFA Supplementation	56

Source: Nutrition Cluster report

INTEGRATED MANAGEMENT OF NEONATAL AND CHILDHOOD ILLNESS (IMNCI)

Background

CB-IMNCI is an integration of CB-IMCI and CB-NCP Programs as per the decision of MoH on 2071/6/28 (October 14, 2015). This integrated package of child-survival intervention addresses the major problems of sick newborn such as birth asphyxia, bacterial infection, jaundice, hypothermia, low birth-weight, counseling of breastfeeding. It also maintains its aim to address major childhood illnesses like Pneumonia, Diarrhoea, Malaria, Measles and Malnutrition among under 5 year's children in a holistic way.

In CB-IMNCI program, FCHVs are expected to carry out health promotional activities for maternal, newborn and child health and dispensing of essential commodities like distribution of iron, zinc, ORS, chlorhexidine which do not require assessment and diagnostic skills, and immediate referral in case of any danger signs appeared among sick newborn and children. Health workers will counsel and provide the health services like management of non-breathing cases, low birth weight babies, common childhood illnesses, and management of neonatal sepsis. Also,the program has provisioned for the post-natal visits by trained health workers through primary health careoutreach clinic.

Goal

- Improve new-bornand child survival and healthy growth and development.

Targets of Nepal Health Sector Strategy (2015-2020)

- Reduction of Under-five mortality rate (per 1,000 live births) to 28 by 2020
- Reduction of Neonatal mortality rate (per 1,000 live births) to 17.5 by 2020

Objectives

- To reduce neonatal morbidity and mortality by promoting essential new-borncare services
- To reduce neonatal morbidity and mortality by managing major cause ofillness
- To reduce morbidity and mortality by managing major causes of illness among under 5 years children

Strategies

1. Quality of care through system strengthening and referral services for specialized care
2. Ensure universal access to health care services for new born and young infant
3. Capacity building of frontline health workers and volunteers
4. Increase service utilization through demand generation activities
5. Promote decentralized and evidence-based planning and programming

Major interventions

Newborn Specific Interventions

- Promotion of birth preparedness plan
- Promotion of essential new-born care practices and postnatal care to mothers and new-borns
- Identification and management of non-breathing babies at birth
- Identification and management of preterm and low birthweightbabies
- Management of sepsis among young infants(0-59days) includingdiarrhoea

Child Specific Interventions

- Case management of children aged between 2-59 months for 5 major childhood killer diseases (Pneumonia, Diarrhoea, Malnutrition, Measles and Malaria)

Cross-Cutting Interventions

- Behaviourchange communications for healthy pregnancy, safe delivery and promote personal hygiene and sanitation

- Improved knowledge related to Immunization and Nutrition and care of sick children
- Improved interpersonal communication skills of HWs and FCHVs

Vision 90 by 20

CB-IMNCI program has a vision to provide targeted services to 90% of the estimated population by 2020 as shown in the diagram below.

Major activities

Major activities carried out under the IMNCI programme in FY 2073/74 were as follows:

- Development and certification of Mid-Western Regional Hospital as an IMNCI Clinical Training Site as Nepal's first IMNCI Clinical Training Site
- Expansion of IMNCI Training Site at Pokhara (Pokhara Academy of Health Science) and Dang (Rapti Sub-regional Hospital): On-going
- Development of National Medical Standard for Care of Newborns and Children has been started: On-going
- Development of FB-IMNCI package: On-going
- Implementation of Remote Area Guideline for CB-IMNCI program (on-going)
- Development a pool of IMNCI trainers for CB-IMNCI and Comprehensive Newborn Scale up of Navi care Program in public as well as private sector
- Procurement of commodities and equipment related to IMNCI
- Establishment/Strengthening of SNCU
- Printing of CB-IMNCI, Comprehensive New-born Care (Level II) Training Materials (Guidelines, Handbook, Chart, Flex, etc.)
- Training of Trainers (TOT) for CBIMNCI and Comprehensive Newborn Care Training (Level II)
- Implementation of free sick newborn care program through five hospitals (Kanti Children Hospital, KoshiZonal Hospital, Western Regional Hospital, LumbiniZonal Hospital and SetiZonal Hospital)
- Initiation of Perinatal Quality Improvement Initiative in 12 hospitals

CB-IMNCI Program Monitoring Key Indicators

Regular monitoring is important for better management of program. Therefore, CB-IMNCI program has identified 6 major indicators to monitor the programs that are listed. The 2073/74 monitoring results of the CB-IMNCI programmewere afollows.

CB-IMNCI programme monitoring indicators by province, FY 2073/74

	% of institutional deliveries	% of new-borns applied chlorhexidine (CHX) gel	% of PSBI cases received complete dose of inj. Gentamicin	% of pneumonia cases treated with antibiotics	% diarrhoeal cases treated with ORS and zinc
Province 1	49.12	42.66	46.32	137.80	86.40
Province 2	43.90	77.13	78.49	178.38	94.76
Province 3	52.78	48.10	24.20	141.06	92.17
Province 4	45.99	50.66	16.41	195.46	96.63
Province 5	69.28	80.10	64.19	170.48	88.81
Province 6	60.15	81.50	71.41	145.24	96.14
Province 7	67.80	78.04	60.36	147.20	93.88
National	**54.56**	**63.71**	**58.35**	**155.73**	**92.14**

In the fiscal year 2073/74, 25,742 newborns cases (aged 0-28 days) were registered and treated at health facilities and PHC/ORCs of whom 12,295 were treated for local bacterial infections and 3,713 for possible

infections (PSBI). In the same year, 31,098 infants (29-59 day old) were treated at health facilities and PHC/ORCs of whom 2,765 were treated for PSBI. At the national level 1.0 percent 0-59 day old (among expected number of live births) suffered from PSBI. And 58.3 percent of all PSBI cases were treated with a complete dose of gentamycin.

In 2073/74, 1,184,120 cases of diarrhoea were reported of which 0.44 percent suffered from severe dehydration (increased from 0.2 percent the previous year). The national incidence of diarrhoea per 1,000 under-5 year olds decreased from 422/1,000 in 2072/73 to 400/1000 in FY 2073/74. In FY 2073/74, a total of 1,810,722 ARI cases were registered, out of which 10.5% were categorized as pneumonia cases and 0.29% were severe pneumonia cases. The incidence of pneumonia (both pneumonia and severe pneumonia at HF and PHC/ORC) at national level was 64 per 1000 under five children as compared to 147 per 1,000 under-five children in the previous fiscal year (FY 2072/73).

Total 13,019 cases were identified by FCHVs as sick children out of which 48.7 percent were treated with antibiotic and referred to health facilities and 8.01 percent were reported as death in FY 2073/74As per the new reporting and recording system, the achievements of management of under 5 children are given in the table below.

Management of newborns (0-28 days)

Classification and treatment of 0-28-day newborn cases by province (FY 2073/74)

Indicators	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	National	
								No.	% among total cases
Total cases (HF+ORC)	4,573	2,370	2,989	1,888	5,694	3,967	4,261	**25,742**	**NA**
Possible severe bacterial infections (PSBI) (HF+ORC)	578	217	246	124	1035	752	761	**3,713**	**14.4**
Local bacterial infections (HF+ORC)	2,549	1,660	1,296	904	1,887	1,745	2,255	**12,296**	**47.8**
Jaundice (HF+ORC)	298	122	320	296	339	181	184	**1,740**	**6.8**
% of Low weight or feeding problem (HF only)	3.98	5.23	5.16	7.40	6.06	8.55	10.55	**1,605**	**6.8**
Referred	357	183	214	88	252	131	185	**1,410**	**5.5**
Deaths	7	2	13	2	45	12	23	**104**	**0.4**
FCHVs									
Sick baby	2,607	2,105	1,794	783	1,982	1,391	2,357	**13,019**	**NA**
Treated with antibiotic and referred to a health facility	1,656	1,121	534	193	1,118	865	855	**6,342**	**48.7**
Deaths	168	70	155	52	204	145	249	**1,043**	**8.01**

Source: HMIS

Diarrhoea

Classification of diarrhoeal cases by province 2073/74

CB-IMNCI program has created enabling environment to health workers for better identification, classification and treatment of diarrhoeal diseases. As per CB-IMNCI national protocol, diarrhoea has been classified into three categories: 'No Dehydration', 'Some Dehydration', and 'Severe Dehydration'. The reported number and classification of total new diarrhoeal cases has been presented in table below.

Classification of diarrhoeal cases by province FY 2073/74

Indicators		Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	National
HF + ORC diarrhoeal cases	Total	55,474	88,821	47,379	22,220	65,641	45,216	58,433	383,184
	No dehydration	42,643	69,566	40,920	19,288	56,679	35,058	49,793	313,947
		11.13%	18.15%	10.68%	5.03%	14.79%	9.15%	12.99%	81.93%
	Some dehydration	12,589	18,937	6,285	2,909	8,585	9,796	8,449	67,550
		3.29%	4.94%	1.64%	0.76%	2.24%	2.56%	2.20%	17.63%
	Severe dehydration	242	318	174	23	377	362	191	1687
		0.06%	0.08%	0.05%	0.01%	0.10%	0.09%	0.05%	0.44%
FCHV (diarrhoeal cases)		130,616	116,656	133,692	54,669	140,718	82,848	141,737	800,936
		11.03%	9.85%	11.29%	4.62%	11.88%	7.00%	11.97%	67.64%
Total diarrhoeal cases (HF & Communities)		186,090	205,477	181,071	76,889	206,359	128,064	200,170	1,184,120
		15.72%	17.35%	15.29%	6.49%	17.43%	10.82%	16.90%	100.0%

Source: HMIS

In FY 2073/74, a total of 1,184,012 diarrhoeal cases were reported out of which about one third (32%) were reported from health facilities and ORC and rest two third (68%) by FCHVs. Among registered cases in Health Facilities and PHC/ORC more than three fourth (82%) were classified as having no dehydration. Severe dehydration remained below 1% across all provinces.

Incidence and case fatality of diarrhoea among children under 5 years of age by province FY 2073/74

Indicators	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	National
Estimated <5 year population that are prone to diarrhoea	494,301	613,361	629,577	254,998	502,216	177,389	287,244	2,959,086
Incidence of diarrhoea/1,000 <5	376	335	288	302	411	722	697	400

years population								
Diarrhoeal deaths (HF+ORC)	7	16	4	1	1	2	2	33
Case fatality rate per 1000 (HF+ORC)	0.13	0.18	0.08	0.05	0.02	0.04	0.03	0.09

Source: HMIS

Incidence of diarrhoea per thousand under age 5 children was highest in province 6 (722) followed by province 7 (697) where incidence was 1.5 times higher than the national average. Further, the lowest incidence was in province 3 (288). Case fatality rate across all the provinces was below 1 per thousand.

Treatment of diarrhoea

Treatment of diarrhoea cases by province FY 2073/74

Indicators	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	National
Total cases (HF+ORC+FCHV)	186,090	205,477	181,071	76,889	206,359	128,064	200,170	1,184,120
Diarrhoeal cases treated with ORS and zinc	160,798	194,706	166,946	74,298	183,273	123,139	187,923	1,091,083
	86.41%	94.76%	92.20%	96.63%	88.81%	96.15%	93.88%	92.14%
Intravenous (IV) fluid (HF)	1,113	2,282	1,026	285	937	975	1,117	7,735
	0.09%	0.19%	0.09%	0.02%	0.08%	0.08%	0.09%	0.65%

Source: HMIS

In FY 2073/74, the proportion of diarrhoeal cases treated with ORS and Zinc as per IMNCI national protocol at national level was 92% and was highest in Province 4 (97%) and lowest in province 5 (88%).

Acute Respiratory Infections

ARI management is one of the components of CB-IMNCI program. As per CB-IMNCI protocol, every ARI cases should be correctly assessed and classified as no pneumonia, pneumonia or severe pneumonia; and given home therapy, treated with appropriate antibiotics or referred to higher centre as per the indications.

Acute respiratory infection (ARI) and pneumonia cases by provinces FY 2073/74

Indicators	Province 1	Province 2	Province 3	Province 4	Province 5	Province 6	Province 7	National
Target population (<5 years that are prone to ARI)	494,301	613,361	629,577	254,998	502,216	177,389	287,244	2,959,086
Total ARI cases	354,323	289,278	276,317	152,164	289,294	164,473	284,873	1,810,722
ARI incidence per 1,000<5 year	717	472	439	597	576	927	992	612

population								
Incidence of pneumonia per 1,000 <5 children	89	53	51	52	55	117	86	66
% of pneumonia among ARI cases	12.15%	10.88%	11.29%	8.59%	9.36%	12.14%	8.31%	10.47%
% of severe pneumonia among ARI cases	0.25%	0.30%	0.30%	0.11%	0.22%	0.51%	0.33%	0.29%
Deaths due to ARI at HF	11	58	7	62	13	5	20	176
ARI Case fatality rate per 1000 at HF	0.086	0.629	0.073	1.155	0.126	0.083	0.224	0.283

Source: HMIS

In FY 2073/74, a total of 1,810,722 ARI cases were registered, out of which 10.5% were categorized as pneumonia cases and0.29% were severe pneumonia cases. The incidence of pneumonia (both pneumonia and severe pneumonia at HF and PHC/ORC) at national level was 66 per 1000 under five children as compared to 147 per 1,000 under-five children in the previous fiscal year (FY 2072/73). Highest ARI incidence was seen at Province 7 (992/1000 U5 children) followed by Province 6 (927/1000 U5 children) and least at Province 3 (439/1000 U5 children). Similarly, Provinces 1 and 6 had the highest percentage of pneumonia cases among ARI cases (12.15% and 12.14%) and Province 7 has the lowest (8.31%).

The total ARI-related deaths at health facilities were reported to be176 which ismore compared to previous FY 2072/73 which was 155. The ARI case fatality rate per thousand at health facility also increased to 0.28 per 1000 in FY 2073/74 compared to last fiscal year (0.08). ARI case fatality rate shows a wide variation in between the provinces ranging from the lowest 0.073 per 1000 in province 3 to the highest 1.16 per 1000 in province 4.

CHAPTER 3: FAMILY HEALTH

FAMILY PLANNING

Background

From program perspective, GoN through its subsidiary (FHD/DoHS/MoH and the new structures under federal system) will ensure access to and utilization of quality FP services through improved contraceptive use especially among hard to reach, marginalised, disadvantaged and vulnerable groups and areas, broaden the access to range of modern contraceptives method mix including long acting reversible contraceptives such as IUCD and implant from service delivery points, reduce contraceptive discontinuation, scale up successful innovative evidence informed FP service delivery and demand generation interventions. FP services are part of essential health care services and are provided free in all public sector outlets.

The FP program of Nepal has contributed significantly in reducing total fertility, unintended pregnancies, unsafe abortions, high-risk births, maternal and neonatal deaths and has played crucial role in protecting the health of women and children through the health service network such as hospitals, primary health care (PHC) centres, health posts (HP), primary health care outreach clinics (PHC/ORC) and mobile voluntary surgical contraception (VSC) camps. The policy also aims to encourage public private partnership. Female community health volunteers (FCHVs) are mobilized to promote condom distribution and re-supply of oral pills.

Objectives, policies and strategies

The overall objective of Nepal's FP programme is to improve the health status of all people through informed choice on accessing and using voluntary FP. The specific objectives are as follows:

- To increase access to and the use of quality FP services that is safe, effective and acceptable to individuals and couples. A special focus is on increasing access in rural and remote places and to poor, Dalit and other marginalized people with high unmet needs and to postpartum and post-abortion women, the wives of labour migrants and adolescents.
- To increase and sustain contraceptive use, and reduce unmet need for FP, unintended pregnancies and contraception discontinuation.
- To create an enabling environment for increasing access to quality FP services to men and women including adolescents.
- To increase the demand for FP services by implementing strategic behaviour change communication activities.

Major activities in 2073/74

Key FP activities carried out in 2073/74 as follows:

1. Condom Box Distribution
2. Provision of regular comprehensive FP service
3. Provision of long acting reversible services (LARCs)
4. Expansion of family planning service at urban health clinic
5. Micro planning for addressing unmet need of FP in low modern CPR district
6. Permanent FP Methods or Voluntary Surgical Contraception (VSC)
7. Implementation of PPP program at high population district
8. Family planning onsite coaching program
9. FP Satisfied Client Interaction Program
10. Provision of VP service to increase FP service user
11. Integration of FP and immunization service
12. Satellite clinic services for long acting reversible contraceptives
13. FP updates orientation for Obs/Gyne doctors and other key players
14. Roving ANM (RANM) for FP in Disadvantaged Community (Mushar, Dom, Chamar, etc.)

Major Achievements

FP Current users

As with the previous years, female sterilization (38%) occupies the greatest part of the contraceptive method mix for all current user, followed by Depo (17%), male sterilization (13%), implant (11%) and lastly IUCD (6%) in 2073/74. The number of FP users at the national level was 93 percent of projected users in FY 2073/. Province 2 has the highest proportion (22.6%) of current users while Province 6 (5.1%) the lowest in 2073/74. Total number of permanent current users exceeds that of spacing method at national level and in Province 2 and 4.

FP current users (modern methods) by Province, 2073/74

Method	Province							National total users
	Prov 1	Prov 2	Prov 3	Prov 4	Prov 5	Prov 6	Prov 7	
Spacing methods	266,042	126,579	304,099	99,497	295,681	80,613	149,331	1,321,841
Permanent methods	239,889	486,213	223,315	103,016	176,140	57,057	100,082	1,385,712
Total	505,931	612,792	527,414	202,513	471,821	137,670	249,413	2,707,553
Share of total methods as % of total users	18.7%	22.6%	19.5%	7.5%	17.4%	5.1%	9.2%	

The modern contraceptive prevalence rate (mCPR) for modern FP methods is computed based on service data reported to HMIS, although HMIS does not capture all private sector service data. The mCPR, at national level, is 44 in 2073/74 (Figure 3.1.3). mCPR of Terai (50%) is higher than national average (44%) while that of Mountain and Hill ecological region below the national average Province 2 has the highest mCPR of 49 percent while Province 4 the lowest (35 percent). Four Provinces (3, 4, 6 and 7) have mCPR less than national average.FP use after abortion is encouraging. Contraceptive uptake among total reported abortion services is 70.7% and with the lowest uptakes in Province 2 and 6. But the contribution of LARCs is only 16% indicating women after abortion are relying on less effective methods.

Only about 8 to 9 percent of under 20 years of age population (a proxy for adolescent population) accepted modern contraceptive methods. More than half of the method mix is contributed by Depo. Adolescents in Province 2 reported to accept lower proportion of contraceptives compared to other Provinces. Condom and LARCs use is lower than SARCs in all Provinces. Contraceptive use was lowest in mountain ecological region. Adolescents have high unmet need while contraceptive use is low, this is indicative of implementation challenges of comprehensive sexual and reproductive health programmatic in general and adolescent's family planning program in particular in Nepal.

SAFE MOTHERHOOD AND NEWBORN HEALTH

Background

The goal of the National Safe Motherhood Programme is to reduce maternal and neonatal morbidity and mortality and improve maternal and neonatal health through preventive and promotive activities and by addressing avoidable factors that cause death during pregnancy, childbirth and the postpartum period. Evidence suggests that three delays are important factors for maternal and new-born morbidity and mortality in Nepal (delays in seeking care, reaching care and receiving care).

The following major strategies have been adopted to reduce risks during pregnancy and childbirth and address factors associated with mortality and morbidity:

- Promoting birth preparedness and complication readiness including awareness raising and improving preparedness for funds, transport and blood supplies.
- Expansion of 24 hours birthing facilities alongside AamaSuraksha Programme promotes antenatal check-ups and institutional delivery.
- The expansion of 24-hour emergency obstetric care services (basic and comprehensive) at selected public health facilities in all districts.

Major activities in 2073/74

- Birth Preparedness Package and community level maternal and new-born health
- Rural Ultrasound Programme
- Reproductive health morbidity prevention and management programme
- Human resources development
- Expansion and quality improvement of service delivery sites
- Emergency referral funds
- Safe abortion services
- Obstetric first aid orientations
- NyanoJhola Programme
- Aama and New-born Programme

Major Achievements carried out in FY 2073/74

Antenatal care

Pregnant women are encouraged to receive at least four antenatal check-ups, give birth at a health institution and receive three post-natal check-ups, according to the national protocols. HMIS reported since 2066/67 to track the timing of ANC visits as per the protocol. All antenatal indicators performance dropped in 2073/74. The national average of first ANC visits as a percentage of expected pregnancies increased from 96 percent in 2071/72 and 97 percent in 2072/73 which has declined to 87 percent in 2073/74. The proportion of pregnant women who visit antenatal first visit on-time also declined from 76 percent 2072/73 to 59 percent in 2073/74. The proportion of pregnant women attending at least 4 ANC visits among expected pregnancies as per the protocol has declined from 51 percent in 2072/73 to 45 percent in 2073/74 at the national level. As the trend of all these indicators were increasing for the last three years, the reasons for declined in all indicators could not be identified, except poor reporting from referral hospitals. FHD is able to get information on institutional deliveries from these referral hospitals; however, data on antenatal and post-natal care is not possible to get from these hospitals.

While the percentage of pregnant women who received antenatal care (at any time, first visit by 4th month, and 4 ANC according to protocol) declined the proportion of women who came for four visits (as per protocol) among who did their first visit per protocol is constant over the last two years.

Delivery care

Nepal is committed to achieving 70 percent of all deliveries by SBAs and at institutions by 2020 (2076/77) to achieve the SDG target in 2030. In 2073/74, nationally and in CDR and WDR, the proportion of deliveries attended bySBAs increased

Postnatal care

The number of mothers who received their first postnatal care at a health facility within 24 hours of delivery is similar to the number of institutional deliveries in almost all health facilities as most health workers reported to have provided post-natal care to both mothers and babies on discharge. The revised HMIS introduced the monitoring of three PNC visits according to a protocol since 2071/72. The proportion of mothers attending three PNC visits as per the protocol is slightly declined in 2073/74. Cultural and geographical factors affecting the movement of postnatal mothers could be reasons for the low coverage while the perceived low importance of care in the postpartum period could also be significant. There is a need for culturally sensitive interventions to promote access to and the use of postnatal services, especially in geographically challenging areas.

New-born care

A separate report on post-natal care to new born is not reported in HMIS and it can be assumed that the percentage of new born who received PNC as per protocol is similar to as of mothers. Among 343,577 live births reported 91 percent received application of Chlorhexidine (Nabi care) at umbilical cord at delivery. Total low birth weight (LBW) was 11.5 percent among institutional deliveries -2.5 percent were very low birth weight (less than 2000 gm) and another 9 percent were LBW (2000-2499 gm). Reported still birth rate among deliveries at health institutions increased from 14 in 2072/73 to 17 per 1000 total births in 2073/74.

Provincial level Performance

The performance of provinces of Nepal varies in maternal and new-born health care utilisation. The continuum of care in maternal and new-born health care services shows that there needs to be more awareness and encouragement of pregnant women to seek timely first antenatal care, improve quality of counselling during antenatal care, improved access to delivery care services and post-natal care services. C-Section rate in province number 1 and 3 is higher than maximum desirable rate 10 percent while that of province 2, 6 and 7 is lower than minimum acceptable rate of 5 percent.

Safe abortions

More than 1,005,000 women have received safe abortion services from certified service sites since the service began in Nepal in 2060/61. The use of safe abortions services increased from 89,214 in 2072/73 to 96,417 women in 2073/74, of which 56 percent received medical abortions. Fourteen percent of safe abortion service users were adolescents (<20 years) slight decline from 16 percent in 2072/73. Thought the number of women who received safe abortion services increased in 2073/74 from previous year, it is still less than one third of the total estimated abortion occurred in Nepal in 2014 (CREHPA 2016). Compared to fiscal year 2072/73, the proportion of women who had a safe abortion and then used contraceptives increased from 69 percent in 2072/73 to 71 percent in 2072/73. The acceptance of post abortion contraception among medical abortion service users was high compared to among surgical abortion users (medical abortion 77% versus surgical abortion 63%). Overall, post-abortion LARC use is higher among women who had surgical abortion (18 percent) than among medical abortion (14 percent).

FEMALE COMMUNITY HEALTH VOLUNTEERS (FCHV)

Background

The government initiated the Female Community Health Volunteer (FCHV) Programme in 2045/46 (1988/1989) in 27 districts and expanded it to all 75 districts thereafter. Initially one FCHV was appointed per ward following which in 2050 (1993/94) a population-based approach was introduced in 28 districts. There are 51,420 FCHVs working in Nepal. The goal and objectives of the programme are listed in Box

Goal and objectives of the FCHV Programme

Goal

Improve the health of local communities by promoting public health. This includes imparting knowledge and skills for empowering women, increasing awareness on health related issues and involving local institutions in promoting health care.

Objectives

i) Mobilise a pool of motivated volunteers to connect health programmes with communities and to provide community-based health services, ii) activate women to tackle common health problems by imparting relevant knowledge and skills; iii) increase community participation in improving health, iv) develop FCHVs as health motivators and v) increase the use of health care services.

Major achievements in FY 2073/74

Progress reports, which provide the basis for the following analysis, were only received from 534,626 FCHVs for 2073/74. In 2073/74 Nepal's FCHVs distributed fewer pills, condoms. The number of mothers participating in health mother's group meetings also decreased.

Trend of services provided by FCHVs

Services	2071/72	2072/73	2073/74
Pills distribution (no. cycles)	866,881	840,762	808,138
Condom distribution (pieces)	10,512,449	10,068,095	9,983,379
Iron tablet distribution	932,945	743,297	717,267
Health mother's group meetings	702,823	488,377	506,909

Source: HMIS

Support for home deliveries

FCHVs support home deliveries. In 2073/74 they initiated baby to mother skin-to-skin contact after delivery in 101,997 cases, applied chlorhexidine to the umbilicus after delivery for 95,283 cases and ensured the taking of misoprostol for preventing PPH in 38,462 cases.

Support provided by FCHVs for home deliveries, 2073/74

Region	Initiating skin-to-skin contact after birth	Chlorhexidine applied on umbilicus	Ensured misoprostol tablets taken
Province 1	16,790	15,223	3,824
Province 2	40,674	38,664	17,474
Province 3	10,301	7,565	3,524
Province 4	4,731	4,458	1,590
Province 5	14,170	13,619	5,703
Province 6	8,564	8,644	3,995
Province 7	6,767	7,110	2,352
National	**101,997**	**95,283**	**38,462**

Source: HMIS

Fewer CB-IMCI services were provided by FCHVs in communities in 2073/74. FCHVs treated 166,202 no. of children with infections treated with cotrim. Also, FCHVs assisted the immunization against polio of children below 5 years on National Immunization Day, the community-based management and treatment of acute respiratory infections and control of diarrheal diseases, community nutrition programmes and other public health activities.

CB-IMCI service provided by FCHVs at the community level

Services	2071/72	2072/73	2073/74
Cotrim treatment (cases)	277,095	221,716	166,202
Total diarrhoea cases reported by FCHVs	1,136,165	931,376	800,936
Treated with ORS and zinc	1,088,979	853,924	713,728

Source: HMIS

PRIMARY HEALTH CARE OUTREACH (PHC/ORC)

Background

The aim of these clinics is to improve access to basic health services including family planning, child health and safe motherhood. These clinics are service extension sites of PHCCs and health posts. The primary responsibility for conducting them lies with maternal and child health workers (MCHWs) and village health workers (VHWs) at health posts and ANMs, AHWs and VHWs at PHCCs and health posts. With the upgrading of MCHWs and VHWs and the upgrading of all sub-health posts the responsibility is being shared with all ANMs and AHWs. FCHVs, local NGOs and community based organisations (CBOs) support health workers to conduct clinics including recording and reporting.

Based on local needs, these clinics are conducted every month at fixed locations on specific dates and times. They are conducted within half an hour's walking distance for their catchment populations. VHWs and MCHWs or ANMs/AHWs provide the basic primary health care services listed in Box.

Services to be provided by PHC-ORCs according to PHC-ORC strategy

Safe motherhood and new-born care:
- Antenatal, postnatal, and new-born care
- Iron supplement distribution
- Referral if danger signs identified.

Family planning:
- DMPA (Depo-Provera) pills and condoms
- Monitoring of continuous use
- Education and counselling on family planning methods and emergency contraception
- Counselling and referral for IUCDs, implants and VSC services
- Tracing defaulters.

Child health:
- Growth monitoring of under 3 years' children
- Treatment of pneumonia and diarrhoea.

Health education and counselling:
- Family planning
- Maternal and new-born care
- Child health
- STI, HIV/AIDS
- Adolescent sexual and reproductive health.

First aid:
- Minor treatment and referral of complicated cases.

Service coverage

In 2073/74, 2.5 million people were served at 133,147 outreach clinics. A total of 133,147 clinic events (days) were run which represents 91 percent of the targeted number (133,147 clinics x 12 = 1,597,764 in a year). An average of 19 clients were served per day per outreach clinic, an increase from 18 the previous year with the highest average number being in province 2. The average number of daily clients served by PHC-ORC is higher than the number of served in Health posts.

PHC-ORCs conducted and people served in 2073/74 by Province

Province	Total no. clinics	Services provided to clients (new+old)
Province 1	24,792	451,341
Province 2	23,984	483,682
Province 3	20,542	340,889
Province 4	15,464	257,018
Province 5	21,264	463,944
Province 6	11,024	212,788
Province 7	16,077	372,779
National	**133,147**	**2,582,441**

Source: HMIS

Average number of people served per clinic per day by province in FY 2073/74

Province	PHCC/day	Health post/day	PHC-ORC/clinic
Province 1	33	13	18
Province 2	32	12	20
Province 3	37	13	17
Province 4	33	10	17
Province 5	38	19	22
Province 6	27	13	19
Province 7	42	15	23
National	**35**	**13**	**19**

Services provision

The number of people served by PHC-ORCs increased in the past two years. In FY 2073/74 primary treatment has been increased in comparison to last fiscal year.

Trend of services provided by PHC-ORCs

Service Types	2071/72	2072/73	2073/74
Primary treatment	754,413	736,538	817,748
Depo (times)	214,370	193,030	189,686
ANC (times)	258,979	227,230	249,525
PNC (times)	56,917	45,968	43,752
Growth monitoring	931,097	852,701	385,076

Source: HMIS

DEMOGRAPHY AND REPRODUCTIVE HEALTH RESEARCH

Background

The planning, monitoring and evaluation of reproductive health activities are key functions of the Programme, Budget and Demography Section. This section conducts studies and coordinates reproductive health related research and studies carried out by other organisations in Nepal.

Major responsibilities of the Demography Section/FHD include:

Estimate annual national targets for family planning, safe motherhood and adolescent reproductive healthservices including family planning acceptors and reproductive health commodities. Regularly monitor reproductive health and essential obstetric care (EOC) activities. Provide supportive supervision to DHOs, DPHOs and all levels of health facilities on reproductive health services. Conduct periodic and ad-hoc research and studies on family planning, maternal and neonatal health, safe abortion services, adolescent sexual and reproductive health and FCHV services. Conduct and support the piloting of maternal and new-born health initiatives.

Major Activities carried out in FY 2073/74

In order to fulfil these objectives, the Demography and RH Research Section conducted the following activities in the FY 2037/74.

1. Annual programme and budget
2. Target population setting, monitoring and research
3. Guidelines and document development

Implementation of Maternal and Perinatal Death Surveillance and Response (MPDSR)

4. Community-based MPDSR:
5. Hospital-based MPDSR:
6. Formation of MPDSR Committees at different levels
7. Web-based reporting system
8. On-site coaching and supportive supervision

Major reproductive health studies carried out in FY 2073/74

a. The Rapid Assessment of Aama and 4 ANC Program round 10.
b. Assessment of the Integration of Family Planning and Expanded Program of Immunization (EPI)

ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH

Background

National Adolescent Sexualand Reproductive Health is one of the priority program of Family Health Division (FHD),Department of Health Services Nepali some of the country in South Asia developed and endorsed the first National Adolescent Health and Development (NAHD) Strategy in 2000.To address the needs of emerging issues of adolescents in the changing context, the NAHD strategy is revised in 2017 and is under process of endorsement.

Goal: To promote the sexual and reproductive health of adolescents.

Objectives:

- To increase the availability of and access to quality information on adolescent health and development, and provide opportunities to build the knowledge and skills of adolescents, service providers and educators.
- To increase the accessibility and use of adolescent health and counselling services.
- To create safe and supportive environments for adolescents to improve their legal, social and economic status.
- To create awareness on adolescence issues through BCC campaigns and at national, provincial and community levels through FCHVs and mother groups

Targets:

- To make all health facilities as adolescent friendly as per the envision of National Health policy (2014) and NHSS (2016-2021)
- To ensure universal access to ASRH services, the Nepal Health Sector Strategy Implementation Plan (2016-2021) aims to: scale up Adolescent Friendly Service (AFS) to all health facilities; behavioral skill focused ASRH training to 5,000 Health Service Providers and more than 100 health facilities to be certified with quality AFS by 2021

Major Achievements in FY 2073-74 (FY 2016-17):

The national ASRH program focused on the following activities and the achievements including in the **2073-74 (FY 2016-17):** are:

- Result # 1. Scale-up of Adolescent Friendly Service
- Result # 2. Strengthening Health facilities for AFS
- Result # 3: Demand generation interventions on ASRH Program:
- Result # 4 ASRH Service Utilization
- In 2073/74, the proportion of adolescents getting antenatal check-ups among total ANC check-up visits, both at any time and as per the protocol, is highest in province number 6 and lowest observed in province number 3.

Proportion of adolescent ANC among total ANC visits by provinces, FY 2073/74

National and Province	First ANC Visit (any time)	First ANC as per protocol	Four ANC as per protocol
National	19.2	18.9	15.4
Province 1	21.1	21.0	18.9
Province 2	22.1	20.2	16.3
Province 3	13.8	15.2	10.2
Province 4	19.3	19.6	17.7
Province 5	16.6	16.7	14.9
Province 6	32.8	32.8	27.9
Province 7	17.7	17.4	15.0

Source: HMIS

The proportion having medical abortions was highest in the province number 3 and lowest in province number 7 whereas the proportion of surgical abortion was highest in province number 5 and lowest in province number 4. The proportion of adolescent abortion at National level by both medical and surgical procedure was 13.8% of the total abortion done in this reporting Fiscal Year.

Proportion of adolescent safe abortion service users among total safe abortion service users by provinces (2073/74)

National and Provincial level	Medical abortion	Surgical abortion	Total abortion among adolescent
National	11.6%(6196)	16.7% (7138)	13.8% (13334)
Province 1	9.6% (1037)	10.3% (703)	9.9% (1740)
Province 2	12.4% (547)	20.8% (570)	15.6% (117)
Province 3	18.5% (2486)	16.9% (2025)	17.7% (4511)
Province 4	8.0% (643)	8.5% (431)	8.2% (1074)
Province 5	10.1% (841)	29.7% (2751)	20.4% (3592)
Province 6	13.3% (279)	11.3% (163)	12.5% (442)
Province 7	5.5% (279)	9.1% (495)	7.2% (858)

Source: HMIS

CHAPTER 4: DISEASE CONTROL

MALARIA

Background

The high risk of getting the disease is attributed to the abundance of vector mosquitoes, mobile and vulnerable population, relative inaccessibility of the area, suitable temperature, environmental and socio-economic factors. The updated micro-stratification 2013 exercise (based on the number of malaria cases, geo-ecology, vector breeding and vulnerability due to migration and population movements), identified 54 VDCs to be high risk, 201 VDCs moderate risk and 999 VDCs low risk for contracting malaria (Figure 4.1.1). The exercise identified 13 million people (47.9% of the population) as living in malaria endemic VDCs, out of which around 1 million (3.62%) live in high risk VDCs,2.66 million (9.8%) in moderate risk VDCs, and 9.38 million (34.5%) in low risk VDCs. A total of 14.13 million (52.1%) people are estimated to live in VDCs with no malaria transmission in Nepal. The high risk areas are the foothills with river belts, forest fringe areas in the Terai, hill river valleys and inner Terai areas. Low risk VDCs lie in the cultivated outer Terai plains, mountains and mountain valleys.

National Malaria Strategic Plan (2014–2025)

Current National Malaria Strategic Plan (NMSP) 2014-2025 was developed based on the epidemiology of malaria derived from 2012 micro-stratification, 2013 Mid –Term Malaria Program Review, and the updated WHO guidelines, particularly for elimination in low endemic country. This plan has inherent Government of Nepal's commitment and seeks appraisal of external development partners, including the Global Fund, for possible external funding and technical assistance. The aim of NMSP is to attain **"Malaria Free Nepal by 2026".**

The strategic plan was divided into two phases: achieve Malaria Pre - Elimination by 2018 and attain Malaria Elimination by 2026. Malaria pre-elimination targets were set to achieve and sustain zero deaths due to malaria by 2015, reduce the incidence of indigenous malaria cases by 90%, and reduce the number of VDCs having indigenous malaria cases by 70% of current levels by 2018. The baseline year was taken as 2012.

Strategy

The strategy to achieve the targets was identified as follows:

i) to strengthen strategic information for decision making towards malaria elimination
ii) to further reduce malaria transmission and eliminate the foci wherever feasible
iii) to improve quality of and access to early diagnosis and effective treatment of malaria
iv) to develop and sustain support through advocacy and communication, from the political leadership and the communities towards malaria elimination and
v) To strengthen programmatic technical and managerial capacities towards malaria elimination.

Current Achievement

By 2016, National Malaria Program had achieved 54% reduction in indigenous malaria cases compared to 2012, death was recorded in an imported case of malaria, and no foci have been cleared of malaria transmission

Analysis of Achievements

Data generated by public health care facilities in the HMIS, the Early Warning and Reporting System (EWARS) and from studies including malaria micro-stratification show a substantial decline over the last six years in clinical and laboratory confirmed *Plasmodium falciparum* and P.*vivax* cases. The findings of the micro-stratification exercise (2013) reduced the number of high and moderate risk district from 31 to 25 and identified 1,254 VDCs (out of 3,972) as presenting a risk of contracting malaria. In 2073/74 (2016), micro stratification was done to assess the risk at ward level. The result was published. The trends of the malaria epidemiological situation between 2071/72 and 2073/74 show a slightly increasing trend of confirmed cases and 3 deaths

Malaria epidemiological information (2071/72–2073/74)

Items /indicators	2071/72	2072/73	2073/74
Total population	13,455,000	13,767,000	4944174
Slide Collection Targer	150,000	150,000	150,000
Total slide examined	101,377	116,276	118165
Total positive cases	1,352	991	
Total indigenous cases	683	506	492
Total imported cases	669	485	636
Total P. *falciparum* (Pf) cases *	274	162	148
% of Pf of total cases*	20.26	16.34	13.1
Total indigenous *Pf* cases *	101	70	52
% indigenous *Pf* cases *	36.86	43.21	
Total imported *Pf* cases *	173	92	96
% imported *Pf* cases	63.13	56.79	65
Total P. *vivax*(Pv)cases	1078	829	980
Total indigenous *Pv* cases	570	436	440
% indigenous *Pv* cases	42	52.6	44.9
Total imported *Pv*cases	508	393	540
% imported *Pv* cases	37.57	47.4	55.1
Annual blood examination rate	0.75	0.84	0.79
Annual parasite incidence	0.1	0.07	0.08
Annual *Pf* incidence	0.02	0.012	0.01
Slide positivity rate	1.33	0.85	0.95
Slide *Pf* positivity rate *	0.27	0.14	0.13
Probable/clinical suspected malaria cases (not tested but treated by chloroquine)	20,861	10642	3904

Source: EDCD

Province wise Malaria epidemiological information of 2073/74

	Annual Blood Examination rate of malaria in high risk districts	Malaria annual parasite incidence per 1000 population at high risk districts	Percentage of Plasmodium falciparum cases in high risk districts	Percentage of imported cases among positive cases of malaria	Slide positivity rate of malaria among high risk districts
Province 1	0.44	0.02	24.5	77.6	0.39
Province 2	0.51	0.04	19.9	28.1	0.83
Province 3	0.42	0.03	28.9	37.8	0.63
Province 4	0.87	0.03	10.3	72.4	0.32
Province 5	1.07	0.08	16.19	74.5	0.77
Province 6	0.7	0.13	5.3	74.7	1.7
Province 7	1.6	0.3	8.3	50.6	1.6

Source: EDCD

KALA-AZAR

Background

Kala-azar is a vector-borne disease caused by the parasite *Leishmaniadonovani,* which is transmitted by the sand fly*Phlebotomusargentipes.* The disease is characterized by fever for more than two weeks with splenomegaly, anaemia, and progressive weight loss and sometimes darkening of the skin. In endemic areas, children and young adults are the principal victims. The disease is fatal if not treated on time. Kala-azar and HIV/TB co-infections have emerged in recent years.

Goal

To improving the health status of vulnerable groups and at risk populations living in kala-azar endemic areas of Nepal by eliminatingkala-azar so that it is no longer a public health problem.

Target

Reduce the incidence of kala-azar to less than 1 case per 10,000 populations at district level.

Objectives

- Reduce the incidence of kala-azar in endemic communities including poor, vulnerable and unreached populations.
- Reduce case fatality rates from kala-azar.
- Treat post-kala-azar dermal leishmaniasis (PKDL) to reduce the parasite reservoir.
- Prevent and treat kala-azar and HIV–TB co-infections.

Strategies

Based on the regional strategy proposed by the South East Asia kala-azar technical advisory group and the adjustments proposed by the Nepal expert group discussions, MoH has adopted the following strategies for the elimination of kala-azar.

- Improve programme management
- Early diagnosis and complete treatment
- Integrated vector management
- Effective disease and vector surveillance
- Social mobilization and partnerships
- Clinical, implementation and operational research.

Analysis of Achievement

In 2073/2074, 151 kala-azar cases were reported, decreased from the previous year (Table below). The most cases were reported from Sarlahi (24), Morang (21) and Malpa (16) while the programme districts of Parsa reported no cases. Twenty-five non-programme districts reported 80 cases in 2073/74 (Achham, Argrakhachi, Bajura, Banke, Bardiya, Dailekh, Dang, Dhankutta, Doti, Humla, Kalikot, Kanchanpur, Kapilbastu, Kathmandu, Kavre, Lalitpur, Mugu, Pyuthan, Ramechape, Rukum, Rupandehi, Salyan, Sindhuli, Synajha and Tanahu)

Trend of kala-azar cases (FY 2070/71 to 2072/73)

Province	Districts	2071/2072		2072/2073		2073/2074	
		Native	Foreign	Native	Foreign	Native	Foreign
1	Jhapa	6	0	11	0	6	0
	Morang	48	0	50	0	21	0
	Sunsari	18	0	14	0	6	0
	Okhaldhunga	1	0	0	0	2	0
	Bhojpur	6	0	2	0	6	0
	Udayapur	2	0	3	0	2	0
2	Dhanusha	16	0	8	4	15	1
	Siraha	17	0	23	0	15	1
	Mahottari	18	0	18	7	11	0
	Sarlahi	13	4	10	6	24	4
	Saptari	9	1	16	0	6	0
	Rautahat	0	0	1	0	1	0
	Bara	1	0	2	0	1	0
	Parsa	0	0	0	0	1	0
3	Makwanpur	4	0	1	0	5	0
5	Palpa	3	0	9	0	16	0
6	Surkhet	9	0	10	0	11	0
7	Kailali	6	0	3	0	2	0
	Total cases of programme districts	177	0	181	0	151	6
	Other districts	43	0	69	0	74	0
	Total cases	**220**	**5**	**250**	**17**	**225**	**6**

Source: HMIS/EDCD

LYMPHATIC FILARIASIS (LF)

Background

Lymphatic filariasis is a public health problem in Nepal. Mapping of the disease in 2012 using ICT (immune-chromatography test card) revealed 13 percent average prevalence of lymphatic filariasis infection in Nepal's districts, ranging from <1 percent to 39 percent. Based on the ICT survey, morbidity reporting and geo-ecological comparability, 61 districts were identified as endemic for the disease (Figure 4.3.1). The disease has been detected from 300 feet above sea level in the Terai to 5,800 feet above sea level in the Mid hills. Comparatively more cases are seen in the Terai than the hills, but hill valleys and river basins also have high disease burdens.

Goal, objectives, strategies and targets of lymphatic filariasis elimination programme

Goal:
The people of Nepal no longer suffer from lymphatic filariasis

Objectives:

- To eliminate lymphatic filariasisas a public health problem by 2020
- To interrupt the transmission of lymphatic filariasis
- To reduce and prevent morbidity
- To provide deworming through albendazole to endemic communities especially to children
- To reduce mosquito vectors by the application of suitable available vector control measures (integrated vector management).

Strategies:

- Interrupt transmission by yearly mass drug administration using two drug regimens (diethylcarbamazine citrate and albendazole) for six years
- Morbidity management by self-care and support using intensive simple, effective and local hygienic techniques**.**

Targets:

- To scale up MDA to all endemic districts by 2014
- Achieve <1% prevalence (microfilaraemia rate) in endemic districts after six years of MDA by 2018.

Major Activities carried out in this fiscal year 2073/74

MDA coverage survey conducted

MDA was continued in 30 districts in 2073/74. 10 districts completed five, 10 districts completed six, 4 districts completed seven, 5 districts completed eight and 1 district completed nine rounds of MDA in this year. A total of 7,870,784 (72.7%) of the targeted 10,827,093 people in 30 districts were treated this year and more percentage of people were treated than in previous years Baseline survey for micro-filaria prevalence in 10 different districts (5 from eastern and 5 inmid-western region).

DENGUE

Background

Dengue is a mosquito-borne disease that occurs in Nepal as dengue fever, dengue haemorrhagic fever (DHF) and dengue shock syndrome (DSS). The earliest cases were detected in 2005. Sporadic cases and outbreaks occurred in 2006 and 2010. Initially most cases had travelled to the neighbouring country (India), although lately indigenous cases are also being reported.

The affected districts are Chitwan, Kanchanpur, Kailali, Banke, Bardiya, Dang, Kapilvastu, Parsa, Rupandehi, Rautahat, Sarlahi, Saptari and Jhapa, reflecting the spread of the disease throughout the Tarai plains from west to east. In 2011, 79 confirmed cases were reported from 15 districts with the highest number in Chitwan (55).

Goal:

To reduce the morbidity and mortality due to dengue fever, dengue haemorrhagic fever (DHF) and dengue shock syndrome (DSS).

Objectives:

To develop an integrated vector management (IVM) approach for prevention and control.
To develop capacity on diagnosis and case management of dengue fever, DHF and DSS.
To intensify health education and IEC activities.
To strengthen the surveillance system for prediction, early detection, preparedness and early response to dengue outbreaks.

Strategies:

Early case detection, diagnosis, management and reporting of dengue fever,DHF and DSS.
Regular monitoring of dengue fever, DHF and DSS cases and surveillance through the EWARS.
Mosquito vector surveillance in municipalities.

Major activities in 2073/74

To achieve the goal of controlling dengue, following activities were carried out.

Trained physicians, nurses, paramedics and laboratory technicians on dengue case detection, diagnosis, management and reporting.
Orientated municipality stakeholders in 25 programme districts.
Supplied rapid diagnostic test kits (IgM).
Dengue case monitoring and vector surveillance.
Search and destruction of dengue vector larvae (*A. aegypti*) in 25 programme districts.
Developed and disseminated health education messages.

A total of 1527 dengue cases were reported from 42 districts in 2073/74. The most were from Chitwan (687) followed by Jhapa and Rupendehi. And there were one confirmed deaths due to Dengue —in Chitwan.

The number of reported dengue cases has decreased significantly since 2010 with high percent increase in the last three years from 302 to 134 to 1527 in the current year. The majority of cases have been reported from Chitwan, Jhapa and Rupandehi with more than 46 percent of 2073/74 cases from Chitwan.

Dengue positive cases (2071/72–2073/74)

SN	Districts	Total positive		
		2071/72	2072/73	2073/74
1	Bara	0	2	4
2	Bhaktapur	1	1	0
3	Bhojpur	0	2	0
4	Chitwan	119	70	687
5	Dadeldhura	1	0	0
6	Dang	0	3	8
7	Doti	1	0	0
8	Gorkha	0	2	0
9	Gulmi	0	1	0
10	Ilam	0	0	0
11	Jhapa	8	2	405
12	Kailali	9	1	14
13	Kanchanpur	15	4	2
14	Kapilbastu	0	2	3
15	Kaski	0	1	1
16	Kathmandu	1	1	5
17	Kavre	0	1	2
18	Mahottari	0	0	3
19	Makwanpur	20	2	82
20	Nawalparasi	3	12	3
21	Palpa	0	4	0
22	Parsa	114	12	7
23	Pyuthan	0	1	1
24	Rautahat	0	0	0
25	Rupandehi	10	2	164

ZOONOSES

Background

The Epidemiology and Disease Control Division (EDCD) is responsible for responding to poisonous snake bites, and the control and prevention of rabies and other zoonosis in coordination and collaboration with the general public and non-governmental and private partners

Goals

No Nepalese dies of rabies or poisonous snake bites due to the unavailability of anti-rabies vaccine (ARV) or anti-snake venom serum or timely health care services.

To prevent, control and manage outbreaks and epidemics of zoonosis.

Objectives

- To strengthen the response and capacity of health care service providers for preventing and controlling zoonoses.
- To improve coordination among and between stakeholders for preventing and controlling zoonoses.
- To enhance the judicious use of tissue culture, ARV and ASVS in health facilities.
- To reduce the burden of zoonotic diseases (especially rabies and six other priority zoonoses) through public awareness programmes.
- To provide tissue culture ARV as a post-exposure treatment to all victims bitten by suspicious or rabid animals.
- To reduce the mortality rate in humans by providing ASVS and ARV.
- To train medical officers and paramedics on snake bite management and the effective use of ARS.
- To reduce the number of rabid and other suspicious animal bites.
- To reduce the annual death rate due to rabies.

Activities and achievements in 2073/74

In 2073/74, 37226 cases animal bites were reported. The number of reported animal bite cases has fluctuated in recent years but the number of rabies deaths has increased in line with the decreasing administration of ARV.

Status of reported dog bites and rabies in Nepal

Fiscal year	No of cases of dog bites	No. of cases of other animal bites	No. of cases of animal bites (dog+ other animal)	No. ofARV vials consumed	Deaths
2065/66	24,005	2,571	26,576	145,978	97
2066/67	23,517	2,145	25,662	168,194	89
2067/68	24,269	2,197	26,466	167,663	83
2068/69	29,102	2,211	31,313	229,851	76
2069/70	31,937	2,996	34,933	219,651	68
2070/71	31,976	2,540	34,516	195,868	10
2071/72	17,320	3,290	20,610	273,000	13
2072/73	20,133	2,494	22,627	320,139	6
2073/74	37,226	2,518	39,744	227,639	8

Source: HMIS/EDCD

In 2073/74, 6,121 snake bite cases were reported in Nepal. A total of 912 cases were poisonous resulting in 33 deaths. Following table show summarises progress in 2073/72 against previous years' data.

Snake bite cases and deaths, Nepal (2065/66–2073/74)

Fiscal year	Total cases	Non-poisonous	Poisonous	Cure	No. deaths	% deaths
2065/66	13,017	11,883	1,134	1,006	128	11.3
2066/67	17,163	15,844	1,319	1,188	131	9.9
2067/68	18,204	17,121	1,083	965	118	10.9
2068/69	14,768	13,789	979	890	89	9.1
2069/70	14,329	13,462	867	788	79	9.1
2070/71	5,143	4,145	998	988	10	1.0
2071/72	4,128	3,461	667	666	1	0.14
2072/73	3,268	2,605	663	643	20	3.0
2073/74	6,121	5209	912	879	33	3.6

Source: HMIS/EDCD

LEPROSY

Background

Leprosy has existed in Nepal since time immemorial and was recognized as a major Public Health problem. It has been a priority of the government of Nepal. Thousands of people have been affected by this disease and many of them had to live with physical deformities and disabilities. The establishment of the Khokana Leprosarium in the nineteenth century was the beginning of organized leprosy services in Nepal. Key leprosy control milestones since 1960 and the goal, objectives and strategies of the national Leprosy Control Programme are given below.

Goal, objectives, strategies and targets of the leprosy control programme

Vision:Leprosy free Nepal
Goal:End the consequences of leprosy including disability and stigma

Guiding principles

- Stewardship and system strengthening
- Expedite the elimination process in high prevalence districts
- Collaboration, coordination and partnership
- Community involvement
- Integration, equity and social inclusion
- Linkages with Universal Health Coverage and Sustainable Development Goals

Objectives

1. Achieve elimination status in all districts by 2019
2. Expand services for early detection of leprosy cases at health facility, especially in high prevalence districts through Enhancing selected diverse approaches (ISDT)
3. Strengthen cases-based reporting and surveillance by 2017
4. Initiate Post-Exposure Leprosy Prophylaxis to family members and neighbors
5. Achieve the surveillance performance indicators

Strategies

1. Expand and Enhance early case detection through selected diverse approaches (ISDT)
2. Strive to achieve the surveillance performance indicators
3. Modernize and intensify the service delivery pathways for ensuring quality services
4. Heighten the collaboration and partnership for Leprosy-Free Nepal
5. Enhance support mechanism for people infected and affected by leprosy

Analysis of Achievement

The elimination status was maintained at the national level as the prevalence rate remained below 1 case/10,000 population this year although the rate was still high in 17 districts compared to 18 districts last year. The increased proportion of female and child cases could be a result of more early and active case detection activities. Finally, there is good coordination and partnerships with partners. Main indicators of leprosy control for the last eight years are summarised and given below.

Comparison of leprosy indicators (2071/72–2073/74)

Indicators	2071/72 (2014/15)	2072/73 (2015/16)	2073/74 (2016/17)
New patients	3,053	3,054	3215
New case detection rate	11.01	10.67	11.23
Under Treatment cases at the end	2,461	2,559	2626
PR/10,000 population	0.89	0.89	0.92
No. new child cases	236	220	220
Proportion child cases	7.73	7.20	6.84
New G2D cases	135	109	87
Proportion G2D cases	4.42	3.57	2.71
G2D rate/100,000	0.49	0.38	0.33
New female cases	1,100	1,169	1361
Proportion female cases	36.03	38.28	42.33
Released from treatment	2,800	2,902	3040
No. Defaulters	38	44	57
No. relapse cases	*8*	*12*	*15*

Source: LCD

TUBERCULOSIS

Background

Tuberculosis (TB) is a public health problem in Nepal that affects thousands of people each year and is the sixth leading cause of death in the country. WHO estimates that 44,000 people develop active TB every year and out of them 20,500 have infectious pulmonary disease and can spread the disease to others. The achievement of the global targets of diagnosing 70 percent of new infectious cases and curing 85 percent of these patients will prevent 30,000 deaths in Nepal over the next five years.

Vision, goal, strategy and target of the National TB Programme are:

***Vision*:**

Nepal free of tuberculosis.

***Long term goal*:**

End the tuberculosis epidemic by 2050.*Short term goal*: Reduce TB incidence by 20% by 2021 compared to 2015 and increase case notifications by a cumulative total of 20,000 from July 2016 to July 2021.

Objectives:

- Increase case notification through improved health facility-based diagnosis.
- Maintain the treatment success rate at 90% of patients (for all forms of TB) through to 2021.
- Provide drug resistance diagnostic services for 50% of persons with presumptive drug resistant TB by 2018 and 100% by 2021 and successfully treat at least 75% of diagnosed drug resistant patients.
- Further expand case finding by engaging the private sector.
- Strengthen community systems for the management, advocacy, support and rights of TB patients in order to create an enabling environment to detect and manage TB cases in 60% of all districts by 2018 and 100% of districts by 2021.
- Contribute to health system strengthening through TB human resource management, capacity development, financial management, infrastructure, procurement and supply management.
- Develop a comprehensive TB surveillance, monitoring and evaluation system
- Develop a plan to continue NTP services in the aftermath of natural disastersand public health emergencies.

Major activities in 2073/74

- Provided effective chemotherapy to all patients in accordance with national treatment policies.
- Promote early diagnosis of people with infectious pulmonary TB by sputum smear examination and GeneX-pert.
- Provided continuous drugs supply to all treatment centres.
- Maintained a standard system for recording and reporting
- Monitored the result of treatment and evaluate progress of the programme
- Strengthened cooperation between NGOs, bilateral aid agencies and donors involved in the NTP.
- Coordinate and collaborate NTP activities with and HIV /AIDS programmes.
- E-TB orientation to district staff has been completed.
- Linkage of DOTS centres to Microscopic centre through courier.
- Provided training to health personnel.
- Training to medical doctors for childhood TB diagnosis

Analysis of Achievements

In 2073/74, the National Tuberculosis Programme (NTP) registered 31,764 TB cases. Among them 16,927 (53.28%) were new and relapse pulmonary smear positive TB cases, 427 (1.34%) were smear positive retreatment cases,

5,216 (16.42%) were sputum smear negative and 9,194 (28.94%) were extra-pulmonary TB cases. Of all registered cases 20,364 (64.1%) were male and 11,400 (35.9%) female.

The NTP reported 31,764 tuberculosis cases in 2073/74. The National Case Notification Rate (All forms) is 111/100,000 population. Based on the CNR, there are 18 districts had CNR more then 120, while 30 districts had CNR between 75-120 and remaining 22 districts had below 75 CNR. Among 18 districts, 1 2 districts are from the Terai belt and mostly concentrated in central region. There were 97% newer cases registered (New and Relapse) among all TB cases notified. Around 71 % of all TB cases reporting in this reporting period were pulmonary cases and out of them 77% were bacteriologically confirmed. Among those bacteriologically confirmed, 30% were confirmed using Xpert MTB/RIF testing.

TB case notification rate by region, FY 2068/69 – 2073/74

Year	EDR	CDR	WDR	MWDR	FWDR	NEPAL
2068/69	95	149	105	141	119	125
2069/70	105	153	120	146	135	130
2070/71	109	155	123	146	132	136
2071/72	96	137	115	137	125	123
2072/73	92	127	107	122	105	112
2073/74	83	123	106	129	110	111

Source: NTC

HIV/AIDS AND STI

Background

With the first case of HIV identification in 1988, Nepal started its policy response to the epidemic of HIV through its firstNational Policy on Acquired Immunity Deficiency Syndrome (AIDS) and Sexually Transmitted Diseases (STDs) Control, 1995 (2052 BS). Taking the dynamic nature of the epidemic of HIV into consideration, Nepal revisited its first national policy on 1995 and endorsed the latest version: National Policy on Human Immunodeficiency Virus (HIV) and Sexually Transmitted Infections (STIs), 2011. A new National HIV Strategic Plan 2016-2021 is recently launched to achieve ambitious global goals of 90-90-90. By 2020, 90% of all people living with HIV (PLHIV) will know their HIV status by 2020, 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy, and by 2020, 90% of all people receiving antiretroviral therapy will have viral suppression.

Overview of the Epidemic

Starting from a 'low level epidemic' over the period of time HIV infection in Nepal evolved itself to become a 'concentrated epidemic' among key populations (KPs), notably with People who Inject Drugs (PWID), female sex workers (FSW), Men who have Sex with Men (MSM) and Transgender (TG) People in Nepal. A review of the latest epidemiological data, however, indicates that the epidemic transmission of HIV has halted in Nepal. The trend of new infections is evidently taking a descending trajectory, reaching its peak during 2001-2002. The epidemic that peaked in 2000 with almost 8,000 new cases in a calendar year has declined to 942 in 2016 (reduced by 88%). This declineis further accompanied by the decreasing trend of estimated new HIV infections occurring annually in Nepal.**Error! Reference source not found.**

Analysis of Achievement

In 2016, 96.4% of the total infection was distributed among the population having age group 15 years and above. The estimate indicates that among total infections are distributed among PWIDs (4%), MSWs(6%), MSM and TG (7%), FSWs (1%) and Client of FSWs (7%). These apart, low-risk males including MLM account for 38%,andlow-risk females account for 37% of the remaining infections. The estimated number of annual AIDS deaths of all ages is estimated to be around 1,771 for 2016.

HIV Testing Services

There are 175 HIV Testing and Counseling sitesin Nepalthat include 39 non-government sites and 136 government sites operating in the country also maintaining their linkages with KPs as well as with ART sites as well as PMTCT sites. The trend of programmatic data of people who were tested and counseled over the last three yearsis showed in table below.

Service Statistics HIV Testing and Counseling for the period of FY 2071/72-2073/74

Indicators	2071/72	2072/73	2073/74
Total tested for HIV	2,64,081	122,888	176,228
Total Positive reported	1,480	2,163	1,781
Cumulative HIV reported cases	26,702	28,865	30,646

Source: NCASC

The HIV testing is higher in Province 7 (40,388) and Province 3 (39,043) whereas the percentage of positivity yield is higher in Province 2 and Province 3. The province wise detail is also shown in table below.

Province wise Service Statistics HIV Testing and Counseling in 2073/74

Provinces	Tested for HIV	Positive reported	% of positivity yield
Province 1	31,780	207	0.7%
Province 2	14,245	273	1.9%
Province 3	39,043	630	1.6%
Province 4	4,530	108	2.4%
Province 5	45,104	134	0.3%
Province 6	682	9	1.3%
Province 7	40,844	208	0.5%
	176,228	**1781**	**1.0%**

Source: NCASC

Pursuant to its commitment toeliminate vertical transmission of HIV among children by 2021, Nepal has scaled up it PMTCT services in recent years. As a result of this scale up of PMTCT sites, the number of women attending ANC and labor who were tested and received results has increased over the years. Despite this relative increase in uptake, the coverage for PMTCT is still low (63.7%). The three-year trend of service statistics is showed intable

Service Statistics on PMTCT for the period of FY 2071/72 -2073/74

Indicators	2071/72	2072/73	2073/74
Tested for HIV (ANC &Labour)	135,904	276,593	382,887
HIV Positive Pregnant women	108	145	128
Total Deliveries by HIV +ve mothers	88	128	126
Mothers received prophylaxis and ART	74	163	175
Babies received prophylaxis	73	119	112

The HIV testing among pregnant women is higher in Province 3 (100,340), and Province 5 (74,829) whereas the percentage of positivity yield among pregnant women is higher in Province 1, 2, 3 and 4 than national. The province-wisedetails also shown in table below.

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Province wise Service Statistics on PMTCT in Nepal 2073/74

Provinces	Pregnant women tested for HIV	Positive pregnant women identified	Positivity Yield
Province 1	53,646	27	0.05%
Province 2	32,724	17	0.05%
Province 3	100,340	45	0.04%
Province 4	45,189	20	0.04%
Province 5	81,521	13	0.02%
Province 6	16,899	0	0.00%
Province 7	52,568	6	0.01%
Total	**382,887**	**128**	0.03%

Source: NCASC

By the end of 2016, out of 13,069 of those who were on ART, there were 11,318 retained in the treatment for 12 months and among the total tested (7,042) almost 90%(6,209) ofPLHIV were with their viral load suppressed (**Error! Reference source not found.**6). The total cumulative number of PLHIV receiving ART by the end of fiscal year 2073/2074has reached the figure of 14,544. Over the years, there have

been gradual increases in the number of people enrolling themselves on ART as well as receiving ARVs

Out of those who are currently on ART, 91.7% are adults and remaining 8.3% are children, while male population makes 51.0%, female population 48.6%, and remaining 0.4% are of the third gender.

ART Profile of the period of FY 2070/71-FY 2073/74

Indicators	2071/72	2072/73	2073/74
People living with HIV ever enrolled on ART (cumulative)	14,745	16,499	19,388
People with advanced HIV infection receiving ARVs (cumulative)	11,089	12,446	14,544
People lost to follow up (cumulative)	1,216	1,612	2,049
People stopped treatment	30	31	25
Total deaths (cumulative)	1,834	2,410	2,770

Source: NCASC

The number of people on ART is higher in Province 3 (4,082) and Province 7 (2,824). The province wisedetails also shown in Table

Province wise people on ART FY 2073/74

Province	People on ART
Province 1	1,197
Province 2	1,428
Province 3	4,082
Province 4	1,807
Province 5	2,772
Province 6	434
Province 7	2,824
Total	**14,544**

Source: NCASC

EYE CARE

Background

The considerable progress was achieved in mitigating blindness in the past decades, there is a need to implement more effective programmes to meet the goal of Vision 2020 and WHO Global Action Plan and a lot of effort should be made to realize the vision of sight for all. In this period, considerable development has been achieved in the sector of infrastructure development also. At present the services at primary eye care centres/eye hospitals are available in all the districts of the country. The technology applied in eye care has been regularly updated to the global standard.

Goal and Objectives:

To reduce the overall blindness below 0.2% among the visual acuity <3/60 and <0.4% among the visual acuity 6/60 by the year 2020.

Achievement

Nepal's eye care programme is run by Nepal Netra Jyoti Sangh and is a successful example of an NGO-run eye care programme. The prevalence of blindness in Nepal has reduced at the current time. In 2073/74, Nepal's hospitals, eye care centres and outreach clinics provided 3,873,340 outpatient consultations and performed 317,901 eye surgeries.

HUMAN ORGAN TRANSPLANT SERVICES

Introduction

Sahid Dharma Bhakta National Transplant Center (SDBNTC) was established in 2012 by the Ministry of Health to strengthen and expand organ transplantation services in the country. This center stated its services merely with the OPD services, but within a few years of its establishment it has extended its services beyond organ transplantation.

Objectives

1. To strengthen and expand organ transplantation services in the country.
2. To provide and expand specialized services beyond transplantation
3. To provide high quality health care at a low price/free of cost
4. To undertake research related to human organ transplant to understand the state of kidney and other organ failure in Nepal.
5. To advocate for policy interventions
6. To organize free health camps across Nepal to screen any kind of diseases.
7. To conduct educational activities to raise awareness regarding organ failure, organ transplantation and organ donation.
8. To produce high level human resources by providing structured training in various aspects of services to expand the services across the country.

Major achievements of FY 2073/74

1. Played an important role in the amendment of old organ transplant act of Nepal opening doors for cadaveric organ donation, transplantation and pair exchange programs.
2. Instigator of first liver transplantation in Nepal
3. Conducted two kidney transplantations from a brain dead donor for the first time in the history of Nepal
4. First to Initiate open heart surgeries in Bhaktapur district
5. Carried out 132 kidney transplants in the FY 2073/74 with 66 free kidney transplants.
6. A total number of 22,473 patients served in outpatient department, while the rate of admission and discharge were almost similar with 1,676 and 1,675.
7. In FY 2073/74, 518 minor surgeries and 1,101 major surgeries were performed which was quite higher than the past years. Similarly, the number of kidney transplantation also escalated from 101 to 132 in FY 2073/74 along with two liver transplantations which was first of its kinds in the nation.
8. The number of sessions of paid dialysis decreased from 8,351 in FY 7072/73 to 3,136 in the FY 2073/74, while there has been a significant rise in the free dialysis sessions to 26,342 from 17,240 in FY 2072/73.

ENTOMOLOGY

Background

The Entomology Section and its laboratory is an integral part of the Epidemiology and Disease Control Division. This section plans, implement, monitors and supervises entomological activities including surveillance, risk assessments and the operational research of vector and carrier borne diseases including malaria, kala-azar, filariasis, dengue, chikungunya, zika, Japanese encephalitis, chandipura encephalitis, scrub typhus, leptospirosis, plague, gastroenteritis and emerging and re-emerging diseases with the potential of epidemic outbreaks

The objectives are listed below

- To make available an accessible, affordable, acceptable and sustainable level of vector control methods through community participation for scientific protection from vector borne diseases.
- To enhance vector control activities for eliminating targeted vector borne diseases.
- To provide rapid test kits, chemicals, lab equipment and accessories to diagnose vector-borne diseases.
- To develop the capacity of laboratory personnel on malaria microscopy to help achieve a malaria free Nepal by 2025.
- To develop the capacity for laboratory quality control and assurance and research on vector borne diseases and epidemic prone diseases.
- To investigate the source of infection during outbreak situations.

Activities in 2073/74

The following investigations were carried out in 2073/74

Investigations and an entomological survey in all five regions in 12 districts of Nepal. In that survey Anopheles mosquitoes were collected. These are the common species of anopheles mosquito which were found in that survey.*An. Culicifacies, An. vagus, An. annularis, An. fluviatilis, An. splendidus,An. peditaeniatus*

EPIDEMIOLOGY AND DISEASE OUTBREAK MANAGEMENT

The objectives and strategies of the Epidemiology and Outbreak Management Section are given in below.

Objective

- To reduce the burden of communicable diseases and unwanted health events through preparedness and responses during outbreak and epidemic situations by using the existing health care system.

***Strategies*:**

- The development and execution of preparedness planning to respond to outbreaks, epidemic and the control of unwanted health events.
- The formation and mobilization of rapid response teams.
- The regular monitoring of outbreaks and epidemics through surveillance activities

Major outbreaks in 2073/74

Forty-one communicable disease outbreaks were recorded in Nepal in 2073/74, which affected 3,565 people and resulted in 29 deaths. However, not all outbreak events are reported to EDCD. There were major outbreaks of acute gastroenteritis and diarrhoea, cholera, leptospirosis, scrub typhus, influenza, food poisoning, mushroom poisoning and dog bite. The average case fatality rate was 0.81 percent. The Scrub Typhus outbreak had the greatest morbidity. Mushroom poisoning also had a high case fatality rate (45%). Reported water and food-borne diseases were more prevalent this year.

***C*ommunicable disease outbreaks, Nepal, 2073/74**

Disease	No. Outbreaks	No. affected districts	Affected districts	Total cases	Deaths
Acute gastroenteritis and diarrhoea	9	6	Gorkha, Saptari, Nawalparasi, Baitadi, Siraha, Ramechhap,	579	3
Influenza	8	8	Illam, Kathmandu, Jhapa, Pokhara, Syangja, Butwal, Nuwakot, Dolpa, Dailekh	463	1
Cholera	6	5	Kathmandu, Lalitpur, Bhaktapur, Dhading, Saptari	155	0
Leptospirosis	1	1	Ramechhap	178	0
Food Poisoning	7	6	Kaski, Bhaktapur, Sindhuli, Ramechhap, Jhapa, Nuwakot	188	0
Dog Bite	3	3	Chitwan, Surkhet, Dolakha	37	0
Mushroom Poisoning	3	2	Kaski, Palpa	22	10
Scrub typhus	2	47	Chitwan-538, Kailali-194 & other districts- 99	831	14
Dengue	2	2	Jhapa, Chitwan	1094	1
Total	**41**	**80**		**3,565**	**29**

Source: EDCD

DISASTER MANAGEMENT

Background

The Disaster Management Section is a programme implementation unit of EDCD. The disaster management programme is implemented by MoH, DoHS, EDCD and WHO Emergency Risk Management (WHO-ERM). This section works for health sector emergency preparedness and disaster response including disaster related outbreak management in coordination and collaboration with stakeholders across the country. This section aims to enhance the capacities of the health sector in emergency preparedness through disaster preparedness, disaster risk reduction and response by:

- expediting health sector contingency planning;
- training health workers on emergency preparedness and responding to disasters; and
- Strengthening multi-sectoral coordination and collaboration for health sector disaster management.

In the fiscal year 2073/74, no any such disaster event was recorded which affected the health of people.The Disaster Management Section has prepared a number of guidelines to guide disaster resilience, prevention, preparedness and response.

Disaster-related guidelines published by EDCD

	Documents	Year published
1	Emergency Preparedness and Disaster Management for Hospitals	2002
2	Emergency Preparedness and Disaster Response Plan	2003
3	Guidelines for Seismic Vulnerability Assessment of Hospitals	2004
4	Public Health Guidelines in Emergencies	2004
5	Non-structural Safety in Health Institutions	2006
6	Nepal District Level Contingency Planning Manual	2010
7	Standard Operating Procedure for Disaster Health Working Group(DHWG) (Draft)	2010
8	Guidelines and Tools for Conducting Integrated Training of Rapid Response Teams (RRT) on Emergency Preparedness and Response	2011

Activities in 2073/74

District health sector contingency planning

In 2073/74, 11 districts viz. Bhojpur, Sankhuwasabha, Tehrathum, Taplejung, Okhaldhunga, Khotang, Tanahun, Kaski, Myagdi, Manang and Mustang completed health sector contingency planning for disaster preparedness. This means that all the 75 districts have now completed health sector contingency planning. These plans are prepared by DHOs and DPHOs with technical and financial support from EDCD and WHO-ERM.

Rapid Response training

Two RRT Teams in 2 districts, namely Baitadi and Palpa were trained on emergency preparedness and disaster response. The Integrated Training Package for Rapid Response Team on Emergency Preparedness and Response Manual was piloted among these two districts. The training was conducted by EDCD with support from UNFPA.

Emergency and disaster preparedness planning

All the 75 districts conducted one-day orientation on emergency and disaster preparedness themselves.

Stockpiling

In 2073/74 EDCD's Disaster Management Section continued its disaster preparedness activity of stockpiling essential drugs and supplies at the central level, including surgical and trauma kits and rehabilitation equipment. MoH and WHO manage large scale inter-agency emergency health kits and diarrhoeal disease kits, which are

stockpiled in Kathmandu, Biratnagar and Nepalgunj. And all regional health directorates stockpiled necessary medicine and logistics while DHOs and DPHOs stockpiled medicines and logistics in their disaster cupboards

SURVEILLANCE AND RESEARCH

Background

EDCD's Disease Surveillance and Research Section was established in August 2013. It conducts the surveillance of reportable diseases and is responsible for collecting, analysing, interpreting, and reporting information for infectious diseases. It monitors disease trends for early detection and prompt response to outbreaks. It also assists in developing public health policies and programme planning and implementation related to communicable diseases.

The section's main strategies are to:

- monitor and describe trends of infectious diseases through a sentinel surveillance network of hospitals, followed by public health action and research;
- develop a comprehensive, computerized database of infectious diseases of public health importance;
- expand and strengthen the Early Warning and Reporting System (EWARS) to 75 districts; and
- implement the District Health Information System (DHIS2) platform for EWARS.

EDCD is a secretariat of the Water Quality Surveillance Committee, which is led by the EDCD director. The committee is responsible for the regular surveillance of water borne diseases, for coordinating with stakeholders for quality surveillance and for improving surveillance by training human resources and through meetings and other programmes. It is also responsible for facilitating water quality testing when waterborne disease epidemics occur and for recording the drinking water distribution system through geographical information system (GIS) data and providing feedback to the responsible organization**.**

Early Warning and Reporting System

Disease surveillance is carried out through the EWARS, a hospital-based sentinel surveillance system that complements the HMIS by the early reporting of selected vector-borne, water and food borne diseases with outbreak potential. The system provides timely alerts when increased numbers of cases are reported from its hospitals.

The EWARS is mainly concerned with the weekly reporting of number of cases and deaths (including zero reports) of six priority diseases — malaria, kala-azar, dengue and acute gastroenteritis (AGE), cholera and severe acute respiratory infection (SARI). It prioritises the immediate reporting (within 24 hours of diagnosis) of one or more confirmed cases of cholera, severe and complicated malaria cases, one suspected/clinical case of dengue, or five or more cases of AGE and SARI, from the same geographical locality in a one-week period. Other communicable diseases should also be reported to the EWARS, whenever the number of cases exceeds the expected level.

Activities in 2073/2074

Expansion, sensitization and strengthening of sentinel sites

In 2073/74 an additional 4 sentinel sites were trained on EWARS (District hospital Khotang, District hospital Panchthar, District hospital Manangand Bayalpata hospital, Achham) bringing the number of EWARS sentinel sites to 64.

The medical recorders, doctors, nurses, lab personnel, other hospital staff, and staff from DPHOs and DHO shave been oriented on the system in 4 districts, which also serves o strengthen the sites programmes and coordination between the hospitals and DHOs and DPHOs. Eighteen of the 82 sites are yet to be oriented. EDCD also provided on-site support to the Sentinel sites with poor reporting status.

HOMOEOPATHIC SERVICES

Background

Pasupati Homoeopathic Hospital's is the only one hospital providing homoeopathic services to the people of Nepal in the public sector. The homoeopathic system is economic, easy and effective having no side effect as well. The hospital provides OPD and IPD services to the patients and six beds are available for Indoor patients along with meal free of cost. The hospital is processing for upgrade from six to twenty-five beds.

Summary of Achievement

Homoeopathic system is going popular mode of treatment. Hospital record shows that; the number of patient is increasing day by day. Many rejected cases by other system of medicine and surgical cases have been treated successfully. A total number of 78,450 patients were visits for treatment in the fiscal year 2073/74.

Patients visited, FY 2073/74

Particular	**Number of Patients**
General Medicine	41,200
Skin	19,540
E.N.T	4,250
Eye	1,320
Dental	1,560
Gyn/Obs.	1,640
Other	8,940
Total Patients	**78,450**

CHAPTER 5: CURATIVE SERVICES (INPATIENTS/OPD SERVICES)

BACKGROUND

Government of Nepal is committed to improving the health status of rural and urban people by delivering high-quality health services throughout the country. Curative (out-patient, in-patient and emergency) services are highly demanded component of health services by the people. The policy is aimed at providing prompt diagnosis and treatment, and referral of cases through the health network from PHC outreach clinics to the specialized hospitals.

Objectives

The overall objectives of curative services is to reduce morbidity, mortality and to provide quality health services by means of early diagnosis, adequate as well as prompt treatment and appropriate referral, if necessary.

Target Group

All patients attending at health facilities.

Analysis of Achievement FY 2073/74

Curative health services were provided at all health facilities including outpatient, emergency and inpatient care and free health services. Inpatient services were provided at all levels of hospitals including INGO and NGO run hospitals, private medical college hospitals, nursing homes and private hospitals. Medical camps were organised mainly in remote areas.

In 2073/74 Nepal's the HMIS recorded 980703 patients (female 60%–male 40%) being discharged from all types of hospitals. Of this number 980703 (92%) (female 56%–male 36%) were recorded as cured or recovered, while 14840 (1.51%) did not show clinical improvement (female 51%-male 49%). A total of 4,593 (0.4%) patients (female 43%–male 57%) died within 48 hours of admission while, whereas 4,579(0.46%) patients (female 43%–male 57%) died more than 48 hours after admission. Most patients were aged between 20-29 years (24%), More than a half of the inpatients were aged 15-49 years (53.8%).

Inpatient morbidity by age and sex, all hospitals, FY 2073/74

Age Group		≤ 28 Days	29 Days - 1 Year	01 - 04 Years	05 - 14 years	15 - 19 Years	20 - 29 Years	30 - 39 Years	40 - 49 Years	50 - 59 Years	≥ 60 Years	Total
Recovered/ Cured	Female	19935	13108	19864	32004	54855	183127	73707	47152	41043	63694	548489
	Male	24305	20508	25767	36295	25394	42811	40592	39867	40982	60184	356705
Not Improved	Female	255	224	299	502	583	1537	806	874	772	1726	7578
	Male	346	385	392	551	475	852	744	795	867	1855	7262
Referred Out	Female	496	410	467	773	1107	2839	1252	948	950	1830	11072
	Male	699	596	617	864	583	1029	987	942	997	2126	9440
DOR/LAMA/ DAMA	Female	683	493	626	863	1321	3266	1659	1261	1257	2943	14372
	Male	990	773	996	1021	754	1402	1251	1337	1368	3209	13101
Absconded	Female	84	94	102	161	266	743	223	135	125	232	2165

Age Group		≤ 28 Days	29 Days - 1 Year	01 - 04 Years	05 - 14 years	15 - 19 Years	20 - 29 Years	30 - 39 Years	40 - 49 Years	50 - 59 Years	≥ 60 Years	Total
	Male	74	104	124	182	127	167	126	122	111	210	1347
Death < 48 Hours	Female	261	67	42	49	65	172	171	197	234	718	1976
	Male	388	96	56	54	56	127	184	293	375	988	2617
Death ≥ 48 Hours	**Female**	150	67	35	56	43	147	132	166	287	884	1967
	Male	314	152	55	68	45	117	156	253	354	1098	2612
Total	Female	21864	14463	21435	34408	58240	191831	77,950	50733	44668	72,027	587619
	%	4	2	4	6	10	33	13	9	8	12	100
	Male	27,116	22,614	28,007	39,035	27,434	46,505	44,040	43,609	45,054	69,670	393,084
	%	7	6	7	10	7	12	11	11	11	18	100
	Total	48,980	37,077	49,442	73,443	85,674	238,336	121,990	94,342	89,722	141,697	980,703
	%	5	4	5	7	9	24	12	10	9	14	100

Source: HMIS, DoHS

CHAPTER 6: SUPPORTING PROGRAMME

HEALTH TRAINING

Background

The National Health Training Centre (NHTC)is the apex body for developing human resources for health in Nepal. It caters for the training needs of all MoHP departments, divisions and centres by delivering pre-service, basic, upgrading, competency-based, orientation and refresher training courses that train health service providers to deliver quality health care services. It works to implement the National Health Training Strategy, 2004. In-service technical and managerial training is delivered through NHTC's network at national, regional, district and community levels.

Goal

The overall goal of NHTC is to build a technical and managerial capacity of health service providers at all levels to deliver quality health care services towards attainment of the optimum level of health status.

Objectives

- To enhance and standardize the training curricula, references, trainer's capacity with the training sites.
- To organize training activities to address the need of quality health services providers in different level of health facilities.
- To address the training requirements reflected in current national health policy and strategies
- To ensure quality of training programs using different mechanisms in adherence to national standards.
- To adopt and promote innovative training approaches
- To strengthen mechanism and capacity for post training follow up and support

Achievements in 2073/74

In fiscal year 2073/74 NHTC spent 80.62 percent of its central and regional budgets and 95.18 percent of its district level budget and performed well against targets set for the year 2073/074 i.e. physical progress 95.92% central and 100% .

A number of training manuals were developed or revised this year with support from external development partners (PEN Package, OTTM, NSV self-paced and IUCD self-paced training packages and five upgraded training packages. *Staff development*—The external evaluation identified the need for the institutional reform of NHTC. Only a few activities were run this year to enhance the capacity of health trainers.

Upgrading and maintenance of facilities — A few health training buildings were renovated and some equipment (laptops, LCDs, desktop computer, printer, photocopy machine) were supplied to strengthen training sites. NHTC also added many books, periodicals and equipment to its libraries.

New initiatives

- Blended learning approach (NSV,IUCD, 2nd tri abortion)
- Structured OJT
- Trauma Management Trainings
- Revision of NHT strategy (amendments in according to the federal situation)
- District level Coach and Mentor Development
- Training on Non Communicable Disease [PEN Protocol]
- Web based access to training related documents (manuals and references etc)
- Development of Comprehensive Reproductive Health Training sites [Seti, Bheri, Paropakar Maternity, *West Regional Hospitals]*

VECTOR BORNE DISEASE RESEARCH & TRAINING

Background

Vector Borne Disease Research & Training Center (VBDRTC) was established in 1979 as a Malaria Research & Training Centre under the Nepal Malaria Eradication Organization (NMEO). On 12th June 1996, the center named as Vector Borne Disease Research & Training Center. VBDRTC became semi-autonomous with the effect of Development Board Act from 24th January 2000 and now the center is being governed by the Development Board. VBDRTC is responsible for research and training of VBDS including malaria, kala-azar, dengue/ chikungunaya, lymphatic filariasis, scrub typhus and Japanese encephalitis.

Mandate of VBDRTC are:

1. Identify and prioritize research needs on vector borne and emerging infectious diseases (EIDs) in Nepal.
2. Coordinate and conduct research and trainings on VBDS and EIDs.
3. Collaboration conduct and coordination with research institutes/university both within and outside the country through proper government channels on VBDS and EIDs.
4. Conduct and facilitate in monitoring and evaluation in collaboration with the disease control/elimination /interventions programmes such as drug efficacy.
5. Studies, vector bionomics and control, mapping, evaluation of intervention/elimination of VBDS and EIDS.
6. Collaborate with disease control/elimination /interventions programmes to develop and disseminate advocacy materials for prevention and control of VBDS and EIDs.
7. Provide technical support for policy development and planning of the control/ elimination of VBDS and EIDs to the government of Nepal.
8. Provide training for national capacity building on VBDS and EIDs and related research in collaboration with the diseases control/elimination programmes and national Health research council (NHRC)
9. To work as center of excellence for VBDs and EIDs in Nepal and neighboring countries.

Major activities in FY 2073/74

VBDs basic training

Twenty-one day's VBDs Basic Training for VCI/MI and Focal persons were conducted and fifteen persons were trained on basic VBDs including medical officers, HA, PHI, VCI and MI from 15 districts Facilitators were managed from VBDRTC, CHRD, and some from outside from government sector.

VBDs training for Physicians, pediatricians and medical officers

Objective of this training is to orient the physician, pediatrician and also the medical generalist working in emergency department on strategies and treatment protocol of VBDs and facilitate early diagnosis and prompt and correct treatment of VBDS. Orientation was conducted in Janakpur, Dhanusha and Biratnagar, Morang. Consultant, Medical superintendents, physician and Pediatrician and programme specialist/ focal persons was used as facilitators. A total of 60 doctors were oriented.

VBDS training for health workers

The overall objective of this training is to update the knowledge, skills and strengthen management capacity of health workers on VBDs. Three days VBDs training was conducted in endemic districts including Kapilbastu, Nawalparasi and Kavre district. A total of 75 persons including MO, VCI/ VCO/ MI, HA, AHWs, ANMs and MR were trained on VBDs.

Early warning and reporting system on site coaching programme

The objective of EWARS on site coaching is to improve recording /reporting system, strengthen surveillance system of VBD's and other epidemic potential diseases and encourage timely and complete reporting. It facilitates coordination and early response from sentinel sites and DPHO. Programme was conducted in 16 sentinel sites of poor reporting sites A total of 13 persons were participated including medical superintendent, MO, MR and other programme related paramedics

Following research activities/ study carried out

- Successptibility test of different species of Anopheline mosquitoes with Alphacypermethrin (0.05%) and Lambdacyhalothrin (0.05%) in Dhanusha District.
- This susceptibility test / study was conducted second time in the same study area from 2074/02/09 to 2074/02/15 with slight variation in temperature and humidity.

HEALTH EDUCATION, INFORMATION AND COMMUNICATION

Background

The National Health Education, Information and Communication Centre (NHEICC) is the apex body under the Ministry of Health and Population for planning, implementing, monitoring and evaluating Nepal's health promotion, education and communication programmes including periodic surveys and research. The Scope of the centre is guided by the National Health Communication Policy 2012 following the National Health Policy 2014, communication strategies and other health related plans and policies.

The centre functions to support health programmes and services to achieve national health goals and SDGs through health communication approach. The centre is the lead for all health promotion, education and communication programmes including multi-sectoral health initiatives. The centre uses advocacy, social mobilization and marketing, behavior change and community led social change strategies to implement its programmes.

Goal

The goal of the Health Communication Policy is to promote healthy behaviour, prevention and control of diseases and increase access to and use of health services

Objectives

- Mobilize and use modern and traditional communication multimedia and methods to raise health awareness, knowledge and promote healthy behaviour among the general public.
- Strengthen, expand and implement health communication programmes at all levels.
- Generate, collect and mobilize resources to implement health communication programmes.
- Prevent the unauthorized dissemination and duplication of health related messages or information and materials on different issues.
- Enhance capacity on health communication to develop, produce and disseminate quality, correct, authorized, uniform and appropriate messages and information.
- Provide quality health messages and information through appropriate media and methods to the citizens who otherwise have little access to such messages and information.

Achievement of fiscal year 2073/74

Health promotion, education, and communication activities implemented at central levels

- MeroBarsa 2074: "Ma Swastha Mero Desh Swastha" health promotion campaign launch and implementation.
- Mero Barsa Campaign'sPolicy, strategy, programme development and implementation
- Development of programme guidelines and directives and supplies to RHD, RHTCs, DHOs and DPHOs.
- Development, production and broadcasting of health messages through radio, television, and newspapers (printed and electronic).
- Development, production and distribution of IEC materials to stakeholders, regional medical stores, DHOs and DPHOs.
- Direction to districts for celebration of World Health Day and continuation of Golden 1000 days' communication campaigns at different levels.
- Capacity building on health promotion, education and communication programmes.
- Supervision, monitoring and evaluation of health promotion, education and communication programmes.
- Conduction of environmental health, hygiene and sanitation activities.

- Broadcasting of healthmessages through radio and television in packages including Jeevanchakra, Janaswasthya radio, JanaswasthyaBahas, Golden 1000 days' communication campaign, Mero Barsa Campaign.
- Mero Barsa Mobile app development and dissemination of messages through the app.
- Health related mobile SMS messages delivery through NHEICC IT HUB.

LOGISTIC MANAGEMENT

Background

An efficient management of logistics is crucial for an effective and efficient delivery of health services as well as ensuring rights of citizen of having quality of health care services. Logistics Management Division (LMD) has established under the Department of Health Services in 2050/51 (1993), with a network of central and five regional medical stores as well as district level stores. The major function of LMD is to forecast, quantify, procure, store and distribute health commodities for the health facilities of government of Nepal. It also involves repair and maintenance of bio-medical equipment, instruments and the transportation vehicles.

LMIS unit just started Online Inventory Management System in 2 Central Warehouses, 5 Regional Warehouses and 75 District Warehouses in 2073/2074. LMIS Unit also collects and analyses quarterly (three monthly) LMIS reports from all of the health facilities across the country; prepares report and disseminated.

Goal

Quality health commodities available at health facilities and community level round the year.

Overall Objective

To plan and carry out the logistics activities for the uninterrupted supply of essential medicines, vaccines, contraceptives, equipment, HMIS/LMIS forms and allied commodities (including repair and maintenance of bio-medical equipment) for the efficient delivery of healthcare services from the health institutions of government of Nepal in the country.

Major Activities carried out in FY 2073/74

- Plan for the efficient management on forecasting/quantification, procurement, storage, distribution and transportation of health commodities to all health facilities for the delivery of healthcare services based on LMIS.
- Develop tender documents as per public procurement rules and regulations and procure essential medicines, vaccines, contraceptives, equipment, different forms including HMIS/LMIS and allied commodities.
- Store, re-pack and distribute medicines, vaccines, contraceptives equipment and allied commodities.
- Formation of 9 members Logistics Working Group (LWG) at Central level to solve logistics issues
- Manage to print and distribute HMIS/LMIS forms, stock books and different forms required for all health institutions.
- Support on implementation and functioning of Web Based LMIS. Web based LMIS will be modified and robust into Online Inventory Management Systemat Centre, Region and Districts level.
- Conduct capacity building in Online Inventory Management System to all New/Old Store Keepers, Computer Assistants for full functioning of OIMS throughout country with live operation.
- Conducted fo capacity building on Public Procurement Act and Regulations with coordination of Public Procurement Monitoring Office to Regional and Districts Managers and Store Keepers in remaining of 2 Regions.
- Capacity build of health workers in central, regional, district and below district level and office assistants of regional, district and below district level on Standard Operating Procedures (SOP) in Effective Vaccine Management (EVM).
- Disposal, De-junking and auctioning of unusableequipment, materials and other health commodities.
- Coordinated with partner INGOs and NGOs likeUNICEF, Lifeline Nepal for strengthening cold chain capacity through support in disaster resilient cold chain equipment as well as repair and maintenance of refrigerators and freezers.
- Managed to maintained the bio-medical equipment, machineries and transport vehicles.
- Implement and monitor Pull System for contraceptives, vaccines and essential drugs in the districts.

- Coordinated with all development partners supporting health logistics management.
- Supervised and monitor the logistics activities of all region (RMS) and district levels (DPHO/DHO).
- Conducted RDQA for LMIS data Quality Assessment.
- Implement Telemedicine program in the hill and mountain districts

PUBLIC HEALTH LABORATORY SERVICES

Background

NPHL is also the focal point of blood safety on behalf of MoHP and for effective implementation of National Blood program is working on development/revision of policy, guidelines, protocols, SOPs as per need. There are currently diagnostic health laboratories in 8 central hospitals, 3 regional hospitals, 3 sub-regional hospitals, 10 zonal hospitals, 62 district hospitals, 16 other district level hospitals, 204 PHCCs and more than 1,500 private health institutions.

NPHL monitors these laboratories through its external quality assurance of lab services and the quality control testing of samples. It conducts the National External Quality Assurance Scheme (NEQAS) programme to monitor testing quality. It dispatches samples (including biochemical tests, malaria slides, HIV testing, Transfusion Transmissible Infection (TTI) screening, and Prothrombin Time (PT) for blood testing) to laboratories to test. NPHL provides feedback based on the results. This also helps access the testing capability of lab personnel.

Objectives

- To affirm the government's commitment and support for the organization and management of efficient, cost-effective and sustainable health laboratory services.
- To strengthen laboratory services for supporting the diagnosis, treatment, surveillance, prevention and control of diseases.
- To establish national standards for laboratory quality systems.
- To ensure the quality of health laboratories through a quality system.
- To empower the establishment, implementation and monitoring of the national health laboratory programme and the national regulatory mechanism for regulating health laboratories.
- To ensure adequate financial and human resources for health laboratory services.
- To monitor adherence to ethical values in laboratory practice, including patient confidentiality, adherence to professional codes of conduct and ethical research practices.
- To encourage research and collaboration to inform and improve the quality of health laboratory services.

Following major activities were carried out in FY 2073/74

NPHL provided different laboratory test from its different department biochemistry, haematology, parasitology, immunology, virology, endocrinology, and microbiology. number of test were in increasing trend with comparison with previous year. NPHL conducts laboratory surveillance on various disease pathogens including on measles-rubella, Japanese encephalitis, influenza and antimicrobial resistance surveillance to monitor the burden of these diseases and to inform disease control strategies and NPHL generate revenue from different laboratory testing service. There is increasing trend on revenue generation in comparison with previous year

PERSONNEL ADMINISTRATION MANAGEMENT

Background

Human resources are the pivotal resource for health care delivery. Human resource management involves the planning, motivation, use, training, development, promotion, transfer and training of employees. The proper placement and use of human resources is crucial for effective quality health care delivery. DoHS's Personnel Administration Section (PAS) is responsible for routine and programme administrative functions including upgrading health institutions, the transfer of health workers, the upgrading of health workers up to the 7th level, capacity building and the internal management of human resources.

Objectives

The main objective of the section is to mobilize human resource to deliver quality health services. The specific objectives are as follows:

- To transfer and manage all posts up to 7th level according to the government policy and law.
- To place health staff at sanctioned posts in public health institutions.
- To manage human resources at the different levels.
- To take disciplinary action according to the law.
- To manage and update personnel information of all levels and institutions under DoHS.
- To manage the posting and transfer of medical officers who completed their studies under government scholarships.
- To execute organisation and management (O&M) surveys to establish and extend the structure of health institutions and organizations under DoHS.
- To recommend to MoH for approval special leave and education leave requests by health workers.

Distribution of Health Work Force

MoHP has more than 30,000 employees of whom more than 24,000 are technical personnel and 6,300 are administrative staff. DoHS have about 24,000 personnel including in its health facilities across the 196 sanctioned types of technical and administrative posts (across all divisions and sections).

FINANCIAL MANAGEMENT

Background

An effective financial support system is imperative for efficient health service management. The preparation of annual budgets, the timely disbursement of funds, accounting, reporting, and auditing are the main financial management functions needed to support the implementation of health programmes. DoHS's Finance Section is the focal point for financial management for all DoHS programmes. All health institutions have their own Finance Section, except PHCCs and health posts.

Objectives

- To support all programmes, divisions and centres for preparing their annual budgets
- To obtain and disburse programme budgets
- To keep books of accounts and collect financial reports from all public health institutions
- To prepare and submit financial reports
- To facilitate internal and external auditing
- To provide financial consultations.

Targets

To achieve 100 percent expenditure of all budgets in accordance with programme work plans within a specified times as per financial rules and regulations of the government and to maintain the recording and reporting system accurately and on time.

Achievements in 2073/74

Out of total National Budget of Rs. 10,48,92,13,54,000 a sum of Rs. 40,56,30,27,000 (3.86%) was allocated for the health sector during the fiscal year 2073/74. Of the total health sector budget, Rs. 31,45,05,36,111 (77.53%) was allocated for the execution of programs under the Department of Health Services Network (see below Table).

Health budget details, FY 2073/74 (NPR)

Budget	Total	Recurrent	%	Capital	%
National budget	1,048,921,354,000	617,164,129,000	58.84	431,757,225,000	41.16
Health budget	40,563,027,000	35,207,587,000	86.80	5,355,440,000	13.20
Health budget under DoHS	31,450,536,111	25,262,110,060	80.32	6,188,426,051	19.68

Allocation of health budget by source, FY 2073/74

Budget	Total	GoN	%	Donor	%
Health budget under DoHS	31,450,536,111	22,253,963,060	51.52	9,196,573,051	48.47

HEALTH SERVICE MANAGEMENT

Background

The Management Division is responsible for DoHS's general management functions. DoHS's Operating Manual (Procedures), 2068 (third edition) describes the responsibilities for information management, planning, coordination, supervision, and the monitoring and evaluation of health programmes. The division is also responsible for monitoring the delivery of quality health services by all types of health institutions. It also monitors the construction and maintenance of public health institution buildings and supports the maintenance of medical equipment. More activities were assigned to this division under NHSP-1, including policy and planning related to mental health, oral health, health care waste management, WASH, facility upgrading and renewal, nursing programmes and treatment facilities for selected diseases to impoverished Nepalese citizens at listed hospitals.

Objectives

The Management Division aims to support health programmes and DoHS to deliver health services through the following specific objectives:

- Facilitate and coordinate among concerned divisions and centres to prepare annual plans, programmes and to make necessary arrangements to get approval from the National Planning Commission (NPC) and MoF.
- Make arrangements for the preparation and compilation of annual budgets and programmes of regional health directorates, DHOS and DPHOs.
- Monitor programme implementation status and carryout periodic performance reviews.
- Support quality improvements in the health sector.
- Manage the HMIS.
- Manage and coordinate the construction and maintenance of buildings and other public health infrastructureincluding the maintenance of biomedical equipment.
- Process for approval the establishment of private and non-government health institutions.
- Process for approval new public health institutions and their upgrades.
- Make arrangements for capacity building of human resources in public health
- Support information technology related to health information, dissemination and management.
- Provide treatment facilities for impoverished Nepalese citizens for listed diseases.

Strategies:

- Make arrangements to collect and analyse health information and use it to support the planning, monitoring, and evaluation of health programmes
- Strengthen bottom-up planning from community to central levelsvia the optimum use of available resources including health service information.
- Conduct and expand regular periodic performance reviews and use outcomes for improvements down to community level.
- Strengthen and guide the monitoring and supervision system at all levels.
- Establish a central data bank linking HMIS with the Human Resources Management Information System (HURIS), LMIS, finance, surveys, censuses and other sources of information.
- Expand computerized information systems at all levels.
- Monitor the health services provided by state and non-state health institutions.
- Develop and implement construction, repair and maintenance plans for public health facilities and for biomedical equipment.
- Develop the capacity of health workers and HFOMCs in collaboration with NHTC and concerned agencies.
- Conduct human resource development programmes to improve the quality of health services.
- The routine management of health service Information.

- Orientations on quality health service delivery.
- The upgrading of health facilities in line with plans and policies.
- Initiate the processing for approval of the establishment of private and non-government health institutions of 51 to 200 bed capacity.
- Process for approval and renew private and non-governmental health facilities operating licenseson the basis of given service standards
- Develop and implement integrated supervision and monitoring plans.
- Establish and develop required infrastructure, human resource and guidelines to conduct other assigned designated and non-routine works.

Major activities carried out in FY 2073/74

The following are the major activities conducted:

- Conducted 22th National Annual Performance Review Meeting, 2073/74.
- Continued HMIS's web-based online reporting system.
- Prepared, printed and distributed the DoHS Annual Report, 2072/73 (2015/16).
- Conducted HMIS training for newly recruited health workers throughout the country.
- Arranged the printing and supply of HMIS recording and reporting tools.
- Constructed and maintained public Hospitals, PHCCs, health posts, birthing centres, DPHO and DHO buildings.
- Procured electricity supply and furniture for newly constructed facilities.
- Orientated and trained health workers on health care waste management.
- Continued mental health training.
- Conducted workshop of improvised citizen programme for health workers.
- Conducted kidney disease screening camp for 2 district.
- Orientation and training on health care waste management to DHO and DPHO staff.
- Managed the provision of free treatment to impoverished citizens including 5,821 Cancer, 3,291 Heart diseases and 5,888 Kidney free treatment services (see below table).

Number of Impoverished patients provided with treatment support for serious Disease, FY 2073/74

	Type of Free Treatment Services										
	Kidney										
Reported by 59 listed Hospitals	**Dialysis**	**Kidney Transplant**	**After Transplant Medication**	Heart	Cancer	Head Injury	Spinal Injury	Parkinsons	Alzeimers	Sicklecell Anaemia	Total
National total	**5531**	**159**	**198**	**3219**	**5821**	**82**	**130**	**16**	**11**	**1693**	**16860**

PRIMARY HEALTH CARE REVITALIZATION

Background

PHCRD strives to strengthen the gate keeping functions at the lower level of public health facilities while enhancing the capacity of District Health Offices and Municipalities to develop local health systems that are responsive and accountable to clients' needs. As mandated by the Constitution of Nepal, the division is playing an instrumental role in expanding the reach of basic health services at across the country, particularly focusing on urban areas while also introducing service packages that are focused on prevention of NCDs. The division also continues to facilitate continuum of care across preventive, promotive, curative and rehabilitative components of health services. The PHCRD is envisaged to revitalize PHC services in Nepal by addressing the unaddressed and unmet issues of PHC.

Vision

To contribute in improving the health status of Nepali population, especially of the poor and excluded through provision of equitable and accessible health care services.

Goal

To reduce morbidity and mortality especially of poor, marginalized and vulnerable people by securing the right of the citizens to quality basic health services.

Objectives

- Ensure the fundamental right of all Nepalese citizens to basic health care services
- Ensure year-round availability of essential drugs in both urban and rural health facilities to increase access and utilization of quality Basic health care services.
- Reduce mortality & morbidity related to major four NCDs, mental diseases and others diseases in Nepal.
- Increase the utilization of health care services especially by the poor, marginalized, vulnerable and disadvantaged groups by minimizing economic, cultural and geographical barriers
- Promote good governance and accountability of the health workers and health facilities towards the people through social audit
- Increase the quality of treatment services through Rational Use of Medicine (RUM) and Standard Treatment Protocol (STP)
- Promote urban health services through Urban Health Centre (UHC) and Urban Health Promotion Centre (UHPC)

Key Achievements of fiscal year 2073/74

- Public Health Campaign
- Special health camp for Disadvantage groups
- Establishment of 110 Community Health Unit (Total 360 CHUs)
- Development of Social Audit Guidelines and implementation plan
- Social audit in 70 Districts (1752 Health facilities)
- Interaction among health cooperatives
- Urban Health Policy and Strategy- 2015
- Establishment of 40 Urban Health Centre (Total 366 UHCs)
- Establishment of 11 UHPCs in Kathmandu metropolitan city and 2 UHPCs in Budanilkantha Municipality
- Development of PEN implementation plan 2016-2020
- PEN (Package for essential non-communicable diseases) Program Piloted in two districts (Kailali and Ilam) and expansion in Nepal at 10 Districts (Makwanpur, Rautahat, Palpa, Baglung, Myagdi, Surkhet, Accham, Bardia)

- Nepal PEN Package 1,2,3 and 4 endorsement
- PEN Package Training in 10 districts
- NCD drugs procurement
- Recording and reporting tools development including NCD mobile app and Dashboard
- Development of Standard Treatment Protocol for Mental Health
- Adaptation of MHGAP II
- ToT and Orientation in 10 districts (Total 20 districts)
- Concept development and Budget planning of different programs.

MEDICO-LEGAL SERVICES

Background

Constitution of Nepal 2072 in its article 35 guarantees Right to Health for all Nepali citizen and in articles 20, 21 and 22 Right to justice, Right of victim of crime and Right against Torture also guaranteed. There are other articles like article 42 Right to social justice, article 44 Right of consumer which are all related with medico-legal field for their proper implementation in real life situation. For effective application of above constitutional rights, medico-legal sector in Nepal must be in properly functional state.

Positive Outcomes

Few incidents have coming up with the support and advocacy by MELESON (Medico-legal Society of Nepal), a registered professional society of practicing Nepali Forensic Medicine specialists in this country. Some of the positive outcome can be listed as follow:

1. Ministry of Health has created few posts for consultants in this field at four hospitals of the country.
2. A historical first National Medico-legal Workshop was held on this year at Kathmandu which was organized by Ministry of Health.
3. Six types of medico-legal examination and reporting formats are prepared and prescribed by Nepal Government with initiation of Ministry of Law and Justice last year.
4. National Health Training Center from Department of Health requested to MELESON to prepare six various types of Standard Operating Procedures (SOP), Reference Manuals and Training Manualsfor standard medico-legal examination and reporting procedures. This task was completed by MELESON successfully. Now following SOPs are on the process of authentication by Ministry.
    a) SOP and manuals for autopsy work
    b) SOP and manuals for injury examination
    c) SOP and manuals for sexual offence cases examination
    d) SOP and manuals for age estimation
    e) SOP and manuals for examination of victims of torture
    f) SOP and manuals for forensic identification of skeletal remains
5. There are initiations from various medical colleges to have permission for routine medico-legal services to public from their hospitals.

Though there are various problems in health care service delivery system in the country, the forensic service sector which is in pathetic condition must be addressed to keep minimum standard. There are suggestions provided from the first National Medico-legal Workshop 2074 for very basic and minimum care in forensic sector. If those suggestions or recommendations are cared step by step, it may take no longer to have minimum standard in this service field.

MONITORING AND EVALUATION

Background

The Nepal Health Sector Strategy (NHSS) was endorsed by the Council of Ministers to provide strategic guidance to the health sector in Nepal in the 2016–2021 period. The activities outlined in the NHSS Implementation Plan (NHSS-IP) and subsequent annual work plans and budgets(AWPB) will translate the strategy into action.

The performance of the health sector is monitored through the NHSS Results Framework, a mid-term review (MTR) of NHSS and regular performance reviews. The Results Framework has 10 goal level indicators, 29 indicators to measure the 9 outcomes and 56 indicators to measure the 26 outputs. The framework provides detailed information on levels of data disaggregation, periodicity, means of verification and responsible agencies. The goal and outcome level indicators will be monitored in 2017 and 2020; while output level indicators are monitored annually.

Major Achievements, FY 2073/74

Integrated Information Management

- MoH developed and endorsed the National e-Health Strategy in 2017. The strategy strives for cost-effectiveness and secure use of information and communications technologies for population, health clients, health workers and public health managers & policy makers. MoH is in the process of finalizing the eHealth roadmapdrafted during the e-health convergence and planning meetings held in July 2017.
- HMIS Section, Management Division is expanding electronic reporting from health facilities. More than 600 health facilities are now reporting electronically.
- Similarly, MoH has initiated the process of developing unified coding system of health facilities. Each health facility gets a unique code which identifies each individual facility irrespective of its ownership, type and location. The unified coding systemwill be a milestone to move towards data exchange across various information systems and making them interoperable.
- MoH has also initiated the process of developing web-based health facility registry which will include a master inventory list of all health facilities in Nepal with unique identification code, location, type, level, and service information that can be used by the Government and public. Gradually this system will be upgraded to include e-registration and licensing of health facilities.
- MoH has also initiated a number of e-health initiatives like standardization of e-attendance system and development of web-based grievance management system.
- Development of health sector monitoring and evaluation plan is currently underway. The plan will: (a) define the M&E functions of the local, provincial and federal government based on the functional analysis endorsed by the Cabinet in 2017; (b) map out the health sector data needs to monitor the NHSS RF and health related SDG indicators and ensure timely availability of the data either through routine systems or surveys or other means as appropriate; and (c) develop a survey plan with reference to the NHSS RF and the SDGs.
- Progress on the NHSS RF indicators, key results from the national level surveys (NDHS and NHFS) and routine data (HMIS) are shared through dashboards hosted at interactive web-portal in MoH's website at www.moh.gov.np. MoH will soon share the progress on SDGs and Disbursement Linked Indicators (DLIs) in the same portal.
- MoH in close collaboration with National Planning Commission, developed the national health sector SDGs indicators, milestones and targets in line with the global framework.
- The HMIS in DHIS2 platform has been updated to incorporate the latest federal structure. Electronic reporting of service statistics from health facilities has expanded to more than 600 facilities across the country.
- During the flood in 2017, DoHS/MoH effectively managed information from the flood affected 36 districts in real time. This helped in assessment of the situation and identification of needs to deliver effective and

efficient health sector response. The daily situation update reports including final comprehensive report are available in EDCD's website atwww.edcd.gov.np.

Survey, Research and Studies

- Nepal Demographic and Health Survey (NDHS) 2016 completed and findings disseminated.
- Further analysis of 2015 Nepal Health Facility Survey (NHFS) is being carried out on the following topics:
  - Integrated Management of Neonatal and Childhood Illnesses (IMNCI)
  - Maternal health
  - Family planning
  - Quality of care
  - Status of service readiness and availability by Province
- MoH developed the national health account for the year 2014. It provides detailed and updated information regarding the health expenditure by source, financing agents, types of service providers, functions and status of out-of-pocket expenditure in the country.
- Nepal Health Research Council (NHRC) carried out a number of researches in 2016/17. The reports of the researches are available in NHRC's websiteat: http://nhrc.gov.np/publication-category/reports/

Health sector reviews with functional linkage to planning process

- The national annual review of 2073/74 (2016/17) was aligned with the federal structures in line with the changed context of transition to federalism. Service statistics and other issues were analyzed and presented by province.
- The output of the annual review will feed to the Joint Annual Review of 2016/17. The action plan developed based on the national annual review 2016/17 and joint annual review 2016/17 will feed into the annual work plan and budget for the fiscal year 2017/18.
- The annual report of the Department of Health Services for the year 2073/74 reflects the provincial status.

CHAPTER 7: PROGRESS OF OTHER DEPARTMENTS UNDER MOHP

DEPARTMENT OF DRUG ADMINISTRATION

Background

Government of Nepal has promulgated the Drug Act 1978, to prohibit the misuse or abuse of medicines and allied pharmaceutical materials as well as the false or misleading information relating to efficacy and use of medicines and to regulate and control the production, marketing, distribution, export-import, storage and utilization of those medicines which are not safe for the use of the people, efficacious and of standard quality. Drug Act 1978 and various regulations under it Government of Nepal established Department of Drug Administration (DDA) in 1979.

Objective

The main objective of DDA is to regulate all functions relating modern, veterinary and traditional medicines, like misuse and abuse of medicines and its raw materials, to stop false and misleading advertisement and make available safe, efficacious and quality medicine to the general public by controlling the production, marketing, distribution, sale, export-import, storage and use of medicines.

Activities carried out in FY 2073/74 (2016-2017)

1. Revision of National List of Essential Medicine (NLEM), 2016
2. Revision of Drug Act, 2035 and submitted for approval process
3. Preparation of Post Marketing Surveillance (PMS) software and Medicine App
4. Preparation and approval of special permission guideline
5. Method validation of nine non-pharmacopoeial products
6. Awareness on the rational use of medicines by different media.
7. Regular publication of Drug Bulletin of Nepal (DBN).
8. Audit/inspection of domestic pharmaceutical industries for WHO Good Manufacturing Practice (GMP) compliance.
9. Inspection of retail & wholesale pharmacies for compliance of regulatory framework.
10. Risk based post marketing quality analysis of medicine available in market.
11. Inspection of Foreign Manufacturers before registration for the importation purposes.
12. Conducting examination of veterinary drug sellers' training.
13. Pre marketing medicine analysis for marketing authorization/ Approval
14. Audit of domestic manufacturer laboratory for compliance of Good Laboratory Practice (GLP)
15. Take legal and administrative action for violation of regulatory standards.
16. Recall of medicine from market those failed to quality standard.

DEPARTMENT OF AYURVEDA

Background

Department of Ayurveda (DoA) primarily manages the delivery of Ayurveda services and promotes healthy lifestyles through its network facilities all across the country. The Department of Ayurveda, one of the three departments of the Ministry of Health (MoH) and is responsible for programming, management of information, and supervision, monitoring and evaluation of the Ayurveda Service programmes.

Objectives

- To expand and develop functional, physical Ayurveda health infrastructure;
- To improve quality control mechanism for Ayurveda health services throughout the country;
- To develop and manage the required human resources;
- To mobilize the adequate resources for medicinal plants;

- To promote community participation in the management of the health facility & utilization of local herbs;
- To procure, store and distribute the Ayurveda medicine & other allied materials;
- To promote health status & sustainable development of Ayurveda system using locally available medicinal plants;
- To promote positive attitudes towards health care & awareness of health issues;

Analysis of Achievement, FY 2073/74

Based on the treatment report of different Ayurveda institutions following diseases were classified as top ten diseases:

- Amlapitta (Gastritis)
- Udar rog (Abdominal diseases)
- Swasan Bikar (Respiratory diseases)
- Vata Vyadhi (Osteorthritis, Rheumatoid Arthritis & other neuromuscular Diseases)
- Jwar (Pyrexia)
- Bal Roga (Pediatric diseases)
- Karna, Nasa, Mukha, Danta & Kantha rog (ENT, Oral, Dental diseases)
- Stri rog (Gynecological diseases)
- Brana (Wound, Abscess & Other Skin Diseases)
- Atisar/Grahani (Diarrheal diseases)

Below table shows the number of people served at various regions and zones by sex in 2073/74. The highest number of people were served in western region where as the least number of people were served in mid-western region.

Service Statistics, FY 2073/074

SN	Particular	EDR	CDR	WDR	MWDR	FWDR	Hospitals	DoA*	Total
1	OPD service	202864	287101	300174	191123	208233	26814		1216309
2	Senior citizen programme	6521	8205	12543	7568	5203	235		40275
3	Lactating mother programme	4119	5264	5157	4163	4229	212		23144
4	Snehan\ Swedan	5238	5184	2764	3218	5261	6421		28086
5	Free Health Camp	6542	12385	7221	7237	6382	1275	1521	42563
6	Rural outreach clinic	18026	11852	25769	15781	15208			86636
	Total	**243310**	**329991**	**353628**	**229090**	**244516**	**34957**	**1521**	**1437013**

**Free health camp conducted by DoA

CHAPTER 8: HEALTH COUNCILS

NEPAL NURSING COUNCIL

Introduction:

Nepal Nursing Council is a regulatory body for maintaining the Standard and quality of nursing education. Nepal Nursing Council established on 2053 (1996) Nursing council to mobilize nursing service of the kingdom of Nepal in a systematic and scientific manner having made it efficient and also provide for registration of the name of the nurses according to their qualification.

Objectives:

- Toregister the name of eligible nurses and A.N.M., Midwifery, in the registration book of the Council according to their qualification
- Tomaintain quality nursing & Midwifery education & Services throughout the country

Key Achievement, fy 2073/74

- In line with National Health Policy 2014, minimum requirement to start midwifery education in the country was developed.
- Common guideline for the midwifery curriculum was developed keeping in view the international standard.
- E-recording started.
- Online form submission for the 17th NLEN which is going to be held in Kartik 25, 2074 (Nov 11th 2017)

Registration status 26thKartik 2074

Particulars	**Total Number 26th Kartik 2074**
Nurse	44,737
ANM	29,140
Total	**73,877**
Foreign nurse	830

NEPAL AYURVEDIC MEDICAL COUNCIL

Introduction:

The Nepal Ayurvedic Medical Council (NAMC) is the autonomous body to regulate & control Ayurvedic medicine in Nepal. It was established under the Ayurveda Medical Council Act, 2045. The council is the regulatory & legislative body for Ayurvedic courses, human resources, institutions, practitioners & Traditional healers in Nepal. All Ayurveda practitioner & educational institutions have to register with the council. The council has developed a code of ethics for Ayurvedic doctors & minimum requirements for Ayurvedic educational institutions.

Function and Objectives of Council

- Arrange for the smooth provision of Ayurveda Treatment
- Develop the system of use of Ayurvedic medicines
- Determine the qualification of doctors & to register them
- Advice the government on the production, sale & distribution of Ayurvedic medicines.
- Suggest to the government for making arranging research on Ayurveda.
- Recognize appropriate Ayurveda educational institutions in Nepal.
- Determine the curriculum, terms admission & examination system policies and essential infrastructures of educational institutions.
- Recognize the educational qualifications granted on Ayurveda. modern medicine and surgery and paramedics.
- Prepare a code of conduct for Ayurvedic doctors and to monitor its implementation.

Nepal Ayurvedic Council registered members up to date, FY 2073/74

S.N	Registration	Number
1.	Master of Medicine	59
2.	Bachelor of Ayurvedic Medicine & Surgery (BAMS) or equivalent	598
3.	Ayurveda Health Assistant (AHA) of equivalent	1404
4.	Auxiliary Ayurveda Health Worker (AAHW)/Technical School Leaving Certificate (TSLC)	1618
5.	Traditional Healers	19
6.	Academic Institutions	20
7.	Foreigner Practitioners	4

NEPAL HEALTH RESEARCH COUNCIL

Introduction

Nepal Health Research Council (NHRC) is the national apical body for promoting health research across the country. NHRC was established in 1991 by an Act of Parliament and was given the responsibility to promote and coordinate health research for improvement of the health status of people of Nepal. The major focus of NHRC is on research regulation, evidence generation, translation of evidence into policy and practice, and capacity building of national scientists in the areas of health research and evidences.

NHRC carries out research in priority areas of the Ministry of Health. Out of total research conducted between 1995 and 2017, majority of research were related to health system, non-communicable diseases, and the environmental health. The table below shows the research activities of the NHRC by research areas between 1995 and 2017.

Activities carried out, FY 2073/74

Nepal Health Research Council conducted different research activities with support of Government of Nepal and other different agencies. The research activities conducted by NHRC during the FY 2073/74 are as listed below:

- Prevalence Study of Selected Chronic Diseases (Chronic Kidney Disease, Chronic Obstructive Pulmonary Disease, Diabetes Mellitus, Coronary Artery Disease) in Nepal
- Community Based Intervention for Prevention and Control of NCD Risk Factors (CIPCoN Study)
- Asparagus Powder Distribution Program for Breastfeeding Promotion: Perspectives from Mothers and Health Service Providers
- Nepal Mental Health Survey 2017-2018

- Review of Social Health Insurance Scheme in Selected Districts of Nepal
- Verification of Disbursement Linked Indicators
- Assessing Effects of Climatic Factors on Diarrheal Diseases Incidence at National and Sub-National Levels In Nepal
- Descriptive Epidemiology of Scrub Typhus in Nepal

Total Research Conducted by the NHRC between 1995 and 2017 by Research Area

Research Areas	No of Research	Percent
Communicable Diseases	45	18.9
Environment Health	44	18.5
Health System	42	17.6
Reproductive Health	31	13
Neonatal and Child Health	18	7.6
Non Communicable Disease	17	7.1
Traditional Medicine	11	4.6
Mental Health	10	4.2
Nutrition and Food Safety	8	3.4
Geriatric Health	6	2.5
Miscellaneous	4	1.7
Injury and Accident	2	0.8
Total	**138**	**100.0**

NEPAL MEDICAL COUNCIL

Introduction

Nepal Medical Council (NMC) is a statutory organization established under the Act 2020 with responsibilities to maintain high standards of medical practices in Nepal. The major functions of Nepal Medical Council is to provide registration by taking licensing examination, to inspect, monitor and recognize medical institutions. Medical council is also responsible for monitoring quality medical service for patient safety.

If registered medical doctors are found to be violating NMC rules and regulations council can recommend from minor warning to up to permanent cancellation of registration. Additionally, Nepal Medical Council also provide temporary license for foreign doctors to practice medicine in Nepal.

Challenges and Solutions:

Nepal Medical Council functions under NMC Acts, rights, rules and regulations in order to achieve its major objective of maintaining high standards of medical education and practices. NMC is responsible to control the activities which would lead to violation of NMC policy. The trend of neglecting law, rules and regulations by government and related departments itself has become challenging factor for Nepal Medical Council.

NEPAL HEALTH PROFESSIONAL COUNCIL

Introduction

Health Professional Council, Nepal has been established to make more effective the health services in Nepal, to mobilize the services of health professionals except the qualified doctors and nurses to be registered with the Medical Council in a managed and scientific manner and make provisions on the registration of their names according to their qualifications, according to "Nepal Health Professional Council Act 2053" by the Government of Nepal.

The functions, duties and powers of the Council are,

- To make necessary policies for smoothly operating the health profession related activities.
- To determine the curricula, terms of admission and policies on examination system of educational institutions imparting teaching and learning on health profession and evaluate and review the related matters.
- To determine the qualifications of health professionals and to provide for the registration of the names of health professionals having required qualifications

Status of total number of Health Professionals Permanent Registered till now. FY 2073/74

S.N.	Subject	Specialization	First	Second	Third
1	Public Health	697	3013		
2	Health Education	17	73	9	
3	Medicine			11695	51226
4	Medical Microbiology	111	104		
5	Laboratory	17	1974	5258	12465
6	Radiography	14	404	1172	43
7	Radiotherapy	1	5	9	
8	Cytrology	1	3		
9	Hematology	16	9		
10	Biochemistry	148	59		
11	Virology	7			
12	Nuclear Medicine	3			
13	Ayurved		6	196	1148
14	Homeopathy	1	104	31	
15	Unani		16		
16	Acupuncture	1	6	67	37
17	Physiotherapy	111	889	104	62
18	Community Base Rehabilitation		1		
19	Prosthetic & Arthritic		7	4	
20	Dental Assistant			940	647
21	Naturopathy		33		2
22	Yoga	3	9		1
23	Ophthalmology	2	282	728	
24	Operation Theater and Allied Health Sciences	6		41	
25	Clinical Psychology	13	2		
26	Speech and Hearing	5	49		
27	Forensic Medicine	2	1	3	
28	Perfusion Technology	2	3		
29	Anaesthesia		35		
30	Cardiology Tech.		1		
31	TCM AMT	3			
32	Occupational Therapy		2		
Sub total		**1181**	**7090**	**20257**	**65631**
Total		**94159**			

NEPAL PHARMACY COUNCIL
Introduction

Nepal Pharmacy Council (NPC) is an autonomous body constituted under the Nepal Pharmacy Council Act, 2057 to make pharmacy profession more effective through systematic and scientific operation.

The functions, duties and powers of NPC are as follows:

- To prepare and implement policy, plans and programs to run pharmacy profession scientifically and systematically,
- To grant recognition to educational institutions and certificates and degrees awarded by such institutions which provide pharmacy education,
- To determine the standards of curricula, conditions for admission and examination system of the educational institutions providing pharmacy education, and enquire whether standards so determined are maintained or not and abrogate the certificate and degree awarded by the educational institutions which do not comply with the standards so determined after completing the procedures as prescribed,
- To determine the qualification as required to carry out the pharmacy profession and register the name of pharmacists and pharmacy assistants as prescribed in the Registration Book of the Council who have completed the qualification so determined,
- To remove the names of registered pharmacist and pharmacy assistant from the registration book after the completion of the procedures as prescribed if they are found to violate or not following the professional codes of conduct as prescribed.

Achievements in 2073/074

- Conducted licensing examination 3 times for pharmacists and pharmacy assistants.
- 47 colleges (29 diploma colleges & 18 colleges conducting B.Pharm course) were inspected.
- Success rate in licensing examination (of three years)

S.No.	Particulars	F.Y. 2071/072			F.Y. 2072/073			F.Y. 2073/074		
		Attended	Passed	%	Attended	Passed	%	Attended	Passed	%
1	Pharmacists	110	96	87	860	439	51	1114	659	59
2	Pharmacy Assistants	481	426	89	1089	495	45	1943	1148	59

CHAPTER 9: HEALTH CARE SOCIAL SECURITY

Introduction

Nepal is committed to access to quality health care for all its citizens. Although good progress has been made on improving access, much remains to be done. Out-of-pocket expenditure still puts vulnerable households at risk of catastrophic spending and prevents them from using services. Existing social health protection schemes are fragmented and often fail to provide financial protection against catastrophic spending and are not always based on medical needs. Thus, there was a need to develop a health care financing pre-payment system and to pool risks to minimize financial hardships.

The National Health Insurance Program (NHIP) was funded in the government's budget for 2011/12 (2068/2069). The government then adopted the National Health Insurance Policy in 2014. Under this policy the government established the semi-autonomous Social Health (Health Insurance) Security Development Committee (SHSDC) in 2015 to implement the program to promote pre-payment and risk pooling to mobilize financial resources for health.

Vision:

To improve the overall health situation of the people of Nepal.

Objectives:

- Ensure access to quality health service (equity and equality).
- Protect from financial hardship and reduce out-of pocket payments
- Extent to universal health coverage

Strategy:

To implement health insurance program gradually throughout the country by increasing enrolment through awareness activities at the community level and special protection for poor and marginalized people by coordinating with government and private health service providers.

Program Implementation

The Social Health Security Program was initiated in April 2016 in Kailali district and in June 2016 in Baglung and Ilam districts. As such, the program was rolled out to three districts in FY 2072/73. In the FY 2073/74, the program was expanded to additional 12 districts. By the end of this year, 228,113 people have been enrolled to the program, which is less than one percent of total the population of Nepal and more than 63 million annual contributions has been collected (see below table).

Summary of district-wise enrolment in SHSP (FY 2073/74)

District	Male	Female	Others	Total
Kailali	3975	4203	5	8183
Baglung	7021	8465	9	15495
Ilam	9310	10050	2	19362
Achham	857	931	0	1788
Baitadi	1584	1556	0	3140
Palpa	18254	21444	1	39699
Myagdi	2797	3197	1	5995
Kaski	19763	21834	1	41598
Tanahaun	3910	4553	3	8466
Gorkha	3825	4416	3	8244
Chitwan	16914	18826	3	35743
Makwanpur	7972	8692	2	16666
Jumla	3592	3709	2	7303
Jajarkot	1475	1454	0	2929
Bhaktapur	6555	6947	0	13502
Total	**107804**	**120277**	**32**	**228113**

CHAPTER 10: DEVELOPMENT PARTNER SUPPORT

Development partners support the government health system through a sector-wide approach (SWAp). The SWAp now supports the implementation of the new Nepal Health Sector Strategy (NHSS, 2016–2021). The Joint Financing Arrangement (JFA) has been signed by various partners and the government. The JFA describes in detail the arrangement for partners' financing of the NHSS. The JFA elaborates the pool funding arrangement and parallel financing mechanism as bilaterally agreed between the government and the donor partners. This time the World Bank has allocated all its commitment through a Program-for-Results, a tool which disburses fund against a verifiable set of results, called Disbursement Linked Results (DLRs). DFID and GAVI are also disbursing part of their commitments against some DLRs identified and agreed with the MoHP. The contributions of various partners for supporting the NHSS program activities were presented as a matrix format in the DoHS Annual Report of fiscal year 2073/74 (2016/2017). For this, visit on DoHS website "www.dohs.gov.np"

ANNEX: Status of major health indicators, FY 2073/74

District Name	GoN Hospital	PHCC	Health Post	PHC/ORC	EPI Clinics	FCHVs	BCG	DPT-Hep B-Hib3rd	OPV- 3rd	PCV 3rd	MR 1stDose
National	123	200	3808	12180	16022	49001	91.3	87	85.9	78	84
Province 1	18	41	648	2189	2787	8578	92	87	86	82	84
01 TAPLEJUNG	1	2	50	176	179	896	96	92	91	77	89
02 PANCHTHAR	1	2	40	147	217	394	89	91	90	87	90
03 ILAM	1	4	44	185	187	1057	77	75	74	68	70
04 JHAPA	1	6	44	187	250	586	96	91	91	87	88
05 MORANG	3	6	60	258	360	722	100	91	88	84	85
06 SUNSARI	2	5	47	149	255	1052	100	86	86	80	81
07 DHANKUTA	1	2	35	105	138	315	73	78	80	74	76
08 TERHATHUM	1	2	29	67	119	392	78	79	78	75	82
09 SANKHUWASABHA	1	3	36	98	204	314	91	91	92	79	86
10 BHOJPUR	1	3	60	191	186	530	80	83	83	80	84
11 SOLUKHUMBU	1	2	32	76	93	265	74	77	78	70	81
12 OKHALDHUNGA	1	1	54	168	167	707	87	81	81	78	78
13 KHOTANG	1	2	73	228	230	898	86	88	88	82	90
14 UDAYAPUR	2	1	44	154	202	450	89	88	87	84	83
Province 2	13	32	745	2358	3384	7073	103	99	98	72	91
15 SAPTARI	2	4	111	406	460	1074	87	88	88	82	87
16 SIRAHA	2	4	104	251	432	981	115	106	104	84	96
17 DHANUSA	1	5	98	322	486	882	113	115	114	86	102
18 MAHOTTARI	2	3	72	273	359	635	105	101	100	61	93
19 SARLAHI	1	5	94	226	344	1015	97	89	87	56	79
32 RAUTAHAT	2	3	93	333	422	841	108	98	100	64	90
33 BARA	1	5	94	277	493	932	97	98	98	67	94
34 PARSA	2	3	79	270	388	713	104	93	93	82	91
Province 3	34	43	640	1904	2418	9016	85	76	75	73	76
20 SINDHULI	1	4	51	181	208	494	87	79	79	71	78
21 RAMECHHAP	1	3	52	139	187	752	57	61	61	53	61
22 DOLAKHA	1	2	52	164	161	1238	62	71	71	63	72
23 SINDHUPALCHOK	1	3	75	212	233	693	59	75	72	72	74
24 KAVRE	2	4	89	285	323	956	93	81	80	73	76
25 LALITPUR	3	4	38	75	140	445	108	69	62	64	70
26 BHAKTAPUR	3	2	19	42	59	218	44	81	81	83	84
27 KATHMANDU	14	8	58	134	217	1589	96	71	71	70	72
28 NUWAKOT	1	3	63	174	203	1007	72	84	82	76	84
29 RASUWA	1	1	17	45	57	245	83	101	102	91	97
30 DHADING	1	2	49	190	226	471	62	77	77	73	78

District Name	GoN Hospital	PHCC	Health Post	PHC/ORC	EPI Clinics	FCHVs	BCG	DPT-Hep B-Hib3rd	OPV- 3rd	PCV 3rd	MR 1stDose
31 MAKWANPUR	1	4	41	159	206	450	85	90	89	88	89
35 CHITAWAN	4	3	36	104	198	458	95	82	82	79	78
Province 4	14	24	492	1358	1748	5767	75	76	76	75	75
36 GORKHA	1	3	66	237	264	624	70	80	80	79	80
37 LAMJUNG	1	2	58	171	194	654	71	76	76	72	74
38 TANAHU	3	2	46	145	210	448	64	70	70	70	69
39 SYANGJA	1	3	65	198	236	594	66	80	80	73	75
40 KASKI	3	4	45	158	203	1037	94	71	71	71	71
41 MANANG	1		13	10	20	118	28	46	46	46	50
42 MUSTANG	1	1	15	20	26	135	47	71	70	60	69
43 MYAGDI	1	1	39	78	117	370	80	82	82	80	82
44 PARBAT	1	2	52	105	161	500	60	76	75	71	71
45 BAGLUNG	1	3	58	141	168	922	77	79	78	78	78
48.1 NAWALPUR	0	3	35	95	149	365	77	83	83	84	84
Province 5	18	31	570	1874	2668	8718	92	87	87	85	86
46 GULMI	1	4	76	214	306	959	79	84	84	83	82
47 PALPA	2	2	62	180	228	553	80	78	78	77	77
48 NAWALPARASI	1	2	36	101	158	435	77	82	82	78	78
49 RUPANDEHI	2	5	64	215	281	1395	103	88	88	89	89
50 KAPILBASTU	3	2	73	279	362	1040	97	95	94	84	86
51 ARGHAKHANCHI	1	2	39	84	170	845	68	80	80	77	78
52 PYUTHAN	1	2	46	152	239	432	98	95	92	91	98
53 ROLPA	1	2	49	169	209	445	99	97	96	89	95
54 RUKUM	0	1	15	44	54	126	116	97	96	88	93
56 DANG	2	3	36	131	195	871	88	87	86	86	87
57 BANKE	3	3	44	150	271	785	110	94	94	92	92
58 BARDIYA	1	3	30	155	195	832	78	76	74	75	77
Province 6	12	13	336	1060	1323	4102	101	97	96	86	96
54.1 RUKUM WEST	1	1	26	75	100	243	104	91	93	82	90
55 SALYAN	1	2	45	164	223	423	93	90	90	87	92
59 SURKHET	2	3	47	150	185	987	93	88	88	84	86
60 DAILEKH	2	2	56	247	287	788	95	95	95	90	97
61 JAJARKOT	1	2	32	97	126	258	109	98	97	86	97
62 DOLPA	1		23	52	59	132	104	95	93	87	89
63 JUMLA	1	1	29	86	86	509	104	104	101	74	103
64 KALIKOT	1	1	28	66	107	284	121	116	116	84	113
65 MUGU	1	1	24	73	84	290	136	136	131	115	133
66 HUMLA	1		26	50	66	188	109	110	99	73	94
Province 7	14	16	377	1437	1694	5747	87	85	85	79	85

District Name	GoN Hospital	PHCC	Health Post	PHC/ORC	EPI Clinics	FCHVs	BCG	DPT-Hep B-Hib3rd	OPV- 3rd	PCV 3rd	MR 1stDose
67 BAJURA	1	1	26	68	119	261	108	105	104	97	102
68 BAJHANG	1	2	45	119	145	425	99	94	94	85	94
69 ACHHAM	1	2	73	235	239	943	95	97	97	93	99
70 DOTI	2	2	49	217	251	627	100	95	95	81	94
71 KAILALI	3	4	37	183	242	1062	78	76	77	74	77
72 KANCHANPUR	1	3	18	72	138	773	81	79	79	75	76
73 DADELDHURA	2		24	74	93	456	82	80	80	80	80
74 BAITADI	1	2	65	315	330	831	88	85	85	71	89
75 DARCHAULA	2		40	154	137	369	87	88	87	74	88

District Name	Average new visits aged 0-11 months for GM	% of underweight new children 0-11 months	Inccidence of Diarrhoea	ARI Inccidence	CPR	% of ANC 1st new visit	% of 4th ANC visit	% of Institutional Delivery	Slide positivity rate (SPR) of malaria	Malaria annual parasite incidence (per 1,000 population)	Incidence of kala-azar (KA) per 10,000 population in at risk districts
National	3	3.5	400	612	43.6	102.1	52.8	54.6	1.0	0.08	0.11
Province 1	3	1	377	717	47.8	95.3	44.1	49.1	0.4	0.0	
01 TAPLEJUNG	3	2	499	916	38.4	87	36.3	36	0.0	0.0	0.0
02 PANCHTHAR	3	1	360	985	35.2	80.8	42.6	39.1	0.8	0.1	0.0
03 ILAM	4	0	318	734	51.5	64.1	36.1	20.5	0.2	0.0	0.0
04 JHAPA	3	1	314	588	53.5	105.4	41.8	74.8	0.6	0.0	0.1
05 MORANG	3	1	276	516	61.5	122.4	43.1	78	0.2	0.0	0.2
06 SUNSARI	3	2	358	489	54.3	85.2	53.7	23.1	1.0	0.0	0.1
07 DHANKUTA	4	1	393	1157	39.1	79.2	37.1	14.4	7.0	0.1	0.1
08 TERHATHUM	3	1	537	1210	27.6	73.6	34.3	28.3	0.0	0.0	0.0
09 SANKHUWASABHA	3	1	302	737	27.4	70.4	46.7	60.6	0.0	0.0	0.0
10 BHOJPUR	4	1	543	1035	34.7	74.5	39.5	26.7	0.0	0.0	0.4
11 SOLUKHUMBU	6	5	560	1235	37.7	104.7	39.3	24.1	0.0	0.0	0.0
12 OKHALDHUNGA	3	3	891	1833	41.3	85.4	43	61	0.0	0.0	0.1
13 KHOTANG	4	1	633	1087	27.0	107.4	56.3	25.5	0.0	0.0	0.0
14 UDAYAPUR	3	2	383	610	27.1	82.5	43.3	39.3	0.0	0.0	0.1
Province 2	2	4	335	472	49.4	102.9	37.3	43.9	0.8	0.0	
15 SAPTARI	2	4	409	513	56.3	104.6	62.2	33.1	0.5	0.0	0.1
16 SIRAHA	2	4	433	697	47.7	110.7	40.3	45.2	0.0	0.0	0.2
17 DHANUSA	2	2	337	523	54.0	96	21	58.6	2.5	0.2	0.2

District Name	Average new visits aged 0-11 months for GM	% of underweight new children 0-11 months	Inccidence of Diarrhoea	ARI Inccidence	CPR	% of ANC 1st new visit	% of 4th ANC visit	% of Institutional Delivery	Slide positivity rate (SPR) of malaria	Malaria annual parasite incidence (per 1,000 population)	Incidence of kala-azar (KA) per 10,000 population in at risk districts
18 MAHOTTARI	2	3	330	514	45.1	101.2	47	16.3	0.4	0.0	0.2
19 SARLAHI	2	4	165	277	47.0	98.3	32.7	33.4	3.0	0.0	0.3
32 RAUTAHAT	2	6	375	459	42.3	126.5	37.8	41.9	0.3	0.0	0.0
33 BARA	2	7	334	422	35.5	87.8	32.2	30.7	0.7	0.0	0.0
34 PARSA	1	5	334	417	70.7	99.1	28.1	97.4	0.2	0.0	0.0
Province 3	3	3	288	439	41.1	109	68	52.8	0.6	0.0	
20 SINDHULI	3	3	416	741	34.6	77.5	29	23.7	0.8	0.1	0.1
21 RAMECHHAP	3	2	733	1206	32.7	60.3	35.9	32.2	0.0	0.0	0.1
22 DOLAKHA	4	3	694	1065	37.0	69.4	50.6	42.7	0.0	0.0	0.0
23 SINDHUPALCHOK	3	3	461	772	37.7	63.6	29.2	21.7	0.0	0.0	0.0
24 KAVRE	4	2	420	725	55.1	112.8	44.9	65.9	0.0	0.0	0.0
25 LALITPUR	2	8	200	326	49.4	93.2	78	77.6	0.0	0.0	0.0
26 BHAKTAPUR	3	2	219	238	34.6	61.6	37.8	21.5	0.0	0.0	0.0
27 KATHMANDU	4	1	99	141	31.4	144.1	104.2	81	100.0	0.0	0.0
28 NUWAKOT	3	2	327	509	38.9	70.9	40.5	34.2	0.0	0.0	0.0
29 RASUWA	3	2	874	1168	54.8	98.9	47.8	24.9	0.0	0.0	0.0
30 DHADING	4	4	419	630	39.9	75	54	41.8	0.0	0.0	0.0
31 MAKWANPUR	3	2	501	614	52.9	101	52.8	46.9	0.2	0.0	0.1
35 CHITAWAN	3	3	240	387	59.0	146.1	68.8	18.3	0.7	0.0	0.0
Province 4	4	1	302	597	35.6	102.4	59.1	46	0.3	0.0	
36 GORKHA	4	1	456	800	40.3	78.5	46.2	35	0.0	0.0	0.0
37 LAMJUNG	4	1	388	732	33.5	92.4	54	42.2	0.0	0.0	0.0
38 TANAHU	4	2	213	347	29.6	56.3	25.6	22.9	0.0	0.0	0.0
39 SYANGJA	6	0	278	726	32.4	81.7	41.9	22.7	0.8	0.1	0.1
40 KASKI	4	3	198	378	41.5	192.4	109.6	102	1.0	0.0	0.0
41 MANANG	4	0	467	661	56.2	76.5	14.8	12.2	0.0	0.0	0.0
42 MUSTANG	4	2	537	1208	69.0	78.7	23.7	19.8	0.0	0.0	0.0
43 MYAGDI	4	0	448	737	39.8	99.7	66.5	52.8	0.0	0.0	0.0
44 PARBAT	4	1	340	941	28.4	60.2	43.1	29.1	0.3	0.0	0.0
45 BAGLUNG	4	0	415	930	30.9	82.1	46.9	45.1	0.0	0.0	0.0
48.1 NAWALPUR	4	1	245	382	37.2	90.4	59.4	20.1	0.2	0.0	0.0
Province 5	3	4	411	576	43.6	102.7	57.9	69.3	0.8	0.1	
46 GULMI	4	1	329	843	35.2	73.4	61.6	37.6	0.4	0.1	0.0
47 PALPA	4	2	354	672	44.6	117.1	69.1	89.1	0.3	0.1	0.6
48 NAWALPARASI	4	2	330	325	38.8	96.2	62	34	0.2	0.0	0.0

District Name	Average new visits aged 0-11 months for GM	% of underweight new children 0-11 months	Inccidence of Diarrhoea	ARI Inccidence	CPR	% of ANC 1st new visit	% of 4th ANC visit	% of Institutional Delivery	Slide positivity rate (SPR) of malaria	Malaria annual parasite incidence (per 1,000 population)	Incidence of kala-azar (KA) per 10,000 population in at risk districts
49 RUPANDEHI	3	1	298	355	47.6	128.1	69	109	0.5	0.1	0.0
50 KAPILBASTU	2	10	339	297	37.7	121.9	53.9	31.3	1.6	0.1	0.0
51 ARGHAKHANCHI	4	1	332	755	23.7	65.7	41	26.5	2.5	0.3	0.2
52 PYUTHAN	4	3	667	1093	36.9	91	47.8	55	1.5	1.5	0.3
53 ROLPA	3	1	808	1022	38.1	90.5	44.2	50	0.0	0.0	0.0
54 RUKUM	2	2	478	962	25.7	101.7	45.9	38	0.0	0.0	0.2
56 DANG	2	3	417	561	52.6	86.2	60.7	66.3	0.6	0.1	0.1
57 BANKE	3	4	516	618	42.0	113.5	49.5	126.7	0.9	0.1	0.2
58 BARDIYA	5	5	454	782	59.6	79.1	56	50.6	0.9	0.1	0.3
Province 6	2	8	722	927	37.4	109.8	49.1	60.2	1.8	0.1	
54.1 RUKUM WEST	3	3	415	591	24.7	156.3	31.6	53.7	0.0	0.0	0.0
55 SALYAN	3	3	646	989	38.6	100.9	58.5	54	0.0	0.0	0.1
59 SURKHET	2	3	649	770	48.7	110.2	73.5	80.8	1.9	0.2	0.3
60 DAILEKH	3	4	1020	1324	35.4	84.2	47.6	70	1.8	0.1	0.0
61 JAJARKOT	2	7	601	789	30.4	80.6	25.1	31.3	0.0	0.0	0.0
62 DOLPA	2	8	533	934	34.9	84.7	29.9	30.6	0.0	0.0	0.0
63 JUMLA	3	13	879	1089	44.4	110.7	34.6	54.1	0.0	0.0	0.0
64 KALIKOT	2	21	910	876	36.9	142.5	50.6	72.3	0.0	0.0	0.1
65 MUGU	3	13	621	886	26.3	216.7	41.6	49.3	0.0	0.0	0.2
66 HUMLA	1	16	780	1004	23.4	49.6	15.2	18.9	0.0	0.0	0.7
Province 7	4	5	697	992	40.5	91.8	55.2	67.8	1.6	0.3	
67 BAJURA	2	11	1030	1687	33.9	92.9	47.8	69.1	14.7	2.1	0.5
68 BAJHANG	3	4	823	1129	33.7	113.3	61.1	75.8	0.0	0.0	0.0
69 ACHHAM	6	3	1296	1975	30.6	115.1	72.7	73.8	3.8	0.3	0.1
70 DOTI	3	7	843	1108	38.4	104.4	52.6	71	1.1	0.0	0.1
71 KAILALI	4	3	445	532	48.7	84.4	51.5	76.5	2.1	0.3	0.0
72 KANCHANPUR	2	11	574	625	41.8	77.1	49	48.2	0.6	0.2	0.0
73 DADELDHURA	5	4	880	1107	34.2	100.9	61.5	68.9	1.0	0.1	0.0
74 BAITADI	5	4	769	1480	37.6	90.6	61.6	64.5	6.2	1.3	0.0
75 DARCHAULA	5	3	446	1106	37.5	82.8	50.7	59.6	1.2	0.1	0.0

District Name	Leprosy New Case Detection Rate/100000	Leprosy Prevalence Rate/10000	TB-Case notification Rate	% of TB-New Case	HIV Testing and Counseling		PMTCT		On ART	% of new OPD Visits of Total Population	Proportion by sex among total OPD Visit	
					Tested	Positive	Tested	Positive			Female	Male
National	11	0.9	111	89	176228	1781	382887	128	14544	71.7	56.2	43.8
Province 1	10.5	0.8	84	91	31780	207	53646	27	1197	77.9	55.1	44.9
01 TAPLEJUNG	1.2	0.2	22	86	0	0	217	0	0	89.7	53.5	46.5
02 PANCHTHAR			40	88	0	0	857	0	0	58.2	54.7	45.3
03 ILAM	1.0	0.1	53	94	58	0	3468	0	27	56.2	56.6	43.4
04 JHAPA	17.8	1.4	117	92	10230	46	2520	0	288	76.0	51.0	49.0
05 MORANG	2.1	0.3	103	90	6435	71	16953	0	280	100.0	56.1	43.9
06 SUNSARI	18.0	1.4	106	90	13261	84	21968	26	541	39.6	55.3	44.7
07 DHANKUTA	2.7	0.3	48	95	468	5	1156	0	6	75.7	54.2	45.8
08 TERHATHUM		0.2	37	89	25	0	49	0	0	80.1	54.1	45.9
09 SANKHUWASABHA	1.9	0.2	54	95	40	0	2064	0	25	87.5	56.1	43.9
10 BHOJPUR	1.0		48	93	60	0	43	0	0	79.2	55.5	44.5
11 SOLUKHUMBU	10.4	0.9	30	97	0	0	283	0	0	94.2	57.7	42.3
12 OKHALDHUNGA	1.5	0.1	54	87	391	0	196	0	6	100.0	58.3	41.7
13 KHOTANG	1.0	0.1	35	97	550	0	1475	0	0	89.0	55.6	44.4
14 UDAYAPUR	13.8	0.8	79	89	262	1	2397	1	24	66.2	57.0	43.0
Province 2	19.8	1.5	109	93	14245	273	32724	17	1428	46.7	53.6	46.4
15 SAPTARI	18.9	1.6	76	96	331	10	3437	0	88	52.4	54.9	45.1
16 SIRAHA	32.5	2.0	88	96	979	26	6945	3	62	56.8	55.4	44.6
17 DHANUSA	20.2	1.4	88	93	1029	63	10412	6	497	40.1	54.5	45.5
18 MAHOTTARI	17.5	1.8	121	95	2240	14	1664	1	53	44.2	54.8	45.2
19 SARLAHI	16.8	1.3	121	90	3118	17	1439	3	114	24.6	53.0	47.0
32 RAUTAHAT	13.8	1.0	102	92	1392	36	1555	0	80	50.8	52.8	47.2
33 BARA	20.8	1.5	138	90	3333	20	4625	0	11	42.5	53.0	47.0
34 PARSA	15.6	1.3	136	93	1823	87	2647	4	523	68.8	51.3	48.7
Province 3	3.5	0.3	128	87	39043	630	100340	45	4082	81.9	55.8	44.2
20 SINDHULI	1.2	0.0	94	86	120	4	3227	1	15	59.0	56.5	43.5
21 RAMECHHAP	13.8	1.1	62	93	220	0	78	0	0	100.0	58.5	41.5
22 DOLAKHA	0.9	0.1	57	91	985	0	2286	0	0	100.0	57.8	42.2
23 SINDHUPALCHOK	1.1	0.1	70	87	116	0	1362	0	37	96.6	57.0	43.0
24 KAVRE	3.1	0.1	89	92	10	0	2120	1	46	100.0	56.1	43.9
25 LALITPUR	1.0	0.0	135	89	8596	26	9519	0	290	100.0	57.9	42.1
26 BHAKTAPUR	1.7	0.2	162	87	4190	15	1653	0	28	90.5	54.7	45.3
27 KATHMANDU	3.6	0.7	160	87	18784	442	41337	38	2599	65.4	53.4	46.6
28 NUWAKOT	3.2	0.2	85	85	116	11	4728	0	109	70.5	55.3	44.7
29 RASUWA	0.0	0.0	61	85	0	0	275	0	0	100.0	52.7	47.3

District Name	Leprosy New Case Detection Rate/100000	Leprosy Prevalence Rate/10000	TB-Case notification Rate	% of TB-New Case	HIV Testing and Counseling		PMTCT		On ART	% of new OPD Visits of Total Population	Proportion by sex among total OPD Visit	
					Tested	Positive	Tested	Positive			Female	Male
30 DHADING	2.2	0.2	76	92	47	2	4972	0	63	79.4	58.9	41.1
31 MAKWANPUR	4.9	0.4	154	88	2506	17	7840	0	146	35.2	58.9	41.1
35 CHITAWAN			143	84	3353	113	20943	5	749	100.0	55.6	44.4
Province 4	5.0	0.5	81	88	4530	108	45189	20	1807	96.1	56.4	43.6
36 GORKHA	2.2	0.2	89	92	117	5	3435	1	161	100.0	58.5	41.5
37 LAMJUNG	3.5	0.2	79	89	148	0	2616	2	84	100.0	57.3	42.7
38 TANAHU	5.3	0.5	90	84	781	7	2664	0	163	61.3	57.0	43.0
39 SYANGJA	2.9	0.1	94	85	345	12	3506	1	225	75.0	57.5	42.5
40 KASKI			86	88	2373	76	25160	15	944	100.0	54.6	45.4
41 MANANG			31	50	24	0	31	0	0	100.0	44.3	55.7
42 MUSTANG	6.2	0.6	73	100	0	0	15	0	0	100.0	47.3	52.7
43 MYAGDI	11.0	1.1	61	88	139	3	1157	1	41	100.0	57.9	42.1
44 PARBAT	4.7	0.5	66	94	511	0	1298	0	51	100.0	56.7	43.3
45 BAGLUNG	6.0	0.6	56	88	92	5	5307	0	138	75.4	58.3	41.7
48.1 NAWALPUR	2.7	0.4			0	0	0	0	0	55.0	56.0	44.0
Province 5	18.1	1.6	135	88	45104	346	81521	13	2772	69.1	57.9	42.1
46 GULMI	1.0	0.2	111	92	150	18	3940	4	150	48.7	57.6	42.4
47 PALPA	51.8	4.7	144	89	1417	1	6896	1	252	100.0	57.9	42.1
48 NAWALPARASI	51.1	4.5	130	87	5397	28	6692	0	156	65.9	58.5	41.5
49 RUPANDEHI	6.4	0.7	134	88	4118	134	19341	6	1021	70.7	57.1	42.9
50 KAPILBASTU	3.8	0.2	102	90	3180	34	5281	0	344	65.8	56.9	43.1
51 ARGHAKHANCHI	17.4	1.1	112	89	6334	7	2643	0	78	62.1	57.9	42.1
52 PYUTHAN	10.6	1.1	120	87	5902	2	5288	1	62	97.1	60.4	39.6
53 ROLPA	7.1	0.6	120	89	287	1	4165	0	28	57.7	60.3	39.7
54 RUKUM	3.0	0.4	96	88	831	0	1662	0	38	64.4	54.6	45.4
56 DANG	3.9	0.6	193	88	8793	17	13930	0	180	51.5	60.1	39.9
57 BANKE	12.2	0.9	161	88	6609	101	6264	1	394	67.1	54.8	45.2
58 BARDIYA			130	88	2086	3	5419	0	69	65.2	59.7	40.3
Province 6	6.7	0.6	98	92	682	9	16899	0	434	77.9	58.4	41.6
54.1 RUKUM WEST	1.8	0.2			0	0	0	0	0	68.5	60.4	39.6
55 SALYAN	6.1	0.6	83	92	230	2	1599	0	14	72.6	61.2	38.8
59 SURKHET		0.2	168	90	98	0	7170	0	258	81.1	62.2	37.8
60 DAILEKH		0.5	86	95	354	7	4579	0	140	75.2	58.8	41.2
61 JAJARKOT	17.0	1.3	64	93	0	0	189	0	0	57.3	57.0	43.0
62 DOLPA	5.0	0.4	17	100	0	0	426	0	0	100.0	54.3	45.7
63 JUMLA	6.6	0.7	76	98	0	0	1471	0	0	90.9	53.6	46.4

District Name	Leprosy New Case Detection Rate/100000	Leprosy Prevalence Rate/10000	TB-Case notification Rate	% of TB-New Case	HIV Testing and Counseling		PMTCT		On ART	% of new OPD Visits of Total Population	Proportion by sex among total OPD Visit	
					Tested	Positive	Tested	Positive			Female	Male
64 KALIKOT	4.9	0.8	64	97	0	0	1443	0	22	65.8	54.9	45.1
65 MUGU	6.1	0.5	84	98	0	0	22	0	0	100.0	52.3	47.7
66 HUMLA	8.4	0.8	74	85	0	0	0	0	0	100.0	51.5	48.5
Province 7	7.5	0.7	110	88	40844	208	52568	6	2824	71.1	58.1	41.9
67 BAJURA	6.5	0.8	81	79	255	0	2284	0	44	100.0	54.1	45.9
68 BAJHANG	1.9	0.2	61	80	4444	10	3894	0	65	68.6	55.7	44.3
69 ACHHAM	0.9	0.2	66	83	6544	61	7354	1	529	100.0	59.9	40.1
70 DOTI	0.7	0.2	86	91	4695	30	7600	0	590	77.9	59.1	40.9
71 KAILALI	2.6	0.3	135	89	5649	57	13976	1	1154	53.9	60.3	39.7
72 KANCHANPUR	2.1	0.2	173	87	8451	32	6579	4	243	51	59.5	40.5
73 DADELDHURA	1.9	0.2	74	89	3247	7	4554	0	75	100.0	58.0	42.0
74 BAITADI	14.0	1.2	61	88	6725	10	3864	0	104	70.2	55.2	44.8
75 DARCHAULA	9.8	0.9	81	92	834	1	2463	0	20	89.8	53.7	46.3


NEPAL
Administrative Division
CHINA
INDIA
KATHMANDU VALLEY
KATHMANDU
BHAKTAPUR
LALITPUR
HUMLA
DARCHULA
BAJHANG
BAITADI
BAJURA
MUGU
DADELDHURA
DOTI
ACHHAM
KALIKOT
JUMLA
DOLPA
MUSTANG
KANCHANPUR
KAILALI
DAILEKH
JAJARKOT
RUKUM_W
RUKUM_E
MANANG
SURKHET
SALYAN
MYAGDI
KASKI
GORKHA
BARDIYA
ROLPA
BAGLUNG
PARBAT
LAMJUNG
RASUWA
BANKE
PYUTHAN
GULMI
SYANGJA
TANAHU
NUWAKOT
SINDHUPALCHOK
DOLAKHA
DANG
ARGHAKHANCHI
PALPA
DHADING
SANKHUWASABHA
KAPILBASTU
KABHREPALANCHOK
TAPLEJUNG
RUPANDEHI
NAWALPARASI_E
CHITAWAN
RAMECHHAP
SOLUKHUMBU
NAWALPARASI_W
MAKAWANPUR
OKHALDHUNGA
BHOJPUR
PARSA
SINDHULI
KHOTANG
TERHATHUM
RAUTAHAT
PANCHTHAR
BARA
SARLAHI
DHANUSHA
DHANKUTA
ILAM
MAHOTTARI
UDAYAPUR
SIRAHA
SUNSARI
SAPTARI
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Province - 4
Province - 5
Karnali
Provice - 7
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