

NATIONAL PRIORITIZED DISEASE CONTROL PROGRAMMES OF NEPAL



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INTRODUCTION

The term disease control describes ongoing operations reducing:

- The incidence of disease
- The duration of disease and consequently the risk of transmission.
- The effects of infection including both the physical and psychosocial complications.
- The financial burden to the community.



NATIONAL HEALTH POLICY - 2019

Vision

“All nepali citizens to have healthy, alert and conscious happy lives.”

Goal

“To develop and expand a health system for all citizens in the federal structure based on social justice and good governance and ensure access to and utilization of quality health services.”

It has **25 policies and 146 strategies** to accomplish the goal and vision of respective policy.

CURRENT BURDEN OF DISEASE IN NEPAL

- ❖ Cyclosporiasis
- ❖ Hepatitis E
- ❖ Influenza
- ❖ Tuberculosis
- ❖ Dengue
- ❖ Japanese Encephalitis
- ❖ Leprosy
- ❖ Kala-azar
- ❖ Epidemic prone disease
- ❖ Vaccine preventable disease
- ❖ Lifestyle related disease
- ❖ Nutritional problem





HIV AND SEXUALLY
TRANSMITTED
INFECTIONS
CONTROL
PROGRAMME

National HIV strategic plan (NHSP) 2021-2026

Vision

Ending AIDS epidemic in nepal by 2030

Target by 2026

- Identifying 95% of the estimated PLHIV
- Treat 95% of people diagnosed with HIV
- Attain viral load suppression for 95% of PLHIV on ART
- Reduce 90% of new HIV infections
- Eliminate vertical transmission of HIV
- Achieve case rate of congenital syphilis of <50 per 100 000 live births.

Table 5.1.10.1: Service Statistics HIV Testing and Counseling for the period of BS 2073/074-2078/79

Indicators	2073/074	2074/075	2075/076	2076/77	2077/78	2078/079*
Total tested for HIV	210,525	330,460	237,496	147,968	176895	376191
Total HIV Positive reported	1,854	2,152	2,298	2,416	2944	3270
HIV Positivity rate (%)	0.88	0.65	0.97	1.63	1.66	0.86

Source: IHMIS. *Out of total 376191 HIV tests reported in IHMIS only 174251 number of tests reported by HTC list of IHMIS which was approved by NCASC in close coordination with IHMIS and provincial authorities. HIV screening numbers were also reported by non-HTC sites (Private hospitals, Health Posts, UHCs, BHSCs, NGOs etc.). Similarly, some of the NGO sites were not integrated within national IHMIS during FY 2078/079.

Table 5.1.10.2: Province wise Service Statistics HIV Testing and Counseling in 2078/79

Provinces	Tested for HIV	Positive reported	% of positivity yield
Koshi	32395	343	1.06
Madhesh	36026	675	1.87
Bagmati	30155	951	3.15
Gandaki	41297	247	0.60
Lumbini	133184	659	0.49
Karnali	12090	70	0.58
Sudurpaschim	91044	325	0.36
Total	376191	3270	0.87

Source: IHMIS.

The following programs are implemented at national level to ensure achievement of vision and target set by the NHSP 2021-2026

➤ **HIV testing and Counselling Services(HTC)**

Government is promoting the uptake of HIV testing among key population through communication and linkages between community outreach and HTS. Likewise provider-initiated testing and counselling (PITC) have been taken to STI,clinics,Antenatal (ANC),childbirth,malnourished clinic,postpartum,family planning and TB services.managing TB/HIV co-infection.

➤ **Sexually transmitted infections(STI) management program:**

In the context of management of STI,the standardization of quality STI diagnosis and treatment up to health post level as a part of primary health care services has been a key strategy in the national response to HIV.this strategy further foresees standardization of syndromic approach with the referral for etiological treatment when needed.

➤ Prevention of Mother to Child Transmission(PMTCT) program

The PMTCT service in Nepal has been integrated into maternal and neonatal health services since 2009 in the districts with CB-PMTCT services and the program has been expanded to 77 district of Nepal where HIV screening and counselling is done among women during ANC visit to the health facilities.

➤ Antiretroviral Therapy (ART)

It is available free of cost for all eligible people living with HIV.It is currently available in 65 sites in 59 districts.

In additional to it other services such as community based outreach including online - offline approaches,awareness raising,condom and lubricants promotion,behaviour change communications,OST,referrals to health facilities,community-lead advocacy,networking,research and capacity building etc are also available.

TUBERCULOSIS CONTROL PROGRAMME



Goal

Nepal has set a goal to decrease incidence rate from 238 in 2020/21 to 181 per 100,000 population by 2025/26; decrease mortality rate from 58 in 2020/21 to 23 per 100,000 by 2025/26; end TB epidemic by 2035; eliminate TB by 2050; and reduce the catastrophic cost to zero

Objectives

1. To build and strengthen political commitment, sustainability, and patient-friendly health system to end TB.
 - 1.1. **Strategy:** Strengthen the health system in delivering TB services under universal health coverage, scaling community engagement in TB care and support and program monitored through integrated and digitalized case-based surveillance system.
2. To ensure the identification of TB, diagnosis, quality treatment and prevention.
 - 2.1. **Strategy:** Strengthen quality TB lab network, increasing reach and access to rapid diagnostic methods and improve case notification by strengthening facility and active case finding activities in communities, including private sectors engagement and multi-sectorial approach.

BURDEN OF TUBERCULOSIS IN NEPAL



27,745

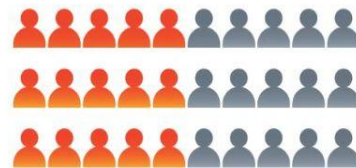
cases notified
in NTP (2020)



10

leading causes
of death in Nepal

Almost half
of Nepal's
population
are infected



Each Year
(Estimated)

67%
male



33%
female



68,000
new cases



36,500
cases missed



17,000
death

Each Day
(Estimated)



189
new cases



101
cases missed



47
death

Source:

National Tuberculosis Control Center. (2077). Tuberculosis Profile FY 2076/77. Kathmandu, Nepal;
National Tuberculosis Control Center. Retrieved on March 22, 2022 from: https://nepalntp.gov.np/wp-content/uploads/2021/04/Factsheet_Final.pdf



DOTS Programme in Nepal

It is the most effective strategy available today for tuberculosis control and is recommended by WHO . It have successfully been implemented throughout the country since April 2001. A total of 4244 DOTS treatment centers are providing TB treatment service. Expansion of this cost effective and highly successful treatment strategy has proven its efficacy in reducing the mortality and morbidity in Nepal. The programme has a cure rate consistently above 85% and a case detection rate of 70%.



MALARIA CONTROL PROGRAMME



Vision: Malaria Elimination in Nepal by 2025

Goal: Reduce the indigenous malaria cases to zero by 2022 and sustain zero malaria mortality.

Objectives:

- ❖ Strengthen surveillance and information system on malaria risk areas to reduce transmission.
- ❖ Ensure effective coverage of vector control interventions in malaria risk areas to reduce transmission.
- ❖ Ensure universal access to quality assured diagnosis and effective treatment for malaria.
- ❖ Ensure government committed leadership and engage community for malaria elimination.
- ❖ Strengthen technical and capacities towards malaria elimination.

Malaria Risk Area as of Microstratification 2021

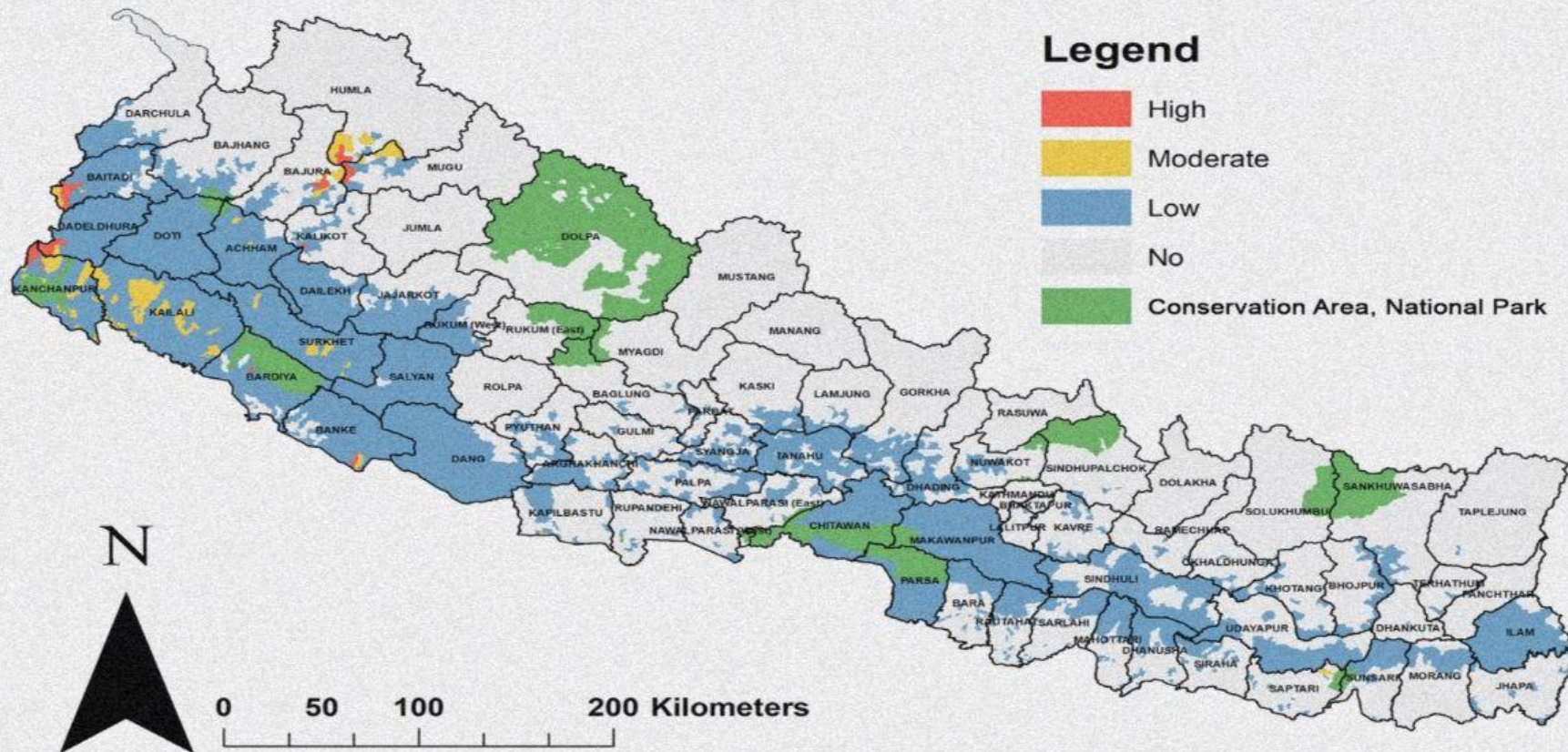


Figure 5.1.1.1: Ward Level Risk Classification Map (MS 2022)

Source: Malaria micro stratification report 2022

Major Activities in 2078/79

- 88,897 long lasting insecticidal nets (LLIN) was distributed as mass distribution and 25,196 LLINs were distributed through continuous distribution to people leaving in active foci, malaria risk groups, army police, pregnant women at their first ANC visits.
- Conducted the ward-level micro-stratification of malaria cases in 77 districts.
- Continuation of case-based surveillance system as key intervention, including web-based recording and reporting system for districts. The malaria disease information system (MDIS) is now fully operational.
- Carried out detailed foci investigation at 38 sites.
- Conducted supportive supervision to SDPs.
- Conducted operational research on malaria vector behaviour and insecticide resistance.



KALA - AZAR CONTROL PROGRAMME



Goal

- The goal of kala-azar elimination program is to contribute to mitigation of poverty in kala-azar endemic districts of Nepal by reducing the morbidity and mortality of the disease and assisting in the development of equitable health systems.

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 with special emphasis on poor, vulnerable and unreached populations.
- Reduce case fatality rates from kala-azar to ZERO.
- Detect and treat Post-Kala-azar Dermal Leishmaniasis (PKDL) to reduce the parasite reservoir.
- Prevent and manage Kala-azar HIV–TB co-infections.

Strategies

Based on the regional strategy proposed by the South East Asia Kala-azar Technical Advisory group (RTAG) and the adjustments proposed by the Nepal expert group, Government of Nepal, MoHP has adopted the following strategies for the elimination of Kala-azar.

- Early diagnosis and complete treatment
- Integrated vector management
- Effective disease and vector surveillance
- Social mobilization and partnerships

Trends of Kala-azar cases in Nepal

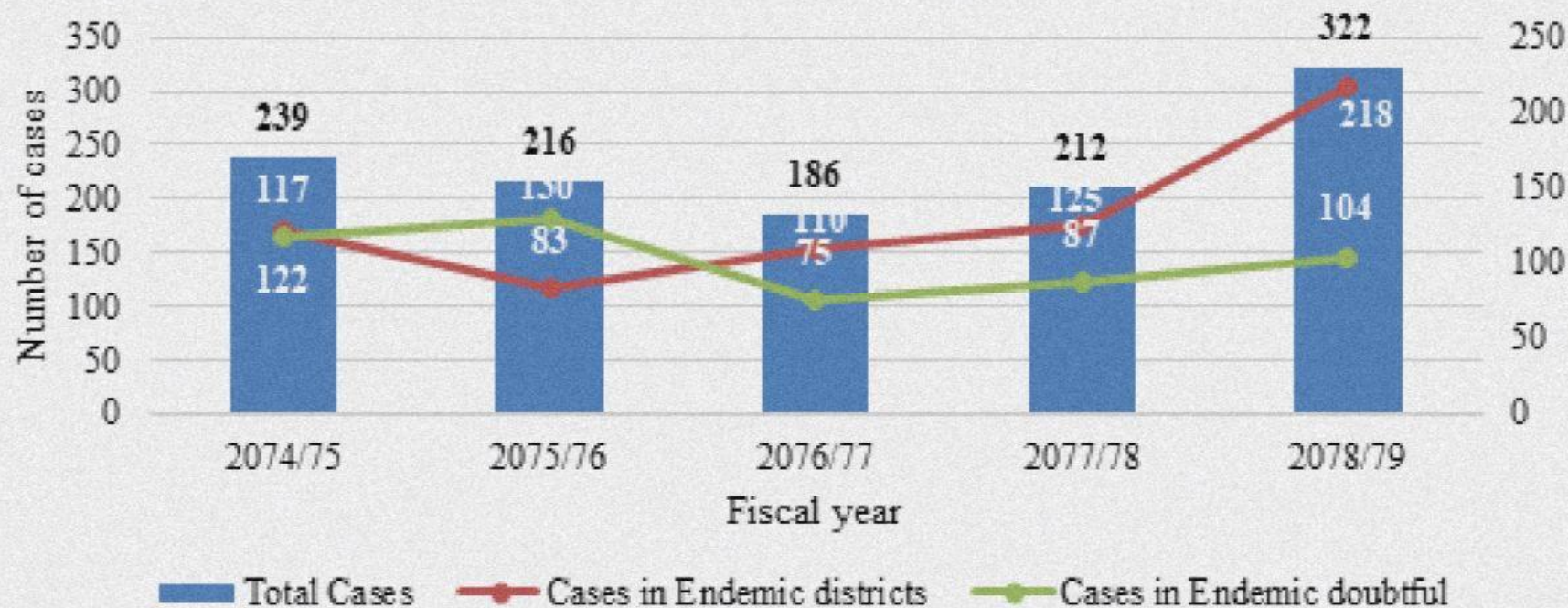


Figure 5.1.2.3: Trends of Kala-azar in Nepal

Major Activities in 2078/79

- Case detection and treatment : kala-azar related diagnostics are provided up to PHCC level and diagnostics/treatment services are provided at district and above levels of health facilities while awareness ,health education , identification and referral of suspected cases are also offered at health posts.
- RDT scaling up
- Indoor residual spraying in priority areas
- Supervision and monitoring
- Annual review
- Disease surveillance



L. FILARIASIS CONTROL PROGRAM



Goal

Elimination of Lymphatic Filariasis From Nepal by the year 2030

Objectives

- To interrupt the transmission of lymphatic filariasis
- To reduce and prevent morbidity
- To provide deworming benefit using Albendazole to endemic community
- To reduce mosquito vectors through application of suitable and available vector control measures(Integrated Vector Management)



Targets

- To complete confirmatory mapping survey in 8 endemic doubtful districts in 2023
- To cover with MDA in all potential endemic districts confirmed endemic after mapping by 2024(however ,MDA covered in all the identified district in 2014)
- To stop MDA in all the endemic districts in 2026
- To complete morbidity mapping all remaining districts 2025
- To provide essential package of care in all the endemic districts 2028 through establishing at least one MMDP care and support centre in each endemic district.
- To complete TAS-3 in all endemic districts by 2030

MDA ongoing districts: 15/64

MDA Stopped districts: 48/64

TAS 3 failed Verification awaiting: 1/64

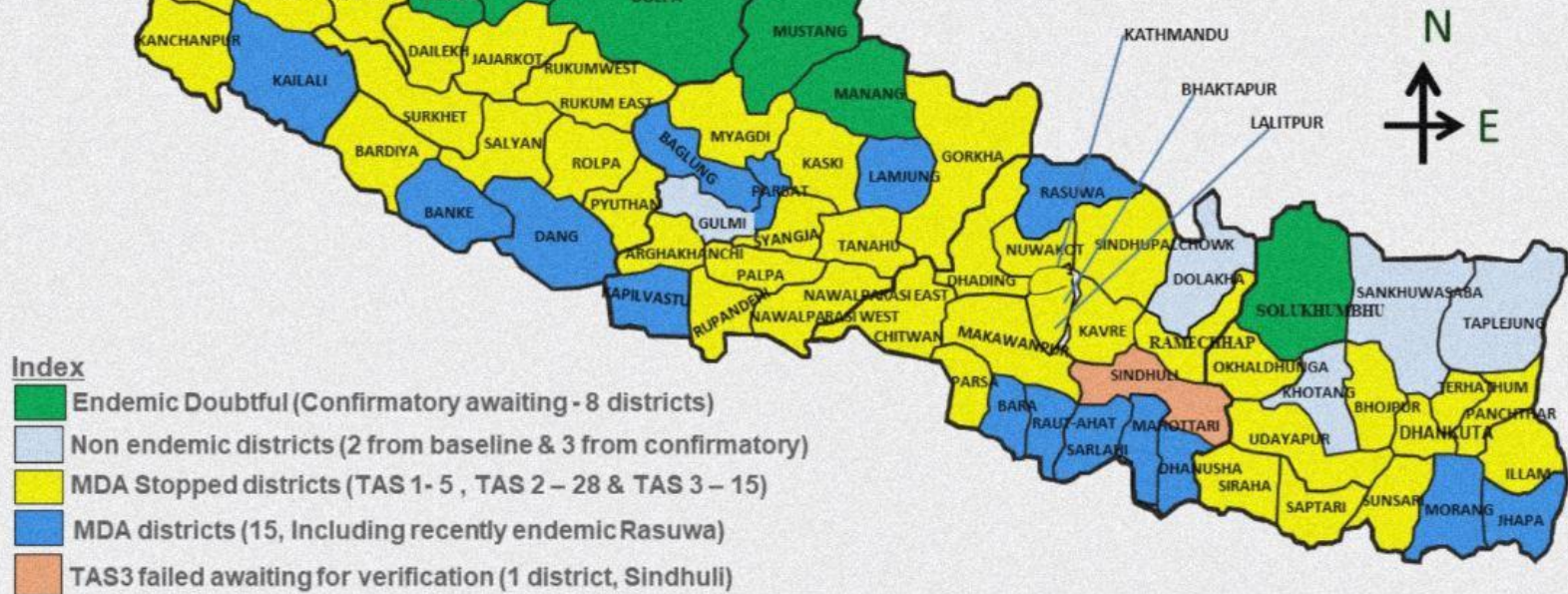


Figure 5.1.3.2: LF Endemicity Status of Nepal, as of March 2022

Major Activities in 2078/79

- Provincial Strategic Planning meeting was held in order to sensitized about the triple drug regimen for LF MDA in persistent failure districts and to learn more about IDA importances
- MDA planning were held in all 10 districts of 5 provinces
- The LF MDA campaign of 2022 was conducted in 114 municipalities/Rural municipalities of 10 districts from 12th march 2022 onwards.
- The interaction meeting and awareness raising activities for the inter-social coordination and advocacy of LF MDA program were conducted in the districts, municipalities and wards of the municipalities involving elected representatives and varied sectors of the community.



DENGUE CONTROL PROGRAMME

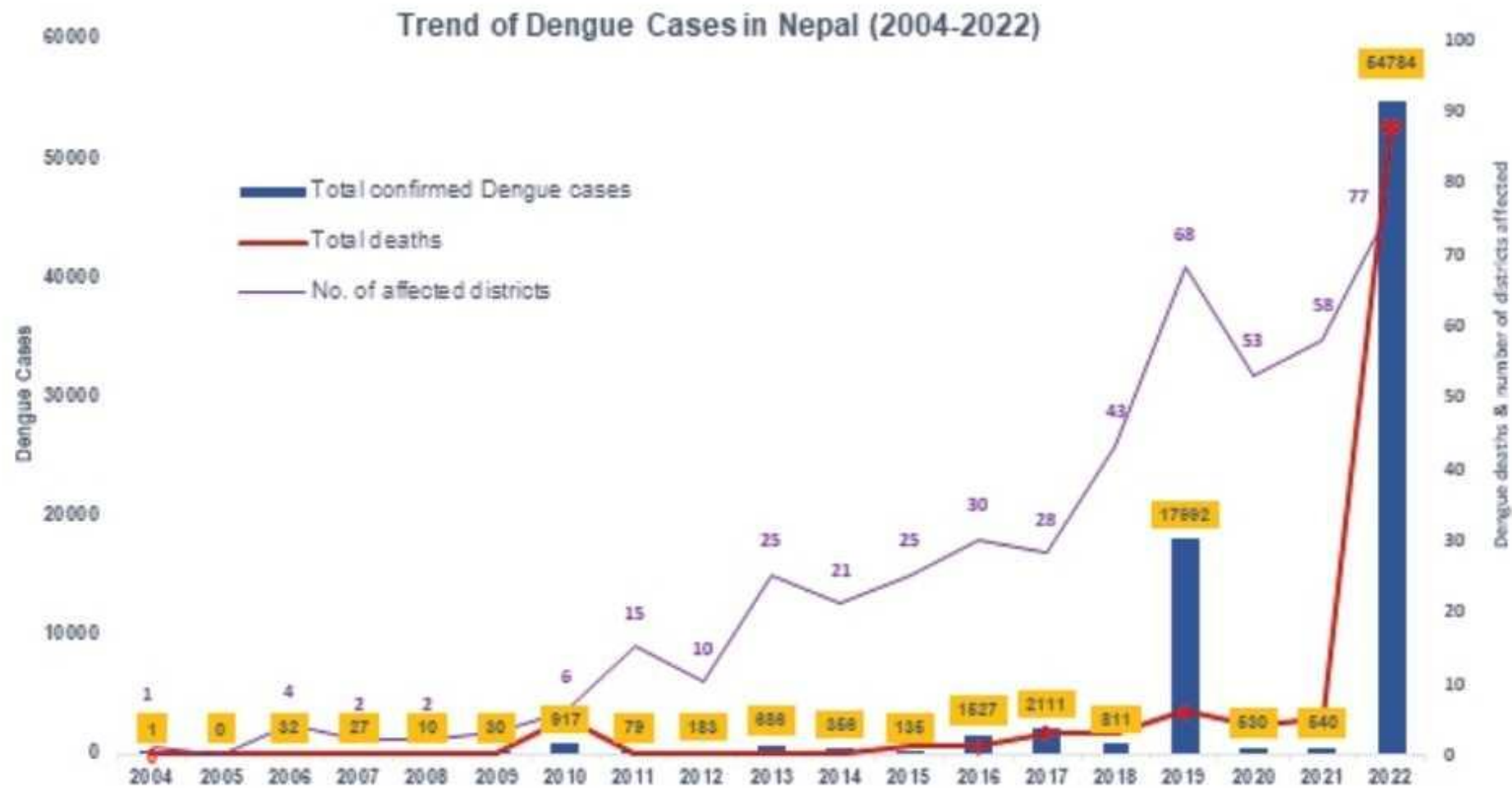


Figure: 5.1.4.1 Annual trend of dengue cases and deaths in Nepal (2004-2022)

5.1.4.2: Goal, Objectives and Strategies of Dengue Control Program

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
- Regular monitoring of dengue fever surveillance through the EWARS
- Mosquito vector surveillance in municipalities
- The integrated vector control approach where a combination of several approaches are directed towards containment and source reduction

Major Activities in 2078/79

- Conducted orientation to multi-stakeholders at local levels advocacy on dengue prevention and control including support for search and destroy activities.
- Conducted search and destroy activities at local level
- Routine surveillance of dengue through EWARS.EDCD also conducted data verification of dengue cases reported from the EWARS.
- Vector surveillance at provincial levels.
- Procurement and supply of rapid diagnostic test kits (IgM).
- EDCD conducted a stakeholder meeting with Hotel Association of Nepal (HAN) as well as school associations such as PABSON and National PABSON as a preparedness for outbreak.

LEPROSY CONTROL PROGRAMME



The National Leprosy Elimination Program of Nepal is guided by National Roadmap for Zero Leprosy (2021-30) and National Leprosy Strategy (2021-25). The vision, goals, objectives and targets of National Leprosy Elimination Program as stated in National Leprosy Strategy of Nepal (2021-2025):

Vision: Leprosy free Nepal

Goal: Elimination of leprosy (interruption of transmission of leprosy) at the subnational level (municipality) (interruption of transmission is defined as zero new autochthonous child leprosy cases for consecutive five years at the municipality level)

Objectives

1. To eliminate leprosy transmission at the subnational level (province, district, local level).
2. To strengthen clinical case management at district and municipal levels and improve referral system.
3. To enhance capacity building through training of health staff particularly at the peripheral health facilities.
4. To enhance prevention of leprosy.
5. Reduction of stigma and discrimination.
6. To strengthen leprosy surveillance system and regular monitoring, supervision, and periodic evaluation at all level.
7. To strengthen partnerships among different stakeholders.
8. To strengthen management of leprosy complications like reactions and disability prevention and rehabilitation.
9. To coordinate with neighboring states of India in management, reporting and referral of cases from border areas.
10. To promote research and innovations.

Major Activities in 2078/79

- Endorsement of National leprosy strategy and Action Plan
- Development of Leprosy Training Package for Health Workers
- Leprosy service delivery- In FY 2078/79, a total 2,373 cases were under treatment at the end of the fiscal year.
- Case Validation and data verification
- Conducted operational research
- Transport support to released from treatment cases
- Annual report and bulletin



NATIONAL IMMUNIZATION PROGRAMME



National Immunization Programme (NIP) is the priority 1 (P1) program of Nepal. Launched as “Expanded Program on Immunization” in 2034 BS, national Immunization program has met several milestones during the past decades, including reduction of under 5 mortality goal (MDG 4). National immunization program provides equitable services to the geographically, economically hard to reach, marginalized community through more than 16,000 outreach sessions. Currently, 11 antigens are provided through *national* immunization program.

Goal

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

Service availability: The services are available at District Hospitals, Primary Healthcare Centers and Health Posts and Female community Health Volunteers during campaigns.

Eligibility criteria: All children are eligible to acquire the vaccinations provided under National Immunization Program as and when required.

Benefit: Children under 5 years and pregnant women can benefit from the following vaccine per the immunization schedule:

Timeline	Vaccine	Dose	Administration
At Birth	BCG (Bacillus-Calmette-Guerin)	1 (0.05 ml)	Intradermal (I.D)
6 weeks	DPT-HepB-HiB*	1 (0.5 ml)	Intramuscular (I.M)
	OPV (Oral Polio Vaccine)	1 (0.5 ml)	Oral
	PCV (Pneumococcal Conjugate Vaccine)	1 (0.5 ml)	Intramuscular (I.M)
10 weeks	DPT-HepB-HiB*	1 (0.5 ml)	Intramuscular (I.M)
	OPV (Oral Polio Vaccine)	1 (0.5 ml)	Oral
	PCV (Pneumococcal Conjugate Vaccine)	1 (0.5 ml)	Intramuscular (I.M)
14 weeks	DPT-HepB-HiB*	1 (0.5 ml)	Intramuscular (I.M)
	OPV (Oral Polio Vaccine)	1 (0.5 ml)	Oral
	IPV (Injectable Polio Vaccine)	1 (0.5 ml)	Intramuscular (I.M)
9 Months	PCV (Pneumococcal Conjugate Vaccine)	1 (0.5 ml)	Intramuscular (I.M)
	MR (Measles-Rubella)	1 (0.5 ml)	Subcutaneous (S.C.)
12 Months	JE (Japanese Encephalitis)	1 (0.5 ml)	Subcutaneous (S.C.)
15 months	MR (Measles-Rubella)	1 (0.5 ml)	Subcutaneous (S.C.)

6.1. National vaccination coverage

The tables and maps presented below show the routine immunization vaccination coverage and achievement status in FY 2078/79.

Table 6.1.1. National vaccination coverage by vaccine, FY 2078/79

S.N.	Antigens	Target population	Targets	Achievement (No)	% Achieved
1	BCG	under 1 year	520,049	539,789	104
2	DPT-Hep B-Hib1	under 1 year	520,049	513,744	99
3	DPT-Hep B-Hib2	under 1 year	520,049	503,113	97
4	DPT-Hep B-Hib3	under 1 year	520,049	494,843	95
5	DPT-Hep B-Hib3 including delayed dose given after 1 year of age	under 1 year	-	12,586	-
6	OPV1	under 1 year	520,049	512,338	99
7	OPV2	under 1 year	520,049	503,053	97
8	OPV3	under 1 year	520,049	495,897	95
9	OPV3 including delayed dose given after 1 year of age	under 1 year	-	12,586	-
10	fIPV1	under 1 year	520,049	498,315	96
11	fIPV2	under 1 year	520,049	483,444	93
12	Rota 1	under 1 year	520,049	490,291	94
13	Rota 2	under 1 year	520,049	471,210	91
14	PCV1	under 1 year	520,049	510,928	98
15	PCV2	under 1 year	520,049	499,412	96
16	PCV3	under 1 year	520,049	487,956	94
17	MR1	under 1 year	520,049	492,373	95
18	MR2	15 Months	517,254	480,032	93
19	JE	12 Months	517,254	495,882	96
20	TD2 & TD2+	pregnant women	640,387	458,923	72

Data source: IHMIS/MD, DoHS

CHALLENGES

- Limited Resources: Insufficient financial and human resources can impede the implementation and sustainability of disease control programs.
- Infrastructure: Inadequate healthcare infrastructure, especially in remote areas, may hinder the effective delivery of services and the timely response to outbreaks.
- Healthcare Access: Accessibility to healthcare services, particularly in rural or hard-to-reach areas, may be a significant challenge.

Contd...

- **Public Awareness:** Lack of awareness and education about diseases, their prevention, and the importance of vaccination can contribute to the spread of diseases.
- **Political Instability:** Political instability and changes in government can affect the continuity and effectiveness of health programs.
- **Coordination and Collaboration:** Effective coordination among different levels of government, as well as collaboration between various stakeholders, is crucial for successful disease control efforts.

Contd...

- **Emerging Diseases:** The emergence of new diseases or the re-emergence of existing ones can pose unforeseen challenges that require rapid response and adaptation of control strategies.
- **Drug Resistance:** The development of drug-resistant strains of infectious agents can complicate treatment and control efforts.
- **Cultural and Social Factors:** Cultural beliefs, practices, and social factors can impact healthcare-seeking behavior and adherence to control measures.

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→ <https://www.who.int/>

→ <https://mohp.gov.np/en>

→ <http://dohs.gov.np/annual-report-2078-79/>

→ <https://www.edcd.gov.np/>

DONE PRESENTATION



ANY QUESTIONS?



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