

HeRAMS Nepal

September 2024 floods and landslides

January 2025



Communicable disease services

A comprehensive mapping of availability of essential services and barriers to their provision



© World Health Organization 2025

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; https://creativecommons.org/licenses/by-nc-sa/3.0/igo).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual PropertyOrganization(http://www.wipo.int/amc/en/mediation/rules/).

Suggested citation. HeRAMS Nepal September 2024 floods and landslides - January 2025 - Communicable disease services: A comprehensive mapping of availability of essential services and barriers to their provision; 2025

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

General disclaimers. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

HeRAMS Nepal

September 2024 floods and landslides

January 2025

Communicable disease services

A comprehensive mapping of availability of essential services and barriers to their provision







Phone: 4.

Ref:

Ministry of Health & Population

Ramshahpath, Kathmandu

Nepal

Date: 7 July 2025



Ramshahpath, Kabinatis Foreword

of Health and Police

Foreword

In the face of escalating natural and human-induced hazards, ensuring the safety and resilience of healthcare facilities remains a critical public health priority. Hospitals are essential lifelines during emergencies and disasters, providing life-saving care and coordinating relief when communities need them the most. Recognizing the importance of robust disaster preparedness, the Ministry of Health and Population (MoHP) is unwavering in its commitment to enhancing the disaster resilience of health facilities across Nepal.

The Health Resources and Services Availability Monitoring System (HeRAMS) serves as a comprehensive framework to assess the availability, accessibility, and functionality of health facilities, resources, and services within specific regions. This system empowers decision-makers by offering detailed insights into facility conditions, enabling evidence-based interventions to strengthen health system preparedness and response.

In Nepal, the Health Emergency and Disaster Management Unit (HEDMU)/HEOC, with support from the World Health Organization (WHO), first implemented HeRAMS following the 2023 earthquake in West Nepal. This assessment covered 83 health facilities, including temporary setups, to evaluate the damage and service availability in the affected region. Subsequently, in 2024, HeRAMS was extended to assess 78 health facilities across the Koshi, Madhesh, and Bagmati provinces, in the aftermath of floods and landslides.

This report provides an overview of the outcomes of these assessments of 2024 Nepal's Flood and Landslide and outlines the subsequent actions to be taken at various levels. It is a result of the collaborative efforts between the MoHP, WHO, and local health institutions, ensuring that Nepal's health system remains prepared for future emergencies.

I would like to express my sincere gratitude to WHO Nepal, the Swiss Agency for Development and Cooperation and United Nations Resident Coordinator's Office, the WHO South-East Asia Regional Office (SEARO), the HeRAMS Team at WHO Headquarters, and all the contributing institutions, experts, and hospital teams for their invaluable support and dedication to this essential initiative.

Dr Prakash Budhathoky

Chief

HEDMU/HEOC

ACRONYMS

BHSC Basic Health Service Center

EPI Expanded Programme on Immunization

HeRAMS Health Resources and Services Availability Monitoring System

HP Health Post

HSDU Health Service Delivery Unit

IEC Information, Education, and Communication

MDRTB Multi-Drug-Resistant Tuberculosis

PHC Primary Health Center

UHC Urban Health Centre

WHO World Health Organization

TABLE OF CONTENTS

Acronyms	IV
Disclaimer	2
Overview of HSDUs evaluated	3
Interpretation guide	6
Syndromic surveillance	8
Event-based surveillance	10
Case based surveillance	12
Malaria at the community level	14
Malaria at the primary care level	16
Vector control	18
Support mass drug administration	20
Tuberculosis	22
Multi-drug-resistant tuberculosis	24
IEC on local priority diseases	26
Diagnosis and management of other locally relevant diseases	28
Management of severe and/or complicated communicable diseases	30
Isolation unit or room	32
Annex:	34
Annex I: Previously published reports	35



DISCLAIMER

Disruptions to health systems can impede provision of and access to essential health services. Communities' vulnerability to increased morbidity and mortality substantially increases when a lack of reliable information prevents sound decision-making, especially in rapidly changing environments that require continued assessment. The Health Resources and Services Availability Monitoring System (HeRAMS) aims to provide decision-makers and health stakeholders at large with vital and up-to-date information on the availability of essential health resources and services, help them identify gaps and determine priorities for intervention.

HeRAMS draws on the wealth of experience and knowledge gathered by the World Health Organization (WHO) and health sector actors, including nongovernmental organizations, donors, academic institutions and other technical bodies. It builds on a collaborative approach involving health service providers at large and integrating what is methodologically sound and feasible in highly constrained, low-resourced and rapidly changing environments such as humanitarian emergencies. Rapidly deployable and scalable to support emergency response and fragile states, HeRAMS can also be expanded to - or directly implemented as - an essential component of routine health information systems. Its modularity and scalability make it an essential component of emergency preparedness and response, health systems strengthening, universal health coverage and the humanitarian development nexus.

HeRAMS has been operational in Nepal since January 2024 with an initial focus on areas affected by the 2023 Jajarkot earthquake Annex I. Following the devasting floods and landslides in September 2024, HeRAMS was expanded to "insert provinces". This report presents the results of the assessment of 78 health service delivery units (HSDUs) across affected areas. It is important to note that the deployment of HeRAMS is ongoing, including data verification and validation. Hence, this analysis is not final and was produced solely for the purpose of informing operations.

This is the fourth report of the HeRAMS Nepal September 2024 floods and landslides - January 2025 series, focusing on the availability of communicable disease services. It is a continuation of the first report on the operational status of the health system¹ and should always be interpret in conjunction with results presented in the first report. Additional reports are available covering general clinical and trauma care service², essential child health and nutrition services³, sexual and reproductive health services⁴, and Noncommunicable disease and mental health services⁵.

Caution must be taken when interpreting the results presented in this report. Differences between information products published by WHO, national public health authorities, and other sources using different inclusion criteria and different data cut-off times are to be expected. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change.

For additional information, please see https://www.who.int/initiatives/herams or contact herams@who.int/initiatives/herams or contact https://www.who.int/initiatives/herams or contact https://www.who.int/initiatives/herams or contact herams@who.int/initiatives/herams or contact herams@who.int/initiatives/herams or contact herams@who.initiatives/herams o

HeRAMS Nepal September 2024 floods and landslides - January 2025 - operational status of the health system: a comprehensive mapping of the operational status of health service delivery units, https://www.who.int/publications/m/item/herams-nepal-september-2024-floods-and-landslides-report-2025-01operational-status-of-the-health-system.

HeRAMS Nepal September 2024 floods and landslides - January 2025 - General clinical and trauma care services: A comprehensive mapping of availability of essential services and barriers to their provision, https://www.who.int/publications/m/item/herams-nepal-september-2024-floods-and-landslides-report-2025-01-general-clinical-and-trauma-care-services

HeRAMS Nepal September 2024 floods and landslides - January 2025 - Child health and nutrition services: A comprehensive mapping of availability of essential services barriers to their provision, https://www.who.int/publications/m/item/herams-nepal-september-2024-floods-and-landslides-report-2025-

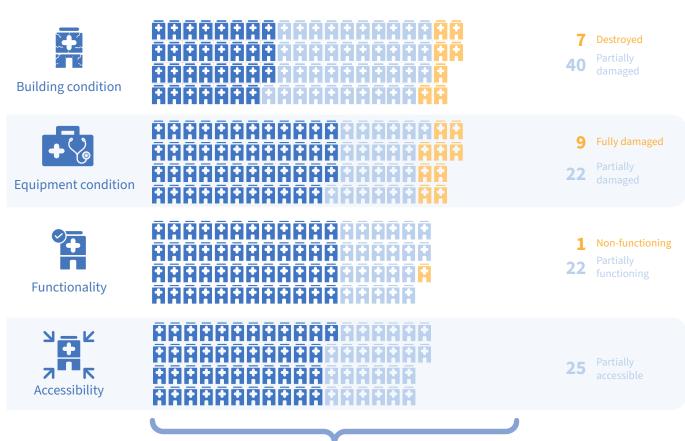
HeRAMS Nepal September 2024 floods and landslides - January 2025 - Sexual and reproductive health services: A comprehensive mapping of availability of essential services and barriers to their provision, https://www.who.int/publications/m/item/herams-nepal-september-2024-floods-and-landslides-report-

HeRAMS Nepal baseline report 2025 - Noncommunicable disease and mental health services: A comprehensive mapping of availability of essential services and barriers to their provision. https://www.who.int/publications/m/item/herams-nepal-september-2024-floods-and-landslides-report-2025-01-ncd-andmental-health-services.

OVERVIEW OF HSDUs EVALUATED

Data collection summary

78 HSDUs assessed





HSDUs at least partially operational

(out of 78 HSDUs assessed)⁶

^{*} Five of the assessed facilities were temporary structures.

⁶ HSDUs (Health Service Delivery Units) reported as destroyed, non-functioning, or inaccessible are deemed unable to provide any health services, hence categorized as non-operational. Consequently, reporting ends upon confirmation of an HSDU's non-operational status.

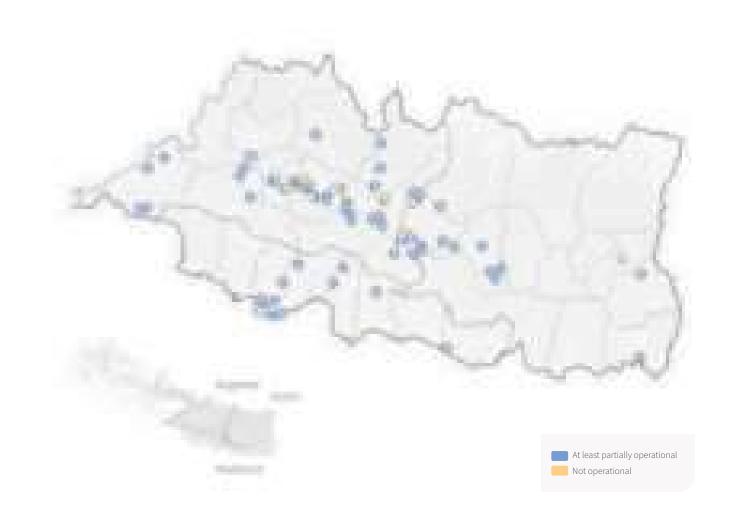


Reporting frequency and operational status by district

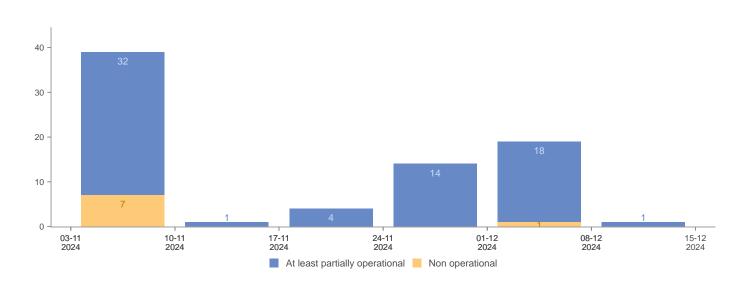
		He Se	asic ealth rvice entre	th Community ce Health Unit		EPI Clinic			Health Post		Municipal/ Local level Hospital		Primary Healthcare Center		Provincial Hospital		rban ealth entre	Other		Total	
		0	N/O	0	N/O	0	N/O	0	N/O	0	N/O	0	N/O	0	N/O	0	N/O	0	N/O	0	N/O
	CHITAWAN	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	4	-
	DHADING	-	-	-	-	-	_	1	-	-	-	-	-	-	-	-		-	-	1	-
	DOLAKHA	_	_	1	1	-	_	2	_	-	_	-	_	-	_	-	-	-	_	3	1
	KAVREPALANCHOK	1	_	2	1	1	_	9	2	1	1	-	-	-	-	-		-	_	14	4
IATI	LALITPUR	_	-	-	_	-	-	2	_	-	_	-	-	1	_	-	-	-	-	3	-
BAGMATI	MAKWANPUR	1	-	-	_	-	-	1	_	-	_	-	-	-	-	1		-	-	3	-
	RAMECHHAP	_	-	-	_	-	-	7	_	-	_	-	-	-	_	-	-	-	-	7	-
	SINDHULI	1	-	4	-	-	-	4	-	-	-	-	-	-	-	-		-	-	9	-
	SINDHUPALCHOK	-	_	-	_	-	-	-	_	1	_	-	_	-	_	-	_	-	_	1	-
	TOTAL	5	-	8	2	1	-	26	2	2	1	-	-	1	-	1		1	-	45	5
	ILAM	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-
	JHAPA	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	1	-
_	KHOTANG	-	_	-	-	-	-	3	-	1	-	1	-	-	-	-	-	-	-	5	-
KOSHI	OKHALDHUNGA	-	_	1	1	-	_	4	1	-	-	-	-	-	-	-		-	_	5	2
×	PANCHTHAR	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	1	1
	SOLUKHUMBU	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-		-	-	1	-
	TOTAL	1	_	1	1	-	-	9	2	2	-	1	-	-	-	-	-	-	-	14	3
	MAHOTTARI	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-		-	-	2	-
_	RAUTAHAT	-		-	-	-	-	3	-	-	-	2	-	-	-	-	-	-		5	-
HES!	SAPTARI	-		-	-	-		1	-	-	-	-	-	-	-	-		-		1	-
MADHESH	SARLAHI	2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		2	-
~	SIRAHA	-		-	-	-		1	-	-	-	-	-	-	-	-		-		1	-
	TOTAL	2	_	-		-	-	7	-	-	-	2	-	-	-	-	-	-	-	11	-
	TOTAL	8	-	9	3	1	-	42	4	4	1	3	-	1	-	1	-	1	_	70	8

O = At least partially operational - **N/O** = Not operational

Geographic distribution of HSDUs



Date of last update





INTERPRETATION GUIDE

Service status

Arc charts provide an overview of the overall availability of a health service. The total number of HSDUs included in the analysis of a service is shown inside the arc chart. It should be noted that analysis of individual services was limited to operational HSDUs (see page 3 for details). There are two numbers separated by a bar ("|") inside the arc of the chart: on the left is the percentage of HSDUs, and on the right of the bar is the number falling into that category.





For further insights, **donut charts** break down service availability by HSDU type or province. To improve readability, labels indicating the availability level for each category are provided either beside or below the chart. Additionally, to highlight the percentage of HSDUs where an service is available up to standard, the number may also be prominently placed inside the chart. Information on the total number of HSDUs included is clearly indicated above or below the respective donut.

Column charts offer a breakdown of availability by district. By default, these charts exclude HSDUs where an service was not applicable or the HSDU did not report on it. The total number of HSDUs included in each district is indicated to the right of the bar.





In contrast to charts, and to highlight areas not reporting, as well as the impact of non-operational HSDUs, **maps** depict all HSDUs targeted with HeRAMS. Each dot corresponds to an HSDU, with the colour indicating the availability level.

Barriers

To gain a more comprehensive understanding of the challenges faced by HSDUs, whenever an service was not or only partially available, main barriers impeding availability were recoded. Similarly, questions on building and equipment conditions, functionality and accessibility gather information on the underlying causes for non or partially operating HSDUs.



Each **donut chart** indicates the percentage of HSDUs having reported a specific barrier. The total number of HSDUs reporting at least one barrier is shown below the chart header.

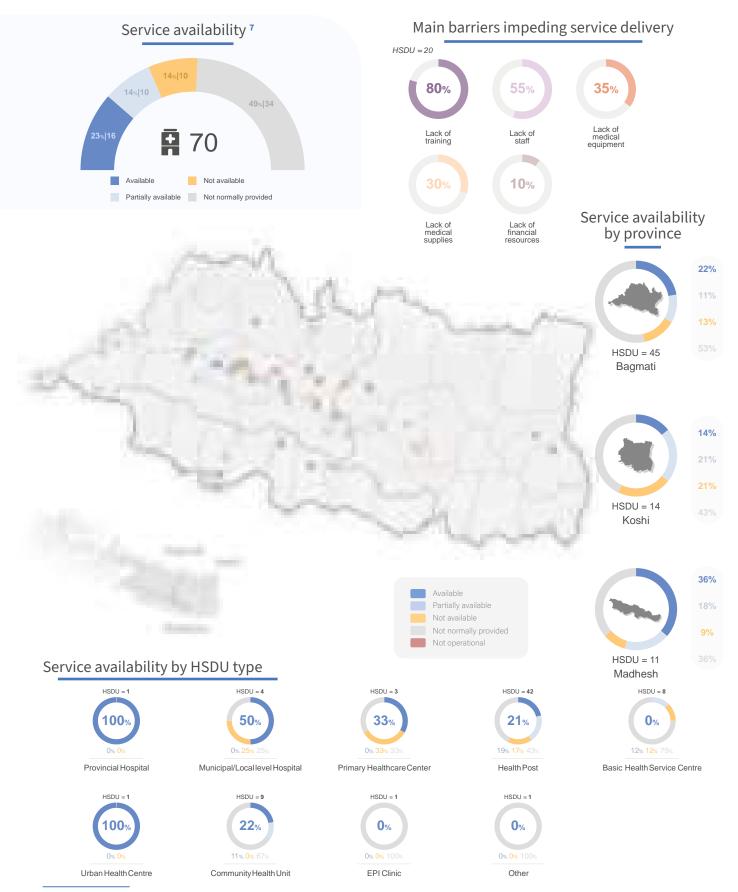
Heat maps indicate the barriers that each HSDU listed face with a colored rectangle. When the rectangle is grey, the HSDU does not face this barrier.



Important: The denominator for barrier charts excludes HSDUs where the service is fully available or not normally provided. It should further be noted that HSDUs can report up to three barriers for each service. Thus, the sum of all barriers may exceed 100%.



SYNDROMIC SURVEILLANCE



Regular reporting sentinel site for syndromic surveillance of local relevant diseases/conditions.





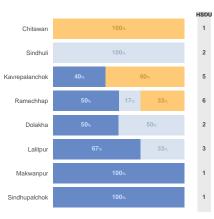


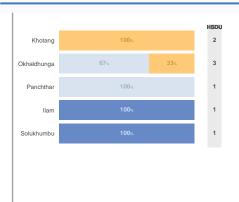


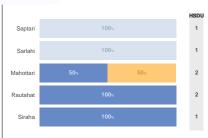


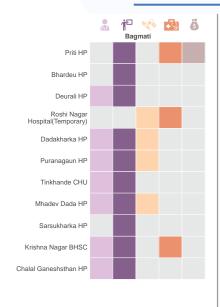
Madhesh

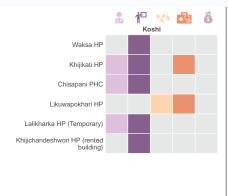
Service availability by district

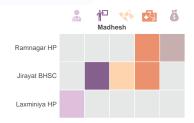










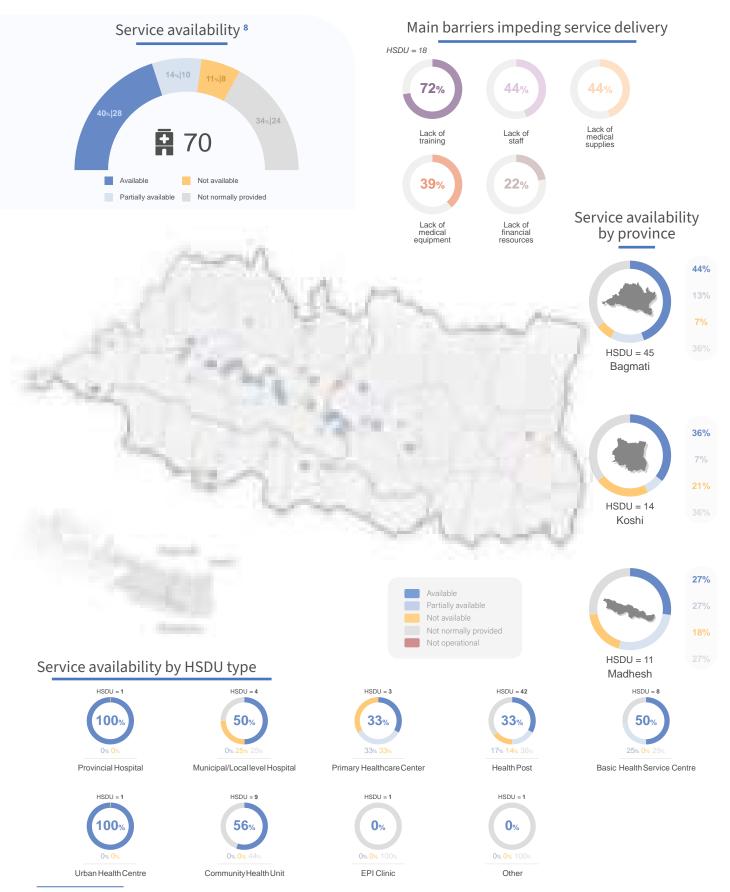




HSDUs that did not report any data or that do not normally provide the service are excluded from the analysis.



EVENT-BASED SURVEILLANCE



⁸ Immediate reporting of unexpected or unusual health events through an event-based surveillance system.

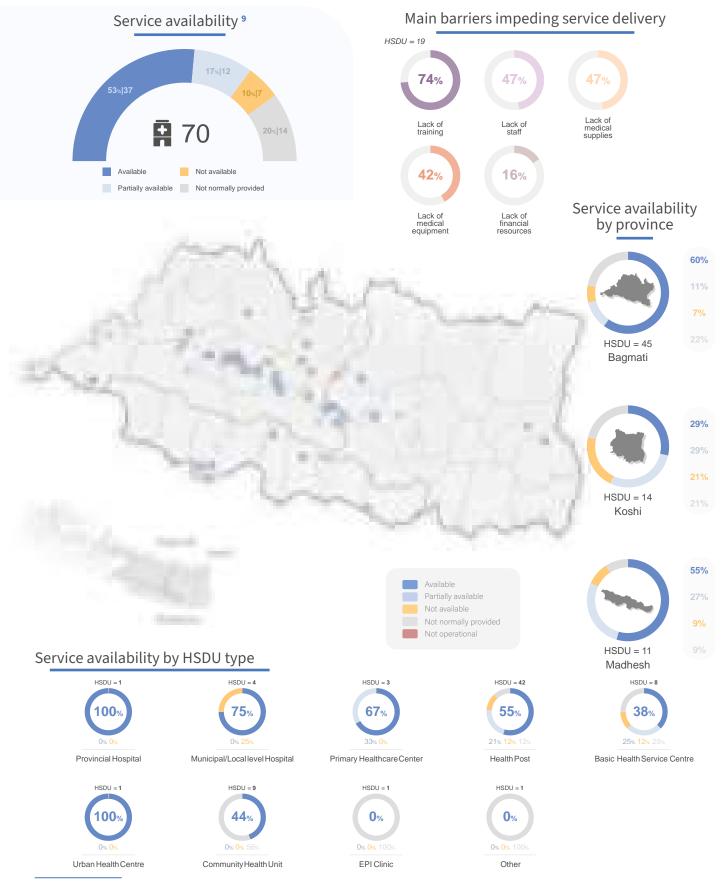




HSDUs that did not report any data or that do not normally provide the service are excluded from the analysis.



CASE BASED SURVEILLANCE



Active/ Passive case detection.





Bagmati

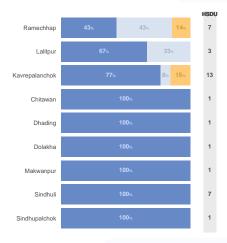


Koshi

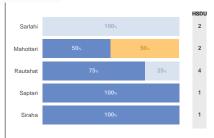


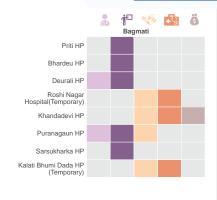
Madhesh

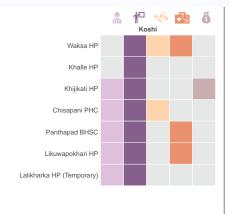
Service availability by district

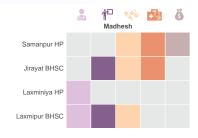








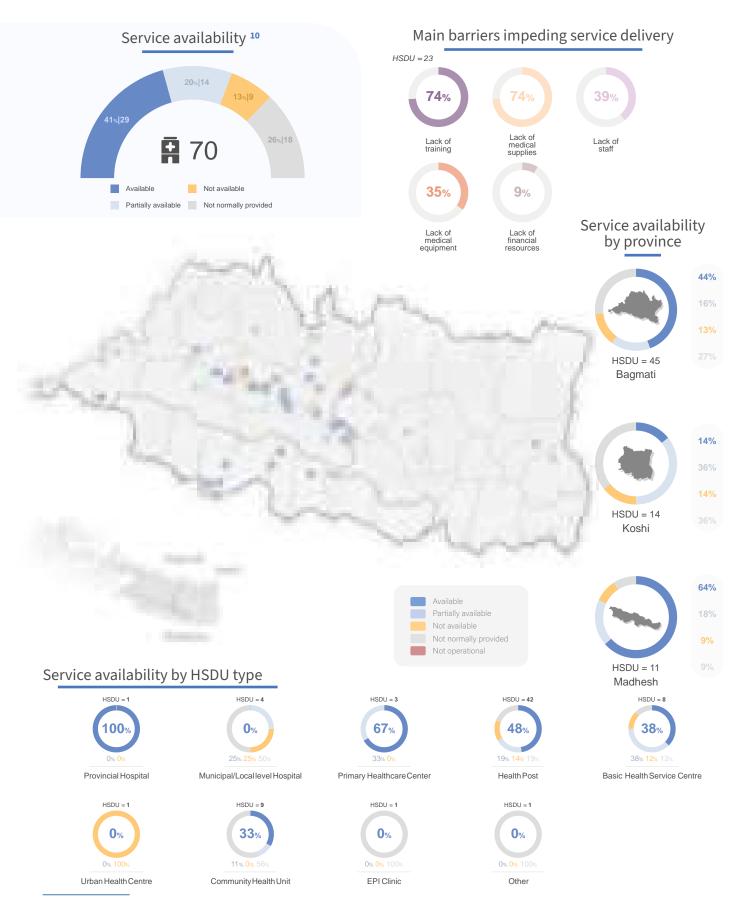






HSDUs that did not report any data or that do not normally provide the service are excluded from the analysis.

MALARIA AT THE COMMUNITY LEVEL



Diagnosis of malaria suspected cases with rapid diagnostic test (RDT) and treatment of positive cases, or detection and referral of suspected cases, and follow-up, at community level.





Bagmati

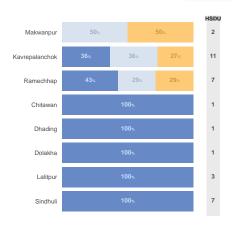


Koshi

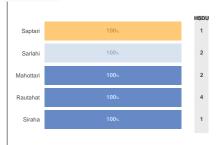


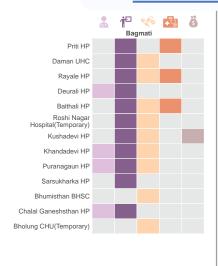
Madhesh

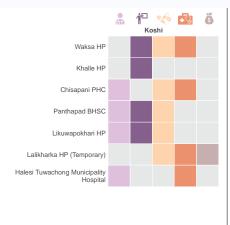
Service availability by district

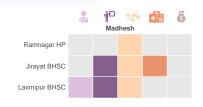








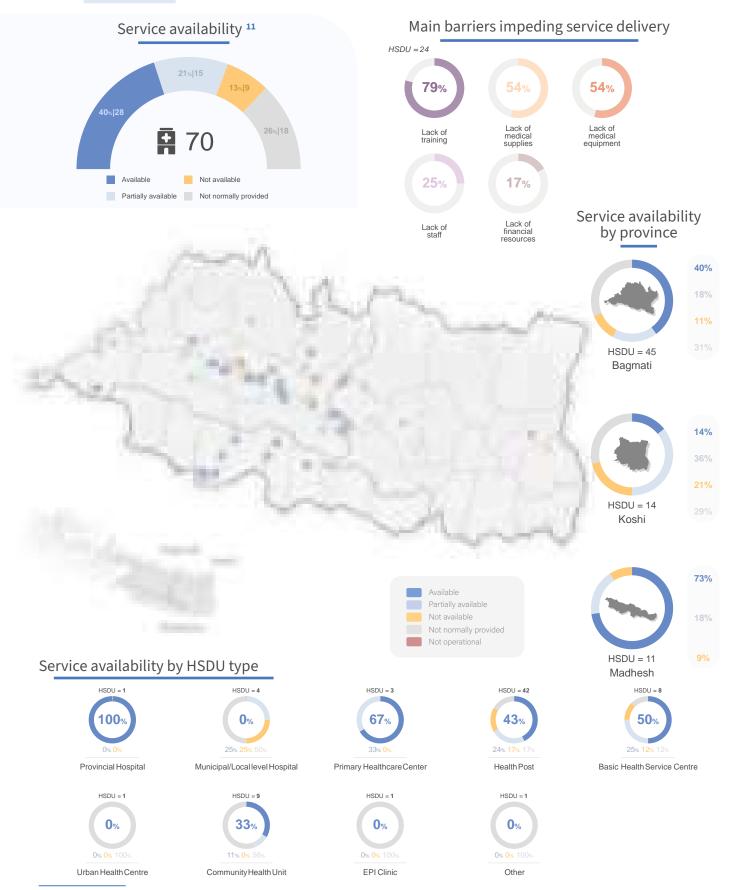






HSDUs that did not report any data or that do not normally provide the service are excluded from the analysis.

MALARIA AT THE PRIMARY CARE LEVEL



Diagnosis of suspected malaria cases with rapid diagnostic test (RDT) and treatment of positive cases, or detection and referral of suspected cases, and follow-up, at the primary care level.







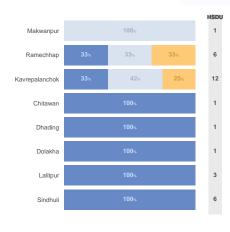


Koshi

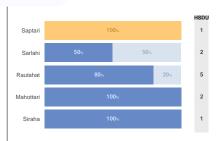


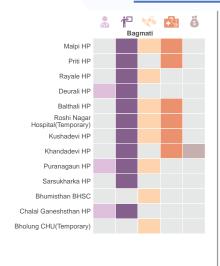
Madhesh

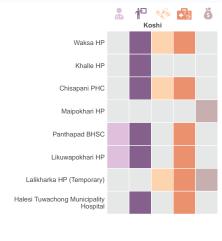
Service availability by district

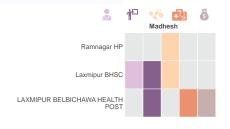










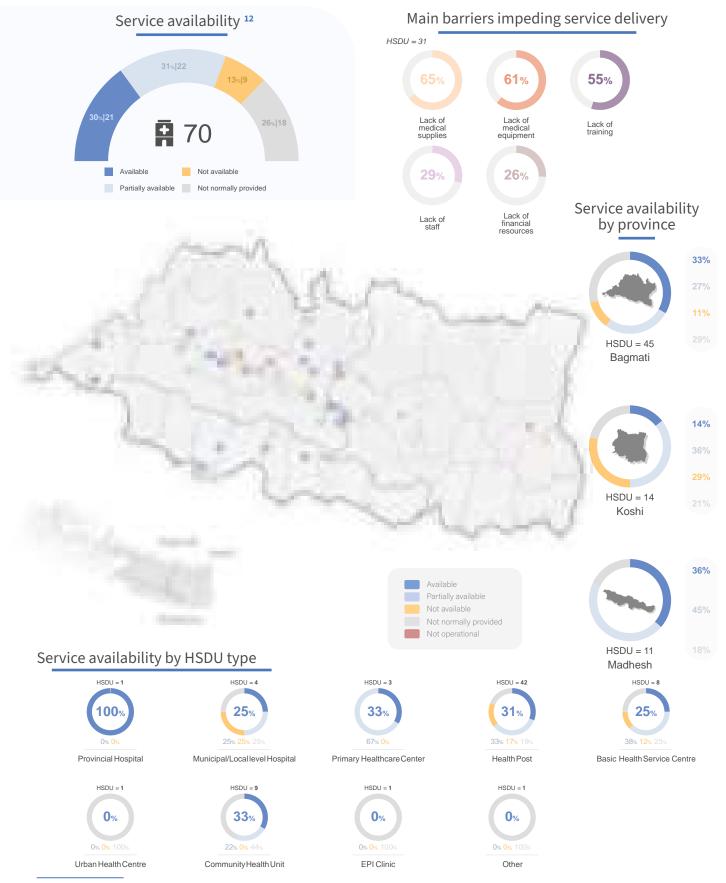




HSDUs that did not report any data or that do not normally provide the service are excluded from the analysis.



VECTOR CONTROL



¹² Support vector control interventions (distribution of impregnated bed nets, in/outdoor insecticide spraying, distribution of related IEC materials).





Bagmati

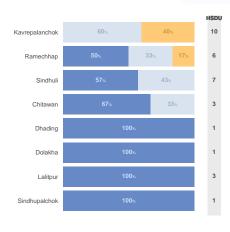


Koshi

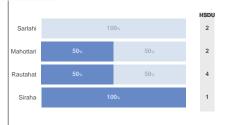


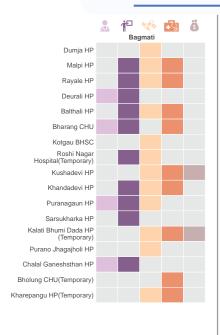
Madhesh

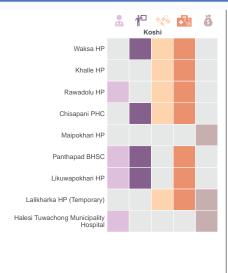
Service availability by district

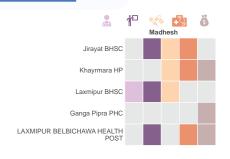










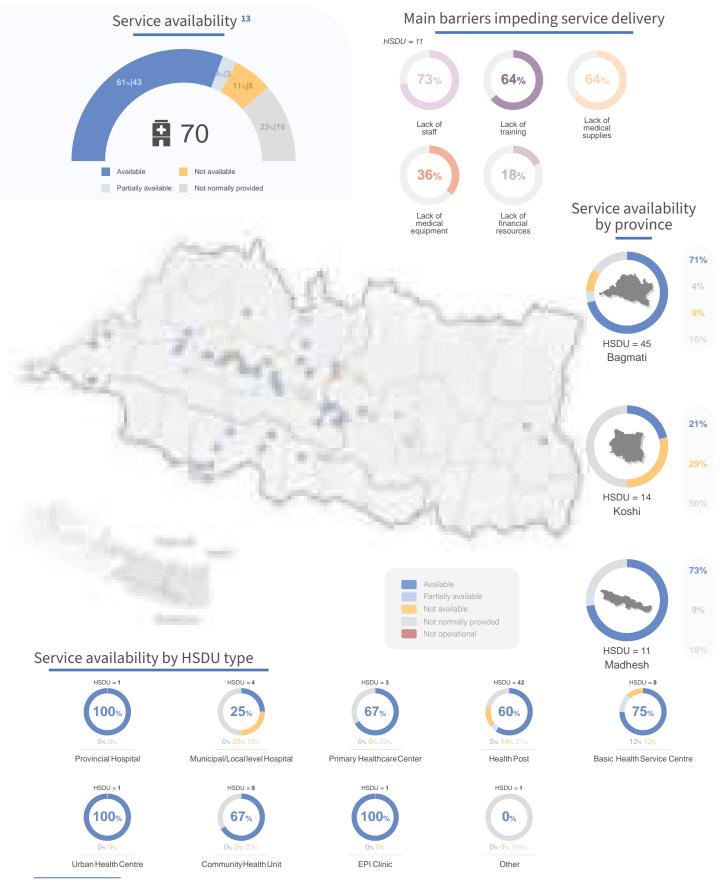




HSDUs that did not report any data or that do not normally provide the service are excluded from the analysis.



SUPPORT MASS DRUG ADMINISTRATION



¹³ Mobilize communities and support mass drug administration/treatment campaigns.





Bagmati

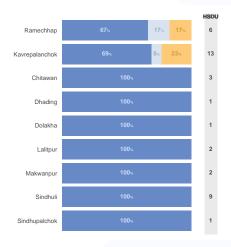


Koshi

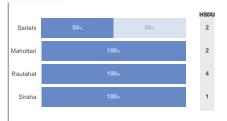


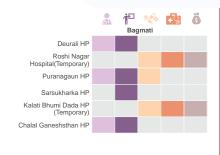
Madhesh

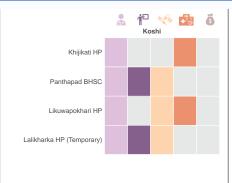
Service availability by district











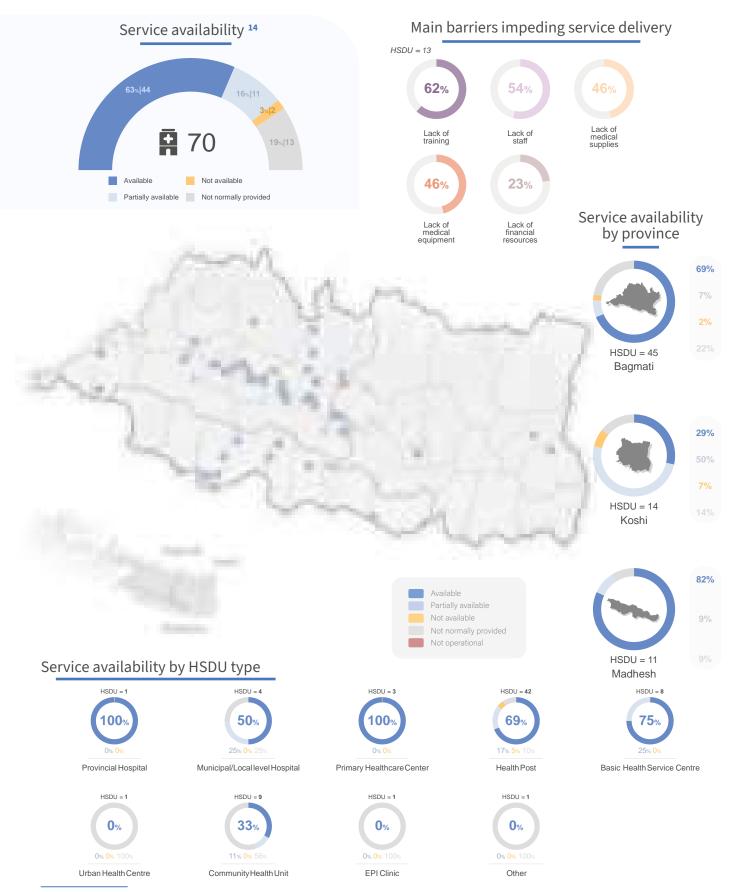




HSDUs that did not report any data or that do not normally provide the service are excluded from the analysis.



TUBERCULOSIS



¹⁴ Diagnosis and treatment of tuberculosis (TB) cases, or detection and referral of suspected cases, and follow-up.





Bagmati

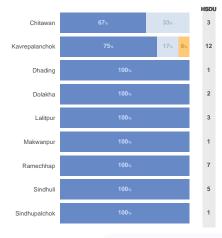


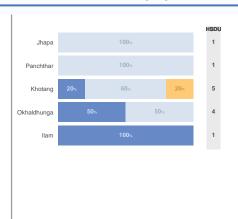
Koshi

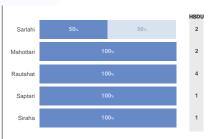


Madhesh

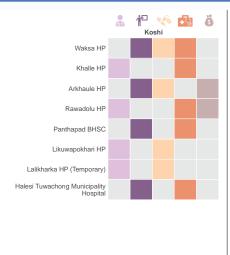
Service availability by district

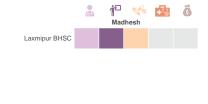










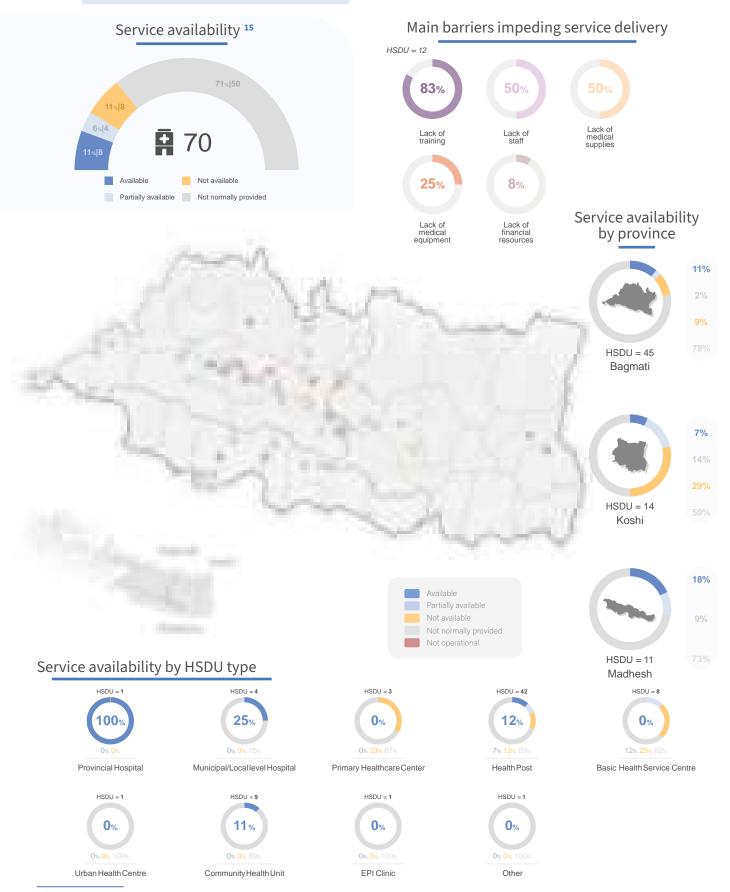




HSDUs that did not report any data or that do not normally provide the service are excluded from the analysis.



MULTI-DRUG-RESISTANT TUBERCULOSIS



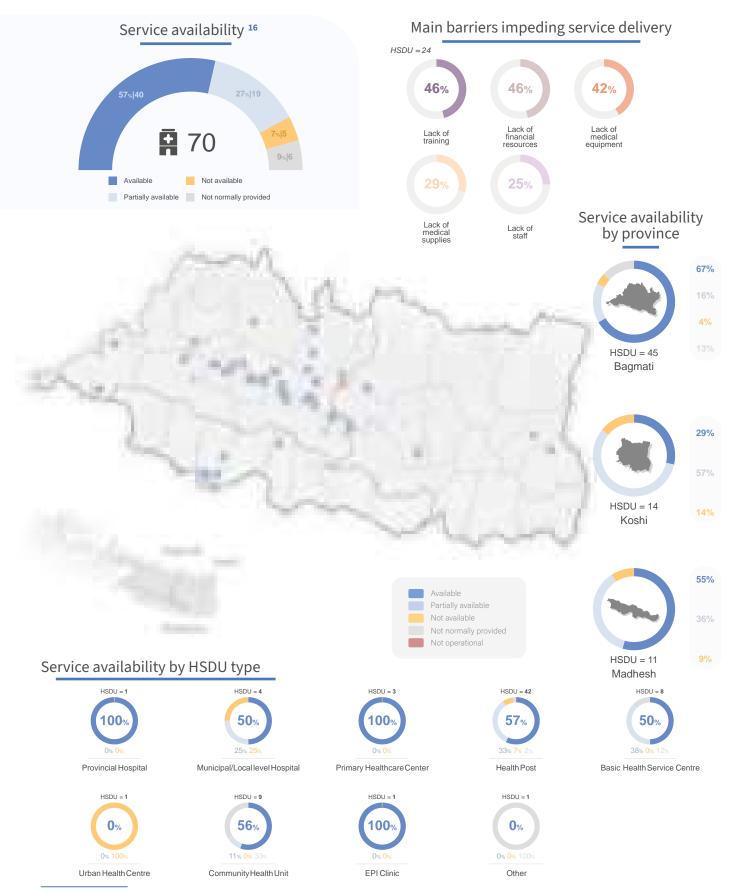
¹⁵ Diagnosis, management, and follow-up of multi-drug-resistant TB (MDRTB) patients.



HSDUs that did not report any data or that do not normally provide the service are excluded from the analysis.



IEC ON LOCAL PRIORITY DISEASES



¹⁶ Information, Education, and Communication on the prevention and self-care of local priority diseases, such as dengue, acute diarrhea, others.





Bagmati

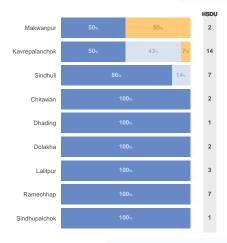


Koshi

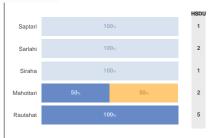


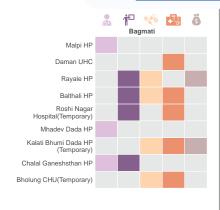
Madhesh

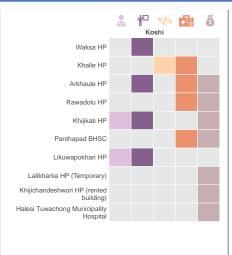
Service availability by district

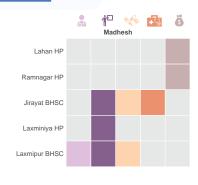










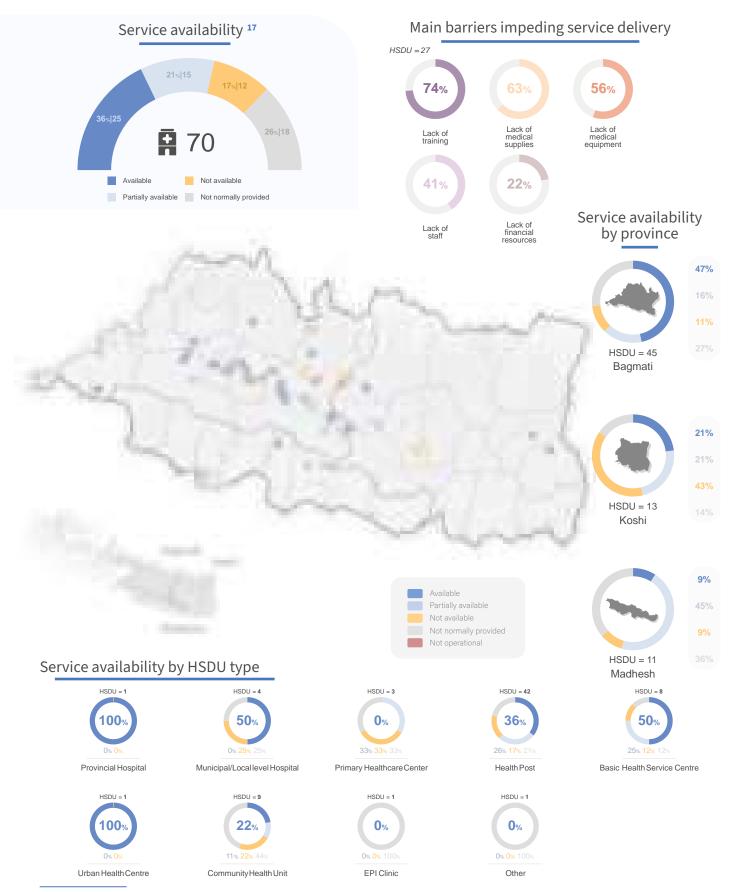




HSDUs that did not report any data or that do not normally provide the service are excluded from the analysis.



DIAGNOSIS AND MANAGEMENT OF OTHER LOCALLY RELEVANT DISEASES



Diagnosis and management of other locally relevant diseases such as dengue, with protocols available for identification, classification, stabilization and referral of severe cases.





Bagmati

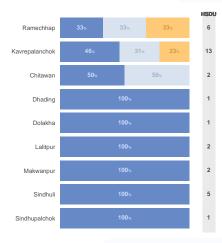


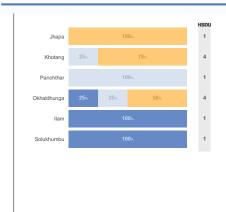
Koshi



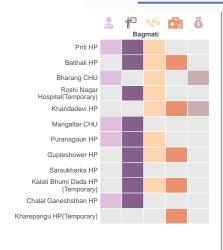
Madhesh

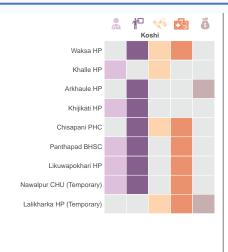
Service availability by district

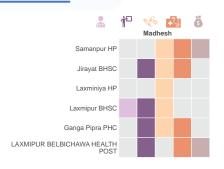








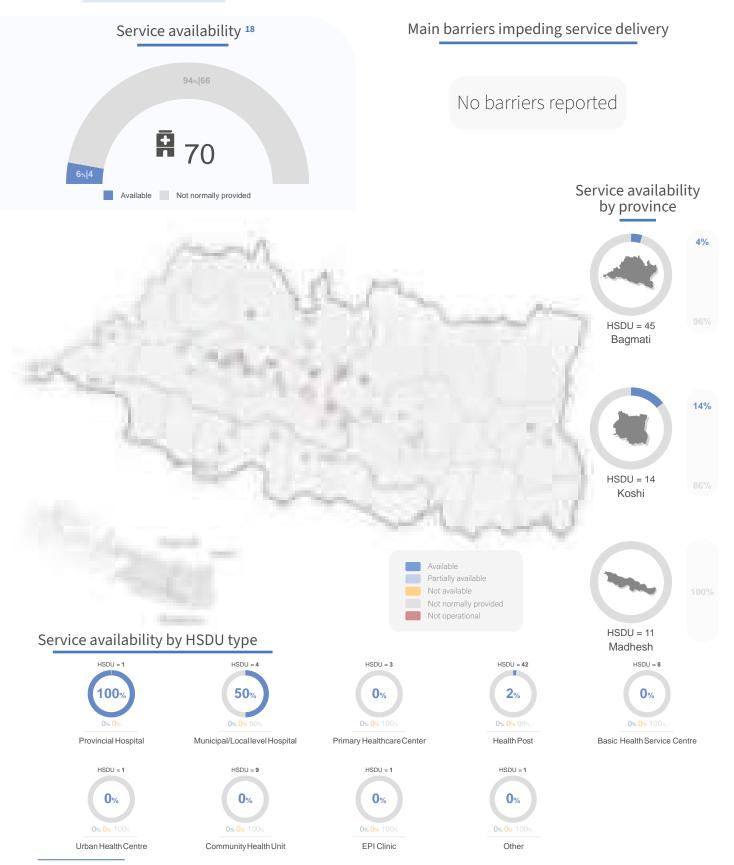






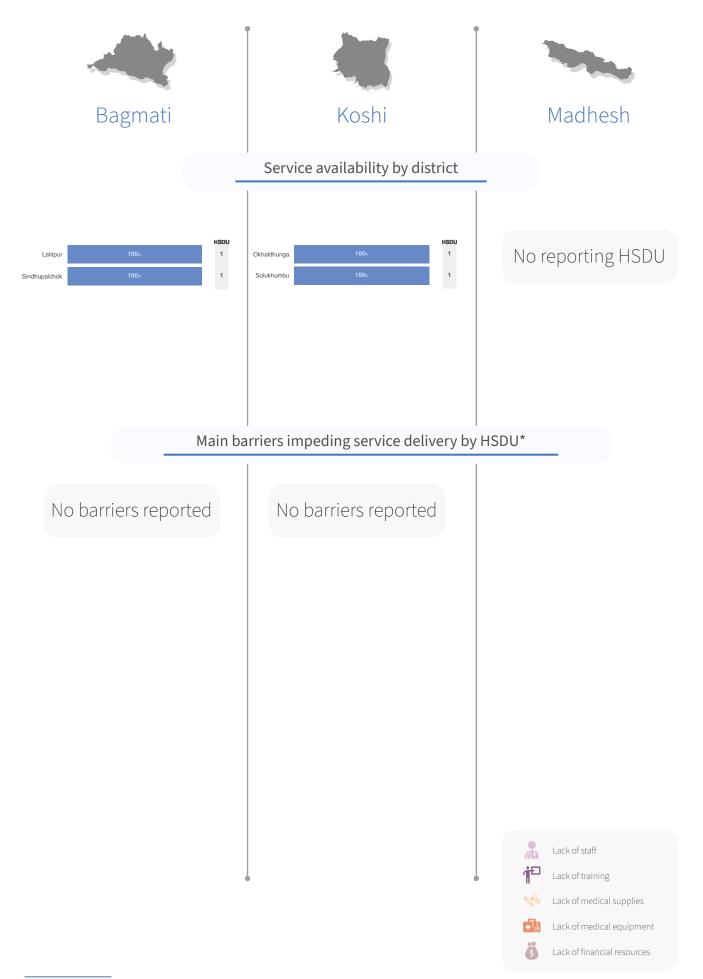
HSDUs that did not report any data or that do not normally provide the service are excluded from the analysis.

MANAGEMENT OF SEVERE AND/ OR COMPLICATED COMMUNICABLE **DISEASES**



¹⁸ Management of severe and/or complicated communicable diseases such as severe dengue, measles with pneumonia, cerebral malaria, etc.

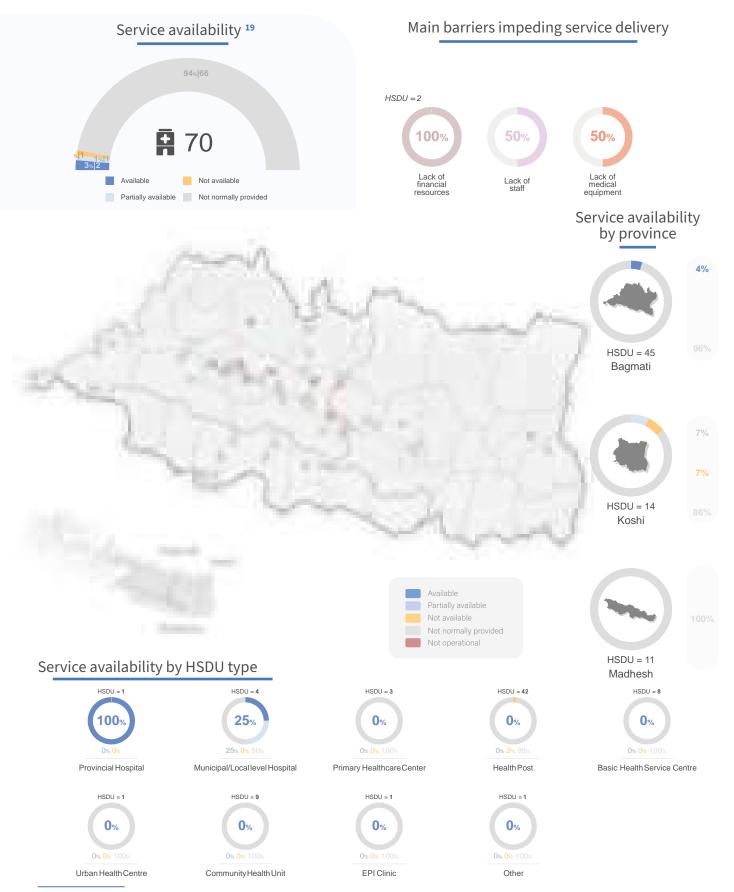




HSDUs that did not report any data or that do not normally provide the service are excluded from the analysis.



ISOLATION UNIT OR ROOM



¹⁹ Isolation unit or room for patients with highly infectious diseases.





[·] HSDUs that did not report any data or that do not normally provide the service are excluded from the analysis.

ANNEX





ANNEX I: PREVIOUSLY PUBLISHED REPORTS

- 1. HeRAMS Nepal post-Jarjarkot earthquake report April 2024 General clinical and trauma care services: A comprehensive mapping of availability of essential services and barriers to their provision, https://www.who.int/publications/m/item/herams-nepal-post-jarjarkot-earthquake-report-2024-04-general-clinical-and-trauma-care-services.
- 2. HeRAMS Nepal post-Jarjarkot earthquake report April 2024 Child health and nutrition services: A comprehensive mapping of availability of essential services barriers to their provision, https://www.who.int/publications/m/item/herams-nepal-post-jarjarkot-earthquake-report-2024-04-child-health-and-nutrition-services.
- **3.** HeRAMS Nepal post-Jarjarkot earthquake report April 2024 Communicable disease services: A comprehensive mapping of availability of essential services and barriers to their provision, https://www.who.int/publications/m/item/herams-nepal-post-jarjarkot-earthquake-report-2024-04-communicable-disease-services.
- **4.** HeRAMS Nepal post-Jarjarkot earthquake report April 2024 Sexual and reproductive health services: A comprehensive mapping of availability of essential services and barriers to their provision, https://www.who.int/publications/m/item/herams-nepal-post-jarjarkot-earthquake-report-2024-04-sexual-and-reproductive-health-services.
- **5.** HeRAMS Nepal post-Jarjarkot earthquake report April 2024 Noncommunicable disease and mental health services: A comprehensive mapping of availability of essential services and barriers to their provision. https://www.who.int/publications/m/item/herams-nepal-post-jarjarkot-earthquake-report-2024-04-ncd-and-mental-health-services.



35



