



**MINISTRY OF HEALTH
AND FOOD SAFETY**

DEPARTMENT OF HEALTH SERVICES
EPIDEMIOLOGY AND DISEASE CONTROL DIVISION

Post-disaster communicable disease surveillance and response plan

Flood outburst of 26 August 2026

Bagmati Province

ISSUED

27 August 2026

FINAL

Acknowledgement

The flood outburst of 26 August 2026 took a heavy toll on life across the rural districts of Bagmati Province. Health facilities were damaged, water systems and latrines destroyed, and households displaced into congregate shelters. Conditions of this kind amplify the diseases already endemic to the corridor, and they do so on a predictable schedule: enteric disease within days, leptospirosis and hepatitis within weeks, vector-borne disease over the following two months. This document sets out how that risk will be watched and answered, and is issued for immediate use in the affected districts.

The Epidemiology and Disease Control Division records its appreciation of the teams whose work produced this plan under emergency conditions. Teams from the Department of Health Services, including the National Public Health Laboratory, drafted and reviewed it in the days immediately following the surge. The Division is grateful to the Ministry of Health and Food Safety and the Department of Health Services for their support and feedback.

The Division thanks the provincial officials of Bagmati Province, including the Health Directorate and the Public Health Emergency Operations Centre, the district health offices of the affected corridor, and the Provincial Public Health Laboratory and the National Public Health Laboratory, for their contribution to the development of this document. The technical support of WHO Nepal in the development of this document is gratefully acknowledged.

Epidemiology and Disease Control Division

Department of Health Services

Ministry of Health and Food Safety

Abbreviations

AES	acute encephalitis syndrome	NPHL	National Public Health Laboratory
AFP	acute flaccid paralysis	NRCS	Nepal Red Cross Society
AGE	acute gastroenteritis	NS1	non-structural protein 1
CFR	case-fatality rate	ORS	oral rehydration salts
DPD	N,N-diethyl-p-phenylenediamine (reagent for free residual chlorine testing)	PHEOC	Public Health Emergency Operations Centre
EDCD	Epidemiology and Disease Control Division	PHLMC	Provincial Health Logistics Management Centre
FCHV	female community health volunteer	PPHL	Provincial Public Health Laboratory
FETP	Field Epidemiology Training Programme	RDT	rapid diagnostic test
GPS	global positioning system	RRA	rapid risk assessment
HIV	human immunodeficiency virus	RRT	rapid response team
IgM	immunoglobulin M	UNICEF	United Nations Children's Fund
NHEICC	National Health Education, Information and Communication Centre	WHO	World Health Organization

Introduction and rationale

Flooding in the rural districts of Bagmati Province creates the classic post-disaster conditions for communicable disease transmission: contamination of drinking-water sources, destruction of latrines, displacement of populations into crowded temporary shelters, interruption of health services and cold chain, expansion of vector breeding habitat, and loss of livestock with associated zoonotic exposure. Floods do not import new pathogens; they amplify the pathogens already endemic in the area. Preparedness must therefore be built on what is known to circulate in Bagmati Province — including the enteric pathogens *Vibrio cholerae* O1, *Salmonella* Typhi and hepatitis A and E viruses, together with dengue virus, *Orientia tsutsugamushi*, *Leptospira* species, Japanese encephalitis virus, measles virus, and residual foci of malaria and visceral leishmaniasis.

Two operational realities shape this plan. First, the interval between exposure and detectable clusters is short for enteric disease (2–14 days) and long for vector-borne and leptospiral disease (2–8 weeks), so surveillance intensity must be sustained well beyond the point at which media and political attention recede. Second, the routine surveillance system will be degraded exactly when it is most needed, because reporting health facilities may be damaged, staff displaced and connectivity lost. Apparent declines in reported cases in the first weeks after a flood are more often artefacts of reporting failure than evidence of control.

1.1 Expected temporal sequence of health events

Table 1 sets out the expected sequence of health events, timed from the surge on 26 August 2026. A landslide-dam outburst front-loads mortality and does not bring the weeks of continuing rainfall that a monsoon flood does, so the enteric phase depends on damage to water systems rather than on continuing inundation.

SECTION 1 · CONTINUED

Table 1. Expected temporal sequence of health events and surveillance implications

Period	Conditions to expect	Surveillance implication
26–29 August (day 0–3)	Drowning, crush and burial injury, hypothermia in the upper corridor, wound infection, interrupted treatment for tuberculosis, HIV, diabetes and hypertension, acute psychological distress	Mortality and injury reporting; body identification; do not yet expect infectious clusters. Hypothermia, not heat, is the exposure risk at Timure and Dhunche.
28 August–9 September (day 2–14)	Acute watery diarrhoea, cholera, bloody diarrhoea, foodborne illness, acute respiratory infection, conjunctivitis, scabies, tetanus	Peak enteric alert period. Risk is highest in the destroyed-settlement catchments, the army barracks and school shelters, and Nuwakot Central Jail.
2–23 September (week 1–4 · day 7–28)	Leptospirosis, enteric fever, hepatitis A, measles in congregate settings, varicella	Watch acute jaundice syndrome and undifferentiated fever. Leptospirosis exposure is high: rescuers and survivors waded through a high-sediment torrent.
9 September–21 October (week 2–8 · day 14–56)	Dengue, malaria, Japanese encephalitis and other acute encephalitis syndrome, scrub typhus, hepatitis E, visceral leishmaniasis	Concentrated in the lower corridor — Chitwan, Gorkha, Tanahun, lower Dhading and Nawalparasi. Do not stand down surveillance when the upper corridor quietsens.

Surveillance in emergency mode

2.1 System architecture

Enhanced surveillance for this emergency comprises five components, operating simultaneously:

- 1 Event-based surveillance** — structured capture and verification of rumours and informal signals from communities, female community health volunteers (FCHVs), traditional healers, schools, veterinary services, media and social media;
- 2 Indicator-based surveillance** — daily syndromic reporting from all functional health facilities, shelter clinics, mobile medical teams and treatment centres in the affected area;
- 3 Case-based surveillance** — continued individual case notification and investigation for acute flaccid paralysis (AFP), measles-rubella, neonatal tetanus, acute encephalitis syndrome (AES), cholera and any nationally notifiable condition;
- 4 Mortality surveillance** — daily death reporting from facilities, shelters and communities;
- 5 Water quality surveillance** — daily monitoring of distributed water in the affected areas, using portable water testing kits.

INFORMATION SYSTEM

EWARS and SORMAS platforms will be actively used to monitor the situation. Daily reports can be collected through Whatsapp, Kobo or paper based forms.

2.2 Case definitions and daily reporting

All reporting sites apply the syndromic case definitions in Table 2 and record daily counts on the reporting form in Annex B. Definitions are deliberately sensitive: a case that meets a syndromic definition is reported, whether or not laboratory confirmation is available.

Table 2. Syndromic case definitions for daily reporting

No.	Syndrome / symptoms	Case definition
1.	Fever	Any individual presenting with a documented or measured fever of >38 °C (>100.4 °F), or with self-reported fever.
2.	Acute gastroenteritis (AGE)	Any individual presenting with acute episodes of three or more loose or watery stools in the past 24 hours, with or without dehydration. ^a
3.	Fever and cough (ILI)	Any individual presenting with cough and/or difficulty in breathing together with a documented or measured fever of >38 °C (>100.4 °F), or with self-reported fever.
4.	Fever with rash	Any individual presenting with a documented, measured or self-reported fever of >38 °C (>100.4 °F) together with a rash. ^b
5.	Fever with jaundice	Acute onset of jaundice (yellowing of the whites of the eyes or of the skin, or dark urine) AND Fever
6.	Acute encephalitis syndrome (AES)	Acute onset of fever with a change in mental status — including confusion, disorientation, coma or inability to talk — or new onset of seizures, excluding simple febrile seizures.
7.	Animal bite	Bite from a dog or jackal etc.

^a Dehydration is characterized by a combination of one or more of the following: thirst; dry mouth and dry skin; dark urine; reduced urination, in frequency and in volume; sunken eyes; fainting; tearless crying (in infants); sunken fontanelle (in infants).

^b Maculopapular rash, generalized diffuse erythema, and vesicular, pustular, nodular, petechial and purpuric rashes.

Logistics and pre-positioning

Supplies must be positioned before the alert, because the roads that carry them are roads that fail. EDCD and the Provincial Health Directorate confirm the availability and location of, at minimum, the items listed in Table 3.

Table 3. Supplies to be pre-positioned

Category	Items
Rehydration and enteric care	Oral rehydration salts (ORS) sachets, zinc tablets, Ringer lactate and normal saline with giving sets, nasogastric tubes, cholera kits, doxycycline, azithromycin, ciprofloxacin, ceftriaxone
Water treatment	Chlorine tablets for household use, portable water testing kits
Diagnostics	Cholera rapid diagnostic tests (RDTs), Malaria RDTs, Dengue NS1 and IgM RDTs, Scrub typhus RDT kits, Hepatitis A and E RDT Kits, Viral Transport Media (VTM), Cary–Blair transport medium, sterile stool containers, blood culture bottles, vacutainers, cerebrospinal fluid tubes, cool boxes with ice packs, triple packaging for transport
Vector control	Long-lasting insecticidal nets, repellents
Infection prevention and control	Gloves, gowns, masks, eye protection, chlorine for disinfection, waste bags and sharps containers, body bags

Action plan

Table 4 sets out the immediate and continuing actions, with the lead and supporting agencies for each.

Table 4. Action plan: activities, timelines and responsibilities

No.	Activity	Timeline	Lead	Support
1	Develop the post-disaster surveillance and response plan	Immediate (27 August 2026)	EDCD	Bagmati Province, WHO, UNICEF
2	Disseminate the plan to provincial, district and local-level stakeholders	Immediate (27 August 2026)	EDCD, Bagmati Province (PHEOC)	Health Directorate, districts, WHO, UNICEF
3	Identify focal people at local level for communication and coordination on surveillance	From 28 August 2026	Bagmati Province (PHEOC)	EDCD, Health Directorate, districts, WHO, UNICEF, NRCS
4	Compile and analyse the information received from surveillance	From 28 August 2026	EDCD	WHO
5	Conduct water quality surveillance	From 28 August 2026	District Health Office	EDCD, Unicef, WHO
6	Arrange transportation of samples to the higher lab	From 28 August 2026	PPHL	NPHL
7	Assess the risk of the current event on the data available, using the RRA tool	Daily	District Health Office	EDCD, Bagmati Province
8	Respond to any outbreak according to the assessed risk level	Regularly	District RRT, FETP	EDCD

SECTION 4 · CONTINUED

Table 4 (continued)

No.	Activity	Timeline	Lead	Support
9	Assess provincial logistics status	Daily	PHLMC and PPHL	Management Division, NPHL
10	Conduct risk communication	Daily	Bagmati Province	NHEICC, NRCS
11	Publish the public health event report	Daily by 17:00	EDCD	WHO

Rapid response team deployment checklist

A.1 Before departure

- ☐ team members and skill mix confirmed;
- ☐ briefing on the current case definitions and thresholds;
- ☐ contact list for the District Health Office, local level and shelter focal points;
- ☐ departure notified to Provincial Health Emergency Operation Center and Epidemiology and Disease Control Division (Then Epidemiology and Disease control Division will communicate to HEOC)

A.2 Technical kit

- ☐ printed case definitions, line lists, tally sheets, case investigation forms and the signal register format;
- ☐ specimen containers, Cary–Blair medium, blood culture bottles, vacutainers, needles, gloves, cool box with ice packs, triple packaging, request forms, marker pens;
- ☐ cholera, malaria and dengue RDTs;
- ☐ thermometer, ORS, zinc, Ringer lactate with giving sets, first-line antibiotics as per protocol;
- ☐ personal protective equipment, alcohol-based hand rub, chlorine, waste bags.

A.3 On arrival

- ☐ report to the local health authority and to the shelter or settlement leadership;
- ☐ explain the purpose of the deployment before starting data collection;
- ☐ establish the daily reporting line back to the District Health Office;
- ☐ agree the denominator with local authorities.

Daily syndromic reporting form

One form is completed per reporting site per day, for every syndrome in Table 2, and transmitted via Whatsapp message to the authorized phone number or Enter in the SORMAS by 15:00.

Health facility / reporting site: _____

Name of municipality and ward: _____

Date: _____

Number of patients visiting the health facility: _____

Syndrome / symptoms	Total cases reported	Sex		Age (years)				
		Male	Female	<1	1–5	6–19	20–59	≥60
Fever								
Acute gastroenteritis (AGE)								
Fever and cough								
Fever with rash								
Fever with jaundice								
Acute encephalitis syndrome (AES)								
Animal bite								

Name and designation of reporting officer

Signature and date