The surge in dengue cases is expected to continue until April 2024, coinciding with the rainy season following El Niño. The outbreak is attributable to the Dengue virus serotype DENV-3. A significant rise in suspected dengue cases has been observed since week 47 of 2023.

**WHO Indonesia** is currently engaged in guideline revision for managing the dengue outbreak, capacity building for 38 provinces, and procurement of 5 000 kits of dengue rapid diagnostic tests (RDT).

**National trend of suspected dengue cases in 2023–2024**

As at 25 March 2024, by week.

Source: MOH Public Health Emergency Operations Centre (PHEOC)

**Dengue symptoms**

Source: WHO

High fever (40°C/104°F)  
Nausea  
Severe headache  
Vomiting  
Persistent vomiting  
Pain behind the eyes  
Swollen glands  
Rapid breathing  
Bleeding gums or nose  
Muscle and joint pains  
Rash  
Feeling weak

**Severe dengue symptoms**

Source: WHO

Severe abdominal pain  
Restlessness  
Blood in vomit or stool  
Rapid breathing  
Feeling weak  
Being very thirsty  
Pale and cold skin  
Blood in vomit or stool  
Restlessness

Source: Ministry of Health (MOH) as at 1 April 2024  
*cumulative number in 2024
Rabies, invariably fatal after symptom onset, is mainly spread by dogs. East Nusa Tenggara (NTT) is identified as a high-risk area among the 26 provinces in Indonesia facing rabies cases. In support of the outbreak response, the National Disaster Management Agency established a task force in January 2024 to manage rabies situations in NTT. WHO has also facilitated the distribution of antirabies sera and vaccines to the province, in addition to enhancing local capacity through workshops and technical assistance on joint risk assessment.

### Distribution of rabies cases in NTT between 2023–March 2024

- **Timor Tengah Utara District** (4 cases)
- **Ende District** (5 cases)
- **Timor Tengah Selatan District** (16 cases)
- **Manggarai District** (3 cases)
- **Ngada District** (1 case)
- **Sikka District** (10 cases)
- **Malaka District** (2 cases)
- **East Manggarai District** (2 cases)
- **Nagekeo District** (1 case)
- **Timor Tengah Selatan District** (16 cases)

**Source:** MOH - Zoonoses Unit

**As at 31 March 2024**

- From 2023 to March 2024, a total of 44 deaths were attributed to rabies in the province, with 35 deaths in 2023 and 9 deaths in 2024 to date.

**Source:** MOH - Zoonoses Unit

**As at 31 March 2024**

- Rabies re-emerged on Timor Island in May 2023, after years of being rabies-free. All districts on the island other than Kupang District have been affected by the virus.

- In July 2023, a dog was tested positive for rabies in Kupang City, and in March 2024, two dogs were infected rabies in Belu District.

### What to do for potentially rabid bites?

1. Wash the bite area(s) with running water and soap for 15 minutes.
2. Visit the nearest health facility (primary health service, rabies centre, or hospital).
3. Report immediately to animal health officers.

**Source:** MOH - Zoonoses Unit
In March 2024, Indonesia experienced a total of 167 disasters comprising 11 disaster types. The most prevalent were flooding and earthquake, affecting multiple provinces nationwide, notably West Sumatra, Central Java, and East Java.

Flooding in Central Java

In Demak District, heavy rainfall, strong winds, and river overflow on 13 March 2024 led to flooding, with water levels ranging from 20 to 150 cm. The regent declared a 14-day emergency until 30 March 2024. Similarly, on 14 March 2024, intense rainfall in Kudus District led to flooding, with water levels reaching 10-70 cm. In response, a 10-day emergency status was declared, effective until 25 March 2024.

Flooding and landslide in West Sumatra

High-intensity rain caused flooding in Pesisir Selatan District on 7 March 2024, with floodwater levels measuring 10–80 cm. An emergency status has been extended until 4 April 2024.
Earthquake in East Java

On 22 March 2024, a series of earthquakes measuring magnitudes 6.0, 5.3, and 6.5 shook Tuban District. The earthquakes did not pose a risk of triggering tsunami.

### Tuban District
- 1 hospital affected (NU Tuban Hospital) with minor damage but remained operational
- 60 people affected

### Surabaya District
- 6 hospitals affected with minor damage but remained operational
- 236 people affected

### Gresik District
- 1 hospital affected with moderate damage but remained operational
- 39,003 people affected (1,572 elderly, 215 pregnant women, 852 toddlers, 195 infants)
- 26 people injured
- 33,635 people internally displaced

### Response

#### Ministry of Health (MOH)
1. Coordinated and oversaw the public health emergency operations centre (PHEOC).
2. Deployed an assessment team and assistance in the management of health crises.
3. Generated timely disaster situation updates.
4. Identified affected health facilities.
5. Conducted on-site assessments and evaluated current health sector conditions.
6. Supported operational planning, daily reporting, infographics creation, data compilation, response mapping, and information board setup for health volunteer coordination and distribution.

#### Provincial and District Health Offices (PHOs and DHOs)
1. Increased healthcare workers vigilance to detect leptospirosis following heavy rainfall and flooding in Central Java Province and Demak District.
2. Delivery of health services, health education, disease surveillance, and outbreak prevention in Central Java.
3. Deployment of the emergency medical teams (EMT) from the West Sumatra office of the Centre for Health Crises to support Pesisir Selatan district.
5. Rapid health assessment, mobile clinics deployment, and disease control and surveillance by West Sumatra DHOs and puskesmas.
6. Emergency response team deployment to Bawean Island by the Gresik DHO to ensure the delivery of adequate health services.

#### WHO Indonesia
1. Monitored the situation in coordination with the Centre for Health Crises and PHEOC in MOH.
This calendar, used by MOH, serves as a preparedness tool for stakeholders, facilitating proactive communication and establishing a foundation for risk-based surveillance measures. Calculated over a span of 10 years using accumulated national disease data, the risk calendar aims to provide forward-looking projection of hazards and risks. This integrated approach signifies the synergy between climate change insights and public health data, enhancing the country’s preparedness and response strategies.

This calendar, used by MOH, serves as a preparedness tool for stakeholders, facilitating proactive communication and establishing a foundation for risk-based surveillance measures. Calculated over a span of 10 years using accumulated national disease data, the risk calendar aims to provide forward-looking projection of hazards and risks. This integrated approach signifies the synergy between climate change insights and public health data, enhancing the country’s preparedness and response strategies.

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Seasonality</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dengue¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chikungunya¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaria¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leptospirosis¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rabies bites¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suspected typhoid¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flooding²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diarrhoea²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza-like illness¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Landslide³</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drought²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forest/Land fire²</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typhoon³</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹EWARS data from 2014-2023
²Data from 2020-2023
³Data from 2023 only

Source: MOH/WHO Indonesia

Hospitals play a crucial role in strengthening health resilience by providing essential healthcare services to communities, acting as referral centres, sharing health data and surveillance information, and contributing to preventive and promotive efforts. To effectively fulfil these functions, hospitals must prioritise safety, functionality, and accessibility during disasters, embodying the concept of safe hospitals.

MOH, through the leadership of the Centre for Health Crises, is developing safe hospitals to strengthen the resilience of the healthcare system. Towards this aim, WHO provided technical support and expert input for the Guidelines for Safe Hospitals. These guidelines are expected to serve as a valuable resource for all stakeholders seeking to establish resilient and secure hospitals, especially in the face of a variety of threats, including those arising from climate change. The guidelines are available here: https://link.kemkes.go.id/PedomanSafeHospital1.
Zoonosos and EID preparedness

WHO supported the orientation for severe acute respiratory infection (SARI) at 10 expanded hospitals in Bekasi City on 8 March 2024.

A WHO officer spoke as a resource person at an influenza-like illness (ILI) and SARI supervisory activity in Yogyakarta on 25 March 2024 (funded by the Global Fund) and at another in South Kalimantan on 26-28 March 2024.

Indonesia took part in the online simulation exercise on International Health Regulations (IHR) on 12 March 2024. The main goals of the simulation were to enhance coordination between IHR national focal points and WHO IHR focal points and to practice the use of the IHR Annex II.

WHO provided technical assistance for development curricula and modules on emerging infectious disease (EID) preparedness and resilience in hospital networks on 20-21 March 2024 (funded by USAID).

WHO provided technical support for on-the-job training on bubonic plague in Boyolali District, Central Java, on 27 March 2024. A total of 42 participants attended from various districts including Boyolali, Sleman, West Bandung, and Pasuruan, as did MOH and local PHO representatives.

WHO provided technical assistance for the procurement of 5 000 dengue RDT kits. WHO also supported the revision of the dengue outbreak guidelines and training for officers from 38 provinces.

WHO facilitated the procurement of 8 850 antirabies vaccines and the second batch of 2 481 antirabies sera to be distributed to selected provinces with funding from the Department of Foreign Affairs and Trade (DFAT).

WHO provided expert guidance on the use of the eZoonosis application during a meeting on Anthrax cases. Participants came from puskesmas in and DHOs of Sleman and Gunung Kidul Districts, and the Yogyakarta PHO.

WHO contributed input during the preparation meeting for a simulation exercise on outbreak-prone diseases at land points of entry.

Surveillance

WHO participated in a syndromic surveillance meeting on 13 March 2024. The meeting focused on identifying referral laboratories as well as monitoring and supervision methods, including utilisation of the International Classification of Diseases (ICD) 10 and hospital record reviews.

On March 13, 2024, WHO offered technical assistance during an EWARS refresher training for specific districts in East Nusa Tenggara Province, focusing on event-based surveillance (EBS) data reporting. Eight districts were chosen based on the volume of animal bite cases received by PHEOC. The training was attended by a total of 61 participants from primary health centres, hospitals, and district health offices.

WHO Indonesia presented the draft surveillance roadmap during a framework meeting on 15 March 2024.
Health emergency activities – February

Zoonosis and EID preparedness

- WHO participated in a monitoring and evaluation visit on 31 January to 1 February 2024 about the implementation of leptospirosis prevention and control programme in Demak District. The visit included discussions on molecular epidemiology at Sultan Fatah Hospital, leptospirosis infection control at Bonang 1 Puskesmas, and the local coordination team for leptospirosis prevention and control.

- WHO provided input for the updates of the rapid response team training module and the Field Epidemiology Training Program (FETP) mentor training module.

- WHO and MOH participated in the FETP SEARO regional meeting on 20–24 February 2024.

- WHO facilitated a virtual meeting between MOH of Indonesia MOH of India and risk-based vessel inspection benchmarking.

Surveillance

- WHO participated in a syndromic surveillance meeting on 15 February 2024. The ICD10 code was used to identify trends and establish baseline rates.

- WHO participated in an online EWARS training for hospital staff in North Sulawesi on 19 February 2024. A total of 25 participants attended the training. Most participants were from hospitals and DHOs.

- WHO participated in another online EWARS training, for hospital staff in East Kalimantan on 20 February 2024. Surveillance and PHEOC teams attended the meeting in person to deliver presentations on EWARS, data management, and data analysis.

Health emergencies preparedness

- WHO facilitated a meeting of the health cluster support team, Indonesia’s primary coordination mechanism for health emergency preparedness, response, and recovery activities, on 27 February 2024. Over 20 partners participated in the meeting, bringing together six sub-clusters and establishing a framework for regular health cluster meetings to improve coordination, information exchange, and strategic planning for health system resilience and emergency preparedness and response activities.

For more information, please contact:
WHO Indonesia
sewhoindonesia@who.int