

## Update on the Dengue situation in the Western Pacific Region

This report describes the epidemiology of dengue in the World Health Organization Western Pacific Region. Data are compiled from open sources (national indicator-based surveillance systems) with the exception of Indonesia, Lao People's Democratic Republic, Malaysia, and Viet Nam, where data are provided by the WHO Country Offices. For the Pacific Island Countries, syndromic surveillance data are provided by the WHO Division of Pacific Technical Support. Information is reported based on countries' standard dengue case definitions, summary of these definitions and countries' dengue surveillance systems - included as an annex to this report. Due to differences in surveillance methods and reporting practices, a comparison of trends between countries and areas is not possible, however, national trends can be observed over time.

### Northern Hemisphere

#### Cambodia

As of 31 December 2025 (epidemiological week 52), a total of 63 016 dengue cases, including 79 deaths (case fatality rate [CFR]: 0.13%), have been reported through the National Dengue Surveillance System (Figure 1). This represents an increase compared to the same period in 2024, when 18 983 cases and 46 deaths were reported.

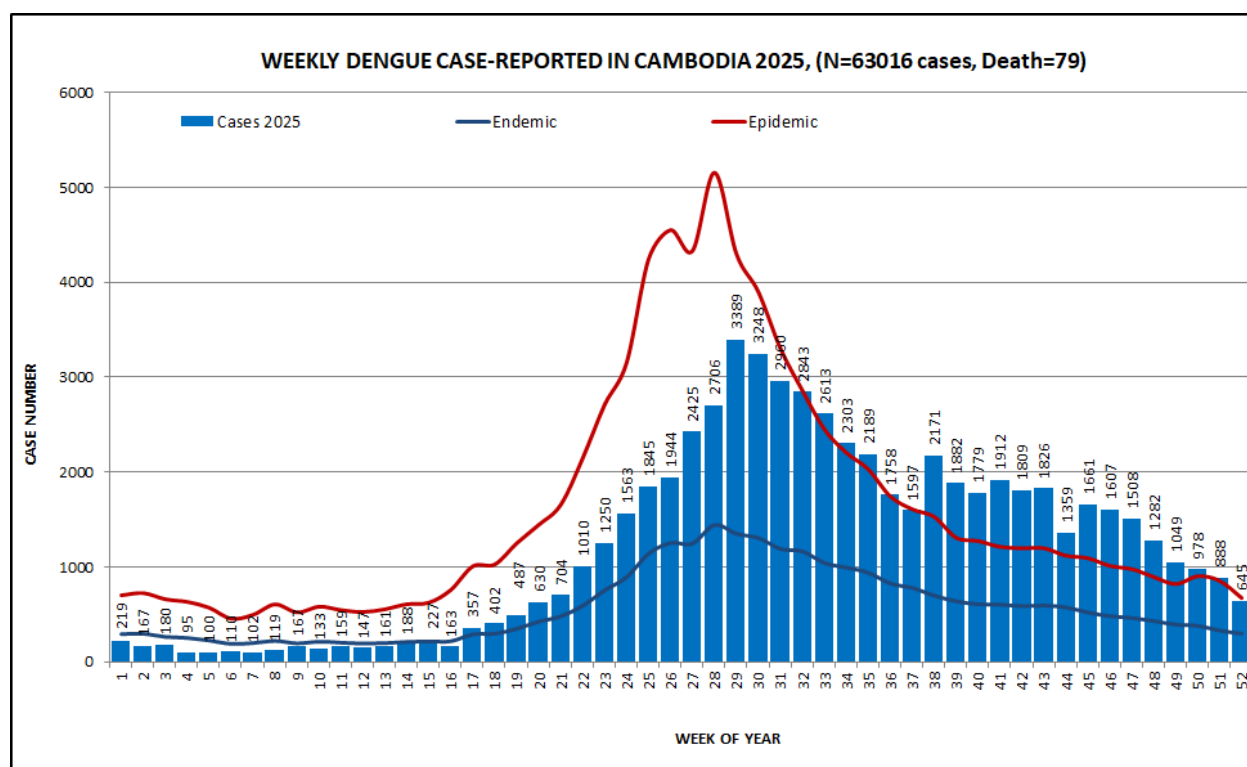


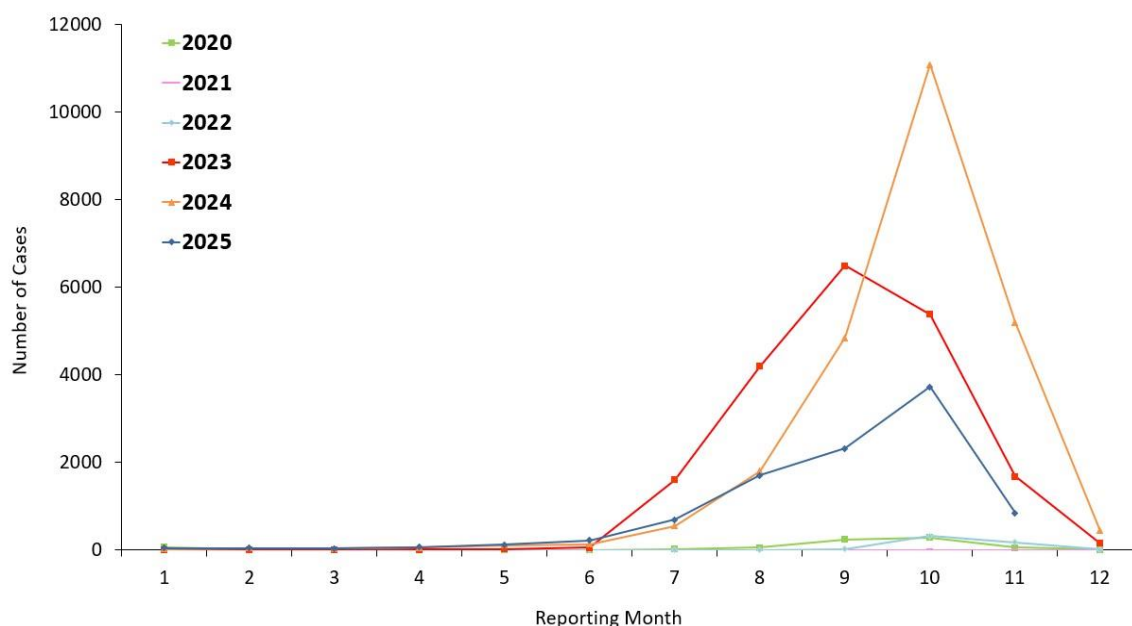
Figure 1: Weekly dengue cases in 2025 with endemic and epidemic alert thresholds in Cambodia

Source: National Dengue Surveillance System (NDSP/CNM/MOH)

#### China (Monthly update)

There was no update in this reporting period. In November 2025, a total of 849 dengue cases were reported in China, a decrease from 3 727 cases reported in October 2025. The number of dengue cases

reported in November 2025 was lower than the same period in 2024 (n=5 201) (Figure 2). Cumulatively, a total of 9 856 dengue cases have been reported this year, as of November 2025.

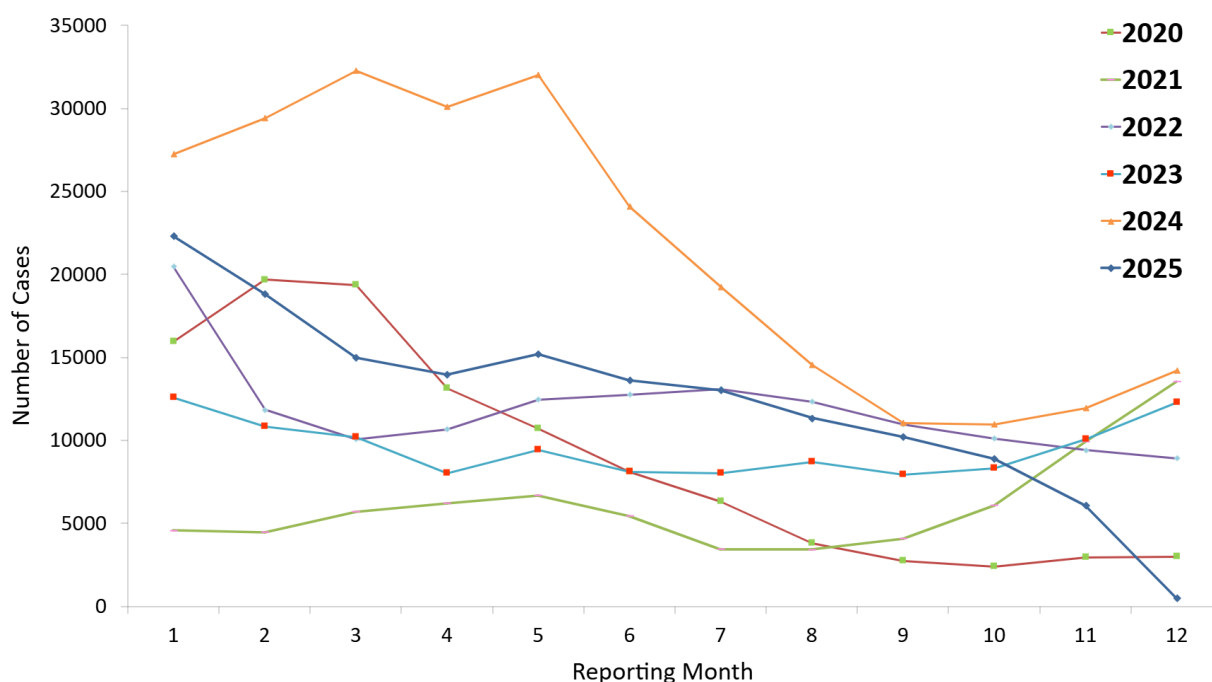


**Figure 2: Dengue cases reported monthly from 2020-2025 (as of November 2025) in China**

Source: [National Disease Control and Prevention Administration, China](#)

### Indonesia (Monthly update)

A total of 6 079 new dengue cases, including 19 deaths, and 478 new dengue cases, including one death, were reported in November and December 2025, respectively. Compared to the same period in 2024, reported cases decreased by 49.2% in November and by 96.6 % in December 2025 (Figure 3). Cumulatively, a total of 148 922 dengue cases have been reported this year.



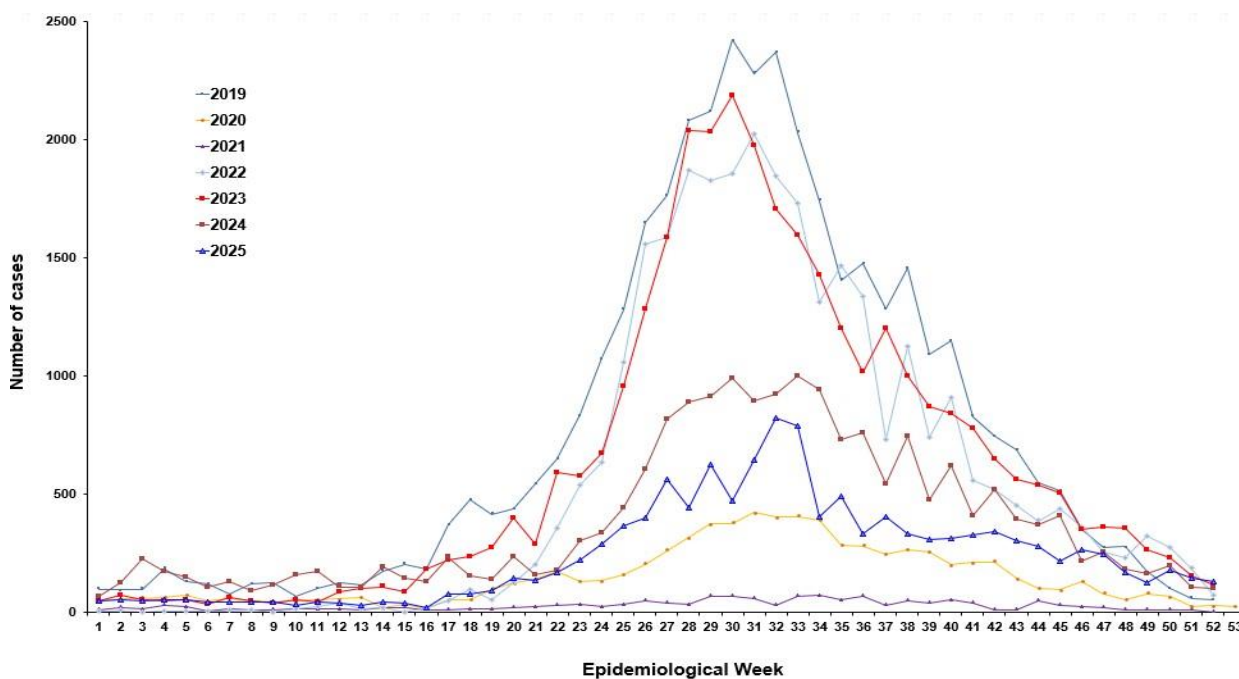
**Figure 3: Dengue cases reported monthly from 2020-2025 (as of October 2025) in Indonesia**

Source: Ministry of Health, Indonesia

Note: The data included here may be subject to delays or variations in case notifications over time. Therefore, the data presented in this report may be retrospectively revised.

## Lao People's Democratic Republic

In epidemiological week 52 (22 to 28 December 2025), 130 dengue cases, including no deaths, were reported, a decrease from 143 cases in week 51 (Figure 4). One death has been reported this year. The cumulative number of cases reported in 2025 (as of epidemiological week 52) is 12 245, which is 37.1% lower than during the same period in 2024 (n=19 486).

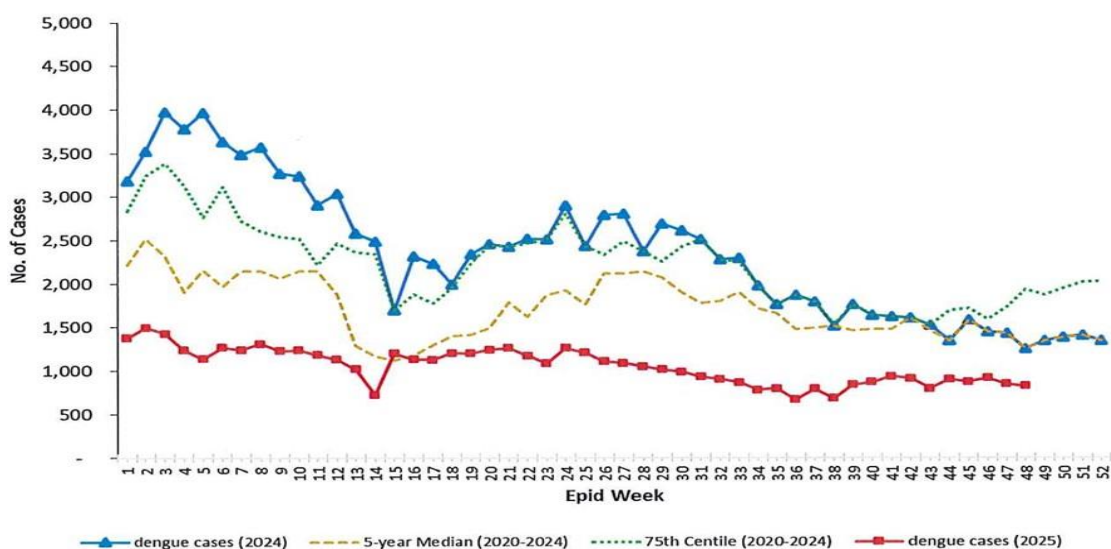


**Figure 4: Dengue cases reported weekly from 2019-2025 in Lao PDR**

Source: National Centre for Laboratory and Epidemiology, Ministry of Health, Lao PDR

## Malaysia

In epidemiological week 49 (30 November to 6 December 2025), 974 new dengue cases, were reported in Malaysia, an increase from 822 cases in week 48 (Figure 5). In the same reporting period, two new deaths were reported. Cumulatively, a total of 51 406 cases, including 43 deaths, have been reported in 2025.

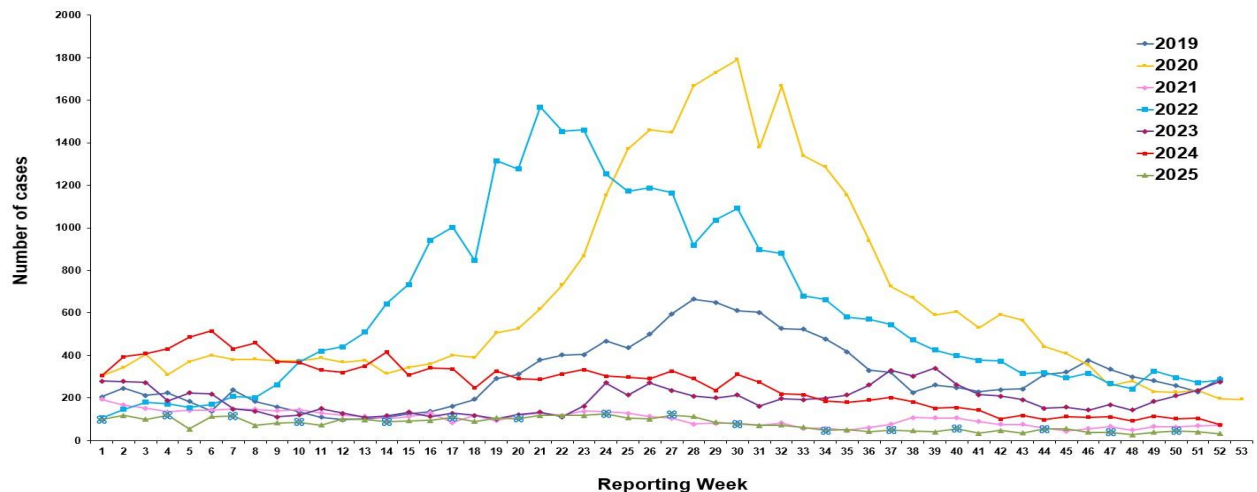


**Figure 5: Number of dengue cases reported in 2025, compared to 2024 and 5-year median (2020-2024), Malaysia**

Source: Ministry of Health, Malaysia

## Singapore

In epidemiological week 52 (21 to 27 December 2025), a total of 32 dengue fever cases were reported in Singapore. Cumulatively, a total of 3 998 dengue cases (including 19 dengue haemorrhagic fever cases) have been reported in 2025, which is a 70.7% decrease compared to the same period in 2024 (n=13 655). Preliminary results of all positive dengue samples serotyped in December 2025 showed DEN-1, DEN-2, DEN-3 and DEN-4 at 12.9%, 58.1%, 25.8% and 3.2% respectively.



**Figure 6: Dengue cases reported weekly from 2019-2025 (as of 2 January 2026) in Singapore**

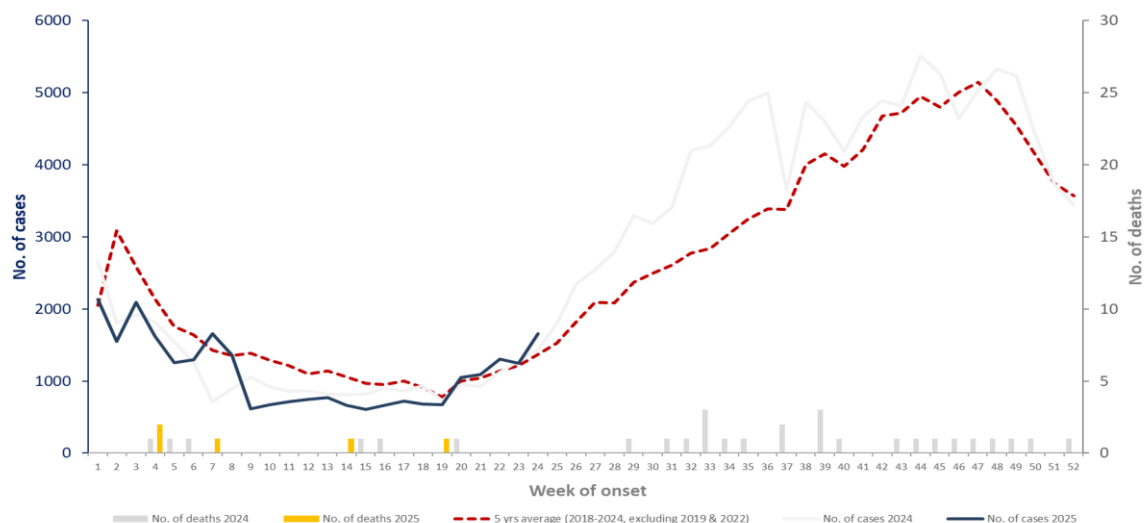
Source: Communicable Diseases Agency, Singapore

(Note: Case numbers are derived from the CDA Singapore's weekly-infectious-disease-bulletin-year-2025\_upload as available from [Weekly Infectious Diseases Bulletin 2025 | Communicable Diseases Agency](#))

## Viet Nam

In December 2025, a total of 22 355 dengue cases were reported nationwide, including two associated deaths. This represents a 14% decline compared with November 2025. Cumulatively, 184 903 cases and 43 deaths were recorded in 2025, marking a 28.4% increase compared with the same period of 2024, with 14 additional deaths.

Please note that the figure below has not been updated since week 25 of 2025, due to the ongoing reporting system transition. It will be updated once the transition is complete and the database becomes available.



**Figure 7: Number of dengue cases and deaths in 2024-2025 by week of onset, as of week 25 of 2025, Viet Nam**

Source: Vietnam Administration of Disease Control (VADP), Ministry of Health, Viet Nam.

Note: Data reporting and this figure may be delayed or updated; recent data will be subject to revision.

## Southern Hemisphere

### Australia (Monthly update)

From 1 to 31 December 2025, a total of 72 dengue notifications were reported in Australia, a decrease from 40 dengue notifications in November. The number of dengue notifications in December 2025 is 55.6% lower than the same period in 2024 (Figure 8).

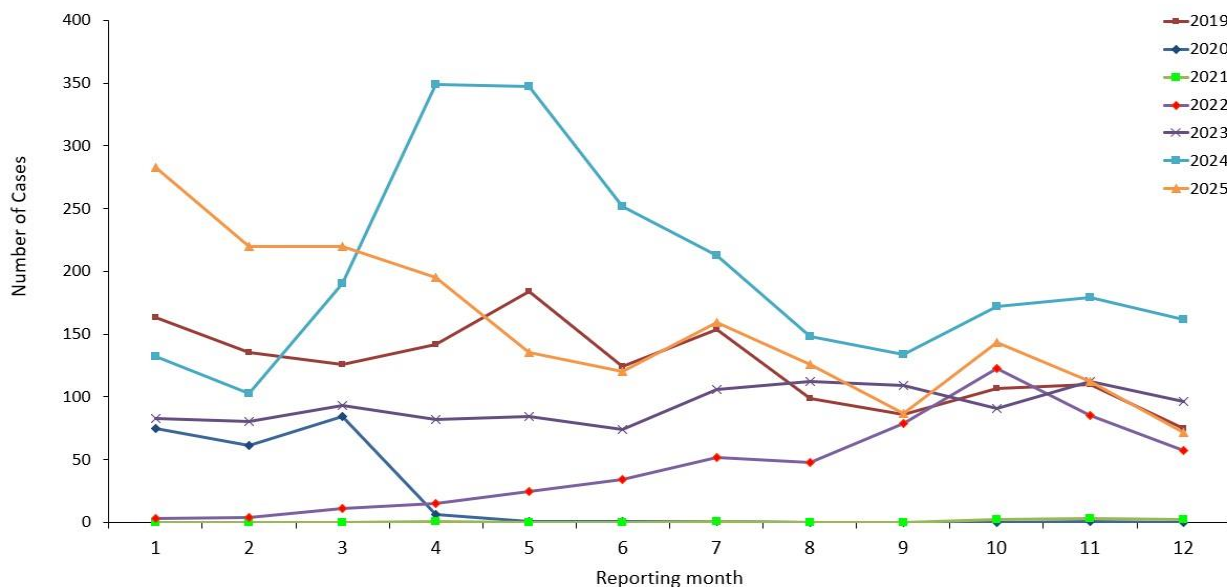


Figure 8: Laboratory-confirmed dengue notifications reported monthly from 2019-2025 in Australia

Source: [Department of Health, Australia](#)

*Note:* The graph was updated as of 5 January 2026. The data included here are reliant on the provision of data from states and territories to the Australian Government Department of Health and Aged Care, which may cause backlogs and large variabilities in case notifications over time. The data included in this report are, therefore, subject to retrospective revision and may vary from reports published in NNDSS reports or reports of notification data by states and territories.

Although dengue does not usually occur in Australia, outbreak have occurred in some areas including northern and central Queensland ([source](#)).

## Pacific Islands Countries

### French Polynesia

In epidemiological week 52 (22 to 28 December 2025), one confirmed dengue case was reported with no deaths and no hospitalisation (Figure 9).

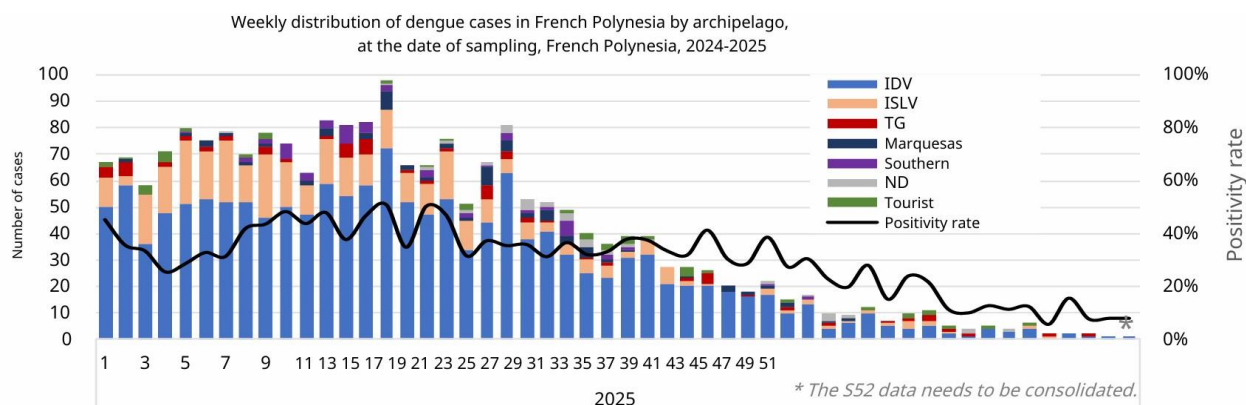
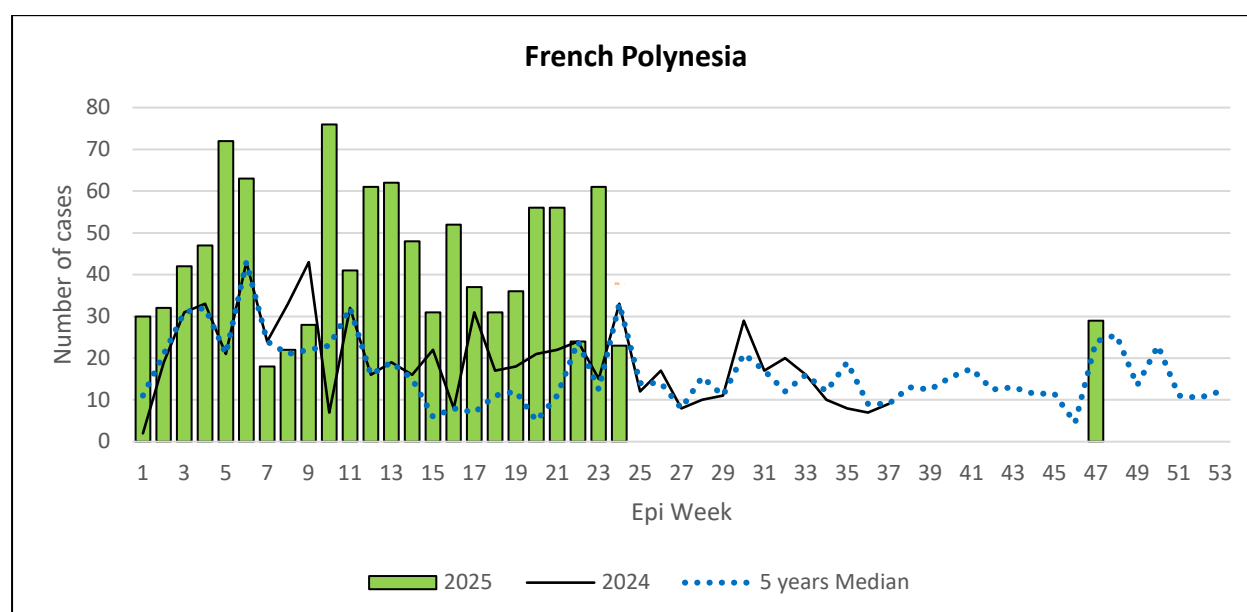


Figure 9: Weekly reported dengue cases from Epi week 1 to Epi week 52 of 2025 in French Polynesia

Source: [Bulletin de Surveillance Sanitaire, Polynésie française - N°49/2025](#)

*Note:* Îles du Vent (IDV), Îles Sous le Vent (ISLV), Tuamotu-Gambier Islands (TG), Nuku-Hiva (ND)

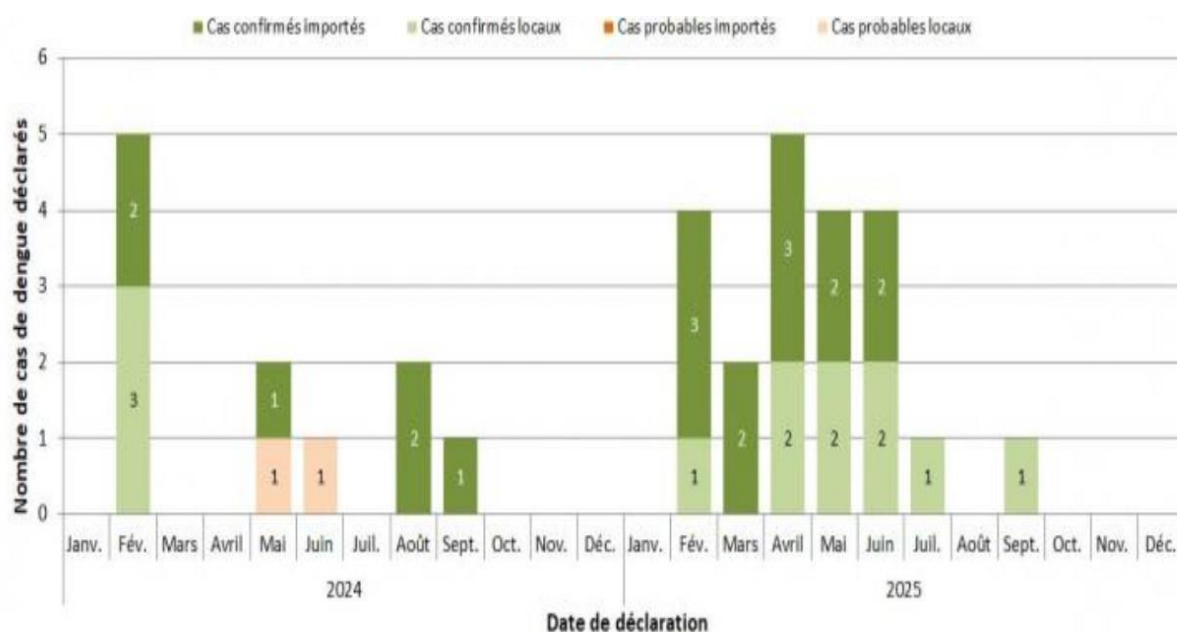
In week 52, no dengue-like illness (DLI) was reported in French Polynesia (Figure 10).



**Figure 10: Weekly reported cases of dengue-like illness (DLI) in French Polynesia**  
Source: WHO Division of Pacific Technical Support ([Pacific Syndromic Surveillance System Weekly Bulletin](#))

## New Caledonia

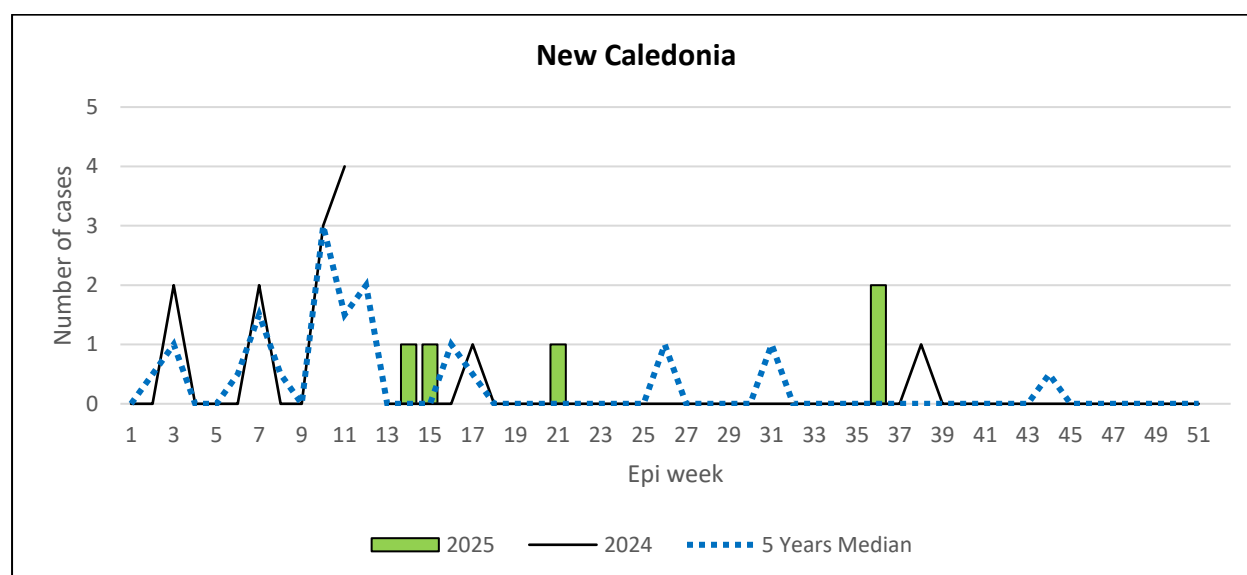
There was no update in this reporting period. As of 9 November 2025, a total of 21 dengue cases have been confirmed, of which 12 were imported and nine were local cases, the majority of which were type 1(DENV-1). A total of 11 dengue cases were reported in 2024 in New Caledonia (Figure 11). Currently, there is no ongoing dengue outbreak in New Caledonia.



**Figure 11: Dengue cases reported by month from 1 January 2024 to 9 November 2025 in New Caledonia**  
Source: [Network of sentinel physicians, New Caledonia](#)



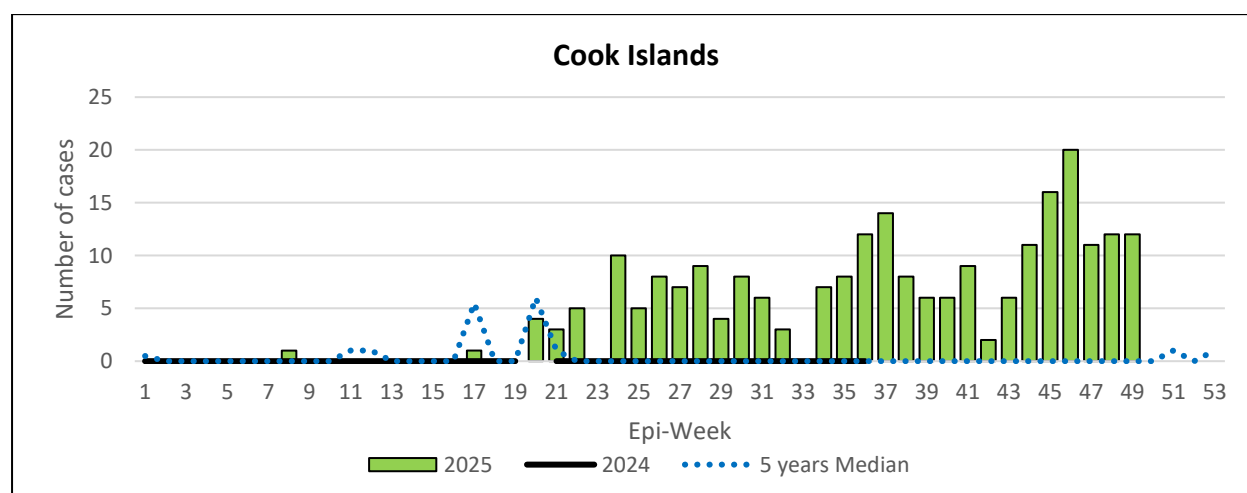
In week 52 of 2025, no DLI case was reported in New Caledonia. Cumulatively, a total of five DLI cases have been reported as of week 52 (Figure 12).

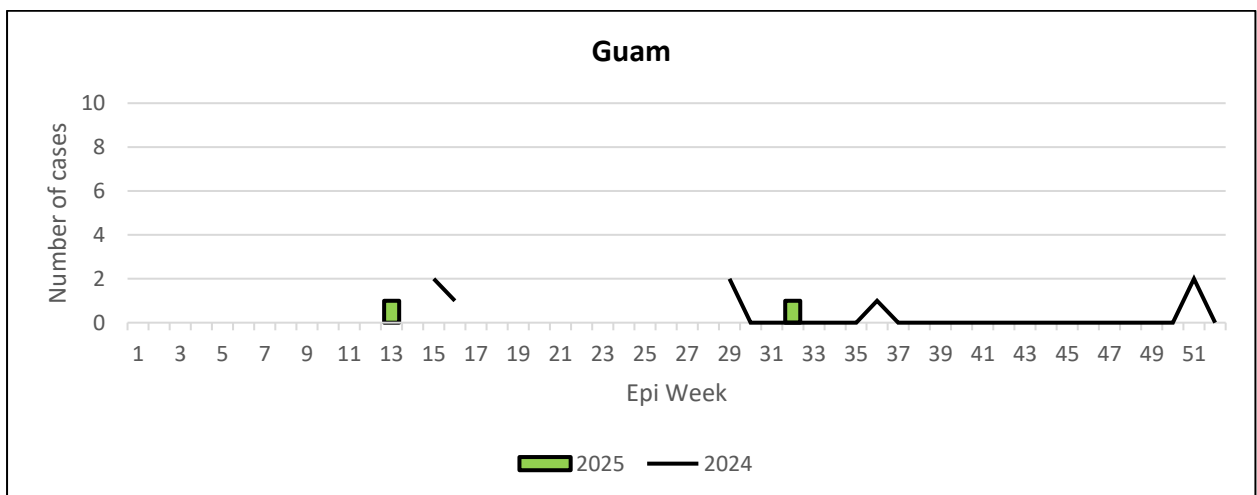
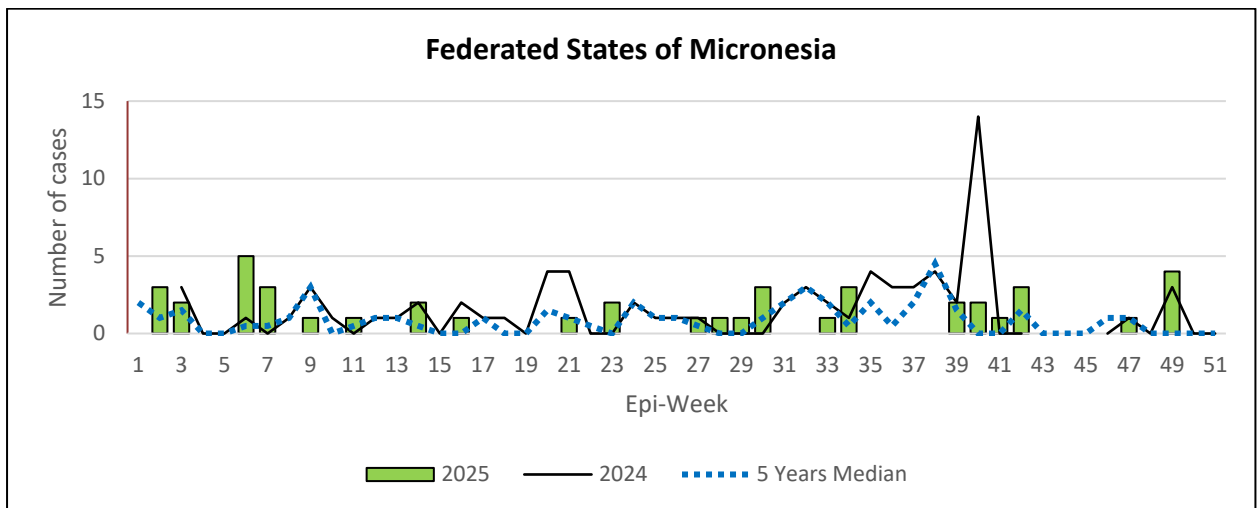
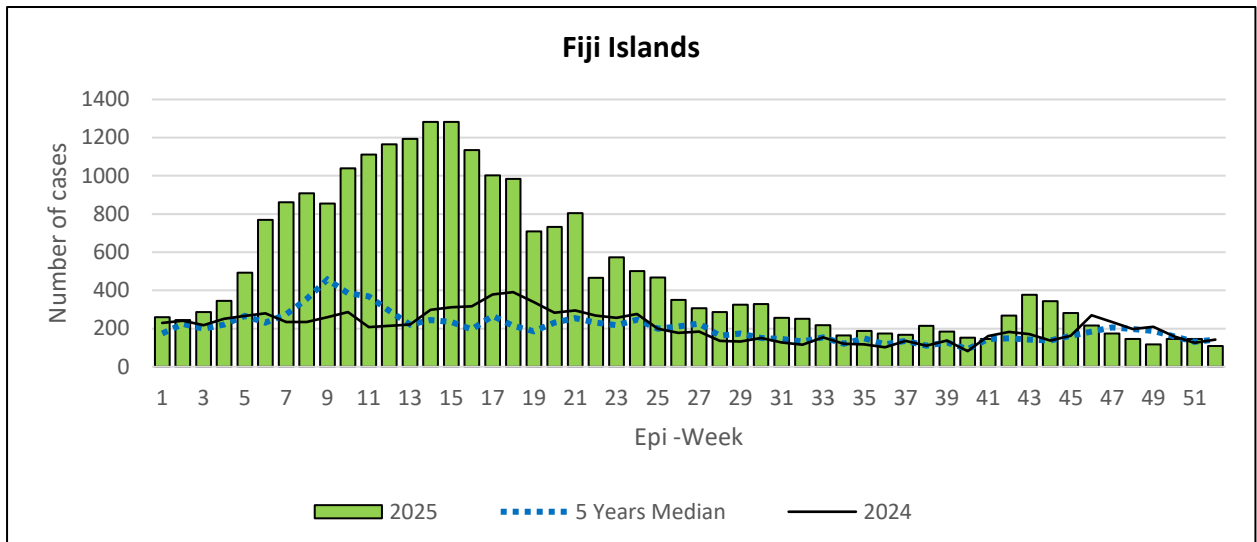


**Figure 12: Weekly reported cases of dengue-like illness (DLI) in New Caledonia**  
Source: WHO Division of Pacific Technical Support ([Pacific Syndromic Surveillance System Weekly Bulletin](#))

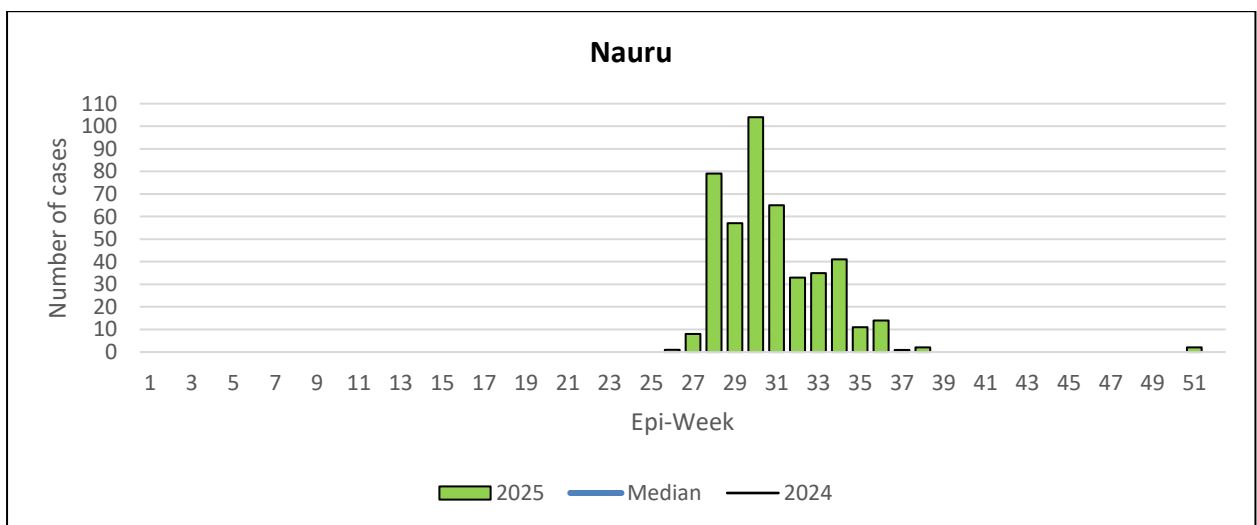
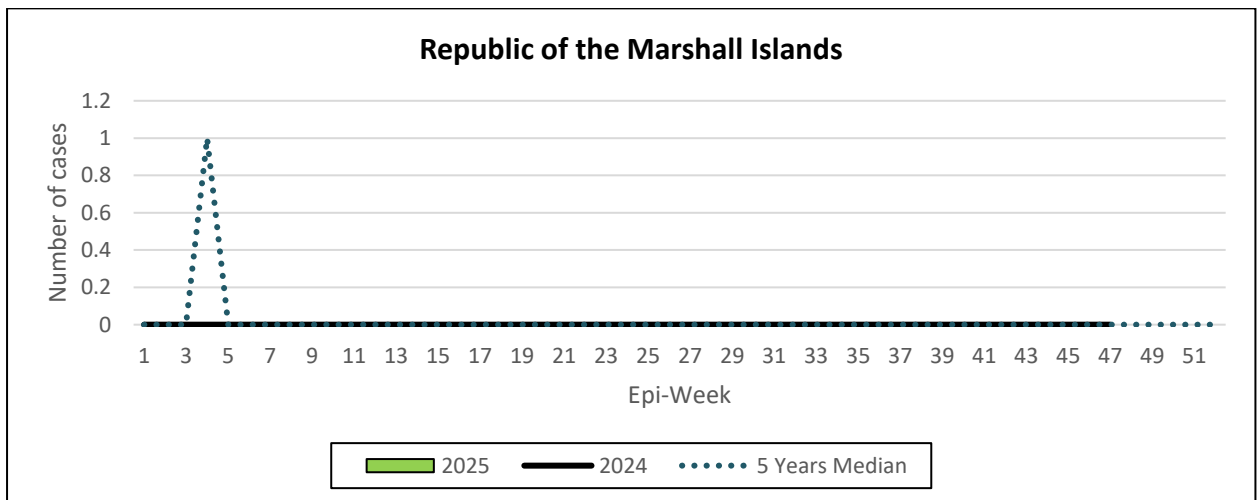
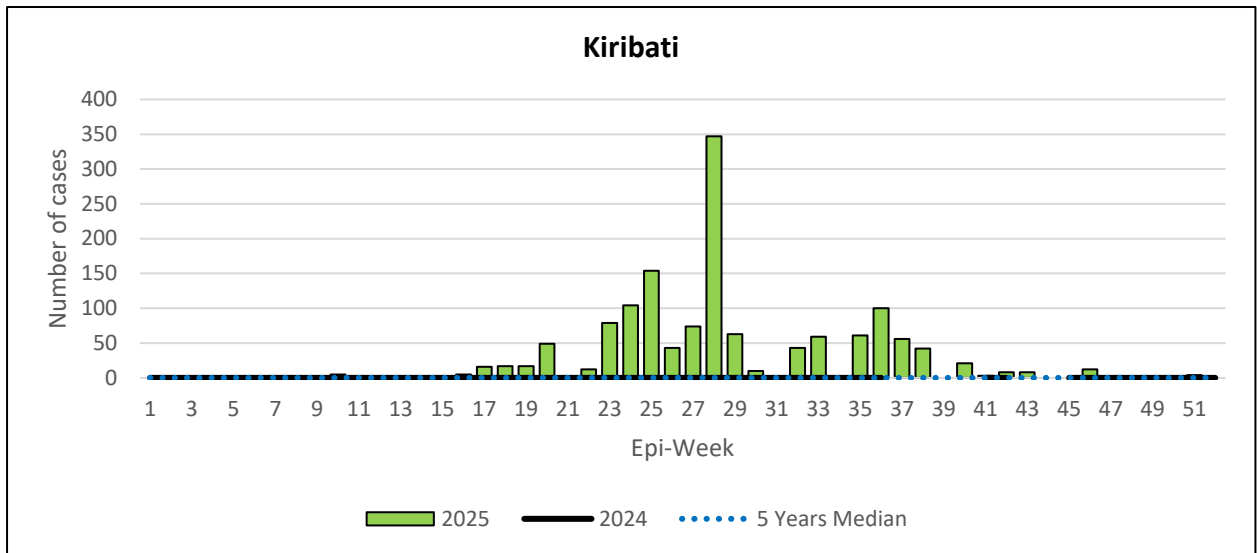
### Other Pacific Island Countries and Areas (PICs) – Dengue-like illness (DLI) Surveillance

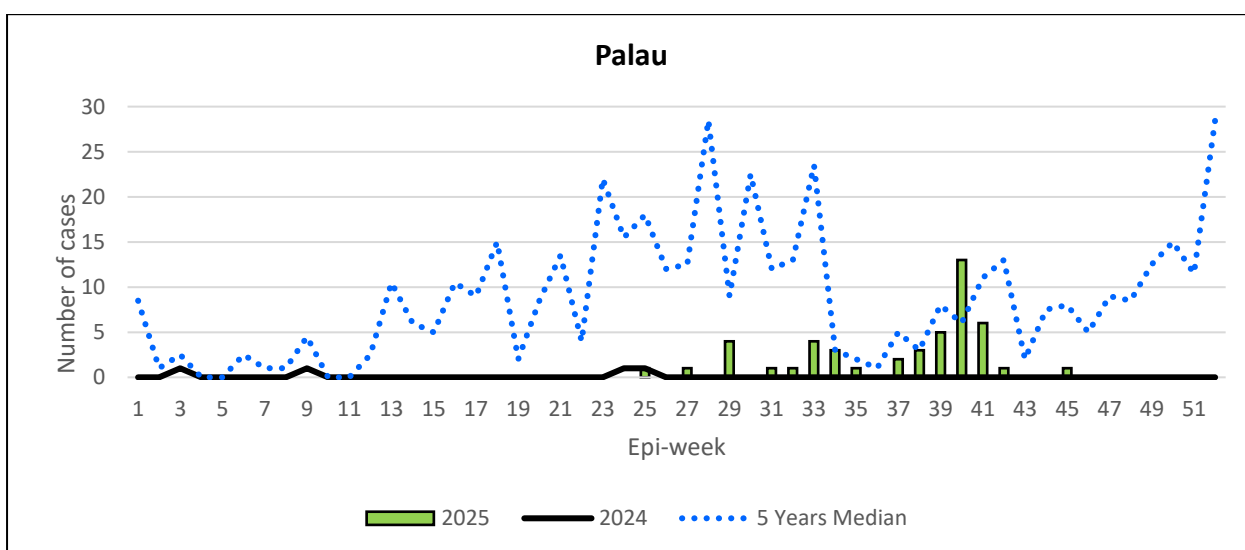
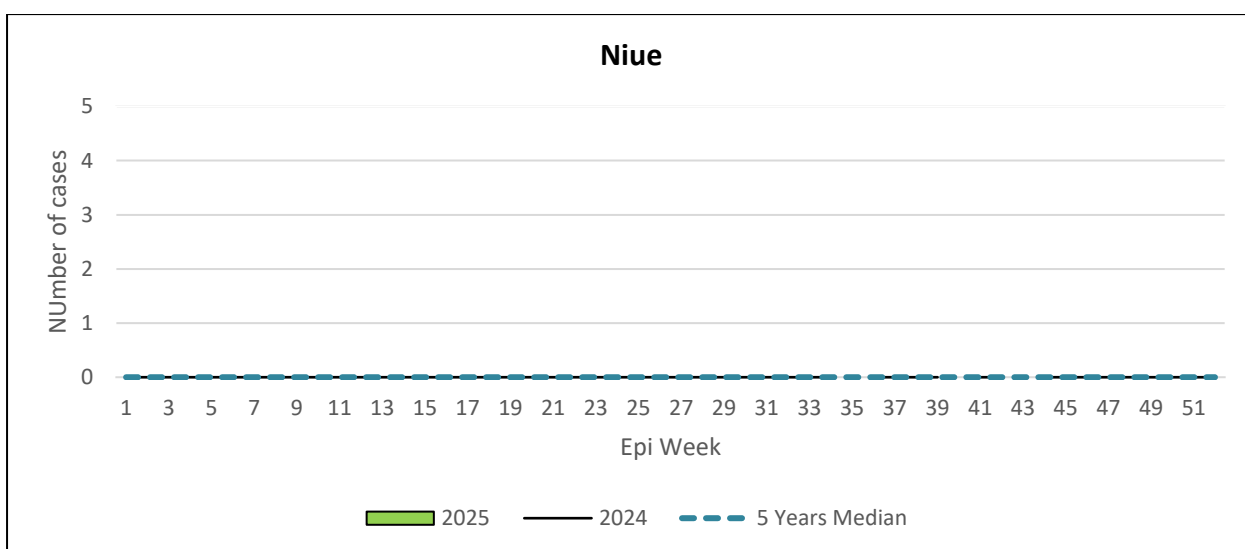
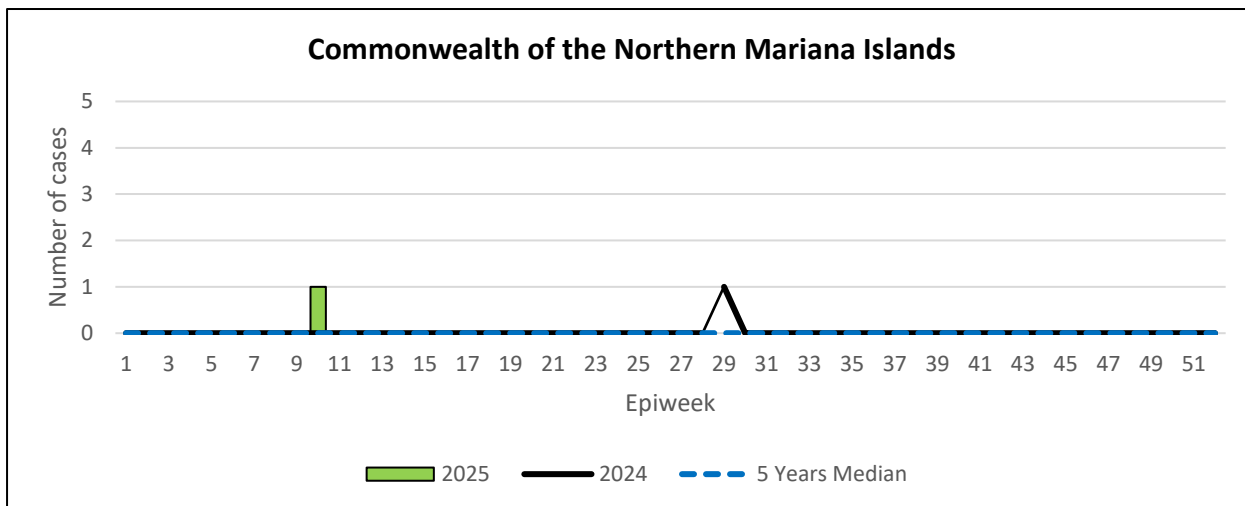
Among the PICs with available surveillance data (20/21 PICs), majority of PICs reported no or low number of DLI cases between week 48 and 50. Solomon Islands reported an increasing trend since week 47, and an uptick was observed in Micronesia (Federated States of) in week 49 and in Wallis and Futuna in week 51. The number of cases remain similar in Cook Islands, Fiji, and Vanuatu in the same reporting period (Figure 13).

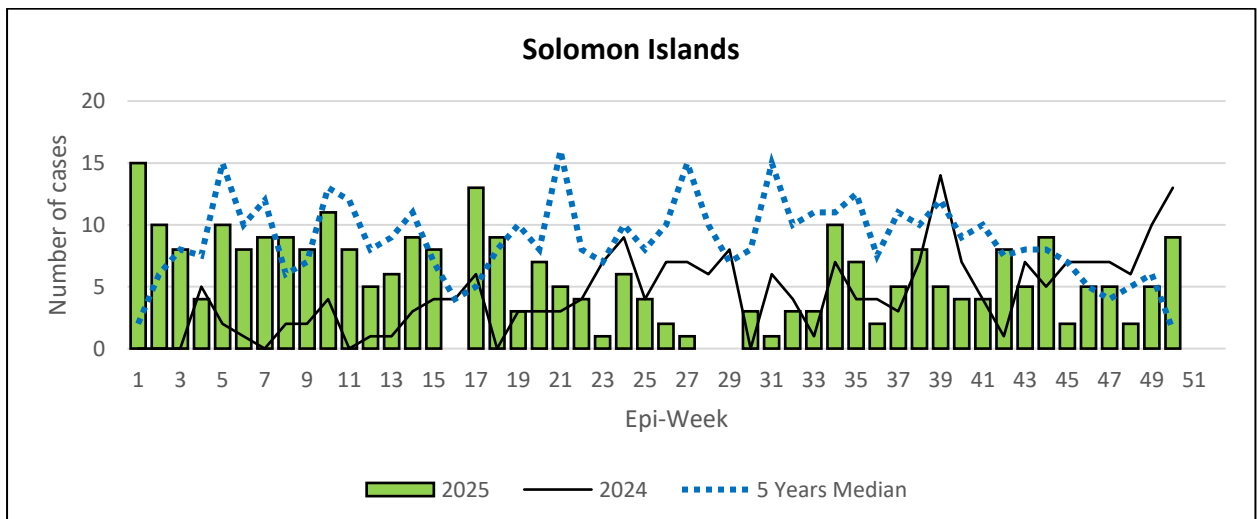
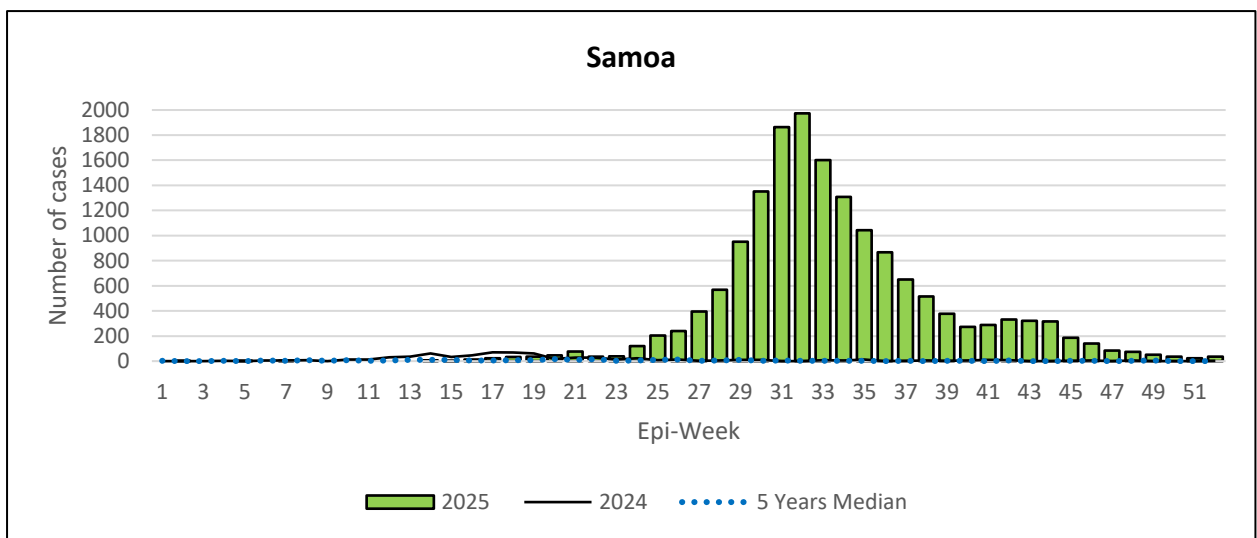
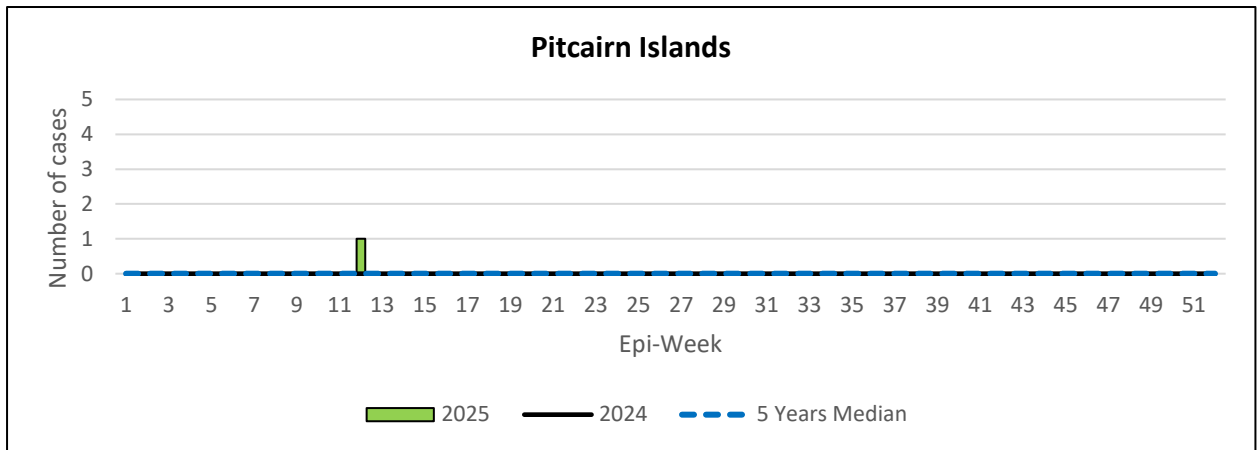


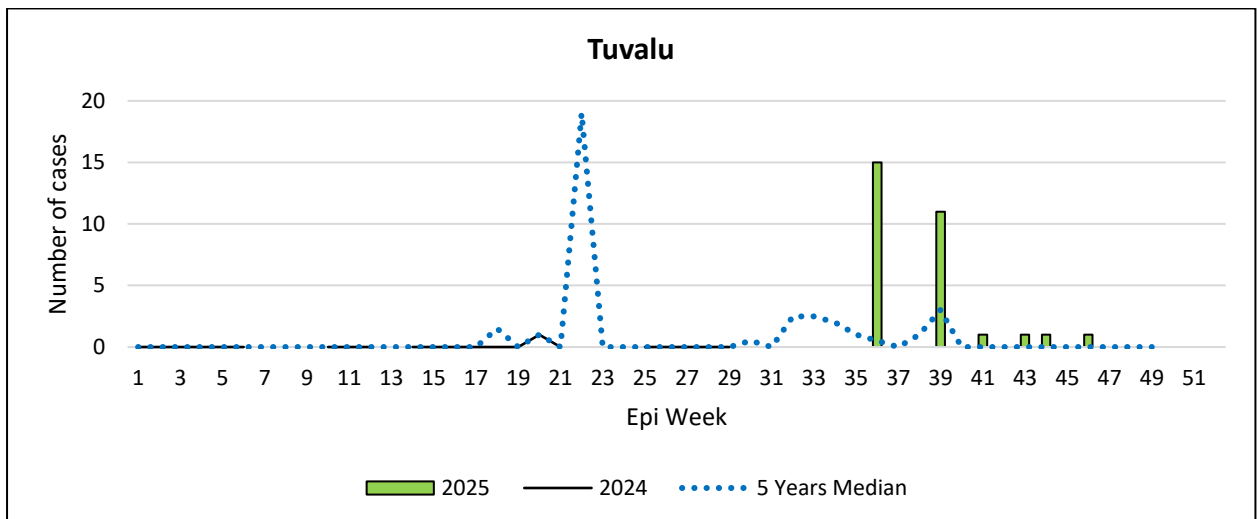
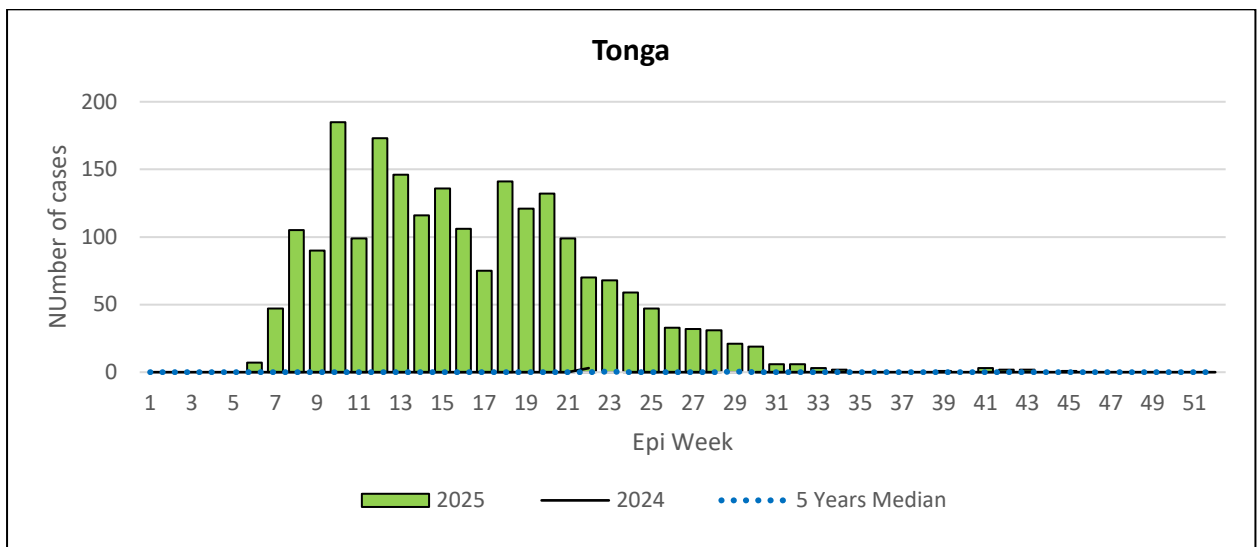
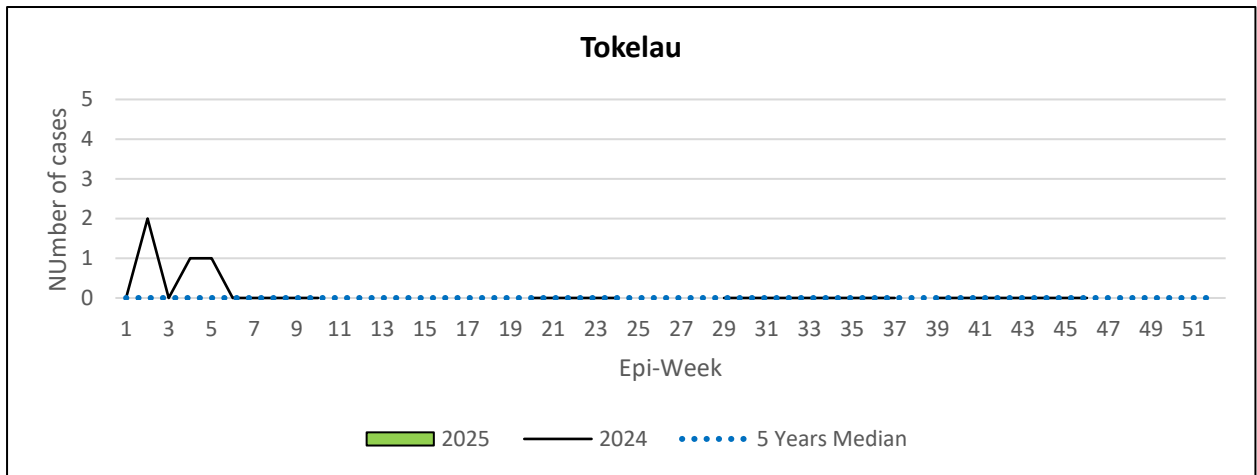


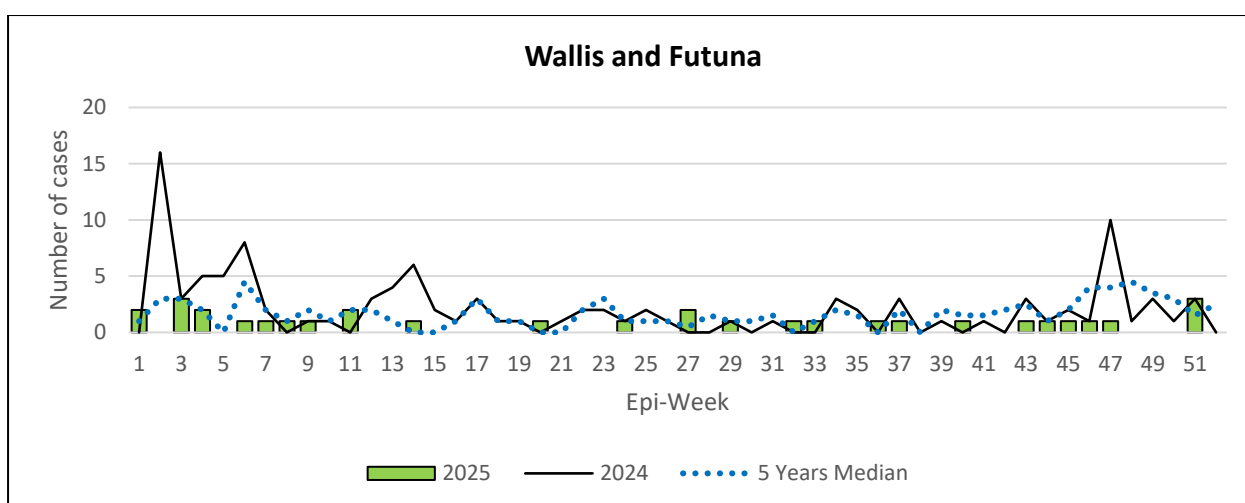
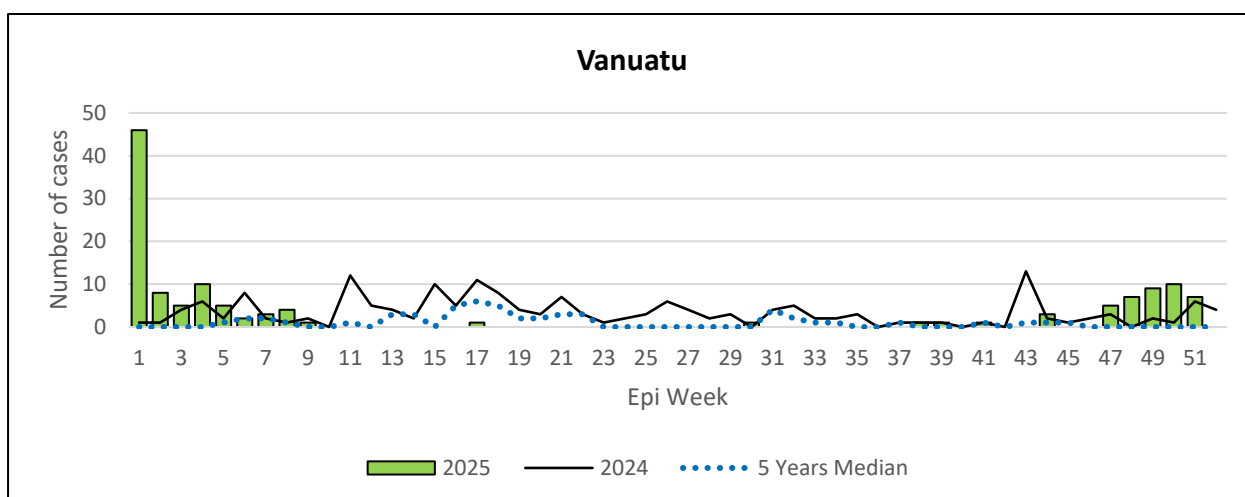












**Figure 13. Weekly reported cases of dengue-like illness (DLI) in Pacific Islands Countries and Areas**

*Source: WHO Division of Pacific Technical Support*

Note: Caution should be taken in interpreting these data as there may be changes in the number of sentinel sites reporting to the Pacific Syndromic Surveillance System (PSSS). Furthermore, the syndromic case definition of DLI may capture cases with non-dengue acute febrile illnesses (AFI) with similar clinical manifestations to dengue. This includes AFI such as chikungunya, influenza, hantavirus, leptospirosis, malaria, measles, paratyphoid and typhoid fevers, scrub typhus, yellow fever, zika, other diseases. The PSSS may also capture dengue cases under ‘prolonged fever’ surveillance. Alert threshold for DLI is twice the average number of cases seen in the previous 3 weeks.

# Annex 1. Summary of dengue case definitions, laboratory sampling and testing methods used for surveillance in Member States

Country	Case definition		Surveillance system	Laboratory sampling and testing method	Reference
	Clinically confirmed case	Laboratory confirmation required	Description		
Australia	Fever, headache, arthralgia, myalgia, rash, nausea and vomiting	Yes	Dengue is a nationally notifiable disease and cases are monitored through the National Notifiable Diseases Surveillance System (NNDSS) indicator-based surveillance system.	<p>Both confirmed and probable cases are nationally notifiable. A confirmed case requires both laboratory definitive evidence and clinical evidence. A probable case requires either laboratory suggestive evidence and clinical evidence and epidemiological evidence, or clinical evidence and household epidemiological evidence.</p> <p>Laboratory definitive evidence:</p> <ul style="list-style-type: none"> <li>- Isolation of dengue virus, or</li> <li>- Detection of dengue virus by nucleic acid testing, or</li> <li>- Detection of NS1 antigen in the blood by EIA, or</li> <li>- IgG seroconversion or significant increase in antibody level or fourfold or greater rise in titre to dengue virus (proof by neutralization or another specific test)</li> <li>- Detection of dengue virus-specific IgM in cerebrospinal fluid, in the absence of IgM to Murray valley encephalitis, West Nile virus/Kunjin, or Japanese encephalitis viruses.</li> </ul> <p>Laboratory suggestive evidence:</p> <ul style="list-style-type: none"> <li>- Detection of NS1 antigen in blood by rapid antigen test, or</li> <li>- Detection of dengue virus-specific IgM in blood</li> </ul> <p>Epidemiological evidence:</p> <ul style="list-style-type: none"> <li>- Exposure between 3 – 14 days prior to onset either in a country with known dengue activity or in a dengue-receptive area in Australia where a locally-acquired or imported case has been documented with onset within a month.</li> </ul>	1

				Household epidemiological evidence: <ul style="list-style-type: none"> <li>- Living in the same house as a locally-acquired case in a dengue-receptive area of Australia within a month of onset in the case and at least one case in the chain of epidemiologically linked cases is laboratory confirmed.</li> </ul>	
<b>Cambodia</b>	<p>Suspected dengue: very high fever at 39-40 degrees celcius for 2-7 days (usually 3-4 days), with 2 or more of the following signs: flushed face, headache, retro-orbital pain, myalgia/arthritis, cutaneous rash, haemorrhagic signs (petechiae, positive tourniquet test), and leucopenia.</p> <p>Probable dengue: signs of suspected dengue plus laboratory test results (see right column) or that the case occurred in an area where the dengue case has been confirmed.</p>	Yes	<p>National Dengue Control Program (NDCP) enhanced sentinel surveillance system</p> <p>Communicable Disease Control (CDC) syndromic surveillance system (CamEWARN).</p> <p>Health Management Information System (HMIS) collects data on confirmed cases and deaths.</p>	<p>Data collected for Cambodia Laboratory Information System (CamLIS), comprised of 32 participating hospital laboratories where NS1 detection is conducted.</p> <p>Laboratory testing: Antibody HI<math>\geq</math> 1/1280 or IgM/IgG positive by ELISA test in convalescence serum</p>	2
<b>China</b>	<p>1) Typical dengue fever can be diagnosed with any of the following conditions:</p> <ul style="list-style-type: none"> <li>- General clinical symptoms of dengue fever, with an epidemiological history (having been to an area where dengue fever is prevalent within 14 days before onset), or living or working in an area where dengue fever cases have occurred within the past month, and with reduced white blood cell count and platelet count (below <math>100 \times 10^9/L</math>)</li> <li>- No epidemiological history, but with a rash, bleeding tendency, and positive IgG or IgM antibodies in a single serum sample.</li> </ul>	No	Reported to the Chinese Centre for Disease Control and Prevention (China CDC) through the Chinese National Notifiable Infectious Disease Reporting Information System (CNNDS).	<p>A clinically diagnosed case with any of the of the following laboratory findings:</p> <ul style="list-style-type: none"> <li>- Isolation of the dengue virus from the serum, cerebrospinal fluid, blood cells, or tissues of an acute-phase patient</li> <li>- Detection of dengue virus gene sequence by RT-PCR or real-time fluorescent quantitative PCR</li> <li>- Detection of dengue virus NS1 antigen in serum from an acute-phase patient</li> <li>- A fourfold or greater increase in specific antibody titer in the convalescent phase compared to the acute phase.</li> </ul>	3. WHO internal communication



	<p>2) Dengue Hemorrhagic Fever can be diagnosed when accompanied by any of the following clinical symptoms:</p> <ul style="list-style-type: none"> <li>- Bleeding tendency, significant bleeding manifestations (such as gastrointestinal bleeding or hemorrhage in the chest, abdomen, or cranium), hepatomegaly, and ascites; and</li> <li>- Laboratory findings including thrombocytopenia (platelet count below <math>100 \times 10^9/L</math>), hemoconcentration (an increase in hematocrit of more than 20% above normal levels or a decrease of more than 20% after fluid resuscitation), and hypoalbuminemia.</li> </ul> <p>3) Dengue Shock Syndrome: Patients with dengue hemorrhagic fever presenting with cold and clammy skin, restlessness, rapid and weak pulse, low blood pressure with a narrow pulse pressure (less than 20mmHg or 2.7kPa), and reduced urine output.</p>				
<b>Indonesia</b>	<p>Confirmed case: Dengue Hemorrhagic Fever (DHF) clinically diagnosed** and/or confirmed by NS1/IgG-IgM Dengue testing and/or PCR. (Cases reported by the Arbovirosis team, Ministry of Health)</p> <p>1) Dengue fever can be diagnosed with any of the following conditions:</p> <ul style="list-style-type: none"> <li>- Bleeding manifestations, leukopenia (Leukocytes <math>\leq 5,000/mm^3</math>), thrombocytopenia (Platelets <math>&lt; 150,000/mm^3</math>), hematocrit increase of 5–10%</li> </ul> <p>2) Dengue Hemorrhagic Fever can be diagnosed when accompanied by any of the following clinical symptoms:</p> <ul style="list-style-type: none"> <li>- Spontaneous bleeding or positive tourniquet test,</li> </ul>	<p>Yes (lab confirmed by NS1/IgG-IgM and /or PCR or clinically diagnosed by blood count laboratory result)</p>	<p>Dengue is a nationally notifiable disease and cases are monitored through the weekly Early Warning Alert and Response System indicator-based and near real time event based surveillance system (Ref EWARS guideline 2024).</p> <p>National Dengue Control Programme (Arbovirosis programme Ministry of Health) collects dan report monthly data on confirmed cases and deaths.</p> <p>National Dengue Control Programme (Arbovirosis Programme Ministry of Health) conduct dengue sentinel surveillance system for serotyping data.</p>	<p>Confirmed dengue cases can be reported based on clinically diagnosed or confirmed NS1/IgG-IgM dengue testing and/or PCR.</p> <p>Confirmed case based on Clinical Diagnosis (Source: Dengue Prevention and Control Guidelines, Ministry of Health, 2017) with the following conditions :</p> <p>Dengue Fever (DF) Clinical diagnosis with bleeding manifestations, Leukopenia (Leukocytes <math>\leq 5,000/mm^3</math>), Thrombocytopenia (Platelets <math>&lt; 150,000/mm^3</math>), Hematocrit increase of 5 – 10%</p> <p>Dengue Hemorrhagic Fever (DHF), Clinical diagnosis with spontaneous bleeding or positive</p>	4, 5

	<p>thrombocytopenia (Platelets <math>\leq</math> 100,000 /mm<sup>3</sup>), evidence of plasma leakage marked by one or more of the following*</p> <p>* Hematocrit increase / hemoconcentration <math>\geq</math> 20% from baseline, pleural effusion, ascites, or hypoproteinemia / hypoalbuminemia.</p> <p>3) Dengue Shock Syndrome: Patients with dengue hemorrhagic fever presenting with signs and symptoms of hypovolemic shock, either compensated or decompensated.</p>			<p>tourniquet test, Thrombocytopenia (Platelets <math>\leq</math> 100,000 /mm<sup>3</sup>), Evidence of plasma leakage marked by one or more of the following: Hematocrit increase / hemoconcentration <math>\geq</math> 20% from baseline, Pleural effusion, ascites, or hypoproteinemia / hypoalbuminemia</p> <p>Dengue Shock Syndrome (DSS) Clinical diagnosis fulfilling DHF criteria along with signs and symptoms of hypovolemic shock, either compensated or decompensated.</p>	
<b>Lao People's Democratic Republic</b>	WHO dengue case classification (2009) †	No	National Surveillance System for Notifiable Selected Diseases, indicator-based surveillance system that consists of passive weekly reports of clinically suspected cases, on admission, from all health-care facilities across the country.		6
<b>Malaysia</b>	WHO dengue case classification (2009) †	Yes	National Dengue Surveillance System, indicator-based surveillance system	All suspected cases are to be tested by the following laboratory tests: Rapid Combo Test (RCT) (NS1, IgM, IgG), Dengue Antigen and Serology tests by ELISA, Dengue Viral RNA Detection (Real time RT-PCR), Viral Isolation	7
<b>Philippines</b>	WHO dengue case classification (2009) †	Yes	Philippine Integrated Disease Surveillance and Response (PIDSR), indicator-based surveillance system. Reporting delays of 2-3 weeks, making comparison of current weekly and cumulative figures with previous years difficult.	Confirmed dengue is a suspect case with positive (+) viral culture isolation and/or PCR. NS1 (+), IgM is used to identify probable dengue.	8, 9, 10
<b>Singapore (endemic)</b>	Fever, headache, backache, myalgia, rash, abdominal discomfort and thrombocytopenia and laboratory testing (see right column)	Yes	Dengue is a legally notifiable disease in Singapore and notifying the Ministry of Health should not be later than 24 hours from the time of diagnosis.	Laboratory confirmation is done using standard diagnostic tests for the detection of dengue NS1 antigen, IgM and IgG, or RT-PCR.	11, 12
<b>Viet Nam (endemic)</b>	Acute onset of fever continuously lasting from 2-7 days AND at least 2 of the following: haemorrhagic manifestation /presentation; headache, loss of appetite, nausea, vomiting; rash; muscle pain, joint pain, orbital pain; lethargy; abdominal pain.	No		As per the MOH dengue surveillance guideline, in routine surveillance MAC-ELISA is conducted for at least 7% and virus isolation is conducted for at least 3% of clinical cases. In an outbreak, at least 5 to 10 suspected cases are tested.	13

Pacific Island Countries	WHO dengue case classification (2009) †	No	Pacific Syndromic Surveillance System	Confirmed case: Isolation of dengue virus or detection of dengue-specific antigen or antibodies in tissue, blood, CSF or other body fluid by an advanced laboratory test	14
--------------------------	---	----	---------------------------------------	--	----

Only the minimum criteria required for fulfilling a clinical dengue case definition are included here; additional signs and symptoms required for more severe forms are not listed.

† **A probable dengue case** is defined as any case living in or travel to dengue endemic area with fever and two or more of the following: nausea, vomiting, rash, aches and pains, positive tourniquet test, leucopenia and any warning sign. A case with warning signs is defined as a clinically diagnosed case with any of the following: abdominal pain or tenderness, persistent vomiting, clinical fluid accumulation, mucosal bleed, lethargy, restlessness, liver enlargement > 2 cm and increase in haematocrit concurrent with rapid decrease in platelet count. **Severe dengue** is defined as severe plasma leakage leading to any of the following: shock, fluid accumulation with respiratory distress OR severe bleeding as evaluated by clinician OR severe organ involvement of liver (aspartate amino transferase or alanine amino transferase  $\geq$  1000), central nervous system (impaired consciousness) or heart and other organs.<sup>15</sup>

#### References:

1. Australian Government Department of Health AGDo. Dengue virus infection surveillance and case definition [updated 14 June 2022 and 1 January 2018 respectively] Available from: <https://www.health.gov.au/diseases/dengue-virus-infection>, and <https://www.health.gov.au/sites/default/files/documents/2022/06/dengue-virus-infection-surveillance-case-definition.pdf>
2. Cambodia Ministry of Health NCfP, Entomology and Malaria Control. National Guideline for Clinical Management of Dengue, 2018. 2018. Available from: [https://niph.org.kh/niph/uploads/library/pdf/GL055\\_National\\_guideline\\_for\\_CIM\\_Dengue.pdf](https://niph.org.kh/niph/uploads/library/pdf/GL055_National_guideline_for_CIM_Dengue.pdf).
3. China CDC. Dengue surveillance guideline. Available from: [https://www.chinacdc.cn/jkzt/crb/zt/dgr/jszl\\_2235/201810/P020181010391462131548.pdf](https://www.chinacdc.cn/jkzt/crb/zt/dgr/jszl_2235/201810/P020181010391462131548.pdf)
4. [Early Warning alert and Response System Ministry of Health, 2024.](#)
5. [Dengue Dengue Prevention and Control Guidelines, Ministry of Health, 2017.](#)
6. Khampapongpane B, Lewis HC, Ketmayoon P, Phonekeo D, Somoulay V, Khamsing A, et al. National dengue surveillance in the Lao People's Democratic Republic, 2006-2012: epidemiological and laboratory findings. Western Pac Surveill Response J. 2014;5(1):7-13. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/24734212>.
7. Ministry of Health Malaysia DCD. Case definitions for infectious diseases in Malaysia. 2017. Available from: [https://www.moh.gov.my/moh/resources/Penerbitan/Garis%20Panduan/Pengurusan%20KEsihatan%20&%20kawalan%20pykit/Case\\_Definition\\_Of\\_Infectious\\_Disease\\_3rd\\_Edition\\_2017.pdf](https://www.moh.gov.my/moh/resources/Penerbitan/Garis%20Panduan/Pengurusan%20KEsihatan%20&%20kawalan%20pykit/Case_Definition_Of_Infectious_Disease_3rd_Edition_2017.pdf)
8. Secretary PDoHOot. Guidelines for the Nationwide Implementation of Dengue Rapid Diagnostic Test (RDT), Administrative order No.2016-0043. 2016(2016-0043).
9. Secretary PDoHOot. Revised Dengue Clinical Case Management Guidelines 2011, Administrative order No.2012-0006. 2012 22 March 2012. Report No.
10. Diseases SNCfI. Diseases and Conditions, Dengue 2020 [updated 14 September 2020. Available from: <https://www.doh.gov.ph/Health-Advisory/Dengue>.
11. National Centre for Infectious Diseases, Dengue. Available from: <https://www.ncid.sg/Health-Professionals/Diseases-and-Conditions/Pages/Dengue.aspx>
12. National Environment Agency. Surveillance and Epidemiology Programme [updated 21 April 2023]. Available from: <https://www.nea.gov.sg/corporate-functions/resources/research/surveillance-and-epidemiology-programme#Ehi%20Diagnostics%20Unit>
13. Viet Nam Ministry of Health VNMo. Circular 54/2015 / TT-BYT 2015 [updated 26 April 2016. Available from: <https://syt.thuathienhue.gov.vn/?gd=27&cn=108&tc=3993>.
14. Pacific Islands Outbreak Manual. Available from: <https://www.pphsn.net/resources/outbreak-manual/>
15. WHO dengue outbreak toolbox. Available from: [https://www.who.int/docs/default-source/outbreak-toolkit/updates-documents\\_july-5/dengue-outbreak-data-collection-toolbox---inis-3-july-1.pdf?sfvrsn=ec3ffcf3\\_2](https://www.who.int/docs/default-source/outbreak-toolkit/updates-documents_july-5/dengue-outbreak-data-collection-toolbox---inis-3-july-1.pdf?sfvrsn=ec3ffcf3_2)