



Dengue Situation Report

Epi-week 8: 19 – 25 February 2024

Date of report: 26 February 2024

Email: surveillance@health.gov.ws

Prepared by: National Health Surveillance & IHR Division

Tel: 66506/66507

Case definition and alert threshold

Alert threshold: Twice the average number of cases seen in the previous 3 weeks

Case definition:

Suspected case (clinical case definition):

Acute fever $\geq 38^{\circ}\text{C}$ for at least 2 days, AND two or more of the following:

- Anorexia and nausea
- Aches and pains
- Rash
- Low white blood cell count
- Warning signs, including:
 - Abdominal pain or tenderness
 - Persistent vomiting
 - Mucosal bleeding
 - Liver enlargement $>2\text{cm}$ below costal margin
 - Clinical evidence of fluid accumulation
 - Lethargy, restlessness
 - Laboratory: increase in hematocrit, rapid decrease in platelet count

Confirmed case

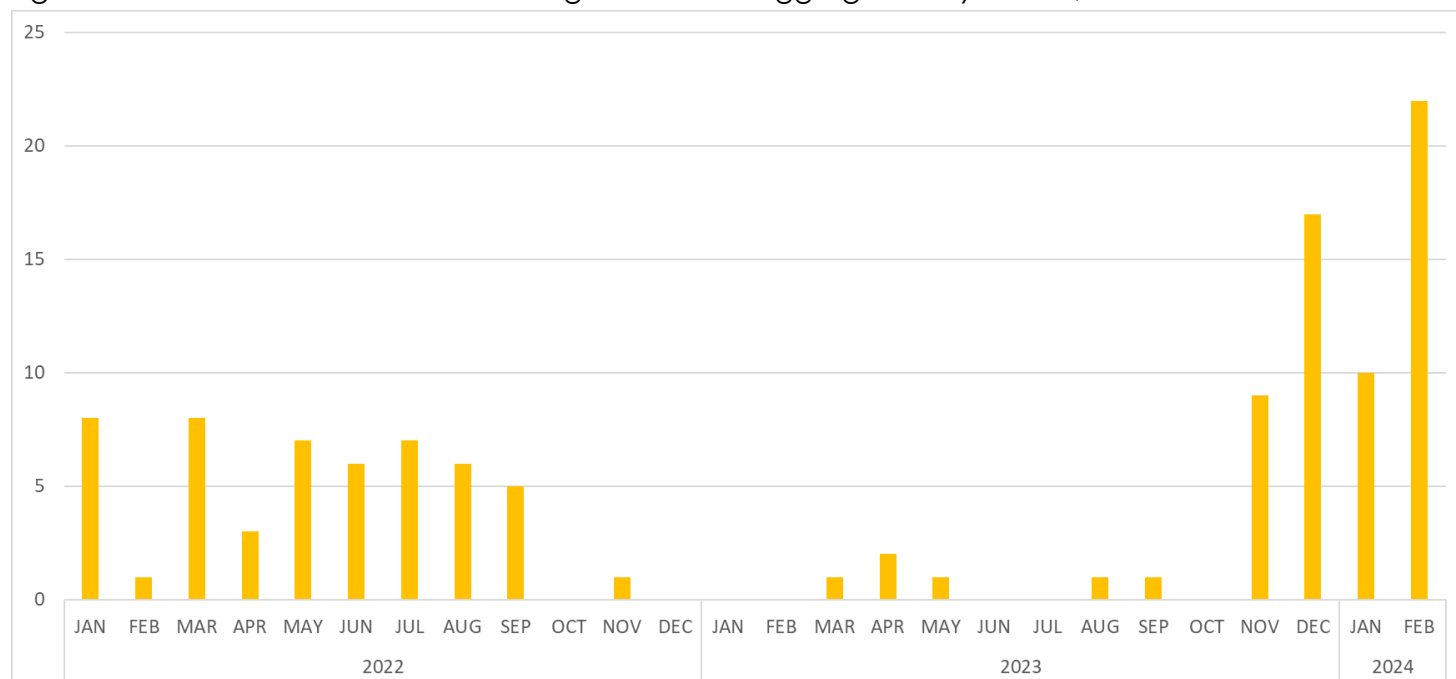
Isolation of dengue virus or detection of dengue-specific antigen or antibodies in tissue, blood, CSF or other body fluid by an advanced laboratory test

Highlights from data collected through laboratory surveillance

- Since November 2023, we continue to observe a rise in dengue lab-confirmed cases (see figure 1)
- The number of dengue cases in Epi-week 7: 12-18 February has now exceeded the alert threshold (see figure 2)
- The most affected age group are those aged 60 years and over
- The most affected region is North West of Upolu (NWU); though there are cases in all regions
- Majority of those affected presented at the TTM Hospital where most of the test requests were from.
- From the case investigations, no clear epidemiological links were identified.



Figure 1. Number of lab-confirmed dengue cases disaggregated by month, 2022 to date



Source: Clinical laboratory serology data

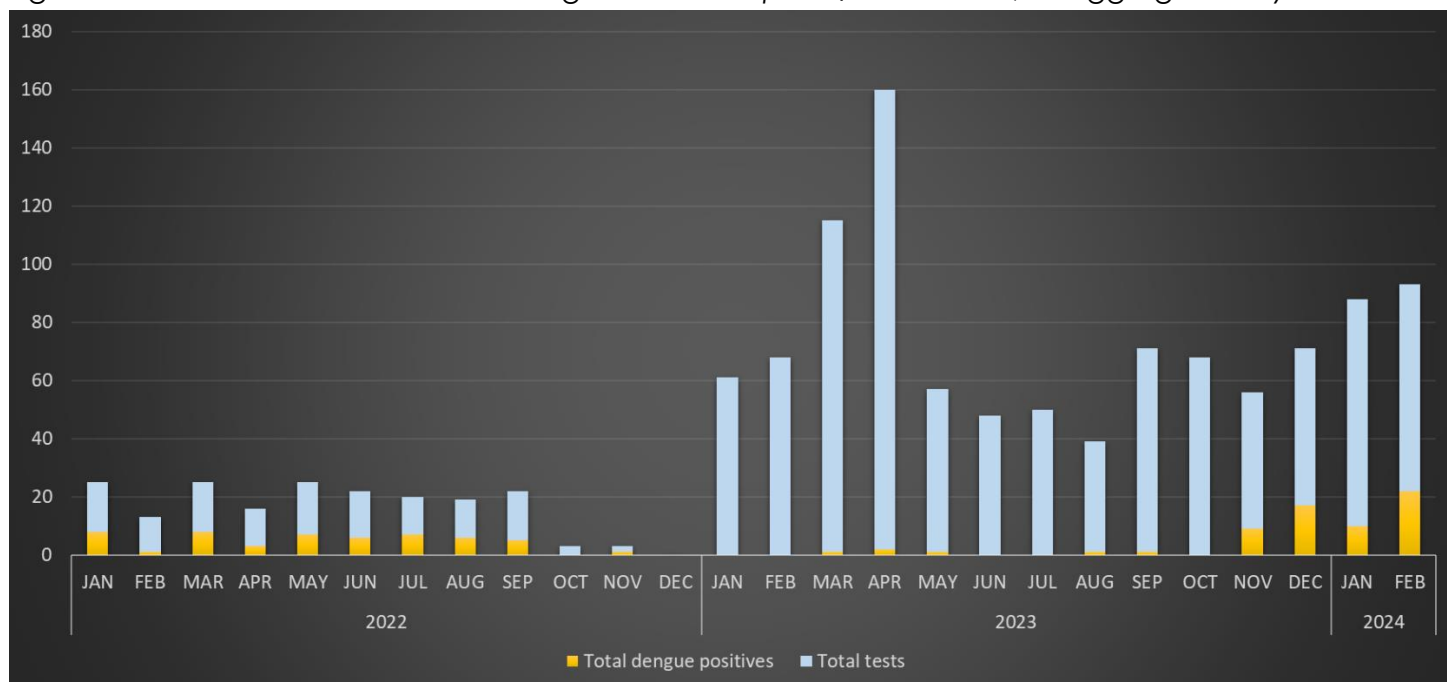
Figure 2. Number of lab-confirmed dengue cases by epi-week against the alert threshold



Source: Clinical laboratory serology data

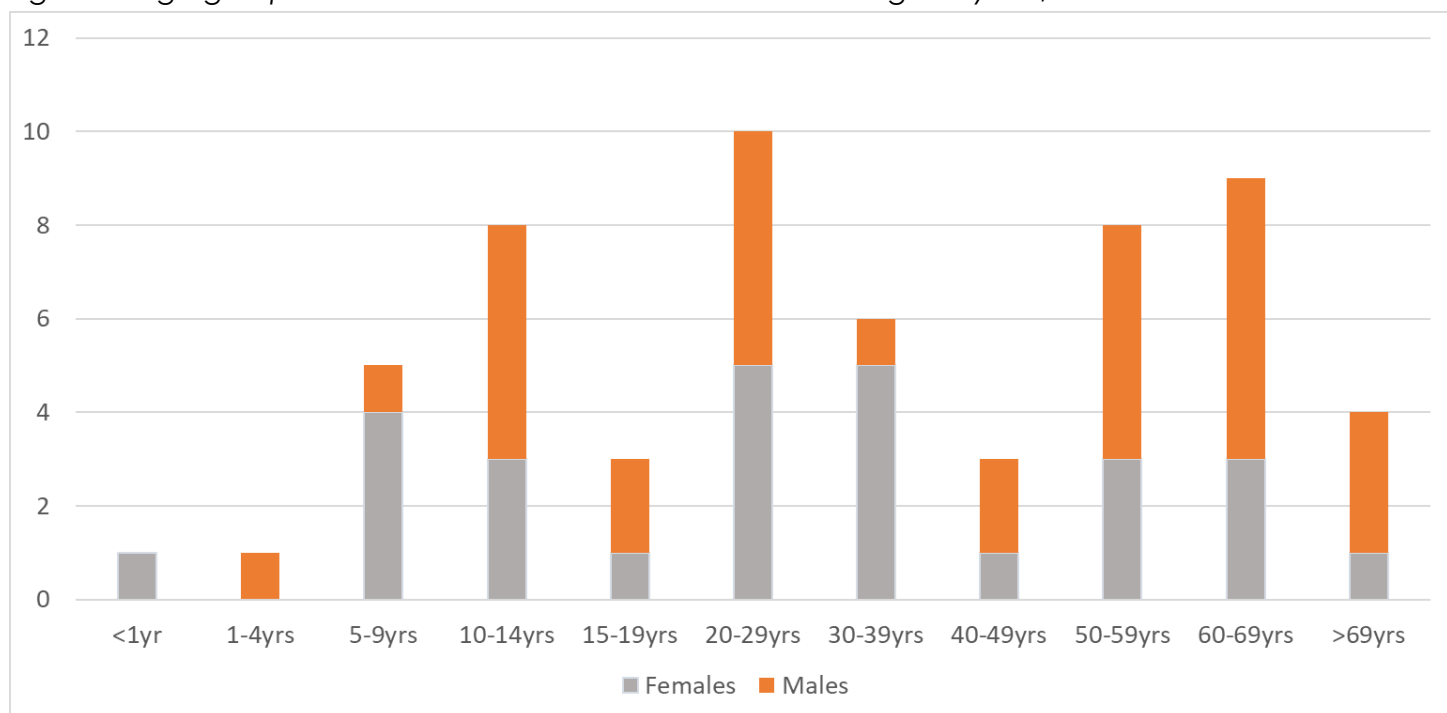


Figure 3. Number of lab-confirmed dengue vs test requests/conducted, disaggregated by month



Source: Clinical laboratory serology data

Figure 4. Age group distribution of lab-confirmed cases of dengue by sex, Nov 2023 to date



Source: Clinical laboratory serology data



Actions taken

- In November 2023, confirmed dengue cases that were NS1 and/or IgM positive were detected through laboratory surveillance. Initial investigations for individual cases were carried out. Unfortunately, due to limited information provided, 5 of 9 were successfully investigated.
 - The investigations found that the cases were sporadic and were not linked to a single source or to each other.
 - From the interviews with the cases, majority admitted to having mosquito breeding grounds around their homes eg; bromeliad plants and old tyres. The case reports were sent to Vector & Sanitation Team for environmental health assessment and other appropriate action.
- In December 2023, only one new case detected. Dengue data was presented to the Communicable Disease Control Committee (CDCC) meeting. Resolutions of the meeting were to:
 - Boost awareness on all media outlets eg advertisements, talk shows, etc
 - Circulate memorandum to clinicians to test all symptomatic patients presenting with dengue-like illness (DLI)
 - Requested a plan from the Vector Control team on control strategies
- In January 2024, Clinical Lab updated the serology database with 10 new cases and recorded 16 additional cases in December (delayed reporting). Of the 26, one case was successfully investigated due to data limitations. Findings were the same as above. Additionally, there was a notable amount of mosquitoes observed in the wards where the cases are admitted. Advised to isolate the case away from other patients.
- In February 2024, the dengue cases are gradually increasing and this data was presented in the CDCC meeting. Resolutions were to:
 - Call an Integrated Vector Control Committee (IVCC) meeting to plan out collaborated control strategies and interventions.
 - Consider decentralizing dengue rapid test kits to the peripheral health facilities

Recommendations – immediate

- Organize the IVCC meeting to discuss and formulate collaboratively with other sectors a feasible and comprehensive control strategy and interventions for immediate implementation
- Disseminate a public notice to inform the general public of a potential outbreak and provide recommendations for their prevention and awareness. This is critical given the rainy season where favorable conditions for mosquito breeding sites may be enhanced, increasing exposure to mosquito-borne diseases such as dengue fever.
- Continue to boost media awareness on preventative measures including talk shows on all media outlets
- Decentralize dengue testing by distributing rapid test kits to the peripheral health facilities
- Spray all health facilities especially TTM hospital as this is where most of the positive cases are admitted
- Clinicians to report and notify dengue like illnesses through syndromic surveillance and to test all symptomatic and suspected dengue patients

Recommendations – long term

- IVCC to be more proactive on strategizing and implementing of control measures in anticipation of vulnerable and favorable weather conditions increasing mosquito populations resulting in potential outbreaks of mosquito-borne diseases

