On Friday, December 7, 2018, the Palau Ministry of Health alerted the public of an outbreak of dengue fever following the first-ever laboratory confirmation of two cases with dengue serotype 3. This poses a significant concern for public health as the whole population is potentially vulnerable to infection. In response to the outbreak, the Ministry of Health activated its emergency response team on December 7, 2018. The team has been tasked with raising community awareness of the outbreak and dengue prevention measures, conducting disease surveillance and reporting, strengthening environmental control measures, and ensuring adequate resources are available to combat the outbreak.

Between September 2–8, 2019, there were 16 new cases reported. This brings the total from December 1, 2018 - September 8, 2019 to 586 cases. There have been two deaths attributed to dengue infection during this outbreak.

### Outbreak Overview

- September 2–8, 2019: 16 new cases reported. This brings the total from December 1, 2018 - September 8, 2019 to 586 cases.
- There have been two deaths attributed to dengue infection during this outbreak.

### Demographics

- Age range = 0–88 years
- Mean age = 29 years
- Median age = 24 years
- The majority of cases during this outbreak have been Palauan.

### Cases by State and Koror Hamlets

#### Cases by State

- Ngerkebesang: 300 cases
- Peleliu: 200 cases
- Southern Rock Islands: 100 cases
- Hatohobei: 60 cases
- Sonsorol: 40 cases
- Airai: 30 cases
- Melekeok: 20 cases
- Ngadzollai: 10 cases
- Ngerulmud: 5 cases
- Kayangel: 3 cases
- Ngeremelchok: 3 cases
- Ngaraard: 3 cases
- Ngardmau: 2 cases
- Ngiwal: 2 cases
- Ngatpang: 1 case
- Koror: 1 case

#### Cases by Koror Hamlets

- Ngerchehsang: 1 case
- Ngerchehsang: 1 case
- Pau searches: 1 case
- Pau searches: 1 case
- Ngerchehsang: 1 case
- Ngerchehsang: 1 case
- Ngerchehsang: 1 case
- Ngerchehsang: 1 case
- Ngerchehsang: 1 case
- Ngerchehsang: 1 case

### Epi Curve

#### Dengue Cases by Week of Diagnosis

- December 3, 2018 - September 8, 2019

### Symptom Profile of Cases

- Fever
- Chills
- Headache
- Body pain
- Joint pain
- Loss of appetite
- Altered taste sensation
- Nausea
- Vomiting
- Cough
- Eye pain
- Abdominal pain
- Rash

### Education and Prevention

- The Belau National Hospital (BNH) Laboratory and laboratories at three private clinics in Koror have the capacity to test symptomatic patients for dengue via a rapid diagnostic test kit, SD Bioline Dengue Duo (Dengue NS1 Ag + IgG/IgM) by Abbott.
- The BNH Lab continues to send a sample of serum specimens to the Hawaii State Laboratory (HSL) for confirmation and serotyping for monitoring.

### Response Measures

There was a slight decrease in the number of cases reported in August compared to July. Although the majority of cases in August were residents of Koror state, there were a considerable number of cases from outlying states including Airai, Melekeok, Ngapang, and Ngeraard. There have been cases reported in 13 out of 16 states. Another death attributed to dengue infection occurred during the last reporting period, bringing the total number of fatalities to two.

The Ministry of Health Dengue Response Team is focusing its efforts on increasing community participation in clean-up activities through partnership with state governments and other community organizations. Various activities during September, Palau’s National Preparedness Month, will promote dengue awareness and prevention including the preparedness parade and fair, roadside campaign, school outreach, and state visits.

The Team continues to provide updates on the dengue outbreak to the community through a weekly radio spot at the national radio station, dissemination of print material about dengue prevention to the community.

The Communicable Disease Unit and the DEN Vector Control Program continue to investigate all reported cases of dengue fever and implement vector control measures.

The Palau Ministry of Health promotes the dengue 35 messages:
- Search and eliminate mosquito breeding sites.
- Self-protect by wearing insect repellent and ensuring a mosquito-free environment.
- Seek early consultation if you show severe signs or symptoms of dengue.

The next report for epi week 37 will be released on Tuesday, September 17, 2019.

**Contact:** Tmong Udui  tmong.udui@palauhealth.org  (680) 488-4772/4773

**Epi Week 36: September 2 – September 8, 2019**