Dengue 3 Outbreak, Palau, December 2018 – November 2019
Epi Week 45: October 28 – November 10, 2019

Outbreak Overview
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 November 4 - 10, 2019, there were 7 new cases reported. This brings the total number of cases for the month of November 2019 to 11 and from December 1, 2018 – November 10, 2019 to 684 cases. There have been two deaths attributed to dengue infection during this outbreak.

Cases by State and Koror Hamlets

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

Ethnicity Count %
Palauan 577 84%
Bangladeshi 37 5%
Filipino 23 3%
Chinese 19 3%
Other 28 4%
TOTAL 684

Symptom Profile of Cases
# of Cases with Each Symptom (Cases with available data = 340)

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

0 50 100 150 200 250 300

Lab Testing
• 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/M) by Abbott.
• Confirmatory testing and serotyping is done by the Hawaii State Laboratory (HSL) and Guam Public Health Laboratory (GPHL).
• There have been 225 serotyped cases of DENV-3. The last recorded cases of DENV-2 in Palau were from November of 2018.
• During week 37, two imported cases of dengue were identified with travel history to Bangkok, Thailand. Specimens were referred to Guam Public Health Laboratory (GPHL) for serotyping, which confirmed infection with DENV-1. No additional cases of dengue serotype 1 have been identified since.

Response Measures
Seven (7) cases were reported during the past week, with four residing in Koror (Ngerchebesang (2) and Ngerchommel (2) hamlets), one from Ngaremlengui, one from Ngapal and one visitor who is still pending investigation.

The Ministry of Health Dengue Response Team continues to promote efforts to increase community involvement in mosquito source reduction activities through partnership with state governments and other community organizations. Outreach activities aim to promote the dengue prevention message in schools and the general community in advance of the upcoming holidays.

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

The Communicable Disease Unit and the DEH 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 3S 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 46 will be released on Tuesday, November 19, 2019.

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Epi Curve

Dengue Cases by Week of Diagnosis
December 1, 2018 – November 10, 2019

Lab Testing

Response Measures

Epi Curve

Dengue Cases by State and Koror Hamlets

Demographics

Symptom Profile of Cases

Outbreak Overview

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