Dengue 3 Outbreak, Palau, December 2018 – January 2019
Report Date: February 5, 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 mosquito control measures, and ensuring adequate resources are available to combat the outbreak.

Between January 28 – February 3, 2019, there were 6 new lab-confirmed cases reported. This brings the total from December 1, 2018 to February 3, 2019 to 77 cases.

There have been no deaths attributed to dengue infection during this outbreak.

Demographics

- Age Range = 3 – 88 years
- Mean age = 33 years
- Median age = 29 years
- Male:Female ratio= 126

The majority of cases during this outbreak have been Palauan.

- Ethnicity
  - Palaun: 58 cases (75.3%)
  - Bangladeshi: 9 cases (11.7%)
  - Chinese: 4 cases (5.2%)
  - Filipino: 3 cases (3.9%)
  - Other Asian: 3 cases (3.9%)
  - TOTAL: 77 cases

Symptom Profile of Cases

<table>
<thead>
<tr>
<th>Symptom</th>
<th># of Cases</th>
<th># of Cases with available data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever</td>
<td>58</td>
<td>74</td>
</tr>
<tr>
<td>Headache</td>
<td>22</td>
<td>28</td>
</tr>
<tr>
<td>Chills</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Body pain</td>
<td>39</td>
<td>49</td>
</tr>
<tr>
<td>Joint pain</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Loss of appetite</td>
<td>20</td>
<td>26</td>
</tr>
<tr>
<td>Altered taste sensation</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Vomiting</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Nausea</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Eye pain</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Cough</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Abdominal pain</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Rash</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Cases by State and Koror Hamlets

- Koror: 58 cases (75%)
- Airai: 12 cases (16%)
- Aimelik: 2 cases (3%)
- Ngarchelong: 2 cases (3%)
- Mokilok: 2 cases (3%)
- Ngereemngui: 1 case (1%)
- TOTAL: 77 cases

Epicurve

- The Belau National Hospital (BNH) Laboratory and 3 private clinics on-island continue to screen symptomatic patients for dengue with a rapid diagnostic test kit.
- The BNH Lab continues to send serum specimens to Hawaii State Laboratory (HSL) for confirmation and serotyping.
- 17 specimens were sent to HSL on January 30, 2019.
- The last recorded cases of DENV-2 were in November of 2018. Since the beginning of the outbreak, there have been 47 serotyped cases of DENV-3.

Lab Testing

- The Communicable Disease Unit and the DEH Vector Control Program continue to investigate reported cases of dengue fever and implement vector control measures.
- The Ministry of Health’s community dengue prevention 3S Program (Self-protection, Search and Eliminate, Self-reporting) is continuing efforts to increase community awareness on the dengue outbreak and prevention measures through:
  - Weekly radio talk shows at the national radio station
  - Dissemination of print material about dengue prevention to the community
  - Development of dengue prevention videos for public consumption that target young adults
  - Utilizing public forums to spread the prevention message.

Response Measures

- The next report will be released on Tuesday, February 12, 2019.

Report Date: February 5, 2019

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