

# American Samoa UHC Dengue Situation Report

Epi Week 43 (October 21 – 27, 2018)

## Activity Updates and Resource Needs

### Epidemiology

#### Activities & General Updates

This Report covers the period between September 22 to October 25, 2018.

- Am. Samoa Department of Health Laboratory continue to send serum samples, from patients with symptoms characteristic of a flavivirus infection, weekly to Hawaii State Lab for Trioplex rRT PCR testing.
- Am. Samoa have not seen any ZIKV PCR positive cases since June 2016. From Sep 22 – Oct 25, Hawaii State Lab (HSL) released 93 results for samples tested via ZIKA IgM MAC ELISA, **23 samples were IgM positive**. Because of high cross reactivity between Zika and Dengue in ELISA tests, Am. Samoa is currently tracking only PCR results.
- Am. Samoa continue to see a **decline** in the ratio of samples that test positive for Dengue Virus infection. From Sep 22 to Oct 25, HSL released 109 results for samples tested via RT-PCR, of which 11 were confirmed positive. However, from Oct 14 – 28, Hawaii State Lab release results for 33 samples tested via Trioplex rRT- PCR, all were negative.
- **Am. Samoa has completed its Mass Drug Administration (MDA) campaign to eliminate Lymphatic Filariasis (LF)**. After 5 weeks of MDA activities, the one-time three drug regimen (Albendazole, Ivermectin, and Diethylcarbamazine) were administered via Directly Observed Therapy (DOT), to roughly 29,700 individuals who provided a signed consent form. With the 2010 US Sense population estimates as denominators, it was estimated that 56% of the total population participated.

#### Next Steps

- Discuss with CDC's Career Epidemiologist Field Officer: Pacific Region possibility of declaring the Dengue 2 outbreak "over".
- MDA campaign to eliminate LF coverage assessment survey.

#### Resource Needs/Requests of PHEP/ELC

- N/A

### Laboratory Testing

#### Activities & General Updates

- From Sep 22 – Oct 25, 2018, **103 serum samples were sent to Hawaii State Lab** for Trioplex rRT-PCR testing for Zika, Dengue, and Chikungunya (Selection criteria: Any two symptoms of fever, rash, arthralgia, myalgia, headache, conjunctivitis)
- For Sep 22 – Oct 25, 2018) Hawaii State Lab released 109 results **for samples tested via Trioplex PCR Assay, 11 samples test PCR positive for Dengue 2.**
- **However, For EpiWeek 43 (Oct 21 – 27, 2018) Hawaii State Lab release 18 results for Samples tested via Trioplex PCR, all results were negative.**
- Hawaii State Lab released results for Dengue serotyping. Only Dengue Type 2 detected among all PCR positive samples.
- From March 1, 2017 to October 25, 2018:
  - **932 Dengue PCR positives (Hawaii State Lab)**
  - 130 Rapid Dengue Test kits: positive NS1 antigen (LBJ Lab)
  - 33 PRNT Positive\*

*\*Note: PRNT counts may vary as confirmatory PRNT test results are received from Ft. Collins*

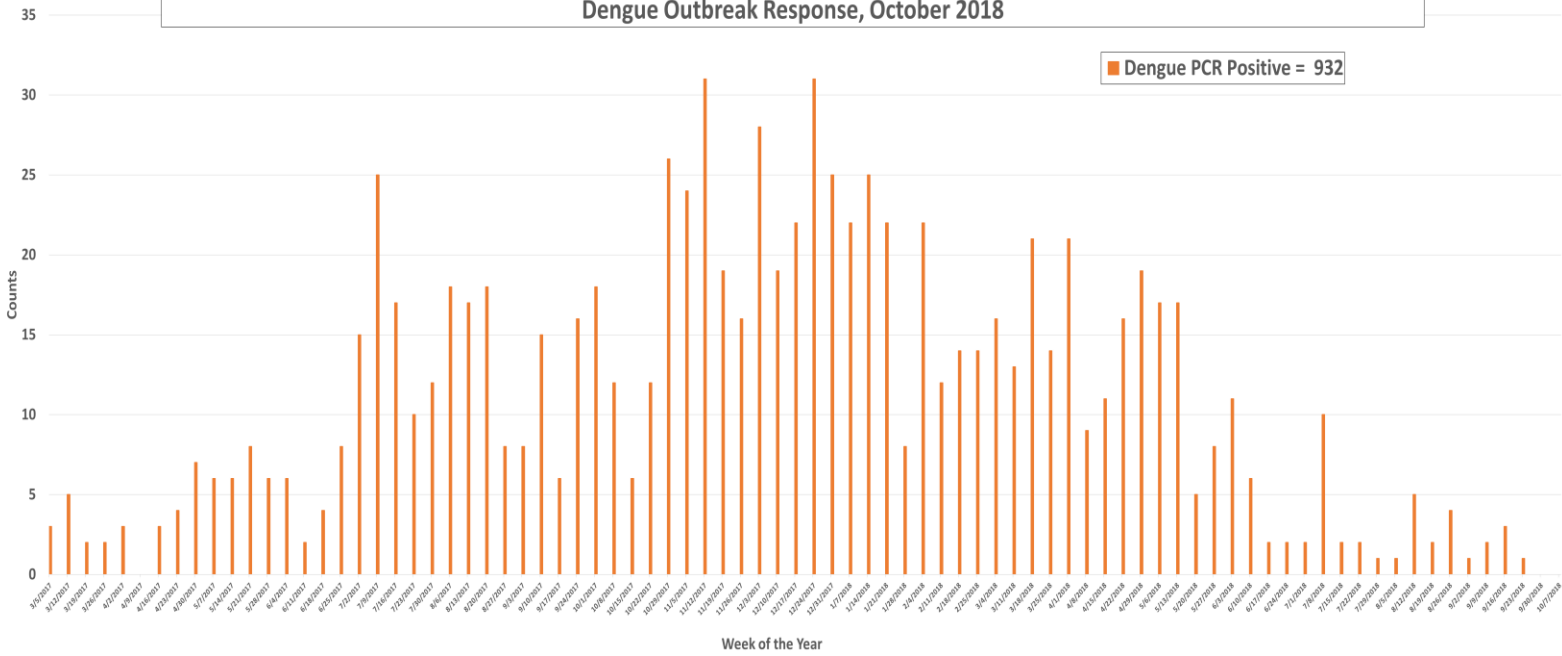
#### Next Steps

#### Resource Needs/Requests of PHEP/ELC

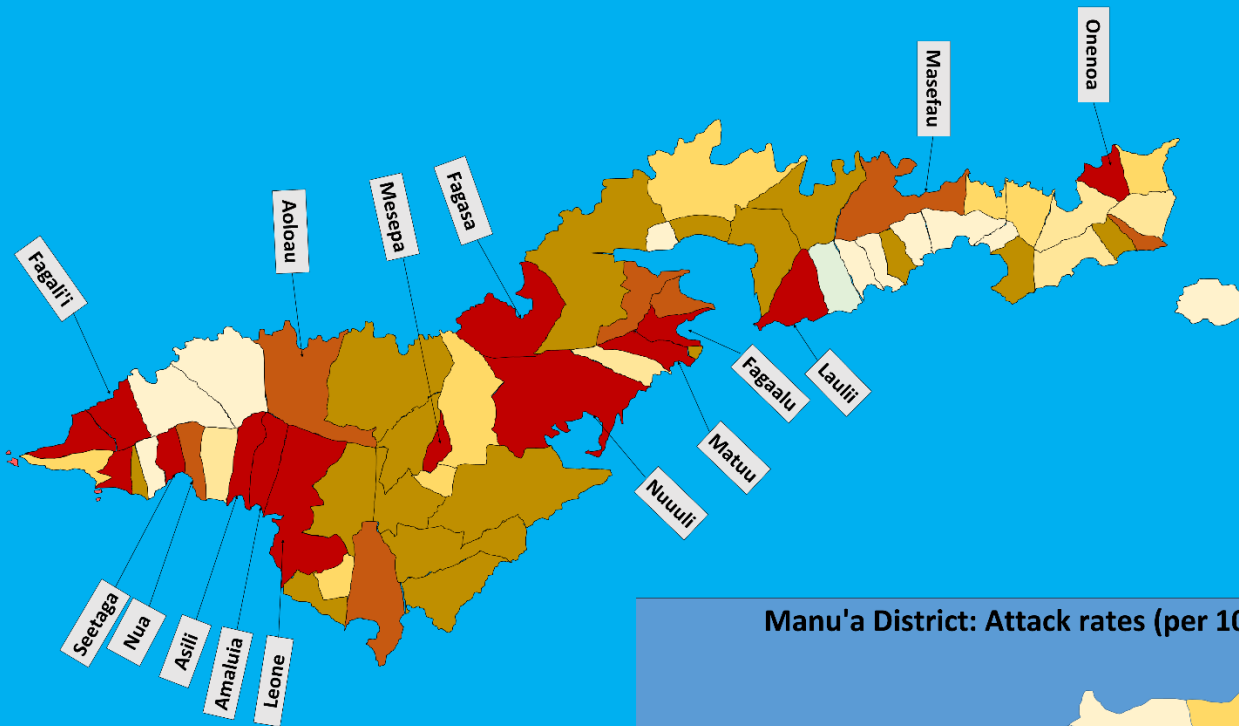
- Still awaiting results for dry spot testing.

**Epidemiologic data for American Samoa-UHC Weekly Report – Week 43 (Oct 21 – 27, 2018)**

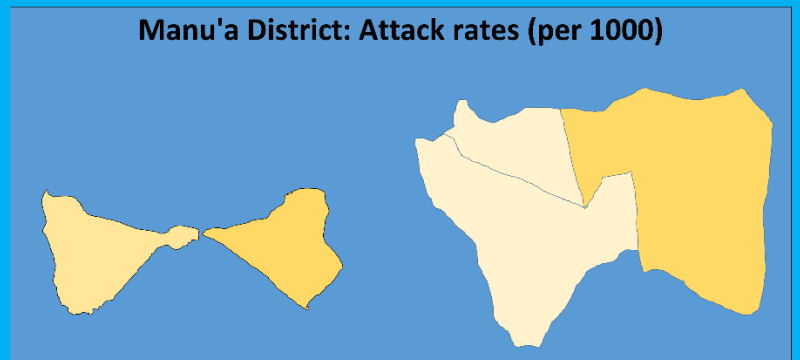
Counts of Triplex PCR Positive Dengue Patients per week, by week of symptom onset, March 2017 - October 2018, Am. Samoa  
Dengue Outbreak Response, October 2018



**Tutuila Island: Attack rates (per 1000) by Village**



**Manu'a District: Attack rates (per 1000)**



**Attack Rate Scale**  
(Per 1000 individuals)

0 - 4.9	5 - 9.9	10 - 14.9	15 - 19.9	20 - 24.9	≥25
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