



Dengue-Like Illness in Republic of the Marshall Islands, May 21 – August 23, 2019

Report Date: August 23, 2019



Outbreak Overview

First cases: Index case identified in Ebeye, no travel history. Had negative rapid test result. Next suspect case in Ebeye identified on June 24 with + NS1 test. There was a rapid increase in epidemic from that point. First case in Majuro, a traveler from Ebeye, currently residing in Jenrok, detected on August 15 with multiple additional cases among non-travelers identified the following week (27 cases in Majuro, including 8 NS1+ and 2 with travel history from Ebeye). 95 patients hospitalized, one dengue hemorrhagic fever patient evacuated out-of-country and no deaths to date.

Response: EpiNet team in Ebeye and the RMI national EpiNet teams were both activated on July 16. Three response goals currently: 1) slow spread in Ebeye and Majuro; 2) Prevent spread to outer islands; 3) assure excellent clinical care- maintain 0 deaths.

Case Definitions (based on PPHSN):

Suspected case: Acute fever > 2 days with **two or more** of the following: anorexia and nausea; aches and pains; rash; low white blood cell count; tourniquet test positive; warning signs (*abdominal pain or tenderness; persistent vomiting; mucosal bleeding; liver enlargement > 2 cm; fluid accumulation; lethargy, restlessness; increase in hematocrit with decrease in platelets*).

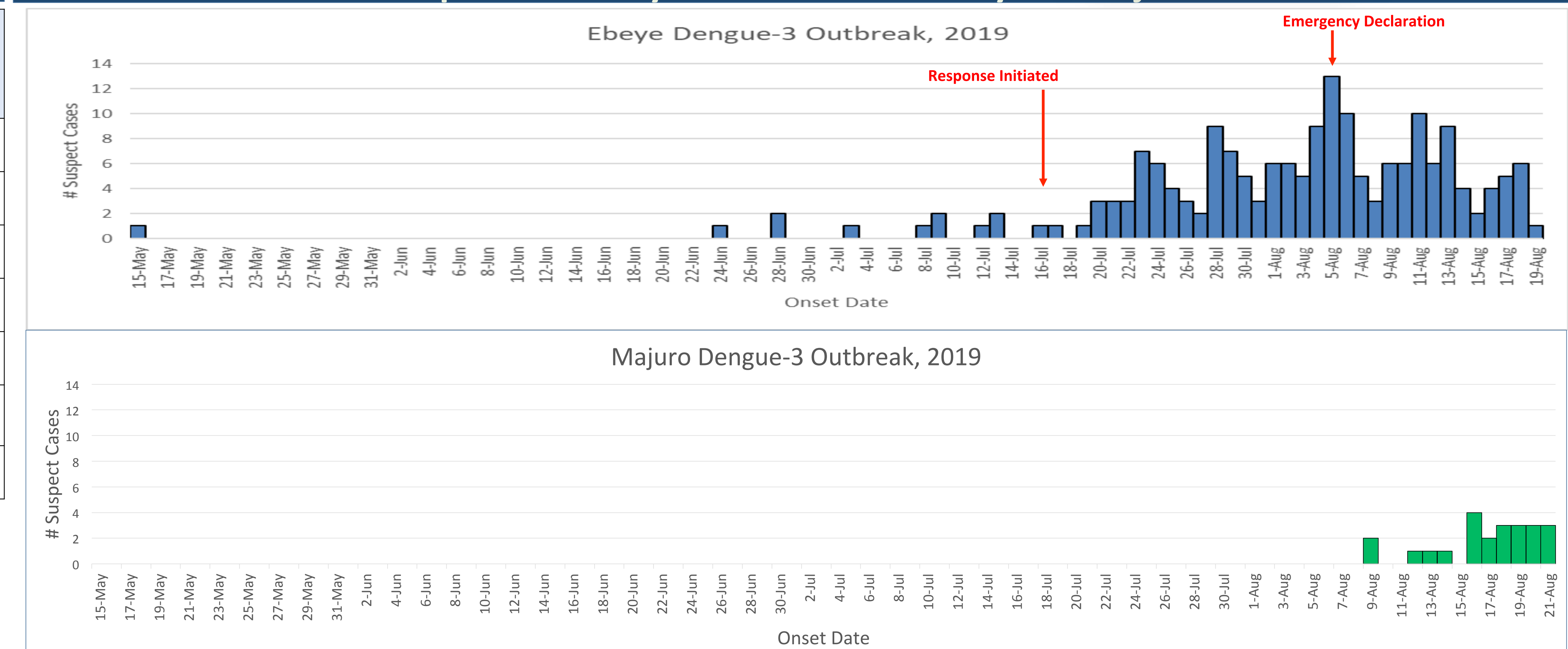
Confirmed case: Suspected case with lab confirmation (+Rapid test (for NS1 or IgM) or +PCR test)

Summary of Cases

	Ebeye	Majuro	Outer Islands
# Suspected Cases	185	27	0
# New in Past 7 Days	31	24	0
# Hospitalized	88	7	0
# in Hosp Now	14	4	0
# Died	0	0	0
# NS1 or IgM+ (# Tested)	51 (89)	8 (24)	0
# PCR+ (# Tested)	11(12)*	1 (1)	0

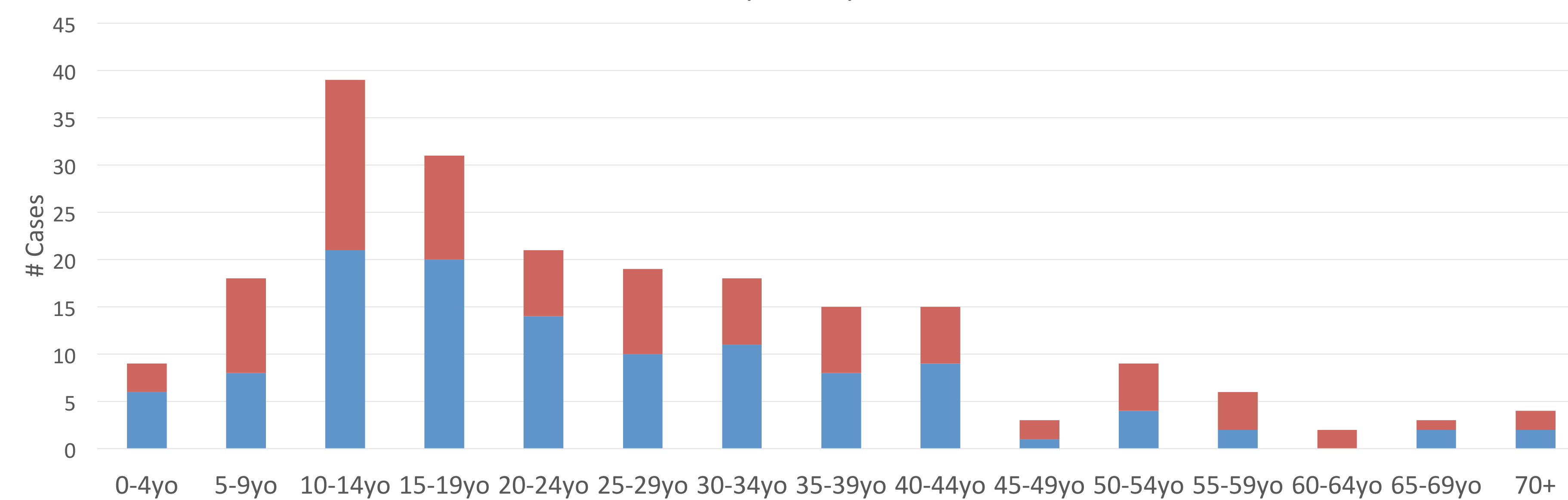
* 10+ for Dengue-3-

Suspect Cases by Date of Onset- Ebeye & Majuro



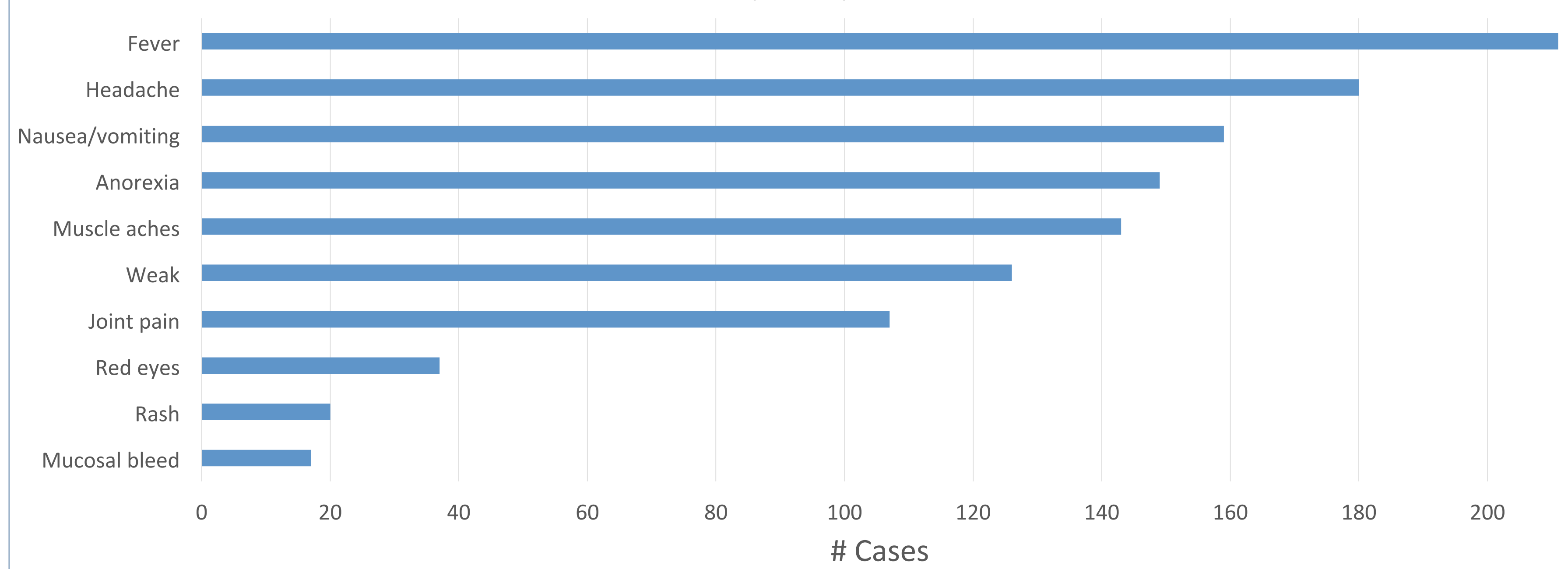
Suspect Cases by Age Group & Gender

(n=212)

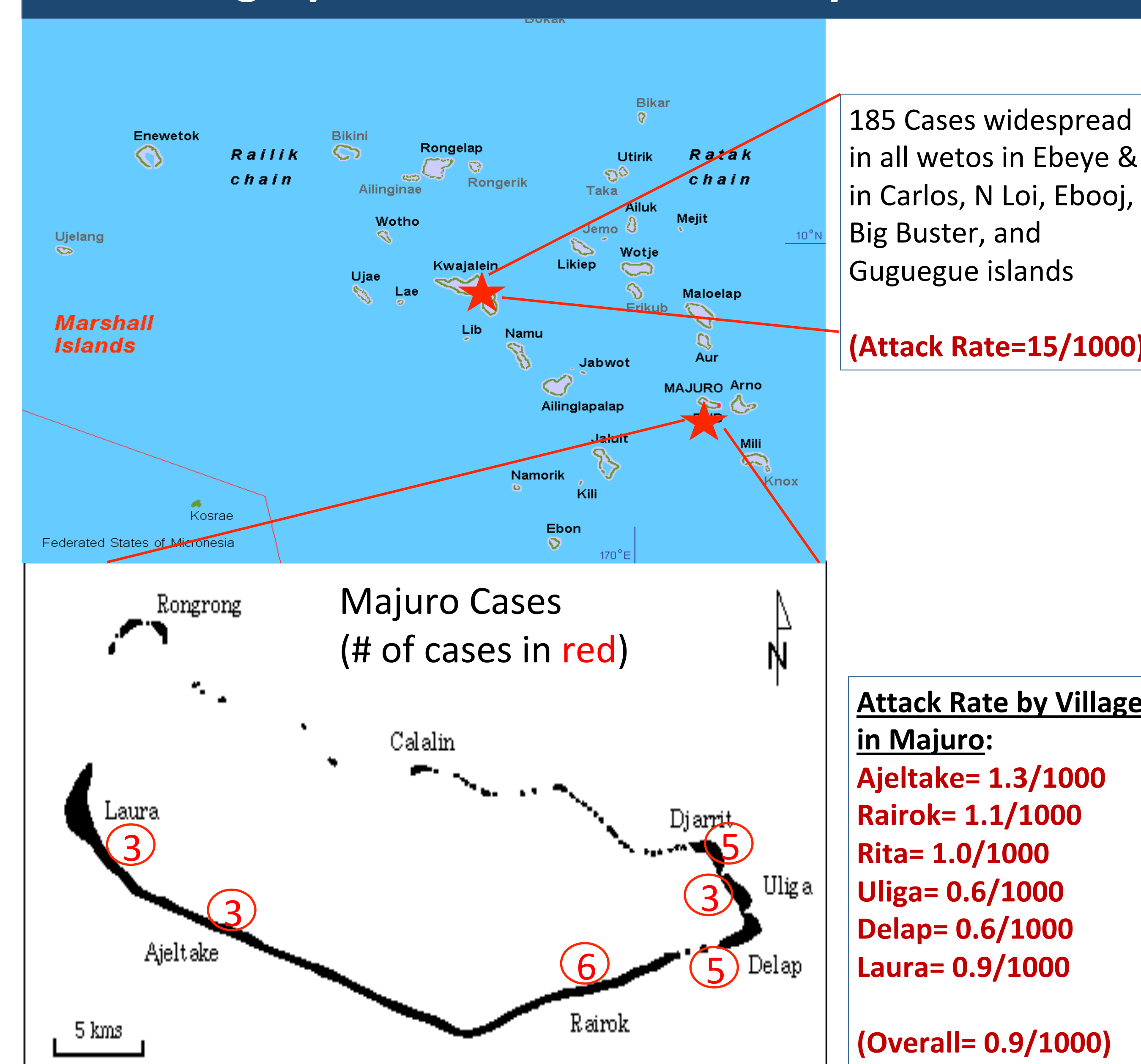


Symptom Profile of Suspect Dengue Cases

(n=211)



Geographic Distribution of Suspect Cases



Response Measures

- Dengue State of Emergency Declaration (by President Heine, Aug 6)
- Surveillance system in place
- Increased EpiNet response meeting frequency to every day (4pm) starting Aug 23
- Cleanup campaign in place in Ebeye (including spraying & larvicide application)
- Outreach to case households in Majuro with search for associated cases and vector control (including spraying). General cleanup campaign also initiated.
- Multiple Dengue prevention and control presentations given in Ebeye and Majuro
- Posters for Dengue prevention distributed to all churches and most public places (stores, community centers, etc) in Ebeye, and started in Majuro
- Clinical protocols disseminated and reviewed with medical & nursing staff in Ebeye & Majuro
- Travel restrictions from Majuro and Ebeye to outer islands put in place, Aug 23
- TA and dengue-related materials solicited from WHO, PIHOA, CDC
- Cancelling of off-island travel & leave for MOHHS employees

To do items:

- Update response plan to fit with recent developments
- Re-inventory dengue related supplies
- Revise testing protocol to preserve dengue test supplies
- Additional surge planning for Majuro, and contingency planning for outer islands
- Additional surveillance & clinical management training for outer island health assistants

EpiNet Outbreak Team Members:

Ebeye: Dr Thein/Rivera, Allen Capelle, Dr. Juaquin Nasa, Rose Bobo, Mela Ratu;

Majuro: Dr. Helentina Garstang, Secretary Jack Niedenthal, Deputy Secretary Mailyynn Konelios-Lang, Dr Tom Jack, Francyne Wase-Jacklick, Edlen Anzures, Paul Lalita, Linda Chutaru, Philmar Mendoza, Dr Robert Maddison,

External Partners: RMIEPA, Director Moriana Phillip MalGov- Russell Langrine

PIHOA: Dr Mark Durand

Surveillance Contact:

Francyne Wase-Jacklick, Deputy Secretary, wasejacklick@gmail.com
 Edlen Anzures- Health Informatics Director, eanzures@gmail.com
 McKaifer Takiah- Data Officer