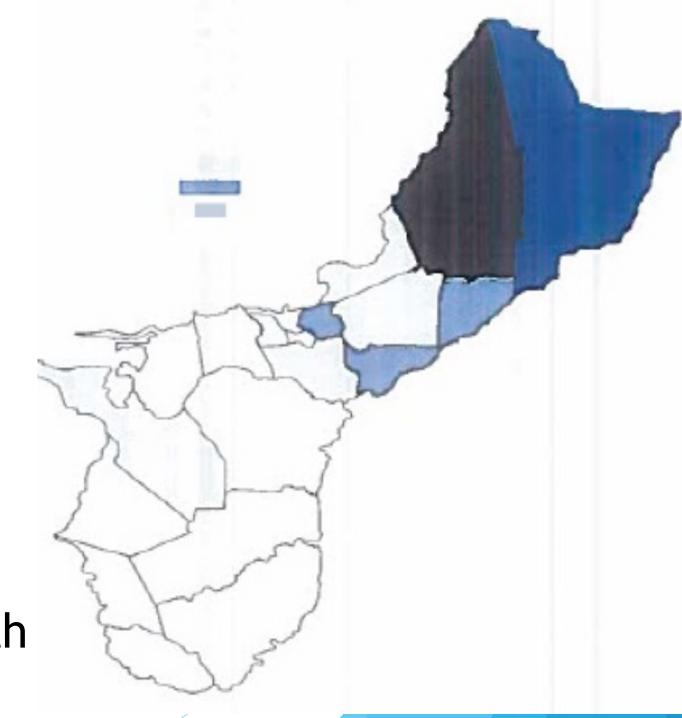
#### **DENGUE IN GUAM**

Pacific Island Health Officer's Association Meeting November 20, 2019

Presented By:
Linda Unpingco DeNorcey
Director, Guam
Department of Public Health



# DENGUE IN GUAM On September 11, 2019 Guam DPHSS activates the Arboviral Plan First Locally Acquired Dengue Case

On September 13, 2019
Governor of Guam declares state of emergency
Governor signs Executive Order

On September 14, 2019
Governor activates DPHSS Incident Command System

# **DPHSS Incident Command System**

- Incident Commander-DPHSS Director
- **Public Information Officer**
- Liaison
- Safety Officer
- **Environmental Health Operations** 
  - Mosquito Surveillance and Vector Control
- **Medical Operations** 
  - Medical Surveillance and Education Community Health Outreach (ECHO)
- Logistics
- **Planning**
- Finance/Admin



Press Conference on Dengue

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On September 17, 2019
  Governor of Guam partially activates the Emergency
  Operations Center (EOC)
         Homeland Security
         Department of Public Works
         Guam Environmental Protection Agency
         Guam Police Department
         Department of Agriculture
         Chamorro Land Trust
         Department of Education
         Mayor's Council
As of November 20, 2019: 20 cases (13 locally acquired and 7
```

imported) Age ranges between 11 months to 68 years old; majority are male

#### DENGUE IN GUAM

#### **Strategies:**

Epidemiology Surveillance

Education Community Health Outreach (ECHO)

Educate the island community on Dengue to prevent further transmission

Consent to spray homes

Environmental Health Surveillance

Assess environmental area

Set-up Mosquito traps

Collect mosquitos and conduct dengue testing on Mosquitos

Determine 200 meter radius (from home of infected person)

Determine the need for spraying

#### **DENGUE IN GUAM**

Epidemiology Surveillance:

Assess patients and household members for Dengue symptoms and recommend testing (PCR, IgG, IgM)

Conduct Education Community Health Outreach

Consent to spray pesticide and larvicide



### Educational Community Health Outreach







**DENGUE: JUST THE FACTS** 

A person infected with DENGUE will have a fever for 2-7 days. Those with fevers can INFECT mosquitoes with DENGUE.











**DENGUE: JUST THE FACTS** 

Once people NO LONGER have a fever, they are NO LONGER INFECTIOUS to mosquitoes.



The community is reminded to only share official, verified information from the Joint Information Center. For more information, visit ghs.guam.gov, or contact the Joint Information Center Monday through Friday from 8 a.m. to 5 p.m. at (671) 478-0208/09/10. If there is an emergency, dial 911.

# Educational Community Health Outreac

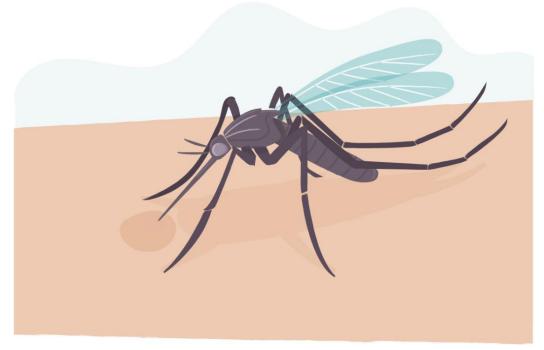






**DENGUE: JUST THE FACTS** 

**Dengue CANNOT be transmitted** from person-to-person.



The community is reminded to only share official, verified information from the Joint Information Center. For more information, visit qhs.quam.gov, or contact the Joint Information Center Monday through Friday from 8 a.m. to 5 p.m. at (671) 478-0208/09/10. If there is an emergency, dial 911.







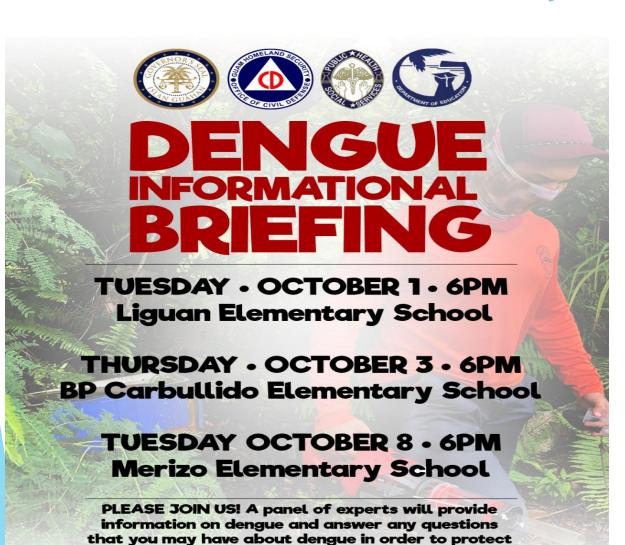
**DENGUE: JUST THE FACTS** 

THE FEBRILE PHASE: When infected people have fevers, they should stay home, indoors and avoid mosquito bites.

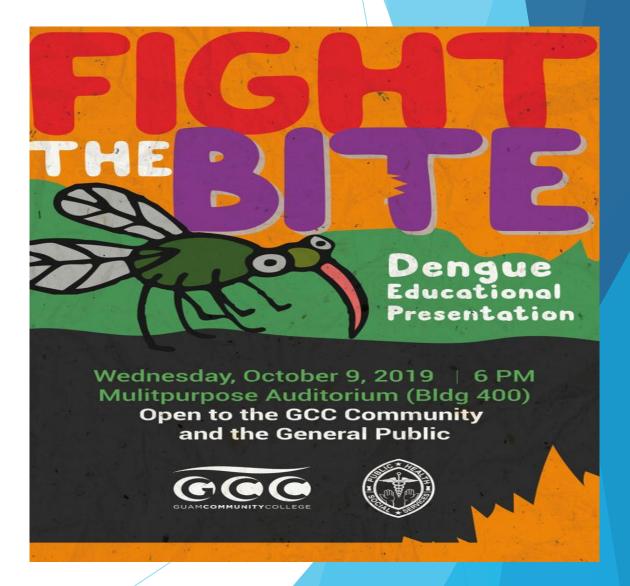


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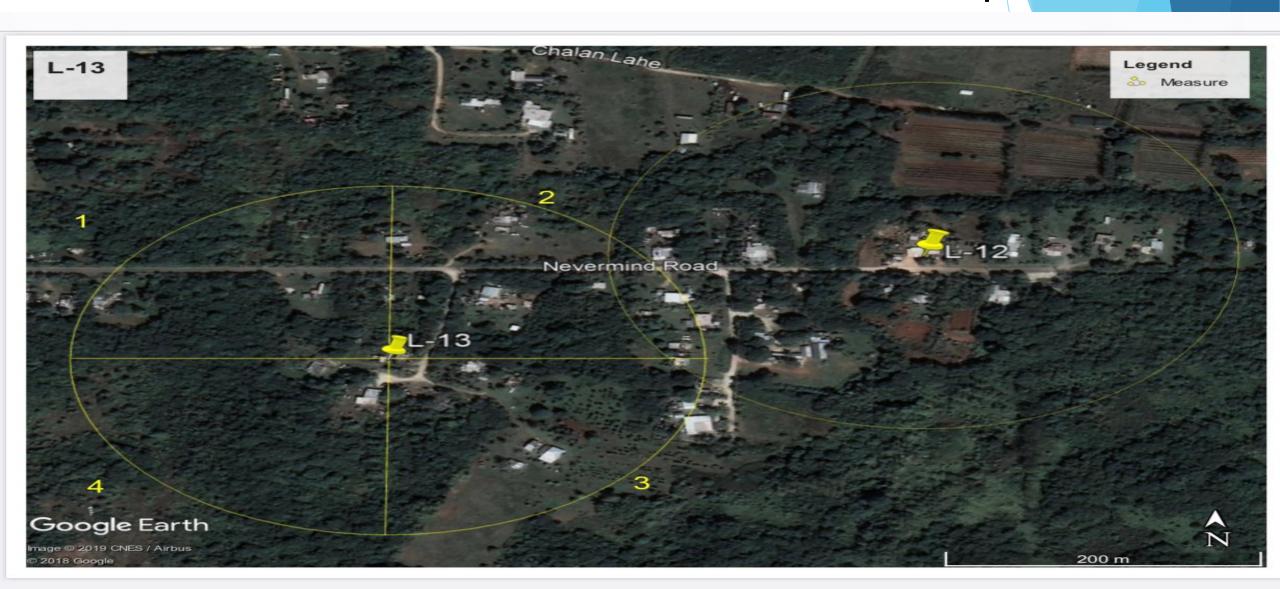
# Educational Community Health Outreach



you and your family.

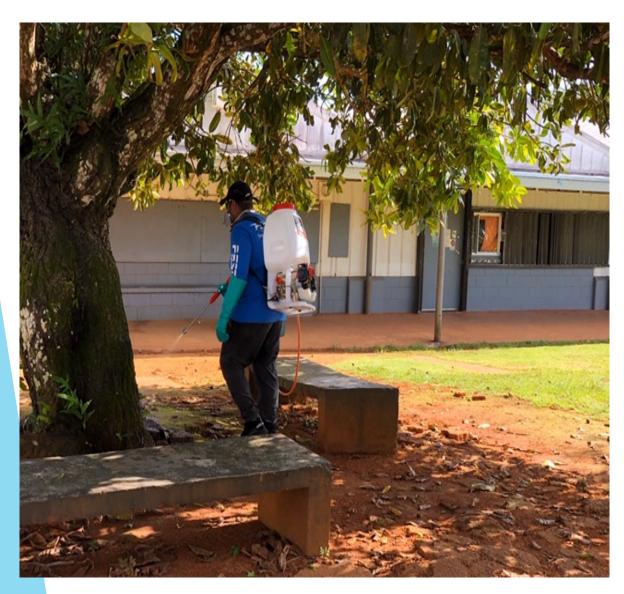


# Environmental Health Surveillance: Determining Area of Surveillance 200 meter radius the from infected patient's



#### **Environmental Assessment:**

Spraying of Pesticides



Spraying of Pesticides in the school



Areas Sprayed with Pesticide

Schools

Agueda

Ordot Chalan Pago

Harvest

F.B. Leon Guerrero

Simon Sanchez

Ponding Basin in Ordot Village

Swamp and Nevermind Roads (also clearing of breeding sites such as: tires, old appliances, containers, etc.)



#### **STRATEGIES:**

Press Releases developed daily by the Joint Information Center (JIC) (Guam Homeland Security, DPHSS, Governor's Office, and Environmental Health Protection) "One Voice"

# Dengue Awareness and Education

- Issuance of Dengue Educational Materials (posters, brochures)
- Social Media Campaign
- DPHSS Incident Command System meetings held daily and with Emergency Operations Center

# STRATEGIES:

#### Utilized ICS Forms to complete daily reports

202 (Incident Objectives), 204 (Assignment List)

214 (Activity Log), 208 (Safety Message/Plan)

#### Developed FAQs on:

Safety of Pesticides

About Dengue and responses to FAQs questions for the Village Mayors

#### Letter to health care providers:

- -to increase dengue testing
- -notifying of the availability of free PCR testing at Guam DPHSS Laboratory

#### Collaboration with Entities:

#### U.S. CDC:

Conference calls with CDC ELC and PHEP Project Officers

(identify allowable cost of supplies and equipment)

Request for Medical Entomologist and Biologist Technical Assistance in the review of Guam Environmental Health Arboviral Plan

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# Collaboration with Entities:

#### U.S. CDC:

TA in testing of Dengue in mosquitos; studying of Aedes albopictus (Asian tiger) mosquito habitat, training in the spraying of pesticides, donning and doffing of PPEs, preventive maintenance of "Back Pack" equipment, and storing of pesticides

PIHOA: Regional Medical Entomologist and Batteries

CDC Foundation: Perma Net 2.0, "OFF" repellants, and repellant lotions

# Collaboration with Entities:

Coordination of logistics with CDC Foundation and its donors:

**Transportation Services** 

Ocean Freight

Door to Door Delivery via United Postal Services

Guam Environmental Protection Agency: Environmental Form

Guam Customs and Quarantine: Letter of Approval

# Dengue Response Review "Hot Wash"

Identified the Challenges and Successes of:

- Governor's Executive Order
- Coordination between JIC and ECHO
- Enhanced Surveillance (Human and Mosquito) and Laboratory Response
- Swamp Road Response
- Emergency Management Coordination between PH Incident Command System and EOC
- School and Village Spraying of Pesticides
- DPHSS Incident Command System

# DENGUE IN GUAM Shortfalls:

Budgetary Constraint Total Cost so far: \$463,253.05

Executive Order needs flexibility (>\$250,000 for Governor's transfer authority; longer than 30 days; include overtime pay)

Dengue educational materials need to be translated into different languages

Low consent rate for spraying of pesticides

#### DENGUE IN GUAM SHORTFALLS:

- Shortage of DPHSS Lab personnel
- Lack of DPHSS Lab Equipment for IgG and IgM testing
- Need to correct construction deficiencies of the Mosquito Laboratory in Dededo
- Illegal Dumping (big problem)
- ICS training needed annually (refresher courses)
- Need to conduct cross training of DPHSS Incident Command System and identify 3 alternates for each sections (PIO, Liaison, Safety Officer, Incident Commander, Operations, Planning, Finance/Admin)

#### **DENGUE IN GUAM Overcome Shortfalls:**

- Recruiting 2 DPHSS Microbiologists
- Procured DPHSS Lab Equipment for IgG and IgM testing
- Support from Governor: DPW conducted assessment of Environmental Health Lab with scope of services and cost to correct construction deficiencies; Governor committed to fix Environmental Health Lab and then sue the contractors later
- Illegal Dumping-Chamorro Land Trust now evicts landowners who have debris around their property
- Mayor's Council addressing illegal dumping problem
- ICS training will be provided annually (refresher courses)
- Planning to cross train DPHSS staff involved in the Incident Command System and 3 alternates for each sections have been identified(PIO, Liaison, Safety Officer, Incident Commander, Operations, Planning, Finance/Admin)

# THANK-YOU