Efforts to Minimize the Spread of Dengue Virus Underway

On September 11, 2019, the Guam Public Health Laboratory of the Department of Public Health and Social Services (DPHSS) confirmed the first locally acquired case of dengue fever. The virus, type III [DENV 3], is the same affecting Yap, Palau, Marshall Islands, and the Philippines. The individual had no recent history of travel outside of Guam.

To prevent further spread of dengue virus, DPHSS, through the Division of Environmental Health, has requested assistance from a local contractor to conduct insecticide application at Agueda Johnston Middle School and Ordot-Chalan Pago Elementary School. Residents in the 200-meter radius of the confirmed case will also be asked to have their homes sprayed both inside and outside with insecticides to control adult and larval mosquitoes. DPHSS has identified 82 residential homes and outreach efforts for their participation are underway with the assistance of the Mangilao Mayor’s Office.

The spraying of schools started on Sunday and will resume on Monday at 3:30pm after students have been released from school. The ASPIRE after school program at Ordot-Chalan Pago Elementary School will be canceled on Monday, September 16, 2019, and is expected to resume on Tuesday, September 17, 2019.

The vendor contracted to apply the insecticides is permitted with the Guam Environmental Protection Agency (GEPA) as a Certified Pesticide Applicator. These insecticides, which are both EPA-Registered and EPA-Established, are used to reduce the occurrence of mosquito breeding and biting.

Dengue fever is transmitted to humans by the bite of an infected mosquito, and cannot spread directly from person to person. The best preventive measure for residents living in areas infested with mosquitoes is to eliminate areas where mosquitoes lay eggs, which are primarily artificial containers that hold water.
DPHSS is working closely with the U.S. Centers for Disease Control and Prevention and other partners to minimize the spread of dengue virus. All healthcare providers are urged to be on alert for additional cases, and a physicians’ alert has been disseminated.

For more information, contact the DPHSS epidemiologist at (671) 888-9276 and refer to the attached Dengue Fever Frequently Asked Questions for Guam.
**DENGUE FEVER FAQs FOR GUAM**

- **What is dengue fever?** Dengue fever is a disease caused by any one of four closely related dengue viruses (DENV 1, DENV 2, DENV 3, or DENV 4). The viruses are transmitted to humans by the bite of an infected mosquito. *Aedes aegypti* mosquito is the primary transmitter, or vector, of dengue viruses, and fortunately this particular mosquito is not found on Guam.

- **What can I do to prevent the spread of dengue fever?** Take precautions and preventing mosquito bites, as well as eliminate areas where mosquitoes breed and multiply. Breaking the mosquito life cycle starts at the home.
  - Properly cover or dispose of all containers that collect rainwater or water, such as flower pots, garbage cans, recycling containers, wheelbarrows, aluminum cans, boat tarps, old tires, and buckets.
  - Flush birdbaths and wading pools weekly. Flush ornamental bromeliads with water, or treat with BTI, a biological larvicide available at most home stores.
  - Clean roof gutters, which can become clogged and hold water.
  - Change the water in outdoor pet dishes regularly.
  - Keep pools and spas chlorinated and filtered.
  - Stock ornamental ponds with mosquito-eating fish.
  - Cover rain barrels with screening.
  - Check for standing water under houses, near plumbing drains, under air conditioner drip areas, around septic tanks, and water pumps.
  - Take steps to eliminate standing water, improve drainage, and prevent future puddling.

- **What are the symptoms?** Principal symptoms include high fever, severe headache, severe pain behind the eyes, joint pain, muscle and bone pain, rash, and mild bleeding usually around nose or gums.
  - Dengue hemorrhagic fever (DHF), the severe form of the disease, is characterized by a fever that lasts from 2 to 7 days, which can be followed by persistent vomiting, severe abdominal pain, and difficulty breathing. Patients with DHF tend to bruise easily or other skin hemorrhages and possibly even internal bleeding. There is no vaccine for preventing dengue fever.

- **What do I do if I feel sick?** Talk to your doctor or nurse if you feel seriously ill, especially if you have a fever with other symptoms such as headache and joint pain, or
have traveled to a country with locally occurring dengue fever or other mosquito-borne
diseases.
   ○ Consult with your doctor about the use of acetaminophen to treat fever and pain.
   ○ Get lots of rest, and drink plenty of liquids.
   ○ Avoid spreading the disease by preventing more mosquito bites.

● **What should I know if I’m traveling?** People traveling to the Philippines, Palau, or Yap
  State should be vigilant about taking precautions and preventing mosquito bites.