The Virgin Islands Consortium

St. Croix Residents Question Chikungunya Tracking, Dept. of Health Responds

Health / **Published On December 08, 2014 11:02 AM /**

Ernice Gilbert December 08, 2014

The *VI Consortium* has received emailed complaints from a number of local residents, mostly from St. Croix, who are either suffering from the chikungunya virus or who know of someone who has been afflicted by it.

Some have suggested that the Virgin Islands Department of Health (DOH) is not keeping accurate count of the number of people who are ill in the territory and others have suggested the department find alternative methods of fighting the debilitating disease.

One concerned resident, whose name is being withheld, wrote to *VI Consortium* about the current method being implemented by the DOH to track the disease.

"I [would] like to suggest that you interview the Territorial Epidemiologist Dr. Esther Ellis and ask her what is her source of data to track chikunguya. I imagine that the data is based on people who have seen a medical doctor at the hospital, clinic or privately. However, I know many people who have had chikungunya and never went for treatment. My husband had it two weeks ago and this week, 2 of my friends have it. None of them went for medical treatment. Many people do not go for treatment because there is no treatment, but [to] stay in bed, drink fluid, and take something for the fever," the woman wrote.

She added: *"I suspect that the Dept. of Health's data is an underestimation of the true cases of chikungunya in the territory. I would like to encourage the Dept. of Health to have a hotline that people could call to report they believe they have chikungunya. The hotline operator can write down their symptoms and get more data to get a better count of the amount of suspected cases of chikungunya in the territory."*

According to the latest report from DOH, there have been 12 confirmed cases on St. Croix as of Nov. 1, compared to five confirmed cases on Nov. 5. The number of suspected cases on St. Croix also rose substantially, with the island now seeing 338 of those cases as of Nov. 1, compared to 91 on Oct 4.

VI Consortium reached out to Dr. Esther Ellis for clarification on how the department collects its data.

"The Department of Health has a dengue and chikungunya reporting form that has been shared with all healthcare providers (hospitals, clinics, and private physicians). This form is used for reporting suspected chikungunya cases to the department of health epidemiology department. The dengue-chikungunya reporting forms received are reviewed by the epidemiology division and entered into a database as a suspected case if it meets the criteria," Dr. Ellis wrote in response to *VI Consortium's* emailed questions.

According to Ellis, once the cases, suspected and confirmed, are recorded, "all data from the USVI is reported to the CDC who is tracking this outbreak worldwide."

Ellis said the DOH was assisted by the Center for Disease Control's arboviral disease branch to develop its reporting form, database and educational training.

"Through this assistance, we have improved case finding and surveillance, entomological response, and prevention and education," she wrote.

Dr. Ellis went on to explain how the department's tracking system works.

"Healthcare providers submit completed case report forms for suspected cases to the USVI Department of Health. These suspected cases are entered into an electronic database that was adapted and implemented by the epidemiologic team for monitoring arboviral diseases on USVI. On a weekly basis, an export of chikungunya and dengue cases in the database is uploaded to CDC's ArboNET, an electronic database for reporting arboviral diseases in the United States," she wrote.

In reference to the concerned resident's suggestion that a hotline be created to better track chikungunya among those experiencing symptoms, but whom have not visited a healthcare provider, Dr. Ellis did not provide a direct answer, but stressed seeking

medical care.

"It is recommended that if someone is sick with chikungunya they seek care from their healthcare provider or at the Charles Harwood Medical Complex clinic or Frederiksted Health Clinic," she wrote. "In this way, a trained medical professional can evaluate the patient and determine if chikungunya is suspected or not. It's important to remember that chikungunya is very similar to dengue clinically; however, dengue can have hemorrhagic manifestations and may require care from a medical professional."

There is no medical treatment for the chickungunya virus or disease. According to the CDC website, symptoms usually begin 3-7 days after being bitten by an infected mosquito:

- The most common symptoms are fever and joint pain.
- Other symptoms may include headache, muscle pain, joint swelling, or rash.
- Chikungunya disease does not often result in death, but the symptoms can be severe and disabling.
- Most patients feel better within a week. In some people, the joint pain may persist for months.
- People at risk for more severe disease include newborns infected around the time of birth, older adults (?65 years), and people with medical conditions such as high blood pressure, diabetes, or heart disease.
- Once a person has been infected, he or she is likely to be protected from future infections.

Previously, there had been discussions about the possibility of using fogging to control the disease, however health officials said fogging would not be effective in the territory.

"The impact of fogging to control Aedes aegypti, the mosquito responsible for transmitting dengue and chikungunya, has been controversial but most vector control programs acknowledge its extremely limited effect. Extensive trials carried out by the CDC others have repeatedly shown disappointing results, and there is no well-documented example of using fogging to interrupt an epidemic," Brett Ellis, Health Department entomologist, has said.

He added: "The primary reason for this is not because the chemicals are ineffective, but that it has been difficult to get the chemical in direct contact with the mosquito. This type of mosquito spends a lot of its time indoors near us, in dark places like our closets or under our beds, and do not come into contact with the chemicals when sprayed. Unlike many mosquito species, Aedes aegypti mosquitoes are aggressive daytime bitters, and fogging is typically performed in the evening. Fogging can also kill other beneficial insects, such as bees."

The doctor went on to say there were "unique concerns" with implementing fogging in the Territory, particularly as it relates to safeguarding cisterns and potable water sources.

"Control programs should focus their efforts on an integrated approach that includes effective surveillance, clinical case management, community education, personal protection, and the destruction of mosquito breeding sites in and around our homes and public places," he said.

Health Commissioner Plaskett backed up Ellis' claim, adding that, according to CDC's arboviral experts and vector control specialists, "the most effective method of abatement for Aedes aegypti mosquito in the territory is source reduction/elimination (draining and dumping stagnant water from containers like buckets, pet dishes, flower pots and tires)," and eradicating mosquito larva from large bodies of stagnant water that cannot be drained or dumped, by using the bacterial insecticide known as Bti briquettes or mosquito dunks.

Dr. Esther Ellis has said the territory is experiencing a chikungunya epidemic and gave residents, as well as visitors, tips on how to protect themselves from contracting the disease.

They include:

- Use insect repellents — Repellents containing DEET or oil of lemon eucalyptus. Apply repellent only to exposed skin or clothing, follow product instructions carefully. Do not use repellents on babies less than two months of age.
- Use air conditioning or window/door screens to keep mosquitoes outside. If you are not able to protect yourself from mosquitoes inside your home or hotel, sleep under a mosquito bed net.
- Wear clothing that protects you from mosquito bites (long-sleeved shirts and long pants).
- Protect infants: cover cribs, strollers and baby carriers with cotton mosquito netting at all times, day and night, both inside and outside of your home. Dress babies in loose cotton clothing that covers arms and leg.
- Treat clothing with permethrin or purchase permethrin-treated clothing.

Image Credit: Life Hack