Notes on Chikungunya Virus and Prevention of Mosquito-borne Infections

Current situation

In January 2014, the first transmission of Chikungunya (chik-en-gun-ye) virus in the Western Hemisphere was reported in a few of the northern Caribbean countries. The virus has been moving to other countries within the Caribbean, Central America, South America, and North America, with reports of confirmed and suspected cases. As of July 14, the Caribbean Public Health Agency (CARPHA) has reported five confirmed cases of Chikungunya in Grenada.

What is Chikungunya?

Chikungunya virus is transmitted to people by mosquitoes. Mosquitoes become infected when they feed on a person already infected with the virus. Infected mosquitoes can then spread the virus to other people through bites. Chikungunya virus is most often spread to people by Aedes aegypti and Aedes albopictus mosquitoes. These are the same mosquitoes that transmit dengue virus. They bite mostly during the daytime.

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 infection is very rarely deadly, 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. Once a person has been infected, he/she is protected from future Chikungunya infection.

Diagnosis

Visit or call the University Health Services (Tel: 444-4671) if you develop the symptoms described above. If someone is suspected of Chikungunya, he/she should come to the clinic to see a physician immediately. A blood sample will be taken and sent to the General Hospital for them to forward to CARPHA. The Ministry of Health will have to be informed immediately of a suspected case, and it in turn will inform the environmental health team who will survey the area of the suspected case, treat any sources of standing water for mosquito control, and do fogging if necessary.
Treatment

There is no medicine or vaccine to treat Chikungunya virus infection or disease. Symptoms can be managed by rest and drinking more fluids to prevent dehydration. Take ibuprofen, naproxen, acetaminophen, or paracetamol to relieve fever and pain, as directed.

Prevention

Chikungunya virus infection is prevented by avoiding mosquito bites, especially during the day. Use window/door screens to keep mosquitoes outside and sleep under a mosquito bed net. When weather permits, wear long-sleeved shirts and long pants. Use insect repellents containing DEET, picaridin, IR3535, and oil of lemon eucalyptus and para-menthane-diol products which provide long-lasting protection. Persons diagnosed with Chikungunya should stay under an insecticide-treated bed net during the day; spray their room with a knock-down insecticide, and wear insect repellent when moving around outside the net. These measures will help to prevent uninfected mosquitoes from picking up the virus.

What the University is doing to reduce mosquito breeding

Groundskeepers on the University campus constantly pick up discarded receptacles like plastic and foam containers which can hold water and breed mosquitoes. All uncovered sources of groundwater on campus are treated with guppy fish that eat mosquito larvae. All construction sites on campus are routinely inspected to remove any sources of standing water.

What each person should do to reduce mosquito breeding and mosquito bites

Take a walk around your residence. Discard any standing water from saucers under potted plants, tires, buckets, or any other containers that can breed mosquito larvae. Ensure that screens are securely fastened on doors and windows, or sleep under a bed net that is pre-treated with insecticide. Use mosquito coils or wear mosquito repellent during the day. Wear long-sleeved shirts and long pants.
For more information, visit:

Caribbean Public Health Agency
http://www.carpha.org/What-We-Do/Public-Health-Activities/Chikungunya

Centers for Disease Control and Prevention
http://www.cdc.gov/chikungunya/