Preventative Medicine and our Mosquito Population

By Lt. Alicia Sammons and HM2 Sean Browder, PREVMED Department

Guantanamo Bay is host to over a dozen mosquito species that have the ability to carry several arboviral diseases that can be harmful to humans. An arboviral disease is a general term used to describe infections caused by a group of viruses spread to people by the bite of infected arthropods or insects such as mosquitoes and ticks. Diseases known to be carried by mosquitoes found in Guantanamo Bay include Yellow Fever, Dengue Fever, West Nile Virus, Zika Virus, Chikungunya, Malaria, and Japanese Encephalitis Virus.

Rest assured, these diseases are currently not present on the island, meaning that while the vector is here, the disease is not. Preventive Medicine conducts active mosquito surveillance monitoring and lab testing weekly to ensure these diseases are not present.

Mosquitos are commonly found near water of some sort, however different types of water attract different types of mosquitos. Permanent water mosquitos such as the Culex species, tend to lay their eggs on the surface of standing water at the edges of lakes and ponds and among the vegetation in swamps and marshes. Floodwater mosquitos, such as the Aedes, lay their eggs in moist soil, and as the eggs start to dry out, they hatch when re-introduced into flooding/standing water. Examples of this can include temporary puddles from leftover rain and containers that hold water after a rainstorm, such as outside furniture, clay pots, and birdbaths. (continued on page 2)
Summer is here! Preventing heat injuries and staying hydrated

We all know how hot and humid it can get here on the island, and most of us like the outdoors, whether it be hiking, kayaking, sports, or just enjoying the sun in our backyard. However, what you may not know are the signs and symptoms of heat injuries. There are three stages of heat illness: cramps, exhaustion, and stroke. Knowing these alone is half the battle, but knowing what to look for and how to treat could save a life.

Obviously, we all sweat being outside, and this alone is not a sign. Add cold, pale, clammy skin and cramps or spasms; now we’re looking at the first signs of a heat injury. Other indicators of something more serious are nausea, vomiting, dizziness, fast-weak pulse, and fainting.

The most serious signs are hot, red dry skin, loss of consciousness, and a temperature above 103°F.

Upon signs of cramping, stop what you’re doing and move to a cool, dry place and hydrate with water or electrolytes, loosen clothes and put cool, wet cloths on your body or take a cool bath. If you’re alone and are experiencing severe symptoms like nausea, vomiting, dizziness or cramps lasting an hour, or more, seek medical care, or dial 911.

Mosquito Population continued

Mosquito bites and their associated diseases can be easily prevented. As mentioned earlier, mosquitoes are more prevalent in wet environments. Removing any standing water from your residence or even preventing water from pooling in certain areas will significantly reduce the likelihood of mosquito presence.

The Centers for Disease Control and Prevention (CDC) also recommends that once a week community members empty and scrub, turn over, cover, or throw out any items that accumulate water, such as tires, buckets, planters, toys, pools, bird baths, flowerpot saucers, or trash containers.

Prevention of bites is a little more difficult. However, the CDC recommends if you’re going to be outside during peak mosquito biting times, which is different for certain species of mosquitoes, one should wear long sleeves and pants, treat clothes with .5% permethrin, or use any EPA-registered repellents that have any of the following as the main ingredient: 2-undecanone, Catnip Oil, Citronella, Citronella Oil, DEET, IR 3535, Oil of lemon eucalyptus, or picaridin.
Wildfires!

Even though we’re near the peak of our hurricane season, rainy days are few and far between. These dry conditions create a virtual tinder box on the installation. We, as a community, have to be very diligent with our choices, from smoking in undesignated areas to BBQ’ing and grilling, and everything in between.

On our installation, safety and common sense are essential when working with an open flame, or cigarette. In the not-so-distant past, we experienced a fire that burned approximately 60 acres and threatened our windward housing development and fuel farm. Without any storms in the area, what could have been the cause you ask? A thoughtlessly thrown out, lit cigarette.

Our safety and well-being is in everyone’s hands, so think about what you will do with that cigarette, or grill embers when you are done with them!

ITO Corner

Update coming 1st quarter of FY21.

Contacts

**NAVSTA EM**
Jeremy Watson
660-4558 or 757-458-4558
jeremy.a.watson.civ@mail.mil

**NAVSTA EM LCPO**
Chief R. Shlemon
660-4558 or 757-458-4558
rebecca.k.shlemon.mil@mail.mil

**NAVSTA ITO**
Joe Randall
660-4286 or 757-458-4286
joe.c.randall.civ@mail.mil