

Preventive Medicine Department Public Health Service

MOSQUITO SURVEILLANCE

Mosquito-Borne Diseases

Some mosquitoes are vectors for diseases. This means they can transmit diseases from one human or animal to another. Typically, the diseases are caused by viruses or tiny parasites. For example, a mosquito that bites an infected human or animal can pick up a virus along with the blood meal. The mosquito and virus do not harm one another but the virus reproduces inside the mosquito. Later, the mosquito can pass the viruses to other humans when biting them. Some of the diseases transmitted by mosquitoes are: Zika Virus, West Nile Virus, Malaria, Dengue Fever, Chikungunya, St. Louis, Western Equine, LaCrosse, and Easter Equine Encephalitis.

Mosquito Trapping

When temperatures reach a consistent 50 degrees, mosquito eggs begin hatching and mosquito season begins. Every year from June thru October, the Preventive Medicine Department conducts surveillance by trapping and identification of adults mosquitoes as part of routine surveillance for West Nile virus. Traps are set up in several locations throughout MCB Quantico community.

Why do we do this? <u>Surveillance</u> is one of the key components of the <u>Disease Carrying</u> <u>Insects Division</u>. Collecting mosquitoes helps the Preventive Medicine Department monitor for West Nile virus and other potential mosquito-borne diseases in our community.

If you see a mosquito trap, PLEASE DO NOT DISTURB IT.

What do they look like? You can view the various types of traps and read how they work in the photo on the right. **Please note:**

- The traps are clearly labeled to let people know what these devices are.
- Preventive Medicine Department staff set out and collect the traps, and collect mosquitoes regularly.
- One trap is usually set up at each location. Traps are set up in several locations throughout MCB Quantico community.
- Some traps are about the size of an office trash can and are set on the ground; others are hung from a tree and are about 5 feet long.

Prevent Mosquito Bites

- 1. Wear long-sleeved shirts and long pants.
- 2. Stay in places with air conditioning and window and door screens to keep mosquitoes outside.
- 3. Use <u>Environmental Protection Agency (EPA)-registered insect repellents</u>. When used as directed, these insect repellents are proven safe and effective even for pregnant and breastfeeding women.
- 4. Remove or stay away from mosquito breeding sites, like containers with standing water.
- 5. Women who are pregnant should not travel to any <u>area where Zika virus</u> is spreading.



BG-Sentinel Trap



CDC Light Trap

Preventive Medicine uses CDC light traps and BG-Sentinel Traps. Every Trap consists of a small motor, fan, and collection net. Each trap type utilizes a different attractant light and heat. Each trap will attract various species of mosquitoes. Once the adult mosquito is lured in by these traps, it is then blown into the net by the fan.

If you have any questions or concerns, please contact the Preventive Medicine Department at 703-784-1680/1683/1685 or email us at: us at usn.quantico.navhlthclinquava.list.pmt@mail.mil.

Learn more about protecting yourself and your family from mosquito bites and the diseases they transmit by visiting:

http://www.med.navy.mil/sites/nmcphc/program-and-policy-support/Pages/Zika-virus.aspx#Info-for-Navy-and-Marine-Corps-Pers-and-Their-Fam; https://phc.amedd.army.mil/topics/discond/diseases/Pages/Zika.aspx

http://www.cdc.gov/zika/index.html; http://www.cdc.gov/zika/pregnancy/protect-yourself.html