

Aedes Control in Preparation for Zika

Aedes spp. mosquitoes are vectors of arboviruses such as Zika virus, which is transmitted by *Aedes aegypti* and possibly *Aedes albopictus*. Endemic to equatorial Africa, southern Asia, the Pacific Islands, and now South America, Zika is spread through travel of infected individuals between regions where there are sufficient populations of mosquitoes that are competent for local transmission. While Zika viral disease is usually mild, with the illness usually mild with symptoms that may include fever, rash, joint pain, or conjunctivitis, muscle pain and headache lasting for several days to a week, but recent data suggests an association between Zika infection and the birth defect microcephaly. There is no vaccine or specific treatment available for Zika. Currently, several countries in the Americas are reporting locally transmitted cases, including Mexico. To date, there have been no locally transmitted cases in CONUS, but locally transmitted cases have been reported in the Commonwealth of Puerto Rico. A number of imported travel-related cases of Zika have been reported in the continental United States (CONUS), and with the recent outbreaks, the number of cases among travelers visiting in or returning to the CONUS will likely increase.

Given that travel-acquired cases of Zika are being diagnosed in CONUS and the frequency with which it gains entry to the continental U.S. via infected travelers, the Armed Forces Pest Management Board (AFPMB) is taking steps to prepare the Department of Defense (DoD) community for this disease. These steps include: publication of updated Technical Guide Number 47, *Zika, Dengue, and Chikungunya Vector Control Pocket Guide*; and updating National Stock Numbers for mosquito vector surveillance and control equipment in the Federal Supply System.

- **AFPMB Technical Guide (TG) No. 47, *Aedes* Mosquito Vector Control Guide:** Consolidates information and procedures for surveillance and control of mosquitoes that transmit Zika, dengue and chikungunya viruses, which have the potential to cocirculate in the same regions where the viruses are endemic. Updated in January 2016 to provide additional information with regard to Zika. This document is found on the AFPMB website at the following link:

[Aedes Mosquito Vector Control Guide](#)

- **The BG-Sentinel Mosquito Trap:** This trap was initially developed for monitoring *Aedes aegypti* (the yellow fever mosquito) and *Aedes albopictus* (the Asian tiger mosquito). The BG-Sentinel Mosquito Trap will also attract and collect other mosquito species and anthropophilic insects. There are four components to the trap: the Sentinel Trap itself, a wall charger, a catch bag, and the lure. AFPMB has assigned National Stock Numbers (NSNs) to each for availability through the Federal Agency Supply System. Links for the Total Item Records (TIRs) from the Defense Logistics Agency (DLA) for each component are listed below along with their NSNs:

[Sentinel Trap \(P/N: 2880\): NSN 3740-01-628-9326](#)

[Wall Charger \(P/N: 2861c\): NSN 3740-01-628-9324](#)

[Catch Bag \(P/N: 2880c\): NSN 3740-01-628-9327](#)

[Lure \(P/N: 2881\): NSN 3740-01-628-9325](#)

- **Lethal Ovitrap:** This kit comes with a container, velour strip, and dichlorvos (i.e., Vapona). The trap mimics man-made containers that hold standing water, the preferred breeding habitat for egg-laying by *Aedes aegypti* and *Aedes albopictus*. The advantages of the Lethal Ovitrap include attracting the specific target mosquito species, using lesser amounts of insecticide, and providing isolated spaces where mosquitoes, not humans and other wildlife, will find the insecticide. The NSN information and the DLA TIR for this product are accessible at:

[Mosquito Trap-N-Kill \(P/N: Ovitrap Mosquito Trap-N-Kill\): NSN 6840-01-628-4751](#)

Additional Resources

- **National Center for Medical Intelligence (NCMI):**

[Latin America and the Caribbean: Dengue, Chikungunya, and Zika Risk to U.S. Forces \(U\)](#)
(CAC access required)

- **Armed Forces Health Surveillance Center (AFHSC):**

[Zika Virus in the Americas Surveillance Summary \(19 Jan 2016\)](#)

- **U.S. Army Public Health Command:**

[Zika Virus Facts](#)

- **U.S. Navy and Marine Corps Products:** The Navy and Marine Corps Public Health Center maintains a Chikungunya, Dengue, and other Arboviral Infections webpage

[Zika Information Sheet](#)

- **U.S. Air Force Products:**

[AFMS Knowledge Exchange Zika Folder](#)

- **Centers for Disease Control and Prevention:**

[Zika Virus home](#)