Stepping up Our Game against Zika Virus

By Bob G. Vincent

“Ground zero” for the first likely cases of locally transmitted Zika virus in the US has been identified as a one-mile square patch in the Wynwood neighborhood north of downtown Miami. The virus has not yet been found in local mosquitoes, but Florida Department of Health officials are aggressively implementing disease and environmental surveillance while city and county agencies conduct mosquito control measures. These include ground level spraying of the “ground hugging,” mosquitoes (aerial spraying is less efficient and effective), treating storm drains and removing standing water in affected neighborhoods. Blood donations from the affected region are being screened for the virus. In short, it’s “game on” for Zika virus prevention in Florida where I work as an environmental administrator.

Health Officials Working Together

The Florida Department of Health and the US Centers for Disease Control and Prevention (CDC) are partnering to keep the public advised on strategies to avoid the mosquito borne illness that might result in devastating health effects in newborns of infected mothers and other less well documented health effects in adults, such as Guillain-Barre Syndrome (see CDC webpage).

According to the World Health Organization, the female (biting) Aedes aegypti mosquito flies an average of only 400 meters in her lifetime, meaning that it is people, not mosquitoes that move the virus among widely spaced communities.

Until a vaccine is available, the essential measures to avoid contracting the Zika virus are to prevent mosquito bites and to ensure protection during sex in the event that a partner...
may be a Zika virus carrier. Because 80 percent of people infected with Zika virus have no symptoms, condom use during sexual intercourse is especially critical for pregnant women or women who may become pregnant. CDC also recommends that women who are pregnant or who are planning to become pregnant postpone travel to areas with widespread Zika infection (see CDC webpage on Zika and Sexual Transmission). That now includes the impacted area of Florida’s Wynwood neighborhood.

_Drain and Cover_

The Florida Department of Health’s “Drain and Cover” program provides the following tips to control the risk of mosquito borne illness:

- Drain water from garbage cans, house gutters, pool covers, coolers, toys, flower pots, or any other containers where sprinkler or rain water has collected.
- Discard old tires, drums, bottles, cans, pots and pans, broken appliances and other items that aren’t being used.
- Empty and clean bird baths and pets’ water bowls at least once or twice per week.
- Protect boats and vehicles from rain with tarps that do not accumulate water.
- Maintain appropriate pool chemistry of swimming pools. Empty plastic swimming pools when not in use.
- Repair broken screens on windows, doors, porches and patios.
- If you must be outside when _Aedes_ mosquitoes are active (daytime), cover up. Wear shoes, socks, long pants and long sleeves.
- Apply mosquito repellent to bare skin and clothing. Follow label directions. Repellents with DEET, picaridin, oil of lemon eucalyptus, para-methane-diol, and IR3535 are effective and safe for pregnant and breast-feeding women, when used as directed. Use netting instead of repellents to protect children younger than two months.

_Looking Ahead_

If the recent outbreaks of dengue and chikungunya — which are also spread by the _Aedes_ mosquito — are any indication, then it is expected that Florida will experience only small and geographically limited outbreaks of Zika. That said, CDC notes regions once affected by dengue and chikungunya are considered to be a higher risk for Zika virus outbreaks. The Florida Department of Health is committed to employ every available resource in order to reduce the spread of Zika virus. Yes, it’s “game on” for Zika virus prevention in Florida.

The Florida Department of Health issues frequent Zika virus updates at:


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