



### BACKGROUND

The Zika virus, originally from Africa, first appeared in the Western hemisphere in Brazil in April 2015. Since then it's been spreading rapidly throughout Central America. The World Health Organization (WHO) estimates there have been 0.5-1.5 million cases already and project 3-4 million cases within a year. No deaths so far are attributed to Zika, but World Health Organization officials agree that a causal relationship between Zika infection during pregnancy and microcephaly (abnormally small heads) is strongly suspected.<sup>1</sup> In 2013, Brazil reported 167 cases of microcephaly; since October 2015 there have been 4,180 cases reported. The Zika Virus was identified in several infants born with microcephaly while some of the infants tested negative.<sup>2</sup> On February 1, 2016, the WHO declared Zika a public health emergency and the CDC warned pregnant women against traveling to countries with large-scale Zika infections.

### SYMPTOMS AND TREATMENT

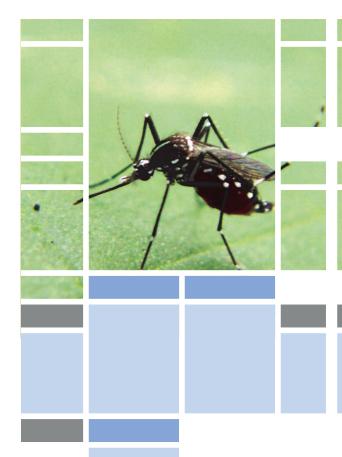
Only about 1 in 5 people infected with Zika have symptoms and those are usually mild including low-grade fever, rash, joint pain, body aches, conjunctivitis, headache, and vomiting. Symptoms last several days to one week. There is currently no vaccine or medication to prevent Zika virus infection although hospitalization is uncommon and fatalities are rare. To date, only imported cases have been found in the U.S. although a new case in Dallas, Texas appears to show the Zika Virus can be transmitted sexually.

# WORLD HEALTH ORGANIZATION AND ZIKA VIRUS

Zika Virus

<u>February 1, 2016</u> WHO Director-General, Margaret Chan, declares that the recent cluster of microcephaly cases and other neurological disorders reported in Brazil, following a similar cluster in French Polynesia in 2014, constitutes a Public Health Emergency of International Concern.





# **BAY COUNTY MOSQUITO CONTROL SURVEILLANCE**

The most effective way of controlling Zika is to eliminate mosquitoes. The number of mosquitoes in and around homes can be reduced by emptying standing water from containers, the primary habitat of Zika vectors.

The virus will most likely continue to spread in areas with competent vectors. Travel-associated cases have been reported in the U.S., which may result in local transmission and outbreaks. With many unknowns regarding the potential for local mosquito species to act as vectors, surveillance will be stressed. BCMC will employ BG-Sentinel traps in 2016 which are designed to capture *Aedes aegypti* and *Aeds albopictus* (neither of which has previously been captured in Michigan).



## TRANSMISSION

Zika virus is primarily transmitted by *Aedes aegypti* or *Aedes albopictus* mosquitoes, which are found throughout much of the region of the Americas, including parts of the United States. These *Aedes* mosquitoes bite mostly during daylight hours so protection from mosquito bites is recommended even during the day.

While transmission via mosquitoes is the primary means, it is also possible for the virus to be transmitted from mother to fetus (intrauterine), sexually, through blood transfusion, or lab exposure.

# **INFORMATION FOR TRAVELERS**

All travelers to or residents of areas with ongoing Zika virus transmission should be advised to strictly follow steps to avoid mosquito bites because of the potential for exposure to Zika, dengue, and chikungunya viruses. To prevent human-tomosquito-to-human transmission, persons infected with Zika, dengue, or chikungunya virus should protect themselves from mosquito exposure during the first week of illness.

MAP SOURCE: WHO–Distribution of Zika Virus 2007-2016



# RESOURCES

Centers for Disease Control and Prevention: http://www.cdc.gov/zika World Health Organization: http://www.who.int/topics/zika/en/

- <sup>1</sup> WHO Latest Zika Situation Report
- <sup>2</sup> Michigan Department of Health and Human Services http://www.michigan.gov/mdhhs