

## **The Bureau of Laboratories and Zika Virus Testing**

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The Bureau of Laboratories, Michigan's State Public Health Laboratory, began testing human clinical samples for Zika virus on May 9, 2016. Michigan is not a geographical hot zone for Zika virus. Our public health laboratory has allied with notable public health officials to perform clinical sample analysis for suspected human cases. Analysis of these clinical samples aids epidemiologists and other scientific entities in finding definitive answers to concerns about contraction and spread of this viremic disease. Although the Bureau of Laboratories is not a research facility, characteristics of identified viral illness will aid in the quest for answers to our scientific questions about this virus.

There are unknown questions about the virus such as, whether the Zika virus is the cause for the higher incidents of birth defect and congenital abnormalities in newborn infants. Zika virus testing is just one way the Bureau of laboratories can help answer this question. The Bureau of Laboratories enters test data into the Centers for Disease Control and Prevention (CDC) registry designed to track pregnant women and their infants in the United States who have a lab-confirmed Zika virus infection.

Zika virus was first discovered in Africa in 1947 in a rhesus macaque. Researchers found the virus was spread by a mosquito bite and could infect mice. Since this first discovery, outbreaks have been reported throughout the past seven decades in tropical areas because mosquitoes thrive there.

Currently, United States travelers are bringing the viral disease back with them. Approximately 1000 laboratory-confirmed cases have been documented in the United States. It is highly unlikely that travelers would bring back mosquitoes to the United States. The virus can spread through sexual contact or local mosquitoes biting infected persons then transmitting to non-travelers.

There is no vaccine for Zika virus. Prevention is the recommended strategy. Mosquitos are most active in the early morning and dusk. The best method for protection is the use of a repellent containing picaridin, oil of lemon eucalyptus, at least 20% DEET, or IR3535 and wearing attire with long sleeve and pants. Local mosquito control can assist with prevention of Zika virus and other associated mosquito acquired diseases such as West Nile virus.