

# Stars in Action

## The Mercer County MRC Newsletter



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### Zika Virus Disease

New Jersey currently has 59 confirmed travel-related cases of Zika virus (as of 7/14/16). To ensure our MRC volunteers have the information you need to protect yourself and your family members, this issue is devoted to Zika virus, including the latest updates on the disease.



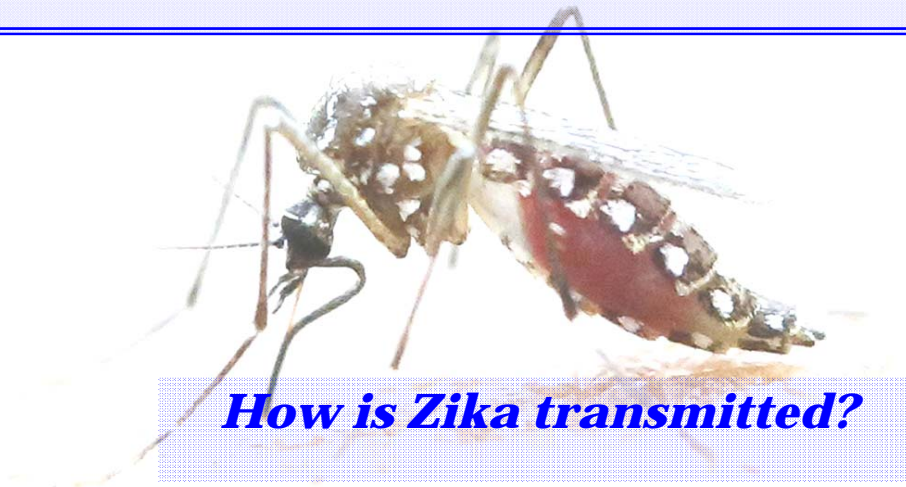
The New Jersey Department of Health's #ZapZika public awareness campaign has been underway since March, and the webpage may be found at:  
[www.nj.gov/health/cd/zika/index.shtml](http://www.nj.gov/health/cd/zika/index.shtml)  
There you will find frequently asked questions about Zika, key messages, information on building your own Zika prevention kit, and mosquito control measures recommended for inside and outside the home. Please share the webpage with your friends and family and help us to #ZapZika.

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## ***What is Zika Virus?***

- ◆ Zika is a viral infection primarily spread through the bite of an infected *Aedes* species mosquito.
- ◆ Zika virus was first discovered in 1947 and is named after the Zika Forest in Uganda.
- ◆ In 1952, the first human cases of Zika were detected.
- ◆ Before 2007, at least 14 cases of Zika had been documented, although other cases were likely to have occurred and were not reported.



## ***How is Zika transmitted?***

- ◆ Primarily transmitted through the bite of an infected *Aedes* species mosquito (*Aedes aegypti* and possibly *Aedes albopictus*)
- ◆ Only female mosquitoes transmit the virus (after taking blood meal from infected person).
  - Virus remains in the blood of an infected person for about a week.
- ◆ From mother to child
  - An infected pregnant woman can pass the virus to her fetus during pregnancy or around the time of birth.
- ◆ Through sexual contact
  - Zika virus can be spread by a man to his sex partners. Virus detected at least 62 days in semen
- ◆<sup>2</sup> Through a blood transfusion

## ***Symptoms***

- ◆ 75%-80% of people do not have any symptoms
  - ◆ Symptoms are similar to Dengue and Chikungunya
  - ◆ Most common is fever, rash, joint pain, or conjunctivitis (red eyes).
  - ◆ Other symptoms include muscle pain and headache.
- Illness usually mild, symptoms usually resolve in a week

## ***Complications***

- ◆ Since May 2015, Brazil has experienced a significant outbreak of Zika virus. In recent months, Brazilian officials reported an increase in the number of babies born with microcephaly.
- ◆ There is now enough evidence to conclude that Zika virus infection during pregnancy is a cause of microcephaly and other severe fetal brain defects.
- ◆ A baby girl delivered at a hospital in New Jersey in May 2016 was born with severe microcephaly as a result of contracting Zika virus from her mother. The mother likely contracted the virus in South America.
- ◆ Microcephaly is a birth defect where a baby's head is smaller than expected when compared to babies of the same sex and age.
- ◆ Babies with microcephaly often have smaller brains that might not have developed properly during pregnancy, were damaged at some point during the pregnancy, or that have stopped growing after birth.
- ◆ Zika has also been linked to Guillain-Barré syndrome (GBS), a rare disorder that can cause muscle weakness (arms and legs) and sometimes paralysis.

## ***Prevention***



- ◆ Wear long-sleeved shirts and long pants.
- ◆ Stay in places with air conditioning and screened doors and windows to keep mosquitoes outside.
- ◆ Take steps to control mosquitoes inside and outside your home.
- ◆ Sleep under a mosquito bed net if you are overseas or outside and are not able to protect yourself from mosquito bites.
- ◆ Use EPA-registered insect repellents with one of the following active ingredients: DEET, picaridin, IR3535, oil of lemon eucalyptus, or para-menthane-diol.
- ◆ When used as directed, EPA-registered insect repellents are proven safe and effective, even for pregnant and breast-feeding women.
- ◆ Always follow the product label instructions.
  - Reapply insect repellent as directed.
  - Do not spray repellent on the skin under clothing.
  - If you are also using sunscreen, apply sunscreen before applying insect repellent.
- ◆ Men who have been diagnosed with Zika or have (or had) symptoms should use condoms or abstain from sex for at least 6 months after symptoms begin.
- ◆ If no symptoms, use condoms for at least 8 weeks after returning from the affected country.

## ***Mosquito control***



- ◆ Empty and scrub, turn over, cover, or throw out any items that hold water, such as tires, buckets, planters, toys, pools, birdbaths, flower pot saucers or trash containers. Mosquitoes lay eggs near water.
- ◆ Tightly cover water storage containers (buckets, cisterns, rain barrels) so that mosquitoes cannot get inside to lay eggs.
- ◆ For containers without lids, use wire mesh with holes smaller than an adult mosquito.
- ◆ If you have a septic tank, repair cracks or gaps. Cover open vent or plumbing pipes.
- ◆ Install or repair and use window and door screens.
- ◆ Use air conditioning when possible.
- ◆ Use an outdoor insect spray made to kill mosquitoes in areas where they rest (dark, humid areas).
- ◆ Kill mosquitoes inside your home. Use an indoor insect fogger (**Hot Shot, Raid, Real Kill, Spectracide**)
  - Or indoor insect spray (**Home Pest Insect Killer, Raid, Ortho, HotShot, EcoLogic**) to kill mosquitoes and treat areas where they rest.

## ***Treatment***

- ◆ Supportive treatment (treat the symptoms)
- ◆ Get plenty of rest, drink fluids, take acetaminophen to reduce fever and pain
- ◆ Do not take aspirin and other non-steroidal anti-inflammatory drugs (NSAIDS) until dengue can be ruled out to reduce the risk of bleeding.
- ◆ If you have Zika, prevent mosquito bites for the first week of your illness.

## ***Take-home Messages***

- ◆ No vaccine exists to prevent Zika virus disease (Zika).
- ◆ Prevent Zika by avoiding mosquito bites
- ◆ Mosquitoes that spread Zika virus bite mostly during the daytime.
- ◆ Mosquitoes that spread Zika virus also spread Dengue and Chikungunya viruses.
- ◆ Once infected with Zika, likely to be protected from future Zika infections
- ◆ Take steps to control mosquitoes inside and outside your home.
- ◆ Wear appropriate clothing and apply insect repellents to prevent bites.
- ◆ Always follow the product label instructions.
- ◆ Men who have been diagnosed with Zika or have (or had) symptoms should use condoms or abstain from sex for at least 6 months after symptoms begin.
- ◆ Couples with a pregnant partner should use condoms every time they have sex, or abstain from sex during the pregnancy.

## ***PREVIOUS TRAININGS/EVENTS***

Mercer Division of Health staff attended a Zika Virus Workshop sponsored by the New Jersey Association of County & City Health Officials (NJACCHO) on June 22, 2016, at the Heldrich Hotel in New Brunswick, NJ. Various panels of speakers presented the latest updates on the disease, including clinical and epidemiological information, and an overview of mosquito biology and habitat. Selected presentations from the workshop may be accessed at: <http://njaccho.org/zika-virus-workshop-program-material/>

Health staff and several MRC volunteers also attended the MRC Emerging Infectious Diseases program June 28 in Middlesex County that included information on Puerto Rico's efforts to educate its residents on Zika virus disease, skill-building workshops on a range of topics for MRC volunteers, and a special session devoted entirely to Zika virus.



“Building capacity around emerging infectious diseases and public health response program” June 28, 2016, Middlesex County Fire Academy

## **Upcoming Training Opportunity**

**What:** Emerging/Re-Emerging Infectious Diseases

**When:** July 21, 2016, 6 pm

**Where:** Dempster Fire Academy, Lawrenceville, NJ (downstairs in Classroom D)

**Topics to be covered:** Zika Virus Disease (including latest updates), Dengue Fever, Chikungunya, Chagas Disease, Yellow Fever, and MERS respiratory syndrome.

At this time the program is not available on NJLMN for registration although we expect it to be posted soon. Public Health credits will be offered.

The training will be provided by Mercer County Division of Health staff and is open to MRC volunteers, CERT, and public health staff.

If interested, please register on NJLMN by July 20, 2016