

Mercer MRC

A Newsletter for and about our volunteers



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Lyme Disease Awareness Month

May is Lyme Disease Awareness Month. We are all familiar with the impact of ticks and tick-borne diseases here in Mercer County. Lyme disease in particular poses a serious public health issue, and is the most prevalent vector-borne disease in the continental United States.



Scientists are predicting that 2017 is going to be a banner year for ticks. More infected ticks raise the potential for increased tick-borne disease infections. In addition to Lyme disease, other illnesses transmitted by ticks include babesiosis, ehrlichiosis, Rocky Mountain spotted fever and Powassan virus.

Prevention is our best tool to combat infections like Lyme disease.

To provide our volunteers with the most up-to-date information and education on this topic, Mercer LINCS will be providing a program on Lyme and tick-borne diseases at the next MRC meeting on June 20 at the Dempster Fire Academy from 6 to 8 p.m. Public Health credits will be available. We hope you are able to join us!

As we head into the summer months, mosquito-borne diseases are also an increasing health concern, especially for county residents traveling outside of the country. Along with Zika virus, other illnesses caused by mosquito bites include chikungunya, dengue virus disease, yellow fever and West Nile virus. In this issue, we present an overview of these diseases to assist you in taking steps to fight the bite!

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Zika Virus



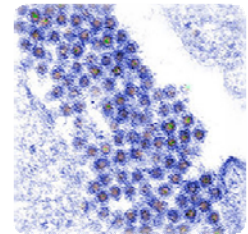
- ◆ New Jersey currently has 245 confirmed travel-related cases of Zika.
- ◆ Zika is a viral infection spread by the bite of an infected mosquito.
- ◆ Primarily transmitted through the bite of an infected *Aedes* species mosquito (*Aedes aegypti* and possibly *Aedes albopictus*)
- ◆ Other ways the virus is transmitted include: from mother to child, via sexual contact and blood transfusion.
- ◆ Virus remains in the blood of an infected person for about a week, but can remain in other body fluids much longer.
- ◆ 75-80% of infected people do not have any symptoms of the disease.
- ◆ The most common symptoms include fever, rash, joint pain and conjunctivitis (red eyes)
- ◆ Some people may also experience muscle pain and headache.
- ◆ The illness is usually mild, with symptoms resolving in a week.
- ◆ Zika virus can be passed from a pregnant woman to her fetus during pregnancy or at delivery.
- ◆ If a pregnant woman is exposed, it is not known how likely she is to get Zika.
- ◆ Zika virus infection during pregnancy is a cause of microcephaly and other severe fetal brain defects.
- ◆ Microcephaly has been linked to seizures, developmental delay, intellectual disability, problems with movement and balance, feeding problems, hearing loss and vision problems.
- ◆ Zika has also been linked to Guillain-Barré syndrome (GBS), a rare disorder that can cause muscle weakness (arms and legs) and sometimes paralysis.
- ◆ Prevent Zika by avoiding mosquito bites.
- ◆ Take steps to control mosquitoes inside and outside your home.
- ◆ Use EPA-registered insect repellents with one of the following active ingredients: DEET, picaridin, IR3535, oil of lemon eucalyptus or para-menthane -diol.

Chikungunya

- ◆ Transmitted by the same mosquitoes that spread Zika virus.
- ◆ Chikungunya virus is occasionally transmitted from mother to newborn around the time of birth.
- ◆ Beginning in 2014, chikungunya virus disease cases were reported among U.S. travelers returning from affected areas in the Americas and local transmission was identified in Florida, Puerto Rico and the U.S. Virgin Islands.
- ◆ Most infected people develop some symptoms.
- ◆ Symptoms usually begin three to seven days after being bitten by an infected mosquito.
- ◆ The most common symptoms are fever and joint pain.
- ◆ Other symptoms may include headache, muscle pain, joint swelling or rash.
- ◆ Chikungunya disease does not often result in death, but the symptoms can be severe and disabling.

Dengue Fever

- ◆ Mosquito becomes infected with dengue virus when it bites a person who has dengue virus in their blood.
- ◆ Endemic in Puerto Rico and in tourist destinations in Latin America, Southeast Asia and the Pacific islands.
- ◆ Symptoms include high fever, severe headache, severe pain behind the eyes, joint pain, muscle and bone pain, rash, and mild bleeding (nose or gums bleed) or bruising.
- ◆ Dengue hemorrhagic fever is a more severe form of the illness.
- ◆ Dengue hemorrhagic fever is characterized by a fever that lasts from two to seven days, with general signs and symptoms consistent with dengue fever.
- ◆ When the fever declines (after three to seven days), symptoms including persistent vomiting, severe abdominal pain and difficulty breathing may develop. Marks the beginning of a 24- to 48-hour period of capillary leakage, bleeding from nose or gums, vomiting blood, internal bleeding. May lead to shock, followed by death if volume replacement therapy is not started promptly.



West Nile Virus

- ◆ West Nile virus is most commonly transmitted to humans by mosquitoes.
- ◆ While additional routes of human infection have been documented, these methods of transmission represent a very small proportion of cases:
 - Blood transfusions
 - Organ transplants
 - From mother to baby during pregnancy, delivery or breastfeeding
- ◆ Most people (70-80%) who become infected with West Nile virus do not develop any symptoms.
- ◆ About 1 in 5 people who are infected will develop a fever with other symptoms such as headache, body aches, joint pains, vomiting, diarrhea or rash.
- ◆ Most people with this type of West Nile virus disease recover completely, but fatigue and weakness can last for weeks or months.
- ◆ Less than 1% of people who are infected will develop a serious neurologic illness such as encephalitis or meningitis (inflammation of the brain or surrounding tissues).
- ◆ Approximately 10% of people who develop neurologic infection due to West Nile virus will die.

Yellow Fever

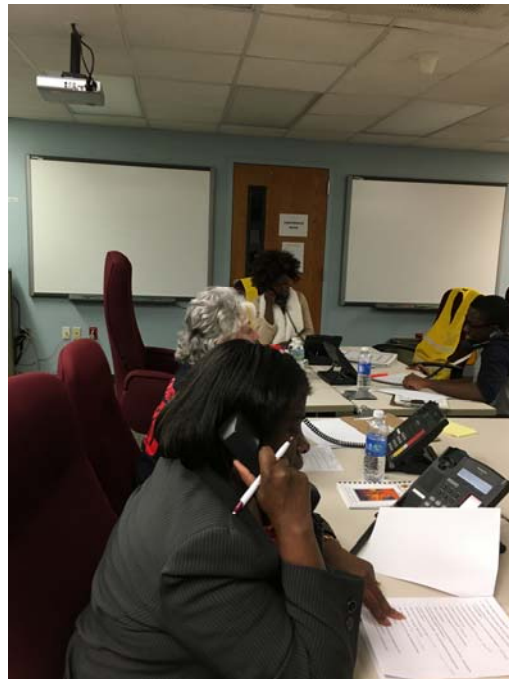
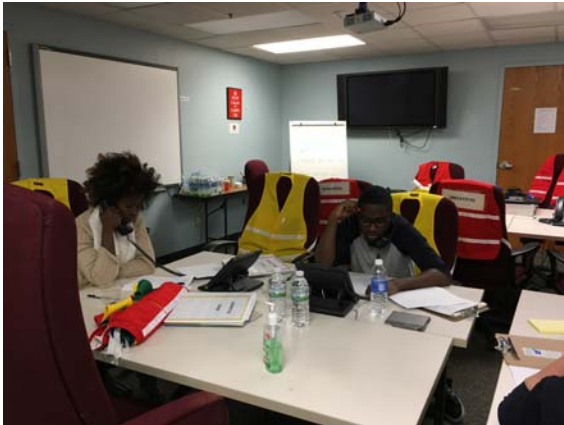
- ◆ Found in tropical and subtropical areas in South America and Africa.
- ◆ The majority of people infected with yellow fever virus have no illness or only mild illness.
- ◆ Incubation period (time from infection until illness) is typically three to six days.
- ◆ The initial symptoms include sudden onset of fever, chills, severe headache, back pain, general body aches, nausea and vomiting, fatigue and weakness.
- ◆ After a brief remission of hours to a day, roughly 15% of cases progress to develop a more severe form of the disease. The severe form is characterized by high fever, jaundice, bleeding, and eventually shock and failure of multiple organs.
- ◆ Among those who develop severe disease, 20–50% may die.
- ◆ Those who recover from yellow fever generally have lasting immunity against subsequent infection.
- ◆⁴ Yellow fever vaccine is a live-virus vaccine that has been used for several decades. A single dose provides lifelong protection for most people.

MRC trainings and events

MRC volunteers have participated in several trainings and programs this year including:

- MRC orientation: February 21
- Social Media & Mobs Training (Somerset County): February 24
- JEM Method POD training: March 23
- Zika Virus phone bank training and drill: April 18
- Operation Gotham Shield Radiation Reception Center Exercise: April 27
- Mercer County Airport Exercise: May 6
- Ewing Rabies Clinic: May 8
- CBRNE training: May 18

Zika Virus Phone Bank Drill



If you know someone who may be interested in joining the MRC, or you are currently not a member and are interested in joining, please contact Stephanie Mendelsohn, MRC Coordinator, at: smendelsohn@mercercounty.org or call 609-989-6898. 5