

February 1, 2016

What is the Zika Virus?

The Zika Virus is a mosquito-borne virus from the Aedes mosquito. This variety of mosquito exists in the US as well as in Brazil. Aedes-borne viruses have been known to follow a geographic pattern from Africa to South America to North America. The Zika virus was first detected in Brazil in April 2015.

Current affected areas

The Center for Disease Control (CDC) has launched a targeted surveillance and disease prevention program to monitor the Aedes mosquito population in the United States. The CDC have issued travel alert for 24 countries and territories: Brazil, Columbia, El Salvador, French Guiana, Guatemala, Haiti, Honduras, Martinique, Mexico, Panama, Paraguay, Suriname, Venezuela, Puerto Rico, U.S. Virgin Islands, Dominican Republic, Barbados, Bolivia, Ecuador, Guadeloupe, Saint Martin, Guyana, Cape Verde and Samoa.

The U.S. first case of microcephaly linked to the Zika virus reportedly surfaced in Hawaii. Currently 31 laboratory confirmed travel associated cases have been found in 11 U.S. states. There is currently no reported transmission of the virus in the U.S. (all travel related). Current states reporting Zika virus infection: Arkansas, California, Florida, Hawaii, Illinois, Massachusetts, Minnesota, New York, New Jersey, Texas and Virginia.

There are 20 laboratory confirmed cases of the Zika Virus in US Territories, 10 of which were in Puerto Rico and one in the US Virgin Islands. These are believed to be transmitted in these territories.

Effects of the Zika Virus

Symptoms of virus include: fever, rash, joint pain, red eyes (conjunctivitis), muscle pain and headache. Symptoms may last from several days to a week. Hospitalization is not required and fatality is low.

The Zika virus can be spread from a pregnant woman to her fetus. There appears to be a causal relationship between the Zika virus and microcephaly, a condition in which the head is too small for age and gender. Microcephaly almost always causes significant brain damage and can be life threatening. However, more research is needed to determine if the Zika virus can affect the fetal brain and cause microcephaly.

During the first week of infection, the Zika virus can be found in the blood and can be passed from the infected person to a mosquito via mosquito bites. The infected mosquito can then pass the virus onto other people.

Guillain-Barre syndrome (GBS) has also been found in patients with possible Zika virus infection. Studies will determine if there is a link between GBS and the Zika virus.

What is being done to reduce exposure?

Public health officials in Brazil are working to stop the spread of the virus on a large scale. They are spreading massive amounts of larvicide in the northeast and southeast regions of the country. Brazil indicated that 3,700 cases of microcephaly are being studied for signs of the Zika virus.

The U.S. Centers for Disease Control and Prevention have dedicated an emergency operations center to address the Zika virus.

The World Health Organization declared the Zika Virus an international health emergency on February 2, 2016. They estimated that as many as 4 million people could be affected by the virus as it spreads in the coming months.

When did the Zika virus become such a huge problem in Brazil?

There has been speculation that it could be related to the influx of foreign visitors to Brazil during the 2014 World Cup. Global warming has been proposed as a factor in the virus's ability to proliferate in a new environment.

Who is at risk?

People, especially pregnant women, who are traveling to countries where the virus is active should be cautious or postpone travelling. Dusk and dawn are particularly dangerous times to be out of doors.

Is it safe to get pregnant after traveling to a country with known Zika virus?

Zika virus usually remains in the blood of an infected person for only a few days to a week. The virus will not cause infections in an infant that is conceived after the virus is cleared from the blood. There is currently no evidence that a Zika virus infection poses a risk of birth defects in future pregnancies. Women are encouraged to consult with her healthcare provider.

Is Zika Testing Recommended for Pregnant Women?

At this time, the CDC does not recommend routine Zika virus testing in pregnant women who have traveled to a country with known transmission.

Treatment

There is no vaccine to prevent infection or medicine to treat Zika. Acetaminophen or paracetamol may be taken for fever and/or pain and drink plenty of fluids. NSAIDs and aspirin are not recommended. Report any suspected infections to your doctor and be certain to disclose recent travel.

Babies affected by the Zika virus may suffer from microcephaly. Treatment for this condition will be dependent upon the severity, there is no cure. Common problems associated with microcephaly include: seizures, developmental delays, intellectual disability, movement/balance issues, feeding problems, hearing loss and vision problems. Problems can range from mild to severe and are lifelong.

Prevention

Travelers are encouraged to prevent mosquito bites by: using as directed EPA-registered insect repellents containing DEET, picaridin, oil of lemon eucalyptus (OLE), or IR3535.

Pregnant and breastfeeding women can use all EPA-registered insect repellents, including DEET, according to the product label. Most repellents can be used on children aged >2 months. Permethrin-treated clothing and products are recommended. Keep inside and sleep in screened-in or air-conditioned rooms.

Once infected, the infected person should avoid getting mosquito bites for at least a week to prevent transmitting the virus to a biting mosquito, which in turn can infect other people.