

Massachusetts Nurses Association/National Nurses United: Zika Facts

What is Zika?

Zika is a mosquito-transmitted virus related to dengue, yellow fever and West Nile virus. First identified in 1947 in Uganda, for any years disease outbreaks were limited to small geographical areas in equatorial Africa and Asia. The virus appears to be transmitted by specific mosquito species (Aedes genus, the Asian tiger mosquito and the yellow fever mosquito), similar to dengue fever and chikungunya. Both are found in the U.S., as far north as the Canadian border.

What are the symptoms and complications?

Fever, itchy maculopapular rash, and joint pain; often in combination with conjunctivitis. Generally mild symptoms that last a few days to a week. Death and severe sickness are rare. The incubation period is currently estimated between three and twelve days. It is thought that up to 80% of people infected with the virus have no symptoms.

Zika virus infection in pregnant women may be connected to microcephaly in their infants. The CDC, WHO, and other scientific organizations are working to understand this possible link. Microcephaly (head smaller than average) is related to developmental delay, intellectual disability, vision problems, and other effects. The impact on babies born with microcephaly ranges from little to no harm to major deficits of intellect and motor functioning.

Evidence is also emerging that Zika infection may also be connected to Guillain-Barré syndrome, a rare auto-immune disorder that results in damaged nerve cells, weakened muscles, and paralysis. Most people recover from GBS, but some suffer permanent damage or death. This potential link is also being investigated.

Note: There is a school of researchers who have suggested that microcephaly, one of the most dangerous potential outcomes of Zika infection, might really be caused not by Zika but by Pyriproxyfen, the ingredient in the larvicide used to treat water to kill Aedes Aegypti mosquitoes. Some scientists conjecture that the treated water, not the Zika infection itself, could be causing the health problems. This controversy has not been settled.

Where has Zika infection been found?

Zika is currently locally transmitted in 28 countries and territories in North and South America. The CDC updates its list of areas with Zika at <http://www.cdc.gov/zika/geo/index.html>.

As of February 17, 2016 travel-associated and laboratory-confirmed Zika infection had been reported in 22 states of the U.S., including Massachusetts. No mosquito-acquired Zika cases had yet been reported. See <http://www.cdc.gov/zika/geo/united-states.html>

How does transmission of Zika occur?

Transmission occurs primarily through bites by infected mosquitoes. However it could also happen through sexual contact, blood transfusion, and from mother to baby during pregnancy and birth. No vaccine exists. Diagnostic testing is limited and testing can take a week for results.

Who is at risk?

Anyone who has travelled to an area with local transmission of Zika virus by Aedes mosquitoes. Pregnant women are especially at risk because infection may impact their fetus' development. Women who might become pregnant and their partners may also be at risk. More than one case of Zika virus has been sexually transmitted and live virus has been found in semen.

What protective measures exist?

On February 1, 2016, the World Health Organization declared a global health emergency (officially a [Public Health Emergency of International Concern](#) [PHEIC]) because of clusters of microcephaly and other neurological disorders in some areas affected by Zika. On February 8, 2016, CDC elevated its response efforts to a Level 1 activation, its highest response level.

Control of the vector, Aedes mosquitoes, is the most direct protective measure. National Nurses United, of which the Massachusetts Nurses Association is a founding member, is currently reviewing available control measures to be prepared in advance of warmer seasons. Consistent and thorough surveillance and screening of all pregnant women, women who might become pregnant, and their sexual partners who have travelled to an area where the virus is transmitted locally is necessary.

Because Zika virus is an emerging infectious disease, information is emerging on almost a daily basis about the risks, transmission routes, and complications of infection. Adherence to the precautionary principle in situations such as this is of vital importance, and preparations for full protective measures and thorough surveillance should begin immediately.

MNA calls for hospitals to commit to pandemic preparedness and to making appropriate PPE (Personal Protective Equipment), education and staffing available immediately.

What is the impact of the Zika crisis on all of us?

There are fears that Zika infection is being underreported even as the number of confirmed and reported cases escalates. National and international health agencies are generally considered to have fumbled the ball with Ebola last year and concerns are emerging that the same could be true with Zika (https://www.washingtonpost.com/national/health-science/mysterious-and-fast-moving-zika-virus-has-worlds-health-leaders-scrambling/2016/02/13/c2aac122-d119-11e5-abc9-ea152f0b9561_story.html), a viral infection that many are now suggesting compares to the AIDS crisis of the 1980 in the lack of scientific research and knowledge and the potential impact of the infection.

Furthermore, evidence is emerging that the Zika epidemic is another warning of the dangers of climate change, given that climate extremes lead to faster development of mosquito larvae into adults capable of transmission.

More information on Zika is at the National Nurses United website. Type Zika into the search box at the top left: <http://www.nationalnursesunited.org/> 2/23/16/mh