



June 2016

DEP FACT SHEET: Zika virus & New Jersey mosquitoes

New Jersey is vigilantly monitoring concerns about the Zika virus global outbreak and is providing the following information to help residents and local governments understand the State's longstanding efforts to monitor and control mosquito-borne diseases. New Jersey has had organized county mosquito control since the state Health Law, Title 26 Chapter 9 was passed in 1912. New Jersey's State Mosquito Control Commission has been in existence since 1956, and is now under the purview of the New Jersey Department of Environmental Protection, which works with mosquito control agencies in all 21 counties and the Rutgers Center for Vector Biology (RCVB) to monitor and control mosquito populations.

What is Zika?

[Zika](#) is a viral infection that is spread primarily by the bite of an infected *Aedes aegypti* mosquito. For more information about the disease, please visit the New Jersey Department of Health's [Frequently Asked Questions page](#).

Can *Aedes aegypti* mosquitoes become established here, and under what conditions?

While *Aedes aegypti* has occasionally been found in New Jersey in very small numbers, it is unlikely to establish a permanent population in the state due to our moderate climate. The *Aedes aegypti* mosquito is found in tropical climates. However, out of an abundance of caution, the New Jersey Department of Environmental Protection has been working with the New Jersey Mosquito Control Commission, the New Jersey Department of Health (NJDOH) and county agencies to be on the lookout for this particular species of mosquito.

Can other species of mosquito also spread the Zika virus?

The U.S. Centers for Disease Control (CDC) is looking at the extent to which *Aedes albopictus* (Asian tiger mosquito) can also spread the Zika virus. The Asian tiger mosquito, which is present in New Jersey, has been found in laboratory studies, and in one African nation, to have the ability to transmit the virus from an infected person to other people.

The Zika virus can be spread from a pregnant woman to her unborn baby. The U.S. Centers for Disease Control reports there have been incidences of a serious birth defect of the brain called microcephaly and other poor pregnancy outcomes in babies of mothers infected with Zika while pregnant.

How does New Jersey control the mosquito population?

DEP works with [county mosquito control agencies](#) to reduce mosquito breeding habitats and to monitor and reduce mosquito-borne illness, as well as threats to human and animal health. Program representatives regularly use traps to capture, identify and test adult mosquitoes at local labs for the presence of viruses. These agencies are now also monitoring for *Aedes aegypti* mosquitoes as part of their normal monitoring protocols. DEP's Office of Mosquito Control Coordination works closely with DOH, the New Jersey Department of Agriculture (NJDA) and the Rutgers Center for Vector Biology in tracking Zika developments abroad and in the USA.

What mosquito-borne illnesses are of concern in New Jersey?

DEP, DOH, RCVB and NJDA work closely to monitor for mosquito-borne viruses that have impacted humans and animals, including, [West Nile virus](#), [Eastern Equine Encephalitis](#), and [Saint Louis Encephalitis](#). Recently Dengue virus and Chikungunya virus

monitoring has been added to that ongoing effort, as has Zika virus monitoring.

What is done annually to reduce or eliminate mosquito populations?

State officials have worked with federal, county and local partners on mosquito control in New Jersey for more than a century and our efforts also address the potential threat posed by Zika. Each of the 21 county mosquito control agencies employs a variety of activities for mosquito eradication, such as water management programs to eliminate some breeding sites, use of natural predators, such as fish that eat mosquito larvae, public awareness campaigns and application of approved insecticides.

What more is being done this year to address any potential threat posed by Zika?

- In addition to the integrated mosquito management efforts undertaken every year, we and our public partners in all 21 counties are monitoring for any evidence of the *Aedes aegypti* mosquito, providing information at events on effective mosquito control and repellents, and continuing to monitor updates on the Zika virus from scientists here in New Jersey at our labs in Ewing and Cape May County as well as coordinating with the [Rutgers Center for Vector Biology](#) and other agencies and labs across the Americas.
- DEP will make available to county mosquito control agencies additional mosquito traps to expand monitoring, especially in urban and suburban areas. In addition, DEP will be making available to counties a supply of “mosquito dunks” – an easy to use biological larvicide (which is not hazardous to other wildlife) for use in standing water that cannot be drained. These dunks can also be purchased privately at many hardware and home improvement centers across the state.
- DEP also works closely with the NJDOH in their public health capacity through participation in the State’s Vector Borne Disease Working Group and is coordinating on grant applications to the federal government for additional Zika preparedness funding as well as on public outreach through Public Service Announcements and other means.

What should I do at home to reduce mosquitoes?

The best actions to take are eliminating standing water around your home and property, especially in urban & suburban areas, and eliminating all areas where still water can attract mosquitoes, such as trash bags, tin cans, plastic containers, ceramic pots or other water-holding containers, as well as discarded tires. In addition, roof gutters should be cleaned annually, and during warmer months, plastic wading pools should be emptied and turned over when not in use. Fish will regularly eat mosquitoes and may be a good addition to an ornamental pond. Be sure to change water in bird baths or troughs weekly. Remember, no amount of standing water is too small to be a mosquito breeding site: even a bottle cap containing water can serve this purpose.

How can I reduce the risk of a mosquito bite?

In addition to eliminating standing water, make sure your window & door screens are in good shape so mosquitoes cannot enter your home. Wear light-colored long sleeves & pants when you are outside during mosquito season from May through October. Follow the label instructions and apply an Environmental Protection Agency-registered mosquito repellent (see: www.epa.gov/insect-repellents). And remember, infants less than 2 months should not use any repellent and children under 3-years-old should not use eucalyptus oil. So, practice the 3 D’s: **Drain the water, Dress to cover skin, and Defend by use of repellents.**

For more information:

New Jersey Department of Health: <http://nj.gov/health>

New Jersey Mosquito Control Commission: <http://nj.gov/dep/mosquito/>

County Mosquito Control Agencies: <http://nj.gov/dep/enforcement/pcp/bpo-mfagencies.htm>

Mosquito Control Homeowner Information: <http://nj.gov/dep/mosquito/owners.htm>

U.S. Centers for Disease Control & Prevention’s (CDC) Zika Facts: <http://cdc.gov/zika/index.html>

CDC Travel Health Notices: <http://cdc.gov/travel/notices>