

Zika Virus: What You Should Know

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West Nile Virus was detected in Connecticut in 1999 and now Zika Virus has arrived and has been front page news, just like West Nile Virus was years ago. Like West Nile Virus, Zika Virus is spread to people primarily through mosquito bites, though Zika Virus can also be spread from men to women through sexual transmission and it's linked to birth defects and miscarriages. This makes prevention among pregnant women essential.

To date confirmed Zika cases in Connecticut have all been travel related. If travel is necessary to countries where viruses spread by mosquitoes have been reported, the ways to avoid exposure are to use insect repellent, wear clothing that covers arms, legs, and other exposed skin, and stay in places with air conditioning or that have window and door screens.

For pregnant women the Connecticut Department of Public Health (DPH) is advising they avoid or postpone travel to Zika affected areas if at all possible, and to not have unprotected sex with a male that's been exposed to the disease.

For couples who want to conceive DPH advises asymptomatic men and women to wait 8 weeks after last having traveled to an affected area or where potential exposure might have occurred. They also advise symptomatic women to wait 8 weeks after recovery and for symptomatic men to wait 6 months after recovery before having unprotected sex with their partner.

A vaccine for Zika is estimated to be 2 years away. There is no cure or treatment at this time. Symptoms include fever, rash, conjunctivitis, joint pain and red eye.

Along with personal awareness and behavioral modifications, mosquito control is the other component of lessening the potential risk of contracting Zika or West Nile Virus. Redding has had a mosquito control program in place since the arrival of West Nile Virus in 1999. Wetlands and shallow waters near ball fields and public gathering areas are treated with applications of larvicide throughout the mosquito season to help control mosquito activity in the larval stage.

Redding continues to participate in the Connecticut Agricultural Experiment Station's mosquito testing program. Mosquitoes are trapped every 10 days and tested for West Nile Virus and now Zika.

According to DPH the mosquitoes in Connecticut are much more likely to transmit West Nile Virus than Zika. Connecticut has had human West Nile Virus cases yearly.

The mosquitoes currently associated with transmitting Zika Virus are the *Aedes aegypti* and the *Aedes albopictus*. They're mosquitoes that are known to lay eggs in back yard containers including plant and flower vases, tires, kiddie pools, buckets, cans, bottles, barrels and birdbaths. In order to eliminate these breeding sites homeowners should empty containers at least once a week. Roof gutters with wet organic material such as decaying leaves and droppings from trees are also ideal for mosquito breeding. Keeping them clear and free of such material is advised.

Abandoned pools or shallow stagnant water can be treated with Mosquito Dunks, or Bti, which can be purchased at the local hardware store. Bti, a larvicide, is a naturally occurring soil bacterium that's effective in preventing mosquito larvae from growing into adult mosquitoes. It's best to start applying larvicide in the spring.

Mosquitoes require shallow putrid, organic material laden water and a blood meal to survive. The objective is to intervene in their life cycle. Once mosquitoes reach the adult stage prevention is difficult. It's best to decrease the mosquito numbers in the larvae stage before they take flight.

Mosquito activity is very much temperature related. Hot weather produces more mosquitoes and cold winters and cool summers help lessen the mosquito population. Thus the Connecticut human West Nile Virus cases usually occur between August and September and most of the cases in Connecticut have occurred in the coastline corridor between Greenwich and New Haven.

Many ask about the benefits of bats and bat boxes to control mosquitoes. According to Connecticut Department of Energy and Environmental Protection experts when asked said bats eat mosquitoes but don't keep up enough to be considered effective mosquito control.

Whether it's West Nile Virus or Zika Virus, the preventative measures to be taken are pretty much the same. If in the past you've been adamant about covering up, using bug spray (following directions) and getting rid of sources of standing water whenever possible to reduce or eliminate areas where mosquitoes lay eggs, those same measure will be effective for Zika Virus.

Websites for further up-to-date information on Zika Virus are cdc.gov and ct.gov/dph: type in Zika Virus and for additional information on mosquito control go to epa.gov and type in mosquito control.