West Nile Virus

What's the Buzz About West Nile Virus?

Hot weather is a breeding ground for West Nile virus, and residents of Whiteside County are urged to take precautions to protect themselves from mosquito bites. Mosquito bites can be irritating and can lead to serious illness or even death if the insect transmits the West Nile virus to a person.

Read below for more frequently asked questions about West Nile virus. This information can also be found on the Whiteside County Health Department website.

- Find out Three Steps You Can Take to Reduce Your Risk of West Nile here.
- Get updated information about Mosquito Repellents <u>here</u>.

What is West Nile virus?

West Nile virus is caused by a bite from an infected mosquito that's already carrying the virus, but it's important to remember that not all mosquitoes are infected.

How is West Nile virus transmitted?

West Nile virus is transmitted from mosquitoes that get the virus from infected birds and then transmit it to people.

West Nile virus is not spread by person-to-person contact or directly from animals to people. Mosquitoes transmit West Nile virus to birds, horses and people. Of the more than 3,500 species of mosquitoes, only the Culex (northern house) mosquitoes are carriers of West Nile virus, and only female mosquitoes bite as they searches for food supplies for their eggs.

What is the Peak Time for West Nile virus?

August and September tend to be the peak season for West Nile virus activity. Mosquitoes that have West Nile virus will be active until the first hard frost of the year.

For more information or to report a potential West Nile virus infection, call the health department at (815) 626-2230 or (815) 772-7411.

What are considered West Nile virus symptoms?

Most people with West Nile virus have no clinical symptoms of illness, but some may become ill three to 14 days after the bite of an infected mosquito. Symptoms of West Nile virus is generally mild and includes flu-like symptoms such as fever, headache, body aches, tiredness, neck and back stiffness, joint pain, swollen glands and a rash. Only about 2 out of 10 people who are bitten by an infected mosquito will experience any illness. However, serious illness such as encephalitis (inflammation of the brain) and meningitis (inflammation of the lining of the brain and spinal cord) are possible. People older than 50 years of age have the highest risk of severe disease. Also, people with weakened immune systems due to HIV/AIDS, cancer or organ transplants are most at risk for the infection.

If you are determined to be at high risk and have symptoms of West Nile encephalitis, your provider will draw a blood sample and send it to a commercial or public health laboratory for confirmation.

How does West Nile virus form?

West Nile virus-infected mosquitoes reproduce in artificial containers of stagnant water such as flower pots or trays, bird baths, barrels, old tires, clogged roof gutters, boats and abandoned swimming pools. Hot weather is also conducive to large numbers of these mosquitoes and rapid multiplication of the virus.

What can people do to prevent the spread of West Nile virus?

Property owners should empty outside containers filled with water to prevent mosquito reproduction. However, regardless of the effort to eliminate or treat stagnant water, mosquitoes will continue to reproduce, which is why personal protection is so important.

Some mosquitoes like to come indoors. Keep them outside by having well-fitting screens on both windows and doors. Offer to help neighbors whose screens might be in bad shape. Other ways to eliminate potential mosquito-breeding areas are to fill in root-ball holes from downed trees or any depression that holds water for more than a week. Consider eliminating standing water on tarps or flat roofs, and clean roof gutters and downspouts regularly. Birdbaths and wading pools should be emptied of water once a week.

"Regardless of the effort to eliminate or treat stagnant water, mosquitoes will continue to reproduce. That is why personal protection is so important," said Gene Johnston, director, Environmental Health, Whiteside County Health Department.

Personal Protection against West Nile virus

Using insect repellant and a little common sense are all it takes to stay safe from mosquitoes, which are typically out at dawn and dusk in summer and fall. Mosquitoes find their human prey using a combination of sensory signals including light, shape, color, heat, movement and other byproducts of human activity. If you are not properly protected, stay in your house. Consider avoiding outdoor activities during these times.

When it may be appropriate to apply insect repellant

When outdoors, wear shoes and socks, long pants and a long-sleeved shirt and apply insect repellant that includes DEET, picaridin or oil of lemon eucalyptus according to the label instructions. Mosquitoes may bite through thin clothing, so spraying clothes with repellent is an important consideration when going outdoors. Young children should not be allowed to apply insect repellant themselves. Parents should apply repellant on their own hands and then rub them on the child, avoiding the child's hands as they may accidentally ingest the repellant by putting their hands in their mouth.

Do not apply repellant under clothing. If repellant is applied to clothing, the items should be washed before being worn again. Mosquito netting can be placed over strollers if infants are taken outside at night.

West Nile virus and birds

Residents are urged not to touch any bird found lying on the road. Dead birds infected with West Nile virus found in Whiteside County may have been infected elsewhere and flown into Whiteside County when they died. However, chances are good dead birds that test positive for West Nile virus were infected locally.

It is important to remember that birds die from many other causes besides West Nile virus. Birds should be dead no more than about 48 hours prior to collection, and should not show signs of advanced decomposition. Whiteside

County Health Department staff collects up to 10 birds beginning in May of each year. Laboratory testing for West Nile virus is available through the Illinois Department of Public Health laboratory from May 15 to October 31 (or until 2 weeks after the first killing frost).

Call the Whiteside County Health Department at (815) 772-7411, ext. 104, to indicate the location of the bird, and a determination will be made if it is to be collected for testing.

Which birds are carriers of West Nile virus?

More than 130 species of birds are known to have been infected with West Nile virus, though not all infected birds will die. In Whiteside County, crows have been the birds most often found dead from West Nile virus, though an owl was recently found dead in the Fulton/Morrison area, and tested positive for the disease.

Some acceptable species for testing are crows, blue jays, grackles, starlings, robins, cardinals, sparrows, finches, hawks and owls. Birds that will not be accepted include pigeons, ducks, geese, chickens, other large birds and endangered species.

How Whiteside County tests for West Nile virus

Mosquito traps are generally set up first in the communities with the largest population then moved to new communities when positive pools occur. Mosquito surveillance involves trapping mosquitoes, counting them, identifying the species involved and testing the appropriate species for viruses. These surveillance methods are used to better identify areas where mosquito control efforts are needed. Detection and control of mosquito breeding sites depends upon integrated efforts among state and county agencies as well as private citizens.

Whiteside County Health Department collects and tests mosquito pools annually beginning in July and through late September.

Other Sources of Information

- The Illinois Department of Public Health has a website specifically designed with information about West Nile virus.
 The website has educational information and detailed surveillance of West Nile virus in humans, mosquitoes, birds and horses from 2001 to 2010.
- The U.S. Department of the Interior, U.S. Geological Survey has a website with information about West Nile virus and other similar viruses. The website has frequently updated maps showing the presence of West Nile virus in humans, birds and mosquitoes. On the main web page, click on West Nile Virus, and a map of the United States of America broken down into counties will appear. Viewers also can check individual states and counties.
- The Center for Disease Control and Prevention have extensive information about West Nile virus at its website.
- Another source of West Nile virus information is provided by the University of Illinois Extension, which includes a
 detailed map and chart regarding positive human West Nile virus cases.
- The Mayo Clinic has comprehensive West Nile Virus information on its website.