
West Nile Virus

What is West Nile virus?

West Nile virus (WNV) is an uncommon but serious mosquito-borne infection. The virus can be transmitted to horses, other animals, and, in rare cases, people.

How do people get West Nile virus?

WNV usually is spread by adult mosquitoes that are infected with the virus. Mosquitoes spread the virus by biting humans, horses, and other animals. WNV can sometimes be spread in other ways. In a very small number of cases, WNV also has been spread through blood transfusions, organ transplants, breastfeeding and even during pregnancy from mother to baby. Because of the unknown risk at this time and the fact that breastfeeding has well-established benefits, it is not recommended to discontinue breastfeeding. WNV is not spread through casual contact such as touching or kissing a person with the virus.

What are the symptoms of West Nile virus in humans?

Most WNV infections do not cause any symptoms. Mild WNV infections can cause fever, headache and body aches, often with a skin rash and swollen lymph glands. In a small percentage of people infected by the virus, the disease can be serious, even fatal. More severe infections can cause headache, high fever, neck stiffness, stupor, disorientation, coma, tremors, convulsions, paralysis, and sometimes death.

How soon after exposure do symptoms appear?

Symptoms of WNV usually appear 3 to 14 days after the bite of an infected mosquito.

How is West Nile virus diagnosed?

Diagnosis is based on tests of blood or spinal fluid.

Who is at risk for West Nile virus?

Anyone can get WNV, but some people are at increased risk, such as people living in or visiting areas where the disease is common, or people who work outside or participate in outdoor recreational activities in areas where the disease is common. Persons older than 50 years of age are more likely to develop serious symptoms of WNV if they do get sick and should take special care to avoid mosquito bites. Risk through medical procedures is very low. All donated blood is checked for WNV before being used. The risk of getting WNV through blood transfusions and organ transplants is very small, and should not prevent people who need surgery from having it. If you have concerns, talk to your doctor.

What is the treatment for West Nile virus?

There is no specific treatment for WNV. In more severe cases, intensive supportive therapy is indicated, i.e., hospitalization, intravenous (IV) fluids and nutrition, airway management, ventilatory support (ventilator) if needed, and prevention of secondary infections (pneumonia, urinary tract, etc.).

How common is West Nile virus?

WNV was first identified in NH in 2000. WNV has been found in horses, mosquitoes and several species of birds. Since 2003, four human cases have been reported in NH.

How can West Nile virus be prevented?

A vaccine is available for horses, but not for humans. Prevention of the disease centers around controlling mosquitoes and on individual action to avoid mosquito bites. To avoid being bitten by the mosquitoes that transmit WNV:

- If possible, stay inside between dusk and dawn, when mosquitoes are most active.
- When outside between dusk and dawn, wear long pants and long-sleeved shirts.
- Use an insect repellent with DEET or Picaridin according to manufacturer's directions when outside. Oil of lemon eucalyptus and IR3535 have been found to provide protection similar to repellents with low concentrations of DEET.
- Put screens on windows and make sure they do not have holes.
- Eliminate standing water and other mosquito breeding locations from your property. Do not alter natural water bodies. The management of ponds and wetlands is regulated by the Department of Environmental Services and any alterations require a permit before work may begin.

For more information about West Nile virus, call the New Hampshire Department of Health and Human Services West Nile Virus Information Line at 1-866-273-NILE (6453) or visit our website at www.dhhs.nh.gov or the Centers for Disease Control and Prevention website at www.cdc.gov. For questions about West Nile virus illness, contact the DHHS Infectious Disease Investigation Section at 1-800-852-3345 x4496 or 603-271-4496.