

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. For example, WNV can be spread to humans through blood transfusions and organ transplants from infected donors. Also, it is possible that pregnant women or breastfeeding mothers who become infected with WNV may pass the virus to their 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.

What are the symptoms of West Nile virus?

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 have the highest risk of severe disease.

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. In 2003, three human cases were 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. Repellents with Picaridin or oil of lemon eucalyptus have been found to provide protection similar to repellents with low concentrations of DEET. Follow label directions carefully.
- Put screens on windows and make sure they do not have holes.
- Eliminate standing water from your property.

For specific concerns about West Nile virus, call the New Hampshire Department of Health and Human Services, Communicable Disease Control Section at 603-271-4496 or 800-852-3345 x4496. For further information, refer to the Centers for Disease Control and Prevention website at www.cdc.gov or the New Hampshire Department of Health and Human Services website at www.dhhs.nh.gov.