



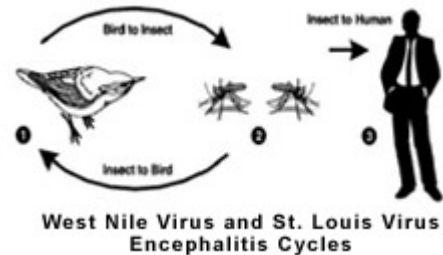
West Nile Virus

What Is West Nile disease?

Viruses and bacteria can cause encephalitis (an inflammation of the brain) in humans and other animals. West Nile encephalitis is a mosquito-borne infection of the brain caused by West Nile virus, a close relative of St. Louis encephalitis virus. It is thought to have been introduced into the New York City area in 1999 and by 2003 had spread across the country to California. West Nile virus is commonly found in Africa, West Asia and the Middle East. Although it is not known how the virus was introduced to the U.S., it may have entered this country in an infected traveler, bird or mosquito.

How do people get West Nile disease?

People get West Nile disease from the bite of a mosquito (primarily the *Culex* group of species) that is infected with West Nile virus. A mosquito becomes infected by biting a bird that carries the virus. West Nile virus is not spread by person-to-person contact or directly from birds to people.



When was West Nile virus first identified in Illinois?

In September 2001 laboratory tests confirmed the presence of West Nile virus in two dead crows found in the Chicago area. The following year all but two of the state's 102 counties reported West Nile activity.

What about human cases of West Nile disease in Illinois?

In August 2002, Illinois reported its first case of West Nile disease and by the end of the year had counted more human cases (884) and deaths (67) than any other state in the nation. In 2003, the number of West Nile disease human cases fell to 54 and only one death and in 2004, there were 60 human cases and four deaths.

What is the transmission cycle of West Nile virus in the environment?

Mosquitoes become infected with West Nile virus when they feed on infected birds. These infected mosquitoes then can transmit West Nile virus to humans and to other birds and animals when a mosquito bite occurs.

Is it only humans who become ill when infected with West Nile virus?

No. Certain animals also can become ill when infected with West Nile virus. For example, horses exposed to West Nile virus can develop encephalitis. Also, certain birds – particularly crows and blue jays – can become ill and die with West Nile virus infection.

What are the symptoms of West Nile disease?

Most people who are infected have no symptoms or may experience mild illness, such as a fever and headache, before fully recovering. In some individuals, particularly the elderly, West Nile virus can cause a serious disease that affects the brain called West Nile encephalitis. It can cause permanent neurological damage and be fatal. Symptoms generally occur three to 15 days following the bite of an infected mosquito and range from a slight fever, headache, rash, swollen nodes and conjunctivitis (irritation of the eye) to the rapid onset of a severe headache, high fever, stiff neck, disorientation, muscle weakness, coma or death. Less than 1 percent of persons infected with West Nile virus will develop severe illness.

Who is at risk of contracting West Nile disease?

All residents in areas with West Nile virus activity are at risk of getting West Nile disease; those at highest risk of severe disease are persons 50 years of age or older and those whose immune systems are weakened by illness or medical treatment (for example, chemotherapy).

Is there a treatment for West Nile disease?

There is no specific therapy for West Nile disease. In more severe cases, intensive supportive therapy – hospitalization, intravenous (IV) fluids, airway management, respiratory support (ventilator) if needed, prevention of secondary infections (pneumonia, urinary tract, etc.) and good nursing care – are indicated.

Is there a vaccine for West Nile disease?

No human vaccine for West Nile virus disease exists.

If I travel to an area where birds with West Nile virus have been reported and I am bitten by a mosquito, am I likely to get sick?

No. Even in areas where mosquitoes do carry the virus, very few mosquitoes (usually less than one out of 500) are infected. The chance that one mosquito bite will be from an infected mosquito is very small.

If bitten by a mosquito, should I be tested for West Nile virus?

No. Illnesses related to mosquito bites are rare. However, you should see a doctor immediately if you develop symptoms such as high fever, confusion, muscle weakness or severe headaches. Patients with mild symptoms are likely to recover completely and do not require any specific medication or laboratory testing.

Why is the state testing birds (especially crows) for West Nile virus?

Crows appear to be highly sensitive to the virus and provide an early warning system for detecting West Nile virus activity in a community. Knowledge of infected birds in a neighborhood or community allows public health officials to alert citizens about the increased risk of mosquito-borne diseases.

What should I do if I find a dead bird?

If a **dead crow or blue jay** is found between May 1 and the end of October and appears to have died from natural causes, you should report this information to your local health department. Your local health department will let you know if it is still collecting and testing dead birds. If the local health department has stopped collecting birds, you will be provided with instructions on how to safely dispose of the bird.

What time of year are mosquito viruses spread?

Viruses are most likely to be spread during the warm weather months when mosquitoes are most active, usually beginning in the spring and lasting until the first hard frost. Most human cases occur in late summer and fall.

Are bird and wild game hunters at risk for West Nile virus?

Because of their outdoor exposure, hunters may be at risk if they are in areas with West Nile virus activity and are bitten by mosquitoes. If they anticipate being exposed to mosquitoes, they should apply insect repellent to clothing and skin, according to label instructions, to prevent mosquito bites. Hunters should follow the usual precautions when handling wild animals and birds. They should wear gloves when handling and cleaning birds or animals to prevent blood exposure to bare hands.

Can a person contract West Nile disease by eating infected game birds?

Proper cooking kills the West Nile virus. Consequently, there is no danger associated with eating wild game that might be infected.

Can West Nile disease be prevented?

The best way to prevent West Nile disease or any other mosquito-borne illness is to reduce the number of mosquitoes around your home and neighborhood and to take personal precautions to avoid mosquito bites. Here are some suggestions:

- Avoid being outdoors when mosquitoes are most active, especially between dusk and dawn.
- When outdoors, wear shoes and socks, long pants and a long-sleeved shirt, and apply insect repellent that includes DEET, picaridin or oil of lemon eucalyptus according to label instructions. Consult a physician before using repellents on infants.
- Make sure doors and windows have tight-fitting screens. Repair or replace screens that have tears or other openings. Try to keep doors and windows shut, especially at night.
- Eliminate all sources of standing water that can support mosquito breeding, including water in bird baths, ponds, flowerpots, wading pools, old tires and any other receptacles. In communities where there are organized mosquito control programs, contact your municipal government to report areas of stagnant water in roadside ditches, flooded yards and similar locations that may produce mosquitoes.

Where do I call if I need more information on West Nile virus?

Call your local health department or the Illinois Department of Public Health's West Nile virus information toll-free number 866-369-9710, Monday through Friday 8 a.m - 5 p.m. Or visit the [Department's West Nile virus Web site](#) and the [U.S. Centers for Disease Control and Prevention's West Nile virus Web site](#) for more information on West Nile virus.