

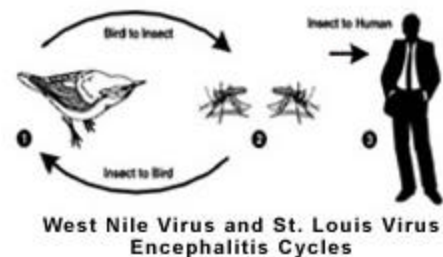
# West Nile virus Fact Sheet

## What Is West Nile encephalitis?

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 (WNV), 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 the fall of 2001 had spread as far west as Missouri and Iowa. WNV 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 encephalitis?

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



## Has West Nile virus been detected in Illinois?

West Nile virus was first identified in Illinois on Sept. 5, 2001. By the end of 2001, the virus had been found in seven Illinois counties in birds, mosquito pools and horses. In 2002, the virus has been identified in birds, mosquito pools and a horse.

## Have there been any human cases of West Nile encephalitis in Illinois?

Yes. Illinois reported its first case of West Nile disease on Aug. 6, 2002. The Illinois Department of Public Health has asked physicians to report all suspect cases of West Nile disease and to submit specimens so that testing for West Nile virus can be done.

## What is the transmission cycle of WNV in the environment?

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

## Is it only humans who become ill when infected with WNV?

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

## What are the symptoms of West Nile encephalitis?

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, WNV can cause serious disease that affects the brain. 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.

**What percentage of WNV cases are fatal?**

The case fatality rate ranges from 3 percent to 15 percent.

**Who is at risk of contracting West Nile encephalitis?**

All residents in areas with WNV activity are at risk of getting West Nile encephalitis; 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 encephalitis?**

There is no specific therapy for West Nile encephalitis. 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 encephalitis?**

No human vaccine for West Nile virus encephalitis exists.

**If I travel to an area where birds with WNV 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 WNV?**

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 WNV?**

Crows appear to be highly sensitive to the virus and provide an early warning system for detecting WNV 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 WNV?**

Because of their outdoor exposure, hunters may be at risk if they are in areas with WNV 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 encephalitis by eating infected game birds?**

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

### **Can West Nile encephalitis be prevented?**

The best way to prevent West Nile encephalitis 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:

- Stay indoors at dawn, dusk and early evening. If outdoors at these times, wear shoes and socks, long pants and a long-sleeved shirt. Loose-fitting, light colored clothing is best.
- Use mosquito repellent containing 25 percent to 35 percent DEET when it is necessary to be outdoors, applied sparingly to exposed skin or clothing, as indicated on the repellent label. Consult a physician before using repellents on young children.

- Eliminate stagnant water in bird baths, ponds, flower pots, wading pools, old tires and any other receptacles in which mosquitoes might breed
- Check for and repair any tears in residential screens, including porches and patios.

**Where do I call if I need more information on WNV?**

You can call the Kankakee County Health Department, Environmental Health Division at 815-937-7860.