



## West Nile Virus and Wildlife

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### **What is West Nile virus?**

West Nile virus (WNV) is a viral disease previously seen only in Africa, Asia and Southern Europe. This virus can cause encephalitis, an infection of the brain and the spinal cord. WNV was first detected in the United States in 1999 when at least 62 people became seriously ill, and seven of them died. Since then, WNV has rapidly spread throughout the continental United States. In Ohio, WNV was first identified in birds and mosquitoes in 2001. The following year, the first human cases and deaths were reported in Ohio. By the end of 2002, WNV was reported in all 88 Ohio counties, either in birds, mosquitoes, humans or horses. There were 441 human and 644 horse cases identified. WNV is now established in Ohio where cases occur each year and seasonal epidemics can flare up under certain conditions in the summer and continue into the fall.

WNV is spread to people by the bite of an infected mosquito. The principal transmitter of West Nile virus is the Northern house mosquito (*Culex pipiens*). Mosquitoes first become exposed to the virus when they feed on birds that are infected with WNV. Once the mosquito is infected, it may transmit the virus to people or other animals when it bites them. Many birds can be infected with WNV, but crows and blue jays are the most likely to die from the infection. Horses, too, are prone to severe WNV infection. People cannot get WNV from another person or horse that has the disease.

### **Are wild game hunters at risk for West Nile virus infections?**

Because of their outdoor exposure, game hunters may be at risk if they are bitten by mosquitoes in areas with WNV activity.

### **Can I get West Nile virus from handling dead animals?**

There is no evidence that WNV can be spread directly from animals to people. However, the Centers for Disease Control and Prevention (CDC) does recommend that hunters wear gloves when handling and cleaning all game to prevent blood exposure to the bare hands.

### **What should wild game hunters do to protect themselves from West Nile virus infection?**

Hunters should follow the usual precautions when handling wild animals. 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 wear gloves when handling and cleaning animals to prevent blood exposure to bare hands, and meat should be cooked thoroughly.

### **Are the wetlands where I hunt ducks a source for West Nile virus-transmitting mosquitoes?**

Although mosquitoes are found in wetlands, natural predators help reduce their numbers in all but the wettest years. In order to successfully transmit WNV to people, a mosquito must first bite an infected bird and then bite a person. Few mosquitoes feed on both birds and people. The virus-carrying northern

house mosquito has been identified as an important threat in Ohio, and it breeds in stagnant pools and containers around homes. You can reduce their numbers by removing all discarded tires from your property; disposing of tin cans, plastic containers, ceramic pots and similar water-holding containers; making certain that your roof gutters drain properly; draining water from pool covers; turning over wheelbarrows and plastic wading pools when not in use; and eliminating standing water around your property.

### **Can people get West Nile virus from eating wild meat?**

No. Proper cooking kills WNV, so there is no danger in eating wild game. The CDC does recommend that hunters wear gloves when handling and cleaning all game to prevent blood exposure to the bare hands.

### **Are crows the only birds affected by West Nile virus?**

No, but crows and their relatives (especially blue jays) are the most likely to die from WNV infection. Since WNV was discovered in the United States in 1999, the virus has been detected in over 300 species of dead birds. Most birds survive WNV infection.

### **Are any other wild animals at risk for West Nile virus?**

Other animals, including several mammals and alligators, are susceptible to WNV. For more information about WNV in birds and other wild animals, visit the National Wildlife Health Center's Frequently Asked Questions web site at:

[http://www.nwhc.usgs.gov/disease\\_information/west\\_nile\\_virus/frequently\\_asked\\_questions.jsp](http://www.nwhc.usgs.gov/disease_information/west_nile_virus/frequently_asked_questions.jsp)

### **Can infected mammals be carriers (i.e., reservoirs) for West Nile virus and transmit the virus to humans?**

No. WNV is transmitted by infected mosquitoes. Birds are the natural host and reservoir of WNV. Although other animals, including several mammals and captive alligators, are susceptible to WNV infection, there is currently no evidence that animals other than birds naturally develop a high enough virus load to transmit the infection to an uninfected mosquito.

### **What is the current status of West Nile virus in Ohio?**

Contact your local health department or visit the Ohio Department of Health's web site for the current status of WNV in Ohio: <http://www.odh.ohio.gov/wnv>.