



# Extension FactSheet

Veterinary Preventive Medicine, 1900 Coffey Road, Columbus, Ohio 43210

## Frequently Asked Questions About Wildlife and West Nile Virus

### What is West Nile Virus?

West Nile Virus (WNV) is a viral disease that can cause encephalitis or meningitis, infection of the brain and the spinal cord or their protective covering. Prior to 1999, the disease was found only in Africa, Asia, and southern Europe. Over the past several years, WNV has caused disease in the United States. In 1999, at least 62 people became seriously ill, and seven of those died. Since then, WNV has rapidly spread throughout North America. During the year 2000, 21 human cases of WNV encephalitis were reported in the United States, with two deaths. In 2001, there were 66 cases with nine deaths. In 2002, 4,156 human cases of WNV encephalitis or WNV fever were reported with 284 fatalities. During 2003, almost 10,000 human cases of WNV encephalitis and fever were reported from 46 states, with 264 fatalities. Since 2003, WNV cases and fatalities have continued to remain fairly high. The yearly number of cases and number of fatalities have fluctuated depending on the weather conditions throughout the nation. It is expected that WNV will continue to be a serious disease threat well into the future.

West Nile Virus 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

Year	United States		Ohio	
	Cases	Deaths	Cases	Deaths
1999	62	7	0	0
2000	21	2	0	0
2001	66	9	0	0
2002	4,156	284	441	31
2003	9,862	264	108	8
2004	2,539	100	12	2
2005	3,000	119	61	2
2006	4,266	177	48	4
2007	3,623	124	23	3

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 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.

Continued spread of this disease among wild birds and mosquitoes is anticipated. State, federal, and local agencies are working together to address the health risks of WNV to Ohio families and their animals. Ohio public health officials test for WNV in many species of birds, mosquitoes, and horses. Once infected areas are identified, mosquito control efforts are increased in those areas to protect people from the disease.

### Prepared by:



Ohio Department of Health • Ohio Department of Agriculture • Ohio Department of Natural Resources

The Ohio State University • Ohio Environmental Protection Agency • Association of Ohio Health Commissioners

Ohio Mosquito Control Association • Ohio Environmental Health Association • United States Department of Agriculture

**Q. Are duck and other wild game hunters at risk for West Nile Virus infections?**

A. Because they are outdoors, hunters who go into the field while mosquitoes are still active may be at risk if they are bitten by mosquitoes in areas with WNV activity. The extent to which WNV may be present in wild game is unknown at this time.

**Q. What should wild game hunters do to protect themselves from West Nile Virus infection?**

A. WNV infections usually peak in late summer and early autumn, before mosquito numbers are reduced by hard freezes. If you hunt during this period, you should wear long-sleeved shirts, long pants, and apply insect repellents to clothing and skin, following the label directions, to prevent mosquito bites.

**Q. Will the wetland where I hunt ducks be drained to control mosquitoes?**

A. Although mosquitoes are found in wetlands, natural predators help reduce their numbers in all but the wettest years. In order to successfully transmit the 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, and it breeds in stagnant pools 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.

**Q. Can you get West Nile Virus if you eat wild meat?**

A. As far as we know, proper cooking kills WNV, so there is no danger in eating wild game. 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.

**Q. Who should hunters contact for information about the risk for West Nile Virus infection in a specific geographic area?**

A. Local health departments will know where WNV has been found in Ohio.

**Q. I enjoy watching birds. If I see a lot of crows roosting in an area, should I be concerned about West Nile Virus?**

A. No. Seeing crows alive and well is a good indication that the virus is not in your area. Dead crows, however, may indicate the presence of the virus and should be reported to your local health department.

**Q. Are crows the only birds affected by West Nile Virus?**

A. No, but crows and their relatives (especially blue jays) are most seriously affected by the virus. Large numbers of North American crows and other birds have died from WNV infection. Some exotic birds in zoos died. WNV has been identified in at least 200 species of free ranging and captive birds found dead in the United States. The public reported most of these birds. Wildlife biologists have also found evidence that some healthy birds have been exposed to the WNV and have survived.

**Q. Will West Nile Virus cause songbird populations to become endangered?**

A. While we are still learning about the impact of West Nile Virus on our native birds, it seems unlikely that healthy native songbirds will be greatly threatened. Studies show that many species and individuals survive WNV infections. Wildlife disease scientists are monitoring the impact of WNV as it moves west across the country.

**Q. Are any other wild animals at risk for West Nile Virus?**

A. We are still learning about the susceptibility of other species to the WNV. While it does appear that some mammals are affected, at this time it appears that crows and members of the crow family are the most susceptible bird species impacted by WNV.

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

A. WNV is transmitted by infected mosquitoes. At this time, there is no documented evidence of animal-to-animal or animal-to-person transmission of WNV. Bird-to-bird transmission has been reported in laboratory studies; however, the significance of this under natural conditions is unknown at this time.

## **What is the status of WNV in Ohio?**

WNV has been confirmed in Ohio every year since 2001. Infected mosquitoes, birds, horses, and humans have been found in all Ohio counties. Therefore, the virus is present throughout the state. Contact your local health department in your area, or visit one of the web sites.

For the current status on WNV in Ohio and for more information, you can log on to the following web sites:

The Ohio State University:  
**<http://vet.osu.edu/1516.htm>**

Ohio Department of Health:  
**<http://www.odh.ohio.gov/odhprograms/idc/zoodis/wnv/wnv1.aspx>**

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