



Extension FactSheet

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

What Outdoor Enthusiasts Should Know About 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

Does West Nile Virus pose a special risk to outdoor enthusiasts?

Any person bitten by a mosquito infected with WNV is at risk. The mosquito most closely associated with the disease (northern house mosquito) breeds in the stagnant water of mud puddles, ditches, flower pots, old tires, clogged gutters, and similar reservoirs of water. It is important to apply mosquito repellent when participating in any outdoor activity — especially when fishing, camping, or boating at night. Wearing light-colored clothing with long sleeves and long pants helps prevent mosquito bites. Window screens on campers and boats should be kept “bug-tight” as should netting on tents and similar outdoor gear. Keeping a campsite neat and orderly and eliminating any potential mosquito breeding sites is always recommended. Electric “bug zappers” do not help since these devices attract more mosquitoes than they kill.

Are hunters who field dress wild game birds at risk for WNV?

There is no evidence that WNV can be transmitted directly from birds or mammals to humans through direct blood contact. However, hunters are always urged to take proper precautions and wear rubber gloves when field dressing game.

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

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

Is feeding wild birds a health risk for humans?

It is completely safe to feed and provide habitat for wild birds in Ohio. Residents are urged to clean birdbaths regularly (at least weekly); aerate backyard ponds or stock them with mosquito-eating species such as goldfish; and eliminate containers of stagnant water.

What should outdoors enthusiasts do if they encounter dead birds?

During the summer of 2002, West Nile Virus was responsible for widespread illness and death among Ohio's

birds-of-prey, especially hawks and owls. Anyone who encounters an ill raptor in the wild should take special care to avoid contact with the bird and call a local raptor rehabilitation center for assistance. A list of raptor rehab centers is available on the ODNR web site. While WNV cannot be contracted through touch, the sharp beaks and claws of raptors pose a different kind of danger. People who encounter freshly dead birds with no other apparent illness or injury should alert the local health department. Health officials are currently monitoring deaths in Ohio's bird population to track the progression of WNV. However, anyone handling dead wildlife, including raptors, should always wear rubber gloves. Dead birds should be double-bagged in trash bags and disposed of. Responsible public action coupled with responsible individual behavior is the best way to prevent the spread of WNV and keep Ohioans safe from this new disease.

Outdoor enthusiasts concerned about WNV should contact:

The Ohio Department of Natural Resources at 614-265-1015 or 614-265-6860. Or visit the ODNR web site at www.dnr.state.oh.us and link to the WNV Work Group page for updated information on the disease.

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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