



# It's Your Health

## WEST NILE VIRUS

### The Issue

Canada had its first confirmed cases of West Nile (WN) virus in 2002. For most Canadians, the risk of illness from West Nile virus is low, and the risk of serious health effects is even lower. Nevertheless, it is important to know the symptoms of illness related to infection and how to minimize your risk, especially if virus activity is reported in an area near you.

### Background

The evidence to date shows that most people with West Nile virus contracted it from the bite of an infected mosquito. A mosquito becomes infected when it feeds on the blood of a bird that carries the virus. About two weeks later, the infected mosquito becomes capable of spreading the virus.

In 2002, scientists discovered other ways that West Nile virus could be spread, such as through blood transfusions and organ/tissue transplants. The risk of getting WN virus through these procedures is considered to be quite low. There is evidence that the virus can also be spread through breast milk, and from a pregnant mother to her unborn baby. In addition, laboratory workers who handle specimens with WN virus can become infected through needle punctures or small cuts.

There is no evidence to suggest that you could get WN virus by touching or kissing an infected person, or from being around a health care worker who has treated an infected person. There is no evidence that the virus can pass from infected animals, such as horses or pets, to people. However, it is still important to follow standard health and safety practices if you are going to handle dead birds or animals. The same is true if you work with animals at risk for WN virus infection, such as horses, or flocks of domestic birds.

For example, you should cover open wounds and wear protective gloves.

### Symptoms and Health Effects of West Nile Virus

Anyone who is exposed to mosquitoes in an area where WN virus has been detected is at some degree of risk for infection. Most people who become infected have no symptoms, and do not get sick. When infection does cause illness, symptoms generally appear within two to 15 days. In mild cases, people may have flu-like symptoms, including fever, headache, and body aches. Some may also develop a mild rash, or swollen lymph glands.

Some individuals, including older people, have weaker immune systems. This puts them at greater risk for serious health effects, such as meningitis (inflammation of the lining of the brain or spinal cord), and encephalitis (inflammation of the brain). In these cases, symptoms could include the rapid onset of severe headache, high fever, stiff neck, vomiting, drowsiness, confusion, loss of consciousness, muscle weakness, and paralysis. Severe cases of illness due to West Nile virus can be fatal. Anyone who experiences the sudden onset of these symptoms should seek immediate medical attention.

The long-term effects of serious cases are not fully understood, but studies to date show that prolonged health problems are possible. These can include physical effects (long-term muscle weakness and paralysis, fatigue, and headache), cognitive effects (confusion, depression, problems with concentration, and memory loss), and/or functional effects (difficulty with preparing meals, going out, shopping).



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Although individuals with weaker immune systems are at greater risk for serious health effects, WN virus can cause severe complications for people of any age and health status. This is why it is important to reduce your risk of becoming infected.

## Minimizing Your Risk

Your chance of being bitten by a mosquito capable of spreading West Nile virus is small. However, if there are reports of infected mosquitoes, infected horses or dead birds in your area, you should take immediate action to minimize your risk of mosquito bites.

- Limit the time you spend outdoors at dawn and dusk, when mosquitoes are most active.
- Wear light-colored long-sleeved shirts, long pants, and a hat when outdoors.
- Use insect repellents. Read and follow the manufacturers' directions for safe use.
- Make sure that door and window screens fit tightly and have no holes.

You can also take steps to reduce mosquito populations around your home and property. Mosquitoes need standing pools of water to breed, so remove standing water from such items as pool covers, saucers under flower pots, pet bowls, and wading pools. Empty and clean bird baths twice a week. Also, clean eaves troughs regularly to prevent clogs that can trap water.

## Government of Canada's Role

The Public Health Agency of Canada is working with its partners on a coordinated approach to reducing the risk of exposure to West Nile virus through education, surveillance, prevention and response. The approach was developed by a number of partners, including Health Canada, the provincial Ministries of Health, other federal and provincial departments and agencies, and the Canadian Cooperative Wildlife Health Centre. These partners provide educational information on WN virus through brochures, fact sheets, media briefings, news releases, and Web sites. The surveillance activities focus mainly on identifying the presence of WN virus in birds, mosquitoes, and horses. If the virus is detected in animals in a particular area, it means that people who live nearby are at increased risk of becoming infected. In these instances, provincial and municipal health authorities will implement local prevention and response measures, including advice to the public about how to minimize risks.

Because it is an emerging disease, many questions about WN virus do not yet have answers. The Public Health Agency is working diligently with its many partners to discover, analyze, and communicate information that will help protect Canadians against potential health effects from West Nile virus.

## Need More Info?

For detailed information on West Nile virus in Canada, visit the Public Health Agency's West Nile Virus site at:  
[http://www.phac-aspc.gc.ca/wn-no/index\\_e.html](http://www.phac-aspc.gc.ca/wn-no/index_e.html)  
Or call 1-800-816-7292

For Health Canada's brochure, Safety Tips on Using Personal Insect Repellents at:  
<http://www.pmra-arla.gc.ca/english/consum/insectrepellents-e.html>  
or call 1-800-267-6315

Health Canada's Climate Change and Health Web site at:  
[http://www.hc-sc.gc.ca/ewh-semt/climat/index\\_e.html](http://www.hc-sc.gc.ca/ewh-semt/climat/index_e.html)

For information on this virus from Canadian Blood Services visit:  
<http://www.bloodservices.ca/>  
and click on "West Nile Virus" under the heading "What I should know?"

For information on West Nile virus activity in your area, including surveillance activities, confirmed cases, cases, and proposed response and prevention measures, contact your provincial and/or local health authority.

For information about West Nile virus activity in the United States, visit the Centers for Disease Control and Prevention, West Nile Virus at:  
<http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>

For additional articles on this subject and other issues go to the It's Your Health Web site at:  
[www.healthcanada.gc.ca/iyh](http://www.healthcanada.gc.ca/iyh)  
You can also call toll free at 1-866-225-0709 or TTY at 1-800-267-1245\*