

West Nile Disease

This OSACH Fast Fact is intended to promote driving safety awareness, policies, and practices among health care employers, supervisors, and workers.

West Nile disease was first identified in North America in 1999. Since that time it has been gradually spreading across the North American continent, and is thought to be carried long distances by infected birds. Even faster than the spread of the disease has been the spread of worry and concern. Employers should have the information and the means of protection for workers who may be exposed to this biological hazard.

What is West Nile disease?

West Nile is an infectious disease that is caused by the West Nile (WN) virus, one member of a family of viruses that cause diseases such as Dengue fever and Yellow fever. At its most serious, West Nile disease can cause encephalitis or meningitis.

How can one become infected?

Human infection by West Nile virus is usually caused by the bite of an infected mosquito. Mosquitoes become infected by biting infected birds. Although the risk may be very low, Health Canada has indicated the virus may also be transmitted by blood transfusion and organ/tissue transplants. Laboratory workers handling infected specimens could also be exposed through needle stick or contact on open wounds.

Can West Nile be transmitted by person-to-person contact?

Casual contact, touching or kissing an infected person have not been shown to transmit the virus. It has been shown in at least one case in the United States that the virus can be transmitted to an unborn baby and may be present in breast milk of an infected mother.

Who is at risk?

Anyone exposed to infected mosquitoes in areas where they work, live or spend leisure time may be at risk of contracting West Nile disease. Unfortunately, there is no easy way to tell if a mosquito is infected. Therefore one should minimize the threat by reducing the chances of being bitten (see "How do I protect myself?" below).

What are the symptoms?

Most people who contract the disease will have no symptoms or very mild illness. The illness can include flu-like symptoms, fever, headache, or body aches, according to Health Canada. However, the disease may also cause the sudden onset of high fever, loss of consciousness, paralysis, severe headache, or lack of muscle coordination; these should be addressed by immediate medical attention. Symptoms usually manifest themselves within two to fifteen days after infection. Symptoms and their severity vary widely between individuals. Generally, persons with a compromised immune system experience the more severe symptoms; however, young, healthy individuals have been known to become severely afflicted. The long-term effects of West Nile disease are not yet fully known. While some people recover completely, others continue to have health problems.

Is West Nile in my area?

Health Canada has established a West Nile Surveillance program that tracks the number and location of dead birds that have tested positive for the virus, as well as the number and location of reported cases in humans. This information is posted on the Health Canada web site at www.hc-sc.gc.ca/pphb-dgsp/wnv-vwn/ and will assist in assessing the risk of exposure, bearing in mind, however, that human cases can result from infection acquired during travel to areas where West Nile disease is endemic. It is important that we support the West Nile Surveillance program by reporting dead birds to the local public health unit for testing.

How do I protect myself?

There is no vaccine for West Nile virus at this time. To reduce the risk of contracting West Nile disease individuals can:

- drain pools of standing water where mosquitoes breed
- repair or install screens to keep mosquitoes outdoors
- wear light-colored protective clothing such as hats, long-sleeved shirts, and full-legged pants
- spray clothing with mosquito repellent
- use an approved repellent
- try to avoid outdoor activities around sunrise and sunset
- stay informed and exercise caution
- report dead birds found on the workplace grounds to the employer
- report illness that may have resulted from workplace exposure

What should I do as an employer?

As with any hazard, employers should take all reasonable precautions, including:

- conducting a risk assessment
- developing and communicating policies and procedures
- draining pools of standing water
- providing information, protective clothing, and mosquito repellent to employees
- repairing or installing screens to keep mosquitoes outdoors
- reporting dead birds to the local Public Health Unit for testing for West Nile virus

Where do I find additional information?

The following sites have links that can provide you with further resources.

The Health Canada web site is a comprehensive site, including information, tips, links and tracking data of the virus: www.hc-sc.gc.ca/english/westnile/

The Centers for Disease Control (CDC) has developed a West Nile Advisory site, including information on repellents, tips, links and tracking: www.cdc.gov/ncidod/dvbid/westnile

The Ontario Ministry of Health and Long-Term Care has also established a West Nile site. Information can be accessed through the local public health unit in your area: www.health.gov.on.ca/english/public/program/pubhealth/westnile/wnv_mn.html



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