



West Nile Virus: Fact Sheet #7

Frequently Asked Questions

What is West Nile virus?

West Nile virus is a mosquito-borne virus that can cause mild symptoms or occasionally a more serious illness. West Nile virus was most commonly found in Africa, Central and West Asia, and the Middle East.

When and how did West Nile virus enter Canada?

West Nile virus was first detected in Ontario in 2001. It may have reached North America through infected migratory or imported birds, or, more likely through infected mosquitoes that were transported to North America by air travel.

Has West Nile virus been detected in the NWT?

West Nile virus has not been detected in the mosquito, bird or animal populations of the NWT. The probability of the virus appearing in the NWT and establishing itself in the north remains very low. To date, it has also not been found in British Columbia, the Yukon, Nunavut and Newfoundland.

How do people become infected with West Nile virus?

People become infected by West Nile virus primarily through the bite of a mosquito that carries the virus.

Mosquitoes become colonized with West Nile virus when they feed on infected birds. These infected mosquitoes can then transmit West Nile virus to other birds, or animals and humans. The West Nile virus is not known to be directly spread by birds or other animals to people, or by direct person-to-person contact. However, blood transfusion and organ transplantation have been confirmed as sources of human infection, but the risk of West Nile virus from blood and/or tissues remains very low, particularly since routine testing of blood donations. There is also evidence that pregnant women can pass the virus to their unborn babies and that the virus may be passed to infants through breast milk.

What effect does West Nile virus have on people?

Most people infected with West Nile virus do not get sick at all, or will only have mild symptoms. When infection does cause illness, symptoms will usually appear within two to 15 days after initial exposure. The extent and degree of symptoms can vary widely from person to person.

Milder cases typically display flu-like symptoms, including fever, headache and body aches. Some people may also develop a mild rash or swollen lymph glands.

Individuals who have weaker immune systems are at greater risk of developing more severe symptoms and health effects, including meningitis and encephalitis. Meningitis is an



inflammation of the lining of the brain or spinal cord. Encephalitis is an inflammation of the brain itself. These conditions can be fatal.

In such cases, symptoms could include the rapid onset of severe headache, high fever, stiff neck, nausea, difficulty swallowing, vomiting, drowsiness, confusion, loss of consciousness, lack of coordination, muscle weakness and paralysis. Other more chronic symptoms of West Nile virus have also been identified, including movement disorders and muscle wasting. Anyone who has a sudden onset of any of these symptoms should seek immediate medical attention.

Who is more likely to contract West Nile virus?

People with weaker immune systems are considered to be at greater risk for serious disease. This higher risk group includes:

- people over the age of 50
- people with chronic diseases, such as cancer, diabetes, alcoholism, or heart disease
- people that require medical treatment that may weaken the immune system, i.e. chemotherapy
- people who are immunocompromised, i.e. leukemia, lymphoma, HIV/AIDS.

However, West Nile virus can cause severe complications for people of any age and any health status. This is why it is important for all to reduce their risk of getting bitten by mosquitoes. Everyone exposed to mosquitoes in an area where West Nile virus has been detected is at some risk of infection.

What should hunters/others out on the land do to reduce risk of contracting West Nile virus?

Hunters should follow the usual precautions when handling wild animals. If they anticipate being exposed to mosquitoes, they should apply insect repellents to clothing and skin, according to label instructions, to prevent mosquito bites. During mosquito season travelers on the land, canoeists, hikers and others should be aware of the risk from mosquito bites.

Can I get West Nile virus from eating birds or animals that have been infected?

There is no evidence that West Nile virus can be transmitted to humans through consumption of infected birds or mammals. In keeping with good public health practice, people should always fully cook meat from either birds or mammals.



If I travel to a place where West Nile virus has been reported and I am bitten by a mosquito, am I likely to get sick?

Even in regions of the country and abroad where West Nile virus is present, only a small percentage of the mosquito population will carry it. Less than one percent of humans bitten by an infected mosquito will become seriously ill.

People traveling to infected regions should nonetheless take the proper precautions to reduce the likelihood of mosquito bites, including wearing protective clothing such as long-sleeved shirts, long pants and a hat. Light coloured clothing is best because mosquitoes tend to be more attracted to dark colours.

People should also use DEET (N,N - diethyl meta-toluamide) insect repellents on exposed skin following package directions carefully. The concentration of DEET varies in various repellents. The higher concentrations do not provide better protection but rather extend the length of time for protection from 3-8 hours. Follow the following rules when using DEET:

- **Children under 6 months of age** – do not use personal insect repellents containing DEET on infants.
- **Children aged 6 months to 2 years** – in situations where a high risk of complications from insect bites exist, the use of one application per day of DEET may be considered for this age group. The least concentrated product (10% DEET or less) should be used. The product should be applied sparingly and not be applied to the face and hands. Prolonged use should be avoided.
- **Children between 2 to 12 years** – the least concentrated product (10% DEET or less) should be used. Do not apply more than three times per day. Do not apply to the face and hands. Prolonged use should be avoided.
- **Adults** – should not use products containing more than 30% DEET.

Note: Refer to the safety tips as indicated in Health Canada's Information Sheet "Safety Tips on Using Personal Insect Repellents". It can be found at http://www.hc-sc.gc.ca/dc-ma/wnv-vno/index_e.html. Do not use DEET on pregnant women or infants.

What can I do to help reduce the mosquito population?

Mosquitoes lay eggs in standing water and it takes about four days for the eggs to grow into adults that are ready to fly. Even a small amount of water, for example, in a saucer under a flowerpot, is enough to act as a breeding ground. As a result, it is important to eliminate as much standing water around your property as possible by:

- Regularly draining standing water from items like pool saucers under flowerpots, recycle bins, garbage cans, wheelbarrows, etc.



- Remove old unused items from around your property including old tires that have a tendency to collect water.
- Change the water in wading pools, birdbaths, and pet bowls twice a week.
- Clean out eaves troughs regularly to prevent clogs that can trap water.

What is being done to monitor the spread of West Nile virus?

The Department of Health and Social Services is working with the Department of Environment and Natural Resources to ensure that people are informed regarding West Nile virus and report suspect findings of dead birds of the corvid family (crows, ravens, magpies, and grey jays). Renewable Resource officers throughout the NWT will collect bird carcasses, for testing. Using proper techniques to collect the bird carcasses, they will make arrangements for them to be examined for the presence of West Nile virus.

What should I do if I find a dead bird?

Contact your local Renewable Resources officer or Environment and Natural Resources office as officers have the training to handle and transport dead birds safely. Do not attempt to move the carcass yourself.

(Note: West Nile virus has not been found in any dead birds collected to date in the NWT.)

For further information:

Contact the Office of The Chief Medical Health Officer at (867) 920-8877.

Visit the following websites:

www.hlthss.gov.nt.ca – NWT Department of Health and Social Services (See Programs & Services Section)

http://www.hc-sc.gc.ca/dc-ma/wnv-vno/index_e.html – Health Canada