

Your Health

by Dr. Paul Roumeliotis

West Nile Virus

The West Nile virus belongs to a family of viruses called Flaviviridae and was first isolated in the West Nile province of Uganda. The first West Nile virus infection in North America occurred in the New York City area in the summer of 1999. In Canada, the virus was first found in birds in Ontario in 2001, and the first human case of West Nile virus occurred in Ontario in September 2002.

How do people get infected with West Nile virus?

Most people infected with West Nile virus get it from the bite of an infected mosquito. A mosquito becomes infected when it feeds on a bird that is infected with the virus. The mosquito can then pass the virus to people and animals by biting them. There have been cases in Canada and the United States of West Nile virus being spread through blood transfusions and organ transplants.

Who is most at risk?

Many people infected with West Nile virus have mild symptoms, or no symptoms at all. Although anybody can have serious health effects, it is people with weaker immune systems that are at greater risk for serious complications. This higher risk group includes:

- people over the age of 40
- people with chronic diseases, such as cancer, diabetes or heart disease
- people on medical treatment that may weaken the immune system (such as chemotherapy or corticosteroids)
- Although individuals with weaker immune systems are at greater risk, West Nile virus can cause severe complications for people of any age and any health status. This is why it is so important to reduce the risk of getting bitten by mosquitoes.

The symptoms of West Nile virus infection

The type and severity of symptoms varies from person to person.

Symptoms of mild disease include:

- flu-like symptoms
- fever
- headache
- body aches
- rash

Persons with weaker immune systems or chronic disease are at greater risk of developing more serious complications, including meningitis (infection of the covering of the brain) and encephalitis (infection of the brain itself). Tragically, these conditions can be fatal.

Mosquito bite prevention

Unfortunately, as with most viruses, there is no specific treatment or medication for West Nile virus. The best way to reduce the risk of infection is to try to prevent mosquito bites. If West Nile virus activity is detected in your area:

- Limit time spent outdoors at dawn and dusk, when many mosquitoes are most active.
- Wear light-coloured protective clothing such as long-sleeved shirts, long pants, and a hat when outdoors in areas where mosquitoes are present.
- A long sleeve shirt with snug collar and cuffs is best. The shirt should be tucked in at the waist. Socks should be tucked over pants, hiking shoes or boots.
- Light-coloured clothing is best because mosquitoes tend to be more attracted to dark colours.
- When going outdoors use insect repellents that contain DEET or other approved ingredients.
- Make sure that door and window screens fit tightly and have no holes that may allow mosquitoes indoors.
- To avoid insect bites, do not use scented soaps, perfumes or hair sprays.
- For young babies, mosquito netting is very effective in areas where exposure to mosquitoes is likely. Netting may be used over infant carriers or other areas where young children are placed.

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