

Cover up!

Mosquitoes are most active between dusk and dawn. If you need to be outside at this time, cover up and consider using insect repellent for extra protection.



What are the symptoms?

The chances of being bitten by an infected mosquito are rare. In fact, for the very few who are bitten by an infected mosquito most do not even know it, with approximately four out of five people infected by West Nile Virus not showing any symptoms or signs of illness at all.

While most people who become infected will experience no symptoms or have very mild illness, for some the symptoms will be pronounced. West Nile Virus illness consists of fever, muscle weakness, stiff neck, confusion, severe headache, and a sudden sensitivity to light. If you experience any of the symptoms mentioned, seek medical attention. These may be early symptoms of West Nile Virus or other illness.

For a very rare few, the virus causes serious neurological illness including encephalitis (inflammation of the brain).

Is there a vaccine?

Researchers are working hard to develop a vaccine to protect humans from West Nile Virus, but at this time no vaccine is available. Interestingly, studies indicate that some people in West Nile Virus-infected areas were found to have produced antibodies against the virus, providing some protection against future infection.



For more information about West Nile Virus contact:

York Region Health Services Health Connection
1-800-361-5653
TTY 1-866-252-9933
www.york.ca

Other useful websites:

Ministry of Health and Long-Term Care
www.gov.on.ca or www.healthyonario.com

Health Canada
www.hc-sc.gc.ca/pphb-dgspsp/wnv-vwn.html

Safety Tips on Using Personal Insect Repellents
www.hc-sc.gc.ca/pmra-arla/english/pdf/pnotes/deet-e.pdf



West Nile Virus

Spoil a mosquito's dinner plans

Protect yourself ...

Cover up ...

Wear insect repellent



WHAT YOU NEED TO KNOW ...

What is West Nile virus?

West Nile Virus is a mosquito-borne virus that can in rare cases cause serious illness. The risk of becoming seriously ill as a result of infection with West Nile Virus is low and most people who become infected experience no symptoms or have very mild illness. The virus is named after the West Nile region of Uganda where it first appeared in 1937.

How is West Nile virus spread?

West Nile Virus is primarily spread to humans by the bite of an infected mosquito. Mosquitoes become infected when they bite an infected bird. The virus is not spread by person-to-person contact through touching, coughing, sneezing or drinking from the same cup.

Who is at risk for West Nile virus?

Everyone who is active and outside during the summer months should take precautions to avoid being bitten by mosquitoes. Gardeners, golfers, walkers, campers and others who enjoy the outdoors are advised to use protection measures, such as repellent and appropriate clothing, and to consider avoiding outdoor activities in early morning and evening when mosquitoes are most active. People who have chronic illnesses and the elderly should be especially careful.



Prevention and protection

are the best ways to protect yourself and your family from West Nile virus



WHAT YOU CAN DO...

Don't get bitten!

Protect yourself and your family from mosquito bites

A recent survey indicated that 97% of York Region residents had heard about West Nile Virus, yet of those who knew about it only 63% took the proper protective measures to avoid being bitten by mosquitoes.

How can I protect myself and my family against West Nile Virus?

Cover up

Mosquitoes are attracted to darker, more intense colours, so wear light-coloured clothing when going outside when mosquitoes are active. It is recommended that long sleeved shirts or jackets, long pants and socks be worn. Pants legs can be tucked into socks for extra protection.

Use an insect repellent

Apply repellent sparingly on exposed skin surfaces or on top of clothing. Do not use under clothing. The repellent doesn't have to be applied heavily to be effective. A light coating works well.

- Choose a product that meets your needs. If you plan to be outdoors for a short period of time, for example, choose a product with a low concentration of repellent and repeat application only if you need a longer protection time.
- Use only personal insect repellents that are federally-regulated
- Always read the entire label carefully before using. Follow all the label directions including restrictions for use on young children and the maximum number of applications per day.

Clean up!

The best way to keep mosquitoes away is to clean up areas of stagnant water where they like to breed. Look around your house and property and get rid of places that are "mosquito friendly."

Information on repellents

Consider the following when choosing a repellent:

- **DEET**- The concentration of DEET (N,N-diethyl-m-toluamide) should be no greater than 30% for adults and no greater than 10% for children. Do not use DEET on children under six months of age, but consider an alternative such as using mosquito netting to cover baby carriages and strollers when outdoors.
- **P- menthane 3, 8-diol** - A product containing this active ingredient was recently registered in Canada. It provides up to 2 hours of protection against mosquitoes and can be applied two times daily. Do not use this product on children under 3 years of age.
- **Soybean oil** - Registered products containing soybean oil provide between one to 3.5 hours of protection against mosquitoes, depending on the product.
- **Citronella and Lavender** - Registered products containing citronella protect people from mosquito bites from 30 minutes to 2 hours. Registered lavender products repel mosquitoes for approximately 30 minutes. These products cannot be used on infants and toddlers under 2 years of age.
- **Products containing sunscreen and DEET**- Some personal insect repellent products also contain sunscreen compounds. As of December 2003, these products are no longer available in stores. Discard any combination product that you may still have at home.

Clean up around the house

The best way to keep mosquitoes away is to clean up areas of stagnant water where they like to breed. Look around your house and property and get rid of places that are potential mosquito breeding sites, including:

Containers of stagnant water

- Clean up and empty containers where water collects, such as in old tires, flower pots, wheelbarrows, barrels or tin cans that are outdoors.
- Change water in bird baths weekly
- If appropriate, drill holes in the bottoms of containers so water can't collect
- Mosquito breeding is not likely to occur in these temporary water sources until after approximately 7 days

Check swimming or wading pools

- Immediately remove water that collects on pool covers
- Make sure the pool pump is circulating
- Turn over wading pools when not in use

Check and clear eaves and drains

- Clear leaves and twigs from eavestroughs, storm and roof gutters throughout the summer
- Make sure drainage ditches are not clogged
- Check flat roofs frequently for standing water

Regular home and lawn maintenance

- Decaying debris can end up in storm sewers and become a food source for mosquito larvae
- Turn over compost frequently and fill in low depressions in lawn areas
- Clear out dense shrubbery where mosquitoes like to rest
- Make sure door and window screens are tight fitting and in good repair
- Spread the word. Point out potential breeding areas to your neighbours

WHAT YORK REGION IS DOING ...

The York Region West Nile Virus control plan includes extensive public education, mosquito control activities (including larviciding), and mosquito, bird and human surveillance, or monitoring.

What is larviciding?

Larviciding is a low risk and effective measure for the control of West Nile Virus. Methoprene is the larvicide that will be used. It comes in a slow-release pellet-like formulation and is administered when the mosquito is in the larval stage of development. It is not sprayed, but is placed in the water in catch basins. Methoprene is a synthetic growth hormone that interferes with the mosquito-life cycle, preventing the mosquito larva from reaching maturity. It has been approved by both the provincial and federal governments and is considered low risk for humans and the environment when it is applied in accordance with the label instructions. Larvicide will be applied in four phases, June through September.

Will York Region apply larvicide on private property?

Residents who are concerned about catch basins on their property are requested to place a mesh screen over the catch basin to prevent mosquitoes from entering and exiting the catch basin. A limited number of rear yard catch basins located on private property will be treated with larvicide on a case-by-case basis.

Dead bird pick-up service is available!

Please contact *Health Connection* for pick-up of dead birds of any species.

Report dead crows and blue jays through the *Health Connection* information line.

These species are known to be most susceptible to the disease and act as early warning signs for the presence of the virus in a particular area.



Why are dead birds being collected?

Like humans, West Nile Virus is transmitted to the bird population by infected mosquitoes. Crows, blue jays and other raptorial species are known to be most susceptible to the disease and act as early warning signs for the presence of the virus in a particular area.

Report dead crows and blue jays

York Region Health Services requests that residents report sightings of dead crows and blue jays. Suitable specimens may be collected and submitted to the Canadian Co-operative Wildlife Health Centre in Guelph for testing. All crows and blue jays that are reported will help to track the travel of the virus within York Region.

Dead crows and blue jays are to be reported to York Region Health Services through the *Health Connection* information line at **1-800-361-5653**.

- **Suitable specimens** - A suitable specimen must be a crow or blue jay that has died less than 12 hours prior to collection. These birds may be collected by York Region *Health Services* and sent for testing.
- **Unsuitable specimens** - Most dead birds will not be suitable for testing, but knowing what species they are and where they died is important information. Do not handle birds with bare hands or dispose of dead birds through the municipal garbage systems. If you choose to handle a dead bird, wear rubber gloves, double bag the bird and contact Health Connection for pick-up.
- **Dead bird pick-up service is available** - Please contact *Health Connection* for pick up of dead birds of any species.

