

West Nile virus



What is York Region doing to control West Nile virus?

The York Region West Nile virus Control Plan for 2009 includes public education, mosquito control, mosquito and human surveillance.

Education

York Region delivers seasonal public education that explains what the Region is doing to control West Nile virus and what residents can do to reduce their risk of getting the virus.

Information about West Nile virus is communicated to the public through paid advertisements and distribution of printed materials in public settings like municipal offices, libraries and garden centres. Up-to-date information about West Nile virus, including fact sheets, York Region West Nile virus statistics and press releases, are available on the West Nile virus section of the York Region website. York Region also offers public information sessions, upon request. Current information about the status of West Nile virus activity in York Region is shared regularly with the local media.

Mosquito control - larviciding

One of the measures to control West Nile virus is to reduce mosquito populations through a process called larviciding. Larviciding involves using pesticides (larvicides) to control mosquitoes when they are in the larval stage of development. This stage occurs in water, after the mosquito eggs hatch, but before the mosquito becomes an adult that bites.

In York Region, Methoprene, *Bacillus thuringiensis israelensis (Bti)* and *Bacillus sphaericus (B. sphaericus)* are the pesticides used for larviciding. All pesticides used in York Region's mosquito control program have been approved by both the provincial and federal governments and are considered safe for humans, animals and the environment.

Methoprene

Methoprene is a pesticide that comes in slow-release pellet-like formulations; it is not sprayed. In York Region, methoprene is used to control mosquito larvae in roadside catch basins on public property and, as required, in catch basins on private property.

Bacillus thuringiensis israelensis (Bti)

Bti is a naturally occurring bacteria found in soil and water. In York Region, it is used to control mosquito larvae in ponds, ditches and storm water retention ponds where larvae are found.

Bacillus sphaericus (B. sphaericus)

B. sphaericus is a naturally occurring bacteria found in soil and water. The toxin released by *B. sphaericus* does not affect other life forms or water quality. In York Region, *B. sphaericus* is used in catch basins in environmentally sensitive areas, surface waters, sewage lagoons and storm water management ponds where mosquito larvae are found.

Where and when will larviciding take place in York Region?

All municipal catch basins will be treated with four rounds of larvicide, beginning in June. Later applications will take place in July, August and September.

Municipal park catch basins will be treated in the early part of the summer.

Storm water management ponds, sewage lagoons, and road-side ditches will be treated as mosquito larvae are found through regular monitoring by York Region staff.

Will York Region apply larvicide on private property?

Residents who are concerned about catch basins on their property are asked 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.

Mosquito surveillance

Mosquitoes are responsible for passing West Nile virus from birds to humans. Not all mosquitoes carry West Nile virus. Only a few of the 57 mosquito species found in Ontario are able to carry and spread the virus.

Each week, from June until October, York Region staff set up and collect up to 40 mosquito traps across York Region. Captured mosquitoes are tested for West Nile virus. Information from the surveillance is used to monitor the level of West Nile virus in York Region and to identify where in the Region, it is present in mosquitoes. Knowing where and when the virus is present in York Region, allows the control plan to be modified so that it remains effective.

Human surveillance

York Region Community and Health Services is notified if a York Region resident tests positive for West Nile virus. In this case, York Region will inspect the area around the resident's home to identify and make recommendations to correct potential mosquito breeding sites. Other control measures may be put in place, if necessary.