WNV Questions and Answers

WNv Questions

1.) What is the effect of larvicide on humans?

The management of pesticides is a joint responsibility of the Federal and Provincial Governments. Health Canada’s Pest Management Regulatory Agency (PMRA) is responsible for assessing pesticides to determine if they are acceptable in terms of safety, merit and value.

Pesticides approved by PMRA are granted registration which allows them to be sold and used in Canada.

The Ministry of the Environment (MOE) regulates the sale, use, transportation, storage and disposal of federally registered pesticides in Ontario under the Pesticides Act and Regulation 914.

Approved by the Ministry of Environment, methoprene is an insect growth regulator with a non-toxic mode of action. It controls mosquitoes by preventing their development beyond the larval life stage. Specifically for the use of catch basins, ditches, storm drains, pools, and sewage lagoons in the Province of Ontario.

(Ministry of Environment, Permit Applicant Guide for Municipalities and Health Units: Controlling Mosquito Larvae for Prevention and/or Control of West Nile Virus May, 2011) https://dr6j45jk9xcmk.cloudfront.net/documents/858/6-4-6-permit-applicant-guide-for-municipalities.pdf

Studies indicate that methoprene is of low toxicity and poses little risk to people when used according to label instructions. Methoprene was not shown to have any significant toxicological effects in the standard battery of toxicity studies used to assess human health effects. The pesticide has very low acute oral and inhalation toxicity potential and is not an eye or skin irritant. Methoprene is also of low acute skin toxicity and is not a human skin sensitizer.

Laboratory tests of methoprene have shown to be non-toxic to mallard ducks and only slightly toxic to fish. Although it has been observed to be very highly toxic to freshwater invertebrates, results from field studies involving methoprene have shown that it has no lasting adverse effects on populations of invertebrates or other non-target aquatic organisms when used according to label instructions for mosquito control. Methoprene is not persistent in the environment. It degrades rapidly in water, being susceptible to transformation by sunlight and microorganisms.

Methoprene, when used in the approved manner, is not expected to pose unreasonable risks to wildlife, people, or the environment.

2). Is there a cost to private residents with catch basins on private property?

Owners of private land (e.g., shopping centers, school boards, apartment complexes, residential, farm, commercial and industrial properties, etc.) or managers of recreational lands (e.g., conservation authorities, zoos, amusement parks, etc.) or administrators of Crown Land (e.g., Management Board Secretariat, Ministry of Natural Resources, Ministry of Transportation, Ontario Realty Corporation, Hydro One, federal agencies, etc.) may conduct a larviciding program in water bodies located on land they own or manage if authorized by the local MOH.

Catch basins located on private land normally drain into a public storm drain system and therefore written authorization must be obtained from the proper jurisdiction (e.g., town, city or municipality) and accompany any permit application in order to use a larvicide in a catch basin. It is the responsibility of the property owner to hire a private contractor or service provider like a pest control or exterminating company to conduct larviciding practices.

Application of larvicide to water bodies on private land can occur only if the water body cannot be drained or modified (i.e., cost prohibitive or water body is a sensitive area). The licensed exterminator must provide in writing a copy of all permits to the Ministry of Environment for approval. The information submitted must identify clearly the addresses of the private lands and the type of water bodies intended to be treated with a mosquito larvicide before the larviciding program begins.

A permit application form may be submitted by:
- a licensed exterminator contracted by a private land owner
- a private land owner who holds an appropriate exterminator’s license
- a full-time employee, who holds an appropriate exterminator’s license, of a private land owner.

Ditches in front of private land abutting public roads are considered easements and are the property of the town, city or municipality and written authorization to apply a larvicide into these surface water bodies must also accompany a permit application form.

Provided below is information for a complete copy of the application guide:

**Permit Applicant Guide for Private Land: Controlling Mosquito Larvae for Prevention and/or Control of West Nile Virus. Ontario Ministry of Environment: May, 2011**

[https://dr6j45jk9xcmk.cloudfront.net/documents/860/6-4-7-permit-applicant-guide-for-private-land-en.pdf](https://dr6j45jk9xcmk.cloudfront.net/documents/860/6-4-7-permit-applicant-guide-for-private-land-en.pdf)

3). What pamphlets have information about bird baths?

The Ontario Ministry of Health and Long-Term Care send pamphlets that we administer to the public and they state:

“Get rid of standing water around your home on a regular basis-once a week is a good standard.”
“Change water in troughs and birdbaths frequently.”
“Change water in bird baths every other day.”
West Nile Virus and West Nile Encephalitis

What is West Nile Virus (WNV)?

WNV is a mosquito-borne virus. "Encephalitis" means a swelling of the brain, and can be caused by many different viruses and bacteria. West Nile Encephalitis is a type of encephalitis caused by West Nile Virus (WNV).

What are the signs and symptoms?

Only 1 in 150 people infected will experience symptoms. Only 20% of those infected will become seriously ill. Of these, 15% may be at risk for encephalitis.

- Symptoms are flu-like and may include fever, headache, body aches, and/or a skin rash.
- The elderly and people with weak immune systems are more likely to have severe cases.
- The period from contacting the virus to having symptoms is usually 3-15 days.
- See a doctor if you develop symptoms such as high fever, confusion, muscle weakness, severe headache, or stiff neck.

How is it spread?

West Nile Virus is spread to people and animals through the bite of infected mosquitoes. The mosquitoes get the virus by feeding on infected birds. The virus is NOT transmitted from person to person contact.

What can people do?

There is no specific treatment for this virus. Antibiotics are not effective. There are no vaccines approved for use against this virus.

To reduce your risk of getting WNV:

- When you are outdoors, use insect repellents containing DEET. Follow the directions. Do NOT use products with DEET on children under 2 years or pregnant women.
- Many mosquitoes are most active at dusk and dawn. Be sure to use insect repellent and wear long sleeves and pants at these times or consider staying indoors during these hours. Light-colored clothing can help you see mosquitoes that land on you.
- Make sure you have good screens on your windows and doors to keep mosquitoes out.
- Get rid of mosquito breeding sites by emptying standing water from flowerpots, buckets and barrels. Change the water in pet dishes and replace the water in birdbaths weekly. Drill holes in tire swings so water drains out. Keep children's wading pools empty and on their sides when they are not being used.

West Nile Virus and Encephalitis must be reported to the local Medical Officer of Health under the Health Protection and Promotion Act.
West Nile virus (WNv) and West Nile encephalitis

- WNv is a mosquito-borne virus
- "Encephalitis" means a swelling of the brain, and can be caused by many different viruses and bacteria. West Nile encephalitis is a type of encephalitis caused by WNv

Signs and Symptoms

- Only 1 in 150 people infected will experience symptoms. Only 20% of those infected will become seriously ill. Of these, 15% may be at risk for encephalitis.
- Symptoms are flu-like and may include fever, headache, body aches, and/or a skin rash.
- The elderly and people with weak immune systems are more likely to have severe cases.
- The period from contacting the virus to having symptoms is usually 3-15 days.
- See a doctor if you develop symptoms such as high fever, confusion, muscle weakness, severe headache, or stiff neck.

Spread

- West Nile virus is spread to people and animals through the bite of infected mosquitoes.
- The mosquitoes get the virus by feeding on infected birds.

Treatment

- There is no specific treatment for this virus. Antibiotics are not effective. There are no vaccines approved for use against this virus.

Complications

- Neurological effects may be permanent
Prevention

- When you are outdoors, use insect repellents containing DEET. Follow the directions. Do NOT use products with DEET on children under 2 years or pregnant women.

- Many mosquitoes are most active at dusk and dawn. Be sure to use insect repellent and wear long sleeves and pants at these times or consider staying indoors during these hours. Light-colored clothing can help you see mosquitoes that land on you.

- Make sure you have good screens on your windows and doors to keep mosquitoes out.

- Get rid of mosquito breeding sites by emptying standing water from flowerpots, buckets and barrels. Change the water in pet dishes and replace the water in birdbaths weekly. Drill holes in tire swings so water drains out. Keep children's wading pools empty and on their sides when they are not being used.

West Nile virus and encephalitis must be reported to the local Medical Officer of Health under the Health Protection and Promotion Act.

- The virus is NOT transmitted from person to person contact.
West Nile Virus

WNV is mainly spread to people through an infected mosquito's bite. Mosquitoes become infected by feeding on the blood of birds that carry the virus. The virus does not spread from person to person.

We monitor and control West Nile virus (WNV) in Brantford and Brant County by:

- Storm sewer catch basins pesticide treatments to kill mosquito larvae and reduce the number of mosquitoes
- Weekly surveillance

More information about WNV (http://www.ontario.ca/page/outdoor-health#section-2) (Ministry of Health and Long Term Care)

Standing Water

Standing water can be a breeding ground for mosquitoes, so public health inspectors enforce the municipal City of Brantford Standing Water Bylaw (http://www.brantford.ca/govt/bylawcodes/Pages/default.aspx). Report standing water complaints to our WNV hotline at 519-753-4937 ext. 444.

https://www.bchu.org/ServicesWeProvide/InfectiousDiseases/WestNileVirus
Reporting Dead Birds

Some birds, including crows and jays, may catch and die from West Nile virus. To report a bird who may have died from WNV, phone the Canadian Cooperative Wildlife Health Centre at 1-866-673-4781.

Links and Resources

- Canadian Co-operative Wildlife Health Centre (http://www.ccwhc.ca/west_nile_virus.php)
- City of Brantford Standing Water Bylaw (http://www.brantford.ca/govt/bylawcodes/Pages/default.aspx)
- Outdoor health (http://www.ontario.ca/page/outdoor-health) (Ontario Ministry of Health and Long-Term Care)
- West Nile virus (http://www.cdc.gov/ncidod/dvbid/westnile/index.htm) (Centers for Disease Control and Prevention)
- Surveillance of West Nile virus (http://www.phac-aspc.gc.ca/wnv-vwn/index-eng.php) (Public Health Agency of Canada)

Contact Us

West Nile Virus Hotline
519-753-4937 ext. 444

Environmental Health
519-753-4937 ext. 470

Other Resources

Reporting Dead Birds

https://www.bchu.org/ServicesWeProvide/InfectiousDiseases/WestNileVirus

3/24/2016
WEST NILE VIRUS SAFETY FOR 2015!
Protect Yourself and Your Family from West Nile Virus (WNV) this Summer
WNV is spread to people through the bite of infected mosquitoes.

Reduce the Risk of WNV
- Around the Home:
  - Remove stagnant water from pools and pool covers
  - Ensure that eaves troughs are clear and free-flowing
  - Empty spare tires and ANYTHING that collects water including flower pots or drill holes in bottom so water can’t collect
  - Empty bird baths twice a week
  - Keep ditches trimmed back and ensure they drain properly

Protection from Mosquito Bites
- Wear an insect repellent containing DEET
- Repellent should contain a maximum of 30% DEET for adults and children over 12 years of age, and no more than 10% for children 6 months to 12 years of age
- Do not use insect repellants combined with skin moisturizers or sunscreens as they are not approved for use by Health Canada. Apply these products separately when needed
- Wear light-coloured, long-sleeved shirts and long pants
- Minimize time outdoors between dusk and dawn
- Keep screen doors closed
- Make sure all window and door screens are in good repair

If you have any questions please call the WNV hotline at 519-753-4937 ext 444

WEST NILE VIRUS: How to Protect Yourself
Some mosquitoes carry West Nile virus. Mosquito bites can make you ill. Take these steps to protect you and your family:

Clean Up
- Keep your swimming pool chlorinated and circulated even if it’s not being used.
- Remove standing water from unopened pools and pool covers.
- Trim growth around ditches and ensure ditches drain.
- Empty spare tires, flower pots and wading pools.
- Seal holes in screens and doors.
- Empty bird baths twice a week.

Cover Up
- Wear light-coloured clothing, long sleeves and pants when outdoors between dusk and dawn.
- Wear insect repellent that contains DEET. Always follow the label.
- For adults and children over 12 years, use maximum 30% DEET.
- Children 6 months to 12 years, use maximum 10%.
- Do not use DEET on children under 6 months of age.
- Do not use products that contain both skin moisturizer and insect repellent.
- Apply sunscreen first, followed by repellent.

Questions? Please call the West Nile virus hotline: 519-753-4937 ext 444

DEAD BIRD PICK UP PROGRAM
The Brant County Health Unit will not be picking up dead birds for the 2015 season.
Dead birds such as crows, ravens, and blue jays are no longer required as an early indicator of WNV because information collected over the past few years has confirmed when and where the virus will most likely appear.
The Brant County Health Unit will focus on other indicators of WNV surveillance such as mosquito trapping and testing, sampling of mosquito standing water breeding grounds and larval testing.
Appendix “G”

Top ten mosquito love nests

1. Bird baths
2. Old tires
3. Unused containers like barrels
4. Flower pot saucers
5. Swimming pool covers
6. Latrine well covers
7. Clogged gutters and downspouts
8. Clogged drainage ditches
9. Small containers like cats or bottle tops
10. Unused children’s toys or vehicles

For more information:
www.MinistryOfHealthOntario.on.ca
1-800-473-1212
www.MinistryOfHealthOntario.on.ca
1-800-473-1212

From a report by the Government of Ontario
Today, mosquitoes are more than a nuisance.

West Nile virus is established in Ontario and the disease is transmitted to humans by mosquitoes. There is no way to predict how serious West Nile virus will be in any given year.

West Nile virus first appeared in Ontario in 2001. The virus is transmitted by mosquitoes that become infected by feeding on an infected bird. Of those who show symptoms, most will experience mild illness including fever, headache, body ache, nausea, vomiting and rash on chest, stomach or back. About one in 150 people infected will experience serious symptoms including high fever, severe headache, muscle weakness, stiff neck, confusion, tremors, numbness and sudden sensitivity to light. Symptoms usually develop between two and 15 days after being bitten by an infected mosquito.

Use insect repellent when outdoors

It's important you take steps that will protect you and your family from mosquito bites.
The good news is, it's easy.

• Use insect repellent when outdoors.
• Cover up.
• Clean up mosquito-friendly areas around your home regularly.

If they can't get to you, you won't get bitten.

Minimize exposed skin by wearing long-sleeved shirts or jackets and long pants. Mosquitoes are attracted to darker, more intense colours, so remember to wear lighter colours if possible.
And it's particularly bad out there and you need to be out for a long time, consider specialized bug protective clothing.

Clean up and ruin a mosquito's love life

The best way to keep mosquitoes away is to clean up areas where they like to breed.

Unlike birds and other insects, most mosquitoes do not fly very far and tend to stay close to their breeding sites and normal habitat.
Mosquitoes lay their eggs in stagnant water - even small amounts. The life cycle from egg to adult usually takes less than seven days.
So it’s important to get rid of standing water around your home on a regular basis – once a week is a good standard.
Adult mosquitoes like to rest in dense shrubbery. Keep bushes and shrubs clear of overgrowth and debris. And keep your compost pile turned on a regular basis.