

Fact Sheet

Winter 2010

West Nile Virus

What is West Nile Virus?

West Nile Virus (WNV) is a virus transmitted by mosquitoes that become infected by feeding on an infected bird. Other animals including people can also be infected.

How serious is West Nile Virus?

The risk of infection is low. Less than 1% of people infected become ill enough to be hospitalized. About 1 in 5 people who are infected will feel sick but will recover on their own. West Nile Virus is established in Ontario. There is no way to predict how serious West Nile virus will be in any given year.

Who is at risk for WNV?

While anyone can be infected with WNV, the chances of having a severe illness are greater as you get older, even if you are healthy. You may be at greater risk if you have a weakened immune system.

What are the symptoms of West Nile Virus?

The majority of people infected with WNV show no symptoms. About one in five people infected with WNV have symptoms which may include fever, headaches, nausea, vomiting and body aches these can be accompanied by a skin rash and swollen glands. Symptoms can last anywhere from a few days to weeks.

About one in 150 people infected will experience serious symptoms including neck stiffness, extreme confusion, disorientation, muscle weakness, vision loss and numbness.

Symptoms usually develop between two and fifteen days after being bitten by an infected mosquito.

How do I use mosquito repellents safely?

Always follow product instructions. Apply repellent lightly to clothing and exposed skin. Never use over cuts, wounds, sunburned or irritated skin. Avoid applying to children's hands, face and eyes. If repellent gets in the eyes, rinse with water right away. When using a spray, avoid breathing it in, and always spray in a well-ventilated area. Don't spray near food. Avoid prolonged use and wash repellent off daily.

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Can I use mosquito repellents on children?

Not all mosquito repellents are safe for children under 3 years of age. Check the product instructions. For DEET Health Canada recommends the following for children:

Children under six months of age

- Do NOT use insect repellents containing DEET
- Use other methods to avoid mosquitoes such as netting and not taking an infant outdoors during dusk and dawn

Children six months to two years

- Use a product containing 10% DEET or less
- Maximum of one application per day

Children two to 12 years of age

- Use a product containing 10% DEET or less
- Maximum of three applications per day

Children 12 years of age or older

- Can use DEET as often as needed according to product instructions

What concentration of DEET should adults use?

The concentration of DEET should be chosen based on the amount of time a person will need to protect themselves from mosquitoes. Products containing 10% DEET provide approximately 3 hours of protection and those containing 5% DEET provide 2 hours of protection. Studies show that lower concentrations of DEET are just as effective as higher concentrations; they just don't last as long. If staying outdoors for a long period of time, repellent should be re-applied after the protection time listed on the product.

Pregnant and breastfeeding mothers

There is no evidence that the use of DEET by a pregnant woman harms the fetus or affects a nursing child through breast milk. However, non-chemical methods to reduce mosquito bites could be considered.

Can repellent and sunscreen be used together?

Insect repellent may reduce the effectiveness of sunscreen. When using them together, sunscreen should be applied 20 minutes before outdoor activities, followed by repellent just before going into an area with mosquitoes. Children should always cover up and wear a hat to ensure protection from the sun. Products that combine insect repellent and sunscreen are not recommended.

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What should I do if I find a dead bird?

Do not touch the carcass with bare hands. Wear gloves or use a double plastic bag to pick up the bird and place it another plastic bag.

If you find a dead wild animal of any type please call the Canadian Cooperative Wildlife Health Centre (CCWHC) at 1-866-673-4781

How can I reduce my risk of getting infected with WNV?

Everyone is encouraged to avoid being bitten by mosquitoes. This includes things like wearing insect repellent (personal precautions) and getting rid of places where mosquitoes can breed on your property. Please review the list of precautions below:

1. Personal precautions

- If possible, avoid areas with mosquitoes or leave an area that has mosquitoes

2. Protect Yourself Outdoors When Mosquitoes are Present

- Be sure to take precautions when out at night, especially during dusk and dawn when mosquitoes tend to be most active.
- Wear light-coloured clothing, long-sleeved shirts, long pants, shoes and socks outdoors whenever possible.
- Make sure clothing is breathable and allows moisture to evaporate.
- Wear insect repellent

3. Safe Insect Repellents Use

- Follow product instructions.
- Apply only to clothing and exposed skin
- Never use over cuts, wounds, sunburned or irritated skin.
- Wash repellent off daily.
- Some products are not recommended for children under three, check the instructions.
- Repellents containing DEET work best
- Repellents containing 10% DEET or less are good for most uses. Higher concentrations of DEET last longer but are no more effective.
- Only use Health Canada approved repellents. This applies to DEET and alternatives to
- DEET such as soya bean oil, or p-menthane-3,8-diol

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4. Reducing mosquitoes in and around your house / Protect Yourself Indoors

- Use fine-mesh screens on windows and doors.
- Make sure screens fit tightly and do not have holes.

5. Eliminate Mosquito Breeding Sites

- Do not allow water to collect in toys, garbage cans, plant containers, etc.
- Clean roof gutters, downspouts and eavestroughs regularly.
- Clean birdbaths at least once a week.
- Turn over plastic wading pools and wheelbarrows when not in use.
- Eliminate discarded tires. If you must keep them, remove any standing water from the tires and store them covered or stand them on end and fill the inside with sand.
- Bubble ornamental garden ponds using an oxygenator.
- Change and empty water from outdoor dishes for animals daily.

The City has a WNV prevention program that includes monitoring for WNV in mosquitoes and people, community outreach and mosquito reduction.

For more information call 416-338-7600 or visit our website www.toronto.ca/health