

## The West Nile Virus (WNV)

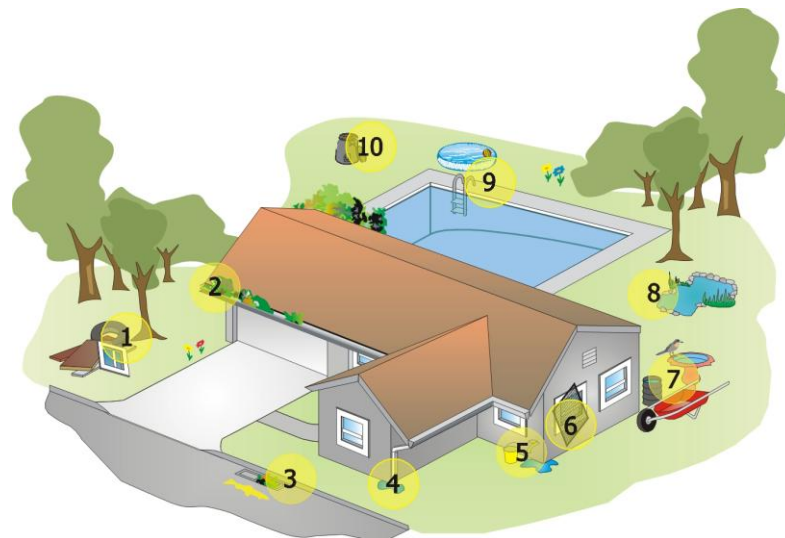
The West Nile Virus is a mosquito-borne virus named after the West Nile region of Uganda, where it first appeared in 1937. West Nile Virus has spread across North America since it was introduced to this continent in New York in 1999.

### How is the virus spread?

WNV will most likely enter BC by infected birds flying into the province. Mosquitoes become infected by biting infected birds. Mosquitoes that bite both birds and people can spread WNV to people. It is very unlikely that mosquitoes can spread WNV from one person to another. WNV is not spread by direct person-to-person or animal-to-person contact. However, it can be transmitted through blood transfusion and transplanted organs (In Canada blood is routinely screened for WNV). WNV has been found in the breast milk of infected mothers, but this does not seem to cause any significant illness in breastfed infants.

## DRAIN: Protecting yourself, your family and neighbours

The mosquitoes that breed in standing water around our homes and businesses are among the types of mosquitoes most likely to spread WNV to people. Therefore, it is important to keep your home or business property free of standing and stagnant water. This helps reduce the number of mosquitoes in your neighbourhood as most mosquitoes fly about 1 to 3 km from their breeding site. **Please follow these simple practices to eliminate mosquito breeding sites on your property:**



...Courtesy Twp. of Langley

- (1) Move inside, or dispose of old tires. Do not let outside containers, equipment or debris collect water. Throw out, drill holes in, or turn over when not in use.
- (2) Eavestroughs should be kept clean to allow proper water drainage. Flat roofs should be kept free of standing water.
- (3) Storm drains or ground gutters should be kept free of debris such as yard waste, lawn cuttings and leaves.
- (4) Roof gutters should be properly designed and maintained to prevent standing water.
- (5) Repair leaky faucets because water build-up can create breeding grounds for mosquitoes.
- (6) Windows and attic vents allow mosquitoes to make their way into your home. These should be adequately screened and maintained.
- (7) Stagnant water located in birdbaths should be changed twice a week. Rain barrels should be covered with fine mesh and wheelbarrows turned over when not used.
- (8) Ponds should be maintained. Using pumps or fountains to keep water circulating reduces mosquito breeding.
- (9) Swimming pools should have operating chlorine and circulation systems. Wading pools should be turned over when they are not in use.
- (10) Compost should be turned over frequently to keep well-aerated.

**REMEMBER: Just a little water in a discarded container may allow hundreds of mosquitoes to breed.**

## DUSK and DAWN, DRESS and DEFEND (DEET): Reducing risk to yourself and family

**D**usk and **D**awn: Mosquitoes are most active at dusk and dawn. If you need to be outside, cover up and use insect repellent for extra protection—especially at dusk or dawn. Gardeners take note, if you like to work outside, avoid early morning and evening when mosquitoes are most likely to keep you company.

**D**ress appropriately: Wear protective clothing such as long-sleeved shirts, long pants, shoes, socks, and a hat when outdoors, especially when mosquitoes are most active. Light coloured clothing is best because mosquitoes are attracted to dark colours. Loose fitting, but tightly woven materials help prevent mosquitoes from biting through to your skin.

### Defend: Use insect repellent

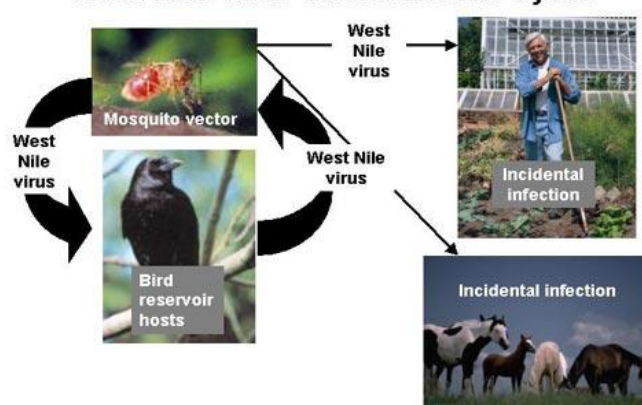
If living or travelling in an area known or suspected to have WNV, using an insect repellent can help protect against mosquito bites. Use only insect repellents that contain DEET or other approved ingredients. Repellents that contain DEET (N, N-diethyl-m-toluamide) are effective and safe when used as directed (*The percentage of DEET in a repellent should not exceed 30% for adults or 10% for children and Health Canada advises that DEET should not be used for infants under 6 months of age.*) It is important to know how long a repellent is likely to stay effective after being applied. Read the entire label for detailed information, or ask your pharmacist for assistance.

*Keep these tips in mind too, when using insect repellent:*

- Apply repellent sparingly on exposed skin or on top of clothing. The repellent does not need to be applied heavily to be effective – a light coating will do. Repeat applications only as necessary.
- Do not use repellent on open wounds, sunburned or irritated skin.
- Wash skin with soap and water when you return indoors or when protection is no longer needed.
- Do not get in eyes – if this happens, rinse with water right away.
- Avoid breathing repellent spray. Always apply spray repellents in a well-ventilated area. Never apply spray repellent inside a tent.
- Do not use near food.
- Check for sensitivity – apply repellent to a small area of skin on the arm and wait for 24 hours before use.
- Keep all insect repellent containers out of the reach of children.
- Do not directly spray repellent on children—Wipe repellent on by hand.
- There is no indication of a hazard to the unborn or nursing child associated with the use of DEET by pregnant or breastfeeding women.

For further information on insect repellents, see Health Canada's web-page: [http://www.hc-sc.gc.ca/english/westnile/insect\\_repellents.html](http://www.hc-sc.gc.ca/english/westnile/insect_repellents.html) ("Safety Tips on Using Personal Insect Repellents").

### West Nile Virus Transmission Cycle



### What is being done to protect you from WNV?

There is no known method to prevent the arrival of WNV in BC. Fraser Health and your local and regional governments are working together to:

- detect WNV quickly when it arrives and communicate information to the public;
- Monitor potential mosquito habitat and when necessary, take action in an environmentally responsible way to reduce the risk of human infection.

**However, the most important things to do to prevent WNV infection are up to you—to act on the 4 “D”s.**

## What can I do if I spot a dead bird?

Fraser Health and B.C. Centre for Disease Control staff have a collection system in place to monitor and test dead **corvids**. Crows, ravens and jays are corvids common in the Fraser Health area. Dead corvids are tested because they are the birds most likely to die if infected with West Nile Virus. Therefore, testing of dead corvids is a useful method to detect the presence of WNV in an area.

To report a dead corvid (crow, raven, jay), please call and leave a message on the Fraser Health West Nile Virus Toll Free Reporting Line at: **1-888-WNV-LINE (1-888-968-5463)**.

## Will all dead birds be picked up and tested?

Not all dead birds reported will be picked up and tested. Thousands of birds die each summer due to causes other than West Nile Virus. Approximately 600 corvids from the Fraser Health area will be tested from May through October. Any die-off of several corvids in one place should be reported so investigation can be done.

## How to dispose of a dead bird

As not all birds that you report to public health will be picked up for testing, you may need to dispose of a dead bird. There is no evidence that a person can get West Nile Virus from handling live or dead infected birds. However, you should avoid barehanded contact when handling any dead animals and use gloves or double plastic bags to place the carcass in a garbage can (if permitted within your Municipality) or to dispose of by burying in the ground.

If you are not comfortable handling the dead bird, the S.P.C.A. or vector control may pick-up dead birds or accept drop-off of dead birds for incineration. You will need to check with your local S.P.C.A. or vector control office to determine if this service is available to you.

## Find out more

For more detailed information on West Nile Virus, please check the Fraser Health or BCCDC website. For a brief recorded message about the current status of monitoring for West Nile Virus within the Fraser Health area, please call the toll-free WNV Information Line.

Fraser Health website: [www.fraserhealth.ca](http://www.fraserhealth.ca)  
Fraser Health Toll Free Line: **1-888-WNV-LINE (1-888-968-5463)**

BC Centre for Disease Control (BCCDC) website: [www.bccdc.org](http://www.bccdc.org)  
(The BCCDC website also allows reporting of dead corvid sightings)

In Delta, check the Municipal website: [www.corp.delta.bc.ca](http://www.corp.delta.bc.ca) or call 604-946-3253 for more information about West Nile Virus or Delta's Mosquito Control Program.

## It's that time of year

Nice weather in British Columbia also means the start of mosquito season. Mosquitoes are usually just considered a nuisance, and bites are uncomfortable, but in areas with West Nile Virus, a small percentage of mosquito bites can cause West Nile Virus infection.

Anyone can be affected by West Nile Virus, but older adults and people who have chronic illnesses are more likely to develop serious illness.

Protect yourself and your family by following the 4 "D"s to reduce mosquito breeding sites and avoid mosquito bites.

## How serious is a mosquito bite?

Most mosquito bites cause itching and minor irritation. Only a very small percentage will cause WNV infection and most people who are infected don't even know it. About 20% of people who actually become infected will develop illness with fever and one or more of headache, body aches, malaise, nausea, rash, sensitivity to light, and swollen glands. People usually recover within a week or so.

About 1% of those infected may develop more serious illness affecting the nervous system. Signs and symptoms may include fever, severe headache, stiff neck, muscle weakness or paralysis, confusion, convulsions, or even coma. Severe WNV infection may result in long-term disability or death.

Advice about symptoms of WNV is available from BC NurseLine:  
604-215-4700 or Toll Free 1-866-215-4700  
or 1-866-TTY-4700 (if hearing impaired).

If you or a family member are seeking medical attention for signs and symptoms of WNV, be sure to inform the doctor if you have been in an area known to have WNV or have recently received or donated blood.

It is worth doing the things you can to reduce mosquito breeding sites and protect yourself and family from mosquito bites. Remember the 4 "D"s (**Drain, Dusk/Dawn, Dress and Defend**).

# WEST NILE VIRUS

Reduce your Risk  
Remember the 4 "D"s



- **DRAIN** your property of standing water
- **DUSK/DAWN**. Take extra care
- **DRESS** Appropriately
- **DEFEND** against mosquito bites by using mosquito repellents wisely



**The Corporation of Delta**