



HOMES AND SENIORS SERVICES

POLICY & PROCEDURE NUMBER: 4.27

DEPARTMENT: *Infection Control*

SUBJECT: *West Nile Virus*

APPROVAL DATE: April 2004

REVISION DATE: Dec. 2019; Nov. 2022

REVIEW DATE: March 2017; Nov 2018; Dec. 2020

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BACKGROUND

West Nile Virus (WNV) is a mosquito-borne infection that is transmitted to humans through a bite from an infected mosquito. The mosquito becomes infected by biting a bird that carries the virus. WNV is not spread from person-to-person contact through touching, oral or respiratory route. It does not appear to be spread directly from birds to humans; however, individuals should avoid handling of dead birds. WNV is a disease of public health significance in Ontario.

POLICY:

The County of Elgin Homes are committed to the necessary precautions to ensure all reasonable measures for prevention, response and reporting will be taken to minimize risks for residents, families, volunteers and staff from contracting West Nile virus.

DEFINITION:

- West Nile Virus is a mosquito borne virus. A mosquito becomes infected by feeding on the blood of a bird infected with the virus.
- Two weeks must pass after the mosquito has fed on the bird before the mosquito can pass the virus to an animal or human.
- Humans contract the virus by receiving a bite from an infected mosquito.
- There is no evidence that the virus can spread through human contact.

RISK GROUP:

- The risk of being bitten by an infected mosquito or developing complications from the virus is low.
- The elderly, children and those with a weak immune system are at greater risk of developing serious health problems due to West Nile Virus.

SIGNS & SYMPTOMS:

There are three clinical manifestations of WNV; asymptomatic, non-neurological, and neurological. The majority of WNV cases are asymptomatic. About 20% of infected persons



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develop the usually less severe symptom complex known as WNV fever (non-neurological syndrome). This presents with a mild flu-like illness with fever, headache, and body aches, occasionally with a skin rash and swollen lymph nodes or other non-specific symptoms that last several days. Other symptoms may include nausea, vomiting, diarrhea, eye pain or photophobia. WNV neurological symptoms can present as meningitis, encephalitis as well as conditions similar to acute flaccid paralysis, and Parkinson's disease. Less than 1% of infected people will develop neurological symptoms.

- The incubation period for WNV ranges from 2-15 days.
- In severe cases for people at high risk, symptoms could include: severe headache, muscle weakness, vomiting, stiff neck, high fever, drowsiness, skin rash, fatigue, or loss of consciousness. **These symptoms should be reported to a physician immediately.**

TREATMENT:

- There is no known cure or vaccine for West Nile Virus. The symptoms of the disease can be treated.

The focus, in long-term care homes, should be on prevention of infection through reducing the number of vector mosquitoes and preventing mosquitoes from biting humans.

PERSONAL & PROTECTIVE MEASURES:

- Avoid prolonged outdoor exposure between dusk, dawn and early evening without appropriate mosquito protection (i.e. wearing light coloured clothing with full length pants and long-sleeved shirts).
- All staff will apply insect repellent when performing outdoor tasks, i.e. grass cutting.
- Outdoor activities for residents are to be limited to daytime hours avoiding times when mosquitoes are the most active.



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- Recreation staff is responsible for insect repellent application to residents when attending a group outdoor event. Nursing staff will be responsible to apply Deet on each unit for individual resident outdoor activities.
 - Wearing tightly woven, long-sleeved, light coloured shirts and long pants with the pant leg tucked into socks to minimize the amount of skin exposed.
 - Use repellents that contain 30% or less DEET. Apply in well ventilated areas only. Use sparingly on exposed skin, avoiding hands and face, irritated sunburned or broken skin. Wash hands after application. Do not use DEET on skin under clothing. Re-apply every 4-6 hours.
 - If skin becomes irritated (rash, redness, swelling or burning), wash skin with soap and water and report to RN for assessment.
 - Prolonged use of DEET should be avoided.
 - Report to Registered staff any sudden onset of any of the following- severe headache, muscle weakness, vomiting, stiff neck, high fever, drowsiness or loss of consciousness.

ENVIRONMENTAL PRECAUTIONS:

- Ensure all roof drains are free and clear of debris to enable proper drainage.
- Ensure that all outside areas are free and clear of any type of container that may hold standing water.
- If courtyard pond is full of water, ensure pump is properly functioning to ensure constant movement of water.
- Maintain general awareness of standing water and continue to prevent areas of standing water around the facility at all times.
- All windows that open to the exterior should have screens. These screens should be checked to ensure that they are intact with no holes.
- All exterior doors should be checked to ensure that they close properly and the seal is intact.
- The Public Health Unit and Director of Homes and Seniors Services will be notified in the event of probable and/or confirmed cases of West Nile virus being identified.
- Fallen or dead birds found on the facility property will be reported to the Public Health Unit. The fallen or dead bird should not be touched until specific direction regarding disposal are received from the Public Health Unit.



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IPAC Program Manager will ensure situational awareness and be aware of any disease of public health significance increase in the area, WNV Risk assessment may be conducted which could include:

- Local mosquito and arbovirus surveillance findings
- Evidence of WNV illness in the health unit region and consideration of activity in adjacent health units
- Trends in local human morbidity and mortality that indicate the relative urgency of the risk to human health
 - Demographic and geographic distribution of the human population at risk
 - Nature and location of the larval development site(s) to be treated, including the habitat type, its proximity to at risk human populations, and logistics of larvicide application
 - Season and local weather conditions
- Current and historical vector data from the health unit and surrounding health units

Resources:

West Nile Virus Preparedness and Prevention Plan Ministry of Health July 2019

Appendix 1: Case Definitions and Disease Specific Information Disease: West Nile Virus Illness
Effective: May 2022