simcoe muskoka
DISTRICT HEALTH UNIT

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HealthFAX

West Nile Virus Update 2012

Attention: **Physicians, Emergency Departments, Infection Control Practitioners, Walk-In Clinics/Urgent Care Clinics, Nurse Practitioners**
Date: August 13, 2012

This HealthFAX is to inform you of the current provincial situation regarding West Nile Virus (WNV) testing and diagnostics should you have a patient with signs and symptoms consistent with WNV infection.

The period of greatest risk for human WNV acquisition is from mid-July to end of August. Adult mosquito trapping programs across the southern part of the province have identified WNV positive mosquitoes including local sites in Gravenhurst, Huntsville, and the Town of Bradford West Gwillimbury. There have been no probable or confirmed cases reported to our health unit this season.

The following is an update of the West Nile virus activity in Ontario and Canada:

Ontario

- As of August 7, 2012, one confirmed and six probable human WNV cases reported and believed to have been acquired in Ontario.

Canada

- As of July 26, 2012, there are no other Canadian provinces/territories reporting human WNV activity. Manitoba is reporting positive virus activity in mosquito populations.

Although 80% of infected human cases are asymptomatic, health care providers are encouraged to remain vigilant for clients presenting with signs and symptoms consistent with WNV.

<u>Clinical Presentation</u>

West Nile Non-neurological Syndrome (20% of infected cases)

- Generally infection is characterized by a mild febrile illness with sudden onset and usually resolves in three to six days. Symptoms can include:
  - Fever
  - Myalgia
  - Arthralgia
  - Headache
  - Fatigue
  - Lymphodenopathy
  - Maculopapular rash; or
  - Other signs and symptoms are possible (e.g. GI symptoms)

West Nile Neurological Syndrome (<1% of infected cases)

- Severe manifestations can occur in all age groups but there is increased risk and incidence of severe neurological illness with increasing age. Syndromes include:
  - Encephalitis (acute signs of central or peripheral neurologic dysfunction)
  - Viral meningitis (pleocytosis and signs of infection)
  - Acute flaccid paralysis (e.g. poliomyelitis-like syndrome or GBS)
  - Movement disorders (e.g. tremor, myoclonus)
  - Parkinsonism or Parkinsonia-like conditions (e.g. cogwheel rigidity, bradykinesia, postural instability); or
  - Other neurological syndromes

Laboratory Testing

Diagnostic Testing of Acute Cases (IgM)

The requisition for all initial WNV blood tests should indicate: ***"Testing is for suspect WNV-V02 for arbovirus testing"*****.** Please include symptoms and travel history on the requisition.

- Serologic testing of clotted or serum blood is the preferred method of testing for WNV. CSF is not recommended for Arbovirus serology (including WNV and other flaviviruses) because tests have not been validated on this type of specimen.
- Blood should be collected in a red cap tube (5-10 ml).
- Negative or equivocal results from samples taken <10 days after symptom onset should be repeated in 10 days to confirm the diagnosis as it can take this long for a detectable antibody response to develop.

If you suspect a case of West Nile Virus or have questions regarding proper specimen collection, please contact the Simcoe Muskoka District Health Unit Communicable Disease Team at 705-721-7520 or 1-877-721-7520 Ext. 8809.

More information can be found on our website at www.simcoemuskokahealth.org.