

IN THIS ISSUE
2004 West Nile Virus Update

FROM
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Medical Officer of Health

July 27, 2004

Introduction

West Nile virus (WNV) was first detected in birds and mosquitoes in Peel in 2001. It has caused disease in Peel residents in both 2002 and 2003. This update provides a brief summary of the 2003 season and a review of information on WNV similar to the information that was provided to you last year. Also included in this package are WNV educational materials that you may want to post in your office.

Summary of WNV in Peel for 2003

WNV activity in Peel was much lower in 2003 compared to 2002. There were 10 residents of Peel who had laboratory evidence of WNV infection stemming from the 2003 season, nine of whom were confirmed as having West Nile Fever (WNF) and one having a diagnosis of West Nile Neurological Manifestations (WNNM). There were no deaths in Peel due to WNV in 2003. Each of the 10 cases reported onset of symptoms in August or September. An additional 56 residents were assessed but either they had a previous infection (49) or it was determined that they did not meet the case definition (7). In addition, 12 crows and 24 mosquito batches from the 2003 season tested positive for WNV in the Region of Peel. Most likely WNV will reappear in Peel in 2004.

WNV in Peel So Far in 2004

As of July 6, 2004, 18 dead crows have been submitted for testing for WNV. None have tested positive. The adult mosquito surveillance program started June 14, 2004. The larviciding of 80,000 roadside catch basins started June 14, 2004. Methoprene

pellets will again be used this year to control mosquito larvae in catch basins. There will be a total of three applications. The three rounds of applications will be completed by the end of August. Stagnant water at other sites is being treated with Bti if mosquito larvae are found.

When to Include WNV in a Differential Diagnosis

WNV should be in the differential diagnosis of all cases of encephalitis, meningitis, meningoencephalitis, Guillain-Barre and acute flaccid paralysis when the virus is known to be circulating in the community. The period of greatest risk is from mid-July to the end of September. Diagnostic tests for WNV should be performed on all patients meeting the above criteria. In addition, WNV should be suspected in any adult presenting with fever and rash during this time period. Testing should be performed only if it will aid in the management of the patient. Other prominent symptoms include headache, gastrointestinal symptoms and fatigue.

Diagnostic Testing of Acute Cases

Serologic testing of blood (or CSF) remains the mainstay of diagnosis of WNV. Blood should be collected in a red cap tube (5 - 10ml). Negative or equivocal results from samples taken less than 10 days after onset of symptoms should be repeated after 10 days from symptom onset to confirm the diagnosis since it can take this long for a detectable antibody response to develop.

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The requisition should indicate that testing is for suspect WNV.

Diagnostic Testing of Immunity

Tests for immunity (IgG) to WNV may be indicated in certain patients (e.g. outdoor workers who experienced a WNV – like illness last year). The requisition needs to clearly state that this is a test for immunity otherwise an acute test (IgM) will be done which could be negative in an individual immune from exposures from last year or before.

WNV is a Reportable Disease

Since May 1, 2003, WNV has been specified as a reportable and communicable disease under of the Health Protection and Promotion Act (HPPA). Physicians and other health care providers must report WNV cases to the local Medical Officer of Health. Physicians can report to Peel Health by calling 905-799-7700.

Canadian Blood Services (CBS) Reporting

Where a physician reasonably suspects that a person has, or may have been a blood recipient or donor, and also has or may be infected with WNV, the Health Protection and Promotion Act permits the disclosure of the patient's name and other information to the Canadian Blood Services.

Please provide information about the patient as a recipient of blood or blood products or as a blood donor when making a case report of WNV to the local Medical Officer of Health

to ensure the continued safety of the blood supply system.

MOHLTC Physician Mailing

A physician package from the Ontario Ministry of Health and Long Term care including WNV case definitions and a WNV summary was mailed out to all practicing physicians on May 7, 2004.

For further information on West Nile Virus, contact Peel Health at 905-799-7700 or visit Peel Region's WNV Web site (which includes weekly Peel WNV status reports) at:

<http://www.peel-bugbite.ca>