



July 17, 2003

## calgary health region

Healthy Communities

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Dear Colleague:

### RE: WEST NILE VIRUS ARRIVES IN ALBERTA

Alberta has reported its first West Nile virus infection in two magpies, on July 9 (Camrose area) and July 11, 2003 (Medicine Hat area). Surveillance for the virus in birds of the *Corvidae* family (crows, magpies, ravens and jays) will continue, and will now commence in mosquito populations in Alberta. Surveillance for cases in horses and humans will also continue. Surveillance results are posted at [http://www.health.gov.ab.ca/healthier/diseases/west\\_nile\\_testing.html](http://www.health.gov.ab.ca/healthier/diseases/west_nile_testing.html) (Alberta); [http://www.hc-sc.gc.ca/pphb-dgspsp/wnv-vwn/mon\\_maps\\_e.html](http://www.hc-sc.gc.ca/pphb-dgspsp/wnv-vwn/mon_maps_e.html) (Canada); and <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm> (US).

#### Human Surveillance

With the arrival of WNV in Alberta, please maintain a high index of suspicion for WNV infection in patients who have a history of exposure to mosquitoes where WNV activity is occurring (see above), or who may have been exposed through an alternate mode of transmission (blood transfusion, organ or tissue transplant, in utero, breast milk, laboratory-acquired), and are presenting with:

- Symptoms of meningoencephalitis, acute flaccid paralysis or other neurologic syndromes
- Unexplained fever more than 3 days and less than 8 weeks after blood transfusion
- Fever and a history of blood, organ or tissue donation within 8 weeks
- Fever NYD and are immune compromised

Laboratory testing for WNV is being done by the Provincial Laboratory for Public Health, and requires completion of a Prov Lab requisition as well as an Arboviral History Form (see [www.provlab.ab.ca](http://www.provlab.ab.ca)). Samples for WNV testing should include: acute serum (5-10 mL in gold top serum separator tube); CSF, if an LP is done (dedicated 1 mL sample for PCR viral testing, and specify what virus(es) to test for – WNV, enterovirus, HSV as clinically appropriate); convalescent serum 2-3 weeks later (5-10 mL in gold top serum separator tube); stool (sterile container) and throat swab (in M5 viral transport medium) for enterovirus culture; acute whole blood, especially if immune compromised (5-10 mL EDTA, purple top tube for PCR testing). **Testing for mild, uncomplicated WNV infection is not generally indicated.**

Case definitions for WNV infection (West Nile Neurological Syndrome and West Nile Fever) have been previously distributed by Alberta Health and Wellness, and are attached for your reference.

West Nile Neurological Syndrome is **notifiable by immediate telephone call** to the Medical Officer of Health (MOH) at 264-5615. West Nile Fever is notifiable to the MOH within 48 hours by calling Communicable Disease Control at 571-9190 or the MOH at 264-5615.

#### Informed Consent

There is a risk of WNV transmission through transfusion of platelets, red cells or frozen plasma products, though this risk is seasonal and regional, and depends on the presence or absence of WNV in the donor population. The risk has been further decreased by the introduction of an investigational test for all donations as of July 1, 2003. However, Canadian Blood Services recommends that information on this risk be provided as part of the informed consent process for transfusion. See [www.bloodservices.ca/CentreApps/Internet/UW\\_V502\\_MainEngine.nsf/page/E\\_West+Nile+Virus?OpenDocument](http://www.bloodservices.ca/CentreApps/Internet/UW_V502_MainEngine.nsf/page/E_West+Nile+Virus?OpenDocument) for details about the risk, and the contact information for CBS Medical Directors.

As well, organ and tissue recipients should be similarly advised about the risk of WNV transmission through this means. The Provincial Laboratory is carrying out PCR screening tests on plasma of donors of tissue and organs, but potential recipients should still be counselled appropriately.

For additional information on West Nile virus, please see <http://www.westnilevirusalberta.ca> or check the Doctors' Page at <http://www.calgaryhealthregion.ca/clin/cme/NewsletterQuickLinks.htm>.

Sincerely,  
Judy MacDonald, BSc, MD, MCM, FRCPC  
Deputy Medical Officer of Health

From Alberta Health and Wellness, May 2003:

## **2003 West Nile Virus Clinical Case Definitions for Surveillance**

### **West Nile virus Neurological Syndrome:**

History of exposure in an area where WNV activity is occurring<sup>1</sup> OR exposure to an alternate mode of transmission (laboratory acquired, in utero, receipt of blood components or organ or tissue transplants and possibly via breast milk)

#### **AND**

Onset of a febrile illness\*

**AND AT LEAST ONE** associated neurological syndrome consistent with a diagnosis of

- encephalitis or meningoencephalitis **OR**
- viral meningitis **OR**
- acute flaccid paralysis\*

**AND** in the absence of any other obvious cause.

\* A person with West Nile virus-associated acute flaccid paralysis may present with or without fever or mental status changes.

**NB West Nile Neurologic Syndrome as defined above is notifiable to the Regional Medical Officer of Health by fastest means possible.**

### **West Nile virus Fever**

History of exposure in an area where WNV activity is occurring<sup>1</sup> OR exposure to an alternate mode of transmission (laboratory acquired, in utero, receipt of blood components or organ or tissue transplants and possibly via breast milk)

#### **AND**

Onset of a febrile illness

**AND AT LEAST ONE OF:**

- myalgia
- arthralgia
- headache
- photophobia
- lymphadenopathy
- maculopapular rash

**AND** in the absence of any other obvious cause

**AND** serologic evidence of West Nile Virus infection, or demonstration of WNV in CSF or blood.

**NB West Nile virus Fever as defined above is notifiable to the Regional Medical Officer of Health within 48 hours**

<sup>1</sup>History of exposure when and where West Nile virus transmission is present, or could be present, or history of travel to an area with confirmed WN virus activity in birds, horses, other mammals, sentinel chickens, mosquitoes, or humans.