



Office of the Medical Health Officers
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July 16, 2010

To: SHR Physicians and Nurse Practitioners

Re: **West Nile Virus (WNV)**

As required by the Ministry of Health, all physicians and nurse practitioners are to immediately report all positive cases of WNV by completing the "Physician Reporting Form for Human West Nile Cases" (see attachment; this form will also be available on the Saskatoon Health Region website). The form needs to be faxed to Public Health Services at 655-4723 within 72 hours of receiving confirmation of WNV infection.

Who should be tested?

1. Testing is not required for mild uncomplicated infections.

- Testing is generally not indicated for an individual with a mild uncomplicated febrile illness unless the results will influence clinical management.
- Testing is not indicated for an individual who is interested in knowing whether the mild febrile illness they are recovering from was WNV, and has no clinical benefit.

2. Testing is recommended for individuals presenting with neurological symptoms or severe illness during West Nile season (July to October).

- Testing for West Nile virus is recommended for patients with the following clinical presentations:
 - Meningitis, Encephalitis or Acute Flaccid Paralysis
 - Other unexplained neurological symptoms consistent with West Nile virus infection
 - Unexplained fever in any:
 - a) Individual who has received a blood transfusion in the last 8 weeks
 - b) Recipient of an organ or tissue donation in the last 8 weeks
 - c) Immunocompromised individual
 - d) Pregnant woman

3. Testing may also be appropriate when there is a diagnostic dilemma and the diagnosis needs to be confirmed in order to make clinical decisions and avoid unnecessary diagnostic and therapeutic interventions.

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Recommended Specimens for WNV Testing

- **Send one SST (serum separator tube [red top tube]) for serology.** SDCL will be using an IgM serology test for antibodies to the WNV. If this specimen is IgM positive it will then be tested for IgG antibodies, and IgG avidity. This will separate past infections from recent infections.
- **When appropriate (meningitis/encephalitis patients only) send 2 ml of CSF** on an ice pack.
- SDCL will indicate on the lab report the need for any convalescent samples. Also consider submitting a second sample if the first was taken within 48 hours of the onset of symptoms and came back negative – it may have been taken before antibodies formed.
- Immunocompromised patients can have a delayed antibody response but a prolonged viremia. When IgM is negative, submit a plasma specimen to SDCL for a WNV test by PCR.
- Summer is also enterovirus season and enteroviruses can cause symptoms that are virtually indistinguishable from WNV. For patients with meningitis or encephalitis, send a throat swab and stool specimens, as well as CSF, for culture for enteroviruses.

Please indicate on the laboratory requisition if the individual you are testing has been hospitalized or is presenting with meningitis or encephalitis.

Public Health will be following up with physicians and nurse practitioners on **all** laboratory confirmed cases of WNV.

- Please notify your regional public health office if you have any WNV cases by faxing the attached form to 655-4723.

For further information or questions on submission of specimens for WNV infection and the investigation of suspected WNVNS, call the Saskatchewan Disease Control Laboratory at (306) 787-2964 or SHR Public Health Services – Communicable Disease Control at 655-4612.

Sincerely,

Dr. Johnmark Opondo
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Deputy Medical Health Officer

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