

August 19, 2002

To: Alberta Physicians

Re: West Nile Virus

As you are likely aware, West Nile Virus (WNV) has been confirmed in a dead bird in Saskatchewan.

Although there has yet to be a case of human WNV infection in Canada, the fact that the virus has been confirmed in a neighbouring jurisdiction has led to WNV being placed under surveillance in Alberta under Section 15(1) of the *Public Health Act*.

Therefore, when a patient presents with the following symptoms, consideration should be given to the possibility of WNV infection. For the purposes of WNV surveillance, a suspect case is:

*a person with a febrile illness **and** associated neurological manifestations consistent with a diagnosis of viral meningitis, meningoencephalitis, or encephalitis which would include an altered mental status ranging from confusion to coma with or without additional signs of brain dysfunction (e.g. paresis or paralysis, cranial nerve palsies, sensory deficits, abnormal reflexes, generalized convulsions and abnormal movements). A significant feature of WNV encephalitis may be marked muscle weakness, therefore WNV should be considered in the differential diagnosis of all suspected cases of acute flaccid paralysis or Guillain-Barre Syndrome. Patient history could include travel to an area with confirmed WNV activity in birds, and/or horses, and/or sentinel chickens, and/or mosquitoes, and/or humans.*

When a person presents with these symptoms and there is a high index of suspicion for WNV, diagnostic serum and cerebrospinal fluid specimens **are to be forwarded to the Provincial Laboratory**. A Provincial Lab requisition should be used and “suspect WNV” must be indicated on the form. The Provincial Laboratory will then process these specimens and send them on to the National Microbiology Laboratory in Winnipeg for WNV testing. If you have any questions on the laboratory process, please contact the Virologist on call [(780) 407-7121].

All suspect cases of WNV infection in humans must also be reported by telephone as soon as possible to your regional Medical Officer of Health.

Recent media reports may have generated a great deal of public anxiety regarding the threat from WNV. Whenever possible, it is important to allay these concerns by advising patients and their families that the threat to human health is extremely low. In areas where WNV is present, less than 1% of mosquitoes will carry the virus and of the people bitten by these infected mosquitoes, less than 1% will develop serious illness. People who do become infected and symptomatic usually experience mild flu-like symptoms. WNV infection in humans is rarely fatal. Those most at risk for serious illness (encephalitis) are persons over the age of 50.

The most important preventive measure for WNV is protection against mosquito bites: long sleeves and trousers, limited outdoor activity between dawn and dusk when mosquitoes are most active, and using a mosquito repellent containing DEET.

If you have any questions regarding WNV surveillance in Alberta, please contact Dr. Karen Grimsrud, Deputy Provincial Health Officer [(780) 415-2797] or your regional Medical Officer of Health.

Sincerely,

Nicholas J. Bayliss, MB, BS, MPH
Provincial Health Officer

LS/rcs

cc: Dr. Jutta Preiksaitis
Dr. Karen Grimsrud
Medical Officers of Health