## Coming to a neighbourhood near you? West Nile Virus in British Columbia Dr. Paul Martiquet, Medical Health Officer

Since its New York City debut in the summer of 1999, West Nile Virus has been making its way across North America. By this summer, it will have arrived in British Columbia. While West Nile Virus (WNV) is not quite the threat that some media coverage would suggest, we do need to be prepared and knowledgeable.

West Nile Virus was first identified in 1937 in Uganda; it has now spread to most parts of the world. Southern Ontario was its first point of contact in Canada, in 2001. According to the British Columbia Centre for Disease Control (BCCDC), "it is expected that WNV will be identified [in BC] during the spring or summer of 2003 as the virus continues its westward spread across North America." They add that in 2002, "the virus was identified in a crow in Washington State near the BC border."

The WN virus is spread to humans by the bite of an infected mosquito. The mosquito will have been infected by feeding on the blood of a bird which carries the virus. There is a period of about two weeks before the mosquito can spread the infection to humans or animals. There has been no evidence to suggest that an individual could get WNV from another person.

The WN virus has been known to infect horses, cats, domestic rabbits, squirrels, bats, skunks and 110 species of birds. Among the latter, corvids (crows, ravens, magpies, jays) have been the most susceptible: high numbers die.

Monitoring corvid deaths simplifies monitoring the spread of WNV. Evidence from the U.S. has shown that crow die-offs precede the increased risk for human illness by 2-6 weeks. This makes for an excellent early-warning system. Should this occur, the BCCDC and regional health authorities will notify the public through the media.

The risk of illness from exposure to an infected mosquito is very low. For most people there will be no symptoms at all. For some, there will be only mild, flu-like symptoms such as fever, head and body aches. However, as with many infectious diseases, some people will be at much greater risk: the elderly and very young, and those with weak immune systems may face serious health effects including meningitis and encephalitis.

The chance of being bitten by an infected mosquito is very small. Even in areas where the virus has been detected, very few mosquitoes will be carrying it (fewer than 1%). And among those bitten, less than 1% will experience serious health effects. There is no specific treatment for WNV, and no vaccine yet.

Protecting yourself against the WNV is simple: Avoid mosquitoes — Avoid infections! That means wearing the right clothing (long sleeves, pants, light-coloured), using mosquito repellent that contains DEET, and screening windows and doors.

Destroying potential breeding sites around your home helps, too. Anything that can hold water is a potential development site. Empty saucers under flower pots, regularly change water in bird baths, unclog rain gutters, and remove used tires or other debris where rainwater may collect.

The risk being bitten by an infected mosquito is very low; the risk of serious illness is even lower. But "low" risk is definitely not "no" risk.

**Call-out:** "Avoid mosquitoes — Avoid infections!"

3 WORDS