West Nile Virus Surveillance

Durham Region Health Department has started West Nile virus (WNV) surveillance activities for the 2019 season. WNV is a vector-borne disease that is spread to humans through the bite of an infected mosquito. Mosquitoes become infected by feeding on the blood of a bird that carries the virus. The disease is not passed from person to person or from bird to person. The surveillance activities include larval mosquito, adult mosquito, and human case surveillance. In 2018 there were 5 confirmed cases of WNV reported in Durham Region and 126 cases reported in Ontario.

The incubation period for WNV illness ranges from 3 to 14 days. The illness can be considered to consist of two clinical pictures, WNV fever and WNV neurological manifestations. Approximately 20% of those infected develop a mild flu-like illness (WNV fever) which may include symptoms such as headache, fever, and fatigue, a mild rash, lymphadenopathy, and photophobia. Less than 1% of infections will result in severe neurological disease which may include symptoms consistent with encephalitis, meningitis, or an acute flaccid paralysis syndrome. While persons of any age can be at risk for developing serious health effects from WNV, the elderly and those with a weakened immune system are considered to be at greater risk for serious health effects.

For any patient’s presenting with symptoms suggestive of WNV illness, acute and convalescent serology (min. 5.0 ml clotted blood or 1.0 ml serum) should be submitted to confirm a recent infection. The samples should be collected in red-top tubes and forwarded to the Public Health Ontario Laboratory (PHOL). CSF is not recommended for arbovirus serology (including WNV and other flaviviruses) because tests have not been validated on this type of specimen. Each sample submitted for testing should include a completed PHOL general test requisition form with “West Nile Virus” entered under test description. Indicate that the test is for suspect West Nile Virus, symptoms, date of any significant mosquito exposure, symptom onset date, and any travel history, history of Japanese encephalitis or yellow fever vaccination, and whether the test is for acute or convalescent illness.

Health care providers are being asked to report all cases of West Nile Virus illness (a reportable disease), including suspect cases (no laboratory confirmation) to the Durham Region Health Department at 905-723-3818 or 1-888-777-9613 so that further investigation can be carried out.

Durham Region Health Department: 905-723-3818, 1-888-777 9613

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If you prefer to receive this information in an electronic format please submit your request to healthresources@durham.ca

If you require this information in an accessible format, contact 1-888-777-9613.