

Eastern Equine Encephalitis Virus found in Southern Ontario Horses

Update to York Region health care professionals as of October 1, 2018

York Region Public Health is aware of and monitoring a recent increase in Eastern Equine Encephalitis Virus (EEEV) among horses in Southern Ontario. Public Health Ontario has identified eight cases of EEEV in horses from Hamilton, Haldimand-Norfolk and Niagara regions. While no horse or human cases have been identified in York Region, health care professionals should be aware that the virus continues to circulate in horses in regions nearby. To date, only one locally-acquired human case of EEEV has been reported in Ontario (in 2016).

EEEV can be transmitted to both humans and horses via the bite of an infected mosquito. Mosquitos act as a bridge vector after coming in contact with an infected bird – the primary reservoir of EEEV. EEEV is not spread from horses to humans. EEEV is also sometimes called “sleeping sickness” (not to be confused with trypanosomiasis, which is spread via infected tsetse flies).

York Region Public Health conducts mosquito surveillance and testing for both West Nile virus and EEEV throughout the region. To date, no mosquitoes have tested positive for EEEV in York Region. Surveillance will continue to monitor for the presence of EEEV mosquito vectors and any infectivity in the region.

Information for Physicians

Most persons infected with EEEV show no symptoms of illness. The incubation period ranges from four to 10 days. Infection with EEEV can result in either systemic or encephalitic illness. Systemic infection has an acute onset, typically lasts one to two weeks, and includes symptoms of chills, fever, confusion, malaise, and myalgia. Encephalitic illness involves swelling of the brain and is referred to as Eastern Equine Encephalitis (EEE).

Severe cases of EEE can begin with a sudden onset of headache, chills, high fever, and vomiting, which may progress to disorientation, seizures, or coma. While EEE is rare in humans, it is considered one of the most severe diseases transmitted by mosquitoes affecting people in North America. Over 30 per cent of all people with EEE will die from the disease¹, and those that recover often face permanent neurological sequelae (e.g., paralysis, brain dysfunction, seizures).

If you suspect a person may be infected with EEEV, order a serology test to verify if EEEV is present. EEEV is a disease of public health significance and positive results must be reported to the medical officer of health as per the *Health Protection and Promotion Act*.

If you have any questions regarding EEEV, or to report a suspected case. contact York Region Public Health at **1-877-464-9675 ext. 73588**.

Footnote and Additional Resources on EEEV

1. Eastern Equine Encephalitis Virus. Public Health Ontario. 2014. Available from:
https://www.publichealthontario.ca/en/eRepository/Eastern_Equine_Encephalitis_Virus_Report_2014.pdf

For more information on EEEV testing in Ontario (2014), visit:
https://www.publichealthontario.ca/en/ServicesAndTools/LaboratoryServices/Pages/Eastern_Equine_Encephalitis_Serology.aspx

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