

August 28, 2020

## **West Nile Virus infection Confirmed in a Horse from Durham County**

On August 28, 2020, the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) was notified of a positive test result for West Nile Virus (WNV) from an unvaccinated horse demonstrating neurologic signs in the Municipality of Kawartha Lakes. The horse's clinical condition is stable.

WNV is not transmissible from horses to people. Birds are the natural hosts for WNV, which is transmitted to horses and humans by mosquitoes which have bitten an infected bird.

Effective equine vaccines for WNV are available and veterinarians should encourage clients to keep their horse's vaccinations current. Once clinical infection develops, treatment options are limited to supportive care.

Veterinarians in Ontario should consider WNV as a differential diagnosis in horses exhibiting neurological signs and can identify positive cases through appropriate testing. IgM antibodies to WNV can be detected in serum from horses with neurological signs. As well, RT-PCR testing can be performed on brain tissue if available.

WNV is an immediately notifiable disease under both the federal Health of Animals Act and the provincial Animal Health Act. Signs of WNV (such as lethargy, ataxia, facial tremors, muscle fasciculation and limb paralysis) can mimic a variety of encephalitides including rabies, Eastern Equine Encephalitis (EEE), hepatic encephalopathy, equine protozoal myeloencephalitis (EPM), and equine herpes virus 1 (EHV-1). Please visit CFIA's webpage for more information on testing (<http://www.inspection.gc.ca/animals/terrestrial-animals/diseases/immediately-notifiable/west-nile-virus/surveillance/eng/1346131121021/1346131213336>)

WNV is endemic in Ontario and cases occur in the horse population at varying levels each year. Most equine cases of WNV occur between August and September, although cases can occur into October if environmental conditions permit the survival of the mosquito vector species.

WNV infections have been reported in a wide range of animal and bird species, including horses, dogs, cats, deer, crows, chickens, geese, jays, raptors and owls. Horses and birds of the corvid family, including ravens, magpies, jays and crows, are particularly susceptible to WNV.

Equine neurological cases are posted on the OMAFRA website at:  
<http://www.omafra.gov.on.ca/english/livestock/horses/westnile.htm#surveillance>

Ontario's local public health units are currently conducting mosquito surveillance. As of August 22, 2020, there have been 9 reported (confirmed or probable) human cases of West Nile virus infection in Ontario. As well there have been 121 positive mosquito pools, from 16 different health units, identified across the province.  
<https://www.publichealthontario.ca/en/DataAndAnalytics/Pages/WNV.aspx>

Questions about WNV in horses can be directed to:

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