

January 14, 2020

Two cases of equine abortion in Simcoe County due to equine herpesvirus-1 (EHV-1) infection

Issue

The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has been notified of two cases of equine abortion in Simcoe County caused by equine herpesvirus-1 (EHV-1).

Animal Health Risk / Disease Information

On January 6th, 2020 OMAFRA was notified of two cases of equine abortion in Simcoe County. Both cases were confirmed to be caused by equine herpesvirus-1 (EHV-1). Both mares aborted during their 10th month of pregnancy and both arrived from an out-of-province location in December. A third mare was exposed to the infected mares but has remained unaffected. The farm manager was proactive and kept the new mares separate from the resident mares and in a small group. This type of management procedure reduces the risk of spreading the virus to the entire herd. Working with their veterinarian, the farm manager has isolated the affected mares and has voluntarily placed the premises under quarantine to reduce the risk of viral spread.

Human Health and Food Safety Risk

EHV-1 does not pose a human health or food safety risk.

Transmission Routes

EHV-1 infection is easily spread to other horses by nose-to-nose or close contact with an infected horse or aborted fluids, by sharing contaminated equipment including **lead shanks, buckets and towels** or by the clothing and hands of people who have recently had contact with an infected horse.

Biosecurity is key to preventing spread of EHV-1. Strict routine biosecurity measures are the best way to minimize viral spread and should be in place at all times to prevent a disease outbreak, including hand hygiene and basic cleaning and disinfection practices.

Pregnant broodmares should be housed separately from other groups of horses such as young stock, boarders and horses in training.

Stress increases the risk of horses shedding the EHV-1 virus, even years after initial infection. Stress caused by severe weather should be minimized by access to appropriate shelter, food and water. Stress due to transport and mixing of social groups should be avoided when possible in the last trimester of pregnancy.

Current EHV-1 vaccines that protect against abortion should be administered during the 5th, 7th and 9th months of pregnancy and according to the manufacturer's guidelines to limit the amount and time that the virus is shed. EHV-1 vaccines marketed for prevention of respiratory disease may reduce viral shedding but are not protective against developing the neurological form of the disease in the vaccinated animal.

Clinical Signs

EHV-1 causes abortion as well as respiratory disease, neonatal foal death and/or a neurological disease called equine herpes myeloencephalopathy (EHM). Broodmares that abort due to EHV-1 may not show any clinical signs but will shed large amount of virus in aborted fluid and tissue.

Pregnant and non-pregnant horses exposed to the virus may develop neurologic disease.

Because a fever (101.5 °F or 38.6 °C) may be the first indication of infection prior to neurologic disease developing, the temperature of exposed animals should be monitored twice daily for 21 days and any abnormalities discussed with a veterinarian. Neurological signs, if they develop, may include loss of balance, hind-limb weakness, difficulty urinating, decreased tail tone, depression and being down and unable to rise. It is important that a veterinarian assess horses demonstrating neurological signs since it can be difficult to distinguish this from other serious diseases such as rabies.

Current Advice

EHV-1 infection is not a federally reportable disease but in Ontario it is immediately notifiable by laboratories to OMAFRA under the *Animal Health Act*. Attending veterinarians

Agricultural Information Contact Centre
1-877-424-1300

E-mail : ag.info.omafra@ontario.ca
www.ontario.ca/omafra

concerned about cases of equine herpesvirus-1 infection may contact an OMAFRA veterinarian through the Agricultural Information Contact Centre at 1-877-424-1300.

Additional information is available at:

OMAFRA

Preventing Disease Spread - Personal Hygiene and Disinfectants around Horse Barns:
<http://www.omafra.gov.on.ca/english/livestock/horses/facts/prev-disease-spread.htm>

Horses - Health Management and Biosecurity:
<http://www.omafra.gov.on.ca/english/livestock/horses/health.html>

Equine Neurological Disease Surveillance 2018:
http://www.omafra.gov.on.ca/english/livestock/horses/facts/nhd_surv2018.htm

CFIA

National Farm and Facility Level Biosecurity Standard for the Equine Sector:
<http://www.inspection.gc.ca/animals/terrestrial-animals/biosecurity/standards-and-principles/equine-sector/eng/1460662612042/1460662650577>

EQUINE GUELPH

Equine Biosecurity Risk Calculator:
http://www.equineguelph.ca/Tools/biosecurity_2011.php

ALBERTA VETERINARY MEDICAL ASSOCIATION AND ALBERTA EQUESTRIAN FEDERATION

Equine Biosecurity Principles and Best Practices:
[http://www1.agric.gov.ab.ca/\\$Department/deptdocs.nsf/all/cpv13683/\\$FILE/equine_biosecurity_principles_and_best_practices_guide.pdf](http://www1.agric.gov.ab.ca/$Department/deptdocs.nsf/all/cpv13683/$FILE/equine_biosecurity_principles_and_best_practices_guide.pdf)