This information is a professional communication for the equine industry. The OAHN group is a dedicated group of veterinarians from primary care practices, academia, government and laboratories, who meet regularly to discuss Equine disease and health issues. It is the intent of this program to monitor and protect the health of horses in Ontario.

Ontario Animal Health Network (OAHN)
Equine Expert Network

Equine Herpesvirus-1 Factsheet

February 2017

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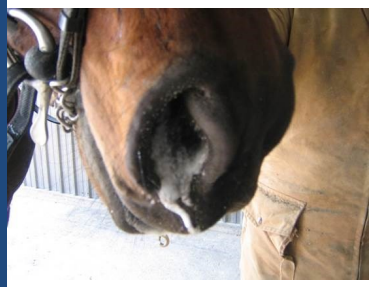
Equine Herpesvirus-1- Be on the alert

Equine herpesvirus-1 (EHV-1) has been associated with outbreaks of neurologic disease called equine herpes myeloencephalopathy (EHM) in four US states* over the last few months. Soon, horses will be making the trek back to Ontario from competition, training and racing grounds south of the border. Now is a good time to be prepared with an understanding of the disease and to ensure appropriate biosecurity measures are in place.

A few points about EHV-1:

- **At least 70% of horses have been infected with EHV-1 as foals by their dams,** and current vaccines and management practices cannot prevent this.
- **EHV-1 produces a latent infection,** meaning these foals don't show any clinical signs at the time, and the virus "hibernates" in the lymph nodes and in a group of nerve cells in the head where it remains inactive, or latent, establishing a carrier state that is life-long.
- **Carrier horses do not show clinical signs** and there is no laboratory test presently to detect them.
- **Stress and suppression of the immune system causes carrier horses to start shedding the virus.** Stressful situations such as shipping (especially over long distance), overcrowding, mixing, illness, or pregnancy can cause the virus to become active and shed by the horse. It is thought that most outbreaks of EHV-1 are caused by reactivation from a carrier state.



- **EHV-1 is transmitted by respiratory secretions**. Horses become infected by inhaling the virus shed by another horse, from nose- to-nose contact, or contact with infectious viral particles in the environment (tack, grooming supplies, stalls, trailers, clothing).
- **Fever is an important clinical sign**. Fever occurs days before the onset of neurologic signs are noticed. It is, therefore, very important to take temperatures twice daily on all new horses arriving at your stable as a fever may be the only indication that an active virus is present.
- **Neurologic disease is characterized by decreased coordination (ataxia) and hind limb weakness.** After gaining access through the nose and entering the blood stream, the virus is delivered to the spinal cord. Loss of balance and recumbency may then ensue.
- **Only 10% of infected horses develop neurologic signs during an EHV-1 outbreak.** The reason the virus attacks the vessels of the CNS in only certain horses is not completely known, although there is a strong relationship between the dominance of specific immune cells and the susceptibility to and recovery from EHM.
- **After infected, the horse will shed the virus for 10-21 days.**

Biosecurity

- **Quarantine new horses upon arrival** for at least 2 weeks taking daily temperatures and making sure not to go back and forth between resident and quarantined horses.
- **Report any abnormalities** (fever or neurologic signs) to your veterinarian.
- **Ensure your horses are vaccinated**. Although vaccines exist to prevent respiratory disease and abortion due to EHV-1, at present there is no vaccine licensed to prevent the neurologic form of the disease. Some veterinarians promote the use of the respiratory/abortion vaccines to reduce the shedding of the virus and limit the spread through the barn. Discuss this with your veterinarian and decide upon the best approach for you and your horse or stable.

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