# **Equine Update** Equine Herpes Virus & COVID-19 Update

#### **Central Ontario Veterinary Services**

132 Commerce Park Drive, Unit N, Barrie ON L4N 8W8 705-722-3232 info@centralontariovet.com



## May 28, 2020

### **Regular Appointments are now available**

In compliance with the Province of Ontario's COVID-19 Emergency Order, Central Ontario Veterinary Services is now able to provide all services to our clients, while continuing to maintain existing biosecurity measures and physical distancing from our clients and barn staff on our calls.

Please contact us at (705) 722-3232 or info@centralontariovet.com to book .

### **Equine Herpes Virus**

Over the last couple of days we have had several clients call in and ask us about

equine herpesvirus. As many of you are aware there have been several reported cases in the province within the last week. So far cases have been confirmed at two locations. The second location has close ties to the facility where the first case was identified. Equine herpesvirus and the diseases it results in are not new to Ontario. For the last several years there have been a handful of cases of Equine Herpes Myeloencephalopathy. In 2018 there was a confirmed case in Simcoe County. The recent cases have some of our horse owners concerned so we thought this would be a good opportunity to provide you with some more information. First of all Equine Herpes Myeloencephalopathy (EHM) is caused by the equine herpesvirus (EHV). This is an extremely common virus in the horse population. In fact pretty much all horses have been infected with the virus at some point in their lives. There are several different types of herpes virus:

- EHV-1 can cause respiratory disease, abortion in pregnant mares, death in young foals and EHM
- EHV-3 causes a venereal disease in horses
- EHV-4 causes respiratory disease and abortion

Respiratory disease caused by EHV is most commonly seen in young horses. Adult horses can also be infected but they often do not develop any symptoms. Clinicals signs of the respiratory form include a fever, nasal discharge, ocular discharge and enlargement of the lymph nodes under the jaw. Notably there is typically very little coughing.

Equine Herpes Myeloencephalopathy occurs when EHV-1 causes widespread injury to the blood vessels that are found within the blood-brain barrier. The neurologic signs associated with this disease result from the inflammation of these vessels, blood clots and the death of nervous tissue as a result of oxygen deprivation. Cases of EHM can occur in isolation or it can affect multiple exposed horses. There may or may not be an associated EHV-1 respiratory or abortion disease outbreak.

EHV-1 is contagious and spreads easily by direct horse-to-horse contact through nasal secretions. The air around a horse that is shedding the virus can also contain viral particles, although we do not know how far this virus travels in the air in a normal barn environment. Lastly the virus can be spread through physical objects that are contaminated with the virus. This can include contaminated clothing, tack and trailers. In normal circumstances the virus can survive in the environment for 7 days. The virus is easily killed in the environment by most disinfectants. Any contaminated clothing or equipment should be first washed and then disinfected. **www.centralontariovet.com**  Horses are at the biggest risk of becoming infected with EHV when they gather in large numbers such as at shows or auctions. Stress can cause some horses who have previously been infected with EHV to start shedding the virus again. Finally people and equipment who have been contaminated by an infected horse could carry the virus between barns.

Horses become infected through their respiratory tract. Once the infection occurs there is an incubation period. This is typically 4-6 days, though it can be as short as 24 hours. With EHM there are typically very minimal respiratory signs and a fever (above 38.6°C) is often the only clinical sign before the onset of neurologic disease. The onset of neurologic disease is sudden and progresses rapidly over the next 24-48 hours. Clinical signs can

- include:
- Incoordination

Fever

- Hind limb weakness
- Loss of tail tone

- Lethargy
- Urine dribbling
- Head tilt
- Recumbency

Unfortunately there is no specific treatment for EHM. Horses are given antiinflammatory medication to try and control the inflammation in the brain and spinal cord. Antiviral medication does seem to be helpful, however the cost of treatment is often prohibitive. Horses with neurologic signs will require intensive care especially if they are recumbent.

The best option when dealing with EHM is prevention. Often vaccines are a critical part of preventative healthcare. Unfortunately none of the current EHV-1 vaccines will protect a horse from developing EHM. There is evidence that EHV-1 vaccines can decrease the amount of virus an infected horse sheds into the environment. This could help reduce the spread of the virus within a barn. The EHV vaccine is one that we have always offered to our clients and we recommend it for anyone who is planning on showing their horses or who board their horses at a facility that has horses coming and going frequently. If your horse receives any of the XP vaccines (2XP, 5XP or Gold XP) then they are vaccinated against EHV-1 & EHV-4.

As we do not currently have an effective vaccine for EHM biosecurity becomes extremely important if we are trying to prevent herpesvirus infection. People should always wash their hands and clothing when moving between facilities. You will all have seen our veterinarians in coveralls and washing their boots. This is one of the things we do every day to decrease the chances of spreading diseases between the farms that we visit. At a show you should never touch any strange horses and you should not share your equipment with people not from your farm. Any equipment that has come in contact with an unknown horse should be washed and disinfected.

It is also good practice to quarantine any new horses that come onto the property. Horses that have been at events where they have come in close contact with other horses not housed at their home facility should also undergo a period of quarantine. These at risk horses should be kept separate from the resident horses for at least 21 days. Quarantined horses will need to be stabled at least 9 meters (30 feet) from other horses on the property. The horses in quarantine will require separate halters, leads, pitch forks, water buckets etc. Handlers should not move between the horses in quarantine and the rest of the horses on the property. If one person handles both groups of horses they should change their clothing and wash their hands when they move between groups. Horses in quarantine should have their temperatures monitored twice daily.

Many of these biosecurity measures will be familiar to you as they are very similar to recommendations currently in place to help reduce the spread of COVID-19. If any of your horses develops a fever please phone us immediately. If you have any further questions do not hesitate to contact us either by the phone or through email.

The Ontario Animal Health Network has an infographic that might be of interest. This infographic and further information can be found on our website under Equine Disease Surveillance -

https://centralontariovet.com/equine-disease-surveillance/

www.centralontariovet.com

