



**PO Box 747
Newberry, FL 32669
Phone: 352.331.8434
Fax: 352.332.6552**

*vets@springhillequine.com
www.springhillequine.com*

**Erica Lacher, DVM
352.665.8222**

**Stephanie King, DVM
352.665.9838**

Due to the current outbreak of Equine Herpes Virus 1 on the West Coast, we thought we would take this opportunity to discuss Herpes Virus in horses and biosecurity protocols.

Let's start with some Herpes Virus basics. Most horses are infected with Herpes viruses by the age of 2 years. Once infected, horses carry the virus for life. The immune system normally keeps the virus in check. However, stress, such as horse shows, shipping or illness can cause the virus to escape immune system control. When this happens the virus can be spread via snorting, coughing, shared equipment and hands. The virus can survive outside the body for several weeks if in a warm, moist environment.

Herpes (also known as Rhinopneumonitis) has three known forms: Respiratory (most common), Abortion in mares and Neurologic Disease.

The respiratory form is common in foals and young horses and clinical signs include snotty noses, coughing and a fever. Signs generally appear within 2-10 days following exposure. Horses with respiratory signs should be rested until normal to avoid complications such as pneumonia. This is the most common form horses are infected with.

Mares who are exposed can abort as early as 90 days of gestation. However, most mares are affected between 7 and 9 months of gestation. The Herpes Virus affects the blood vessels within the uterus and placenta leading to death of the fetus. Mares will often show no signs of exposure other than the loss of the foal. Tissues from the mare and aborted fetus can spread the virus so they should be handled very carefully.

Now on to the one we all want to know about: The Neurologic form. This form presents with respiratory signs but progresses to neurologic signs. Early signs are often subtle such as a dragging toe or incoordination. The signs may advance over several days to include dog-sitting, difficulty urinating and severe weakness. These signs are caused by an attack on the blood vessels of the brain and spinal cord. This form can be fatal depending on the severity of neurologic signs and because of secondary problems when the horse is unable to rise. Luckily this form is carried by a very small percentage of horses.

If Herpes is suspected, a diagnosis can be confirmed by taking a nasal swab and checking for the virus. Using this method, the laboratory can tell the difference between the mild respiratory version and the much more severe neurologic form. Several other tests are available but this way is the most sensitive.

There are no specific treatments for Herpes in horses. Antivirals, such as Valcyclovir and Acyclovir, have been tried but their value is unclear. Most treatments are aimed at supporting the horse until their system can deal with the virus. Fluids are given to help with hydration. Anti-inflammatories help reduce swelling in the brain and spinal cord. Slings can be used to help weak horses stand. The bladder may have to be catheterized to assist with urination. If the horse remains standing, prognosis is good but it may take months for recovery.

Prevention has two major components: vaccination and biosecurity. Vaccination is complicated. It does not protect horses from Herpes. Vaccination significantly reduces the amount of virus shed by infected horses. It is important to vaccinate all horses which travel to reduce potential virus exposure. By vaccinating traveling horses, you also offer protection to the horses left at home. The most important aspect of prevention is biosecurity. It is impossible to reduce the risk to zero but a few simple rules can help;

- Have your Health Program evaluated twice yearly by Springhill Equine
- Keep your horses in tip-top shape. An ideal weight, good nutrition and exercise programs ensure your horse is ready to perform.
- Never share water sources with others at horse shows, trail rides or any other gatherings.
- Bring your own hose and do not let it touch water in buckets or troughs.
- Disinfect with a 1:10 concentration of bleach. This can be used on trailers, stalls and equipment. Large amounts of dirt will decrease the effect so pre-scrubbing may be needed.
- Keep new and recently symptomatic horses away from other horses for 21 days.
- Pregnant mares should be kept away from new and traveling horses.
- If in doubt, take temperatures twice daily. Call Springhill Equine if anyone has a temperature over 102.0 F.

The moral of the story? Have fun with your horse while following these few simple rules!