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Winter 2007



As many of you know, the State of Florida was the site of a recent outbreak of Equine Herpes Virus-1 (EHV-1). EHV-1, also known as Rhinopneumonitis, is a highly contagious respiratory and neurologic disease. The recent outbreak highlighted the problems with detection, control and prevention of EHV-1.

The initial case involved a shipment of horses from Europe through New York and on to Florida and California. These horses were normal when released from quarantine in New York but by the time they reached Florida and California two horses were severely ill. Most likely these horses were exposed during quarantine period and did not show signs until after their release.

A little background on EHV-1 will help clarify how this can occur. Most horses carry a form of EHV-1 and/or Equine Herpes Virus 4 (EHV-4) as a latent virus. This means the virus is "hibernating" in the body and not actively reproducing or causing disease. If the body gets stressed the virus takes advantage and begins reproducing. This is most likely what happened with one of the horses in quarantine with the virus then spreading.

In addition, these horses were affected with a very aggressive form of EHV-1 known as the Neurogenic type. This version of the virus reproduces very quickly causing it to overwhelm the immune system before it even knows the virus is present. Horses affected with this form will show some intermittent mild fevers (101-102 F) in the 7-10 days before showing neurologic signs and high fevers (105 F). During those 7-10 days, while showing clinical signs and for 14-21 days after these horses can shed high numbers of virus into the environment.

You might ask why the horses were not tested in quarantine to see if they were carrying this potentially deadly virus. The problem lies in the test

available. The best test we have for this virus is called PCR. It detects the DNA of the virus in nasal secretions and blood. However, the test is very sensitive and will detect "dead" DNA and DNA from the garden variety strains of EHV, with 4% of all horses testing positive. This means the test cannot be used to screen normal horses.

So how do you prevent your horse from getting EHV-1? You could put a ten foot wall around your property surrounded by a moat of bleach water and never leave but that isn't very practical. So your next option is to play smart. Stress is a major factor causing vulnerability to this disease, so keep your horse as stress free as possible. Vaccination is not protective but may help reduce viral shedding in affected horses. For this reason we recommend regular vaccination every 4-6 months for horses with high exposure levels. Using your own horse trailer is always best for transport. If you haul a horse with an unknown history it is best to disinfect the trailer after shipping that horse. Commercial shippers often pick up numerous horses from many different locations and disinfection can be spotty.

Once you arrive at your event, minimize your horse's exposure to others. While difficult for us social creatures, keeping at least 40 feet between you and other horses keeps you safe from coughs and sneezes. Bring your own water buckets and fill them only from hoses or spigots, making sure hoses do not get submerged. Once you return from an event keep a watchful eye on your horse. Taking temperatures twice daily for 7-10 days after returning home will catch most fevers. These guidelines are good for disease control in general when attending any organized event.

Respiratory diseases can be challenging. Call us for help formulating a plan to minimize your horse's exposure and maximize your fun.