

Equine Herpes Virus (EHV-1)

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The Iowa Department of Agriculture and Land Stewardship (IDALS) has confirmed a single case of Equine Herpes Virus (EHV-1) causing neurological signs in the state of Iowa. The horse was shipped to a farm in Minnesota, where it spent a day prior to returning home. The horse is under a self-imposed quarantine by the facility's owners in Marion. The remaining positive cases have been in horses located in eastern Minnesota and western Wisconsin. At least 3 of the horses have been euthanized.

Equine Herpes Virus (EHV-1) is a contagious equine virus that is most commonly known to cause abortion and can also cause respiratory disease, as well neurologic disease.

The neurological form also known as Equine Herpes Virus Myeloencephalopathy (EHM) involves the brain stem and results in nervous system dysfunction such as incoordination, stumbling, appearing "drunk," urine dribbling, inability to stand, etc. The virus is spread through contact with facial secretions that contain the virus such as snot and saliva. This includes being near a horse that is coughing or sneezing, direct horse-to-horse contact, contact with contaminated feed, equipment, tack, and people's hands and clothing. Once a horse is infected it can become a carrier of the virus. During times of stress, the virus can emerge and the horse may begin shedding. The incubation period is variable ranging from 24 hours to 2 weeks. Typically disease begins with a fever with other signs ensuing in the following days including abortion, respiratory disease, or neurological signs. Shedding by the respiratory route typically lasts for 7-10 days and veterinarians recommend quarantine for a period of 14 to 28 days after resolution of clinical signs to be sure.

If a horse contracts the neurologic form, treatment is directed at supportive care. Horses will be managed according to their individual signs. The current strain circulating in the mid-west region is NOT the neuropathic strain that has been reported in previous years. The strain in this region is a wild-type herpes and while there is not a specific vaccine against this specific strain, there is some antigenic similarity to the vaccine strain. It is recommended that horses who will be coming in contact with other horses during the year receive at least one dose of EHV4-1 vaccine two weeks prior to travel. An additional safeguard may be an intranasal flu vaccine. Recent information has suggested that while the vaccine is for flu specifically, it induces general mucosal immunity as well.

Owners should practice biosecurity measures including not sharing tack; cleaning and disinfecting your horse trailer after transporting horses other than your own with a 1:10 bleach:water solution; provide appropriate food, water and shelter to minimize stress on your horses; quarantine and monitor temperature of new horses for at least 14 days before introducing them to your existing herd, and if your horse exhibits any neurologic signs, contact your veterinarian immediately. A good site to calculate the biosecurity on your farm is

http://www.equineguelph.ca/Tools/biosecurity_2011.php



Additional Resources

- Center for Food Security and Public Health <http://www.cfsph.iastate.edu/?lang=en>
- Equine Herpesvirus (EHV) Myeloencephalopathy-A Guide To Understanding the Neurologic Form of EHV Infection
http://www.aphis.usda.gov/vs/nahss/equine/ehv/equine_herpesvirus_brochure_2009.pdf
- http://www.aaep.org/pdfs/control_guidelines/Equine%20Herpes%20Virus.pdf