

Veterinary Health Center at Kansas State University

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<http://www.vet.k-state.edu/depts/VHC/equine/index.htm>

EQUINE HERPESVIRUS – 1 IN 2014

- The Kansas Department of Agriculture issued a press release on Tuesday 4-29-14 that confirmed that a horse in northeast Kansas had been euthanized after it contracted a deadly virus. The horse likely became infected by coming into contact with another infected horse at the Bonus Race Finals in Lincoln, Nebraska from April 10 to 13. According to the press release, the horse was euthanized and samples were sent to the K-State Veterinary Diagnostic Laboratory on April 25, as well as Equine Diagnostic Services in Lexington, Kentucky. The horse tested positive for EHV-1, or Equine Herpes Virus.
- Equine herpesvirus 1 (EHV-1) is one of a large group of DNA viruses causing potentially serious disease in horses and other species. EHV-1 can cause different forms of disease - one form can cause abortion in mares and another form may cause respiratory infection and neurological symptoms. The most recent outbreaks of concern have involved the EHV-1 respiratory/neurological form of the virus.
- Neurologic disease resulting from infection with EHV-1 is termed Equine Herpes Myelitis (EHM).
- EHV-1 is contagious and is spread by direct horse-to-horse contact, by contaminated hands, equipment and tack, and, for a short time, through aerosolization of the virus within the environment of the stall and stable.
- If horses are identified to have clinical signs consistent with disease, laboratory submission of nasal swabs and whole blood samples collected from the exposed horse can be utilized for virus detection. Please work with the Veterinary Health Center (VHC) or your local veterinarian to discuss protocols for testing any suspected cases.
- The incubation period of EHV-1 infection is typically 2-7 days. Initial clinical signs often include a fever (> 101.5 F) then typically a second fever spike occurs over the following several days. When neurological disease occurs it is typically 7-12 days after the primary infection.
- In horses infected with the neurologic strain of EHV-1, in addition to fever, clinical signs may also include: nasal discharge, incoordination, hind end weakness, recumbency, lethargy, urine dribbling and diminished tail tone.
- Currently there are no EHV-1 vaccines that have been proven to prevent against the development of EHM. It is recommended that you contact your local veterinarian or the VHC to discuss potential vaccine recommendations that may be implemented to help limit the severity of disease, should your horse become exposed to the virus.
- Prognosis depends on severity of signs and the period of recumbency. There is no specific treatment for EHV-1, although antiviral drugs (i.e. valacyclovir) may have some value if started before neurological signs occur. Non-specific treatment may include intravenous fluids, and other appropriate supportive therapy; the use of anti-inflammatory drugs (NSAIDs) is strongly recommended.
- Currently, no equine vaccine maintains a label claim for protection against the neurological strain of the virus. We recommend that you visit with the equine clinicians at the VHC or your local veterinarian to

discuss the indications and type of vaccine that may help reduce the severity of disease should your horse be exposed to EHV-1.

- Isolation (quarantine) of sick horses and early determination of the cause of their symptoms is very important. It is indicated to determine if the horse has been around horses that may have been in a place where EHV-1 has been documented to occur. Infections other than EHV-1 can also spread by horse-to-horse contact, so keeping a horse with a fever isolated is a very good practice regardless of the cause of fever.
- If your horse develops fever, respiratory signs or neurological signs, contact the VHC or notify your local veterinarian and do not move the horse or horses in the immediate area. Alert those who have horses in the adjacent area to cease all movement of horses in and out of the facility until a diagnosis is confirmed by testing. If horses are exposed and then travel to a new stable or show, the infection can spread to other horses at that new location.
- EHV-1 does not persist in the environment for extended periods of time, but disinfection of premises, stalls, trailers is indicated. If you handle a horse with EHV-1 and don't wash hands or change clothing, you will be likely to spread the virus to other horses. A solution of 1 part chlorine bleach to 9 parts water (1:10 dilution) is effective for decontaminating equipment and environment.
- When diagnostic testing is performed for suspect horses, the clinicians at the VHC or your local veterinarian will need to obtain a blood sample and nasal swab. Testing will involve determination of whether EHV-1 viral DNA is present in whole blood and/or nasal secretions.
- While test results are pending it is recommended that horses be maintained in an isolated area to limit the chance for viral transmission to other horses.
- Additional information can be obtained through the AAEP website:
<http://www.aaep.org/-i-101.html>
- AAEP Brochure:
<http://www.aaep.org/-i-101.html>
- Frequently asked questions about EHV-1:
<http://www.aaep.org/-i-101.html>