What are the differences between EHV-1 and EHM?

EHV-1 stands for equine herpesvirus 1. It has four forms, causing:

■ Respiratory infection
■ Neonatal infection
■ Abortion
■ Neurological signs

The last form can cause equine herpesvirus myeloencephalopathy (EHM), which attacks the spinal cord and brain and can be fatal. (ONLY THIS FORM (EHM) is a reportable disease in CA.)

Is EHM treatable?

Treatment for EHM is primarily supportive, and may include anti-inflammatories and fluids to maintain hydration. Slings may be used to help horses that are unable to stand. Antiviral drugs have shown some benefit if administered early. EHM has a high mortality rate of 30-50%. Recovery time can vary from several days to over a year. Horses that are able to remain standing usually have a better prognosis than those that are recumbent.

What to do if you are importing horses

Imported horses should have their temperatures monitored twice daily and should be isolated if they exhibit a fever (≥101.5°F). It is important to try and determine if the horse has been around horses that may have been in a place with documented EHV-1 infected cases. Cease all movement of horses in and out of the facility until a diagnosis is confirmed by testing to prevent the spread of the infection to other locations. Since stress may trigger the onset of clinical signs, horses in areas of known exposure should not be subjected to strenuous physical exercise or long-distance transport until their health status can be determined. Proper biosecurity is essential to prevent spread to other horses or facilities.

Should I test my horse for EHV-1?

EHV-1 testing is warranted only if the horse exhibits fever, has been part of an outbreak or has clinical signs consistent with EHV-1 infection.
Review of biosecurity

Follow these basic guidelines to decrease the potential spread of disease at equine facilities and events:

- Limit horse-to-horse contact
- Limit horse-to-human-to-horse contact
- Avoid use of communal water sources and do not dunk hoses in water buckets when filling
- Avoid sharing of equipment unless thoroughly cleaned and disinfected between uses
- Monitor horses for clinical signs of EHM, including fever of ≥101.5°F, nasal discharge, cough, reddish mucous membranes, puffy and red eyes, swollen legs and acute onset of neurological signs (ataxia, recumbency, urinary incontinence)

EHV-1 does not persist in the environment for a long time, but it is important to disinfect all premises, stalls, trailers, etc. A solution of 1 part chlorine bleach to 10 parts water, or accelerated hydrogen peroxide disinfectants, are effective for decontaminating equipment and the environment. Wash your hands and change clothing if you handle a horse with EHV-1 infection to prevent infecting other horses.

Refer to the Fall 2020 Horse Report on Equine Biosecurity for more information.

Should I vaccinate? If so, with what?

Although vaccines are available for the respiratory and abortion forms of EHV-1, there are currently no vaccines to protect against EHM. There is currently no consensus as to the effectiveness of EHV-1 vaccines. Consult with your veterinarian for questions about EHV-1 vaccination.

What happens if there is an outbreak at my barn or during my horse’s transport?

Once a diagnosis of EHM is confirmed, the office of the state veterinarian will become involved in CA. Quarantine measures, including temperature monitoring and enhanced biosecurity, will be required to prevent the spread of disease. Individuals that have tested positive for EHV-1 within the designated quarantine area will be retested periodically until disease is confirmed or eliminated based upon both a PCR test and a lack of clinical signs for the disease. Quarantine measures will be maintained until an absence of further clinical cases and positive tests suggest no new appearance of disease. A gradual drawdown of these procedures can then be applied. Isolation protocols are recommended to remain in place for 14 to 21 days after confirmation of new EHM cases.

What happens if there is an outbreak at a show I am competing at?

Equine events pose risks for disease spread due to comingling of horses with unknown health status (often stabled in close proximity), movement of people and animals, and often inadequate isolation areas for sick animals.

In the event of an outbreak at a competition or event, enhanced biosecurity protocols will be put into place. These may include:

- Temporary movement restrictions
- Check-in/check-out processes
- Continuous health monitoring of all horses on the premises
- Cleaning and disinfecting of equipment
- Limiting contact between horses, humans, and other animals (including dogs)
- Restricting visitor access
- Posting biosecurity signage
- Enforcing strict cleaning and disinfection protocols

Refer to the California Department of Food and Agriculture (CDFA) Biosecurity Toolkit for Equine Events for additional information.

For more information, visit us at https://ceh.vetmed.ucdavis.edu or call 530-752-6433