

FAQ: UConn EHV outbreak

What is EHV?

Equine herpes virus infection is caused by a herpes virus infectious to equine species (and possibly infectious to llamas and alpacas). Humans and other animal species are not affected.

What other animals can be affected by EHV?

All equine species are affected, including asses and donkeys, and there is recent evidence of both experimental and natural infection in llamas and alpacas. Other animals, including humans, are not affected by the virus.

What are the clinical signs (symptoms) of EHV in horses?

EHV can produce respiratory, abortion and neurological signs in horses. Respiratory signs for EHV-1 and EHV-4 are most common, and include fever of 102 -107° F that lasts for 1-7 days, coughing, depression, inappetence (going off feed), and nasal discharge. Abortion (caused by EHV-1) usually occurs between months 7 and 11 of gestation, about 2-12 weeks after infection. There is no evidence that the mare's reproductive tract is damaged, and it does not affect her ability to conceive later. Signs of neurologic disease (usually caused by EHV-1) include incoordination, hindlimb paralysis, recumbency (lying down and being unable to get up), loss of bladder and tail function, and loss of sensation to the skin around the tail and hindlimb areas.

What other diseases can look like EHV?

Equine influenza and equine viral arteritis (EVA) can both result in clinical signs similar to those present for EHV. Other neurological diseases that affect horses, such as West Nile virus infection, equine encephalitis infection, rabies, and equine protozoal myelitis can have clinical signs that are similar to the neurological form of EHV.

What is the incubation period for EHV?

The incubation period (period of time from exposure to development of first clinical signs) ranges from 2 to 10 days.

How is EHV transmitted among horses?

The virus is present in respiratory secretions of infected horses, as well as tissues and fluids of fetuses that have been aborted due to EHV infection. Most commonly, the virus is spread through the air (up to 35 feet) or through contact with infected horses or equipment (buckets, tack, etc) that has been contaminated with respiratory secretions from infected horses. People working with infected horses can inadvertently spread the

infection to other horses unless biosecurity precautions (changing coveralls, boots, gloves, etc, and washing /disinfecting hands between horses) are followed.

How long does the virus last on surfaces?

The virus is readily destroyed by disinfectants (including washing clothes with detergent); surfaces should be cleaned and rinsed then disinfected. Phenol based disinfectants are useful. The virus can survive outside the horse on contaminated surfaces such as skin, equipment, and bedding for more than a week (as long as 28 days) under normal environmental conditions.

What percent of horses completely recover from the disease that have respiratory signs?

The prognosis for horses that have the respiratory form is very good. Most of these horses fully recover.

What percent of horses completely recover from the disease that have neurological signs?

This depends largely on the severity of the neurological disease. Horses with only mild neurological disease are likely to have a full recovery, although this may take weeks to months. Recovery of horses with more severe neurological disease is more difficult to predict. Horses that become recumbent (unable to stand) for more than 24 hours have a poor prognosis, and may die or require euthanasia. Horses with moderate neurological signs may take many months to recover; some may recover completely and some may be left with residual neurological deficits.

How did UConn equine herd become infected?

We are not really sure what cause the herpesvirus infection outbreak at UConn. Since the virus can be latent (carried in an animal that presents no clinical signs until the virus is reactivated by a stressor), it may have come from an animal that was a latent carrier of the virus. This matter continues to be studied.

I have heard that the UConn herd has been quarantined. What does quarantine mean?

When animals such as horses are quarantined, it means that the horses are separated from other horses. This is done by preventing horses from entering or leaving the facility. If the state veterinarian places a quarantine on the facility, as in the case of the UConn equine herd, then only the state veterinarian can remove the quarantine.

When will the quarantine at UConn be lifted?

Quarantine for EHV generally lasts until 3 weeks after the last clinical case has been diagnosed and all affected horses have tested negative for the EHV virus, indicating that they are no longer contagious. The state veterinarian will review the information and determine when to remove the quarantine.

How do I protect horses on my own farm?

In order to prevent an outbreak, horses arriving on a farm from other locations should be isolated for 3-4 weeks before being introduced into the resident horse population. Reduce management-related stressors that may increase the possibility of stress-induced reactivation of latent EHV-1 in carrier horses. Keep horses separated by physiological state or group, especially with regards to pregnant mares, who should be kept away from weanlings, yearlings, and performance horses that frequently travel. Water buckets, feed buckets, and other equipment should not be shared among horses. Also, this is a good time to determine the normal rectal temperature of your horse, which should be approximately 99.5-100.5 ° F. If your horse shows signs of EHV, take its temperature to determine if it is elevated, and contact your veterinarian.

Should I vaccinate my horse?

There are two types of vaccines available for use in the horse for prevention of the disease, but their use remains controversial. Vaccination may reduce the severity and duration of disease, but will not totally prevent the disease. Your equine veterinarian should be consulted regarding the most appropriate use of vaccination in your particular circumstance. Since latent infection is still a problem, vaccination must go hand-in-hand with the use of best management practices.

What should I do if there is an outbreak of EHV-1 on my farm?

In the case of an outbreak, infected horses should be isolated from other horses. Work closely with your veterinarian. The stable should be quarantined for at least three weeks after signs of clinical disease in the last case subside, and affected horses have tested negative. All stable equipment should be disinfected. People handling the infected horses should be sure to wash their hands after handling each horse, dip their shoes in a disinfecting foot bath, and change clothes before working with healthy horses. Ideally, separate personnel can be used to care for the healthy and sick horse groups. Some sources suggest that bedding be removed and burned. Barn stalls, aisles and other surfaces should be cleaned and disinfected as well. Although this virus can last for several weeks in the environment, it is readily killed by most common disinfectants; phenol based disinfectants are commonly used. You should remove all organic material such as manure and dirt, wash with detergent, rinse, then apply disinfectants, wearing rubber gloves. Be sure to also disinfect trailers that were used to transport sick animals. You can also take rectal temperatures of all horses twice a day and keep a written temperature log for each animal to make sure that they are in normal range.

Should I continue bringing my horse to events?

Participating in equine events is an individual decision. Some events require incoming horse to present a health certificate and/ or temperature log. When you bring your horse to events, minimize direct contact between your horse and other horses, and use only your own equipment on your own horse. Do not share buckets, tack or grooming equipment. Consult with your veterinarian regarding specifics in your area and regarding vaccination of your horse.

I am a student at UConn. If I worked with the horses during the fall semester before the outbreak, could I spread the disease?

No, you were not present when the virus was being shed, so you could not spread the disease.

If I am a student at UConn, can I ride or work at other barns?

You can ride or work at other barns if you will not be working with horses at the UConn barns this semester. If you are in contact with UConn horses while the quarantine is in place, you should not be in contact with other horses until the quarantine is lifted and the herd has been given a clean bill of health.

What precautions should I take when horses are coming onto my premises?

Horses arriving on a farm from other locations should be isolated for 3-4 weeks before being introduced into the resident horse population. You may want to consult your veterinarian as to whether or not he/she thinks vaccination is advisable.

What precautions should be taken when the (farrier, vet, horse dentist, etc) comes to my farm?

It is a good idea to practice good biosecurity measures. After each horse is handled, the service provider should be sure to wash their hands. Also, if they have recently handled infected animals, they should change into clean clothes, disinfect their boots before entering and upon leaving the property, and disinfect any equipment before coming to your farm. Most likely, these service providers already have such a protocol in place, but you can check to make sure that they are taking appropriate precautions.