



EQUINE HERPES MYELOENCEPHALOPATHY

WHAT IS EQUINE HERPES MYELOENCEPHALOPATHY?

Equine herpes myeloencephalopathy (EHM) is a neurologic disease in horses linked to the Equine Herpes Virus (EHV-1). EHV-1 in horses can cause respiratory disease, abortion, and neonatal death. Neurologic signs appear as a result of damage to blood vessels in the brain and spinal cord.

EHV-1 usually has an incubation period between 2-10 days. Respiratory shedding of the virus generally occurs for 7-10 days, but may continue longer in infected horses. For this reason, a 21-day isolation period of confirmed positive EHM cases is suggested.

CLINICAL SIGNS

Clinical signs of EHM in horses may include:

- Fever of 102°F or greater, fever most often comes before neurological signs
- Nasal discharge
- Lack of coordination
- Hindquarter weakness
- Leaning or resting against a fence or wall to maintain balance
- Lethargy
- Urine dribbling
- Head tilt
- Diminished tail tone
- Penile paralysis

Consult your veterinarian if your horse exhibits any of these signs.

TRANSMISSION

Transmission of EHM can be spread in various ways. Horse-to-horse contact via nose to nose, short distance aerosol transmission, contaminated hands, equipment, tack, and feed, all have a role in disease transmission.

Direct and indirect contacts are most important for transmission, since the size of the virus limits airborne transmission to distances of less than 30 feet. Horses with severe clinical signs consistent with the neurological form of EHV-1 most often have a large viral load in nasal secretions and present the greatest risk for disease spread.

DIAGNOSIS

Nasal swabs and whole blood collected from the symptomatic horse are essential for detection of horses positive for the virus. Recent advancements in EHV-1 diagnostic testing enable laboratories to differentiate the non-neuropathic and the neuropathic strains of EHV-1. Both strains may cause neurologic signs, but the neuropathic strain is more likely to do so. Diagnostics for detection of antibodies to EHV-1 indicate past exposure to EHV-1 and not current infection.

Producers who suspect carcasses or animals to be infected with EHM, should notify a veterinarian immediately.

REPORTING DISEASE

The Texas Animal Health Commission (TAHC) must be notified within 24 hours of all suspected and confirmed cases of disease. Reports can be made to any TAHC region office.

PREVENTION

Vaccines are available and may reduce the severity of clinical signs. The practice and enforcement of biosecurity measures on equine premises can help prevent the spread of EHV-1. Key to disease control is the immediate separation and isolation of identified suspect cases. Ideally, a person caring for a sick horse should not also work with healthy horses. If this is impractical, always handle healthy horses first and sick horses last.

People can easily transmit this virus on their hands and clothing. Individuals should wash their hands thoroughly with soap and hot water between contacts with horses to reduce risks of disease spread. Wearing disposable gloves and changing them between horses or use of hand sanitizers between horse contacts are other alternatives. When handling any sick horses suspected to have EHV-1 infection, it is imperative that halters, bridles, and other tack not be shared with stablemates. Feed and water buckets should also be dedicated to sick horses and not be shared within a stable.



Herpes viruses can be prevented by many disinfectants. A 1:10 dilution of bleach in water is effective against EHV-1. All areas must be thoroughly cleaned of dirt, plants, and animal waste before the use of these products. Use soaps or detergents to clean the area before applying a disinfectant.

In barn environments, where organic material (dirt, plants, animal waste, etc.) cannot be completely rid of, it is suggested to use a disinfectant that retains activity in the presence of organic matter. Phenolics, such as 1 Stroke Environ® or SynPhenol-3®, and accelerated hydrogen peroxide products, such as Accel®, have this property. Be sure to follow manufacturers' recommendations and label instructions for all disinfectants.

TREATMENT

Supportive treatments for EHM include administration of intravenous fluids, anti-inflammatory drugs, antiviral drugs and other appropriate supportive therapies. The administration of antiviral drugs may decrease the chance of the horse developing neurologic signs of the disease. For neurological and severe cases, veterinary care and hospitalization may be required.

TESTING REQUIREMENTS

Only clinically ill horses should be tested. Since EHV-1 is considered to be native within the horse population, random testing of normal horses for EHV-1 is not recommended. At this time, the significance of a positive test in a healthy horse not involved in an EHM incident is unknown.

