

Frequently Asked Questions Regarding EHV

What is EHV?

EHV stands for Equine Herpes Virus. There are 9 different EHV's that have been identified. EHV-1 is the type that most commonly causes neurologic disease. EHV-1 can also cause respiratory disease, abortion, and neonatal death. EHV-4 most commonly causes respiratory disease, and is uncommonly associated with abortion or neurologic disease. Almost all horses have been infected with EHV-1 by two years of age and have no serious side effects. Once infected, the virus can become latent (inactive) in the body resulting in carrier horses with no external signs of disease. The virus can then become reactivated during times of stress, such as with travel or strenuous exercise. Current work estimates that at least 60% of horses have a latent EHV-1 infection.

What is EHM?

EHM is Equine Herpesvirus myeloencephalopathy, or the neurologic form of herpes. EHM cases may occur as one isolated case or as an outbreak affecting multiple exposed horses. Outbreaks of EHM may or may not be associated with an EHV-associated respiratory outbreak.

How does EHV cause EHM?

EHV can cause inflammation of the blood vessels surrounding the brain and spinal cord. The neurologic signs (EHM) result from that inflammation and small blood clots that affect the neural tissue. During an outbreak of EHM, usually only 10% of infected horses develop neurologic signs. At this time, we still don't fully understand why some horses get EHM and others don't, but it is likely a combination of factors specific to that individual horse and to the virus infecting it.

What does "wild type" strain mean?

There are two strains of EHV-1, known as D₇₅₂ and N₇₅₂. D₇₅₂ is more frequently associated with EHM, and is therefore sometimes called the "neurotropic strain" while N₇₅₂ is called the "wild type" strain, implying that it is the "normal" variant. This is misleading, however, as either strain can cause neurologic disease. D₇₅₂ is more likely to cause neurologic disease, but the same control methods are indicated for either strain.

What are the signs of EHM?

Clinical signs typically begin with a fever, usually 1-3 days after infection although it can be up to 10 days. Neurologic signs usually appear around 7 days post-infection, and progress rapidly over 24 to 48 hours. Signs may include incoordination, weakness, loss of tail tone, urine dribbling, head tilt, and inability to rise.

How is EHV spread?

Herpesvirus is primarily spread by direct horse to horse contact via the respiratory tract. It is unknown how far the virus can spread in the air surrounding an infected horse. Virus can also be spread by contaminated hands, clothing, buckets, tack, grooming equipment, and trailers. The virus can live for about 7 days in the environment, but it is easily killed by most disinfectants.

How is EHM diagnosed?

Horses with a fever and neurologic signs should be tested by your veterinarian. Currently recommended testing consists of a nasal swab and blood collection to detect virus by PCR (polymerase chain reaction) which detects the DNA of the virus. Doing both nasal swab and blood testing increases the likelihood of making a correct diagnosis. Any horse that dies or is euthanized due to neurologic disease should also be submitted for a necropsy examination.

Who decides how an outbreak is managed?

EHM is a reportable disease. That means that when a veterinarian confirms that a horse is positive for EHV and showing neurologic signs, the state animal health officials are notified. The state veterinarians are specially trained to deal with animal disease prevention, surveillance, and control programs. They determine the necessity for quarantine or restricted movement of animals.

Is there a treatment for EHM?

Treatment is primarily supportive. This includes anti-inflammatory drugs. Intravenous fluids may be necessary if the horse is having trouble drinking. Nursing care is also extremely important if the horse is unable to rise. Antibiotics are not effective against EHV, but can be used if there is a secondary bacterial infection. Antiviral drugs such as valacyclovir may prevent infection in exposed horses.

My horse is vaccinated, so he is safe, right?

Unfortunately, no. While there are several vaccines available that provide protection against respiratory disease and abortion, none are labeled for protection against the neurologic form.

UF Large Animal Hospital

2015 SW 16th Ave

Gainesville, FL 32608

352-392-2229

www.vethospitals.ufl.edu