

Cleary Lake Veterinary Hospital

EHM: What we know and don't know about Equine Herpes Virus Myelonecephalopathy

First of all, let's talk about what EHM actually is.

EHM refers to the neurologic disease that can be caused by EHV-1, also known as Rhino. Most horses will be infected by EHV-1 at some point in their lives, but only a very few of those will develop the neurologic disease. We do not know why some



horses are affected and some are not. It is thought that stress or a compromised immune system may be factors, but even this has not been proven. Most horses when infected with EHV-1 will show no signs at all, or may have a mild fever or nasal discharge. These horses usually recover with no further problems. Any horse, at almost any age, can be a "carrier" of the virus, having it reactivate at anytime. Once the EHV-1 virus is reactivated the horse will shed it in large numbers through nasal secretions, thus spreading it to other horses. Direct horse to horse contact is the most common way to spread the virus. But again, only rarely will it cause neurologic problems. Horses can recover from neurologic EHV-1 infections, but may require extensive treatment and hospitalization. Besides horse to horse contact, the virus may also be spread through shared tack, feed, water, hands, clothes, etc. The virus can shed from a horse for up to 14 days and can live on surfaces for 7 days or more. Thankfully, it is easily killed by common disinfectants and even by sunshine!

What does the neurologic (EHM) EHV-1 look like?

With EHM, horses will often have incoordination, urine dribbling, lethargy and inability to rise. Most horses that contract EHV-1 will not develop EHM and will simply have a mild fever or nasal discharge.

Why and when are barns in Minnesota quarantined?

Barns are only quarantined if a horse becomes neurologic and tests positive for EHV-1. Simply having a horse test positive for EHV-1 will not close a barn down. Once a barn is quarantined, no horses may come or go, and people may or may not be restricted from visiting. All horses will have their temperatures taken twice daily and any horse with a temperature of >102.0 must be tested for EHV-1. The barn will remain in quarantine for 21 days after the last positive horse with symptoms.

Why do we vaccinate for EHV-1 if the vaccine doesn't work?

The EHV-1 vaccine (Rhino) does in fact work for the respiratory and abortion forms of the disease. It just doesn't seem to protect against the neurologic form. However, if an entire barn is vaccinated, this should decrease the spread of the virus in an outbreak and thus decrease the number of sick horses and decrease the length of the quarantine. New vaccines are currently being studied.

Is there a treatment for neurologic EHV-1 (EHM)?

Though there is no actual cure for EHM, antiviral agents such as Valcyclovin seem to be of benefit, especially if started early in the course of disease.

For more information on current outbreaks visit https://www.equinediseasecc.org/alerts or https://www.bah.state.mn.us/horses/

What about the quarantines in our area?

In January of 2023, barns in Washington and Dakota counties in central Minnesota had unrelated cases of EHM which resulted in the two properties being placed under quarantine. Neither horse had a recent travel history. As of this writing, there have been no additional cases of EHM and once quarantines are released, the risk of disease transmission will return to baseline. Recovered cases having completed their quarantines are not considered at increased risk once returning to the general population. Remember, it is always a good idea to quarantine new arrivals at your farm to decrease infectious disease risk.

