



The Facts About Equine Herpes Virus (EHV-1):

Rhinopneumonitis (Equine Herpes Virus) is a respiratory virus. The most common strain is EHV-1, which predominantly causes respiratory disease, but can cause abortions in pregnant mares and a neurologic disease which is often fatal. Typically, horses are infected for the first time in the first few months of life, and after a brief clinical period, the virus becomes dormant in the trigeminal nerve. It remains as a latent infection in the trigeminal nerve for the life of the animal. During times of stress, the virus can reactivate, causing clinical signs, high levels of circulating virus (viremia) and shedding through a nasal discharge. While the virus is dormant, it does not cause an immune response, which is why repeated vaccination is necessary. The source of infection in outbreaks of EHV-1 is likely a carrier horse which has the virus reactivated.¹

Key Facts about EHV-1:

1. The best protection is STRICT isolation of suspect horses¹
2. The virus is typically viable in the environment for 7 days, but may persist for as long as 35 days.¹
3. The primary source of infection is direct horse to horse contact or human handlers failing to follow biosecurity measures, such as washing hands between horses, or sharing tack.¹
4. No vaccination has been demonstrated to prevent the neurologic form of EHV-1, but vaccination decreases viremia and shedding of the virus, decreasing the overall risk of infection.¹
 - a. Any contact horses which have been previously vaccinated should be re-vaccinated because they will rapidly mount a protective response.
 - b. Contact horses which have not been previously vaccinated will not benefit from vaccination.
5. While previous outbreak investigations have identified a relationship between vaccination and the neurologic form of the disease, that was only because older horses, which also had a higher vaccination rate are at greater risk for neurologic disease. When the age effect was taken into account, there was no relationship between neurologic disease and vaccination.¹
6. Alternative therapies may also provide some benefit.
 - a. L-lysine has been shown to slow viral replication in Herpes in cats and humans and may behave similarly in horses
 - b. Zinc supplementation has been related to a decreased risk of neurologic disease from EHV-1.

Specific Biosecurity Guidelines:

1. Booster vaccination of healthy animals in primary and secondary contagion control perimeter.
2. Segregated exercise periods outside the control perimeter:
 - Exercise scheduled after general population's exercise period
 - Denied access to starting gate or similar equipment
 - Restricted use of ponies/outriders' horses
 - Direct horse-to-horse contact is to be avoided.

Release of animals from isolation:

Maintain isolation procedures (primary perimeter) for 28 days after last suspected new infection. In the absence of clinical disease, the risk of exposure decreases with time.

¹Lunn, D. P. *et al.* Equine herpesvirus-1 consensus statement. *Journal of veterinary internal medicine / American College of Veterinary Internal Medicine* **23**, 450-461, doi:10.1111/j.1939-1676.2009.0304.x (2009).