



## Equine Herpesvirus (EHV-1 and EHV-4)

**Disease Name:** Equine Herpesvirus 1 and Equine Herpesvirus 4

**Disease Type:** Viral

**Transmission:** EHV is spread from horse to horse through contact with nasal discharge or spread as aerosol droplets. Horses can also contract the virus by coming into contact with contaminated surfaces such as stalls, water, feed, tack, and transport vehicles. Humans can spread the virus from horse to horse through contaminated hands and clothing.

**Frequency:** EHV-1 and EHV-4 are common causes of mild respiratory disease in foals and young horses and EHV-4 occasionally causes abortion in mares. Equine Herpesvirus Myeloencephalitis (EHM), the neurologic form of EHV-1, is rare.

**Incubation period:** Ranges from 2 to 10 days. Infected horses shed the virus during the incubation period.

**Carrier status:** Infected horses become lifelong carriers and can intermittently shed the virus even when showing no clinical signs. It is thought that most horses become infected with EHV early in life.

**Shedding period:** Varies by horse and strain. Horses with clinical signs (nasal discharge, abortion, neurologic signs) should be considered contagious until cleared by their veterinarian through testing, quarantine, or both.

**Latency:** The virus can remain latent for the lifespan of the horse. Reactivation and viral shedding can occur periodically, especially during stressful events such as travel, illness, etc.

**Severity:** Highly variable; Mild signs of illness to abortion to severe neurologic disease

### Clinical signs:

- Fever
- Nasal discharge
- Enlarged submandibular lymph nodes
- Lethargy/Depression
- Late-term abortion
- Foal death in first 48 hours of life (rare)
- Neurologic disease: incoordination, urine dribbling, inability to stand

**Diagnosis:** EHV-1 and EHV-4 are diagnosed by PCR testing of nasal swab and whole blood samples.



**Treatment:** Supportive care and rest. Non-steroidal anti-inflammatory medications, such as phenylbutazone (Bute) or flunixin meglumine (Banamine) are used to control fever and improve appetite. Antivirals and more aggressive therapies are warranted for EHM cases.

**Prognosis:** Although infection with herpesvirus is longlong, most horses make a full clinical recovery in 1-2 weeks.

**Prevention:** Vaccinations are available for prevention of the respiratory and abortive form of EHV-1 and EHV-4. There is currently no vaccine labeled for the prevention of the neurologic form (EHM). Management practices for preventing EHV-related disease includes maintaining current vaccinations on all horses on the property, practicing biosecurity while traveling and showing, and quarantining any new horses (or horses returning to a farm after travel) for at least 21 days before integration into the farm herd. Avoiding co-mingling of horses in different age groups (e.g. broodmare with yearlings) is also helpful for reducing EHV transmission. Horses at shows should have their temperatures monitored twice daily.

**Biosecurity:** Biosecurity practices for EHV focus on minimizing horse-horse transmission through aerosol particles from nasal discharge or through contaminated surfaces including people, clothing, feed and water, implements, and stalls. This includes extensive disinfection of surfaces and equipment that come in contact with infected horses, as well as isolation of any horse that tests positive on nasal swab or blood.