

# University of Minnesota Equine Center

## Equine Herpesvirus 1 (EHV-1)

### What is equine herpesvirus 1 (EHV-1)?

Equine herpesvirus 1 is a contagious equine virus that can cause four clinical presentations: neurological disease, respiratory disease, neonatal death, and abortion.

There are 2 forms of EHV-1, the neuropathic and non-neuropathic form; despite the names both forms can cause neurologic disease.

### Clinical signs:

- Fever commonly precedes other clinical signs
- Respiratory disease
- Fever, coughing, nasal discharge
- Abortion. Usually occurs in late pregnancy (8+ months), but can occur as early as 4 months with no warning signs
- Neurologic disease, also known as equine herpesvirus myeloencephalopathy (EHM)
  - Hind-end weakness and incoordination
  - Leaning against wall/ fences for balance
  - Urine dribbling or inability to urinate
  - Down and unable to stand

### Incubation:

- The time of exposure to onset of clinical signs is typically 4-6 days, but is highly variable and may be as short as 24 hours.
- When neurologic disease occurs, it is typically 8-12 days after fever begins

### How is the virus spread?

- The most common way to spread EHV-1 is by direct horse-to-horse contact
- EHV-1 can also spread indirectly through contact with physical objects contaminated with the virus, such as tack, grooming equipment, feed and water buckets, and people's hands or clothing

### How is the virus treated?

- Supportive care and anti-inflammatory drugs
- Antiviral medications for horses with the neurologic form
- Sling support for horses with severe weakness and incoordination
- Isolation of affected horses to prevent spread of infection

### How is the virus prevented?

- Vaccinations are available to control the respiratory and abortion manifestations of EHV-1
- Current vaccines do not reliably prevent development of the neurological forms
- Your veterinarian may recommend vaccination to help reduce spread of the virus

### Does EHV-1 affect other animals?

- EHV-1 does not affect humans, dogs, cats, sheep, goats, cattle, pigs, or birds
- Alpacas and llamas are susceptible to EHV-1

### For horses returning from shows, we recommend the following precautions:

#### Shows with CONFIRMED cases of EHV-1:

- Isolate returning horses from the rest of the stable
- Closely monitor horses for fevers, respiratory disease or neurologic signs for 3 weeks
- Take temperature twice daily and if >102F contact your veterinarian
- Equipment should be cleaned. EHV is readily killed with many common disinfectants including dilute bleach, quaternary ammonium compounds, accelerated peroxide and peroxygen compounds, and iodophors
- See: <http://www.thehorse.com/videos/30357/how-to-cleananddisinfect-horse-equipment>

#### Shows with NO KNOWN EHV-1 cases but during an EHV-1 outbreak elsewhere in the state:

- No need to isolate horses but monitor as described above for 2 weeks

### Additional Information:

American Association of Equine Practitioners  
<http://www.aaep.org/i-101.html>

United States Department of Agriculture,  
Animal Plant Health Inspection Service  
[http://www.aphis.usda.gov/vs/nahss/equine/ehv/equine\\_herpesvirus\\_brochure\\_2009.pdf](http://www.aphis.usda.gov/vs/nahss/equine/ehv/equine_herpesvirus_brochure_2009.pdf)

This fact sheet is meant to provide basic information. For specific health concerns please contact your veterinarian. Updated 2014