



STATE OF WASHINGTON

DEPARTMENT OF AGRICULTURE

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Equine Diseases of Concern at Fairs and Exhibitions

Fair Managers and Horse Department Superintendents

Please read this important information about several equine diseases of concern and share with your equine exhibitors in advance of upcoming fairs and exhibitions. These diseases are highly contagious and can spread rapidly where horses and other equines congregate. Please check the health of equines at entry and during exhibition; encourage exhibitors to continue to monitor their animals for signs of illness after the event and contact you and their veterinarian if their animals become ill after returning home. Maintain records after your events so exhibitors can be contacted easily in the event of a disease outbreak. Thank you for doing your part to safeguard the health of horses in Washington State!

Introduction

Several contagious equine diseases can be spread wherever horses or other equines gather. These include Equine Infectious Anemia (EIA); Equine Herpes Virus Type 1 (EHV-1, also known as Equine Rhinopneumonitis and some neurologic cases as Equine Herpes Myeloencephalopathy or EHM); Equine Influenza Virus (EIV); and Strangles. Horses staying home alone or with established populations of other equines are at little risk of these diseases. Those transported to shows, clinics, trainers, breeding farms, or other settings where horses from various areas have contact with each other are at increased risk for these and other diseases. A Certificate of Veterinary Inspection (CVI) and official identification is required for equines traveling interstate for shows and exhibitions; a CVI indicates the animal has been examined and appears healthy, which helps reduce spread of highly contagious diseases. Table 1 lists the causes, means of transmission, signs of illness, prevention methods, zoonotic potential, and relevance to fairs for each of these four equine diseases.

Biosecurity Measures for Fair Managers

- Do not let animals with questionable health enter a fair or exhibition.
- Whenever possible, use metal vs. wood for animal stalls to enable better disinfection.
- Discourage exhibitors from going in and out of others' stalls, sharing tack or other equipment, or contacting others' animals.
- Encourage appropriate pre-event vaccinations for diseases of concern.
- Provide and encourage use of handwashing stations and hand sanitizers for exhibitors and public.
- Monitor animal health throughout the event.

- Contact a veterinarian if animal health concerns arise.
- Establish an isolation area for animal disease suspect cases.
- Thoroughly clean and disinfect all surfaces before and after an event.
- Do not house young weaned animals with adult animals.
- Show exhibitors how to fill water buckets using communal hoses without contaminating buckets.
- Provide solid-sided pen partitions unless ventilation will be compromised.
- Discourage nose-to-nose contact between animals from different farms.
- Have exhibitors provide their own feed and water buckets for each horse.
- Ensure effective amount and direction of ventilation.
- Discourage the public from touching exhibited animals.
- Do not allow eating, drinking, smoking, strollers, or pacifiers in barns.
- Control wild birds, flies, and rodents as much as possible.
- Maintain exhibitor records to be able to communicate post-event outbreaks to exhibitors.

Effective Cleaning and Disinfection Steps

Thorough cleaning and disinfection are important steps to reduce the risk of infectious diseases. A veterinarian can help select the most appropriate disinfectant. Follow these steps for effective disinfection:

- Remove all visible debris (manure, bedding, dirt, feed, etc.).
- Thoroughly clean all surfaces with soap and water.
- Rinse well and let dry.
- Apply an appropriate disinfectant at the proper concentration for the recommended contact time.
- Rinse and let dry before using equipment or restocking premises with birds.

What to Do If an Equine Disease Outbreak Occurs at a Show?

- Contact local veterinarians and/or the State Veterinarian's office at 360-902-1878. To protect animal health and control the outbreak, a decision may be made to quarantine animals at the fairgrounds.
- After emptying infected barns, remove manure and bedding from stalls and compost on site if possible. Clean and disinfect all surfaces thoroughly.
- Notify all exhibitors who visited the premise in the 14 days before an outbreak that an outbreak has occurred and they should contact their veterinarian for guidance.

Conclusion

The diseases mentioned in this publication are highly contagious and can cause severe equine illness and even death. Prevention steps include enacting effective biosecurity steps daily, monitoring equines closely for signs of illness, possible preventative vaccination, and close contact with knowledgeable veterinarians. Show animals are at even greater risk of infection due to increased stress and pathogen exposure, so fair managers and horse department superintendents must keep these and other contagious diseases in mind when managing equine exhibitions.

If you have questions about equine health in Washington State, contact the State Veterinarian's Office at 360-902-1878 or ahealth@agr.wa.gov or your local veterinarian.

Additional Resources

- www.equinediseasecc.org
- <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/horse->

disease-information

- <https://www.colorado.gov/pacific/sites/default/files/atoms/files/Final%20%20EHV1%20Business%20Continuity%20Plan.pdf>
- <https://aaep.org/horsehealth/understanding-equine-strangles>
- <https://aaep.org/guidelines/infectious-disease-control>
- <https://aaep.org/guidelines/vaccination-guidelines>
- <https://www.agr.wa.gov/FoodAnimal/AnimalHealth/>
- https://www.aphis.usda.gov/publications/animal_health/2014/fsc_equine_biosecurity.pdf
- http://www.cfsph.iastate.edu/Infection_Control/Species/equine.php

**Revised Code of Washington (RCW) 16.36.082:
Infected or exposed animals—
Unlawful to transfer or expose other animals.**

It is unlawful for any person with an animal having any contagious, communicable, or infectious disease to knowingly stable the animal or allow the animal to be stabled in any barn with other animals without notifying the other owners.

CRITICAL ADVICE FOR EQUINE EXHIBITORS

- Only take healthy animals to shows or fairs.
- Quarantine new or returning equines from home herd for 30 days; take temperature twice daily and monitor for signs of illness.
- Perform home herd chores first. Use separate equipment, footwear, and clothing for quarantined animals. Wash hands after handling each animal.
- Isolate sick animals and contact a veterinarian about them.
- Clean and disinfect equipment.
- Vaccinate for relevant diseases.
- Minimize stress for equines at home or away.
- Provide excellent nutrition at all times.
- Emphasize sanitation and keep premises clean.

Table 1. Comparison of the disease characteristics of EIA, EHV, EIV, and Strangles.

	EIA	EHV/EHM	EIV	Strangles
Cause	Equine Infectious Anemia virus	Equine Herpes Virus Type 1	Equine Influenza Virus Type A	<i>Streptococcus equi</i> bacterium
Transmission	Infected biting insects, primarily mosquitoes.	Close animal contact; surfaces contaminated with infective discharges; contaminated tack, feeding buckets, and equipment; and contaminated human hands, footwear, and clothing.	Close animal contact; aerosolization of virus via coughing.	Direct contact with infected animals, carriers, and contaminated surfaces or equipment; aerosolization.
Signs	Anemia, weakness, fever, poor endurance, weight loss. Can be healthy-appearing lifelong carrier.	Respiratory, neurologic, or reproductive systems affected: fever, depression, cough, nasal discharge; hindquarter weakness or stumbling, trouble urinating, tail paralysis, tilted head, down; abortion. Can be subclinical carriers.	Fever, coughing, nasal discharge, poor appetite, depression, difficulty breathing.	Fever, depression, poor appetite, thick nasal discharge, swollen or abscessed throat lymph nodes that can rupture and drain pus.
Prevention	No vaccine available. Conduct Coggins test on any horse moving off home premises annually. Euthanize positive animals or quarantine for life in screened barn. Control biting insects. Use needles once; sterilize instruments between uses.	Vaccines available to prevent respiratory and abortion forms of EHV-1. None protective against neurologic form (EHM), but vaccination may reduce disease severity and viral shedding. Monitor horses at risk by taking temperature twice daily and contacting veterinarian if $\geq 102^{\circ}\text{F}$.	Vaccine available but only provides short immunity. Booster at-risk equines every 6-8 weeks.	Vaccine available, but use with veterinary guidance. Quarantine new or returning animals for 30 days. Use excellent disinfection protocols. Use metal vs wooden walls and rails.
Relevance to fairs	Require negative Coggins test within one year; consider	Accurate contact information needed for each exhibitor in the event of an outbreak and post-	Virus short-lived outside of host. Greater distance between animals reduces transmission	Highly contagious; can contaminate surfaces for prolonged periods.

	requiring more recent test.	event follow-up is needed.	risk.	
Human health concern?	No	No	No	No
Notes	This disease seems to be on the increase throughout the U.S. It is a life-long infection and can be fatal at any time.	The neurologic form can be caused by the original “wild type” of EHV-1 virus, or more recently by a mutated EHV-1 virus with predilection for nervous tissue. Neurologic signs can be severe and/or permanent and require euthanasia.	Risk mainly to horses transported and/or mixing with other horses frequently, and their herd mates.	Can be fatal, especially if abscesses are internal.