

Equine Biosecurity

Are you doing everything you can to protect your horse from disease?

Dr. Jessie Evans

In the wake of the recent Equine Herpesvirus outbreak, many horse owners have become aware of the threat of infectious disease, especially during the busy show season. The most common contagious diseases that our equine friends can be exposed to include respiratory diseases such as Equine Influenza, Equine Herpesvirus (Rhinopneumonitis) and Strangles, as well as gastrointestinal diseases such as Salmonella. Diseases transmitted by flies, such as Pigeon Fever (*Corynebacterium pseudotuberculosis*), can also spread quickly through a barn. Preventing an outbreak depends on many variables, some of which are out of your control. Below are some tips on how you can protect your horse from disease and implement good biosecurity measures at your facility and during the show season.

One of the most important components to any infectious disease control program is appropriate vaccination of your horse. Your veterinarian can help you decide which vaccines are optimal for your individual horse, considering their risk of exposure, the effectiveness and safety of the vaccine, and the immune competence of your horse. Although vaccinations will be a large part of disease prevention, vaccines alone will not always prevent infection. Practicing good biosecurity measures and appropriate management practices will greatly reduce exposure and subsequent infection.

What is biosecurity?

Biosecurity includes the principles, actions, and protocols that protect the health of animals by preventing them from acquiring an infectious disease or transmitting disease to another animal. This can be accomplished by implementing physical barriers and hygiene practices. A well-planned biosecurity program will reduce infection and disease in your horse and/or herd, reduce costs for treatment of illness, and promote a stronger equine industry by preventing closure of farms, shows, exhibitions, and/or transport. Oftentimes, disease outbreaks can be prevented by conscientious owners and barn managers that recognize a problem and implement proper biosecurity measures.

Infection can occur when microorganisms are shed from one horse and transmitted to a susceptible horse. Exposure of susceptible horses to disease-causing agents can occur in many ways, including:

- Exposure to contaminated drinking water and/or feed
- Aerosols (airborne infectious agents, i.e. spread by coughing/sneezing/snorting)
- Direct contact with other animals
- Fomites (inanimate objects), including contaminated tack, brushes, etc.
- Contact with insect vectors (insects that transmit disease)
- Contact with contaminated surfaces
- Contact with contaminated hands and clothing

It is important to remember to not share equipment among horses on the facility as bacteria and viruses can be spread from horse to horse via contaminated objects. Also, people should wash their hands after handling one horse and before handling another. The following are important biosecurity measures you

should implement **when travelling**:

1. Avoid travelling to an area where there has been a known disease outbreak.
2. Whenever possible, use your own trailer and avoid shipping with horses from other farms. Make sure the trailer is clean and well-ventilated.
3. Bring water from home in case your horse does not like the water at the show grounds, or in case the only water source is a communal trough, which can be unsafe.
4. Spray or disinfect stalls at show grounds prior to putting your horse in the stall.
5. Every day, be sure to monitor your horse's attitude, appetite, feed and water intake, and fecal output. Take their temperature once daily and contact a veterinarian if febrile (temperature > 101.5).
6. Try and keep interactions between your horse and horses from another barn minimal. Nose-to-nose-contact, drinking from the same water bucket, and sharing supplies (tack, grooming tools) all increase the risk of disease transmission.
7. Try to discourage people who are walking through the show barns from petting your horses. A polite sign will often work well.
8. Be sure your horse is up to date on their vaccinations. Vaccinating at least 2 weeks prior to show season will ensure your horses are well-protected from many diseases they may encounter.

Important biosecurity measures for your own barn depends on your facility and the horse traffic in and out of your barn. The following are important biosecurity measures that should be implemented **at home**:

1. Quarantine all new horses for a minimum of 2 weeks.
 - Be sure horses are quarantined a minimum of 40 yards away from other horses on premises.
 - Be sure there are no shared buckets, water troughs, fence lines, stalls, etc. (see image 1)
 - All horses should be properly vaccinated.
 - Good hygiene practice by those who work with the horses (washing hands between horses, handling sick horses last)
 - Be sure anyone visiting also employs good hygiene (washing hands before touching the horses, especially if they have sick animals at home)
2. People who manage horses at a facility should know the health and nutritional status of each horse, maintain accurate and detailed health records, and have a vaccination protocol based on your veterinarian's recommendations.
3. Enhancing horses' resistance to infectious disease can begin by providing good nutrition, by providing housing with optimal air quality, and by reducing stress where possible.

Remember, an ounce of prevention is worth a pound of cure, and a healthy horse is the key to success in the show ring!



Image 1. Disease can travel quickly between horses housed closely with shared water troughs.