Biosecurity Guidelines for a Boarding Facility

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Introduction

Biosecurity for a boarding facility involves adopting procedures to prevent the introduction and spread of a disease in horses. A normal appearing horse can be carrying a virus or shed an infectious agent which can be passed from horse to horse when biosecurity practices are not used. This document presents biosecurity measures that should be used in any facility where there is a concentrated, transient horse population. Following these principles will minimize the risks and keep horses healthy for optimal performance and prevent a life threatening outbreak which can result in the closure of the facility.

ANYTHING that touches an infected horse or carries secretions or manure from sick horses has the potential to transfer pathogens to other horses.

Disease causing organisms can be spread by equipment, people, vehicles, insects, birds, vermin, feed, waste, water, and air.

General Biosecurity Guidelines

New Horse Arrivals

• Since new horses can bring new diseases to your barn, the best scenario is that the horse was examined by a veterinarian, and deemed free of disease, prior to transportation to your facility. If the horse is arriving from out of state it should have a health certificate. In the event this has not happened, then the horse should be isolated within the facility, ideally greater than 100 feet from other horses and batched with horses from the same evacuation source.
• Obtain a recent history (e.g., health, vaccinations, worming etc.) and determine previous location(s) during the past thirty days.
• Horses that have a cough, nasal discharge, diarrhea or appear to be in poor condition should be examined by a DVM when available, and special precautions taken to avoid contamination of other horses- see below.
• A period of quarantine or isolation (~2 weeks) before placing the new arrival close to your other horses is ideal.
• ***Consult your veterinarian regarding the best place/site and time frame to isolate the horse(s)***

Visitor Access to Horses

• Restrict and/or monitor visitors to prevent contact with horses. Visitors can inadvertently spread disease if specific sanitation procedures are not followed. One visitor can easily spread infectious agents to many animals. It is recommended to keep visitors out of the stable, shed rows and stalls if they don't need to be there.
• Hand washing or the use of hand sanitizers is encouraged before visitors allowed access to the barn.
• Maintain a record of visitors to the barn to improve the ability to respond in case there is an outbreak and spread of disease.

Horse Equipment and Tack

• Don't share any horse equipment with neighbors or other horse people.
• Thoroughly clean your equipment if it has been used by other horses/people. Use detergent and disinfectant before use on your horse. This includes tack, bits, rugs, saddlecloths, feed and water bins. Request others providing horse services to use clean/sanitized equipment on your horses.

Personal Biosecurity
• Some diseases can be easily carried on people's clothing, hats, hands, shoes, and hair.
• Change into clean clothes and footwear; wash your hands with soap and water (or use a hand sanitizer); and blow your nose before coming into contact with other animals offsite. Sometimes it may be necessary to have a shower, wash your hair and put on clean clothes.

Trailers and Trucks
• Clean and decontaminate with disinfectant according to protocol for the interior of the trailer or vans in between usage. See cleaning and disinfectants below.

Disposal of Manure, Soiled Bedding and Hay
• Infectious organisms may remain viable in horse manure for a prolonged period.
• Avoid leaving manure and bedding piles in areas where there is vehicle and foot traffic, horse stabling areas, pastures and where there is standing surface water.
• Use a designated wheelbarrow for a single barn or a single barn aisle.
• Never use a manure wheelbarrow to move feed or clean bedding.
• Frequent manure removal aids in eliminating parasites and insect breeding sites.
• Ensure that fresh manure is not spread on horse pastures.
• Thorough cleaning to remove organic material and disinfecting of stables and stabling areas reduce the level of pathogens. See cleaning and disinfectants below.

Cleaning and Disinfectants
• Following are ***Steps*** for cleaning and disinfection.

1. ***Remove organic matter***
2. ***Wash with soap and rinse with water***
3. ***Allow time to dry***
4. ***Apply the disinfectant***

• Proper cleaning requires removal of all soil, organic material, snot/mucus with a detergent so the disinfectant can be effective. Rinsing, should be done using a hose without a nozzle. High pressure delivery of water can result in dissemination of dirt and organisms. Use a foaming soap agent and a stiff-bristle brush to scrub all surfaces and items (e.g. buckets etc.), then rinse.
• Disinfection can then be achieved with the use of household products such as common household chlorine bleach (1:10 dilution of bleach to water), alcohol and hypochlorite. Check concentration and exposure times on the label.
• In most stall situations organic matter cannot be completely removed effectively from the stall floor, or walls. In this situation use a disinfectant that are effective in an organic environment. Examples include phenolics (1 Stoke Environ® or SynPhenol-3®) or an accelerated hydrogen peroxide product (Virkon®), or (Accel). All products should be used in accordance with manufacturer's recommendations and label instructions. Cleaning and disinfecting a stall is ideally done within four (4) hours of a horse vacating the stall. Wear protective clothing, disposable boot covers and gloves if the horse was sick.

• ***Contact your veterinarian if you have questions.***

Water Source and Disposal

• Avoid communal water troughs or water from a shared water source (e.g., pond) which has a higher risk of potential disease transmission.
• New arrivals should have their own water bucket/trough
• Avoid using a water hose; the potential to spread disease if inserted into multiple buckets or left lying on the ground between uses is increased.
• Natural water sources, such as streams or ponds, also pose a significant disease risk due to an inability to control water quality or prevent contamination with disease agents.
• Water remaining in partially filled buckets should be emptied directly into a drain or onto manure piles to eliminate disease transmission risk.

Illness Surveillance and Reporting

• Report horses that appear ill or have a high temperature (>101.2 ^{0} F) to the appropriate person at your barn. Contact your veterinarian as soon as possible. The veterinarian can determine if the horse is in need of quarantine or a visit to the hospital and whether the illness should be reported to the Official Veterinarian or other authorities.

****The majority of this information was extracted from the following references:***

1) Madigan J, Arthur R, Madigan S: Basic Equine Facility Biosecurity For Horse Owners and Horse Professionals, Veterinary Medical Teaching Hospital University of California, Davis, 2011, 1-19
2) Flynn K, Wilson EM, Traub-Dargatz J, Madigan J: Biosecurity toolkit for equine events. CDFA EMMP, 2012, 1-25

*** For a more complete discussion of this topic the reader is referred to: cdfa equine biosecurity; select biosecurity for equine events; scroll down to: Part 1 – Basic Biosecurity and open.*