



Elden V. Klayman, DVM, CVA  
Laura Parisio, MRCVS  
Tiffany Mahalchick, DVM

## **Biosecurity Guidelines**

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

### **I. PERSONNEL**

- **[Biosecurity instructions for caretakers should be provided in English and Spanish.](#)**

*Note: Animals with neurologic disease should be considered rabies suspects and handled accordingly, until proved otherwise.*

- **Assign specific individual(s) to care for affected horse(s).**  
Ideally, a caretaker should not be responsible for both healthy and exposed /affected horses. If it is unavoidable that an individual provides cares to both affected and unaffected animals:

Care of healthy animals (feed/groom/exercise/muck stall) should be completed first; exposed animals next; affected animals last.

Disposable gloves, plastic booties and barrier clothing should be used when working with sick horses.

After handling sick horses:

Gloves and booties are disposed of in a lidded trash receptacle. Gowns/barrier clothing are placed in a covered hamper.

Hands must then be washed under running water with pump-dispensed liquid (not bar) soap for a minimum of 15 seconds. Alternatively, hands may be cleaned with a 62% ethyl alcohol hand gel or foam disinfectant, and allowed to dry (10-15 seconds). Note: Exposure to open flames must be avoided due to flammability of these products.

Caretakers within the primary perimeter should be provided with a changing area, ensuring that clothing and footwear worn within the restricted area are not worn elsewhere.

### **II. MANAGEMENT PRACTICES**

Post restricted access signs (English and Spanish) at all primary perimeter access points.

Footbaths and hand sanitizers (62% ethyl alcohol) should be placed at all primary perimeter access points. Special attention should be made to cleaning footwear upon leaving the isolation barn area.

Affected horses should be prevented any contact with other horses. Openings in stall walls (windows, gaps between boards) should be covered with solid (not mesh or screen) barriers.

Eliminate use of communal water sources. Instruct caretakers not to submerge water hose when filling buckets!

## **Manure and Bedding**

Note: Waste management procedures are not limited to organisms shed in feces but are applicable to all infectious agents.

*Manure on wheelbarrow tires, tractor tires, etc. is a potential source of the infectious agent and can be tracked everywhere else on the event grounds if tires are not properly cleaned and disinfected!*

Event management will provide enclosed containers (i.e. lidded dumpsters) for the disposal of manure/soiled bedding from within the primary perimeter.

DO NOT put waste material from the stalls of affected horses onto open air manure piles/pits.

DO NOT spread muck from affected horses onto pastures.

## **Equipment/Supplies**

Horse-specific equipment (feed tubs, water buckets, halters, etc.) should be clearly identified as belonging to an individual horse and is to be used only by that horse.

Shared equipment (lead shanks, lip chains, bits/bridles, twitches, dose syringes, thermometers, grooming supplies) should be cleaned of organic debris and disinfected between horses.

All equipment should be thoroughly scrubbed and cleaned with a detergent and water, rinsed, disinfected and followed by a final rinse. This should be done in an area with minimal foot and traffic flow that can be cleaned and disinfected after this procedure (preferably not in a grazing area, but on a solid surface close to a drain).

Cloth items (saddle cloths, towels, bandages, halter fleeces, rub rags) should be laundered and thoroughly dried between each use. (Disinfectant may be added to rinse water, but additional rinse cycle must be used to remove disinfectant residue.)

Equipment that cannot be effectively disinfected (sponges, brushes) should not be shared between horses. Multiple dose medications (oral pastes/ophthalmic ointments, etc.) should be labeled for use by a specific horse and not shared.

Ointments/topical medications should be removed from larger tubs and portioned into smaller containers for use on individual horses.

## **Facility**

Non-porous stall surfaces (varnished wood, metal, painted concrete, asphalt, poured textured floors, stall mats etc.) should be cleaned with a detergent, rinsed and either allowed to dry or squeegeed of excess water.

### **Disinfectants:**

Follow label instructions for use. Note precautionary warnings and requirements for proper disposal of the disinfectant.

DO NOT mix disinfectants with other chemicals.

Select a disinfectant that has documented effectiveness in the presence of 10% organic matter, works in the water hardness of the locale, and is safe to use around horses and humans.

Bleach is readily inactivated by organic matter; use only after thorough cleaning. Note: Bleach is the only practical commercially available disinfectant that kills clostridial spores.

Viruses with envelopes (influenza, herpesvirus, equine viral arteritis, etc.) are readily killed with detergents and disinfectants.

Phenolic compounds are effective for viruses lacking an envelope (rotavirus).

## Environmental Factors

Vermin control is critical, especially for diseases transmitted on fomites. Rodent, bird, and insect control should be evaluated and upgraded as necessary. If adequate control cannot be achieved by traps, repellants and/or insecticides/rodenticides, it may be necessary to install screens to enclose the stalls of affected horses. Non-equines (goats, barn cats, dogs) should not be permitted within the primary perimeter.

### Prior to repopulating a facility having housed affected animals

- Rubber boots, coveralls, goggles and gloves are to be worn by cleaning personnel.
- Completely strip stalls of all bedding material.
- Brush down all walls of cobwebs and other residual material.

For stalls with non-porous walls and floors:

1. Wet down all surfaces—walls, ceilings, ledges (top of walls) - with detergent and water. Powdered laundry detergent can be used; some veterinary disinfectants also have a detergent incorporated in the mix.
  2. Allow 5-10 minutes for the liquid to soften caked-on organic material then scrub surfaces with a stiff-bristled broom to loosen all material.
  3. Rinse, beginning at the top of walls and from walls towards the drain. Repeat until surfaces are clean, including corners, ledges and drains. NOTE: Do not use power washers set at >120 psi which can aerosolize pathogens. A garden hose with a regular nozzle can be used.
  4. Squeegee excess water off surfaces, or allow them to dry.
  5. Spray properly diluted disinfectant on surfaces, starting at the top of stall walls and working from the far end of the stall to the exit. Allow to dry.
  6. Repeat.
- Completely clean and disinfect aisle ways, wash racks and common areas following similar procedures.

For facilities with porous surfaces (wood construction, dirt or clay flooring, etc.):

*Note: These are extremely difficult to clean and disinfect. Removal of as much organic matter as possible is critical. Thorough cleaning with quantities of water can turn dirt or sand floors to a slurry and should be avoided.*

1. Remove all bedding and organic matter and thoroughly dry scrub all surfaces to remove as much organic matter as possible.
2. Follow up with scrubbing stall walls with a detergent solution.
3. Disinfectants can be sprayed on surfaces, but may have inadequate results.
4. Remove all buckets, hay nets, feed tubs, stall webbings, metal grates, etc. and scrub with detergent solution, rinse, disinfect and then rinse thoroughly with potable water and allow to dry.

### Outside primary perimeter

Outriders' horses, pony horses, pick-up horses:

- Update/initiate vaccinations (where applicable)
- Daily veterinary inspection prior to use should include:
  - Rectal temperature
  - Inspection for clinical signs of illness

Contact with multiple horses is to be avoided. Horse identifier should require stable employees to lift lips for tattoo inspection. Judges should avoid contact with horses during equipment inspection. Where bit inspection is mandatory, judges should wash their hands and use hand sanitizers between the handling of each horse

Personnel required to have multiple horse contacts (jockeys' valets, assistant starters, pony persons) should use hand sanitizers between the handling of each horse.

During an outbreak all shared facilities/equipment (i.e. detention barn stalls/receiving barn stalls/starting gate/equine ambulance) should be cleaned and disinfected after each use.

Horse trailers/vans should be cleaned and disinfected between each load.

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15 Hidden Pines Drive  
Clarksburg, NJ 08510-1214  
Phone 732.780.7563 Fax 732.780.5265  
[www.ColtsHeadVet.com](http://www.ColtsHeadVet.com) [MyHorseVet@aol.com](mailto:MyHorseVet@aol.com)