

# Biosecurity Measures for Different Situations

The following recommendations from the U.S. Department of Agriculture Plant and Animal Health Inspection Service are based on the belief that you are the best protection your horses have. These guidelines are intended to reduce the chances of an infectious disease being carried onto your farm by people, animals, equipment or vehicles, either accidentally or on purpose.

## Showing Your Horse

- Use your own trailer whenever possible. Don't ship your horses with horses from unknown farms.
- Ship only in a trailer or van that has been cleaned and disinfected. If you can "smell horse" in the empty trailer, it has not been cleaned and disinfected properly.
- Don't let your horse touch unknown horses, especially nose to nose.
- Wash your hands, especially after helping other people with their horses.
- Don't let strangers pet your horse, especially those with horses at home.
- Before leaving the show grounds, clean and disinfect tack, boots, equipment and grooming supplies. Brush off dirt or manure; then disinfect (spray or wipes are easy to take with you).
- When you get home, shower, blow your nose and put on clean clothes and shoes before going near other horses.

## Visiting Other Farms, Horse Shows or Auctions

- Have a pair of shoes or boots that you save for visiting and don't wear around your own

horse or wear plastic shoe covers.

- If you are going to be working with horses on another farm, wear coveralls or plan to change clothes before returning home to your horses.
- If there are farms you visit all the time and you can't change clothes and shoes, be sure their vaccination program and biosecurity practices are as good as your own.

## For Visitors to Your Farm or Horse

- It is best to have only one public access to your farm. Mark this as the main entrance.
- Park away from the horses. Doing that will help keep disease-carrying organisms from being tracked from car floors or tires to your horses.
- Ask all visitors to wear clean clothes and shoes. Give visitors plastic shoe covers or brush dirt off their shoes and spray them with disinfectant.
- If you have many visitors such as at a farm tour or open house, make a footbath for them to walk through (see inset, page 11).

## Bringing Horses Back from a Show

- If one or more horses travel to horse shows, all horses on the premises should be vaccinated. Horses that show can bring home infectious agents. Discuss with your veterinarian what vaccinations the horses need and how often.
- If possible, keep horses that were off the farm isolated for at least 2 weeks. At the very least, make sure there is no nose-to-nose contact between horses in the stable.

## Bringing in New Horses

This is the most likely way for infectious diseases to come in, especially if horses are coming from other states or from foreign countries.

- Keep every new horse isolated for 30 days. Don't use pitchforks, grooming tools, or feed and water buckets on any horse but the new one. Mark these with red tape or use red brushes, etc., only for the isolation area.

- Work with the isolated horse last each day. Alternatively, wear boots and coveralls when working with the isolated horse and remove them before working or going near other horses. You can keep these in a plastic-covered tub near the horse. Exercise the isolated horses, alone, at a separate time from others in the stable.

- Always wash your hands and blow your nose after working with the new horse. You could carry germs to your other horses in your nose.

## Making an Easy Footbath

You will need:

- A low plastic pan or bin, wide enough to fit an adult's foot, shallow enough to step into easily
- A plastic doormat (the "fake grass" mats work well)
- A disinfectant that works when manure or dirt is present is best, such as Tek-trol or One Stroke Environ. A 1:10 Clorox solution is also an effective virucidal if the solution is replenished often and kept out of direct sunlight.
- Water

1. Mix the disinfectant with water following label instructions.
2. Put the doormat in the plastic pan.
3. Add disinfectant so that the bottom of the "grass" is wet.
4. Ask visitors to walk through the footbath, wiping their feet on the mat. The "grass" scrubs their shoes a bit as they wipe them, and applies the disinfectant.
5. When the liquid starts to get dirty, empty it and put in new disinfectant.

## How to Set Up a Disease Isolation Unit at a Farm or Horse Show

**A** horse with an infectious disease should be isolated from other horses to prevent the spread of infection. It is also important to prevent exposure by indirect contact from those handling an infected horse and spreading the infection to other horses via touching, equipment and so forth. Isolation can occur by stall confinement if the stall is secure and the horse is not in contact with others that walk by or are housed next to the horse. Often housing at shows is in tight quarters and contact can occur, so extreme care and vigilance in control of these isolation units are required.

If a horse has a fever and neurological signs that would suggest EHV-1 infection, it may be carrying high levels of the virus and become a primary source of spread. The horse should immediately be moved to an isolation area either on or off site.

Any horses that were adjacent to the infected patient that has been moved out should be restricted in their movements and have their temperatures taken twice daily until the nature of the infection is determined. A perimeter and quarantine of that focal area of the barn should be instituted and access to and from the area limited. Horses in that area should be exercised at times when other horses are not in the arena or area. The length of the movement-restriction period will depend on whether other horses develop a fever during the next 7 to 10 days. The end of the quarantine period will be determined by the last horse to develop fever or clinical signs of disease.

An isolation barn that is effective has these characteristics:

- It is well separated from other barns and main horse traffic contact.
- It can be contained. Movement by people in and out can be regulated and controlled.
- Each stall is isolated and prevents direct contact with horses adjacent to each other.
- It has cleanable surfaces, including walls and flooring (mats). Use of liquid laundry detergent is useful in stalls and trailers with large volumes of water. A 10% bleach solution is a good general disinfectant if it is changed and replenished once or twice a day. Other commercial disinfectants can be obtained through your veterinarian.
- It is reserved **ONLY** for use by infectious disease suspects and is not used by other horses at any time.
- It has water buckets and separate equipment (wheelbarrows, pitchforks, bedding, etc.) used **ONLY** by the isolation unit.
- It has a sink for handwashing and treatment area. Space must be supplied for storage of things needed for biosecurity such as gloves, disposable coveralls, boots, disinfectant, footbath stations (rubber tubs), and garbage collection and holding for disposables used on the horses. This can be another stall converted into a storage area.
- A person to oversee the isolation stall is designated. This individual should have prior

training in biosecurity. Their responsibility is to ensure that all activities meet with the biosecurity plan outlined for the facility.

- In an ideal situation, an isolation facility would be equipped with an overhead beam or other means for lifting or supporting a down horse, similar to the UC Davis Large Animal Lift ([www.vmeth.ucdavis.edu/home/VERT/LART/lal.html](http://www.vmeth.ucdavis.edu/home/VERT/LART/lal.html)).

- The designated biosecurity supervisor ensures that people allowed to enter the facility follow appropriate sanitation measures: Rubber boots are dipped in a prescribed foot bath; disposable or dedicated coveralls are used only for one horse stall; disposable gloves are worn; and a treatment coat is worn over the reusable coveralls. If during treatment of the horse facial or other contamination of the caregiver occurs, the caregiver must shower and change clothes before touching other horses.

- Hands are washed for 60 seconds (sing "Happy Birthday" twice at normal tempo) before entering or leaving the isolation area. Use disposable towels and leave in a covered waste container at the site of handwashing.

- A perimeter is set up around the stall area to limit vehicular traffic and entry. This perimeter could be designated with ropes, fencing used for construction sites, and so forth. Random access should be restricted, with only one entry and exit to the area.
- There is appropriate lighting.

### Equipment Needed

Treatment carts or smocks  
 Painter's disposable coveralls  
 Disposable gloves  
 Rubber boots  
 Foot bath containers  
 Garbage bags  
 Garbage cans with secure lids  
 Disposable plastic shoe covers  
 Thermometer for each horse  
 Equipment for each horse (drugs in sealed plastic container for that horse, stomach tube, twitch, lip chain, etc.)



*One of the isolation units at the UC Davis Veterinary Medical Teaching Hospital.*