

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



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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, preferably 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, supplemented by PCR testing as appropriate.

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. Remember, bleach is inactivated by organic material and direct sunlight. 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).
- 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 for Setting Up An Isolation Barn

- 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.)



This is the type of portable structure that can be used to create an isolation unit at an equine facility or event.