10995 State Route 128 Harrison, OH 45030
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miamitownequine.com

MIAMITOWN EQUINE VETERINARY SERVICES

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AAEP (American Association of Equine Practitioners) Biosecurity Guidelines

Outbreak Prevention

Routine equine entry onto the premises:

- Restrict entry to healthy equids only and refuse entry of equids displaying clinical signs of infectious disease. Take temperature upon arrival (normal 99-101.5).
- New entries should be quarantined from the resident equids for 2-3 weeks and monitored for signs of contagious disease. During this time, equipment should not be shared among new and resident equids, and caretakers should care for resident equids before new entries.
- Resident equids returning to their home stable from an event should be quarantined or at least have their temperatures checked twice daily for at least 1 week to allow early detection of disease.
- It is good practice to segregate equids on a larger facility by use and age. For example, show equids should be segregated from resident broodmares and their foals, and from geriatrics.
- Premises may require documentation of vaccinations and Coggins/CVI for entry.

Requirements for entry during local disease outbreak:

- Restrict entry to equids that have no clinical signs of a contagious disease and have had twice daily temperatures <101.5 logged for the preceding 7 days.
- If high level of concern, can consider requiring CVI within 72 hours prior to entry.

Water sources:

- Communal water sources should not be offered at events and exhibitors should be instructed to use their own buckets and to not share any type of equipment with other exhibitors.
- To avoid cross-contamination, hoses should not be allowed to touch or submerge in water buckets while filling.

Housing:

- Stalls should be cleaned regularly, and waste stored in an area remote from equids. Equipment used for cleaning stalls should not be used for feed and vice versa, e.g., the same wheelbarrow used to transport soiled bedding should not be used to move feed.
- Housing that prevents equid to equid contact over or through walls, and/or prevents equids from reaching into the barn aisle can limit disease transmission.
- Improving air circulation and ventilation in barns reduces ammonia levels and may help reduce transmission of respiratory and airborne pathogens.

Vermin and vector control:

- Securing feed storage areas from unwanted vermin and wildlife, instituting rodent control measures, and eliminating areas of standing water will reduce disease transmission risks.
- Individual animals can be protected from insect vectors via topical insect repellents and physical barriers such as face masks with ear protection, leg boots and fly sheets.

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Outbreak Response

Reduce Traffic:

- Stop all movement of equids on and off the premises.
- The movement of trucks, trailers, tractors, golf carts, wheelbarrows and bicycles around an equine premises have the potential to spread infectious disease agents.
- Dogs, cats, and other animals may carry infectious disease agents on the premises.

Establish Isolation Area:

- As far away as possible from human, equine, and vehicle traffic areas.
- Set up a temporary pen structure if no suitable permanent stabling is available.
- Openings in stall walls (windows, gaps between boards) should be covered with solid barrier material to prevent equid to equid contact.

Create 3 color-coded groups that are separated as much as possible:

- Red group: Horses that have shown one or more clinical sign of infectious disease.
- Orange group: Horses that have had direct or indirect contact with an infected horse in the red group and may be incubating the infection.
- Green group: Horses that have had no known contact with affected animals.
- Even if all animals on the property have already been exposed, it is still worthwhile to isolate the symptomatic animal(s). The infective "dose" and frequency is significant, and some animals may be resistant to the infection after a small amount of contact but will fall ill with repeated contact with the sick animal.
- Exposure as a result of shared air spaces differ by pathogen. For example, for airborne pathogens such as influenza, all equids stabled under one roof would all be considered exposed, however, in an outbreak of Streptococcus equi, more direct contact would be required for a horse to be considered exposed.

Monitoring:

- Temperatures of all equids should be taken twice daily and documented in a log.
- A body temperature over 101.5°F should be immediately reported to the veterinarian. Equids with temperatures between 100°F and 101.5°F should be monitored for other signs of disease and have the temperature retaken in 1 hour.

General criteria for a sick equid- call veterinarian and isolate immediately:

- Body temperature greater than 101.5°F (38.61°C)
- Ataxia or recumbency or other neurologic signs
- Aggressive behavior or stupor
- Passage of frequent loose feces
- Oral or coronary band vesicular or ulcerative lesions
- Nasal discharge, coughing, and/or lymphadenopathy
- Limb or ventral body wall edema especially if it occurs in multiple horses

Care of sick equids in isolation:

- Maintain a log including which horses get sick, control measures, diagnostic testing results, and communications.
- ANYTHING that touches an infected equid, and its secretions or excretions has the potential to transmit pathogens to other equids. Pathogens can be indirectly transmitted to other equids on equipment, tack, hands, footwear, or clothes.

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- Clearly color-coded buckets and other equipment should be used to ensure that indirect mixing between groups does not occur. Eliminate all sharing of water and disinfect water and feed buckets daily.
- Whenever possible, dedicated staff should be used for each color-coded group. If separate staff are not an option, staff should always move from the lowest risk to highest risk groups (from green to orange to red groups in that order and not back again).
- Disinfectant footbaths should be placed at all entry and exit points to and from the isolation area and each stall.
    - Disinfectants suitable for footbaths include 10% bleach or peroxygen compounds such as Virkon® S.
    - The footbaths and mats should be kept as free of organic matter as possible and routinely filled with new disinfectant solution (at least every 2-3 days and preferably daily).
    - Rubber boots or other footwear suitable for disinfection should be worn. If other types of footwear are used, plastic over-boots should be employed and disposed of after each use. The tread of rubber boots should be kept free of organic debris with a brush.
- Handwashing or hand sanitizer stations should be placed at all entry and exit points to and from the isolation area and each stall. Hand hygiene should be performed before entering and when leaving each stall, and before entering and leaving the isolation area.
    - Hands should be washed under running water with pump-dispensed liquid soap (not bar soap) for a minimum of 20 seconds.
    - If facilities are not available for handwashing, hand sanitizer containing at least 61% alcohol should be used and allowed to dry for 10-15 seconds. Hand wipes should be available to remove all organic debris prior to using hand sanitizer.
- Clothes should be changed and laundered, and footwear changed or disinfected after leaving the isolation area and before handling other equids.

Disinfection:

- Thorough cleaning and disinfection of the premises at the beginning of an infectious disease outbreak and throughout can reduce disease spread.
- then remove residual organic matter by washing all surfaces with soap and water before the application of a disinfectant.
- Clean equipment of organic matter, thoroughly scrub with detergent and water, rinse, dry and disinfect.
- Sharing of equipment should be discouraged, but any equipment which must be shared should be cleaned and disinfected between uses.
- Sunlight inactivates/kills many pathogens. After cleaning and disinfecting buckets, tack, and equipment allow them to dry in the sunlight if possible. Items, such as tack, to which disinfectants cannot be applied, should be cleaned and allowed to dry in the sun.
- Cloth items should be laundered and thoroughly dried between each use. Disinfectant may be added to rinse water, but an additional rinse cycle must be included to remove disinfectant residue.
- Surfaces around the feeders and cross ties should be given special consideration due to contact with potentially infectious nasal secretions.

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- Stalls with non-porous walls and floors are easier to clean and disinfect. If stalls are constructed of porous materials (untreated wood construction, dirt, or clay flooring, etc.), these are difficult to adequately clean and disinfect.
    1. Remove all bedding, uneaten feed, and organic matter and thoroughly dry scrub all surfaces to remove as much organic matter as possible.
    2. Wet down all surfaces with detergent and water. Powdered laundry detergent can be used or soap. Cleaning with large quantities of water can turn dirt or sand floors into a slurry and should be avoided.
    3. Allow 5-10 minutes for the detergent liquid to soften dried organic material, then scrub surface with a stiff-bristled broom used only for stall cleaning. Disinfectants such as bleach are inactivated by organic matter; use only after thorough cleaning.
    4. Rinse. Do not use power washers, as they can aerosolize pathogens. A garden hose with a regular nozzle is acceptable.
    5. Squeegee excess water off surfaces or allow them to dry.
    6. Apply disinfectant according to label directions to all surfaces, starting at the top of stall walls and working from the far end of the stall to the exit. Allow to dry.
    7. Repeat disinfection may be necessary for difficult to inactivate pathogens, such as Salmonella and rotavirus. Herpes and influenza viruses are more susceptible to detergents and disinfectants and one cycle is generally sufficient. Phenolic and peroxygen based products are effective for viruses lacking an envelope (e.g., rotavirus).