



Infection Control Plan for Horse Facilities

Name of business or facility: _____

Purpose of this infection control plan:

A good infection control plan is an important tool to prevent the spread of infections from animals to people (zoonotic infections), and also decreases disease between animals. This plan is designed for horse facilities, particularly those that provide services to members of the public, to help prevent and control zoonotic infections and to keep the horses and their environment healthy and safe.

How you can use the infection control plan:

- Use the plan to guide daily operations
- Use the plan to train employees/volunteers
- Post the plan in a place where it is easily visible to staff
- Use a weekly check list to assign cleaning tasks to staff and have them check off completed tasks
- Keep all necessary supplies and equipment readily available
- Review the plan with staff/volunteers annually and at the time of hire
- Update the plan as needed

Resources

Public Health - Seattle & King County Contact Public Health with questions about infection control, zoonotic diseases in animals or people, or to request educational materials.

- Zoonotic Disease Program: www.kingcounty.gov/vet
 - 206-263-9566, Animaldiseasespublichealth@kingcounty.gov
- Communicable Disease Program: www.kingcounty.gov/cd
 - Meagan Kay DVM MPVM, Medical Epidemiologist, 206-263-1395, meagan.kay@kingcounty.gov

Equine veterinarian and phone number: _____

Other resources:

- Center for Food Security and Public Health (*amazing resources!*): www.cfsph.iastate.edu/Infection_Control/Species/equine.php
- National Association of Public Health Veterinarians, Animal Contact Compendium: www.nasphv.org/documentsCompendiumAnimals.html
- WA State Department of Agriculture: <http://agr.wa.gov/>
- CDC Healthy Pets Healthy People: www.cdc.gov/healthypets/pets/horses.html

HAND HYGIENE

Proper and frequent handwashing is the single most important step in preventing the spread of germs. A hand washing station and/or hand sanitizer should be provided to all staff/caregivers and to the public.

When to clean your hands:

- Before and after handling horses
- After completing cleaning tasks
- Before eating, drinking, smoking or breaks
- After using the bathroom
- After removing soiled clothing or shoes/boots
- Right before leaving the facility

How to wash your hands:

- Remove jewelry
- Wet hands and forearms with **warm** water
- Add a dollop of soap about the size of an olive
- Lather and scrub vigorously, paying attention to finger tips, between fingers, backs of hands, base of thumbs, and underneath fingernails

- Wash for at least 20 seconds – sing “Happy Birthday” twice
- Rinse until no soap residue remains
- Dry hands with a disposable towel (multi-use towels can spread disease between people)

How to use hand sanitizer:

- **Hand sanitizers are not as effective when hands are visibly dirty or greasy** (wash dirty hands first)
- Apply squirt of sanitizer to palm and spread over all surfaces and rub for 20 seconds, until dry
- Use a sanitizer with at least 60% alcohol

Hand washing supplies

- Warm water
- Liquid hand soap
- Paper towels
- Hand sanitizer

PERSONAL PROTECTIVE EQUIPMENT (PPE)

PPE prevents animal germs from infecting you and others.

Wear gloves when:

- Handling sick horses or horses with skin problems
- Touching nasal or eye discharge, urine, feces or blood
- Gathering up dirty laundry
- Disinfecting dirty surfaces, soiled equipment, or used stalls

How to wear gloves:

- Use disposable gloves; change gloves between each horse and throw away after use
- Wash hands after removing gloves
- Avoid touching surfaces and items that will be touched by people with bare hands

Wear coveralls and boots when:

- Handling sick horses
- Gathering up dirty laundry
- Cleaning horse stalls and other horse environments

How to use coveralls and boots:

- Designate barn clothes that you only use in the horse environment
- Put on clean barn clothes each day
- Remove dirty barn clothes before going home or running an errand
- Keep used barn clothes separate from other clothes in the washing machine and wash regularly in washing machine
- Do not wear barn/work boots inside
- Use a long handled brush to scrape manure and debris off boots then disinfect them
- Store barn/work boots outside

Wear a mask and goggles when:

- Handling or in close contact with horses displaying signs of a possible respiratory infection (e.g. sneezing, eye and/or nasal discharge)
- There is risk of splashes of blood/bodily fluids (e.g. cleaning a wound)

GENERAL SANITATION

Good cleaning and disinfection and waste management help to minimize risk of exposure to germs.

Cleaning and disinfection

Use EPA Registered Commercial Products that include directions for disinfecting and/or bleach and water solutions. For more on how to properly disinfect, see the Iowa State University Center for Food Security and Public Health website: www.cfsph.iastate.edu/disinfection.

How to clean and disinfect:

- Prepare and store solutions according to label directions
- Label spray bottles and buckets with the product name and dilution ratio
- Make up fresh solutions as often as directed by the label; more frequently if solution is visibly dirty
- Bleach solutions should be prepared daily using cold water

- Keep a Materials & Safety Data Sheet (MSDS or SDS) for each chemical you use
- Clean surfaces thoroughly to remove organic matter, such as dirt, feces, soiled bedding, and spilled feed, before disinfection (organic matter can create a barrier that protects germs from contact with the disinfectant, and can neutralize many disinfectants)
- Leave the disinfectant on the surface for the recommended amount of time
- Equipment and other items (halters, brushes, clippers, etc.) should be cleaned and disinfected on a regular basis (daily, weekly, or monthly, depending on item and frequency of use)
- Shared items should always be cleaned and disinfected between uses
- Trucks and trailers used to transport horses should be cleaned and disinfected regularly, preferably after each use, including the outside surfaces
- Consider dust as potentially contaminated with germs and clean surfaces such as railings, bleachers, gates, latches and benches on a regular basis
- Minimize dusty areas by wetting the area down first, then cleaning and disinfecting; leaf blowers and vacuums should not be used in dusty areas

Keep information regarding all cleaners and disinfectants used in your facility:

PRODUCT NAME: _____ USED FOR: _____ DILUTION RATIO: _____:_____

How to mix it: _____

PRODUCT NAME: _____ USED FOR: _____ DILUTION RATIO: _____:_____

How to mix it: _____

PRODUCT NAME: _____ USED FOR: _____ DILUTION RATIO: _____:_____

How to mix it: _____

Use this bleach dilution calculator to help determine how to mix your bleach solution:

<https://kingcounty.gov/en/legacy/depts/health/communicable-diseases/zoonotic/veterinarians/-/media/depts/health/communicable-diseases/documents/zoonotic/bleach-dilution-calculator.ashx>

Preparing bleach (8.25%) solutions – examples

Bleach solution for a 24 oz. spray bottle:

Add 1 Tbs. of bleach to a 24 oz. of cold water

*Label spray bottle: **Bleach and 1:50 dilution ratio***

Bleach solution for a 2 gallon bucket:

Add 5 oz. of bleach to 2 gallons of cold water

*Label bucket: **Bleach and 1:52 dilution ratio***

Waste management

Animal manure and other waste, including soiled bedding and feed, are potential sources of harmful germs and provide ideal environments for insects and other pests.

- Have storage areas for waste that prevents public contact
- Equipment and tools used for manure removal should only be used for that purpose
- Have storage for equipment and tools used for manure removal in isolated areas away from visitors

WHEN AND HOW TO ISOLATE HORSES

Have a designated veterinarian who can be contacted about sick or injured horses.

- Promptly isolate potentially sick or injured horses from healthy horses and notify your veterinarian
- Keep sick or injured horses in an isolation area away from the public- sick horses should not be made available to clients for riding lessons or other activities that would involve close contact
- New arrivals to the facility should be isolated from the rest of the population, with the length of time dependent upon known health status and history
- The isolation area should eliminate all nose-to-nose contact between horses and decrease the potential for airborne transmission of germs
- Caregivers of sick horses should wear PPE, including gloves and coveralls or scrubs. A mask and goggles should be worn for horses with signs of respiratory infection (e.g. sneezing, eye and/or nasal discharge) or with the risk of splashes of blood/bodily fluids from ill horses (e.g. cleaning a wound)
- PPE used in the isolation area should not be used in other areas of the facility or with healthy horses
- Have dedicated equipment, brushes, and tack for the isolation facility or sick horse
- Ideally, sick horses should be cared for by individual(s) that are not taking care of healthy horses; if this is not possible, take care of the sick horses after taking care of the healthy horses
- Isolation areas should be cleaned/disinfected last after other stalls have been cleaned

ZOONOTIC DISEASE PREVENTION

Some diseases can be spread from horses to people such as: Rabies, Cryptosporidiosis, Leptospirosis, Ringworm, Salmonellosis, Methicillin-resistant Staphylococcus aureus (MRSA), Streptococcus equi zooepidemicus, and others.

Certain people are at higher risk for zoonotic diseases, including children under 5 years old, adults age 65 and older, pregnant women, and people with weakened immune systems (such as organ transplant recipients, people on cancer treatment or other medicines that suppress the immune system, people with AIDS). To decrease the risk of zoonotic disease spread, follow these recommendations:

- Follow the hand hygiene, PPE, general sanitation, and isolation guidelines above
 - Wash hands often with soap and warm water or use alcohol-based hand cleaners if soap and water is not available, especially after contact with horses/other animals or areas where animals are housed
 - Avoid close contact with sick horses, especially if they are showing signs of a respiratory infection (e.g. sneezing, eye and/or nasal discharge)
 - Sick horses should not be made available to clients for riding lessons or other activities that would involve close contact
 - Promptly isolate potentially sick horses and notify your veterinarian
 - Know when to use appropriate PPE - gloves, coveralls, boots, mask, and goggles
- Remind staff and clients to avoid touching his or her eyes, nose, or mouth to reduce the spread of germs
- Do not allow consumption of food or beverages; pacifiers, strollers, or baby bottles; or smoking/other tobacco use in animal areas
- Ensure all animals receive vaccinations and regular deworming according to the advice of a veterinarian
- Develop and follow a standard, written health protocol that includes: identifying, examining, separating and treating sick animals; administration of routine health procedures; and general husbandry procedures
- Avoid sharing equipment between animals; disinfect shared equipment thoroughly before use
- Regularly clean and disinfect areas with public access and surfaces with which the public will have direct contact (e.g. railings, counter tops, gates, handles and latches)
- Vehicles, trailers and people can spread germs via contaminated tires, wheel wells, clothing, or boots - designate a parking area for visitors, clean and disinfect vehicles and trailers after travel, and have signage for visitors to follow hand washing and PPE protocols

ANIMAL BITES

First aid for bite wounds:

- Promptly rinse wounds with lots of water and wash with soap and warm water for 3 to 5 minutes
- If the wound is bleeding apply pressure with a clean, dry towel and raise the area above heart level to stop the bleeding
- Apply a sterile bandage to the wound
- Consult a healthcare provider if the bite or scratch has broken the skin
- Monitor all bites & scratches closely and seek medical care immediately if any redness, swelling or pain occurs at the site
- Remind staff and the public to report any bites to the person-in-charge immediately

RODENT AND VECTOR CONTROL

Rodents, flies and mosquitoes can spread germs and contaminate feed and water.

- Repair all holes in walls and floors and seal around drains and vents
- Eliminate clutter and maintain storage areas in a neat and sanitary manner
- Store animal feed in pest proof containers with tight fitting lids
- Remove sources of food and water that may attract rodents; clean up spilled feed immediately
- Store garbage in pest proof containers with tight fitting lids
- For mosquito control, eliminate standing water, including wet, muddy areas
- For fly control, eliminate decaying organic matter weekly
- See information about rodent control at www.kingcounty.gov/rats
- Call your local pest control company if needed

INFECTION CONTROL CHECK LIST FOR HORSE FACILITIES

Disinfect equipment, stalls, trailers, and trucks on a regular basis or when moved between locations.
All equipment should be used on a single horse or disinfected between horses.

TASK	WHEN	PROCEDURE
<i>Equipment & Tools</i>		
Brushes, combs, clippers, hoof picks, etc.	Daily/weekly (depending on item and frequency of use)	<input type="checkbox"/> Put on personal protective equipment (gloves/coveralls/boots) <input type="checkbox"/> Remove hair and debris from tools <input type="checkbox"/> Clean items with hot water and detergent then rinse <input type="checkbox"/> Spray or soak used tools in a disinfectant solution or sanitizing blade wash/spray <input type="checkbox"/> Clean and disinfect shared items between uses <input type="checkbox"/> Ill horses should have dedicated equipment/tools
Lead ropes, halters, saddle pads, blankets, etc.	When dirty, after use with new arrivals, after use with sick horses	<input type="checkbox"/> Put on personal protective equipment (gloves/coveralls/boots) when collecting dirty laundry <input type="checkbox"/> Washable items should be laundered in hot water in washing machine <input type="checkbox"/> Soak non-washable items in a disinfectant solution <input type="checkbox"/> Clean and disinfect shared items between uses <input type="checkbox"/> Ill horses should have dedicated equipment/tools
Trailers, trucks	After hauling an animal or visiting another farm/facility	<input type="checkbox"/> Put on personal protective equipment (gloves, coveralls/boots) <input type="checkbox"/> Sweep and clean out hair, manure and debris <input type="checkbox"/> Clean inside and outside surfaces with hot water and detergent then rinse <input type="checkbox"/> Disinfect vehicle's inside surfaces and outside surfaces, such as wheel wells, tires, and undercarriage <input type="checkbox"/> Deep-clean hard to reach places where dirt or debris may accumulate as needed
Coveralls and boots	Regularly and after visiting another farm/facility	<input type="checkbox"/> Launder dirty clothing separate from other clothing in hot water in washing machine <input type="checkbox"/> Use a brush to scrub boots then disinfect <input type="checkbox"/> Have visitors wear clean clothing/boots when arriving <input type="checkbox"/> Consider use of a foot bath
<i>Stalls—daily cleaning</i>		
Use standard cleaning procedures for stalls that are occupied by animals	Twice daily and when dirty	<input type="checkbox"/> Put on personal protective equipment (coveralls/boots) <input type="checkbox"/> Remove any food and water buckets and clean with warm water, soap, and a scrub brush <input type="checkbox"/> Remove soiled bedding, manure, food and debris <input type="checkbox"/> Add fresh bedding to the stall <input type="checkbox"/> Add fresh water and food/hay to the stall <input type="checkbox"/> Keep manure and other waste in an area away from public contact <input type="checkbox"/> Equipment and tools for manure removal should not be used for other cleaning purposes

TASK	WHEN	PROCEDURE
<i>Stalls—disinfecting</i>		
Use standard cleaning and disinfection procedures for stalls	Weekly/ monthly and between animals	<input type="checkbox"/> Put on personal protective equipment (coveralls/boots) <input type="checkbox"/> Remove all bedding, manure, food, hair, and debris <input type="checkbox"/> Sweep and/or scrape floors and walls thoroughly; moisten the area to control dust as needed <input type="checkbox"/> Soak all surfaces with hot water and detergent then wash by wiping, spraying or scrubbing from top downward <input type="checkbox"/> Rinse from top downward to remove all organic matter and detergent <input type="checkbox"/> Spray disinfectant on all surfaces of stall <i>Allow the disinfectant solution to sit for recommended time</i> <input type="checkbox"/> Deep clean as needed to remove build-up of oils and debris with a degreaser <input type="checkbox"/> Add fresh bedding to the stall <input type="checkbox"/> Add fresh water and food/hay to the stall
<i>Other surfaces</i>		
Railings, bleachers, gates, latches and benches - all surfaces that the public may come into contact with	Weekly/ monthly	<input type="checkbox"/> Clean surfaces with hot water and detergent then wash by wiping, spraying or scrubbing <input type="checkbox"/> Spray disinfectant on all surfaces <i>Allow the disinfectant solution to sit for recommended time</i>