



# Biosecurity Tips for Horse Owners

As a horse owner, following good biosecurity practices is one of the most important things you can do to prevent your horses from catching contagious diseases. Here are some simple steps you can take to protect them.

## Vaccination and General Health

Horses fed a good diet in a low-stress environment can effectively fight off disease. By practicing good biosecurity, you will help your horses avoid disease exposure. Vaccination can help protect your horses when exposure can't be avoided. Consult with your veterinarian about an appropriate vaccination schedule for your horses. Typically, horses receive a "core" group of vaccines. Depending on specific risk factors (such as age, environment, geographic location, and amount of travel), your veterinarian may suggest additional vaccines. Appropriately vaccinating all the horses on a property helps to build "herd immunity" and protect all the horses in the group.

## Leaving the Farm

Horses that leave the farm to compete, breed, train, or go to a veterinary hospital can be exposed to all kinds of disease agents. When leaving the farm, don't ship your horses with horses from other farms. Use your own trailer whenever possible. If you must use someone else's trailer, be sure to clean and disinfect it before loading your horse. If you can "smell horse" in the empty trailer, it has not been cleaned and disinfected well enough.

Once you arrive at your destination, don't let your horse touch other horses, especially nose to nose. Avoid sharing equipment (such as buckets, brushes, sponges, or hoses) with horses from other farms, and never reuse needles or syringes for injections. Also, never put the end of a shared hose in your horse's water bucket as it is being filled. Wipe the hose end with a disinfectant wipe, hold the hose above the water bucket, and then fill the bucket. If you don't have a disinfectant wipe, holding the hose above the bucket will still help protect your horse.

Don't hand-graze your horse where other horses have recently grazed. If you touch other horses, wash your hands with soap and water, and dry them well. Use disinfectant wipes or hand sanitizer if soap and water are not available. Don't let strangers pet your horse, especially if they've visited other countries within the last 2 weeks.

## Returning to the Farm

When you and your horses return home, you need to protect those that didn't travel from being exposed to new germs. Clean and disinfect tack, boots, equipment, and grooming supplies before coming back. Make sure to clean off dirt and manure before disinfecting. Disinfectant wipes or a disinfectant-dampened cloth work well for tack, and shoes can be sprayed with disinfectant. You should also shower, blow your nose (germs can survive a long time in nasal secretions), and put on clean clothes and shoes upon your return.

Returning horses should be separated from your other horses for at least 2 weeks. Dividing horses that live on your property into an "at-home" group and a "traveling" group if all the horses do not regularly leave the property is an even better strategy to avoid spreading disease. Avoid any nose-to-nose touching, including through holes or gaps in stall walls. When doing feeding and chores, work with the traveling horses last, wear boots and coveralls, and remove them before working with your other horses. And finally, don't forget to wash your hands.

## Don't Carry Germs Home

You can accidentally carry germs home to your horses on your clothes and shoes. To avoid doing this, keep a pair of shoes or boots that you only use for visiting other places with horses and clean and disinfect the footwear after leaving the farm. If you are working with horses on another farm, wear coveralls or plan to change your clothes before working again on your farm. If there are farms you visit frequently and you can't always change clothes or clean your shoes, be sure their vaccination and biosecurity habits are as good as your own.

## On Your Farm

Even horses that never travel need good biosecurity at home. When visitors arrive, have them park away from the horse area of your property. If the farrier or veterinarian needs to park closer, be sure their tires and shoes have been cleaned and disinfected.

Ask visitors to wear clean shoes and clothes. Provide plastic shoe covers or have them brush dirt off their shoes and then spray the shoes with a disinfectant. If you are hosting many guests from diverse locations, such as a farm tour, or there is a local outbreak of a disease of concern, consider requiring visitors to use a footbath when they enter and leave your farm.

To make a footbath, you will need:

1. A low plastic pan or bin, wide enough to fit an adult's foot and shallow enough to step into easily.
2. A plastic doormat (the "fake grass" mats work well).
3. A suitable, broad-spectrum disinfectant; the American Association of Equine Practitioners recommends a 1:10 dilution of sodium hypochlorite or peroxygen compound such as Virkon™ LPS for use in footbaths.
4. Water.

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

## Adding New Horses

Bringing home a new horse is one of the most likely ways for diseases to enter your farm. Keep new horses away from your other horses for 30 days. Use a separate set of pitchforks, grooming tools, and feed and water buckets for the new horses. Work with the isolated horse last each day, or wear boots and coveralls and take them off before working with other horses. You can keep these in a plastic, covered tub near the new horse's field, stall, or barn. Always wash your hands with soap and water and blow your nose (to clear debris and germs) after working with the new horse.

## Keep Germs From Spreading

If one of your horses is sick, isolate the animal and put up signs to limit unnecessary contact with people. Make sure the sick horse can't have nose-to-nose contact with other horses. Also, put a footbath at the entrance and exit to the isolation area, and keep coveralls and boots or plastic foot covers near the sick horse isolation area. In general, you can follow the same isolation guidance as for new horses but seek your veterinarian's advice on how long to keep the sick horse isolated and how to clean and disinfect tools and the stall after the horse is well.

Insects, birds, and rodents can all spread disease-causing germs to horses. Use effective insect and rodent control methods on your farm and when traveling. For example:

- Keep weeds and grass cut down.
- Prevent and remove pools of standing water wherever possible, including those formed from rain or washing stalls and in unused buckets, tires, and other objects.
- Use fly predators, traps, or fly spray.
- Store feed in closed, rodent- and insect-proof bins.
- Empty and clean water troughs at least weekly.

## Disinfectants

Dirt and manure lower the germ-killing power of most disinfectants, so you need to remove these first. Dirt floors and unsealed wood cannot be effectively disinfected; ideally stalls should be constructed of materials that can be disinfected. Wash the surface with soap and water using a brush as needed. Rinse the surface off, let it dry completely, then apply the disinfectant, and follow any other label instructions. Always follow the label instructions when mixing, using, and throwing away disinfectants and wear appropriate personal protective equipment. Be sure to use care and keep disinfectants away from children and animals—these products may be harmful.

Some common disinfectants include:

- Household bleach (sodium hypochlorite)—Follow label instructions or mix one cup of bleach per gallon of water to make a 1:10 dilution. Bleach is inactivated by organic matter and can form a toxic gas if mixed with strong acids or ammonia. For guidelines on using bleach, go to [ufl.edu](http://ufl.edu) and search "Guidelines for Using Bleach."
- Pre-mixed spray disinfectants—Be sure the label says the product kills bacteria and viruses and is safe for your intended use. Sprays work well for disinfecting shoes, tack, and grooming equipment.
- Waterless hand sanitizer—Alcohol-based (at least 60%) liquids or gels are easy to use for sanitizing your hands at a show or after visiting other horses. Be sure to get between your fingers and cover all surfaces of your hands. They do not work well if hands are visibly dirty or greasy.
- Peroxygen compounds—Examples of these products include Virkon™ S and Intervention®. These are broad-spectrum products that are fast acting, have low toxicity at lower concentrations, and are effective in the presence of organic matter, hard water, soaps, and detergents.
- Quaternary ammonium compounds—Examples of these products include KennelSol® and Lysol® I.C.™ These products are inactivated by organic matter, hard water, saps, and anionic detergents.
- Phenolic compounds—Examples of these products include One Stroke Environ® and Tek-trol®—They also work well in the presence of organic matter, hard water, soaps, and detergents.

For more information, go to [www.cfsph.iastate.edu/](http://www.cfsph.iastate.edu/) and search "Characteristics of Selected Disinfectants."

## Questions?

Call the U.S. Department of Agriculture (USDA) Veterinary Services office in your State or send an email to [equine.health@usda.gov](mailto:equine.health@usda.gov). Visit our Web site at [www.aphis.usda.gov/animalhealth/contact-us](http://www.aphis.usda.gov/animalhealth/contact-us) for a list of offices and phone numbers.

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