Reduce Your Horse's Risk of Infectious Disease

A few definitions...

Infectious disease – Any disease caused by the entrance, growth, and multiplication of microorganisms in the body; a germ disease (A disease caused by a microorganism or other agent, such as a bacterium, fungus, or virus that enters the body of an organism.). It may not be contagious from one animal to another.

Examples of infectious and contagious disease: EHV-1, influenza

Example of infectious but not contagious disease: ascarids (roundworms)

Biosecurity – A somewhat scary sounding word that really just means taking steps to prevent spread of disease in and outside of your barn. Biosecurity embodies all the cumulative measures that can or should be taken to keep disease (viruses, bacteria, fungi, protozoa, parasites) from a farm and to prevent the transmission of disease (by humans, insects, rodents, and wild birds/animals) within an infected farm and to neighboring farms.

Fomite – An inanimate object or substance that is capable of transmitting infectious organisms from one individual to another. Common fomites for horses: food/water buckets, brushes, tack, owners, veterinarians

Disease Recognition and Containment

Clinical signs of infectious disease will vary depending on what the disease is and how severely affected the horse is. Most important to disease recognition and treatment is **knowing your horse's normal behavior**; anything out of the ordinary should encourage you to check your horse over thoroughly and call your veterinarian early if concerned.

Signs of definite concern:

- Fever, >102.5°F (normal temperature is 99.5°F 101.5°F)
- Gastrointestinal
 - Anorexia
 - Diarrhea
- Respiratory
 - Nasal discharge, ocular discharge
 - Cough
 - Labored breathing
- Neurological
 - Tremors, stumbling, staggering
 - Change in attitude/behavior/mentation

If you suspect your horse has contracted an infectious disease:

Don't panic! There are many conditions, particularly when caught early, that are easily treated or managed. In the rare instance that your horse contracts something more severe, there are many resources available to provide medical care or guidance.

- Call your veterinarian, making sure to let them know you suspect an infectious disease.
 - This helps your veterinarian best prepare for the visit and take extra measures to limit potential ongoing disease spread.

- Quarantine your horse.
 - o Put them in a stall or pasture separate from other horses.
 - Do not take them into common areas of the barn/stable where other horses may be / have been.
 - o Do not take your horse off the property (no rides, events, shows).

During the veterinary visit, your veterinarian will give you guidance on how to proceed to get your horse well and to protect other potentially affected or exposed horses. In the *very rare* instance that a reportable foreign animal disease is suspected, your veterinarian will ask that no animals are moved off your premises and they will call the California Department of Food and Agriculture's Animal Health Branch. CDFA (or USDA, who works closely with CDFA in California) will send a veterinarian to talk to you, examine the horse, and possibly take some samples for diagnostic testing. (More to come in Part II on reportable diseases)

If an infectious / potentially infectious disease is diagnosed, recommendations include:

- Stop all animal movements on/off facility
- Stop (or limit to only essential) animal movements around facility
- Pick up all manure/organic material, then clean and disinfect entire facility (1:10 bleach works well for many pathogens, including EHV)
- Do not share food or water buckets, grooming tools, halters. Clean and disinfect all equipment and do not share between horses.
- Try to not be a fomite: wash your hands, do not visit other horses, clean boots and clothes before and after caring for any horse.
- If you are responsible for caring for a large barn without a large staff, be conscientious of which horses are being cared for first (think about disease spread).
 - Ideally, start the day with youngest, healthy and unexposed animals working your way up through to older animals (who should be better able to mount an immune response to a disease exposure) and animals that have been exposed to disease but are not showing clinical signs.
 - O It is best if a separate person can care for all sick animals. If you cannot dedicate a single person to caring for only sick animals, these animals should be cared for last. It is particularly important to wash your hands between caring for each animal. If you have been in contact with a sick animal and need to then handle a healthy one, change clothes and clean/disinfect your shoes in addition to thoroughly washing your hands.

Reduce risk of infectious disease in your barn by:

- Limiting access to your facility, keeping a visitor log
- Maintain a thorough accounting of animal movements on/off facility (include shows, events, sales, purchases)
- Quarantining new animal additions (21-30 days is generally good, but should be determined based on incubation period of diseases you are trying to prevent the introduction of)
- · Good hygiene: wash hands, clean boots
- Good animal husbandry: keep manure picked up, stalls/pastures clean, keep food/water buckets clean, don't overcrowd, daily observation of animal health that includes isolating any potentially ill horses
- Using separate tack, grooming equipment and food/water buckets for each horse. If sharing, disinfect between horses every time.
- Keeping all vehicles and equipment cleaned of organic debris and disinfected

This is a good checklist to get you thinking about ways to keep your facility and horses safe from disease - CFSPH prevention practices checklist for horse facilities:

http://www.cfsph.iastate.edu/Animal Response/English/pdf/Prevention%20Practices%20Horses%20Checklist.pdf

Reduce disease risk when traveling by:

- Staying informed and alert to current animal disease risks (In California, the Animal Health Branch of the Department of Food & Agriculture is the place to go: http://www.cdfa.ca.gov/ahfss/animal_health/)
- Attending reputable events; keep contact information of organizers so they can be contacted if your horse does get sick this will help in limiting spread of disease and in tracing the disease source
- Not traveling with your horse if they are anything less than completely healthy not only could they be incubating a disease that may spread to other horses, but they may not be as able to fight off a disease if exposed to another sick horse.
- Minimize stress to your horse, avoid overcrowded equine housing situations whenever possible.
- Bringing your own food and water buckets. Do not allow your horse to drink from a common water trough or bucket.
- Bringing your own tack and grooming equipment; do not share with others.
- Not approaching or handling other people's horses; if you do, be sure to disinfect your hands (clothing, shoes) before handling your horse again.
- Keeping your trailer cleaned and disinfected.

Resources

CDFA equine biosecurity toolkit, 2011: http://www.cdfa.ca.gov/ahfss/animal health/equine biosecurity.html#tool

AAEP biosecurity guidelines, 2006: http://www.aaep.org/pdfs/control_guidelines/Biosecurity_instructions%201.pdf

USDA-APHIS equine biosecurity brochure, 2005:

http://www.aphis.usda.gov/publications/animal health/content/printable version/HorseBioSecurity final.pdf

UC Davis Center for Equine Health current health issues: http://www.vetmed.ucdavis.edu/ceh/currenthealth.cfm

Center for Food Security & Public Health: http://www.cfsph.iastate.edu/Infection Control/equine-facilities-for-veterinarians.php

CFSPH prevention practices checklist for horse facilities:

http://www.cfsph.iastate.edu/Animal Response/English/pdf/Prevention%20Practices%20Horses%20Checklist.pdf

CDFA, current EHV situation: http://www.cdfa.ca.gov/ahfss/animal health/equine herpes virus.html

ACVIM EHV-1 consensus statement, 2009: http://www.acvim.org/websites/acvim/index.php?p=22

