

Horse Biosecurity Guide



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Glossary

Biosecurity	Biosecurity is a set of practices that are used to minimize the transmission of an infectious agent onto, within and off of farms and stables by new horses, other animals, wildlife, people, equipment, feed, water, insects and pests.
Commingled	Mixing animals together from different sources, i.e. other stables and farms.
Disinfection	A process that kills most microorganisms but rarely kills bacterial spores.
Fomite	An inanimate object or substance, such as clothing, equipment and tack, that is capable of transmitting microorganisms from one individual to another.
Infectious agent	Microorganism capable of causing disease.
Infectious disease	Disease caused by microorganisms.
Microorganism	Microscopic organism (living system), e.g. bacteria, virus, parasites or fungi.
Reportable disease	Is a disease that must be reported to the Canadian Food Inspection Agency upon suspicion or diagnosis. Examples of reportable diseases that affect horses are: African Horse Sickness, Anthrax, Brucellosis, Contagious Equine Metritis, Equine Infectious Anemia, Equine Piroplasmiasis, Rabies, Trichinellosis, Venezuelan Equine Encephalomyelitis, Vesicular Stomatitis.
Vector	An organism, such as a mosquito, tick or person, that transmits disease-causing microorganisms from one infected person or animal to another.

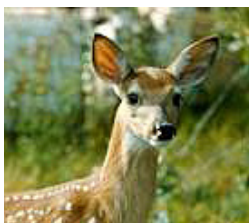
Biosecurity Basics

Biosecurity* is the end result of the total management practices that are designed by the horse producer or owner to reduce infectious diseases* carried onto farms and into stables by:

- New horses, other animals and wildlife;
- Equipment;
- People;
- Insects and pests; and
- Feed and water.

Biosecurity

Up-to-date principles and practices that are to be applied to keep our horses healthy.



*See Glossary, page 3



The Importance of Biosecurity

The health of a horse is the responsibility of the horse owner. Gaining more knowledge on diseases, management practices and hazards is an important step in caring for a horse.

Biosecurity helps prevent diseases from entering and/or exiting a farm and from spreading among horses living on the farm. The reduction of financial losses from treating sick horses is one of the benefits in preventing disease, and it lessens hardships endured when losing a horse to disease.

Biosecurity improves the horse industry by promoting healthy horses. As part of efforts to prevent the incursion of foreign animal diseases (FAD) into Canada and Saskatchewan, sound and rigorous biosecurity practices at home help prevent unwanted foreign diseases from thriving in our country and threatening our livestock.

Your veterinarian is one of the best sources of information on biosecurity and minimizing disease risks. They can help you create a practical biosecurity plan for your facility that will be tailored specifically for you.

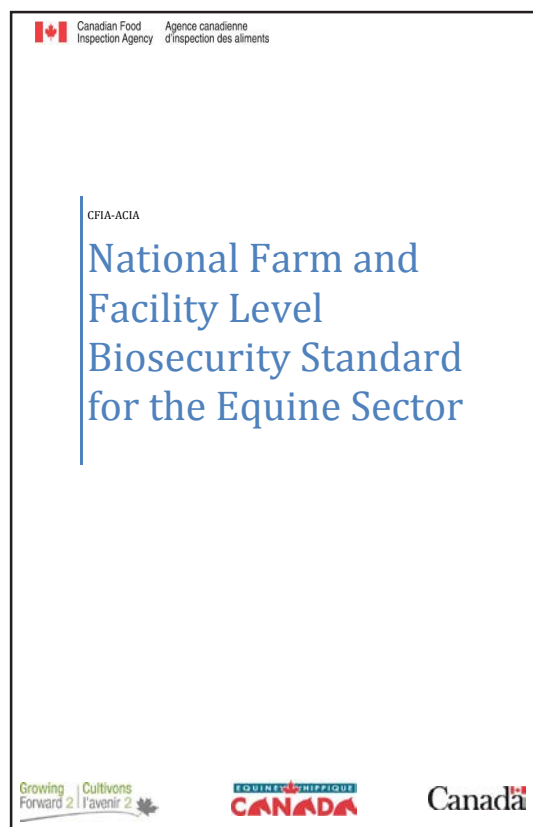
The National Farm and Facility Level Biosecurity Standard for the Equine Sector

The Canadian Food Inspection Agency (CFIA) in partnership with Agriculture and Agri-Food Canada (AAFC), Equine Canada and its equine sector organizations developed a national biosecurity standard for the equine sector. This national biosecurity standard contains guidelines and recommendations to benefit horse owners and custodians in protecting their horses from contagious diseases.

The standard provides guidelines and recommendations rather than prescribing what must be done on all farms and facilities. The complex and variable nature of the horse industry, regional difference, limited data and other factors prevent the development of one set of specific guidelines and recommendations that are optimal for all farms and facilities.

The standard consists of seven biosecurity components:

- Developing a biosecurity plan and self evaluation checklist;
- Monitoring and maintaining animal health and disease response;
- New horses, returning horses, visiting horses, movements and transportation;
- Access management;
- Farm and facility management;
- Biosecurity awareness, education and training; and
- Farm and facility location, design, layout and renovations to existing facilities.



The Saskatchewan Horse Biosecurity Guidebook provides some basic biosecurity information for horse owners and custodians. To further expand on knowledge of equine biosecurity, please view the National Farm and Facility Level Biosecurity Standard for the Equine Sector at <http://www.inspection.gc.ca/animals/terrestrial-animals/biosecurity/standards-and-principles/equine-sector/eng/1460662612042/1460662650577>.

Disease Exposure and Your Horse

Horses can come into contact with diseases in various ways. Some common sources of infectious disease are:

- Other horses;
- Respiratory tract;
- Feces;
- Vectors* (e.g. ticks);
- Blood;
- Aborted fetuses/fetal fluid;
- Infected semen;
- Direct contact; and
- Fomites* (inanimate object capable of carrying microorganisms*).

All infectious diseases result from interactions between the horse and the horse's:

- Immune system
- Exposure to infectious agents* (e.g. viruses, bacteria, parasites)
- Environment

Impact of Infectious Diseases

The impact of an infectious disease is indicated by:

- Number of animals affected;
- Illness and death;
- Ability to prevent further spread;
- Limits placed on movements of horses on and off property; and
- Loss of confidence and business.

Risk Factors for Disease Exposure

Horses can become more prone to disease when they are:

- In high-density populations;
- Commingled*;
- Stressed;
- Transported; and
- Exposed to horses that are sick or apparently healthy horses shedding infectious microorganisms.

Horse owners should be aware of the effects of stress, which can cause increased susceptibility for diseases in horses.

Stress can result from conditions at:

- Breeding farms;
- Boarding facilities;
- Training barns;
- Show grounds;
- Equestrian events;
- Racetracks;
- Veterinary clinics; and
- Transportation activities.



*See Glossary, page 3

Vaccination

Your veterinarian will recommend or will advise the vaccines required for the optimal care and well-being of your horses. Medical assessments are based on the individual horse, environmental conditions in your area, if the horse is travelling away from its home base or if there are security considerations from incoming horses to your premises.

Vaccines fall into two categories: core and risk-based.

- Core vaccines are required for all horses in order to maintain biosecurity.
- Risk-based vaccines should be administered on the advice of your veterinarian.

Core Vaccines

- *Eastern Equine Encephalitis (EEE) and Western Equine Encephalitis (WEE)*: Viral diseases that cause brain and spinal cord inflammation transmitted by mosquitoes. Can also cause disease in humans.
- *West Nile Virus (WNV)*: Viral disease that can cause swelling of the brain and paralysis. Mosquitoes can transmit this disease to horses, humans and birds.
- *Rabies*: Viral disease that affects the central nervous system. It is transmitted from bites of diseased animals.
- *Tetanus*: A paralytic disease caused by bacteria that enters a wound. The bacteria is found in soil and feces.

Risk-based Vaccines

- *Influenza*: Contagious viral disease that causes upper respiratory illness.
- *Equine Herpes Virus (EHV)*: Viral disease that causes respiratory disease, abortions in mares and, rarely, neurological (brain and spinal cord) disease.
- *Strangles*: Contagious bacterial disease that affects the upper respiratory tract and causes abscesses in the lymph nodes (especially in the throat).
- *Anthrax*: Bacterial disease that causes sudden death. Symptoms, when seen, include staggering, shortness of breath, trembling, collapse, a short period of convulsions and death. These symptoms are usually quite rapid. Also common are bloody discharges from body openings (e.g. the nose).
- *Equine Viral Arteritis (EVA)*: Contagious viral disease that causes fever, depression, swelling of limbs, eye and nose discharge, abortion and, rarely, death.
- *Potomac Horse Fever*: Summer disease caused by a rickettsial bacteria that causes high fever, diarrhea and inflammation of the feet.
- *Botulism*: Paralytic disease caused by a bacterial toxin that can be present in spoiled feed.
- *Rotavirus Diarrhea*: A virus that causes diarrhea, depression and decreased appetite in foals. Does not usually cause illness in adults. Vaccine is available for mares to pass on immunity to their foals.

Separation

New horses entering the facility should be separated from an existing herd for two to three weeks. Separation of sick horses can prevent the spread of illness to healthy herd mates.

Disease Prevention

Record Keeping

An important biosecurity measure in disease prevention is accurate and timely record keeping of management practices in horse health and care.

Horse health records:

- Vaccination records
- Health records for illness
- Veterinarian appointments

There are many record keeping programs available to help organize all of this information.

Facility records:

- New horse(s) entering premises and any noticeable illnesses
- Equine Infectious Anemia (EIA) records for all horses on premises
- Stall allocation for horses
- Safety procedures and emergency contacts

Cleaning records:

- Barn/stable/pasture/yard
- Tack and equipment

Hand Washing

People should wash hands thoroughly between the handling of horses, after handling horses, and before they eat or drink. Signage should be provided in the barn/stable/halls to promote the importance of hand hygiene. Hand washing materials should be visible, easily accessible and fully stocked with soap, disposable gloves and paper towels.

Work with healthy horses first and sick horses last, and always wash your hands after handling horses.

Using disposable gloves is important when you're handling sick animals, as is changing gloves between horses. Disposable gloves are effective, inexpensive and readily available.

People follow by example. Using a consistent hand washing routine when handling horses will result in others practicing your example.

Sanitizers are an option when you don't have access to running water, but they are not effective for any length of time. Sanitizers do not replace a thorough hand washing.

Disinfection[‡]

There are three things to consider when choosing a disinfectant:

1. Spectrum of activity
 - Some disinfectants are only effective on certain types of infectious agents (i.e. viruses, bacteria, parasites, etc.).
2. Cleaning Activity
 - Unlike detergents, disinfectants typically have limited cleaning ability.
3. Contact time required for disinfection
 - Depends on microorganism of concern.

Talk to your veterinarian about the best detergent and disinfectant to use. There are many different types. Refer to pages 8 to 10 for a list of common detergents and disinfectants used for livestock and companion animals.

[‡]See Glossary, page 3

Equipment, Tack and Grooming Supplies

Each horse should have its own equipment. When sharing tack between horses, clean and disinfect equipment thoroughly before use on each horse. Bits, harness pads and blankets are commonly shared and should also be cleaned and disinfected between uses on different horses.

Both cleaning and disinfecting are important steps for protecting your horse. Cleaning is critical because disinfectants are not as effective on dirty surfaces. Organic matter (dirt, manure, etc.) can inactivate disinfectants, reducing their effectiveness. Properly removing organic matter allows the disinfectant to work most effectively.

Equipment, tack and grooming supplies should be cleaned and disinfected at regular intervals. A cleaning schedule is an effective way of managing this.

Boots and Clothing

The horse industry is much more relaxed when it comes to changing boots and clothing compared to other industries. For example, many swine and poultry facilities require personnel to shower and change into clean coveralls and boots prior to entering the barn. This helps prevent the spread of disease.

When returning home from other farms, change clothing and boots before working with your own horses.

You should also have dedicated clothing and boots to wear only at home.

During any given day, a horse owner may come into contact with many different horses and travel from different stables and events. This creates a potential to spread disease. Make sure to wear different clothing for each farm you visit. If that's not possible, your boots should be cleaned and disinfected, and clean or different clothes should be worn.

Cleaning and Disinfection of Barns and Stalls

1st step

- Thoroughly “dry clean” surfaces. This means removing bedding, feces, feed, dust and debris. All of this organic matter can decrease the effectiveness of disinfectants; therefore, it must be removed.

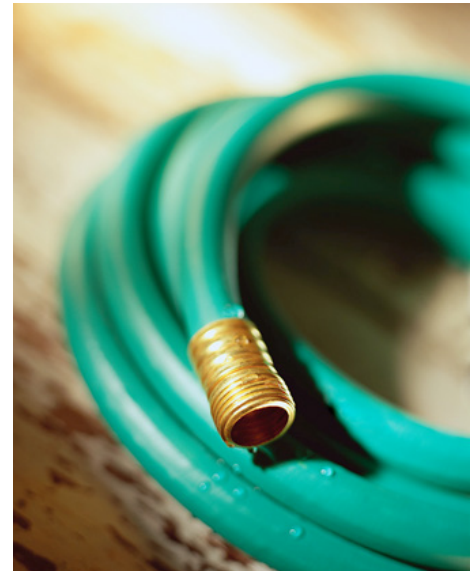
2nd Step

- “Wet clean” surfaces with water (preferably hot) and detergent. This step removes a large quantity of contamination.
- Always progress from the cleanest areas to dirtiest and from the ceiling to the floor.
- The area should be rinsed prior to disinfectant application because some detergents reduce the effectiveness of disinfectants.

3rd Step

- Read labels prior to application.
- Choose a disinfectant based on the microorganism(s) of concern.
- Disinfectants should be sprayed on and left for the required contact time shown on the label.
- After an appropriate contact time, the area should be allowed to dry prior to animals reentering.
- Ensure drains are cleaned and disinfected, as a lot of microorganisms can accumulate in them.

**See Glossary, page 3*



More Information on Detergents

Detergents aid water in removing organic material and soil from surfaces. This allows a disinfectant to reach and destroy microorganisms.

- Many disinfectants do not work in the presence of organic material or dirt; therefore, using detergent first is a critical step in the cleaning process.
- Mechanical scrubbing and wiping of surfaces during the cleaning step is also a good method of removing soil and organic material, such as manure.
- Not all detergents work for all situations.

For general “everyday” cleaning, a normal household detergent, like dish soap, could be used.

Commercial detergents come in three categories:

Detergent Type	Examples*	Purpose
Alkaline (pH > 7)	<ul style="list-style-type: none">• Penblitz 228M®• Biosolve Plus®	<ul style="list-style-type: none">• Remove high organic matter• Efficient at removing manure and soil buildup
Acid (pH < 7)	<ul style="list-style-type: none">• Biofoam®• Dupont Acid-A-Foam XL®	<ul style="list-style-type: none">• Remove mineral deposits and staining• Remove hard water scale buildup
Neutral (pH = 7)	<ul style="list-style-type: none">• Neutrafoam®• Envirolab Neutral Cleaner for Walls and Floors®	<ul style="list-style-type: none">• Use on easily corroded surfaces and when harsh acidic/alkaline detergents aren't required• Efficient at removing fecal matter and soil

These specialized detergents are most appropriate to use during an infectious disease situation. Specialized detergents and disinfectants can be ordered through your veterinarian. Always ensure your detergent or disinfectant is safe for use around animals.

**No endorsement is intended for products mentioned*

More Information on Common Disinfectants

Disinfectant	Examples*	Advantages	Disadvantages
Alcohols	<ul style="list-style-type: none"> Ethyl alcohol Isopropyl alcohol 	<ul style="list-style-type: none"> Fast-acting No residue 	<ul style="list-style-type: none"> Rapid evaporation Flammable
Aldehydes	<ul style="list-style-type: none"> Formaldehyde Glutaraldehyde 	<ul style="list-style-type: none"> Broad spectrum (effective on a variety of microorganisms) 	<ul style="list-style-type: none"> Carcinogenic Irritating to skin and eyes Can only be used in areas with good ventilation
Biguanides	<ul style="list-style-type: none"> Chlorhexidine Nolvasan Virosan® 	<ul style="list-style-type: none"> Broad spectrum (effective on a variety of microorganisms) 	<ul style="list-style-type: none"> Only effective in pH between 5 and 7 Environmental concerns (toxic to fish) Mostly effective only on bacteria
Halogens: Hypochlorites	<ul style="list-style-type: none"> Household bleach 	<ul style="list-style-type: none"> Broad spectrum (effective on a variety of microorganisms) Short contact time Inexpensive 	<ul style="list-style-type: none"> Inactivated by sunlight Requires frequent application Corrodes metal Irritating to skin and eyes Can't be mixed with acids; toxic chlorine gas will be released Needs high concentration to be effective on viruses
Halogens: Iodine Compounds	<ul style="list-style-type: none"> Betadyne® Providone® 	<ul style="list-style-type: none"> Stable in storage Generally safe 	<ul style="list-style-type: none"> Inactivated by Quaternary Ammonium Compounds (QAC) Requires frequent application Corrosive Stains clothes and treated surfaces
Oxidizing Agents	<ul style="list-style-type: none"> Hydrogen peroxide Peracetic acid Virkon S® Oxy-Sept 333® Peroxigard® 	<ul style="list-style-type: none"> Broad spectrum (effective on a variety of microorganisms) 	<ul style="list-style-type: none"> Damaging to some metals
Phenols	<ul style="list-style-type: none"> One-Stroke Environ® Pheno-Tek II® Tek-Trol® 	<ul style="list-style-type: none"> Good efficacy in organic material Non-corrosive Stable in storage 	<ul style="list-style-type: none"> Irritating to skin and eyes May be toxic to animals, especially cats and pigs
Quaternary Ammonium Compounds (QAC)	<ul style="list-style-type: none"> Roccal® DiQuat® D-256® Biosentry 904® 	<ul style="list-style-type: none"> Stable in storage Non-irritating to skin Effective at high temperatures and high pH (9 to 10) 	<ul style="list-style-type: none"> Environmental concerns (toxic to fish) Easily inactivated by organic matter, detergents, soaps and hard water

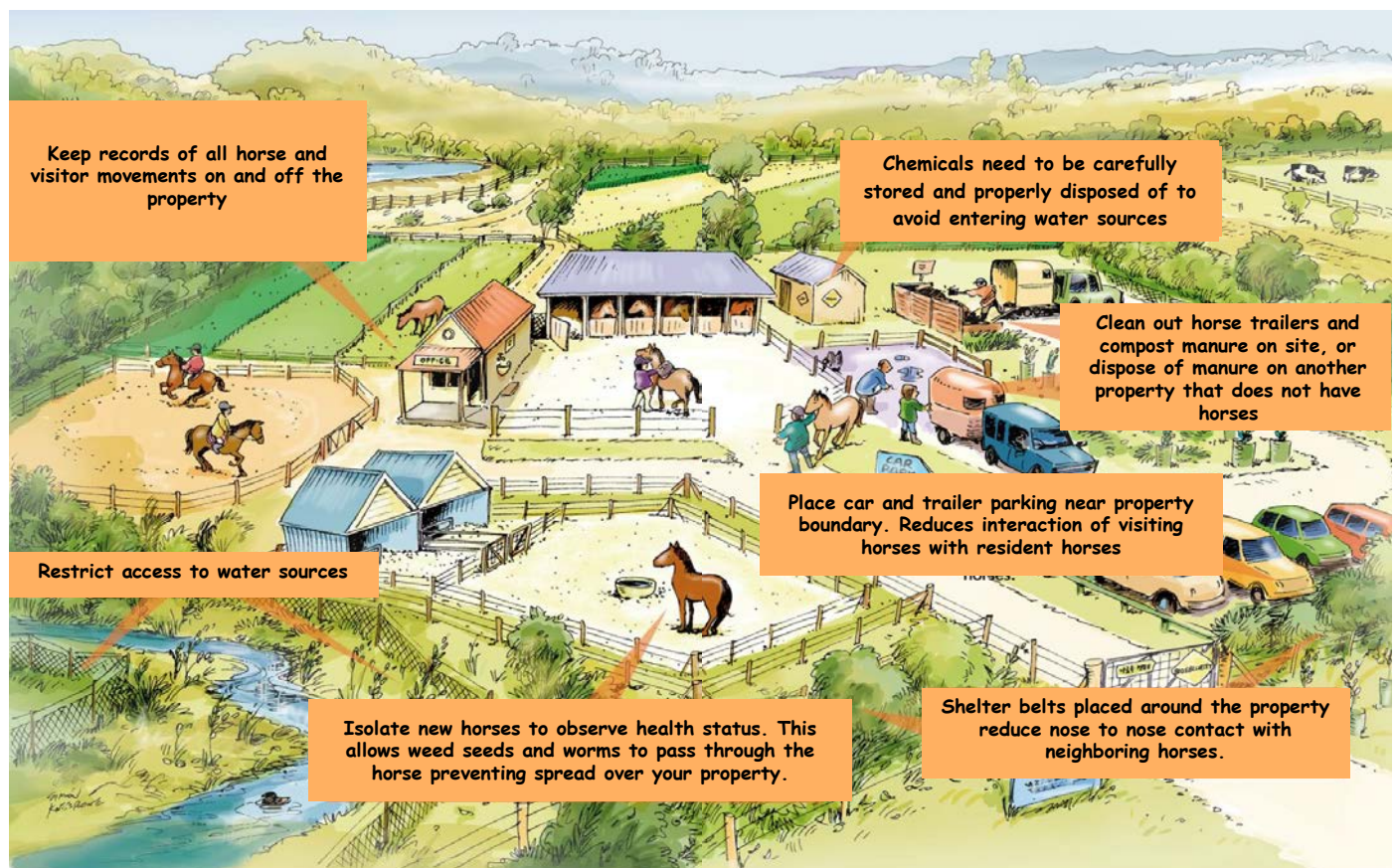
*No endorsement is intended for products mentioned

Access Control

Access control manages disease introduction on farms, in barns or in stables. Some key points to consider are:

- Establish visitor parking away from horses with clear signage and directions. Consider a separate area for the guest horse trailers away from the barn, stable, pens and pastures.
- Consider having established zones on your property. A zone is a defined geographical area where natural, artificial or legal boundaries and implementation of biosecurity procedures creates a defined health status.
- *Controlled Access Zone (CAZ)*: The area of land and buildings constituting the animal production area of the premises that is accessible through a securable controlled access point.
- *Restricted Access Zone (RAZ)*: An area within the CAZ that is used, or intended to be used, to house horses or where they commonly reside. Within the RAZ, there is potential for direct contact with horses. Personnel and equipment access is more restricted than CAZ.
- *Public Access Zone*: An area where no animal contact crossover is anticipated. Identifying a public zone indicates to the public that there are also areas where they cannot go.

An example of how access control can manage and minimize unnecessary contact with agents that are potentially infectious for horses.



Source: Government of South Australia. Horse biosecurity: The glovebox guide.

Date Accessed: Feb. 15, 2010

http://www.pir.sa.gov.au/data/assets/pdf_file/0018/124326/HorseBiosecurity_GloveboxGuide_09.pdf

Travelling

It may not be possible or practical to separate horses that are returning home, especially if you travel frequently (i.e. weekly or monthly). Here are some recommendations to minimize bringing disease home while travelling:

- Ensure travelling horses and horses at home have up-to-date vaccinations. Discuss your vaccination program with your veterinarian.
- Avoid communal water troughs and bowls. Take your own water bucket to events and fill from a source that delivers fresh, clean water.
- Tie your horse to your own trailer. In the event you must tie to a communal site, choose a non-porous surface and disinfect it before tying your horse.
- When arriving at an event and using a stall:
 - Remove old bedding, if present.
 - Clean walls, railings and door to remove organic matter such as manure.
 - Disinfect surfaces such as water troughs and bowls, latches and handles.
 - Put in clean bedding.

Separate returning horses for two to three weeks before allowing contact with horse herd.

Managing New Arrivals

New horses are a common source of disease being introduced to a farm or stable. To minimize the risk:

- Separate a new horse for two to three weeks.
- Use different equipment, tools, tack and grooming supplies on the new horse. If different equipment is not available, ensure it is properly cleaned and disinfected before using it on other horses.
- Ensure separated horses cannot contact other horses on your property.
- Have your veterinarian examine your new horse to rule out any infectious disease. This may include:
 - Equine Infectious Anemia (EIA) test;
 - Other lab testing;
 - Vaccination program; and
 - Physical exam.

The separated horse should be the last horse worked on each day. If that is not possible, ensure you have a change of boots and coveralls that are only worn when working with the new horse.

Fever is a common symptom of a disease. Take daily rectal temperatures to monitor any presence of fever (Temperature of above 102 F (38.8 C).

Contact your veterinarian if the horse:

- Stops eating and/or drinking;
- Is lethargic; or
- Has nasal discharge.



Insect Control

Insects (flies, lice, mosquitoes and ticks) are potential carriers of human and animal diseases. Bites from insects can be painful and irritating to humans and horses. Destroying insect breeding areas is an effective method for reducing insect populations near your horses.

Flies

- Cleaning stables and corrals weekly will help reduce fly lifecycles.
- Manure is a preferred material for breeding, therefore proper disposal is crucial.
- Wet manure is ideal for fly breeding, therefore ensure good drainage to allow it to dry.
- Disrupting the breeding cycle is the most effective way of reducing fly populations.
- Insecticides are helpful to reduce fly numbers.
- Sprays and wipes, roll-ons and towels, spot-ons, injectables, and dusts are available to use on horses.
- Baits, sprays, fogs, mists and larvicides can be useful supplements to fly control.

Discuss insecticide use with your veterinarian to find the best products for your needs.

Mosquitos

- Any type of standing water can be breeding grounds for mosquitoes.
- Regularly empty and clean items that collect water.
- Flush water troughs and bowls once a week and ensure water is not collecting around them.
- Remove any tall vegetation around barns and corrals.

Rodent Control

Mice and rats pose problems for horse owners for several reasons. They:

- Carry diseases that affect horses and humans, e.g. hantavirus.
- Consume and contaminate feed.
- Damage buildings and pose a fire risk due to gnawing on wires.

Here are some tips for controlling rodents:

- Remove any food source(s).
 - Ensure feed is not easily accessible and sweep up spilled feed immediately.
- Prevent entry into buildings.
 - Ensure openings and cracks are filled.
 - Mice can get into any opening larger than 0.6 cm (0.25") and rats 1 cm (0.5").
 - Do not leave barn doors open longer than needed.
- Eliminate any nest sites.
- Remove tall vegetation around barns and corrals.

Rodent Control Methods

Trapping

- Preferred because the risk of unintentional ingestion of poison by animals or children can occur with rodenticide use.

Poisons

- If poisons are used, ensure other animals cannot access them.
- Poisoned rodent carcasses can be a threat to domestic and wild animals—be sure to properly dispose of them (preferably by incineration).

Animal Control

- Food and water left for dogs and cats can sometimes attract rodents to your site.
- Dogs and cats cannot effectively control rodents when populations multiply.

Grouping Horses and Disease Monitoring

Grouping Horses

Monitor animals in order to group them based on their health status. This should be done by:

- Performing a physical exam;
- Screening and/or testing for disease; and
- Assessing disease history and vaccination status.

Once horses are in their separate groups, facility hygiene and personnel hygiene is critical to prevent horses and their manure from contact with other groups.

Disease Monitoring

- Routine monitoring for disease through observation for clinical signs is important.
- Separate and appropriately treat affected horses if disease occurs.
- Conduct regular examinations of the horse herd.
- Monitor rectal temperatures for indications of fever.
- Keep records on horse health.
- Recognize a problem when it exists.
- Communicate disease control strategies to staff/personnel and boarders.
- Use signage to indicate a horse that is separated, for limited access and other precautions.
- Contact appropriate authorities if reportable or other diseases are suspected.

Utilizing Premises Identification

The Saskatchewan Premises Identification (PID) database links poultry and livestock, including horses, to geographical locations. It's an integral part of Canada's traceability system, and is intended to help the Government of Saskatchewan and industry plan for and respond to animal health issues, natural disasters and other emergencies.

Anyone who owns, leases or rents property where horses are kept should register for the database. Registration is easy and can be completed online by visiting premisesid.saskatchewan.ca.

In the event of a disease outbreak or other emergency, the Government of Saskatchewan will use information held in the database to contact horse owners who may be affected.



Indicators of an Emergency Disease Situation

Call your veterinarian immediately if:

- There is a high number of sick horses;
- There are dead horses;
- You notice severe and/or bloody diarrhea;
- You notice nervousness or behaviour changes;
- You notice a severe hacking cough;
- Horses are lethargic, listless or depressed; or
- There is a rapid spread of signs/symptoms throughout a stable.



Disease Response Plan

Source: Canadian Food Inspection Agency. *See Something? Say Something.*

Date accessed: February 13, 2012.

<http://www.inspection.gc.ca/english/animal/biosec/repe.shtml>

Rapidly responding to disease events can reduce the impact on your farm and on surrounding farms. It is always better to be prepared.

Owners can also help prevent disease on their farms by working with a veterinarian to have a disease response plan in place for suspected cases of contagious or reportable diseases. A disease response plan should include:

- Triggers for the response plan (e.g., lethargy during riding, numerous animals showing signs of disease, reduced feed and/or water intake, a lack of response to routine treatments, and unanticipated mortality rates).
- Details of whom to contact, such as your veterinarian or local CFIA office.
- Plans for limiting movements of animals, people or vehicles to and from the premises.
- Other measures determined by you and your veterinarian.

If you see unusual rates of disease or death:

- Contact your veterinarian.
- Separate sick animals.
- Ensure animals are healthy before re-introducing them to the rest of the farm population.
- Post signs advising people of the illness.
- Wash hands frequently to disinfect properly.
- Separate water and feed sources between healthy and sick animals.
- Voluntarily stop horse movement—do not travel to equine events when you have sick horses at home.
- Avoid sharing equipment between healthy and sick animals. If equipment must be shared, clean and disinfect between each use.
- Strictly control visitor access to your property.

When handling sick animals:

- Wash your hands and clean and disinfect your boots before and after handling the sick animals.
- Use disposable gloves. Ensure you use new gloves and wash your hands between handling sick horses.
- Specify designated clothing and footwear to only use with sick animals.
- Restrict other animals' access to carcasses. Discuss with your veterinarian how to remove and dispose of carcasses in your area.
- If possible, dedicate workers to exclusively care for and handle sick animals. If this is not possible, always handle healthy animals first.

Notification Protocol for a Non-reportable Disease

Suspected	<ul style="list-style-type: none"> • Suspected case is identified by the attending veterinarian
Confirmed	<ul style="list-style-type: none"> • Diagnosis is made by a testing protocol that is consistent with recognized standards as dictated for that particular disease • Case is “confirmed”
Notify	<ul style="list-style-type: none"> • Notification of case (by attending veterinarian) is made to the provincial veterinarian (Saskatchewan Ministry of Agriculture), who in turn notifies provincial health and welfare officers, farm animal councils and the Saskatchewan Horse Federation
Notify	<ul style="list-style-type: none"> • Notification of case (by the provincial veterinarian) is made to the office of the national veterinarian, who in turn notifies national health and welfare officials, the national minister of agriculture and Equine Canada
Liason	<ul style="list-style-type: none"> • Provincial and national bodies co-ordinate efforts to create a timely information package that is accurate, factual and consistent • Information package is made available to all reporting bodies • A veterinarian is designated as the official spokesperson
Announce	<ul style="list-style-type: none"> • Inform the stakeholders, media and public of the presence of the disease • Include in this announcement an educational component explaining what the disease is and how to minimize its spread

Reportable diseases* must be reported to CFIA under the federal *Health of Animals Act*.

*See Glossary, page 3

Healthy Horses: 21 Guidelines

Source: Government of South Australia. Horse biosecurity: The glovebox guide.

Date Accessed: Feb. 15, 2010

http://www.pir.sa.gov.au/data/assets/pdf_file/0018/124326/HorseBiosecurity_GloveboxGuide_09.pdf

1. Train staff, volunteers and club members in disease prevention, identification and hygiene procedures.
2. Get an annual Equine Infectious Anemia test (Coggin's test).
3. Control insects with proper manure management.
4. Control rodents and prevent rodents from accessing feed.
5. Administer and record vaccinations.
6. Use fresh needles and syringes for every horse—every time.
7. Verify proof of vaccine for new arrivals.
8. Separate new arrivals.
9. Separate horses at first sign of sickness.
10. Handle, feed, water and treat sick horses last or use separate staff.
11. Do not move sick horses unless your veterinarian allows it.
12. Avoid communal water troughs when away from home.
13. Contact a veterinarian if unusual sickness or unexplained death occurs.
14. Take rectal temperatures when possible. A high temperature (above 102 F or 38.8 C) suggests a disease may be present.
15. Group horses by use and ages, in the smallest groups possible.
16. Keep records of movements of horses and semen so contacts can be traced in the event of a disease outbreak.
17. Regularly clean and disinfect stables, equipment and transport vehicles.
18. Clean and disinfect equipment between uses on different horses.
19. Wash your hands between different groups of horses.
20. Keep boundary fences in good condition.
21. Avoid locating horse properties in swampy areas.



Emergency Contacts

Canadian Food Inspection Agency (CFIA) toll-free number	1-877-814-2342
Saskatchewan Horse Federation	1-306-780-9244
Saskatchewan Ministry of Agriculture - Livestock Branch	1-306-787-2150
Saskatchewan Ministry of Agriculture - Farm Stress Line	1-800-667-4442
Your veterinarian Name: _____	Phone number: _____
Your Rural Municipality Name: _____	Phone number: _____
Owner/Employees/Volunteers (Please list all names and phone numbers that apply)	
Clear directions to the farm/stable (test the directions for clarity)	

References

- Alberta Veterinary Medical Association and Alberta Equestrian Federation. 2011. Equine biosecurity principles and best practices. Date accessed February 13, 2012.
<https://www.abvma.ca/Biosecurity/documents/EquineBiosecurityPrinciplesandBestPracticesguide.pdf>
- Canadian Food Inspection Agency. 2016. National Farm and Facility Level Biosecurity Standard for the Equine Sector. Date accessed June 27, 2016.
<http://www.inspection.gc.ca/animals/terrestrial-animals/biosecurity/standards-and-principles/equine-sector/eng/1460662612042/1460662650577>
- Canadian Food Inspection Agency. 2009. See Something? Say Something. Date accessed February 13, 2012.
<http://www.inspection.gc.ca/english/animal/biosec/repe.shtml>
- Canadian Swine Health Board. 2010. National swine farm-level biosecurity standard. Date accessed February 12, 2012.
http://www.cpc-ccp.com/biosecurity/publications/en/National_Swine_Farm-Level_Biosecurity_Standard.pdf
- Dvorak, G. 2008. Disinfection 101. Date accessed February 12, 2012.
<http://www.cfsph.iastate.edu/Disinfection/Assets/Disinfection101.pdf>
- Government of South Australia. 2009. Horse biosecurity: The glovebox guide. Date accessed February 12, 2012.
http://www.pir.sa.gov.au/_data/assets/pdf_file/0018/124326/HorseBiosecurity_GloveboxGuide_09.pdf
- Rietveld, G. and Wright, B. 2007. Rodent control in horse stables. Date accessed February 12, 2012.
<http://www.omafra.gov.on.ca/english/livestock/horses/facts/07-011.htm>
- Townsend, L. 2011. Insect control for horses, horse barns and stables. Date accessed February 12, 2012.
<http://www.ca.uky.edu/entomology/entfacts/entfactpdf/ef513.pdf>
- Traub-Dargatz, J. L., Dargatz, D. A., Morley, P. S., Dwyer, R. and Landry, K. 2001. Infection control strategies for horses in the new millennium. AAEP proceedings. 47: 36-40.

For more information, please contact:

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