

## Horse Stalls

Our topics for this week are:

- **Natural behaviors of horses vs. stall confinement**
- **Potential problems of stall confinement**
- **Cast in stall rescue**

### Need and Purpose

Horses have served humans as beasts of burden for more than 6,000 years, beginning on the Eurasian Steppes, vast grasslands that extend from Ukraine to southern Siberia and Mongolia. They crave the opportunity to socialize with other horses, to feel the security of other horses being present, and to graze 12 to 17 hours per day. Each of these are essential to horse mental health and each affects their ability to be handled by humans.

Keeping a horse in a stall is for the usually for the convenience of humans, and is generally detrimental to horses. Appropriate uses for stalls are to separate horses at feeding times, to limit movement and facilitate treatment in times of a horse being ill or injured, or as shelter during hail and lightning or extremes in temperature, Stalls are poor means for long term confinement.

Horses are herd animals that need more fresh air and exercise than any other domestic animal. When confined to a stall environment, they tend to develop undesirable behaviors (weaving and cribbing) and are at more risk of respiratory, intestinal (impaction colics), and musculoskeletal problems. Unfortunately, the reasons most horses are stalled because of anthromorphism (treating horses as if they were human), lack of appropriate exercise space, to protect the hair coat from bleaching by sunlight, or the mane and tail from traumatic hair loss from horse bites and vegetation, i.e., burrs and branches. Stalls are valuable to have for short-term use. They are a poor means of primary containment for horses.

### Proper Construction of Box Stalls

For the average-sized adult horse, the dimensions of a stall should be at least 10 X 10 feet, but 12 X 12 feet is preferable. Being square, they are generally referred to as box stalls. The ceiling should be a minimum of 9 ft to prevent head injuries, if rearing occurs. Overhead lights should be at least 9 ft high and covered by wire cage or jelly jar (thick glass) cover. Preferably, light covers should be sealed against bugs, dust, and water as fire prevention. Stall doors should be at least 4 ft wide and 7 ft tall. Latches on doors should be able to be opened with one hand, but unable to be opened by horses. There should be no clutter or protruding structures into an aisle or any other area that horses will be handled or restrained. No halter hooks should be placed on

stalls that could scrape, cut, or otherwise injure horses. Stall doors should slide sideways flush with the wall or swing open to the outside for handler safety. Stall doors should never swing into a stall. Horses like to chew wood edges. Wood edges that might be chewed should be protected with metal flashing or corner protection metal. Alleyways inside barns should be at least 10 ft wide.

If a horse can kick through a wall, the results can be catastrophic. Horse stalls and 3-sided sheds must be lined with kickboards at least 4 ft high of rough sawn oak, two layers of 3/4 inch plywood, or 3/4 inch plywood covered by rubber mats.

Healthy horses are very athletic, but their powerful, quick movements can be extremely dangerous to them and to their handlers if the footing is slick. Flooring should be nonslip such as textured concrete, rubber pavers, or rubber matting.

Horses urinate about 2-3 gallons of urine per day. Hazardous levels of ammonia can be quickly produced that is injurious to horses and handlers' eyes and lungs. Horses expire about two gallons of water into the air each day. Condensation can be a problem without adequate ventilation.

Inhalation of dust from hay and bedding can also be a problem in stabled horses. Stables should prevent drafts but allow temperatures near that of the outdoors with an abundance of fresh air exchange. Horses prefer temperatures around 40°F. Heating of stalls is usually unnecessary and can be detrimental to horse health. Barns should have at least 8 to 10 air exchanges per hour (all air completely replaced every 6 to 7 minutes). Air movement required is about 2 mph, equal to the sensation of a faint breeze. Removal of wet bedding should be done as often as possible and at least twice per day.

If shavings are used, dust free, kiln-dried pine shavings should be used for bedding. Oak has tannic acid in it that injures hooves. Walnut has oils that can cause laminitis (inflammation and separation of a layer in the hoof). However, sawdust will break down and become dust that can irritate the respiratory system, eyes, and frog of the hoof if adequate stall cleaning and ventilation is not provided. If straw is used, wheat straw preferred for bedding. It drains well and does not dry hooves.

To promote good ventilation, solid stall walls should be avoided. Mesh walls are best for stalls with foals. Fans above stalls which blow existing stall air around the stall do not provide good ventilation if used alone. Effective ventilation pulls air through the stall. Dutch doors allow horses to be confined indoors with their head outdoors for fresh air and socialization, but horses may like them so much that constant leaning on the lower door can weaken the hinges and reinforcing boards on brackets are needed. Additional means of providing better ventilation in barns include pot vents, ridge vents, and cupolas.

Grills should be used between stalls or Dutch doors used to exercise pens to allow socialization among horses. This is more important for young or insecure horses. Openings between bars or grills should be less than 3 inches. Larger spaces will allow a jaw or hoof to be caught.

## **Tie Stalls**

As long as other horses are present, tie (also called straight or standing) stalls can be used for short term confinement. These are slightly wider than the width of a horse (at least 4 ft), long enough for a manger at the tie ring end (at least 8 ft), and separated by narrow partitions. As with box stalls, kick boards should be present and 4 ft tall. Tie stalls are efficient in space and cleaning time. These work well for temporarily containing horses that are turned out most days. Only gentle horses should be tied in tie stalls since the handler must ask the horse to move over in order to slip past the horse after tying or before untying the horse in the tie stall.

## **Companionship**

It is stressful for a horse to be kept alone. Although almost any other animal is beneficial for companionship, a pony, miniature donkey, or goats are usually the best surrogate herd members for a single horse. If the horse is kept in stall, the companion should be in an adjacent stall with bars between the stalls for the horse to be able to see the companion.

## **Monitor the Use of Nails**

Whenever nails are used for construction or repair, a careful sweep of a magnet on a long handle should be done to retrieve any dropped nails. This is particularly important if using a contractor who is unfamiliar with horses because they tend to be more careless about leaving nails. They do not know that nails are common causes of hoof infections and there is a high risk of tetanus in horses.

## **Handling Within a Stall**

The horse's attitude should first be assessed. If the horse has its rump directed toward the stall door, the handler should not enter until he can get the horse to turn around. A handler can cluck, tap on walls escalating to loud banging on a wall until the horse faces the handler and then the stimulus to face the handler should stop instantly. This may need to be repeated several times to reposition the horse in the stall.

Most horse stalls only have one exit, the stall door. Therefore, the stall door must always be unlatched when inside a stall and a horse should never be allowed to get between the handler and the stall door.

After the horse is facing the handler, the handler diagonally approaches the left shoulder, puts the lead rope around the horse's neck, and places the halter using the bear hug technique. All people should use good manners in a stable by avoiding loud noises or sudden quiet appearances that could startle a horse in a stall with another person trying to handle it.

## **Cast in a Stall**

Some horses, particularly younger ones, will sometimes attempt to roll in their stall. When they do, there is a risk of being cast in a stall, i.e., rolling 3/4 of the way over next to a wall and becoming entrapped from being tipped on their backs with their legs folded against a wall. In

this position, they cannot push themselves back or away from the wall, and they will panic, thrashing with their legs and head. Remaining in this position can be deadly for the horse.

To rescue a horse that is cast in a stall, the handler should call for assistance while also appearing calm to the horse. The handler should talk to the horse to be sure the horse knows of the handler's presence. As soon as an assistant is present, the handler should position himself near the lower part of the horse's neck while not getting near the horse's legs or trying to step or reach over the horse. The safest method of moving the horse is to place a rope loop around its neck, work the loop toward the upper part of the horse's neck, and then pull the neck away from the wall and toward the middle of the stall until the horse can get its legs underneath its body. In the absence of a rope, the mane in the mid-neck area can be pulled to move the horse. Pulling the horse by a halter and lead rope to reposition a cast horse could injure its neck. Care must be taken by the handler not to get stepped on or pinned against the wall by the horse as it attempts to stand. The horse should be observed for an hour after standing for signs of colic that could result from being cast or swellings in the legs from injuries that may have occurred.

Alternative methods that involve pulling on the horse's legs and rolling the horse toward the handler are not recommended.

If you have comments or you're interested in particular animal handling subjects contact us at [CBC@BetterAnimalHandling.com](mailto:CBC@BetterAnimalHandling.com)

Now let's recap the key points to remember from today's episode:

- 1. Not all horses need to be kept in a stall and all horses should not be stabled all the time.**
- 2. A handler in a stall should never allow a horse to be between him and the stall door.**
- 3. Being cast in a stall can be lethal for a horse.**

More information on animal handling can be found in my book, *Animal Handling and Physical Restraint*, published by CRC Press and available on Amazon and from many other fine book supply sources. My new spiral-bound handbook, *Concise Textbook of Small Animal Handling* was recently published and can be found on Amazon as well as other book supply sources.

Additional information is provided at: [www.betteranimalhandling.com](http://www.betteranimalhandling.com) . This website has more than 100 past podcasts with notes on handling of dogs, cats, other small mammals, birds, reptiles, horses, cattle, small ruminants, swine, and poultry.

Don't forget, serious injury or death can result from handling and restraining some animals. Safe and effective handling and restraint requires experience and continual practice. Acquisition of the needed skills should be under the supervision of an experienced animal handler.