

## **Colic Risk Factors**

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Colic is considered by most horse owners and veterinarians to be one of the most important medical problems of horses. For that reason, how to prevent or decrease the risk of colic has been an important research topic. Colic risk factors, or things that increase the risk of a given horse to colic, are numerous. Some of the risk factors are things we can change or alter, and some are not.

### **Breed, Sex, Use**

This is one area that we can't do much to change in most cases. Arabians are overrepresented overall in colic cases. Miniature horses have proportionally more small colon impactions. Standardbreds and Tennessee Walkers have more scrotal hernias. Post-foaling broodmares are more susceptible to colon torsion than other horses. Performance or show horses are at an increased risk for all types of colic because of their strenuous schedule and frequent transport.

### **Medical history**

A history of previous colic is a large risk factor for colic, *i.e.*, if a horse has colicked frequently in the past, it is likely to do so in the future, unless significant management changes are made. A horse that undergoes colic surgery is an increased risk for colic for the remainder of its life. In fact, for horses that require colic surgery multiple times, the risk of reoccurrence goes up exponentially.

Vaccination within the last day or two does slightly boost the chances that a colic will occur. This is probably because vaccination can cause horses to run a small fever or have a sore neck. Both of these events can obviously change a horse's appetite and feeding patterns, which is probably how it results in the increased risk.

### **Farm Management Factors**

Diet, as we all know, has an important effect on colic. Any abrupt change in diet can precipitate a colic. Horses like a routine—don't change feeding times if you can help it, and avoid changing what the horse is eating, unless changes are made gradually.

Feeding large amounts of grain, even routinely, increases the chance of colic. The type of roughage fed can increase or decrease risk of colic. Very stemmy hay, like oat hay or coastal Bermuda grass hay, is more likely to cause impactions. Poor quality feed, which may include very dusty or moldy feed, is also a bad idea.

Constant access to water is key in prevention. Horses kept in pastures where water is readily available have fewer colics than those kept where they have to go back to the barn for water. High densities of horses, as in a boarding stable or crowded dry lot, leads to a greater risk of colic.

Spending more time on pasture or turned out vs. being kept in a stall and fed twice per day, is good for decreasing colic, but if the pasture is lush and horses have 24 hour access, it conversely increases risk. Changes in activity level are associated with colic, as are strenuous athletic activities.

In areas with sandy soil, make every attempt to decrease how much sand your horse takes in. Feed out of large troughs rather than on the ground, and consider putting mats around the feeder, so what hay does fall out isn't falling into sandy soil. Another option is putting down

several inches of hog fuel or pole peelings in drylots. This covers the sand and makes drylots less dusty.

### **Preventative Medicine Factors**

Routine dental care can decrease the risk of impactions, which result from poorly chewed roughage. Most horses should be checked at 12 month intervals; older horses may need even more frequent dental work.

Good parasite control programs will also decrease colic risk. In fact, because of this significant effect, Pfizer, the manufacturer of daily dewormer Strongid C, offers a colic insurance program if your horse is enrolled in its Preventicare Program. They have found that horses on daily dewormer have a much lower risk of colic, and thus will back this claim up by offering the colic insurance program.

Recent purge deworming can slightly increase the risk of colic if a horse has not previously been on a good deworming program. This effect is particularly strong in foals and weanlings who have a heavy worm burden and then are dewormed. The large roundworms die off en masse, and can actually cause a potentially fatal worm impaction within the intestines.

### **Weather**

The data varies on whether or not weather has an effect on colic. However, it is likely that large weather changes, as in hot weather to cold or vice versa, can alter eating and drinking patterns, and result in colic. We certainly see this effect in our practice. To decrease the effect of weather, be sure tanks and troughs have tank heaters when the weather starts to turn chilly. Horses will drink less water if the water temperature is very cold.

### **Other Factors**

Recent transportation is another factor that will increase your risk. Try to keep distances traveled per day relatively short, and always provide your horse's normal feed and water at frequent intervals. Bring water from home to avoid having finicky horses go off water because it tastes different. You can also get your horses used to drinking water flavored slightly with applejuice, Kool Aid, or any other flavored additive, and then use it to mask the taste of the "new" water during your trip.