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Colic in your horse

What is colic?

Colic indicates a painful problem in your horse's abdomen. Because colic is often unpredictable and frequently unpreventable, it's a common concern for horse owners. Horses are naturally prone to colic. Fortunately, over 80 percent of colic types respond well to treatment on the farm.

Signs of colic in your horse

- Frequently looking at their side.
- Biting or kicking their flank or belly.
- Lying down and/or rolling.
- Little or no passing of manure.
- Fecal balls smaller than usual.
- Passing dry or mucus (slime)-covered manure.
- Poor eating behavior, may not eat all their grain or hay.
- Change in drinking behavior.
- Heart rate over 45 to 50 beats per minute.
- Tacky gums.
- Long capillary refill time.
- Off-colored mucous membranes.

Caring for the colicky horse

Because colic is often unpredictable and frequently unpreventable, it's a common concern for horse owners.



A colicky horse will commonly bite at its side and roll.

Preventing colic

Each colic is unique. You should balance the factors involved in your horse's care, feeding and activity. Work with your veterinarian and barn manager (if boarding) to determine the best plan for your horse. Revisit those plans annually to alter your practices due changes in activity, feeding, illness and other factors.

Horses are prone to colic and many types of colic aren't preventable. But you can take some simple steps to ensure your horse is at the lowest possible risk for colic.

Above all, be a proactive owner. If your horse is at unnecessary risk for colic, try to change the situation. These measures should reduce colic risk, but don't guarantee to eliminate it.

Always have fresh, clean water

Research shows horses without water for one to two hours had increased risk of colic. This risk increased 10 times in horses over six years old. Horses prefer to drink out of buckets compared to automatic waterers. This preference is likely due to the ability to drink large amounts more quickly.

In the winter, always ensure automatic waterers and other water sources have free flowing water. Horses will drink more in colder weather if the water is warm. Adding hot water to buckets, twice daily, works as well as continuous warm water. [Learn more about watering horses in the winter.](#)

When traveling on longer trips, stop to let the horses drink. A veterinarian can also give them mineral oil before starting the trip.

Allow pasture turnout

Horses with access to two to three different pastures in the previous month had lower colic risk than horses without pasture access. Research shows feeding from round bales increases the risk of colic. This increase may relate to a decrease in round bale quality due to weather exposure and storage outside, the type of hay, and/or freely eating certain types of hay. [More information on pastures and hay.](#)

Avoid feeding hay on the ground in sandy areas

Horses may eat enough sand to bother their gut or affect motility. To reduce the amount of sand eaten:

- Use feed tubs or hay racks
- Place rubber mats or catch pans underneath racks so horses can eat scraps without sand

Feed grain and pelleted feeds only when you need to

For every one-pound increase in whole grain or corn fed, colic risk increases 70 percent. Compared to horses fed 100 percent hay:

- Pelleted feeds led to a 6 to 9.5 times increased colic risk
- Sweet feeds led to a 4 to 7.5 times increased colic risk

More information on basic nutrition is available in [ten things everyone should know about nutrition for the mature horse.](#)

Watch horses carefully for colic following changes in exercise, stabling, or diet

Colic risk increases within two weeks following changes. Farms making more than four feed changes in a year have three times the incidence of colic than farms with less than four feed changes. Even changing the batch of hay can increase the risk of colic. Make only gradual changes in diet, housing and exercise whenever possible. To make changes in feed, mix one-fourth new with three-fourths old for about seven days, then increase the percent of new feed gradually.

Float your horse's teeth every six months

Routine floating ensures your horse chews its feedstuff properly and thoroughly. Floating is filing down the sharp enamel points on the buccal and lingual. The buccal is the cheek surface of the upper teeth. The lingual is the tongue surface of the lower teeth. Learn more about [caring for your horse's teeth.](#)

Control parasites

Horses on a daily or regular worming program are less likely to colic. [Learn more about horse deworming and parasites.](#)

Closely monitor and care for your horse as much as possible yourself

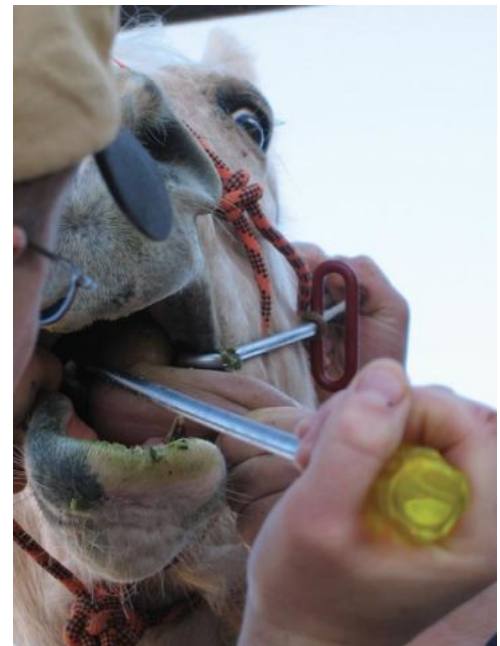
Horses are two to three times less likely to colic when receiving care from their owner compared to a stable manager or trainer. You will pick up on subtle signs or changes in habit more quickly if you're familiar with your horse's "normal." [Learn more about how to know what's normal for your horse.](#)

Watch broodmares and horses that have colicked before

You should closely watch broodmares in the two months following foaling. Also watch horses that have been ill or have colicked before. These horses have a higher risk of colic, and early treatment is important.

Discuss your use of bute with a veterinarian

Treating with bute (phenylbutazone) can make horses prone to some types of colic and can hide early signs of colic. Discuss the correct levels of bute with your veterinarian and avoid using large amounts or long-term use.



Floating a horse's teeth.

Types of colic

Impaction colic

Impactions occur when feed material builds up in a part of the gut (usually the colon) and the horse can't easily remove it. Pain occurs as the gut wall stretches and strongly contracts trying to push the feed through the colon.

Causes of impaction include the following;

- Coarse feed (poorly chewed)
- Dry feed; poor water intake; dehydration
- Poor motility
- A block in the digestive tract

Because of the folds and turns of the colon, there are several narrow sites prone to impactions. Horses with impactions are often mildly painful and off feed. They may not get much worse for several days.

Gas colic

Gas colic may occur when the microbes in the colon produce excessive gas, possibly due to dietary changes or highly fermented feeds. The gas stretches the gut wall causing mild to moderate pain. Most gas colics clear up with little treatment. But gas colics may cause the colon to move out of its normal place.

Colon shift

The horse's long colon sometimes moves out of position. It may flip forward, hook over the kidney, or even twist like a phone cord. This shift often leads to impactions and gas build up and cause more severe or prolonged pain. A tight colon twist can damage or kill the colon by stopping blood flow and oxygen availability. Large colon twists cause severe pain and illness as toxins enter the gut wall. This type of colic requires emergency surgery.

Poor blood supply to the gut

Older horses may get fatty tumors that can wrap around the small intestine and reduce blood flow. Parasites may move through the blood vessels and cause direct damage to the vessels and indirect damage to the gut.

Poor motility

Colic may occur due to poor motility. In most cases, the cause of poor motility isn't clear. Poor motility may relate to infections in the gut or in the abdominal cavity. These horses often become sick due to toxins coming from the gut.

How does poor motility cause problems?

If the process responsible for moving feed in the gut becomes disrupted, food may stop moving even if the path is clear. The gut will add fluid to the small intestine to try to move the food along. But this fluid can't move either. If the gut continues to add fluid, the horse may become dehydrated and shocky.

Overtime, fluid will back up into the stomach. Since horses can't throw up, the fluid stretches the stomach and causes pain. Without relief, the stomach may burst. If poor motility occurs in the colon, gas will build up and lead to gas colic and maybe displacement.

What to do if your horse colics

Walking can provide pain relief and encourage motility if your horse has cramps or is early on in colic. Walking can also help prevent your horse from rolling.

Rolling can injure you or your horse. If your horse wants to roll frequently, it's better to be in an open area. A horse may become cast rolling in a stall or other small area.

If your horse is uncontrollably thrashing, stay out of the way. It's unclear whether walking a horse during colic reduces the severity of colic.

Some types of colic are linked to fever. Horses with a fever are okay to walk while waiting for the veterinarian.

Diseases such as pleuritis, tying up and laminitis may present signs similar to colic. Walking horses with these diseases will only make the disease worse.

- Pleuritis is swelling of the chest cavity, which you can feel by pressing the ribs.
- Tying up is when the muscles look swollen or feel firm due to muscle trauma.
- Laminitis or founder causes heat and pain in the foot.

In general, walk the horse if it makes them feel better. Stop walking if the horse seems worse or if you detect signs of rib pain, foot pain, or muscle pain. Never walk your horse or yourself to exhaustion.

When to call the veterinarian

Mild, recently onset colic may improve by walking the horse, without a veterinarian. You should call a veterinarian if:

- You haven't observed the horse in several hours and you notice signs of colic
- You don't know the length of time the horse has been showing signs of colic
- The colic is severe and doesn't improve with walking
- The horse's vital signs are not normal, you can review normal vitals for horses in "Basic first aid for your horse."

Treating colic with the help of a veterinarian

While waiting for your veterinarian

- Remove your horse's feed to prevent further problems.
- If possible, take your horse's vitals and share this information with your veterinarian. Your veterinarian may be able to determine how severe the colic is before arriving.
- If safe, walk your horse to help motility and prevent rolling. Only walk if it makes your horse feel better, and never walk until you or your horse tire.

Colic exams

Routine physical exam

When your veterinarian arrives she/he will try to determine the severity and general type of colic. It's uncommon to pinpoint the exact cause of colic. But your veterinarian may determine if it's more likely to be an impaction or gas colic, or if it may involve damaged gut or toxemia.

Your veterinarian will assess your horse's heart status and identify signs of shock or toxemia. If your horse is too uncomfortable, your veterinarian may give a short acting analgesic/tranquilizer to control the horse's pain.

Nasogastric tube

Depending on your case, your veterinarian may then pass a nasogastric tube. This narrow, long tube runs from the nostrils to the stomach. Your veterinarian uses a nasogastric tube to make sure fluid hasn't built-up in the stomach. This process can be a life-saving measure by preventing the stomach from bursting.

If there's minimal fluid, your veterinarian can use the tube to give mineral oil, water, and/or other laxatives. Mineral oil and laxatives may relieve an impaction, and water can rehydrate your horse. Both mineral oil and water can stimulate gut motility.

Rectal exam

A rectal exam allows your veterinarian to palpate the back half of the gut. Sometimes your veterinarian can feel an impaction. A rectal exam is always somewhat risky due to the potential of tearing the rectum. If the rectum tears, feces can enter the abdominal cavity and cause severe problems. A veterinarian should use a sedative or twitch for this exam. Not every colic case needs a rectal exam.

Belly tap

If your veterinarian is concerned about infection or damage in the gut, she/he may stick a needle in the gut and try to collect fluid for testing. The test results can help determine if the horse needs surgery. But a belly tap generally only occurs if there's a problem getting the horse to a referral institution or if the colic persists.

Other exams

If you take your horse to an equine hospital, a veterinarian may run blood work or perform tests such as ultrasound or radiographs.

Follow-up treatment

Your veterinarian will likely recommend that you don't feed your horse grain or hay until they pass manure and the colic resolves. Feed may add to an impaction. Grazing on a small amount of fresh grass may help stimulate motility. Your veterinarian may also have you walk your horse periodically to encourage motility.

Most cases will respond to this type of treatment within a few hours. Some horses may need additional fluids for rehydration or may need another exam. Your veterinarian may recommend a visit to a horse hospital equipped for abdominal surgery if the colic:

- Is more severe
- Requires intensive treatment
- Doesn't resolve with on-farm treatment

Visiting the hospital for colic

Veterinarians may repeat several tests to assess how your horse is responding to your veterinarian's treatment. Veterinarians will then decide if your horse needs surgery or continued treatment and close monitoring. Success rates after colic surgery differ with the type of gut involvement. In general, horses have better than a 75 percent long-term survival rate after colic surgery with early diagnosis and proper treatment.

Much to everyone's regret, sometimes the colic is so severe or the prognosis is so poor that a decision may be to euthanize the horse. Postmortem exams can be helpful in determining the cause of colic. These results can help prevent similar cases if the cause relates to the animal's care.

Problems following colic

Most colic episodes will fully resolve with no long-lasting problems. But, your horse may be at risk for other problems if:

- Toxins enter the abdominal cavity or bloodstream
- Your horse needs colic surgery

Toxin-caused problems

Certain bacteria carry toxins. Many of these bacteria are normally found in the gut. Large amounts of toxins can overwhelm your horse's normal defense. Toxins may also leak out if your horse's gut is damaged. Both of these cases can cause your horse to become ill. Signs your horse may be ill include:

- Shock (poor blood flow causing an elevated heart rate and cool limbs)
- Reddened or purplish gums
- Red lines around the teeth
- Depression

Toxins can cause laminitis, clotting problems, and damage to other organs (e.g. kidneys). The horse's immune system may weaken when the horse undergoes stress (e.g. from colic surgery). A weakened immune system can't keep natural organisms such as Salmonella under control. Thus, the horse develops diarrhea. This can be a severe problem of colic that is hard and expensive to treat. Many horses have diarrhea following intestinal upset and should be monitored for salmonella.

Post-surgery problems

After colic surgery, your horse will be watched for motility upset and infections of the incision site and abdominal cavity. Motility problems occurring after small intestinal surgery may greatly prolong nursing care and hospital stays.

Surgery also places horses at risk for developing intestinal adhesions. Adhesions may make the intestines stick to each other or the body wall in abnormal positions. Some adhesions can cause repeated fits of colic. In general, surgery for large colon problems has a greater success rate than surgery for small intestinal problems. Luckily the odds for both are improving all the time.



Horse colic surgery

About your horse's gut

Horses have an intestinal tract adapted to digest forages. The first part of the gut is similar to humans: food travels down the esophagus, mixes with stomach acid, and starts digestion and absorption the small intestine.

The remainder of the gut is long and specialized to process the cellulose in hays.

The cecum (resembles the appendix in people) and colon (large intestine) are large and take up most of the space in the abdomen. Because of its length, the colon folds on itself and loops around, somewhat like a folded extension cord or ribbon. The extra length gives the horse more time to remove nutrients from the hay. The colon is not well attached to the abdomen, which can allow it to become displaced.

These portions of the gut also contain microorganisms that help digest hay.

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