

## Equine News Q & A

### What is sand colic and how can I safeguard my horse from it?

The pain resulting from an accumulation of sand in the digestive tract that prevents normal passage of ingesta is called sand colic. As in other types of colic, the first sign of this ailment is usually gastrointestinal distress and inappetence. Other signs include fever, depression, frequent lying down, pawing, rolling, and possibly thrashing. One sign that often forewarns of sand colic is chronic diarrhea that usually progresses in severity over several days or weeks.

Sand gains entrance into the gastrointestinal system inadvertently when horses overgraze sandy-soil pastures or are fed from the ground. Horses that are chronically underfed will likely procure more sand from the environment because they will scavenge for every stray stem of forage or kernel of grain. Because of the weight of sand, it does not advance normally through the colon or cecum of the large intestine and usually settles in the hindgut. Veterinarians can often determine if sand is present in the large intestine through ultrasound, radiography, stool samples, or occasionally abdominocentesis.

The key to preventing sand colic is astute management. Of foremost importance is where a horse is fed. Feeding systems designed specifically to reduce sand ingestion should be engineered. Instead of feeding horses off the stall floor, for instance, place large rubber mats beneath a manger or hanging haynet. The horse will consume the majority of the hay allowance from the haynet. Should he decide to delve into the fallen stems and leaves, he will be plucking them from a sand-free surface. In pasture situations, hay feeders can be secured on rubber mats or concrete or asphalt pads. Textured feed and pellets should also be offered in an appropriate feeder, ideally one large enough to catch any grain that falls from the mouth. As with the hay feeders, these tubs or containers should be placed on a hard surface that is cleaned regularly.

In terms of a supplement that may rid the gastrointestinal tract of sand, there is only one that may be of benefit. Husks of the minute psyllium seed are often fed as a sand-colic preventative. Such products come as pellets, powders, or granules and are top-dressed to the feed. Psyllium is thought to improve intestinal motility and remove sand by a process known as agglutination, which causes sand granules to bind to psyllium and move through the gut normally.

Occasional feeding of psyllium is recommended more often by veterinarians than daily feeding. Dosing once a week or for several consecutive days a month is thought to be more advantageous because the gastrointestinal tract will not have time to become accustomed to psyllium, thus reducing its effectiveness in clearing sand. Daily psyllium

intake may also prevent proper absorption of some nutrients from the intestinal mucosa.

The scientific community does not agree on the benefits of psyllium. Numerous studies conducted on psyllium-dosed horses have ended in mixed results; some researchers have found psyllium useful in clearing unwanted sand, while others have encountered only negligible results.



*Though more labor intensive, offering a full haynet will keep a horse from eating off the ground and therefore reduce his ingestion of sand.*

### On a recent horse-buying trip to Europe, I noticed that silage is frequently fed to horses. Is this the same feedstuff fed to cattle in the United States, and is it safe for horses? What's the difference between silage and haylage?

Silage is chopped forage that retains its succulence through anaerobic fermentation. Silage usually contains grain plants such as corn. Haylage is also a fermented forage but typically does not include grain plants; it's made entirely from grasses or legumes. In the United States, silage is more often fed to cattle than horses, as you have observed. Horses are fed hay in the United States because the weather is typically dry enough to allow for mass cultivation. In countries such as England or Netherlands, rainfall may preclude the production of hay, and alternative forages must be sought.

When preserved properly, silage is an acceptable feed for horses. Silage should be green or greenish-brown, be uniform in texture and moisture content, and have a pleasant smell. Due to the high moisture content, silage may be an excellent feed choice for horses with respiratory problems such as chronic obstructive pulmonary disease (heaves).

If the fermentation process goes amiss, however, mold and bacterial toxins may proliferate in silage. Moldy silage has been implicated in cases of colic and botulism. Therefore, horse owners must carefully weigh the benefits of feeding silage against the potentially fatal side effects of spoiled silage. Because of these risks and the abundance of hay available, silage is not commonly fed to horses in the United States. ☺☺