

Internal parasites are a primary cause of colic in horses and can cause or contribute to many respiratory, digestive, and performance problems. Though parasites are a constant concern for horse owners, the severity of the problem can be reduced by following a regular preventive deworming program formulated by your veterinarian.

Horses are affected by four common internal parasites — bots, strongyles, ascarids and pinworms. Large and small strongyles, ascarids and tapeworms present the greatest health risks.

STRONGYLES

Large Strongyles

Large strongyles are a group of internal parasites also known as bloodworms or redworms. Eggs in manure hatch into larvae that are consumed by the grazing horse. The larvae mature in the intestinal tract and burrow out into blood vessels where they migrate throughout various organs and eventually back to the intestine. The larvae can cause extensive damage to the lining of blood vessels.

Horses with large strongyle infestations may display weight loss, anemia, or colic. In extreme cases, the blood supply to the intestine may become completely blocked by the strongyles resulting in severe (and even fatal) colic. In heavily infested horses, blood vessels may become distended and may even rupture, leading to sudden death. Frequent deworming is recommended to reduce the risk of serious problems from infestation with large strongyles.

Small Strongyles

Small strongyles differ from large strongyles in several ways. First, small strongyles do not migrate through tissues as do large strongyles. Second, small strongyle larvae may become encysted. This means that they burrow into the intestinal wall and lay dormant waiting for the proper conditions to emerge. During this encysted period, unlike adult parasites, small strongyle larvae are not susceptible to most dewormers.

If large numbers of small strongyles emerge from the intestinal wall simultaneously, severe damage to the intestinal lining may result. Colic and diarrhea may be seen. Other signs of small strongyle infestation include loss of condition, weight loss, poor coat condition and slowed growth.

Diagnosis and Treatment

Veterinarians diagnose strongyle infestation from microscopic observation of eggs in the feces. Blood tests are often used to assess the seriousness of an infestation. Frequent deworming is recommended to reduce the risk of serious problems from these parasites. An appropriate prevention program should be discussed with your veterinarian.

ASCARIDS

Ascarids (large roundworms) affect young horses more often than mature horses. The 6-to12-inch long worms can number in the hundreds in the horse's small intestine and can adversely affect its nutrition. Colic, coughing and diarrhea are common clinical signs associated with ascarid infestation. In addition, ascarids may cause blockage of the intestine or migrate through the lungs causing pneumonia.

Foals acquire ascarid eggs from feces that other horses have passed. These eggs, swallowed in contaminated hay or water, hatch in the intestinal tract. The young worms burrow through the intestinal wall, taking about a week to make their way to the lungs. From there, the young worms travel up the trachea to the mouth to be swallowed a second time. They mature in the intestine in 2 to 3 months, and then lay eggs that are passed in the feces and the cycle is repeated. Female ascarids can lay up to 200,000 eggs per day.

Control of ascarids

To adequately control ascarids, foals should be first treated at 8 weeks of age and then every 6 to 8 weeks until they become 2-year-olds, or as recommended by your veterinarian. Colic sometimes results when young foals are dewormed for the first time.



PINWORMS

Though less dangerous than other internal parasites, pinworms are annoying to the horse because they cause severe anal itching. A characteristic of pinworm infestation is rubbing of the tail and the anal region causing broken tail hairs and bare patches around the tail.

Horses acquire the parasite by consuming contaminated water, grain, hay or grass. Young worms mature in the large intestine in 3 to 4 months, then crawl part way out of the anus to deposit their eggs on the adjacent surface. The eggs hatch outside of the horse's body and become infective in a few days, although they can survive unhatched for several months.

Pinworms can be treated successfully with the same drugs that are effective against strongyles and ascarids.

TAPEWORMS

Mites living in a horse pasture may consume tapeworm eggs from the feces of infested horses. Grazing horses may then swallow the mites and become infested with tapeworms. Tapeworm infestation in horses may lead to varying degrees of colic. Therefore, it is important to include treatment for tapeworms in your deworming plan. Because many deworming agents do not kill tapeworms, a specific product may need to be added to your deworming program. Consult your veterinarian for the most effective treatment plan for your horse.

BOTS

Bots are the larvae (immature flies) of the botfly. Since these flies are common in the horse's environment, it is likely that most horses will become infested.

Life cycle

During late summer and early fall, adult botflies lay eggs on the hair of horses, particularly around the chest, forelegs, throat and nose. Stimulated by the horse's licking, the larvae hatch and enter the horse's mouth, settling in the tissues of the gums, cheek and tongue. After a month, the larvae migrate and attach to the stomach lining causing irritation, interfering with digestion and obstructing the opening to the small intestine. After 8 to 10 months, bot larvae are passed in the feces and burrow into the ground, eventually maturing into adult flies and beginning the cycle again.

Treatment

Since it is likely a horse will become infested, treatment should be scheduled from the time botflies are seen in the environment or nits are observed on the horse until a month after the first hard frost. Your veterinarian will recommend the best products and frequency of treatment against bots as part of an overall parasite control program.

A FINAL NOTE ON PARASITE PREVENTION

Environmental measures that break the life cycle of internal parasites are as important as administering dewormers. Follow good management practices to control the frequency and spread of internal parasites.

- Remove manure daily from stalls and weekly from pastures.
- Be sure pastures and paddocks are well-drained and not overpopulated.
- Compost manure rather than spreading it on fields where horses graze.
- Use a feeder for hay and grain and avoid ground feeding.
- Initiate effective fly control programs.
- Routinely examine horses for telltale signs of infestation.
- Establish a parasite prevention and monitoring program with your veterinarian.



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What you should know about Internal Parasites in HORSES



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