



The Three “Rights” of Deworming Adult Horses

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The goal of a strategic deworming program is not to eradicate all parasites from all horses on the farm. It is to reduce the parasite burden in each horse so that they remain healthy. The best way to effectively accomplish this goal using the deworming products available is to employ the help of a veterinarian and take a science-based approach to identify the “right horse” and give him the “right dewormer” at the “right time.”

1. The right horse

There is no one-size-fits-all deworming program. For example, a 10-year-old performance horse in a stall does not have the same parasitic risk as a weanling. Each horse’s age, exposure and environment must be taken into consideration in determining their parasite risk and deworming protocol.

Because approximately 20 percent of the adult horses shed 80 percent of the parasite eggs on a farm, fecal egg counts (FEC) should be conducted by a veterinarian to identify which horses are actually shedding the parasite eggs. Adult horses should then be categorized according to their level of shedding as “low,” “moderate,” or “high,” as designated in the AAEP Parasite Control Guidelines.ⁱ

2. The right dewormer

Some level of parasite resistance has been documented for every dewormer on the market and that resistance varies greatly by geographic location, as well as by parasite.¹ A way to determine if parasitic resistance to a particular dewormer exists on a particular farm is to have a veterinarian perform a fecal egg count reduction test. First a fecal egg count (FEC) is performed prior to deworming a horse, then a second fecal egg count test is performed 10-14 days later on the same horse. The pre-deworming and post-deworming FEC results are compared to determine if parasites are resistant to the dewormer used.

3. The right time

Ideally, deworming should be conducted on the “right horse” at the “right time” based on its parasite egg shedding level. Adult horses that are low egg shedders (based on their FEC) may need to be treated 2 times a year, whereas a high shedder may need 3 or 4 treatments a year.

Parasite “season” varies by geographic location. In the northern part of the United States, the summer months are parasite season. For the South, primary transmission takes place in the spring and fall. Parasite transmission is not as high during the very hot and/or cold times of the year and, thus, these are not the right time to deworm.

For the low egg shedder, deworming during peak parasite transmission based on your geographic location might be sufficient.

These guidelines apply to the moderate egg shedders, as well, but a veterinarian may recommend a third treatment for these horses.

Horses that are high egg shedders should get the above recommendations, as well as one additional (non-larvicidal) treatment during the main season of larval transmission (typically summer) and a second non-larvicidal treatment during the “off-season” (typically winter) in your area.

Parasites that threaten equine health

Having a basic understanding of the parasites that can be a risk to a horse can help you better navigate the three “rights” of deworming.

Ascarids (roundworms) are the primary threat to young horses. Infective ascarid larvae are ingested by the horse and immature ascarid larvae migrate through the liver and lungs before arriving in the small intestine where they will mature to adults. Clinical signs may include respiratory disease, weight loss, diarrhea, impaction colic and bowel rupture. Young horses may develop natural immunity against ascarids by 18 months of age.

Small strongyles (cyathostomes) are considered the primary parasite problem in adult horses today. They burrow and encyst in the lining of the large intestine and can stay there for years evading the effects of most dewormers. Eggs are laid in the pasture and hatched larvae are ingested by the horse. The clinical signs range from none to poor performance, dull hair coat, recurring colic, diarrhea, weight loss and even death.

Large strongyles (bloodworms) used to be the greatest threat to horses. Although their role has lessened, they can still cause problems. The larval stages are ingested on pasture and migrate through the walls of certain abdominal arteries resulting in inflammation and blood clots that can block circulation to the large intestines or result in rupture of the arteries. These parasites can also damage the liver and other internal organs. Clinical signs include weight loss, anemia, and fatal thromboembolic colic.

Pinworms are a cause of tail rubbing since the female lays her eggs in the perianal region.

Tapeworms require an intermediate host. The eggs passed in the stool are ingested by a mite and the tapeworm undergoes development within the mite. The horse ingests the mite while grazing and the cycle continues with the tapeworm maturing within the horse’s large intestine. It is difficult to confirm the presence of tapeworms even with regular fecal exams. Clinical signs may include colic and intestinal blockage.

Safe and easy deworming

Effective deworming does not have to be difficult. SAFE-GUARD® (fenbendazole), for example, is the only horse dewormer on the market today that comes in many forms, including paste and alfalfa-based pellets. Fenbendazole, the active ingredient in SAFE-GUARD®, features broad-spectrum activity and is effective against the key intestinal parasites of horses. And because of its unique mode of action, it’s safe for your horse and effective against the most dangerous parasites of the horse.^{2,3,4}

[SIDEBAR 1]

Top 10 Non-Chemical Parasite Control Tips

In addition to choosing a science-based, strategic deworming protocol, there are non-chemical measures that can be taken to reduce the amount of parasites on a farm.

- Don't overstock pastures or allow pastures to become overgrazed
- Remove manure from stalls daily and from paddocks and pastures two times a week
- Keep pasture roughs (areas where horses defecate and do not graze) mowed to a height less than or equal to 3 to 8 inches
- During hot, dry weather, harrow, or rake pastures to disperse manure piles and expose larvae to sun. Rest the pasture a minimum of four weeks after harrowing
- Cross-graze pastures with other species. Cattle and sheep serve as biological vacuums for equine parasites
- Make at least one cutting of hay off some pastures to help reduce the parasite burden
- Plant an annual crop in pastures, such as winter wheat
- Feed hay and grain in raised containers
- Clean water sources regularly to prevent fecal contamination
- Compost manure. Properly composted manure will kill strongyle larvae and many ascarid eggs

[END SIDEBAR 1]

¹ AAEP Parasite Control Guidelines ([revised 2021](#))

² Kellar QA., Gokbulut C., Muzandu K., Benchaoui H. Fenbendazole Pharmacokinetics, Metabolism, and Potentiation in Horses. Drug Metabolism and Disposition. Vol. 30, No. 11: 1230-1239, 2002.

³ Lacey E. Mode of Action of Benzimidazoles. Parasitology Today, vol. 6, no. 4, 1990.

⁴ SAFE-GUARD® (fenbendazole) Paste 10% equine dewormer product label

IMPORTANT SAFETY INFORMATION: Consult your veterinarian for the diagnosis, treatment, and control of parasitism. Do not use in horses intended for human consumption.