

Bend Equine Deworming Recommendations

You wouldn't necessarily think that dealing with internal parasites would be a fast-changing, hot topic in veterinary medicine, but in fact it is. Here are some important facts that may surprise you.

- 1) Not all horses carry the same internal parasite burden. In fact, 35% of the horses in a given herd are responsible for 85% of the pasture contamination with internal parasites.
- 2) Parasite resistance to dewormers is a reality for all classes of dewormers, but is more prominent in some classes than others. Resistance to dewormers is greatest for the benzimidazole (fenbendazole/Panacur) and pyrimidine (pyrantel/Strongid) classes, and less in the avermectin (ivermectin) class.
- 3) Resistance develops by using the same dewormer over and over again, and often by underdosing. Be sure to check your horse's weight with a weight tape or scale to avoid this problem.
- 4) Fecal egg count testing is the best way to determine what parasites your horse is harboring, and in what numbers. This testing can be done by our office on one fecal ball that is 24 hours or less old, and is relatively inexpensive (about \$25). Based on these results, the appropriate dewormer can be selected.
- 5) Effectiveness of a given dewormer for your particular parasite population can be best determined by a fecal egg count reduction test. This involves taking a sample for fecal egg counts before deworming, then a sample 2 weeks after deworming to determine how much the deworming reduced the parasite numbers.
- 6) It is unrealistic and unnecessary for a horse that grazes on pasture to be completely free of small strongyles. A low eggs per gram count is the goal. Horses should be kept free of roundworms (*Parascaris*), but these are only a problem in horses < 18 months old.
- 7) Horses kept only in stalls or in drylots have lower risk of parasitization, because the internal parasite larvae cannot develop well without the moisture of pasture, and high levels of ammonia from urine in stalls prevents this as well.
- 8) Strategic deworming, which is using dewormers based on fecal egg counts and other management factors, is the best plan.

- 9) One of the most important parasite control measures is frequent cleaning up of manure. Parasite larvae take three days in the manure to become infective, so if pastures are cleaned this frequently, it reduces risk significantly. Harrowing pastures to break up and disperse the manure and then immediately allowing horses access to it is actually a bad idea, because it just spreads the parasites around to where the horses can't avoid them. Ideally, limit harrowing to summer when the heat and lack of humidity will kill the larvae, or keep the horses off for four weeks after harrowing.

Based on these facts and concepts, we recommend the following deworming options:

Plan A.

Submit manure for fecal egg count testing every 2-3 months and deworm or don't deworm accordingly. If fecal egg counts are 100 strongyle eggs per gram or lower, it may be okay to skip deworming. If deworming is necessary, rotate the class of dewormer. Always deworm at least twice per year with ivermectin to avoid infestations of deadly large strongyles. Always deworm at least once per year with ivermectin plus praziquantel, to kill tapeworms.

Tapeworms do not always show up on standard fecal egg counts. If fecal egg counts show heavy infestations, such as 500 eggs/gram or greater, use a product effective against encysted strongyles, such as Panacur Powerpack or Quest (moxidectin).

Plan B.

Deworm every 8 weeks, using a rotational plan. Rotate between ivermectin, pyrantel, fenbendazole, and ivermectin with praziquantel. If possible, submit 1-2 fecals per year to ensure your program is effective. Some horses might require more frequent deworming. Young horses less than 18 months in age should use this plan or Plan C.

Plan C.

Use a daily dewormer, such as Strongid C2X, combined with spring and fall purge deworming with an ivermectin product. Use ivermectin with praziquantel at least one of those times; you can use both times.

Combine all of these plans with the following management recommendations.

Keep pens and pastures as free of feces as possible.

Avoid ground feeding. Use feeder tubs or rubber mats.

Don't overcrowd/overgraze pastures. Horses can't avoid manure piles as they normally would.

Harrow pastures only in summer, or when you can leave the pasture vacant for a month afterwards.

If possible, rotate pastures to allow pasture to be vacant for 2 months in the warm season.

If possible, rotate species between pastures (cows, goats, camelids, etc.)