

Internal Parasite Control Program, April 2010

Due to the potential resistance of parasites of the horse to the medications used for their control, Littleton Equine Medical Center is recommending a new control program. There are differences in the parasite problem in different geographic regions. Therefore, this program has been developed for the horses in our area and may vary from ones used in other regions. It is based upon the most recent information provided by on-going research. For most clients, it will result in less overall expense from deworming.

The research tells us not all horses should be dewormed the same way. Horses maintained in different environments will have different levels of infestation. Horses housed in the same environment may have different levels of parasite loads. The first stage of the program is to identify the worm load of each horse. The best method available to quantify worm loads is to do fecal egg counts on all horses at a facility. The best time to perform this egg count is in the spring or fall, at least three months since the last deworming, or four months, if Moxidectin (Quest) was used.

We also know 20% of the horses in a group will produce 80% of worm eggs shed to the environment. This is due to individuals being more susceptible to worms and having a larger worm load. The fecal egg count will allow us to classify all members of a group as low shedders and high shedders of parasite eggs and target some individuals for more frequent deworming.

Each farm or stable may need its own program developed through the input of facility manager and veterinarian, but the core of all plans will include:

1. Baseline fecal exams at or just prior to deworming to identify level of infestation overall and identify low and high shedders.
2. Low shedders should be dewormed twice per year, in spring and fall, with ivermectin, moxidectin, or the "Panacur Power Pack." Moxidectin is not approved for foals under 6 months of age. Dosing should be based on accurate estimate of weight. Remember: many horses are heavier than the dose provided by one tube of dewormer.
3. High shedders will receive the spring and fall dewormers plus additional treatments in the summer and fall. Additional fecal exams should be completed prior to these dewormings.
4. One of the dewormings per year should include praziquantel, a product effective against tapeworms. The presence of tapeworms is not detected by fecal exams, but the parasite is a severe enough problem to warrant an annual treatment.
5. Fecal egg reduction tests can be used to identify the development of resistance

to deworming products. This test compares pretreatment egg counts to a post-treatment egg count taken at a certain time after deworming, the time after treatment based on what deworming product was used. If resistance to a product is suspected, you may be encouraged to use this procedure.

6. At this time we are recommending special programs for some groups of horses:
 - a. Pregnant mares should be dewormed with ivermectin the day after foaling.
 - b. Foals should be dewormed at 1 month, 3 months, and 5 months of age. A fecal exam should be done at the first deworming. Ivermectin or Anthelcide (oxibendazole) can be used.
 - c. Animals with chronic illnesses or undergoing extreme stress may need additional deworming. Your veterinarian can assist you in making a plan for these special cases.
7. Good husbandry is encouraged to decrease parasite levels. Disposing of manure, instead of spreading on pastures, has been shown to reduce parasite loads. In addition, removing manure regularly from pasture areas, when possible, is very effective at controlling parasites.

This program will be tailored to the individual horse, and in most cases will be less expensive than the traditional method. There are no new equine dewormers presently in development, so it is vital to preserve the efficacy of the products that we now have. The alternative is to face a day in the near future when we have no effective deworming options, because of developed resistance.