

Equine Veterinary Associates Client Information on Deworming Protocol

We have two basic regimens for keeping the parasites in and on your horse to a minimum:

1. Daily deworming

This involves adding to the feed about 2 oz. (dose based on your horse's weight) of a pelleted wormer once a day year-round. The active ingredient is *pyrantel tartrate*, and is in *Strongid C2X*. It is extremely important that you have an accurate estimate of your horse's weight, or guess high, for this wormer to be effective. Of course, it also has to eat the full dose every day, and be fed separately if you have multiple horses to prevent "stealing."

The main advantage to this protocol is that your horse never gets a chance to get infested with high numbers of larvae or adult worms because they are killed at the stage ingested by the horse. In addition, several parasites of horses have a stage that involves migration through the intestinal wall, liver, or lungs, which can cause major damage, so that does not get a chance to happen. It can be started at 5-6 months of age.

The disadvantage to daily deworming is mainly cost; it depends on the dose, but runs approximately \$0.45-0.55 a day. Buying in larger quantities is less expensive. You also have to make sure each horse gets its full dose every day as mentioned above. You do still have to pasteworm your horse, but only twice a year (in the spring and fall) with any *ivermectin* product to kill bots, as *pyrantel tartrate* does not.

If you choose to use *Strongid C2X*, Pfizer has a program called PreventiCare Colic Assistance Plan. If you comply with their requirements, including annual exam and immunizations by your veterinarian, twice a year pasteworming with Pfizer products *Equell* or *Equimax*, and purchase of *Strongid C2X* from the vet, Pfizer will reimburse you for up to \$5000 for colic surgery should it become necessary for any reason. There is no cost to enroll, and more information can be found at our clinic or PfizerAH.com, or equinepreventicare.com.

2. Rotational deworming

The goal of this regimen is to try and use the most effective active ingredient against the parasites present in your horse at the time and stage of their life cycle they might be susceptible to it. Since it is impossible to know all of this information at the time of deworming, it is a good idea to rotate active ingredients (not name brands!) to prevent the parasites from becoming used to or resistant to one particular dewormer. We recommend giving a dose about every 8 weeks, or every other month. Any more frequently can increase parasite resistance, and any less frequently can allow a buildup of large numbers.

The advantages to this protocol include availability and low cost of paste and pelleted dewormers from feed stores, web sites, catalogs, and your veterinarian. If you have multiple horses, you can dose each one separately and make sure they get treated.

The disadvantages are of course, as mentioned above, you are somewhat guessing that what you are giving your horse will work at the time. As with the daily dewormer, you must dose the horse accurately by weight, and if you're not sure most of these products are safe to overdose by a couple hundred pounds. If your horse is fractious or does not like to have things put in its mouth, there is a good chance you will underdose it or the paste will get spit out.

Here are the three main categories of active ingredients in paste and pelleted dewormers:

1. Ivermectin
with or without Praziquantel (specifically for tapeworms)
2. Fenbendazole or Oxibendazole
3. Pyrantel pamoate

Each one has certain parasites and/or stages of parasites it is better at killing than the others, hence the reason for rotation. The best time of year to give each one of these in this region are:

Jan or Feb - Fenbendazole or Oxibendazole
Mar or Apr - Ivermectin +/- Praziquantel
May or Jun - Pyrantel pamoate

Jul or Aug - Fenbendazole or Oxibendazole
Sep or Oct - Ivermectin +/- Praziquantel
Nov or Dec - Pyrantel pamoate

You can choose all the “odd” or “even” months, and deworm your horse as close as you can to the same day every other month.

Additional information about deworming:

Tubeworming

Historically veterinarians “tubewormed” horses, meaning a nasogastric tube was passed through the horse’s nose into the stomach and a liquid wormer was poured in. The main reason for this was liquid wormers were all that was available, and such a large volume had to be given to accurately dose a horse the tube was the only way to deliver it. Obviously this is much more traumatic to the horse and time-consuming for the veterinarian. We believe that the current available concentrated paste and pelleted dewormers can accurately dose a horse, and if it’s all swallowed, it’s going the same place as the tube! In other words, there is no advantage to tubeworming and it is not “better” than daily or rotational deworming except for the fact that the wormer is 100% guaranteed delivered to the stomach. We do offer deworming your horse with *ivermectin* liquid through a drench gun, which goes in the mouth and squirts the liquid through a long metal “straw” into the back of their throat where it is easily swallowed.

Purge deworming

On occasion we will recommend a specific type of purge deworming for horses we believe to have high parasite numbers (extremely “wormy”) or have an unknown/inaccurate deworming history, such as a new purchase. It is a double-dose (i.e. twice the horse’s weight) of *fenbendazole* five days in a row. It comes pre-packaged by Intervet in a *Panacur Powerpac* . This is the only regimen that will kill small strongyle larvae that are encysted in the walls of the intestine, which can prevent absorption of nutrients and cause major long-term damage. It’s not a bad idea to work this into your rotational deworming program and use it in July or August, when the fewest numbers of parasite eggs are on the ground due to heat and dry weather, so re-infection is at a minimum.

Pregnant mares

During her pregnancy a mare still needs to be regularly dewormed. However, we feel it is ideal not to give her any paste wormers during the first 60 days. Therefore, we recommend deworming just prior to breeding, and then resume your normal protocol after 60 days gestation. The exception is the daily wormer, which can be used at any stage of pregnancy and nursing according to the label. In addition, there is one specific parasite larvae (*Strongyloides westeri*, a.k.a. threadworms) that can pass to their foal in the milk, so they should be dewormed with an *ivermectin* product prior to or soon after foaling to prevent transmission.

Foals

A foal should be paste wormed for the first time at one month of age and once a month thereafter until it's weaned or reaches six months. Each dose should be according to its estimated weight at the time. We recommend using a *fenbendazole/oxibendazole* or *pyrantel pamoate* product for the first five months. Then at six months of age give an *ivermectin* product, and begin the same protocol you use for your adult horses.