



South Shore Equine Clinic & Diagnostic Center
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STRATEGIC DEWORMING

WHERE WE ARE TODAY AND WHAT IS BEST FOR YOUR HORSE

New research has shown that deworming on a rotation every 6-8 weeks is not the best way to care for horses anymore. Because of the emergence of anthelmintic resistance we are recommending a new system of fecal testing, deworming, and protecting the environment to rid horses of any existing infection; as well as preventing horses from becoming infected with parasites in the first place.

First and foremost, for optimal impact, you must give the right dewormer at the effective dosage at the appropriate time of year. The idea of rotational deworming between different drug classes was based on the premise that some parasites will survive treatments with a particular dewormer. If you use the same drug class in successive treatments, the surviving parasites can reproduce with new generations resistant to that particular drug class. This is the problem that some farms are experiencing and why the industry as a whole needs to make a concerted effort to deworm based on fecal egg counts and by targeting the specific parasite(s) present.

Timing of deworming is very important. Consider the small strongyle larvae, for example. Small strongyle larvae are able to migrate and hide in the wall of the large intestine and are not affected by many of our common anthelmintics. These larvae begin to emerge as the days get longer (March-April). We often see an increase in fecal egg counts (FEC) at this time. By deworming for small strongyles at the proper time in your area of the country, we can thwart extensive egg laying that would contaminate spring pastures and perpetuate infection the rest of the year. Many of our current dewormers kill only the adults. It is ideal to deworm with a product that will treat both the adults as well as the larvae twice annually. It is also important to use a product that will kill tapeworms, as these parasites reside farther up the GI tract and do not always show up in routine fecal testing.

It is imperative to ensure you are giving the proper dosage to your horse, which is based on his/her body weight. Your horse's bodyweight should be measured and recorded with a weight tape annually. The weight tape gives an estimation of your horse's bodyweight by girth size.

Lastly, it is important to be sure that your horse gets and swallows all of the deworming medication. Ask for assistance if your horse resists oral administration.

DETERMINING THE EFFECTIVENESS OF YOUR DEWORMING PROGRAM

Previously we reviewed the importance of identifying horses within your barn with high intestinal parasite loads and how to effectively deworm these horses. The next step is ensuring that the dewormer you used is effective – that it will kill off any parasites that your horse may have by at



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least 90-100%. With the emergence of dewormer resistance, this is a crucial step in management of parasite loads on your farm and the overall wellness of your horse(s). Unfortunately, it is often overlooked by horse owners.

To determine the effectiveness of the dewormer you are using, as well as your overall deworming program, it is essential to perform serial fecal egg counts (FECs). FEC testing determines the concentration of parasite eggs in manure. Initially, a FEC should be done to determine the parasite load of your horse. If your horse is negative, then your deworming program is probably ok; however, another FEC should be done at the egg reoccurrence period (ERP). If your horse is positive, a second FEC should be performed 10 to 14 days after deworming to establish the effectiveness of the product used (you should expect a FEC near zero). If the FEC is still high, then your horse has resistance to that product. A dewormer from a different drug class should then be used and the FEC repeated in 10-14 days to establish its effectiveness.

The final FEC should be done at the egg reappearance period (ERP). The ERP is a predictable interval where the FEC remains low after an effective deworming agent is administered and it differs slightly depending on the deworming product used. The normal ERP is 4-5 weeks for benzimidazole and pyrantel products, 6-8 weeks for ivermectin, and 12 weeks for moxidectin. The second FEC helps to determine which horses have a high parasite load (encysted larvae) and/or if your farm or paddock has a parasite problem (re-infection). By identifying the “problem” you can provide targeted treatment of the individual horse and/or environment.

Cleaning manure out of stalls daily and paddocks 2-3 times weekly is essential to controlling parasite contamination of your horse’s environment. Rotating paddocks periodically in the hot, dry months allows larval stages to emerge and die off without finding hosts. If you spread your manure over actively grazed areas, it is best to compost it prior to spreading it, as the heat generated during the process kills the parasite eggs. Additionally, you always want to deworm new horses and check their FEC prior to turning them out with the herd to minimize contamination by an unknown host.

Research has found that once a farm and its horses have been cleared of parasites, many horses only need to be dewormed twice yearly with an Ivermectin-Praziquantel combination product to eliminate tapeworms and keep bots under control. This approach to strategic deworming and parasite control will minimize the potential of developing resistance and is better for the environment. It also stops us from giving unnecessary medications to our equine friends and, long term, minimizes costs to you, the horse owner.