
De-worming Dilemma

By Jennifer Warmke

Think you know all there is to know about de-worming your horse? Think again!

Standard practice (for the past 20+ years) has been to de-worm your horse every two months and to rotate between classes of de-wormers with each treatment. And your goal was to kill all the worms in your horse's intestinal tract, right?

Would it surprise you to know that the main objective of de-worming (to kill adult worms that are living in the horse) isn't necessarily the only objective? While it is true that controlling the parasite load in our horses is important, another integral objective of parasite control is to prevent environmental contamination. By doing this you not only decrease the transmission of worms, but also potential re-infection.

TEST YOUR KNOWLEDGE – TRUE OR FALSE

- ✓ Large strongyles have mostly been eradicated from well-managed herds.
- ✓ There are only three classes of anthelmintics (de-wormers) that are available for use in horses.
- ✓ Most small strongyle (which are the most significant worm of mature horses) are resistant to at least one class of de-wormers (benzimidazoles).
- ✓ About 50% of small strongyle populations are resistant to two classes of de-wormers (benzimidazoles and pyrimidines).

If you mentioned 'true' to all of the above questions, congratulations! If not, please read on to learn more.

Large strongyles have mostly been eradicated from well-managed herds. This has been done by determining which de-wormers are effective on your horses (to be sure there is no resistance to de-wormers on your farm), determining how often individual horses in your herd need to be de-wormed (each horse has a slightly different immune system and can differ in their parasite susceptibility), and by ensuring proper pasture maintenance.

There are only three classes of anthelmintics (de-wormers) that are available for use in horses. They are Benzimidazoles - Fenbendazole (Panacur) and Oxybendazole (Anthelcide); Macrocytic lactones - Ivermectin and Moxidectin (Quest); and Pyrimidines – Pyrantel (Strongid).

It is also true that most small strongyle are resistant to at least one class of de-wormers (benzimidazoles), and 50% are resistant to two classes (benzimidazoles and pyrimidines)! In fact, a recent survey in parts of the US

found that the small strongyle population in 95% of herds were resistant to Panacur, 53% of herds were resistant to Anthelcide, and 40% of herds were resistant to Strongid. They have also found indications that resistance to Ivermectin is developing in some small strongyle populations.

For these reasons, appropriate de-worming care is becoming more strategic and should be customized to your individual horse's parasite burden and environment. And the key to this program is fecal testing!

Fecal Testing

A twice yearly fecal exam is recommended for all horses. It is best done in the spring and fall, when internal parasites are gearing up to contaminate your pasture with the most eggs. In fact, most veterinarians now recommend twice yearly fecal exams alternated every three months with a chemical de-wormer, if the fecal results are negative. An alternate program should be discussed with your veterinarian should positive results be reported.

What fecal egg counts provide you is much-needed information on the effectiveness of your de-worming program, and suggests important tweaks that might make it even more effective - perhaps even saving you money and your horse from unnecessary chemicals.

While it is well known that some horses harbor quite high parasite numbers and others consistently maintain a low burden, by conducting fecal egg counts your veterinarian can build a picture of each horse's susceptibility to parasites and gauge the effectiveness of your program.

The ultimate aim of any horse owner is to use as little de-worming as possible to obtain maximum, effective control. It is also possible, for example, that worms resistant to a particular de-wormer are on your property. In that case, the particular de-wormer you are utilizing may be largely ineffective. Conversely, you may be de-worming horses that have a low parasite burden.

A simple way to be sure is to conduct a fecal test. To do this you will need to collect 1 fecal ball in a small Ziploc bag and deliver it to your veterinary office within a 24-hour period. It helps to first label the bag clearly with your name, the horse's name, age, breed, gender and contact information so that the test results can be forwarded back to you.

Testing typically takes 48-72 hours and will provide you with an egg count. The reason your veterinarian wants to quantify the level of infestation is that most horses exposed to pasture are infected by strongyles. While the fact your horse has strongyle eggs in its feces should not be surprising, strongyles are prolific egg producers and by quantifying the eggs your veterinarian will get a clear indication of just how heavy a burden your horse has.

By performing twice annual fecal egg counts and conducting follow-up tests (2-4 weeks after a positive result and appropriate de-worming) you can draw a more accurate picture of the parasite management issues on your property and among your horses. Repeated egg counts will quickly help you identify the horses most susceptible to parasites and follow-up tests will show whether the de-wormer you are using is effective. By working with your veterinarian and conducting twice annual fecal testing, you will be able to fully evaluate your overall de-worming program and equine health care program.
