



FACT SHEET

Department of Animal Science, University of Connecticut

Effective Horse Management – Horse Health Series

Strategic Deworming and Preventing Reinfestation

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Spring usually makes horse owners think of deworming their animals. Let's first review recent discussion about how horse owners should switch from rotational deworming or time-based deworming with the same drug to strategic deworming also known as targeted or selective deworming. Then we will consider ways to prevent reinfestation of horses that were dewormed.

Rotational deworming is when you use a different class of dewormer each time you deworm a horse. One form of this is slow rotation, when one dewormer is used for one year, then a different dewormer is used the next year. Fast rotation includes the use or rotation between different classes of dewormers at periods of three to six times per year. Time-based deworming is when horses are dewormed at 8 week intervals or another set time period.

Parasite guidelines written by the American Association of Equine Practitioners are designed to prevent parasite resistance and increase dewormer effectiveness by reducing deworming treatment frequency using strategic or targeted deworming, and using environmental management practices.













What is strategic deworming?

Strategic deworming involves collecting the feces of the horse and examining it using a fecal flotation test to determine the number of parasite eggs present. Then, with strategic

deworming, only horses with a specific number of parasite eggs or higher (called “shedders”) would be dewormed. Shedding refers to the number of strongyle type eggs present. Generally, you would deworm a horse if its fecal egg count was 500 eggs per gram or higher. A previous article in the CHC newsletter in February 2011, focused on strategic deworming, its advantages and disadvantages, so we will not cover that here.

Luckily weather conditions do help us out with deworming. Strongyle larvae cannot survive on pasture when temperatures rise above 85 degrees Fahrenheit, and eggs cannot develop into larvae when temperatures are below 45 degrees F. Although strongyle larvae may only survive a few weeks in hot weather, in cold weather they may persist in the environment for as long as six to nine months depending on local climatic conditions. Therefore, we need to consider ways to prevent reinfestation.

What are ways to prevent reinfestation after a horse is dewormed?

-  Remove manure from stalls and small paddocks daily, and from larger paddocks on a weekly basis.
-  If at all possible, rotate dirt paddocks in the summer months so that the eggs/larvae die off without finding a host.
-  Composting manure should be considered since it will help kill eggs and larvae.
-  Compost manure before spreading onto fields (heat of composting will kill the eggs/larvae).
-  Keep weeds and grasses in paddocks short.
-  Avoid feeding grain/hay out of wheelbarrows or manure buckets used for cleaning stalls.
-  Perform fecal egg counts on new horses and deworm appropriately before turning out in lots and/or pastures.
-  Avoid having a lot of horses in a small area (high stocking density).
-  Limited access to pasture or absence of grass may help prevent reinfestation.
-  Focus special attention on fecal egg count monitoring in young horses which are more likely to be high shedders than mature horses.
-  Pasture rotation may help prevent reinfestation especially if you pick up manure and mow after taking horses off the pasture.
-  Cross grazing with other species can help, they won't be affected by the eggs or larvae and give them time to die off.

Strategic deworming is a new way of managing the horse to reduce parasite loads. Studies have shown that it is quite effective. You should work with your veterinarian to determine the deworming method that is best for you. It is also important to prevent overgrazing and manage manure in your pastures to keep from adding to the horse's

parasite load. Deworming works best when it goes along with best management practices that include good farm sanitation and manure removal.

Sources:

American Association of Equine Practitioners. Internal Parasites: Strategies for Effective Parasite Control. Accessed 6/16/21.

https://aaep.org/sites/default/files/Guidelines/AAEPParasiteControlGuidelines_0.pdf

Brady H and Nichols W. Drug resistance in equine parasites: an emerging global problem. *Journal of Equine Veterinary Science* 29 (5): 285-29.

Acknowledgements:

We are grateful for the reviews by Dr. Debra Hagstrom of the University of Illinois, Horse Extension Specialist.