Protect Your Horse From Parasites

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It’s time to re-think your plan about protecting your horses against parasitism. Internal parasites can cause extensive internal damage even if the horse looks healthy on the outside. It’s important to be in tune with your horse’s health care program and work together with your veterinarian to achieve a successful deworming strategy. Some interesting points to consider when contemplating a deworming strategy for your herd are:

- 20% of the horses shed 80% of the parasite load – Those in your herd that are “high fecal egg shedders” will need more frequent deworming than those that are “low fecal egg shedders.”
- If horses are susceptible to diseases that compromise the immune system, preventative health, including deworming strategy is very important.
- A good deworming strategy goes hand in hand with excellent manure management and pasture management.
- Anthelmintic resistance is becoming more and more of an issue; therefore, having a deworming program that targets your horse’s needs is important.

**Clinical signs of possible parasitism –**

- Dull haircoat
- Unthrifty appearance or poor body condition
- Diarrhea
- Colic
- Poor growth rates in young horses
- Weight loss
- Anemia
- Lethargy
- Potbellied appearance

**Parasite Refugia –**

“Refugia” is a term that can be confusing and it’s okay to say you have never heard the word before. In general, refugia refers to any portion of a population that is not exposed to a selection pressure for genetic change. The parasites in refugia would be those stages of the life cycle that are not exposed to a drug at the time of treatment, such as parasitic stages in the environment, or encysted strongyle stages. Greater refugia means a greater reservoir of susceptible genes and less resistance in the gene pool. When a large parasite population is exposed to deworming medications repeatedly, the selection pressure for developing resistance is very high. Therefore, selective treatment approaches based on your horse’s needs attempt to accomplish a slower development of resistance.
Equine Population –

Consider the population of your herd. Horses less than 3 years old require special attention and are more susceptible to parasite infection. They are also more at risk for disease in general. Older horses or those that have underlying diseases that compromise the immune system should also be taken into consideration. Their parasite load may also be greater. Every farm and every horse are different. Work with your veterinarian to determine the need on your farm.

Fecal Egg Counts (FEC’s) –

These are helpful and their collection process is very important to determine an accurate result. Your veterinarian can guide you as to the collection process. Fecal egg counts are important and can serve a great purpose for several reasons –

- To evaluate the population of parasite in a certain horse or herd (ie., ascarids vs. strongyles).
- To categorize a given horse as a low, medium, or high shedder so their deworming program can be planned and implemented.
  - Horses with lower FEC’s require less frequent deworming (low shedder)
  - Horses with higher FEC’s require more frequent deworming (high shedder)
- To determine treatment efficacy and if drug resistance is becoming a problem.
- To evaluate the interval between treatments. Knowing when “egg reappearance” occurs, can aid in timing of subsequent treatments.

An important point regarding FEC’s is that, although they are helpful diagnostic tests, they do not accurately reflect total parasite burden in a given horse because larvae do not produce eggs and they may be present in high numbers. In addition, tapeworm and pinworm egg shedding is often missed or misrepresented by typical fecal techniques.

Manure Management and Pasture Management Strategies –

Since parasites are transferred from horse to horse via manure, a good management plan is also essential.

- Keep the number of horses per acre to a minimum. This will prevent overgrazing and pasture contamination.
- Dispose of manure at least twice a week from pasture.
- Do not spread manure over fields where horses graze.
- If composting, pile manure away from the pasture and avoid any run off contamination from heavy rain. It is necessary for an internal temperature of the compost pile to be over 40 degrees Celsius for a minimum of two weeks.
- Mow and harrow pastures periodically.
- Cold climate simply slows the rate of development in larvae. Extreme heat and dryness is hard for larvae to tolerate. Consider resting pastures during hot weather to reduce parasite burden
but not eradicate. With this in mind, concentrate deworming treatments when climate conditions favor parasite transmission.

- Group horses by age. Keep foals and weanlings away from yearlings and older horses to reduce exposure to Ascarids (roundworms) and other parasites.

**Goals of Parasite Control -**

- To have horses remain healthy, have no development of clinical illness, and limited parasite infections.
- The goal is *NOT* to eradicate every parasite in every horse or “sterilize.” If we did this, resistance would be inevitable.
  - To allow some degree of “safe exposure” to parasites in young horses so that their naive immune system can strengthen naturally.
- To control parasite egg shedding.
- To use efficacious drugs on your farm and avoid drug resistance.

As mentioned earlier, every farm and every horse are different, so it is important to work with your veterinarian to determine the needs for your farm and herd.

This newsletter was created using the AAEP Parasite Control Guidelines.