RESISTANCE AND RISK: THE LATEST IN PARASITE CONTROL

Targeted treatments, horse owner partnership are must-haves for stopping these persistent horse health threats.

While rarely the sole focus of your equine appointments, parasites can become more than pesky if not accurately treated.

All horses face parasite exposure in their environment, with risk factors including age, climate, pasture and manure management and other lifestyle factors. And even with no outward signs of a health problem, parasites can damage vital organs and impact horse health by:

- Decreasing nutrient absorption, causing weight loss or stunting growth
- Increasing risk for colic
- Causing pneumonia and/or irreversible lung damage
- Impairing performance
- Damaging coat condition

“Two parasites pose the greatest threat to adult horses: small strongyles and tapeworms,” said Kenton Morgan, DVM, senior veterinarian, Equine Technical Services with Zoetis. “The primary concern with small strongyles occurs during the encysted stage of their life cycle, in particular when the encysted parasite exists from the walls of a horse’s lower intestines, resulting in inflammation.”
Tapeworms are difficult to detect in horses; they do not appear in our commonly used fecal egg count testing methods. One study found that horses with tapeworms were 81% more likely to experience an ileal impaction colic.2

**WHY TARGET DEWORMING TREATMENTS?**

A year-round rotation of dewormers that alternated approximately every other month was once considered enough to keep horses protected. However, ongoing monitoring has shown an increase of drug-resistant parasites, making them harder to manage through traditional strategies. "Parasite resistance to equine dewormer active ingredients is a real threat to horse health," said Dr. Morgan. “The American Association of Equine Practitioners Parasite Control Guidelines, updated in June 2019, expand upon the research in equine deworming, parasite resistance and outline the need for horse owners to work closely with their veterinarians for parasite management.”

Notable information and updates within the **AAEP Parasite Control Guidelines** include:

- Small strongyles remain the key parasite of concern in adult horses, and the guidelines recommend treating against the encysted stage of the parasite at least once per year. Ascarids (roundworms) are the crucial parasite affecting young horses.
- All treatment or nontreatment recommendations are outlined based on a preventive program where fecal egg count (FEC) testing is being performed. Horses should not receive a deworming treatment in the 8 weeks prior to a fecal egg count reduction test (FECRT) to evaluate the development of parasite resistance.
- Two recent studies were highlighted documenting reduced larvicidal efficacy of the five-day double-dose fenbendazole regimen (marketed as Panacur® Powerpac).
- Moxidectin, the active ingredient exclusive to Quest® Gel and Quest® Plus Gel, is noted as the treatment of choice for small strongyles, given the widespread benzimidazole resistance in cyathostomin parasites.
- The guidelines caution that reduced product efficacy can be caused by factors other than resistance such as incorrect dosage, incorrect storage and expired product.
- New information was added to Table 3: Cyathostomin Egg Reappearance Periods (ERP) for Equine Anthelmintics documenting farms with emerging resistance. All dewormer active ingredients saw a decrease in duration; however, moxidectin remains the longest duration for suppressing small strongyle egg reappearance.

### Table 3: Cyathostomin egg reappearance periods (ERP) for equine anthelmintics

<table>
<thead>
<tr>
<th>Anthelmintic</th>
<th>Usual ERP when drug is effective</th>
<th>ERP when drug was first introduced</th>
<th>ERPs on farms with emerging resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fenbendazole/</td>
<td>4-5 weeks</td>
<td>6 weeks²</td>
<td></td>
</tr>
<tr>
<td>Oxibendazole</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pyrantel</td>
<td>4-5 weeks</td>
<td>5-6 weeks³</td>
<td></td>
</tr>
<tr>
<td>Ivermectin</td>
<td>6-8 weeks</td>
<td>9-13 weeks⁴</td>
<td>3-5 weeks</td>
</tr>
<tr>
<td>Moxidectin</td>
<td>10-12 weeks</td>
<td>16-22 weeks⁴</td>
<td>4-6 weeks</td>
</tr>
</tbody>
</table>

**PARTNER WITH HORSE OWNERS**

"The key for effective, safe equine parasite control is discussing individualized, age-appropriate deworming plans with your horse owner clients and selecting effective anthelmintics," said Dr. Morgan. "Deworming treatments should also be properly timed during the year, typically treating in the spring and fall in correspondence with the horse’s parasite burden and the parasites’ cycles of development and transmission."

To help ensure proper parasite control, make FEC tests a part of your spring appointments to establish a baseline and determine which horses need treatment and which may not. Once a baseline is established, take an individualized deworming approach to help ensure each horse is getting the care it deserves.
“All horses do not carry the same parasite burden. Usually, in a herd, 80% of the parasite burden is hosted by 20% to 30% of the horses,” Dr. Morgan said. “High strongyle egg shedders are responsible for the majority of parasite transmission.”

Additionally, talk with horse owners about the key parasites to target and help identify effective products and timing.

Devoted to the health of every horse, Zoetis provides a comprehensive portfolio of equine parasite control solutions to meet the needs of every horse. Targeted for spring and parasite risks, Quest® and Quest® Plus Gel are the only FDA-approved dewormers that treat and control encysted small strongyles, bots and roundworms in a single dose.

Consult your veterinarian for assistance in the diagnosis, treatment, and control of parasitism.

Do not use QUEST PLUS Gel in foals less than 6 months of age or in sick, debilitated and underweight horses. Do not use in other animal species, as severe adverse reactions, including fatalities in dogs, may result.

References


To learn more, contact your Zoetis representative or visit QuestHorse.com