YOUR HORSE CAN BE HURT BY PARASITE RESISTANCE TO DEWORMERS.

1 Why is resistance a concern?

- Small strongyles — the major target of parasite control in mature horses — have demonstrated resistance to two of the three major dewormer classes. 1-4
- While products in the third class still control small strongyles, resistance could develop from overuse. 5,6-11
- Rotation has not slowed resistance. 1,12,13

2 Which parasites should we care about?

Small strongyles, roundworms (ascarids) and tapeworms are the greatest threat to horse health. Others are considered case by case.

3 What can we do to protect your horse?

- Use fecal egg count reduction tests to monitor product efficacy and worm burden by horse. 7,13-15
- Implement a strategic deworming program that does not try to eliminate all worms by treating all horses all the time. 13,15
- Slow further resistance by selectively treating horses with products that still work well. 5,14

Fecal egg count tests provide the facts to act.
RESOURCES ON PARASITE RESISTANCE TO DEWORMERS.

Chemical classes of common equine dewormers.

<table>
<thead>
<tr>
<th>Chemical Class/Active Ingredients</th>
<th>Common Product Names</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzimidazoles: Fenbendazole; Oxfendazole</td>
<td>SAFE-GUARD® PANACUR® ANTHELICIDE®</td>
</tr>
<tr>
<td>Tetrahydropyrimidines: Pyrantel pamoate; Pyrantel tartrate</td>
<td>STRONGID® products ROTEC TIN P®</td>
</tr>
<tr>
<td>Macrocyclic lactones: Ivermectin; Moxidectin (Avermectin)</td>
<td>ZIMECTERIN® Gold* ZIMECTERIN QUEST® PLUS* QUEST EQUIMAX®*</td>
</tr>
</tbody>
</table>

*These products also include praziquantel, an active ingredient that specifically controls tapeworms (Anoplocephala perfoliata).

Results of a study documenting resistance.1

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Percent of farms with small strongyle resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZIMECTERIN (ivermectin)</td>
<td>0%</td>
</tr>
<tr>
<td>STRONGID®-P (pyrantel pamoate)</td>
<td>40.5%</td>
</tr>
<tr>
<td>ANTHELICIDE® (oxfendazole)</td>
<td>53.5%</td>
</tr>
<tr>
<td>PANACUR®/SAFE-GUARD® (fenbendazole)</td>
<td>97.7%</td>
</tr>
</tbody>
</table>

Based on the largest survey of equine dewormer resistance reported to date. Forty-four farms/stables in five states.1

ZIMECTERIN® Gold (ivermectin/praziquantel) controls more species and stages of parasites than any other product.18,19

- Effective against small strongyles resistant to benzimidazole products18
- More than 99 percent effective against natural tapeworm infections (Anoplocephala perfoliata)19
- Approved for use in adult horses and foals as young as 2 months old18
- 100% Product Satisfaction Guarantee

Warning: Not for use in humans. Keep this and all drugs out of reach of children. In horses there have been rare reports of swelling and irritation of the mouth, lips and tongue following administration of ZIMECTERIN Gold. These reactions have been transitory in nature. Do not use in other animal species as severe adverse reactions, including fatalities in dogs, may result.

6 Bello TR. Antiparasitic treatment of horses with pyrantel and fenbendazole followed by continued ivermectin treatments. Supplied by the British Library; 419-429.
13 Kaplan RM. These ain’t your father’s parasites: An evidence-based medical approach to equine parasite control. The Practitioner October 2008.
16 Based on data provided on the ZIMECTERIN Gold product label.
17 Based on data provided in FDA Freedom of Information summaries.