



FOX VALLEY EQUINE PRACTICE

The Best Medicine in the Field

**Internal parasites are silent thieves and killers**—they can cause extensive internal damage, and you may not even realize your horse is heavily infected. At the very least, parasites can lower resistance, rob your horse of valuable nutrients, and cause gastrointestinal irritation and general unthriftiness. At their worst, they can lead to colic, intestinal ruptures, and death.

In terms of management priorities, establishing an effective parasite control program is probably second only to supplying your horse with clean, plentiful water and high quality feed.

Most equine parasites are transferred through manure, so keeping stalls, paddocks, and pastures clean and well maintained is an important aspect of parasite control. The other key element to protect your horse from internal parasites is this: Use the appropriate dose of the right deworming agent, at the proper interval, at the correct time of year. It sounds complicated, but we've made an easy to follow deworming schedule that can be adjusted to fit your horse's individual needs.

**Our parasite control program is both highly effective and cost efficient. Let's get started!**

**Clinical signs to watch for:**

Decreased Performance

Dull hair coat

Anemia

Weakness/Decreased Stamina

Weight loss/Underweight

Diarrhea

Behavioral Changes

Potbelly, "hay belly"

Colic

**Get to Know the Parasites:**

- There are more than 150 species of internal parasites that can infect horses.
- Most life cycles involve eggs, larvae, and adult worms. Understanding the life cycles and how they affect your horse will help to know how and when to target them.

**Most Common Equine Parasites:**

- **Small Strongyles:** The #1 internal parasite; burrow and encyst in the lining of the large intestine.
- **Large Strongyles:** Bloodworms that migrate through walls of blood vessels.
- **Tapeworms:** Take 4 to 6 weeks to mature in pasture mites; colic.
- **Bots:** Eggs deposited on horse's legs/body; larvae burrow through skin, attach to stomach wall; colic.
- **Pinworms:** Tail rubbing; immunity with age.
- **Threadworms:** Passed through mare's milk, can cause diarrhea. Must deworm mare within 24 hours of foaling.
- **Roundworms/Ascarids:** Horses < 18 months old; affects liver, lungs, small intestine. Natural immunity by 18 months.

### Get to Know the Dewormers:

<b>Chemical Class</b>	<b>Brand Names</b>	<b>Parasite Targeted</b>
Avermectins Ivermectin:  Moxidectin:	(Most broad spectrum dewormer) Zimectrin, Equell, Ivercare, Rotectin  Quest Gel	Strongyles, Pinworms, Ascarids, Lungworms, Threadworms, Bots, Hairworms. Same as above, plus EL4 encysted Small Strongyles.
Praziquantel w/Avermectin	Equimax, Zimectrin Gold, Quest Plus	Targets all parasites above, plus Tapeworms.
Benzimidazoles Oxibendazole:  Fenbendazole:  Fenbendazole:	Anthelcide EQ  Safeguard, Panacur  Panacur Powerpac	Large Strongyles, Pinworms, Ascarids, Threadworms. Same as above, plus Lungworms. Targets all of the above, plus encysted Small Strongyles.
Pyrantel Salts Pyrantel Pamoate:  Pyrantel Tartrate:	Strongid, TapeCare Plus, Rotectin  Strongid C, Continuex	Large Strongyles, Pinworms, Ascarids. Tapeworms, if double dosed.  Large Strongyles, Pinworms, Ascarids (daily dewormers).

No horse is ever completely cleared of internal parasites. Our goal is to prevent the parasites from causing damage to your horse's vital organs, blood vessels, and his/her general state of health.

We want to use deworming products only when needed, so how will you know when it's time to deworm your horse again? The first step is to keep a record of which deworming product you used, and the date it was administered. Next, find out what the Egg Reappearance Period (ERP) is for the chemical class/deworming product you used. (The ERP is the waiting period after your horse was dewormed, and when new parasites are likely to be in your horse's body again.)

#### **Egg Reappearance Periods (ERP)**

Moxidectin:	10 – 12 weeks.
Ivermectin:	6 – 8 weeks.
Fenbendazole:	4 – 5 weeks.
Pyrantel:	4 – 5 weeks.

\*Moxidectin (Quest Gel) is not to be used on equines less than 6 months old, small ponies, or minis.

### **FECAL EGG COUNT (FEC):**

The next step is the Fecal Egg Count (FEC). We take a small amount of fresh manure, mix it with a special saline solution, and then examine it under a microscope at 10X magnification. We count how many parasite eggs are present per gram of manure.

- One of the most useful tools in parasite control.
- Expressed in eggs per gram of manure.
- Two fresh fecal balls are collected after the Egg Reappearance Period (ERP).
- Fecal Egg Counts are done 0 – 1 time annually.

### **WHEN TO DEWORM?**

That depends—how many parasites eggs were found in the Fecal Egg Count?

<ul style="list-style-type: none"><li>• <b>LOW SHEDDER = Less than 200 Eggs Per Gram</b></li><li>• <b>MEDIUM SHEDDER = Between 200 to 500 Eggs Per Gram</b></li><li>• <b>HIGH SHEDDER = More than 500 Eggs Per Gram</b></li></ul>
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	<b>LOW SHEDDER SCHEDULE:</b>
<b>April</b>	Moxidectin*
<b>November</b>	Moxidectin* with Praziquantel (or) Ivermectin with Praziquantel

	<b>MEDIUM SHEDDER SCHEDULE:</b>
<b>April</b>	Moxidectin*
<b>July</b>	Ivermectin
<b>September</b>	Pyrantel
<b>November</b>	Moxidectin* with Praziquantel (or) Ivermectin with Praziquantel

	<b>HIGH SHEDDER SCHEDULE:</b>
<b>February</b>	Ivermectin
<b>April</b>	Moxidectin*
<b>June</b>	Ivermectin
<b>August</b>	Fenbendazole
<b>September</b>	Pyrantel
<b>November</b>	Moxidectin* with Praziquantel (or) Ivermectin with Praziquantel

\*Moxidectin is **NOT** to be used on equines less than 6 months old, small ponies or mini's.

### **ADDITIONAL TIPS FOR PARASITE CONTROL:**

1. Keep the number of horses per acre to a minimum.
2. Pick up and dispose of manure regularly (at least 2 times per week).
3. Compost manure and wait at least a year before spreading it on horse pastures.
4. Harrow pastures periodically when dry and hot. Wait at least 4 weeks before returning horses to that pasture. (Strongyle larval development on pasture is arrested when temperatures drop below 45 degrees Fahrenheit, and begin to die when temperatures increase above 85 degrees F.)
5. Keep foals and weanlings separate from older horses to minimize exposure.
6. Use a feeder for hay and grain, rather than feeding on the ground.
7. Consider rotating pastures with sheep or cattle to interrupt the life cycle of parasites.
8. Remove bot eggs regularly from hair coat.
9. In most cases, a Fecal Egg Count (FEC) is recommended annually.
10. *Call or email your veterinarian with questions!*