The Science of Unique

Maximize your horse's health from the inside out with PANACUR® (fenbendazole) PowerPac



Different for a Reason

Fenbendazole, the active ingredient in PANACUR® (fenbendazole) PowerPac, is different. Fenbendazole features a unique mode of action that makes it extremely safe, yet powerfully effective against the most significant parasite threats in horses.¹

PANACUR® PowerPac is Extremely Safe:

PANACUR® PowerPac works in a unique way,
—so it's tough on parasites but gentle on the horse.

- Safe for foals, weanlings, senior and even thin or debilitated horses¹⁻²
- Safe for the environment³

Deep Penetration

The PANACUR® PowerPac five-day treatment creates a gentle, slow saturation of the molecule within the horse that is able to penetrate deep enough to kill the deadliest parasites in the most difficult places. This is why PANACUR® PowerPac is the only product approved to act as a larvicidal treatment for stubborn ${\rm EL}_3$ (early stage) and ${\rm L}_4$ small strongyles. 1

Small strongyles are considered a primary problem in adult horses because of their ability to encyst and burrow in the intestinal lining for extended periods of time.

Often Recommended by Veterinarians in these Situations:

- Once a year, especially for young horses and moderate-to-high egg shedders
- All incoming horses before co-mingling with resident horses
- · Before starting horses on a daily dewormer
- · Foals prior to weaning
- 10-14 days before a performance event
- Debilitated or thin horses ²
- Chronic diarrhea²
- Recurring colic²
- Chronic weight loss²



³Environmental Assessment. NADA 137-600. Fenbendazole Type A Medicated Article (Premix) in Dairy Cattle of Breeding Age. May 1995.

The #1 Parasite Problem May be Going Untreated in Your Horse

Parasitologists consider small strongyles the #1 internal parasite problem in adult horses today:

- 90% or more of your horse's parasite burden is comprised of small strongyles.⁴
- Larval stages enter the horse's digestive system, burrow into the intestinal lining and form cysts. Encysted small strongyles can remain in this state for up to 2 years.⁵
- Tissue stages of encysted small strongyles include early third-stage larvae (EL₃), late third-stage larvae (LL₃) and fourth-stage larvae (L₄).
- Often horses affected by encysted small strongyles have been dewormed regularly with non-larvicidal products.
- There may be no obvious clinical signs associated with low to moderate numbers of encysted small strongyles; fecal tests only monitor egg counts, and encysted larval stages do not lay eggs.
- Severe clinical signs (weight loss, colic, diarrhea and even death) may occur when large numbers of fourth-stage larvae emerge simultaneously from the intestinal wall.
- Some adult horses are more susceptible to small strongyles than others. Ask your veterinarian to perform a fecal egg count test to determine your adult horse's egg shedding status.
- Most young horses (less than 2 years of age) are uniquely susceptible and are treated as "high" fecal egg shedders.

The #1 Treatment of Choice for Foals

PANACUR® (fenbendazole) PowerPac is widely recognized as the best treatment option for ascarids (roundworms), which are the most significant and potentially lethal foal parasite. Ascarid populations are developing worldwide resistance to ivermectin, moxidectin and pyrantel pamoate.

- Proven to be effective against ivermectinresistant ascarids¹³
- Demonstrated a 99.52% reduction of ascarid eggs in treated foals¹³
- Proven safe in foals and weanlings less than 18 months of age⁶
- PANACUR® PowerPac's method of killing ascarids decreases the likelihood of potential side effects (endotoxic shock, impactions) which may occur following deworming foals with heavy roundworm infections⁶

Ascarids can also threaten horses beyond the age of 18 months if these animals were not effectively dewormed as foals and have harbored an ascarid infection into adulthood.⁶

Ascarids are one of the most significant and potentially life-threatening parasites in young horses.

⁶AAEP Parasite Control Guidelines. Revised 2019.

⁷Craig TM, Diamond PL, Ferwerda NS, et al. Evidence of ivermectin resistance by *Parascaris equorum* on a Texas horse farm. J Eq Vet Sci 2007; 27: 67-71.

⁸Hearn FP, Peregrine AS. Identification of foals infected with *Parascaris equorum* apparently resistant to ivermectin. J Am Vet Med Assoc. 2003; 223(4): 482-485.

 $^{^\}circ$ Boersema JH, Eysker M, Nas JW. Apparent resistance of Parascaris equorum to macrocyclic lactones. Vet Rec 2002; 150(9): 279-281.

^{**}Schougaard H, Nielsen MK. Apparent ivermectin resistance of *Parascaris equorum* in foals in Denmark. Vet Rec 2007; 160: 439-440.

[&]quot;Lyons ET, Tolliver SC, Ionita M and Collins SS. Evaluation of parasiticidal activity of fenbendazole, ivermectin, oxibendazole, and prantel pamosate in horse foals with emphasis on as cards (*Parascaris equorum*) in field studies on five farms in central Kentucky in 2007. *Parasitol Res*, 2008; 103(2): 287-291.

¹²Reinemeyer, C. Anthelmintic resistance in non-strongylid parasites of horses. *Veterinary Parasitology*, 2012; 185(1): 9-15.

¹³Reinemeyer CR, Vaala WE. Larvicidal efficacy of fenbendazole against a macrocyclic lactone-resistant isolate of Parascaris equorum in foals. 2010 AAEP Proceedings.

For a dewormer to be effective in preventing the mass emergence of encysted small strongyles, it has to treat every stage.

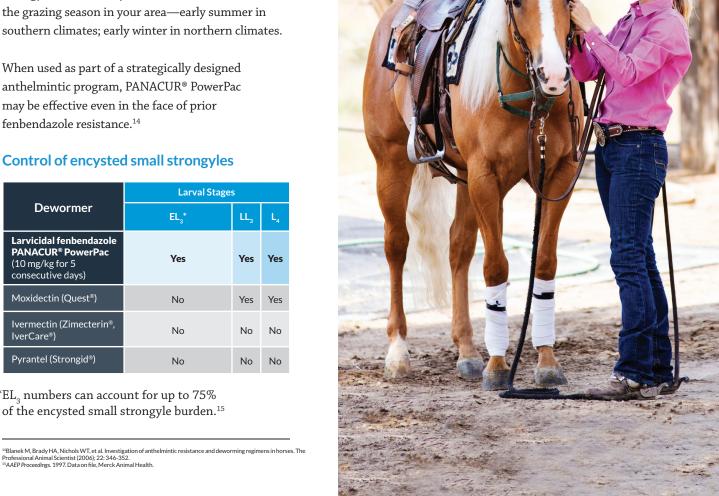
PANACUR® (fenbendazole) PowerPac is your #1 choice for control of encysted small strongyles and effectiveness against early third-stage larvae (EL₂).

Use PANACUR® PowerPac in your strategic deworming program – giving a 5-day larvicidal dose of fenbendazole when your horse is likely to have the highest number of encysted small strongyles. This usually occurs at the end of the grazing season in your area—early summer in southern climates; early winter in northern climates.

When used as part of a strategically designed anthelmintic program, PANACUR® PowerPac may be effective even in the face of prior fenbendazole resistance.14

Dewormer	Larval Stages		
	EL ₃ *	LL ₃	L ₄
Larvicidal fenbendazole PANACUR® PowerPac (10 mg/kg for 5 consecutive days)	Yes	Yes	Yes
Moxidectin (Quest®)	No	Yes	Yes
Ivermectin (Zimecterin®, IverCare®)	No	No	No
Pyrantel (Strongid®)	No	No	No

^{*}EL₂ numbers can account for up to 75%



 $^{^{14}}$ Blanek M, Brady HA, Nichols WT, et al. Investigation of anthelmintic resistance and deworming regimens in horses. The

PANACUR® (fenbendazole) PowerPac

The Science of Effective

How to administer PANACUR (fenbendazole) PowerPac:

Administer orally one 57-gram syringe per 1,250-lb horse (10 mg/kg) for 5 consecutive days. This treatment is effective against¹:

- All stages of small strongyles, including important early third-stage larvae (EL₃), late third-stage larvae (LL₃) and fourth-stage larvae (L₄), as well as adult small strongyles
- Large strongyles (adults and migrating larval stages)
- Pinworms
- Roundworms (ascarids)

Incorporate PANACUR® PowerPac into your deworming strategy for a healthier horse inside and out.

Deworming is only one part of the solution to parasite control. Dewormers such as PANACUR® PowerPac have the best chance of success when partnered with fecal monitoring and strategic use of non-chemical parasite control strategies.

Visit www.panacur-mode-of-action.com to learn more.



IMPORTANT SAFETY INFORMATION: Consult your veterinarian for assistance in the diagnosis, treatment and control of parasitism. Do not use in horses intended for human consumption.

panacur[®] (fenbendazole)

POWERPAC

