

Rotational Worming

Recommendations for worming horses by Valleyvet.com.

Did you know there are more than 150 species of internal [parasites that can infect horses](#)? Some of the most common include: large strongyles, small strongyles, roundworms, pinworms, hairworms, stomach worms, bots, encysted small strongyles and tapeworms. When left untreated, worms in horses cause critical damage to their vital organs, impair growth, hinder performance and even cause colic.

When to Deworm a Horse

First things first: Work with your veterinarian to perform a fecal egg count (FEC) test, which will help determine your horse's level of parasite burden and guide you on the frequency of deworming treatments needed to keep them healthy.

American Association of Equine Practitioners (AAEP) [parasite control guidelines](#) recommend deworming adult horses when parasite levels can be at their highest, during the spring and fall. There are, however, situations requiring horses to be dewormed more than twice yearly, such as a horse being deemed a high-shedder (>500 eggs per gram), or if deworming a young horse or foal.

A number of elements can contribute to higher levels of parasite shedding, requiring more treatments, such as:

- Boarding and training barns, which house greater numbers of horses that may contribute to increased parasite burden
- Movement of horses on and off the farm for training or competitions, presenting greater contact with other horses
- Foals, weanlings and geriatric horses, which are often higher shedders of eggs
- High stocking densities (more than two horses per acre) and nonrotated pastures, which are proven to increase parasite levels

Deworming Adult Horses

Horses deemed low shedders (0 to 200 EPG) should be dewormed twice a year, with [Ivermectin](#) in the spring and [Quest Plus](#) late fall/early winter. Moderate shedders (200 to 500 EPG) should be dewormed three times a year, with the same schedule as above but with an additional late spring/early summer treatment with [Ivermectin](#).

Deworming High-shedders and Young Horses

High shedders (>500 EPG), yearlings, and 2-year-olds should be dewormed four times a year. A convenient one year horse wormer pack is available from veterinarian-founded Valley Vet Supply. To best care for high-risk horses, consider the [Annual Young Horse and High Shedder Dewormer Pack](#). The dewormer pack was developed by the Valley Vet Supply Technical Service Veterinarian team, with guidance from the AAEP Parasite Control Guidelines, and offers young horses and horses deemed high-shedders a comprehensive, convenient pack to help ensure horse health and reduced parasite burden.

With this [convenient yearly horse wormer pack](#), you can control parasites in yearlings, 2 year-olds, and high shedders. The package contains four dewormers, directed to be used as follows:

March 1: Ivermectin

June 1: Quest

Sept. 1: Ivermectin

Dec. 1: Quest Plus

Deworming Foals

Foals are even more susceptible to parasites than adult horses, making their protection against them all the more critical, and frequent. [Ascarids, also known as roundworms](#), are their greatest concern, as ascarids quickly impact the young foal's immune system, causing respiratory challenges, stunted growth, lethargy, and even colic.

Treat foals against parasites with this convenient [Annual Foal Dewormer Pack](#). Developed by the Valley Vet Supply Technical Service Veterinarian team, with guidance from the AAEP Parasite Control Guidelines, the package contains six dewormers for use as follows:

2 months of age: Oxibendazole or Fenbendazole

4 months: Pyrantel

6 months: Oxibendazole or Fenbendazole

8 months: Ivermectin Plus

10 months: Quest Plus

12 months: Ivermectin

Additional Tips for Deworming Horses

- Before deworming horses, use a weight tape or [digital livestock scale](#) to dose the horse wormer to their exact weight. Steps to using a [weight tape](#): Make sure the horse is standing square; place weight tape around the horse's heart girth; for the closest weight approximation, see the number where the tape meets; and set horse wormer paste to the correct weight to administer an accurate dose.
- Perform FEC tests yearly for each horse.
- Perform fecal egg count reduction test (FECRT) in both foals and adult horses every other year. In herds with high numbers of horses, FECRT does not need to be performed on all horses -- six is the recommended number.
- For more challenging horses, make deworming time simple [with a drench bit](#), for less stress on them -- and for you.
- Rotational deworming, the practice of deworming all horses quarterly with different classes of dewormers, is no longer recommended by equine parasite experts. Rotational deworming has been found to increase risk for parasite resistance. Implement a strategic deworming program to help ensure your horse's health and the efficacy of dewormer ingredients.

Find pictures and descriptions about [worms in horses](#) to best identify your horse's risk. To continue learning, view this [horse wormer Q&A](#).

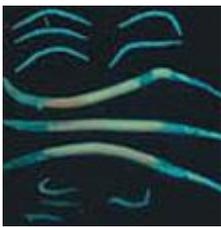
Did you know? Some 90% of worms in horses come from the environment they are exposed to every day. This includes small strongyles, tapeworms, pinworms, roundworms, bloodworms and threadworms. Equine parasites can present a number of health risks to horses, including:

- Poor nutrient absorption
- Increased risk of colic and pneumonia
- Lung damage
- Decreased performance
- Stunted growth
- Weight loss
- Poor coat condition

Help control your horse's risk for parasites; ensure they are on an [effective equine deworming program](#). For young horses and horses deemed high parasite shedders, consider [this annual deworming pack](#), available only at veterinarian-founded Valley Vet Supply. If you are deworming foals, look to [this specific pack](#). Both annual deworming packs were developed by the Valley Vet Supply Technical Service Veterinarian team, with guidance from the AAEP Parasite Control Guidelines.

For a better understanding of worms in horses, review the descriptions and pictures below.

Horse Worm Facts



Pinworms

Pinworm eggs are picked up by horses from contaminated feed, water, bedding, and may also be present on tail wraps, grooming materials, and even fence posts and stalls. The female pinworm deposits eggs around the anus, secreting a substance which can cause intense itching. This may lead to tail rubbing and even injury to the tail and rump. Washing the perianal region may help relieve the itching, but all materials used should be discarded or washed in hot water with soap. Pinworms may be difficult to diagnose in manure samples, but the eggs can usually be picked up on scotch tape pressed to the skin near the anus.



Ascarids (large Roundworms)

The adult stages of the large roundworm is found in the small intestine, where the female passes large numbers of eggs into the manure. In about two weeks, these eggs become infective and the horse picks them up while grazing. The larvae migrate into the blood vessels and are carried to the liver and lungs. The immature worms are coughed up and swallowed, maturing in the small intestine to complete the life cycle.



Bots

Bots are the immature maggot stages in the life cycle of the bot fly, the adult of which resembles the honeybee in general appearance. The females lay their eggs by attaching them to the hairs of the front legs, throat, and under line. As the horse licks itself, the larvae attach themselves to the lips and tongue and burrow into these tissues. After about three weeks they attach themselves to the lining of the stomach, where they may remain for several months, causing additional damage.



Large Strongyles (Blood Worms)

Adult strongyles are found firmly attached to the walls of the large intestine, where the females pass large numbers of eggs into the manure. These eggs hatch and the larvae climb blades of grass and are swallowed. The larvae then migrate to the large arteries which supply the intestines. As the artery walls are damaged, blood clots form and break away, causing colic.

Small Strongyles (Cyathostomins): Ubiquitous parasites, infecting nearly all grazing horses. Relatively mild pathogen, except when present in large numbers.



Tapeworms

Difficult to diagnose, it is estimated that 40% of the horses in the U.S. are affected. Tapeworms are contracted during grazing, when the horse ingests the intermediate host, a mite found on plants. Once infected, tapeworms contribute to digestive problems, colic and malnourishment. Tapeworms are often undetected using normal fecal flotation methods.

Some Question and Answers

Equine deworming is a critical part of overall equine wellness. It's also a rather *technical* part of your horse's wellness program. With this in mind, by working with our veterinarians and founders, Drs. Arnold Nagely and Ray Shultz, we bring you a comprehensive Q&A about all things equine deworming.

Q: What risks do parasites present to horses?

Parasites rob horses of nutrition, energy and overall wellness. When left untreated, parasites can cause critical damage to a horse's vital organs, impair their growth, hinder their performance and even cause colic.

Q: When is the best time to deworm my horse?

American Association of Equine Practitioners (AAEP) [parasite control guidelines](#) recommend deworming when parasite levels can be at their highest, during the spring and fall. Treatment for bots and tapeworms should be timed to coincide with the end of the fly season for bots and the end of pasture season for tapeworms, typically late fall or early winter. For best control, look to [ivermectin/praziquantel](#) or [moxidectin/praziquantel](#) deworming combinations.

While deworming helps alleviate adult worms, in turn reducing the number of eggs shed, it is important to keep in mind that the real damage done by strongyles occur during larval migration. Consider treating with [Panacur PowerPac](#) when the encysted stage is at its peak, typically in the fall for northern climates and spring in more tropical and subtropical climates.

Q: How often should adult horses be dewormed?

Work with your veterinarian to perform a fecal egg count (FEC) test, which will help guide you on the frequency of deworming treatments needed. The [AAEP recommends](#) one FEC per year for adult horses. As a general best practice, though, horses should be treated once or twice yearly, during spring and fall.

Q: According to a horse's FEC results, what constitutes as a low or high parasite shedder?

Understanding a Horse's FEC Test Result Numbers and Level of Parasite Risk

Low shedder	0 to 100 eggs per gram (EPG)
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Moderate shedder	<200 to 500 EPG
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High shedder	600 to 3,000 EPG
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Q: Which parasites should horses be treated against?

There are more than 150 species of internal parasites that can infect horses. The following are the most common, with the first three posing the gravest risk to your horse's health.

- Small strongyles (cyathostomins)
- Roundworms (ascarids)
- Tapeworms
- Large strongyles (bloodworms or redworms)
- Pinworms
- Bots
- Threadworms

Q: Do younger horses have unique deworming needs?

Foals should be dewormed a minimum of four times, beginning at 2 to 3 months of age. Because ascarids are the primary target, [benzimidazole dewormers](#) are recommended. A second dose of benzimidazole is recommended by 6 months of age, at which time an FEC can be used to determine whether the primary worm burden is ascarids or strongyles. The next two dewormings, at 9 and 12 months of age, should primarily target strongyles, with tapeworm treatment included in one of the treatments.

Recently weaned foals should be turned out to the cleanest pastures available with the lowest parasite burdens. Yearlings and 2 year olds should be [treated as high shedders](#), according to their FEC results, and be dewormed on average three times per year.

Q: Do high-shedding horses have different deworming needs?

Some 80% of eggs are often shed by only 20 to 30% of horses. The key is to identify high-shedders and deworm before they begin passing large numbers of eggs into the environment.

To help control parasite burden for high shedders (more than 600 EPG), consider incorporating a daily dose of [Strongid® C 2X](#) to help break the cycle of parasite infection.

Q: Can certain factors contribute to increased parasite levels at a barn?

Yes! A number of elements can contribute to higher levels of parasite shedding, such as:

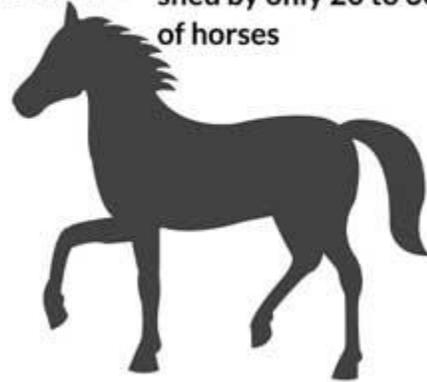
- Boarding and training barns, which house greater numbers of horses that may contribute to increased parasite burden
- Movement of horses on and off the farm for training or competitions, presenting greater contact with other horses
- Foals, weanlings and geriatric horses, which are often higher shedders of eggs
- High stocking densities (more than two horses per acre) and nonrotated pastures, which are proven to increase parasite levels

Q: Should a horse's approximate weight be determined before dosing dewormers?

Yes! It's important to dose to your horse's individual weight when deworming. Keep a handy [weight tape](#) in your tack box to help accurately dose your horse's dewormer, and remember these four simple steps to using a [weight tape](#).

1. Make sure your horse is standing square.
2. Place the weight tape around your horse's heart girth.
3. For the closest weight approximation, see the number where the tape meets.
4. Set your dewormer to the correct weight to administer an accurate dose.

FACT: 80% of eggs are often shed by only 20 to 30% of horses



Q: What are best practices to incorporate for parasite control, in addition to deworming?

To better manage parasites, it is recommended that horses consume grain and hay from a [feeder or hay rack](#) that is elevated off the ground. Removing manure daily, as well as composting manure and clipping pastures, also can help control parasite populations. To help eliminate larvae, pasture rotation also is a best practice. If possible, horse owners can remove horses from the pasture and rotate in another species, such as cattle, to help eliminate parasite burden from the field.
