

# SEP Guide to Worm Control

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## Signs of worm infestation

- Reduction in growth and performance
- Weight loss – mild to severe
- Tail rubbing
- Diarrhoea
- Lethargy
- Anaemia
- Coughing in foals
- Colic
- Death

There are a number of different types of worms that infest horses. They vary in size, shape, presenting signs and target different age groups of horses and require different treatments.

## Here is a brief outline of the most common worms:

**Small strongyles** – Also known as small redworms or Cyathostomes, these are regarded as the most problematic worm for the horse population currently. Eggs are shed in the manure, hatch and develop into ‘infective larvae’ which migrate away from the manure onto pasture ready to be eaten. The pasture can remain infectious for 5 to 9 months depending on weather conditions. When inside the horse’s digestive tract, the larvae can burrow into the gut wall to hibernate or ‘encyst’, usually in the autumn. They will stay buried in the gut wall until early spring, when suddenly they can ‘re-emerge’ together, often causing rapid weight loss, diarrhoea and sometimes colic.

**Large strongyles** – (*Strongylus* spp) These large redworms are less common since the establishment of worming regimes 40 years ago, but can still cause colic, poor growth rates and diarrhoea in youngstock and immunocompromised horses.

**Roundworms** – (*Parascaris equorum*) Horses develop resistance to these worms by 6-9 months of age, but is an important cause of poor growth, impaction and coughing in foals. These produce a large amount of eggs that stick around the horse’s tail and legs, making it easy for a foal to pick them up when suckling.

**Threadworms** – (*Strongyloides westeri*) Another worm that can cause symptoms in foals, as it is transferred through milk. These can be more of a problem in large, overcrowded conditions.

**Tapeworms** – (*Anoplocephala perfoliata*) These are an important cause of colic due to impaction at the ilio-caecal junction in the adult horse. Should be treated once – twice a year (autumn or spring & autumn).

**Bots** – (*Gasterophilus* spp) Rarely cause disease but eggs cling to coat. Easily treated once a year.

**Pinworms** – (*Oxyuris equi*) Eggs are laid around anus and under tail. Only signs are tail rubbing and hair loss around tail as they are extremely itchy. These can be tricky to manage and we advise you to seek advice from your vet.

**Lungworms** – (*Dictyocaulus arnfieldi*) Seen in horses that live with donkeys, clinical signs are coughing and bronchopneumonia.

Planning your worm control program

An effective worm control program is much more than administering a wormer occasionally. In the age of major drug resistance, we should incorporate as many control measures as possible to ensure minimal but effective use of anthelmintics (drugs that treat worms).

1. Limiting reinfestations – by several management practices can dramatically lower the number of worm eggs and infective larvae in the horse's environment.

- Manure removal from stables/yards (daily) and paddocks (2-3 times per week).
- Paddock management – harrowing and resting (6-8weeks) when dry/hot conditions, NOT when wet as this will help spread the eggs/larvae.
- Alternate grazing with other species, e.g. sheep, which also helps with horse-loving weeds.
- When drenching, wait a week before turning onto 'clean' pasture.
- Avoid over-stocking and over-grazing paddocks.
- Wash perineum, legs and udder of pregnant mares prior to foaling.
- Clean and disinfect foaling boxes and stables.
- Avoid feeding horses on the ground, use hay nets/racks and feeders.
- Prioritise low-worm paddocks for mares and foals and segregate horses by age where possible. Try not to follow yearling/weanling paddocks with mares/foals.

2. Faecal egg counts (FEC) - Testing a small sample of manure can estimate the worm burden of your horse and the species that is present. However, it cannot detect larvae and tapeworms.

- Every individual horse has a different susceptibility to worms for their entire life. They will shed more eggs into the environment than other more 'resistant' horses.
- It is important when testing a herd, to collect manure from each horse and treat them as individuals according to the worm test results.
- Regular monitoring (every 3 months) recommended although SEP advise to combine FEC's with a strategic drenching program.
- Best practice is to carry out a FEC before using a drench and then 2 weeks after to check effectiveness of the drench that was used.

3. Anthelmintics – Careful use of drugs to control worms is imperative to keep ahead of worms and their ability to develop resistance. There are no new 'wormers' due for release, so we have to make the most of what we have on the market.

- There are 3 main chemical groups on the market – Benzimidazoles (white drench), Morantel/Pyrantel (clear drench) and Macrocyclic lactones (Avermectin group including Ivermectin and Moxidectin). Use depends on time of year and worm burden (FEC result).

- Do not under-dose! Make sure you have an accurate bodyweight for each horse and that they don't spit it out after administration!
- Avoid using combination wormers unless when targeting tapeworm also.
- FEC's are not recommended for foals until over 6 months.
- Yearlings and 2 year old's can be considered as 'high-shedders'.
- Only treat for small encysted redworms once/twice yearly – autumn +/- spring to prevent overuse of the few wormers effective against them.

Strategic worming program:

**ADULTS**

SEASON	TARGET WORMS	ANTHELMINTIC TYPE
<b>SPRING</b>	Encysted small redworms +/- tapeworms (if wet spring)	-Moxidectin or 5 day double dose Fenbendazole -double dose Pyrantel or standard dose Praziquantel
<b>SUMMER</b>	FEC	ONLY TREAT FOR WORMS ISOLATED
<b>AUTUMN</b>	Encysted small redworms Tapeworms	-Moxidectin or 5 day double dose fenbendazole -double dose Pyrantel or standard dose Praziquantel
<b>WINTER</b>	FEC Bots	Treat as necessary Macrocyclic lactone group

**FOALS**

1. Worm the pregnant mare using a product licenced for use in pregnant mares 2-4 weeks before foaling.
2. First drench at 6 weeks of age using a benzimidazole or pyrantel for roundworms and threadworms.
3. Drench every 4 weeks until 6 months old. Drench just prior to weaning and then turn out onto 'clean' pasture after weaning.
4. Treat for tapeworms at 9 months old.
5. FEC's can be instigated after 6 months of age.