

Fast Fact Sheet: Cyathostominosis

What is it?

Cyathostominosis/cyathostomiasis is a condition caused by infestation of small strongyle parasites (aka cyathostomins, small redworms) within a horse's gastrointestinal tract. Nearly all horses have some of these parasites in their caecums and colons, and most do not become ill because of it. However, cyathostominosis, caused by extreme infestation, can be fatal, so preventing the disease, with input from a vet, is essential.



Horses showing signs of scouring

Cause:

Cyathostomins live in pasture and infest horses who consume their eggs while grazing. Normal, healthy horses can carry a few thousand of these parasites without experiencing any health issues. The disease is only triggered by very high level of infestation.

Cyathostominosis is caused by immature parasites, rather than adults. The larval stages of the parasite encyst in a horse's intestinal walls, similar to a caterpillar in a cocoon. The larvae emerge at the same time. If the horse has a high number of these larvae in its gut, the gut walls become damaged by the mass emergence. This triggers an inflammatory reaction and the damaged gut leaks protein-rich fluid.

Clinical Signs & Diagnosis:

Signs of cyathostominosis include:

- Diarrhoea (chronic or sudden)/ variable faecal consistency
- Weight loss (chronic or sudden)/ poor body condition
- Intermittent colic
- Dehydration
- Loss of appetite
- Lethargy, depression



Lethargic young horse with cyathostominosis

Diagnosis is challenging because clinical and laboratory signs can vary. Faecal egg counts are not useful in assessing cyathostomin burden or diagnosing cyathostominosis because this disease is caused by immature parasites, rather than the adults who lay eggs. Diagnostic tools include physical exams, ultrasonography (used to identify thick/inflamed gut walls), and faecal exam (to rule out other possible diagnoses). Blood tests can help identify redworms – ask your vet about their use.

Should I call the vet?

Yes. Vets are needed to diagnose and treat this condition. Veterinary advice is also necessary to prevent cyathostominosis because the recommended protocol will differ based on each horse and yard.

Treatment:

Veterinarians will administer appropriate larvicidal medication (usually moxidectin). Vets will also provide supportive care, which is likely to include:

- Fluid therapy
- Replacement of electrolyte losses
- Anti-inflammatory drugs
- Nutritional support.

Risk Factors & Prevention:

All horses are likely to carry some cyathostomin parasite burden, but those that are most at risk of becoming ill with the disease are usually between 1 and 4 years of age. It can also affect mature horses and is rare in foals. The mass emergence of larvae typically occurs in late winter to early spring. Horses who have been recently dewormed with a non-larvicidal dewormer are more at risk than those who have not.

Horses require individualised parasite control strategies to prevent excessive worm burdens. Routine deworming (i.e., deworming all horses at set intervals) is not recommended, because it builds drug resistance to the deworming medication, making future treatments ineffective. The goal of parasite control is not to eliminate all parasites. It is to prevent horses from becoming ill while avoiding the development of drug resistance. Vets can advise on appropriate use of medications tailored to each farm and each horse.

Since the parasites are spread through pasture, good pasture management will reduce infestations. These practices include:

- Remove manure from paddocks at least twice per week
- Rotate and rest fields to prevent overgrazing
- Allow 1–2 acres per horse

Recommended Resources:

AAEP Internal Parasite Control Guidelines [pdf download]

The Horse 'Equine parasite control: Deworming and beyond' [online article]. Note: This resource has plenty of good information, including an explanation of drug resistance.

Nielsen, M. 'The parasite journey of the horse part 3: small strongyles'. [video]

World Horse Welfare webinar: 'Managing and controlling worms in your horse and on their pasture'

World Horse Welfare 'How to control worms in horses' [online article]

The information in this fact sheet was collated by the World Horse Welfare education team and verified by relevant industry professionals. We always advise that appropriate veterinary advice is sought for any equine should their health be in question or in an emergency.