

# Worm Control in Horses

**Equine Newsletter** 

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Worms can severely affect the health and wellbeing of our horses and ponies. It is important to implement an appropriate worm control programme for your horse or pony to include regular monitoring, treatment (only if necessary) and good pasture management. In adult horses wormers should be administered to control cyathostomins, large strongyles and tapeworms. While they do not pose a significant risk to the health of your horse, pinworms are an irritation to both infected horses and their owners and are worthy of consideration.

# Types of Worms

## Large Redworms/Strongles

The large redworm is not as problematic as it used to be due to the use of modern equine anthelmintics. However, these are still life-threatening parasites whose migratory larval stage can cause blockages in blood vessels, damaging vital organs.

## Small Redworms/Strongles (Cyathostomes)

Cyathstomins, which used to be considered innocuous, are now recognised as a major cause of potentially fatal disease when mass eruption of larval stages occurs. They can cause weight loss, chronic colic, diarrhoea and inflammation of the gut.

#### Ascarids (Parascaris equorum)

Mainly found in foals and young horses. Horses develop natural immunity to this parasite by about 18 months of age.

#### Tapeworms (Anoplocephala perfoliata)

These are generally considered of little clinical significance unless they are in large numbers. They may affect gut motility causing spasmodic colic, intestinal impaction and rupture. The tapeworm has an intermediate host called the oribatid (forage) mite found on the pasture, as well as in food and bedding. The mite consumes the egg passed in the faeces, and the immature tapeworm then develops inside the mite before it itself is ingested by the horse.

#### Lungworm

Donkeys are the natural host for these worms and don't usually show any symptoms. However, horses grazing in the same field or in fields previously grazed by donkeys may be affected. The worm does not complete it's lifecycle in the horse so it is not detectable in faecal worm egg counts.

#### Pinworm (Oxyuris equi)

There are no significant disease implications but can cause irritation around the anus. This is caused by the female worms gluing eggs on to the perinatal region of the horse, which can result in rubbing and damage to the tail and perinatal skin.

#### **Bots**

Strictly an insect rather than a worm. Bots are commonly recognised by the eggs deposited by the fly on the horse's coat, often around the shoulders, upper foreleg and neck. The eggs look like tiny grains of rice, and are pale cream in colour. Manual removal of the eggs at this stage can be an effective aid in controlling this parasite.

The eggs quickly develop into larvae which are either licked by the horse, or crawl to the horse's mouth to be ingested.







# What is Resistance?

Resistance is the ability of worms to survive a treatment that was once effective against these worms. Even if there are only small numbers of resistant worms at first these will then survive to go on to reproduce until there are many resistant worms. These will then be shed into the environment to infect other horses. In the 1960s when routine worming schedules were recommended they were primarily targeted at the large strongyles. Infection with these is now rare but a consequence of these regular worming strategies was the development of cyathstomins that were resistant to the available wormers. Unfortunately cyathostomins are now recognised as a major cause of potentially fatal disease when mass eruption of larval stages occurs. Resistance is considered irreversible and is the main reason for a more responsible approach to worming.

# **Control of Worms**

Horses are not meant to be worm-free but the burden must be kept to a minimum. It is actually important and beneficial to have parasites that are not exposed to wormers to delay the onset of resistance.

## **Targeted Worming**

Targeted strategies of worm control are aimed at cyathstomins with consideration then given to management of other worms around their control. Recent studies have estimated that targeted worming programmes should reduce the use of wormers by 75%, reduce pasture contamination and also reduce the cost of worm control.

#### Faecal Worm Egg Counts (FWEC)

This is the microscopic examination of a sample of horse's droppings for the presence of worms eggs. These tests do not detect bots, tapeworms or larval cyathostomins. The results of FWEC provide an indication of which horses are contaminating the pasture and to what extent. They are of most use if performed regularly. FWEC are of little value during winter when horses are grazing less and worm egg production reduces.

How do you do this? Collect 2 balls of faeces into a bag and label them with your horses name and your name, then place in a refrigerator or chill packs. Bring into Coombefield Veterinary Hospital as soon as possible after they have been collected. If faeces get warm before evaluation, the eggs will hatch and release larvae in which case the count can no longer be done. If larvae are seen within the eggs it will invalidate the count as eggs already hatched.