

## Equine Worming Guide

Traditionally horses were given a deworming treatment at regular intervals through the year. This is no longer appropriate. As we have started to see resistance to our deworming drugs developing, this has highlighted the importance of protecting these drugs and instead using them more responsibly and sustainably.

Some Scandinavian countries have moved to having these deworming drugs available on veterinary prescription only as the risk of resistance to these drugs developing is such a serious issue. The consequences of having no effective treatments due to widespread resistance would be severe. Diseases such as parasite related colics, diarrhoea, weight loss and larval cyathostomiasis are issues that would be seen more frequently, so managing our worming sustainably is vitally important.

### Aims of worming

It is natural for horses to carry a small number of parasites in their gut. Our aim with our deworming treatments are to:

- > minimise risk of parasitic disease
- > control parasite shedding onto pasture
- > maintain efficacious drugs and prevent resistance

We achieve these things using a combination of management, testing and deworming drugs.

Targeted treatment means we can leave a “refugia” population of worms on our pasture and in our horses guts. This means not treating our low shedders which leaves a population of worms that are susceptible to our deworming drugs. These susceptible worms continue to be shed on the pasture to be picked up at a low level to compete with those that are resistant to our deworming drugs, not allowing the resistant parasites to take over. This means our drugs can continue to be effective.

### What parasites are we tackling?

**Cyathostomins/small strongyles (small redworm)** - cause disease when numbers are high, including weight loss and colic. Severe disease can occur due to mass emergence of larvae from the gut wall in the spring which can be fatal.

**Large strongyles (large redworm)** - can cause colic due to obstruction of blood vessels in the small intestine causing portions of gut to die.

**Tapeworm** - associations with some types of spasmodic and impaction colics

**Ascarids** - most important to consider in foals. Causes poor growth and ill-thrift and migrating larvae can cause a cough and nasal discharge. Can also cause gut impactions.

**Pinworm** - cause itching and rubbing as eggs are laid on the hairs around the tail and hindquarters

**Lungworm** - this parasite is a consideration in donkeys or if your horses are grazing alongside donkeys.

**Bots** - rarely cause disease. Eggs are laid by flies on the hair of the horse which are ingested as they groom themselves.

## **Testing**

It has been shown that 20% of adult horses shed 80% of the parasites into the environment so it is important to identify these high shedders.

### **Faecal worm egg counts (FWEC)**

These should be performed at 3 monthly intervals from March to the start of October and will give an idea of the shedding status of the horse for the strongyle parasites. We can then target our treatments on these horses that are high shedders. Yearlings and 2 year olds are generally high shedders but adult horses will tend to either be high or low shedders throughout their lives.

FWECs can also be used to test the efficacy of the dewormer used or if there is a concern over resistance to a particular drug on your property in a FWEC reduction test. With this we look at the number of eggs shed before treatment compared to the number shed 14 days after treatment has been given.

### **Tapeworm saliva test**

Tapeworm is not reliably detected on FWECs. Many of the deworming products that are available also treat for tapeworm due to the combination of drugs in the product, but if your horse is a low shedder and not receiving a dewormer you can test specifically for tapeworm. This is a saliva swab test that owners can do themselves with a special kit provided by the laboratory that runs this test. This test should only be done every 6 months as antibodies to tapeworm can remain high for several months after treatment which can cause a false positive.

## **Drugs**

There are 5 drugs used commonly for deworming horses.

**Ivermectin** - treatment of large and small strongyles

**Moxidectin** - the only drug that is truly effective on the encysted cyathostomins and vital that it is used only for winter treatments unless otherwise advised by your vet

**Pyrantel** - strongyles and if given at double dose tapeworm

**Fenbendazole** - for treatment of ascarids in foals and pinworm, partial efficacy for encysted cyathostomins

**Praziquantel** - this is for tapeworms only but unfortunately is not available currently other than in combination with ivermectin or moxidectin

## **Management**

Good management is a key feature in managing parasite burden in our horses.

**Poo picking** - this is very effective at removing parasites from pasture. This should be done daily to remove faecal material contaminated with parasite eggs.

**Cross grazing** - cross grazing with another species (e.g. sheep) can be helpful in picking up parasites from the pasture. The parasites cannot continue their lifecycle in ruminants so there are no eggs shed back onto the field.

**Resting pasture** - if there are no horses to pick up the parasites they will eventually die. This does require additional space as the pasture must be rested for a number of months.

## **Winter worming**

Winter worming treatments are a vital part of our worming plans.

Over the late autumn and winter the cyathostomins stop developing to the adult stages and instead “hibernate” in the gut wall by burrowing (encysting) beneath the surface. In the spring there is a trigger which causes these larvae to emerge all at once to continue their development into the adult stage. If this occurs in large numbers it can cause colic, sudden onset diarrhoea and weight loss. The acute condition “larval cyathostomiasis” which can be caused by this mass emergence sadly only has a 50% survival rate and we do see a couple of cases each year.

We strongly recommend treatment with moxidectin. This should only be used at this time of year as it is the only drug we have that is effective against the larval stages in the gut wall so it is vital we protect this drug.

Fenbendazole is sometimes used as a 5 day course. This drug is only partially effective meaning that only some of the larvae are killed. It has been considered that this is a gentler wormer, however it should be noted that this drug has been demonstrated to cause more inflammation in the gut than moxidectin.

There is a blood test available for these encysted larvae. It is based on risk and currently requires horses to be low risk to make performing the test worthwhile. Risk categories are assigned based on age, management and consistent negative worm egg counts. This test is promising for the future but as most horses fit into the medium or high risk categories so it is still appropriate to treat with moxidectin. If this is something you would like to discuss please contact the equine team.

## Worming plan



We run various offers on worm egg counts throughout the year so please keep an eye out for them on social media and in the newsletter. Worm egg counts and a winter wormer are also included in our Horse Health Plan.

## Foals

Foals are the exception for testing and should be routinely dewormed until a year old with the following:

- > at 2-3 months and 4-6 months of age (prior to weaning) with fenbendazole for ascarids
- > at 9 months and 12 months with a combined treatment for strongyles and tapeworm

The vets may advise FWEC if there is a concern about resistance on your property or if there is a concern over weight loss.

**If you have any questions please do not hesitate to contact one of the equine team on 017684 83789.**