



## Worming Advice

Intestinal worms have been around as long as horses have. They have highly complex life cycles and vary hugely in the way they behave and problems they cause. In the wild, horses will have survived quite adequately without the need for worming drugs so why is it that they are so dependent on them now?

The main reason is simply to do with the fact that we tend to keep horses in a much smaller space than they would have done in the wild, and we keep them there all year round. In the wild, a horse would move to new grazing on a very regular basis and therefore rarely be eating pasture close enough to their dung to become re infected.

### 1. What are the symptoms of worms?

For the main part, if present in low numbers, worms cause few symptoms and often you will be unaware of their presence. This doesn't mean that they aren't causing any damage and sometimes problems arise at a later date.

The two main problems we see regularly in horses due to worms are colic and diarrhoea. In more severely infected animals we can see failure to thrive, dull coat, poor weight gain, coughing or liver and other organ damage.

#### Colic

'Colic' is a term used to describe abdominal pain (belly ache) in horses. Worms cause abdominal pain in a number of different ways. Some will burrow through the gut wall into the blood stream, then migrate in the blood vessels that supply the intestines causing severe cramp by interrupting the blood flow to the gut wall (e.g. the large strongyles). Other types of worm can cause a blockage to the passage of food (e.g. the large roundworm 'parascaris'), or can congregate at the opening of the caecum causing spasm (e.g. the tapeworm 'anoplocephala'). Another possible complication of worm damage is a condition called peritonitis. This is infection in the abdomen around the outside surface of the intestines. There are various causes of peritonitis, but migrating worm larvae are one cause.

Sometimes an episode of colic that improves rapidly (e.g. spasmodic colic) may be put down to being 'one of those things'. If your horse has colic,

however mild, it is important to reflect on your worm control program. It may well be worth asking to speak to one of the equine vets at Town and Country and we will be able to advise you of the most appropriate worm control program for your horse and hopefully reduce the risk of further colic episodes in the future.

#### □ **Diarrhoea**

Another common symptom of worm damage is diarrhoea. This is particularly caused by the small redworms (cyathostomes). They tend to damage the wall of the large bowel causing inflammation which results in diarrhoea.

The cyathostomes have a seasonal lifecycle. They are active throughout the spring and summer grazing season, but in the autumn they start to become less active and will 'hibernate' inside the horse by burrowing deep into the gut wall and becoming encysted. In this state, they are able to avoid the horse's immune system and are pretty resistant to most worming drugs. Interestingly, when the spring grass starts to come through, these encysted small redworms will wake up and emerge back into the intestine causing significant damage to the gut wall. If your horse suffers from diarrhoea at the time the new spring grass comes through, it is possible that this is due to worm damage rather than just the 'richness' of the grass. Again, please contact a member of our equine team to discuss your horse if you have any concerns that this could be occurring.

### **2. Assessing the worm burden in an individual or group of horses.**

The easiest way to investigate whether your horse has worms is to collect a fresh sample of faeces and get a worm egg count performed. This is a relatively good way of assessing roundworm burdens but it is not so good at detecting tapeworms. There is a blood test that can give an idea about the level of tapeworm infection present in your horse.

There are a few limitations of the worm egg count. Round worms do not lay eggs all year round. In fact, the number of eggs present in a sample can vary on a daily basis depending on just how many eggs are being laid. It is however a useful tool, particularly if performed reasonably frequently (3-4 times a year particularly during the grazing season).

### **3. Treating worms**

There is no single dosing interval that is correct for all drugs at all times of year. In fact, it is probably fair to say that there is no single worming program that is suitable for all horses.

There *are* comprehensive worming programs that have been designed to give complete cover from all worms all year round. These may be suitable in some circumstances, but a heavy reliance on drug based worm control is more likely to lead to the development of drug resistance. They often lead to

unnecessary dosing and it may become quite expensive, especially if you have more than one horse.

At Town and Country Veterinary centre we aim to advise our clients on an individual basis in order to develop a tailor made worming program to suit their needs and those of their horses. The basis of our program includes:

- Identifying the animals which need treating and those who may have a good natural immunity and therefore don't require treatment. This is done by performing Faecal Worm Egg Counts.
- Recognising which worms are present and therefore which drugs are most appropriate.
- Identifying feasible pasture management changes which can reduce risk.
- Understanding the natural life cycle of the worms and treating at the most important times of the year.

#### **4. Pasture Management**

- Remove droppings**

The single most important management means of worm control is regular dung removal from the pasture. However, in order to be an effective part of your worm control strategy, the dung must be removed before the worm eggs have hatched into infective larvae. The frequency that this must be performed depends on the weather. When it is warm and wet it is particularly important to be vigilant and dung collection should be performed 2-3 times per week.

- Stable new horses until after treatment**

When you worm your horse, it is worth keeping it stabled for 48hrs after dosing so that any worms and eggs that are passed are not left to contaminate the field. It is sensible to worm and follow this procedure for any new horse being brought onto the field.

- Pasture rotation**

Resting a pasture is another way of controlling worm numbers that is useful if you have plenty of land available. Sheep and cattle carry different worms to horses so alternating grazing with other species can be one way of 'resting' a field. They will also graze up infective larvae from ungrazed, faecally contaminated areas. The length of time a pasture needs to be rested however is quite long as some worm eggs can survive for many months. Resting a pasture for a year would significantly reduce the strongyle population, but the tougher eggs such as parascaris (particular problem for foals and youngsters) will take much longer. A very cold winter will help kill off some but probably not all worm eggs. A mild winter is likely to leave many more eggs viable to hatch in the spring when the weather warms up.

Harrowing your field is a risky business. If you can guarantee a hot dry spell for a week or so after you have harrowed then it is likely that the eggs and any newly hatched larvae will be subjected to the sun's baking rays and be killed. If however it rains unexpectedly, your entire pasture will be infected and any horse grazing there will suddenly be exposed to a finely spread layer of worms on almost every blade of grass in the field!

### **How do I protect my mare and foal from worm problems?**

Most of the wormers available are safe to use in pregnant and lactating mares. Some advise that they shouldn't be used in the first 4 months of pregnancy. It is extremely important to read the small print on the leaflet. This will advise whether the product you have is suitable for use in pregnancy.

The age at which a foal first needs to be wormed depends on the management conditions and the likelihood of exposure to worm eggs. As a general rule, they will need a first dose against roundworms at 6-8 weeks old although this can be delayed if management factors have been assessed as posing a very low risk.

There is a roundworm that can be passed directly from the mare's colostrum (strongyloides 'threadworm') that can cause diarrhoea in foals at a younger age. If the mare has not been wormed and infection is suspected then there are some wormers that are safe to use in foals as young as 2-3wks old (for example Panacur oral suspension).

Not all wormers are safe for use in very young foals. It is important to read the instructions carefully. Equest and Equest Pramox are not suitable for young foals. Foals tend to be more sensitive to overdosing, so it is important to assess the foals weight as accurately as possible.

#### **High risk of worm contamination:**

- ∞ Grazing shared with other foals/youngsters
- ∞ Grazing used for foals last year (high risk parascaris contamination)
- ∞ Mares not routinely wormed or checked for worm egg counts prior to foaling (Increases risk for all worms, increases risk threadworm)
- ∞ Dung not cleared from pasture at least 3 times weekly
- ∞ High stocking density.

#### **Lower risk of worm contamination:**

- ∞ Mares and foals turned out onto fresh pasture (ideally no horses on it for >1yr, or at least rested over the winter and turnout delayed until late spring).
- ∞ No other youngsters on grazing
- ∞ No foals on grazing in previous year
- ∞ Regular dung removal performed