

Tor Equine Small Redworm Advice and Fact Sheet

What are redworm?

Small redworm are a type of strongyle worm. They are the most common and most clinically significant gastrointestinal worm found in horses; it is the only parasite that is routinely tested for by the faecal worm egg counts (FWEC).

The small redworm has multiple phases of its life cycle as shown in Figure 1:

1. Adult redworm lay eggs which are passed in the horses' faeces.
2. Whilst on the pasture the eggs develop into larval stages called L1, L2 and L3.
3. L3 larvae in the grass are eaten by the horse/pony/donkey.
4. L3 attach to large intestinal mucosa (causing damage).
5. Depending on the season, L3 may enter hyobiosis and become encysted larvae (EL3) and emerge as L4 larvae (there is a high risk of damage if large numbers of encysted larvae emerge from the mucosa at once).

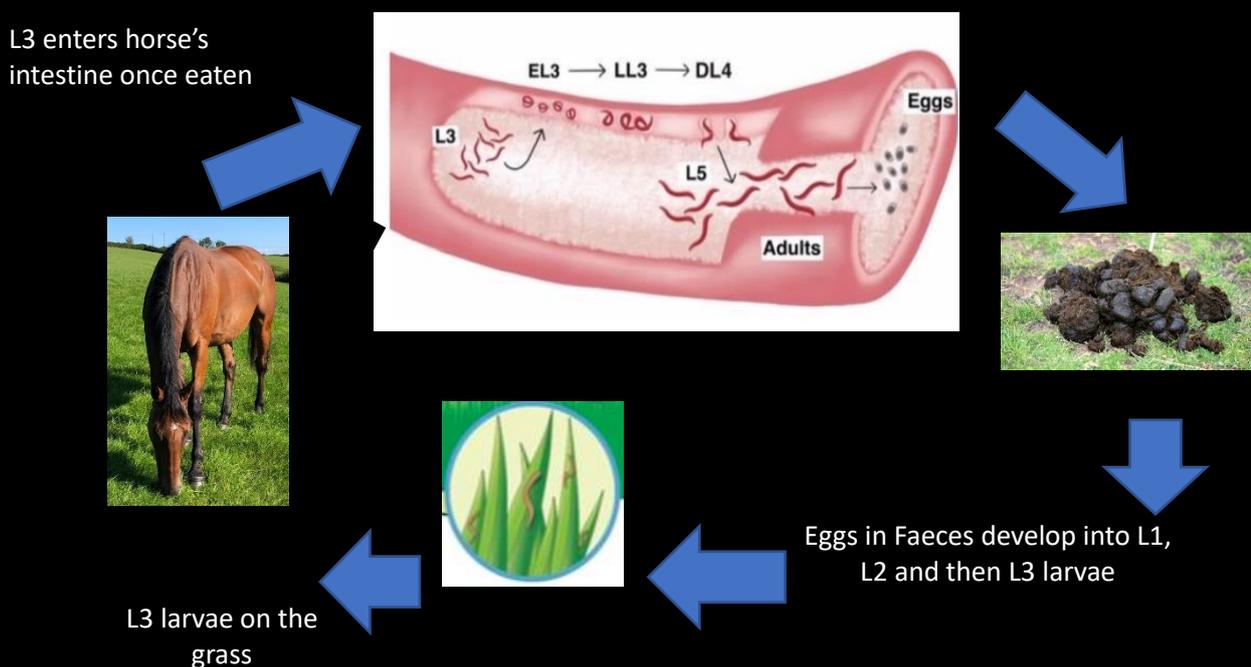


Figure 1: Shows the life cycle of the small redworm.

Picture modified from www.austindavis.co.uk by Meisha Micklewright BVetMed MRCVS

Why should we treat redworm?

Redworm can cause weight loss, diarrhoea/loose faeces and colic. If a horse carries a large amount of encysted small redworm, mass emergence can occur, often in the springtime, resulting in a massive inflammatory response that can frequently be fatal.

Why can't we just blanket worm all horses?

Resistance in the worm population to the anthelmintic medication (wormers) is becoming a bigger and more serious problem. Unfortunately, there are no new anthelmintics in development so when the parasite population is resistant to what we currently have available we will be faced with no effective treatment options. Parasites are more likely to become resistant to the wormers when they are overused or underdosed. Therefore, it is vitally important that we use wormers strategically so that when we really have a need to worm our horses, the wormers will be more effective. This is called 'Strategic worming'.

As a practice we recommend faecal worm egg counts 3-4 times a year to ensure you are not worming your horse unnecessarily. This is a cheap test that can be done quickly and easily, however, it only detects the presence of egg-laying adult worms, it does not detect the earlier part of the worm's life cycle or when it is in the encysted larvae stage. We tend not to routinely do the FWEC over the winter as the adults are less likely to be producing eggs at this time, however, the test can still be a very valuable tool for investigating problems at this time of year.

What is the benefit of the small redworm blood test over FWEC?

The encysted larvae stage occurs most commonly in the autumn to winter months, which makes evolutionary sense: The larvae encyst (similar to hibernate) over the colder months so that when they emerge they drop onto springtime pasture and have a higher chance of survival and finding an equine host. Consequently, your horse could have a high redworm burden in the autumn and winter months which would not be identified with a FWEC. This test isn't suitable for every horse and we would only recommend the redworm blood test for those horses that have had previous low FWEC results during the spring and summer months.

What does the test involve?

The test requires your vet to take a blood sample from your horse which is then sent away to the Lab that runs the test. They will then inform us of the results, and we can then work with you, to create an effective strategic worming protocol.

How can I treat?

Moxidectin (Equest) is the only wormer that is effective against encysted larval stages of redworm. Irresponsible and unnecessary use of this wormer can cause resistance as mentioned above.

Ivermectin and Pyrantel based products are effective against the other larval stages of redworm.

Still confused?

Take a look at our simple worming timeline to help you, or feel free to ring Richard or Meisha for more information. **REMEMBER: Only use wormers when absolutely necessary.**

What test and when?												
		3 FAECAL WORM EGG COUNTS - FWEC										
		1			2			3				
		TAPEWORM SALIVA/ BLOOD TEST If high risk: Test 2x yearly, spring and Autumn							TAPEWORM SALIVA/BLOOD TEST If low risk: Test once yearly, in Autumn			
									ENCYSTED REDWORM BLOOD TEST			
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	