Small strongyles

Synonyms: trichonemes, cyathostomes, cyathostomins, *Trichonema* spp., *Cyathostomum* spp., *Culicocyclus* spp., *Cylicodontophorus* spp., *Cylicostephanus* spp.

This group of worms encompasses over 40 different species, with 15 species being most commonly found in horses. All these species of small strongyles are very similar in morphology, behaviour and lifecycle so are treated as a general group of parasites when diagnosing, treating and managing infection. Small strongyles make up over 95% of all horse worm infections.

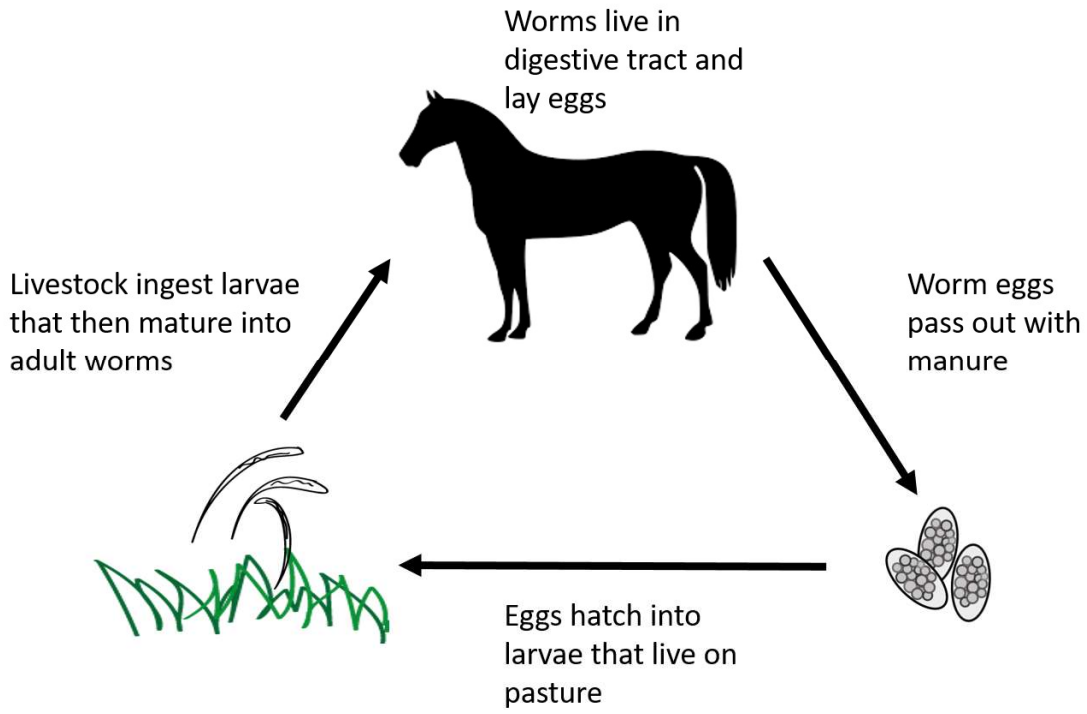
Lifecycle: Small strongyles have a direct lifecycle. Adult worms reside in the large intestine and produce eggs that pass out in the manure. These eggs hatch into larvae on the pasture, where they develop through larval stages to become infective larvae (L3). This can take as little as two weeks during warm, damp weather, however larvae can survive on pasture for up to 6 months. Horses will ingest larvae from pasture. The L3 larvae then invade the wall of the ileum and large intestine before developing into L4 larvae, which leave the intestinal wall and become adults in the gut lumen. Adult worms feed on the mucosa of the intestine wall. Occasionally larvae will encyst in the intestine wall at L3 stage. Mass emergences of L4 larvae can occur, which leads to either acute or chronic inflammatory disease that can resemble colic. This is known as larval cyathostomosis.

Clinical signs: Most adult horses carry small strongyle burdens without any obvious signs of ill health. Heavy burdens can lead to ill-thrift, poor condition and sometimes diarrhoea.

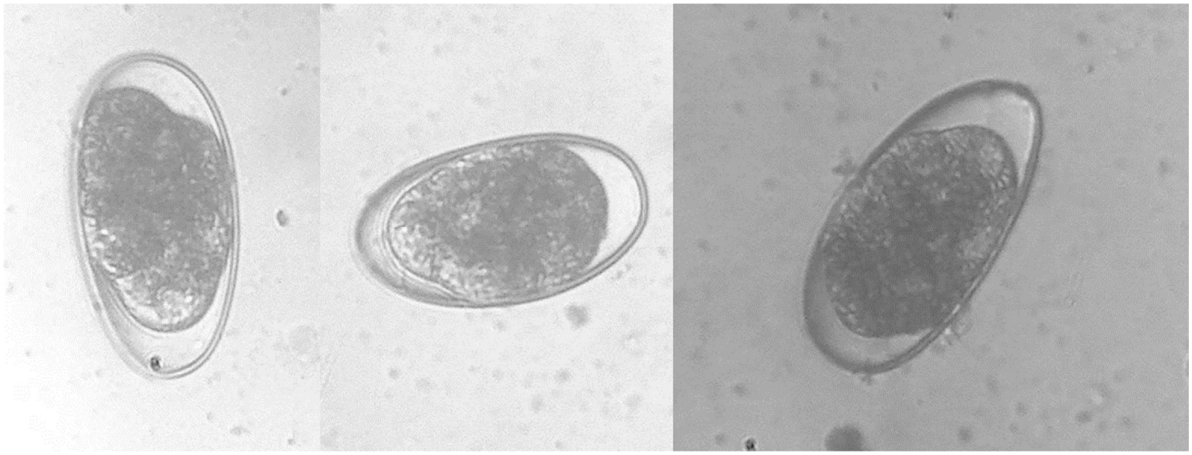
Diagnosis: Small strongyles can easily be diagnosed via FEC. Unfortunately, no diagnostic is available for encysted larvae. Larval cyathostomosis is usually diagnosed via clinical signs and environmental history.

Control and Management: Small strongyles are highly prevalent – these worms require ongoing management. The entire life cycle can take as little as 6 weeks, meaning that control with regular deworming is not sustainable. Pasture management, to limit infective larvae on pasture is a key element. Manure should be collected at least twice a week, and horses should be rotated between paddocks. If possible, cross-grazing with ruminants will help remove infective larvae.

Chemical treatment of worms should only take place after positive FEC results. In order to prevent drug resistance occurring, horses should only be wormed if their FEC results are above 200 EPG (eggs per gram manure). Using FECs, chemical deworming can be decreased to half of a herd to reduce worm egg shedding by 95%.



Strongyle lifecycle. The development of eggs into infective larvae can occur in as little as 4 days, meaning regular manure collection is key to break the lifecycle. In total, the lifecycle may take as little as 6 weeks. ©WormCheck



Examples of strongyle eggs at 100x magnification. ©WormCheck