

# Haemonchosis

**Alternate Names:** Barber's pole worm, wire worm.

**Species Affected:** Ruminants, with small ruminants such as sheep and goats being more severely affected.

**What causes haemonchosis?** Small worms known as *Aemonchus spp.* These parasites infest and damage the true stomach (abomasum or fourth stomach) of small ruminants.

**How is haemonchosis transmitted?** Sheep and goats infested by *Aemonchus spp.* shed parasite eggs in their feces. Animals eat the larvae when grazing, licking the soil, or consuming contaminated feed or water. *Aemonchus* prefer hot and humid environments, but remain a concern all year round.

**What are the clinical signs of haemonchosis?** Parasitic infestations are classified in three categories depending on clinical signs:

- Hyperacute – with a sudden, heavy, *Haemonchus* infestation animals show few to no visible signs of illness but may die within a week.
- Acute – severe anemia is the most common sign of acute haemonchosis. Signs of anemia include weakness, pale skin (easiest seen on the lower eyelids or gums of the mouth), and edema (fluid swelling under the chest, belly, or lower jaw – “bottle jaw”).
- Chronic – damage of the stomach leads to abnormal digestion, dehydration, and progressive weight loss.

If animals have diarrhea, a mixed infestation with other worms should be suspected.

**What are the consequences of haemonchosis?** Depending on severity of the infestation haemonchosis range from no illness, to weight loss, anemia and death.

**How is haemonchosis detected?** Using a combination of clinical signs, history of the herd/flock (e.g. moving to a new pasture), FAMACHA scoring, and laboratory tests.



The FAMACHA eye anemia scoring test is a good tool to examine animals for signs of anemia. It is noninvasive and relatively easy to use on farms.

Blood tests confirm anemia. Parasitology tests used to detect eggs in feces include fecal floatation and Modified McMaster fecal tests.

## How is haemonchosis prevented and controlled?

The key to preventing heavy infestations is to disrupt the worm's life cycle using:

- Pasture Management –
  - *Haemonchus* larvae can only climb up to 5cm on grass. Graze small ruminants on taller grass as short pastures force animals to graze close to the soil and eat the parasite.
  - Allow pastures to rest by following a pasture rotation grazing program.
  - When feasible, rotate non-ruminants (chickens, pigs, horses) into sheep and goat grazing fields.
- Animal Management –
  - Some breeds of sheep and goats are more susceptible to *Haemonchus*. Consider selecting resistant and resilient breeding stock.
  - Provide excellent nutrition.
  - Protect ewes and nannies from grazing on infested pastures by keeping them inside during late pregnancy and early lactation.
  - Producers that lamb/kid in the fall and winter report lower parasitic problems than those who lamb/kid in the spring.
- Dewormers –
  - Parasite loads are heavier in the spring, use the right dewormer, at the right time, for the right animal, at the right dose.
  - Establish a deworming program based on herd history and FAMACHA scores. Document dewormer use.
  - Misuse of dewormers creates parasite resistance.

## Is haemonchosis zoonotic (transmitted from animals to humans)?

No.

### References:

- FOX.MARK (2018). *Gastrointestinal Parasites of Sheep and Goats*. [online] Veterinary Manual. Available at: <https://www.merckvetmanual.com/digestive-system/gastrointestinal-parasites-of-ruminants/gastrointestinal-parasites-of-sheep-and-goats> .
- FAMACHA eye anemia system. [https://www.wormx.info/files/ugd/6ef604\\_7f59340f173b4200bd03d58bf4ab666f.pdf](https://www.wormx.info/files/ugd/6ef604_7f59340f173b4200bd03d58bf4ab666f.pdf)