

Goatvetoz Winter Newsletter

Goat Veterinary Consultancies - goatvetoz

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Coccidiosis

Coccidia are single celled parasites of the intestines and they produce oocysts, not eggs, to spread to other goats. Some coccidia oocysts are often found in faecal samples of normal goats and this doesn't need treatment if goats don't have any clinical signs i.e. they don't have any diarrhoea.

The disease caused by large numbers of coccidia, is called coccidiosis. It can cause diarrhoea (soft or liquid faeces), blood in the faeces, straining when defaecating, reduced growth rates and ill-thrift. Often kids look pot-bellied, have rough coats and are small for their age. The disease, coccidiosis, mainly affects kids as adult goats develop an age resistance to coccidia, unlike the situation with worms. Kids need to be 3 weeks or more of age due to the coccidia life-cycle. Any diarrhoea before 3 weeks of age is more likely to be viral or bacterial or due to giardia or cryptosporidia. Adults can sometimes get coccidiosis if stressed by something

else e.g. worms, transport or cold or wet conditions. Weaning is very stressful for kids and outbreaks of coccidiosis can happen just after weaning.

The only way kids can get coccidia is by eating feed or suckling from teats contaminated by faeces containing oocysts. Therefore prevention is keeping kidding pens clean with fresh bedding and similarly with kid pens. Feeding troughs, water troughs and bottles must also be kept clean and out of reach of the feet of kids or goats. Wash the doe's udder before kids suckle for the first time or if does have diarrhoea or have visually dirty udders. Don't mix age groups of kids if raising separately from their dams and avoid overcrowding.

There are many different species of coccidia that affect goats and some are more likely to cause problems than others. *Eimeria ninakohlyakimovae* is generally considered the worst but there are at least 8 other *Eimeria* species in

goats. It is impossible to determine species just by looking at the oocysts in a faecal sample under a microscope. Also some species of coccidia produce large numbers of oocysts and some only small numbers. This means that oocysts are often not counted and just given a +, ++ or +++ score. Normal goats often have oocysts. Also coccidia have 2 methods of reproduction - firstly asexual and then later sexual which produces oocysts. Both types of reproduction results in damage to the intestinal lining cells. This means that clinical signs can happen after the asexual reproductive stage and before oocysts are produced. If this damage to the intestines is severe then it can be permanent and so the goat kid will be a poor doer for life.

Treatment needs a veterinary prescription as there are no coccidiosis treatments registered for goats. Treatment must kill the coccidia, soothe the gut and correct any dehydration. In Australia

a veterinarian can prescribe and dispense toltrazuril e.g. "Baycox" or "Coxi-Stop" or a vet can prescribe a course of sulpha antibiotics to kill the coccidia. Toltrazuril is a single treatment but has a long meat with-holding period. Also it comes in a much larger volume than a goat owner is likely to use up before the expiry date is reached. However your vet can provide a small amount if they stock it.

There are also coccidiostats which slow the reproduction of coccidia. These are only registered for meat goats, not milking goats and must be added to feed or pellets in a feed mill as it comes as a premix. These are a preventative, not a treatment. Most contain monensin, which is extremely toxic to dogs, pigs and horses. In one report a group of 40 Anglo-Nubian kids was overdosed with monensin and 92% became ill and 62% died (Anjos et al, 2023). Great care must be taken with these products.

There is a myth that poultry can pass on coccidia to goats but this is not true as the species are

completely different. Even sheep coccidia are different species that those that affect goats (Andrews, 2012).

What can we look forward to in the future? There has been a poultry coccidiosis vaccine in Australia for decades and this development allowed the free-range commercial poultry industry to expand. Like goats, poultry suffer from a range of coccidia species so these vaccines protect against 5 or 8 species. There has been some research into a vaccine for lambs and calves. However as coccidia vaccine for goats is unlikely to be developed as the potential market for the goat specific species would be considered too small.

Do you use X, Threads or Tumbler?

See all my tweets at www.x.com/goatvet

My favourite tweet was "Have you run out of Vytrate or electrolyte solution for your goats - try this St Mark's electrolyte solution - <https://www.sps.nhs.uk/articles/using-st-marks-electrolyte-solution/>" If you have decided to leave Twitter/X you can follow me on Tumblr or Threads.

Sun Cancers

Goats do well in hot climates BUT they can also suffer from sun cancers. Generally these are on the perineum of the goats. This is not surprising as goats generally have their tails up, so the sun reaches their peritoneum. In contrast, sheep tails are always down, protecting their peritoneum.

Goats, like cattle, can also get sun cancers around their eyes or on their ears. These sun cancers can be of 2 types:

- Red or squamous cell carcinomas
- Black or melanomas.

These melanomas are more deadly.

Early treatment is needed. If small, they can be frozen off with liquid nitrogen. If large, then surgery is needed and unfortunately sometimes even the whole eye must be removed.

Goat breeders should be aiming to breed goats with a dark tan skin colour. Many Australian Saanen breeders have lines with great tan skin colour on the udder, peritoneum, nose and around the eyes.