Coccidiosis Control in Goats and Sheep

Dr. Michael Neary
Extension Small Ruminant Specialist
Purdue University

Coccidiosis- what causes it?

- Not a bacteria, virus or roundworm
- Single cell protozoa
- Multiple coccidia species
 - Some noninfective
 - Some moderately infective
 - Some highly infective

Coccidiosis- what causes it?

- Strains of coccidia are animal specie specificsome very limited crossover between sheep and goats
- Always present in the herd/flock
- Most adult animals carry coccidia
- Present in small intestine
- Adults have a level of immunity to infectionsheep more so than goats

Coccidia Life Cycle

- Quite complicated- many stages
- 21 days in length
- Coccidia proliferate inside epithelial cells of small intestine
- This process damages the cells of the small intestine
- Oocytes (eggs) released via feces into environment

Coccidia Life Cycle

- Oocytes go through a process called sporulation (hatching)
- Warmth and moisture enhance sporulation
- Infective- 14 to 17 days after ingestionsymptoms
- Very resistant to disinfectants
- Sun and dry best

Coccidia Symptoms Young animals Stress Over crowding- barn 3-6 wks Weaning- pasture





Terry Hutchens University of Kentucky

Other Signs

- Stomach pain
- Decreased appetite
- Dehydration
- Rectal straining- can lead to prolapse
- Chronic poor doers- small intestine damage
- Fecal exams not reliable- post mortems are

Treatment of Coccidiosis

- Work with a veterinarian- most drugs not FDA approved in goats and sheep
 - Dosage rate, length of trt, best drug, withdrawal
- Isolate individual animals
- May have to mass treat remainder of group

Treatment of Coccidia

Albon (sulfadimethoxine)*

25 mg/lb BW Day 1, 12.5 mg/lb for Days 2-5

12.5% solution for drinking water

7 to 21 day withdrawal

Corid (amprolium)*

10 mg/lb BW for 5 days

9.6% solution, or 20% soluble powder

1 day meat withdrawal

* Not approved in goats or sheep; extra label drug use

Prevention of Coccidiosis

- Sanitation first course of action- oocytes spread in feces
- Clean barn- especially before lambing/kidding
- Keep dry- adequate bedding
- Prevent contamination of feed and water
- No feeding on ground

Prevention of Coccidiosis

- Feed coccidiostats- use as preventive before known times of susceptibility
- Monensin (Rumensin)- approved for goats
- Lasalocid (Bovatec)- approved for sheep
- Decoquinate (Decox)- approved for sheep & goats

Barn kidding/lambing time

- Ewes/does shedding oocytes
- Kids/lambs not eating enough feed to get preventative level of coccidiostat
- Feed coccidiostat in late gestation to lower the level of environmental contamination
- At least 21 days before to be effective

Pasture raised

- Mass treat in water at weaning with amprolium or sulfa drug with guidance from a veterinarian
- Start kids/lambs on feed with a coccidiostat at least 21 days before weaning

Summary

- Coccidia are present in all operations
- Prevention is best course of action to susceptible young animals
- Sanitation is important
- Prevent by limiting oocyte contamination with coccidiostats
- Work with a Veterinarian to prevent and treat