



The WeCAHN Small Ruminants Network held a quarterly videoconference meeting 16th November 2023 to discuss the animal health events occurring July to September 2023, with veterinary practitioners, diagnosticians, veterinary college faculty, researchers, and industry representatives in attendance.

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1. Interesting Cases

- i. **E. coli** abortion in flock of sheep
 - **History:** 4 abortions in 7 days in group of 100. Late gestation.
 - **Diagnostics:** Fetuses and placenta submitted to laboratory. Negative for *Chlamydia*, *Coxiella*, *Toxoplasma*.
 - ◊ *E. coli* isolated in pure culture and deemed abortion agent by pathologist. No *Listeria* bacteria found.
 - ◊ Tests on water fountains *E. coli* positive.
 - **Treatment:** Cleaned water lines with peroxide. Treated all ewes with antimicrobials. No more abortions were reported.

This case report of an unusual cause of abortion highlights the value in submitting abortions to the diagnostic laboratory, to get the information required for treatment and control measures. It's also important to remember that some common causes of sheep and goat abortions (e.g. *Chlamydia*) are potentially zoonotic (i.e. can cause disease in people), so gloves should be worn if collecting aborted fetuses for lab submission.

- ii. **Lameness associated with enlarged shoulder lymph node (**
 - Animal presented with non-painful lameness.
 - We inserted a needle in that big shoulder lymph

node and cultured *Corynebacterium pseudotuberculosis*, the bacterium responsible for caseous lymphadenitis.

- Sheep went to post-mortem and found multiple abscesses.
- Another practitioner stated that he had encountered an animal with extremely enlarged although painless hind leg lymph node associated with caseous.

Caseous lymphadenitis, the disease caused by *C. pseudotuberculosis*, occurs commonly in small ruminants in western Canada. If it is diagnosed in your flock, your veterinarian will draft a treatment and control plan. However, the most important control measure is to prevent its introduction to your farm. Again, your veterinarian can help you build a flock health program for your operation.

2. Syndromic Surveillance

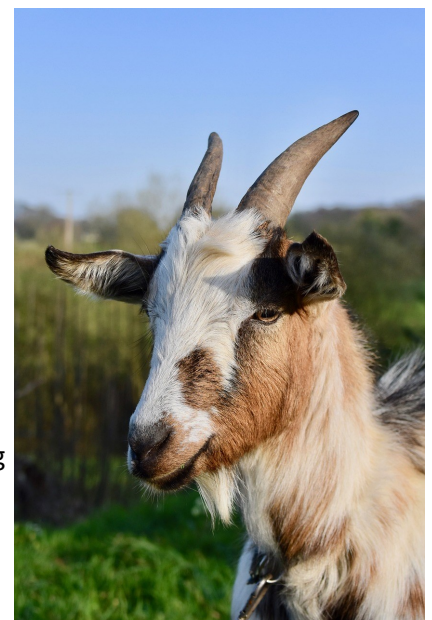
a) Digestive Disease

The commonly encountered syndromes (diarrhea, bloody diarrhea) and the agents associated with them (*E. coli*, rotavirus, cryptosporidia, Johne's disease, coccidiosis) were stable relative to the same time period last year.

i. Treatment failure of gastrointestinal worms, and de-wormer resistance

Three cases of de-worming treatment failure were reported by network practitioners. QUESTION: How do these situations present, and how do you handle them?

ANSWER1: Often! In small flock clients who have limited pasture area and are de-worming too often and lots. The



Syndromic Surveillance (continued)

clinic I work for reserves one de-wormer for farms with resistance diagnosed by serial fecals exams. In a perfect world it does not get dispensed without 2 fecals done on a proportion of the population 2-3 weeks apart after reviewing proper deworming product/dose/technique etc.

Sometimes we don't get called until animals are dying with a history of deworming regularly and frequently with their last treatment usually right after the first animal died. In those cases I have treated the most clinically affected animals with de-wormer once before doing any fecals because waiting for the results would generally mean they would be dead by then, but I try to make it very clear we still have to properly diagnose resistance. We need to establish whether they are under-dosing, or using wrong or expired product.

ANSWER2: I've seen a similar situation with a small purebred flock. They were selling weaned lambs and noted the recipient farm's stock looked better than theirs! When we did fecals on the small purebred flock, they were loaded with strongyles. We had not been consulted on their previous parasite treatments, but the animals had been treated many times with a variety of products.

ANSWER3: Re *Haemonchus* (aka "barber pole" or stomach worms): when weather gets wet, we see more. Environment plays a huge role in *Haemonchus* problems. We don't use de-wormers on our own sheep, but we have seen occasional problems when we get lots of rain in short period of time.

Given the rise of resistance to de-wormers reported in western Canada and globally, it's crucial for producers to build and follow a herd or flock program for parasite control.

b) Reproductive Disease

Commonly reported disease syndromes including individual female reproductive disease, individual male reproductive disease, abortion and associated agents (*Chlamydophilus*, *Campylobacter*, *Coxiella burnetii*, toxoplasmosis) were stable relative to the same time period last year.

QUESTION: Regarding ram testing season: how did it go and did you notice any trends?

ANSWER: Tend to do most ram testing ~ June for shows. One trend over the past couple of years is number of animals with very small testicles presented for Breeding Soundness Exam (BSE). Now I give clients a tape measure and tell them: if something measures below cutoff; don't waste our time by bringing them for exam. Scrotal circumference should be considered by show culling committees along with feet and good bites.

3. Scan: surveillance from beyond western Canada

Bluetongue outbreaks continue to be reported in Europe, from Netherlands, Italy, France, Germany and the UK.

Foot and Mouth Disease outbreaks earlier in the quarter in Indonesia, and later attributable to genotype SAT 2 in the Middle East, were reported in Q3 (July—September) 2023.

Canadian livestock producers traveling over the winter need to be mindful of good biosecurity practices to avoid bringing foreign diseases home. Podcast: Foreign Animal Disease Planning and Prevention

<https://wecahn.podbean.com/e/foreign-animal-disease-planning-and-prevention-for-cattle/>

Meeting takeaways:

- i. Reminder that sheep and goat abortions can have a range of causes including some bacteria which can also cause human illness. An accurate diagnosis is essential to properly manage the problem.
- ii. To maintain the effectiveness of de-wormers they must be used in a strategic herd or flock program, avoiding overuse or using the wrong drug.

Your veterinarian can help design your flock health program to tackle both of these problems.