



The WeCAHN small ruminant network met 31st January 2025 to discuss the animal health events of Q4 (October - December 2024). Veterinary practitioners, lab diagnosticians, researchers, and industry representatives were in attendance.

Overview of dataset

1. Interesting cases.
2. Clinical impressions survey.
3. Laboratory data: Prairie Diagnostic Services, Manitoba Veterinary Services Diagnostic Laboratory (VSDL), University of Calgary of Veterinary Medicine Diagnostic Services Unit (UCVM DSU).
4. Scan: Surveillance reports from other networks.

Interesting cases:

1) Cache Valley virus (CVV) in Alberta, Saskatchewan, and Manitoba.

Manitoba clinical cases

"In late 2024 we had 10-12 clients' flocks affected with one or two confirmed by lab and the rest highly suggestive of CVV. In contrast, previous years we would maybe get 1-2 calls about deformed lambs. So this is an increase.

- During October-November lambings we saw abortions or lambs born with musculo-skeletal deformities and brain defects. These seem to have stopped now. We saw ~4-10 cases per client (lambing groups vary between 40 and 160 ewes approximately). 1 client had ~ 20 affected lambs. The group which were all bred indoors did not have problems; the group with some outdoor exposure (and therefore greater mosquito exposure) did.
- Also aware of a flock with ~ 12 affected ewes with malformations in aborted lambs for which no lab submissions were made. Interestingly these were Katahdins so no fleece (to protect ewes from biting insects which could transmit the virus).
- Affected ewes were bred June-August. First indication of a problem was that pregnancy rates were noted to be lower (% pregnant in the 80s) than normal (generally expect 90-92%).

Alberta cases: Flock 1

- Breeding schedule: 30 ewes synchronized with CIDRS and bred in July, with marketing plan for finished lambs to be available for 4-H shows (ie May-June). At ultrasound scanning there were 2 open which is unusual for them, but 1 old and 1 ewe lamb.
- 10 ewes had CVV affected lambs:
 - 1 had twins that were dead – she should have lambed Dec 27th and finally had them in January. They were deformed, rotting and they ended up euthanizing the ewe.
 - 2 had twins where 1 fetus was normal and the other grossly deformed.
 - The other 7 all had large deformed singles – they have a Rideau base which tends to twins and triplets so that many singles is again unusual.

Strategy for next year: Owners don't want to repeat this year and will move breeding season to avoid risk of exposure via CVV-infected mosquitos.

Alberta cases: Flock 2

- Client 2 that had 150 ewes synchronized to breed in the third week of July with a rebreed cycle, started lambing 10th Dec. Plan was to aim lambs for mid-Feb. to Easter market. To help increase conception, ewes were sheared 2 weeks prior to CIDR placement. Conception rate at scanning was over 90%.
- Approximately 100 ewes lambed normally, followed by 6-7 suspect CVV births due to lamb deformities never seen on the farm before, followed by the remaining ewes have normal lambs. All lambs originating from the re-breed cycle later in August were normal.
- No diagnostics were done in this flock since affected lambs were immediately disposed of by owners.

Strategy for next year: same as this year. For the owners, the premium received for lambing in the target time period more than offsets risk of some lambs with congenital defects.



Cache Valley virus infection risk mitigation strategies:

1. Timing of breeding season
 - a. Market considerations
 - b. Some groups of ewes may be handled differently based on cost-benefit analysis.
2. Timing of shearing?
3. Management of environment and group moves.
4. Immunity post-infection?



Clinical Impressions Survey

Respiratory disease

Mycoplasma ovipneumoniae (M.ovi) in domestic and wild sheep

Mycoplasma ovipneumoniae (M. ovi) is a bacterial species commonly found in the nasal cavity and sinuses of healthy sheep and goats.

Infected animals may have nasal discharge, weight loss, or other signs which could be confused with disease from other causes.

However, disease caused by M. ovi is fatal to bighorn sheep and has produced large die-offs of herds in Alberta and elsewhere.

To prevent M. ovi infection of bighorns by domestic sheep, it's important to keep them physically separated.

Mycoplasma ovipneumoniae (M.ovi) testing and fencing program for domestic sheep and goats located within 50km of bighorn sheep ranges in Alberta

- EPA project with AGI involvement
- Any size flock/herd can participate
- Producers must have a VCPR and a PID number
Veterinarians/Vet staff are responsible for client communications and sampling (reimbursed for your costs).

Please keep this program in mind heading into spring!!

For more information: Dr. Heather Van Esch at heather.Vanesch@gov.ab.ca, 403-948-8536

Research presentation: Lamb Birth Weight and Impact on Health and Performance

By: Dr. Joyce Van Donkersgoed

Issues noted in an intensive sheep operation:

- Ewe genetics were designed to target 3-5 lambs per parity.
- Birthweights decreased with increasing litter size.
- High risk of still births and deaths in lambs less than 2 days of age.
- Significant death loss due to starvation in newborns.

Results noted in research study of respiratory disease and vaccine effectiveness:

- Litter size was associated with birth weight and both were associated with mortalities pre-weaning, as well as growth performance and carcass traits.
- Producers selecting more prolific breeds' genetics must be prepared to manage the challenges presented by lower birthweights and larger litter sizes.



Multi-systemic disease:

Listeriosis in small ruminants

Background:

- One laboratory diagnostician reported four separate flocks experiencing outbreaks of Listeriosis in the lower mainland, which is an increase for the lab.
- Three occurred on pasture; one was a small flock.

Question: Has anyone else, either labs or practitioners, noted a recent increase in listeriosis cases?

- Consensus across the west was no apparent change in frequency of diagnosis

Comment 1 (Pathologist): in the past we've associated cases of listeriosis in small ruminants with silage feeding or wet muddy weather.

Comment 2 (Practitioner): We saw listeriosis in feeder lambs not uncommonly and we fed silage. It was the most common cause of nervous disease in feedlot lambs. We saw it a lot more commonly in feeder lambs than feedlot cattle. Very uncommon in feedlot cattle fed silage. Cattle are not as susceptible to it as sheep.

A factsheet outlining clinical signs of listeriosis, treatment, and prevention is available at the WeCAHN website:

<https://www.wecahn.ca/wecahn-tools/wecahn-information-library/Listeriosis-in-Sheep>



Scan

Foot and Mouth Disease in Germany, 21 January 2025

Since the outbreak of foot-and-mouth disease in Brandenburg, there has been great uncertainty in the agricultural sector. A vaccine is now to be produced -- and very soon. To combat foot-and-mouth disease (FMD), Germany is now preparing itself as a precautionary measure by producing a vaccine. This is to be produced in advance in order to be prepared in the event of a possible spread of the animal disease, the Ministry of Agriculture in Potsdam announced.

Brandenburg has activated the vaccination bank against foot-and-mouth disease after consultation with the federal states. According to the Friedrich Loeffler Institute (FLI), this is the prerequisite for the production of the appropriate vaccine for the animals within a week. However, it has not yet been decided whether there will actually be vaccinations.

Vaccination bank stores killed FMD viruses So far, foot-and-mouth disease has been detected in a herd of buffalo in Honow (Markisch-Oderland). There have been no further cases in other animal populations. However, the examination of samples is ongoing. The vaccine will be kept in stock as a possible control measure in case the disease spreads further or occurs in other regions of Germany, it said. The federal states will share the costs.

As the FLI explained, the vaccination bank stores concentrated amounts of killed FMD viruses in different variants (serotypes) in deep-frozen storage. Once the vaccination bank is activated, ready-to-use liquid vaccines are produced from these, filled, and delivered to the countries.

Ozdemir: Prepared for all conceivable scenarios with vaccination reserve

"If the vaccine is not used in Germany, it can be given to countries where FMD occurs regularly due to its shelf life," it said. The vaccine has a shelf life of 18 months. FMD is not dangerous for humans.

"The vaccination reserve is like a fire extinguisher in the house. It is reassuring to have it ready to hand, even if you hope you never need it," said Federal Agriculture Minister Cem Ozdemir (Greens). "It is good that we are prepared for all conceivable scenarios with the

vaccination reserve. This strengthens the ability to react in the fight against the epidemic and does not mean that vaccinations will actually be carried out. Vaccinations should be the very last step."

Trade restrictions also apply to vaccination According to the FLI, there are still trade restrictions for cloven-hoofed animals even after vaccination. "Many third countries do not want to take any risks and do not want imports from countries that vaccinate," said the head of the Institute for Epidemiology at the Friedrich Loeffler Institute, Carola Sauter-Louis, recently. Therefore, a lot of testing must be done to show that vaccinated animals have not been infected, added Martin Beer, head of the Institute for Virus Diagnostics at the FLI.

If no further infections are found, it will still take a while before Germany is considered disease-free again, said Sauter-Louis. After the last infected animal has been culled, contact and environmental samples must still be taken and evaluated, and then, according to an EU rule, it will take at least 3 months before attempts can be made to achieve "free of FMD" status.

For more information: Promed
<https://promedmail.org>



Meeting Takeaways:

- Cache Valley Virus cases have been diagnosed across the prairies recently, with muscle and limb deformities common presenting signs. However, these can also be seen with some other viral infections, having different management responses. Therefore, producers should contact their vet if deformed lambs are born in their flock.
- Recent western lamb research reports that litter size was associated with birth weight and both were associated with mortalities pre-weaning, as well as growth performance and carcass traits. Producers selecting more prolific breeds' genetics (i.e. breeds having more lambs per litter) must be prepared to manage the challenges presented by lower birthweights and larger litter sizes.

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