

WECAHN DAIRY NETWORK PRODUCER SUMMARY

January - March 2025

The WeCAHN Dairy Network held a quarterly videoconference meeting on May 2nd, 2025, to discuss the animal health events occurring from January to March 2025. Veterinary practitioners, diagnosticians, veterinary college faculty, researchers, and industry representatives attended the meeting.

1) Overview

Data sources in this report include:

- 1. Clinical Impressions Surveys completed by network practitioners.
- Data shared by western veterinary diagnostic laboratories: Manitoba Veterinary Diagnostic Services (VDS) laboratory, Prairie Diagnostic Services (PDS), and University of Calgary College of Veterinary Medicine Diagnostic Services Unit (UCVM DSU).
- 3. Scan: bovine surveillance reported by other sources or networks.



2) Invited presentation on dairy calf bovine respiratory disease (BRD) diagnosis

Kathryn Spohn, PhD candidate at the University of Guelph, Ontario, co-supervised by Drs. David Renaud and Charlotte Winter.

- The goal is to develop a list of symptoms and findings when using lung ultrasound to diagnose pneumonia in dairy calves that need to be treated with antibiotics.
- A review (<u>Churchill et al., 2024</u>) identified cough, nasal discharge and increased body temperature as the common symptoms used for diagnosis of BRD.

Network members use the following to diagnose pneumonia in dairy calves:

- Veterinarians listen to the lungs with a stethoscope for any unusual sounds (e.g., crackling) and look for signs like nasal discharge, fast breathing and fever to diagnose pneumonia.
- Occasionally, veterinarians use ultrasound; some practitioners use thoracic ultrasounds on specific herds for routine surveillance. Another veterinarian stated that they work with trained technicians who perform thoracic ultrasound and respiratory scoring and then report to the veterinarian.

3) Interesting cases

i) In Alberta, a herd experienced an outbreak of the infectious agent *Mycoplasma bovis* in adult lactating cows.

History: This was the area's first outbreak of *M. bovis*. It was a small, closed herd of 55 cows with one milking robot.

- After vaccinating with TOPVAC[®] (*E. coli* and *Staph* infections; HIPRA Animal Health Canada Inc.), cows had swollen legs, and a few had mastitis.
- The herd had a 40% decrease in milk production.
- Another group on the farm had nose-to-nose contact, and some had signs of ear infection.
- Calves in the herd were fed whole milk and did not develop disease.

Testing: the practitioner submitted bulk tank milk samples and samples from the affected cows for testing. The blood sample test was negative, but the other samples were positive for *M. bovis*.

Treatment: Affected cows were removed from the barn, and a short-acting antibiotic was administered. At a recent herd check, the cattle, including the previously affected cows, were negative for *M. bovis*. **Transmission:** A beef client near the herd bought whole

milk, and their calves developed disease.



ii) A practitioner in Alberta reported an abnormal vulva on a breeding-age heifer.

History: The producer went to inseminate the heifer artificially, but could not get the pipette in.

- This abnormality was not likely associated with being intersex (freemartin) because the calf was not a twin.
- The vulva lips were sealed for nearly the entire length with a small opening about 1" ventrally where she could urinate.

Treatment: The veterinarian offered the option of surgery to open the vulva. It was declined, and she will not be bred.

4) Syndromic surveillance

Important information:

Clinical impression surveys Never

Rarely = 1-2 times per 3 months Commonly = 102 times per month Very frequently = 3+ times per month



Respiratory system disease

Clinical impression survey for respiratory system disease Respiratory disease was reported **Rarely** (1/4) to

Commonly (2/4) to Very frequently (1/4).

• Pneumonia without a known cause was reported **Never** (2/3) to Very frequently (1/3).

Digestive system disease

Clinical impression survey for digestive system disease Digestive disease was reported **Commonly** (2/4) to **Very frequently** (2/4).

• Diarrhea was reported Rarely (1/4) to Commonly (2/4) to Very frequently (1/4).

Laboratory diagnoses for digestive system disease

At PDS this quarter, digestive system infectious agent detections and pathological diagnoses in the dairy cattle were within the control limits of the control charts.

At VDS, detections of coronavirus, rotavirus and cryptosporidiosis in calves in all commodities exceeded the upper control limits. Pathological diagnoses of neonatal calf diarrhea secondary to coronavirus and rotavirus were few, with the number of diagnoses within control limits.

Reproductive system disease

Clinical impression survey for reproductive system disease

Reproductive system disease was reported **Rarely** (2/4) to **Very frequently** (2/4).

Multisystemic diseases

Clinical impression survey for multisystemic diseases Multi-systemic disease was reported Rarely (3/4) to Commonly (1/4).

• Septicemia (i.e., infection of the blood) was reported Commonly (1/1).

Laboratory diagnoses for multisystemic diseases

At UCVM DSU, a 4-month-old female calf died from septicemia caused by *Salmonella* Dublin. There were two year-old heifers diagnosed with blackleg, caused by the bacterium *Clostridium chauvoei*.

Additional details of the blackleg case in year-old cows from a pathologist:

- **History:** Replacement heifers, four dead. The herd was not vaccinated. The pen had been deeply cleaned, and the heifers were placed back in the area.
- Tissues were submitted by the veterinarian who performed field post-mortems. The muscle and heart were damaged.





Mastitis

Clinical impression survey for mastitis

Teats and udder disease were reported Rarely (4/4).

Laboratory diagnoses for mastitis

At PDS this quarter, cultures and detections of mastitis infectious agents in dairy cattle were within the control limits of the control charts. A few cultures of *Klebsiella pneumoniae* were reported from milk in unknown cattle commodities. One case noted a history of previous *Klebsiella* infections in the herd, with several new cases and deaths recently.

At VDS, cultures and detections of mastitis pathogens were within the limits of the control charts.

At UCVM DSU, a case of mastitis was reported with *Corynebacterium* spp. with high growth. Other mastitis pathogens were cultured infrequently.

Scan

i) The highly pathogenic avian influenza (HPAI) of concern is influenza A virus subtype H5N1 genotypes B3.13 and D1.1 in dairy cows.

USA, dairy cattle:

- As of May 12, 2025, there were 33 new confirmed cases of HPAI in cattle in 3 states in the last 30 days.
- The total is 1,053 confirmed cases in 17 states.
- USDA's most up-to-date information can be found on their website (<u>LINK</u>).
- USDA's National Milk Testing Strategy (NMTS) continues with mandatory milk bulk tank surveillance. A map of the status of each State can be found <u>here</u>.

Canada, dairy milk samples:

 As of May 8, 2025, the Canadian Food Inspection Agency (CFIA) laboratories tested 3,498 raw (unpasteurized) milk samples at processing plants; all samples were negative for HPAI (<u>LINK</u>).

ii) Foot and Mouth Disease (FMD) in Europe and the Middle East:

- Hungary: 5 herds affected so far, with the newest detection on April 17, 2025 (<u>British Agriculture Bureau</u> (<u>BAB</u>), 2025).
- Slovakia: 6 herds were affected since March, with the newest detection on April 4, 2025 (<u>BAB, 2025</u>).
- Germany has been certified as free of FMD by the WOAH, after the detection of FMD in water buffalo in January this year (<u>Reuters, 2025</u>).
- Of note, an exotic strain of FMD was detected in Iraq and Bahrain (FAO, 2025).
- Additional information about FMD: Canadian Food Inspection Agency (CFIA) (<u>LINK</u>).

Takeaways

- Work with your veterinarian to create a list of symptoms, like cough, nasal discharge and increased respiratory rate, to diagnose pneumonia in dairy calves. If you're unsure if the calf has pneumonia, ask your veterinarian to use thoracic ultrasound for a more accurate diagnosis.
- 2. Keep an eye out for any unusual reproductive issues in your heifers and report them to your veterinarian promptly. Early intervention can help manage these problems effectively.

Financial support was provided under the Sustainable Canadian Agricultural Partnership, a federal-provincial-territorial initiative.

