Western Canadian Animal Health Network

WECAHN BEEF NETWORK PRODUCER REPORT

OCTOBER - DECEMBER 2025

The WeCAHN Beef Network held a quarterly videoconference meeting on February 11th, 2026. The network members discussed the animal health events from October to December, 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.
2. Data shared by western veterinary diagnostic laboratories: Manitoba Veterinary Diagnostic Services (VDS) laboratory, Prairie Diagnostic Services (PDS) laboratory, and University of Calgary Faculty of Veterinary Medicine Diagnostic Services Unit (UCVM DSU).
3. Scan: bovine surveillance reported by other sources or networks.

2) Interesting Cases

i) Case study: Diphtheria/laryngotracheitis in older cattle

- A cluster of diphtheria cases affected weaned calves, yearling bulls, and an adult cow in Saskatchewan.
- Initial signs resembled pneumonia, but the cow did not respond to antibiotic treatment. Labored breathing and laryngeal obstruction developed.
- Diagnosis confirmed diphtheria, an uncommon presentation in older cattle.
- The attending veterinarian performed a successful tracheotomy (surgical incision in the windpipe) and the cow was able to start breathing properly. She calved successfully, though later showed clinical decline possibly due to secondary pneumonia.
- The case highlights that airway trauma and bovine respiratory disease may contribute to unusual disease presentation in older cattle.

ii) Case study: Clostridial toxemia

- Pneumonia occurred in 6-month-old calves and a 6-year-old cow.
- Culture of liver samples confirmed *Clostridium haemolyticum* as the likely cause.
- No liver flukes were detected, showing infection can occur without typical predisposing factors.
- Herd vaccination programs should be reviewed, as not all vaccines protect against this specific *Clostridium*.

iii) Case study Q fever (*Coxiella burnetii*) in a dairy herd

- Two abortions occurred in a well vaccinated dairy herd, with placental lesions and fetal liver changes observed.
- PCR testing confirmed *Coxiella burnetii*, the zoonotic pathogen that causes Q Fever, an illness of public health importance.
- PCR is an accurate detection tool for Q fever, as placenta changes may be caused by other pathogens or be mild enough to not be noticed.
- Surveillance studies in Saskatchewan show that 12% of bovine placental submissions test positive for *Coxiella*; ongoing studies are evaluating herd-level screening and alternatives for testing when placentas are not available. Q fever cases are more common in beef than in dairy herds.
- Producers should be aware of the zoonotic risk of Q fever and protect themselves with gloves, eye and respiratory protection when handling abortive materials.
- Recent Western Producer article by Dr. Campbell (Feb 2026)

iv) Case study: bloody manure and rectal prolapse in Black Angus cattle

- A group of bulls and heifers experienced intermittent bloody stool (hematochezia) and rectal prolapse, often resolving when standing.
- Low-level detection of *Cryptosporidium, Giardia*, and pathogenic *E. coli* was noted, alongside mineral deficiencies but no single infectious, nutritional, or toxic cause was identified despite extensive testing.
- Feed management changes (switching to feeding twice daily) resolved the issue.
- Excessive rumen fill due to gorging plus reduced anal tone were likely contributing factors.
- Similar mild prolapse cases have been observed in feedlot cattle, and phytoestrogens (plant-derived estrogens) exposure may also play a role.

3) Syndromic and Laboratory Surveillance

Important information

Clinical impression surveys

Never; **Rarely** = 1-2 times per 3 months; **Commonly** = 1-2 times per month; **Very frequently** = 3+ times per month.

'Control charts'

Control charts are a simple way of presenting data collected over time (e.g., increasing or decreasing detection frequencies). Each data point reflects the number of positive samples or cases reported by a diagnostic laboratory over 3 months (quarter of a year). The upper and lower horizontal lines are called control limits. Individual points lying outside the control limits (special cause or unstable point) suggest a need for investigation to determine whether/how significant a signal they represent

Respiratory system disease

- **Clinical impressions survey:** Respiratory disease was reported **very frequently**. Laryngotracheitis occurred **commonly**, bronchopneumonia **commonly** to **very frequently**, fibrinous pneumonia **never** to **very frequently**, and interstitial pneumonia and pleuritis ranged from **rarely** to **commonly**. *Mannheimia haemolytica, Pasteurella multocida, Histophilus somni*, and *Mycoplasma bovis* were the main pathogens. *H. somni*–associated mortality **increased** in Southern Alberta feedlots.
- **Laboratory results:** At PDS, BRSV and *M. bovis* detections exceeded control limits in beef, while other bacterial and viral detections were within limits. At Manitoba VDS, *M. bovis* PCR exceeded control limits and *H. somni* cultures peaked. Pathology at PDS showed a rising trend for interstitial pneumonia. UCVM DSU reported bronchopneumonia cases, including one bison with *M. haemolytica* and *H. somni* resistant to multiple antibiotics.

Digestive System Disease

- **Clinical impressions survey:** Digestive disease ranged from **rarely** to **very frequently**, with diarrhea, Johne's disease, dysentery, coccidia, frothy and gas bloat, gastrointestinal parasites, liver disease, and rectal disease reported. Johne's trends were **stable**.
- **Laboratory results:** PDS reported high BVD detections exceeding control limits. Rotavirus, coronavirus, and Clostridia remained within limits. Single cases of enteritis, colitis, and necrotic enteritis were observed. VDS reported one neonate with rotavirus and *Cryptosporidium*. UCVM DSU reported colitis, bronchopneumonia, gastric bloat, peritonitis, and several hepatitis cases.

Reproductive System Disease

- **Clinical impressions survey:** Reproductive disease ranged from **rarely** to **very frequently**, with abortions, bull reproductive injuries, and nutritional deficiencies reported. Infectious infertility was **never** reported. Energy, protein, and copper deficiencies were stable or variable.
- **Laboratory results:** PDS detected one seropositive for *Neospora caninum* and one PCR-positive for *Coxiella burnetii*. VDS had peak *N. caninum* serology and Ureaplasma diversum PCR detections. UCVM DSU found *N. caninum* in Simmental crosses. Abortion diagnoses were low across laboratories.

Musculoskeletal System Disease

- **Clinical impressions survey:** Musculoskeletal disease ranged from **rarely** to **very frequently**, with digital dermatitis, sand cracks, white line disease, non-foot lameness, arthritis, tenosynovitis, and other lameness reported. Frequency increased compared with last year, linked to higher producer engagement which facilitated veterinary intervention, testing and treatments.

Neurological System Disease

- **Clinical impressions survey:** Neurological disease ranged from **never** to **commonly**, including otitis media, polioencephalomalacia, and infectious meningoencephalitis. Blindness, seizures, and paralysis were **rarely** reported.
- **Laboratory results:** PDS diagnosed polioencephalomalacia, meningitis, and meningoencephalitis. VDS reported suppurative meningoencephalitis. UCVM DSU noted meningitis in a bison with respiratory disease.

Dermatological Disease

- **Clinical impressions survey:** Dermatological disease ranged from **never** to **very frequently**, with external parasites, mange, lice, bacterial, and fungal infections reported. Lice were associated with treatment failure.
- **Laboratory results:** PDS had one dermatitis case; UCVM DSU reported ocular squamous cell carcinoma in a Hereford.

Trauma, Injury, or Welfare-Related Issues

- **Clinical impressions survey:** Trauma and welfare issues ranged from **rarely** to **commonly**, with traumatic injury **commonly** reported and emaciation **rarely** reported.

Cardiovascular System Disease

- **Clinical impressions survey:** Cardiovascular disease ranged from **rarely** to **very frequently**, mainly myocarditis associated with *H. somni.* Other causes like *M. bovis*, clostridia, and *Mannheimia* were **never** or **rarely** reported.
- **Laboratory results:** PDS and VDS findings remained within control limits. UCVM DSU reported myocarditis in Angus and crossbred cattle, sometimes with respiratory or neurological disease; *H. somni* was implicated in several cases.

Multisystemic Diseases

- **Clinical impressions survey:** Multisystemic disease ranged from **rarely** to **very frequently**, including septicemia, *H. somni,* nutritional deficiencies, increased calf mortality, and open cows.
- **Laboratory results:** PDS and VDS Johne's disease serology and PCR remained within control limits. *E. coli* detections were historically low, though VDS showed a peak in Q4. Bovine leukemia virus remained within limits.

Mastitis

- **Laboratory results:** PDS reported one *Staphylococcus aureus* culture in a Simmental cow. VDS found *S. aureus, S. chromogenes, S. epidermidis, S. xylosus*, and *Streptococcus uberis* within limits; *S. simulans* exceeded the upper control limit in Q4.

4) Research and network updates

Leptospirosis seroprevalence in Canadian beef calves at or near fall weaning.

A recent Canadian study tested blood from 1,900 spring-born beef calves from 106 herds for leptospirosis at weaning, with only 3% of calves vaccinated. Overall exposure was low: 91% had no detectable antibodies, 3.2% tested positive.

The cattle-adapted serovar *Leptospira Hardjo* was found in 1% cases, and more often in Western Canada. Wildlife-associated serovars such as *Leptospira Grippotyphosa* and *Pomona* were common, while *L. Bratislava* predominated in Eastern Canada.

Cow vaccination status showed little influence on calf antibody levels, and overall herd vaccination coverage is estimated at 36%, with some herds in problem areas vaccinating up to every 4 months. Further studies are planned, including updated vaccination surveys and antimicrobial use surveys, to clarify natural exposure patterns.

Alberta Feedlot Animal Health and Welfare Surveillance Program (AFHWS)

The AFHWS collects health and mortality data from feedlot cattle, tracking respiratory disease, histoplasmosis, and lameness. A new program website provides accessible summaries and infographics by mortality, days on feed, breed, and sex, with 2024 data available and historical data under analysis.
AFHWS addresses a gap in credible, publicly available feedlot health data for Canada.

Manitoba bovine health meeting update:

Manitoba veterinary authorities met with practitioners and industry to provide updates on bovine tuberculosis, liver fluke projects, and educational webinars. Manitoba plans three annual meetings to cover HPAI, lead poisoning, and other veterinary updates.

Canadian Cow-Calf Health and Productivity Enhancement Network (C3H-PEN) Project

C3H-PEN continues postmortem surveillance for calf losses aged 1–45 days and collects serum samples to monitor trace mineral status. A serum bank with recent and historical samples is available for collaborative research and additional screening initiatives.

PDS Abortion investigations project

A beef abortion investigation project using sequencing detects 17 pathogens simultaneously. The approach, combining necropsy, histology, culture, and mineral testing, achieved a 77% diagnosis rate. A similar sequencing panel for bovine respiratory disease is in development.

5) Emerging and International Disease update

i) Bovine tuberculosis (bTB) investigation in Saskatchewan beef herds (Canadian Food Inspection Agency (CFIA, 2025).

In Saskatchewan, CFIA investigations of bovine tuberculosis (bTB) continue. The 2024 infected herd was humanely depopulated, with 27 additional cases detected, and seven linked "lifeline" herds remain under investigation. The 2023 case involved one depopulated herd with 32 confirmed cases; associated trace and lifeline herds have mostly been released from quarantine.

ii) Asian Long-horned tick (ALHT) and theileriosis

Two cases of bovine theileriosis were reported in Ontario since November 2025. One involved a cow imported from Illinois, and the second a cow on the same farm with suspected on-farm transmission by biting flies. No Asian Long-horned ticks (ALHT) were detected.

Theileria orientalis Ikeda is a protozoan parasite not affected by antibiotics. No widely available vaccine exists. Prevention focuses on biosecurity, testing new or transient cattle, single-use needles, and integrated tick management. Environmental measures include clearing brush, managing fence lines, limiting cattle contact with wooded areas, and grazing lower-value animals first.

Useful ALHT resources: Illinois Extension information, CAHSS vector-borne diseases webpage, Image-based tick identification tool: e-tick; Education, communication, and training online resource library VECTOR .

iii) Lumpy skin disease (LSD) in Europe

Lumpy skin disease (LSD), historically in sub-Saharan Africa, has spread to North Africa and Asia since 2023. In 2025, outbreaks occurred in the EU, including Italy, France, and Spain.

iv) Bluetongue (BTV-3) in the United Kingdom

Spread by Culicoides midges affecting all cloven-hooved animals. 284 confirmed cases in England in 2025 (gov.uk news). First cases confirmed in Northern Ireland in early December 2025 (DAERA, 2026).

v) Highly pathogenic avian influenza (HPAI) H5N1

Canada: No HPAI detected in dairy cattle; 8,229 raw milk samples tested negative (CFIA, Jan 27, 2026). Poultry in Western Canada continue to be affected.

USA: No new dairy cattle cases between Jan 5–Feb 5, 2026; total 1,084 cases in 19 states. Commercial and small flock poultry remain affected. Human cases since 2024 total 71, mostly linked to exposure to dairy cows or poultry; one H5N5 death occurred in Washington State in Nov 2025 (Scientific American, 2025).

Europe: In the Netherlands, antibodies to H5N1 were detected in milk from a cow for the first time outside the US. Severy ill and dead barn cats tested positive for H5N1. Four additional cows on the same farm tested positive for antibodies by Jan 29, 2026 (Cohen, J., Science, 2026).

Producer takeaways

- Unusual cases of diphtheria and laryngotracheitis were reported in older cattle, and suspected clostridial hepatitis linked to *Clostridium haemolyticum* was observed, showing that known diseases can appear in unexpected ways.
- Abortions due to *Coxiella burnetii* in a dairy herd are a reminder of importance of PCR testing and the ongoing risk of Q fever to humans.
- Bovine theileriosis caused by *Theileria orientalis* Ikeda was detected in two dairy Ontario cows, with one case suggesting possible local transmission even without the Asian Long-horned tick being present in Canada.
- Ongoing Canadian surveillance projects continue to monitor cattle health, including leptospirosis, feedlot health, and the use of sequencing tools for abortion and respiratory disease investigations.

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