



The WeCAHN Beef Network held a quarterly videoconference meeting on August 28<sup>th</sup>, 2025 to discuss animal health events occurring from April to June 2025 with veterinary practitioners, diagnosticians, veterinary college faculty, researchers, and industry representatives.

## 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 Laboratory (VDS), Prairie Diagnostic Services (PDS), and University of Calgary Faculty of Veterinary Medicine Diagnostic Services Unit (UCVM DSU).
3. Scan: bovine surveillance reported by other sources or networks.

## Interesting Cases

### Encephalitis and Low Magnesium (Hypomagnesemia)

A feedlot reported several calf deaths showing neurological symptoms. Laboratory tests ruled out major infections (e.g., rabies, *Listeria*). Two unrelated findings include encephalitis (brain inflammation) and low magnesium levels suggesting this herd was affected by multiple causes. Interestingly, the investigation revealed inclusion of potato waste in feed, which can cause hypomagnesemia or aluminum toxicity. The investigation is ongoing.



### Severe Calf Diarrhea and *Salmonella*

A large cow-calf operation experienced high mortality in bottle-fed calves. Common diarrhea pathogens were not found, but an unusual *Salmonella* strain (usually seen in pigs) was detected. The virus Aichivirus B was also abundant, though its role is unclear. The investigation continues. Recommendations included stricter biosecurity and improved record keeping.



### Organochloride Poisoning (Lindane)

Five calves died suddenly after their herd was moved to a new pasture. Testing found lindane, a banned pesticide last used in the early 2000s, in stomach contents, liver, and on the property. This case underscores the need to safely dispose of old chemicals and to check pastures and animal areas prior to moving animals.

### Anaplasmosis in Manitoba Herds

A regional survey found high infection rates (60–75%) in some herds. While affected areas are now considered endemic, farmers are adapting management to prevent illness in stressed or newly introduced animals.

### Lead Poisoning Across the Prairies

Between 2014 and 2024, over 350 cattle cases of lead poisoning were recorded, mostly involving young calves exposed to vehicle batteries and junkyards. While rarely fatal to whole herds, contaminated animals must be kept until blood lead levels drop. Lead poisoning is reportable in Alberta and British Columbia.

### Antimicrobial Resistance (AMR) Study

Ongoing research across Western Canada shows that AMR profiles of bacteria responsible for bovine respiratory disease—such as *Mannheimia haemolytica* and *Pasteurella multocida*—may change between feedlot placing and rehandling of cattle. Monitoring AMR helps veterinarians refine treatment and preserve antibiotic effectiveness.



## Syndromic Surveillance

**Respiratory illness:** Bronchopneumonia remains common, but infection levels are stable. *Histophilus somni*, *Mannheimia haemolytica*, and *Pasteurella multocida* as the main bacterial agents. A few cases of interstitial pneumonia and Acute Respiratory Distress Syndrome (ARDS) were reported.

**Digestive system disease:** Diarrhea continues to be a frequent complaint, especially in young calves. Rotavirus, coronavirus, *E. coli*, and *Cryptosporidium* detections remained within or slightly above normal levels. Johne's disease (caused by *Mycobacterium avium paratuberculosis*) showed a slight upward trend.

**Reproductive system disease:** Some increases in *Campylobacter* and *Trichomonas* detections were noted, both of which can cause infertility. Several abortions were investigated, most of them idiopathic (i.e. unknown cause); identified causes included cobalt deficiency, *Campylobacter jejuni*, and *Coxiella burnetii*.

**Musculoskeletal and skin diseases:** Lameness and foot problems remain common and appear to be increasing. Lice and ectoparasites were frequent, with two reports of treatment failure.

**Multisystemic and toxic diseases:** Sporadic cases of selenium and lead toxicity were recorded. One confirmed case of anthrax occurred in Saskatchewan. Nutritional deficiencies (energy, protein, copper) continue to be a concern in stressed or poorly fed cattle.

**'Other' clinical syndromes or disease presentations:**

Nitrate toxicity in a small herd of beef cows on pasture. Clean up from a previous year's fire exposed some chemicals that had been previously inaccessible to the cattle in some old, abandoned vehicles.





## Scan

### New World Screwworm

- A parasitic fly spreading in Central America and Mexico poses a risk to livestock. It lays eggs in open wounds, and larvae feed on live tissue. While Canada's climate is too cold for overwintering, imported animals could carry infestations during warmer months.
- *Prevention:* Check wounds often, remove larvae manually, disinfect, and use insecticide—ivermectin alone does not kill larvae.

### Lumpy Skin Disease (LSD)

- Recently reported for the first time in Italy, France, and Spain, LSD affects cattle and causes nodules on the skin. Though not in North America, it remains a priority watch disease.

### Highly Pathogenic Avian Influenza (H5N1)

- Over 1,000 dairy herds have tested positive in 17 states in the U.S., with some human infections linked to cattle and poultry exposure.
- Canada has found no H5N1 in dairy cattle, though commercial poultry flocks have been recently affected in several provinces.
- CFIA continues milk and herd surveillance and has advised against unnecessary cattle movements to U.S. agricultural fairs.
- The owners of a BC ostrich farm infected with HPAI in December 2024 have been involved in a legal battle with the CFIA to prevent the culling of their birds. August 22<sup>nd</sup> interview with Dr. Rasmussen [LINK](#)

## Producer Takeaways

- Multiple infections can occur at once making diagnosis and treatment more complicated. Using a combination of lab techniques—like pathology, toxicology, and molecular diagnostics—helps veterinarians accurately identify and treat complex cases.
- Cattle producers continue to lose animals to legacy contaminants such as pesticides and chemicals. Checking pasture and livestock areas prior to moving animals remains a good husbandry practice.
- New World Screwworm (NWS) is spreading northward and could threaten livestock and wildlife. While it's unlikely to become established in Canada, isolated cases may appear during warmer months. Early detection and awareness are essential to prevent outbreaks

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