

WECAHN SMALLHOLDERS NETWORK REPORT

JANUARY - MARCH 2025

The WeCAHN Smallholder Network held a quarterly videoconference meeting on June 6th, 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.
- 2. Data shared by western veterinary diagnostic laboratories: Manitoba Veterinary Services Diagnostic (VDS) Laboratory, Prairie Diagnostic Services (PDS), and University of Calgary College of Veterinary Medicine Diagnostic Services Unit (UCVM DSU).
- 3. Scan: smallholder surveillance reported by other sources and networks.

2) Interesting cases

i) Lab diagnosis: 12-year-old Big-horned sheep ram with bronchopneumonia

- History: Severe dehydration, low body weight and lethargy. The left jawbone had a one-inch soft mass, and the underlying bone was firm and enlarged. The ram went into cardiac arrest upon arrival at the clinic. CPR was attempted at the client's request with unsuccessful results.
- Testing: The ram had chronic pneumonia, including lung consolidation and pleural adhesions. Bacteria were cultured from the affected lung lobe.

Network practitioners are comfortable performing CPR on Big-horned sheep (or similar animal species) if needed or requested while on the farm. Depending on the licensing province, mobile practitioners must equip emergency cardiopulmonary resuscitation supplies (e.g., bag-valvemask in British Columbia (BC)).



ii) Lab diagnosis: Salmonella abortion in a wool sheep

- **History:** Ewe aborted the lamb 1 month prior to the due date. She had five sets of lambs previously and had aborted last year. No new additions to the flock. Three sheep were sick in the flock of 100. Fed hay and oats. No mineral or salt provided. Flock was not vaccinated last year.
- Testing: Salmonella was cultured from the aborted lamb. The pathologist noted that Salmonella can cause abortions in sheep, with outbreaks occurring sporadically and affecting 10-20% of the flock. While most dams show no clinical signs before aborting, some may develop fever and diarrhea. Ewes may experience uterine infections following abortion. Given that Salmonella is transmissible to humans, stringent biosecurity measures are essential to minimize risks.



iii) Highly pathogenic avian influenza (HPAI) in Canada

· Poultry:

 Between April 30 and June 17, 2025, there were 5 infected primary control zones (PCZ) for avian influenza subtype H5 in (CFIA Investigations and orders by province, 2025):



- Non-commercial poultry: Saskatchewan (1), Manitoba (1), and Prince Edward Island (1)
- Non-commercial non-poultry: Alberta (1) and Saskatchewan (1)
- HPAI infection in an ostrich farm in BC was confirmed in December 2024. The farm owners have been involved in a legal battle with the CFIA to prevent the culling of their birds for over 5 months.
 - Protesters, mobilized through social media and drawn by the controversy, have travelled to the farm to oppose the planned ostrich culling.



On May 31, 2025, the CFIA issued an update regarding implementing disease control measures at a British Columbia ostrich farm infected with HPAI. The update disclosed that the ostriches were infected with genotype D1.3, a strain not identified elsewhere in Canada (CFIA, 2025).

Clarifications on the HPAI genotype D1.3:

- D1.3 is considered a highly pathogenic avian influenza virus. Fewer ostriches died in this HPAI outbreak, perhaps because they are less susceptible to the infection than domestic poultry. No specific comparisons of the HPAI genotypes were provided in the CFIA update document.
- This genotype is not the same as the second spillover in cattle in the US. The second spillover in cattle in Nevada was D1.1 and not D1.3.

· Dairy cattle:

 As of May 30, 2025, the Canadian Food Inspection Agency (CFIA) laboratories tested 4,003 raw (unpasteurized) milk samples at processing plants; all samples were negative for HPAI (LINK).

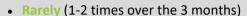


3) Syndromic Surveillance

Important information on clinical impression surveys and graphs:

Clinical impression surveys





- Commonly (1-2 times per month)
- Very frequently (3+ times per month)



Clinical impression surveys for small poultry flocks Infectious laryngotracheitis (ILT) was reported **Never** (1/2) to Rarely (1/2) and with stable diagnosis frequency (1/1).

Marek's disease was reported **Never** (1/2) to Rarely (1/2). The frequency of diagnosis was reported **stable** (1/1).

Mycoplasma spp. infection was reported Rarely (2/2) and with **stable** diagnosis frequency (1/1).

Small flocks of small ruminants

Clinical impression surveys for small flocks of small ruminants

External parasites – lice were reported Rarely (1/1). Other items in the questionnaire were reported Never (1/1).

Laboratory diagnoses for small flocks of small ruminants

Abortion cases: There may be an overall increase in the pathological diagnoses of abortions in goats at PDS. Diagnoses this quarter included placentitis, bacterial infections, idiopathic causes, and more. Cache Valley virus (CVV) was identified in a pet sheep.

See the Saskatchewan Western College of Veterinary Medicine publication by Dr. John Campbell: <u>Understanding</u> Cache Valley Virus in Saskatchewan Sheep Flocks



Small herds of swine

Clinical impression surveys for small herds of swine Lameness: osteoarthritis/degenerative was reported Rarely (1/1). Other items in the questionnaire were reported **Never** (1/1).

The practitioner reported a case of pyometra.

Laboratory diagnoses for small herds of swine

A 4-month-old Berkshire cross pig at PDS was diagnosed with septicemia. *Streptococcus suis* was cultured from the kidney.

The summary table of smallholder disease investigation programs and subsidized tests is on the WeCAHN Smallholder webpage (LINK)

4) Scan

i. BC Smallholder Disease Detection Program

- Top 3 diagnoses for
 - Poultry: Marek's disease, yolk peritonitis/salpingitis and infectious coryza
 - Small ruminant: mixed/diet/husbandry, haemonchosis, listeriosis

ii. Visit the <u>BC Poultry Health Network</u> website for upcoming online and in-person training events.

iii. Alberta Non-quota or non-commercial poultry disease investigations Q1 2025: Six cases were submitted, five from producers and one from a veterinarian. Diagnoses included ILT and other diseases in chickens, and a duck with gizzard puncture and shock.

iv. Manitoba Agriculture:

- MB Agriculture is developing a Small Holder website to consolidate information spread across multiple pages, acknowledging species overlap on farms, such as chickens and small ruminants.
- A quarterly newsletter focused on water quality is planned for June or July, shared mainly via email, with potential printed copies available at feed stores and veterinary clinics.
- v. Canada West Swine Health Information Network (CWSHIN) report Q1 2025: "All regional producers are advised that on-farm and transport biosecurity are critical for any contact with high-traffic sites in (western) Canada."
- vi. The US Centers for Disease Control and Prevention (CDC) and their partners are investigating Salmonella Mbandaka and Enteritidis illnesses that appear to be linked to contact with small flock poultry. As of May 29, 2025, 104 people were identified from 35 states. The Salmonella strains have been linked to two hatcheries. (CDC Investigation Update: Salmonella Outbreak, May 2025)





vii. Highly pathogenic avian influenza (HPAI) H5N1 genotypes D1.1 and D1.2 are currently the most prevalent in domestic and wild birds in North America. In dairy cattle in the United States, HPAI H5N1 genotypes B3.13 and D1.1 continue to be detected.

USA:



Poultry:

- o As of June 17, 2025, there were 4 small flocks (WOAH definition) and 4 commercial flocks affectedby HPAI in the last 30 days (United States Department of Agriculture-Animal and Plant Health Inspection Service (USDA-APHIS) latest confirmed detections in poultry).
- Since the start of the current HPAI outbreak (February 2022), 921 small flocks and 787 commercial flocks have been confirmed HPAI positive.

• Dairy cattle:

- As of June 17, 2025, there were 8 new confirmed cases of HPAI in dairy cattle in 2 states in the last 30 days (USDA-APHIS latest confirmed detections in livestock).
- Since March 2024, a total of 1,073 dairy herds in 17 states have been confirmed HPAI positive.
- USDA's National Milk Testing Strategy continues with mandatory milk bulk tank surveillance. A map of the status of each State can be found here.

Human:

 As of June 13, 2025, the CDC has confirmed 70 cases of avian influenza A(H5) in people in the USA. Forty-one infections (59%) were associated with exposure to affected dairy cows, and 24 (34%) with exposure to infected poultry. The source of exposure for the remaining five human cases was either unknown (n=3) or animal sources (n=2) (LINK).





xii. Foot and Mouth Disease (FMD) in Europe and the Middle East as of May 27, 2025:

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

Other input:

i. Animal Health Canada's Emergency Management Division: They are developing biosecurity documents (LINK) and exploring various ways to share the information, recognizing that no single approach will reach all smallholders. Some existing resources may not be effectively communicated, and they may seek input from the network.

5) Takeaways

- 1. Sheep infected with Salmonella or other bacteria and viruses may abort without showing prior signs of illness. Since these microbes can spread between animals and humans, it's essential to practice strong biosecurity when handling aborted lambs, such as wearing gloves.
- 2. Laboratory testing of a sick piglet helps determine the most effective treatment for the herd, ensuring appropriate antibiotic use while reducing the risk of overuse.
- 3. Even though bird migration is ending, bird flu (HPAI) is still a concern in Canada and the USA. Stay alert and follow biosecurity measures to protect your flocks.

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