



The WeCAHN Smallholder Network held a quarterly videoconference meeting on March 7th, 2025, to discuss the animal health events occurring from October to December 2024, with veterinary practitioners, diagnosticians, veterinary college faculty, researchers, and industry representatives in attendance.

## 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 of networks.



## Interesting cases

### 1) Cache Valley Virus (CVV)

was diagnosed in commercial and small flocks of sheep in Manitoba, Saskatchewan and Alberta in late 2024 and early January 2025. There were no detections in British Columbia.

- One case in Alberta was a small flock breeding with 30 Rideau base ewes bred in July. Ten ewes had CVV-affected lambs.
  - Seven ewes had large, deformed single lambs. Two lambs were submitted to the University of Calgary Veterinary Medicine Diagnostic Services Unit (UCVM DSU); CVV was confirmed at the Guelph Animal Health Laboratory. The two lambs had malformations of the spinal column and joints and abnormally shaped heads.
  - Owners plan to shift the breeding season to avoid a repetition of a CVV outbreak this year.
- Mosquitoes transmit CVV. Synchronizing breeding to avoid high mosquito seasons can help prevent CVV outbreaks.

### 2) Listeriosis in small flock of sheep in BC

- **General history:** Five flocks of sheep and goats were affected from Q2 2024 to Q1 2025. Listeriosis was previously diagnosed approximately 5 years ago. Generally, it is a sporadic diagnosis.
- **Presentation:** Animals were recumbent and paddling or dead.
- The Western veterinary practitioners at the WeCAHN Small Ruminant Network meeting Q4 2024 did not note a change in listeriosis diagnosis frequency.



### 3) MG (*Mycoplasma gallisepticum*) and infectious coryza (*Avibacterium paragallinarum*) in small flocks of layers in BC

- Two flocks in Q4 2024 and a third flock in Q1 2025 were infected with both bacteria. The three affected flocks had sourced birds from multiple sites.
- **Diagnoses:** The veterinarian diagnosed a mixed infection in these flocks of laying hens. They had foul breath (infectious coryza), decreased egg production and trouble breathing (MG). The birds also had mites.
- **Treatment:** There was a poor improvement with the first prescribed antimicrobial. A second antimicrobial was prescribed, requiring a withdrawal period before the eggs were safe to be consumed again.
- It is not always necessary to depopulate these flocks. If the hens are used for egg production and not breeding, they can be maintained in good health and carry out all-in-all-out at the end of their lifespan.

## Small flocks and small herds definitions for the disease investigation programs in Western Canada

Testing can be expensive for the producer/owner. Small flock and small herd disease investigation programs may alleviate some of the costs related to disease investigation. Below is a summary of the definitions of small flocks and small herds for the disease investigation programs in Western Canada. There are specific exclusions to the definitions provided, and these exceptions are detailed on the relevant websites.

Group	BC	AB	SK	MB
<b>Small poultry flock</b>	<100 poultry per premises <a href="#">BC Disease Detection Program for Smallholders</a>	Less than quota-controlled numbers. Includes species or types not subject to quota controls (for example: pheasant, quail, etc.) <a href="#">AB NQ/NC Poultry Disease Investigations</a>	Small flock and backyard poultry producers (non-quota domestic poultry) <a href="#">SK Small Flock Poultry Surveillance Program</a>	<1,000 birds, chickens, turkeys, ducks, geese, game birds, and/or peafowl <a href="#">Manitoba Small Flock Avian Influenza Program</a>
<b>Small ruminants</b>	<100 small ruminants per premises <a href="#">BC Disease Detection Program for Smallholders</a>			
<b>Swine</b>	<100 pigs per premises <a href="#">BC Disease Detection Program for Smallholders</a>	<10 sows or fewer or who markets 100 or fewer finisher pigs every year <a href="#">AB Small-scale Swine Disease Investigations</a>	Smallholders and backyard swine producers (non-commercial domestic swine) <a href="#">SK Small Holder Swine Health Surveillance Program</a>	





## Syndromic Surveillance

### Important information:

#### Clinical impression surveys

Network practitioners complete a survey which captures whether they have identified selected conditions

- **Never**
- **Rarely** (1-2 times over the 3 months)
- **Commonly** (1-2 times per month)
- **Very frequently** (3+ times per month)

### Small poultry flocks

#### Clinical impression surveys for small poultry flocks

The results below combine the responses to the WeCAHN Smallholders – Small Flock clinical impression survey and the WeCAHN Poultry – Small Flock clinical impression survey.

**Egg yolk peritonitis** was reported **Never** (3/5) to **Rarely** (1/5) to **Commonly** (1/5). Relative to the previous quarter, the frequency of diagnosis was **stable** (5/5).

**Infectious laryngotracheitis (ILT)** was reported **Never** (3/5) to **Rarely** (2/5). The frequency of diagnosis was reported **decreasing** (1/5) to **stable** (4/5).

- One practitioner reported that ILT was associated with mixing birds from different sources despite strong messaging to avoid this action.

## Diagnosis of ILT in small flocks of poultry does not require depopulation in the western provinces

The response to ILT in small flocks of poultry varies per province. A summary of the responses is listed in the table below:

Province	Provincial regulations	Response to ILT in a small poultry flock	Recommendation(s) to small flock owners
Manitoba	Reportable	<ul style="list-style-type: none"> <li>• Flock vet or Chief Veterinary Officer (CVO) staff perform a premises evaluation.</li> <li>• Highly encourage depopulation.</li> <li>• Vaccinate with TCO ILT vaccine, if not too close to a commercial farm.</li> <li>• Lifetime quarantine.</li> </ul>	Vaccinate yearly while under quarantine.
Saskatchewan	Notifiable	<ul style="list-style-type: none"> <li>• No response.</li> </ul>	Information to owners or their vet upon request.
Alberta	Reportable	<ul style="list-style-type: none"> <li>• CVO staff consult via telephone.</li> <li>• Send a notification to commercial and small poultry flocks within 20 km of the positive flock using the premises identification (PID) system. Share an ILT fact sheet.</li> <li>• Vaccinate with tissue culture origin (TCO) ILT vaccine and booster 4 weeks later.</li> <li>• The owners/producers can choose to depopulate the flock, but there will be no compensation.</li> </ul>	Apply biosecurity protocols—training on cleaning and disinfection.
British Columbia	Reportable	<ul style="list-style-type: none"> <li>• Vaccinate immediately in the face of an outbreak.</li> </ul>	Maintain as a closed flock. Vaccinate yearly.

***Mycoplasma spp. infection*** was reported **Never** (3/5) to **Commonly** (1/5) to **Very frequently** (1/5). The frequency of diagnosis was reported decreasing (1/5) to stable (4/5).

#### Laboratory diagnoses for small poultry flocks

At UCVM DSU, *Salmonella* Enteritidis was diagnosed in an 8-year-old female chicken backyard/pet.



## Small flocks of small ruminants

### Clinical impression surveys for small flocks of small ruminants

The CIS questions for small flocks of small ruminants were answered **Never** to **Rarely** with a **decreasing** frequency of diagnosis compared to the previous quarter (1/1).

### Laboratory diagnoses for small flocks of small ruminants

A case of companion goats was positive for *Mycobacterium avium* subspecies paratuberculosis (MAP or Johne's disease) by PCR; this case had 10 individual animals tested, and 60 % were positive. A Polled Dorset 3-year-old ewe of an unknown commodity was diagnosed with Johne's on post-mortem evaluation and was PCR positive.

Regarding abortogenic pathogens, there were no isolations of *Listeria monocytogenes* and no PCR detections of *Neospora caninum*, *Coxiella burnetti*, and *Chlamydia abortus* (synonym *Chlamydophila abortus*) in sheep and goats at VDS and PDS this quarter.

## Small herds of swine

### Clinical impression surveys for small herds of swine

**Neonatal diarrhea** was reported **Never** (1/2) to **Rarely** (1/2).

- A practitioner reported that environmental pathogens caused neonatal diarrhea.

**Neurologic disease** and **septicemia** were reported **Never** (1/2) to **Rarely** (1/2).



## Scan

### 1) Alberta Non-quota or non-commercial poultry disease investigations: 13 cases were submitted: producers (2) and vets (11)

- **Chicken:** ILT, Marek's disease, Mycoplasmosis (MG/*Mycoplasma synoviae*), gizzard hemorrhages
- **Turkey:** Mycoplasmosis (MG)
- **Pigeon from a small flock:** Vitamin A deficiency and urinary tract bacterial infection
- A chicken, turkey and duck from a farm were emaciated. This was a new flock, and the weather was cold. The flock veterinarian gave information to the owner to prevent this from happening again.

### 2) Manitoba Agriculture updates

- Manitoba Agriculture held a Small Holder Euthanasia workshop for swine on February 26<sup>th</sup>, 2025. The workshop was delivered by Dr. Jennifer Woods, Livestock Handling and Care Specialist (J Woods Livestock Services).
- Looking at having a dedicated website for smallholder materials.
- Examining future course topics, including emergency training, planning for emergencies (e.g., floods and fire), and nutrition.

### 3) The BC Poultry Health Network

held a small flock euthanasia workshop for owners of small flocks approximately 2 weeks ago. They had the participants practice euthanasia techniques. The participants were engaged throughout the workshop.





#### 4) The highly pathogenic avian influenza

discussed hereafter is influenza A virus subtype H5 in domestic and wild birds. The subtype H5N1 is the most prevalent in domestic and wild birds in North America; the current genotypes are D1.1 and D1.2. In dairy cattle, the subtype is H5N1, and the genotypes identified in dairy cattle are B3.13 (since March 2024) and D1.1 (since January 2025 [LINK](#)).

##### Canada:

##### Poultry:

- As of April 17, 2025, 15 confirmed infected premises were affected by avian influenza subtype H5 ([Canadian Food Inspection Agency \(CFIA\), 2025](#)); non-commercial poultry infected primary control zones (PCZ) in Nova Scotia (2), and Newfoundland and Labrador (NL; 1) and non-commercial non-poultry PCZ in NL (1) and Ontario (1) ([CFIA, 2025](#); [World Organisation Animal Health \(WOAH\), 2024](#) for the definition of poultry and non-poultry). HPAI subtype H5N5 was detected in the NL small flock ([WOAH, 2025](#)).
- “Vancouver backyard chickens practise social distancing from wild birds amid H5N1 risk.” In this news article, “[Dr. Theresa Burns] said the “very safest thing” would be to keep chickens indoors without access to the outside environment, where they might encounter the virus shed from wild birds.” ([The Canadian Press, 2025](#)).



##### Dairy cattle:

- As of April 2, 2025, the Canadian Food Inspection Agency laboratories tested 2,954 raw (unpasteurized) milk samples at processing plants; all samples were negative ([CFIA, 2025](#)).
- During the week of February 24<sup>th</sup>, Dairy Farmers of Canada undertook a Canada-wide virtual exercise simulating positive HPAI milk truck detections in each province with participation from national and regional CFIA colleagues, provincial governments, provincial milk marketing boards, public health sectors and Animal Health Canada.

##### USA:

##### Poultry:

- As of April 17, 2025, 27 backyard flocks and 7 commercial flocks were affected by HPAI in the last 30 days ([USDA-APHIS latest confirmed detections](#) in poultry; [WOAH, 2024](#) backyard flocks are equivalent to non-poultry). The total is 907 confirmed cases in backyard flocks since February 2022.

##### Swine:

- Lessons from the case of HPAI in backyard pigs in Oregon were shared by Dr. Ryan Scholz, Oregon State Veterinarian, in the SowBridge 2025-2026 distance educational series on February 5<sup>th</sup>, during the session “H5N1 as it Relates to Pigs” ([WattPoultry.com, 2025](#)).
  - “First, the importance of specialized equipment and techniques for handling non-confined animals became apparent. The team needed access to sedatives and specialized capture equipment not typically associated with pig handling.”
  - “Second, the case highlighted the critical need for better security education among small farm operators.”

##### Dairy cattle:

- As of April 17, 2025, there were 31 new confirmed cases of HPAI in dairy cattle in 4 states in the last 30 days ([USDA-APHIS latest confirmed detections](#) in livestock). The total is 1,021 confirmed cases in dairy cattle herds in 17 states since March 2024.

### Humans:

- Fewer dairy workers, compared to poultry workers, affected by HPAI reported wearing personal protective equipment (e.g., eye protection, face mask ([Garg et al., 2024](#))).
- CDC confirmed 70 cases of avian influenza A(H5) in people in the US as of March 21, 2025, with most infections linked to dairy cows and commercial poultry ([CDC, 2025](#)).



### United Kingdom:

#### Sheep:

- HPAI was confirmed in a sheep in England on March 24, 2025, following repeat positive milk testing. The sheep was identified following routine surveillance as it was located on a premises with infected captive birds. ([UK's Department for Environment, Food & Rural Affairs, 2025](#)).

### 5) WeCAHN Dairy Network Meeting Q4 2024:

- **Case report:** Monensin toxicity in a group of heifers. There were signs of swollen joints, fevers, heart failure and sudden death. The field post-mortem examination revealed muscle necrosis suggestive of clostridial infection. Bloodwork and laboratory post-mortem evaluation suggested ionophore toxicity. A nutrition analysis revealed an overdose of the mineral mix (where Rumensin® (monensin by Elanco) is pre-mixed).
- Scours caused by *Escherichia coli* in 2-4 day old calves with mortality of a few affected calves within 24 hours of the onset. There was damage to the cells lining the intestines. As seen in this case, *E. coli* toxin typing found toxins typical of *E. coli* infection that cause watery diarrhea but do not damage the cells. The *E. coli* in these calves likely produced an additional toxin not included in the toxin panel. Several such toxins are described, and probably several have not been described. They are uncommon in domestic animals.



### 6) WeCAHN Small Ruminant Network meeting Q4 2024:

Alberta has a [Mycoplasma ovipneumoniae \(M. ovi\) testing and fencing program](#) for domestic sheep and goats within 50 km of the bighorn sheep ranges.

### 7) WeCAHN Poultry Network Q4 2024:

Multiple traditional broiler-breeder chickens died from intestinal blockage with long hay provided for enrichment. Enrichment is encouraged with short hay (chopped) bales.

### 8) Réseau d'alerte et d'information zosanitaire (RAIZO) Poultry Network Q4 2024:

smallholders and backyard hens "Programme de surveillance des maladies d'importance dans la basse-cour" ([LINK](#)): 16 submissions.

- 11 had positive results for single or multiple pathogens: ILT, *M. gallisepticum*, *M. synoviae*

### 9) RAIZO Swine Network Q3 2024:

- smallholders: no submissions.

### 10) Canada West Swine Health Information Network (CWSHIN) Q4 2024:

- nothing to report relevant to small herd swine.

## 11) Foot and Mouth Disease (FMD)

FMD was reported in 2025 in three countries that had not reported any detections for multiple decades:

- In Germany: a single herd of water buffalo in January ([Friedrich-Loeffler-Institut, 2025](#)). Germany has regained its FMD-free status across nearly the entire country. There is no epidemiological link with the FMD outbreaks in Hungary and Slovakia. ([SHIC, 2025](#))
- Hungary and Slovakia: same FMD virus serotype O.
- Hungary: 4 herds ([British Agriculture Bureau \(BAB\), 2025](#)).
- Slovakia: 6 herds ([BAB, 2025](#)).

Information on FMD from CFIA can be found on their webpage: [LINK](#).

### Producer Takeaways:

- Introducing layer hens from different sources into your farm can result in severe respiratory infections. Contact your veterinarian if your hens have foul breath, decreased egg production, and difficulty breathing. Your veterinarian may recommend testing or prescribe antibiotics or other supportive care.
- Spring migration is underway! Watch for signs of bird flu (HPAI) in your poultry: lack of energy, decreased egg production, swelling around the head, neck and eyes, coughing, gasping for air, sneezing, nervous signs, tremors, diarrhea and sudden death. If you see these signs, contact your veterinarian.
- Sheep and goats have died suddenly or after developing nervous signs in BC from spring 2024 to winter 2025 due to infection with Listeria bacteria. Contact your veterinarian if your sheep and goats have nervous signs like tremors and seizures or die suddenly. Your veterinarian will likely recommend testing, which may include post-mortem evaluation of the deceased animals.

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