



The WeCAHN poultry network met 26th June 2025 to discuss poultry health in western Canada during Q1 (January-March 2025) with veterinary practitioners, laboratory diagnosticians, researchers, and provincial veterinarians in attendance.

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 Laboratory (VSDL), Prairie Diagnostic Services (PDS), and University of Calgary College of Veterinary Medicine Diagnostic Services Unit (UCVM DSU).
3. Scan: poultry surveillance reported by other sources of networks.

2) Interesting Cases

Erysipelas septicemia in a commercial aviary housed in a previous broiler breeder barn.

- **History:** This was a 60-week-old layer flock intended for another 3 months of extended laying. There was an increase in mortality; over one week, close to 20% of the flock was lost (900/4,900 hens).
- **Post-mortem examination:** Bacterial septicemia with pulmonary congestion, enlarged spleen and friable liver.
- **Bacteriology:** Erysipelas (4+) was cultured from multiple submitted tissues.
- **Investigation:**
 - Broiler breeder barn built in the 90's. It was recently repurposed as an aviary layer barn but maintained the overall lay out of a breeder barn including flats, nests and feeding equipment
 - The practitioner found sharp ends and cutting edges on metal sheets, as well as protruding screws and wires at many locations in the barn confirming that hens were at risk of skin wounds.

- **Treatment:** This flock cannot be treated for the Erysipelas because they're layer hens (antimicrobial withdrawal times). The practitioner recommended fixing/removing sharp metal, screws and wire, and raising the feeders' height to prevent neck/throat cuts and scrapes. Erysipelas vaccine was also discussed
- Still unknown how the Erysipelas got into the barn.

Additional details on Erysipelas:

- Erysipelas is a bacterial disease.
- Erysipelas bacteria can survive for prolonged periods in the environment, especially when protected by organic material.
- Multiple animal species including birds, mammals, aquatic animals, amphibians, and reptiles can get erysipelas. **It also affects humans.**
- Erysipelas need a break in the skin to enter and cause infection.
- Erysipelas in poultry is primarily an acute infection with septicemia and sudden death.
- Clinical sign in poultry: generalized weakness, depression, diarrhea, and sudden death. Affected birds may develop skin lesions and swelling of the hocks. Signs may resemble those of avian influenza.
- Clinical signs in humans: infection of a skin wound with inflammation, pain, and redness, generally in the extremities.



3) Syndromic Surveillance

Clinical impression surveys



Important information:

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

Note: 3 surveys were completed, which may seem small, but represent up to 580 commercial flocks per year.

Clinical impression survey for respiratory system disease

Broilers

Infectious bronchitis virus (IBV) was reported **Never** (1/3) to **Rarely** (2/3) and **stable** (3/3).

Question: Have any changes been noted regarding infectious bronchitis? There was an increase in the Delmarva strain noted by RAIZO in QC (See the [Scan](#) section below for additional information).

Responses by multiple network members:

- **Practitioner 1:**
 - Broilers are vaccinated at the hatchery and receive a booster on farm. They rarely see clinical cases of IBV in broiler chickens.
 - The bulk of IBV testing done for broilers is pre-slaughter serology for the Massachusetts and Connecticut serotypes contained in the live-attenuated vaccines and related to air sac condemnations.
- **Practitioner 2:**
 - Layers are administered a killed IBV vaccine that combines Salmonella Enteritidis (SE), IBV and Newcastle disease. The administration of the killed vaccine increases the ELISA titres (serology) but clinical cases of IBV are rare.

Broiler-breeders

- Infectious laryngo-tracheitis (ILT) and *Mycoplasma* were reported **Never** and **stable** (3/3).

Layers

IBV – respiratory issues, ILT and *Mycoplasma* were reported **Never** and **stable** (3/3).

Turkeys

Mycoplasma, *Ornithobacterium rhinotracheale* (ORT) and other respiratory disease were reported **Never** and **stable** (3/3).

Clinical impression survey for digestive system disease

Broilers

Ascites was reported **Never** (1/3) to **Rarely** (1/3) to **Commonly** (1/3) and **stable** (2/3) to **increasing** (1/3).

Coccidiosis was reported **Rarely** and **stable** (3/3).

Inclusion body hepatitis (IBH; fowl adenovirus) was reported **Commonly** (2/3) to **Very frequently** (1/3) and **stable** (1/3) to **increasing** (2/3).

Necrotic enteritis was reported **Rarely** (2/3) to **Commonly** (1/3) and **stable** (3/3).

Condemnation issues:

- Ascites was reported **Rarely** and **stable** (2/2).
- Cellulitis was reported **Rarely** (1/2) to **Commonly** (1/2) and **stable** (2/2).
- Liver conditions were reported **Rarely** and **stable** (2/2).

Note: Not every practitioner receives condemnation results. Federal-level condemnation data was not reviewed in the meeting.



Broiler-breeders

- Coccidiosis was reported **Rarely** (2/3) to **Commonly** (1/3) and **stable** (3/3).
- IBV – mortality spike was reported **Never** and **stable** (3/3).

Layers

- Coccidiosis was reported **Never** (2/3) to **Commonly** (1/3) and **stable** (3/3).
- Necrotic enteritis was reported **Never** (2/3) to **Rarely** (1/3) and **stable** (3/3).

Turkeys

- Coccidiosis was reported **Never** (2/3) to **Rarely** (1/3) and **stable** (3/3).
- Necrotic enteritis was reported **Never** (1/3) to **Rarely** (2/3) and **stable** (3/3).
- Histomoniasis and parasites were reported **Never** and **stable** (3/3).

Clinical impression survey for reproductive system disease

Broiler-breeders

- IBV – decreased production/abnormal egg was reported **Never** and **stable** (3/3).
- In-lay bacterial septicemia was reported **Never** (1/3) to **Rarely** (1/3) to **Very frequently** (1/3) and **stable** (2/3) to **increasing** (1/3).
 - One practitioner identified *E. coli* and Erysipelas as the cause of the in-lay bacterial septicemia observed.

Layers

- Bacterial peritonitis/salpingitis was reported **Never** (1/3) to **Rarely** (1/3) to **Commonly** (1/3) and **stable** (2/3) to **increasing** (1/3).
- IBV – decreased production/abnormal egg was reported **Never** (2/3) to **Rarely** (1/3) and **stable** (3/3).

Clinical impression survey for musculoskeletal disease

Broilers

- Lameness – bacterial was reported **Commonly** and **stable** (3/3).
 - Practitioners identified *E. coli*, *Enterococcus spp.* and *Enterococcus cecorum* as the causes of the lameness observed.
- Lameness – viral was reported **Never** (1/3) to **Rarely** (1/3) to **Commonly** (1/3) and **decreasing** (1/3) to **stable** (1/3) to **increasing** (1/3).
 - One practitioner identified reovirus as the likely cause of the lameness observed.
- Condemnation issues:
 - dark carcasses were reported **Never** (1/2) to **Rarely** (1/2) and **stable** (2/2).

Broiler-breeders

- Lameness – bacterial was reported **Commonly** and **stable** (3/3).
 - Practitioners attributed bacterial lameness in broiler breeders to *Staphylococcus*. One practitioner noted recurring infections across multiple farms.
- Lameness – viral was reported **Never** (2/3) to **Rarely** (1/3) and **decreasing** (1/3) to **stable** (2/3).



4) Scan

i. Newcastle disease in pigeons in BC (WAHIS).

- On May 28th, 2025, non-negative results for avian paramyxovirus were reported in two squab pigeon farms experiencing unusual mortality in BC.
- Confirmed as virulent/velogenic avian paramyxovirus type 1 (APMV-1) (Newcastle Disease).
- Genome analysis suggested similarities with pigeon paramyxovirus circulating in Eurasia.
 - CFIA depopulated the pigeon farms and implemented quarantine and movement controls ([LINK](#)). Monitoring of nearby poultry flocks continues.

Réseau d'alerte et d'information zoonitaire (RAIZO), Quebec (QC), Poultry Network report Q1 2025 ([LINK](#)):

Increased laboratory-diagnosed infectious bronchitis (IBV), particularly related to the Delmarva (DMV)/1639 strain. Most poultry (93%) had a concomitant infection with *E. coli*, *E. cecorum* or *Enterococcus* spp. In the clinical impression survey, half (n=5/10) practitioners reported increased infectious bronchitis cases.

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](#)).



ii. 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.

HPAI in Canada:

- **Poultry:**
 - As of July 4th there are still 7 HPAI infected premises in Canada. The last detection was on May 14th in Prince Edward Island. Other cases in May were detected in AB, SK and MB See [CFIA webpage](#).



- HPAI infection in a BC ostrich farm BC
 - Infection was confirmed in December 2024. The farm owners have been involved in a legal battle against the CFIA to prevent the culling of their 400 ostriches.
 - Protesters, mobilized through social media and drawn by the controversy, have travelled to the farm to oppose the planned ostrich culling.
 - On May 31st, 2025, the CFIA confirmed that the ostriches were infected with genotype D1.3, a strain not identified elsewhere in Canada. ([CFIA, 2025](#))
 - Genotype D1.3 is distinct from the D1.1 strain identified in the second HPAI dairy cattle spillover in Nevada.
 - The owners claim there was a single test performed in December. The CFIA update did not specify how many tests were performed.
 - No commercial poultry nearby but abundant wildlife and heavy scavenging in the area, so it is concerning for wildlife infection.

US Poultry:

- Since the start of the current HPAI outbreak (February 2022), 921 small flocks and 787 commercial flocks have been confirmed positive for HPAI. ([USDA-APHIS latest confirmed detections](#))

Dairy cattle:

- Since March 2024, 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](#).
- As of June 30th, 2025, the CFIA laboratories have tested 4,544 raw (unpasteurized) milk samples at processing plants; all samples have been negative for HPAI ([LINK](#)).

Human:

- As of July 4th, 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 other animal sources (n=2) ([LINK](#)).

Environment and Climate Change Canada, Canadian Wildlife Health Cooperative and Canadian Food Inspection Agency HPAI created a dashboard showing the number of HPAI detections in wild animals [LINK](#).

The CFIA avian influenza landing page was recently updated to serve as a one stop hub for all HPAI information [LINK](#).

Research Projects:

- **Salmonella Testing:** A new project aims to develop a faster and more comprehensive method for detecting Salmonella in hatchery fluff samples. Researchers are requesting samples from AB and SK to validate their testing workflow.

Meeting Takeaways:

Clinical cases of infectious bronchitis virus (IBV) remain within the control limits in broilers and layers. it's difficult to interpret serology results when production types are combined.

The barn investigation of a case of erysipelas in a 60 wk old layer flock with 20% mortality revealed several sharp edges and protruding metal pieces that were causing skin wounds. Antibiotic treatment could not be prescribed due to withdrawal times but structural improvements and consideration of vaccination were recommended. Erysipelas are zoonotic causing wound infections in humans.

The last confirmed case of Highly Pathogenic Avian influenza in Canadian poultry was in May 2025. Seven premises remain infected. Over 1,000 dairy herds have been affected by HPAI in the US but no cases have been detected in Canadian cattle or milk.

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

