

WECAHN POULTRY NETWORK SUMMARY

January - March 2025

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

Regional disease surveillance: seven premises remain infected by Highly pathogenic avian influenza (HPAI) in Canada as of July 4th 2025; new HPAI genotype never seen in Canada reported from BC ostriches; outbreaks of Newcastle disease in pigeons in BC; US dairy cattle continue to be affected by HPAI; human cases of avian influenza have been confirmed in the US. 17 18

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 outbreak in layers: A 60-week-old layer flock experienced 20% mortality in a week. The flock was housed in a repurposed broiler breeder barn. Upon investigation, sharp metal edges, wires and exposed screws were found in the barn. Erysipelas need a break in the skin to enter and cause septicemia. Antibiotic treatment was not prescribed due to withdrawal times; barn repairs were recommended, and vaccination was discussed.

Erysipelas disease characteristics: Erysipelas is a bacterial infection affecting multiple species including birds and mammals. Erysipelas bacteria enter through skin breaks causing septicemia and sudden death in poultry. Erysipelas cause wound infections in humans.

2) Syndromic Surveillance

- Respiratory diseases: Infectious bronchitis virus (IBV) remains stable and rare in broilers and layers, under current vaccination practices. Infectious laryngotracheitis and Mycoplasma were reported never or rarely.
- Digestive diseases observations: Ascites, coccidiosis, and necrotic enteritis were reported with varying frequency in broilers, broilerbreeders, layers, and turkeys, generally stable with some increases noted. Inclusion body hepatitis has an increasing trend.
- Reproductive system diseases: In-lay bacterial septicemia including *E. coli* and erysipelas was reported with some increase in broiler breeders and layers. Bacterial peritonitis/salpingitis and IBV-related production issues were mostly stable or rare.
- Musculoskeletal disease findings: Bacterial lameness, mainly due to E. coli, E. cecorum and Staphylococcus, was commonly reported in broilers and broiler-breeders; viral lameness was less frequent and variable.
- Multisystemic and metabolic diseases: Early systemic bacterial infections and yolk sac infections were common and stable or increasing in broilers; multi-drug resistant *E. coli* was variably reported. Fowl cholera and salmonellosis were never reported. Egg yolk peritonitis in layers was linked to extended lay periods due to egg shortages caused by HPAI outbreaks.
- Laboratory diagnostics: No infectious laryngotracheitis detections; mixed Mycoplasma infections and rising avian orthoreovirus cases were noted; Marek's disease diagnoses were few, and the number of positive Salmonella cultures declined.



4) Scan

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

- Avian paramyxovirus were reported in two squab pigeon farms experiencing unusual mortality in BC and confirmed as virulent/velogenic avian paramyxovirus type 1 (APMV-1).
- CFIA depopulated the pigeon farms and implemented quarantine and movement controls (<u>LINK</u>).
 Monitoring of nearby poultry flocks continues.

Réseau d'alerte et d'information zoosanitaire (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 investigated a *Salmonella* Mbandaka and Enteritidis outbreak that appears 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 in Canada



- 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 <u>CFIA webpage</u>.
- 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.
 - On May 31, 2025, the CFIA confirmed that the ostriches were infected with genotype D1.3, a strain not identified elsewhere in Canada. (<u>CFIA</u>, 2025)
 - No commercial poultry nearby but abundant wildlife and heavy scavenging in the area, so it is concerning for wildlife infection.



- USA: 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)
- 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 30, 2025, the CFIA laboratories have tested 4,544 raw (unpasteurized) milk samples at processing plants; all samples have been negative for HPAI (LINK).
- 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).



