

WECAHN POULTRY NETWORK REPORT

APRIL - JUNE 2024

The WeCAHN poultry network met 13th September 2024 with veterinarians, producers, laboratory diagnosticians, provincial veterinarians and researchers in attendance discussing the poultry health events of Q2 (April - June 2024).

1) Overview

Data sources in this report include:

- 1. Clinical Impressions Surveys completed by network veterinarians.
- 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. Western condemnation data from federal slaughterhouses.

2) Interesting Cases

Case Reports: Salmonella Enteritis (SE) in broiler chicks

COMMENT: our practice has recently seen some SE cases in really young chicks.

Case 1:

History:

- 7-day old broiler chicks. Attending veterinarian called to investigate increased early mortality.
- · Based on visit and post-mortem diagnosis of blood poisoning the veterinarian did not suspect
- SE was isolated from the yolk sac only, so if this tissue hadn't been submitted the diagnosis would've been missed.





COMMENT: in a previous SE outbreak in 2008, SE would typically be isolated from yolk sac and also other submitted organs.

Response:

• Culling, and cleanup after batch closeout.

Cases 2 & 3:

· 4-day old Taiwanese Chicken (TC) chicks with similar clinical signs, post-mortem and lab findings.

Case 4: Identified from diagnostic laboratory dataset History: Spleen and bone marrow from broiler submitted to bacteriology lab at UCVM DSU for culture and sensitivity; no additional history.

Culture and sensitivity: Salmonella was isolated from spleen submitted to lab after 24 hours.

COMMENTS ON SE IN YOUNG BROILERS:

- some of the asymptomatic birds will be infected with SE.
- Problem: the SE will continue to be there in some of the healthy birds in the case flocks. If the SE should result in human cases, this will be linked back to poultry industry based on genomics.





3) Federal Condemnations

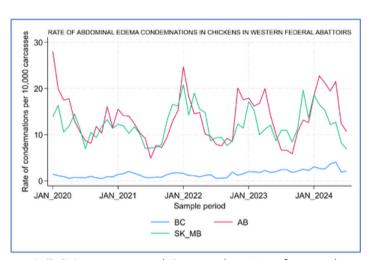
Following are data for selected condemnation categories as reported by the Canadian Food Inspection Agency for western federal slaughterhouses.

For more information:

https://agriculture.canada.ca/en/market-informationsystem/rp/index-eng.cfm?action=pR&r=133&pdctc=

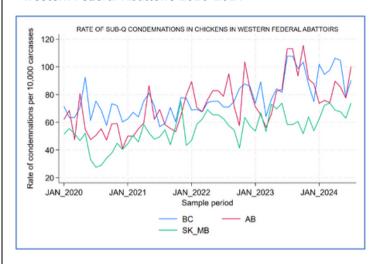
Abdominal edema tends to increase seasonally, and rates broadly tend to be higher on the prairies than B.C.

Rates of Abdominal Edema Condemnations in Chickens in Western Federal Abattoirs 2020-2024



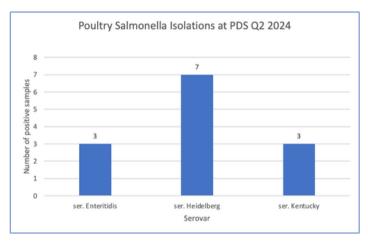
Cellulitis was reported Commonly to Very frequently and rated Increasing by one network practitioner. This would broadly correspond to the "subcutaneous" condemnations category in CFIA reports online. However, it's important to note that each carcass can only be condemned once, and subcutaneous lesions will be one of the first categories encountered after de-feathering. Therefore, some carcasses condemned for "subcutaneous" lesions may also have important predisposing or underlying conditions not reported, such as underlying arthritis.

Rates of sub-cutaneous Condemnations in Chickens in Western Federal Abattoirs 2020-2024



Salmonella Testing at Western Provincial **Veterinary Diagnostic Laboratories**

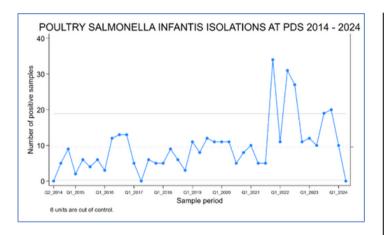
WeCAHN is grateful to have access to Salmonella testing data submitted to PDS and Manitoba VDS.

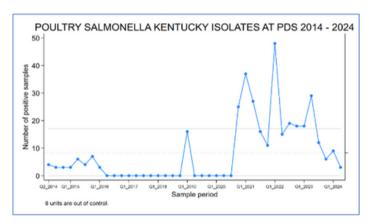


In contrast to previous quarters, in Q2 (April-June) 2024, Salmonella Heidelberg was the most frequently isolated Salmonella serovar across a relatively small number of total isolations at PDS.

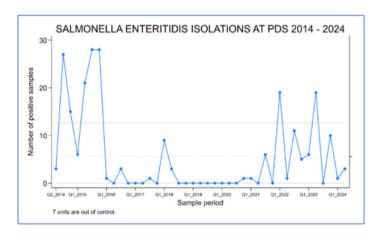
The frequency of *Salmonella* Infantis isolations, which had been broadly increasing for several years, declined this quarter (April - June) at PDS.



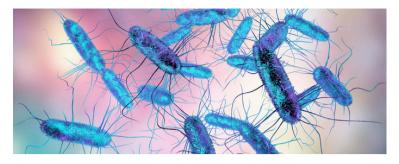




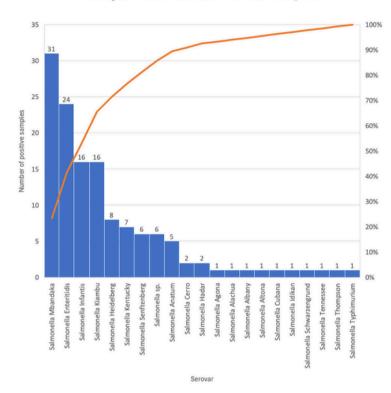
Isolation of Salmonella Kentucky and SE serovars remained stable at PDS in Q2 2024.



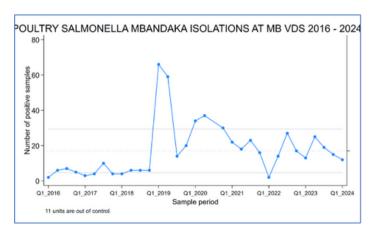




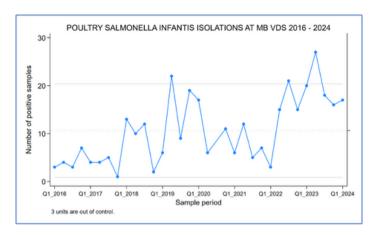
Poultry Salmonella Isolates at Manitoba VDS Q2 2024



Salmonella Mbandaka was the most frequently isolated poultry Salmonella serovar at Manitoba VDS, and isolations remained Stable for this serovar in Q2.







Similarly, Salmonella Infantis isolations remained Stable for this quarter after a period of increase during 2022-early 2023.

4) Update

i. Avian metapneumovirus (aMPV) in western Canada:

- Case count in MB is now 8 farms as of 13th September, including 2 new turkey grower flocks.
- 2 layer flocks are being investigated: one positive on serology (antibody test), one negative.
- No reported cases in BC/AB/SK.

ii. Avian metapneumovirus in eastern Canada:

- 57 cases aMPV to date (6th September, 2024), based on PCR; also some ELISA positive flocks so in these cases the birds are aMPV antibody positive on a blood test.
- · Ontario Animal Health Network will host an interactive dashboard reporting number of positive flocks positive in real time starting next week.
- Experience with clinical cases:
 - Spreads like wildfire.
 - Tends to linger longer than expected.
 - Lots of co-infections e.g., E coli in turkeys; Mycoplasma in broilers.

CFIA update re: vaccine access:

- There is a pathway for import of inactivated vaccine.
- Longer term want vaccine manufacturers to apply for licensing for product here in Canada.
- Currently (13th Sept. 2024) 1 flock in MB and 3 in ON have vaccinated.

PROBLEM: Issue with the length of time flocks remain positive by PCR.

Quebec: One flock which had been persistently positive on serology and negative on PCR (detecting the genetic material of the virus) is now first weak positive on PCR. In Canada CFIA only considers PCR positive findings diagnostic in identifying a positive flock.

Meeting Takeaways

- 1. Avian metapneumovirus (aMPV): the four western provincial veterinary diagnostic labs are all either working on or now have the capability to test for the virus in-house. There are reports of positive flocks in Ontario, Quebec, and Manitoba. Additionally there are reports of flocks positive on a blood test for antibodies, but negative for PCR actually detecting viral genetic material. These flocks aren't currently defined as an avian metapneumovirus case by CFIA, but have ongoing monitoring.
- 2. Condemnations in western federal abattoirs: the rates of chicken subcutaneous condemnations continue to trend upwards.





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