



Data sources in this report include:

- Clinical Impressions Surveys completed by network practitioners.
- 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).
- Western federal poultry abattoir data.

Update:

Avian metapneumovirus in Manitoba flocks

Avian metapneumovirus causes respiratory disease (swollen head disease in broilers; rhinotracheitis (inflammation of nose and windpipe) in turkeys.

Severity of disease depends on whether there are secondary infections.

Metapneumovirus is immediately notifiable to CFIA.

Recently in Manitoba:

- Four confirmed turkey growers, two confirmed broiler breeder flocks
- All are aMPV Type A (ON has Type B).
- The disease appears to resolve in approximately 7-10 days, but requires therapy to address secondary bacterial infections .



Information gaps:

- This is a virus so can't treat it with antibiotics, and there is no commercial vaccine available.
- Biosecurity is important to prevent introducing it into our flocks.
- In eastern Canada studies have detected the virus previously in Canada geese, and obviously now infected commercial flocks have also been detected in western Canada. So biosecurity programs should consider both as potential sources of infection.

Syndromic surveillance: Layers

Case report: Coryza outbreak

History: a pullet operation in MB received pullets from ON. As it became over-supplied, the operation reached out to clients in MB, SK and AB inquiring whether they could receive pullets. The birds were delivered in trucks traveling west from Manitoba to Alberta, delivering pullets enroute. When they arrived in AB no one noticed anything unusual with the birds beyond obvious signs of stressed birds, presumably from a long transport. Receiving farms in AB started phoning veterinarians ~ 5 days after the birds arrived.

Case report: Coryza outbreak

Clinical signs: respiratory signs including swollen heads, as well as decreased production and mortality.

Diagnosis: Coryza.

Control

- Follow-up was initiated with all flocks receiving the transported birds.
- No de-population [of mature birds] was initiated since these were layer birds. However barns with pullets were either de-populated or moving to AIAO facilities.
- We are working with the egg boards on controlling and stamping out the infection.
- We are also working with them to develop better protocols regarding introductions, including pre-movement testing and minimizing movements.

CORYZA OUTBREAK TAKEAWAYS:

- Introduction protocols are always important!
- Best lab samples to submit if Coryza is suspected is whole head from affected birds.

Salmonella testing

Salmonella Infantis continued to be the most frequently isolated poultry serovar in Q1 2024 at PDS. At PDS almost all of these *Salmonella* positives originated from hatchery fluff testing.

Time trend of isolation for *Salmonella* Infantis and *Salmonella* Kentucky continued to be stable relative to the previous quarter.

Isolations of *S. Infantis* and *Salmonella* Mbandaka continued to be the predominate serovars reported at Manitoba VDS. In Manitoba, in contrast with the *Salmonella* testing at PDS, the positives reported originated in a more even split between hatchery and non-hatchery testing.

Condemnation issues

At western federal poultry abattoirs, abdominal edema continued to be stable

in BC and relatively lower in Alberta and Saskatchewan-Manitoba relative to the previous quarter (October–December 2023).

Cellulitis was reported never to Very frequently but rated Stable by all, although abattoir trends appear to be broadly increasing across the west.

Case Report: SE in table egg layers

History: veterinarian was called to investigate slight increase in mortality. Barn in question was a converted turkey barn.

Post-mortem:

- Signs of blood poisoning
- Tissue samples were sent to the provincial lab for culture.

Diagnostics:

- *Salmonella Enteritidis* was grown from the ovary of an affected bird.

Control:

- Barn was found to have rats, a potential reservoir for the pathogen, in the ceiling, and flock was de-populated.

Meeting takeaways

- In the avian metapneumovirus cases reported this year in the U.S. and Ontario, the severity of illness depended on secondary infections and quality of management. “So it can look like anything”.
- Protocols for introduction of birds into barns are important and can’t vary because of external circumstances.
- The *Salmonella* Enteritidis outbreak shows the importance of the flock vet’s perspective in choosing appropriate diagnostics and guiding the farm’s response. In contrast with, say, increased mortality associated with *E. coli* septicemia, SE requires a quick and coordinated response to minimize the public health impact.

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