Western Canadian Animal Health Network

WECAHN POULTRY NETWORK REPORT

FEBRUARY 26TH 2021

Poultry Network Meeting

The first video-conference meeting of the Western Canadian Animal Health Network (WeCAHN) poultry network was held 26th February, 2021 with poultry scientists, laboratory diagnosticians, veterinary epidemiologists, veterinary college faculty and researchers, and a representative from the Canadian Integrated Program for Antimicrobial Resistance Surveillance (CIPARS) in attendance.

Meeting objectives:

- To identify poultry health trends occurring during the time period under discussion (Oct.-Dec. 2020).
- To identify potential data sources to support discussion at network meetings.
- To discuss the best/preferred approach to presenting and sharing data and information.

Dataset: Practitioners' clinical impressions survey, laboratory data from Manitoba VSL, Prairie Diagnostic Services, and University of Calgary, and CFIA western federal poultry abattoir condemnation data, as well as an overview of recent CIPARS poultry sampling.

Clinical impressions survey: Practitioners participating in the meeting completed a survey prior to the call. 'Commonly diagnosed across practitioners' was defined for purposes of this report as 2 or more practitioners reporting diagnosing a given pathogen 1-2 times or more per month, from Oct.-Dec. 2020. 'Increasing' over time, for purposes of this report, was defined as one or more practitioners categorised syndrome as increasing relative to July-Sept.2020.

Broiler diseases: Commonly diagnosed: early systemic bacterial infections, late systemic bacterial infection, other causes of early mortality, ascites, Inclusion Body Hepatitis, Infectious Bronchitis, Infectious Bursal Disease, bacterial, viral, and developmental lameness, and condemnation issues.
Time trends: Increasing: ascites, Inclusion Body Hepatitis, and developmental lameness.

Broiler-breeder diseases: : Commonly diagnosed: early systemic bacterial infection, other early mortality, coccidiosis, in-lay bacterial septicemia, bacterial lameness, *Salmonella* confirmed by the lab, aggression and cannibalism.
Time trends: Increasing: *Salmonella* confirmed by the lab.

Layer diseases: Commonly diagnosed: bacterial peritonitis/salpingitis, aggression/cannibalism, IBV associated with production drop. Salmonellosis confirmed by the lab was reported very frequently by one practitioner.
Time trends: Increasing: Aggression-cannibalism.

Turkey diseases: Commonly diagnosed: early bacterial systemic infection, late bacterial systemic infection, other early mortality, aggression-cannibalism, and round heart.
Time trends: Increasing: early bacterial systemic infections, histomoniasis, aggression and cannibalism, and round heart.

Laboratory data

Bacteriology: most frequently diagnosed included *E. coli*, *Salmonella* spp., *Clostridium perfringens*, and *Staphylococcus aureus*.

PCR: most frequently diagnosed pathogens included Reovirus, Marek's Disease, Infectious Laryngotracheitis (ILT) and Avian Influenza.

Canadian Integrated Program for Antimicrobial Resistance Surveillance (CIPARS):

Dr. Agnes Agunos gave an overview of her work in the CIPARS poultry program, monitoring antimicrobial usage and antimicrobial resistance. The program monitors antimicrobial resistance (AMR) trends in several key bacteria (*E. coli*, *Salmonella* spp., *Campylobacter* spp.).

The most recent CIPARS report on broiler flocks (which describes samples collected in 2019) identified regional variations in the species of *Salmonella* cultured from the participating flocks.

While the percentage of *Salmonella* positive flocks was trending up relative to the preceding year (2018) in B.C., the trend was downward for the prairie provinces.

CIPARS' 2019 broiler flock study also identified that much of the participating broiler population could be categorized as raised within 'low' to 'medium' AMU.

CFIA condemnation data: examining the monthly western poultry condemnation data reported from federal abattoirs, suggested:

- An increase in birds found dead in January 2020, relative to the rest of the year.
- An uptick in total post-mortem condemnations in August and October 2020.
- An increase in condemnations due to bruising, bruising, in August and October of 2020, across western federal poultry abattoirs.

Meeting takeaways

- Local/provincial variations in the frequency of diagnosis of some specific pathogens were apparent.
- Some of the difficulties in distinguishing between treatment failure and antimicrobial resistance or logistics/vaccination timing were discussed, highlighting the need for consultation with veterinary practitioners and labs to mitigate or treat poultry flock health challenges