


Fraser Health Avian Influenza AH5N1 Update

2024-25 'Season' and Looking
Ahead

Scope

In Scope

- Fraser Health commercial and community Avian Influenza exposures

Out of Scope

- Human Avian Influenza case details

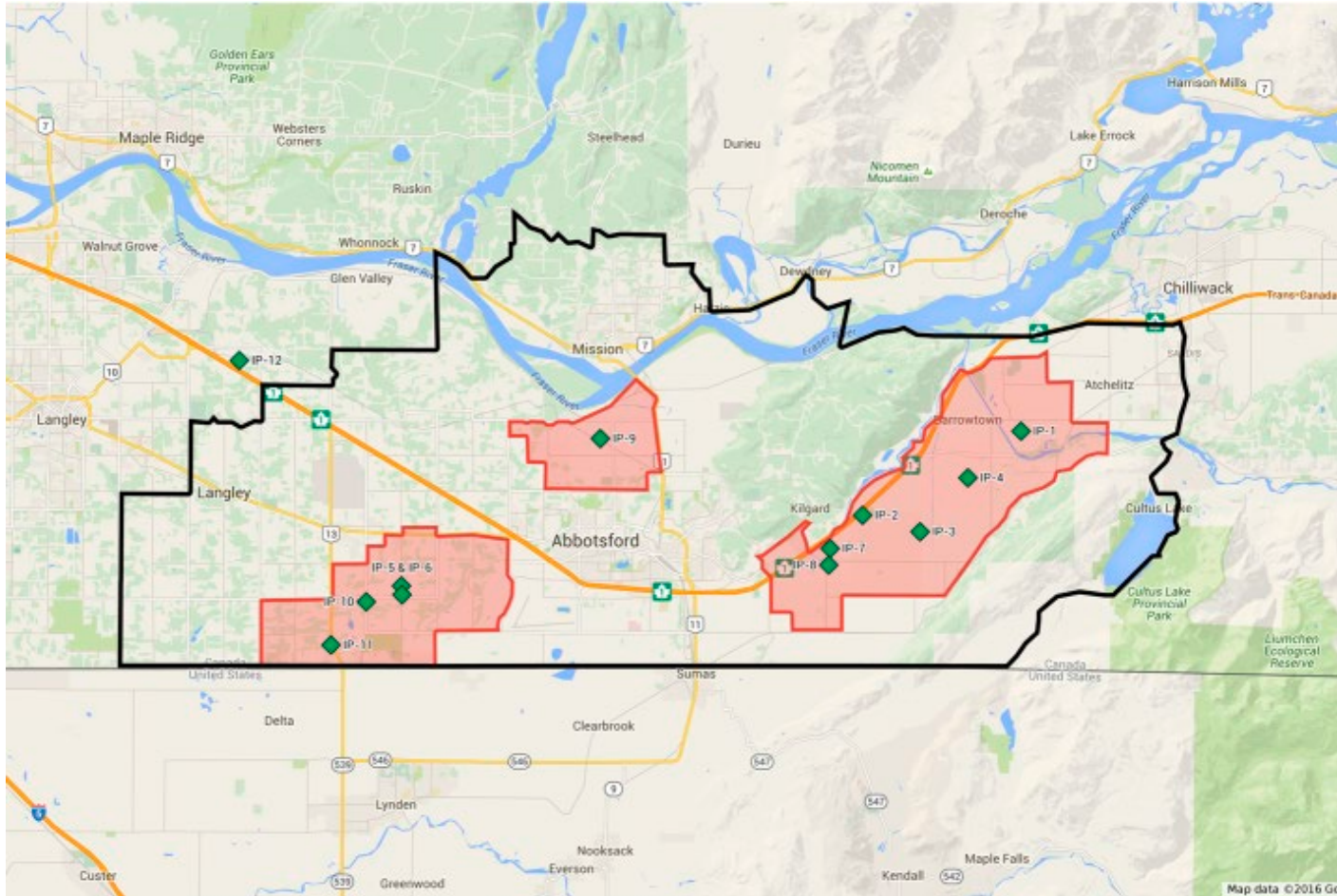
Bottom Line Up Front

Influenza AH5N1 is a significant animal and human health challenge

Fraser Health has one of the most concentrated commercial poultry and dairy sector locations in Canada

Health Authority collaboration with BCCDC, Ministry of Agriculture and Food (MAF), and Canadian Food Inspection Agency (CFIA) has played key role in our response

Spatial distribution of infected farms in the 2014 H5N2 outbreak in British Columbia, Canada.



- Known since 2000s
- H5 N1 and N2 both in 2014

Fraser Valley Poultry and Dairy Concentration

BC Dairy: 70+ % of dairy farms in BC are in Fraser Valley

BC Poultry: Unknown proportion of commercial poultry farms

- High concentration in a narrow belt is well known

2023 CFIA data

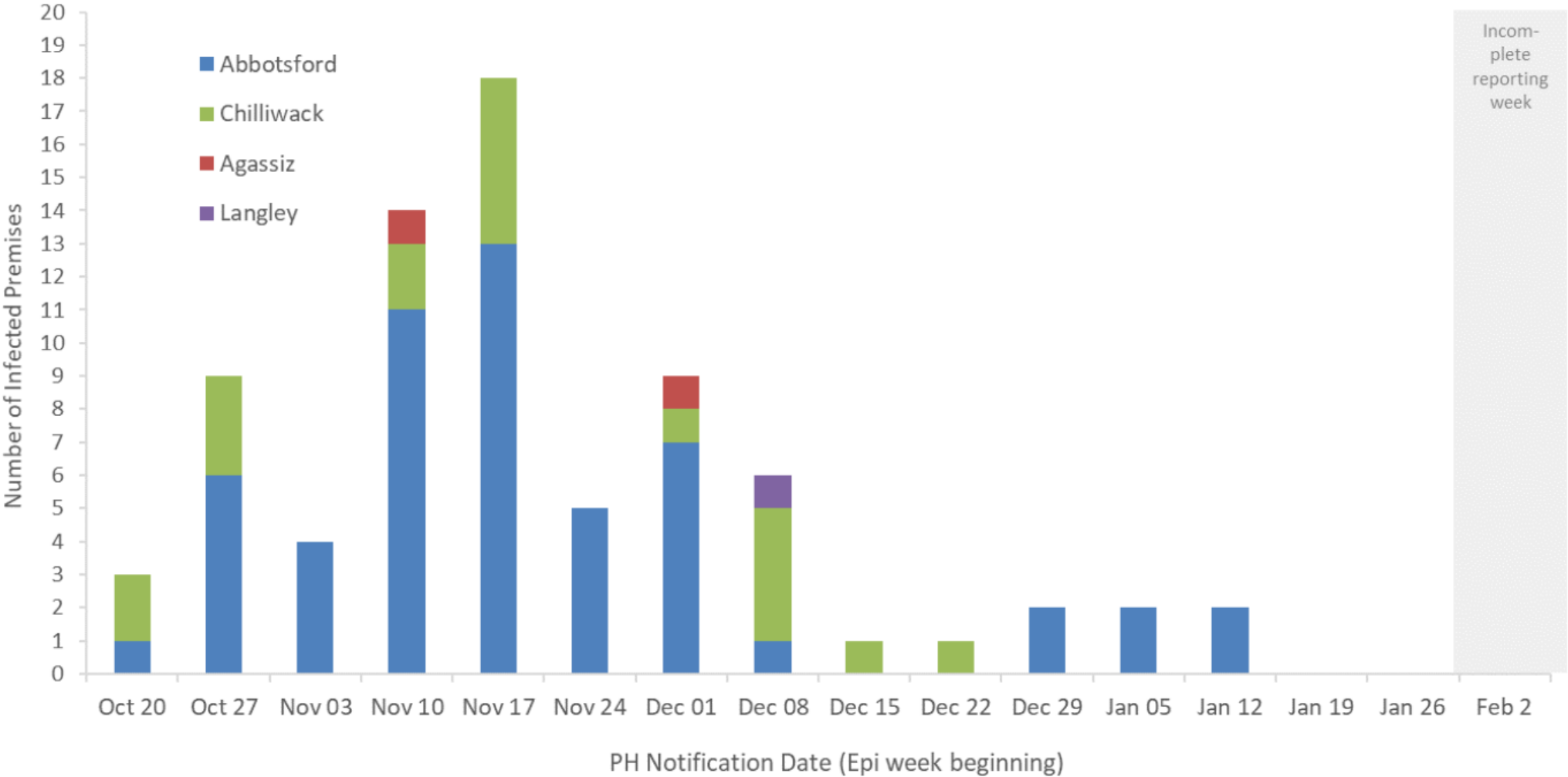
- 314 chicken, 62 turkey producers – number keeps changing due to different licensing structure
- 8 federally inspected, 25 provincially inspected chicken slaughter plants
 - 33/77 Canadian plants are in BC
- 23 turkey slaughter plants in BC, 42 in Canada
- Relatively smaller contribution to egg production

Epi Summary

Table 1: Geographical distribution of HPAI infected premises as of Feb 6, 2024

City / Municipality	Active monitoring	Follow-up Pending	Follow-up Complete	Lost to Follow Up	Total (since Oct. 22, 2024)	
Abbotsford			38	16	54	71.1%
Chilliwack			14	5	19	25.0%
Agassiz			2		2	2.6%
Langley			1		1	1.3%

Figure 2: Number of HPAI infected premises by City, Oct. 20, 2024 to Feb 6, 2025 (n = 76)

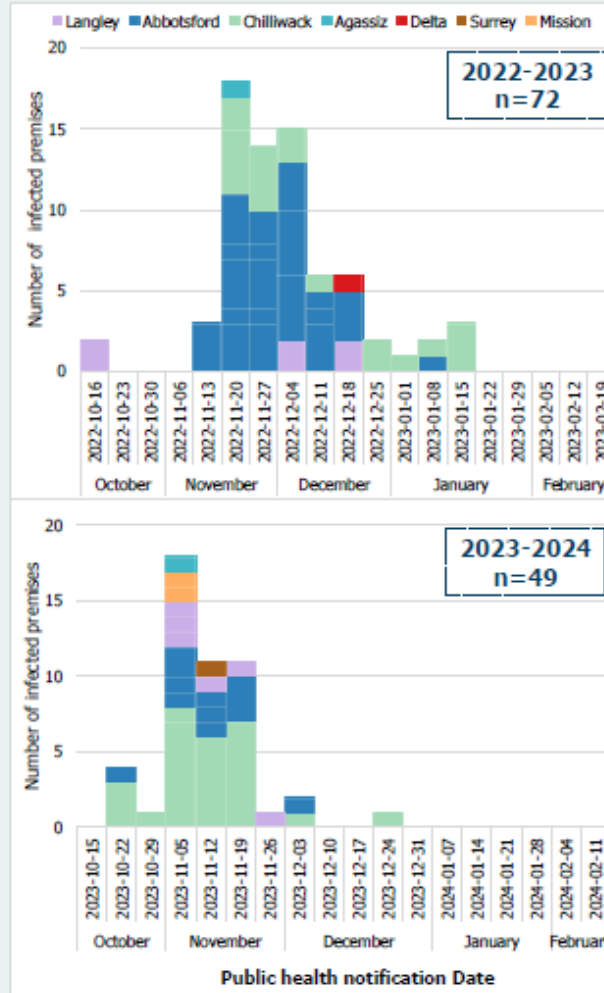


Our presentation at European Scientific Conference on Applied Infectious Disease Epidemiology (ESCAIDE), Helsinki, Finland

Anonymized data

Differences between the 2022-23 and 2023-24 seasons

Infected premises over time by Fraser Health cities or municipalities, 2022-2023 and 2023-2024 seasons



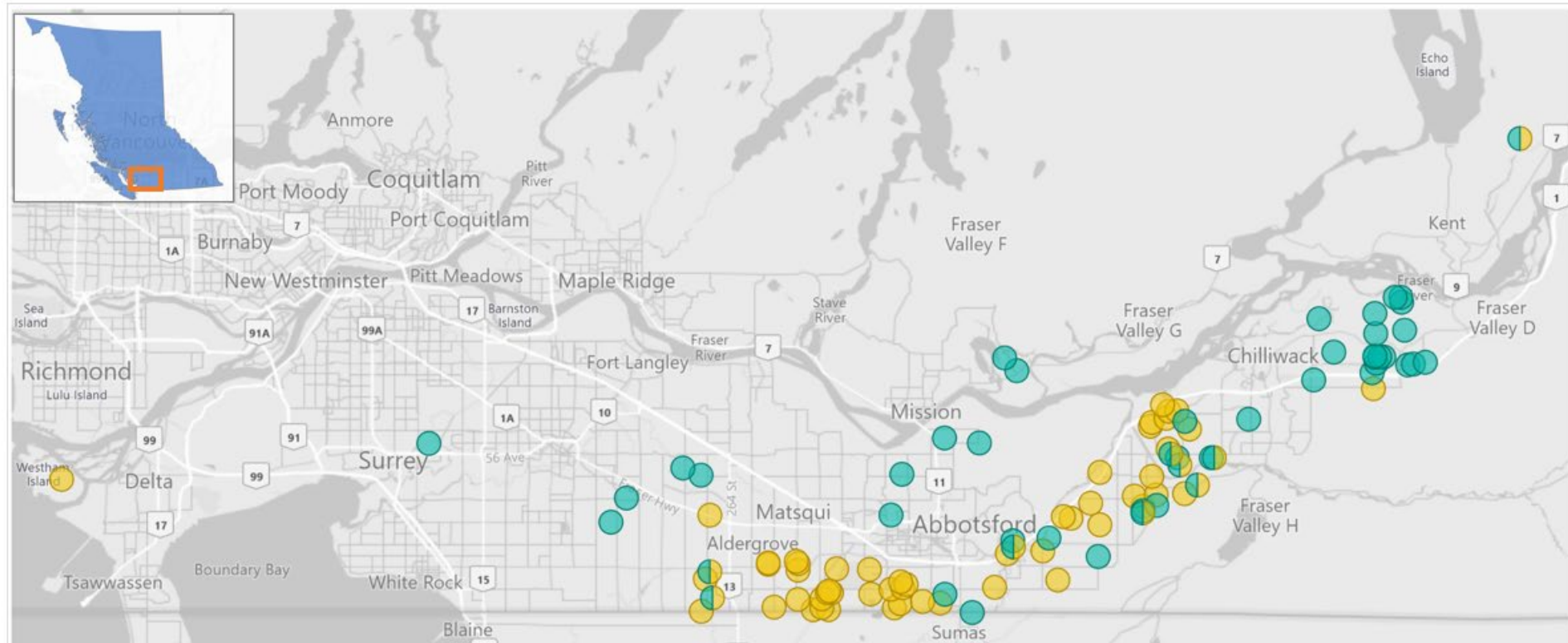
During the 2022-2023 and 2023-2024 seasons:

- There were respectively 72 and 49 HPAI infected poultry premises in Fraser Health, accounting for **89%** and **96%** of detections in the province.
- **All infected premises were poultry farms** and no HPAI infection was detected in other livestock settings.

Compared with the 2022-2023 season, the HPAI activity in the 2023-2024 season:

- Peaked earlier (early vs. late November),
- Spanned over a shorter period (10 weeks vs. 14 weeks),
- Was more widespread across Fraser Health, with higher number of detections in the eastern municipalities.

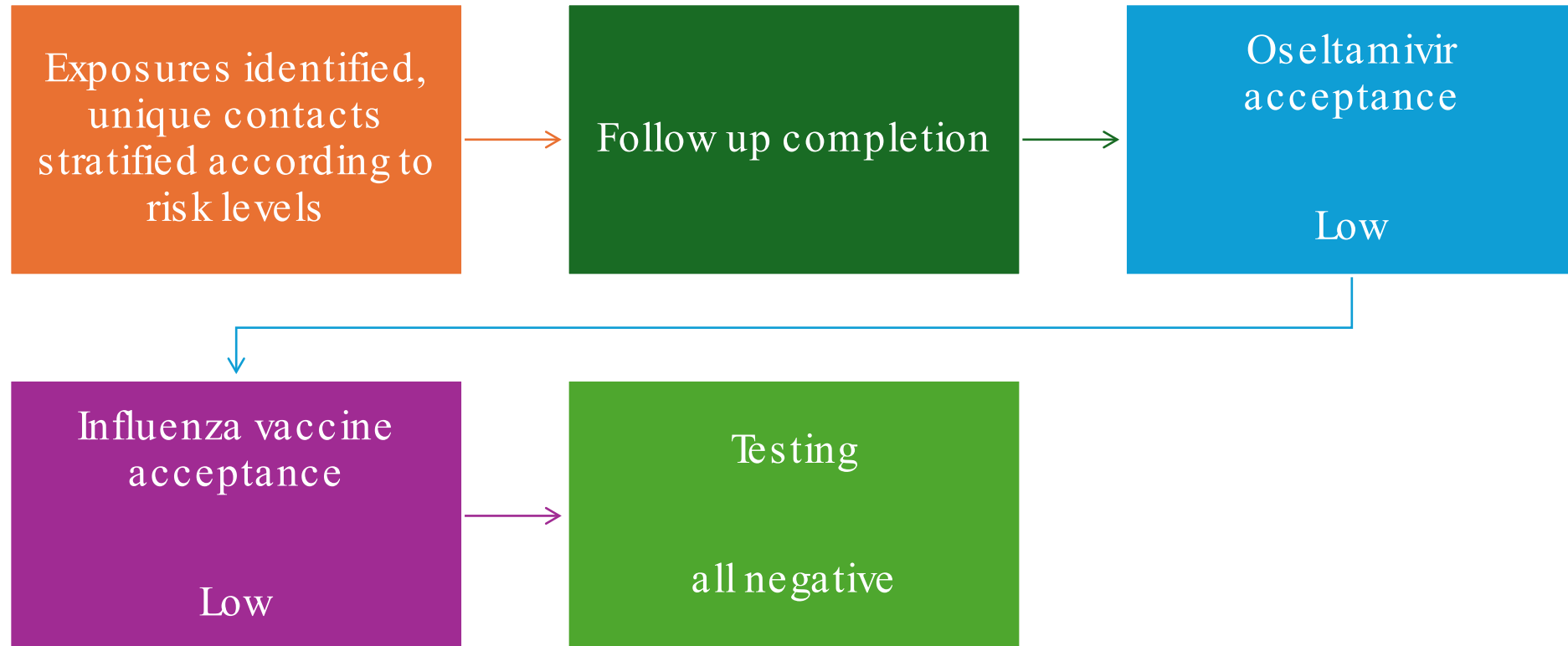
Distribution of infected premises in Fraser Health by season



Legend:

● 2022-2023 ● 2023-2024 ● 2022-2023 and 2023-2024

Exposure Assessments and Response



Risk Categories

- High Risk
 - Farm workers on affected farms working with inadequate PPE
 - Depopulation and clean up crew
 - Household contacts of confirmed human case
 - Healthcare workers and lab personnel with insufficient PPE
- Moderate Risk
 - Individuals who handle single or small group of sick or dead animals in outdoor environments without PPE

Community Exposure management

School grounds

Backyard birds

Recreational
encounters

First Responders

Animal Rescue

First Nations
community

ICU and ID
physicians 'ruling
out' avian
influenza

Improper use of
checkbox

CD Operational Outbreak Response Plan

Level 1: Local Response, managed by local / regional CD team

Level 2: Regional Response, potentially internal staffing realignment

- Avian Influenza Response in 2024/25 season
- Included Human Avian Influenza case and contact management, source investigation
- “housed” Oseltamivir in Abbotsford Health Unit – HA funded
- Expedited testing arrangements with local UPCC
- Staff training and education
- Hospital ER Grand Rounds
- Updates to Mayors and municipality officials
- Collaborations with lab teams for expedited processing

Level 3: Provincial response, HEMBC, EOC etc.

Lessons Learned



Fraser Health is uniquely positioned for Avian Influenza AH5N1 response, both in terms of location and experience



The typical avian influenza 'season' in the last four years (Fall of 2022-23, 2023,-24, 2024-25) have all started slightly earlier than the peaks of humanized influenza A (H1N1 and H3N2)



No farm detections or community contacts during last three spring seasons (but no guarantees for future!)



First detections are usually in mid-October, prior to or coinciding with RI vaccine campaign launch



Excellent support from BCCDC Public Health Response



Wishlist: more support and data sharing from CFIA, MAF

Preparation for 2025-26 'season'

- Stronger collaboration with BC Poultry Association
- Revision of Dairy Farm exposure management pathway
- Availability of Avian Influenza AH5N1 vaccine
- Incorporating lessons learned from human avian influenza case
- Moving to more online self-assessment and text based follow up
- Continuing prior activities
 - Staff education
 - Clinician education, lab testing, hospital infection control
 - Surge capacity planning



Thank you!

