

Surveillance Advances
Progrès dans le domaine de la surveillance

Canada's Surveillance Efforts for HPAI in Dairy Cattle and Beyond

Les efforts de surveillance du Canada pour l'IAHP chez les bovins laitiers et au-delà

January 28, 2025

12:00 – 1:00pm CT / 1:00 – 2:00pm ET

Speaker

Dr. Murray Gillies

Interim Director,
Canadian Animal Health Surveillance System,
Animal Health Canada



National Collaborating Centre
for Infectious Diseases
Centre de collaboration nationale
des maladies infectieuses



Public Health
Agency of Canada

Agence de la santé
publique du Canada



Land Acknowledgment:



Both moderators are located in the City of Hamilton, Ontario.

Situated upon the traditional territories of the Erie, Neutral, Huron-Wendat, Haudenosaunee and Mississauga Peoples, this land is covered by the Dish With One Spoon Wampum Belt Covenant, an agreement between the Haudenosaunee and Anishinaabek to share and care for the resources around the Great Lakes.

Today, Hamilton is home to many Indigenous Peoples from across the Turtle Island. We honour the Indigenous Peoples who have lived on and cared for these lands for generations. We are grateful for the opportunity to share and call this place home.

Housekeeping



- Seminar recording and presentation slides will be available shortly after the seminar at the NCCID website: <https://nccid.ca/>
- If you have technical problems with Zoom, please email us at nccid@umanitoba.ca
- The chat box for participants has been disabled for this session. We will use the chat box to share additional information.
- Please use the Q&A tab to submit your questions for our speakers. You can “like” other people’s questions to push them up in priority



Accreditation



Surveillance Advances is a self-approved group learning activity (Section 1) as defined by the Maintenance of Certification Program of the **Royal College of Physicians and Surgeons of Canada**.

The seminar series is also approved by the Council of Professional Experience for professional development hours for members of the **Canadian Institute of Public Health Inspectors**.

If you would like a letter of participation, please complete the survey which will be shared after the seminar.



Disclaimer



Please note that the views expressed, and content presented are solely those of the speaker(s), unless otherwise specified. These do not necessarily reflect the views or initiatives of Public Health Agency of Canada. The Surveillance Advances Seminar Series is committed to fostering a space for diverse ideas and meaningful dialogue, but does not endorse or approve the content, accuracy or completeness of the information presented.

Today's speaker



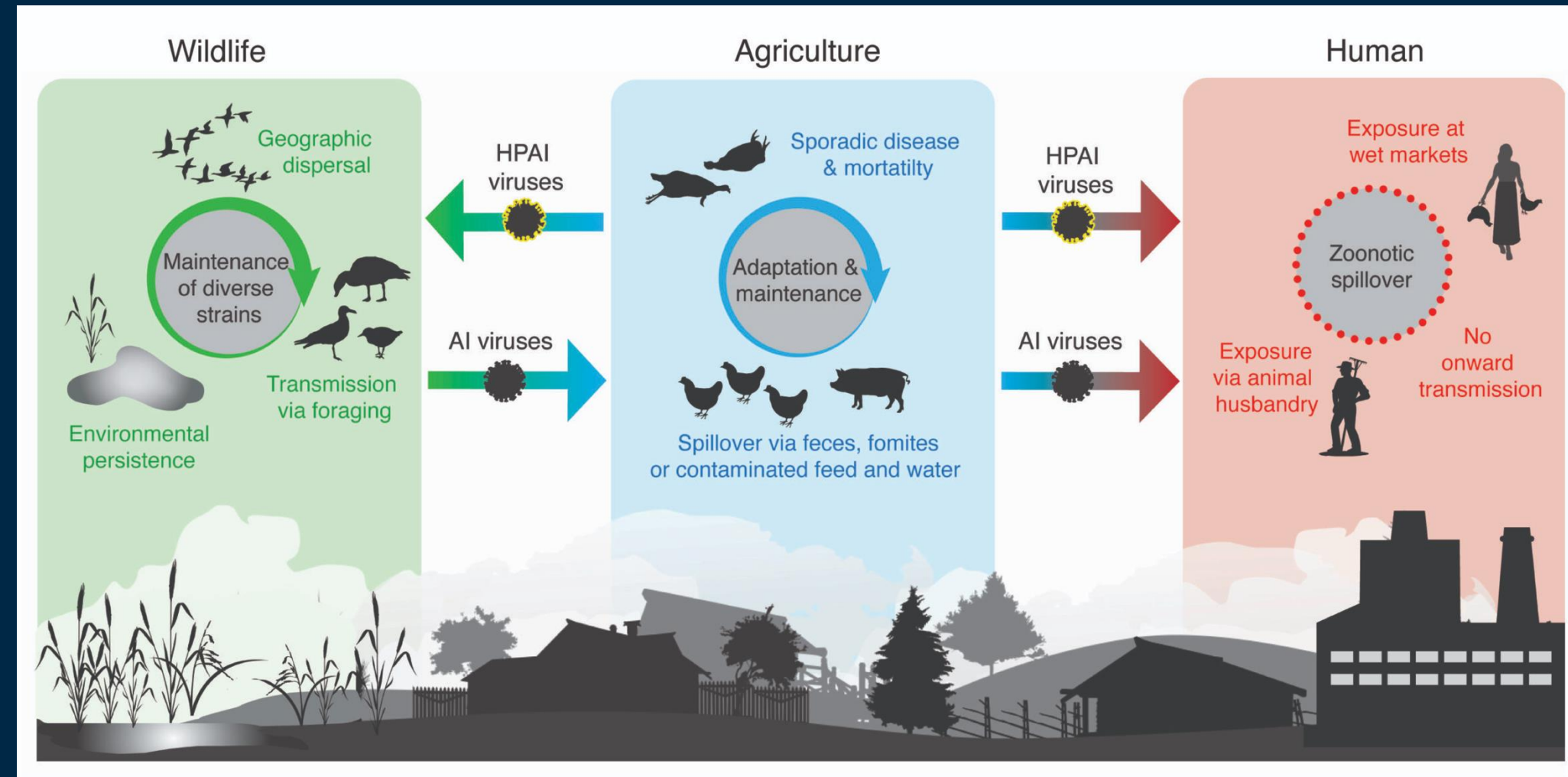
Dr. Murray Gillies

Interim Director,
Canadian Animal Health Surveillance System,
Animal Health Canada



CAHSS Surveillance for HPAI

January 28th, 2025



Dr. Murray Gillies
Coordinator
Canadian Animal Health Surveillance System (CAHSS)
A division of Animal Health Canada

Land Acknowledgement

Before I share my presentation, I wanted to acknowledge the land that I work, live and play on is the traditional unceded territory of the Wəlastəkwiyyik (Maliseet). This territory is covered by the “Treaties of Peace and Friendship”



The Wolastoqiyik, also Wəlastəkweyyik, Malecite or Maliseet are an Algonquian-speaking First Nation of the Wabanaki Confederacy. They are the Indigenous people of the Wolastoq (Saint John River) valley and its tributaries. Their territory extends across the current borders of New Brunswick and Quebec in Canada, and parts of Maine in the United States.



Conflict of Interest disclosure



I do not have a financial relationship with a for-profit and/or a not-for-profit organization to disclose

Presentation Outline

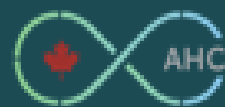
1. Surveillance 101
2. HPAI outbreak and US situation
3. Canada's surveillance efforts
4. How can you participate
5. Questions/Discussion

Epidemiology 101 – basic terms

Epidemiology: the study of how often diseases occur in different groups of people / animals and why.

Disease surveillance: an information-based activity involving the collection, analysis, interpretation and sharing of large volumes of data originating from a variety of sources.

One Health: that the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and interdependent.



Mystery Texas Disease?

15 March 2024

Developing Story: Concerns Rise as Cows Fall Ill in Texas

March 20, 2024



Avian flu detected for first time in US livestock



H5N1 Confirmed Cases in Livestock Herds

Reporting period: March 25, 2024 through January 23, 2025

Last reported new confirmed case: Tuesday, January 21, 2025

The genetic sequence for all cattle cases and the alpaca case is Influenza A, H5, clade 2.3.4.4b, genotype B3.13; the backyard swine were associated with a backyard poultry flock and confirmed as the same genotype as the poultry on the premises: Influenza A, H5 clade 2.3.4.4b, genotype D1.2.
Data updated weekdays by 12pm Eastern

[Download Data](#)

Choose time period

Choose species

[Click for International Exports](#)

Total Outbreak

Livestock (all)

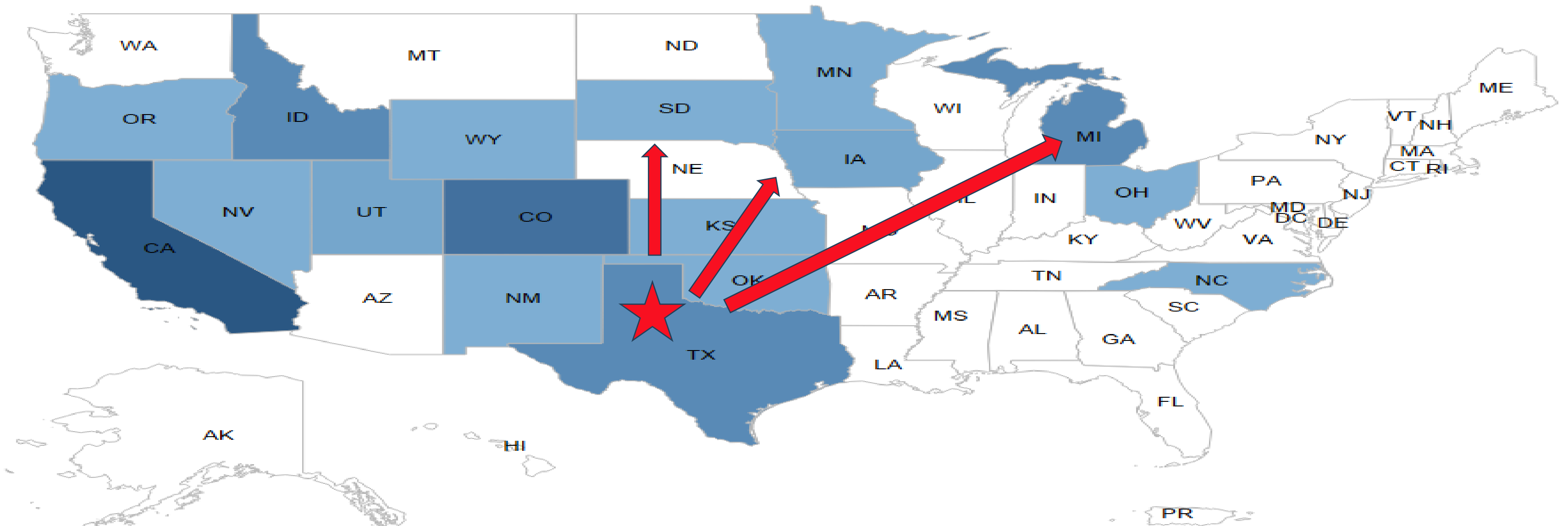
Situational Update

In the Total Outbreak, in Livestock (all), there were:
939 Confirmed Cases in 17 States

Number of Confirmed Cases in Livestock (all) by State, Total Outbreak

Legend

0	26 to 50
1 to 10	51 to 75
11 to 25	75+



CAHSS convenes HPAI scientific working group

- CFIA
- PHAC
- OCVO's
- Provincial vet epi's
- Regional animal health surveillance networks
- Dairy Industry
- EDCC
- CWHC

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CFIA undertakes retail milk sampling

As of September 5, 2024, CFIA laboratories have tested 1,211 retail milk samples from across Canada:  tested **negative**.

Results of the Canada-wide testing of retail milk samples are listed below.

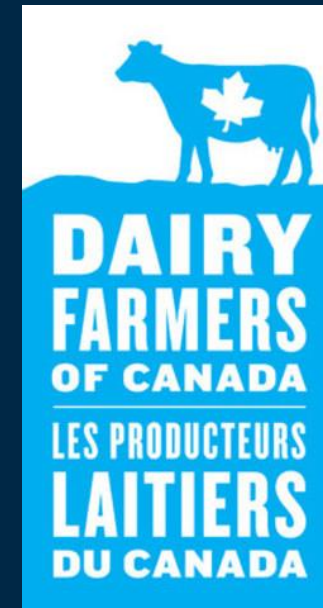
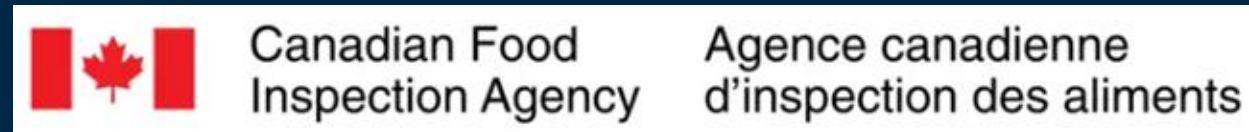
Area	Samples tested	HPAI detections (positive or negative)
Atlantic provinces	302	All negative
Ontario	307	All negative
Quebec	302	All negative
Western provinces	300	All negative

Donald Prater, D.V.M., Acting Director of the U.S. Food and Drug Administration's Center for Food Safety and Applied Nutrition, revealed that **one in five** samples collected in a national survey of retail milk has tested positive for HPAI H5N1 genetic material. The samples with the highest concentrations were sourced from regions where the virus had been confirmed in dairy cattle.

CFIA convenes surveillance meetings

- Industry:

- CFIA
- DFC
- DPAC



- Veterinary Surveillance and Epidemiology Network:

- CVO's
- Provincial vet epis
- CAHSS

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National Milk Testing Strategy

1

Begin National Plant Silo Monitoring

Begin nationwide testing of milk silos at dairy processing facilities. This national sample will allow USDA to identify where the disease is present, monitor trends, and help States identify potentially affected herds.

2

Determine State Status

Building on the results of silo monitoring, USDA will work with States to stand up bulk tank sampling programs. This will enable us to identify herds in the State that are affected with H5N1.

3

Detect and Respond to the Virus in Affected States

For States with H5N1 detections, we will work quickly to identify specific cases and implement rapid response measures. This includes enhanced biosecurity using USDA's existing incentives programs, movement controls, and contact tracing.

4

Demonstrate H5 Absence in Unaffected States

Continue regular sampling of farms' bulk tanks. Bulk tank sampling frequency will progressively decline as the State demonstrates continual silo negativity.

If a State becomes affected, it will return to stage 3.

5

Demonstrate H5 Freedom in U.S. Dairy Cattle

After all States move through stage 4, we will work with the States to begin periodic sampling and testing to illustrate long-term absence from the national herd.



Surveillance of H5 Avian Influenza in Dairy Cattle

State Statuses based on Testing/Surveillance Activities, as part of the National Milk Testing Strategy (NMTS)

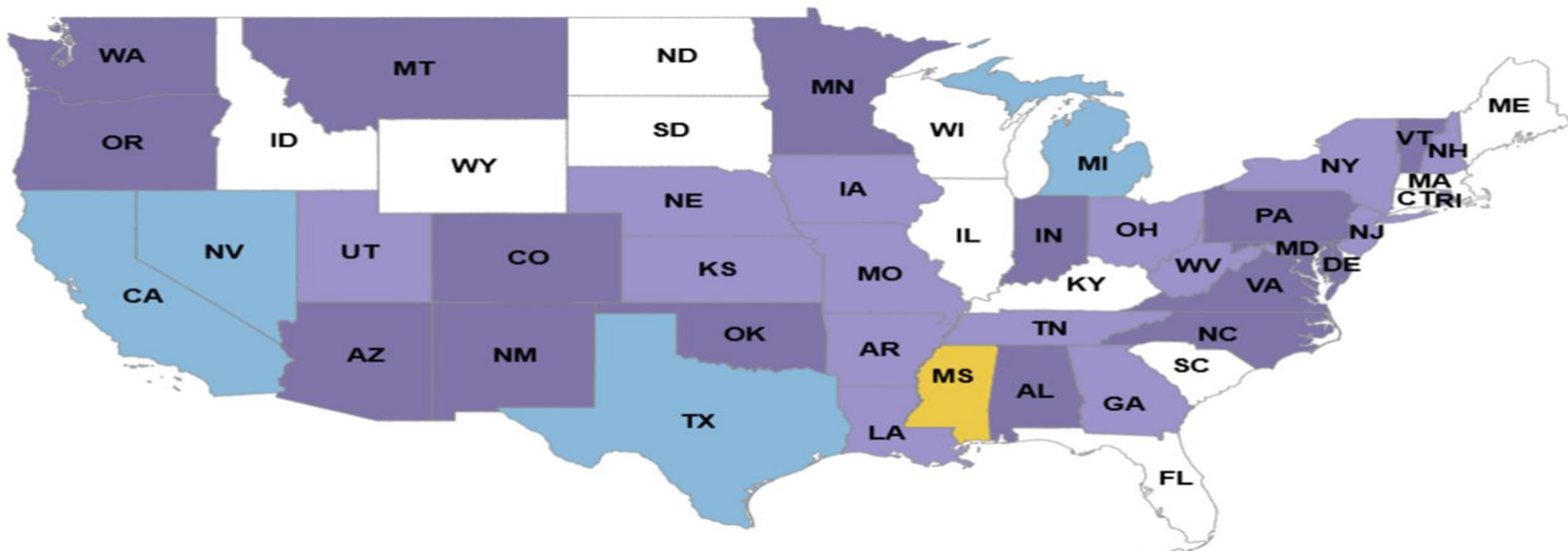
Report Date: January 17, 2025
Data updated every Friday by 5 pm Eastern

State Counts: 43 Provisional Unaffected / 4 Affected / 1 Unaffected

State Statuses - Map

Hover over States for information on previous status and activities

- ☐ Not Enrolled in NMTS (other testing may be taking place)
- 🟪 Enrolled in NMTS, Stage 1 (National Plant Silo Monitoring)
- 🟩 Enrolled in NMTS, Stage 2 (State-level bulk tank testing)
- 🟦 HPAI Detected, Stage 3
- 🟨 Unaffected, Stage 4



Surveillance results

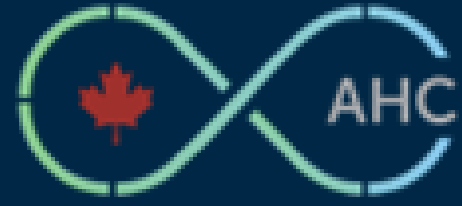
Results of the Canada-wide testing of raw (unpasteurized) milk samples collected

Area	Samples tested	HPAI detections
Atlantic provinces	123	All negative
Ontario	366	All negative
Quebec	479	All negative
Western provinces	464	All negative

What other activities have we done in Canada

- Collaborative multi-stakeholder approach (FPTI)
- Risk Assessment for Canada (CEZD)
- Education, **Surveillance** and Data Synthesis (**CAHSS**)
- Biosecurity (AHC and DFC)
- Response - dERP (CFIA and OCVO's)
- Public Health guidance (PHAC)
- Dead bird HPAI surveillance (CWHC)
- Environmental HPAI surveillance (ECCC)
- Early Warning System development for avian influenza (DLSPH-UoT)

AnimalHealthCanada



What is CAHSS?

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CAHSS

Animal Health Canada



ADVANCING ANIMAL HEALTH AND WELFARE IN CANADA VISION

A sustainable agriculture and agri-food sector strengthened by an inclusive industry-governments partnership protecting the health and welfare of farmed animals.

OUR DIVISIONS

NATIONAL FARM ANIMAL CARE COUNCIL

The division is comprised of animal agriculture and food industry groups, animal welfare advocates, government representatives, scientists, and veterinarians. It addresses national animal care issues with a primary focus on animals raised for the production of food for humans.



EMERGENCY MANAGEMENT

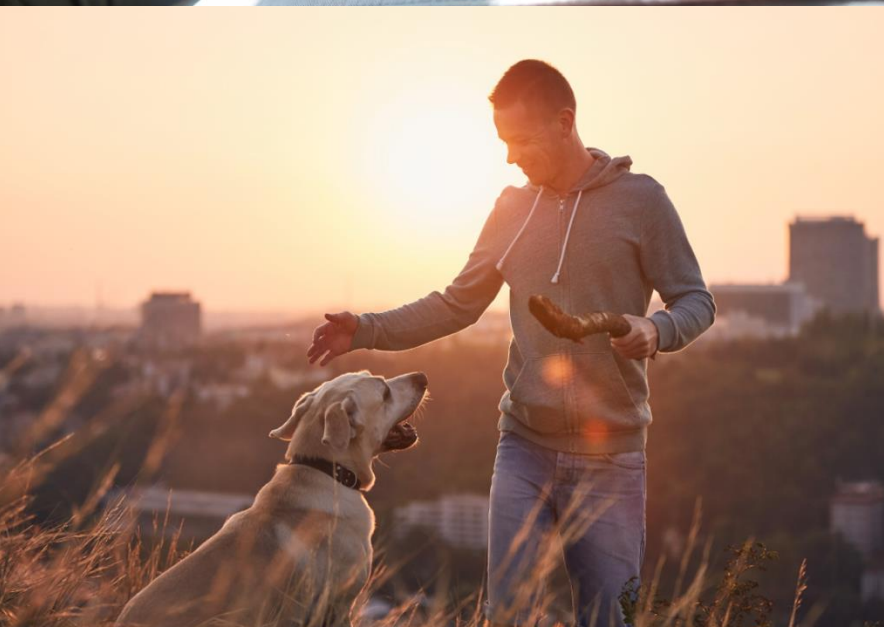
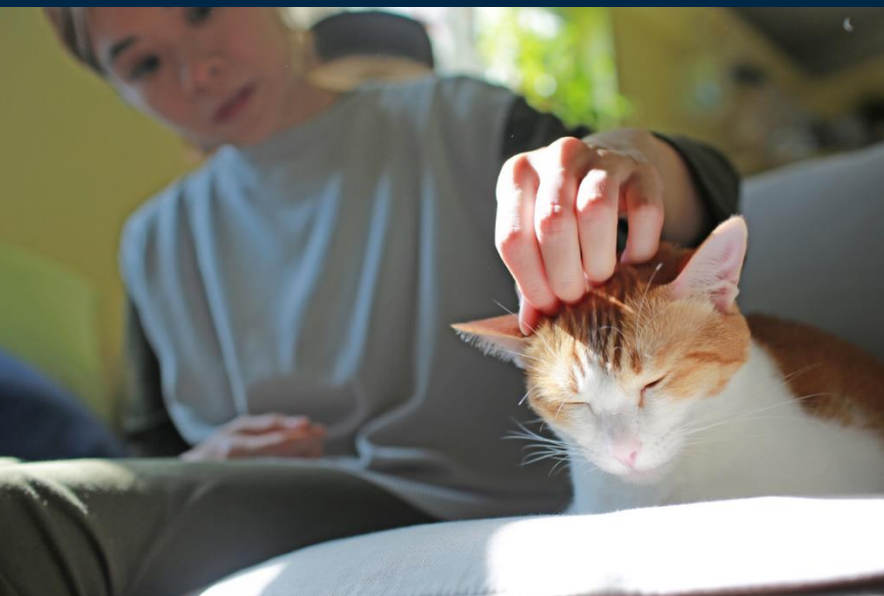
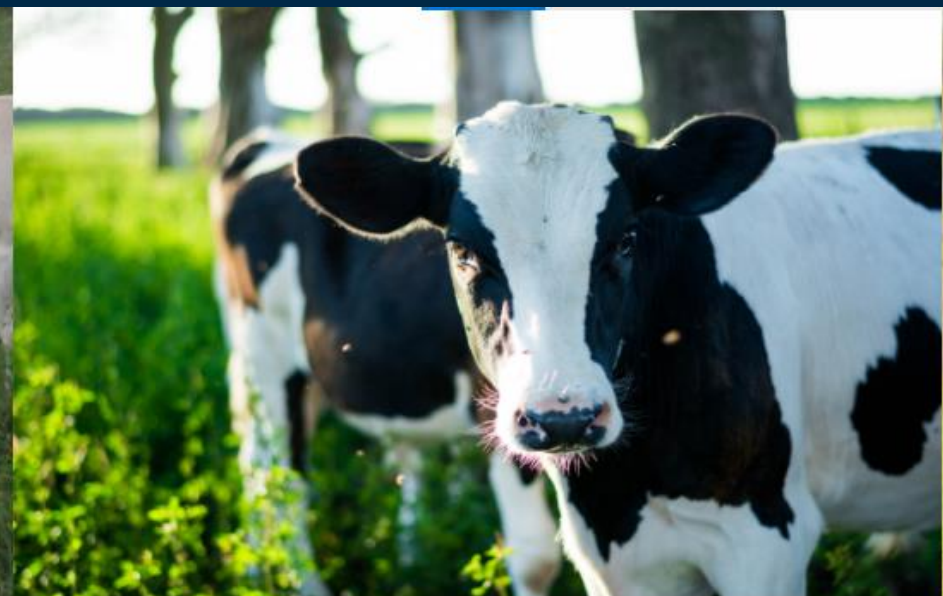
The division is enhancing the emergency management capabilities of Canada's livestock industry, for both a continually evolving disease landscape and adverse events, through increased industry awareness, capacity, and confidence.

CANADIAN ANIMAL HEALTH SURVEILLANCE SYSTEM

The division advises on national animal health surveillance priorities and disease patterns. It is focused on the generation, exchange and application of data-driven information in order to track animal health, and rapidly detect and respond to changing patterns of disease.



Network of Networks



Canadian Animal Health Surveillance System  **CAHSS**

AnimalHealthCanada 

Mission

CAHSS brings together and uses data-driven information to demonstrate animal health, minimize impacts of disease, and guide planning on national animal health priorities.

From Surveillance to Action to Success

- Early threat identification
- Risk assessment
- COLLABORATIVE Action Plan
- Action
- Refinement
- Success

“As of January 28th, 2025, Canada has not seen an incursion of HPAI in our dairy herd despite being at high risk”

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Acknowledgement

Funding for CAHSS activities has been provided through the Agri Assurance Program under the Sustainable Canadian Agricultural Partnership, a federal-provincial-territorial initiative.



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Discussion Period

Any questions?

Please use the **Q&A tab** to submit your questions for our speaker. You can “**like**” other people’s questions to push them up in priority.



Closing Remarks



Thank You!

Seminar recording and presentation slides will be posted on <https://nccid.ca/> in the coming weeks.

Please complete our **post-seminar evaluation survey** by scanning its QR code. Today's survey will also be distributed to you shortly after the seminar.

Join us on **Tuesday, February 25, 2025** (1:00-2:00pm ET) for the next seminar, "**Final report launch for Vision 2030: Moving data to public health action**"

Visit <https://nccid.ca/surveillance-advances-seminar-series/> for more information about the Surveillance Advances seminar series.

