Bird Flu & Home Care: Understanding H5N1 Risks in the Community

An Emergency Management Webinar for NYC Home Care Providers

April 1, 2026

NYS Association of Health Care Providers
Representing Home & Community-Based Care

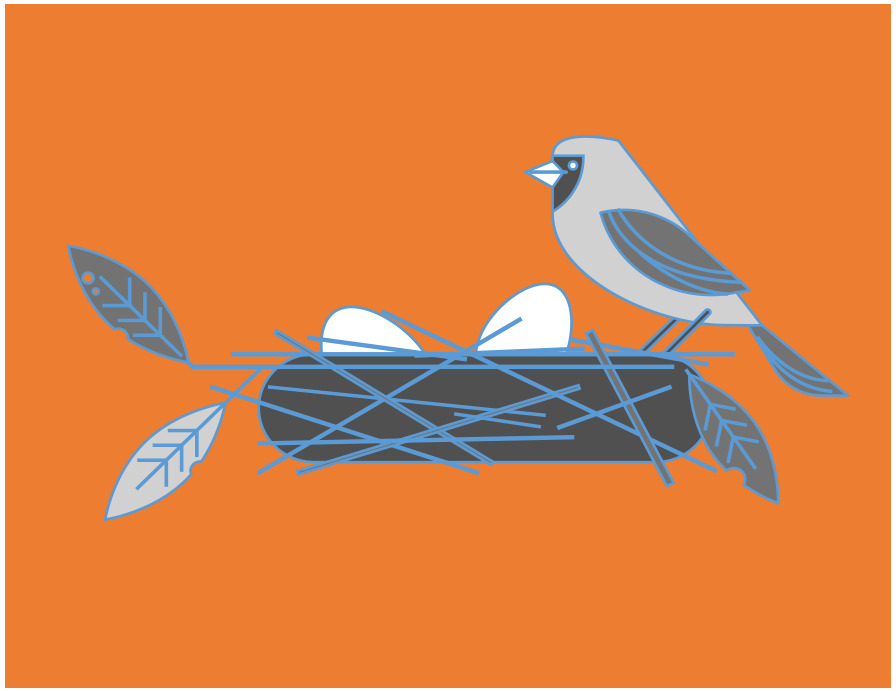
NYS Home Care Providers FOUNDATION
Research & Educational Resources for Home and Community-Based Care

Welcome

NYS Association of Health Care Providers
Representing Home & Community-Based Care

NYS Home Care Providers FOUNDATION
Research & Educational Resources for Home and Community-Based Care

HOUSEKEEPING NOTES



AUDIO: Dial in or use computer audio. Please note that computer audio can be impacted by your internet connection.

ALL PARTICIPANTS WILL BE MUTED to avoid background noise.

QUESTIONS are welcome! Use the chat box at any time.

Note that direct messages may be missed and cannot be retained after the close of the webinar.

Slides will be sent to all participants.

The session recording and slides will be posted on HCP's Emergency Management webpage.

AGENDA

- Introductions
- Topic Overview
- NYS Division of Fish and Wildlife
- NYS Department of Agriculture and Markets
- Q and A
- Evaluation
- Upcoming Events

GRANT INFORMATION AND ACKNOWLEGEMENTS

This project is supported by a grant from the Department of Health and Human Services (HHS) Administration for Strategic Preparedness and Response (ASPR).

Its content is solely the responsibility of the authors and does not necessarily represent the official views of HHS or ASPR

We also acknowledge the support of the New York City Department of Health and Mental Hygiene Office of Emergency Preparedness and Response.

ASPR Administration for Strategic Preparedness & Response

NYC Health

HCP NYS Home Care Providers FOUNDATION
Research & Educational Resources for Home and Community-Based Care

HCP NYS Association of Health Care Providers
Representing Home & Community-Based Care

MEET YOUR HOSTS

NYS Association of Health Care Providers (HCP)

- Carole Deyoe, RPh, Director of Regulatory Affairs and Special Programs
- Laura Ehrich, MSP, Vice President of Public Policy
- Dena Collins, Director of Information Systems

INTRODUCTIONS

- NYS Association of Health Care Providers (HCP)
  - Carole Deyoe, RPh, Director of Regulatory Affairs and Special Programs
  - Laura Ehrich, Vice president of Public Policy
  - Dena Collins, Director of Information Systems
- NYC Department of Health and Mental Hygiene, Office of Emergency Preparedness and Response (OEPR), Bureau of Health Care and Community Readiness (BHCR)
  - Fidelle Munroe, Senior Program Manager for Long Term Care

TOPIC OVERVIEW
BIRD FLU

H5N1 is "bird flu"

Highly pathogenic avian influenza

Emerging infectious disease and

Significant public health consideration

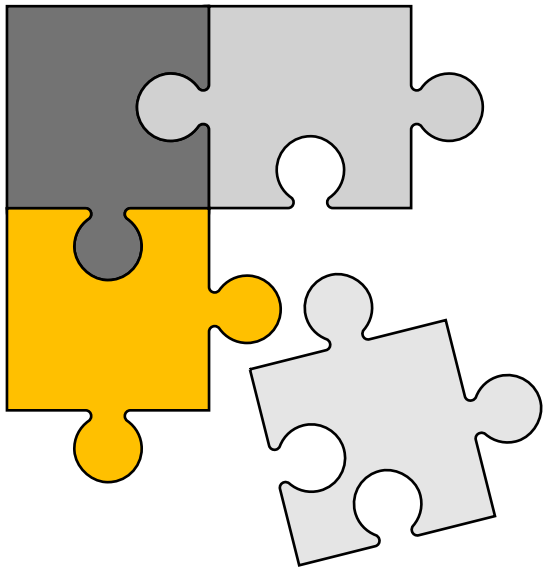
Viral infection mostly affecting birds; rapid spread in flocks

Human infections are rare – for now

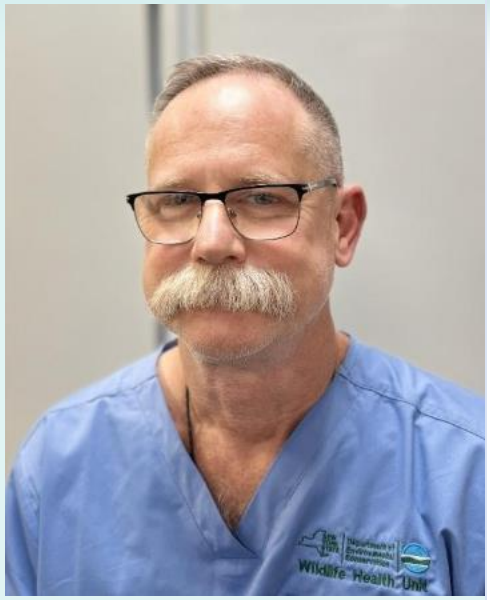
Some strains can cause severe illness

TOPIC OVERVIEW
ONE HEALTH

- H5N1 is a Centers for Disease Control and Prevention (CDC) One Health concern nationwide
- One Health is a collaborative initiative recognizing the interconnection between people, animals, plants, and their shared environment.
- One Health initiatives aim to prevent and control the spread of emerging infectious zoonotic diseases such as H5N1.

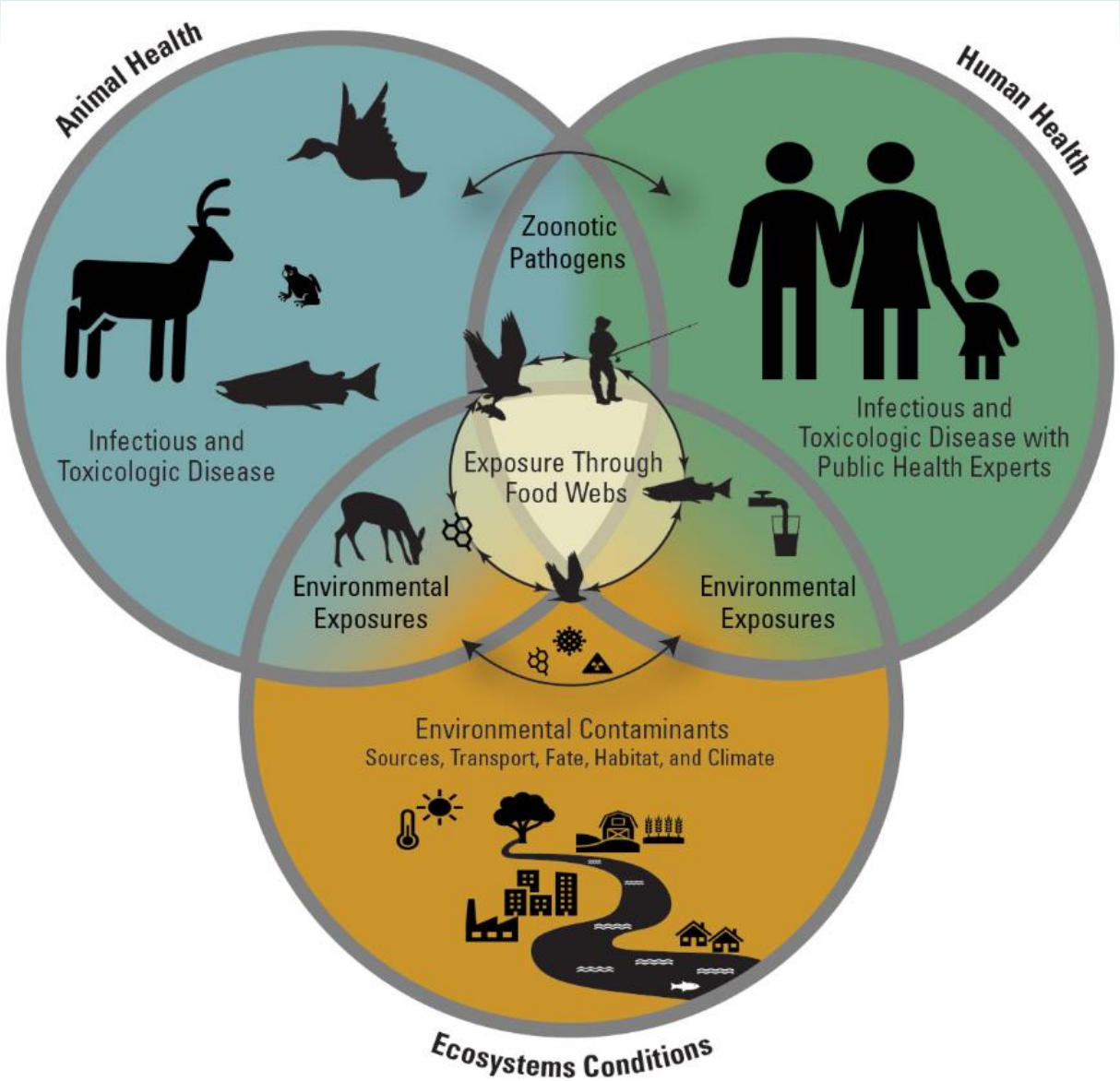


MEET YOUR EXPERTS



Kevin Hynes, Wildlife Health Program Leader, from the New York State (NYS) Division of Fish and Wildlife

Dr. Eireann Collins, Emergency Programs Coordinator for the NYS Department of Agriculture and Markets Division of Animal Industry


Animal Health
Human Health
Zoonotic Pathogens
Infectious and Toxicologic Disease
Infectious and Toxicologic Disease with Public Health Experts
Exposure Through Food Webs
Environmental Exposures
Environmental Exposures
Environmental Contaminants
Sources, Transport, Fate, Habitat, and Climate
Ecosystems Conditions

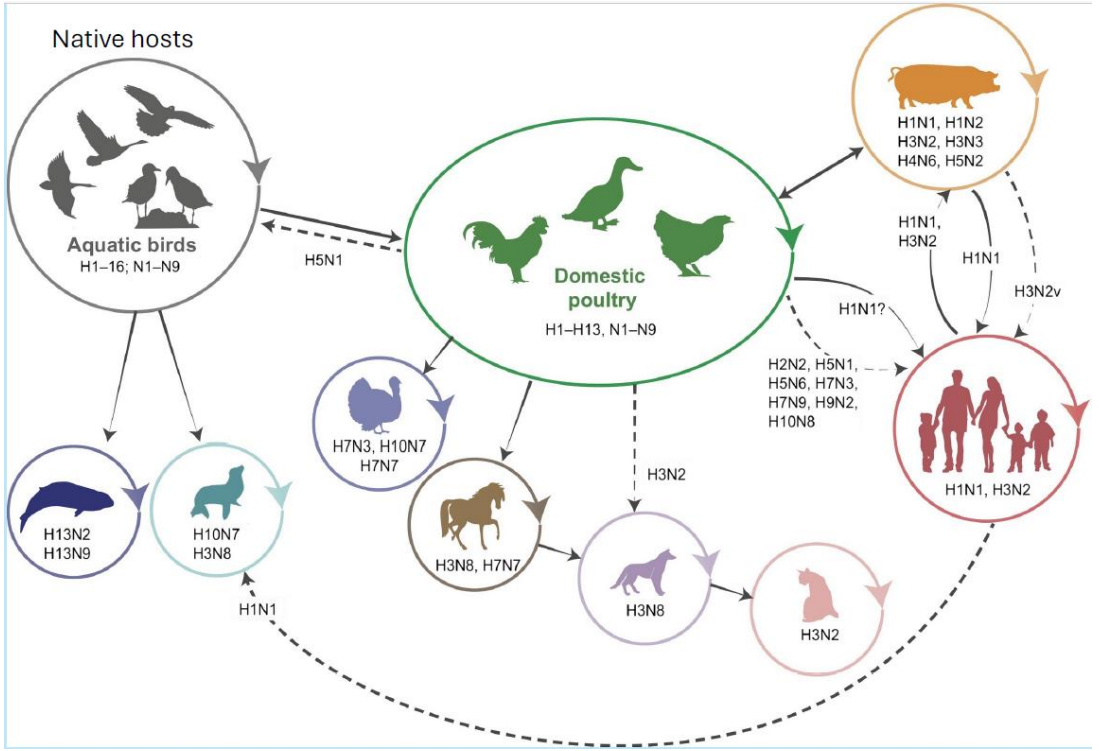
ONE HEALTH AND AVIAN INFLUENZA
ONLY THING PREDICTABLE ABOUT FLU IS UNPREDICTABILITY

Adaptation [Drift/Shift]

Zoonotic Potential

Wash Your Hands

Cook Your Food



INFLUENZA TYPES

Influenza A

Animals and Birds

Influenza B

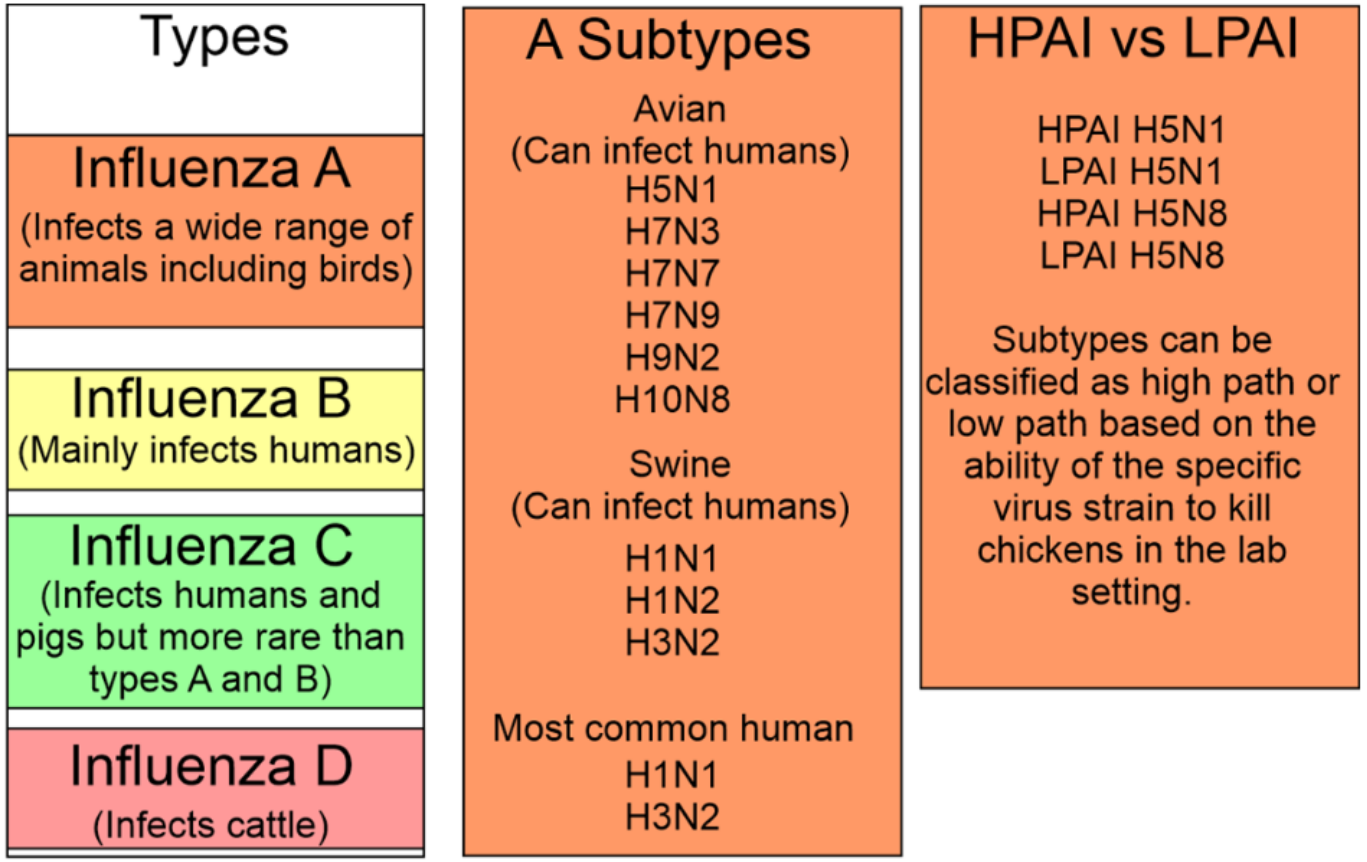
Seals and Humans

Influenza C

Swine and Humans

Influenza D

Cows



AVIAN INFLUENZA (AI)

Influenza Type A virus

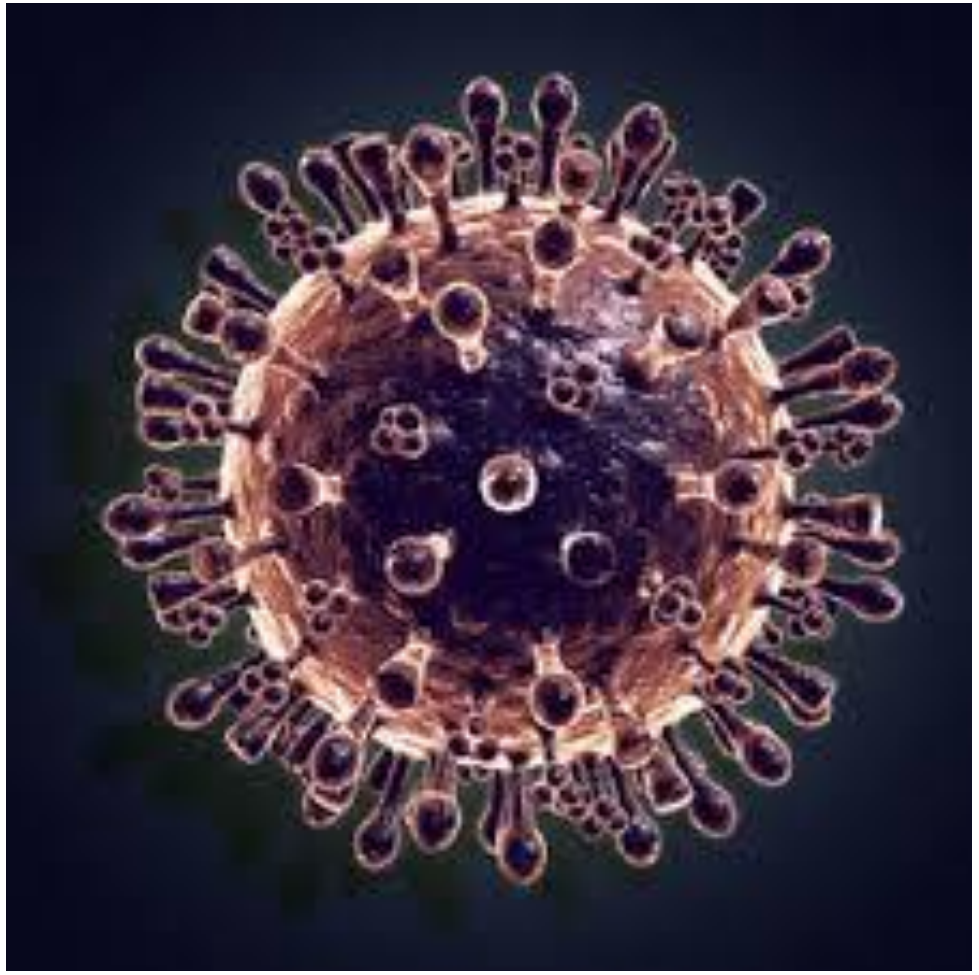
Carried by Waterfowl

ducks, geese and shorebirds

asymptomatic reservoir

Infects poultry

chickens, turkeys, pheasants, quail, domestic ducks, geese, guinea fowl, peafowl, emu, cassowary



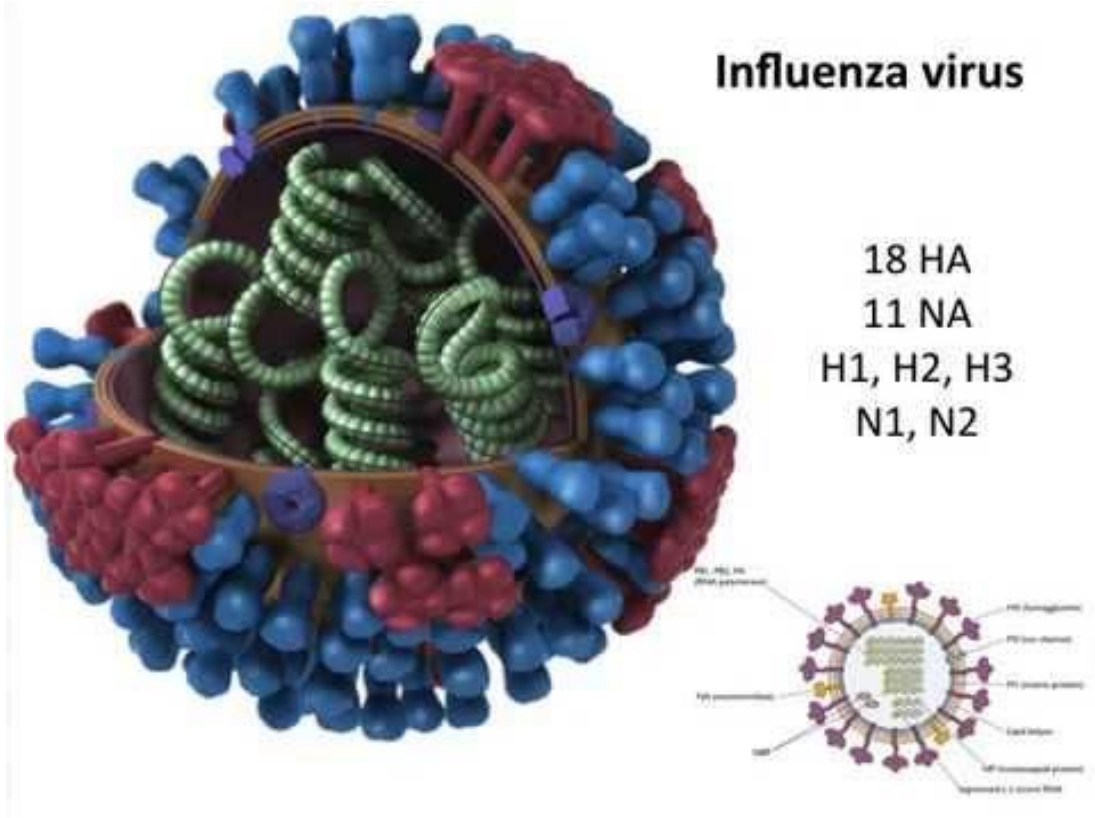
AI viruses are classified by a combination of two groups of proteins:

Hemagglutinin or "H"proteins 16 (H1–H16)

- **H5/H7**

Neuraminidase or "N" proteins

9 (N1–N9).



AVIAN INFLUENZA

Many different **combinations** of "**H**" and "**N**" proteins are possible.

Each combination is considered a different **subtype** example **H5N1**

Further broken down into different ***strains*** which circulate within flyways/geographic regions.

- **EA 2.3.4.4:** H5 goose/Guangdong clade; this lineage is highly pathogenic for poultry

AVIAN INFLUENZA

- **H5/H7**

- AI viruses are further classified by their **Pathogenicity**

  Low

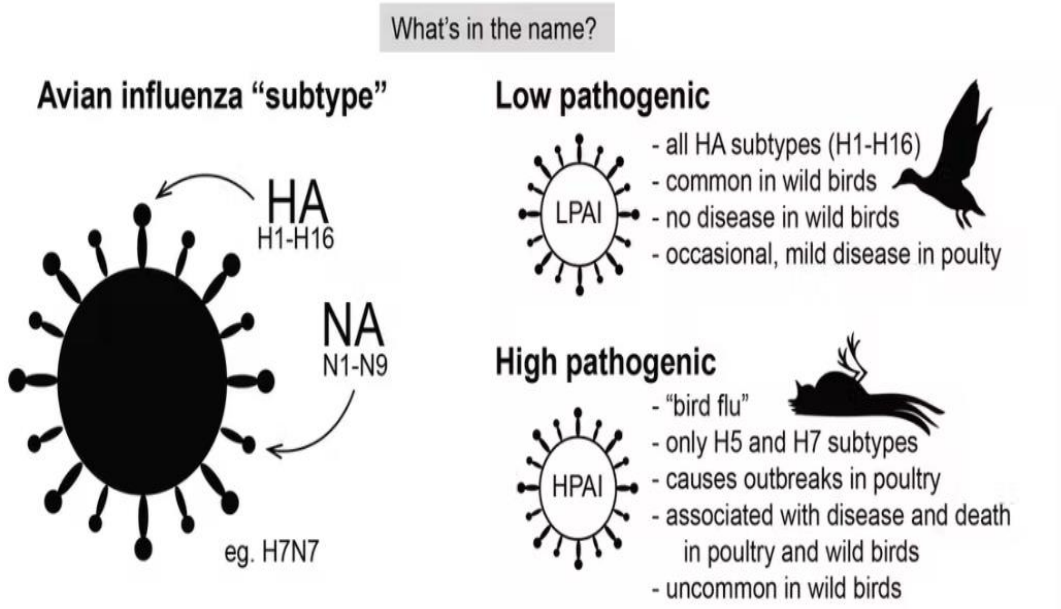
  High (H5/H7)

- The ability of a particular virus strain to produce disease in domestic poultry.

  Clinical Signs

  Cleavage Sites

  Virus subtype and pathotype characterized per cleavage site analysis from partial HA and NA gene sequence



Avian influenza viruses are classified in two ways - the first is based on the HA and NA subtypes, and the second is based pathogenicity. Michelle Wille

HPAI * VIRULENCE * PERSISTENCE

One gram of manure

(hd of a dime)

has enough doses to infect 1 million chickens

Cool and Damp

- Water at 4 °C (39 F) >60 days; at 17° C (62 F) for ≥ 30 days
- Feathers at 4 °C (39° F) for 160 days
- Fecal material for 5 days at 24° C (75 F) and 8 weeks at 4 °C (39° F)

Easily inactivated by hot and dry

AVIAN INFLUENZA TESTING - POULTRY

Real Time Polymerase Chain Reaction (RT-PCR)

Molecular test

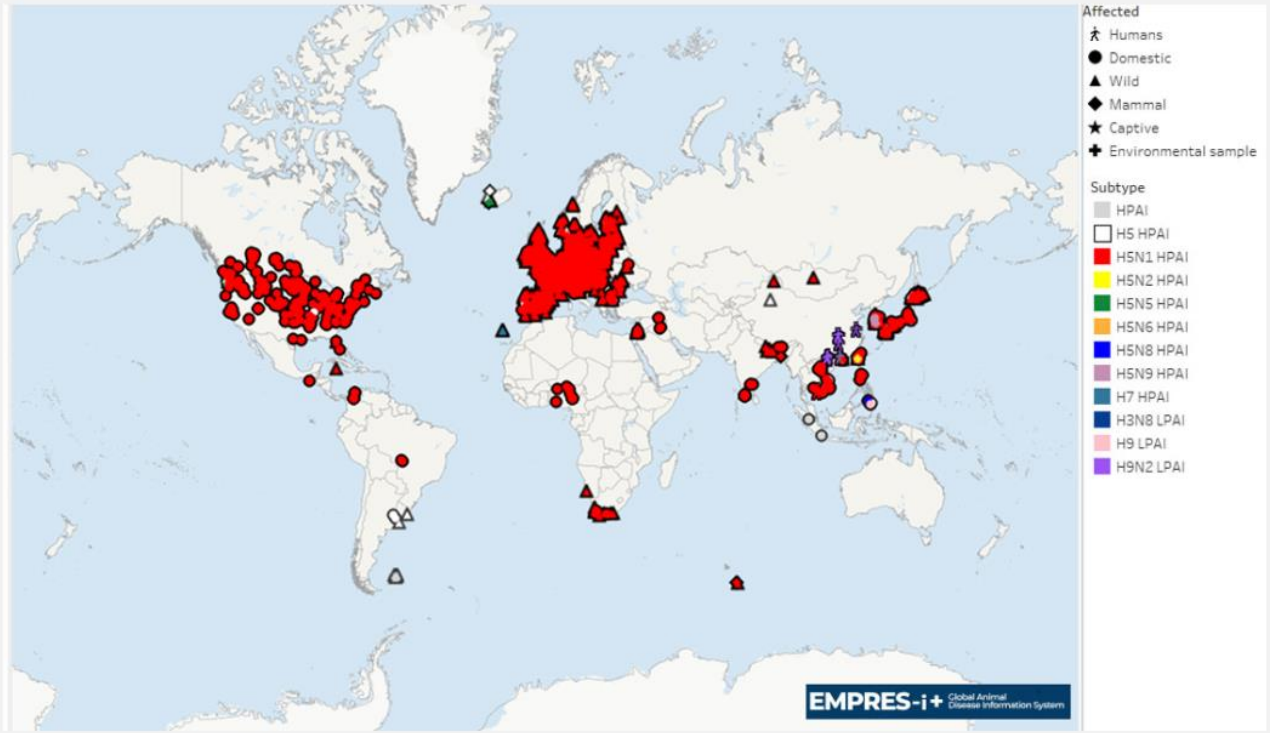
Viral RNA sequences

Matrix – Screening

Hemagglutinin subtype [H5]

Whole Genome

Map 1. *Global distribution of AIV with zoonotic potential observed since 1 October 2025 (i.e. current wave)*



https://www.fao.org/animal-health/situation-updates/global-aiv-with-zoonotic-potential

1997 H5N1 "Bird Flu"

First detected in China

Highly pathogenic avian influenza (HPAI)

Based on mortality in domestic poultry

October 1, 2025- April 1, 2026

HPAI outbreaks in animals officially reported since last update (22 January 2026): in total, **2 717** outbreaks/events have been reported in 46 countries/territories caused by H5Nx (565), H5N1 (2 144), H5N5 (1), H5N6 (1), H5N9 (1), H7N3 (1), and HxNx (4)

LPAI events in animals officially reported since the last update: 2 new events were reported.

Number of human cases officially reported since the last update: 4 new events were reported.

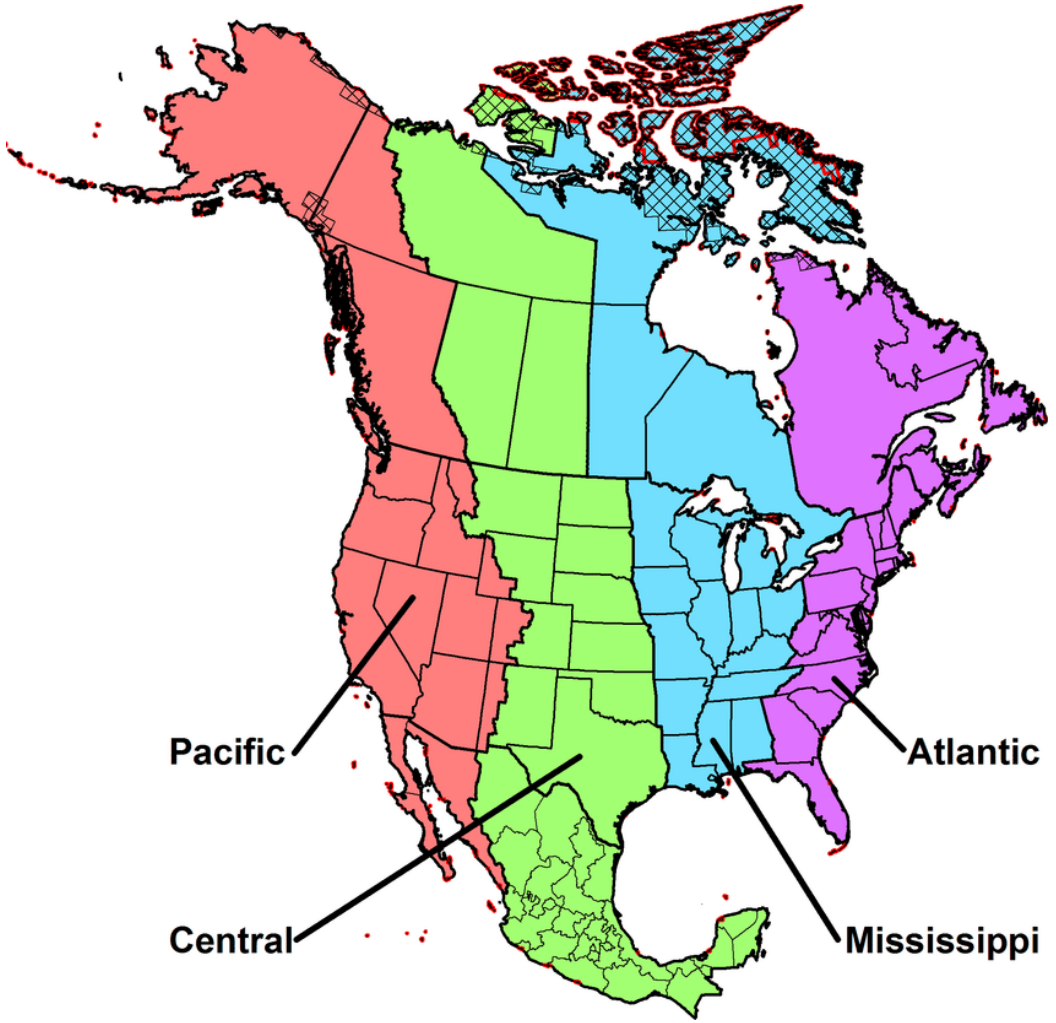
HPAI INTRODUCTION

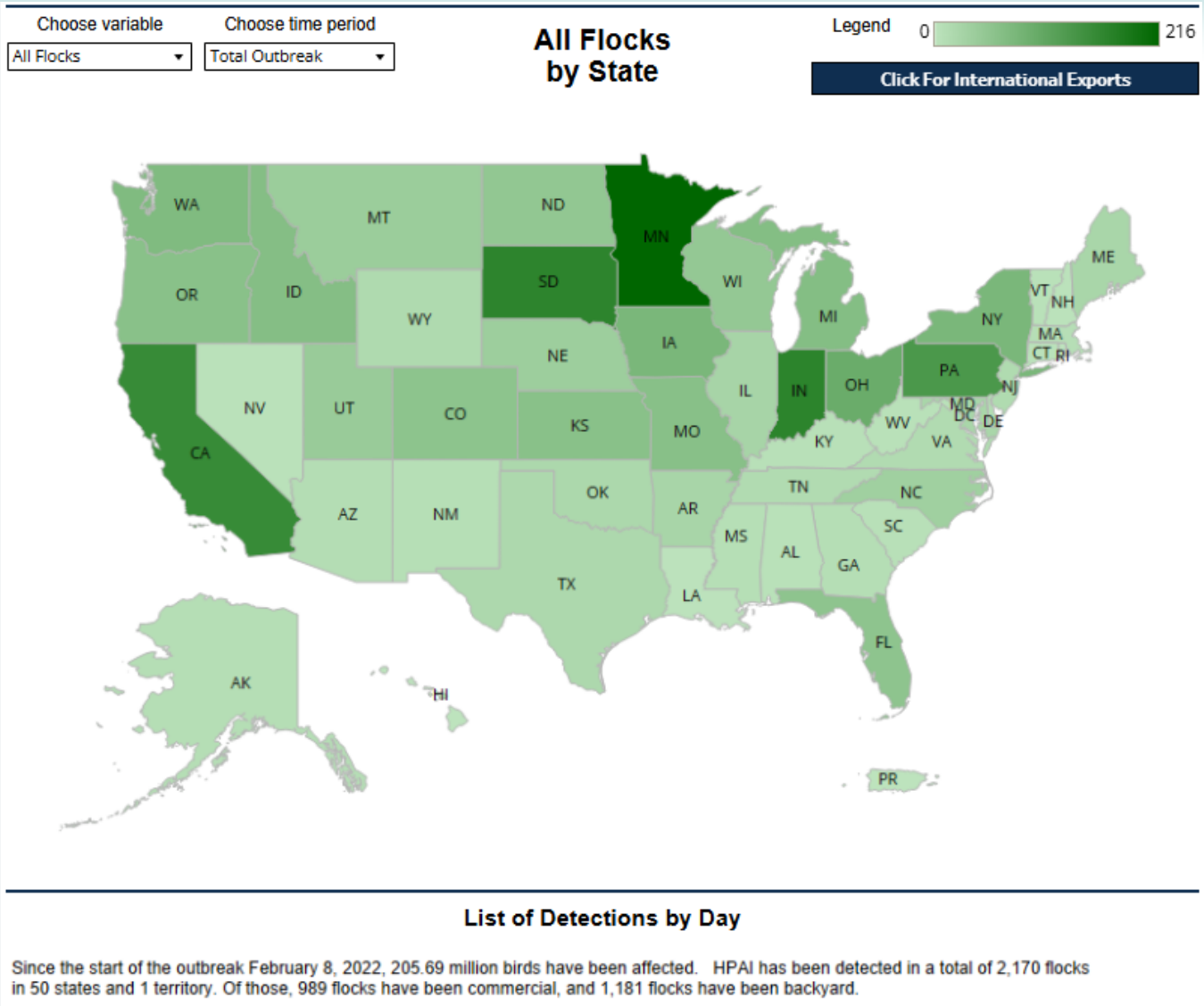
Carried by Asymptomatic Wild Migratory Waterfowl

Contaminate the Environment (Manure)

Infect Resident Waterfowl

Fomite Transmission





February 2022

Detected in US Domestic Poultry

March 23, 2026*

50 States +1 Territory

2,170 Flocks Affected

205.69 Million Birds

HPAI SIGNIFICANCE

Foreign Animal Disease (FAD)

Economy
- 18% of US Poultry Products are Exported

Continuity of Business
- <2% of US population Farms

Environment

Animal Welfare

Food Security

Office International des Epizooties

(OIE)

=

World Organization for Animal Health

(WOAH)

“The only Thing Constant is Change”

- Heraclitus

FEBRUARY 2024

TX Dairy Herd

Illness of unknown origin

5-10% herd

- Decrease Milk Production
- Mastitis
- Thick Milk (Colostrum-like)
- Nasal Discharge
- Low grade fever
  - +/- Increase mortality
  - +/- Abortion

Dead Wild Birds

- Pigeons, blackbirds, grackles

Dead Cats

HPAI IN DAIRY CATTLE

HPAI Confirmed in Texas Dairy Herd on **March 25, 2024**

The HPAI virus detected was H5N1 Eurasian lineage goose/Guangdong clade **2.3.4.4b (Genotype B3.13)**

Wild migratory birds are believed to be the initial source of introduction

https://tpwd.texas.gov/huntwild/wild/birding/migration/flyways/central/

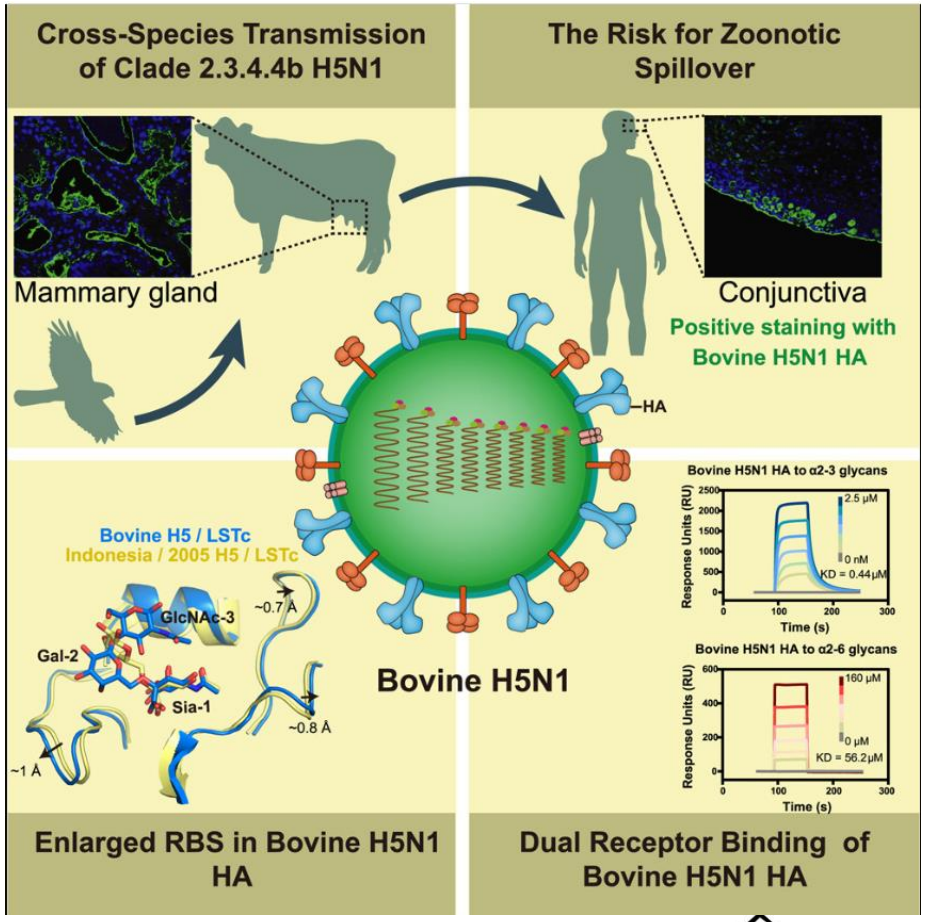
ANTIGENIC SHIFT

Spillover Event

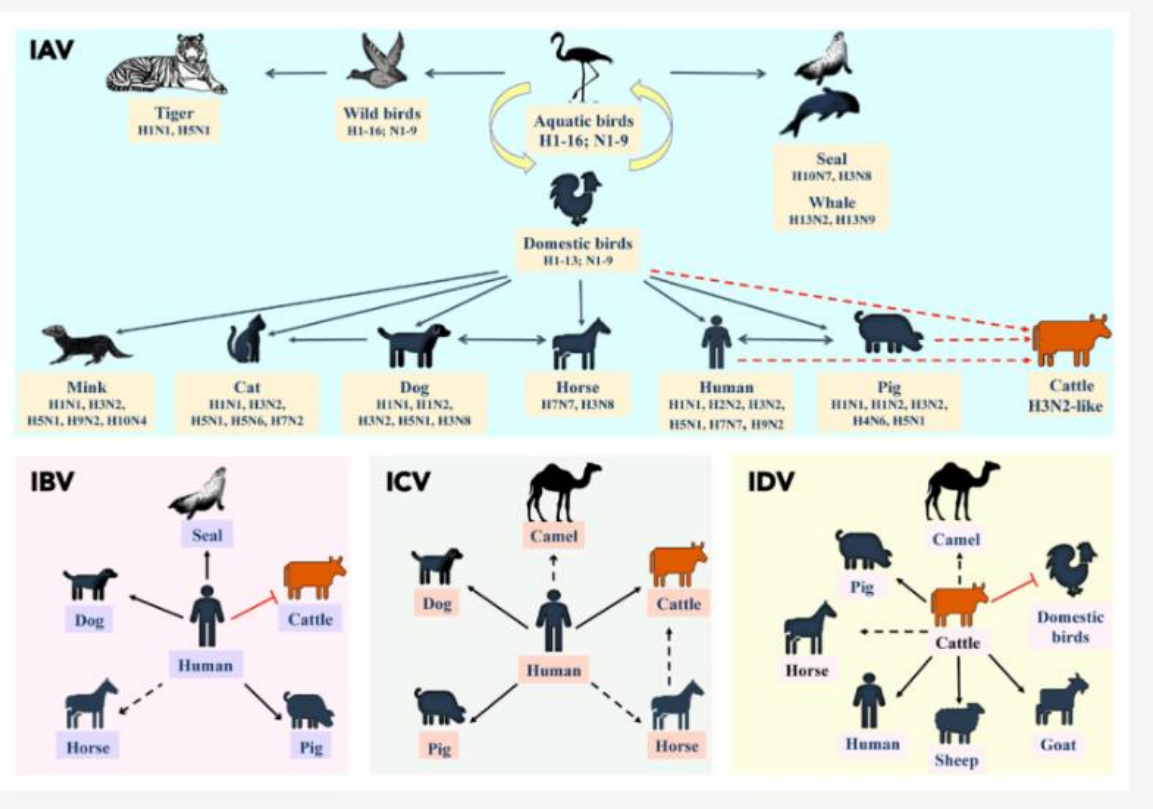
Avian → Bovine

“Shift” Adaptation of the Virus’s Tissue Tropism

Clade 2.3.4.4b to infect mammals



ONE HEALTH CONCERNS



Cattle unusual host for IAV

Unusual presentation of Dz

Predilection for Mammary Tissue

Interspecies Transmission

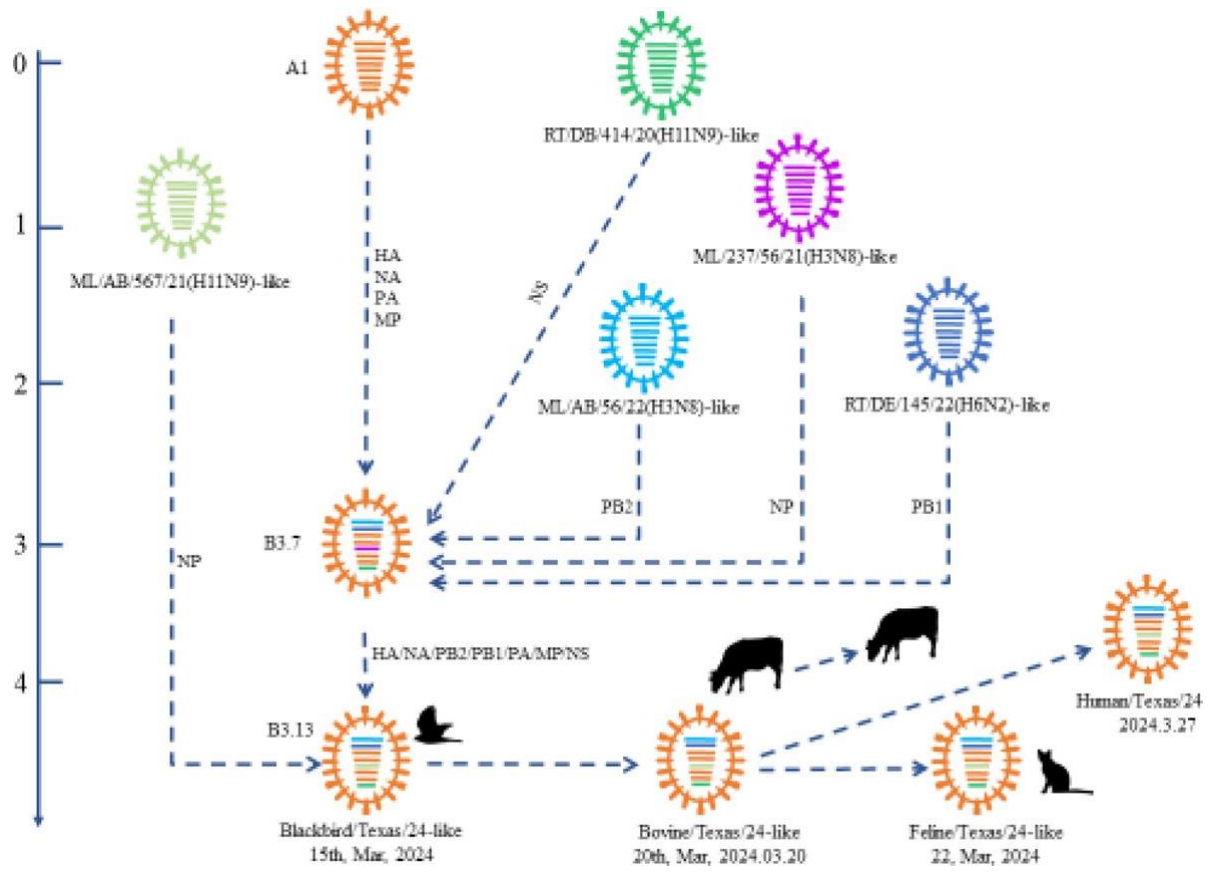
https://onlinelibrary.wiley.com/doi/10.1111/irv

Same strain and **clade** that has been **circulating** in **wild birds and commercial poultry**

Since 2024 there has been repeated **introduction from Birds to Cows**

Introduction from from *Cow's to Cats*

Re-introduced from **Cows to Birds**



https://www.nejm.org/doi/full/10.1056/NEJMc2405371

ZOONOTIC

Introduced *from Cow to person [3]*

[1] Conjunctivitis TX*

[1] Conjunctivitis MI

[1] URT MI

FIGURE 1

Conjunctivitis with Subconjunctival Hemorrhage in Both Eyes.

PUBLIC CONCERNS ABOUT ZOONOSIS

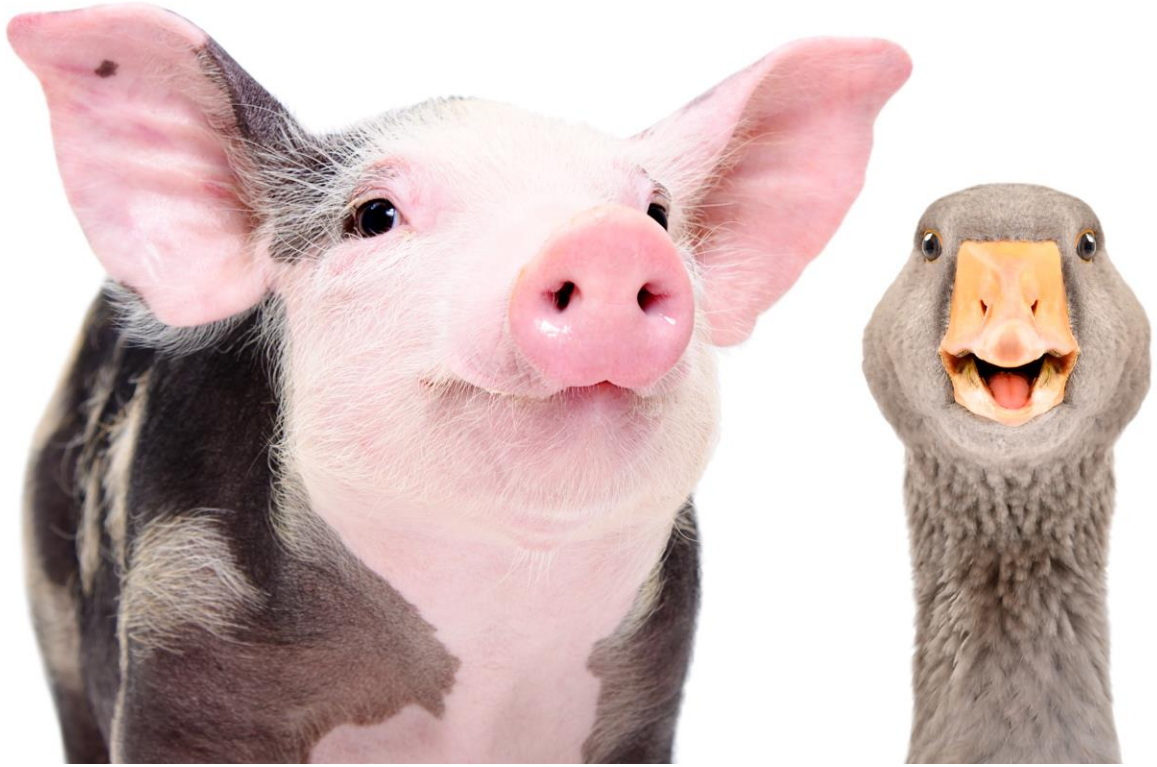
According to the U.S. Centers for Disease Control and Prevention,

The recent HPAI detections in birds do not present an immediate public health concern.

A(H5) Bird Flu Surveillance and Human Monitoring

https://www.cdc.gov/bird-flu/h5-monitoring/index.html

H5N1
ZOONOTIC POTENTIAL



World Wide

2003- 2026 (23 years)

993 Human Infections

477 Fatal
(Case Fatality Rate 48%)

https://cdn.who.int/media/docs/default-source/wpro---documents/emergency/surveillance/avian-influenza/ai_20260220.pdf?sfvrsn=eb7a5bb0_1&download=true#:~:text=481-,319,date%20of%2017%20June%202024.

INFECTED PREMISES

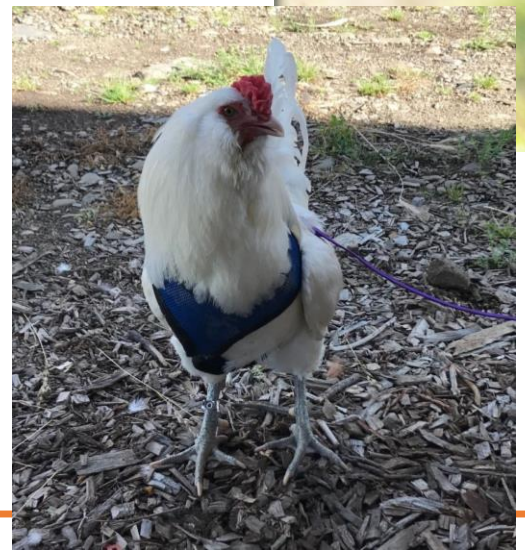
Personal Protective Equipment

- N95 (Fit Tested)
- Eye Protections
- Gloves
- Tyvek
- Disposable foot covers

  * Wash Your Hands*

HEALTHY ANIMALS

- Mask (Dust)
- Eye Protection
- Gloves
- Washable coveralls or dedicated clothing
- Cleanable footwear



- Wash Your Hands

FOOD SAFETY

Eating uncooked or undercooked poultry or beef or drinking unpasteurized (raw) milk can make you sick.

Cooking poultry, eggs, and beef to the appropriate internal temperature kills bacteria and viruses, including avian influenza A viruses.

https://www.cdc.gov/bird-flu/prevention/food-safety.html

MILK

FDA and USDA **commercial milk supply is safe**

Pasteurization process

Diversion or destruction of milk from sick cows

Pasteurization kills bacteria and viruses, like avian influenza A viruses, in milk.

Make the best decision for your health and the health of your family by always choosing pasteurized milk and products made with it.

LOUIS PASTEUR

Germ Theory

1862 Pasteurization

1885 Rabies Vaccination

RESOURCES

Defend the Flock

https://www.aphis.usda.gov/livestock-poultry-disease/avian/defend-the-flock?gad_source=1&gad_campaignid=20882577968&gbraid=0AAAAAC9xWPxbAW1oWzNRkmb2cziMq87Pm&gclid=EAIaIQobChMIsIu6kK65kwMVdRxECB1oVhQ4EAAYASAAEgLMrvD_BwE

USDA FSIS

https://www.fsis.usda.gov/employees/fsis-safety/hpai

QUESTIONS

NEW YORK STATE

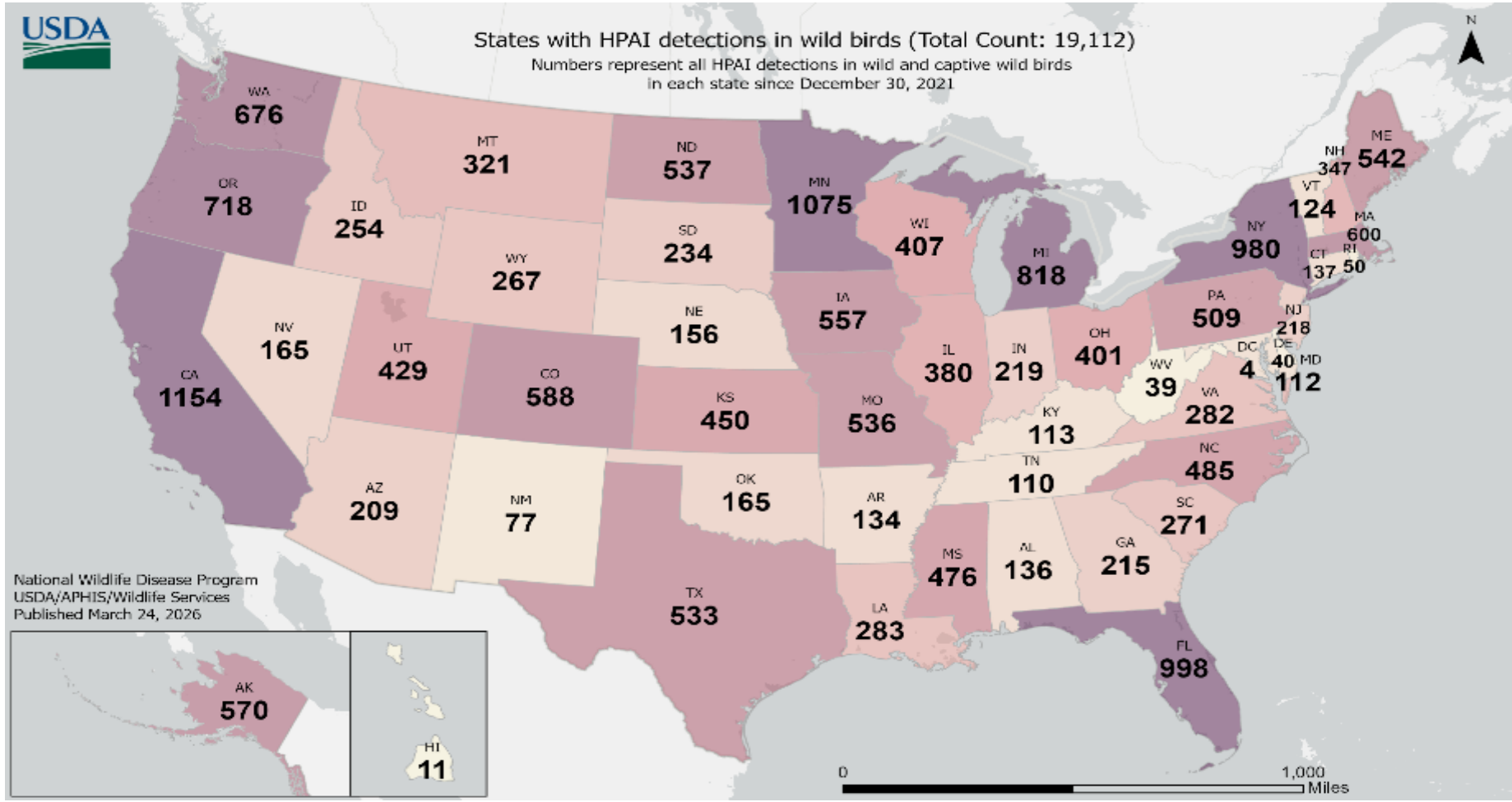
Department of Environmental Conservation

HIGHLY PATHOGENIC AVIAN INFLUENZA (HPAI) IN WILDLIFE

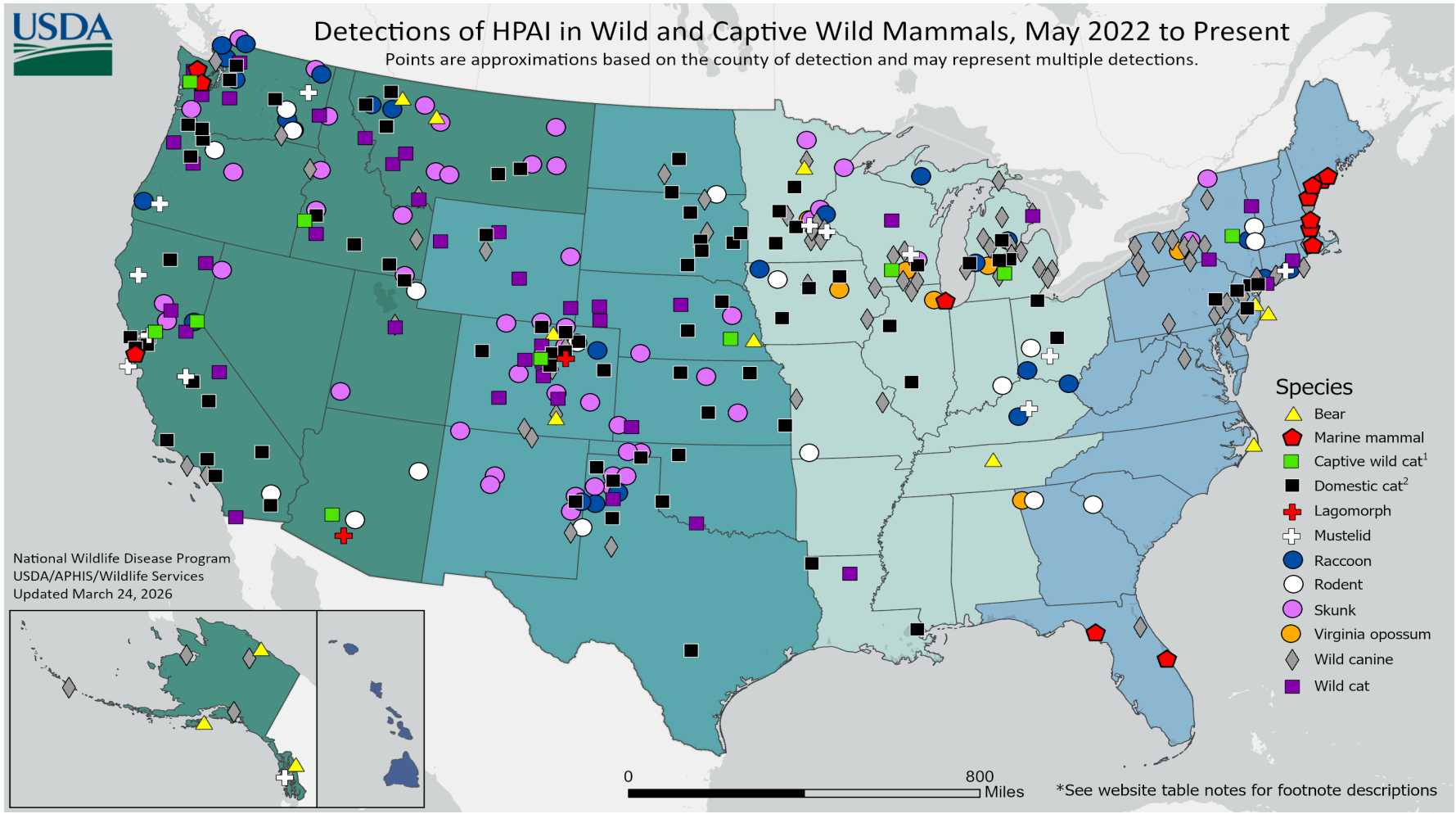
Kevin Hynes

April 1st, 2026

HPAI DETECTIONS NATIONWIDE IN WILD BIRDS (2022-PRESENT)



HPAI DETECTIONS NATIONWIDE IN WILD AND CAPTIVE MAMMALS (2022-PRESENT)



HPAI DETECTIONS IN NEW YORK WILDLIFE

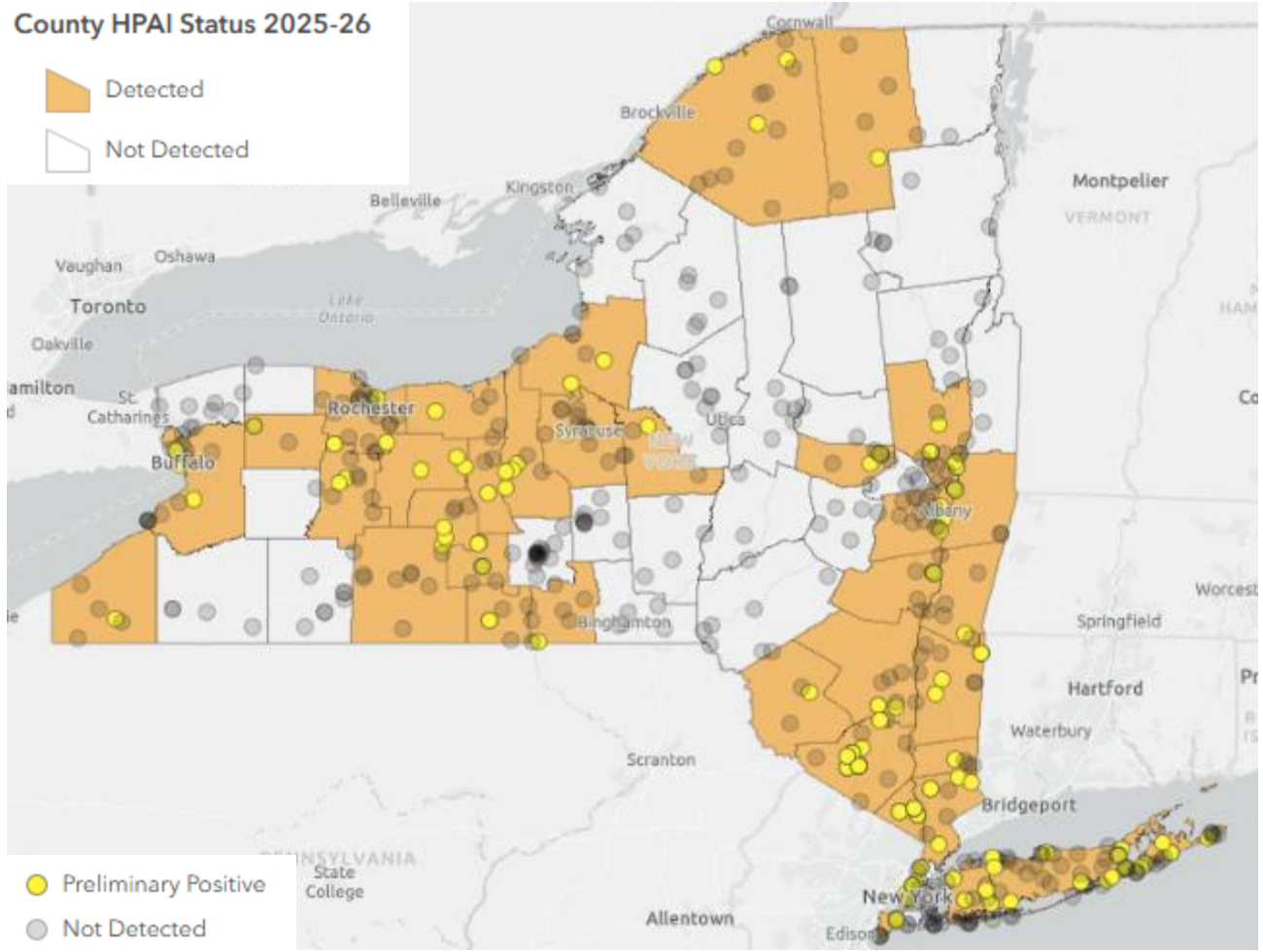
HPAI in New York Total (2022-2025)

- 3,323 total HPAI tests between 2022-2025
- 671 HPAI non-negative (20%)
- 2,652 HPAI non-detect

July 2025 – March 2026

Total number of AI tests: 516

- 134 were preliminary positive (26%)
- 36 counties detected



HPAI DETECTIONS IN NY WILDLIFE

2022 – 2026 Results

- Number of bird species with positive results: 64
- Number of mammal species with positive results: 10

2026 Results (As of 3/30/2026)

- Number of bird species with positive results: 19
- Number of mammal species with positive results: 1

Top 10 Positive Birds in July 2025 – March 2026

Canada Goose (58)
Red-tailed Hawk (18)
American Crow (11)
Bald Eagle (5)
Mute Swan(5)
Black Vulture (4)
Snow Goose (4)
Mallard (3)
Caspian Tern (3)
Snowy Owl (2)

NYS HPAI+ Confirmed Mammals	
Species	**Total**
Red fox	29
Raccoon	3
Striped skunk	2
Domestic cat	2
Muskrat	1
Gray fox	1
Eastern gray squirrel	1
Bobcat	1
Virginia opossum	1
Amur Leopard	1


NY202342


NY202342


Muskrat
NY. 2158557
Rec. 1/3/25

HANDLING HPAI-SUSCEPTIBLE WILDLIFE

- Wear nitrile/latex gloves, masks (N95 or KN95), and eye protection (goggles, safety glasses, or face shield).
- No drinking/eating/smoking while handling birds.
- Be mindful of handling objects or touching your face while wearing gloves.
- Wash hands thoroughly for at least 30 seconds after removing gloves.
- Disinfect clothing & shoes between sites.

NOTABLE HPAI CASES IN NEW YORK STATE

Moreau Lake State Park (Dec. 2023)

- 7 neurologic Canada Geese (CAGO) found; 3 collected, all 3 HPAI+.

Woodland Reservoir (Dec. 2023)

- 15-20 dead CAGOS found; 8 CAGOs collected, all 8 HPAI+.

Hudson Highlands State Park Preserve (Dec. 2023)

- 1 neurologic Bald Eagle (BAEA) found & collected; HPAI+.

Green Lakes State Park (Jan. 2024)

- 1 neurologic CAGO found & collected; HPAI+.

Beaver Island State Park (Feb. 2024)

- 1 neurologic BAEA found & collected; HPAI+.

Clapper Road Water Treatment Plant (Feb. 2025 & Feb. 2026)

- 2025: ~35 dead CAGOs found & collected, 2 tested HPAI+
- 2026: ~3 sick, 6 dead CAGOs, 1 collected, HPAI+.


Dead geese found in Syracuse reservoir last month infected with avian flu, DEC says

Updated: Jan. 04, 2024, 8:12 a.m. | Published: Jan. 04, 2024, 7:49 a.m.

Syracuse resident Gudrun Rudd photographed this dead Canada goose floating in Hiawatha Lake last month. Gudrun Rudd

Source: Syracuse.com

CASPIAN TERN DIE-OFF EVENT, SUMMER 2025

Buffalo Harbor

- Approx. 320 out of 400 Caspian Terns (CATE) found dead at Buffalo Harbor
  - 15 live chicks present on July 8th; usually ~90 fledge from this site

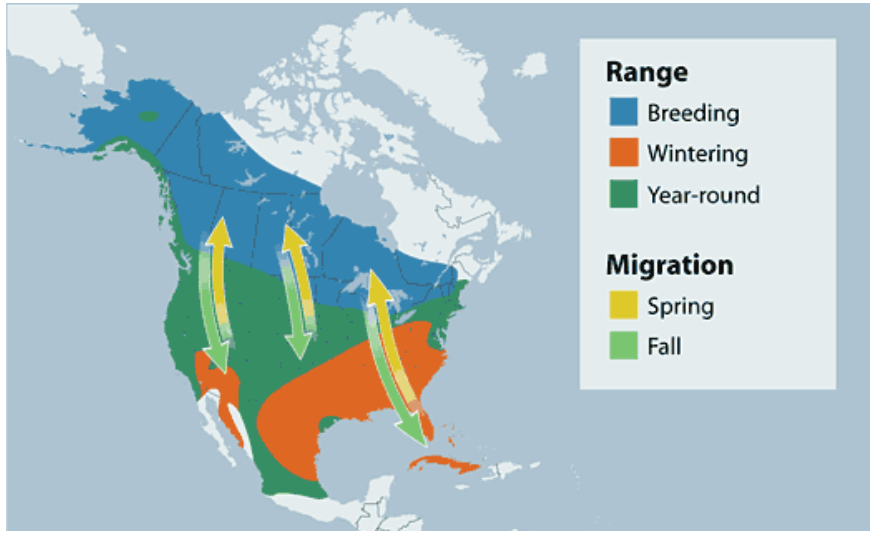
Little Galloo Island

- Estimated CATE population size in 2024: 1,740
- Approximately 450 dead CATEs found in late June 2025
- **HPAI detected in CATEs tested by the WHU.**

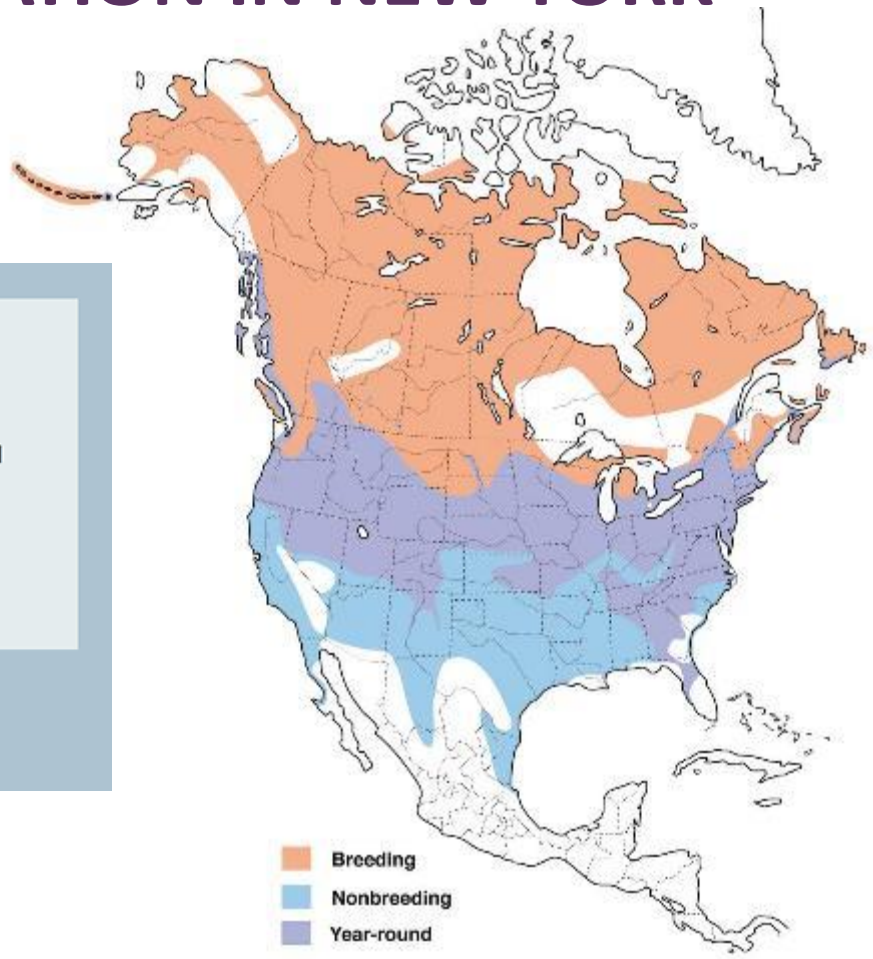

Buffalo Harbor


Little Galloo Island

WATERFOWL MIGRATION IN NEW YORK



Mallard Migration Map



Canada Goose Range Map

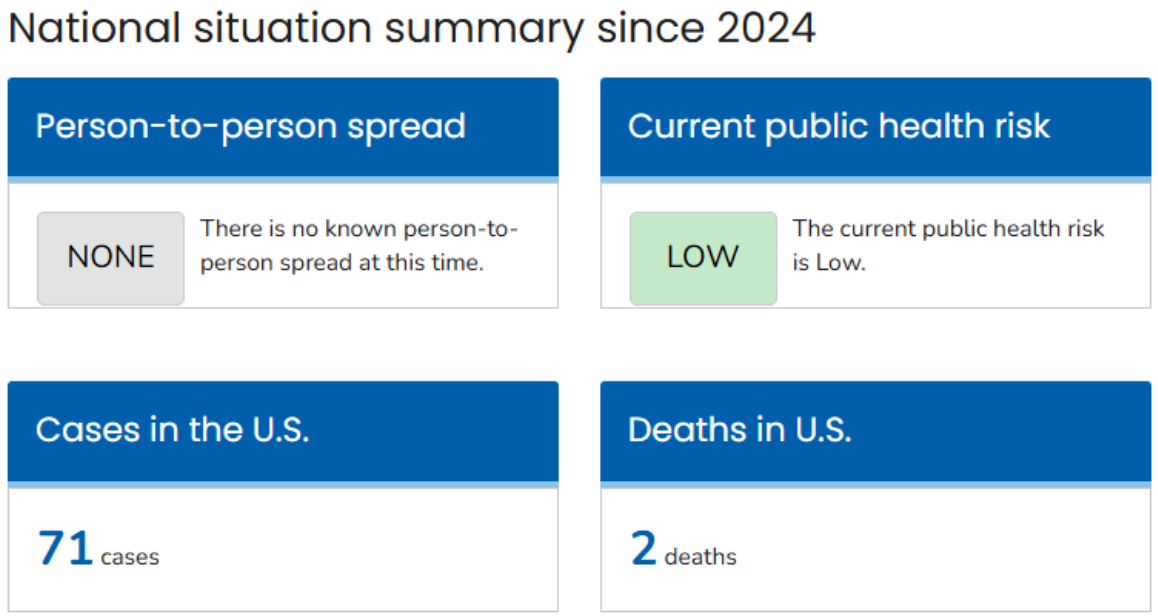
HPAI IN PEOPLE

February 2022-Present

- At least 32,600 people exposed to infected birds, poultry, dairy cows, or other animals for 10 days post-exposure
- At least 1,320 people tested for novel influenza A

September 28, 2025-Present

- At least 3,500 people monitored
- At least 130 people tested for novel influenza A.

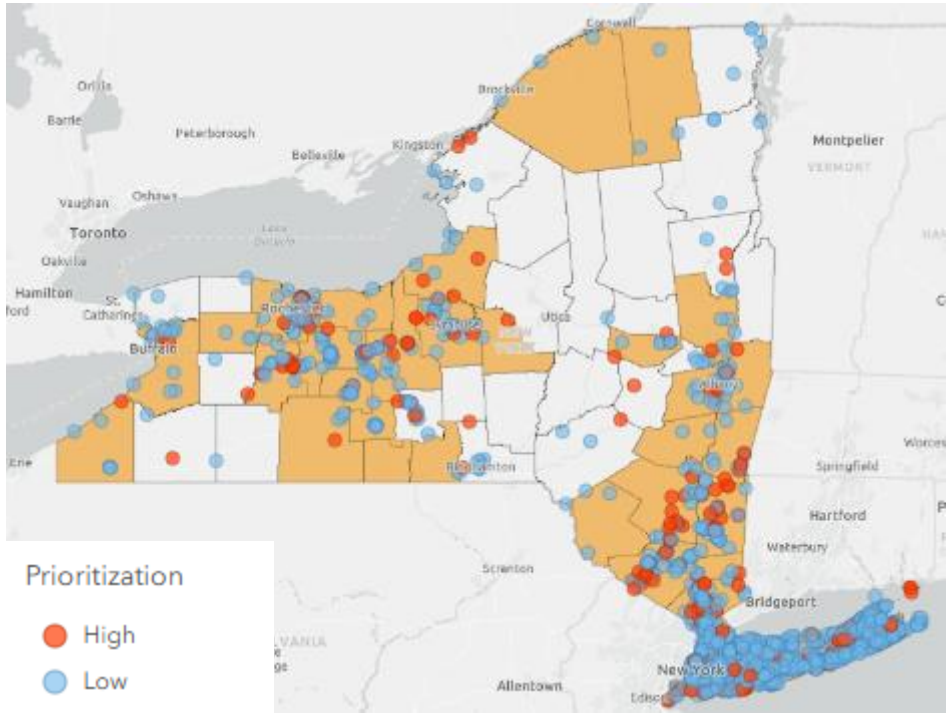


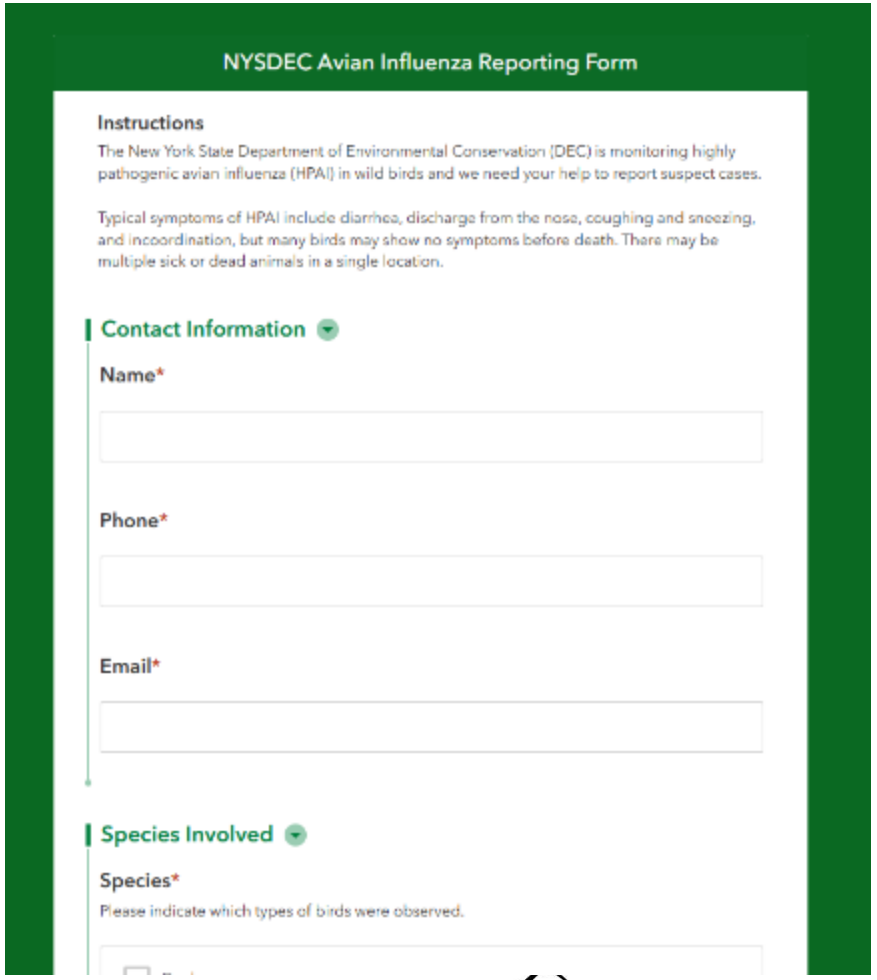
Credit: U.S. Centers for Disease Control and Prevention (CDC)

NYSDEC AVIAN INFLUENZA REPORTING FORM

https://dec.ny.gov/nature/wildlife-health/animal-diseases

QR code for reporting form





Number of Public Reports July 2025- March 2026: 1,782

UPCOMING EVENTS FOR HOME CARE PROVIDERS REGISTRATION OPENS SOON!

APRIL 15 (tentative)

- **Webinar 2 in our communications series focused on effective** messaging

MAY 6

- **Virtual tabletop exercise for the home care sector highlighting capabilities for an imaginary H5N1 outbreak**

MAY 7

- **Second webinar in the H5N1 and other emerging infectious diseases series will address food safety**

CONTACT AND EVALUATION

Contact:
Carole Deyoe, RPh
Director of Regulatory Affairs and Special Programs
NYSHCP
Deyoe@nyshcp.org

https://www.surveymonkey.com/r/H5N1

Be sure to complete the session survey!!!!

Thank you!

Recording and slides will be sent to participants and posted on HCP's website:

https://www.nyshcp.org/emergency-preparedness/projects-programs/

Access recording on YouTube:

https://www.youtube.com/playlist?list=PLW8OG_R_t29A47vhXwSIFbtSqbhO9YgoE