



Bird Flu, Regular Flu, Who Knew?

Respiratory Infection Updates for the Ambulatory Provider

April 25, 2025 Ellie Sukerman, MD

Disclosures

- None

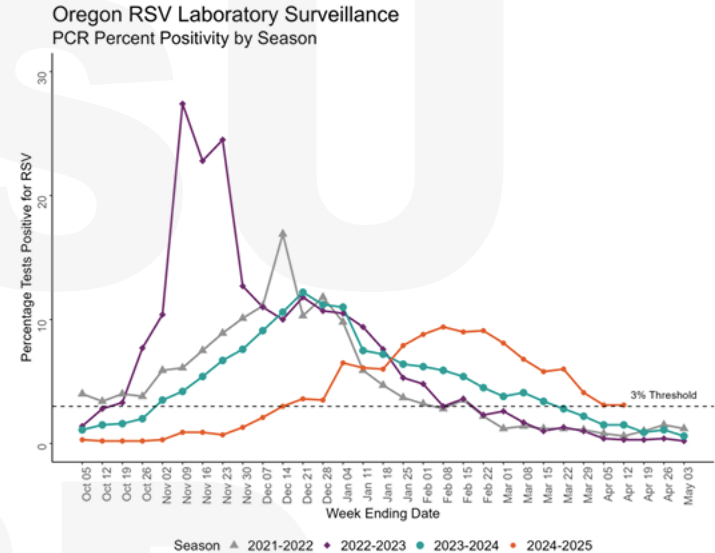
Objectives

- Brief updates on RSV, COVID-19 and seasonal influenza
- Discuss current epidemiology, clinical presentation, testing and treatment of H5 avian influenza

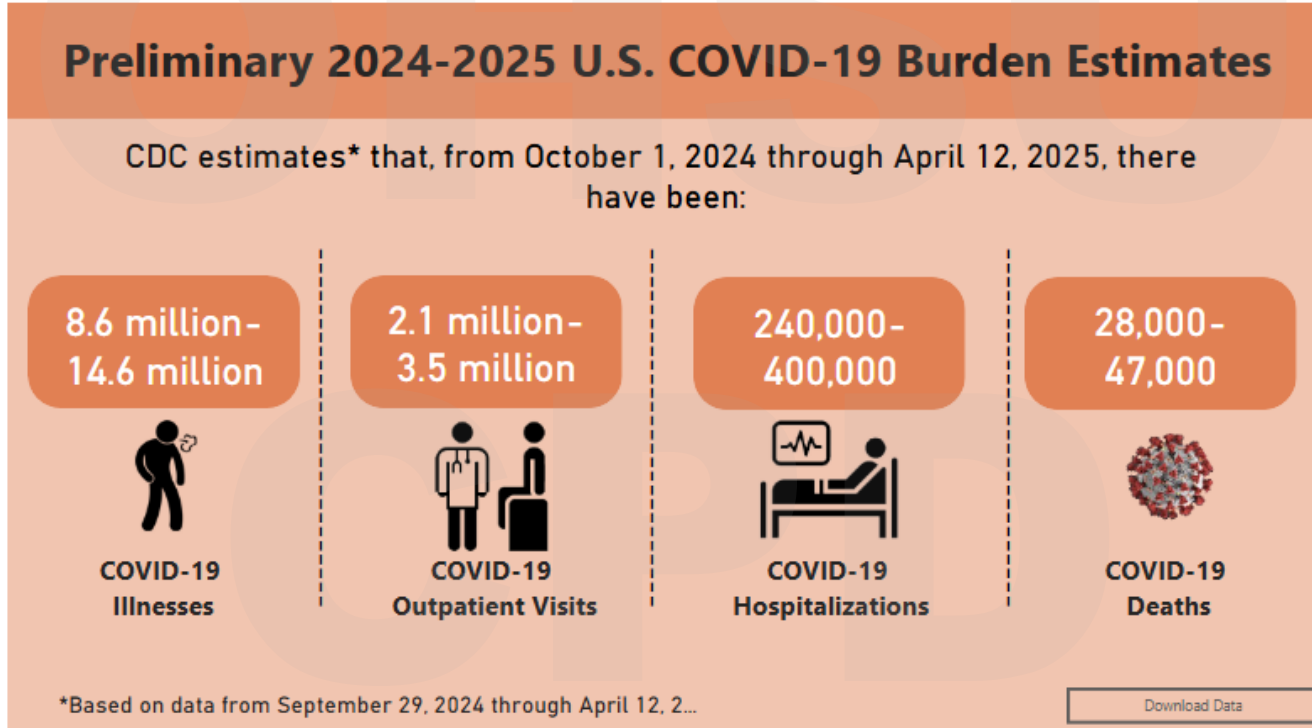
RSV Updates

- Vaccination recommendation for older adults updated 6/2024
- Vaccination recommended for*
 - Everyone 75yo+
 - People 60-74 at increased risk of severe RSV

*if not previously vaccinated for RSV
- May see expansion of recommendation to include adults 50-59yo at increased risk of severe disease

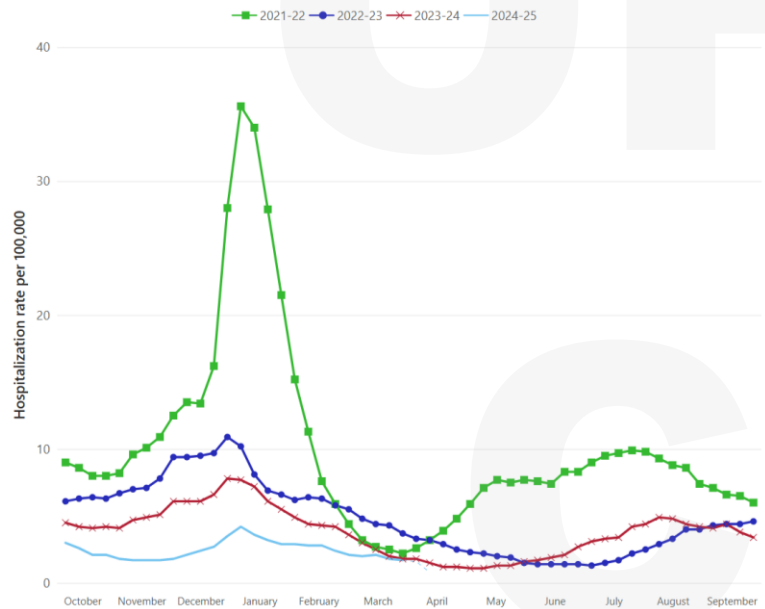


COVID-19 Updates

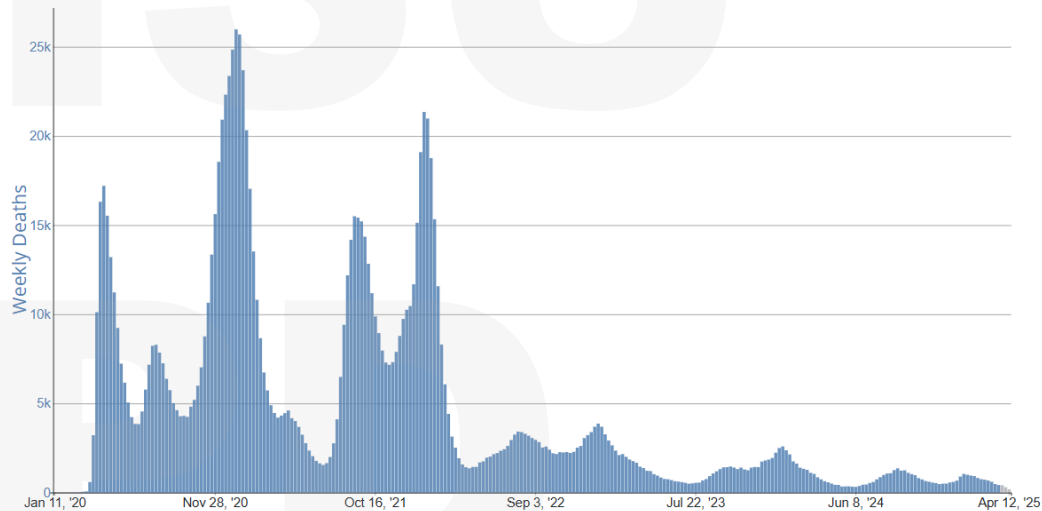


COVID-19 Updates

Weekly Rates of COVID-19 Associated Hospitalizations

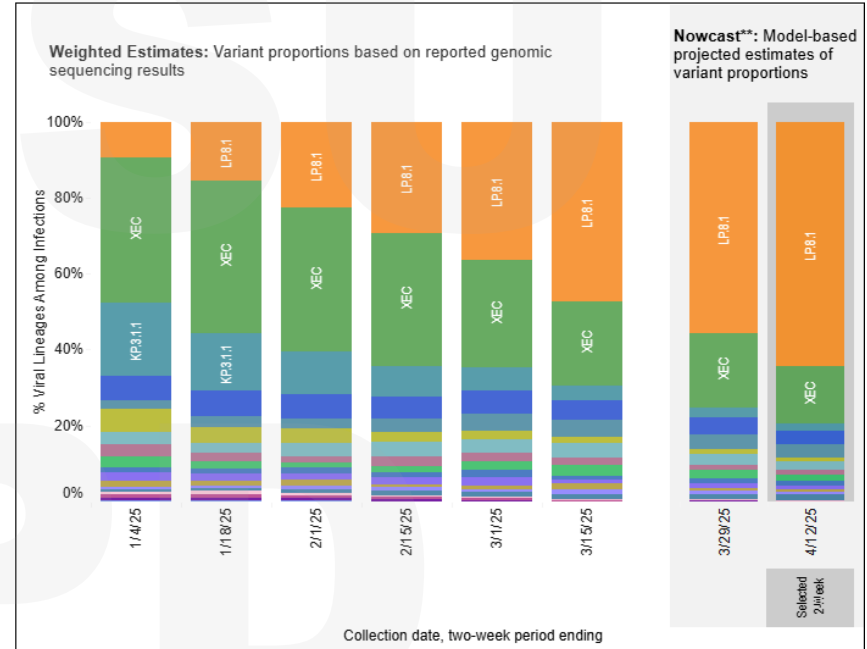


Provisional COVID-19 Deaths by Week, 2020-present



COVID Updates

- LP.8.1 proportion increasing
- Agents for treatment remain the same
- Pemivibart: pre-exposure prophylaxis in moderate to severe immunocompromise
 - In vitro neutralization against LP.8.1 announced
 - May be difficult to operationalize
- Vaccine updates for next season
 - Possible move to risk-based recommendation



Seasonal Influenza Updates

Preliminary 2024–2025 U.S. Flu In-Season Disease Burden Estimates

Since October 1, 2024, CDC estimates there have been between:

46 Million -
81 Million



**Flu
Illnesses**

21 Million -
36 Million



**Flu
Medical Visits**

600,000 -
1.3 Million



**Flu
Hospitalizations**

26,000 -
130,000



**Flu
Deaths**

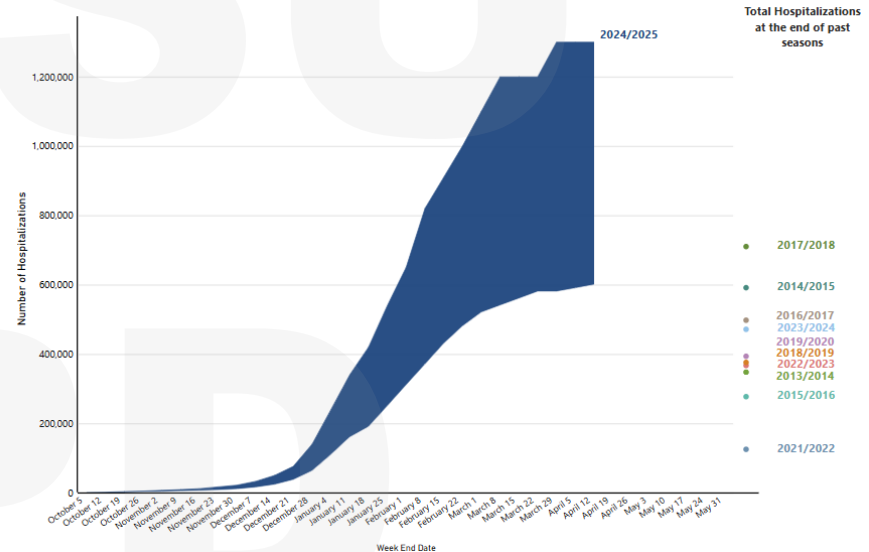
Based on data from October 1, 2024, through April 12, 2025

Because influenza surveillance does not capture all cases of flu, CDC provides these estimated ranges to better reflect the full burden of flu in the United States. These estimates are calculated using a mathematical model based on CDC's weekly influenza surveillance data and are preliminary and are updated weekly throughout the season.

FluVIEW



Preliminary Estimates of Cumulative Flu-Related Hospitalizations



H5N1 Avian Influenza (Highly Pathogenic Avian Influenza (HPAI))



Current Status of H5 Avian Influenza in Animals – U.S.

- 1st HPAI H5N1 in wild birds since 2016 was reported in 1/2022
- Detected in 12,842 wild birds
- 52 jurisdictions

As of 4/15/25

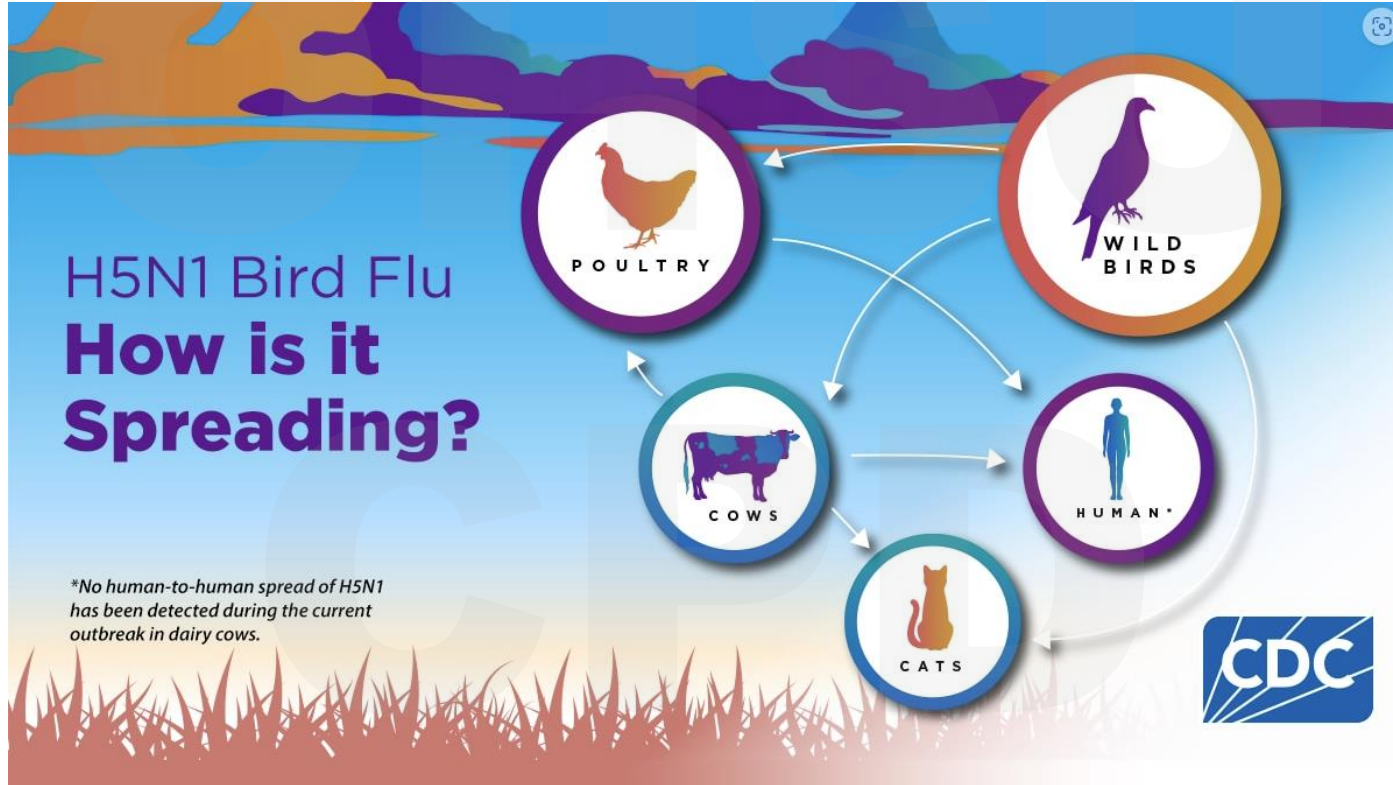
- 1st commercial poultry outbreak 2/2022
- 168,621,877 poultry affected
- 51 jurisdictions

As of 4/16/25

- 1st outbreak in dairy cattle 3/2024
- 1021 herds affected
 - 17 states

As of 4/16/25

Transmission

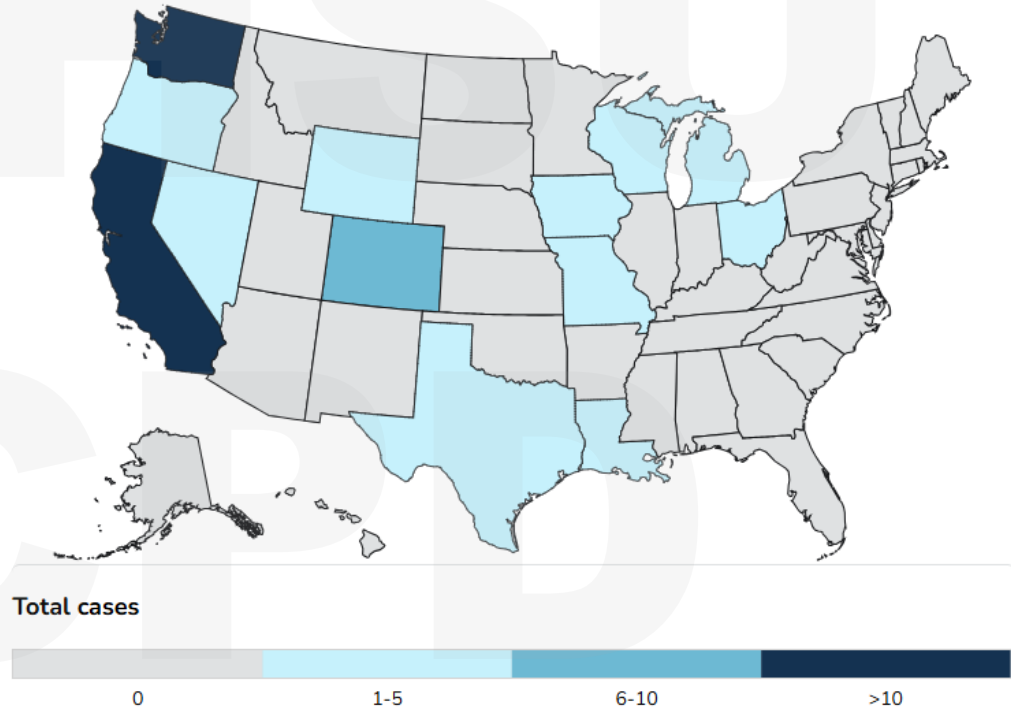


H5N1 in Humans

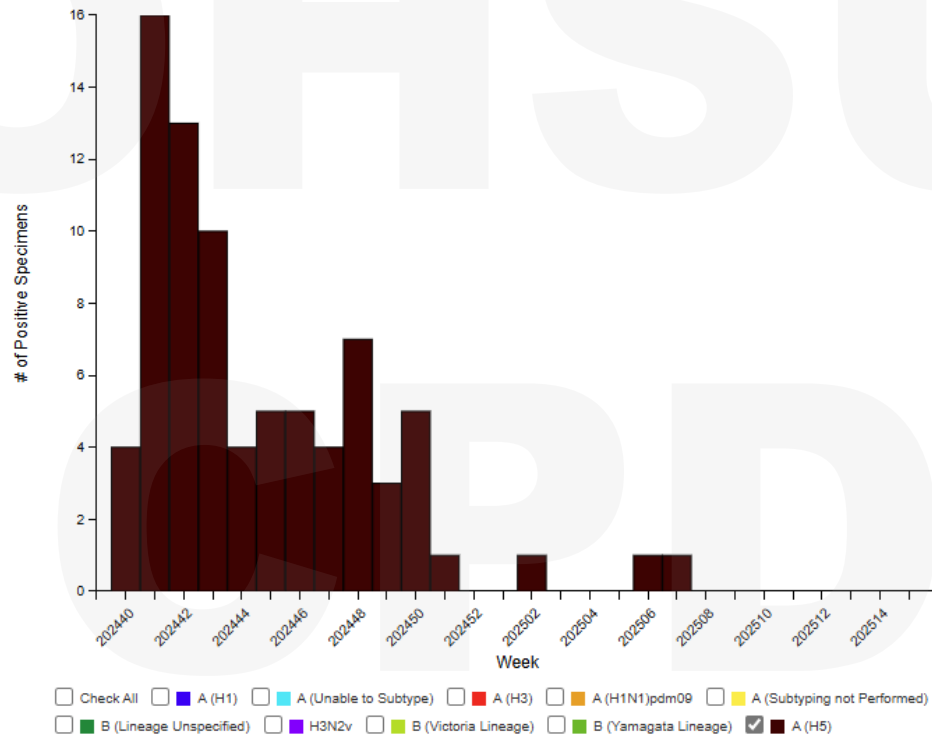
- Prior to 2024, only one human H5N1 case had been reported in the U.S.
- Person in TX tested positive for HPAI H5N1 in 4/2024; 1st presumed case of cow-to-human transmission of H5N1

Confirmed Human Cases – 2024-present

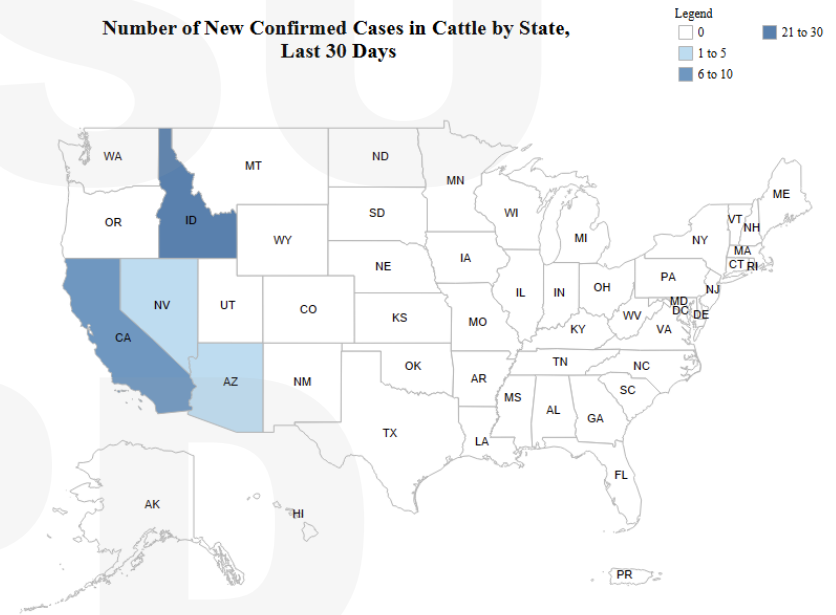
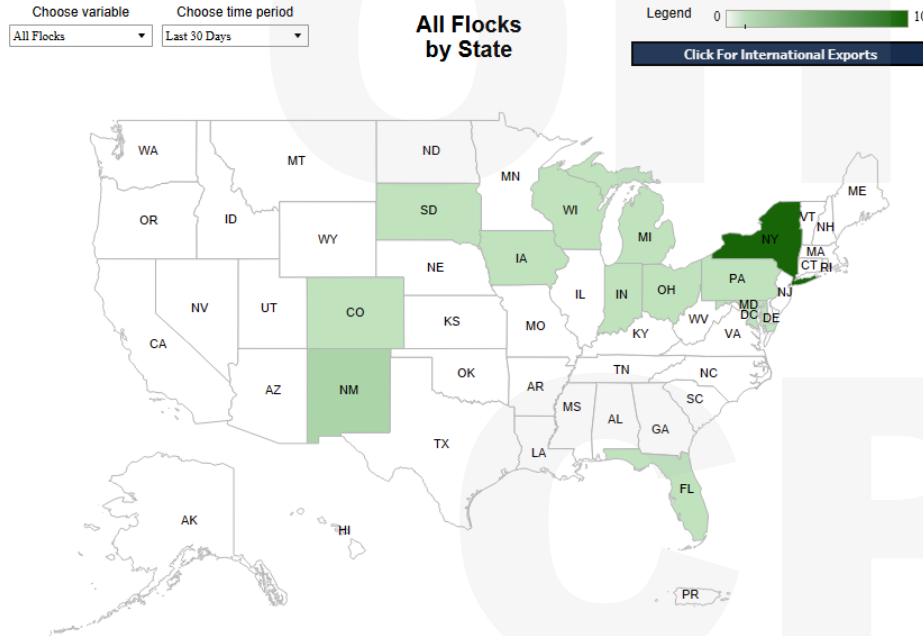
- 70 confirmed cases in U.S.
- ~93% had exposure to dairy cattle or poultry farms/culling
- No known person-to-person spread at this time



Influenza Positive Tests Reported by Public Health Labs, 2024-25 season: H5 Positive Tests



Detection in Commercial and Backyard Flocks and Dairy Cattle in Last 30 Days (as of 4/21/25)



Clinical Presentation



- Incubation period typically 3-5 days (up to 7-10 days)
- Most human cases to date have been mild
 - **Conjunctivitis**
 - +/-Fever
 - Cough, sore throat, rhinorrhea, congestion, dyspnea
 - Myalgias, headache, fatigue
 - GI sx's less common

CDC Confirms First Severe Case of H5N1 Bird Flu in the United States

STATEMENT

📅 For immediate release: December 18, 2024

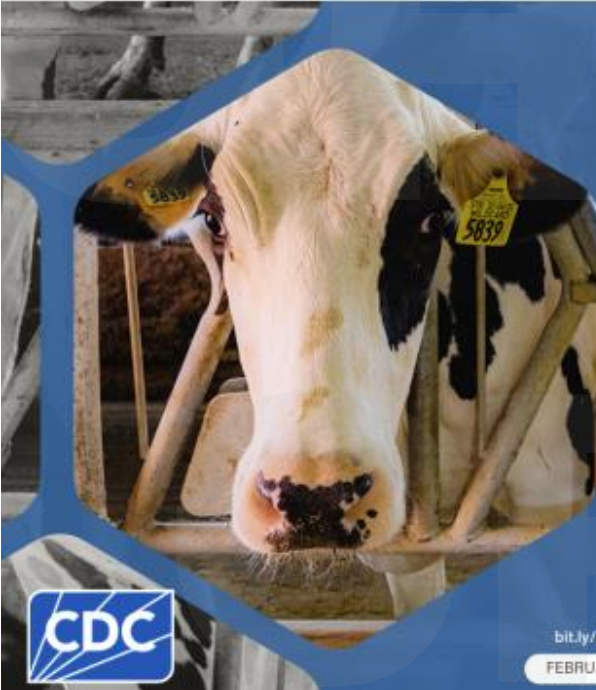
CDC Media Relations

📞 (404) 639-3286

🌐 <https://www.cdc.gov/media/>

- +exposure to backyard flocks
- D1.1 genotype

Concern for Asymptomatic Transmission/Infection



CDC finds antibodies against H5 bird flu in 3 vet practitioners working with cattle*

Continued testing of herds, milk tanks, and those at increased risk of exposure can help better protect vets and other animal workers

CDC

bit.ly/mm74Q4a2

FEBRUARY 13, 2025

MMWR

* Among 150 veterinary practitioners with exposure to cattle in the past 3 months, September 2024

Testing, Treatment and Prevention



When to Test for Avian Influenza

- Recent (within 10d) exposure to avian influenza as a result of:
 - Exposure to infected animals
 - Exposure to an infected person
 - Laboratory exposure

PLUS

- Clinical signs and/or sxs of acute or lower respiratory tract infection or complications or acute respiratory illness without an identified cause

OR

- If testing recommended by public health authorities as part of public health investigations

What to do if you suspect avian influenza?

- Isolate patient
 - Contact and airborne precautions including eye protection
 - If airborne isolation room not available -> private room
- Collect specimens for PCR testing
 - NP swab *plus* a nasal swab combined with OP swab
 - If conjunctivitis -> NP swab and conjunctival swab
 - If severely ill -> upper and lower respiratory tract samples
- Notify state or local health dept.
- Initiate empiric antiviral therapy

Treatment

- Oseltamivir BID x 5 days
- Start ASAP for confirmed/probable/suspected novel influenza A even if >48h from sx onset
- Post-Exposure Prophylaxis: BID dosing
 - Exposure to infected animals without recommended PPE or with breach in PPE
 - Prolonged, unprotected close contact with a symptomatic confirmed/probable case of human infection with novel flu A in a room or other enclosed space*

*PEP can also be considered in moderate risk exposure (e.g., outside of an enclosed space)

Preventative Measures

- Avoidance of sick or dead animals
- For those with occupational or recreational exposure risk
 - Use of PPE based on risk of exposure
 - Farmworkers encouraged to remove clothing and footwear and rinse off any animal byproduct residue before entering households
- Food safety
- H5N1 vaccination not currently available in U.S.
- Seasonal flu vaccine recommended to reduce chances of co-infection with seasonal flu + H5N1

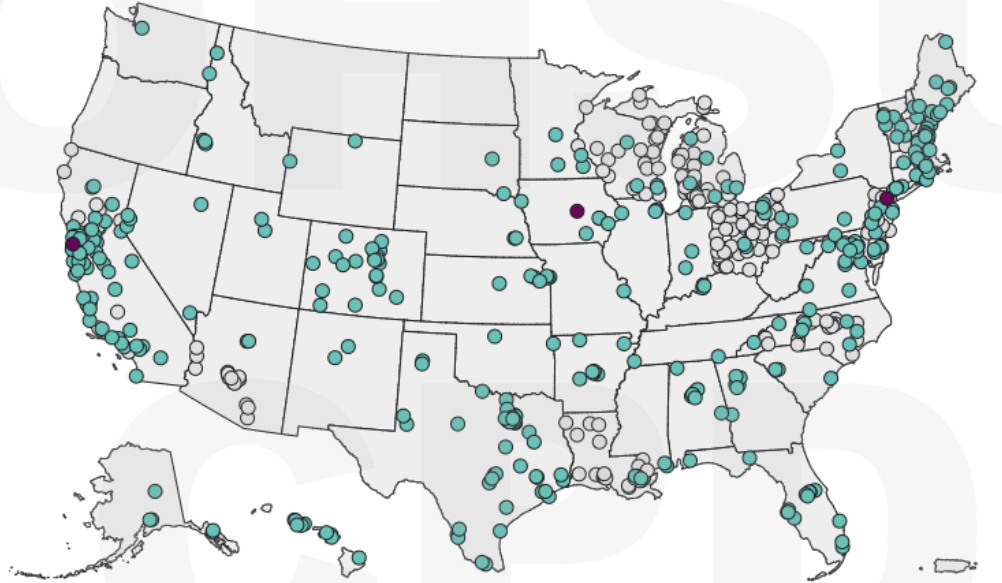


Thank You

Surveillance

- National surveillance (2/24/25->): 6 cases
- Targeted H5 surveillance (3/24/24->): 64 cases
- Wastewater surveillance
- Surveillance in animals

Wastewater Surveillance

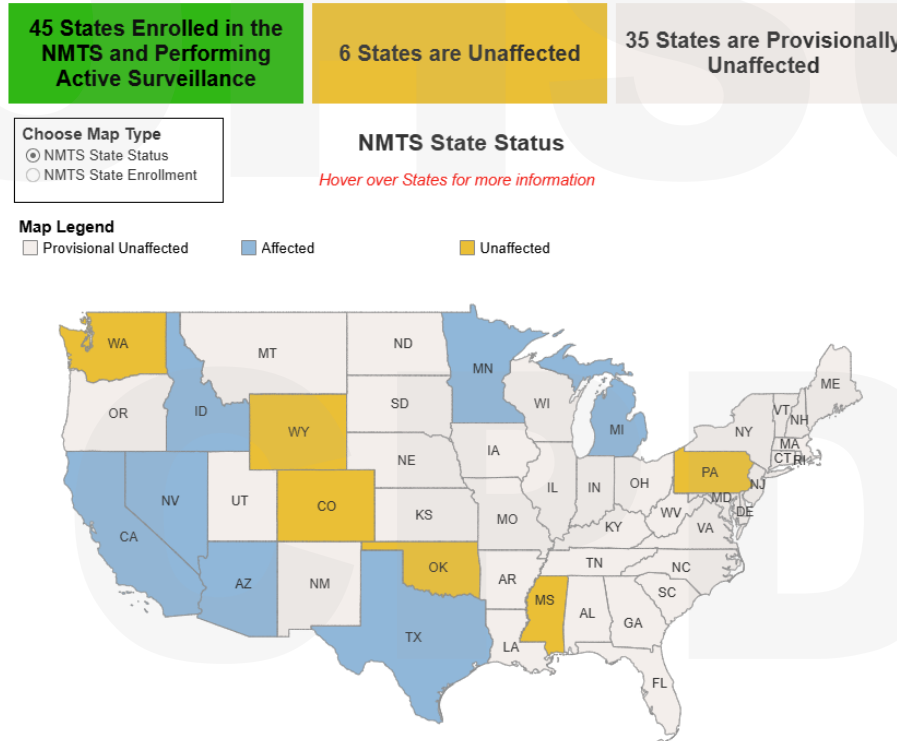


Select a detection type below to add or remove it from the map.

● H5 Detection ● No Detection ● No Samples in Last Week

Data 4/17/25

Surveillance of H5 in Dairy Cattle – National Milk Testing Strategy



Detections of HPAI in Wild and Captive Wild Mammals, May 2022 to Present

Points are approximations based on the county of detection and may represent multiple detections.

