Influenza (Flu) (/flu/index.htm)

How CDC is monitoring influenza data to better understand the current avian influenza A (H5N1) situation in people

Updated May 3, 2024

Weekly Snapshot for Week Ending April 27, 2024

CDC influenza (flu) surveillance systems show no indicators of unusual influenza activity in people, including avian influenza A(H5N1).

This page provides information on how CDC systems that monitor national, state, and local level influenza data are being used during the current avian influenza A(H5N1) situation (https://www.cdc.gov/flu/avianflu/avian-flu-summary.htm)

- Influenza virus and illness activity are monitored year-round through a collaborative effort between CDC and many partners, including state, local, and territorial health departments; public health and clinical laboratories; clinics; and emergency departments.

- Human cases of novel (https://www.cdc.gov/flu/about/glossary.htm) influenza, which are human infections with non-human influenza A viruses that are different from currently spreading seasonal human influenza viruses, are nationally notifiable. Every identified case is investigated and reported to CDC.

- CDC is actively looking at multiple flu indicators during the current situation to monitor for influenza A(H5N1) viruses, including looking for spread of the virus to, or among people, in jurisdictions where the virus has been identified in people or animals.

Monitoring of Persons Exposed to Infected Animals*

February 2022 - Present

CDC and state and local health departments monitor people exposed to infected birds, poultry or other animals for 10 days after exposure. Between February 2022 and now, there have been

- At least 9,000 people monitored and
- At least 200 people tested for novel influenza A

Current HPAI in Cattle Outbreak (2024)

CDC and state and local health departments monitor people exposed to infected cattle for 10 days after exposure. Between March 2024 and now, there have been

- At least 220 people monitored
- At least 30 persons tested for novel influenza A
- One case of avian influenza A(H5N1) (/media/releases/2022/s0428-avian-flu.html) was identified

*CDC numbers are based on state reports and CDC defers to states for updated information on people being monitored and tested.

Main Findings from Surveillance Systems

Case Reporting

In 2024, one human case of influenza A(H5N1) virus infection has been reported by one state (Texas), following exposure to dairy cattle. A total of 2 human cases of A(H5N1) have been reported in the United States ever, with the first case occurring in 2022, following exposure to presumably infected poultry.

(/flu/avianflu/h5-monitoring.html#CaseReporting)

Public Health Laboratory Monitoring

No novel influenza A positive test results, including for influenza A(H5N1) virus, were reported by public health laboratories for the week ending April 27, 2024.

(/flu/avianflu/h5-monitoring.html#PublicHealth)

Clinical Laboratory Trends

CDC has not identified any unusual trends in reported clinical laboratory data at the national, state, or local levels.

(/flu/avianflu/h5-monitoring.html#ClinicalLabs)

Emergency Departments

CDC has not identified any unusual trends in emergency department visits associated with influenza or potentially related symptoms at the national, state, or local levels.
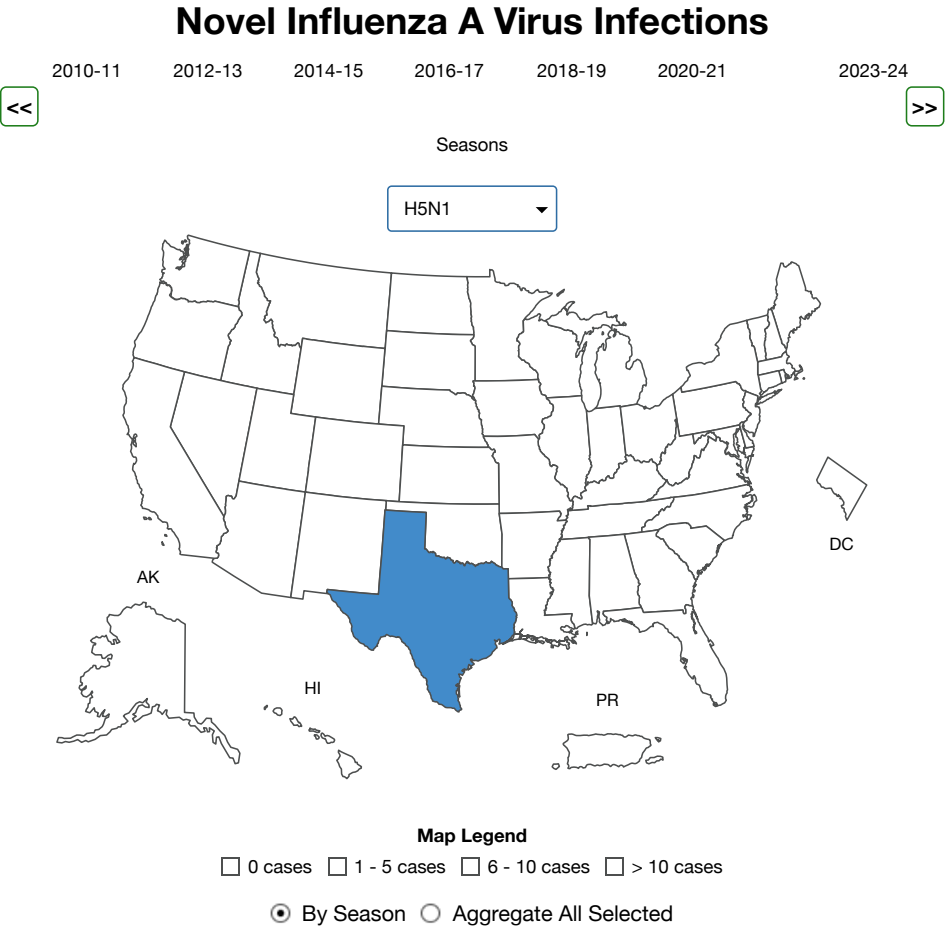
(/flu/avianflu/h5-monitoring.html#NSSP)

Wastewater Surveillance

CDC is monitoring wastewater data for any evidence of unusual increases, and influenza wastewater data will be shared soon.

Monitoring for Novel Influenza A Virus Infections among People, including Influenza A(H5N1)

Rapid detection and reporting of human infections (https://www.cdc.gov/flu/weekly/overview.htm#NovelASurveillance) with novel influenza A viruses, including influenza A(H5N1), is important to facilitate prompt awareness and an effective public health response. For confirmed cases, the reporting jurisdiction completes a case report form, which is submitted to CDC. The information includes patient demographics, symptoms, the clinical course of illness, and exposure history. The reporting jurisdiction for influenza A(H5N1) cases reported in 2024 are summarized below.

Novel Influenza A Virus Infections

| 2010-11 | 2012-13 | 2014-15 | 2016-17 | 2018-19 | 2020-21 | | 2023-24 |

<< >>

Seasons

H5N1 ▼

Map Legend
☐ 0 cases   ☐ 1 - 5 cases   ☐ 6 - 10 cases   ☐ > 10 cases

◉ By Season   ○ Aggregate All Selected

View FluView Interactive (https://gis.cdc.gov/grasp/fluview/Novel_Influenza.html) | Download Map Data |

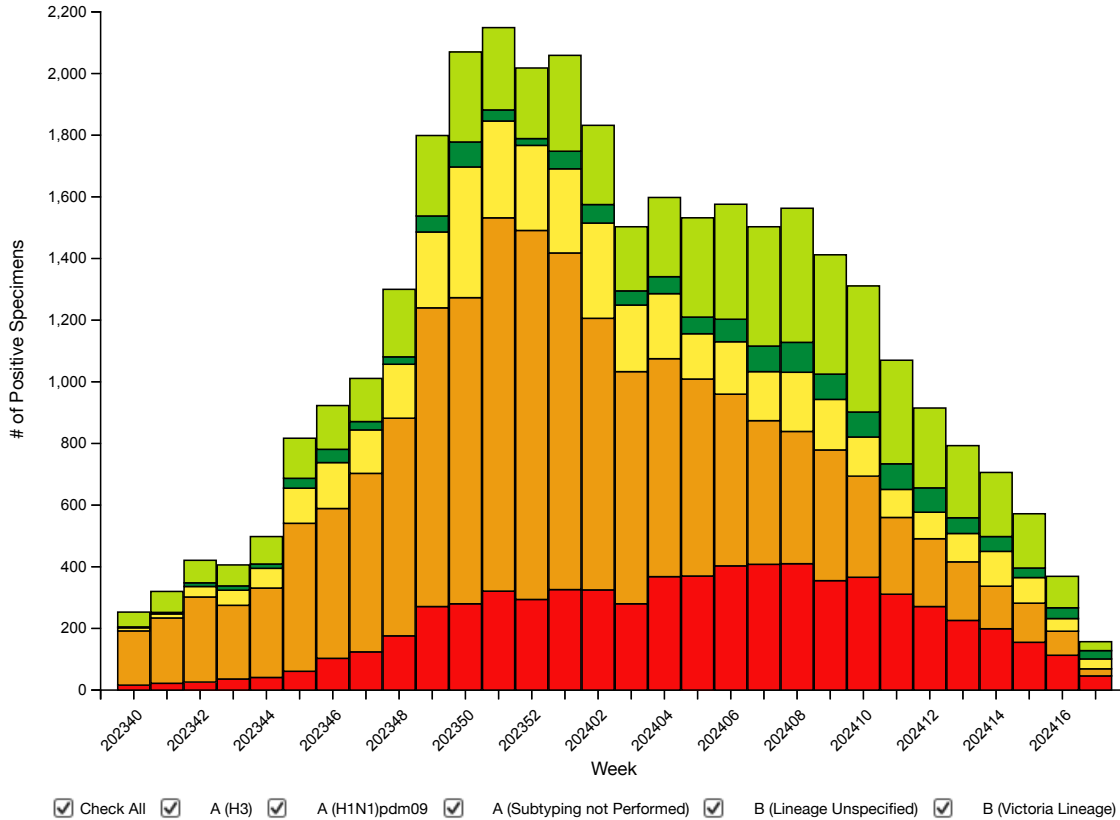Data presented through: 04/27/2024; Data as of: 05/02/2024

Additional novel influenza case surveillance information for current and past seasons:

Surveillance Methods (/flu/weekly/overview.htm#NovelASurveillance) | FluView Interactive: Case Characteristics (https://gis.cdc.gov/grasp/fluview/Novel_Influenza.html)

Public Health Laboratory Reporting

[Public health laboratories (https://www.cdc.gov/flu/weekly/overview.htm#VirologicSurveillance)](https://www.cdc.gov/flu/weekly/overview.htm#VirologicSurveillance) use CDC's diagnostic tools to detect both seasonal influenza viruses and novel influenza A viruses including influenza A(H5N1). These diagnostic tools are used at more than 100 public health laboratories in all 50 U.S. states. The results of tests performed by these public health laboratories nationwide are summarized below.

Season: 2023-24 ▾   **Surveillance Area:** National ▾

Influenza Positive Tests Reported to CDC by Public Health Laboratories, National Summary, 2023-24 Season, week ending Apr 27, 2024

☑ Check All ☑ A (H3) ☑ A (H1N1)pdm09 ☑ A (Subtyping not Performed) ☑ B (Lineage Unspecified) ☑ B (Victoria Lineage)

View Additional Graphs and Data (http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html) | Download Chart Data | Download PowerPoint Presentation

Data presented through: 04/27/2024; Data as of: 05/02/2024

Additional virologic surveillance information for current and past seasons:
[Surveillance Methods (/flu/weekly/overview.htm#LabSurveillance)](/flu/weekly/overview.htm#LabSurveillance) | FluView Interactive: [National, Regional, and State Data (http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html)](http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html) or [Age Data (https://gis.cdc.gov/grasp/fluview/flu_by_age_virus.html)](https://gis.cdc.gov/grasp/fluview/flu_by_age_virus.html)

# Systems Used to Monitor Influenza Activity

Influenza activity is monitored year-round using multiple systems. These systems are used for monitoring seasonal influenza and, because influenza viruses are constantly changing in small, and occasionally more significant ways, these systems are also useful for monitoring signals and trends from novel influenza virus infections. Some examples are provided below.

Monitoring for Changes in Tests Positive for Influenza in Clinical Settings

[Approximately 300 clinical laboratories](https://www.cdc.gov/flu/weekly/overview.htm#VirologicSurveillance) located throughout all 50 states, Puerto Rico, Guam, and the District of Columbia report the results of clinical testing for influenza through either the U.S. WHO Collaborating Laboratories System or the National Respiratory and Enteric Virus Surveillance System (NREVSS). The results of tests performed by clinical laboratories nationwide are summarized below. While these laboratories don't test specifically for influenza A(H5N1) virus, by tracking the percentage of specimens tested that are positive for influenza A viruses, we can monitor for unusual increases in influenza activity that may be an early sign of spread of novel influenza A viruses, including H5N1.

Season: 2023-24   **Surveillance Area:** National

Influenza Positive Tests Reported to CDC by Clinical Laboratories, National Summary, 2023-24 Season, week ending Apr 27, 2024
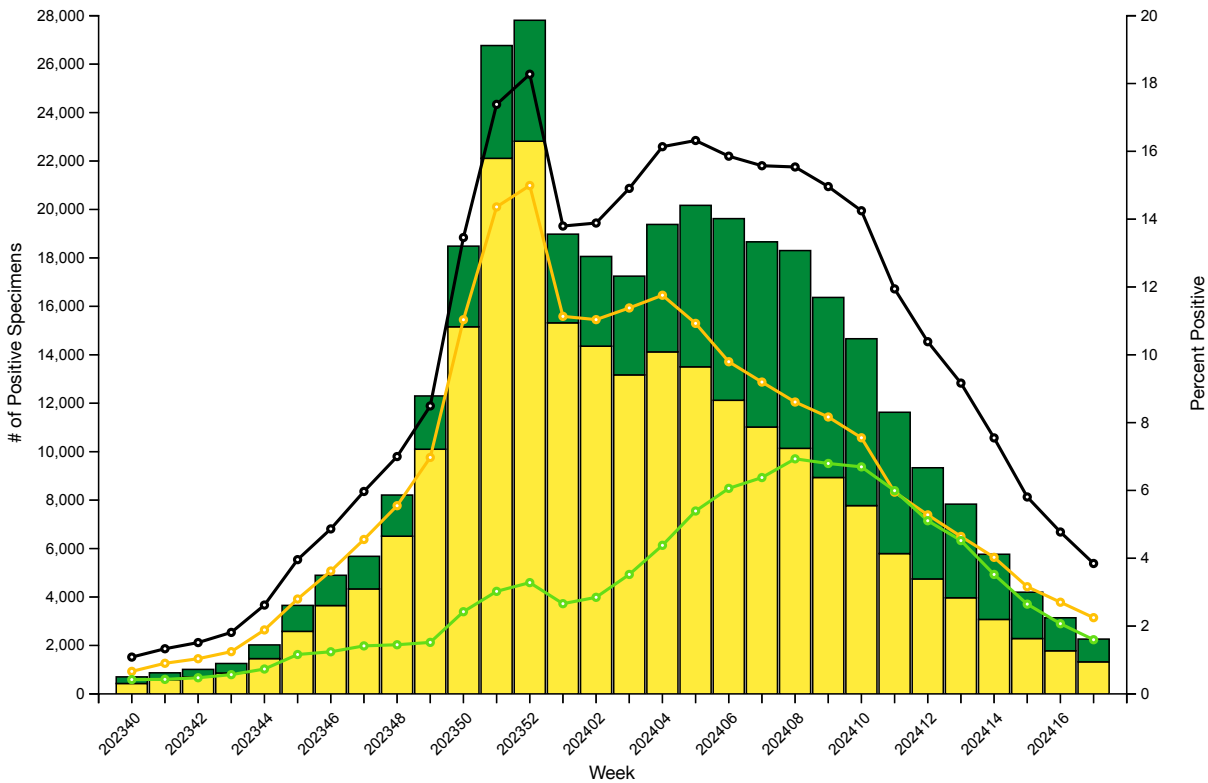
Check All | — Percent Positive | — Percent Positive for Influenza A | — Percent Positive for Influenza B | Total A | Total B

View Additional Graphs and Data (http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html) | Download Chart Data | Download PowerPoint Presentation

Data presented through: 04/27/2024; Data as of: 05/02/2024

Additional clinical laboratory surveillance information for current and past seasons:

[Surveillance Methods](/flu/weekly/overview.htm#LabSurveillance) | FluView Interactive: [National, Regional, and State Data](http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html)

Monitoring for Changes in Emergency Department Visits for Influenza

The National Syndromic Surveillance Program (NSSP) (https://www.cdc.gov/nssp/index.html) collects, analyzes, and shares electronic data received from multiple health care settings, including emergency departments (ED). CDC uses syndromic surveillance in partnership with participating state and local health departments to capture data quickly, monitor for unusual trends, improve situational awareness, and inform decision making.

Data from NSSP on the weekly percentage of total emergency department visits associated with influenza-related diagnoses are summarized below and are closely monitored by the NSSP team. **It's important to note that these visits are among persons with any influenza diagnosis and are not specific to avian influenza A(H5N1) viruses.** However, by tracking all influenza diagnoses, as well as symptoms potentially related to influenza virus infections, among patients in EDs, the chance of detecting unusual levels of influenza is improved, including in jurisdictions where A(H5N1) viruses have been identified in animals or in the one person.

State
United States

County

Reset

Selection:

Counties included in this area   More Info

Weekly percent of total emergency department visits associated with influenza

Percent of Emergency Department Visits

Week Ending

Data presented through: 04/27/2024; Data as of: 05/01/2024
Dataset on data.cdc.gov (https://data.cdc.gov/Public-Health-Surveillance/2023-Respiratory-Virus-Response-NSSP-Emergency-Dep/rdmq-nq56) | Link to Dataset (/wcms/vizdata/NCIRD_FLU/H5N1SubStateInfluenzaPercentEDVisits.json)

| Data Table | — |
| Week Ending | Influenza |

Additional emergency department surveillance information for current and past seasons:
Surveillance Methods (https://www.cdc.gov/nssp/overview.html) |Data.CDC.gov: NSSP Emergency Department Visit Trajectories (https://data.cdc.gov/Public-Health-Surveillance/2023-Respiratory-Virus-Response-NSSP-Emergency-Dep/rdmq-nq56/about_data)

Monitoring for Influenza in Wastewater

- Wastewater surveillance can complement other existing influenza virus surveillance systems to monitor influenza trends.
- Currently, CDC's National Wastewater Surveillance System (NWSS) (https://www.cdc.gov/nwss/about.html) has over 600 sites reporting influenza A virus data to CDC. Data are reported by a variety of NWSS partners. Public health jurisdictions have access to and can monitor NWSS influenza A virus data. Current wastewater testing detects but does not distinguish influenza A(H5N1) virus from other influenza A virus subtypes.
- CDC is monitoring wastewater data for any evidence of unusual levels of influenza and is working to develop and validate an influenza wastewater metric that will be publicly shared soon on CDC's website.
- This metric will compare the current influenza A virus levels for a specific sewer system to influenza A virus levels from the 2023-24 respiratory virus season.
- Data will be displayed for individual sewer systems rather than aggregating at the state or regional level to show increases that are limited to a single sewer system, which may be more relevant in the current situation.
- For sites with unusual influenza A virus activity detected in wastewater data, we will notify relevant partners and continue to actively investigate. Part of this work might include collaboration with partners to better understand factors contributing to these increases such as animal sources located in individual sewer systems (e.g., waste from a milk processing plant).

Explore Deeper

Weekly U.S. Influenza Surveillance Report (https://www.cdc.gov/flu/weekly/)

Novel A FluView Interactive (https://gis.cdc.gov/grasp/fluview/Novel_Influenza.html)

Respiratory Virus Data Channel Weekly Snapshot (https://www.cdc.gov/respiratory-viruses/data-research/dashboard/snapshot.html)