



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

[Influenza \(Flu\) Home \(/flu/index.htm\)](/flu/index.htm)

## FluView Summary ending on October 29, 2022

Updated November 4, 2022

**FLUVIEW**  
A Weekly Influenza Surveillance Report Prepared by the Influenza Division

**Note:** CDC is tracking the COVID-19 pandemic in a weekly publication called [COVID Data Tracker Weekly Review](https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/).  
(<https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/>)

### Key Updates for Week 43, ending October 29, 2022

**Early increases in seasonal influenza activity continue nationwide. The southeastern and south-central areas of the country are reporting the highest levels of activity followed by the Mid-Atlantic and the south-central West Coast regions.**

## Viruses

### Clinical Lab

**9.0%**  
positive for influenza  
this week

[\(/flu/weekly/index.htm#ClinicalLaboratories\)](/flu/weekly/index.htm#ClinicalLaboratories)

### Public Health Lab

The most frequently reported  
viruses this week were influenza

[A\(H3N2\) \(/flu/weekly/index.htm#PublicHealthLaboratories\)](/flu/weekly/index.htm#PublicHealthLaboratories)

### Virus Characterization

Genetic and antigenic  
characterization are summarized  
in this report.

[\(/flu/weekly/index.htm#VirusCharacterization\)](/flu/weekly/index.htm#VirusCharacterization)

## Illness

### Outpatient Respiratory Illness

**4.3%**

of visits to a health care provider are for respiratory illness this week  
**(above baseline)**

[\(/flu/weekly/index.htm#LINet\)](/flu/weekly/index.htm#LINet)

### Outpatient Respiratory Illness: Activity Map

This week, 4 jurisdictions experienced moderate activity and 19 jurisdictions experienced high or very high activity.

[\(/flu/weekly/index.htm#ORIAM\)](/flu/weekly/index.htm#ORIAM)

### Long-term Care Facilities

**0.8%**

of facilities reported  
≥ 1 influenza-positive test  
among residents this week.

[\(/flu/weekly/index.htm#LTFCF\)](/flu/weekly/index.htm#LTFCF)

## Severe Disease

### FluSurv-NET

**2.9 per 100,000**  
cumulative hospitalization rate

[\(/flu/weekly/index.htm#FluSurvNet\)](/flu/weekly/index.htm#FluSurvNet)

### HHS Protect Hospitalizations

**4,326**  
patients admitted to hospitals with influenza  
this week.

[\(/flu/weekly/index.htm#HHSProtect\)](/flu/weekly/index.htm#HHSProtect)

### NCHS Mortality

**9.1%**  
of deaths attributed to pneumonia, influenza, or  
COVID-19 this week **(above threshold)**

[\(/flu/weekly/index.htm#NCHSMortality\)](/flu/weekly/index.htm#NCHSMortality)

### Pediatric Deaths

**2**  
deaths were reported (1 occurred in 2021-22 season  
and 1 occurred in 2022-23 season).

[\(/flu/weekly/index.htm#PedMortality\)](/flu/weekly/index.htm#PedMortality)

*All data are preliminary and may change as more reports are received.*

*A description of the CDC influenza surveillance system, including methodology and detailed descriptions of each data component is available on the [surveillance methods \(/flu/weekly/overview.htm\)](#) page.*

*Additional information on the current and previous influenza seasons for each surveillance component are available on [FluView Interactive \(/flu/weekly/fluviewinteractive.htm\)](#).*

### Key Points

- Influenza activity continues to increase. Regions 4 (Southeast) and 6 (South-Central) are reporting the highest levels of flu activity, followed by regions 3 (Mid-Atlantic) and 9 (south-central West Coast).
- One human infection with a novel influenza A virus was reported by the New Mexico Department of Health.
- The second pediatric death of the 2022-23 influenza season was reported this week.
- CDC estimates that, so far this season, there have been at least 1,600,000 illnesses, 13,000 hospitalizations, and 730 deaths from flu.
- The cumulative hospitalization rate in the FluSurv-NET system is higher than the rate observed in week 43 during every previous season since 2010-2011.
- An annual flu vaccine is the best way to protect against flu. Vaccination helps prevent infection and can also prevent serious outcomes in people who get vaccinated but still get sick with flu.
- CDC recommends that everyone ages 6 months and older get a flu vaccine annually.
- There are also prescription flu antiviral drugs that can be used to treat flu illness; those need to be started as early as possible.

## U.S. Virologic Surveillance

<https://www.cdc.gov/flu/weekly/overview.htm#LabSurveillance>

Nationally, the percentage of specimens testing positive for influenza in clinical laboratories is increasing. Percent positivity increased  $\geq 0.5$  percentage points this week in all regions. The majority of viruses detected so far this season have been influenza A(H3N2), however the proportion of influenza A(H1N1) viruses is increasing nationally. In Region 5, the majority of viruses detected during week 43 were influenza A(H1N1). For regional and state level data and age group distribution, please visit [FluView Interactive \(https://gis.cdc.gov/grasp/fluview/fluportaldashboard.html\)](https://gis.cdc.gov/grasp/fluview/fluportaldashboard.html). Viruses known to be associated with recent live attenuated influenza vaccine (LAIV) receipt or found upon further testing to be a vaccine virus are not included, as they are not circulating influenza viruses.

## Clinical Laboratories

The results of tests performed by clinical laboratories nationwide are summarized below. Data from clinical laboratories (the percentage of specimens tested that are positive for influenza) are used to monitor whether influenza activity is increasing or decreasing.

	<b>Week 43</b>	<b>Data Cumulative since October 2, 2022 (Week 40)</b>
<b>No. of specimens tested</b>	83,742	327,191
<b>No. of positive specimens (%)</b>	7,504 (9.0%)	17,271 (5.3%)
<i>Positive specimens by type</i>		
<b>Influenza A</b>	7,422 (98.9%)	16,901 (97.9%)
<b>Influenza B</b>	82 (1.1%)	370 (2.1%)

(<http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>)

[View Chart Data \(/flu/weekly/weeklyarchives2022-2023/data/whoAllregt\\_cl43.html\)](/flu/weekly/weeklyarchives2022-2023/data/whoAllregt_cl43.html) | [View Full Screen \(/flu/weekly/WeeklyArchives2022-2023/WHONPHL43.html\)](/flu/weekly/WeeklyArchives2022-2023/WHONPHL43.html)

## Public Health Laboratories

The results of tests performed by public health laboratories nationwide are summarized below. Data from public health laboratories are used to monitor the proportion of circulating viruses that belong to each influenza subtype/lineage.

	<b>Week 43</b>	<b>Data Cumulative since October 2, 2022 (Week 40)</b>
<b>No. of specimens tested</b>	8,187	33,638
<b>No. of positive specimens</b>	467	1,699
<i>Positive specimens by type/subtype</i>		
<b>Influenza A</b>	466 (99.8%)	1,674 (98.5%)
<b>(H1N1)pdm09</b>	108 (33.8%)	289 (20.9%)
<b>H3N2</b>	212 (66.3%)	1,097 (79.1%)
<b>H3N2v</b>	0	0
<b>Subtyping not performed</b>	146	288
<b>Influenza B</b>	1 (0.2%)	25 (1.5%)
<b>Yamagata lineage</b>	0	1 (6.3%)
<b>Victoria lineage</b>	0	15 (93.8%)
<b>Lineage not performed</b>	1	9

(<http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>)

[View Chart Data \(/flu/weekly/weeklyarchives2022-2023/data/whoAllregt\\_phl43.html\)](/flu/weekly/weeklyarchives2022-2023/data/whoAllregt_phl43.html) | [View Full Screen \(/flu/weekly/weeklyarchives2022-2023/WhoPHL43.html\)](/flu/weekly/weeklyarchives2022-2023/WhoPHL43.html)

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**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>) 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)

## Public Health Novel Influenza A Virus

A human infection with a novel influenza A virus was reported by the New Mexico Department of Health. The patient was infected with an influenza A(H3N2) variant (A(H3N2)v) virus. The illness occurred during the week ending October 15, 2022 (week 41). The patient is <18 years of age and is recovering from their illness. An investigation by local public health officials found that the patient had swine exposure prior to their illness onset. No person-to-person transmission of A(H3N2)v virus associated with this patient has been identified. The investigation is ongoing.

A total of ten human infections with variant novel influenza A viruses have been reported in the United States in 2022, including five H3N2v (Michigan, New Mexico, West Virginia (3)) and five H1N2v (Georgia, Michigan, Ohio, Oregon, Wisconsin) viruses. When an influenza virus that normally circulates in swine (but not people) is detected in a person, it is called a “variant” influenza virus. Most human infections with variant influenza viruses occur following exposure to swine, but human-to-human transmission can occur. It is important to note that in most cases, variant influenza viruses have not shown the ability to spread easily and sustainably from person to person.

Early identification and investigation of human infections with novel influenza A viruses are critical so that the risk of infection can be understood, and appropriate public health measures can be taken.

Additional information on influenza in swine, variant influenza virus infection in humans, and guidance to interact safely with swine can be found at [www.cdc.gov/flu/swineflu/index.htm](http://www.cdc.gov/flu/swineflu/index.htm) (<http://www.cdc.gov/flu/swineflu/index.htm>).

### Additional virologic surveillance information for current and past seasons:

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

## Influenza Virus Characterization

[\(/flu/weekly/overview.htm#VirusCharacterization\)](/flu/weekly/overview.htm#VirusCharacterization)

CDC performs [genetic \(https://www.cdc.gov/flu/about/professionals/genetic-characterization.htm\)](https://www.cdc.gov/flu/about/professionals/genetic-characterization.htm) and [antigenic \(https://www.cdc.gov/flu/about/professionals/antigenic.htm\)](https://www.cdc.gov/flu/about/professionals/antigenic.htm) characterization of U.S. viruses submitted from state and local public health laboratories according to the Right Size Roadmap submission guidance. These data are used to compare how similar the currently circulating influenza viruses are to the reference viruses representing viruses contained in the current influenza vaccines. The data are also used to monitor evolutionary changes that continually occur in influenza viruses circulating in humans. CDC also tests susceptibility of circulating influenza viruses to antiviral medications including the neuraminidase inhibitors (oseltamivir, zanamivir, and peramivir) and the PA endonuclease inhibitor baloxavir.

CDC genetically characterized 460 influenza viruses collected since May 1, 2022.

	Genetic Characterization				
	Total No. of Subtype/Lineage	HA	Number (% of subtype/lineage)	HA	Number (% of subtype/lineage)

<b>Virus Subtype or Lineage</b>	<b>Tested</b>	<b>Clade</b>	<b>tested)</b>	<b>Subclade</b>	<b>tested)</b>
<b>A/H1</b>	40				
		6B.1A	40 (100%)	5a.1	5 (12.5%)
				5a.2	35 (87.5%)
<b>A/H3</b>	418				
		3C.2a1b	418 (100%)	1a	0
				1b	0
				2a	0
				2a.1	0
				2a.2	418 (100%)
		3C.3a	0	3a	0
<b>B/Victoria</b>	2				
		V1A	2 (100%)	V1A	0
				V1A.1	0
				V1A.3	0
				V1A.3a	0
				V1A.3a.1	0
				V1A.3a.2	2 (100%)
<b>B/Yamagata</b>	0				
		Y3	0		

CDC antigenically characterizes (<https://www.cdc.gov/flu/about/professionals/antigenic.htm>) influenza viruses by hemagglutination inhibition (HI) (<https://www.cdc.gov/flu/about/professionals/antigenic.htm>) (H1N1pdm09, B/Victoria, and B/Yamagata viruses) or neutralization-based HINT (<https://archive.cdc.gov/#/details?url=https://www.cdc.gov/flu/spotlights/2018-2019/new-lab-method-test-flu.html>) (H3N2 viruses) using antisera that ferrets make after being infected with reference viruses representing the 2022-2023 Northern Hemisphere recommended egg-based and cell- or recombinant-based vaccine viruses. Antigenic differences



between viruses are determined by comparing how well the antibodies made against the vaccine reference viruses recognize the circulating viruses that have been grown in cell culture. Ferret antisera are useful because antibodies raised against a particular virus can often recognize small changes in the surface proteins of other viruses. In HI assays, viruses with similar antigenic properties have antibody titer differences of less than or equal to 4-fold when compared to the reference (vaccine) virus. In HINT, viruses with similar antigenic properties have antibody neutralization titer differences of less than 8-fold. Viruses selected for antigenic characterization are a subset representing the genetic changes in the surface proteins seen in genetically characterized viruses.

## Influenza A Viruses

- **A (H1N1)pdm09:** Twenty-six A(H1N1)pdm09 viruses were antigenically characterized by HI, and 24 (92%) were well recognized (reacting at titers that were within 4-fold of the homologous virus titer) by ferret antisera to cell-grown A/Wisconsin/588/2019-like reference viruses representing the A(H1N1)pdm09 component for the cell- and recombinant-based influenza vaccines and 24 (92%) were well recognized by ferret antisera to egg-grown A/Victoria/2570/2019-like reference viruses representing the A(H1N1)pdm09 component for the egg-based influenza vaccines.
- **A (H3N2):** Forty-two A(H3N2) viruses were antigenically characterized by HINT; all were well-recognized (reacting at titers that were within 8-fold of the homologous virus titer) by ferret antisera to cell-grown A/Darwin/6/2021-like reference viruses representing the A(H3N2) component for the cell- and recombinant-based influenza vaccines and 40 (95%) were well-recognized by ferret antisera to egg-grown A/Darwin/9/2021-like reference viruses representing the A(H3N2) component for egg-based influenza vaccines.

## Influenza B Viruses

- **B/Victoria:** One influenza B/Victoria-lineage virus was antigenically characterized by HI; it was well recognized (reacting at titers that were within 4-fold of the homologous virus titer) by ferret antisera to cell-grown B/Austria/1359417/2021-like reference viruses representing the B/Victoria component for the cell- and recombinant-based influenza vaccines and by ferret antisera to egg-grown B/Austria/1359417/2021-like reference viruses representing the B/Victoria component for the egg-based influenza vaccines.
- **B/Yamagata:** No influenza B/Yamagata-lineage viruses were available for antigenic characterization.

Virus antiviral susceptibility data will be reported later this season when a sufficient number of specimens have been tested.

## Outpatient Respiratory Illness Surveillance

(<https://www.cdc.gov/flu/weekly/overview.htm#ILINet>)

The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) monitors outpatient visits for respiratory illness referred to as influenza-like illness [ILI (fever plus cough or sore throat)], not laboratory-confirmed influenza, and will therefore capture respiratory illness visits due to infection with any pathogen that can present with similar symptoms, including influenza, SARS-CoV-2, and RSV. Due to the COVID-19 pandemic, health care-seeking behaviors have changed, and people may be accessing the health care system in alternative settings not captured as a part of ILINet or at a different point in their illness than they might have before the pandemic. Therefore, it is important to evaluate syndromic surveillance data, including that from ILINet, in the context of other sources of surveillance data to obtain a complete and accurate picture of influenza, SARS-CoV-2, and other respiratory virus activity. CDC is tracking the COVID-19 pandemic in a

weekly publication called [COVID Data Tracker Weekly Review](https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html) (<https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html>). Information about other respiratory virus activity can be found on [CDC's National Respiratory and Enteric Virus Surveillance System \(NREVSS\) website](https://www.cdc.gov/surveillance/nrevss/index.html) (<https://www.cdc.gov/surveillance/nrevss/index.html>).

## Outpatient Respiratory Illness Visits

Nationwide during week 43, 4.3% of patient visits reported through ILINet were due to respiratory illness that included fever plus a cough or sore throat, also referred to as ILI. This is an increase compared to week 42 and is above the national baseline of 2.5%. Regions 1, 2, 3, 4, 5, 6, 7, and 9 are above their region-specific baselines. The remaining two regions are below their region-specific baselines. Multiple respiratory viruses are co-circulating, and the relative contribution of influenza virus infection to ILI varies by location.

<http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>

\* Effective October 3, 2021 (week 40), the ILI definition (fever plus cough or sore throat) no longer includes "without a known cause other than influenza."

[View Chart Data \(current season only\) \(/flu/weekly/weeklyarchives2022-2023/data/senAllregt43.html\)](/flu/weekly/weeklyarchives2022-2023/data/senAllregt43.html) | [View Full Screen \(/flu/weekly/weeklyarchives2022-2023/ILI43.html\)](/flu/weekly/weeklyarchives2022-2023/ILI43.html)

## Outpatient Respiratory Illness Visits by Age Group

More than 70% of ILINet participants provide both the number of patient visits for respiratory illness and the total number of patient visits for the week broken out by age group. Data from this subset of providers are used to calculate the percentages of patient visits for respiratory illness by age group.

The percentage of visits for respiratory illness reported in ILINet is increasing in all age groups (0-4 years, 5-24 years, 25-49 years, 50-64 years, and 65+ years).

<http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>

[View Chart Data \(/flu/weekly/weeklyarchives2022-2023/data/iliage43.html\)](/flu/weekly/weeklyarchives2022-2023/data/iliage43.html) | [View Full Screen \(/flu/weekly/weeklyarchives2022-2023/ILIAge41.html\)](/flu/weekly/weeklyarchives2022-2023/ILIAge41.html)

## Outpatient Respiratory Illness Activity Map

Data collected in ILINet are used to produce a measure of ILI activity\*

([https://www.cdc.gov/flu/weekly/overview.htm#anchor\\_1633697504110](https://www.cdc.gov/flu/weekly/overview.htm#anchor_1633697504110)) by state/jurisdiction and Core Based Statistical Areas (CBSA).

Activity Level	Number of Jurisdictions		Number of CBSAs	
	Week 43 (Week ending Oct. 29, 2022)	Week 42 (Week ending Oct. 22, 2022)	Week 43 (Week ending Oct. 29, 2022)	Week 42 (Week ending Oct. 22, 2022)
<b>Very High</b>	11	1	42	9
<b>High</b>	8	4	97	24
<b>Moderate</b>	4	4	82	38
<b>Low</b>	11	12	131	109
<b>Minimal</b>	21	34	332	505
<b>Insufficient Data</b>	0	0	245	244

\*Data collected in ILINet may disproportionately represent certain populations within a jurisdiction or CBSA, and therefore, may not accurately depict the full picture of influenza activity for the entire jurisdiction or CBSA. Differences in the data presented here by CDC and independently by some health departments likely represent differing levels of data completeness with data presented by the health department likely being the more complete.

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**Additional information about medically attended visits for ILI for current and past seasons:**

Surveillance Methods (</flu/weekly/overview.htm#ILINet>) | FluView Interactive: National, Regional, and State Data (<http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>) or ILI Activity Map (<https://gis.cdc.gov/grasp/fluview/main.html>)

## Long-term Care Facility (LTCF) Surveillance

(<https://www.cdc.gov/flu/weekly/overview.htm#LongTermCare>)

LTCFs (e.g., nursing homes/skilled nursing, long-term care for the developmentally disabled, and assisted living facilities) from all 50 states and U.S. territories report data on influenza virus infections among residents through the [National Healthcare Safety Network \(NHSN\) Long-term Care Facility Component](#) (<https://www.cdc.gov/nhsn/ltc/index.html>). During week 43, 117 (0.8%) of 14,221 reporting LTCFs reported at least one influenza positive test among their residents.

(</flu/weekly/weeklyarchives2022-2023/LTCF43.html>) [View Chart Data](#)  (</flu/weekly/weeklyarchives2022-2023/data/LTCFData43.csv>) | [View Full Screen](#) (</flu/weekly/weeklyarchives2022-2023/LTCF43.html>)

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### **Additional information about long-term care facility surveillance:**

[Surveillance Methods](#) (</flu/weekly/overview.htm#LongTermCare>) | [Additional Data](#)  (<https://data.cms.gov/covid-19/covid-19-nursing-home-data>)

## Hospitalization Surveillance

## HOSPITALIZATION SURVEILLANCE

(<http://www.cdc.gov/flu/weekly/overview.htm#HospitalizationSurv>)

### FluSurv-NET

The Influenza Hospitalization Surveillance Network (FluSurv-NET) conducts population-based surveillance for laboratory-confirmed influenza-related hospitalizations in select counties in 13 states and represents approximately 9% of the U.S. population. FluSurv-NET hospitalization data are preliminary. As data are received each week, prior case counts and rates are updated accordingly.

A total of 842 laboratory-confirmed influenza-associated hospitalizations were reported by FluSurv-NET sites between October 1, 2022, and October 29, 2022; 95.0% were associated with influenza A virus, 3.6% were associated with influenza B virus, 0.5% with influenza A virus and influenza B virus co-infection, and 1.0% with influenza virus for which the type was not determined. Among 115 hospitalizations with influenza A subtype information, 26.1% were A(H1N1)pdm09 virus and 72.2% were A(H3N2).

The overall cumulative hospitalization rate per 100,000 population was 2.9. This cumulative hospitalization rate is higher than the cumulative in-season hospitalization rate observed in week 43 during previous seasons going back to 2010-2011, which ranged from 0 to 0.5. The highest hospitalization rates per 100,000 population were among adults aged  $\geq 65$  years (6.3), followed by children aged 0-4 years (5.5), adults aged 50-64 (2.8), children aged 5-17 years (2.6), and adults aged 18-49 years (1.5).

Cumulative hospitalization rates for each age group were higher than cumulative in-season hospitalization rates previously observed during week 43; since 2010-11, in-season rates ranged from 0 to 0.9 among children 0-4 years, 0 to 0.3 among children 5-17 years, 0 to 0.2 among adults 18-49 years, 0 to 0.5 among adults 50-64 years, and 0.1 to 1.4 among adults  $\geq 65$  years.

(<https://gis.cdc.gov/grasp/fluview/FluHospRates.html>)

[View Full Screen \(/flu/weekly/weeklyarchives2022-2023/EIPRates43.html\)](/flu/weekly/weeklyarchives2022-2023/EIPRates43.html)

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**Additional FluSurv-NET hospitalization surveillance information for current and past seasons and additional age groups:**

Surveillance Methods (<https://www.cdc.gov/flu/weekly/overview.htm#FluSurvNet>) | FluView Interactive: Rates by Age, Sex, and Race/Ethnicity (<http://gis.cdc.gov/GRASP/Fluview/FluHospRates.html>) or Data on Patient Characteristics (<http://gis.cdc.gov/grasp/fluview/FluHospChars.html>)



## HHS Protect Hospitalization Surveillance

Hospitals report to HHS Protect the number of patients admitted with laboratory-confirmed influenza. During week 43, 4,326 patients with laboratory-confirmed influenza were admitted to a hospital.

</flu/weekly/weeklyarchives2022-2023/Protect43.html> View Chart Data  </flu/weekly/weeklyarchives2022-2023/data/ProtectData43.csv> | View Full Screen </flu/weekly/weeklyarchives2022-2023/Protect43.html>

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### **Additional HHS Protect hospitalization surveillance information:**

[Surveillance Methods \(https://www.cdc.gov/flu/weekly/overview.htm#HHSProtect\)](https://www.cdc.gov/flu/weekly/overview.htm#HHSProtect) | [Additional Data !\[\]\(e3f8612927870f2e0f9f5989e6dd3064\_img.jpg\)](#)

<https://healthdata.gov/Hospital/COVID-19-Reported-Patient-Impact-and-Hospital-Capa/anag-cw7u>


## Mortality Surveillance

<https://www.cdc.gov/flu/weekly/overview.htm#MortalitySurveillance>

## National Center for Health Statistics (NCHS) Mortality Surveillance

Based on NCHS mortality surveillance data available on November 3, 2022, 9.1% of the deaths that occurred during the week ending October 29, 2022 (week 43), were due to pneumonia, influenza, and/or COVID-19 (PIC). This percentage is above the epidemic threshold of 6.0% for this week. Among the 2,153 PIC deaths reported for this week, 988 had COVID-19 listed as an underlying or contributing cause of death on the death certificate, and 29 listed influenza, indicating that current PIC mortality is due primarily to COVID-19 and not influenza. The data presented are preliminary and may change as more data are received and processed.

<http://gis.cdc.gov/GRASP/Fluview/mortality.html>

[View Chart Data](#)  (</flu/weekly/weeklyarchives2022-2023/data/NCHSData43.csv>) | [View Full Screen](#) (</flu/weekly/weeklyarchives2022-2023/NCHS43.html>)

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### **Additional pneumonia, influenza and COVID-19 mortality surveillance information for current and past seasons:**

[Surveillance Methods](https://www.cdc.gov/flu/weekly/overview.htm#NCHSMortality) (<https://www.cdc.gov/flu/weekly/overview.htm#NCHSMortality>) | [FluView Interactive](#) (<https://gis.cdc.gov/grasp/fluview/mortality.html>)

## Influenza-Associated Pediatric Mortality

Two influenza-associated pediatric deaths were reported to CDC during week 43. Both deaths were associated with influenza A(H3) viruses.

One death occurred during week 43 (the week ending October 29, 2022). This was the second influenza-associated pediatric death occurring during the 2022-2023 season that has been reported to CDC.

The other death occurred during week 37 (the week ending September 17, 2022), which was during the 2021-2022 season. The total number of pediatric deaths that occurred in the 2021-2022 season is 44.

<http://gis.cdc.gov/GRASP/Fluview/PedFluDeath.html>

[View Full Screen \(/flu/weekly/weeklyarchives2022-2023/PedFlu43.html\)](/flu/weekly/weeklyarchives2022-2023/PedFlu43.html)

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### **Additional pediatric mortality surveillance information for current and past seasons:**

Surveillance Methods (<https://www.cdc.gov/flu/weekly/overview.htm#PediatricMortality>) | [FluView Interactive](#)

(<https://gis.cdc.gov/GRASP/Fluview/PedFluDeath.html>)

# Additional National and International Influenza Surveillance Information

**FluView Interactive:** FluView includes enhanced web-based interactive applications that can provide dynamic visuals of the influenza data collected and analyzed by CDC. These [FluView Interactive applications](http://www.cdc.gov/flu/weekly/fluviewinteractive.htm) (<http://www.cdc.gov/flu/weekly/fluviewinteractive.htm>) allow people to create customized, visual interpretations of influenza data, as well as make comparisons across flu seasons, regions, age groups and a variety of other demographics.

**National Institute for Occupational Safety and Health:** Monthly surveillance data on the prevalence of health-related workplace absenteeism among full-time workers in the United States are [available from NIOSH](https://www.cdc.gov/niosh/topics/absences/default.html) (<https://www.cdc.gov/niosh/topics/absences/default.html>).

**U.S. State and local influenza surveillance:** Select a jurisdiction below to access the latest local influenza information.

Alabama (<http://adph.org/influenza/>)

Alaska

(<http://dhss.alaska.gov/dph/Epi/id/Pages/influenza/fluinfo>)

Colorado (<https://www.colorado.gov/pacific/cdphe/influenza>)

Connecticut (<https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Influenza-Surveillance-and-Statistics>)

Georgia (<https://dph.georgia.gov/epidemiology/influenza/flu-activity-georgia>)

Hawaii

(<http://health.hawaii.gov/docd/resources/reports/influenza-reports/>)

Iowa (<https://idph.iowa.gov/influenza>)

Kansas (<http://www.kdheks.gov/flu/surveillance.htm>)

Maryland (<https://phpa.health.maryland.gov/influenza/fluwatch/>)

Massachusetts (<https://www.mass.gov/influenza>)

Missouri

(<http://health.mo.gov/living/healthcondiseases/communicable/influenza/reports.php>)

Montana

(<https://dphhs.mt.gov/publichealth/cdepi/diseases/influenza>)

New Jersey (<http://www.nj.gov/health/cd/topics/flu.shtml>)

New Mexico (<https://nmhealth.org/about/erd/ideb/isp/>)

Ohio (<http://www.flu.ohio.gov>)

Oklahoma (<https://oklahoma.gov/health/health-education/acute-disease-service/disease-information/influenza-home-page.html>)

South Carolina

(<http://www.scdhec.gov/Health/DiseasesandConditions/InfectiousDiseases/Flu/FluData/>)

South Dakota

(<https://doh.sd.gov/diseases/infectious/flu/surveillance.asp>)

Vermont (<http://www.healthvermont.gov/immunizations-infectious-disease/influenza/flu-activity-and-surveillance>)

Virginia (<http://www.vdh.virginia.gov/epidemiology/influenza-in-virginia/influenza-surveillance/>)

Wyoming (<https://health.wyo.gov/publichealth/infectious-disease-epidemiology>)

New York City (<http://www1.nyc.gov/site/doh/provider>)

[unit/disease/influenza/](#)[topics/flu-alerts.page](#)**World Health Organization:**

Additional influenza surveillance information from participating WHO member nations is available through [FluNet](#) (<https://www.who.int/tools/flunet>) and the [Global Epidemiology Reports](#). (<https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-surveillance-outputs>)

**WHO Collaborating Centers for Influenza:**

[Australia](#) ([http://www.influenzacentre.org/Surveillance\\_Samples\\_Received.html](http://www.influenzacentre.org/Surveillance_Samples_Received.html)), [China](#) (<http://www.chinaivdc.cn/cnic/>), [Japan](#) (<http://idsc.nih.go.jp/index.html>), the [United Kingdom](#) (<https://www.crick.ac.uk/research/worldwide-influenza-centre>), and the [United States](#) (<http://www.cdc.gov/flu/>) (CDC in Atlanta, Georgia)

**Europe:**

The most up-to-date influenza information from Europe is available from [WHO/Europe](#) and the [European Centre for Disease Prevention and Control](#) (<http://www.flunewseurope.org/>).

**Public Health Agency of Canada:**

The most up-to-date influenza information from Canada is available in [Canada's weekly FluWatch report](#) (<http://www.phac-aspc.gc.ca/fluwatch/>).

**Public Health England:**

The most up-to-date influenza information from the United Kingdom is available from [Public Health England](#) (<http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/SeasonalInfluenza/>).

**Any links provided to non-Federal organizations are provided solely as a service to our users. These links do not constitute an endorsement of these organizations or their programs by CDC or the Federal Government, and none should be inferred. CDC is not responsible for the content of the individual organization web pages found at these links.**

A description of the CDC influenza surveillance system, including methodology and detailed descriptions of each data component is available on the [surveillance methods](#) (<http://www.cdc.gov/flu/weekly/overview.htm>) page.

Last Reviewed: November 4, 2022, 11:00 AM

Source: Centers for Disease Control and Prevention (<https://www.cdc.gov/>), National Center for Immunization and Respiratory Diseases (NCIRD) (<https://www.cdc.gov/ncird/index.html>)