

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



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Weekly U.S. Influenza Surveillance Report

Updated November 28, 2022



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/).

[\(https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/\)](https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/)

Key Updates for Week 46, ending November 19, 2022

Seasonal influenza activity is elevated across the country.

Viruses

Clinical Lab

18.2%
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

6.0%
of visits to a health care provider are for respiratory illness this week
(above baseline)

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

Outpatient Respiratory Illness: Activity Map

This week, 8 jurisdictions experienced moderate activity and 35 jurisdictions experienced high or very high activity.

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

Long-term Care Facilities

1.6%

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

Severe Disease

FluSurv-NET

11.3 per 100,000

cumulative hospitalization rate

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

HHS Protect Hospitalizations

11,269

patients admitted to hospitals with influenza
this week.

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

NCHS Mortality

9.4%

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

5

deaths were reported this week for a total of 12 so far
this 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 \(/flu/weekly/overview.htm\)](/flu/weekly/overview.htm) page.

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

Key Points

- Seasonal influenza activity is elevated across the country.
- Of influenza A viruses detected and subtyped this season, 78% have been influenza A(H3N2) and 22% have been influenza A(H1N1).
- Five influenza-associated pediatric deaths were reported this week, for a total of 12 pediatric flu deaths reported so far this season.
- CDC estimates that, so far this season, there have been at least 6.2 million illnesses, 53,000 hospitalizations, and 2,900 deaths from flu.
- The cumulative hospitalization rate in the FluSurv-NET system is higher than the rate observed in week 46 during every previous season since 2010-2011.
- The majority of influenza viruses tested are in the same genetic subclade as and antigenically similar to the influenza viruses included in this season's influenza vaccine.
- 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. Now is a good time to get vaccinated if you haven't already.
- 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

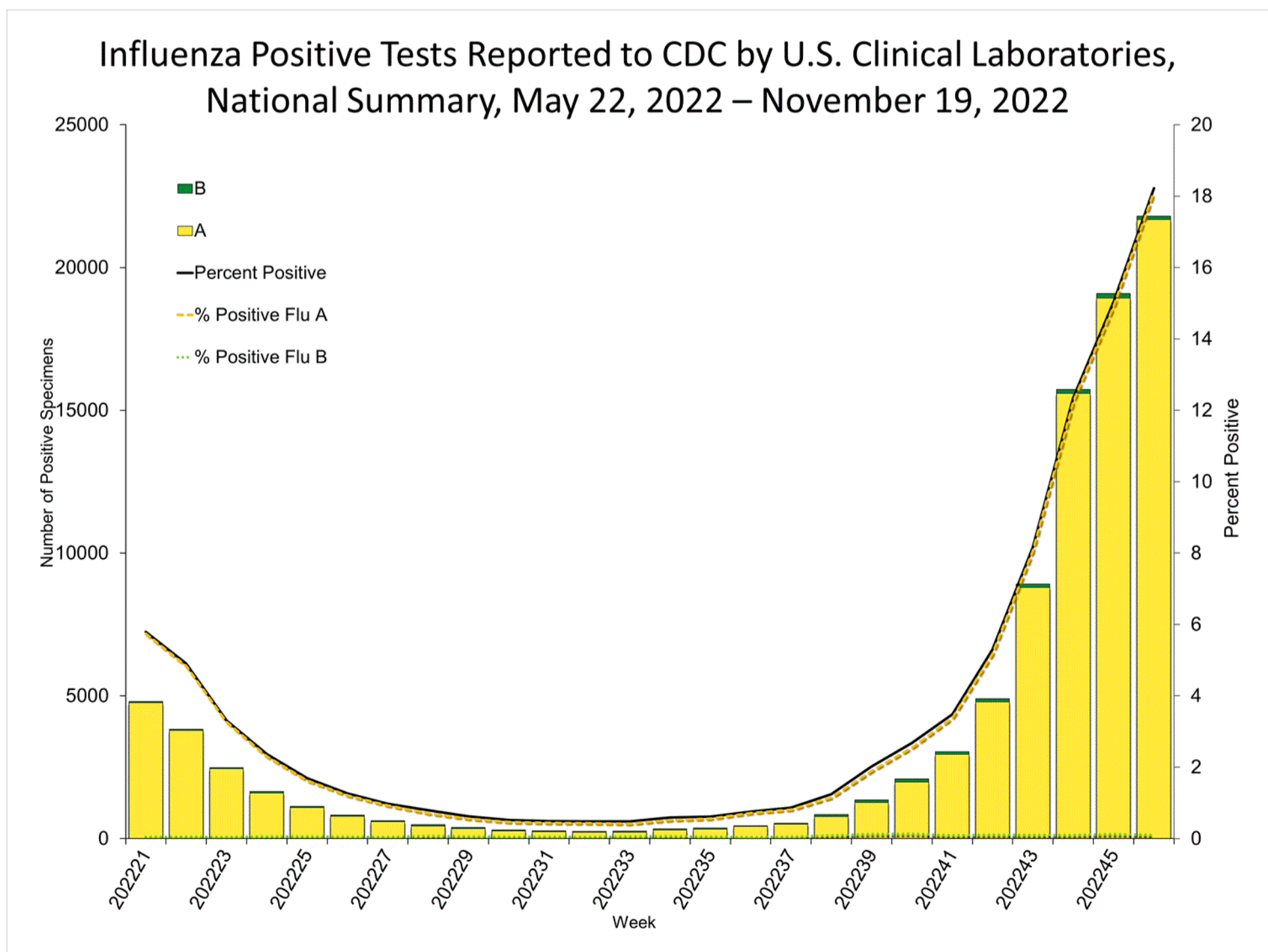
<https://www.cdc.gov/flu/weekly/overview.htm#LabSurveillance>

Nationally, the percentage of specimens testing positive for influenza in clinical laboratories is increasing. Percent positivity increased ≥ 0.5 percentage points this week in regions 1, 2, 3, 5, 7, 8, 9, and 10, remained stable in Region 6, and declined in Region 4. 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.

	Week 46	Data Cumulative since October 2, 2022 (Week 40)
No. of specimens tested	119,615	740,644
No. of positive specimens (%)	21,796 (18.2%)	75,545 (10.2%)
<i>Positive specimens by type</i>		
Influenza A	21,677 (99.5%)	74,728 (98.9%)
Influenza B	119 (0.5%)	817 (1.1%)



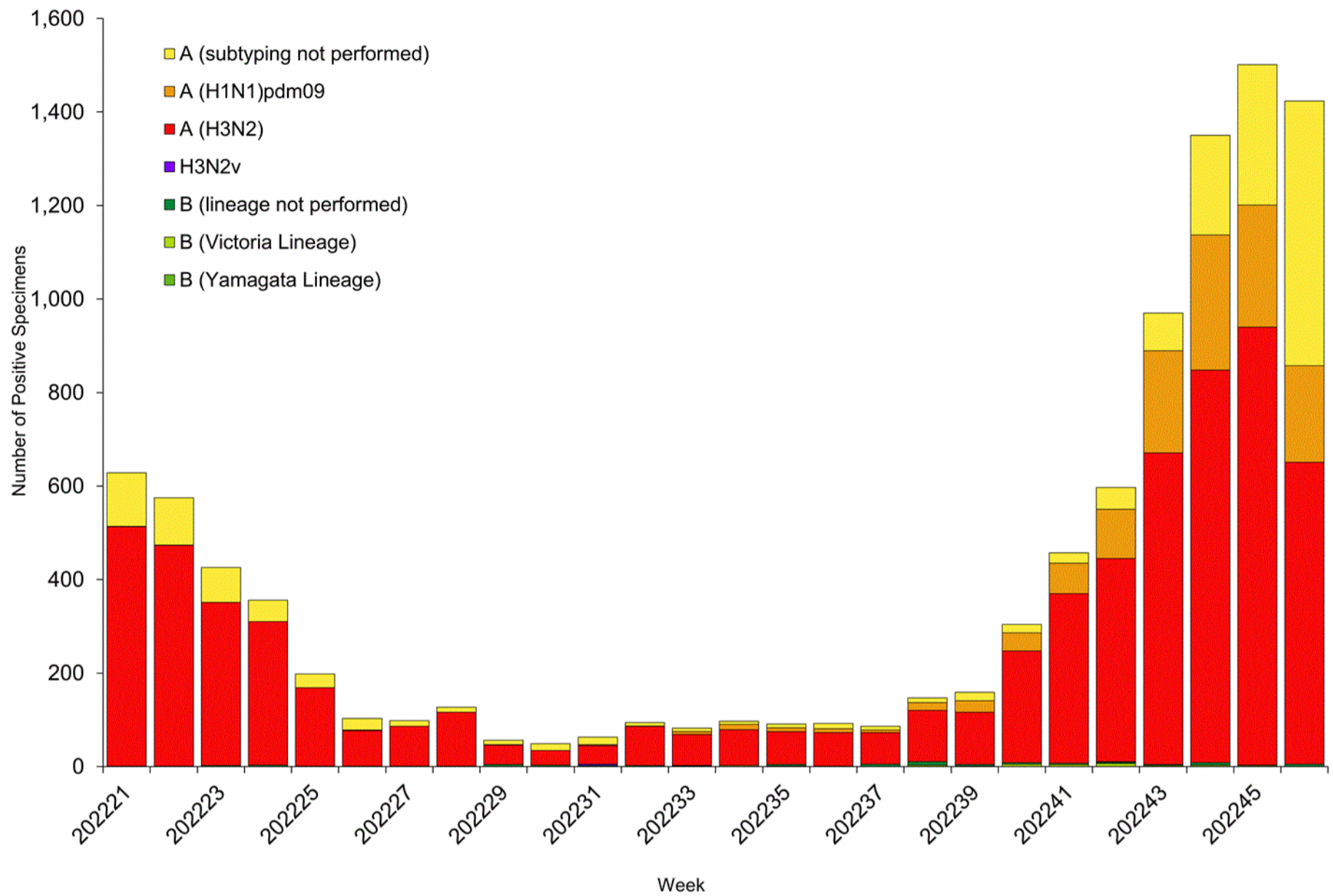
(<http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>)

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.

	Week 46	Data Cumulative since October 2, 2022 (Week 40)
No. of specimens tested	9,673	64,933
No. of positive specimens	1,423	6,602
<i>Positive specimens by type/subtype</i>		
Influenza A	1,418 (99.6%)	6,558 (99.3%)
(H1N1)pdm09	206 (24.2%)	1,183 (22.3%)
H3N2	646 (75.8%)	4,127 (77.7%)
H3N2v	0	1 (<0.1%)
Subtyping not performed	566	1,247
Influenza B	5 (0.4%)	44 (0.7%)
Yamagata lineage	0	0
Victoria lineage	0	22 (100%)
Lineage not performed	5	22

Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, May 22, 2022 – November 19, 2022



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

[View Chart Data \(/flu/weekly/weeklyarchives2022-2023/data/whoAllregt_phl46.html\)](/flu/weekly/weeklyarchives2022-2023/data/whoAllregt_phl46.html) | [View Full Screen \(/flu/weekly/weeklyarchives2022-2023/WhoPHL46.html\)](/flu/weekly/weeklyarchives2022-2023/WhoPHL46.html)

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)

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 genetically characterized 589 influenza viruses collected since May 1, 2022.

Virus Subtype or Lineage	Genetic Characterization				
	Total No. of Subtype/Lineage Tested	HA Clade	Number (% of subtype/lineage tested)	HA Subclade	Number (% of subtype/lineage tested)

Virus Subtype or Lineage	Genetic Characterization				
	Total No. of Subtype/Lineage Tested	HA Clade	Number (% of subtype/lineage tested)	HA Subclade	Number (% of subtype/lineage tested)
A/H1	74				
		6B.1A	74 (100%)	5a.1	5 (6.8%)
				5a.2	69 (93.2%)
A/H3	510				
		3C.2a1b	510 (100%)	1a	0
				1b	0
				2a	0
				2a.1	0
				2a.2	510 (100%)
		3C.3a	0	3a	0
B/Victoria	5				
		V1A	5 (100%)	V1A	0
				V1A.1	0
				V1A.3	0
				V1A.3a	0
				V1A.3a.1	0
				V1A.3a.2	5 (100%)
B/Yamagata	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://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:** Thirty-three A(H1N1)pdm09 viruses were antigenically characterized by HI, and 31 (94%) 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 31 (94%) 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):** Fifty 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 48 (96%) 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.

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

Outpatient Respiratory Illness Surveillance

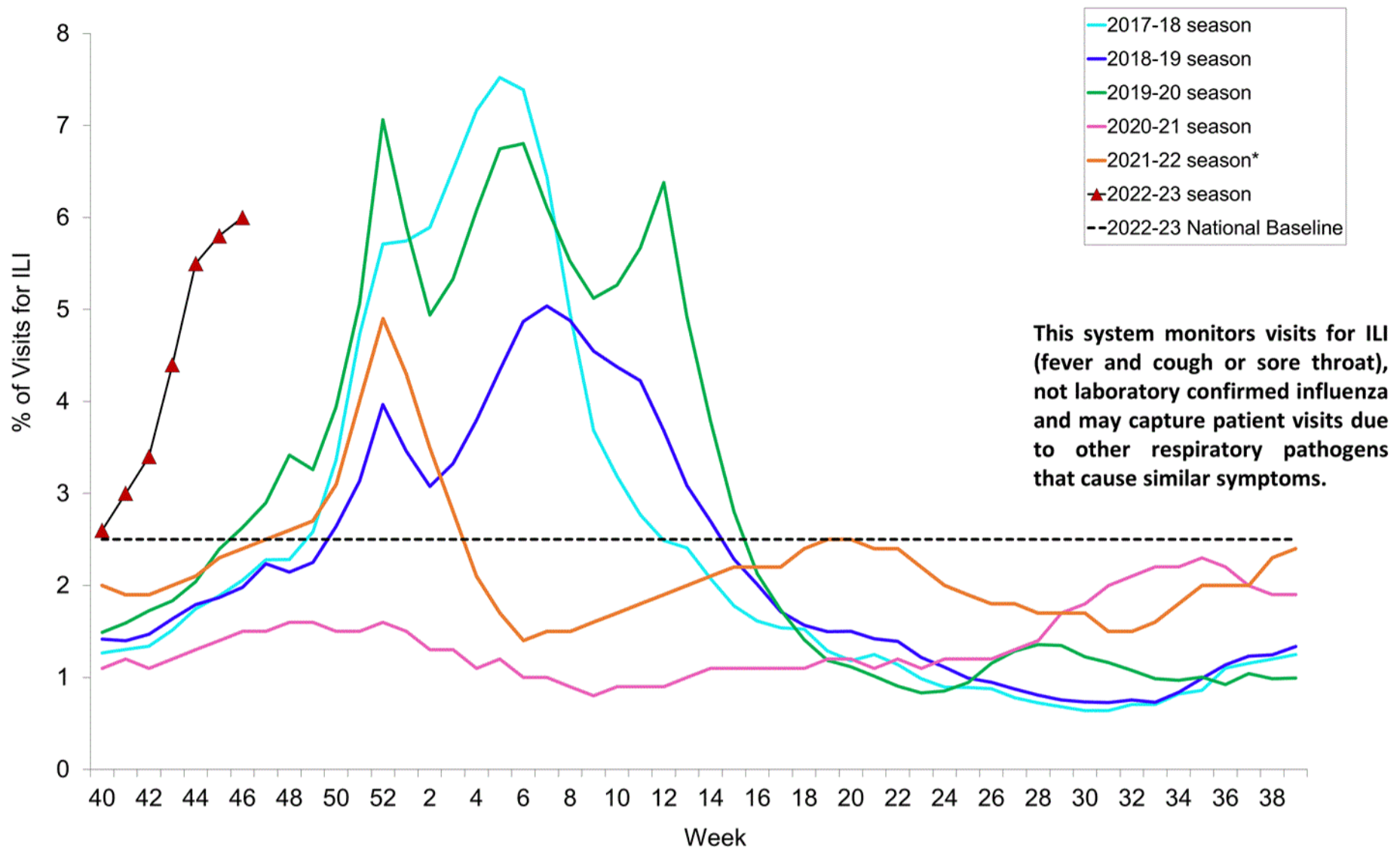
(<https://www.cdc.gov/flu/weekly/overview.htm#ILINet>)

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 46, 6.0% 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 above the national baseline of 2.5%. All 10 HHS regions are above their respective baselines. The percent of patient visits for respiratory illness increased during week 46 compared to week 45 in regions 5, 7, 8, 9, and 10, remained stable (change of $\leq .1$ percentage points) in regions 1 and 6, and decreased in regions 2, 3, and 4. Multiple respiratory viruses are co-circulating, and the relative contribution of influenza virus infection to ILI varies by location.

Percentage of Outpatient Visits for Respiratory Illness Reported By The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, 2022-2023* and Selected Previous Seasons



(<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.”

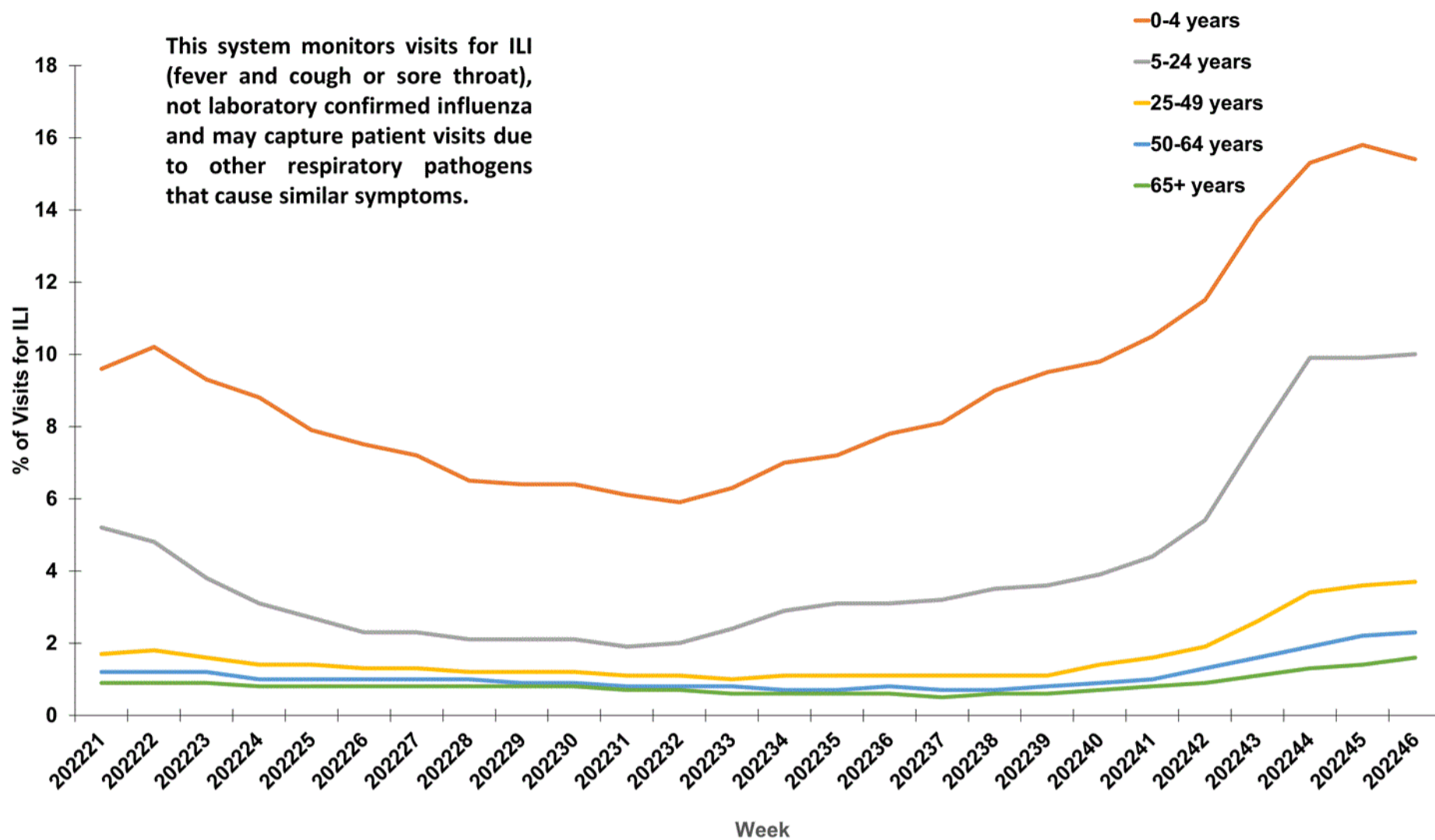
[View Chart Data \(current season only\) \(/flu/weekly/weeklyarchives2022-2023/data/senAllregt46.html\)](/flu/weekly/weeklyarchives2022-2023/data/senAllregt46.html) | [View Full Screen \(/flu/weekly/weeklyarchives2022-2023/ILI46.html\)](/flu/weekly/weeklyarchives2022-2023/ILI46.html)

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 decreased in the 0-4 years age group, increased in the 65+ years age group, and remained stable in the 5-24 years, 25-49 years, and 50-64 years age groups.

**Percentage of Outpatient Visits for Respiratory Illness by Age Group
Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet),
Weekly National Summary, May 22, 2022-November 19, 2022***



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

[View Chart Data \(/flu/weekly/weeklyarchives2022-2023/data/iliage46.html\)](/flu/weekly/weeklyarchives2022-2023/data/iliage46.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 by state/jurisdiction and Core Based Statistical Areas (CBSA).

Activity Level	Number of Jurisdictions		Number of CBSAs	
	Week 46 (Week ending Nov. 19, 2022)	Week 45 (Week ending Nov. 12, 2022)	Week 46 (Week ending Nov. 19, 2022)	Week 45 (Week ending Nov. 12, 2022)
Very High	18	16	65	68
High	17	12	162	153
Moderate	8	10	108	106
Low	6	9	133	131
Minimal	5	8	189	236
Insufficient Data	1	0	272	235

A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Outpatient Respiratory Illness Activity Map Determined by Data Reported to ILINet

This system monitors visits for respiratory illness that includes fever plus a cough or sore throat, also referred to as ILI, not laboratory confirmed influenza and may capture patient visits due to other respiratory pathogens that cause similar symptoms.

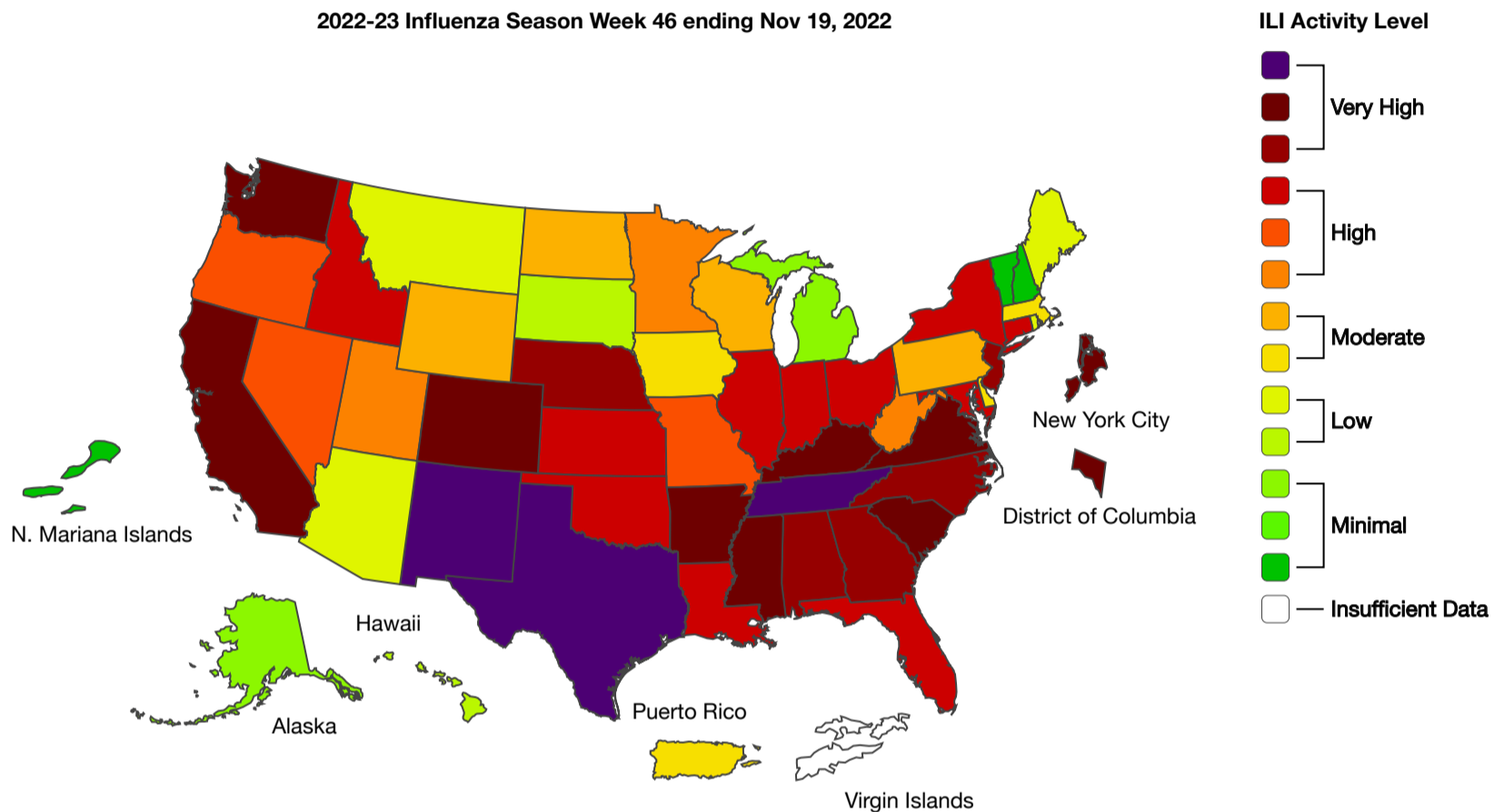
prev Play Pause next

40 41 42 43 44 45 46
weeks

State CBSA



2022-23 Influenza Season Week 46 ending Nov 19, 2022



Season: 2022-23 ▲

Download Image

Download Data

(<https://www.cdc.gov/flu/weekly/fluereport.xml>)View Full Screen (<http://gis.cdc.gov/grasp/fluview/main.html>)

*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.

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

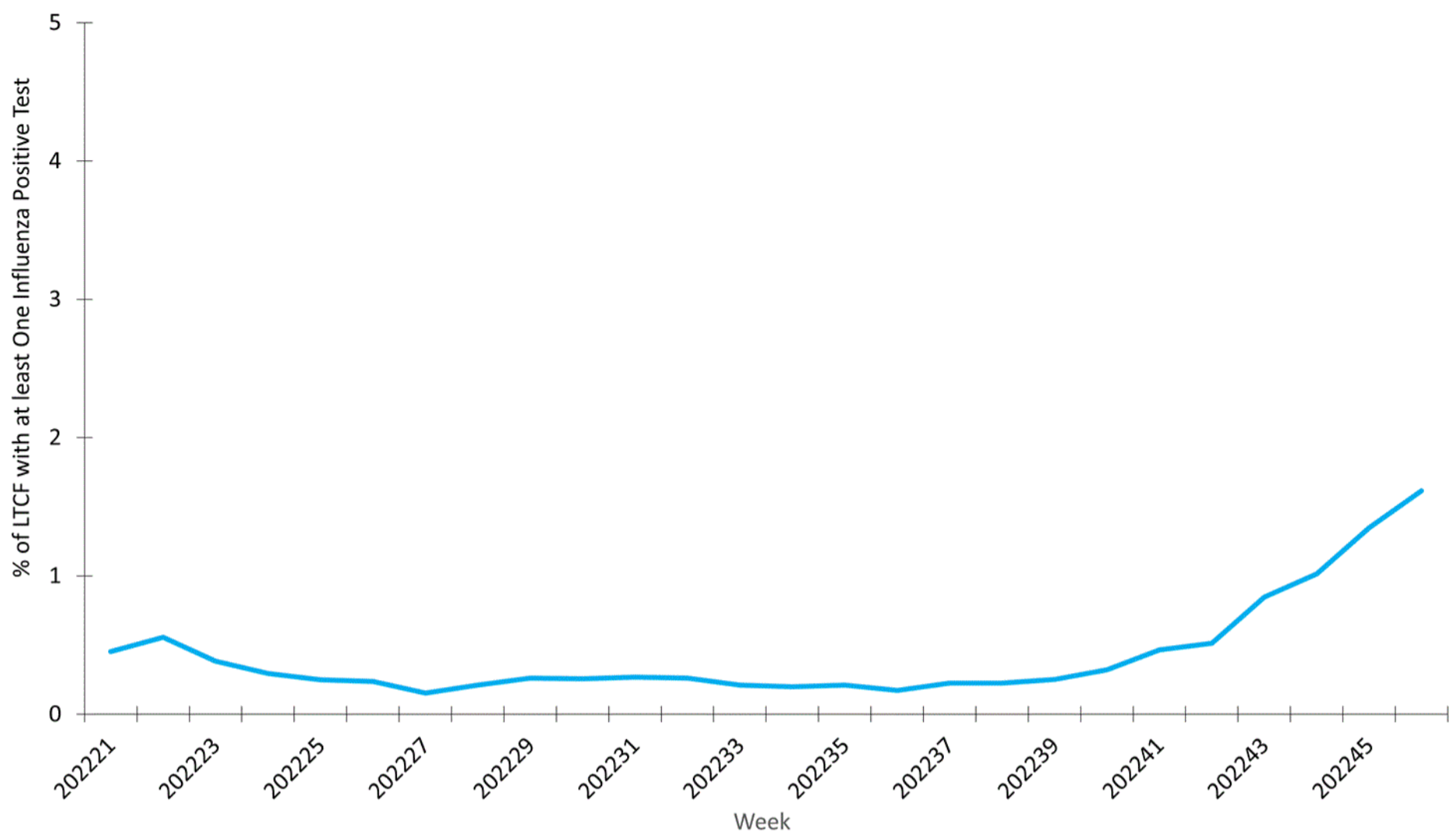
[Surveillance Methods \(/flu/weekly/overview.htm#ILINet\)](#) | [FluView Interactive: National, Regional, and State Data \(http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html\)](#) or [ILI Activity Map \(https://gis.cdc.gov/grasp/fluview/main.html\)](#)

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 \(https://www.cdc.gov/nhsn/lc/index.html\)](#). During week 46, 231 (1.6%) of 14,291 reporting LTCFs reported at least one influenza positive test among their residents.

Percent of Long-term Care Facilities (LTCF) with at Least One Confirmed Influenza Positive Test among Residents, Reported to CDC National Healthcare Safety Network (NHSN), National Summary, May 23, 2022 – November 20, 2022



</flu/weekly/weeklyarchives2022-2023/LTCF46.html> | [View Chart Data](#) </flu/weekly/weeklyarchives2022-2023/data/LTCFData46.csv> | [View Full Screen](#) </flu/weekly/weeklyarchives2022-2023/LTCF46.html>

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

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

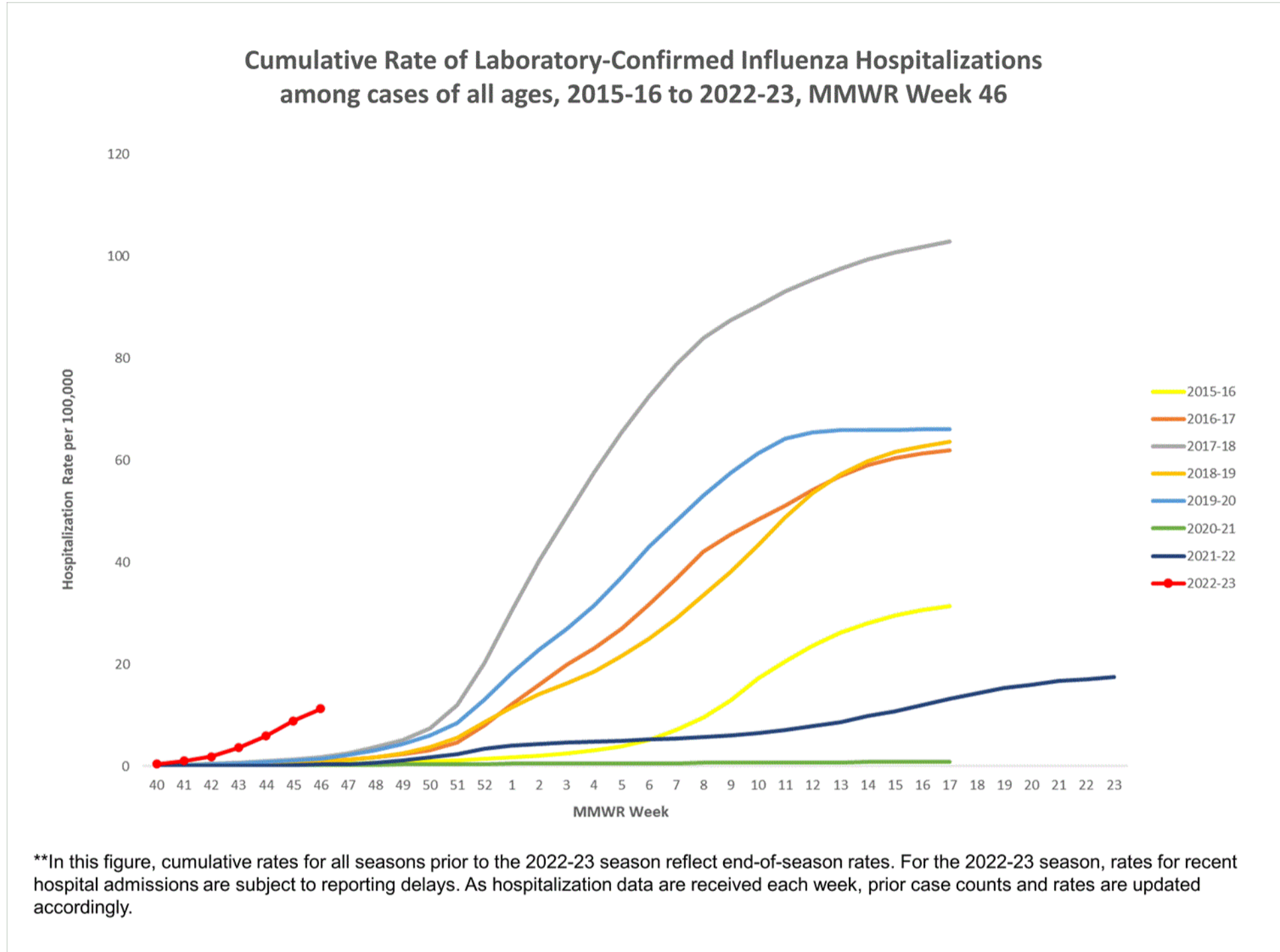
FluSurv-NET

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 3,312 laboratory-confirmed influenza-associated hospitalizations were reported by FluSurv-NET sites between October 1, 2022, and November 19, 2022; 96.6% were associated with influenza A virus, 2.2% were associated with influenza B virus, 0.2% with influenza A virus and influenza B virus co-infection, and 1.0% with influenza virus for which the type was not determined. Among 494 hospitalizations with influenza A subtype information, 21.9% were A(H1N1)pdm09 virus and 78.1% were A(H3N2).

The overall cumulative hospitalization rate per 100,000 population was 11.3. This cumulative hospitalization rate is higher than the cumulative in-season hospitalization rate observed in week 46 during previous seasons going back to 2010-2011, which ranged from 0.1 to 1.4. The highest hospitalization rates per 100,000 population were among adults aged ≥ 65 years (25.9), followed by children aged 0-4 years (20.7), adults aged 50-64 (11.1), children aged 5-17 years (10.3), and adults aged 18-49 years (5.6).

Cumulative hospitalization rates for each age group were higher than cumulative in-season hospitalization rates previously observed during week 46; since 2010-11 in-season rates ranged from 0 to 2.2 among children 0-4 years, 0 to 0.7 among children 5-17 years, 0.1 to 0.7 among adults 18-49 years, 0.1 to 1.4 among adults 50-64 years, and 0.4 to 3.6 among adults \geq 65 years.



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

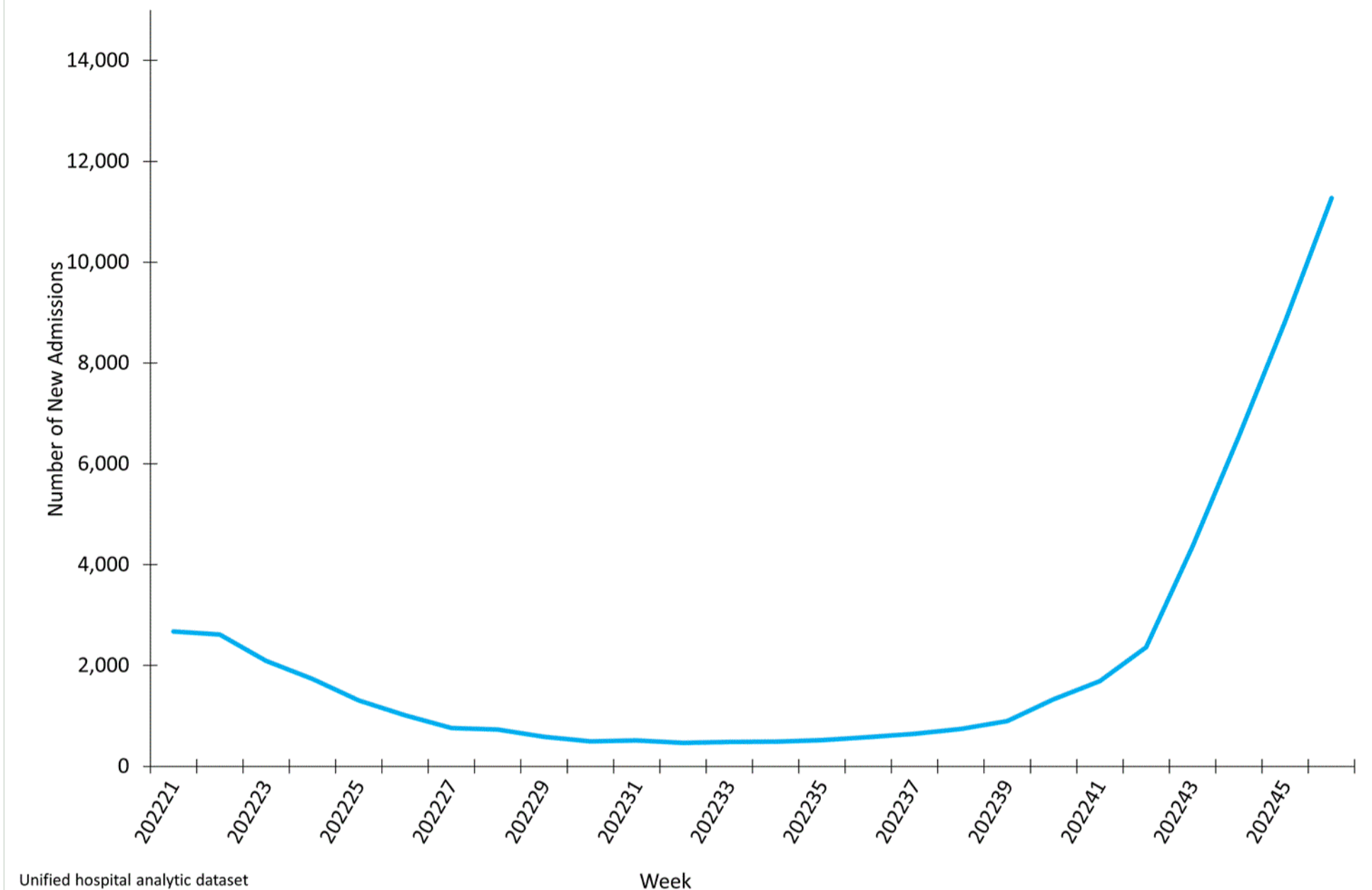
[View Full Screen \(/flu/weekly/weeklyarchives2022-2023/EIPRates46.html\)](/flu/weekly/weeklyarchives2022-2023/EIPRates46.html)

Additional FluSurv-NET hospitalization surveillance information for current and past seasons and additional age groups:
[Surveillance Methods \(https://www.cdc.gov/flu/weekly/overview.htm#FluSurvNet\)](https://www.cdc.gov/flu/weekly/overview.htm#FluSurvNet) | [FluView Interactive: Rates by Age, Sex, and Race/Ethnicity \(http://gis.cdc.gov/GRASP/Fluview/FluHospRates.html\)](http://gis.cdc.gov/GRASP/Fluview/FluHospRates.html) or [Data on Patient Characteristics \(http://gis.cdc.gov/grasp/fluview/FluHospChars.html\)](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 46, 11,269 patients with laboratory-confirmed influenza were admitted to a hospital.

New Influenza Hospital Admissions Reported to HHS Protect, National Summary, May 22, 2022 – November 19, 2022



[View Chart Data](/flu/weekly/weeklyarchives2022-2023/Protect46.html) [View Full Screen](/flu/weekly/weeklyarchives2022-2023/data/ProtectData46.csv) [View Full Screen](/flu/weekly/weeklyarchives2022-2023/Protect46.html)

Additional HHS Protect hospitalization surveillance information:

[Surveillance Methods](https://www.cdc.gov/flu/weekly/overview.htm#HHSProtect) | [Additional Data](https://healthdata.gov/Hospital/COVID-19-Reported-Patient-Impact-and-Hospital-Capa/anag-cw7u)

Mortality Surveillance

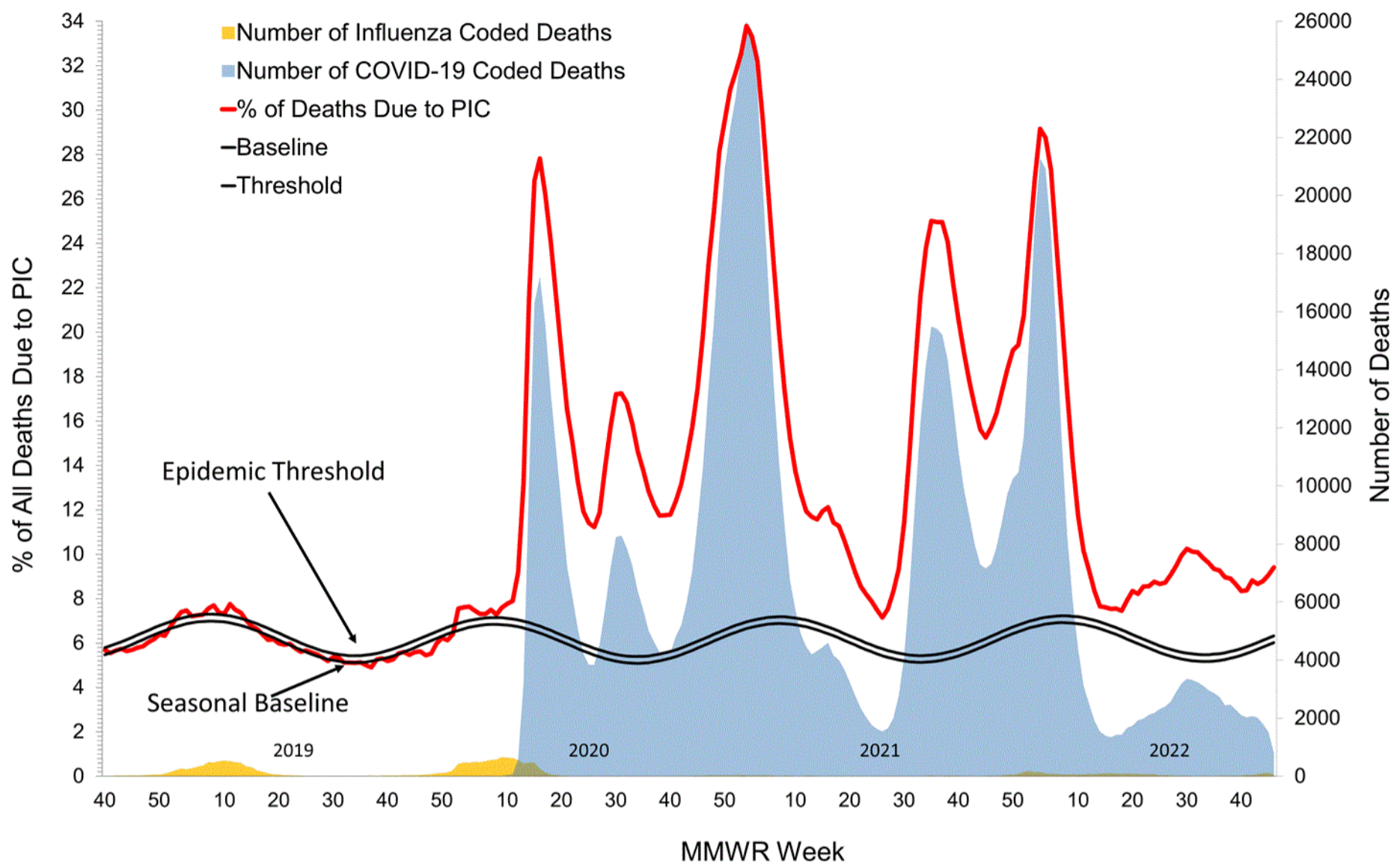
<https://www.cdc.gov/flu/weekly/overview.htm#MortalitySurveillance>

National Center for Health Statistics (NCHS) Mortality Surveillance

Based on NCHS mortality surveillance data available on November 23, 2022, 9.4% of the deaths that occurred during the week ending November 19, 2022 (week 46), were due to pneumonia, influenza, and/or COVID-19 (PIC). This percentage is above the epidemic threshold of 6.3% for this week. Among the 1,861 PIC deaths reported for this week, 807 had COVID-19 listed as an underlying or contributing cause of death on the death certificate, and 66 listed influenza. While current PIC mortality is due primarily to COVID-19, the proportion due to influenza remains small but is increasing. The data presented are preliminary and may change as more data are received and processed.

Pneumonia, Influenza, and COVID-19 Mortality from the National Center for Health Statistics Mortality Surveillance System

Data as of November 23, 2022



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

[View Chart Data](#) (x) (</flu/weekly/weeklyarchives2022-2023/data/NCHSData46.csv>) | [View Full Screen](/flu/weekly/weeklyarchives2022-2023/NCHS46.html) (</flu/weekly/weeklyarchives2022-2023/NCHS46.html>)

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](#)

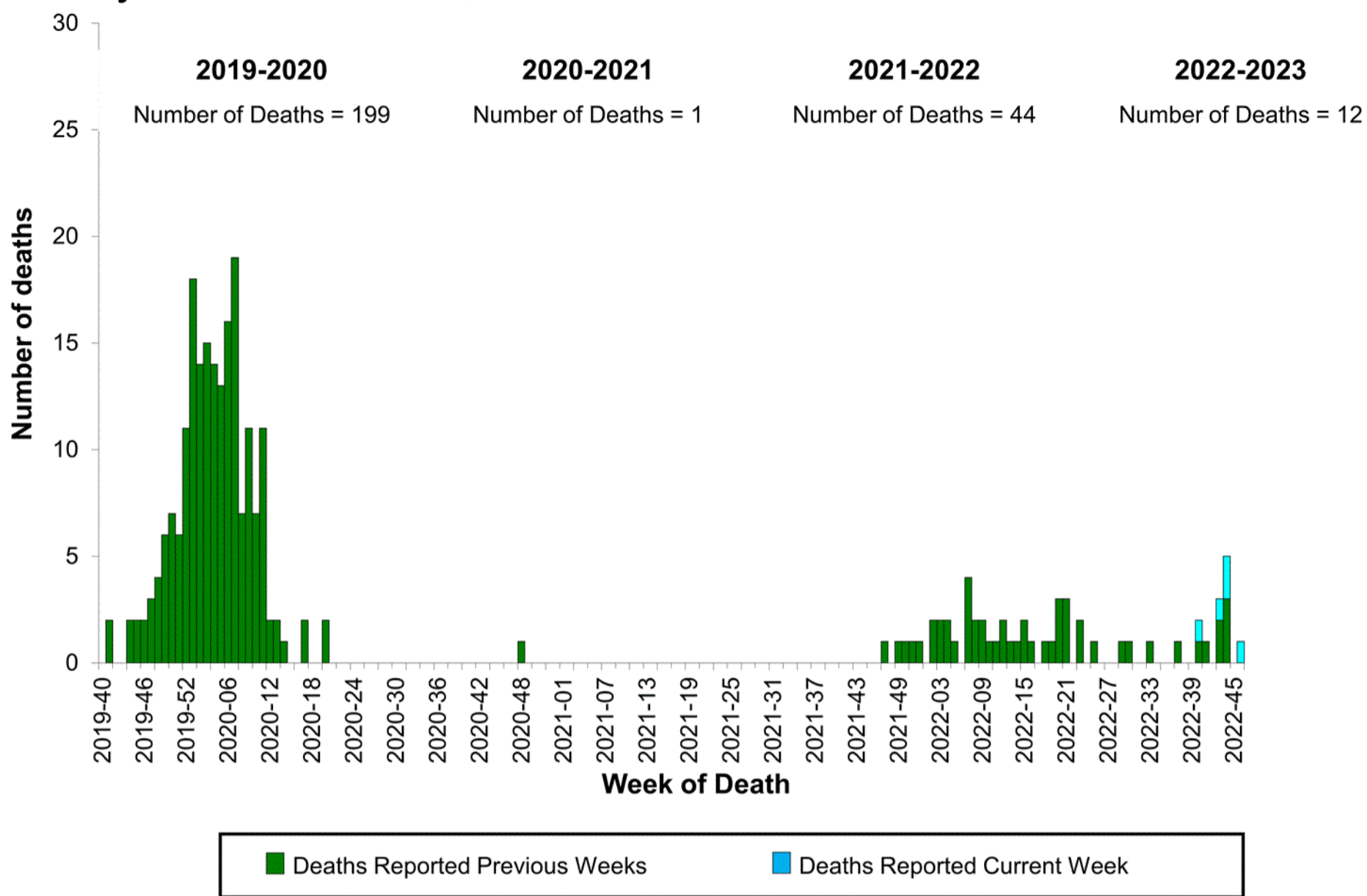
(<https://gis.cdc.gov/grasp/fluview/mortality.html>)

Influenza-Associated Pediatric Mortality

Five influenza-associated pediatric deaths occurring during the 2022-2023 season were reported to CDC during week 46. The deaths occurred during weeks 40, 43, 44, and 46 of 2022 (the weeks ending October 8, October 29, November 5, and November 19, respectively). All five deaths were associated with influenza A viruses. Two of the influenza A viruses had subtyping performed; one was an A(H1N1)pdm09 virus and one was an A(H3) virus.

A total of 12 influenza-associated pediatric deaths occurring during the 2022-2023 season have been reported to CDC.

Influenza-Associated Pediatric Deaths by Week of Death, 2019-2020 season to 2022-2023 season



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

[View Full Screen \(/flu/weekly/weeklyarchives2022-2023/PedFlu46.html\)](/flu/weekly/weeklyarchives2022-2023/PedFlu46.html)

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>) 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>).

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

[Alabama \(http://adph.org/influenza/\)](http://adph.org/influenza/)

[Alaska](#)

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

[Colorado \(https://www.colorado.gov/pacific/cdphe/influenza\)](https://www.colorado.gov/pacific/cdphe/influenza)

[Connecticut \(https://portal.ct.gov/DPH/Epidemiology-and-Emerging-Infections/Influenza-Surveillance-and-Statistics\)](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/in)
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.aspx)
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-unit/disease/influenza/)	New York City (http://www1.nyc.gov/site/doh/providers/health-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) [↗](https://www.who.int/tools/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). [↗](https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-surveillance-outputs) (<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) (http://www.influenzacentre.org/Surveillance_Samples_Received.html), [China](http://www.chinaivdc.cn/cnic/) [↗](http://www.chinaivdc.cn/cnic/) (<http://www.chinaivdc.cn/cnic/>), [Japan](http://idsc.nih.gov/jp/index.html) [↗](http://idsc.nih.gov/jp/index.html) (<http://idsc.nih.gov/jp/index.html>), the [United Kingdom](https://www.crick.ac.uk/research/worldwide-influenza-centre) [↗](https://www.crick.ac.uk/research/worldwide-influenza-centre) (<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](http://www.flunewseurope.org/) and the [European Centre for Disease Prevention and Control](http://www.flunewseurope.org/) [↗](http://www.flunewseurope.org/) (<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/) [↗](http://www.phac-aspc.gc.ca/fluwatch/) (<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/) [↗](http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/SeasonalInfluenza/) (<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) (<http://www.cdc.gov/flu/weekly/overview.htm>) page.

