

Weekly U.S. Influenza Surveillance Report



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 48, ending December 4, 2021

Seasonal influenza activity in the United States remains low but continues to increase.

Viruses

Clinical Lab

2.6%
positive for influenza
this week

Public Health Lab

A small but increasing
number of specimens have
tested positive. The majority of
viruses detected are influenza
A(H3N2).

Virus Characterization

Influenza virus characterization
information will be reported later
this season.

[\(/flu/weekly/#VirusCharacterization\)](#)

Illness

Outpatient Respiratory Illness

2.5%
of visits to a health care provider for respiratory illness this week
(at baseline)

Outpatient Respiratory Illness: Activity Map

This week, 6 jurisdictions experienced moderate activity and 1 jurisdiction experienced high or very high activity.

Long-term Care Facilities

0.4%
of facilities reported
≥ 1 influenza-positive test
among residents this week.

Severe Disease

FluSurv-NET

Hospitalization rates will be updated starting later this season.

HHS Protect Hospitalizations

841
patients admitted to hospitals with influenza this week.

NCHS Mortality

17.5%
of deaths attributed to pneumonia, influenza, or COVID-19 this week (above threshold)

Pediatric Deaths

0
influenza-associated deaths occurring this season

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](http://www.cdc.gov/flu/weekly/overview.htm) (<http://www.cdc.gov/flu/weekly/overview.htm>) page.

Additional information on the current and previous influenza seasons for each surveillance component are available on [FluView Interactive](https://www.cdc.gov/flu/weekly/fluviewinteractive.htm) (<https://www.cdc.gov/flu/weekly/fluviewinteractive.htm>).

Key Points

- Influenza activity remains low nationally but continues to increase.
- The number of influenza viruses detected by clinical and public health labs has increased in recent weeks. The majority of viruses detected are A(H3N2). Most influenza A(H3N2) infections have occurred among children and young adults ages 5-24 years; however, the proportion of infections occurring among adults age 25 years and older has increased in recent weeks.
- The percentage of outpatient visits due to respiratory illness has trended upwards in recent weeks and is now at the national baseline. While influenza is contributing to levels of respiratory illness, other respiratory viruses are circulating. The relative contribution of influenza to respiratory illness varies by location.
- Laboratory-confirmed flu activity is increasing but remains relatively low, confirming that other respiratory viruses are contributing to respiratory disease.
- An annual flu vaccine is the best way to protect against flu and its potentially serious complications. CDC recommends everyone 6 months and older get a flu vaccine.
- There are early signs that flu vaccination uptake is down this season compared to last.
- Flu vaccines are available at many different locations, including pharmacies and health departments. With flu activity just getting started, there is still time to benefit from flu vaccination this season. Visit www.vaccines.gov to find a flu vaccine near you.
- There are also flu antiviral drugs that can be used to treat flu illness.

U.S. Virologic Surveillance

https://www.cdc.gov/flu/weekly/overview.htm#anchor_1633697372803

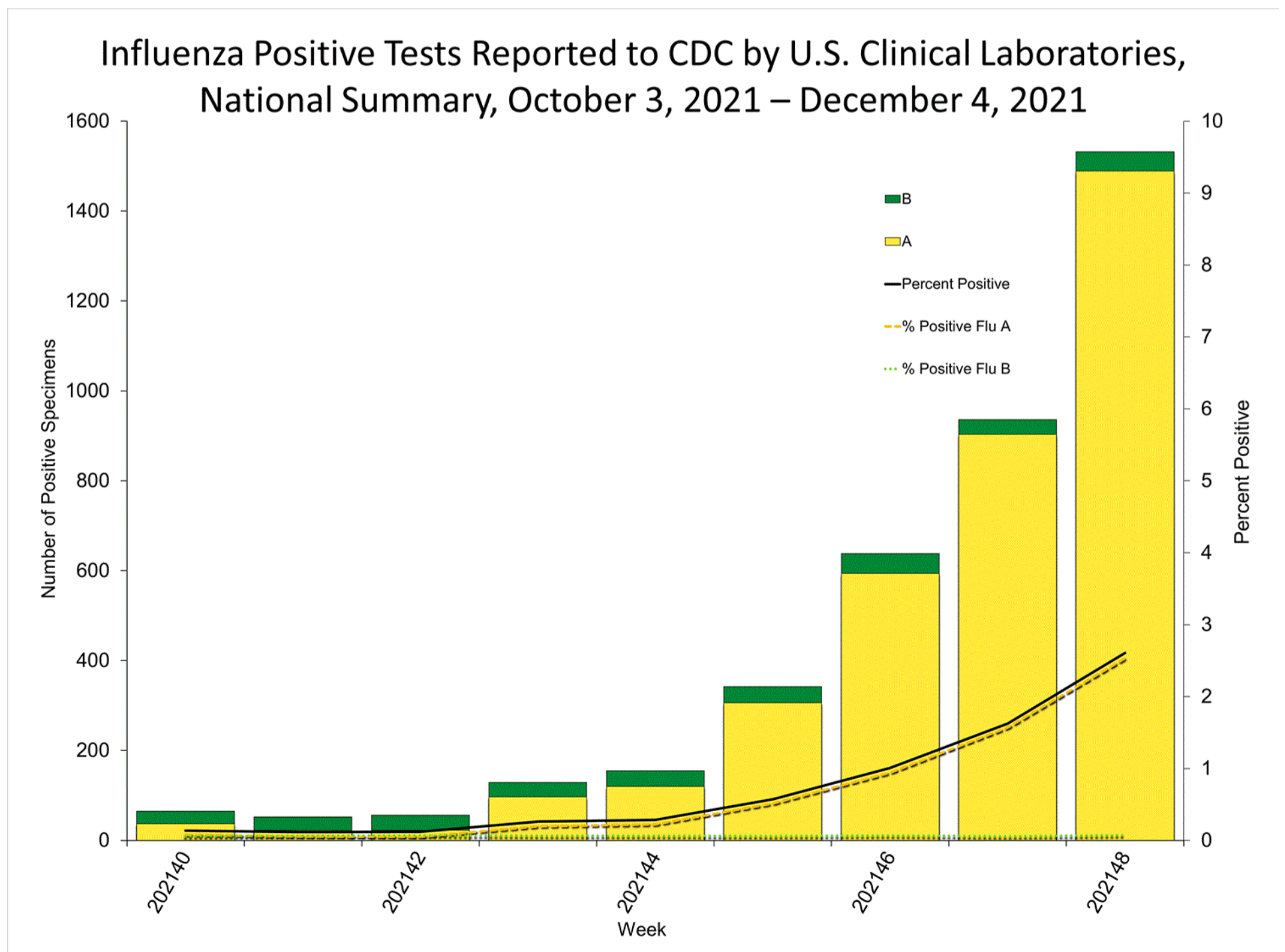
Overall, influenza activity is still low; however, an increasing number of influenza positive tests have been reported by clinical and public health laboratories during recent weeks. Influenza A(H3N2) has been the most frequently detected. The majority of influenza A(H3N2) viruses were detected in persons aged 5-24 years old, but the proportion of influenza A(H3N2) virus detections occurring among adults aged 25 years and older has increased in recent weeks. Influenza A(H3N2) viruses were

reported by public health laboratories in all 10 HHS regions this week. For regional and state level data about circulating influenza viruses, 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 48	Data Cumulative since October 3, 2021 (Week 40)
No. of specimens tested	58,767	480,224
No. of positive specimens (%)	1,532 (2.6%)	3,905 (0.8%)
<i>Positive specimens by type</i>		
Influenza A	1,489 (97.2%)	3,592 (92.0%)
Influenza B	43 (2.8%)	313 (8.0%)



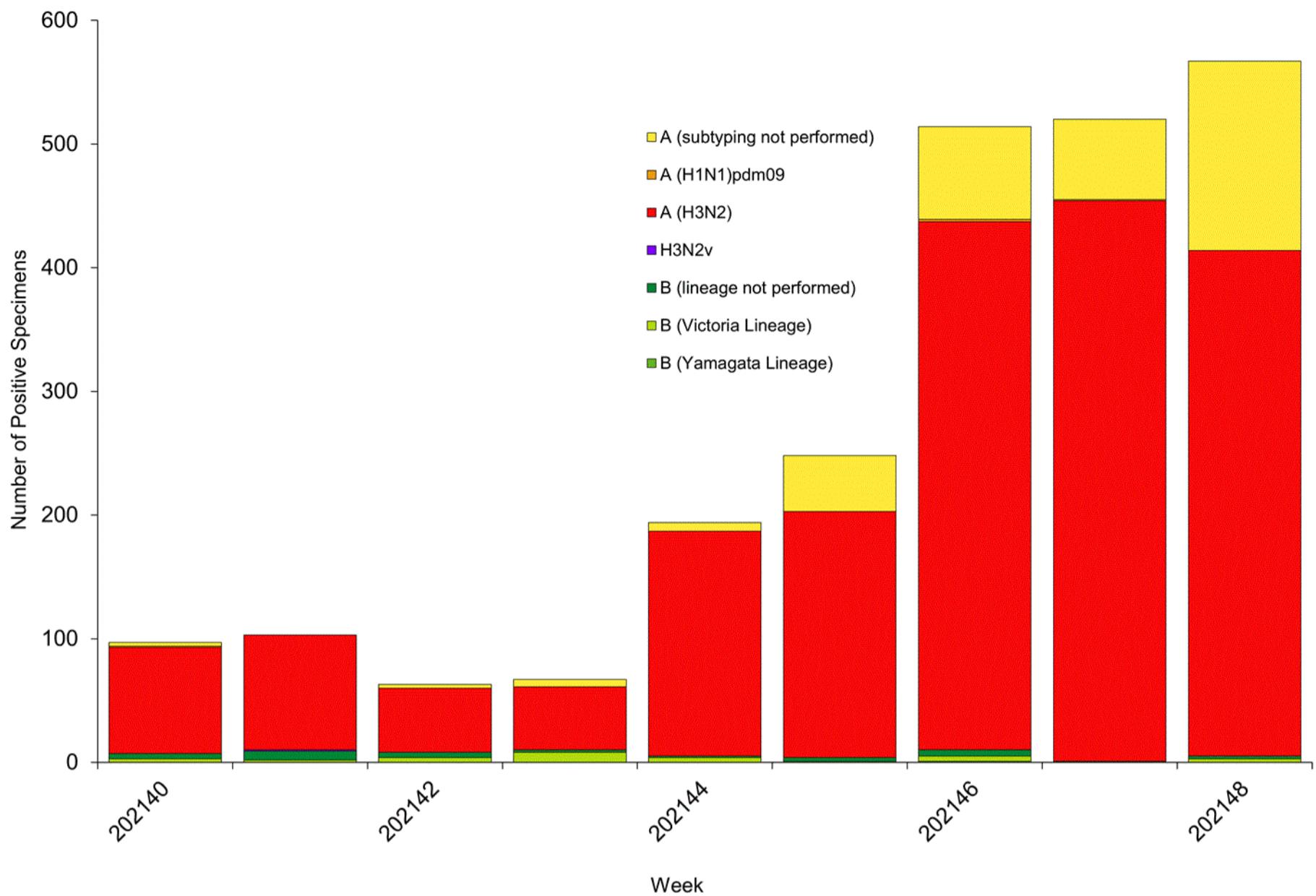
<https://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>

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 48	Data Cumulative since October 3, 2021 (Week 40)
No. of specimens tested	22,062	188,827
No. of positive specimens	567	2,373
<i>Positive specimens by type/subtype</i>		
Influenza A	562 (99.1%)	2,314 (97.5%)
(H1N1)pdm09	0	4 (0.2%)
H3N2	409 (100%)	1,952 (99.7%)
H3N2v	0	1 (0.1%)
Subtyping not performed	153	357
Influenza B	5 (0.9%)	59 (2.5%)
Yamagata lineage	0	1 (3.3%)
Victoria lineage	3 (100%)	29 (96.7%)
Lineage not performed	2	29

Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, October 3, 2021 – December 4, 2021



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

[View Chart Data \(/flu/weekly/weeklyarchives2021-2022/data/whoAllregt_phl48.html\)](/flu/weekly/weeklyarchives2021-2022/data/whoAllregt_phl48.html) | [View Full Screen \(/flu/weekly/weeklyarchives2021-2022/WhoPHL48.html\)](/flu/weekly/weeklyarchives2021-2022/WhoPHL48.html)

Additional virologic surveillance information for current and past seasons:

[Surveillance Methods \(https://wcmis-wp.cdc.gov/flu/weekly/overview.htm#anchor_1633697372803\)](https://wcmis-wp.cdc.gov/flu/weekly/overview.htm#anchor_1633697372803) | [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)

Influenza Virus Characterization

(/flu/weekly/overview.htm#anchor_1633697390939)

CDC performs [genetic \(https://www.cdc.gov/flu/professionals/laboratory/genetic-characterization.htm\)](https://www.cdc.gov/flu/professionals/laboratory/genetic-characterization.htm) and [antigenic \(https://www.cdc.gov/flu/professionals/laboratory/antigenic.htm\)](https://www.cdc.gov/flu/professionals/laboratory/antigenic.htm) characterization of U.S. viruses submitted from state and local health laboratories using 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 and to monitor evolutionary changes that continually occur in influenza viruses circulating in humans. CDC also tests susceptibility of influenza viruses to antiviral medications including the neuraminidase inhibitors (oseltamivir, zanamivir, and peramivir) and the PA endonuclease inhibitor baloxavir.

Virus characterization data will be updated later this season when a sufficient number of specimens have been tested.

Outpatient Respiratory Illness Surveillance

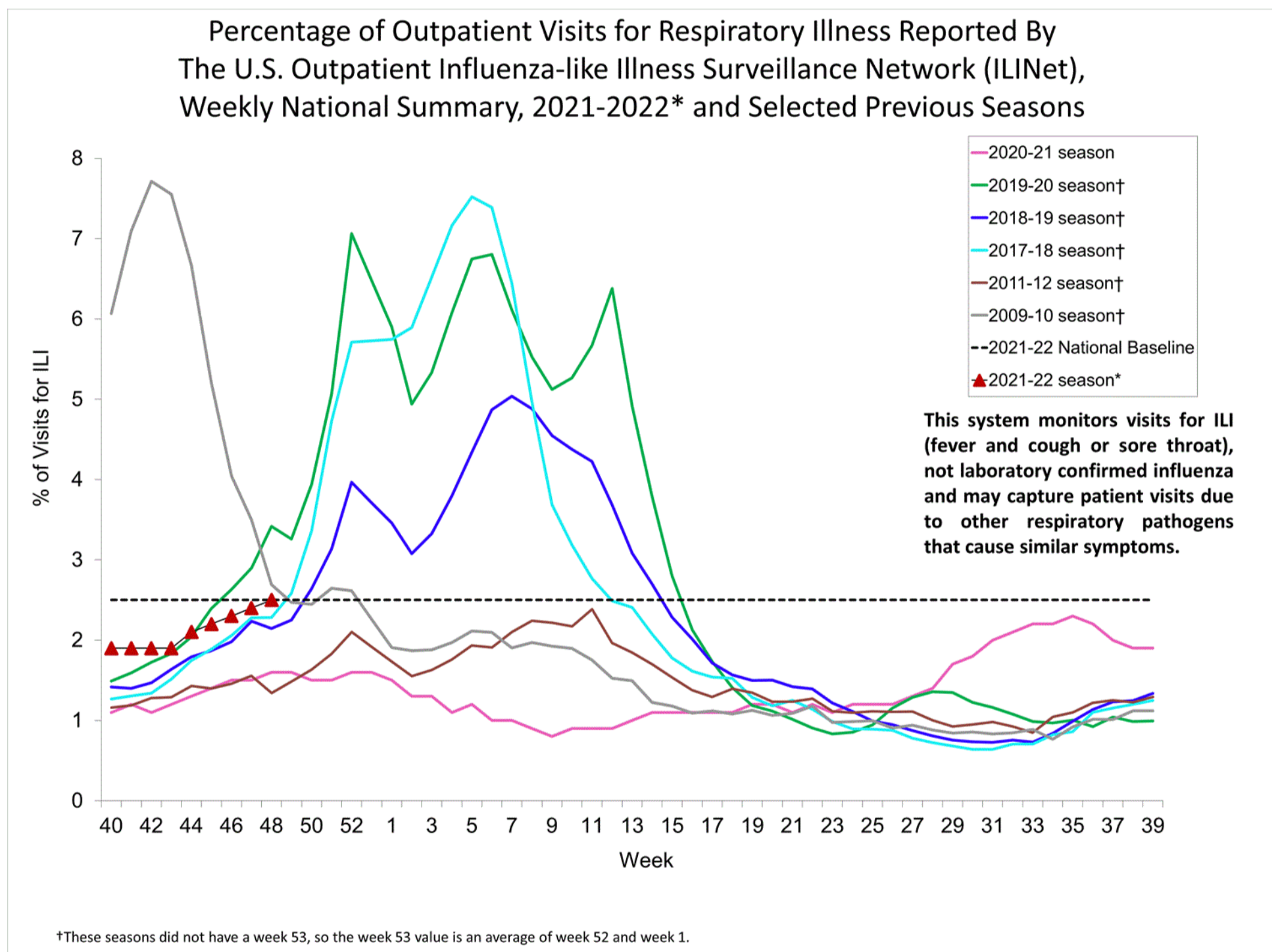
(https://www.cdc.gov/flu/weekly/overview.htm#anchor_1539281266932)

The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) monitors outpatient visits for 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 such as 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>).

Outpatient Respiratory Illness Visits

Nationwide, during week 48, 2.5% 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 percentage is at the national baseline. Regions 1, 2, 3 and 7 are above their region-specific baselines; all other regions are below their baselines. Multiple respiratory viruses are co-circulating, and the relative contribution of influenza virus infection to ILI can vary by location.



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

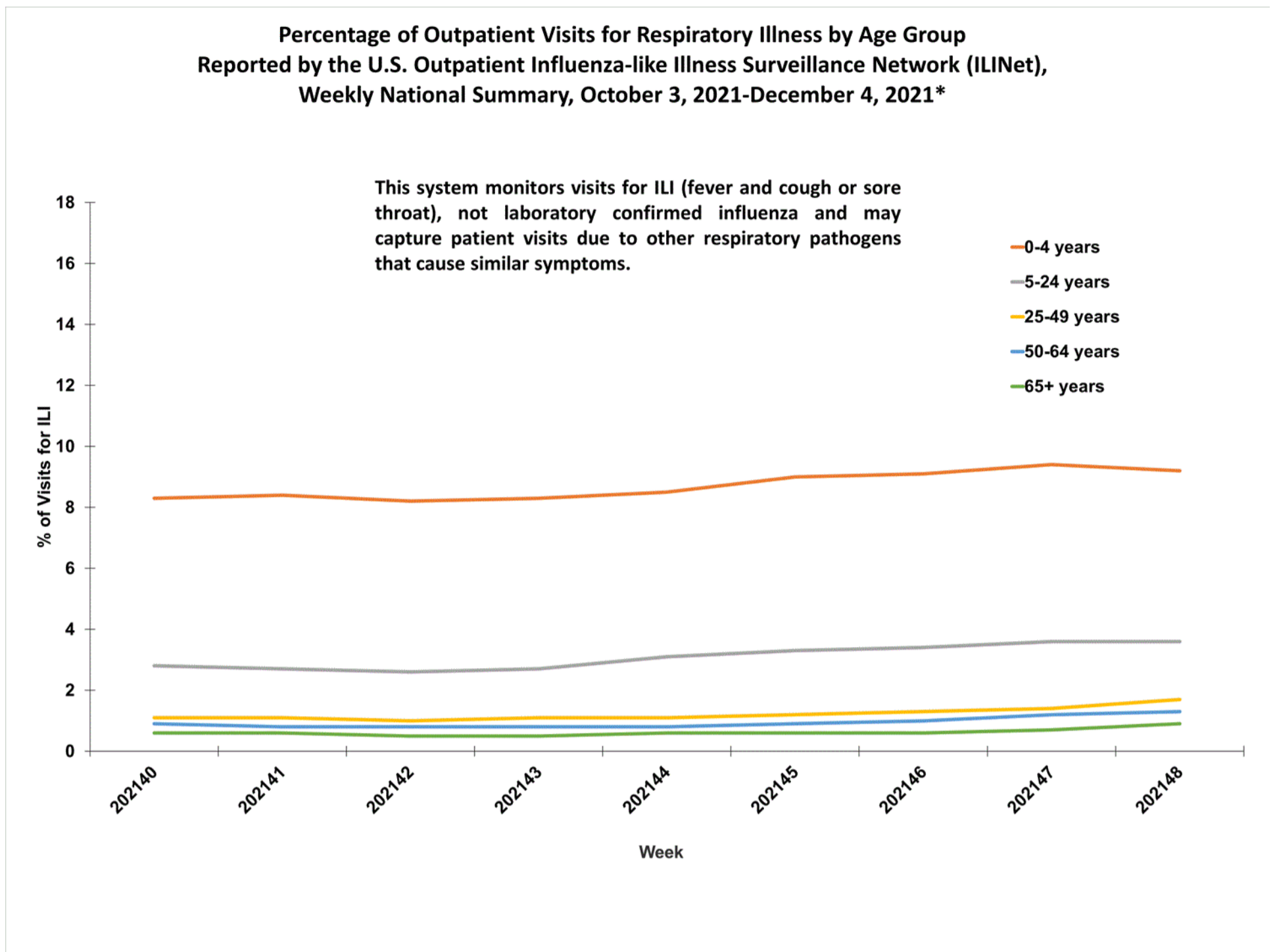
* Effective October 3, 2021 (week 40), the ILI definition (fever plus cough or sore throat) no longer includes "without a known cause other than influenza."

[View Chart Data \(current season only\) \(/flu/weekly/weeklyarchives2021-2022/data/senAllregt48.html\)](/flu/weekly/weeklyarchives2021-2022/data/senAllregt48.html) | [View Full Screen](#)
[\(/flu/weekly/weeklyarchives2021-2022/ILI48.html\)](/flu/weekly/weeklyarchives2021-2022/ILI48.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 are trending upward for all age groups (0–4 years, 5–24 years, 25–49 years, 50–64 years, and 65+).



<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 \(/flu/weekly/weeklyarchives2021-2022/data/iliage48.html\)](/flu/weekly/weeklyarchives2021-2022/data/iliage48.html) | [View Full Screen \(/flu/weekly/weeklyarchives2021-2022/ILIAge48.html\)](/flu/weekly/weeklyarchives2021-2022/ILIAge48.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 48 (Week ending Dec. 8, 2021)	Week 47 (Week ending Nov. 27, 2021)	Week 48 (Week ending Dec. 8, 2021)	Week 47 (Week ending Nov. 27, 2021)
Very High	0	0	2	0
High	1	1	18	19
Moderate	6	3	62	46
Low	16	21	157	148

Activity Level	Number of Jurisdictions		Number of CBSAs	
	Week 48 (Week ending Dec. 8, 2021)	Week 47 (Week ending Nov. 27, 2021)	Week 48 (Week ending Dec. 8, 2021)	Week 47 (Week ending Nov. 27, 2021)
Minimal	31	29	420	453
Insufficient Data	1	1	270	263

A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet

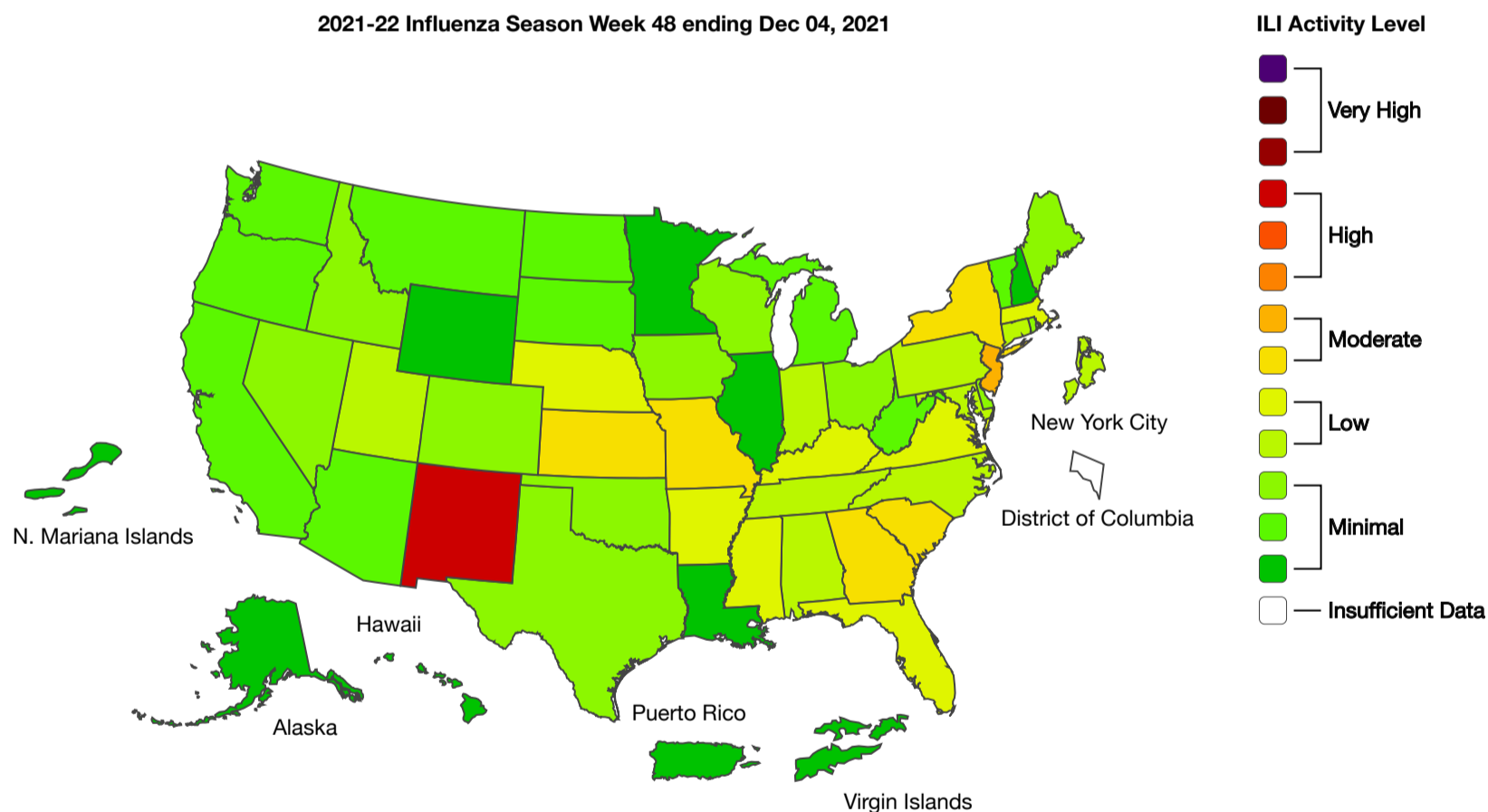
This system monitors visits for ILI (fever and cough or sore throat), not laboratory confirmed influenza and may capture patient visits due to other respiratory pathogens that cause similar symptoms.

prev Play Pause next

40 41 42 43 44 45 46 47 48
weeks

State CBSA

2021-22 Influenza Season Week 48 ending Dec 04, 2021



Season: 2021-22 ▲

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:

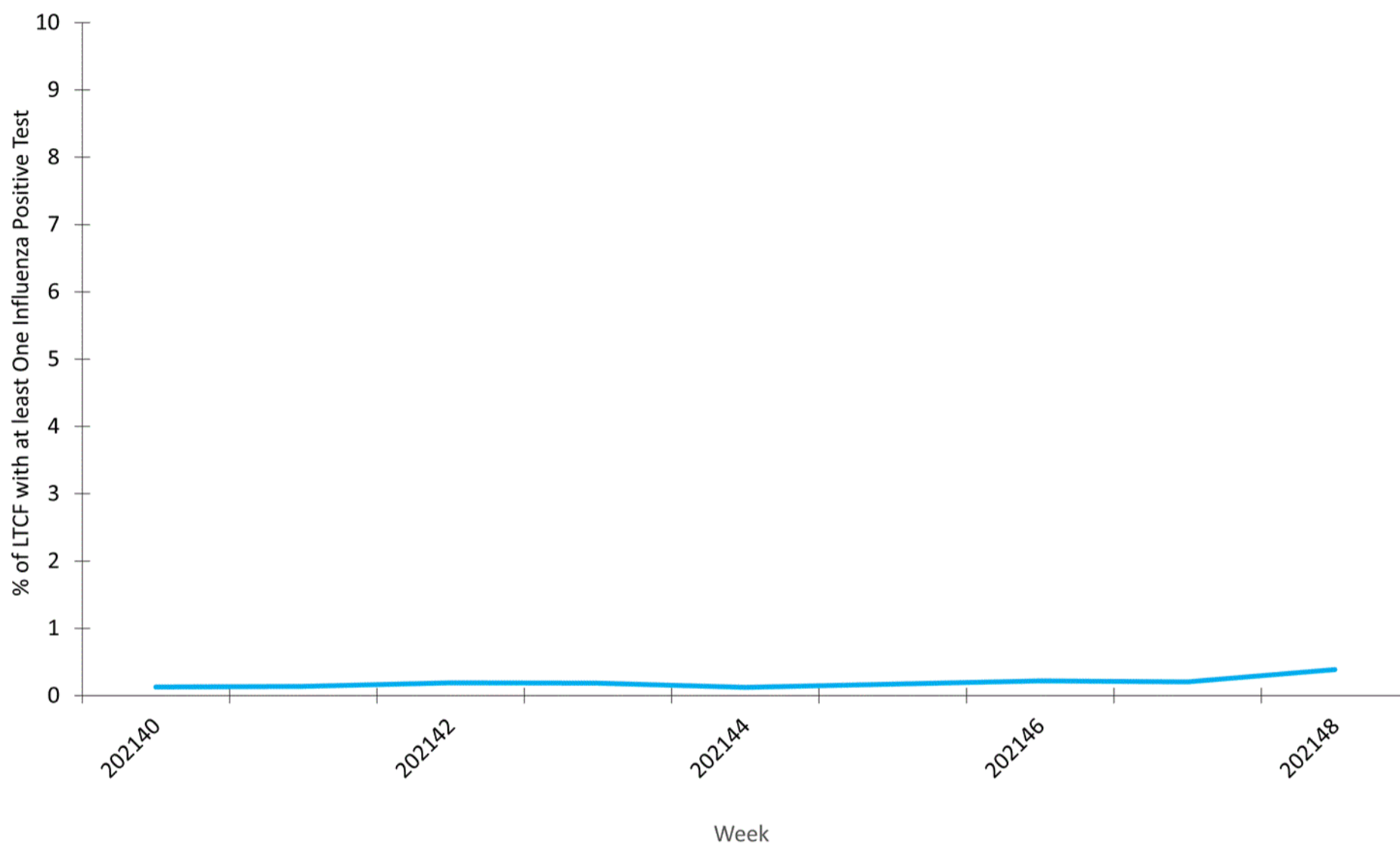
Surveillance Methods (https://wcm5-wp.cdc.gov/flu/weekly/overview.htm#anchor_1539281266932) | FluView Interactive: National, Regional, and State Data (<http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>) or ILI Activity Map (<https://gis.cdc.gov/grasp/fluview/main.html>)

Long-term Care Facility (LTCF) Surveillance

(https://www.cdc.gov/flu/weekly/overview.htm#anchor_1633698386507)

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 infections among residents through the [National Healthcare Safety Network \(NHSN\) Long-term Care Facility Component](https://www.cdc.gov/nhsn/ltc/index.html) (<https://www.cdc.gov/nhsn/ltc/index.html>). During week 48, 55 (0.4%) of 14,237 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, October 4, 2021 – December 5, 2021



(</flu/weekly/weeklyarchives2021-2022/LTCF48.html>) [View Chart Data](#)  (</flu/weekly/weeklyarchives2021-2022/data/LTCFData48.csv>) | [View Full Screen](#) (</flu/weekly/weeklyarchives2021-2022/LTCF48.html>)

Additional information about long-term care facility surveillance:

[Surveillance Methods](https://www.cdc.gov/flu/weekly/overview.htm#anchor_1633698386507) (https://www.cdc.gov/flu/weekly/overview.htm#anchor_1633698386507) | [Additional Data](https://data.cms.gov/covid-19/covid-19-nursing-home-data)  (<https://data.cms.gov/covid-19/covid-19-nursing-home-data>)

Hospitalization Surveillance

(http://www.cdc.gov/flu/weekly/overview.htm#anchor_1634240269291)

FluSurv-NET

The Influenza Hospitalization Surveillance Network (FluSurv-NET) conducts population-based surveillance for laboratory-confirmed influenza-related hospitalizations in select counties in 14 states and represents approximately 9% of the U.S. population. FluSurv-NET estimated hospitalization rates will be updated weekly starting later this season.

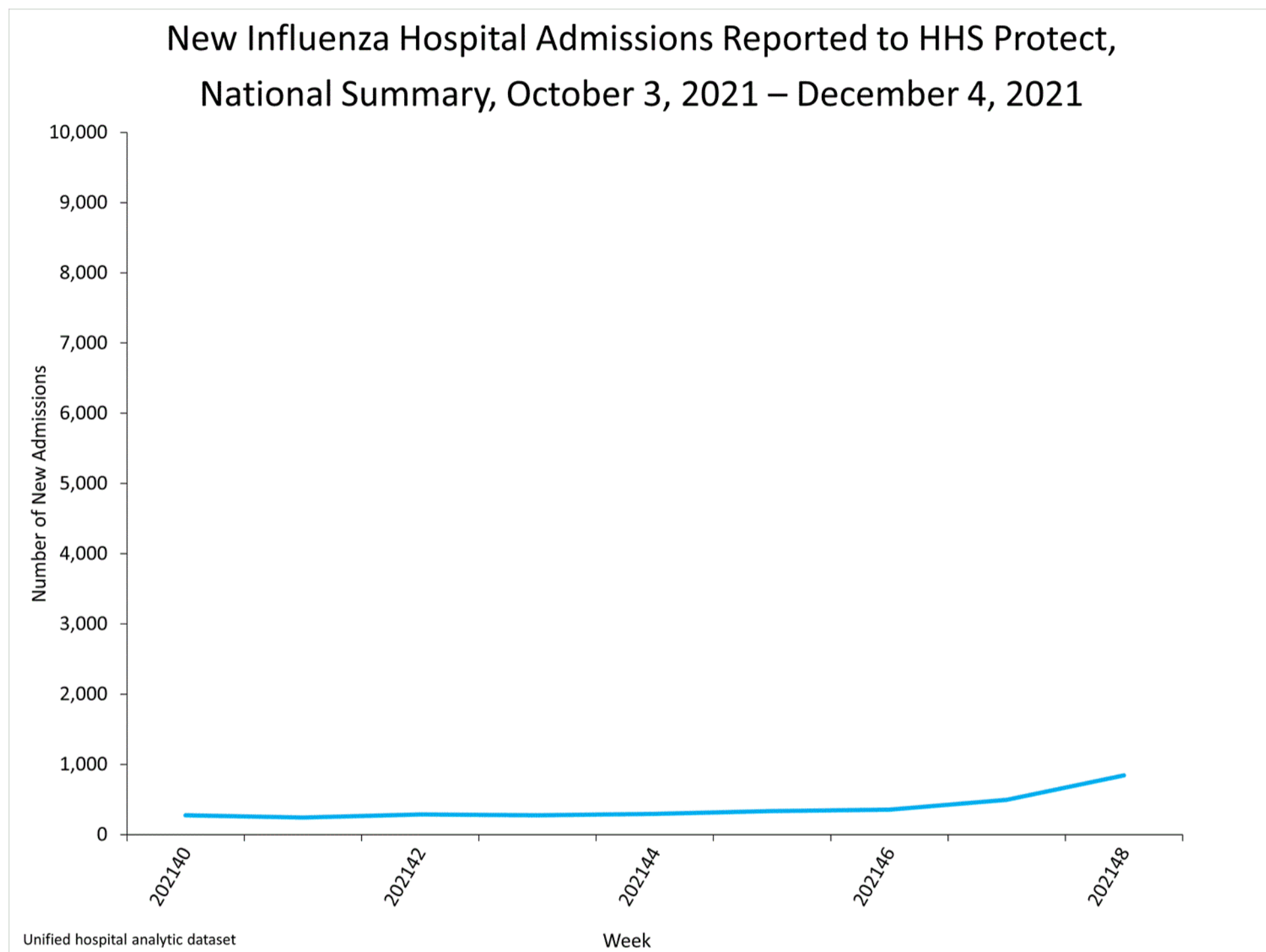
Additional FluSurv-NET hospitalization surveillance information for current and past seasons and additional age groups:

Surveillance Methods (https://www.cdc.gov/flu/weekly/overview.htm#anchor_1633698456778) | FluView Interactive

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

HHS-Protect Hospitalization Surveillance

Hospitals report to HHS-Protect the number of patients admitted with laboratory-confirmed influenza. During week 48, 841 patients with laboratory-confirmed influenza were admitted to the hospital.



(</flu/weekly/weeklyarchives2021-2022/Protect48.html>) View Chart Data  (</flu/weekly/weeklyarchives2021-2022/data/ProtectData48.csv>) | View Full Screen (</flu/weekly/weeklyarchives2021-2022/Protect48.html>)

Additional HHS Protect hospitalization surveillance information:

Surveillance Methods (https://www.cdc.gov/flu/weekly/overview.htm#anchor_1633698474047) | Additional Data 

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

Mortality Surveillance

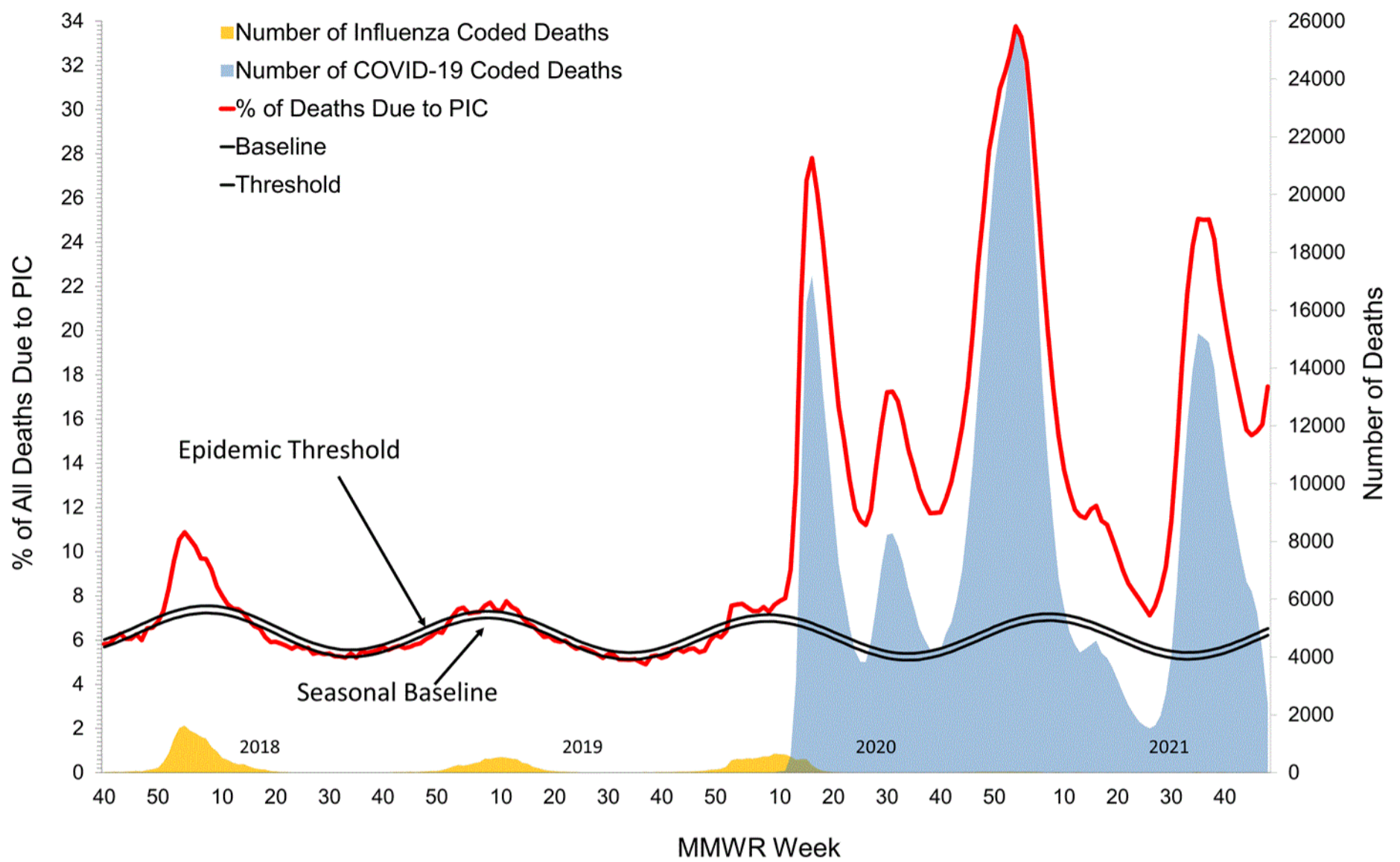
(https://www.cdc.gov/flu/weekly/overview.htm#anchor_1634311686144)

National Center for Health Statistics (NCHS) Mortality Surveillance

Based on NCHS mortality surveillance data available on December 9, 2021, 17.5% of the deaths that occurred during the week ending December 4, 2021 (week 48), were due to pneumonia, influenza, and/or COVID-19 (PIC). This percentage is above the epidemic threshold of 6.5% for this week. Among the 3,167 PIC deaths reported for this week, 2,374 had COVID-19 listed as an underlying or contributing cause of death on the death certificate, and five 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.

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

Data as of December 9, 2021



<https://gis.cdc.gov/grasp/fluview/mortality.html> View Chart Data  (/flu/weekly/weeklyarchives2021-2022/data/NCHSData48.csv) | View Full Screen (/flu/weekly/weeklyarchives2021-2022/NCHS48.html)

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

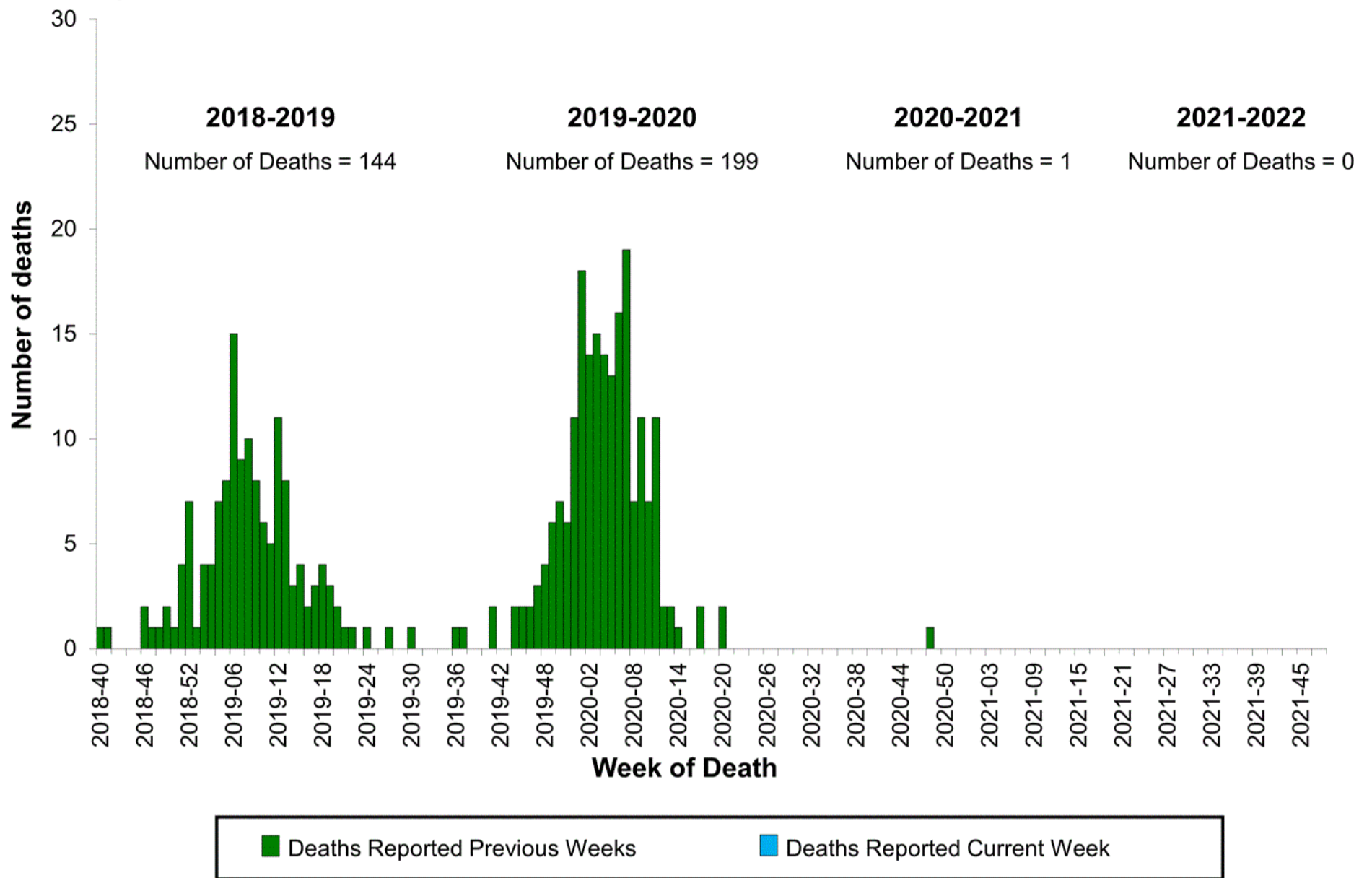
Surveillance Methods (https://www.cdc.gov/flu/weekly/overview.htm#anchor_1633698570680) | FluView Interactive

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

Influenza-Associated Pediatric Mortality

No influenza-associated pediatric deaths occurring during the 2021-2022 season have been reported to CDC.

Influenza-Associated Pediatric Deaths by Week of Death, 2018-2019 season to 2021-2022 season



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

[View Full Screen \(/flu/weekly/weeklyarchives2021-2022/PedFlu48.html\)](/flu/weekly/weeklyarchives2021-2022/PedFlu48.html)

Additional pediatric mortality surveillance information for current and past seasons:

[Surveillance Methods \(https://www.cdc.gov/flu/weekly/overview.htm#anchor_1633698596803\)](https://www.cdc.gov/flu/weekly/overview.htm#anchor_1633698596803) | [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 \(http://adph.org/influenza/\)](http://adph.org/influenza/)

[Alaska \(http://dhss.alaska.gov/dph/Epi/id/Pages/influenza/flui\)](http://dhss.alaska.gov/dph/Epi/id/Pages/influenza/flui)

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

[Connecticut \(https://portal.ct.gov/DPH/Epidemiology-and-En\)](https://portal.ct.gov/DPH/Epidemiology-and-En)

Georgia (https://dph.georgia.gov/epidemiology/influenza/flu-activity-georgia)	Hawaii (http://health.hawaii.gov/docd/resources/reports/influ)
Iowa (http://idph.iowa.gov/influenza/surveillance)	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/)
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://www.ok.gov/health/Prevention_and_Preparedness/Acu)
South Carolina (http://www.scdhec.gov/Health/DiseasesandConditions/InfectiousDiseases/Flu/FluData/)	South Dakota (https://doh.sd.gov/diseases/infectious/flu/su)
Vermont (http://www.healthvermont.gov/immunizations-infectious-disease/influenza/flu-activity-and-surveillance)	Virginia (http://www.vdh.virginia.gov/epidemiology/influenza-)
Wyoming (https://health.wyo.gov/publichealth/infectious-disease-epidemiology-unit/disease/influenza/)	New York City (http://www1.nyc.gov/site/doh/providers/hea)

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>) 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>)

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/) (<http://www.chinaivdc.cn/cnic/>), [Japan](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>), and the [United States](http://www.cdc.gov/flu/) (CDC in Atlanta, Georgia) (<http://www.cdc.gov/flu/>)

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/>).

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/>).

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/>).

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.

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