Weekly U.S. Influenza Surveillance Report

Updated May 6, 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/)

Key Updates for Week 17, ending April 30, 2022

Seasonal influenza activity continues to increase in parts of the country.

Viruses

Clinical Lab

8.1%
positive for influenza this week

(/flu/weekly/index.htm#ClinicalLaboratories)

Public Health Lab

The majority of viruses detected are influenza A(H3N2).

(/flu/weekly/index.htm#PublicHealthLaboratories)

Virus Characterization

Genetic and antigenic characterization and antiviral susceptibility are summarized in this report.
(/flu/weekly/index.htm#VirusCharacterization)

Illness

Outpatient Respiratory Illness

2.2%
of visits to a health care provider are for respiratory illness this week
(below baseline)

(/flu/weekly/index.htm#ILINet)

Outpatient Respiratory Illness: Activity Map

This week, 2 jurisdictions experienced moderate activity and 2 jurisdictions experienced high or very high activity.

(/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#LTCF)

Severe Disease

FluSurv-NET

12.2 per 100,000
cumulative hospitalization rate
(/flu/weekly/index.htm#FluSurvNet)

HHS Protect Hospitalizations

3,070
patients admitted to hospitals with influenza this week.
(/flu/weekly/index.htm#HHSProtect)

NCHS Mortality

7.2 %
of deaths attributed to pneumonia, influenza, or COVID-19 this week ***(above threshold)***
(/flu/weekly/index.htm#NCHSMortality)

Pediatric Deaths

1
influenza-associated death reported this week for a total of 24 so far this season
(/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 varies by region. Influenza activity continues to increase in parts of the country.
- The majority of influenza viruses detected are A(H3N2). H3N2 viruses identified so far this season are genetically closely related to the vaccine virus. Antigenic data show that the majority of the H3N2 viruses characterized are antigenically different from the vaccine reference viruses. While the number of B/Victoria viruses circulating this season is small, the majority of the B/Victoria viruses characterized are antigenically similar to the vaccine reference virus.
- The percentage of outpatient visits due to respiratory illness remained stable compared to last week and is below baseline. Influenza is contributing to levels of respiratory illness, but other respiratory viruses are also circulating. The relative contribution of influenza varies by location.
- The number of hospital admissions with laboratory confirmed influenza that were reported to HHS Protect has decreased for the first time since January.
- The cumulative hospitalization rate in the FluSurv-NET system is higher than the end-of-seasons rates for the 2020-2021 and 2011-2012 seasons, but lower than the rate seen at this time during the four seasons preceding the COVID-19 pandemic.
- One influenza-associated pediatric death was reported this week. There have been 24 pediatric deaths reported this season.
- CDC estimates that, so far this season, there have been at least 5.7 million flu illnesses, 59,000 hospitalizations, and 3,600 deaths from flu.
- An annual flu vaccine is the best way to protect against flu. Vaccination can prevent serious outcomes in people who get vaccinated but still get sick. CDC continues to recommend that everyone ages 6 months and older get a flu vaccine as long as flu activity continues.
- There are also prescription flu antiviral drugs that can be used to treat flu illness.

U.S. Virologic Surveillance

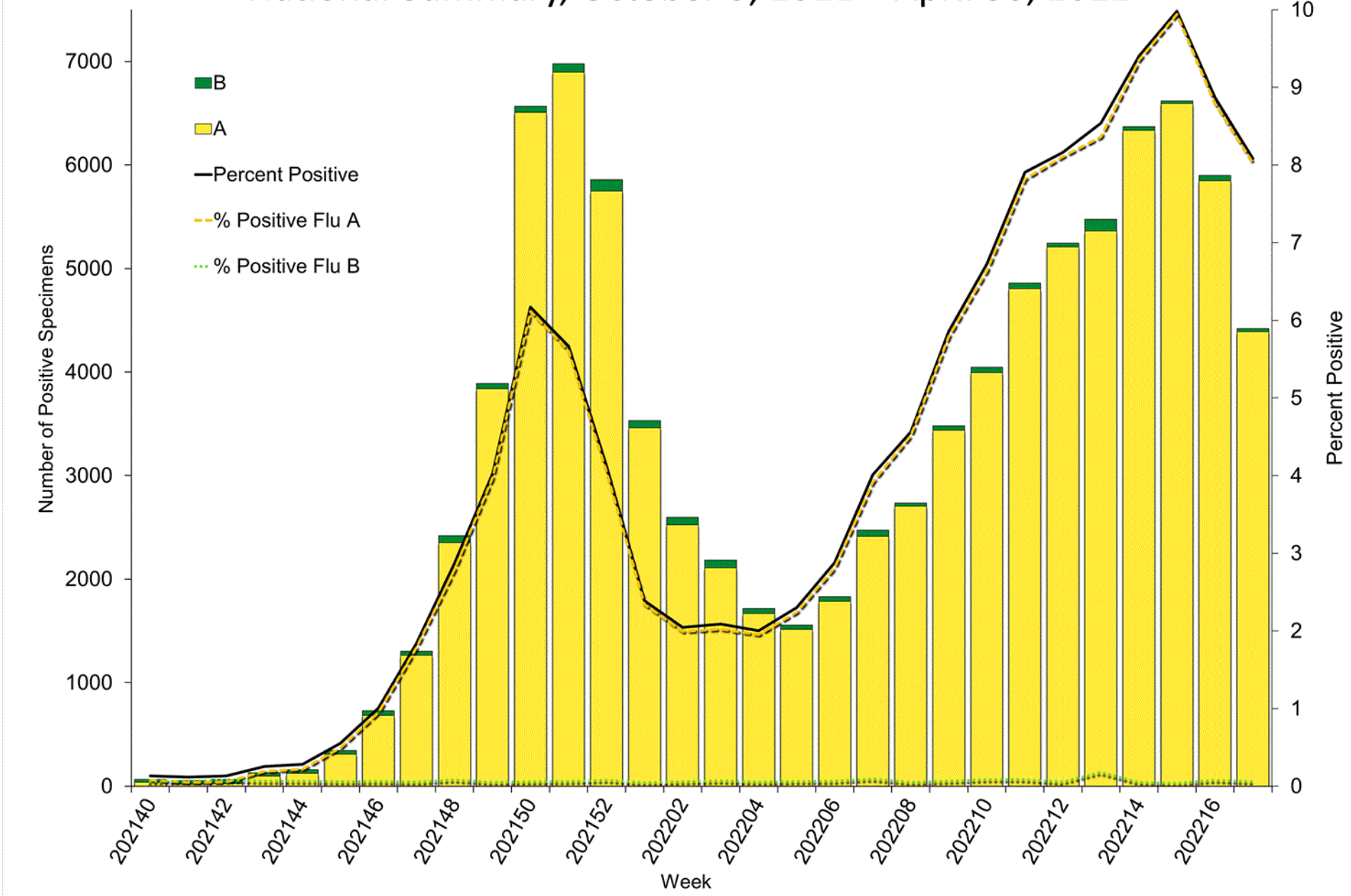
(https://www.cdc.gov/flu/weekly/overview.htm#anchor_1633697372803)

Nationally, the percentage of specimens testing positive for influenza in clinical laboratories decreased. However, activity varied by region; percent positivity increased by more than 0.1 percentage point this week in Region 4, and was similar to or lower than the previous week in all other regions. Influenza A(H3N2) viruses have been the most frequently detected influenza viruses this season. Of the 10,943 influenza positives reported this season by the public health labs and also tested for SARS-CoV-2, 520 (4.8%) were also positive for SARS-CoV-2. For regional and state level data and age group distribution, please visit FluView Interactive (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 17	Data Cumulative since October 3, 2021 (Week 40)
No. of specimens tested	54,691	2,291,246
No. of positive specimens (%)	4,421 (8.1%)	93,590 (4.1%)
Positive specimens by type		
Influenza A	4,390 (99.3%)	92,080 (98.4%)
Influenza B	31 (0.7%)	1,510 (1.6%)



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

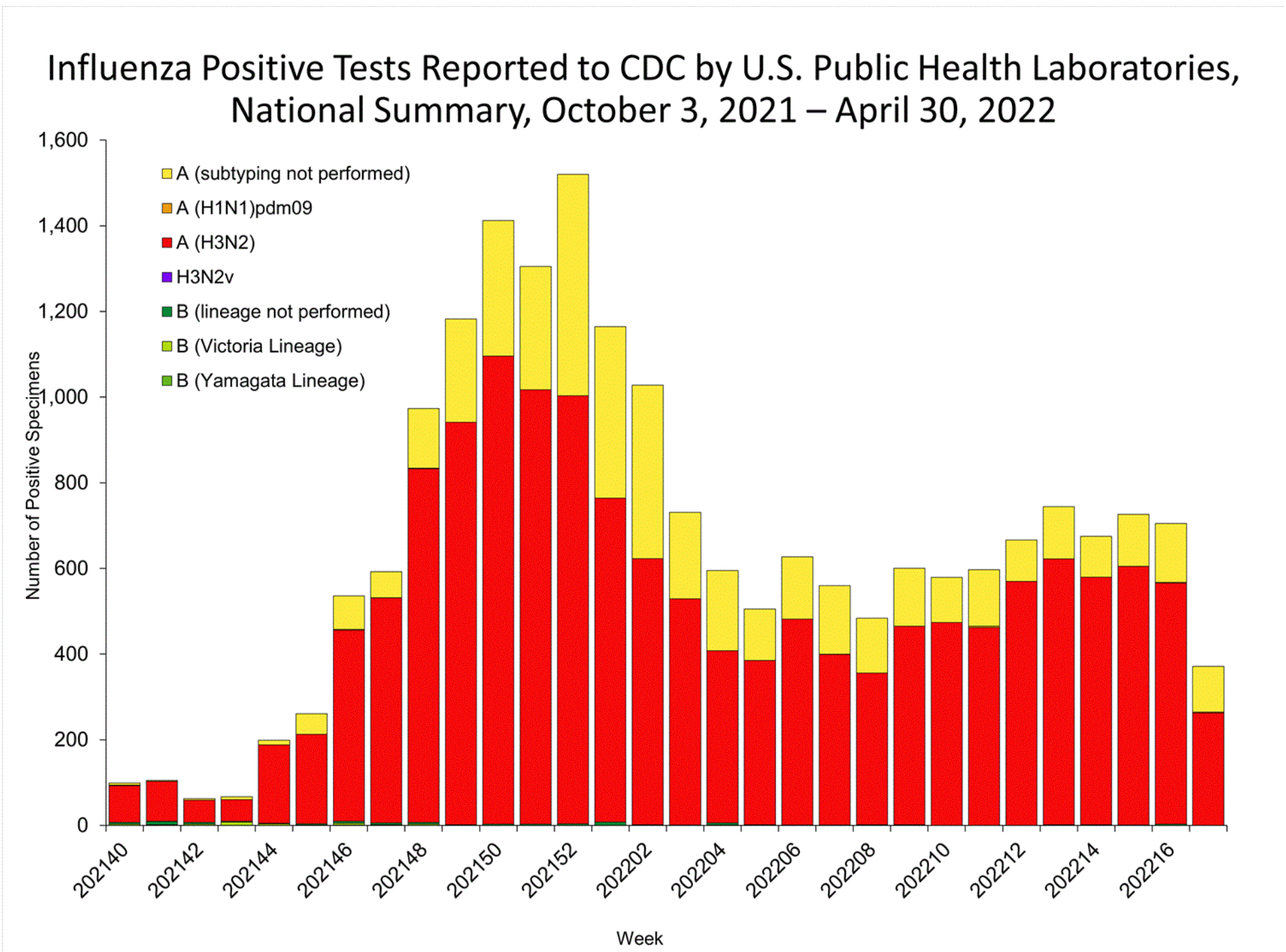
View Chart Data (/flu/weekly/weeklyarchives2021-2022/data/whoAllregt_cl17.html) | View Full Screen (/flu/weekly/weeklyarchives2021-2022/WhoNPHL17.html)

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 17	Data Cumulative since October 3, 2021 (Week 40)
No. of specimens tested	12,204	781,589
No. of positive specimens	371	19,670
Positive specimens by type/subtype		
Influenza A	371 (100%)	19,560 (99.4%)
(H1N1)pdm09	2 (0.8%)	13 (0.1%)
H3N2	263 (99.2%)	15,035 (99.9%)
H3N2v	0	1 (<0.1%)

	Week 17	Data Cumulative since October 3, 2021 (Week 40)
Subtyping not performed	106	4,511
Influenza B	0 (0%)	110 (0.6%)
Yamagata lineage	0	1 (2.8%)
Victoria lineage	0	35 (97.2%)
Lineage not performed	0	74



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

View Chart Data (/flu/weekly/weeklyarchives2021-2022/data/whoAllregt_phl17.html) | View Full Screen (/flu/weekly/weeklyarchives2021-2022/WhoPHL17.html)

Additional virologic surveillance information for current and past seasons:

Surveillance Methods (/flu/weekly/overview.htm#anchor_1633697372803) | 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#anchor_1633697390939)

CDC performs genetic (https://www.cdc.gov/flu/professionals/laboratory/genetic-characterization.htm) and antigenic (https://www.cdc.gov/flu/professionals/laboratory/antigenic.htm) characterization of U.S. viruses submitted from state and local public health laboratories using 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 has genetically characterized 1,188 influenza viruses collected since October 3, 2021. H3N2 viruses identified so far this season are genetically closely related to the vaccine virus, but there are some antigenic differences that have developed as H3N2 viruses have continued to evolve.

	Genetic Characterization				
Virus Subtype or Lineage	Total No. of Subtype/Lineage Tested	HA Clade	Number (% of subtype/lineage tested)	HA Subclade	Number (% of subtype/lineage tested)
A/H1	5				
		6B.1A	5 (100%)	5a.1	3 (60%)
				5a.2	2 (40%)
A/H3	1,160				
		3C.2a1b	1,160 (100%)	1a	2 (0.2%)
				1b	1 (0.1%)
				2a	0
				2a.1	0
				2a.2	1,157 (99.7%)
		3C.3a	0	3a	0
B/Victoria	23				
		V1A	23 (100%)	V1A	0
				V1A.1	0
				V1A.3	9 (39.1%)
				V1A.3a	0
				V1A.3a.1	0
				V1A.3a.2	14 (60.9%)
B/Yamagata	0				
		Y3	0		

CDC antigenically characterizes (https://www.cdc.gov/flu/about/professionals/antigenic.htm) influenza viruses by hemagglutination inhibition (HI) (http://www.cdc.gov/flu/professionals/laboratory/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 2021-2022 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:** Three A(H1N1)pdm09 viruses were antigenically characterized by HI, and 2 (67%) 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 2 (67%) 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):** A subset of 101 A(H3N2) viruses were antigenically characterized by HINT, and 4 (4%) were well recognized (reacting at titers that were within 8-fold of the homologous virus titer) by ferret antisera to cell-grown A/Cambodia/E0826360/2020-like reference viruses representing the A(H3N2) component for the cell- and recombinant-based influenza vaccines, and 19 (19%) were well recognized by ferret antisera to egg-grown A/Cambodia/E0826360/2020-like reference viruses representing the A(H3N2) component for egg-based influenza vaccines.

Influenza B Viruses

- **B/Victoria:** Fifteen B/Victoria lineage viruses were antigenically characterized by HI, and 11 (73%) were well recognized (reacting at titers that were within 4-fold of the homologous virus titer) by ferret antisera to cell-grown B/Washington/02/2019-like reference viruses representing the B/Victoria component for the cell- and recombinant-based influenza vaccines, and 11 (73%) were well recognized by ferret antisera to egg-grown B/Washington/02/2019-like reference viruses representing the B/Victoria component for egg-based influenza vaccines.
- **B/Yamagata:** No influenza B/Yamagata-lineage viruses were available for antigenic characterization.

Assessment of Virus Susceptibility to Antiviral Medications

CDC assesses susceptibility of influenza viruses to antiviral medications including the neuraminidase inhibitors (oseltamivir, zanamivir, and peramivir) and the PA endonuclease inhibitor baloxavir using next generation sequence analysis supplemented by laboratory assays. Information about antiviral susceptibility test methods can be found at U.S. Influenza Surveillance: Purpose and Methods | CDC (https://www.cdc.gov/flu/weekly/overview.htm).

Viruses collected in the United States since October 3, 2021, were tested for antiviral susceptibility as follows:

Antiviral Medication			Total Viruses	A/H1	A/H3	B/Victoria	B/Yamagata
Neuraminidase Inhibitors	Oseltamivir	Viruses Tested	1,201	5	1,173	23	0
		Reduced Inhibition	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)

Antiviral Medication			Total Viruses	A/H1	A/H3	B/Victoria	B/Yamagata
		Highly Reduced Inhibition	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
	Peramivir	Viruses Tested	1,201	5	1,173	23	0
		Reduced Inhibition	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
		Highly Reduced Inhibition	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
	Zanamivir	Viruses Tested	1,201	5	1,173	23	0
		Reduced Inhibition	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
		Highly Reduced Inhibition	(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)
PA Cap-Dependent Endonuclease Inhibitor	Baloxavir	Viruses Tested	1,176	5	1,148	23	0
		Reduced Susceptibility	1 (0.1%)	(0.0%)	1 (0.1%)	(0.0%)	(0.0%)

One A(H3N2) virus had a PA-I38M amino acid substitution previously associated with reduced baloxavir susceptibility and showed ~8-fold reduced susceptibility to baloxavir in vitro.

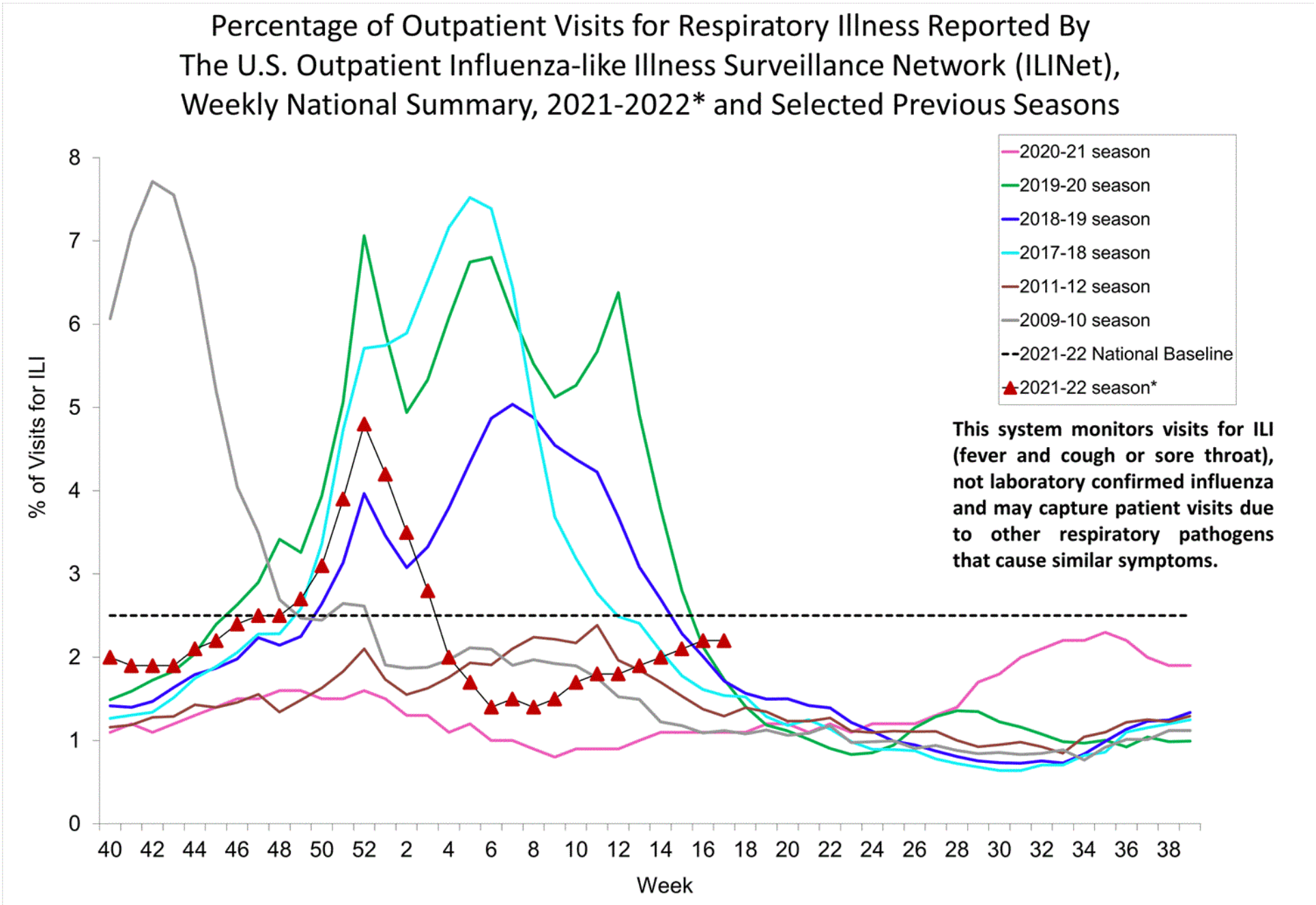
High levels of resistance to the adamantanes (amantadine and rimantadine) persist among influenza A(H1N1)pdm09 and influenza A(H3N2) viruses (the adamantanes are not effective against influenza B viruses). Therefore, use of these antivirals for treatment and prevention of influenza A virus infection is not recommended and data from adamantane resistance testing are not presented.

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, 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). 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 17, 2.2% 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 remained stable (change of ≤ 0.1%) compared to week 16. Seven of the 10 HHS regions are below their region-specific baselines; Regions 1, 2, and 10 are above their respective 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)

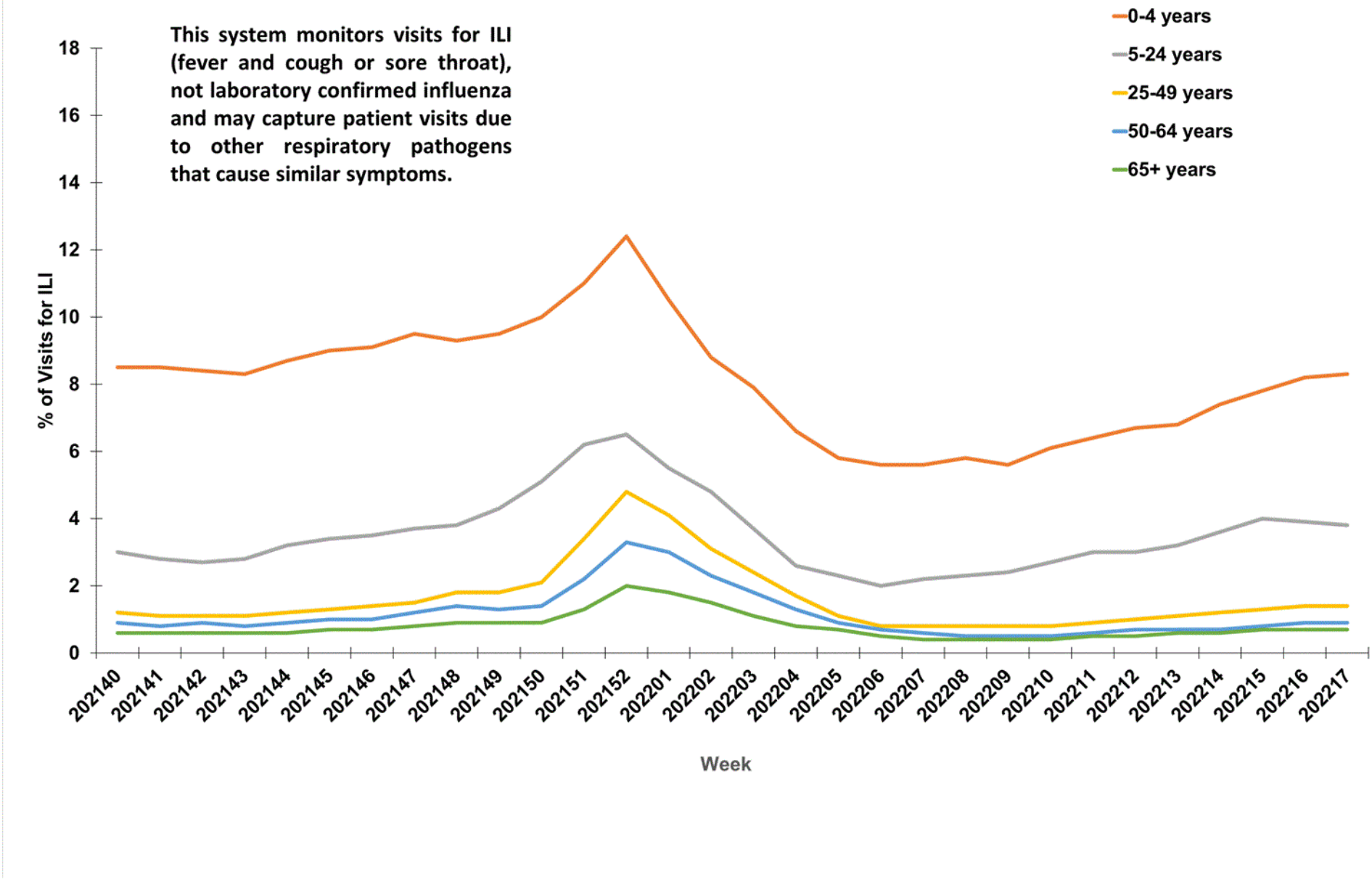
* Effective October 3, 2021 (week 40), the ILI definition (fever plus cough or sore throat) no longer includes “without a known cause other than influenza.”

View Chart Data (current season only) (/flu/weekly/weeklyarchives2021-2022/data/senAllregt17.html) | View Full Screen (/flu/weekly/weeklyarchives2021-2022/ILI17.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 trending upward 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)

* 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/iliage17.html) | View Full Screen (/flu/weekly/weeklyarchives2021-2022/ILIAge17.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 17 (Week ending Apr. 30, 2022)	Week 16 (Week ending Apr. 23, 2022)	Week 17 (Week ending Apr. 30, 2022)	Week 16 (Week ending Apr. 23, 2022)
Very High	1	1	2	2
High	1	3	15	13
Moderate	2	1	16	25
Low	8	10	92	95
Minimal	42	40	540	534
Insufficient Data	1	0	264	260

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.

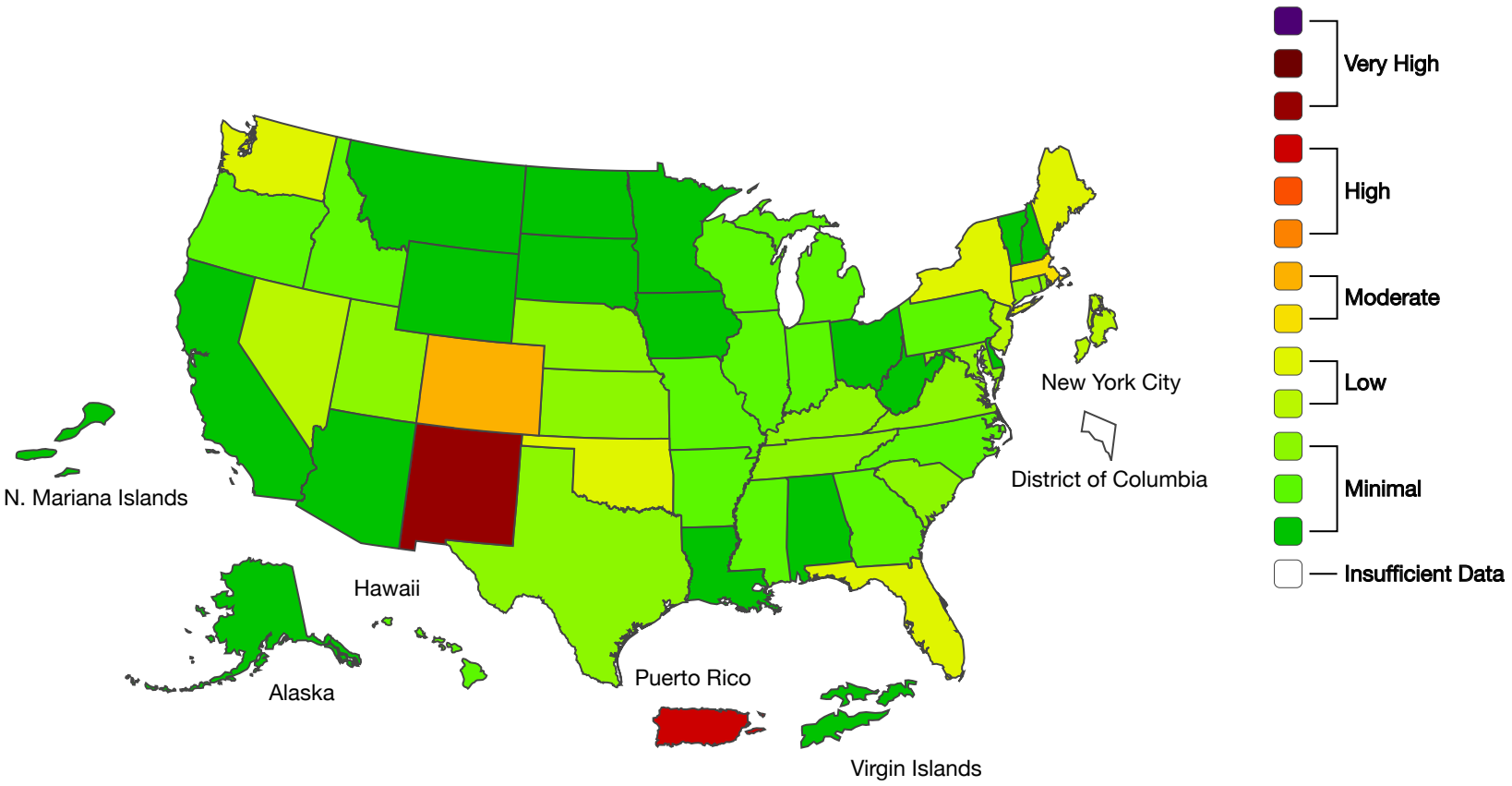
prev Play Pause next

40 50 1 10 17

weeks

State **CBSA**

2021-22 Influenza Season Week 17 ending Apr 30, 2022



Season: 2021-22 ▲

Download Image Download Data

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

*Data collected in ILINet may disproportionally 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.

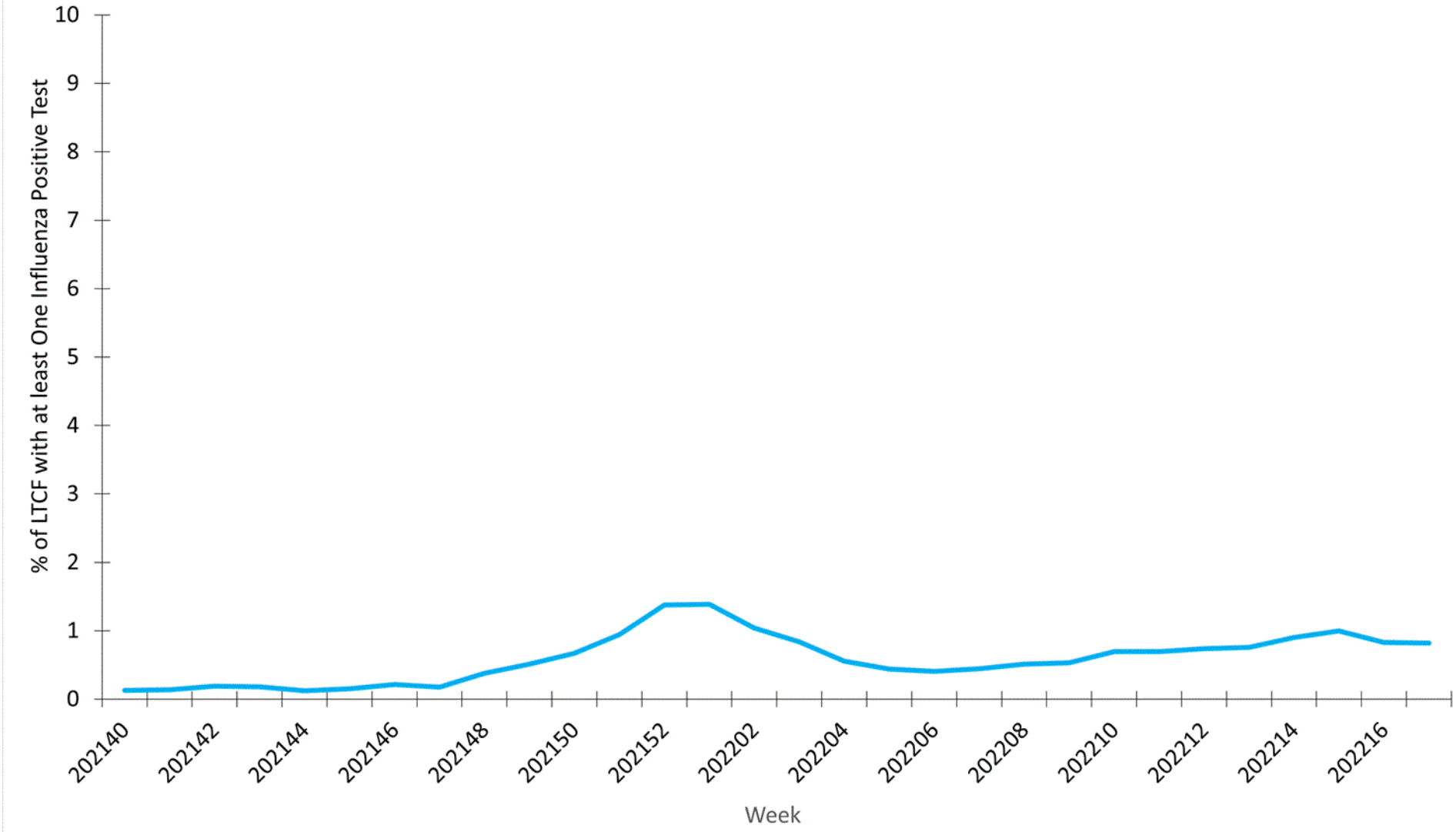
Additional information about medically attended visits for ILI for current and past seasons:

Surveillance Methods (/flu/weekly/overview.htm#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 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 17, 115 (0.8%) of 13,999 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 – May 1, 2022



(/flu/weekly/weeklyarchives2021-2022/LTCF17.html)View Chart Data (/flu/weekly/weeklyarchives2021-2022/data/LTCFData17.csv) | View Full Screen (/flu/weekly/weeklyarchives2021-2022/LTCF17.html)

Additional information about long-term care facility surveillance:

Surveillance Methods (/flu/weekly/overview.htm#anchor_1633698386507) | Additional 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

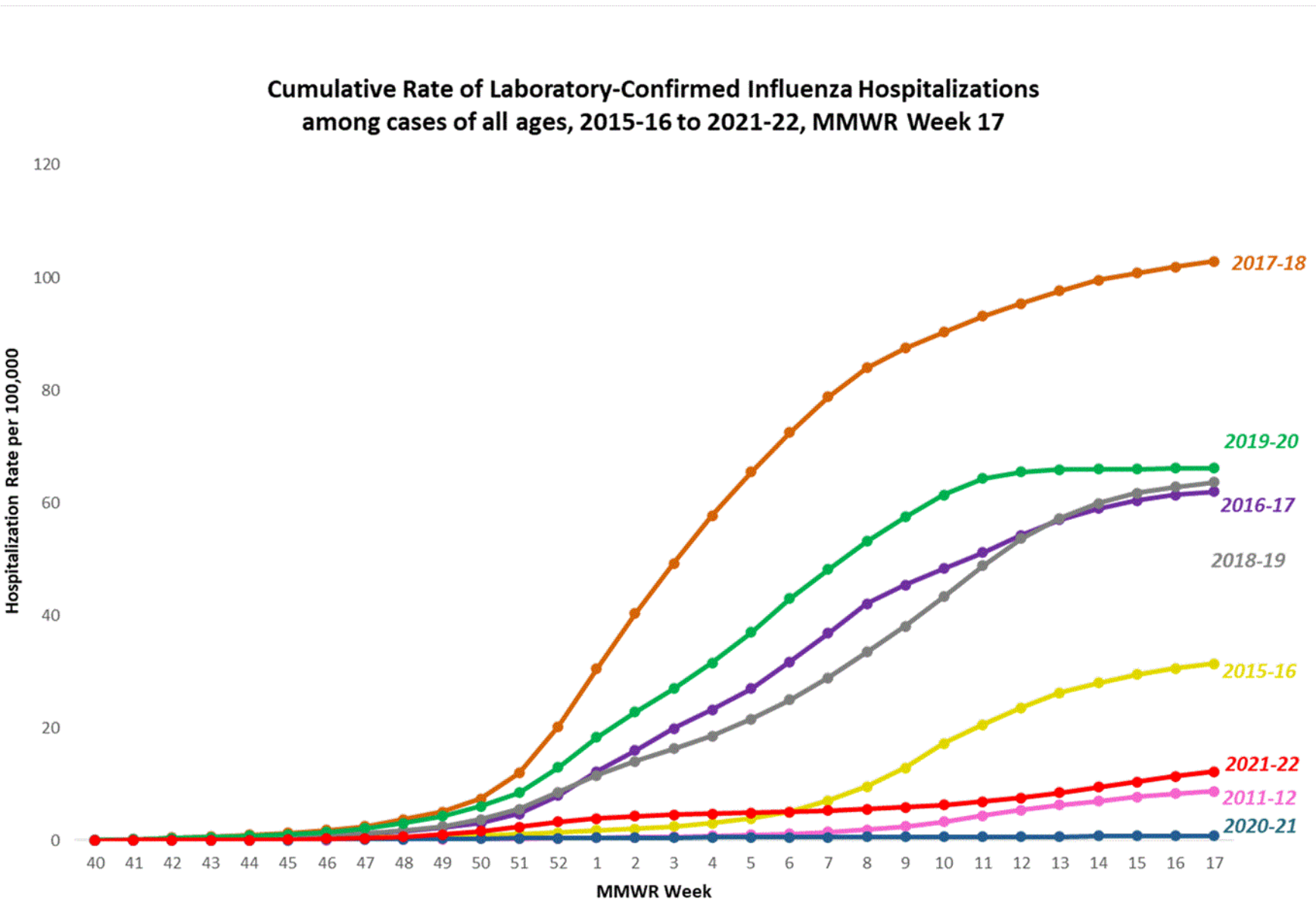
The Influenza Hospitalization Surveillance Network (FluSurv-NET) conducts population-based surveillance for laboratory-confirmed influenza-related hospitalizations in select counties in 14 states and represents approximately 9% of the U.S. population. FluSurv-NET hospitalization data are preliminary. As data are received each week, prior case counts and rates are updated accordingly.

A total of 3,590 laboratory-confirmed influenza-associated hospitalizations were reported by FluSurv-NET sites between October 1, 2021, and April 30, 2022. The overall cumulative hospitalization rate was 12.2 per 100,000 population. This cumulative hospitalization rate is higher than the cumulative end of season hospitalization rate observed during the 2020-2021 season (0.8 per 100,000) and 2011-2012 seasons (8.7 per 100,000), but lower than the in-season rates observed in week 17 during the 4 seasons preceding the COVID-19 pandemic (these ranged from 63.8 to 106 per 100,000 during the 2016-17 through 2019-20 seasons). After increasing during November and December, weekly hospitalization rates declined until the week ending February 19, 2022, when weekly rates began to rise again over the next 9 weeks. The overall weekly rate observed during the week ending April 23, 2022 (1.0), was greater than the previous peak weekly rate observed during the week ending January 1, 2022 (0.9).

When examining rates by age, the highest rate of hospitalization per 100,000 population was among adults aged 65 and older (34.9). Among adults aged 65 and older, rates were highest among adults aged 85 and older (67.6). Among persons aged less than 65 years, hospitalization rates per 100,000 population were highest among children aged 0-4 years (15.4) followed by adults aged 50-64 years (11.5). When examining rates by race and ethnicity, the highest rate of hospitalization per 100,000 population was among non-Hispanic American Indian or Alaska Native persons (18.2), followed by non-Hispanic Black persons (14.1).

Among 3,590 hospitalizations, 3,450 (96.1%) were associated with influenza A virus, 115 (3.2%) with influenza B virus, 6 (0.2%) with influenza A virus and influenza B virus co-infection, and 19 (0.5%) with influenza virus for which the type was not determined. Among 845 hospitalizations with influenza A subtype information, 836 (98.9%) were A(H3N2), and 9 (1.1%) were A(H1N1)pdm09. Based on preliminary data, of the 3,590 laboratory-confirmed influenza-associated hospitalizations, 2.5% also tested positive for SARS-CoV-2.

Among 1,640 hospitalized adults with information on underlying medical conditions, 93.7% had at least one reported underlying medical condition, the most commonly reported conditions were hypertension, cardiovascular disease, metabolic disorder, and obesity. Among 254 hospitalized children with information on underlying medical conditions, 66.9% had at least one reported underlying medical condition; the most commonly reported condition was asthma.



**In this figure, cumulative rates for all seasons prior to the 2021-22 season reflect end-of-season rates. For the 2021-22 season, rates for recent hospital admissions are subject to reporting delays. As hospitalization data are received each week, prior case counts and rates are updated accordingly.

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

View Full Screen (/flu/weekly/weeklyarchives2021-2022/EIPRates17.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#anchor_1633698456778) |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)

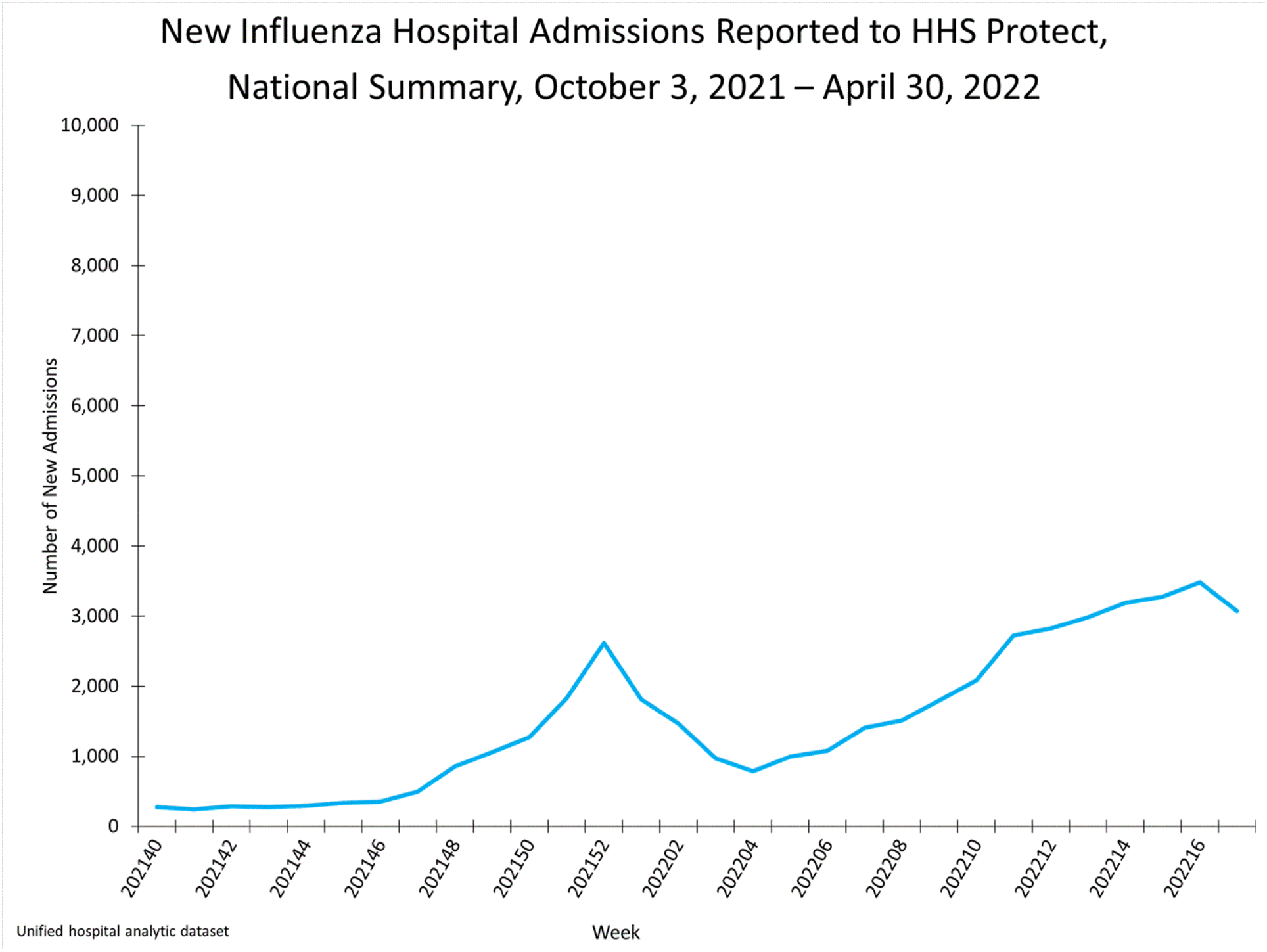
FluSurv-Net data are used to generate national estimates of the total numbers of influenza cases, medical visits, hospitalizations, and deaths. This season, CDC is reporting preliminary cumulative in-season estimates, which are available at https://www.cdc.gov/flu/about/burden/preliminary-in-season-estimates.htm (https://www.cdc.gov/flu/about/burden/preliminary-in-

season-estimates.htm)

HHS Protect Hospitalization Surveillance

Hospitals report to HHS Protect the number of patients admitted with laboratory-confirmed influenza. During week 17, 3,070 patients with laboratory-confirmed influenza were admitted to the hospital.

Effective February 2, 2022, hospitals are required to report laboratory-confirmed influenza hospitalizations to HHS Protect daily. Prior to this update, reporting influenza hospitalizations was optional. See COVID-19 Guidance for Hospital Reporting and FAQs [680 KB, 52 pages] (https://www.hhs.gov/sites/default/files/covid-19-faqs-hospitals-hospital-laboratory-acute-care-facility-data-reporting.pdf) for additional details on this guidance.



(/flu/weekly/weeklyarchives2021-2022/Protect17.html)View Chart Data (/flu/weekly/weeklyarchives2021-2022/data/ProtectData17.csv) | View Full Screen (/flu/weekly/weeklyarchives2021-2022/Protect17.html)

Additional HHS Protect hospitalization surveillance information:

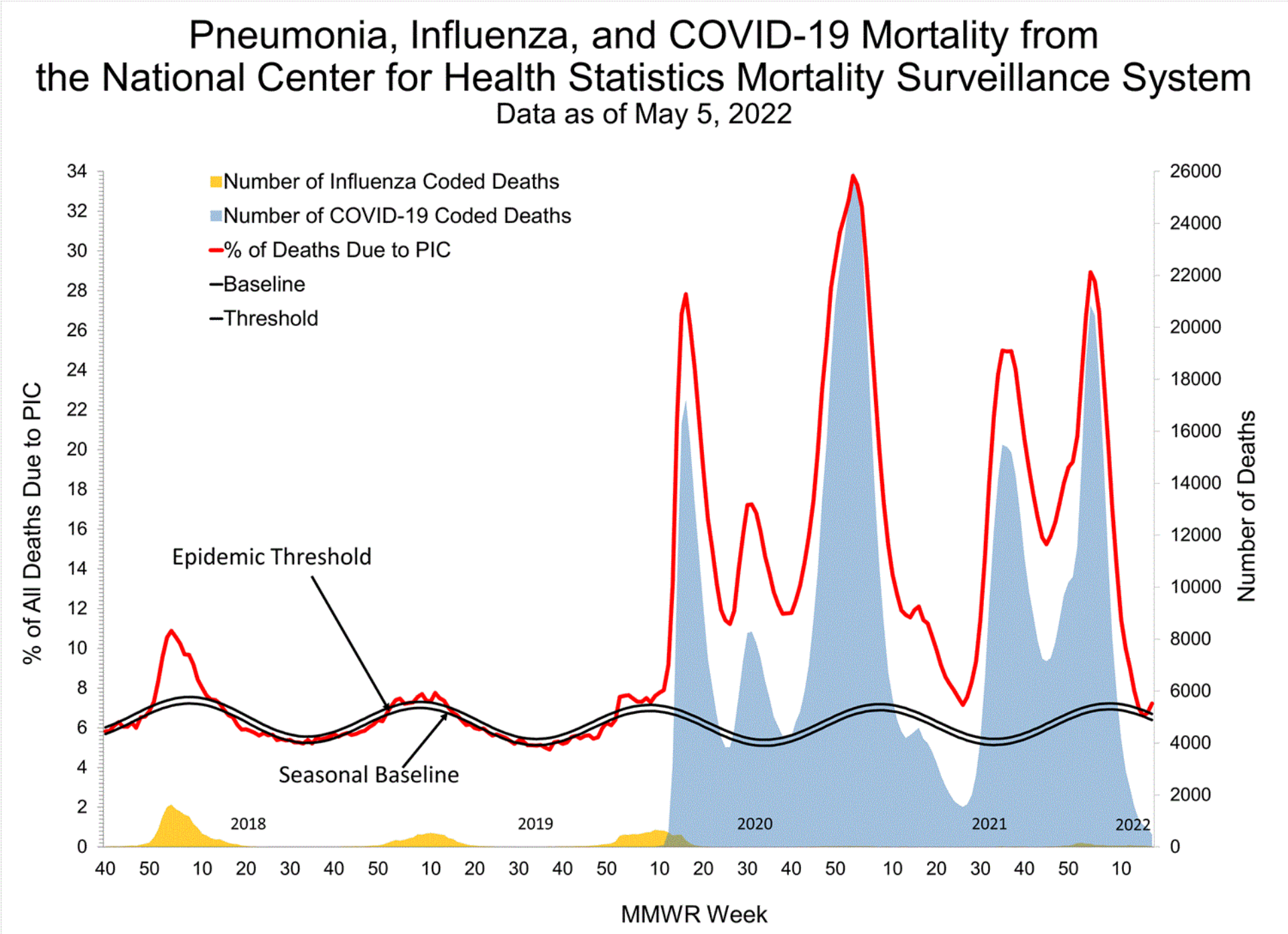
Surveillance Methods (https://www.cdc.gov/flu/weekly/overview.htm#anchor_1633698474047) | Additional Data (https://healthdata.gov/Hospital/COVID-19-Reported-Patient-Impact-and-Hospital-Capa/anag-cw7u)

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 May 5, 2022, 7.2% of the deaths that occurred during the week ending April 30, 2022 (week 17), were due to pneumonia, influenza, and/or COVID-19 (PIC). This percentage is above the epidemic threshold of 6.7% for this week. Among the 1,373 PIC deaths reported for this week, 470 had COVID-19 listed as an underlying

or contributing cause of death on the death certificate, and 27 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.



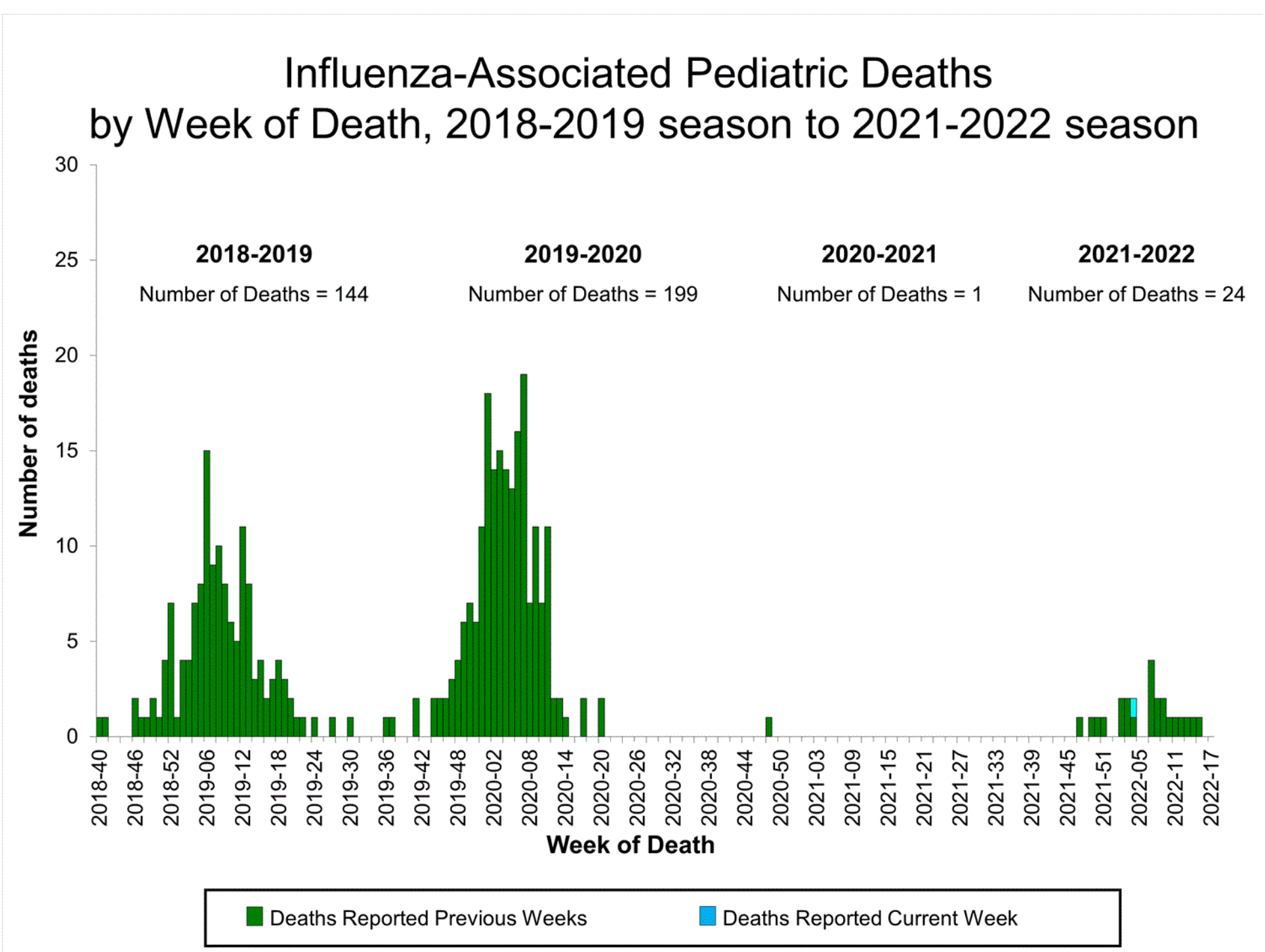
(https://gis.cdc.gov/grasp/fluview/mortality.html)View Chart Data (/flu/weekly/weeklyarchives2021-2022/data/NCHSData17.csv) | View Full Screen (/flu/weekly/weeklyarchives2021-2022/NCHS17.html)

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

One influenza-associated pediatric death occurring during the 2021-2022 season was reported to CDC during week 17. The death was associated with an influenza A(H3) virus and occurred during week 4 (the week ending January 29, 2022).

A total of 24 influenza-associated pediatric deaths occurring during the 2021-2022 season have been reported to CDC.



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

View Full Screen (/flu/weekly/weeklyarchives2021-2022/PedFlu17.html)

Additional pediatric mortality surveillance information for current and past seasons:

Surveillance Methods (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) 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/)	Alaska (http://dhss.alaska.gov/dph/Epi/id/Pages/influenza/flui
Colorado (https://www.colorado.gov/pacific/cdphe/influenza)	Connecticut (https://portal.ct.gov/DPH/Epidemiology-and-Em

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) 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), 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.

Page last reviewed: May 6, 2022, 11:00 AM