

Weekly U.S. Influenza Surveillance Report



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 41, ending October 16, 2021

Seasonal influenza activity in the United States remains low.

Viruses

Clinical Lab	Public Health Lab	Virus Characterization
0.1% positive for influenza	Few specimens have tested positive.	Influenza virus characterization information will be reported later this season.
		(/flu/weeklv/#VirusCharacterization)

Illness

Outpatient Illness: ILINet

1.8% of visits to a health care provider for ILI (below baseline)

Outpatient Illness: ILINet Activity Map



This week, 2 jurisdictions experienced moderate activity and no jurisdictions experienced high or very high activity.

Long-term Care Facilities

0.1% of facilities reported ≥ 1 influenza-positive tests among residents

Severe Disease

FluSurv-NET

Hospitalization rates will be updated starting later this season.

NCHS Mortality

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

HHS Protect Hospitalizations

248

patients admitted to hospitals with flu

Pediatric Deaths

O 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) 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).

Key Points

- An annual flu vaccine is the best way to protect against flu and its potentially serious complications.
- CDC recommends everyone 6 months or older get a flu vaccine by the end of October.
- There also are flu antiviral drugs that can be used to treat flu illness.

U.S. Virologic Surveillance

(https://www.cdc.gov/flu/weekly/overview.htm#anchor_1539281228772)

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 41	Data Cumulative since October 3, 2021 (Week 40)
No. of specimens tested	28,629	69,314
No. of positive specimens (%)	36 (0.1%)	97 (0.1%)
Positive specimens by type		
Influenza A	17 (47.2%)	51 (52.6%)
Influenza B	19 (52.8%)	46 (47.4%)



View Chart Data (/flu/weekly/weeklyarchives2021-2022/data/whoAllregt_cl41.html) | View Full Screen (/flu/weekly/weeklyarchives2021-2022/WhoNPHL41.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 41	Data Cumulative since October 3, 2021 (Week 40)
No. of specimens tested	15,209	30,809
No. of positive specimens	10	24

Positive specimens by type/subtype		
Influenza A	5 (50.0%)	13 (54.2%)
(H1N1)pdm09	0	1 (11.1%)
H3N2	4 (100%)	8 (88.9%)
Subtyping not performed	1	4
Influenza B	5 (40.0%)	11 (45.8%)
Yamagata lineage	0	1 (33.3%)
Victoria lineage	1 (100%)	2 (66.7%)
Lineage not performed	4	8



2022/WhoPHL41.html)

Additional virologic surveillance information for current and past seasons:

Surveillance Methods (https://wcms-wp.cdc.gov/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)

Novel Influenza A Virus

Two human infections with novel influenza A viruses were reported. One infection with an influenza A(H1N1) variant (A(H1N1)v) virus was reported by North Dakota that occurred during the 2020-21 influenza season and one infection with an influenza (A(H3N2)v) virus was reported by Ohio that occurred during the 2021-22 influenza season. Both patients are <18 years of age, were not hospitalized, and have recovered or are recovering from their illness. One of the patients had close contact with swine prior to illness onset. The other patient had no known swine contact or attendance at agricultural exhibits where swine were present; it is possible that limited human-to-human transmission occurred. No ongoing human-to-human transmission has been identified associated with either patient.

When an influenza virus that normally circulates in swine (but not people) is detected in a person, it is called a "variant influenza virus". Most human infections with variant influenza viruses occur following close proximity to swine, but human-to-human transmission can occur. It is important to note that in most cases, variant influenza viruses have not shown the ability to spread easily and sustainably from person to person.

During the 2021-22 influenza season, one human infection with novel influenza A virus has been reported in the United States: H3N2v (OH). During the 2020-21 influenza season, 11 human infections with a novel influenza A virus were reported in the United States, including two H3N2v (IA, WI), three H1N2v (IA, OH (2)), and six H1N1v (IA, NC, ND, WI (3)) virus infections.

Early identification and investigation of human infections with novel influenza A viruses are critical so that the risk of infection can be more fully understood and appropriate public health measures can be taken. Additional information on influenza in swine, variant influenza virus infection in humans, and strategies to interact safely with swine can be found at www.cdc.gov/flu/swineflu/index.htm. Additional information regarding human infections with novel influenza A viruses can be found at http://gis.cdc.gov/grasp/fluview/Novel_Influenza.html. (http://gis.cdc.gov/grasp/fluview/Novel_Influenza.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 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 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 capture visits due to other respiratory pathogens, such as SARS-CoV-2, that present with similar symptoms. 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, COVID-19, 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).

Effective October 3, 2021, the ILI definition (fever plus cough or sore throat) no longer includes "without a known cause other than influenza." This change was made to improve the consistency with which the definition is applied across reporting sites

ILINet

Nationwide during week 41, 1.8% of patient visits reported through ILINet were due to ILI. This percentage is below the national baseline of 2.5%. One region (Region 7) is at their region-specific baseline while the remaining regions are below their baselines. Overall, influenza virus circulation remains low; therefore, increases in ILI activity are likely due to increased circulation of other respiratory viruses.



⁺These seasons did not have a week 53, so the week 53 value is an average of week 52 and week 1.

(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/senAllregt41.html) | View Full Screen (/flu/weekly/weeklyarchives2021-2022/ILI41.html)

ILI Visits by Age Group

More than 70% of ILINet participants provide both the number of patient visits for ILI 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 ILI by age group.

The percentages of visits for ILI reported in ILINet in week 41 decreased or remained stable compared to week 40 for all age groups (0–4 years, 5–24 years, 25–49 years, 50–64 years, and 65+ years) and is showing a decreasing or stabilizing trend over at least the past four weeks for all age groups.

Percentage of Visits for Influenza-Like Illness (ILI) by Age Group Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, May 23, 2021-October 16, 2021



(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/iliage41.html) | View Full Screen (/flu/weekly/weeklyarchives2021-2022/lLlAge41.html)

ILI 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).

Number of Jurisdictions		Number	of CBSAs
Week 41	Week 40	Week 41	Week 40

Activity Level	(Week ending Oct. 16, 2021)	(Week ending Oct. 9, 2021)	(Week ending Oct. 16, 2021)	(Week ending Oct. 9, 2021)
Very High	0	0	0	1
High	0	0	4	3
Moderate	2	2	18	23
Low	6	5	77	90
Minimal	47	48	538	525
Insufficient Data	0	0	292	287

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.



*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 (https://wcms-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 the NHSN Long-term Care Facility Component (https://www.cdc.gov/nhsn/ltc/index.html). During week 41, 19 (0.1%) of 14,271 reporting LTCFs reported at least one influenza positive test among their residents.



Full Screen (/flu/weekly/weeklyarchives2021-2022/LTCF41.html)

Additional information about long-term care facility surveillance:

Surveillance Methods (https://www.cdc.gov/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 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 41, 248 patients with laboratory-confirmed influenza were admitted to the hospital.



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 October 21, 2021, 17.5% of the deaths that occurred during the week ending October 16, 2021 (week 41), were due to pneumonia, influenza, and/or COVID-19 (PIC). This percentage is above the epidemic threshold of 5.8% for this week. Among the 2,885 PIC deaths reported for this week, 2,208 had

COVID-19 listed as an underlying or contributing cause of death on the death certificate, and none 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/NCHSData41.csv) | View Full Screen (/flu/weekly/weeklyarchives2021-2022/NCHS41.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.



View Full Screen (/flu/weekly/weeklyarchives2021-2022/PedFlu41.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 healthrelated 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/influ
Colorado (https://www.colorado.gov/pacific/cdphe/influenza)	Connecticut (https://portal.ct.gov/DPH/Epidemiolog
Georgia (https://dph.georgia.gov/epidemiology/influenza/flu-activity-georgia)	Hawaii (http://health.hawaii.gov/docd/resources/rep
lowa (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/
New Jersey (http://www.nj.gov/health/cd/topics/flu.shtml)	New Mexico (https://nmhealth.org/about/erd/ideb/
Ohio (http://www.flu.ohio.gov)	Oklahoma (https://www.ok.gov/health/Prevention_and_Prepared
South Carolina (http://www.scdhec.gov/Health/DiseasesandConditions/InfectiousDiseases/Flu/FluData/)	South Dakota (https://doh.sd.gov/diseases/infectio
Vermont (http://www.healthvermont.gov/immunizations-infectious- disease/influenza/flu-activity-and-surveillance)	Virginia (http://www.vdh.virginia.gov/epidemiology/i
Wyoming (https://health.wyo.gov/publichealth/infectious-disease-epidemiology- unit/disease/influenza/)	New York City (http://www1.nyc.gov/site/doh/provi

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-influenzaprogramme/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.

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