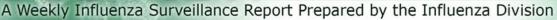


Influenza (Flu)

Weekly U.S. Influenza Surveillance Report







Key Updates for Week 43, ending October 26, 2019

According to this week's FluView report, seasonal influenza activity in the United States increased slightly, but remains low.

Viruses

Clinical Lab

2.4% of respiratory specimens tested in clinical laboratories were positive for influenza viruses. This is slightly higher than the previous week.

Public Health Lab

Influenza A(H3N2) and influenza B/Victoria viruses have been most common so far, with influenza A(H3N2) viruses slightly outnumbering influenza B/Victoria viruses.

Virus Characterization

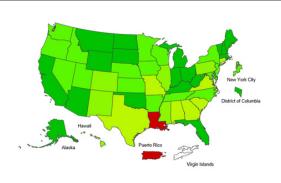
Data for this season will be reported when a sufficient number of viruses have been characterized. Virus characterization data through September 28 is available.

Illness

Outpatient Illness: ILINet

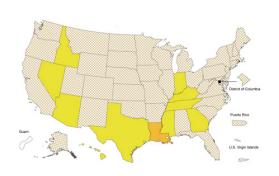
1.9% of visits to a health care provider were for influenza-like illness (ILI). ILI activity is higher than the previous week but remains below the national baseline of 2.4%.

Outpatient Illness: ILI Activity Map



The majority of jurisdictions experienced minimal ILI activity; however, Louisiana and Puerto Rico experienced high ILI activity and 7 states experienced low ILI activity.

Geographic Spread



The majority of jurisdictions reported sporadic or local activity; however, Louisiana reported regional activity and Rhode Island reported no activity.

Severe Disease

Hospitalizations

Data for this season will be provided when a sufficient number of hospitalizations have been reported.

P&I Mortality

5.1% of deaths were attributed to pneumonia and influenza (P&I). This is below the epidemic threshold of 5.8%.

Pediatric Deaths

No new influenza-associated pediatric deaths occurring during the 2019-2020 season were reported to CDC this week. The total for the season is 2.

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

An overview of the CDC influenza surveillance system, including methodology and detailed descriptions of each data component, is available at http://www.cdc.gov/flu/weekly/overview.htm.

Additional information on the current and previous influenza seasons for each surveillance component are available on FluView Interactive

Key Messages from CDC

- Nationally, flu activity is low and similar to what has been observed during recent previous seasons at the same time, but Louisiana and Puerto Rico both continue to experience high levels of influenza-like-illness.
- It's too early to characterize the timing of the season, what viruses will predominate, or how severe the season will be.
- Flu vaccination is always the best way to prevent flu and its potentially serious complications. Most flu vaccines protect against 4 different flu viruses. Get vaccinated now.

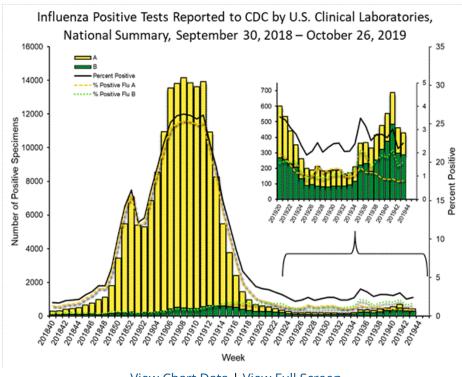
U.S. Virologic Surveillance

Clinical Laboratories

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

	Week 43	Data Cumulative since September 29, 2019 (week 40)
No. of specimens tested	17,720	82,444
No. of positive specimens (%)	428 (2.4%)	2,130 (2.6%)
Positive specimens by type		
Influenza A	141 (32.9%)	685 (32.2%)
Influenza B	287 (67.1%)	1,445 (67.8%)

The majority (75%) of all influenza viruses and 86% of the influenza B viruses reported by clinical laboratories thus far this season were from the south and southeast regions (regions 4 and 6).



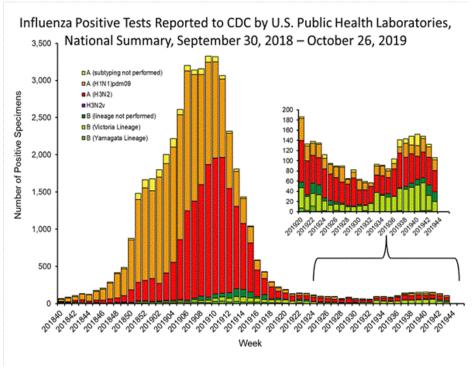
View Chart Data | View Full Screen

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 43	Data Cumulative since September 29, 2019 (week 40)	
No. of specimens tested	550	3,209	
No. of positive specimens	106	538	
Positive specimens by type/subtype			
Influenza A	67 (63.2%)	318 (59.1%)	
(H1N1)pdm09	21 (33.3%)	89 (33.7%)	
H3N2	42 (66.7%)	194 (66.3%)	
Subtyping not performed	4	35	
Influenza B	39 (36.8%)	220 (40.9%)	
Yamagata lineage	0 (0.0%)	6 (3.7%)	
Victoria lineage	20 (100%)	155 (96.3%)	

Nationally, influenza A(H3N2) viruses have been reported more frequently than other influenza viruses this season; however, influenza B/Victoria viruses have predominated in the south and southeast regions (regions 4 and 6).



View Chart Data | View Full Screen

For additional virologic surveillance information for this season and past seasons:

Surveillance Methods | FluView Interactive: National, Regional, and State Data or Age Data

Influenza Virus Characterization

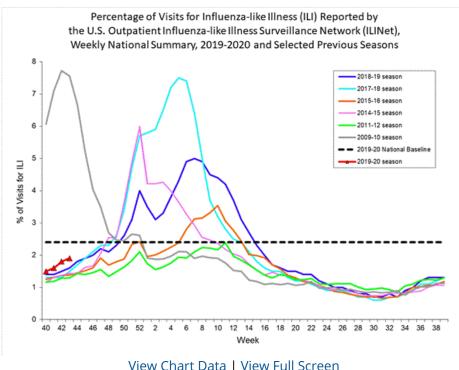
CDC performs genetic and antigenic characterization of U.S. viruses submitted from state and local health laboratories using Right Size Roadmap submission guidance. These data are used to compare how similar the currently circulating influenza viruses are to the reference viruses used for developing new 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 starting later this season when sufficient numbers of specimens have been tested.

Outpatient Illness Surveillance

ILINet

Nationwide during week 43, 1.9% of patient visits reported through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) were due to influenza-like illness (ILI). This percentage is below the national baseline of 2.4%.



View Chart Data | View Full Screen

On a regional level, the percentage of outpatient visits for ILI ranged from 1.1% to 3.3% during week 43. All regions reported a percentage of outpatient visits for ILI below their region-specific baselines.

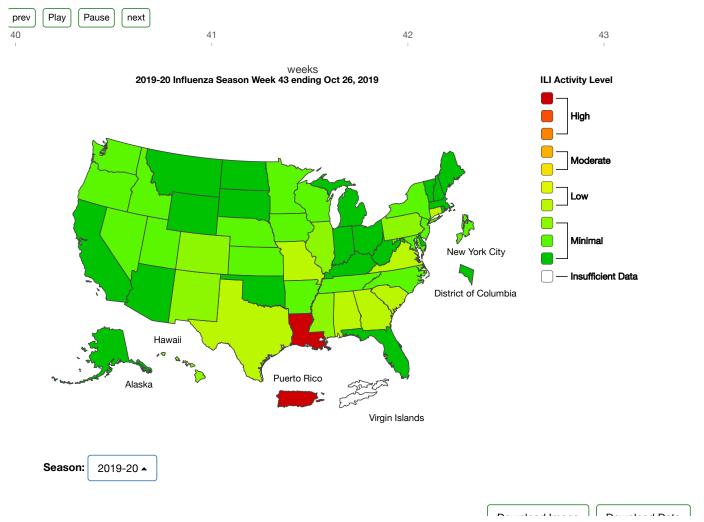
ILI Activity Map

Data collected in ILINet are used to produce a measure of ILI activity* by state.

During week 43, the following ILI activity levels were experienced:

- High Puerto Rico and 1 state (Louisiana)
- Low 7 states (Alabama, Connecticut, Georgia, Missouri, South Carolina, Texas, and Virginia)
- Minimal District of Columbia, New York City, and 42 states (Alaska, Arizona, Arkansas, California, Colorado, Delaware, Florida, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Tennessee, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming)
- Data were Insufficient to calculate an ILI activity level from the U.S. Virgin Islands

A Weekly Influenza Surveillance Report Prepared by the Influenza Division Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet



^{*}Data collected in ILINet may disproportionally represent certain populations within a state, and therefore, may not accurately depict the full picture of influenza activity for the whole state. Differences in the data presented here by CDC and independently by some state health departments likely represent differing levels of data completeness with data presented by the state likely being the more complete.

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

Surveillance Methods | FluView Interactive: National, Regional, and State Data or ILI Activity Map

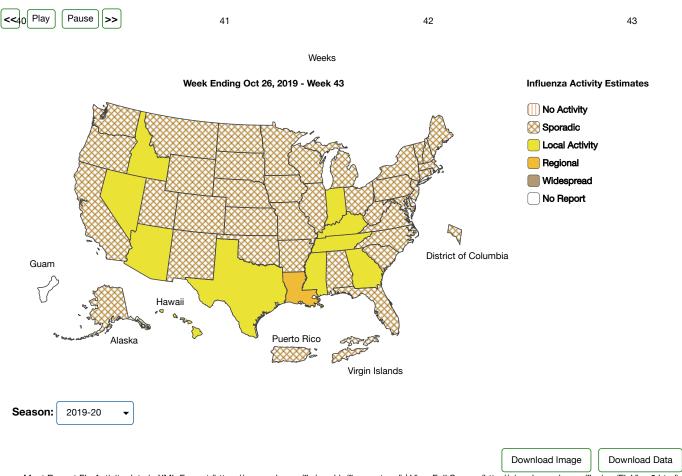
Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists

The influenza activity reported by state and territorial epidemiologists indicates geographic spread of influenza viruses but does not measure the severity of influenza activity.

During week 43 the following influenza activity was reported:

- Regional one state (Louisiana)
- Local 10 states (Arizona, Georgia, Hawaii, Idaho, Indiana, Kentucky, Mississippi, Nevada, Tennessee, and Texas).
- Sporadic the District of Columbia, Puerto Rico, the U.S. Virgin Islands and 38 states (Alabama, Alaska, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Illinois, Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming).
- No activity one state (Rhode Island).
- Guam did not report.

A Weekly Influenza Surveillance Report Prepared by the Influenza Division Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*



 $Most\ Recent\ Flu\ Activity\ data\ in\ XML\ Format\ (https://www.cdc.gov/flu/weekly/flureport.xml)\ |\ View\ Full\ Screen\ (http://gis.cdc.gov/grasp/fluview/FluView8.html)\ |\ View\ Full\ Screen\ (http://gis.cdc.gov/grasp/fluview/FluView8.html)\ |\ View\ Full\ Screen\ (http://gis.cdc.gov/grasp/fluview8.html)\ |\ View\ Full\ Full\ Full\ Full\ Full\ Full\ Full\ (http://gis.cdc.gov/grasp/fluview8.html)\ |\ View\ Full\ Fu$

*This map indicates geographic spread and does not measure the severity of influenza activity.

Additional information about the geographic spread of influenza this season and past seasons:

Surveillance Methods | FluView Interactive

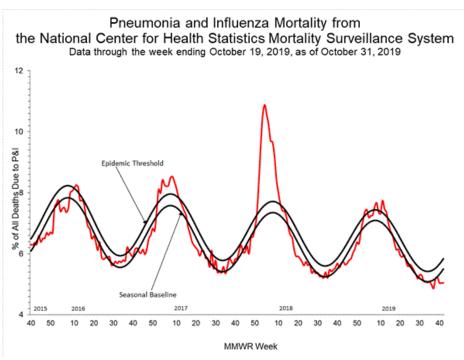
Influenza-Associated Hospitalizations

The Influenza Hospitalization Surveillance Network (FluSurv-NET) conducts population-based surveillance for laboratory-confirmed influenza-related hospitalizations in select counties in the Emerging Infections Program (EIP) states and Influenza Hospitalization Surveillance Project (IHSP) states. FluSurv-NET estimated hospitalization rates will be updated weekly starting later this season when a sufficient number of hospitalizations have been reported.

Additional FluSurv-NET data can be found at: http://gis.cdc.gov/GRASP/Fluview/FluHospRates.html and http://gis.cdc.gov/grasp/fluview/FluHospChars.html.

Pneumonia and Influenza (P&I) Mortality Surveillance

Based on National Center for Health Statistics (NCHS) mortality surveillance data available on October 31, 2019, 5.1% of the deaths occurring during the week ending October 19, 2019 (week 42) were due to P&I. This percentage is below the epidemic threshold of 5.8% for week 42.



View Chart Data | View Full Screen

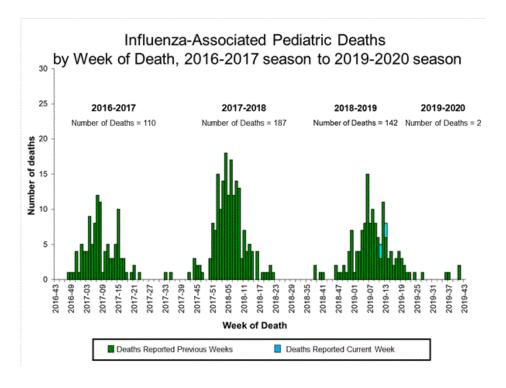
Additional pneumonia and influenza mortality surveillance information for current and past seasons: Surveillance Methods | FluView Interactive

Influenza-Associated Pediatric Mortality

Four influenza-associated pediatric deaths were reported to CDC during week 43. Two of the deaths occurred during week 11 (the week ending March 16, 2019). One of these deaths was associated with an influenza A (H3) virus and the other death was associated with an influenza A (H1N1)pdm09 virus. Two deaths occurred during week 13 (the week

ending March, 30, 2019). One of these deaths was associated with an influenza A virus for which no subtyping was performed and the other death was associated with an influenza A (H1N1)pdm09 virus. All four of these deaths occurred during the 2018-2019 season, bringing the total number of deaths during that season to 142.

A total of two influenza-associated pediatric deaths occurring during the 2019-2020 season have been reported to CDC.



View Full Screen

Additional Influenza-associated pediatric mortality surveillance information for current and past seasons: Surveillance Methods | FluView Interactive

<u>Additional National and International Influenza Surveillance</u> 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 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. To access these tools, visit http://www.cdc.gov/flu/weekly/fluviewinteractive.htm

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 at https://www.cdc.gov/niosh/topics/absences/default.html

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

Alabama	Alaska	Arizona	Arkansas	California
Colorado	Connecticut	Delaware	District of Columbia	Florida
Georgia	Hawaii	Idaho	Illinois	Indiana
Iowa	Kansas	Kentucky	Louisiana	Maine
Maryland	Massachusetts	Michigan	Minnesota	Mississippi
Missouri	Montana	Nebraska	Nevada	New Hampshire
New Jersey	New Mexico	New York	North Carolina	North Dakota
Ohio	Oklahoma	Oregon	Pennsylvania	Rhode Island
South Carolina	South Dakota	Tennessee	Texas	Utah
Vermont	Virginia	Washington	West Virginia	Wisconsin
Wyoming	New York City	Puerto Rico	Virgin Islands	

World Health Organization: Additional influenza surveillance information from participating WHO member nations is available through FluNet and the Global Epidemiology Reports.

WHO Collaborating Centers for Influenza located in Australia, China, Japan, the United Kingdom, and the United States (CDC in Atlanta, Georgia).

Europe: For the most recent influenza surveillance information from Europe, please see WHO/Europe and the European Centre for Disease Prevention and Control at http://www.flunewseurope.org/.

Public Health Agency of Canada: The most up-to-date influenza information from Canada is available at http://www.phac-aspc.gc.ca/fluwatch/

Public Health England: The most up-to-date influenza information from the United Kingdom is available at https://www.gov.uk/government/statistics/weekly-national-flu-reports

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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