Influenza (Flu)

Weekly U.S. Influenza Surveillance Report



A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Key Updates for Week 40 ending October 5, 2019

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

Viruses

Clinical Lab	Public Health Lab	Virus Characterization
3.1% of respiratory specimens tested in clinical laboratories were positive for influenza viruses. This is approximately the same as the previous week.	Influenza A viruses predominated this week with equal numbers of (H3N2) and (H1N1)pdm09 viruses reported.	Influenza virus characterization information will be updated weekly starting later this season.

Illness

Outpatient Illness: ILINet

1.4% of visits to a health care provider were for ILI. ILI activity remains below the national baseline of 2.4% but increased slightly from the previous week.



Outpatient Illness: ILI Activity Map



The majority of jurisdictions experienced minimal ILI activity; however, Louisiana experienced moderate ILI

Geographic Spread



4 out of 53 jurisdictions reported local flu activity; the remainder reported sporadic or no flu activity.

Severe Disease

Hospitalizations	P&I Mortality	Pediatric Deaths
Hospitalization rates will be updated weekly starting later this season.	5.0 % of deaths were attributed to pneumonia and influenza (P&I). This is below the epidemic threshold of 5.6%.	No influenza-associated pediatric deaths occurring during the 2019-20 season have been reported to CDC. 138 pediatric deaths occurring during the 2018-2019 season have been reported.

Key Messages from CDC

- CDC expects flu activity to remain low but increase in the coming weeks.
- An annual flu vaccine is the best way to protect against influenza and its potentially serious complications.
- CDC recommends everyone 6 months or older gets a flu vaccine by the end of October.
- There also are flu antiviral drugs that can be used to treat flu illness.

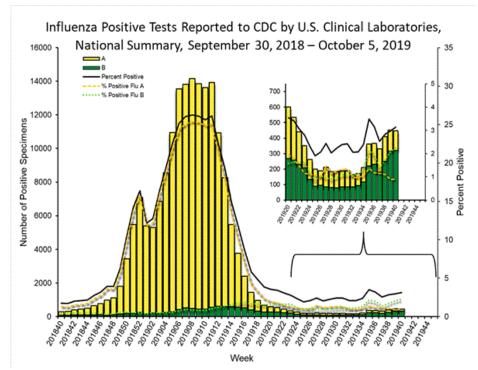
All data are preliminary and may change as more reports are received.

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.

U.S. Virologic Surveillance:

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 40
No. of specimens tested	14,227
No. of positive specimens (%)	447 (3.1%)
Positive specimens by type	
Influenza A	127 (28.4%)
Influenza B	320 (71.6%)

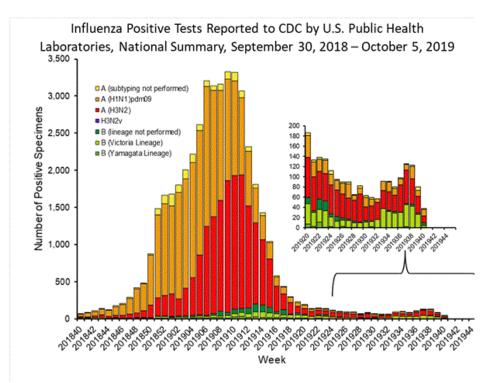


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The results of tests performed by public health laboratories nationwide are summarized below. Data from public health laboratories are used to monitor the proportion of circulating viruses that belong to each influenza subtype/lineage.

	Week 40
No. of specimens tested	352

No. of positive specimens	38
Positive specimens by type/subtype	
Influenza A	28 (73.7%)
A(H1N1)pdm09	13 (50.0%)
Н3	13 (50.0%)
Subtyping not performed	2
Influenza B	10 (26.3%)
Yamagata lineage	1 (20.0%)
Victoria lineage	4 (80.0%)
Lineage not performed	5



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Additional virologic surveillance information for this season and past seasons:

Surveillance methods - http://www.cdc.gov/flu/weekly/overview.htm. National, regional and state data - http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html. Age group data - http://gis.cdc.gov/grasp/fluview/flu_by_age_virus.html.

Influenza Virus Characterization:

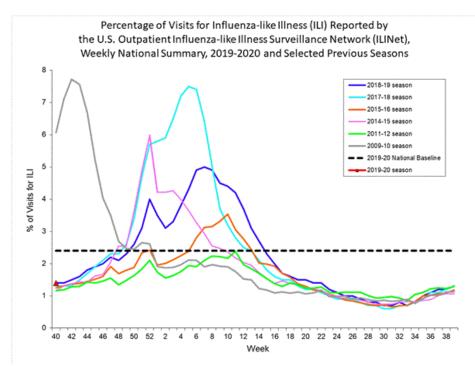
CDC performs genetic and antigenic characterization of U.S. viruses submitted from state and local health laboratories using Right Size Roadmap submission guidance. These data are used to compare how similar the currently circulating influenza viruses are to the reference viruses used for developing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

Outpatient Illness Surveillance:

Nationwide during week 40, 1.4% 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%. *(ILI is defined as fever (temperature of 100°F [37.8°C] or greater) and cough and/or sore throat.)*

On a regional level, the percentage of outpatient visits for ILI ranged from 0.8% to 2.2% during week 40. All regions reported a percentage of outpatient visits for ILI below their region-specific baselines



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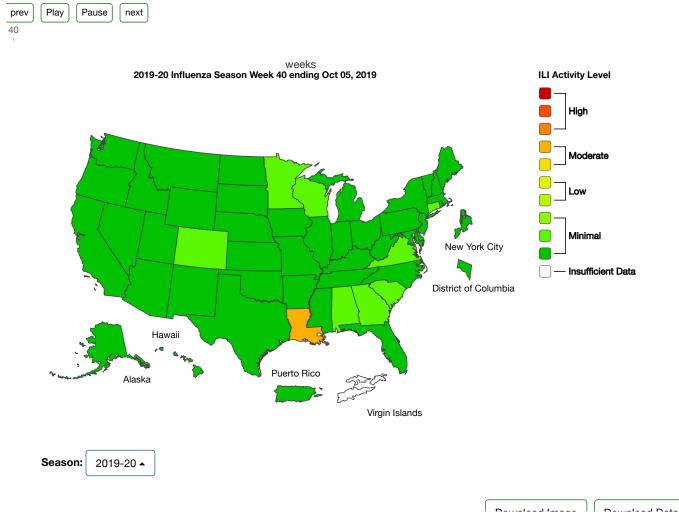
ILINet State Activity Indicator Map:

Data collected in ILINet are used to produce a measure of ILI activity* by state. During week 40, the following ILI activity levels were experienced:

- Moderate 1 state (Louisiana)
- Minimal District of Columbia, New York City, Puerto Rico and 49 states (Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, 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 and Wyoming)
- Data were Insufficient to calculate an ILI activity level from the U.S. Virgin Islands

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



ions within a state and therefore ma

*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:

Surveillance methods - http://www.cdc.gov/flu/weekly/overview.htm. National, regional and state data - http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html. ILI Activity Indicator Map for past weeks - https://gis.cdc.gov/grasp/fluview/main.html.

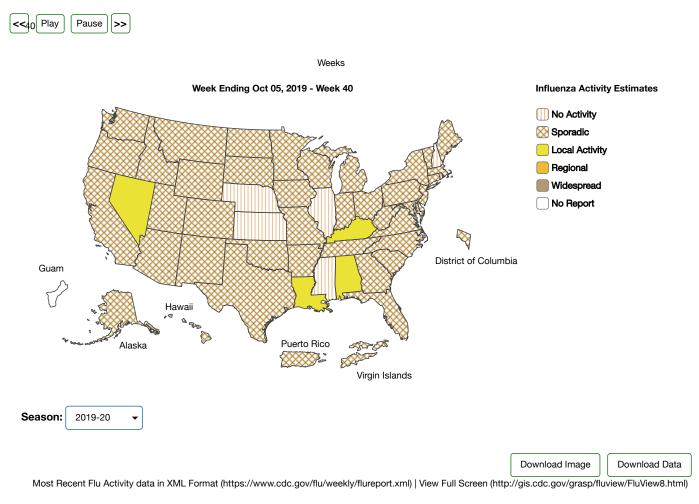
Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists

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 40, the following influenza activity was reported:

- Local four states (Alabama, Kentucky, Louisiana and Nevada).
- Sporadic the District of Columbia, Puerto Rico, the U.S. Virgin Islands and 40 states (Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Indiana, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin and Wyoming).
- No activity six states (Illinois, Kansas, Mississippi, Nebraska, New Hampshire and 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*



*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 - http://www.cdc.gov/flu/weekly/overview.htm. Map for past weeks - https://gis.cdc.gov/grasp/fluview/FluView8.html.

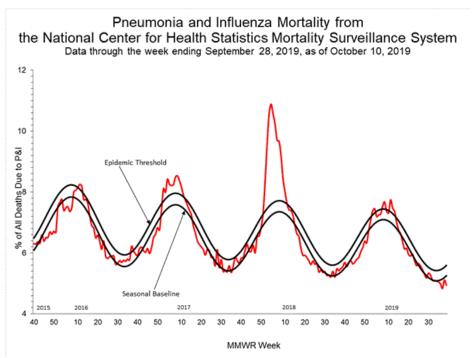
Influenza-Associated Hospitalizations:

The Influenza Hospitalization Surveillance Network (FluSurv-NET) conducts all age 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.

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 10, 2019, 5.0% of the deaths occurring during the week ending September 28, 2019 (week 39) were due to P&I. This percentage is below the epidemic threshold of 5.6% for week 39.



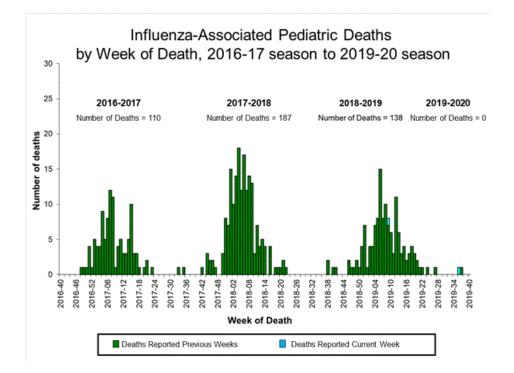
View Regional and State Level Data | View Chart Data | View Full Screen | View PowerPoint Presentation

Additional pneumonia and influenza mortality surveillance information for current and past seasons: Surveillance methods - http://www.cdc.gov/flu/weekly/overview.htm. National, regional and state data - http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html. Age group data- https://gis.cdc.gov/grasp/fluview/mortality.html.

Influenza-Associated Pediatric Mortality:

No influenza-associated pediatric deaths occurring during the 2019-2020 season have been reported to CDC.

Two influenza-associated pediatric deaths were reported to CDC during week 40. Both occurred during the 2018-2019 influenza season, weeks 9 and 36 (the weeks ending March 2, 2019 and September 7, 2019), and both were associated with influenza A (H3) virus infection. The total number of pediatric deaths occurring during the 2018-2019 season is 138.



View Interactive Application | View Full Screen | View PowerPoint Presentation

Additional Influenza-associated pediatric mortality surveillance information for current and past seasons: Surveillance methods - http://www.cdc.gov/flu/weekly/overview.htm.

Basic demographics, underlying conditions, bacterial co-infections, and place of death for the current and past seasons - https://gis.cdc.gov/GRASP/Fluview/PedFluDeath.html.

<u>Additional National and International Influenza Surveillance</u> <u>Information</u>

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 healthrelated 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

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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.

Page last reviewed: October 11, 2019

Content source: Centers for Disease Control and Prevention, National Center for Immunization and Respiratory Diseases (NCIRD) Error processing SSI file