

Influenza (Flu)

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 COVIDView (https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview.html).

Key Updates for Week 3, ending January 23, 2021

Seasonal influenza activity in the United States remains lower than usual for this time of year. The first novel influenza A virus infection of the 2020-2021 season was reported this week.

Viruses

Clinical Labs

The percentage of respiratory specimens testing positive for influenza at clinical laboratories is 0.3% this week.

(/flu/weekly/#ClinicalLaboratories)

Public Health Labs

The number of influenza positives reported by public health labs remains unusually low, however, one novel influenza A virus infection was reported.

(/flu/weekly/#PublicHealthLaboratories)

Virus Characterization

Influenza virus characterization information will be updated weekly starting later this season.

(/flu/weekly/#ivc)

Illness

Outpatient Illness: ILINet

This week, 1.3% of patient visits to a health care provider were for influenza-like illness (ILI), remaining stable ($\leq 0.1\%$ change) compared to week 2. National ILI remains below the national baseline of 2.6%. ILI surveillance may be impacted by the COVID-19 pandemic and should be interpreted with caution.



This week, one jurisdiction experienced low activity, and the remaining jurisdictions experienced minimal activity. ILI activity levels may be impacted by the COVID-19 pandemic and should be interpreted with caution.

Severe Disease

Hospitalizations	NCHS Mortality	Pediatric Deaths
FluSurv-NET sites have reported 142 laboratory-confirmed influenza hospitalizations so far this season for an overall cumulative hospitalization rate of 0.5 per 100,000 population.	14.8% of deaths were attributed to pneumonia, influenza, or COVID-19 (PIC). This is above the epidemic threshold of 7.1%. Currently, the majority of PIC deaths are due to COVID-19.	No new influenza-associated pediatric deaths were reported to CDC this week. The total for the 2020-21 season is one.

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

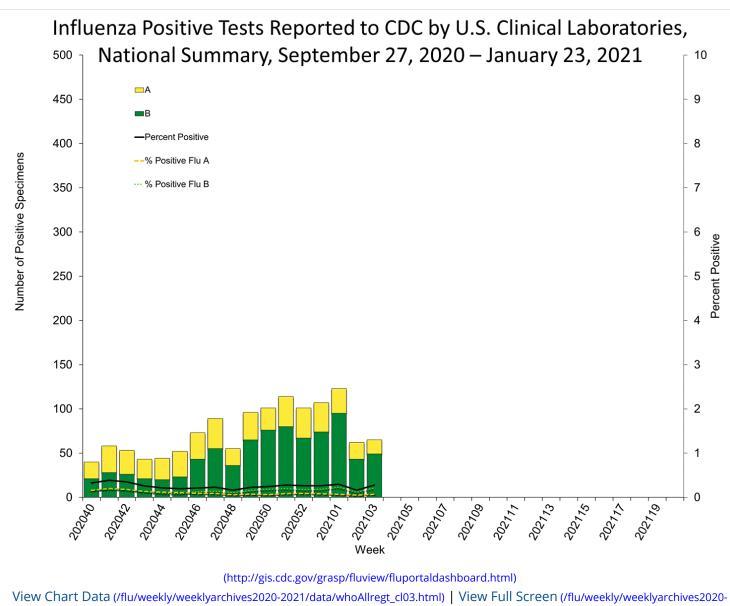
- Flu activity is unusually low at this time but may increase in the coming months.
- An annual flu vaccine is the best way to protect against flu and its potentially serious complications.
- If you haven't gotten your flu vaccine yet, get vaccinated now (https://www.cdc.gov/flu/season/protect-your-health.html).
- 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_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 3	Data Cumulative since September 27, 2020 (Week 40)
No. of specimens tested	23,549	524,037
No. of positive specimens (%)	65 (0.3%)	1,276 (0.2%)
Positive specimens by type		
Influenza A	16 (24.6%)	454 (35.6%)
Influenza B	49 (75.4%)	822 (64.4%)



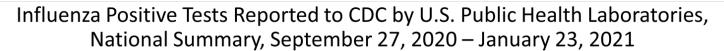
2021/WhoNPHL03.html)

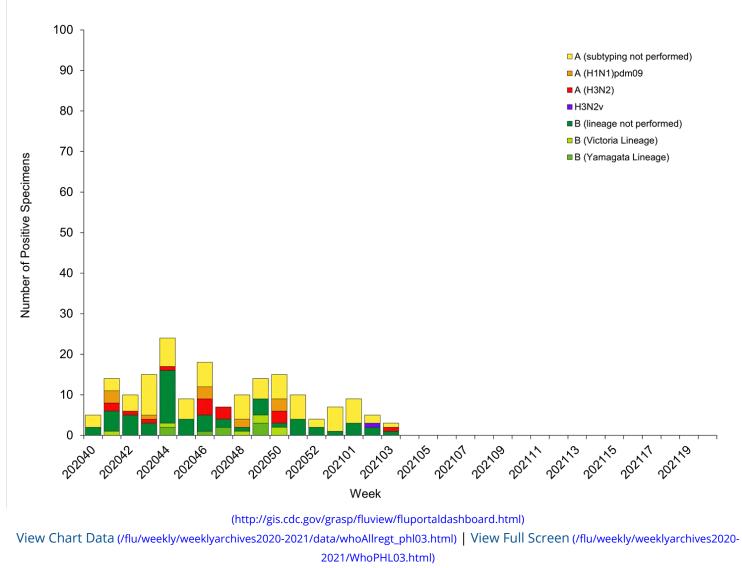
Public Health Laboratories

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 3	Data Cumulative since September 27, 2020 (Week 40)
No. of specimens tested	13,202	266,865
No. of positive specimens	3	179
Positive specimens by type/subtype		
Influenza A	2 (66.7%)	107 (59.8%)

(H1N1)pdm09	0 (0%)	12 (41.4%)
H3N2	1 (100%)	16 (55.2%)
H3N2v	0 (0%)	1 (3.4%)
Subtyping not performed	1	79
Influenza B	1 (33.3 %)	72 (40.2%)
Yamagata lineage	0 (0%)	7 (46.7%)
Victoria lineage	0 (0%)	8 (53.3%)
Lineage not performed	1	57





Additional virologic surveillance information for current and past seasons:

Surveillance Methods (https://www.cdc.gov/flu/weekly/overview.htm#anchor_1539281228772) | FluView Interactive: National, Regional, and State Data (http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html) or Age Data (http://gis.cdc.gov/grasp/fluview/flu_by_age_virus.html)

Novel Influenza A Virus

One human infection with a novel influenza A virus was reported by Wisconsin. This person was infected with an influenza A(H3N2) variant (A(H3N2)v) virus. The patient is a child < 18 years of age, was not hospitalized, and has completely recovered from their illness. Investigation into the source of the infection revealed that the child lives on a farm with swine present. This is the first influenza A(H3N2)v virus infection detected in the United States in 2021.

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 infection in humans, and strategies to interact safely with swine can be found at http://www.cdc.gov/flu/swineflu/index.htm (http://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_1571167630754)

CDC performs genetic (/flu/about/professionals/genetic-characterization.htm) and antigenic

(/flu/about/professionals/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.

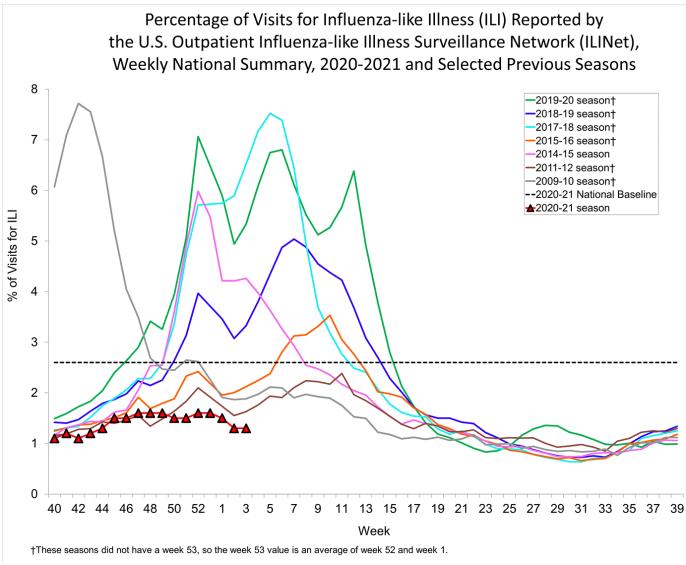
Virus characterization data will be updated weekly starting later this season when a sufficient number of specimens have been tested.

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

Please note, the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) monitors outpatient visits for influenza-like illness (ILI), not laboratory-confirmed influenza, and will capture visits due to other respiratory pathogens, such as SARS-CoV-2, that present with similar symptoms. In addition, healthcare-seeking behaviors have changed dramatically during the COVID-19 pandemic. Many people are accessing the healthcare system in alternative settings, which may or may not be captured as a part of ILINet. Therefore, ILI data, including ILI activity levels, should be interpreted with extreme caution. It is particularly important at this time 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 both influenza and COVID-19 activity. CDC is tracking the COVID-19 pandemic in a weekly publication called COVIDView (https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview.html).

ILINet

Nationwide during week 3, 1.3% of patient visits reported through ILINet were due to ILI. This percentage is below the national baseline of 2.6%.



(http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html)View Chart Data (current season only) (/flu/weekly/weeklyarchives2020-2021/data/senAllregt03.html) | View Full Screen (/flu/weekly/weeklyarchives2020-2021/ILI03.html)

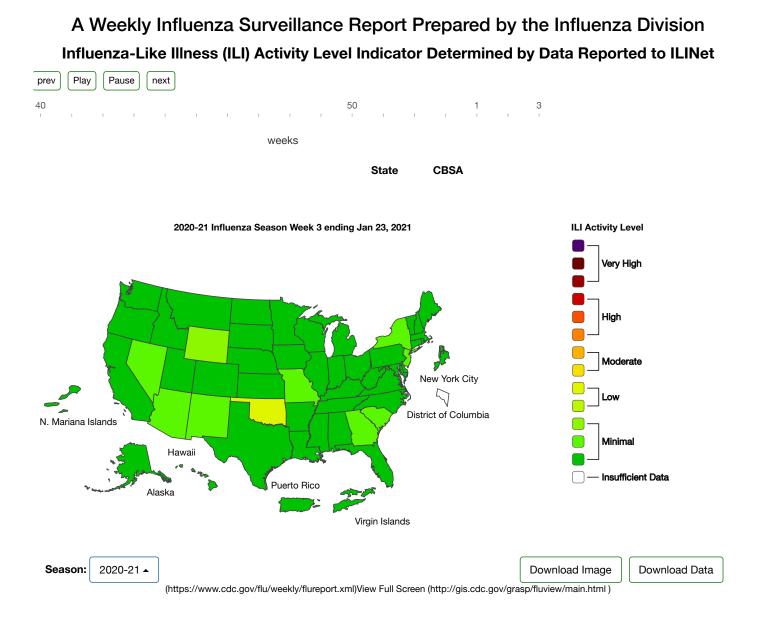
During week 3, compared with week 2, the percentage of visits for ILI increased for two regions (Regions 2 and 6), decreased for two regions (Regions 4 and 10) and remained stable (change of \leq 0.1%) in the remaining six regions. All regions reported percentages of outpatient visits for ILI below their region-specific baselines.

ILI Activity Map

Data collected in ILINet are used to produce a measure of ILI activity* (https://www.cdc.gov/flu/weekly/overview.htm#anchor_1571167821424) by state/jurisdiction and Core Based Statistical Areas (CBSA).

Number of Jurisdictions	Number of CBSAs

Activity Level	Week 3 (Week ending Jan. 23, 2021)	Week 2 (Week ending Jan. 16, 2020)	Week 3 (Week ending Jan. 23, 2021)	Week 2 (Week ending Jan. 16, 2020)
Very High	0	0	0	0
High	0	0	3	2
Moderate	0	0	4	5
Low	1	0	26	31
Minimal	53	54	584	588
Insufficient Data	1	1	312	303



*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)

Geographic Spread of Influenza as Assessed by State and Territorial Epidemiologists

(https://www.cdc.gov/flu/weekly/overview.htm#anchor_1568388833450)

The geographic spread of influenza as reported by state and territorial epidemiologists indicates geographic spread of influenza viruses but does not measure the severity of influenza activity. Due to the impact of COVID-19 on ILI surveillance, and the fact that the state and territorial epidemiologists report relies heavily on ILI activity, reporting for this system will be suspended for the 2020-21 influenza season. Data from previous seasons is available on FluView Interactive.

Additional geographic spread surveillance information for current and past seasons:

Surveillance Methods (https://wcms-wp.cdc.gov/flu/weekly/overview.htm#anchor_1568388833450) | FluView Interactive (https://gis.cdc.gov/grasp/fluview/FluView8.html)

Influenza-Associated Hospitalizations: (http://www.cdc.gov/flu/weekly/overview.htm#Hospitalization)

The Influenza Hospitalization Surveillance Network (FluSurv-NET) conducts population-based surveillance for laboratoryconfirmed influenza-related hospitalizations in select counties in the Emerging Infections Program (EIP) states and Influenza Hospitalization Surveillance Project (IHSP) states.

A total of 142 laboratory-confirmed influenza-associated hospitalizations occurring between October 1, 2020, and January 23, 2021, were reported by FluSurv-NET sites for an overall cumulative hospitalization rate of 0.5 per 100,000 population. This is lower than average for this point in the season and comparable to the overall rate seen at this point during the 2011-12 season. Hospitalization rates stratified by age will be presented once case counts increase to a level that produces stable rates by age.

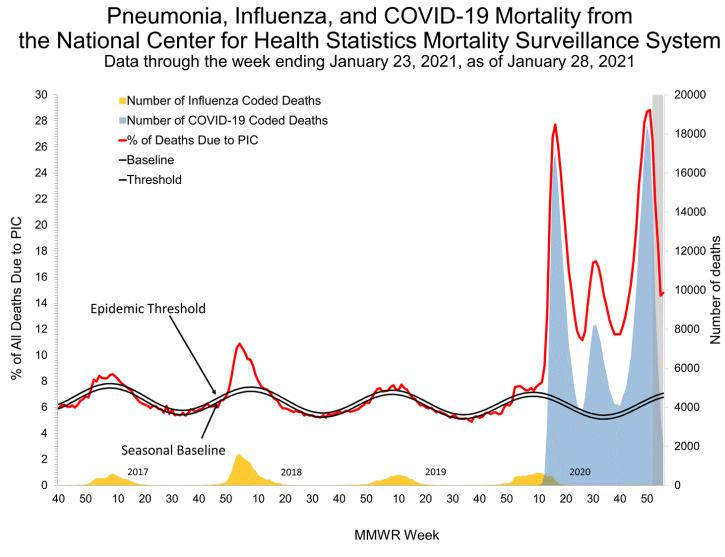
Additional hospitalization surveillance information for current and past seasons and additional age groups: Surveillance Methods (https://www.cdc.gov/flu/weekly/overview.htm#Hospitalization) | FluView Interactive: Rates by Age (https://gis.cdc.gov/GRASP/Fluview/FluHospRates.html) or Patient Characteristics (https://gis.cdc.gov/grasp/fluview/FluHospChars.html)

National Center for Health Statistics (NCHS) Mortality Surveillance

(https://www.cdc.gov/flu/weekly/overview.htm#anchor_1539281356004)

Based on NCHS mortality surveillance data available on January 28, 2021, 14.8% of the deaths that occurred during the week ending January 23, 2021 (week 3), were due to pneumonia, influenza, and COVID-19 (PIC). This percentage is above the epidemic threshold of 7.1% for week 3. Among the 3,043 PIC deaths reported for this week (week 3), 2,102 had COVID-19 listed as an underlying or contributing cause of death on the death certificate and seven listed influenza, indicating that the current increase in PIC mortality is due primarily to COVID-19 and not influenza.

Weekly mortality surveillance data include a combination of machine coded and manually coded causes of death collected from death certificates. Percentages of deaths due to pneumonia, influenza, or COVID-19 (PIC) are higher among manually coded records than more rapidly available machine coded records. Because of additional time needed for manual coding, the initially reported PIC percentages are likely to increase as more data are received and processed. The lag in availability of manually coded data increased during the holiday weeks at the end of 2020, and because of the large numbers of deaths reported during recent weeks, the delay in availability of manually coded data continues to increase. Weeks for which the largest changes in the percentage of deaths due to PIC are expected are highlighted in gray in the figure below and should be interpreted with caution.



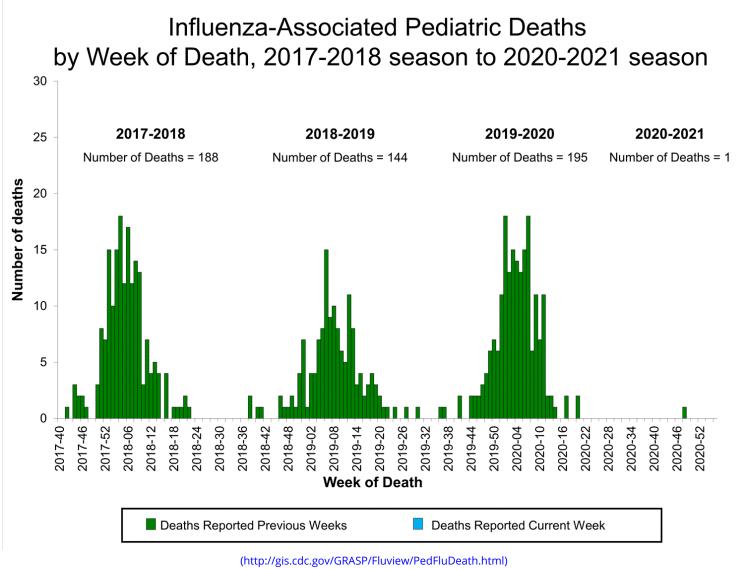
(https://gis.cdc.gov/grasp/fluview/mortality.html)View Chart Data 🕼 (/flu/weekly/weeklyarchives2020-2021/data/NCHSData03.csv) | View Full Screen (/flu/weekly/weeklyarchives2020-2021/NCHS03.html)

Additional pneumonia and influenza mortality surveillance information for current and past seasons: Surveillance Methods (https://www.cdc.gov/flu/weekly/overview.htm#anchor_1539281356004) | FluView Interactive (https://gis.cdc.gov/grasp/fluview/mortality.html)

Influenza-Associated Pediatric Mortality (https://www.cdc.gov/flu/weekly/overview.htm#anchor_1571168571052)

No influenza-associated pediatric deaths were reported to CDC during week 3.

One influenza-associated pediatric death occurring during the 2020-2021 season has been reported to CDC.



View Full Screen (/flu/weekly/weeklyarchives2020-2021/PedFlu03.html)

Additional pediatric mortality surveillance information for current and past seasons:

Surveillance Methods (https://www.cdc.gov/flu/weekly/overview.htm#anchor_1571168571052) | 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 (http://dphhs.mt.gov/publichealth/cdepi/d
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 🖸 (http://www.who.int/influenza/gisrs_laboratory/flunet/en/index.html) and the Global Epidemiology Reports. 🖸 (http://www.who.int/influenza/surveillance_monitoring/en/)

WHO Collaborating Centers for Influenza:

Australia 🖸 (http://www.influenzacentre.org/surveillance_samplesreceived.htm), 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.

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