



**Summit County Public Health  
Influenza Surveillance Report  
2019 – 2020 Season  
Report #15**



**Public Health**  
Prevent. Promote. Protect.

**Flu Surveillance Weeks 15 & 16 (1/12/2020 to 1/25/2020)  
Centers for Disease Control and Prevention MMWR Weeks 3 & 4**

**Summit County Surveillance Data:**

In **Week 16** of surveillance, influenza-related activity is moderate in Summit County, and most indicators increased.

<b>Table 1: Overall Influenza Activity Indicators in Summit County by Week</b>				
	<b>Week 15 MMWR 3 N (%)<sup>1</sup></b>	<b>Week 16 MMWR 4 N (%)<sup>1</sup></b>	<b>Percent change from previous week</b>	<b>Number of weeks increasing or decreasing</b>
<b>Lab Reports</b>				
Test Performed	<b>1315</b>	<b>1501</b>	+ 14.1%	↑2
Positive Tests (Number and %)	<b>362 (27.5)</b>	<b>552 (36.8)</b>	+33.6%	↑3
Influenza A (Number and %)	<b>128 (9.7)</b>	<b>213 (14.2)</b>	+ 45.8%	↑3
Influenza B (Number and %)	<b>234 (17.8)</b>	<b>339 (22.6)</b>	+ 26.9%	↑3
<b>Acute care hospitalization for Influenza:</b>	<b>34</b>	<b>50</b>	+ 47.1%	↑1
<b>Influenza ILI Community Report:</b>				
Long-term Care ILI Cases	<b>2</b>	<b>2</b>	--	--
Correctional & Addiction Facility	<b>3</b>	<b>0</b>	- 100%	↓1
Physician Offices & University Clinic	<b>8</b>	<b>7</b>	- 12.5%	↓1
<b>Pharmacy Prescriptions</b>				
Zanamivir (Relenza)	<b>0</b>	<b>0</b>	--	--
Oseltamivir (Tamiflu)	<b>52</b>	<b>65</b>	+ 22.6%	↑3
Baloxavir marboxil (Xofluza)	<b>0</b>	<b>0</b>	--	--
<i>Total</i>	<b>52</b>	<b>65</b>	+ 22.6%	↑3
<b>Schools absenteeism<sup>2</sup></b>	<b>7.4%</b>	<b>7.9%</b>	+ 6.8%	↑2
<b>Deaths</b>				
Pneumonia associated	<b>9 (6.6)</b>	<b>3 (2.2)</b>	- 66.2%	↓1
Influenza associated	<b>0</b>	<b>0</b>	--	--
<b>Emergency room visits (EpiCenter)<sup>3</sup></b>				
Constitutional Complaints	<b>788 (13.1)</b>	<b>886 (14.5)</b>	+ 11.1%	↑2
Fever and ILI	<b>118 (2.0)</b>	<b>155 (2.5)</b>	+ 29.8	↑1
1) N and % are reported when available, NC = no change, or change that is not significant				
2) Absence is for any reason. Percent is from total number of students enrolled. Data was collected from 6 schools or school districts throughout Summit County (n = 32,000 students)				
3) Percent is from total number of emergency room interactions				
<b>Note:</b> Data is provisional and may be updated as more information is received. Percentages should be interpreted with caution. Small changes in number can result in large changes in percent. When a percentage, or prevalence, is available in this table, the percent change will be calculated from those values				

**Zero** deaths related to influenza were reported during Week 16, and there were three deaths associated with pneumonia. **Figure 1** displays weekly Summit County death counts associated with pneumonia and influenza. *The seasonal average for pneumonia and influenza (P&I) deaths is 3.3%.*

**Acute Care Hospitalizations:** 50 hospitalization was reported during Week 16. **Figure 2** displays influenza associated hospitalizations in Summit County.

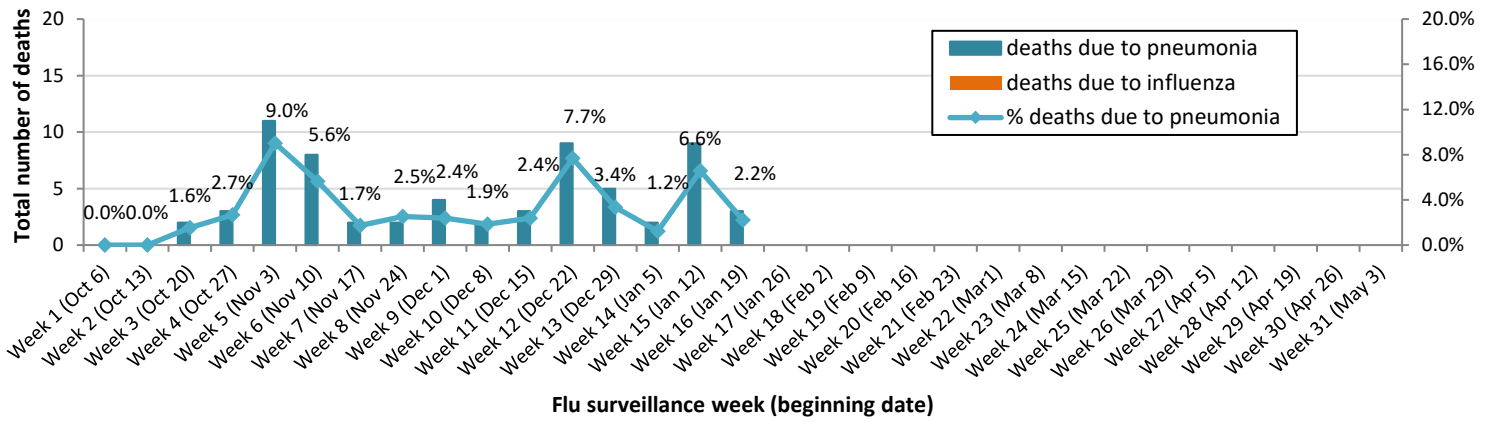
**COMMUNITY ILI REPORTS:** Influenza like Illness (ILI) as defined by the CDC is fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat without a known cause other than influenza. Community ILI reports: **Long Term Care Facilities:** There were two cases of ILI reported. **Correctional and Inpatient Addiction facilities:** Zero cases of ILI were reported. **Physician offices and clinics:** During Week 16, seven cases of ILI were reported.

**Pharmacies:** 65 antiviral prescriptions were filled by reporting pharmacies during Week 16.

**School absenteeism** includes absences regardless of reason. During Week 16, the reported absence rate was 7.9%, a 6.8% increase from Week 15.

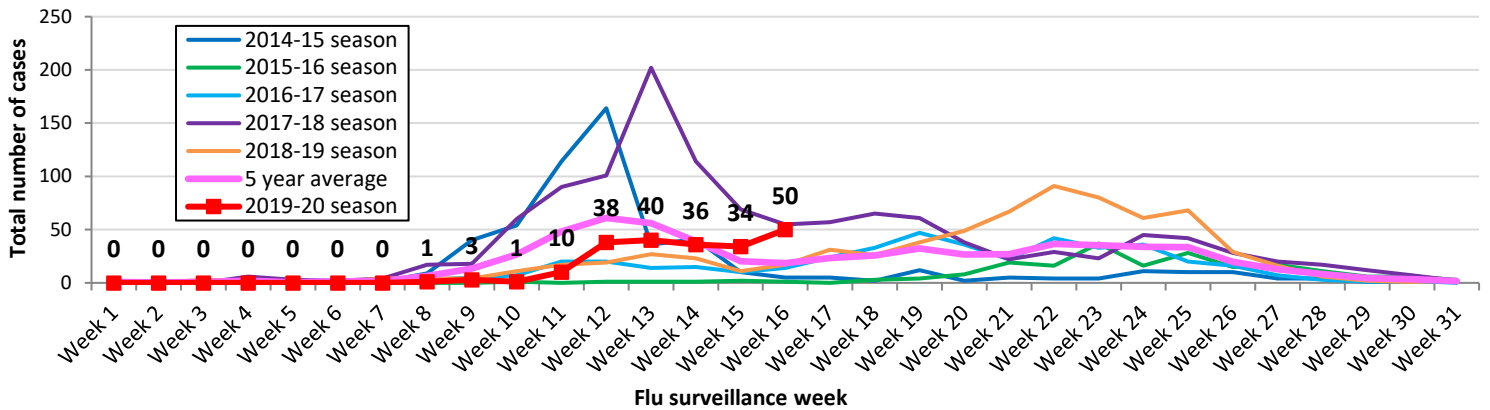
**Lab reports:** During Week 16 of influenza surveillance, reporting Summit County laboratories performed 1501 flu tests, of which 552 were positive (Type A = 213, Type B = 339). **(Figure 4).**

**Figure 1. Weekly Summit County death counts associated with pneumonia and influenza during 2019-2020 season**



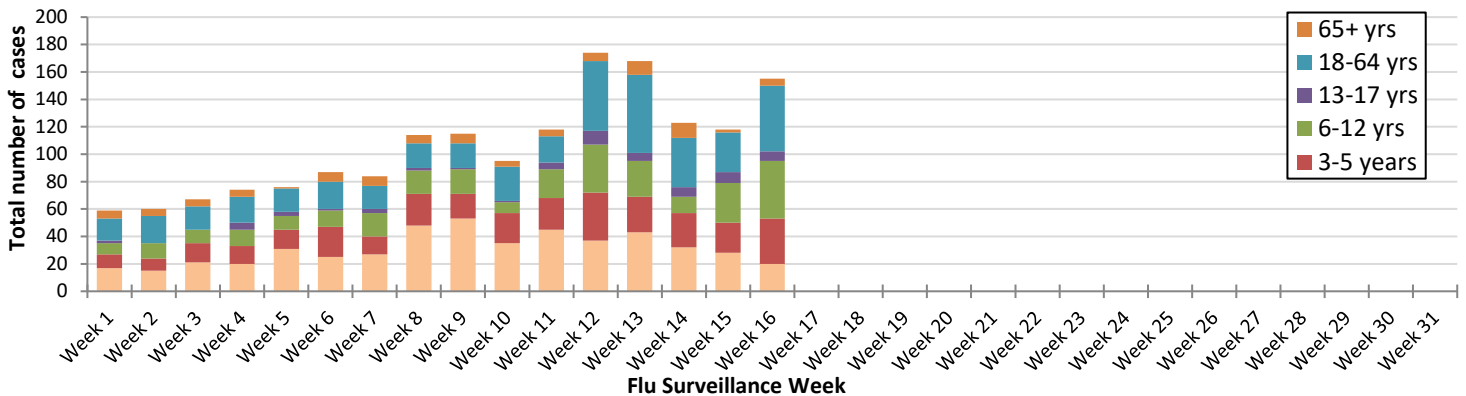
**Influenza-associated hospitalization:** Summit County hospitals reported 50 influenza-associated hospitalizations during Week 16. **Figure 2** displays weekly confirmed hospitalization count for Summit County (**cumulative count to date = 213**).

**Figure 2. Summit County influenza-associated hospitalizations by week, 2019-2020 and previous five seasons**

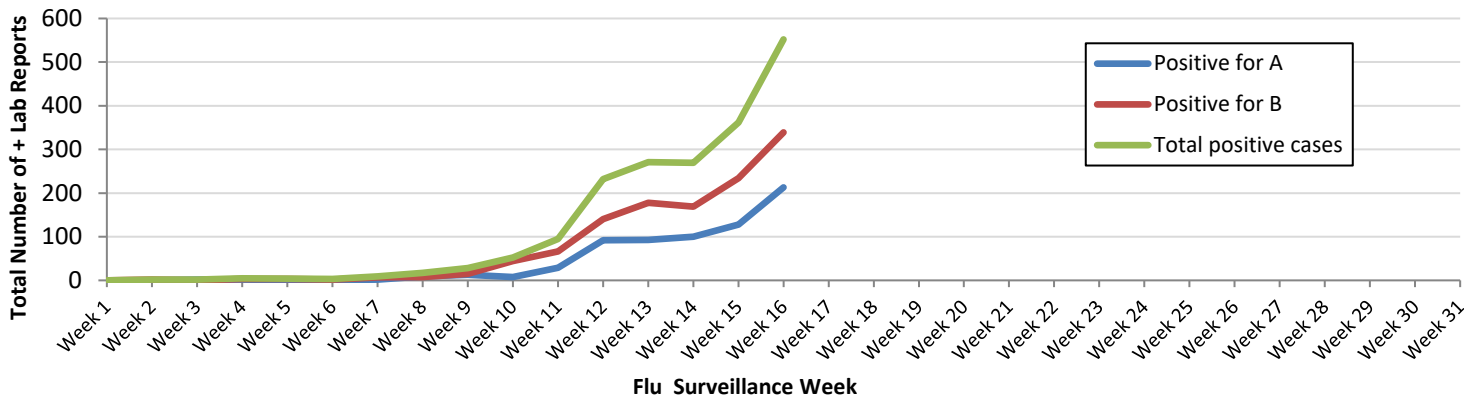


**EpiCenter** collects and analyzes health related data in real time to provide information about the health of the community. This system tracks ER visits related to constitutional complaints and fever and ILI. **Figures 3** displays the weekly number of ER visits related to ILI and flu symptoms in Summit County. There were 155 ILI-related visits reported during Week 16, which was 2.5% of total ED visits (n = 6102). This rate was 30% higher than the ILI rate during Week 15.

**Figure 3. Weekly ED visits in Summit County related to Fever + ILI stratified by age groups, 2019 to 2020 season**



**Figure 4. Influenza diagnostic tests with positive results completed by Summit County health facilities, 2019 - 2020 season**



## Ohio Influenza Activity: from the Ohio Department of Health:

### Current Ohio Activity Level (Geographic Spread) – *Widespread*

**Definition:** Increased ILI in at least half of the regions AND recent (within the past 3 weeks) lab confirmed influenza in the state.

During MMWR Week 4, public health surveillance data sources indicate moderate intensity for influenza-like illness (ILI) in outpatient settings reported by Ohio’s sentinel providers. The percentage of emergency department visits with patients exhibiting constitutional symptoms are above baseline levels statewide; fever and ILI specified ED visits are also above baseline levels. Reported cases of influenza-associated hospitalizations are above the seasonal threshold, which is 25 hospitalizations. There were 611 influenza-associated hospitalizations reported during MMWR Week 4.

### Ohio Influenza Activity Summary Dashboard (January 19 – January 25, 2020):

Data Source	Current week value	Percent Change from last week <sup>1</sup>	# of weeks <sup>2</sup>	Trend Chart <sup>3</sup>
Influenza-like Illness (ILI) Outpatient Data (ILINet Sentinel Provider Visits)	3.11%	46.01%	↑ 2	
Thermometer Sales (National Retail Data Monitor)	1954	9.04%	↑ 3	
Fever and ILI Specified ED Visits (EpiCenter)	3.46%	11.61%	↑ 2	
Constitutional ED Visits (EpiCenter)	15.09%	7.10%	↑ 2	
Confirmed Influenza-associated Hospitalizations (Ohio Disease Reporting System)	611	7.95%	↑ 1	
Outpatient Medical Claims Data <sup>4</sup>	4.24%	23.62%	↑ 2	

<sup>1</sup>Interpret percent changes with caution. Large variability may be exhibited in data sources with low weekly values.

<sup>2</sup>Number of weeks that the % change is increasing or decreasing.

<sup>3</sup>Black lines represent current week's data; red lines represent baseline averages

<sup>4</sup>Medical Claims Data provided by athenahealth®

Source: <https://www.odh.ohio.gov/seasflu/Ohio%20Flu%20Activity.aspx>

## Ohio Surveillance Data:

- **ODH lab** has reported **332 positive** influenza tests from specimens sent from sentinel ILINet providers and hospital clinical labs. 2019-2020 influenza season results: **(143) A/pdmH1N1; (14) A/H3N2; (175) Influenza B;** (through 01/25/2020).
- The **National Respiratory and Enteric Virus Surveillance System (NREVSS)** has tested **46,137** influenza specimens by RTPCR at participating facilities. 2019-2020 influenza season positive results: **(158) A/pdmH1N1; (2) A/H3N2; (2,351) Flu A Not Subtyped; and (5,227) Flu B;** (through 01/25/2020)
- **1 influenza-associated pediatric mortality** has been reported during the 2019-2020 season (through 01/25/2020).
- **No novel influenza A virus infections** have been reported during the 2019-2020 season (through 01/25/2020).
- Incidence of confirmed **influenza-associated hospitalizations** in 2019-2020 season = **3,642** (through 01/25/2020).

## National Surveillance: from Centers for Disease Control and Prevention (CDC):

According to this week's FluView report, key indicators that track flu activity remain high and, after falling during the first two weeks of the year, increased slightly this week. Indicators that track severity (hospitalizations and deaths) are not high at this point in the season.

- **Viral Surveillance:** Nationally influenza B/Victoria viruses have been reported more frequently than other influenza viruses this season. However, during recent weeks, influenza A(H1N1)pdm09 viruses have been reported more frequently than B/Victoria viruses. The predominant virus varies by region and by age group.
  - **Virus Characterization:** the percentage of viruses that were characterized antigenically are similar to the cell grown reference viruses representing the 2019-20 Northern Hemisphere influenza vaccines are listed by subtype. **A (H1N1)pdm09: 100%** (74 of 74 samples); **A (H3N2): 41.5%** (22 of 53 samples); **B/Victoria: 60.2%** (53 of 88 samples); **B/Yamagata: 100%** (10 of 10 samples).
  - **Antiviral Resistance:** the vast majority of influenza viruses tested (99.9%) show susceptibility to oseltamivir, peramivir, and zanamivir. All influenza viruses tested showed susceptibility to baloxavir.
- **Influenza-like Illness Surveillance (Figure 5):** Nationwide during week 4, 5.7% 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 above the national baseline of 2.4%.* On a regional level, the percentage of outpatient visits for ILI ranged from 4.1% to 7.7% during week 4. All regions reported a percentage of outpatient visits for ILI which is above their region-specific baselines.
  - **ILI State Activity Indicator Map (Figure 6):** Puerto Rico, New York City, the District of Columbia and 41 states reported high ILI activity; and 7 states reported moderate activity; 0 states experienced low or minimal ILI activity. Data was insufficient for US Virgin Islands, Delaware and Idaho to report.
- **Geographic Spread of Influenza (Figure 7):** During Week 3, the geographic spread of influenza was reported widespread in Puerto Rico and 49 states; regional in Hawaii, local in the District of Columbia; the U.S. Virgin Islands reported sporadic activity and Guam did not report.
- **Pneumonia and Influenza (P&I) Mortality:** Based on National Center for Health Statistics (NCHS) mortality surveillance data available on January 30, 2020, 6.7% of the deaths occurring during the week ending January 18, 2020 (week 3) were due to P&I. This percentage is below the epidemic threshold of 7.2% for week 3.
- **Influenza-associated Pediatric Deaths:** A total of 68 influenza-associated pediatric deaths occurring during the 2019-2020 season have been reported to CDC.
  - 45 deaths were associated with influenza B viruses. Eight of these had the lineage determined and all were B/Victoria viruses.
  - 23 deaths were associated with influenza A viruses. 13 of these had subtyping performed and all were A(H1N1)pdm09 viruses.

Figure 5. Percentage of visits for influenza-like illness (ILI) reported by the U.S. Outpatient Influenza-like Surveillance Network (ILINet), weekly national summary, 2019-2020 and selected previous seasons

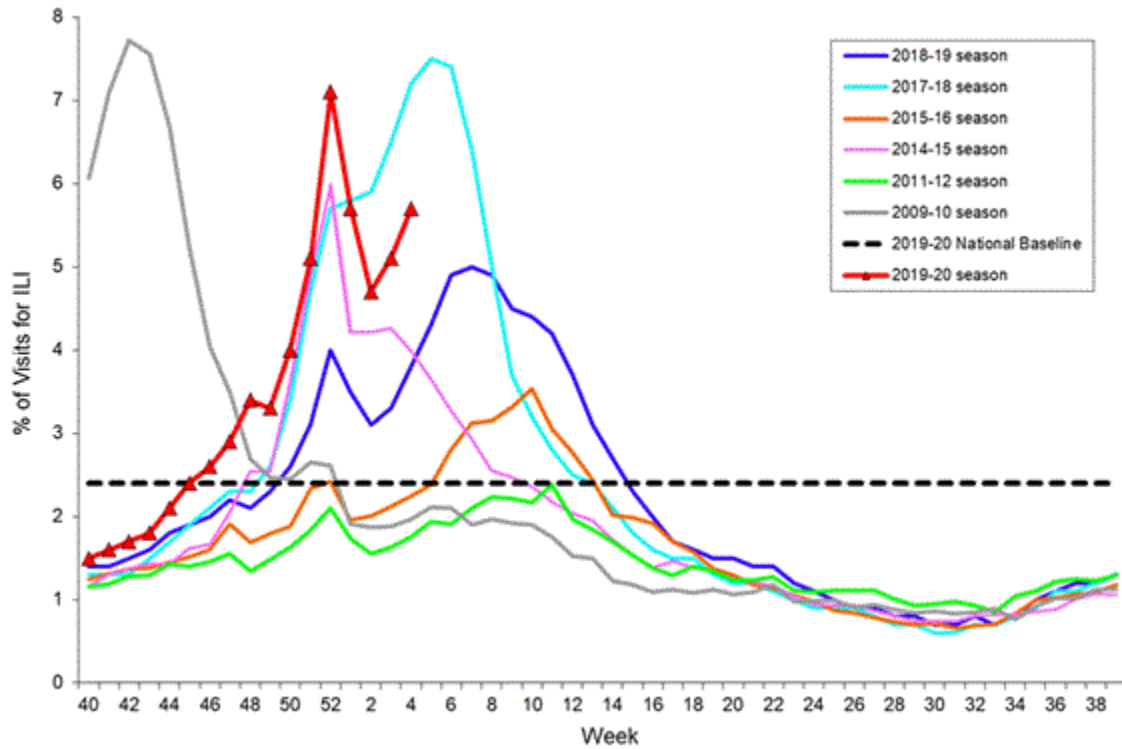


Figure 6. Influenza-like illness (ILI) activity level indicator determined by data reported to ILINet

2019-20 Influenza Season Week 4 ending Jan 25, 2020

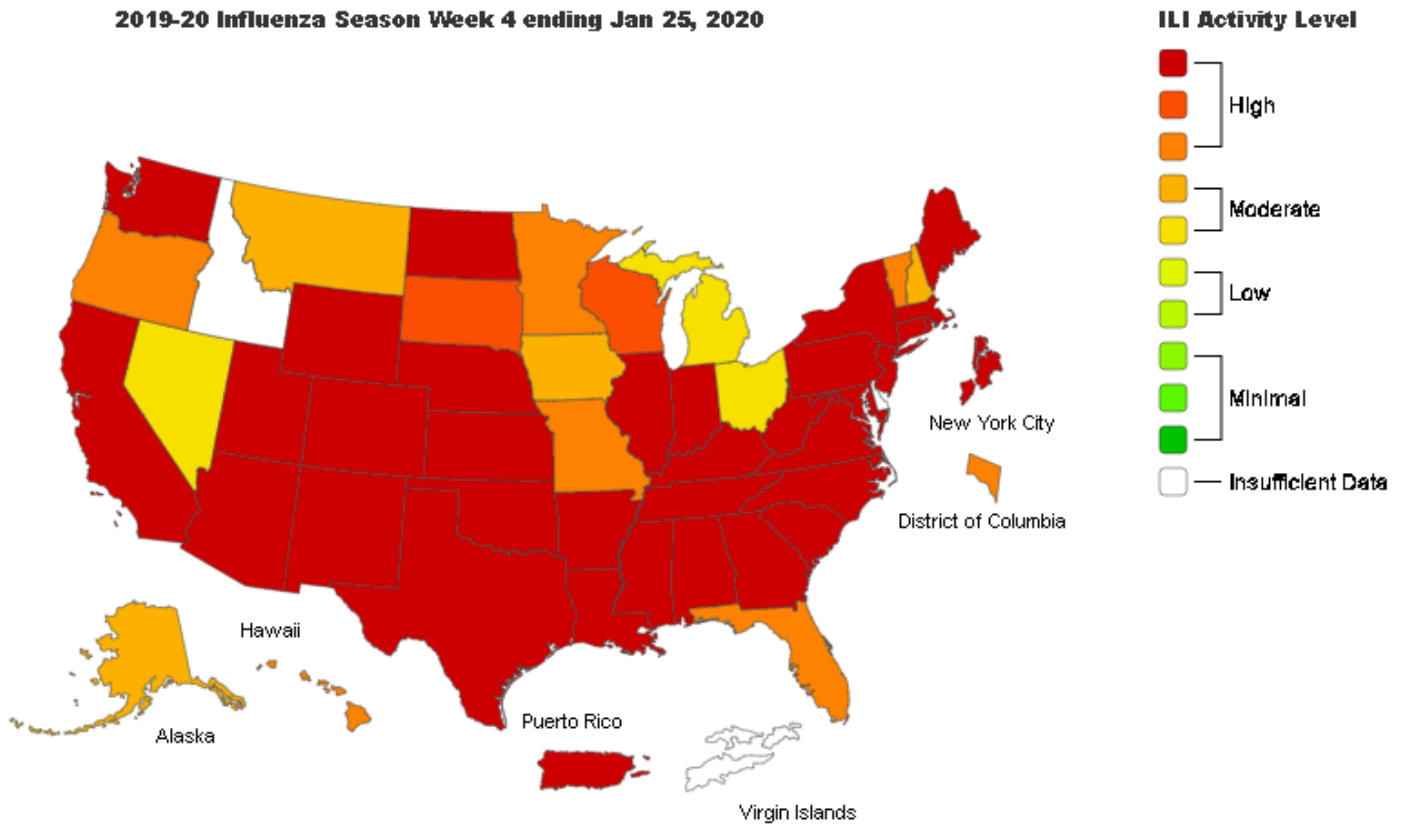
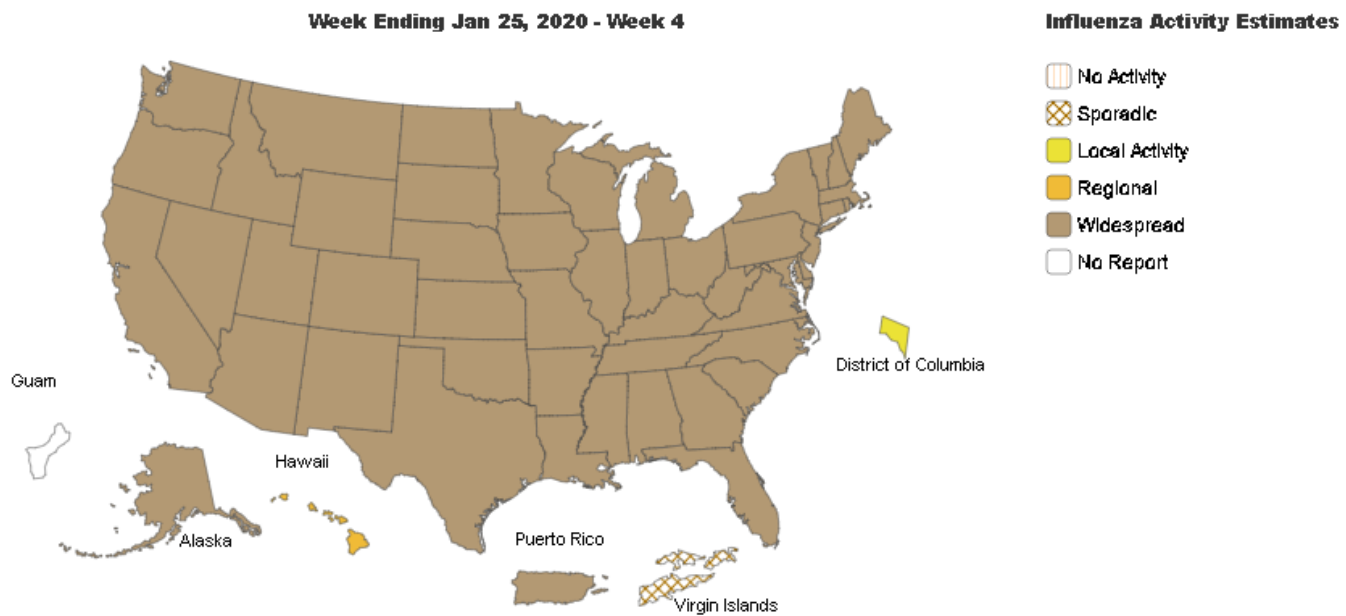


Figure 7. Weekly influenza activity (geographic spread) estimates reported by state and territorial epidemiologists



Source for Figures 5 - 7: <https://www.cdc.gov/flu/weekly/>

## Global Surveillance:

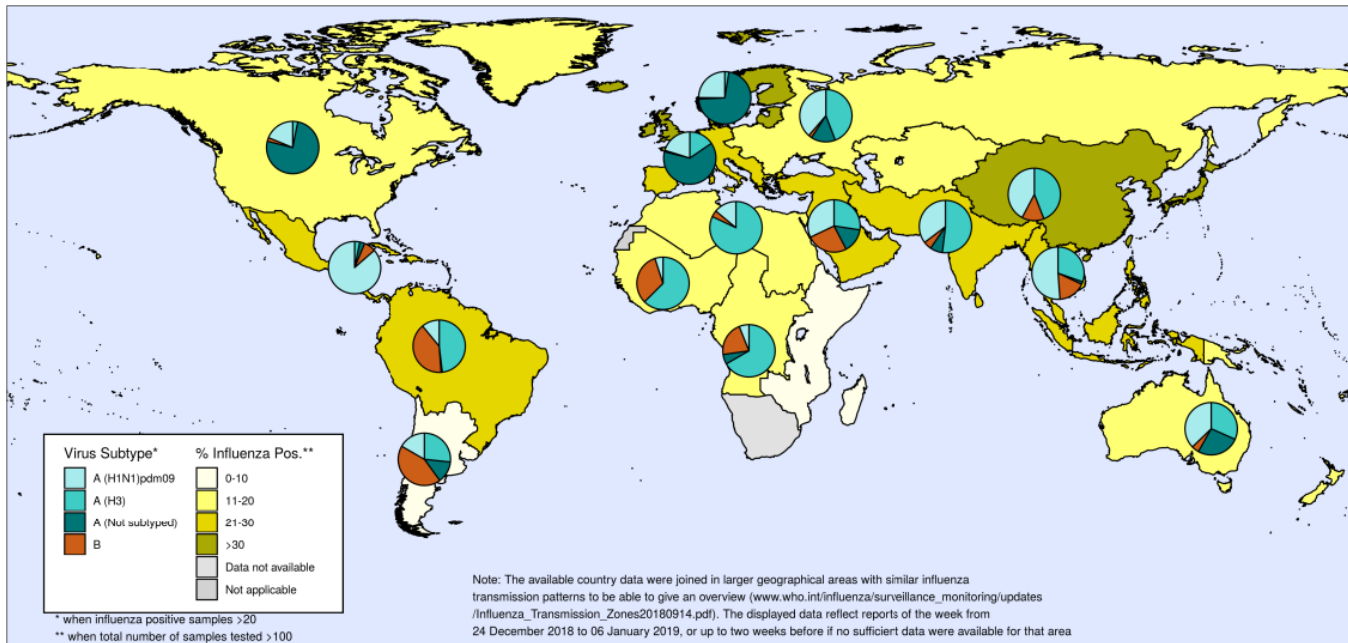
Influenza Update N° 359, World Health Organization (WHO), published 20 January 2020, based on data up to 05 January 2020. The Update is published every two weeks.

### Summary

- In **the temperate zone of the northern hemisphere**, respiratory illness indicators and influenza activity continued to increase in most countries.
  - In **North America**, influenza activity further increased with all seasonal influenza subtypes circulating.
  - In **Europe**, influenza activity continued to increase across the region and was reported at moderate levels in some countries of Northern Europe.
  - In **Central Asia**, influenza activity increased with influenza B viruses predominant.
  - In **Northern Africa**, influenza activity was low overall.
  - In **Western Asia**, influenza activity remained elevated overall and continued to increase in Iraq, Israel, Jordan, Turkey and Yemen.
  - In **East Asia**, influenza-like illness (ILI) and influenza activity continued to increase overall.
- In **the Caribbean and Central American countries**, influenza activity was low overall, except for Mexico where increased detections of influenza A viruses were reported. In **tropical South American countries**, increased influenza activity was reported from Ecuador and Colombia in recent weeks.
- In **tropical Africa**, influenza activity was low across reporting countries of Eastern and Western Africa.
- In **Southern Asia**, influenza activity was low in most reporting countries, but increased in Afghanistan.
- In **South East Asia**, influenza activity continued to be reported in Lao People's Democratic Republic and Malaysia and increased in Singapore.
- In **the temperate zones of the southern hemisphere**, influenza activity remained at inter-seasonal levels.
- **Worldwide**, seasonal influenza A viruses accounted for the majority of detections.

National Influenza Centres (NICs) and other national influenza laboratories from 104 countries, areas or territories reported data to FluNet for the time period from 23 December 2019 to 05 January 2020 (data as of 2020-01-17 04:29:43 UTC). The WHO GISRS laboratories tested more than 174 604 specimens during that time period. A total of 44 847 were positive for influenza viruses, of which 27 946 (62.3%) were typed as influenza A and 16 901 (37.7%) as influenza B. Of the sub-typed influenza A viruses, 5081 (31.6%) were influenza A(H1N1)pdm09 and 11 005 (68.4%) were influenza A(H3N2). Of the characterized B viruses, 23 (0.6%) belonged to the B-Yamagata lineage and 3753 (99.4%) to the B-Victoria lineage.

**Figure 8. Percentage of respiratory specimens that tested positive for influenza, by influenza transmission zone**  
**Map generated by the WHO on 17 January 2020**



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.



Data source: Global Influenza Surveillance and Response System (GISRS), FluNet (www.who.int/flu-net)  
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Source: [https://www.who.int/influenza/surveillance\\_monitoring/updates/latest\\_update\\_GIP\\_surveillance/en/](https://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/)

## Influenza News from CIDRAP and CDC:

### Phase 2 trial demonstrates good protection by oral flu vaccine

Results of a phase 2 trial demonstrate that Vaxart's oral flu vaccine provides similar protection as Fluzone quadrivalent in adults and produces a strong immune response with a good safety profile, according to a study yesterday in *The Lancet Infectious Diseases*. The researchers, from Vaxart and elsewhere in the United States, assigned 178 adults aged 18 to 49 years old to receive VXA-A1.1, the oral vaccine made by Vaxart, of South San Francisco, California; Sanofi's quadrivalent (four-strain) Fluzone vaccine, or a placebo. Seventy participants received VXA-A1.1, 71 received Fluzone, and 36 got a placebo. In addition, 58 VXA-A1.1 recipients, 54 Fluzone recipients, and 31 in the control group were inoculated with influenza virus after receiving the vaccine.

The trial was conducted from August 2016 to April 2017, and Vaxart had reported preliminary results in October 2018. No oral flu vaccine has been licensed for use in the United States. The researchers found that 17 people in the VXA-A1.1 group (29%), 19 (35%) in the Fluzone recipients, and 15 (48%) in the placebo group developed lab-confirmed flu after they were challenged with the virus. The Vaxart vaccine was also well tolerated and produced a strong immune response. In a related commentary in the same journal, two Russian experts wrote, "The study by Liebowitz and colleagues provides promising data that could lead to an improved strategy for influenza immunisation.... The vaccine platform could be used to develop more broadly protective (ie, universal) influenza vaccines."

Jan 21 *Lancet Infect Dis* [study](#)

Jan 21 *Lancet Infect Dis* [commentary](#)

Oct 4, 2018, [CIDRAP News scan](#) on preliminary results

Source: <http://www.cidrap.umn.edu/news-perspective/2020/01/news-scan-jan-22-2020>

**Prevention of Respiratory Illnesses:** Although the new coronavirus (2019-nCoV) is of serious concern and is currently capturing news headlines, another respiratory virus – **Influenza** – remains a far bigger threat to most Americans. The Centers for Disease Control and Prevention (CDC) always recommends **everyday preventive actions to help prevent the spread of respiratory viruses**, including:

- ✓ **Wash your hands often with soap and water** for at least 20 seconds. Use an alcohol-based hand sanitizer that contains at least 60% alcohol if soap and water are not available.
- ✓ **Avoid touching your eyes, nose, and mouth** with unwashed hands.
- ✓ **Avoid close contact** with people who are sick.
- ✓ **Stay home** when you are sick.
- ✓ **Cover your cough or sneeze** with a tissue, then throw the tissue in the trash.
- ✓ **Clean and disinfect** frequently touched objects and surfaces.



An **influenza vaccine** is still available if you have not had it yet. **It is not too late to get the vaccine**, especially since influenza activity continues to increase during the 2019-20 season.

Source: <https://www.cdc.gov/coronavirus/2019-ncov/about/prevention-treatment.html>

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## Clinician Outreach and Communication Activity (COCA): 2019-2020 Influenza Season Update and Recommendations for Clinicians

COCA presented this webinar on Tuesday, January 28, 2020. A recording of this webinar will be available shortly at the COCA website ([LINK](#)). Clinicians may obtain free Continuing Education Units (CE) by following the instructions on the COCA website.

**Overview:** Influenza activity in the United States is elevated and is expected to continue at elevated levels for several more weeks. Nationally, influenza B/Victoria viruses have been most common followed by influenza A(H1N1)pdm09 viruses. The predominant virus varies by region and age group. There has been low circulation of influenza A(H3N2) and influenza B/Yamagata viruses. Annual vaccination is the best way to prevent influenza. CDC continues to recommend everyone six months of age and older get vaccinated for influenza. CDC also recommends antiviral medications to treat influenza. Antiviral treatment has shown clinical and public health benefit in reducing illness and lessening severe outcomes of influenza based on evidence from randomized controlled trials, meta-analyses of randomized controlled trials, and observational studies during past influenza seasons and during the 2009 H1N1 pandemic.

During this COCA Call, clinicians will learn about current 2019–2020 influenza activity and CDC’s recommendations for healthcare providers, including influenza vaccination and the appropriate use of antiviral medications.

Source: [https://emergency.cdc.gov/coca/calls/2020/callinfo\\_012820.asp?deliveryName=USCDC\\_1052-DM18313](https://emergency.cdc.gov/coca/calls/2020/callinfo_012820.asp?deliveryName=USCDC_1052-DM18313)

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**About this report:** Reporting agencies include labs, hospitals, long-term care and community-based care providers, physician offices, university clinic, pharmacies, and schools. Agencies are distributed throughout Summit County and report different indicators of flu activity including total lab tests, numbers of positive tests and type, antiviral prescriptions filled, school absences, and influenza like illness (ILI). Hospitalizations are lab confirmed for influenza and are obtained from the Ohio Disease Reporting System. Number of deaths associated with influenza and pneumonia are gathered from the Summit County Office of Vital Records death listings. Emergency room visits for complaints related to influenza are obtained by syndromic surveillance system (Epicenter). Special thanks to all agencies who report Influenza related data weekly.

Reporting from participants may not be complete each week. Numbers may change as updated reports are received. For questions, please contact Joan Hall or Tracy Rodriguez at the Summit County Public Health Communicable Disease Unit (330-375-2662 or [cdu@schd.org](mailto:cdu@schd.org)). This report was issued on January 31, 2020.