Summit County Public Health
Influenza Surveillance Report
2019 – 2020 Season
Report #6
Flu Surveillance Weeks 6 & 7 (11/9/2019 to 11/23/2019)
Centers for Disease Control and Prevention MMWR Weeks 46 & 47

Summit County Surveillance Data:

In **Week 7** of surveillance, influenza-related activity remained minimal in Summit County.

Table 1: Overall Influenza Activity Indicators in Summit County by Week

	Week 6 MMWR 46 N (%)[1]	Week 7 MMWR 47 N (%)[1]	Percent change from previous week	Number of weeks increasing or decreasing
Lab Reports				
Test Performed	**581**	**575**	- 1.0%	**NC**
Positive Tests (Number and %)	**3 (0.5)**	**9 (1.6)**	+ 203%	**↑1**
Influenza A (Number and %)	**1 (0.2)**	**2 (0.4)**	+100%	**↑1**
Influenza B (Number and %)	**2 (0.3)**	**7 (1.2)**	+ 300%	**↑1**
Acute care hospitalization for Influenza:	**0**	**0**	--	**--**
Influenza ILI Community Report:				
Long-term Care ILI	**3**	**1**	- 66.7%	**↓1**
Correctional & Addiction Facility	**0**	**0**	--	**--**
Physician Offices & University Clinic	**0**	**0**	--	**--**
Pharmacy Prescriptions				
Zanamivir (Relenza)	**0**	**0**	--	**--**
Oseltamivir (Tamiflu)	**3**	**1**	- 66.7%	**↓1**
Baloxavir marboxil (Xofluza)	**0**	**0**	--	**--**
Total	**3**	**1**	- 66.7%	**↓1**
Schools absenteeism[2]	**6.8**	**6.7**	- 1.5%	**NC**
Deaths				
Pneumonia associated	**8 (5.6)**	**2 (1.7)**	- 69.4%	**↓2**
Influenza associated	**0**	**0**	--	**--**
Emergency room visits (EpiCenter)[3]				
Constitutional Complaints	**517 (8.8)**	**495 (7.9)**	- 10.8%	**↓1**
Fever and ILI	**87 (1.5)**	**84 (1.3)**	- 10.0%	**↓1**

1) N and % are reported when available, NC = no change

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

Note: *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 7, and there were two deaths associated with pneumonia. **Figure 1** displays weekly Summit County death counts associated with pneumonia and influenza.

Acute Care Hospitalizations: There were no reported hospitalizations during Week 7. **Figure 2** displays influenza associated hospitalizations in Summit County.

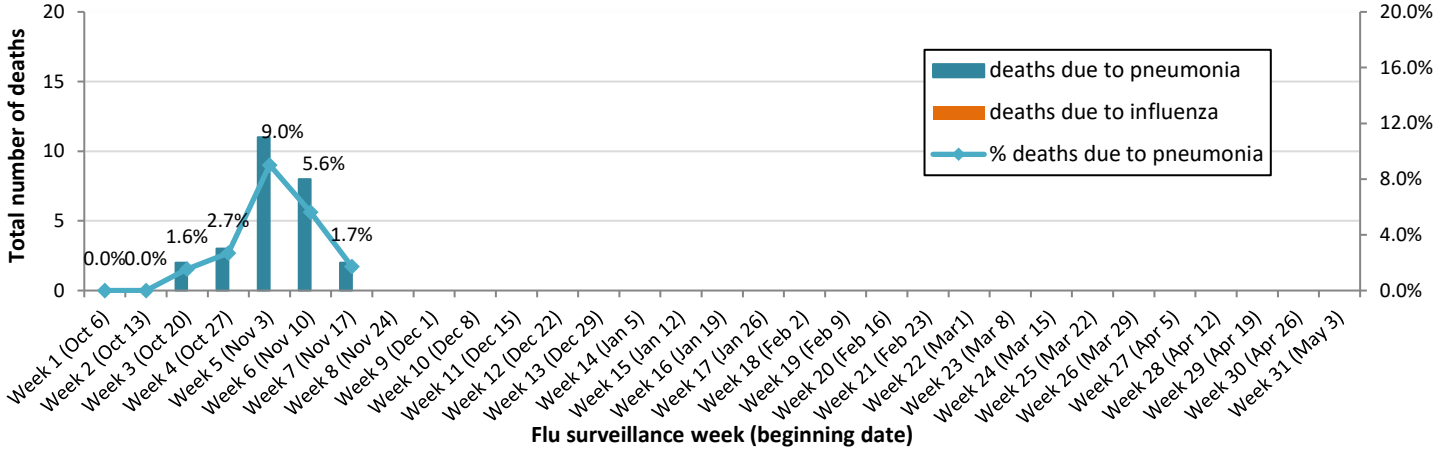
COMMUNITY ILI REPORTS:
Influenza like Illness (ILI) as defined by the CDC is fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat without a known cause other than influenza. Community ILI reports: **Long Term Care Facilities:** There was one case of ILI reported. **Correctional and Inpatient Addiction facilities:** Zero cases ILI reported. **Physician offices and clinics:** During Week 7, zero cases of ILI were reported.

Pharmacies: One prescription for CDC-approved antiviral medications were reported during Week 7.

School absenteeism includes absences regardless of reason. During Week 7 the rate was 6.7%, a slight decrease from the rate reported in Week 6.

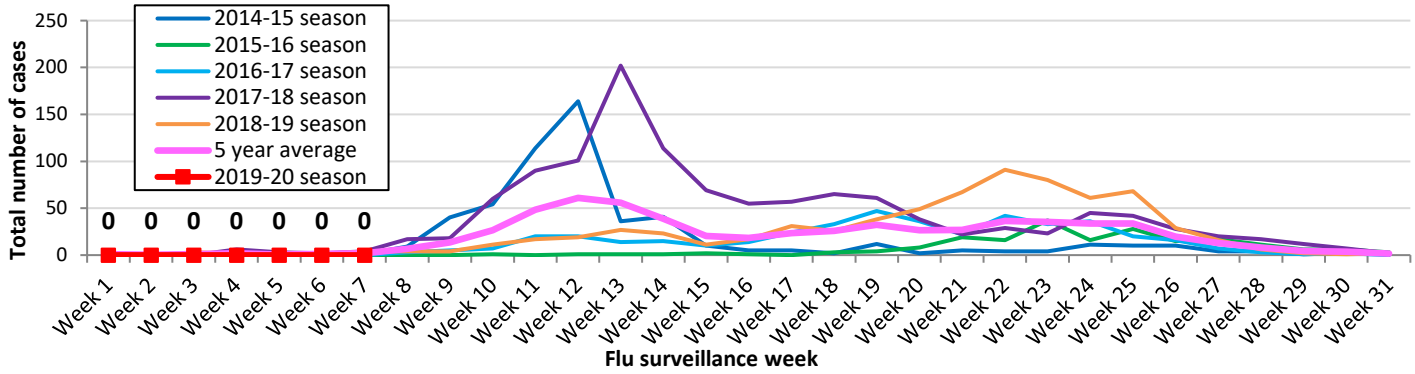
Lab reports: During Week 7 of influenza surveillance, Summit County facilities performed 575 flu tests, of which 9 were positive (Type A = 2, Type B = 7). **(Figure 4)**

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



Influenza-associated hospitalization: Summit County hospitals reported no influenza-associated hospitalizations during Week 6. **Figure 2** displays weekly confirmed hospitalization count for Summit County **(cumulative count to date = 0).**

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 84 ILI-related visits reported during Week 7, which was 1.3% of total ED visits (n = 6303). This rate was 10% lower than the ILI rate during Week 6.

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

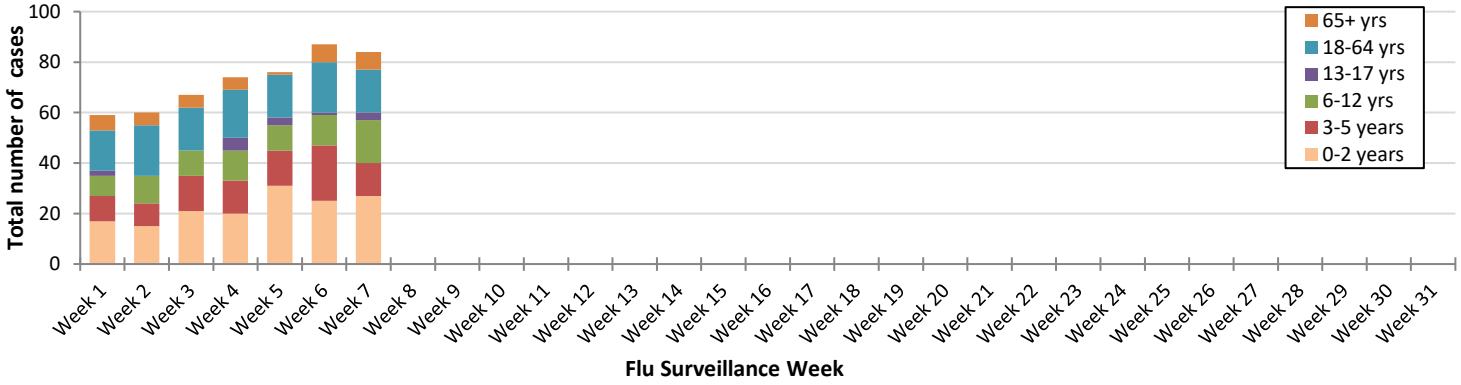
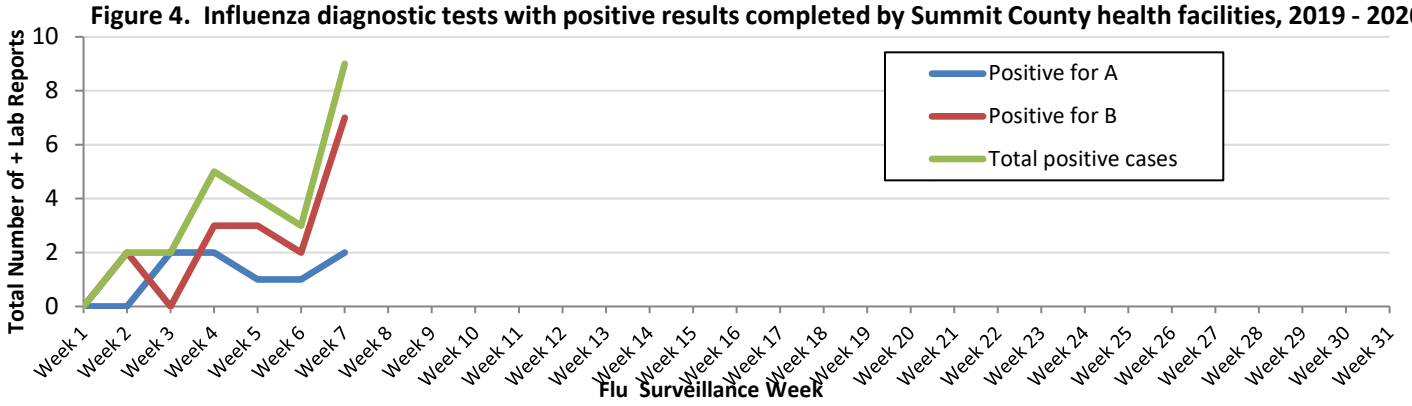


Figure 4. Influenza diagnostic tests with positive results completed by Summit County health facilities, 2019 - 2020

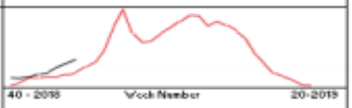
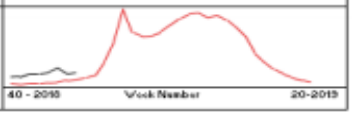


Ohio Influenza Activity: from the Ohio Department of Health:

Current Ohio Activity Level (Geographic Spread) – Local Definition: Increased ILI in 1 region; ILI activity in other regions is not increased AND recent (within the past 3 weeks) lab evidence of influenza in region with increased ILI, OR 2 or more institutional outbreaks (ILI or lab confirmed) in 1 region; ILI activity in other regions is not increased AND recent (within the past 3 weeks) lab evidence of influenza in region with the outbreaks; virus activity is no greater than sporadic in other regions.

During MMWR Week 47, public health surveillance data sources indicate minimal 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*. There were 32 influenza-associated hospitalizations reported during MMWR Week 46.

Ohio Influenza Activity Summary Dashboard (November 17 – 23, 2019):

Data Source	Current week value	Percent Change from last week[1]	# of weeks[2]	Trend Chart[3]
Influenza-like Illness (ILI) Outpatient Data (ILINet Sentinel Provider Visits)	0.81%	-13.83%	↓ 2	
Thermometer Sales (National Retail Data Monitor)	1075	14.48%	↑ 3	
Fever and ILI Specified ED Visits (EpiCenter)	2.12%	3.92%	↑ 10	
Constitutional ED Visits (EpiCenter)	9.42%	2.61%	↑ 6	
Confirmed Influenza-associated Hospitalizations (Ohio Disease Reporting System)	32	28.00%	↑ 2	
Outpatient Medical Claims Data[4]	0.56%	5.66%	↑ 1	

[1]Interpret percent changes with caution. Large variability may be exhibited in data sources with low weekly values.
[2]Number of weeks that the % change is increasing or decreasing.
[3]Black lines represent current week's data; red lines represent baseline averages
[4]Medical Claims Data provided by athenahealth®

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

Ohio Surveillance Data:

- **ODH lab** has reported 12 positive influenza tests from specimens sent from sentinel ILINet providers and hospital clinical labs. 2019-2020 influenza season results: (1) A/pdmH1N1; (7) A/H3N2; (4) Influenza B; (through 11/23/2019).
- **The National Respiratory and Enteric Virus Surveillance System (NREVSS)** has reported 12,009 influenza RT-PCR tests performed at participating facilities. 2019-2020 influenza season positive results: (6) A/pdmH1N1; (2) A/H3N2; (50) Flu A Not Subtyped; and (38) Flu B; (through 11/23/2019).
- **0 pediatric influenza-associated mortalities** have been reported during the 2019-2020 season (through 11/23/2019).
- **No novel influenza A virus infections** have been reported during the 2019-2020 season (through 11/23/2019).
- Incidence of confirmed **influenza-associated hospitalizations** in 2019-2020 season = 139 (through 11/23/2019).

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

According to this week's FluView report, seasonal influenza activity in the United States continues to increase but the amount of activity and the predominant influenza virus varies by region.

- **Viral Surveillance:** Nationally influenza B/Victoria viruses have been reported more frequently than other influenza viruses this season; followed by A(H1N1)pdm09 and A(H3N2) viruses, which are also circulating in significant numbers. The predominant virus varies by region and the proportion of influenza B/Victoria viruses is increasing in some regions. The predominant virus also varies 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% (2 of 2 samples); A (H3N2): 87.5% (7 of 8 samples); B/Victoria: 63.6% (7 of 11 samples); B/Yamagata: antigenic characterization is pending.
    - **Antiviral Resistance:** the vast majority of influenza viruses tested (> 99%) show susceptibility to oseltamivir, peramivir and zanamivir. All influenza viruses tested showed susceptibility to baloxavir.

- **Influenza-like Illness Surveillance (Figure 5):** Nationwide during week 47, 2.9% 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 above the national baseline of 2.4%.* On a regional level, the percentage of outpatient visits for ILI ranged from 1.5% to 6.8% during week 47. Region 3 (Delaware, the District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia), Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee), Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas), and Region 10 (Alaska, Idaho, Oregon, and Washington) reported a percentage of outpatient visits for ILI which is equal to or above their region-specific baselines. Regions 1, 2, 5, 7, 8, and 9 were below their region-specific baselines.
    - **ILI State Activity Indictor Map (Figure 6):** Puerto Rico and seven states reported high ILI activity; seven states reported moderate activity; New York City and eight states reported low activity; and, and 28 states experienced minimal ILI activity. Data was insufficient for the US Virgin Islands and the District of Columbia.

- **Geographic Spread of Influenza (Figure 7):** The geographic spread of influenza was reported widespread in Alabama, Alaska, California, Louisiana, Massachusetts, Nevada, New Mexico, South Carolina, Tennessee and Texas; regional in 14 states, local in Puerto Rico and 19 states; the U.S. Virgin Islands and 7 states reported sporadic activity; Rhode Island reported no activity; and the District of Columbia and Guam did not report.

- **Pneumonia and Influenza Mortality:** Based on National Center for Health Statistics (NCHS) mortality surveillance data available on November 27, 2019, 5.1% of the deaths occurring during the week ending November 16, 2019 (week 46) were due to P&I. This percentage is below the epidemic threshold of 6.3% for week 46.

- **Influenza-associated Pediatric Deaths:** One influenza-associated pediatric deaths was reported to CDC during Wk 47.

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

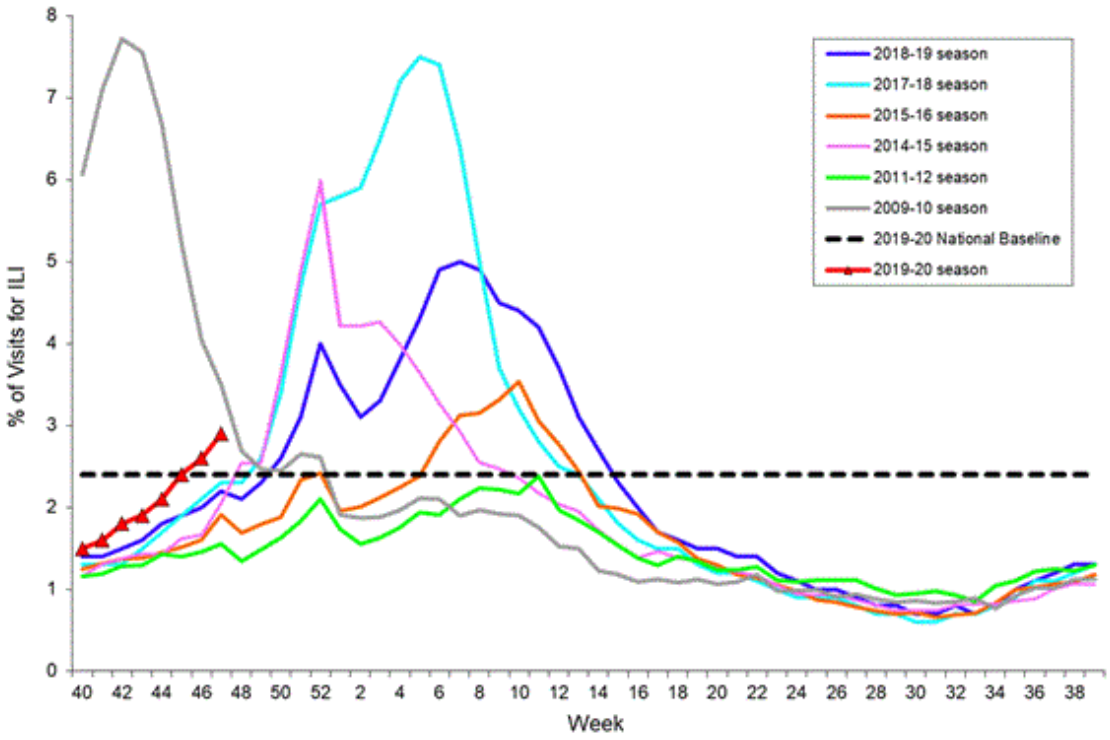


Figure 6. Influenza-like illness (ILI) activity level indicator determined by data reported to ILINet

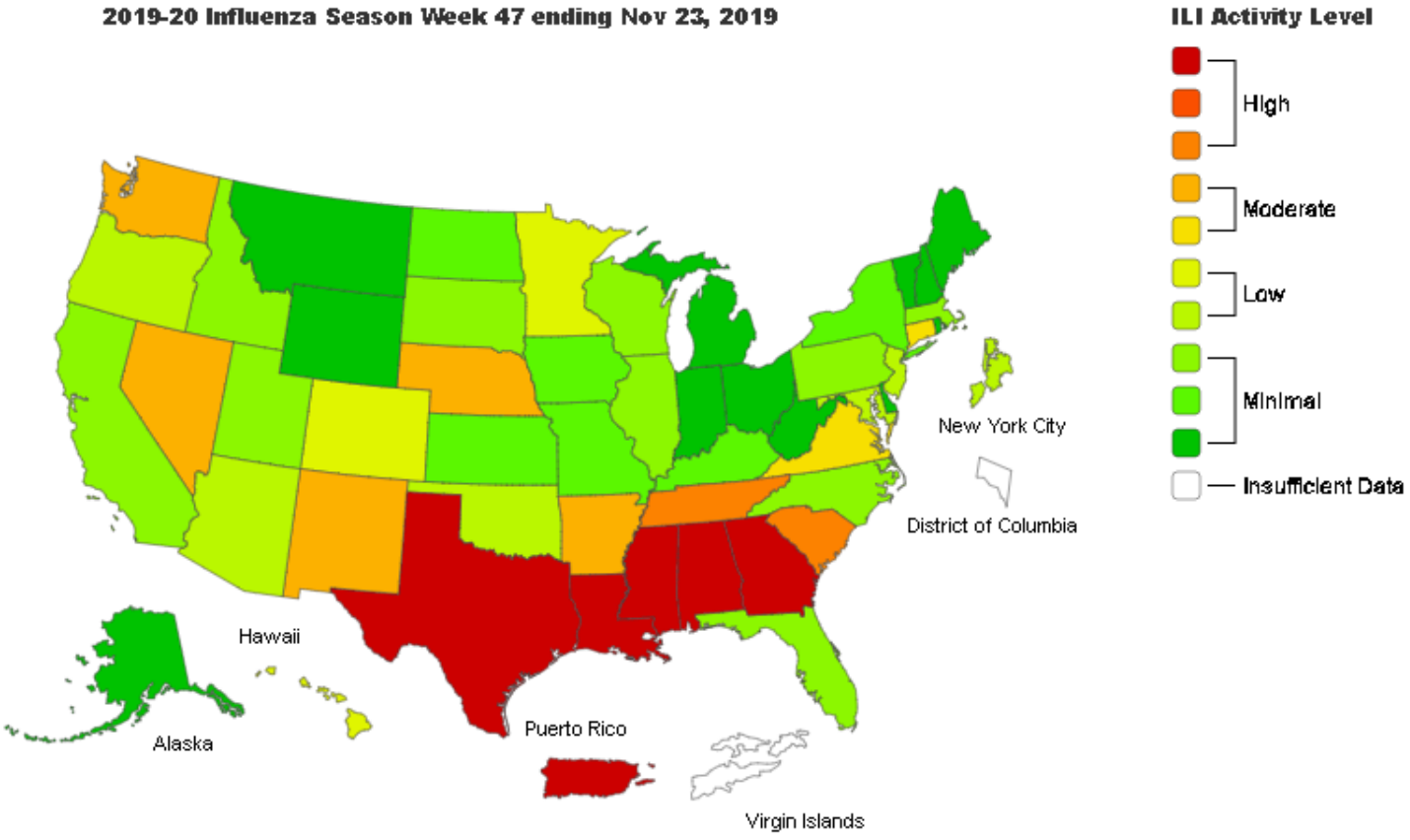
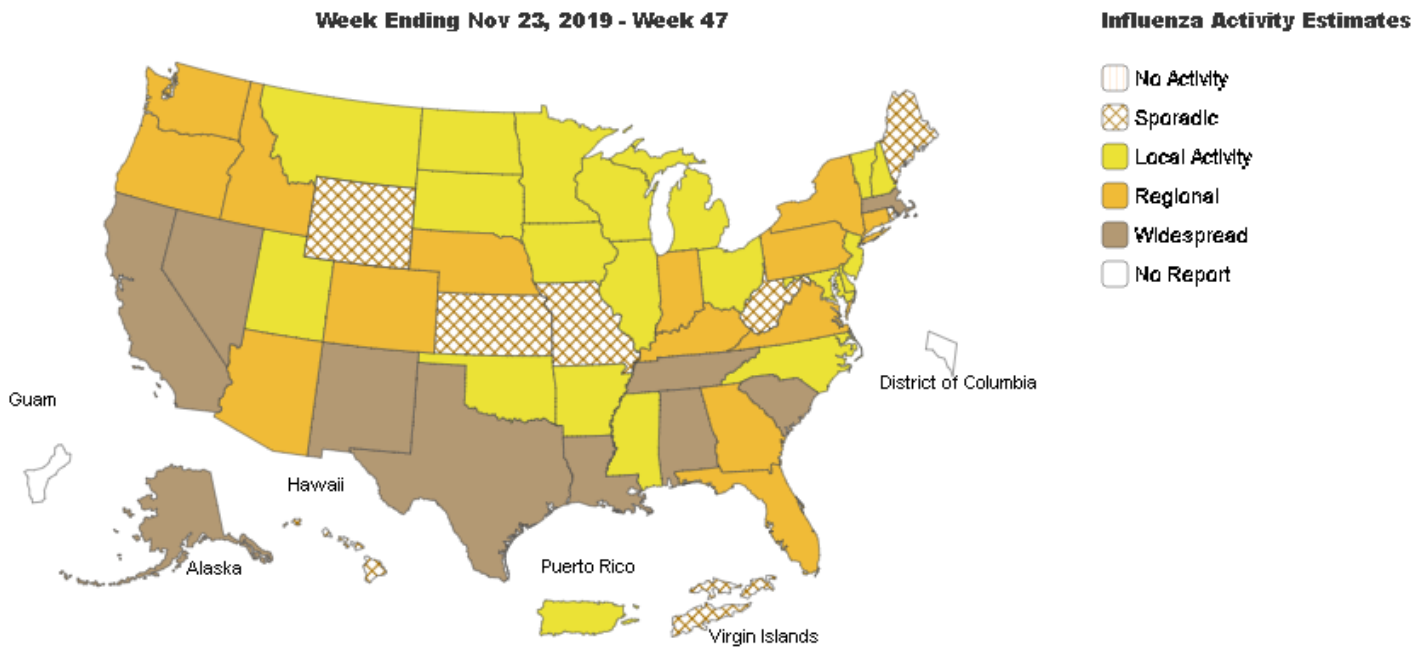


Figure 7. Weekly influenza activity (geographic spread) estimates reported by state and territorial epidemiologists



Source: https://www.cdc.gov/flu/weekly/

Global Surveillance:

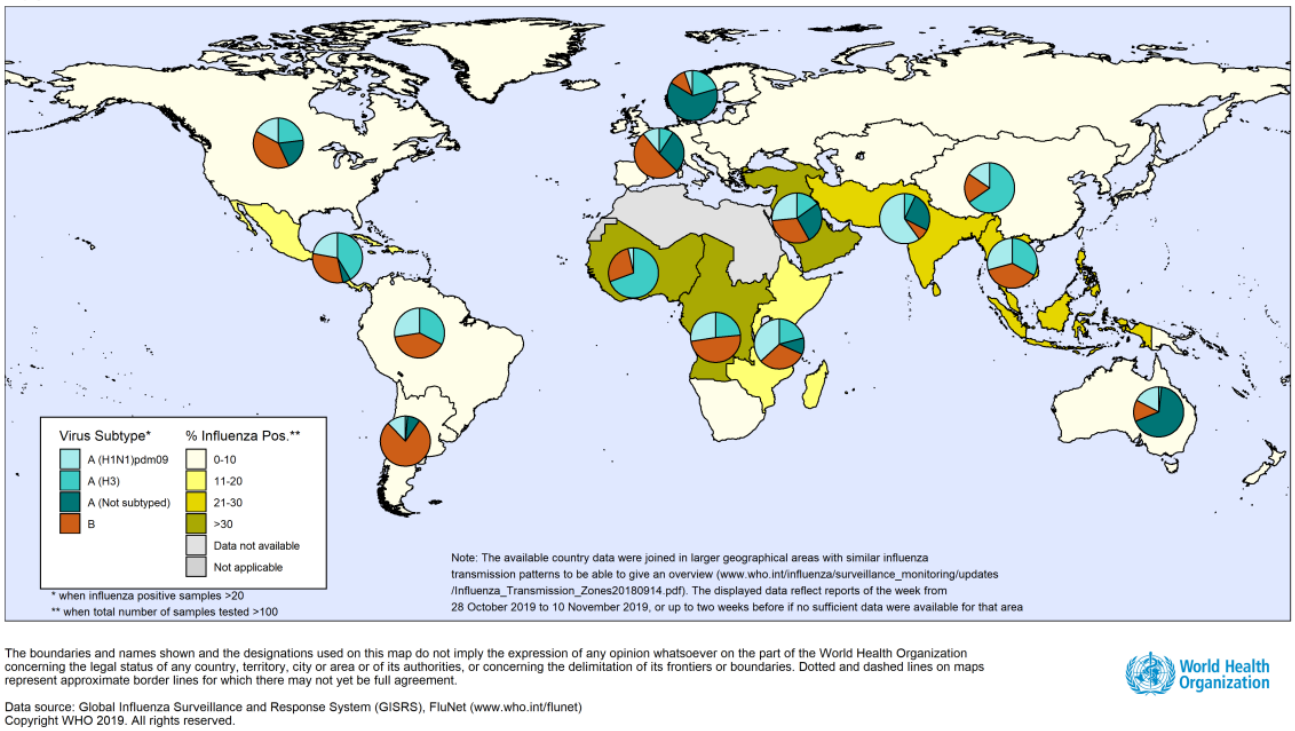
Influenza Update Nº 355, World Health Organization (WHO), published 25 November 2019, based on data up to 10 November 2019. The Update is published every two weeks.

Summary

- In **the temperate zone of the northern hemisphere**, influenza activity remained at inter-seasonal levels in most countries. However, flu activity continued to increase across the countries in Western Asia.
- In **the Caribbean, and tropical South American countries**, influenza activity was low overall, except for Cuba. In Central American countries, influenza activity decreased in El Salvador and Nicaragua.
- In **tropical Africa**, influenza activity remained elevated in some countries of Western Africa.
- In **Southern Asia**, influenza activity was low across reporting countries, but continued to increase in Iran (Islamic Republic of).
- In **South East Asia**, influenza activity continued to be reported in Lao PDR.
- In **the temperate zones of the southern hemisphere**, influenza activity returned to inter-seasonal levels in most countries and decreased to low levels in Chile.
- **Worldwide**, seasonal influenza A accounted for the majority of detections, with equal proportions of influenza A(H1N1)pdm09 and A(H3N2) viruses.

National Influenza Centres (NICs) and other national influenza laboratories from 112 countries, areas or territories reported data to FluNet for the time period from 28 October 2019 to 10 November 2019 (data as of 2019-11-22 05:24:24 UTC). The WHO GISRS laboratories tested more than 85 126 specimens during that time period. A total of 6187 were positive for influenza viruses, of which 4608 (74.5%) were typed as influenza A and 1579 (25.5%) as influenza B. Of the sub-typed influenza A viruses, 1473 (47%) were influenza A(H1N1)pdm09 and 1664 (53%) were influenza A(H3N2). Of the characterized B viruses, 43 (6.2%) belonged to the B-Yamagata lineage and 650 (93.8%) to the B-Victoria lineage.

Figure 8. Percentage of respiratory specimens that tested positive for influenza, by influenza transmission zone (map generated on 22 November 2019)



Source: https://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/

Influenza News from CDC:

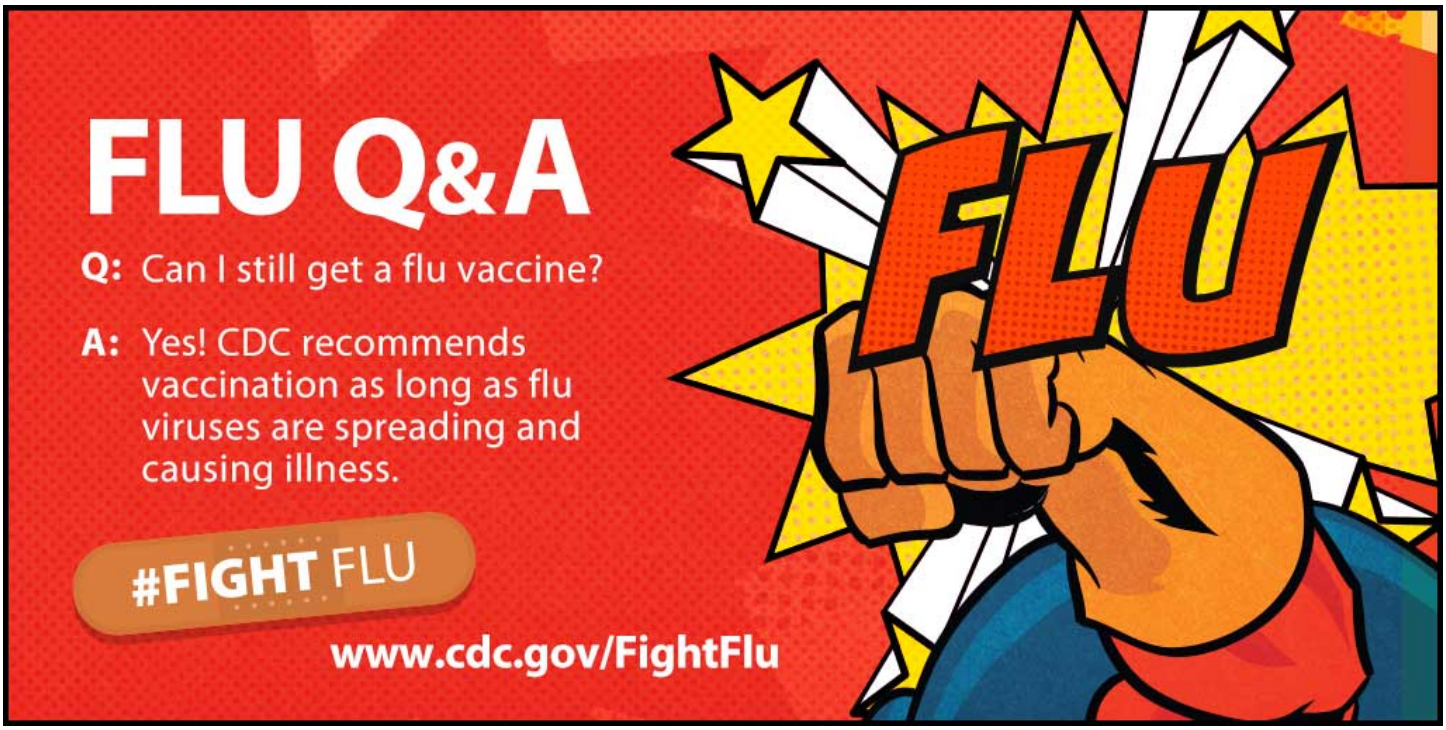
National Influenza Vaccination Week is happening NOW!

From **December 1-7, 2019** CDC are observing National Influenza Vaccination Week, reminding everyone 6 months and older that it's not too late to get a flu vaccine.

NIVW Timing: Previous flu vaccination coverage data have shown that few people get vaccinated against influenza after the end of November.

- CDC and its partners choose December for NIVW to remind people that even though the holiday season has begun, it is not too late to get a flu vaccine.
- As long as flu viruses are spreading and causing illness, vaccination should continue throughout flu season in order to protect as many people as possible against flu.
- Vaccination efforts should continue through the holiday season and beyond. It's not too late to vaccinate.
- While vaccination is recommended before the end of October, getting vaccinated later can still be beneficial during most seasons for people who have put it off.
- Even if have already gotten sick with flu, you can still benefit from vaccination since many different flu viruses spread during flu season and most flu vaccine protects against four different flu viruses.

More information, resources and a digital toolkit can be accessed at this website:
https://www.cdc.gov/flu/resource-center/nivw/index.htm



Centers for Disease Control and Prevention to Host Seasonal Influenza Education with PlatformQ Health on December 3

This year, the Centers for Disease Control and Prevention (CDC) is releasing two educational segments about flu vaccination with PlatformQ Health: one designed specifically for health care professionals (HCPs) and the other for members of the public. Both programs will be live broadcast from CDC headquarters in Atlanta, and feature CDC experts as speakers.

The webinar for the general public will be live streamed tomorrow, December 3, at 2:30 pm. This interactive, streaming webinar will feature opportunities for members of the public to directly engage with a CDC subject matter expert and ask questions about flu and flu vaccine. It will also provide an overview of flu vaccine benefits and why flu is so dangerous.

More information and webinar registration can be found here:
https://www.medlive.com/app/signup/Flu_PtEd_MedLive_120319_Reg/formPage/

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). This report was issued on December 2, 2019.