

Summit County Public Health Influenza Surveillance Report

2020 - 2021 Season



Final Report

Flu Surveillance Weeks 30 & 31 (4/25 to 5/8/2021) Centers for Disease Control and Prevention MMWR Weeks 17 & 18

2020-2021 Influenza Season Summary (October 4, 2020 to May 8, 2021)

Laboratory Testing:							
	<u> 2020 - 2021</u>	<u> 2019 - 2020</u>					
Influenza Tests ordered:	16,247	29,898					
Positive test results:	3	6,581					
Type A:	0	3,472					
Type B:	3	3,109					
Total influenza hospitalizations:	1	744					
Influenza – related deaths:	0	4					
Pneumonia – related deaths:	584	188					
COVID-19 – related deaths:	584						

Notes: COVID-19 data was not reported in influenza reports during the 2019-2020 season.

Although the number of COVID-19 and pneumonia deaths were equal during the 2020 – 2021 influenza season, these were not the same deaths for each cause. Some deaths were due to the development of pneumonia as the result of a COVID-19 infection, while others were due to pneumonia from other causes, or complications of COVID-19 that did not include pneumonia.

Summit County Surveillance Data:

During Week 31 of influenza surveillance, influenza-related activity was minimal in Summit County. COVID-19 activity has been decreasing but still remains high with continued elevated risk of community exposure.

Table 1: Overall Influenza Activity Indicators in Summit County by week							
	Week 30 MMWR 17 N (%) ¹	Week 31 MMWR 18 N (%) ¹	Percent change from previous week	Number of weeks increasing or decreasing			
Lab Reports: Influenza							
Tests Performed	453	479	+ 5.7%	↑1			
Positive Tests (Number and %)	0 (0.0)	0 (0.0)					
Influenza A (Number and %)	0 (0.0)	0 (0.0)					
Influenza B (Number and %)	0 (0.0)	0 (0.0)					
Lab Reports: COVID-19							
Tests Performed	2133	2278	+ 6.8%	↑1			
Positive Tests (Number and %)	126 (5.9)	106 (4.7)	- 21.2%	↓1			
Acute care hospitalizations for Influenza:	0	0					
Acute care hospitalizations for COVID-19:	112	83	- 25.9%	↓1			
Pharmacy Prescriptions							
Zanamivir (Relenza)	0	0					
Oseltamivir (Tamiflu)	0	0					
Baloxavir marboxil (Xofluza)	0	0					
Peramivir (Rapivab)	0	0					
Total	0	0					
Schools absenteeism ²	6.6%	7.2%	+ 8.8%	↑1			
Deaths (occurred in Summit County)							
Total deaths certified	141	126	- 10.6%	↓1			
Pneumonia associated	9 (6.4)	13 (10.3)	+ 61.6%	↑1			
Influenza associated	0 (0.0)	0 (0.0)					
COVID-19 associated	6 (4.3)	14 (11.1)	+ 161%	↑1			
Emergency room visits (ESSENCE)	³ (Figure 3)						
Total ED Visits	5919	6059	+ 2.4%	↑2			
Respiratory Encounters	585 (9.9)	573 (9.5)	- 4.3%	↓2			
ILI Encounters	46 (0.8)	31 (0.5)	- 34.2%	↓2			
1) N and % are reported when available	0						

¹⁾ N and % are reported when available

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

Lab reports: During the Week 31, reporting Summit County facilities ordered 479 influenza tests, none of which had a positive result. 2,278 COVID-19 tests were completed by reporting partners, with a positivity rate of 4.7% in Week 31 (a 21% decrease from Week 30) (Figure 4).

Note: Influenza and COVID-19 testing data are collected from

the entire county.

Acute Care Hospitalizations: There were zero reported influenza and 83 COVID-19 admissions during

selected reporting partners and do not represent positivity rates for

Pharmacies: Zero prescriptions for CDC- approved influenza antiviral medications were reported during Week 31.

Week 31. (Figure 2).

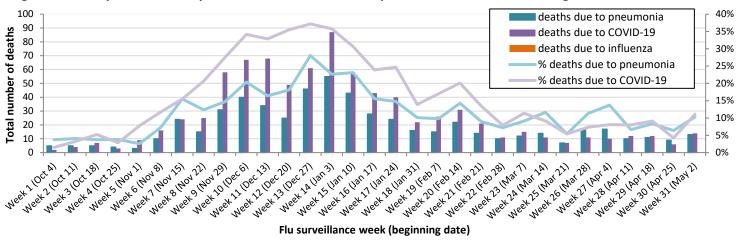
School absenteeism includes absences regardless of reason. In Week 31, the absence rate was 7.2%. This was 9% higher than the rate reported in Week 30. Attendance rates may be affected by school closures due to spring break.

Zero deaths related to influenza, 14 COVID-19 deaths and 13 pneumonia related deaths were reported during Week 31. The rates of pneumonia deaths increased by 62% and the COVID-19 associated death rate increased by 161% (**Figure 1**).

²⁾ Absence is for any reason. Percent is from total number of students enrolled. Data was collected from 12 schools or school districts throughout Summit County (n = approx. 32,000 students)

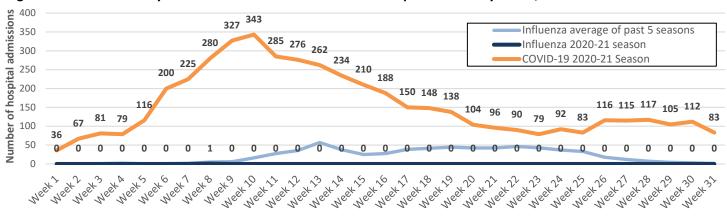
³⁾ Percent is from total number of emergency room interactions

Figure 1. Weekly Summit County death counts associated with pneumonia and influenza during 2020-2021 season



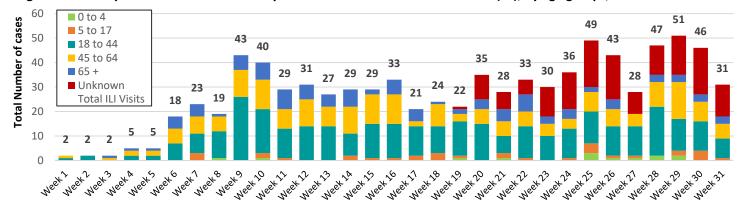
Hospitalizations: Summit County hospitals reported no influenza-associated hospitalizations, and 83 COVID-19 admissions in Week 31. **Figure 2** displays weekly confirmed hospitalization counts for Summit County facilities (influenza total count to date = 1).

Figure 2. Summit County influenza and COVID-19 associated hospitalizations by week, 2020-2021 season



ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics) is a web-based disease surveillance information system that lets agencies analyze events of public health interest, monitor healthcare data for events that could affect public health. For this report, ED visits related to respiratory complaints and influenza-like illness (ILI) are included. **Figure 3** displays the weekly number of ER visits related to ILI symptoms in Summit County. There were 31 ILI-related visits reported during Week 31, which was 0.5% of total ED visits (n = 6,059). This rate was 34% lower than the ILI rate during Week 30.

Figure 3. Weekly ED visits in Summit County associated with influenza-like illness (ILI), by age groups, 2020 to 2021 season



500 20% % COVID-19 Positives 18% 17% 17% 16% _{16%} 18% Positive for Influenza A Positive test results 400 16% Positive for Influenza B 14% 13% 13% 14% Total positive influenza results Total COVID-19 positives 12% 10% Positivity 8% 8% 7% 10% 200 8% 6% 6% 5% 5% 5% 6% 4% 3% 4% 3% 3% 100 4% 2% 0 0 1 0 0% Neekil Neek 13 Neekal week 19 Neek 20 Weeks neeki Neeks Neeks NeekJO NeekJZ NeekJa Week 15 NeekJo Week 18 Neek 22 Meek22 Week 23 Week 26 Neekza Neek25

Flu Surveillance Week

Figure 4. Influenza diagnostic tests with positive results completed by Summit County health facilities, 2020 - 2021 season

Ohio Influenza Activity: from the Ohio Department of Health:

Current Ohio Activity Level (Geographic Spread) - Minimal

During MMWR Week 18, public health surveillance data sources indicate minimal intensity for influenza-like illness (ILI) in outpatient settings reported by Ohio's sentinel providers. Data from public health and clinical laboratories show very low levels of influenza virus circulation. Week 18 syndromic emergency department data is delayed as Ohio finalizes the transition between syndromic surveillance data vendors. Reported cases of influenza-associated hospitalizations are below the seasonal threshold*. There were 0 influenza-associated hospitalization reported during MMWR Week 18.

Ohio Influenza Activity Summary Dashboard (May 2 to May 8, 2021):

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)	1.33%	17.70%	↑ 1	40 - 2020 Week Number 20-3
Thermometer Sales (National Retail Data Monitor) ⁴	0.52%	-1.89%	↓ 2	40 - 2020 Week Number 20-3
Fever and III Specified ED Visits (EpiCenter) ⁵	1.73%	-14.78%	↓ 4	40 - 2020 Week Number 20-3
Constitutional ED Visits (EpiCenter)⁵	9.82%	-5.12%	↓ 2	40 - 2020 Week Number 20-3
Confirmed Influenza-associated Hospitalizations (Ohio Disease Reporting System)	0	-100.00%	↓ 1	40 - 2020 Week Number 20-3

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

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

²Number of weeks that the % change is increasing or decreasing.

³Black lines represent current week's data; red lines represent baseline averages

⁴Due to abnormally high thermometer sales during the COVID-19 pandemic, the 2019-2020 season data has been omitted. A 4-year average, which includes data from the 2015-2016 season through the 2018-2019 season, is shown

⁶Week 18 syndromic emergency department data is delayed as Ohio finalizes the transition between syndromic surveillance data vendors; Data through week 52 is shown.

Ohio Surveillance Data:

- The Ohio Department of Health Laboratory has tested 18 specimens for influenza during the 2020-2021 influenza season; of these, 0 tested positive for influenza A(H1N1pdm09), 0 for influenza A(H3N2), 1 for influenza A (not subtyped), 0 for influenza B, and 17 were negative (through 05/08/2021).
- The National Respiratory and Enteric Virus Surveillance System (NREVSS) and U.S. World Health Organization
 (WHO) Collaborating Laboratories reported 35,630 tests for influenza performed at participating facilities; of these, 0
 tested positive for influenza A(H1N1pdm09), 2 for influenza A(H3N2), 35 for influenza A (subtyping not performed),
 and 19 for influenza B (through 05/01/2021; 2020-2021 season positive influenza testing data reflects a two-week lag
 to ensure data completeness).
- No pediatric influenza-associated mortalities have been reported so far during the 2020-2021 influenza season (through 05/08/2021).
- No novel influenza A virus infections have been reported so far during the 2020-2021 influenza season (through 05/08/2021).
- Incidence of confirmed influenza-associated hospitalizations in 2020-2021 season = 121 (through 05/08/2021).

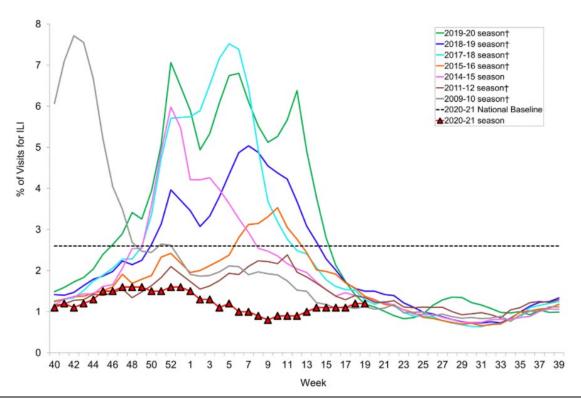
National Surveillance: from Centers for Disease Control and Prevention (CDC):

Seasonal influenza activity in the United States remains lower than usual for this time of year.

National Outpatient Illness Surveillance:

During week 18, the percentage of outpatient visits for ILI increased to 1.2% (Figure 5), which is below the national baseline of 2.6%. During week 18, compared with week 17, the percentage of visits for ILI remained stable (change of \leq 0.1%) in all ten regions. All regions reported percentages of outpatient visits for ILI below their region-specific baselines. All regions reported percentages of outpatient visits for ILI below their region-specific baselines. In Week 17, all reporting states & territories experienced minimal activity as reported by sentinel ILINet providers (Fig. 6).

Figure 5. Percentage of visits for influenza-like illness (ILI) reported by the U.S. Outpatient Influenza-like Surveillance Network (ILINet), weekly national summary, 2020-2021 and selected previous seasons



N. Mariana Islands

Puerto Rico

ILI Activity Level

Wery High

Moderate

Insufficient Data

Virgin Islands

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

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

Global Surveillance:

Influenza Update N° 393, World Health Organization (WHO), published 10 May 2021, based on data up to 25 April 2021. The Update is published every two weeks.

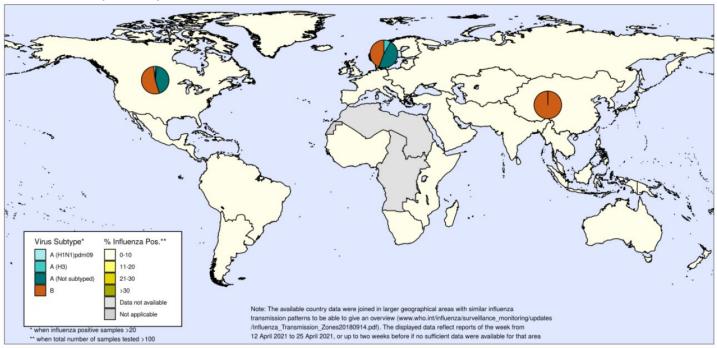
Summary

The current influenza surveillance data should be interpreted with caution as the ongoing COVID-19 pandemic has influenced to varying extents health seeking behaviours, staffing/routines in sentinel sites, as well as testing priorities and capacities in Member States. The various hygiene and physical distancing measures implemented by Member States to reduce SARS-CoV-2 virus transmission have likely played a role in reducing influenza virus transmission.

- Globally, despite continued or even increased testing for influenza in some countries, influenza activity remained at lower levels than expected for this time of the year.
- In the temperate zone of the northern hemisphere, influenza activity remained below baseline, though detections of influenza B-Victoria lineage slightly increased, especially in China.
- In the temperate zone of the southern hemisphere, influenza activity remained at inter-seasonal level.
- In the Caribbean and Central American countries, there were no influenza detections reported.
- In **tropical South America**, no influenza but respiratory syncytial virus (RSV) detections were reported in some countries.
- In tropical Africa, influenza detections were reported in some countries in Western, Middle and Eastern Africa.
- In Southern Asia, influenza activity continued to be reported at low levels in India.
- In South East Asia, influenza A(H3N2) detections continued to be reported in Lao People's Democratic Republic (PDR).
- Worldwide, influenza B detections accounted for the majority of the very low numbers of detections reported.

• National Influenza Centres (NICs) and other national influenza laboratories from 92 countries, areas or territories reported data to FluNet for the time period from 12 April 2021 to 25 April 2021 (data as of 2021-05-07 06:24:00 UTC). The WHO GISRS laboratories tested more than 327056 specimens during that time period. A total of 724 were positive for influenza viruses, of which 101 (14%) were typed as influenza A and 623 (86%) as influenza B. Of the subtyped influenza A viruses, 18 (34.6%) were influenza A(H1N1)pdm09 and 34 (65.4%) were influenza A(H3N2). Of the characterized B viruses (564), 100% belonged to the B-Victoria lineage.

Figure 7. Percentage of respiratory specimens that tested positive for influenza, by influenza transmission zone (based on data up to 25 April, 2021)



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/flunet) Copyright WHO 2021. All rights reserved.

World Health Organization

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

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 at the Summit County Public Health Communicable Disease Unit (330-375-2662 or cdu@schd.org). This report was issued on May 22, 2021.