

# **Summit County Public Health Influenza Surveillance Report**

2019 - 2020 Season





# Flu Surveillance Weeks 7 & 8 (11/16/2019 to 11/30/2019) Centers for Disease Control and Prevention MMWR Weeks 47 & 48

### **Summit County Surveillance Data:**

In Week 8 of surveillance, influenza-related activity remained minimal in Summit County, but is increasing.

	Week 7 MMWR 47 N (%)¹	Week 8 MMWR 48 N (%)¹	Percent change from previous week	Number of weeks increasing or decreasing
Lab Reports				
Test Performed	575	598	+ 4.0%	↑1
Positive Tests (Number and %)	9 (1.6)	17 (2.8)	+ 81.6%	↑2
Influenza A (Number and %)	2 (0.4)	9 (1.5) +333%		↑2
Influenza B (Number and %)	7 (1.2)	8 (1.3)	+ 9.9%	↑2
Acute care hospitalization for Influenza:	0	1	+ 100%	<b>↑</b> 1
Influenza ILI Community Report:				
Long-term Care ILI	1	1	NC	NC
Correctional & Addiction Facility	0	0		
Physician Offices & University Clinic	0	1	+ 100%	<b>†1</b>
Pharmacy Prescriptions				
Zanamivir (Relenza)	0	0		
Oseltamivir (Tamiflu)	1	1	NC	NC
Baloxavir marboxil (Xofluza)	0	0		
Total	1	1	NC	NC
Schools absenteeism <sup>2</sup>	6.3	7.4	+17.5%	<b>1</b>
Deaths				
Pneumonia associated	2 (1.7)	2 (2.5)	+ 46.8%	<b>1</b>
Influenza associated	0	0		
Emergency room visits (EpiCenter) <sup>3</sup>				
Constitutional Complaints	495 (7.9)	578 (9.9)	+ 26.1%	<b>↑1</b>
Fever and ILI	84 (1.3)	114 (2.0)	+ 46.6%	<b>↑1</b>

<sup>1)</sup> N and % are reported when available, NC = no change

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

Acute Care Hospitalizations: One hospitalization was reported during Week 8. 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 8, one case of ILI was reported.

**Pharmacies:** One prescription for CDC-approved antiviral medications were reported during Week 8.

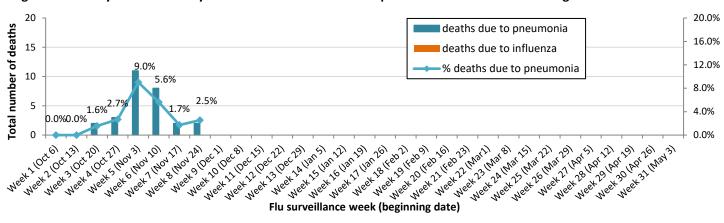
**School absenteeism** includes absences regardless of reason. During Week 8 the rate was 7.4%, a 17.5% increase from the rate reported in Week 7.

**Lab reports:** During Week 8 of influenza surveillance, Summit County facilities performed 598 flu tests, of which 17 were positive (Type A = 9, Type B = 8). **(Figure 4)** 

<sup>2)</sup> 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)

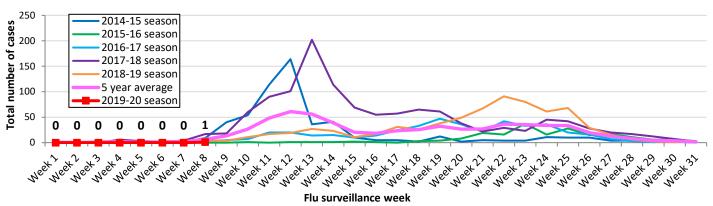
<sup>3)</sup> Percent is from total number of emergency room interactions

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



**Influenza-associated hospitalization**: Summit County hospitals reported one influenza-associated hospitalization during Week 8. **Figure 2** displays weekly confirmed hospitalization count for Summit County (cumulative count to date = 1).

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 114 ILI-related visits reported during Week 8, which was 2.0% of total ED visits (n = 5835). This rate was 47% higher than the ILI rate during Week 7.

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

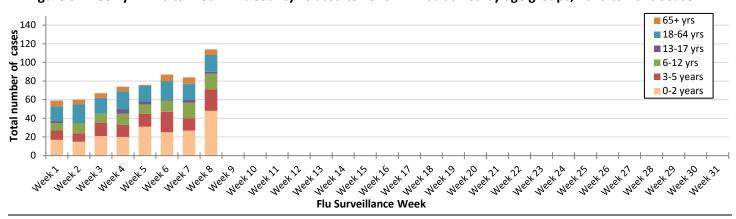
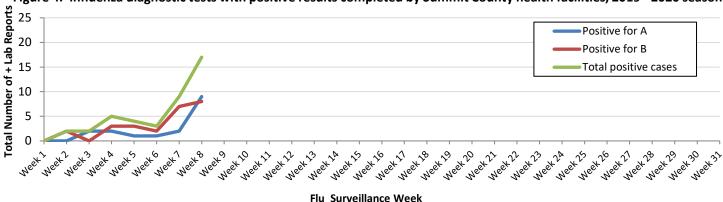


Figure 4. Influenza diagnostic tests with positive results completed by Summit County health facilities, 2019 - 2020 season



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

#### Current Ohio Activity Level (Geographic Spread) - 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 48, 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 (25 hospitalizations). There were 33 influenza-associated hospitalizations reported during MMWR Week 48.

#### Ohio Influenza Activity Summary Dashboard (November 24 – 30, 2019):

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)	0.92%	-12.38%	↓1	40 - 2018 West Number 20-2019
Thermometer Sales (National Retail Data Monitor)	945	-12.09%	<b>↓</b> 1	40 - 2018 Week Number 20-2013
Fever and ILI Specified ED Visits (EpiCenter)	2.48%	16.43%	<b>↑</b> 11	40 - 2018 Week Number 20-2013
Constitutional ED Visits (EpiCenter)	10.01%	6.04%	<b>↑</b> 7	40 - 2016 Week Number 20-2013
Confirmed Influenza-associated Hospitalizations (Ohio Disease Reporting System)	33	3.13%	<b>↑</b> 3	40 - 2018 Week Number 20-2013
Outpatient Medical Claims Data <sup>4</sup>	0.48%	-34.25%	<b>↓</b> 1	40 - 2018 Week Number 20-2013

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 19 positive influenza tests from specimens sent from sentinel ILINet providers and hospital clinical labs. 2019-2020 influenza season results: (5) A/pdmH1N1; (8) A/H3N2; (6) Influenza B; (through 11/30/2019).
- The National Respiratory and Enteric Virus Surveillance System (NREVSS) has 14,014 influenza specimens tested by RT-PCR at participating facilities. 2019-2020 influenza season positive results: (12) A/pdmH1N1; (2) A/H3N2; (72) Flu A Not Subtyped; and (86) Flu B; (through 11/30/2019).
- 0 pediatric influenza-associated mortalities have been reported during the 2019-2020 season (through 11/30/2019).
- No novel influenza A virus infections have been reported during the 2019-2020 season (through 11/30/2019).
- Incidence of confirmed influenza-associated hospitalizations in 2019-2020 season = 172 (through 11/30/2019).

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

According to this week's FluView report, seasonal influenza activity in the United States has been elevated for four weeks and continues to increase.

- <u>Viral Surveillance</u>: 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. The proportion of influenza B/Victoria viruses is increasing in some regions, while the proportion of A(H3N2) viruses is decreasing overall. 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% (5 of 5 samples); A (H3N2): 87.5% (7 of 8 samples);
     B/Victoria: 62.5% (10 of 16 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 48, 3.5% 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 1.8% to 6.9% during week 48. All regions except Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont) reported a percentage of outpatient visits for ILI which is equal to or above their region-specific baselines.
  - ILI State Activity Indictor Map (Figure 6): Puerto Rico and 12 states reported high ILI activity; New York
    City and 14 states reported moderate activity; and the District of Columbia, and 8 states experienced
    low ILI activity; and 16 states reported minimal activity. Data was insufficient for US Virgin Islands.
- Geographic Spread of Influenza (Figure 7): The geographic spread of influenza was reported widespread in 16 states; regional in Puerto Rico and 14 states, local in 17 states; the District of Columbia, the U.S. Virgin Islands and 3 states reported sporadic activity; and Guam did not report.
- Pneumonia and Influenza Mortality: Based on National Center for Health Statistics (NCHS) mortality surveillance data available on December 5, 2019, 4.8% of the deaths occurring during the week ending November 23, 2019 (week 47) were due to P&I. This percentage is below the epidemic threshold of 6.4% for week 47.
- <u>Influenza-associated Pediatric Deaths:</u> Six influenza-associated pediatric deaths were reported to CDC during Week 48.

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

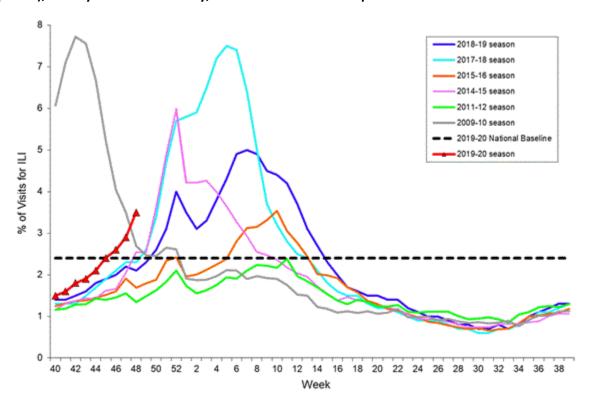


Figure 6. Influenza-like illness (ILI) activity level indicator determined by data reported to ILINet

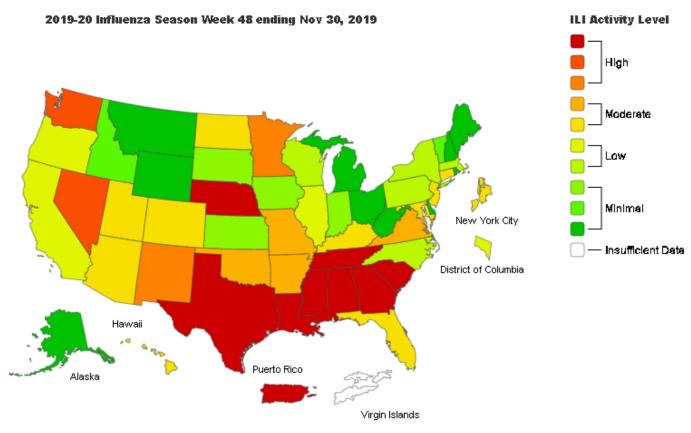
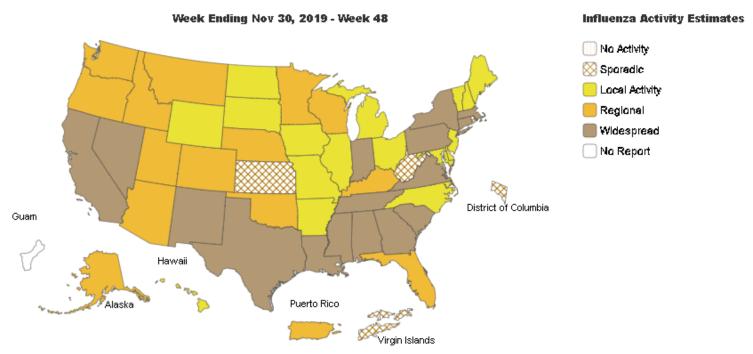


Figure 7. Weekly influenza activity (geographic spread) estimates reported by state and territorial epidemiologists



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

# **Global Surveillance:**

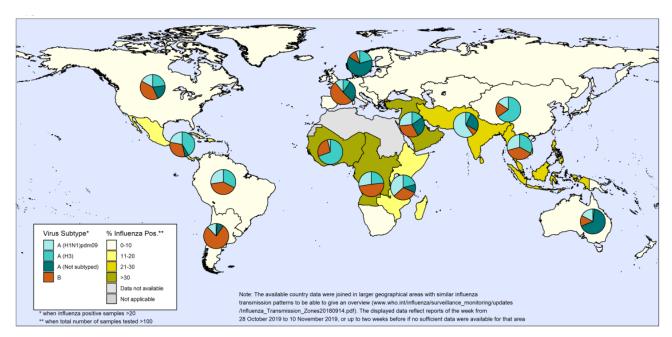
Influenza Update N° 355, World Health Organization (WHO), published 25 November 2019, based on data up to 10 November 2019. The Update is published every two weeks.

#### **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)



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.

World Health Organization

Data source: Global Influenza Surveillance and Response System (GISRS), FluNet (www.who.int/flunet) Copyright WHO 2019. All rights reserved.

Source: <a href="https://www.who.int/influenza/surveillance">https://www.who.int/influenza/surveillance</a> monitoring/updates/latest\_update\_GIP\_surveillance/en/

# Influenza News from MMWR and Medscape:

# **New FREE Continuing Education Activity from MMWR and Medscape:**

CDC's MMWR and Medscape are proud to introduce a new FREE continuing education (CE) activity. The goal of this activity is to describe updated recommendations from CDC's Advisory Committee on Immunization Practices (ACIP) regarding prevention and control of seasonal influenza with vaccines.

This activity is intended for primary care physicians, infectious disease practitioners, nurses, pharmacists, public health/prevention officials, and other physicians caring for persons for whom influenza vaccination is indicated.



The goal of this activity is to describe updated influenza vaccine recommendations from the Advisory Committee on Immunization Practices (ACIP) for the 2019-2020 flu season.

#### Upon completion of this activity, participants will be able to:

- Describe availability and composition of influenza vaccine preparations, according to updated influenza vaccine recommendations from ACIP for the 2019-2020 flu season
- Identify recent labeling changes for 2 quadrivalent influenza vaccine formulations, according to updated influenza vaccine recommendations from ACIP for the 2019-2020 flu season
- Determine other recommendations from ACIP regarding use of influenza vaccine for the 2019-2020 flu season

To access this free MMWR/Medscape CE activity, visit: <a href="www.medscape.org/viewarticle/920838">www.medscape.org/viewarticle/920838</a>. If you are not a registered user on Medscape, <a href="register for free or log in without a password">registered user on Medscape</a>, <a href="register for free or log in without a password">register for free or log in without a password</a> and get unlimited access to all CE activities and other Medscape features.

# **Updated Interim Guidance for HCPs: Managing Patients with Suspected EVALI** *During Flu Season*

Because patients with e-cigarette, or vaping, product use-associated lung injury (EVALI) may have similar symptoms to flu or other respiratory illness, diagnosing and managing these patients can be challenging. CDC has provided updated clinical guidelines for evaluating and managing patients with EVALI in the outpatient setting, including specific considerations during flu season.

#### **Summary**

#### What is already known about this topic?

A total of 2,172 U.S. e-cigarette, or vaping, product use-associated lung injury (EVALI) cases have been reported to CDC. Vitamin E acetate and tetrahydrocannabinol appear to be associated with the outbreak; however, no single causative agent has been identified.

#### What is added by this report?

As rates of influenza increase, providers evaluating patients with respiratory illnesses should ask them about e-cigarette, or vaping, product use; evaluate whether patients require hospital admission; and consider empiric use of antimicrobials, including antivirals, as well as possible corticosteroids.

#### What are the implications for public health practice?

EVALI is a diagnosis of exclusion; rapid recognition of EVALI patients by health care providers is critical to reduce severe outcomes.

#### This MMWR report can be accessed here:

https://www.cdc.gov/mmwr/volumes/68/wr/mm6846e2.htm?s\_cid=mm6846e2\_w&deliveryName=USCDC\_7\_3%20-%20DM13959

**About this report:** Reporting agencies include labs, hospitals, long-term care and community-based care providers, phsician 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 6, 2019.