

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

2019 - 2020 Season





# Flu Surveillance Weeks 3 & 4 (10/27/2019 to 11/2/2019) Centers for Disease Control and Prevention MMWR Weeks 43 & 44

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

In Week 4 of influenza surveillance, influenza-related activity was minimal in Summit County.

	Week 3 MMWR 43 N (%)¹	Week 4 MMWR 44 N (%)¹	Percent change from previous week	Number of weeks increasing or decreasing
Lab Reports				
Test Performed	403	474	17.6 %	<b>↑1</b>
Positive Tests (Number and %)	2 (0.5)	5 (1.1)	113 %	<b>↑1</b>
Influenza A (Number and %)	2 (0.5)	2 (0.4)	- 15.0 %	<b>↓</b> 1
Influenza B (Number and %)	0 (0.0)	3 (0.6)	100 %	<b>↑1</b>
Acute care hospitalization for Influenza:	0	0		
Influenza ILI Community Report:				
Long-term Care ILI	0	2	+ 100%	<b>1</b>
Correctional & Addiction Facility	0	0		
Physician Offices & University Clinic	0	1	+ 100%	<b>↑1</b>
Pharmacy Prescriptions				
Zanamivir (Relenza)	0	0		
Oseltamivir (Tamiflu)	2	2	NC	NC
Baloxavir marboxil (Xofluza)	0	0		
Total	0	0		
Schools absenteeism <sup>2</sup>	5.8	7.7	37.9 %	<b>↑1</b>
Deaths				
Pneumonia associated	2 (1.6)	3 (2.7)	+ 72.8%	<b>↑</b> 2
Influenza associated	0	0		
Emergency room visits (EpiCenter) <sup>3</sup>				
Constitutional Complaints	465 (7.8)	464 (7.8)	0.4%	NC
Fever and ILI	67 (1.1)	74 (1.2)	11.2%	↑2

<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 4, and there were three 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 4. 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 2 cases of ILI reported. Correctional and Inpatient Addiction facilities: Zero cases ILI reported. Physician offices and clinics: During Week 4, one case of ILI was reported.

**Pharmacies:** Two prescriptions for CDC-approved antiviral medications were reported during Week 4.

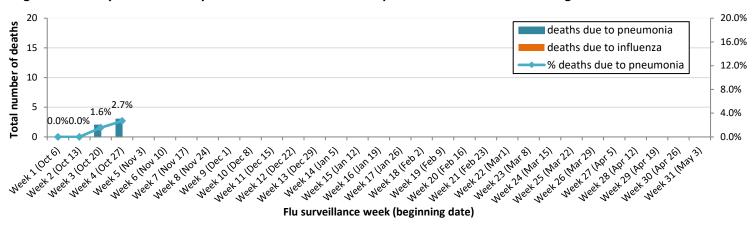
**School absenteeism** includes absences regardless of reason. During Week 4 the rate increased by nearly 38%.

Lab reports: During Week 4 of influenza surveillance, Summit County facilities performed 474 flu tests, of which 5 tested positive (Type A = 2, Type B = 3). (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 = 10,459 students)

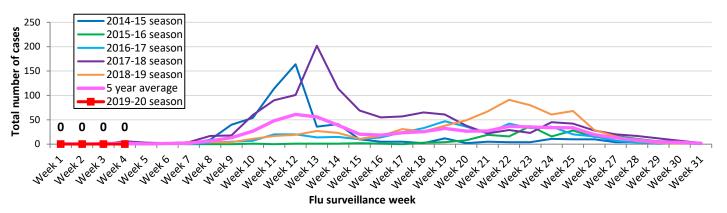
<sup>3)</sup> Percent is from total number of emergency room interactions

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



**Influenza-associated hospitalization**: Summit County hospitals reported no influenza-associated hospitalizations during Week 4. **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 74 ILI-related visits reported during Week 4, which was 1.2% of total ED visits (n = 5959). This rate was 11.2% higher than the ILI rate during Week 3.

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

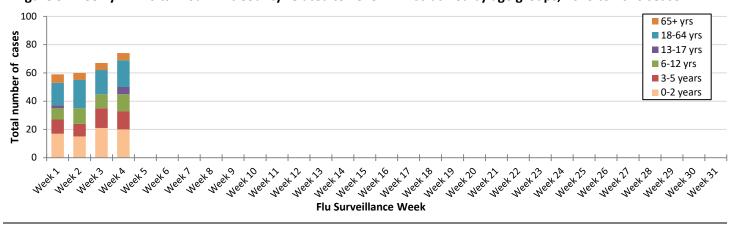
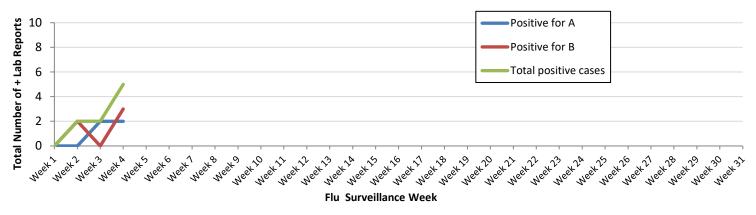


Figure 4. Influenza diagnostic tests with positive results completed by Summit County health facilities, 2019 - 2020 season



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

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

Definition: Small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in cases of ILI.

During MMWR Week 44, 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 slightly above baseline levels statewide; fever and ILI specified ED visits are also above baseline levels. Reported cases of influenza-associated hospitalizations are below the seasonal threshold\*. There were 21 influenza-associated hospitalizations reported during MMWR Week 44.

#### Ohio Influenza Activity Summary Dashboard (October 27 – November 2, 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)	0.98%	36.11%	<b>↑</b> 1	40 - 2018 Week Number 20-2013
Thermometer Sales (National Retail Data Monitor)	911	-9.35%	<b>↓</b> 1	40 - 2018 Week Number 20-2013
Fever and ILI Specified ED Visits (EpiCenter)	1.76%	2.92%	<b>↑</b> 7	40 - 2018 Wesh Number 20-2019
Constitutional ED Visits (EpiCenter)	8.59%	0.82%	<b>↑</b> 3	40 - 2018 Week Number 20-2019
Confirmed Influenza-associated Hospitalizations (Ohio Disease Reporting System)	21	5.00%	<b>↑</b> 1	40 - 2010 Week Number 20-2010
Outpatient Medical Claims Data <sup>4</sup>	0.32%	-78.08%	<b>↓</b> 1	40 - 2018 Week Number 20-2019

<sup>&</sup>lt;sup>1</sup>Interpret 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

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

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

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

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

According to this week's FluView report from CDC, seasonal influenza activity in the United States remains low but is increasing.

- <u>Viral Surveillance</u>: Nationally, influenza A(H3N2) and B/Victoria viruses have been reported more frequently than other influenza viruses this season; however, influenza A(H1N1)pdm09 viruses are also circulating widely. The predominant virus varies by region. The majority (63%) of all influenza viruses and 75% of the influenza B viruses reported by clinical laboratories thus far this season were from the south and southeast regions (regions 4 and 6).
  - o **Virus Characterization:** Virus characterization data will be updated starting later this season when sufficient numbers of specimens have been tested.
  - o **Antiviral Resistance:** Antiviral resistance data will be updated starting later this season when sufficient numbers of specimens have been tested.
- Influenza-like Illness Surveillance (Figure 5): Nationwide during week 44, 2.1% 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 below the national baseline of 2.4%. On a regional level, the percentage of outpatient visits for ILI ranged from 1.2% to 3.8% during week 44. Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas) and Region 7 (Iowa, Kansas, Missouri, and Nebraska) reported a percentage of outpatient visits for ILI which is equal to their region-specific baselines. All other regions remained below their region-specific baselines.
  - ILI State Activity Indictor Map (Figure 6): Puerto Rico and Louisisana reported high ILI activity; nine states reported low activity; and New York City, the District of Columbia, the U.S. Virgin Islands and 40 states experienced minimal ILI activity.
- Geographic Spread of Influenza (Figure 7): The geographic spread of influenza was reported widespread in Louisiana and Maryland, regional in Alabama, local in Puerto Rico and 15 states; the District of Columbia, the U.S. Virgin Islands and 31 states reported sporadic activity; Rhode Island reported no activity; and Guam did not report.
- <u>Pneumonia and Influenza Mortality:</u> Due to technical issues, the National Center for Health Statistics (NCHS) mortality surveillance data for the week ending October 26, 2019 (week 43) will not be published this week. Reporting of this data will resume once the technical issues have been resolved.
- Influenza-associated Pediatric Deaths: No influenza-associated pediatric deaths were reported to CDC during Week 44.

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

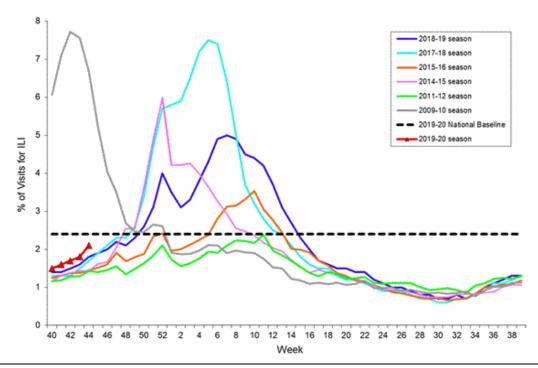


Figure 6. Influenza-like illness (ILI) activity level indicator determined by data reported to ILINet

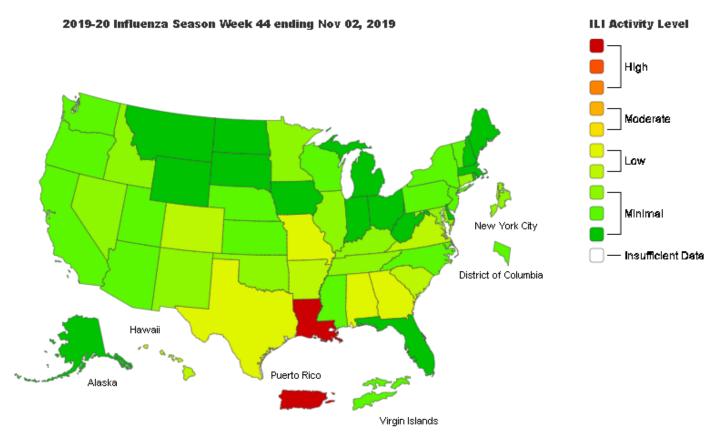
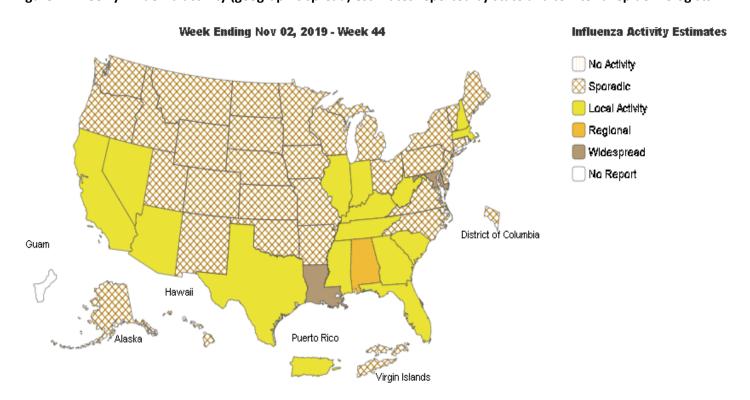


Figure 7. Weekly influenza activity (geographic spread) estimates reported by state and territorial epidemiologists



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

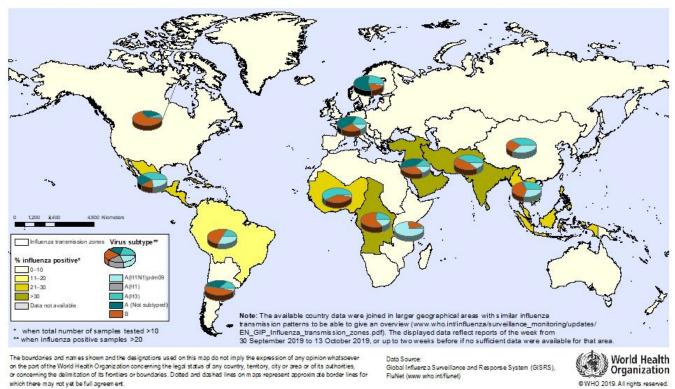
## **Global Surveillance:**

Influenza Update N° 353, World Health Organization (WHO), published 28 October 2019, based on data up to 13 October 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, influenza activity continued to increase across the countries of the Arabian Peninsula.
- In the Caribbean, and tropical South American countries, influenza activity was low overall. In Central American countries, influenza activity increased in El Salvador and Nicaragua.
- In tropical Africa, increased influenza activity was reported from Western Africa.
- In Southern Asia, influenza activity was low across reporting countries.
- In South East Asia, influenza activity increased in Lao PDR and the Philippines in recent weeks.
- In the temperate zones of the southern hemisphere, influenza activity was low in most countries, though
  influenza B virus detections continued to be reported in Chile.
- Worldwide, seasonal influenza A viruses continued to account for the majority of detections, though the proportion of influenza B viruses increased in recent weeks.
- National Influenza Centres (NICs) and other national influenza laboratories from 103 countries, areas or territories reported data to FluNet for the time period from 30 September 2019 to 13 October 2019 (data as of 2019-10-25 04:07:37 UTC). The WHO GISRS laboratories tested more than 102881 specimens during that time period. 5005 were positive for influenza viruses, of which 3030 (60.5%) were typed as influenza A and 1975 (39.5%) as influenza B. Of the sub-typed influenza A viruses, 595 (35.6%) were influenza A(H1N1)pdm09 and 1076 (64.4%) were influenza A(H3N2). Of the characterized B viruses, 71 (14.1%) belonged to the B-Yamagata lineage and 433 (85.9%) to the B-Victoria lineage.

Figure 8. Percentage of respiratory specimens that tested positive for influenza, by influenza transmission zone (status as of 25 October 2019)



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 Weekly and NY Times

# **Vital Signs: Burden and Prevention of Influenza and Pertussis Among Pregnant Women and Infants — United States**

Weekly / October 11, 2019 / 68(40);885-892

#### **Abstract**

Introduction: Vaccinating pregnant women with influenza vaccine and tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine (Tdap) can reduce influenza and pertussis risk for themselves and their infants.

**Methods:** Surveillance data were analyzed to ascertain influenza-associated hospitalization among pregnant women and infant hospitalization and death associated



with influenza and pertussis. An Internet panel survey was conducted during March 27–April 8, 2019, among women aged 18–49 years who reported being pregnant any time since August 1, 2018. Influenza vaccination before or during pregnancy was assessed among respondents with known influenza vaccination status who were pregnant any time during October 2018–January 2019 (2,097). Tdap receipt during pregnancy was assessed among respondents with known Tdap status who reported a live birth by their survey date (817).

**Results:** From 2010–11 to 2017–18, pregnant women accounted for 24%–34% of influenza-associated hospitalizations per season among females aged 15–44 years. From 2010 to 2017, a total of 3,928 pertussis-related hospitalizations were reported among infants aged <2 months (annual range = 262–743). Maternal influenza and Tdap vaccination coverage rates reported as of April 2019 were 53.7% and 54.9%, respectively. Among women whose health care providers offered vaccination or provided referrals, 65.7% received influenza vaccine and 70.5% received Tdap. The most commonly reported reasons for nonvaccination were believing the vaccine is not effective (influenza; 17.6%) and not knowing that vaccination is needed during each pregnancy (Tdap; 37.9%), followed by safety concerns for the infant (influenza =15.9%; Tdap = 17.1%).

Conclusions and Implications for Public Health Practice: Many pregnant women do not receive the vaccines recommended to protect themselves and their infants, even when vaccination is offered. CDC and provider organizations' resources are available to help providers convey strong, specific recommendations for influenza and Tdap vaccination that are responsive to pregnant women's concerns.

Source: https://www.cdc.gov/mmwr/volumes/68/wr/mm6840e1.htm?s\_cid=mm6840e1\_e&deliveryName=USCDC\_921-DM10321

# Expired funding shutters 10-year zoonotic virus surveillance project

A 10-year-old program called Predict that searches for potential zoonotic virus threats is winding down because its federal funding has not been renewed, triggering concern among some experts that the world will be less prepared for the next epidemic or pandemic, the *New York Times* reported on October 25, 2019.





The program is run by the US Agency for International Development (USAID) and has cost \$207 million, according to the report. Since its launch it has collected more than 140,000 virus samples and identified more than 1,000 new viruses, including a new Ebola strain. Predict has also trained 5,000 people in African and Asian nations and has built or bolstered 60 medical research labs, primarily in developing countries.

USAID's former emerging threats director, Dennis Carroll, told the *Times* that the program was being shelved because of "the ascension of risk-averse bureaucrats" and a rising discomfort with an economic aid agency funding cutting-edge science. He noted that the two former presidential administrations were "enormously supportive" of Predict.

Irene Koek, acting assistant administrator of USAID's global health bureau, told the *Times* that USAID is proud of Predict's work and that the program is closing because it reached the end of a 10-year funding cycle. She added that similar research will be part of future budget requests, but so far, the details are still in planning stages.

Oct 25 NY Times story

Source: http://www.cidrap.umn.edu/news-perspective/2019/10/news-scan-oct-25-2019



**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 November 8, 2019.