

Summit County Public Health Influenza Surveillance Report

2016 - 2017 Season

Centers for Disease Control and Prevention Weeks 7 & 8





Summit County Surveillance Data:

In Week 20 of influenza surveillance, influenza-related activity continued to increase in Summit County.

	Week 7 N (%)*	Week 8 N (%)*	Percent change from previous week ^a	Number of weeks increasing or decreasing
Lab Reports				
Test Performed	768	745	↓ 2.9	↓1
Positive Tests (Number and %)	182(23.7)	229(30.7)	↑ 29.5 ^b	↑ 5
Influenza A (Number and %)	130(71.4)	155(67.7)	↓ 5.2 ^b	↓ 2
Influenza B (Number and %)	52(28.6)	74(32.3)	↑ 12.9 ^b	^2
Acute care hospitalization for Influenza ILI reports	24	29	↑ 20.8	↑ 1
Long-term Care ILI	0	0		
Community-based Care	0	0		
Physician Offices	0	0		
Pharmacy Prescriptions				
Amantidine	3	1	↓ 66.7	↓1
Rimantidine Flumadine	0	0		
Relenza	0	0		
Oseltamivir Tamiflu	25	30	↑ 20.0	^ 1
Total	28	31	↑ 10.7	^ 1
Schools**	1821(17.0)	1570(14.7)	↓ 13.5 ^b	↓ 2
Deaths				
Influenza associated	1	8	↑ 87.5	^ 1
Pneumonia associated	3	0	↓ 100.0	↓ 2
Emergency room visits (EpiCenter	r)***			
Constitutional Complaints	831(11.7)	720 (14.1)	↑ 20.5 ^b	↑ 3
Fever and ILI	173(2.4)	148(2.9)	↑ 20.8 ^b	^ 4

^{*} N and % are reported when available

Lab reports: During MMWR WK8 of surveillance, Summit County labs performed 745 tests, of which 155 tested positive for influenza A virus and 74 tested positive for Influenza B. Compared to WK7, there was a 2.9% decrease in tests performed, with 29% increase in positive tests for influenza A /B compared to WK7.

There were no reported new cases for community-based care providers, physicians' offices and long-term care facilities in WK8.

Pharmacies dispensed 31 anti-viral prescriptions in WK8 which is an increase by 11% compared to WK7.

School absenteeism includes absences regardless of reason. There was 13% decrease in school absenteeism in WK8 when compared to WK7.

No reported death related to influenza in WK8. Eight deaths related to Pneumonia were reported in WK8.

Epicenter reported increased proportions of emergency room visits for constitutional complaints (increased by 20%) and increased proportions for ILI / fever cases (increased by 21%) in WK8 compared to WK7. Figures 1 and 2 displays the weekly number of ER visits related to

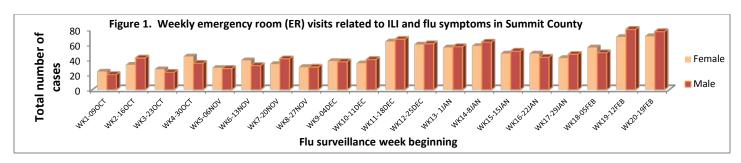
ILI and flu symptoms, stratified by gender and age groups for Summit County (influenza surveillance 2016-2017).

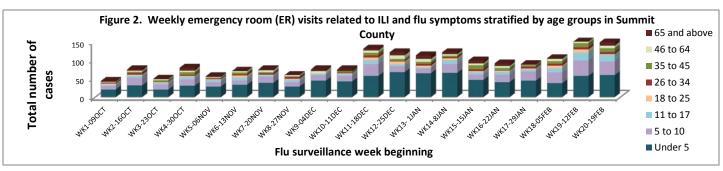
^{**}Percent is from total number of students enrolled between all schools. WK7 and WK8 (n = 10,688).

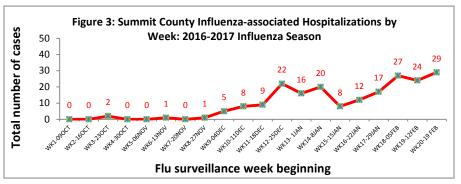
^{***}Percent is from total number of emergency room interactions

^a Percentages should be interpreted with caution. Small changes in number can result in big changes in

^b This percent change is the difference in percent (i.e., the percent change in prevalence). It is not the percent change in the number of tests, number of school absences, number of deaths, etc.)

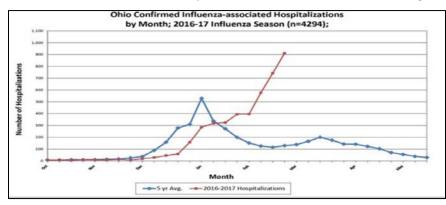






Influenza-associated hospitalization in Summit County increased slightly in WK8. In WK8 there were 29 confirmed influenza-associated hospitalizations which is an increase by 21% when compared to WK7. Figure 3 displays weekly confirmed hospitalization count for Summit County (cumulative count = 201).

Ohio Surveillance Data (Ohio Department of Health (ODH): Weeks beginning Feb 12th, 2017 and Feb 19th, 2017)



Influenza activity in Ohio during WK7 was widespread. There were 742 influenza-associated hospitalizations in WK7 and 911 in WK6. The cumulative count of confirmed influenza-associated hospitalizations to date in the 2016–2017 season was 4,294 which have been above the seasonal threshold for several weeks (refer to figure on left).

Table 2	Table 2: Statewide Influenza-Associated Hospitalization Counts									
CDC Week	Central	East Central	Northeast	Northwest	Southeast	Southwest	West Central	Total	Percent change from previous week	Number of weeks increasing or decreasing
7	136	177	84	129	42	61	113	742	A 22 00/	A 42
8	174	198	124	150	54	96	115	911	↑ 22.8%	↑13

During WK7 and WK8, public health surveillance data sources indicated increased activity for ILI in outpatient settings. Emergency room activity and the percentage of fever and ILI specified ED visits in Ohio have continued to increase. Reported constitutional complaints and fever/ILI are provided in Table 3.

Table 3: State Surveillance Emergency Room Visits for Influenza Activity by CDC Week						
	Week 7 N (%)*	Week 8 N (%)*	Percent change from previous week**	Number of weeks increasing		
Emergency room visits (EpiCenter)						
Constitutional Complaints	19118 (12.4)	19,426 (12.8)	↑ 8.8 (3.2) ^b	↑ 6		
Fever and ILI	4856 (3.2)	4,831 (3.2)				
* Percentages are the percent of emergency room vis						
** Percentages should be interpreted with caution. S	mall changes in numbers	can result in big changes in pe	ercent.			

- There were 450 confirmed positive tests for influenza A (H3N2); 4 for Influenza A/pdmH1N1 and 64 for influenza B at the ODH lab (n = 687 tests).
- There were five pediatric influenza associated mortality during the 2016-2017 season.
- No **novel influenza A virus** infections have been reported.

National Surveillance (Centers for Disease Control and Prevention (CDC): Week beginning Feb 19th, 2017)

National influenza activity decreased slightly but remained elevated during WK8 in the United States.

• The most frequently identified influenza virus was influenza A, with influenza A (H3N2) predominating. Details on the result of lab test for WK7 and WK8 are provided in Table 4.

	Week 7 N (%)*	Week 8 N (%)*	Percent change from previous week ^a	Number of weeks increasing or decreasing
Test Performed	34,517	35,124	↑ 1.7	^ 1
Positive Tests (Number and %)	8,272 (24.0)	8,515 (24.2)	↑ 0.8 ^b	^ 1
Influenza A (Number and %)	6,506 (78.7)	6,300 (74.0)	↓ 5.9 ^b	↓ 6
Influenza B (Number and %)	1,766 (21.3)	2,215 (26.0)	^ 22.1 ^b	↑ 6

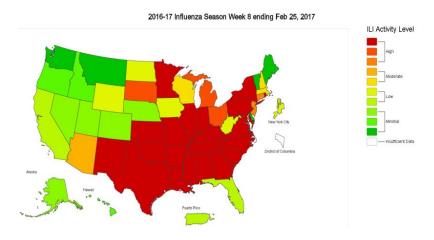
- Six influenza associated pediatric deaths were reported during WK8 (2 deaths: influenza A (H3) virus; 1 death: influenza A (H1N1) pdm09 virus; 2 deaths: influenza A (no subtype) and 1 death: influenza B virus). Total influenza-associated pediatric deaths for 2016-2017 = 40)
- The cumulative count of confirmed influenza-associated hospitalizations to date in the 2016–2017 season was 11,018.
- Outpatient visits for ILI decreased to 4.8% in WK8- still above the national baseline of 2.2%.

Nationwide Geographic Spread of Influenza:

In WK8, The geographic spread of influenza in Puerto Rico and 43 states was reported as widespread; Guam and five states reported regional activity; the District of Columbia and two states reported local activity; and the U.S. Virgin Islands reported sporadic activity.

National Influenza-Like Illness (ILI) Activity:

In WK8, the proportion of outpatient visits for influenza-like illness (ILI) was 4.8%, which is above the national baseline of 2.2%. All 10 regions reported ILI at or above their region-specific baseline levels. 27 states experienced high ILI activity; four states experienced moderate ILI activity; New York City, Puerto Rico and six states experienced low ILI activity; 13 states experienced minimal ILI activity; and the District of Columbia had insufficient data. (Refer to figure on right).



Global Surveillance (World Health Organization, Feb 20th, 2017)

- The World Health Organization report is issued every two weeks. This report includes updates from the WHO Influenza Update N° 283, published on Feb 20th, 2017, based on data up to Feb 5th, 2017. ii
- Influenza activity continued to **increase** in the temperate zone of the northern hemisphere. East Asia and Europe have already peaked and were reporting decreasing trends.
 - North America: Influenza activity and ILI levels continued to increase with influenza A (H3N2) virus predominating. Increased ILI illnesses continued to be reported in the United States and Mexico, whereas in Canada, influenza activity continued to decrease.
 - o **Europe:** Influenza activity remained elevated, with influenza A (H3N2) virus being the most predominant subtype. Most of the countries reported stable or decreasing trends compared with previous weeks.
 - Asia: Influenza activity appeared to be decreasing in most of the countries. India and Sri Lanka reported a sharp increase in influenza activity.
 - o **Northern Africa:** Influenza activity seemed to have peaked.
 - West Africa: Influenza continued to be detected in Ghana with B viruses dominating.

About this report: Reporting agencies include labs, hospitals, long-term care and community-based care providers, physician offices, 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).

Reporting from participants may not be complete each week. Numbers may change as updated reports are received. For questions, please contact Sunita Shakya, MPH • Summit County Public Health Epidemiologist • <u>sshakya@schd.org</u> • 330-926-5747. Report was issued on March 6th, 2017.

- https://www.odh.ohio.gov/en/features/odhfeatures/seasflu/Ohio-Flu-Activity
- https://www.cdc.gov/flu/weekly/
- http://www.who.int/influenza/surveillance monitoring/updates/latest update GIP surveillance/en/