



Summit County Public Health Influenza Surveillance Report 2016 – 2017 Season



Public Health
Prevent. Promote. Protect.

Report # 13

Flu Surveillance **Weeks 13 & 14** (Beginning 1/1/2017 – 1/8/2017)
Centers for Disease Control and Prevention **Weeks 1 & 2**

Summit County Surveillance Data:

In Week 14 of influenza surveillance, influenza-related activity continues to **increase** in Summit County.

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

	Week 1 N (%)*	Week 2 N (%)*	Percent change from previous week ^a	Number of weeks increasing or decreasing
Lab Reports				
Test Performed	461	540	↑17.1	↑4
Positive Tests (Number and %)	71 (51.4)	79 (14.6)	↓71.6 ^b	↓1
Influenza A (Number and %)	67 (94.4)	68 (86.1)	↓8.8 ^b	↓1
Influenza B (Number and %)	4 (5.9)	11 (13.9)	↑135.6 ^b	↑1
Acute care hospitalization for Influenza ILI reports				
Long-term Care ILI	0	0	--	--
Community-based Care	0	0	--	--
Physician Offices	0	0	--	--
Pharmacy Prescriptions				
Amantidine	3	0	↓100.0	↓2
Rimantidine Flumadine	0	0	--	--
Relenza	0	0	--	--
Oseltamivir Tamiflu	12	0	↓100.0	↓1
<i>Total</i>	15	0	↓100.0	↓1
Schools**	940 (9.2)	1504(14.1)	↑52.3 ^b	↑1
Deaths				
Influenza associated	0(0.0)	0(0.0)	--	--
Pneumonia associated	7(100.0)	6(100.0)	↓14.3	↓2
Emergency room visits (EpiCenter)***				
Constitutional Complaints	648(9.1)	611(9.2)	↑1.1 ^b	↑1
Fever and ILI	134(1.8)	142(2.1)	↑16.7 ^b	↑1
* N and % are reported when available				
**Percent is from total number of students enrolled between all schools. WK1: 11 schools (n = 10,271). Schools were closed during WK52.				
***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 percent.				
^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.)				

Lab reports: During MMWR WK2 of surveillance, Summit County labs performed 540 tests, of which 68 tested positive for influenza A virus and 11 tested positive for Influenza B. Compared to WK1, there was a 17% increase in tests performed, and the number of positive tests for influenza B increased by 13%.

There were no reported new cases for **acute care hospitalizations; long-term care facilities, community-based care providers and physicians' offices** in WK 2.

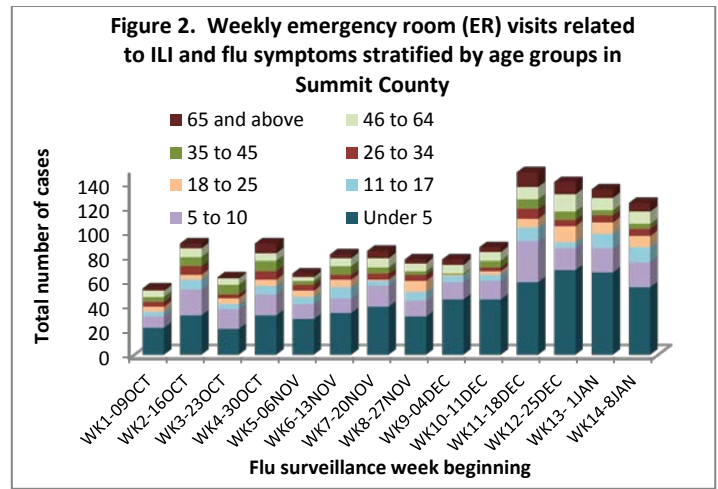
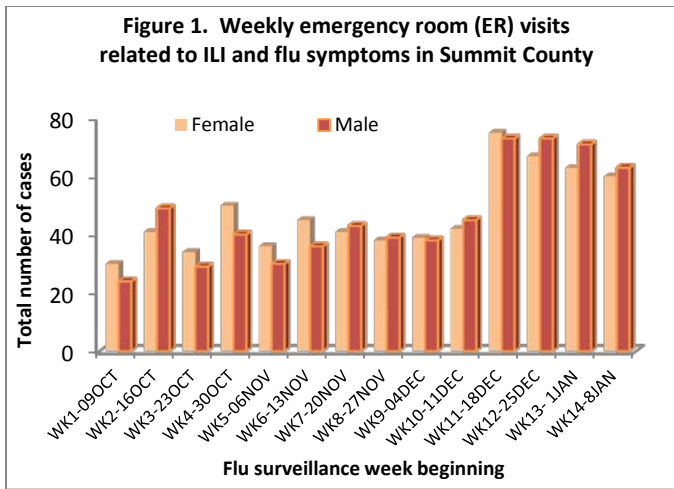
No data was received from **Pharmacies** to report in WK2.

School absenteeism includes absences regardless of reason. There was 52% increase in school absenteeism in WK2 when compared to WK1.

There were no reported **deaths** related to influenza during WK2. Six deaths related to Pneumonia were reported in WK2, a 14% decrease when compared to WK1.

Epicenter reported increased proportions of **emergency room visits** for both constitutional complaints (increased by 1%) and ILI / fever cases (increased by 17 %) in WK2 compared to WK1. Figures 1 and 2 display the weekly number

of ER visits related to ILI and flu symptoms, stratified by gender and age groups.



Ohio Surveillance Data (Ohio Department of Health (ODH): Weeks beginning Jan 8th, 2017

Influenza activity in Ohio during WK2 was **widespread**. There were 285 influenza-associated hospitalizations in WK1 and 317 in WK2. The cumulative count of confirmed influenza-associated hospitalizations to date in the 2016–2017 season was 967.ⁱ

CDC Week	Central	East Central	Northeast	Northwest	Southeast	Southwest	West Central	Total	Percent change from previous week	Number of weeks increasing or decreasing
1	24	120	41	42	11	17	29	285	↑11.2%	↑7
2	44	124	42	41	19	21	26	317		

During WK1 and WK2, public health surveillance data sources indicated increasing activity for ILI in outpatient settings. Although they have been increasing in number, emergency room activity and the percentage of fever and ILI specified ED visits in Ohio have continued to be **below statewide baseline levels**. Reported constitutional complaints and fever/ILI are provided in Table 3.

	Week 1 N (%) [*]	Week 2 N (%) [*]	Percent change from previous week ^{**}	Number of weeks increasing or decreasing
Emergency room visits (EpiCenter)				
Constitutional Complaints	13153(9.2)	12561(8.8)	↓4.3 ^b	↓2
Fever and ILI	2773(1.9)	2763(1.9)	--	--

^{*} Percentages are the percent of emergency room visits that are for constitutional complaints or fever and ILI
^{**} Percentages should be interpreted with caution. Small changes in numbers can result in big changes in percent.
^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.)

- There were **83** confirmed positive tests for influenza A (H3N2) and 9 for influenza B at the ODH lab (**n = 182 tests**).
- There was **0 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 Jan 8th, 2016)

National influenza activity continued to **increase** during WK2 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 WK1 and WK2 are provided in Table 4.ⁱⁱ

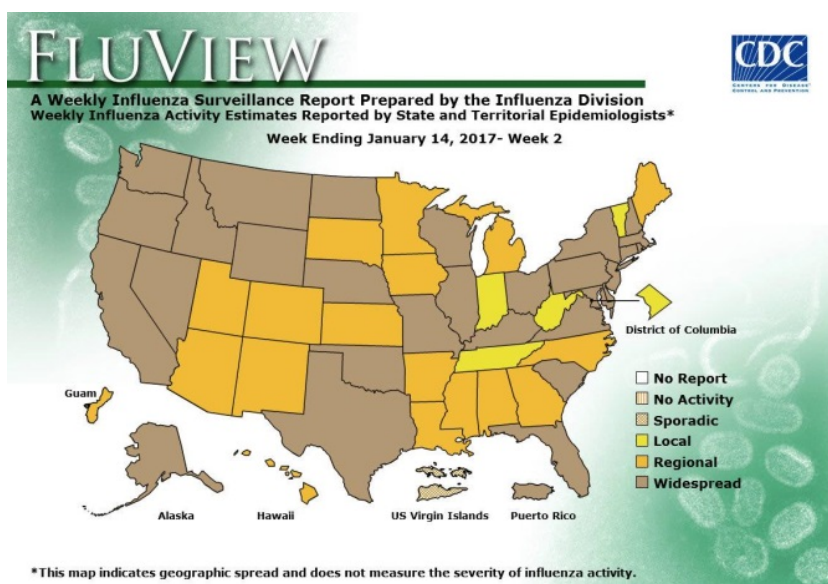
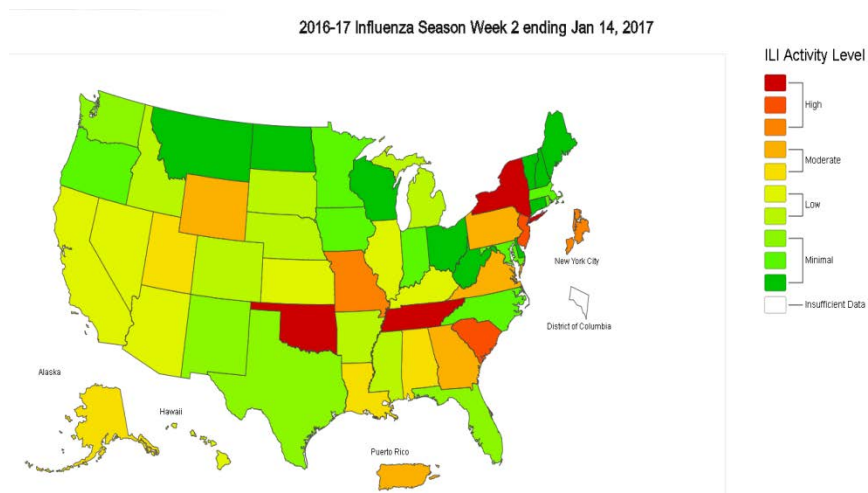
	Week 1 N (%)*	Week 2 N (%)*	Percent change from previous week ^a	Number of weeks increasing or decreasing
Test Performed	25,797	27,805	↑7.8	↑5
Positive Tests (Number and %)	3,580 (13.9)	4,258 (15.3)	↑10.1 ^b	↑6
<i>Influenza A (Number and %)</i>	<i>3,287 (91.8)</i>	<i>3,916 (92.0)</i>	<i>↑0.2^b</i>	<i>↑3</i>
<i>Influenza B (Number and %)</i>	<i>293 (8.2)</i>	<i>342(8.0)</i>	<i>↓2.4^b</i>	<i>↓3</i>

^a Percentages should be interpreted with caution. Small changes in numbers can result in big changes in percent.
^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)

- **Two** influenza associated pediatric deaths were reported during WK2.
- Pneumonia and influenza mortality was **below** the system-specific epidemic threshold.
- Outpatient visits for ILI was 3.3% - **above** the national baseline of 2.2%.

National Influenza-Like Illness (ILI) Activity:

New York City and six states experienced high ILI activity; six states experienced moderate ILI activity; Puerto Rico and eight states experienced moderate ILI activity; 14 states experienced low ILI activity; 22 states experienced minimal ILI activity, and the District of Columbia had insufficient data. (refer to map to the right).



Nationwide Geographic Spread of Influenza:

The geographic spread of influenza in Puerto Rico and 29 states was reported as widespread; Guam and 17 states reported regional activity; the District of Columbia and four states reported local activity; and the U.S. Virgin Islands reported sporadic activity.

Global Surveillance (World Health Organization, Jan 9, 2017)

- The World Health Organization report is issued every two weeks. This report includes updates from the WHO Influenza Update N° 280, published on Jan 9, 2017, based on data up to Dec. 25, 2016.ⁱ
- Influenza activity continued to **increase** in the temperate zone of the northern hemisphere. Some countries have already passed their seasonal threshold, which the WHO considers to be early for the season.
 - **North America:** Influenza activity and ILI levels continued to increase and were reported to exceed seasonal thresholds in the United States. Increased respiratory syncytial virus (RSV) activity was also reported in the United States.
 - **Europe:** Influenza activity continued to increase, and people over the age of 65 were most likely to experience severe disease.
 - **East and West Asia, China:** increased influenza activity was reported throughout temperate Asia.
 - **Southern Asia:** Increased influenza activity was reported in Sri Lanka and the Islamic Republic of Iran.
 - **Northern Africa:** Increased influenza activity was reported in Tunisia and Morocco.
- Globally, Influenza A was the dominant virus type (especially H3N2), with the exception of the African nation of Ghana, where the dominant type was Influenza B.

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 ▪ sshakya@schd.org ▪ 330-926-5747.

Report was issued on **January 24th, 2017**.

ⁱ <https://www.odh.ohio.gov/en/features/odhfeatures/seasflu/Ohio-Flu-Activity>

ⁱⁱ <https://www.cdc.gov/flu/weekly/>

ⁱⁱⁱ http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/