



**Summit County Public Health  
Influenza Surveillance Report  
2016 – 2017 Season**



**Public Health**  
Prevent. Promote. Protect.

**Report # 16**

**Flu Surveillance Weeks 16 & 17 (Beginning 1/22/2017 – 1/29/2017)  
Centers for Disease Control and Prevention Weeks 4 & 5**

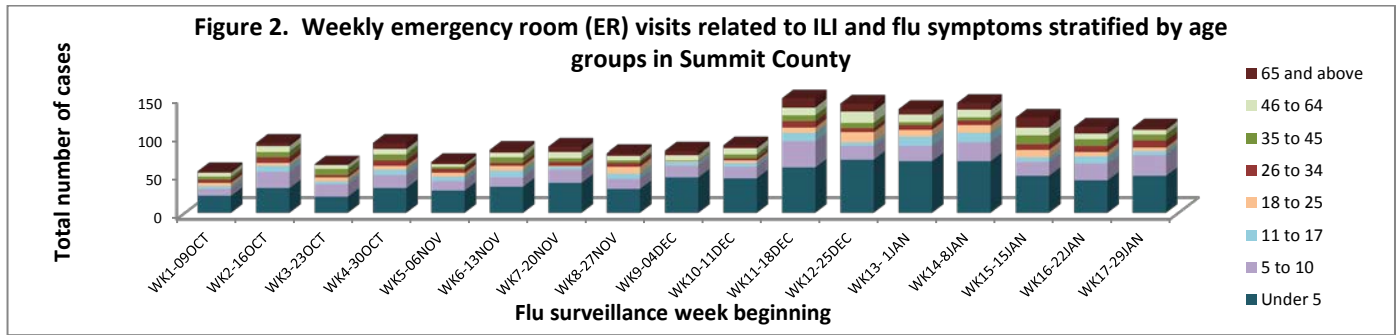
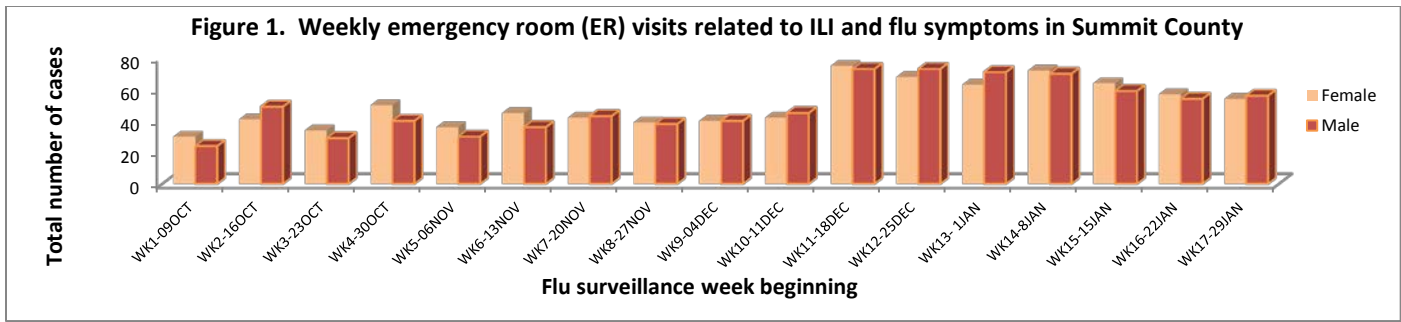
**Summit County Surveillance Data:**

In Week 17 of influenza surveillance, influenza-related activity continued to **increase** in Summit County.

<b>Table 1: Overall Influenza Activity Indicators in Summit County by Week</b>				
	<b>Week 4 N (%)*</b>	<b>Week 5 N (%)*</b>	<b>Percent change from previous week<sup>a</sup></b>	<b>Number of weeks increasing or decreasing</b>
<b>Lab Reports</b>				
Test Performed	527	503	↓4.5	↓2
Positive Tests (Number and %)	67(12.7)	74(14.7)	↑15.7 <sup>b</sup>	↑2
Influenza A (Number and %)	51(76.1)	61(82.4)	↑8.3 <sup>b</sup>	↑1
Influenza B (Number and %)	16(23.9)	13(17.6)	↓26.3 <sup>b</sup>	↓1
<b>Acute care hospitalization for Influenza ILI reports</b>				
Long-term Care ILI	1	0	↑100.0	↑1
Community-based Care Providers	0	0	--	--
Physician Offices	0	0	--	--
<b>Pharmacy Prescriptions</b>				
Amantidine	3	1	↓66.7	↓2
Rimantidine Flumadine	0	0	--	--
Relenza	0	0	--	--
Oseltamivir Tamiflu	11	14	↑27.3	↑1
<i>Total</i>	<i>14</i>	<i>15</i>	<i>↑7.1</i>	<i>↑1</i>
<b>Schools**</b>	1801(16.9)	1760(16.5)	↓2.4 <sup>b</sup>	↓1
<b>Deaths</b>				
Influenza associated	0(0.0)	0(0.0)	--	--
Pneumonia associated	11(100.0)	14(100.0)	↑27.3	↑2
<b>Emergency room visits (EpiCenter)***</b>				
Constitutional Complaints	688(10.2)	598(9.3)	↓8.8 <sup>b</sup>	↓1
Fever and ILI	111(1.6)	110(1.7)	↑6.2 <sup>b</sup>	↑1
* N and % are reported when available				
**Percent is from total number of students enrolled between all schools. WK4 and WK5 (n = 10,688).				
***Percent is from total number of emergency room interactions				
<sup>a</sup> Percentages should be interpreted with caution. Small changes in number can result in big changes in				
<sup>b</sup> 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 WK5 of surveillance, Summit County labs performed 503 tests, of which 61 tested positive for influenza A virus and 13 tested positive for Influenza B. Compared to WK4, there was a 4.5% decrease in tests performed, but, the number of positive tests for influenza increased by 15.7%. There were no reported new cases for **acute care hospitalizations, community-based care providers, physicians' offices and long-term care facilities** in WK5. **Pharmacies** dispensed 14 anti-viral prescriptions in WK4 and 15 prescriptions in WK5 which was an increase by 7%. **School** absenteeism includes absences regardless of reason. There was 2.4% increase in school absenteeism in WK5 when compared to WK4. There were no reported **deaths** related to influenza during WK5. However, 14 deaths related to Pneumonia were reported in WK5, a 27% increase when compared to WK4. **Epicenter** reported increased proportions of **emergency room visits** for constitutional complaints (decreased by 8.8%) and increased proportions for ILI / fever cases (decreased by 6.2%) in WK5 compared to WK4. Figures 1 and 2 display the weekly number of ER visits related to ILI and flu symptoms, stratified by gender

and age groups for Summit County (influenza surveillance 206-2017).



**Ohio Surveillance Data** (Ohio Department of Health (ODH): Weeks beginning Jan 22<sup>nd</sup> and Jan 29<sup>th</sup> 2017)

Influenza activity in Ohio during WK5 was **widespread**. There were 395 influenza-associated hospitalizations in WK4 and 396 in WK5. The cumulative count of confirmed influenza-associated hospitalizations to date in the 2016–2017 season was **2,075** which have been **above the seasonal threshold**.

CDC Week	Central	East Central	Northeast	Northwest	Southeast	Southwest	West Central	Total	Percent change from previous week	Number of weeks increasing or decreasing
4	51	111	108	35	19	32	39	395	↑0.2%	↑10
5	40	121	88	60	18	18	51	396		

During WK4 and WK5, 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.

	Week 4 N (%) <sup>*</sup>	Week 5 N (%) <sup>*</sup>	Percent change from previous week <sup>**</sup>	Number of weeks increasing or decreasing
<b>Emergency room visits (EpiCenter)</b>				
Constitutional Complaints	14,338(10.1)	14,002(10.4)	↑3.0 <sup>b</sup>	↑3
Fever and ILI	3,228(2.3)	3,423(2.5)	↑8.7 <sup>b</sup>	↑3

<sup>\*</sup> Percentages are the percent of emergency room visits that are for constitutional complaints or fever and ILI  
<sup>\*\*</sup> Percentages should be interpreted with caution. Small changes in numbers can result in big changes in percent.

- There were **274** confirmed positive tests for influenza A (H3N2) and **32** for influenza B at the ODH lab (**n = 449 tests**).
- There was **one** pediatric **influenza associated mortality** during the 2016-2017 season.
- No **novel influenza A virus** infections have been reported.

National influenza activity continued to **increase** during WK5 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 WK4 and WK5 are provided in Table 4.<sup>ii</sup>

**Table 4: CDC update on results from clinical laboratories**

	Week 4 N (%) <sup>*</sup>	Week 5 N (%) <sup>*</sup>	Percent change from previous week <sup>a</sup>	Number of weeks increasing or decreasing
Test Performed	26,658	27,409	↑2.8	↑2
Positive Tests (Number and %)	4,786(18.0)	5,722(20.9)	↓16.1 <sup>b</sup>	↑1
Influenza A (Number and %)	4227(88.3)	5,017(87.7)	↓0.7 <sup>b</sup>	↓3
Influenza B (Number and %)	559(11.7)	705(12.3)	↑5.1 <sup>b</sup>	↑3

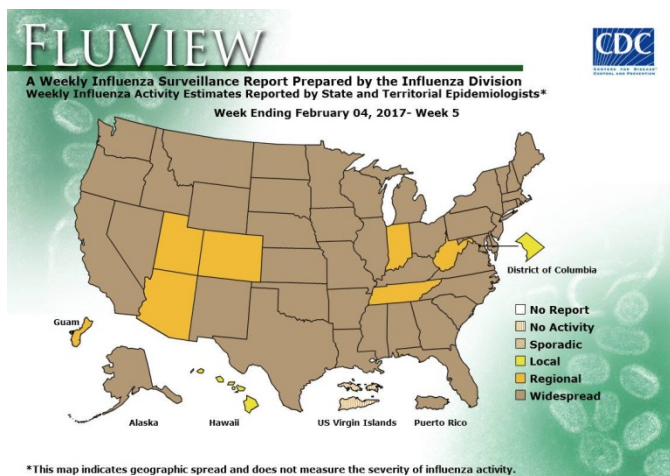
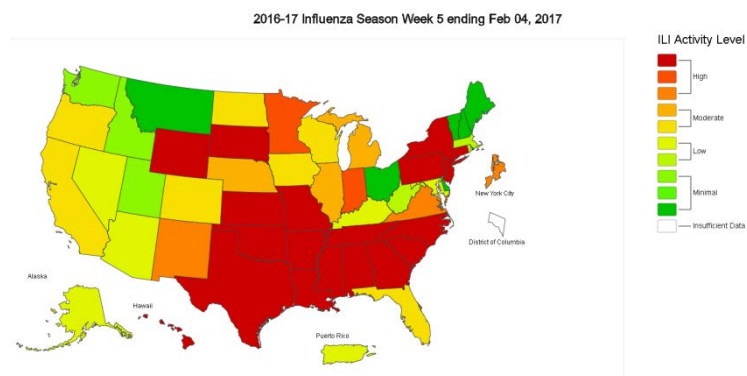
<sup>a</sup> Percentages should be interpreted with caution. Small changes in numbers can result in big changes in percent.

<sup>b</sup> 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)

- **Five** influenza associated pediatric deaths were reported during WK5 (3 deaths: influenza A (H3) virus; 1 death: influenza A (H1N1) pdm09 virus; and 1 death: influenza B virus). Total influenza-associated pediatric deaths for 2016-2017 = **20**)
- The cumulative count of confirmed influenza-associated hospitalizations to date in the 2016–2017 season was **6,804**.
- Outpatient visits for ILI was 4.8% - **above** the national baseline of 2.2%.

**National Influenza-Like Illness (ILI) Activity:**

In WK5, all 10 regions reported ILI at or above their region-specific baseline levels. New York City and 23 states experienced high ILI activity; 10 states experienced moderate ILI activity; Puerto Rico and eight states experienced low ILI activity; nine states experienced minimal ILI activity; and the District of Columbia had insufficient data (*refer to figure on right*).



**Nationwide Geographic Spread of Influenza:**

In WK5, the geographic spread of influenza in Puerto Rico and 43 states was reported as widespread; Guam and six states reported regional activity; the District of Columbia and one state reported local activity; and the U.S. Virgin Islands reported no activity (*refer to figure on left*).

## Global Surveillance (World Health Organization, Feb 6<sup>th</sup>, 2017)

- The World Health Organization report is issued every two weeks. This report includes updates from the WHO Influenza Update N° 282, published on Feb 6<sup>th</sup>, 2017, based on data up to Jan 22<sup>nd</sup>, 2017.<sup>ii</sup>
- Influenza activity continued to **increase** in the temperate zone of the northern hemisphere. East Asia and Europe have passed their seasonal threshold early in comparison with previous year.
  - **North America:** Influenza activity and ILI levels continued to increase with influenza A (H3N2) virus predominating. Reported ILI illnesses levels were above the seasonal thresholds and respiratory syncytial virus (RSV) activity continued to be reported in the United States, whereas in Canada and Mexico, influenza activity decreased.
  - **Europe:** Influenza activity remained high, with influenza A (H3N2) virus being the most predominant subtype.
  - **East Asia:** Influenza activity continued to be reported high and in **West Asia**, influenza activity appeared to be decreasing.
  - **Southern Asia:** influenza activity remained low in most of the countries.
  - **Northern Africa:** Influenza activity was reported in Algeria and Morocco.
  - **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 ▪ [sshakya@schd.org](mailto:sshakya@schd.org) ▪ 330-926-5747.

Report was issued on February 14<sup>th</sup>, 2017.

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

<sup>ii</sup> <https://www.cdc.gov/flu/weekly/>

<sup>iii</sup> [http://www.who.int/influenza/surveillance\\_monitoring/updates/latest\\_update\\_GIP\\_surveillance/en/](http://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/)