



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



**Report # 25**

**Flu Surveillance Weeks 25 & 26 (Beginning 3/26/2017 and 4/2/2017)  
Centers for Disease Control and Prevention Weeks 13 & 14**

**Summit County Surveillance Data:**

In **Week 26** of influenza surveillance, influenza-related activity started to decrease in Summit County.

Table 1: Overall Influenza Activity Indicators in Summit County by Week				
	Week 13 N (%)*	Week 14 N (%)*	Percent change from previous week <sup>a</sup>	Number of weeks increasing or decreasing
<b>Lab Reports</b>				
Test Performed	469	321	↓31.5	↓2
Positive Tests (Number and %)	134 (28.6)	46 (14.3)	↓50.0 <sup>b</sup>	↓1
Influenza A (Number and %)	65 (48.5)	14 (31.4)	↓35.2 <sup>b</sup>	↓8
Influenza B (Number and %)	69 (51.5)	32 (69.6)	↑35.1 <sup>b</sup>	↑8
<b>Acute care hospitalization for Influenza ILI reports</b>				
Long-term Care ILI	0	0	--	--
Community-based Care Providers	0	0	--	--
Physician Offices	0	0	--	--
<b>Pharmacy Prescriptions</b>				
Amantidine	0	2	↑100.0	↑1
Rimantidine Flumadine	0	0	--	--
Relenza	0	0	--	--
Oseltamivir Tamiflu	22	12	↓45.4	↓1
<i>Total</i>	22	14	↓36.4	↓2
<b>Schools**</b>	136 (10.6)	327 (7.1)	↓33.1	↓2
<b>Deaths</b>				
Pneumonia associated	4	6	↑100.0	↑1
Influenza associated	1	0	↓100.0	↓1
<b>Emergency room visits (EpiCenter)***</b>				
Constitutional Complaints	707 (10.5)	599 (9.1)	↓13.3 <sup>b</sup>	↓4
Fever and ILI	132 (1.9)	106 (1.6)	↓15.8 <sup>b</sup>	↓4
* N and % are reported when available				
**Percent is from total number of students enrolled between all schools. WK13 (n = 1,289) and WK14 (n =4,610).				
***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 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, number of school absences, number of deaths, etc.)				

**Lab reports:** During MMWR WK14 of surveillance, Summit County labs performed 321 tests, of which 14.3% tested positive (influenza A = 14 and influenza B = 32). Compared to WK13, there was 31.5% decrease in tests performed and 50% decrease in positive tests. Proportion of tests positive for influenza B continued to increase in WK14 (35.1% increase compared to WK13).

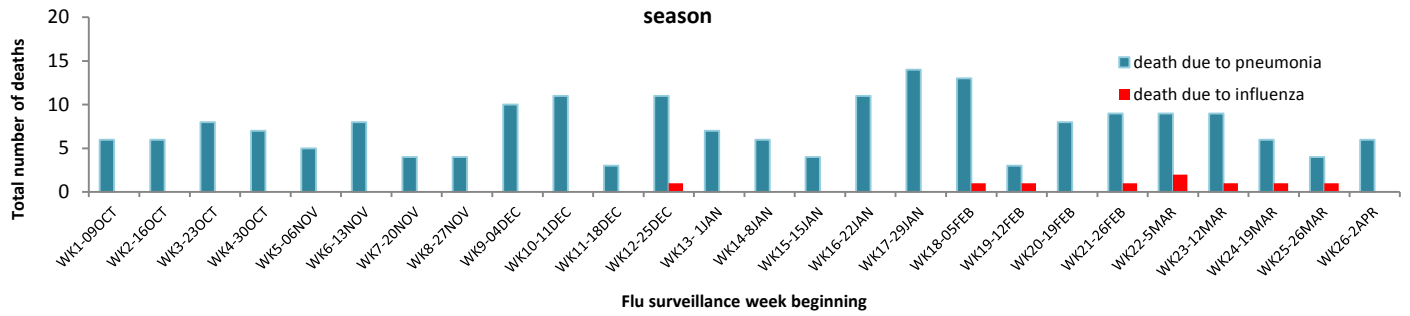
There were no reported new cases for **community-based care providers, physicians' offices and long-term care facilities** in WK14.

**Pharmacies** dispensed 14 anti-viral prescriptions in WK14 which decreased by 36.4% when compared to WK 13.

**School** absenteeism includes absences regardless of reason. Many schools were on their spring break during WK13 and WK14. In WK 14, there was 33% decrease in school absenteeism when compared to WK13.

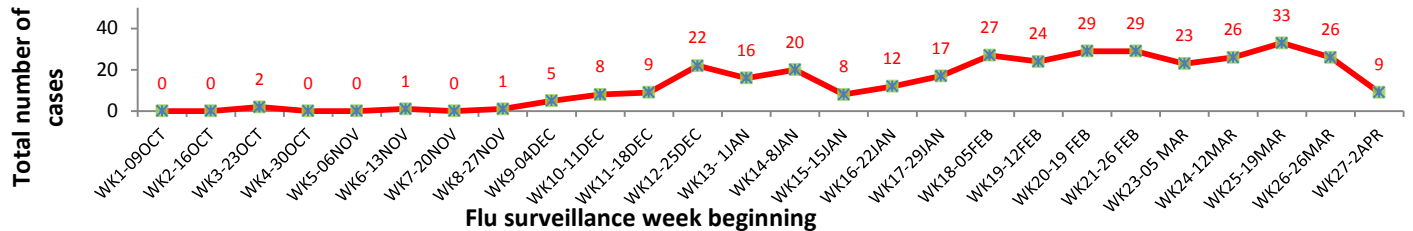
**No death** related to influenza was reported in WK14. However, **six** deaths related to Pneumonia were reported in WK14. **Figure 1** displays weekly Summit County death counts associated with pneumonia and influenza. The cumulative count of confirmed influenza associated deaths in Summit County for 2016-2017 = **9**.

Figure 1: Weekly Summit County death counts associated with pneumonia and influenza (2016 - 2017) influenza season



**Influenza-associated hospitalization:** Summit County reported 9 confirmed cases of influenza-associated hospitalization in WK14 which decreased by 65% compared to WK13. **Figure 2** displays weekly confirmed hospitalization count for Summit County (**cumulative count = 347**).

Figure 2: Summit County influenza-associated hospitalizations by week ( 2016-2017 influenza season)



**Epicenter** reported decreased proportions of **emergency room visits** for constitutional complaints (decreased by 13.3%) and fever and ILI (decreased by 1.6%) in WK14 compared to WK13. **Figures 3 and 4** 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).

Figure 3. Weekly emergency room (ER) visits related to ILI and flu symptoms stratified by age groups in Summit County

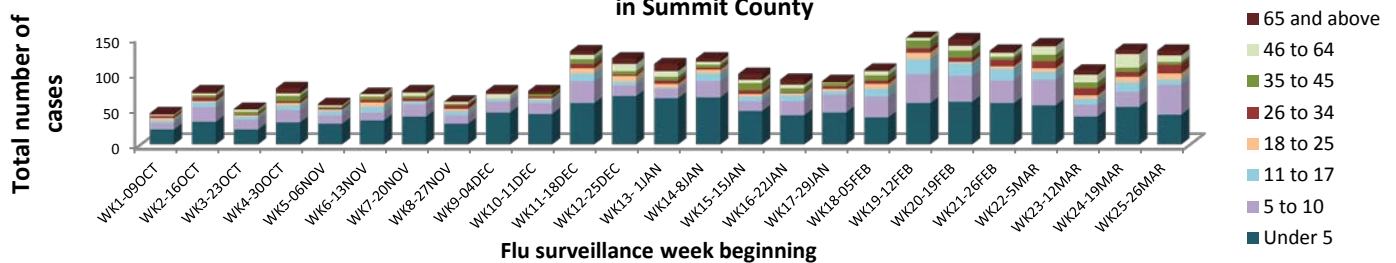
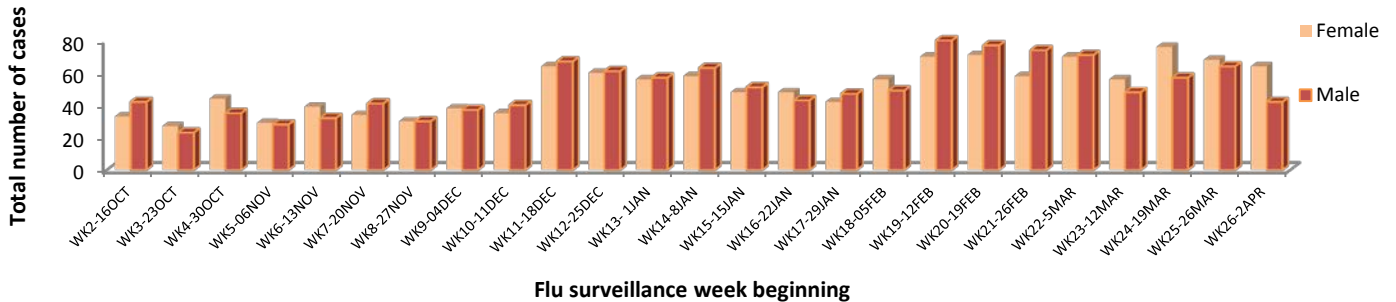


Figure 2. Weekly emergency room (ER) visits related to ILI and flu symptoms in Summit County



**Ohio Surveillance Data** (Ohio Department of Health (ODH): Weeks beginning Mar 26<sup>th</sup>, 2017 and Apr 2<sup>nd</sup>, 2017)

Influenza activity in Ohio during WK14 was **widespread**. There were 678 influenza-associated hospitalizations in WK13 and **420** in WK14. The cumulative count of confirmed influenza-associated hospitalizations to date in the 2016-2017 season was **7,971** which decreased by almost 38% in week 14 compared to WK13 and continues to remain 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
13	92	133	134	56	45	124	94	678		
14	61	129	98	43	37	60	53	420	↓38.0%	↓2

During WK13 and WK14, public health surveillance data sources indicated decreased activity for ILI in outpatient settings. Emergency room activity and the percentage of fever and ILI specified ED visits in Ohio have slightly decreased. Reported constitutional complaints and fever/ILI are provided in Table 3.

	Week 13 N (%) <sup>*</sup>	Week 14 N (%) <sup>*</sup>	Percent change from previous week <sup>**</sup>	Number of weeks increasing or decreasing
<b>Emergency room visits (EpiCenter)</b>				
Constitutional Complaints	15,748 (10.3)	13,523 (9.1)	↓11.6 <sup>b</sup>	↓2
Fever and ILI	3,254 (2.1)	2,745 (1.8)	↓14.3 <sup>b</sup>	↓2

<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 **723** confirmed positive tests for influenza A (H3N2); **5** for Influenza A/pdmH1N1 and **238** for influenza B at the ODH lab (**n = 1,196 tests**).
- There were **six** 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 Apr 2<sup>nd</sup>, 2017)

National influenza activity **decreased but remained elevated** during WK14 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 WK13 and WK14 are provided in Table 4.<sup>ii</sup>

	Week 13 N (%)	Week 14 N (%)	Percent change from previous week <sup>a</sup>	Number of weeks increasing or decreasing
Test Performed	22,257	20,079	↓9.8	↓6
Positive Tests (Number and %)	4,086 (18.4)	3,044 (15.2)	↓17.4 <sup>b</sup>	↓2
<i>Influenza A (Number and %)</i>	<i>1,596 (39.1)</i>	<i>981 (32.2)</i>	<i>↓17.6<sup>b</sup></i>	<i>↓12</i>
<i>Influenza B (Number and %)</i>	<i>2,490 (60.9)</i>	<i>2,063 (67.8)</i>	<i>↑11.3<sup>b</sup></i>	<i>↑12</i>

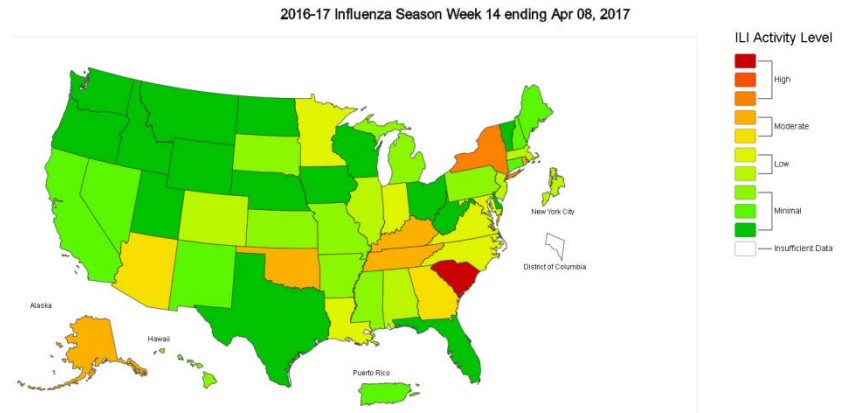
<sup>a</sup> Percentages should be interpreted with caution. Small changes in numbers can result in big changes in percent.  
<sup>b</sup> This percent change is the difference in percent (i.e., the percent change in prevalence). It is not the percent change in the number of tests)

- **Five** influenza associated pediatric deaths were reported during WK14 (3 deaths: influenza A (H3) virus and 1 death: influenza B virus). One death occurred during 2010-2011 season and was reported on WK14. Total influenza-associated pediatric deaths for 2016-2017 = **72**)

- The cumulative count of confirmed influenza-associated hospitalizations to date in the 2016–2017 season was **16,639**.
- Outpatient visits for ILI decreased to 2.6% in WK14 - still **above** the national baseline of 2.2%.

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

In WK14, five of ten regions reported ILI at or above their region-specific baseline levels. Two states experienced high ILI activity; seven states experienced moderate ILI activity; New York City and 11 states experienced low ILI activity; Puerto Rico and 30 states experienced minimal ILI activity; and the District of Columbia had insufficient data. (Refer to figure on right).



**Nationwide Geographic Spread of Influenza:**

In WK14, the geographic spread of influenza in 18 states was reported as widespread; Guam, Puerto Rico, and 18 states reported regional activity; the District of Columbia and 12 states reported local activity; two states reported sporadic activity; and the U.S. Virgin Islands reported no activity.

**Global Surveillance (World Health Organization, April 3<sup>rd</sup>, 2017)**

- The World Health Organization report is issued every two weeks. This report includes updates from the WHO Influenza Update N<sup>o</sup> 286, published on April 3<sup>rd</sup>, 2017, based on data up to March 19<sup>th</sup>, 2017.<sup>ii</sup>
- Influenza activity started to decrease in the temperate zone of the northern hemisphere. Worldwide, influenza A(H3N2) and influenza B virus was predominant.
  - **North America:** Influenza activity and ILI levels decreased in Canada, Mexico and the U.S
  - **Europe:** Influenza activity appeared to decrease to low levels over all but in some countries in Eastern Europe, influenza activity decreased but the proportion of influenza B virus detections increased in recent weeks.
  - **Asia:** Influenza activity appeared to be decreasing in most of the countries. In South Asia (India, Maldives and Sri Lanka), influenza activity continued to be reported with mainly influenza A(H1N1) remained elevated.
  - **Africa:** Influenza activity continued to decrease.

**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 **April 18<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/)