



Summit County Public Health Influenza Surveillance Report 2016 – 2017 Season



Public Health
Prevent. Promote. Protect.

Report # 26

Flu Surveillance **Weeks 26 & 27** (Beginning 4/2/2017 and 4/9/2017)
Centers for Disease Control and Prevention **Weeks 14 & 15**

Summit County Surveillance Data:

In **Week 27** of influenza surveillance, influenza-related activity continued to decrease in Summit County.

Table 1: Overall Influenza Activity Indicators in Summit County by Week				
	Week 14 N (%)*	Week 15 N (%)*	Percent change from previous week ^a	Number of weeks increasing or decreasing
Lab Reports				
Test Performed	321	272	↓15.3	↓3
Positive Tests (Number and %)	46 (14.3)	36 (13.2)	↓7.7 ^b	↓2
Influenza A (Number and %)	14 (31.4)	13 (36.1)	↑14.9 ^b	↑1
Influenza B (Number and %)	32 (69.6)	23 (63.9)	↓8.2 ^b	↓1
Acute care hospitalization for Influenza ILI reports				
Long-term Care ILI	0	0	--	--
Community-based Care Providers	0	0	--	--
Physician Offices	0	0	--	--
Pharmacy Prescriptions				
Amantidine	2	3	↑50.0	↑2
Rimantidine Flumadine	0	0	--	--
Relenza	0	0	--	--
Oseltamivir Tamiflu	12	9	↓25.0	↓2
<i>Total</i>	<i>14</i>	<i>12</i>	<i>↓14.3</i>	<i>↓3</i>
Schools**	327 (7.1)	519 (10.3)	↑45.1	↑1
Deaths				
Pneumonia associated	6	13	↑116.7	↑2
Influenza associated	0	1	↑100.0	↑1
Emergency room visits (EpiCenter)***				
Constitutional Complaints	599 (9.1)	559 (8.5)	↓6.6 ^b	↓5
Fever and ILI	106 (1.6)	98 (1.5)	↓6.2 ^b	↓5
* N and % are reported when available				
**Percent is from total number of students enrolled between all schools. WK14 (n =4,610) and WK15 (n=5,060).				
***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.)				

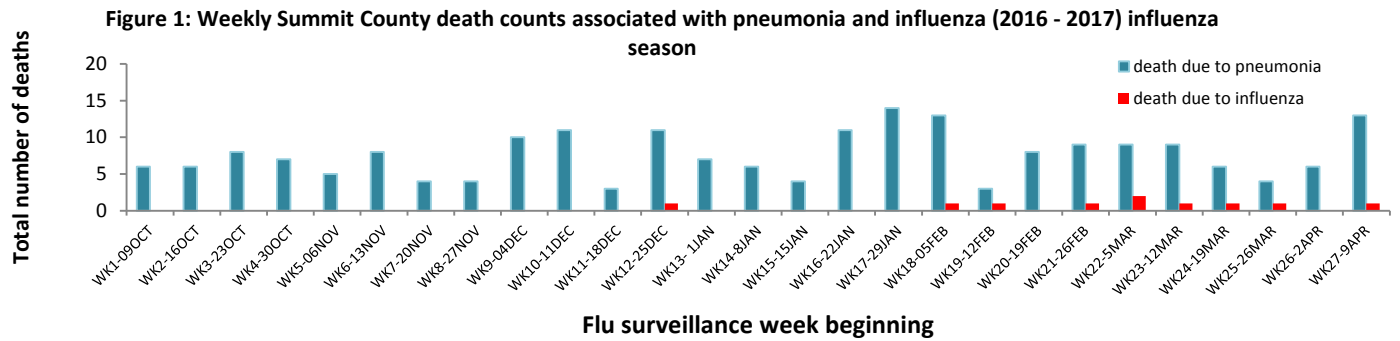
Lab reports: During MMWR WK15 of surveillance, Summit County labs performed 272 tests, of which 13.2% tested positive (influenza A = 13 and influenza B = 23). Compared to WK14, there was 15.3% decrease in tests performed and 8% decrease in positive tests. Proportion of tests positive for influenza A increased by 15% and influenza B decreased by 8% in WK15.

There were no reported new cases for **community-based care providers, physicians' offices and long-term care facilities** in WK15.

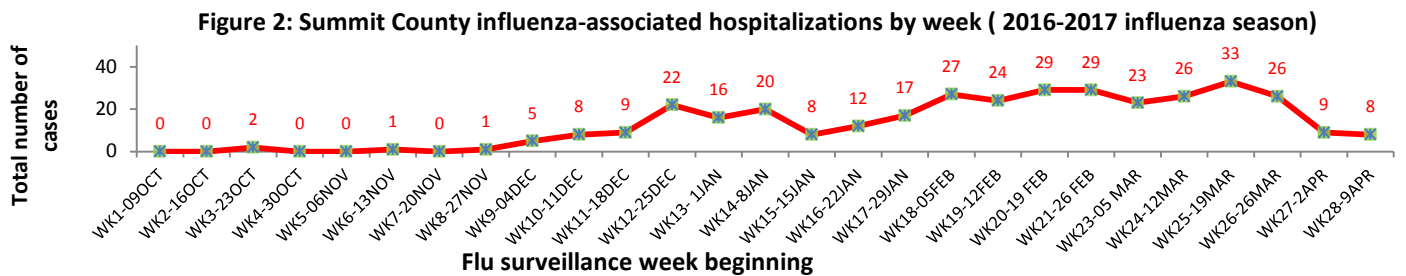
Pharmacies dispensed 12 anti-viral prescriptions in WK15 which decreased by 45.1% when compared to WK 14.

School absenteeism includes absences regardless of reason. In WK 15, there was 45% increase in school absenteeism when compared to WK14.

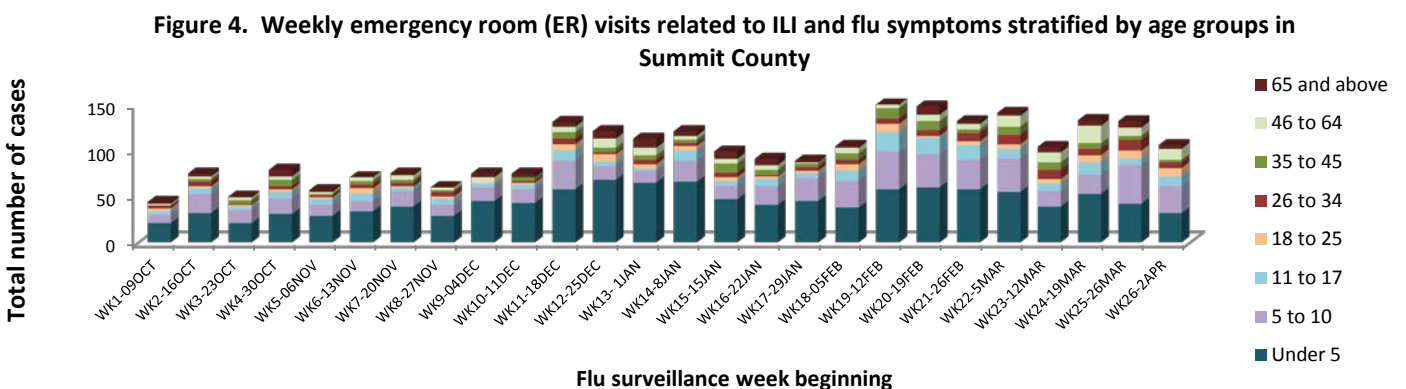
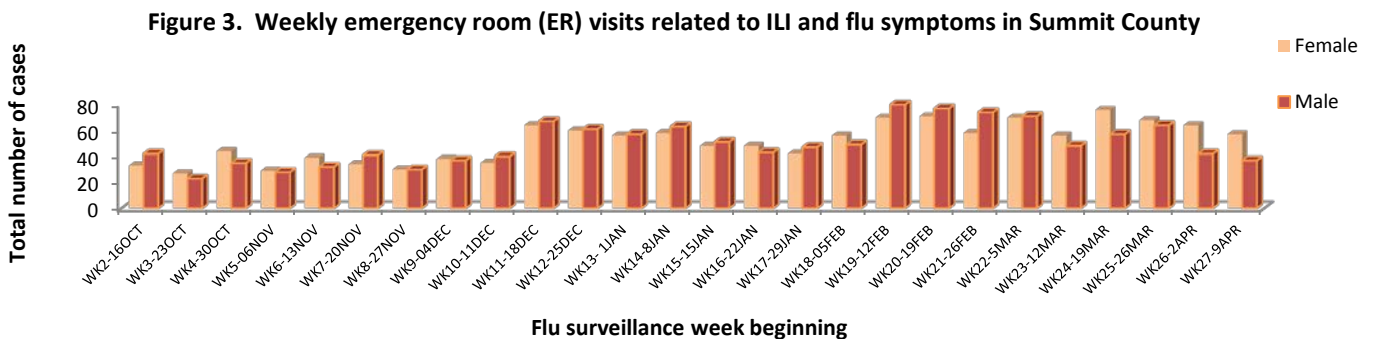
One death related to influenza and 13 deaths related to Pneumonia were reported in WK15. **Figure 1** displays weekly Summit County death counts associated with pneumonia and influenza. The cumulative count of confirmed influenza associated deaths in Summit County for 2016-2017 = **10**.



Influenza-associated hospitalization: Summit County reported 8 confirmed cases of influenza-associated hospitalization in WK15 which decreased by 11% compared to WK14. **Figure 2** displays weekly confirmed hospitalization count for Summit County (**cumulative count = 355**).



Epicenter reported decreased proportions of **emergency room visits** for constitutional complaints (decreased by 6.6%) and fever and ILI (decreased by 1.5%) in WK15 compared to WK14. **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).



Ohio Surveillance Data (Ohio Department of Health (ODH): Weeks beginning Apr 2nd, 2017 and Apr 9th, 2017)

Influenza activity in Ohio during WK15 was **widespread**. There were 420 influenza-associated hospitalizations in WK14 and 307 in WK15. The cumulative count of confirmed influenza-associated hospitalizations to date in the 2016-2017 season was **8,271** which decreased by almost 27% in week 15 compared to WK14 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
14	61	129	98	43	37	60	53	420		
15	44	52	86	29	26	35	35	307	↓26.9%	↓3

During WK14 and WK15, 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 14 N (%) [*]	Week 15 N (%) [*]	Percent change from previous week ^{**}	Number of weeks increasing or decreasing
Emergency room visits (EpiCenter)				
Constitutional Complaints	13,523 (9.1)	12,260 (8.4)	↓11.6 ^b	↓2
Fever and ILI	2,745 (1.8)	2,178 (1.5)	↓14.3 ^b	↓2

^{*} 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.

- There were **745** confirmed positive tests for influenza A (H3N2); **5** for Influenza A/pdmH1N1 and **248** for influenza B at the ODH lab (**n = 1,223 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 9th, 2017)

National influenza activity **decreased** during WK15 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.ⁱⁱ

	Week 14 N (%)	Week 15 N (%)	Percent change from previous week ^a	Number of weeks increasing or decreasing
Test Performed	20,079	17,866	↓11.0	↓7
Positive Tests (Number and %)	3,044 (15.2)	2,249 (12.6)	↓17.1 ^b	↓3
<i>Influenza A (Number and %)</i>	<i>981 (32.2)</i>	<i>648 (28.8)</i>	<i>↓10.5^b</i>	<i>↓13</i>
<i>Influenza B (Number and %)</i>	<i>2,063 (67.8)</i>	<i>1,601 (71.2)</i>	<i>↑5.01^b</i>	<i>↑13</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)

- **Five** influenza associated pediatric deaths were reported during WK15 (4 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 = **77**)
- The cumulative count of confirmed influenza-associated hospitalizations to date in the 2016–2017 season was **17,055**.
- Outpatient visits for ILI decreased to 2.0% in WK15 – **which is below** the national baseline of 2.2%.

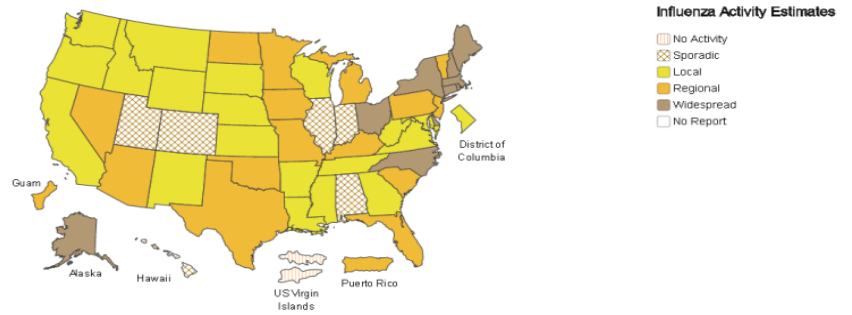
National Influenza-Like Illness (ILI) Activity:

In WK15, three of ten regions reported ILI at or above their region-specific baseline levels. Two states experienced moderate ILI activity; New York City and three states experienced low ILI activity; Puerto Rico and 45 states experienced minimal ILI activity; and the District of Columbia had insufficient data. (Refer to figure on right).

A Weekly Influenza Surveillance Report Prepared by the Influenza Division

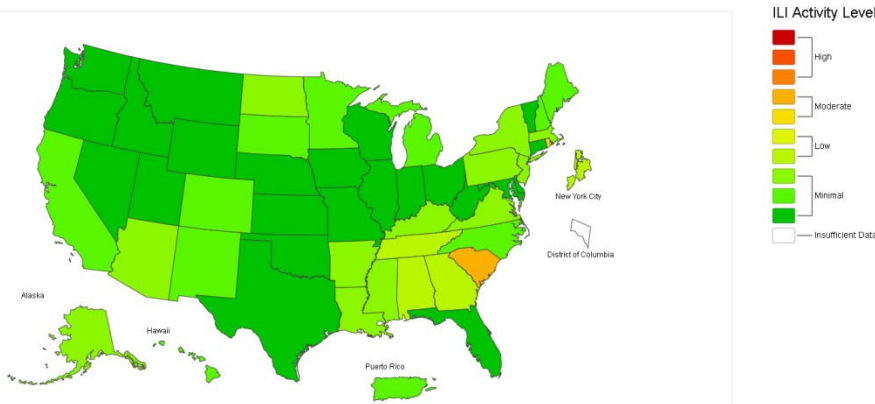
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending Apr 15, 2017 - Week 15



*This map indicates geographic spread and does not measure the severity of influenza activity.

2016-17 Influenza Season Week 15 ending Apr 15, 2017



Nationwide Geographic Spread of Influenza:

In WK15, the geographic spread of influenza in 10 states was reported as widespread; Guam, Puerto Rico, and 15 states reported regional activity; the District of Columbia and 19 states reported local activity; six states reported sporadic activity; and the U.S. Virgin Islands reported no activity. (Refer to figure on left).

Global Surveillance (World Health Organization, April 17th, 2017)

- The World Health Organization report is issued every two weeks. This report includes updates from the WHO Influenza Update N° 287, published on April 17th, 2017, based on data up to April 2nd, 2017.ⁱⁱ
- Influenza activity continues to decrease globally. Worldwide, influenza A (H3N2) and influenza B virus was predominant.

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 April 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/