



Summit County Public Health Influenza Surveillance Report 2016 – 2017 Season



Public Health
Prevent. Promote. Protect.

Report # 10

Flu Surveillance **Weeks 10 & 11** (12/11/2016 – 12/18/2016)

Centers for Disease Control and Prevention **Weeks 50 & 51**

Summit County Surveillance Data (Surveillance began October 9, 2016)

In Week 11 of influenza surveillance, influenza-related activity has increased to **moderate** in Summit County.

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

	Week 50 N (%)*	Week 51 N (%)*	Percent change from previous week ^a	Number of weeks increasing or decreasing
Lab Reports				
Test Performed	190	296	↑55.8	↑1
Positive Tests (Number and %)	8(4.2)	34(11.5)	↑173.8	↑3
Influenza A (Number and %)	8(100.0)	32(94.1)	↓5.9	↓1
Influenza B (Number and %)	0(0.0)	2(5.9)	↑100.0	↑1
Acute care hospitalization for Influenza ILI reports				
	4	10	↑150.0	↑1
Long-term Care ILI	0	0	--	--
Community-based Care Providers	0	0	--	--
Physician Offices	0	0	--	--
Pharmacy Prescriptions				
Amantidine	2	4	↑100.0	↑1
Rimantidine Flumadine	0	0	--	--
Relenza	0	0	--	--
Oseltamivir Tamiflu	3	13	↑333.3	↑2
<i>Total</i>	5	17	↑240.0	↑2
Schools**	1922(18.0)	998(9.6)	↓46.7 ^b	↓1
Deaths				
Influenza associated	0(0.0)	0(0.0)	--	--
Pneumonia associated	11(100.0)	3(100.0)	↓72.7	↓1
Emergency room visits (EpiCenter)				
Constitutional Complaints	535(7.7)	599(9.1)	↑18.2 ^b	↑1
Fever and ILI	101(1.5)	148(2.3)	↑53.3 ^b	↑1
* N and % are reported when available				
**Percent is from total number of students enrolled between all schools. WK 50: 12 schools or districts (n = 10,688); WK51: 11 schools or districts (n = 10,352). There were only 3 days of school during WK51.				
^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 WK51 of surveillance, Summit County labs performed 296 tests, of which 32 tested positive for influenza A virus, and there were 2 positive tests reported for Influenza B. Compared to the previous week, there was a 50% increase in tests performed, and the number of positive tests increased by four times.

Acute care hospitalizations: There were ten reported cases of hospitalization associated with influenza during WK51 of surveillance in Summit County. Two were in the 45 to 64 age group, and eight were aged 65 or older.

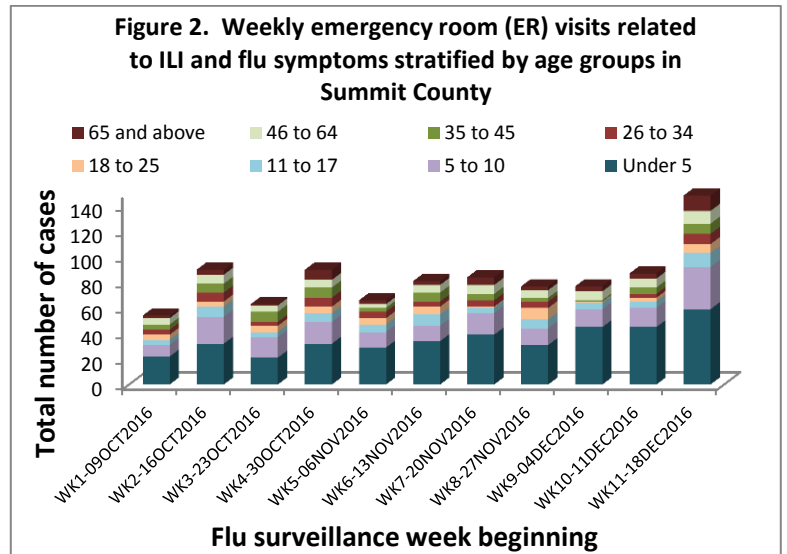
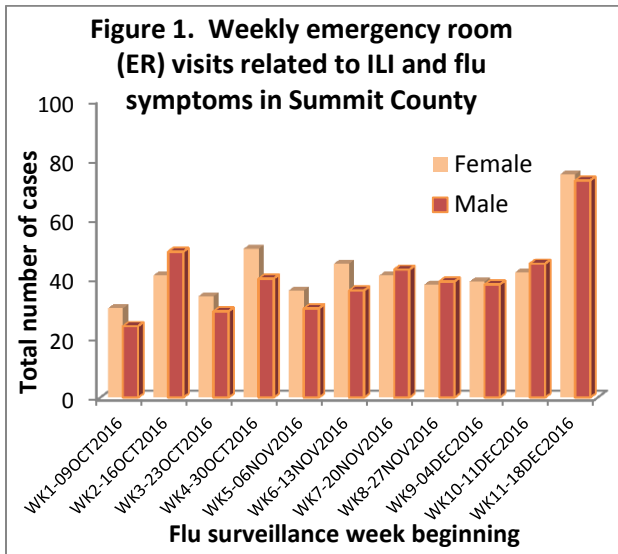
Long-term care facilities, community-based care providers and physicians' offices reported 0 cases of ILI during WK51.

Pharmacies dispensed 17 antiviral prescriptions during WK51.

School absenteeism includes absences regardless of reason. There was 46.7% decrease in the school absenteeism rate in WK51 when compared to WK50, but there were only three days of school due to winter break.

There were no **Deaths** related to influenza in WK50 and WK51; 3 deaths related to Pneumonia were reported in WK51, a 73% decrease when compared to WK50.

Epicenter reported increased proportions of **emergency room visits** for constitutional complaints (increased by 18.2%) as well as for ILI / fever cases (increased by 53.3%) in WK51 compared to WK50. Figures 1 and 2 display the weekly number of ER visits, stratified by gender and age groups.



Ohio Surveillance Data (Ohio Department of Health (ODH): Dec. 11th – Dec 18th, 2016)

Influenza activity in Ohio during WK50 and WK51 was **regional**. There were 45 influenza-associated hospitalizations in WK50 and 59 in WK51. The cumulative count of confirmed influenza-associated hospitalizations to date in the 2016–2017 season was 214.ⁱ

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
50	6	15	9	6	2	2	5	45	↑31.1	↑4
51	4	31	5	4	4	6	5	59		

During WK50 and WK51, public health surveillance data sources indicated minimal intensity for ILI in outpatient settings. 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.

Table 3: State Surveillance Emergency Room Visits for Influenza Activity by CDC Week

	Week 50 N (%) [*]	Week 51 N (%) [*]	Percent change from previous week ^{**}	Number of weeks increasing or decreasing
Emergency room visits (EpiCenter)				
Constitutional Complaints	12363 (8.4)	11,681(8.7)	↑3.6	↑3
Fever and ILI	2718 (1.8)	2,663(2.0)	↑11.1	↑3

^{*} 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 25 confirmed positive tests for influenza A (H3N2) and three for influenza B at the ODH lab (**n = 96 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): Dec 18th – Dec 24th, 2016)

National influenza activity **increased** during WK51 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 WK 50 and WK 51 are provided in Table 4.ⁱⁱ

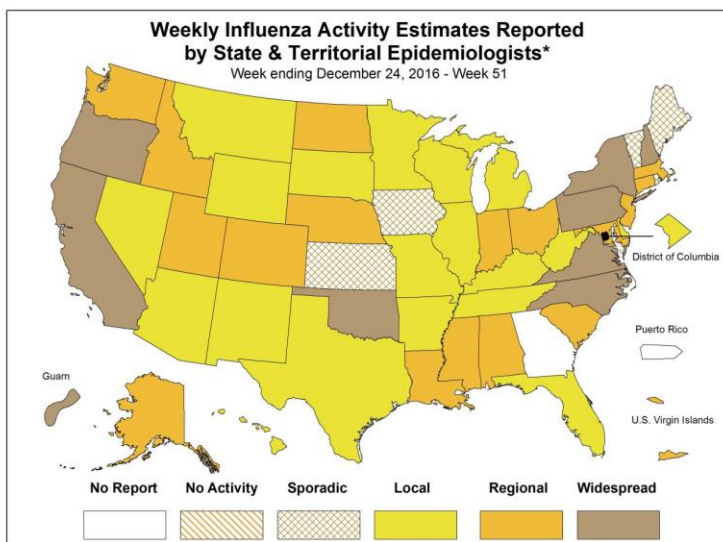
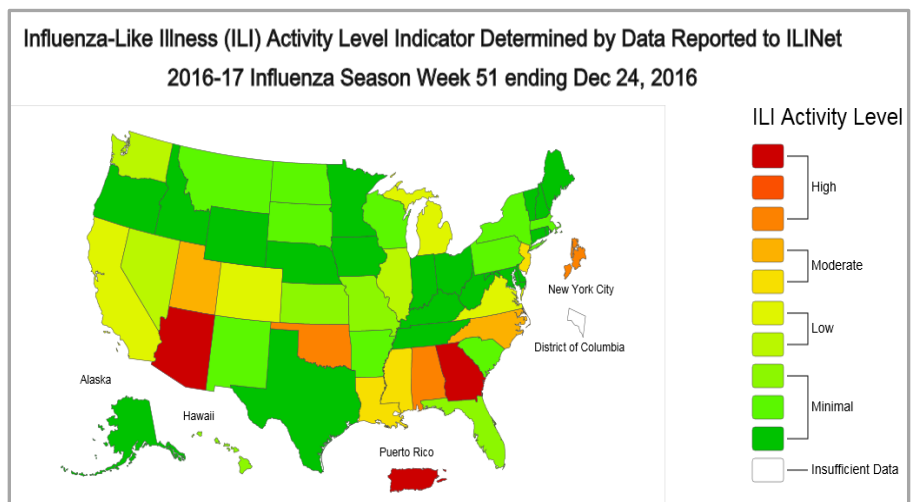
	Week 50 N (%) [*]	Week 51 N (%) [*]	Percent change from previous week ^a	Number of weeks increasing or decreasing
Test Performed	16,010	17,395	↑8.7	↑2
Positive Tests (Number and %)	1,130 (7.1)	1,813 (10.4)	↑46.5 ^b	↑3
<i>Influenza A (Number and %)</i>	986 (87.3)	1,575 (86.8)	↓0.6 ^b	↓1
<i>Influenza B (Number and %)</i>	144(12.7)	239 (13.2)	↑3.9 ^b	↑1

^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)

- **No** pediatric influenza associated mortalities were reported for the 2016-2017 season.
- Pneumonia and influenza mortality was **below** the system-specific epidemic threshold.
- Outpatient visits for ILI was 2.9% - **above** the national baseline of 2.2%.

National Influenza-Like Illness (ILI) Activity:

Nine regions reported *elevated* ILI activity (at or above their region-specific baseline levels), and one region reported *normal* ILI activity (below baseline). Puerto Rico, New York City, Georgia, Alabama, Arizona and Oklahoma experienced *high* ILI activity, five states experienced *moderate* ILI activity, seven states experienced *low* ILI activity, and 34 states experienced minimal ILI activity. The District of Columbia had insufficient data (refer to map to the right).



Nationwide Geographic Spread of Influenza: The geographic spread of influenza in Guam and eight states (California, New Hampshire, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, and Virginia) was reported as *widespread*; the US Virgin Islands and 17 states reported as *regional*; the District of Columbia and 19 states reported *local* activity, and five states reported *sporadic* activity (refer to map to the left). Puerto Rico and Georgia did not report flu activity.

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

- The World Health Organization report is issued every two weeks. This report includes updates from the WHO Influenza Update N° 279, published on Dec 26th, 2016, based on data up to Dec. 11th, 2016.ⁱⁱ
- Influenza activity **increased slightly** 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 have continued to increase yet remain below seasonal thresholds.
 - **Europe:** Influenza activity was low, but increasing. The highest levels of activity were reported in Sweden, Norway, Spain and Portugal.
 - **East and West Asia, China:** increased influenza activity was reported throughout temperate Asia.
- Globally, Influenza A was the dominant virus (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 4th, 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/