



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



Public Health
Prevent. Promote. Protect.

Report # 5

**Flu Surveillance WK 5 & 6 (11/6/2016 – 11/13/2016)
Centers for Disease Control and Prevention Week 45 & 46**

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

In the WK6 of Summit County's influenza surveillance, influenza related activity has **been low** in Summit County.

Table 1 Interpretation

The percent change from week to week should continue to be interpreted with caution due to low incidence. Table 1 compares WK 5 and WK 6 of flu surveillance.

Table 1: Overall Influenza Activity Indicators in Summit County by Week				
	Week 45 N (%)*	Week 46 N (%)*	Percent change from previous week^a	Number of weeks increasing or decreasing
Lab Reports				
Test Performed	79	115	↑45.6	↑1
Positive Tests (Number and %)	0(0.0)	0(0.0)	--	--
Influenza A (Number and %)	0(0.0)	0(0.0)	--	--
Influenza B (Number and %)	0(0.0)	0(0.0)	--	--
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	3	3	--	--
Rimantidine Flumadine	0	0	--	--
Relenza	0	0	--	--
Oseltamivir Tamiflu	0	3	↑100.0	↑1
<i>Total</i>	3	6	↑100.0	↑1
Schools**	1278(11.9)	1619(15.1)	↑26.9 ^b	↑1
Deaths				
Influenza associated	0(0.0)	0	--	--
Pneumonia associated	5(100.0)	8(100.0)	↑60.0	↑1
Emergency room visits (EpiCenter)				
Constitutional Complaints	413(6.6)	431(6.7)	↑1.5 ^b	↑1
Fever and ILI	66(1.0)	79(1.2)	↑20.0 ^b	↑1

* N and % are reported when available
 **Percent is from total number of students enrolled between all schools. WK 45 and WK 46 includes data from 12 schools (total no. of students = 10700).
^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 WK46 of surveillance, Summit county labs performed 115 tests, of which none of the testes were positive. Compared to previous week, there was 45.61% decrease in tests performed by Summit County labs.

Acute care hospitalizations: No reported cases of hospitalization associated with influenza during WK46 of surveillance in Summit County.

Long-term care facilities, community-based care providers and physicians' offices reported 0 cases of ILI during WK46.

Pharmacies dispensed 6 antiviral prescriptions during WK46 which is a 100% increase when compared to previous week.

School absenteeism includes absences regardless of reason. There was 27% increase in school absenteeism in WK46 when compared to WK45.

There were no **Deaths** related to influenza in WK45 and WK46; 8 deaths related to Pneumonia were reported in WK46 which is an increase by 60% when compared to WK45.

Epicenter reported increase proportions of **emergency room visits** for constitutional complaints (increased by 1.5%) as well as for ILI / fever cases (increased by 1.2%) in WK46 compared to WK45.

Ohio Surveillance Data (Ohio Department of Health (ODH): Nov 13th – Nov 19th, 2016)

Influenza activity during WK45 and WK46 was **sporadic** (Small numbers of laboratory-confirmed influenza cases or a single laboratory-confirmed influenza outbreak has been reported, but there is no increase in cases of ILI).

There were 7 influenza-associated hospitalizations in WK 45 and 15 in WK46. Incidence of confirmed influenza-associated hospitalizations to date in 2016 – 2017 season = 60.

CDC Week	Central	East Central	Northeast	Northwest	Southeast	Southwest	West Central	Total	Percent change from previous week	Number of weeks increasing or decreasing
45	1	1	2	2	0	0	1	7		
46	3	5	3	0	0	2	2	15	↑114.3	↑1

During WK45 and WK46, public health surveillance data sources indicate minimal intensity for ILI in outpatient settings. Emergency room activity was **below statewide baseline levels statewide**. The percentage of fever and ILI specified ED visits is **also below baseline levels**. Reported constitutional complaints and fever/ILI are provided in Table 3.

	Week 45 N (%)*	Week 46 N (%)*	Percent change from previous week**	Number of weeks increasing or decreasing
Emergency room visits (EpiCenter)				
Constitutional Complaints	9899(7.7)	10136(7.7)	--	--
Fever and ILI	1993(1.5)	1979(1.5)	--	--

* 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 eight confirmed positive tests for influenza A (H3N2) and one for influenza B at the ODH lab (n = 66 tests).
- There was **0 pediatric influenza associated mortality** during the 2016-2017 season.
- There has been no **novel influenza A virus** infections.

National Surveillance (Centers for Disease Control and Prevention (CDC): Nov 13th – Nov 19th, 2016)

National influenza activity **increased slightly** during WK46 in the United States. ⁱ

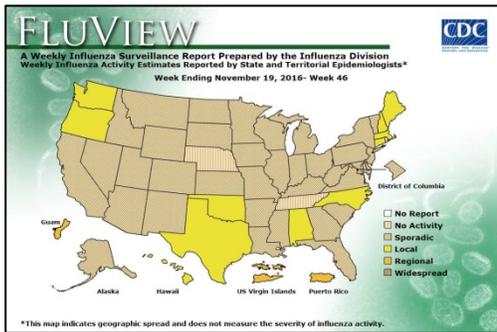
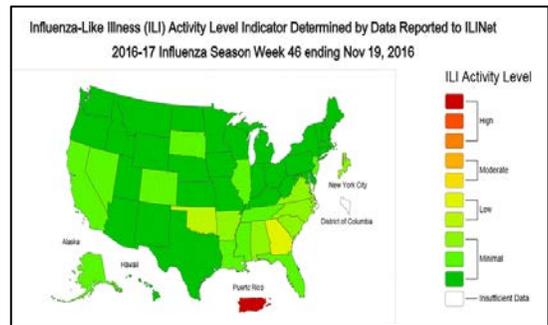
- Most frequently identified influenza virus was influenza A with influenza A (H3N2) predominating. Details on the result of lab test for WK 45 and WK 46 are provided in Table 4.

	Week 45 N (%)*	Week 46 N (%)*	Percent change from previous week ^a	Number of weeks increasing or decreasing
Test Performed	11,841	14,030	↑18.5	↑1
Positive Tests (Number and %)	199(1.7)	385(2.7)	↑58.8	↑1
Influenza A (Number and %)	163(81.9)	273(70.9)	↓13.4	↓1
Influenza B (Number and %)	36(18.1)	112(29.1)	↑60.8	↑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.
- Pneumonia and influenza mortality was below the system-specific epidemic threshold.
- Outpatient visits for ILI was 1.6% - at the national baseline of 2.2%.

- Two regions reported ILI at or above their region-specific baseline levels. Puerto Rico experienced high ILI activity, two states experienced low ILI activity, New York City and 48 states experienced minimal ILI activity, and the District of Columbia had insufficient data (Figure I on right).



- Geographic spread of influenza in Guam was reported widespread; Puerto Rico, the U.S. Virgin Islands and one state was reported regional; five states reported local activity; the District of Columbia, and 40 states reported sporadic activity; four states reported no activity (Figure II –on left).

Influenza Vaccination update for 2016-2017

- Routine annual influenza vaccination is recommended for all persons aged ≥ 6 months.
- In light of low effectiveness against influenza A (H1N1) pdm09 in the United States during the 2013–14 and 2015–16 seasons, for the 2016–17 season, ACIP makes the interim recommendation that LAIV4 should not be used.
- 2016–17 U.S. trivalent influenza vaccines will contain an A/California/7/2009 (H1N1)–like virus, an A/Hong Kong/4801/2014 (H3N2)–like virus and a B/Brisbane/60/2008–like virus (Victoria lineage). Quadrivalent vaccines will include an additional vaccine virus strain, a B/Phuket/3073/2013–like virus (Yamagata lineage).^{iv}

Global Surveillance (World Health Organization, Nov 28th, 2016)

- The World Health Organization report is issued every two weeks. This report includes updates from the WHO report published on Nov 28th, 2016, based on data up to Nov 13th, 2016.ⁱⁱ
- Globally, influenza activity remained at **inter-seasonal level**.
- Increased level of influenza was reported in Southern China (dominating virus was influenza A (H3N2)) and Ghana (dominating virus 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 Nov 29th, 2016.

ⁱ <http://www.cdc.gov/flu/weekly/>

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

^{iv} http://www.cdc.gov/mmwr/volumes/65/rr/rr6505a1.htm?s_cid=rr6505a1_w