



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



Public Health
Prevent. Promote. Protect.

Report # 8
Flu Surveillance Weeks 8 & 9 (11/27/2016 – 12/4/2016)
Centers for Disease Control and Prevention Weeks 48 & 49

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

In Week 9 of influenza surveillance, influenza-related activity remained **low** in Summit County.

Table 1: Overall Influenza Activity Indicators in Summit County by Week				
	Week 48 N (%)*	Week 49 N (%)*	Percent change from previous week^a	Number of weeks increasing or decreasing
Lab Reports				
Test Performed	142	203	↑43.0	↑1
Positive Tests (Number and %)	0(0.0)	5(2.5)	↑100.0	↑1
Influenza A (Number and %)	0(0.0)	4(80.0)	↑100.0	↑1
Influenza B (Number and %)	0(0.0)	1(20.0)	↑100.0	↑1
Acute care hospitalization for Influenza ILI reports				
	0	4	↑100.0	↑1
Long-term Care ILI	0	0	--	--
Community-based Care Providers	0	0	--	--
Physician Offices	0	0	--	--
Pharmacy Prescriptions				
Amantidine	0	0	--	--
Rimantidine Flumadine	0	0	--	--
Relenza	0	0	--	--
Oseltamivir Tamiflu	0	0	--	--
<i>Total</i>	<i>0</i>	<i>0</i>	--	--
Schools**	1577(14.7)	1700 (15.9)	↑8.2 ^b	↑1
Deaths				
Influenza associated	0(0.0)	0	--	--
Pneumonia associated	4(100.0)	10(100.0)	↑150.0	↑1
Emergency room visits (EpiCenter)				
Constitutional Complaints	465(7.1)	410(8.1)	↑14.1 ^b	↑1
Fever and ILI	78(1.2)	84(1.7)	↑41.7	↑1
* N and % are reported when available				
**Percent is from total number of students enrolled between all 12 schools (n=10,700, WK48; n=10688, WK49) that reported attendance data.				
^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 WK49 of surveillance, Summit County labs performed 203 tests, of which 5 tested positive for influenza virus (influenza A = 4; influenza B =1). Compared to the previous week, there was a 43% increase in tests performed and an increase in positive tests.

Acute care hospitalizations: There were four reported cases of hospitalization associated with influenza during WK49 of surveillance in Summit County.

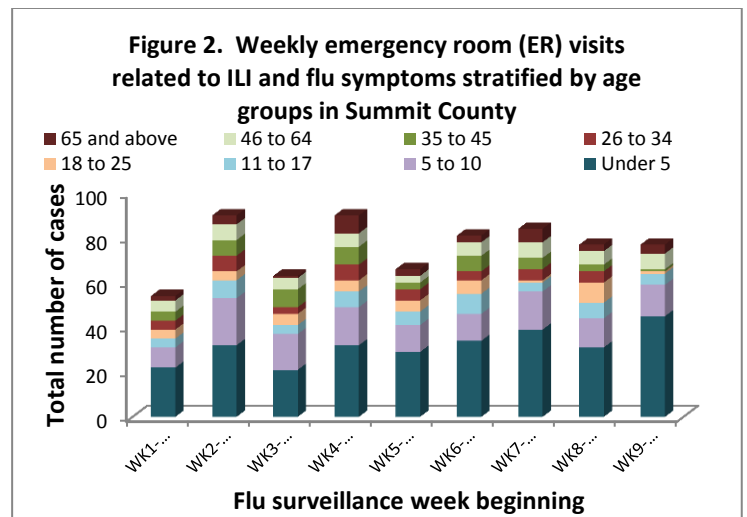
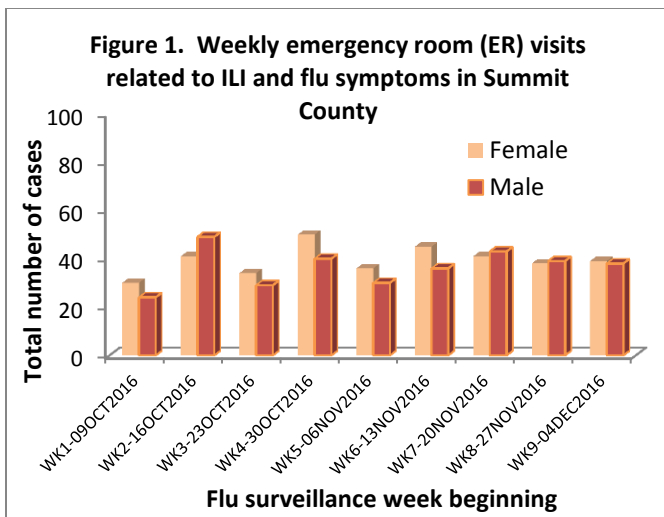
Long-term care facilities, community-based care providers and physicians' offices reported 0 cases of ILI during WK49.

Pharmacies dispensed 0 antiviral prescriptions during WK49.

School absenteeism includes absences regardless of reason. There was 8.2% increase in the school absenteeism rate in WK49 when compared to WK48.

There were no **Deaths** related to influenza in WK48 and WK49; 10 deaths related to Pneumonia were reported in WK49 which is an increase by 150% when compared to WK48.

Epicenter reported increased proportions of **emergency room visits** for constitutional complaints (increased by 14.1%) as well as for ILI / fever cases (increased by 41.7%) in WK49 compared to WK48. Figures 1 and 2 show the ER visits stratified by gender and age groups.



Ohio Surveillance Data (Ohio Department of Health (ODH): Nov 27th – Dec 3rd, 2016)

Influenza activity during WK48 and WK49 was **local**. There were 19 influenza-associated hospitalizations in WK48 and 29 in WK49. Incidence of confirmed influenza-associated hospitalizations to date in 2016 – 2017 season is 112.ⁱ

CDC Week	Central	East Central	Northeast	Northwest	Southeast	Southwest	West Central	Total	Percent change from previous week	Number of weeks increasing or decreasing
48	4	5	4	1	2	2	1	19		
49	7	6	4	5	2	1	4	29	↑52.6	↑2

During WK48 and WK49, 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 48 N (%) [*]	Week 49 N (%) [*]	Percent change from previous week ^{**}	Number of weeks increasing or decreasing
Emergency room visits (EpiCenter)				
Constitutional Complaints	11034 (7.8)	12052 (8.1)	↑3.8	↑1
Fever and ILI	2282 (1.6)	2518 (1.7)	↑6.3	↑1

^{*} 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 thirteen confirmed positive tests for influenza A (H3N2) and two for influenza B at the ODH lab (n = 73 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 4th – Dec 10th, 2016)

National influenza activity **increased slightly but remained low** during WK49 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 48 and WK 49 are provided in Table 4.ⁱⁱ

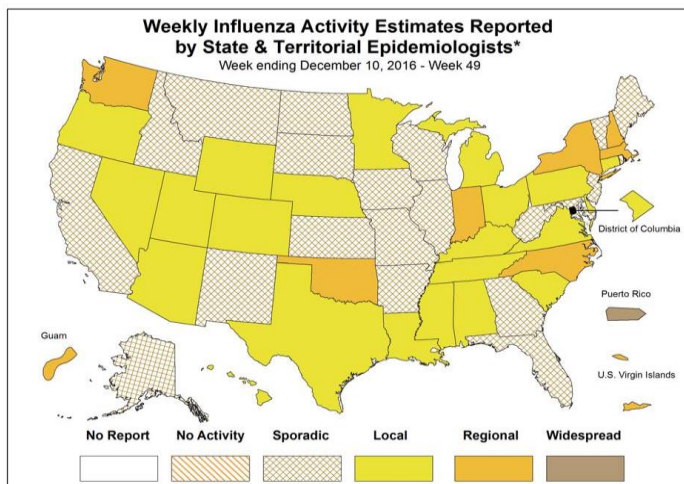
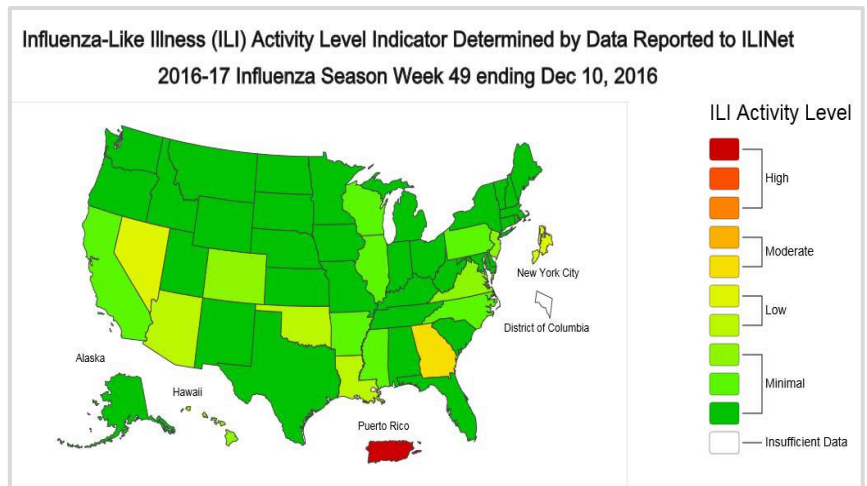
Table 4: CDC update on results from clinical laboratories				
	Week 48 N (%)*	Week 49 N (%)*	Percent change from previous week ^a	Number of weeks increasing or decreasing
Test Performed	15,262	15,117	↓1.0	↓1
Positive Tests (Number and %)	535 (3.5)	728 (4.8)	↑36.1	↑1
<i>Influenza A (Number and %)</i>	390 (72.9)	575 (79.0)	↑47.4	↑2
<i>Influenza B (Number and %)</i>	145 (27.1)	153(21.0)	↑5.5	↑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 1.9% - below the national baseline of 2.2%.

National Influenza-Like Illness (ILI)

Activity: Two regions reported ILI at or above their region-specific baseline levels. Puerto Rico experienced high ILI activity, Georgia experienced moderate ILI activity, New York City and four states experienced low ILI activity, 45 states experienced minimal ILI activity, and the District of Columbia had insufficient data (refer to map to the right).



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

Nationwide Geographic Spread of Influenza:

The geographic spread of influenza in Puerto Rico was reported as widespread; Guam and two states were reported as regional; 19 states reported local activity; the U.S. Virgin Islands and 28 states reported sporadic activity; one state reported no activity; and the District of Columbia did not report (refer to map to the left).

- The World Health Organization report is issued every two weeks. This report includes updates from the WHO report published on Dec 12th, 2016, based on data up to Nov 27th, 2016.ⁱⁱ
- Globally, influenza activity increased slightly in the temperate zone of the northern hemisphere, but actual reported levels detection continued to remain **low**.
- Increased detection levels of influenza was reported in North America, Europe, and China (dominant virus was influenza A (H3N2)) and Ghana (dominant 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 Dec 20th, 2016.

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/