



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



**Public Health**  
Prevent. Promote. Protect.

**Report # 2**

**Flu Surveillance WK 2 & 3 (10/16/2016 – 10/23/2016)**  
**Centers for Disease Control and Prevention Week 42 & 43**

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

In the WK3 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 first WK 2 and WK 3 of flu surveillance.

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

|   | <b>Week 42</b><br>N (%)* | <b>Week 43</b><br>N (%)* | <b>Percent<br/>change from<br/>previous<br/>week<sup>a</sup></b> | <b>Number of<br/>weeks<br/>increasing or<br/>decreasing</b> |
|---|--------------------------|--------------------------|--|---|
| <b>Lab Reports</b>  |                          |                          |  |   |
| Test Performed  | 97                       | 58                       | ↓40.2  | ↓2  |
| Positive Tests (Number and %)                               | 0(0.0)                   | 2(3.4)                   | ↑200.0   | ↑1  |
| Influenza A (Number and %)                                  | 0(0.0)                   | 2(100.0)                 | ↑100.0   | ↑1  |
| Influenza B (Number and %)                                  | 0(0.0)                   | 0(0.0)                   | --   | --  |
| <b>Acute care hospitalization for Influenza ILI reports</b> |                          |                          |  |   |
| Long-term Care ILI  | 0                        | 1                        | ↑100.0   | ↑1  |
| Community-based Care Providers                              | 0                        | 0                        | --   | --  |
| Physician Offices   | 0                        | 0                        | --   | --  |
| <b>Pharmacy Prescriptions</b>                               |                          |                          |  |   |
| Amantidine  | 2                        | 5                        | ↑150.0   | ↑1  |
| Rimantidine Flumadine                                       | 0                        | 0                        | --   | --  |
| Relenza   | 0                        | 0                        | --   | --  |
| Oseltamivir Tamiflu   | 0                        | 0                        | --   | --  |
| Total   | 2                        | 5                        | ↑150.0   | ↑1  |
| <b>Schools (7 schools, n=7656)**</b>                        | 1107 (14.4)              | 1120 (14.6)              | ↑1.2   | ↑2  |
| <b>Deaths</b>   |                          |                          |  |   |
| Influenza associated  | 0(0.0)                   | 0(0.0)                   | --   | --  |
| Pneumonia associated  | 6(100)                   | 8(100)                   | ↑33.3  | ↑1  |
| <b>Emergency room visits (EpiCenter)</b>                    |                          |                          |  |   |
| Constitutional Complaints                                   | 473(7.2)                 | 435(7.0)                 | ↓2.8 <sup>b</sup>  | ↓1  |
| Fever and ILI   | 88(1.3)                  | 63(1.0)                  | ↓23.1 <sup>b</sup>   | ↓1  |

\* N and % are reported when available

\*\*Percent is from total number of students enrolled between all schools. WK 42 and WK 43 includes data from 7 schools (total no. of students = 7656) each week.

<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 WK3 of surveillance, Summit county labs performed 58, of which 2 testes (3.4%) were positive. Both the tests were positive for influenza A. Compared to previous week, there was 40% decrease in the test performed.

**Acute care hospitalizations:** There was only one reported case of hospitalization during WK43 during surveillance in Summit County.

**Long-term care facilities** reported one case of influenza like illness (ILI) in WK43. **Community-based care providers and physicians' offices** reported 0 cases of ILI during WK24 and WK43.

**Pharmacies** dispensed 5 antiviral prescriptions during WK43 which is a 150% increase when compared to previous week.

**School** absenteeism includes absences regardless of reason. There was a 1.2% increase in school absenteeism in WK43 when compared to WK42.

There were no **Deaths** related to influenza in WK42 and WK43; 8 deaths related to Pneumonia were reported in WK43 which is an increase by 33% when compared to WK42.

**Epicenter** reported slightly decreased proportions of **emergency room visits** for constitutional complaints and 23% decrease in ILI / fever cases in WK43 compared to WK42.

## Ohio Surveillance Data (Ohio Department of Health (ODH): Oct 16<sup>th</sup> – Oct 29<sup>th</sup>, 2016)

Influenza activity during WK42 and WK43 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 5 influenza-associated hospitalizations in WK 42 and 12 in WK43. Incidence of confirmed influenza-associated hospitalizations to date in 2016 – 2017 season = 32.

**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 |
|----------|---------|--------------|-----------|-----------|-----------|-----------|--------------|-------|-----------------------------------|--|
| 42       | 2       | 0            | 2         | 0         | 0         | 1         | 0            | 5     | ↑140.0                            | ↑1                                       |
| 43       | 4       | 1            | 3         | 1         | 0         | 2         | 1            | 12    |                                   |  |

During WK42 and WK43, 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.

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

|  | Week 42<br>N (%)* | Week 43<br>N (%)* | Percent change from previous week** | Number of weeks increasing or decreasing |
|--|-------------------|-------------------|-------------------------------------|--|
| <b>Emergency room visits (EpiCenter)</b> |                   |                   |                                     |  |
| Constitutional Complaints                | 10603(7.6)        | 10073(7.5)        | ↓1.3                                | ↓1                                       |
| Fever and ILI                            | 1926(1.4)         | 2046(1.5)         | ↑7.1                                | ↑1                                       |

\* Percentages are the percent of emergency room visits that are for constitutional complaints or fewer and ILI

\*\* Percentages should be interpreted with caution. Small changes in numbers can result in big changes in percent.

There was one confirmed positive tests for influenza A/H3N2 at the ODH lab (**n = 41 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): Oct 16<sup>th</sup> – Oct 29<sup>th</sup>, 2016)

National influenza activity was **low** during WK 42 and 43 in the United States. <sup>i</sup>

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

**Table 4: CDC update on results from clinical laboratories**

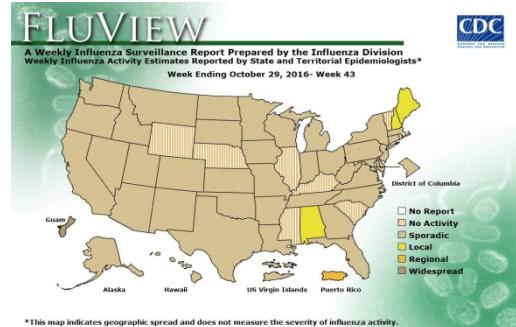
|                                   | Week 42<br>N (%)* | Week 43<br>N (%)* | Percent change from previous week <sup>a</sup> | Number of weeks increasing or decreasing |
|-----------------------------------|-------------------|-------------------|--|--|
| Test Performed                    | 10,837            | 10,890            | ↑0.5   | ↑1                                       |
| Positive Tests (Number and %)     | 176(1.6)          | 177(3.4)          | ↑112.5   | ↑1                                       |
| <i>Influenza A (Number and %)</i> | <i>94(53.4)</i>   | <i>116(65.5)</i>  | <i>↑112.5</i>                                  | <i>↑1</i>                                |
| <i>Influenza B (Number and %)</i> | <i>82(46.6)</i>   | <i>61(34.5)</i>   | <i>↓25.9</i>                                   | <i>↓1</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)

- No** pediatric influenza associated mortalities were reported.
- Pneumonia and influenza mortality was **below** the system-specific epidemic threshold.
- Outpatient visits for ILI was 1.3% - **at** the national baseline of 2.2% (Figure I –on right). All 10 regions reported ILI below region-specific baseline levels (in both WK42 and WK43).

- Geographic spread of influenza in Guam was reported widespread; Puerto Rico reported regional activity; the District of Columbia, three states reported local activity; the U.S. Virgin Islands and 39 states reported sporadic activity; eight states reported no activity. (Figure 2 -right)



### Influenza Vaccination update for 2016-2017

- Routine annual influenza vaccination is recommended for all persons aged  $\geq 6$  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).<sup>iv</sup>

### Global Surveillance (World Health Organization, Oct 31<sup>st</sup>, 2016)

- The World Health Organization report is issued every two weeks. This report includes updates from the WHO report published on Oct 31st, 2016, based on data up to Oct 16th, 2016.<sup>ii</sup>
- Globally, influenza activity remained low with continuous decrease in temperate southern hemisphere countries and inter-seasonal level in the temperate zones of the northern hemisphere region.

**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 • [ssakya@schd.org](mailto:ssakya@schd.org) • 330-926-5747.

Report was issued on Nov 8th, 2016.

<sup>i</sup> <http://www.cdc.gov/flu/weekly/>

<sup>ii</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/)

<sup>iv</sup> [http://www.cdc.gov/mmwr/volumes/65/rr/rr6505a1.htm?s\\_cid=rr6505a1\\_w](http://www.cdc.gov/mmwr/volumes/65/rr/rr6505a1.htm?s_cid=rr6505a1_w)