



**Summit County Public Health
Influenza Surveillance Report
2017 – 2018 Season
Report #1**



**Flu Surveillance Weeks 1 & 2 (Beginning 10/8/2017 and 10/15/2017)
Centers for Disease Control and Prevention MMWR Weeks 40 & 41**

Summit County Surveillance Data:

In **Week 1** of influenza surveillance, influenza-related activity was very low in Summit County.

Table 1: Overall Influenza Activity Indicators in Summit County by Week				
	Week 40 N (%)*	Week 41 N (%)*	Percent change from previous week	Number of weeks increasing or decreasing
Lab Reports				
Test Performed	67	90	↑36.3	↑1
Positive Tests (Number and %)	2(2.9%)	0		
Influenza A (Number and %)	2(2.9%)	0		
Influenza B (Number and %)	0	0	0	
Acute care hospitalization for Influenza:	3	1	↓67%	↓1
Influenza ILI Community Report:				
Long-term Care ILI	0	0	--	--
Correctional & Addiction Facility	0	0	--	--
Physician Offices & University Clinic	11	7	↓36.3	↓1
Pharmacy Prescriptions				
Amantidine	2	1	↓50	--
Rimantidine Flumadine	0	0	--	--
Relenza	0	0	--	--
Oseltamivir Tamiflu	0	4		--
<i>Total</i>	2	0	--	--
Schools** 7 Schools reporting	692 (9.7)	1038 (14.)	↑50	↑1
Deaths				
Pneumonia associated	2	6	↑200.0	↑1
Influenza associated	0	0	--	--
Emergency room visits (Epi Center)***				
Constitutional Complaints	491(7.7)	450(7.4)	↓8.30 ^b	↓1
Fever and ILI	68 (1.0)	50 (0.8)	↓26.47 ^b	↓1
* N and % are reported when available				
**Percent is from total number of students enrolled between all schools. WK 1 (n=7143) and WK2 (n=7144).				
***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.)				

No deaths related to influenza were reported during WK 1 & 2, however there were 8 total deaths associated with pneumonia. **Figure 1** displays weekly Summit County death counts associated with pneumonia and influenza.

Acute Care Hospitalizations: There were 3 reported hospitalizations during week 1 and 1 in week 2. **Figure 2** displays Influenza Associated Hospitalizations in Summit County.

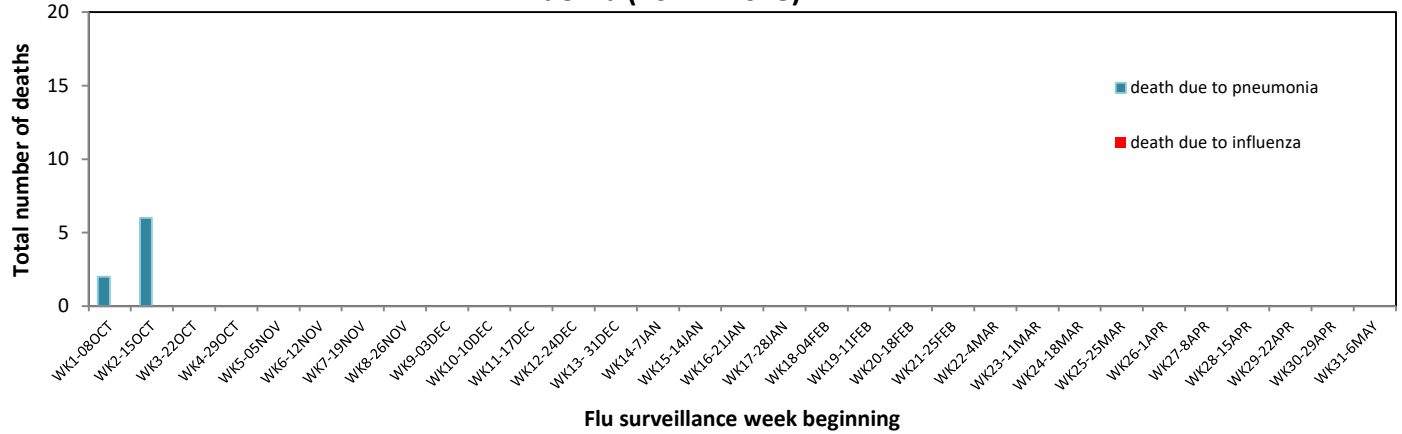
COMMUNITY ILI REPORTS: Influenza like Illness (ILI) as defined by the CDC is fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat without a known cause other than influenza. Community ILI reports:
Long Term Care Facilities: There were 0 cases ILI reported from Long Term Care facilities. **Correctional and Addiction facility:** Zero cases ILI reported **Physician Office and University Clinic:** During week 1, 11 cases of ILI were reported and Week 2 reported 7 cases.

Pharmacy: Two prescriptions for Amantadine were reported during week 1; 1 prescription for week 2, as well as 4 prescriptions for Oseltamivir Tamiflu.

School absenteeism includes absences regardless of reason. In WK1, there were 692 absences and in WK2 there were 1038. That is a 50% change from week 1.

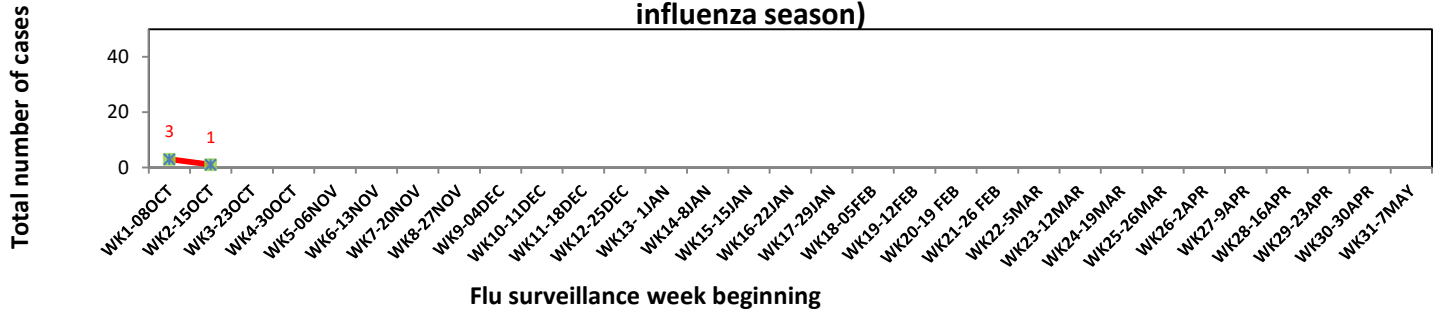
Lab reports: During the first 2 weeks of influenza surveillance, Summit County labs performed 157 tests, of which 2 tested positive (influenza A). See **Figure 4**.

Figure 1: Weekly Summit County death counts associated with pneumonia and influenza (2017 - 2018)



Influenza-associated hospitalization: Summit County hospitals reported 3 influenza-associated hospitalizations in WK1 and 1 hospitalization during week 2. **Figure 2** displays weekly confirmed hospitalization count for Summit County (cumulative count to date =4).

Figure 2: Summit County influenza-associated hospitalizations by week (2017-2018 influenza season)



EpiCenter collects and analyzes health related data in real time to provide information about the health of the community. This system tracks ER visits related to constitutional complaints and fever and ILI. **Figure 3** displays the weekly number of ER visits related to ILI and flu symptoms in Summit County.

Figure 3. Weekly ER visits in Summit County related to Fever + ILI stratified by age

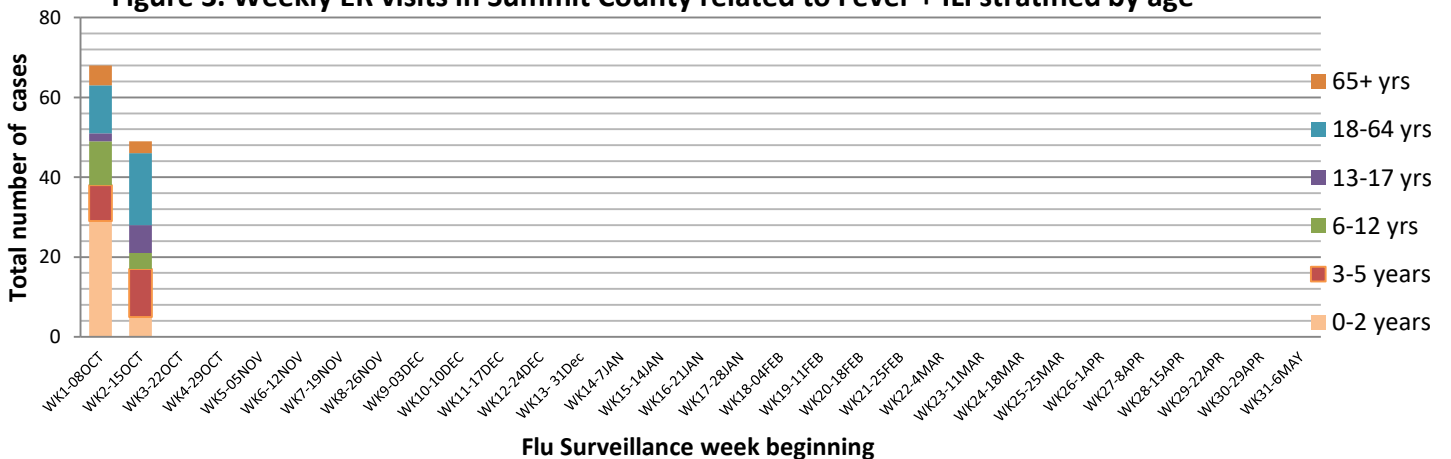
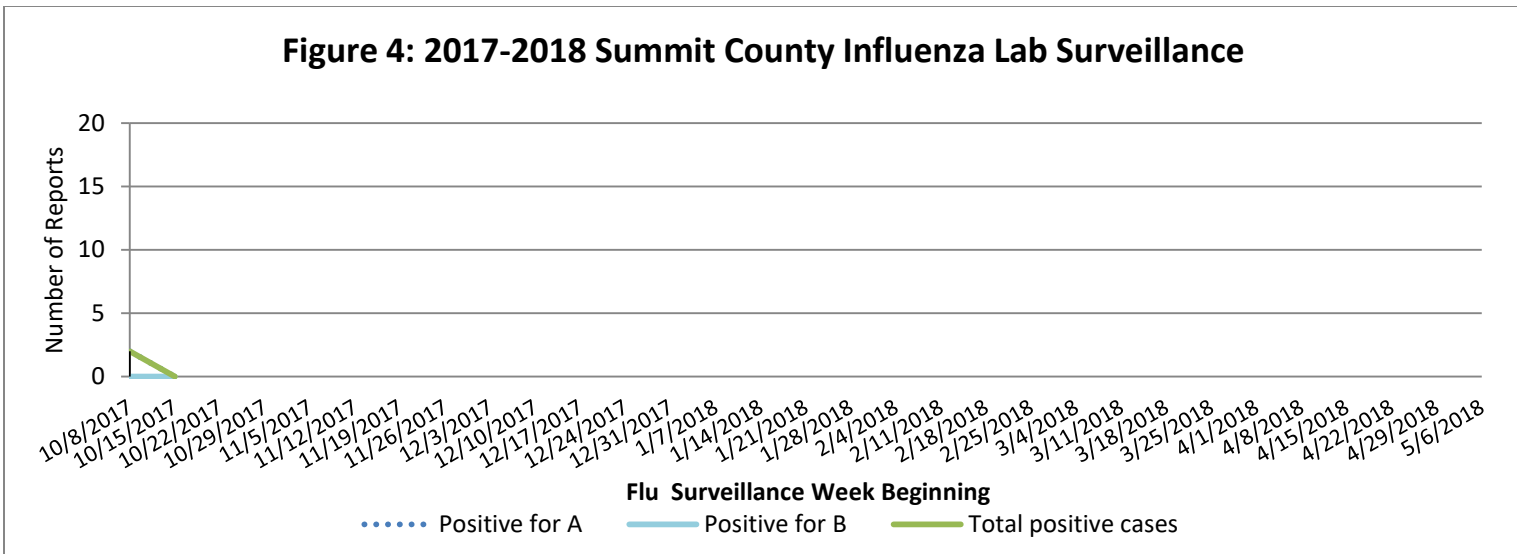


Figure 4: 2017-2018 Summit County Influenza Lab Surveillance



Ohio Influenza Activity: from The Ohio Department of Health:

During MMWR Week 41, public health surveillance data sources indicate minimal intensity for influenza-like illness (ILI) in outpatient settings reported by Ohio’s sentinel providers. The percentage of emergency department visits with patients exhibiting constitutional symptoms are slightly above baseline levels statewide; fever and ILI specified ED visits are below baseline levels. Reported cases of influenza-associated hospitalizations are below the seasonal threshold*. There were 13 influenza-associated hospitalizations reported in Ohio. The dashboard below reflects Ohio influenza activity:

Data Source	Current week value	Percent Change from last week ¹	# of weeks ²	Trend Chart ³
Influenza-like Illness (ILI) Outpatient Data (ILINet Sentinel Provider Visits)	0.57%	-17.39%	↓ 2	
Thermometer Sales (National Retail Data Monitor)	1106	1.19%	↑ 1	
Fever and ILI Specified ED Visits (EpiCenter)	1.45%	3.57%	↑ 1	
Constitutional ED Visits (EpiCenter)	7.91%	-0.13%	↓ 1	
Confirmed Influenza-associated Hospitalizations (Ohio Disease Reporting System)	13	30.00%	↑ 1	
Outpatient Medical Claims Data⁴	0.23%	4.55%	↑ 2	

¹Interpret percent changes with caution. Large variability may be exhibited in data sources with low weekly values.

²Number of weeks that the % change is increasing or decreasing.

³Black lines represent current week's data; red lines represent baseline averages (Week 40 data is a single data point, no line is visible until week 41).

⁴Medical Claims Data provided by athenahealth®

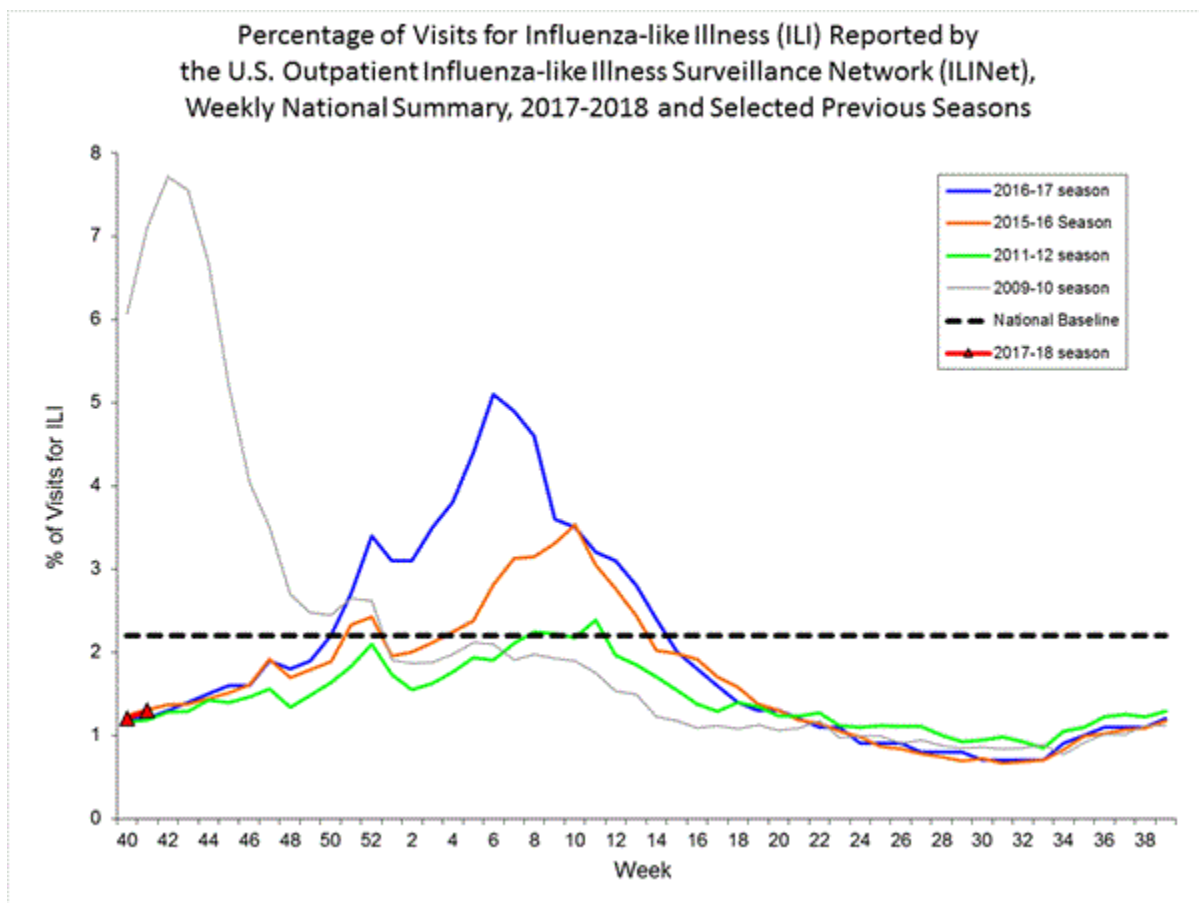
National Surveillance: from the Centers for Disease Control and Prevention (CDC):

Week of October 8, 2017

During week 41 (October 8-14, 2017), influenza activity was low in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus type reported by public health laboratories during week 41 was influenza A. The percentage of respiratory specimens testing positive for influenza in clinical laboratories is low.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** One influenza-associated pediatric death was reported that occurred during the 2016-2017 season.
- **Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 1.3%, which is below the national baseline of 2.2%. All 10 regions reported ILI below region-specific baseline levels. New York City, the District of Columbia, Puerto Rico and all 50 states experienced minimal ILI activity.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Guam was reported as regional; five states reported local activity (see Flu View Map); the U.S. Virgin Islands and 38 states reported sporadic activity; the District of Columbia and seven states reported no activity; and Puerto Rico did not report.

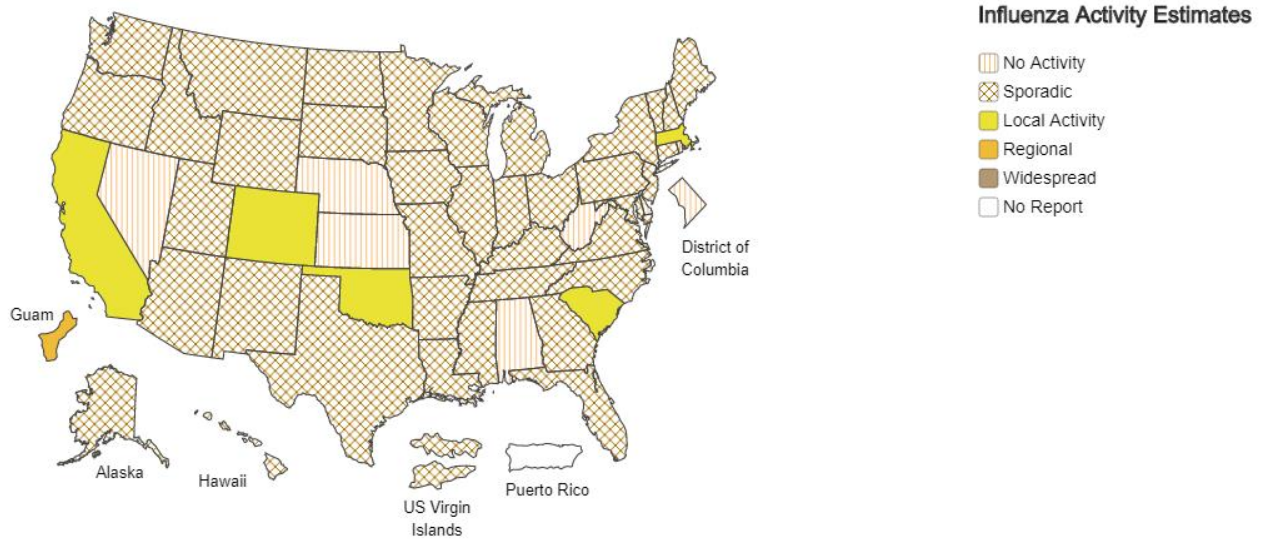
Nationwide during week 41, 1.3% of patient visits reported through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) were due to influenza-like illness (ILI). This percentage is below the national baseline of 2.2%. (ILI is defined as fever (temperature of 100°F [37.8°C] or greater) and cough and/or sore throat.)



A Weekly Influenza Surveillance Report Prepared by the Influenza Division

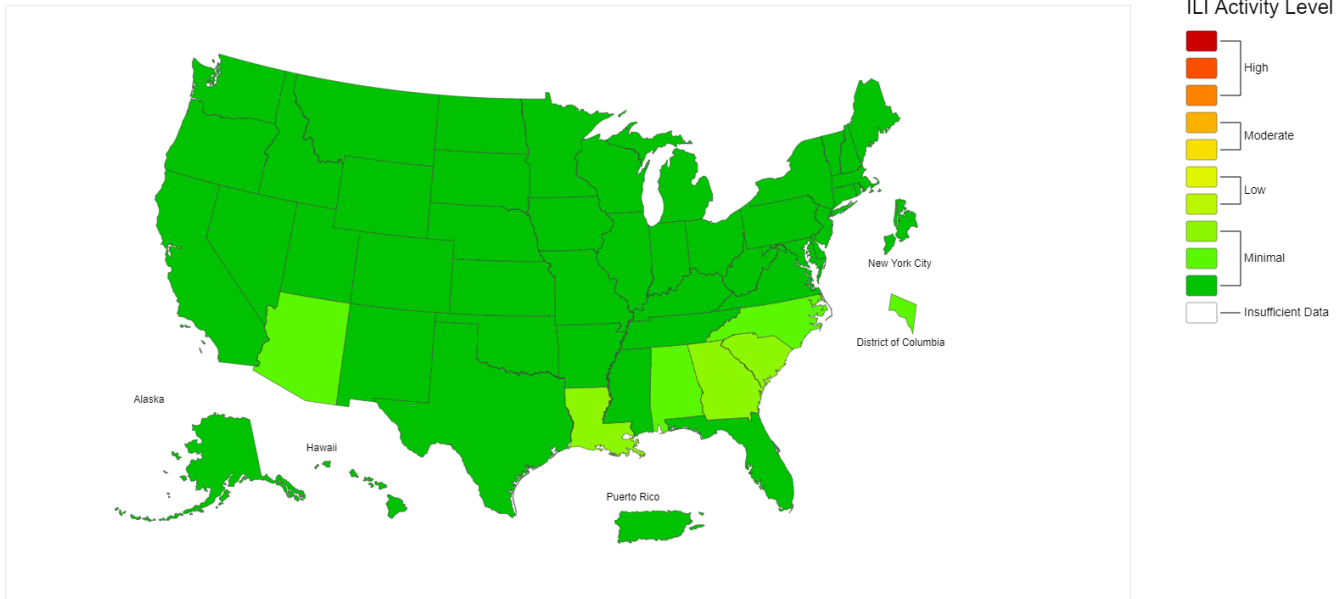
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending Oct 14, 2017 - Week 41



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

2017-18 Influenza Season Week 41 ending Oct 14, 2017



*This map uses the proportion of outpatient visits to healthcare providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state to display high activity levels.
 *Data collected in ILINet may disproportionately represent certain populations within a state, and therefore may not accurately depict the full picture of influenza activity for the whole state.
 *Data displayed in this map are based on data collected in ILINet, whereas the State and Territorial flu activity map are based on reports from state and territorial epidemiologists. The data presented in this map is preliminary and may change as more data is received.
 *Differences in the data presented by CDC and state health departments likely represent differing levels of data completeness with data presented by the state likely being the more complete.
 *For the data download you can use Activity Level for the number and Activity Level Label for the text description.

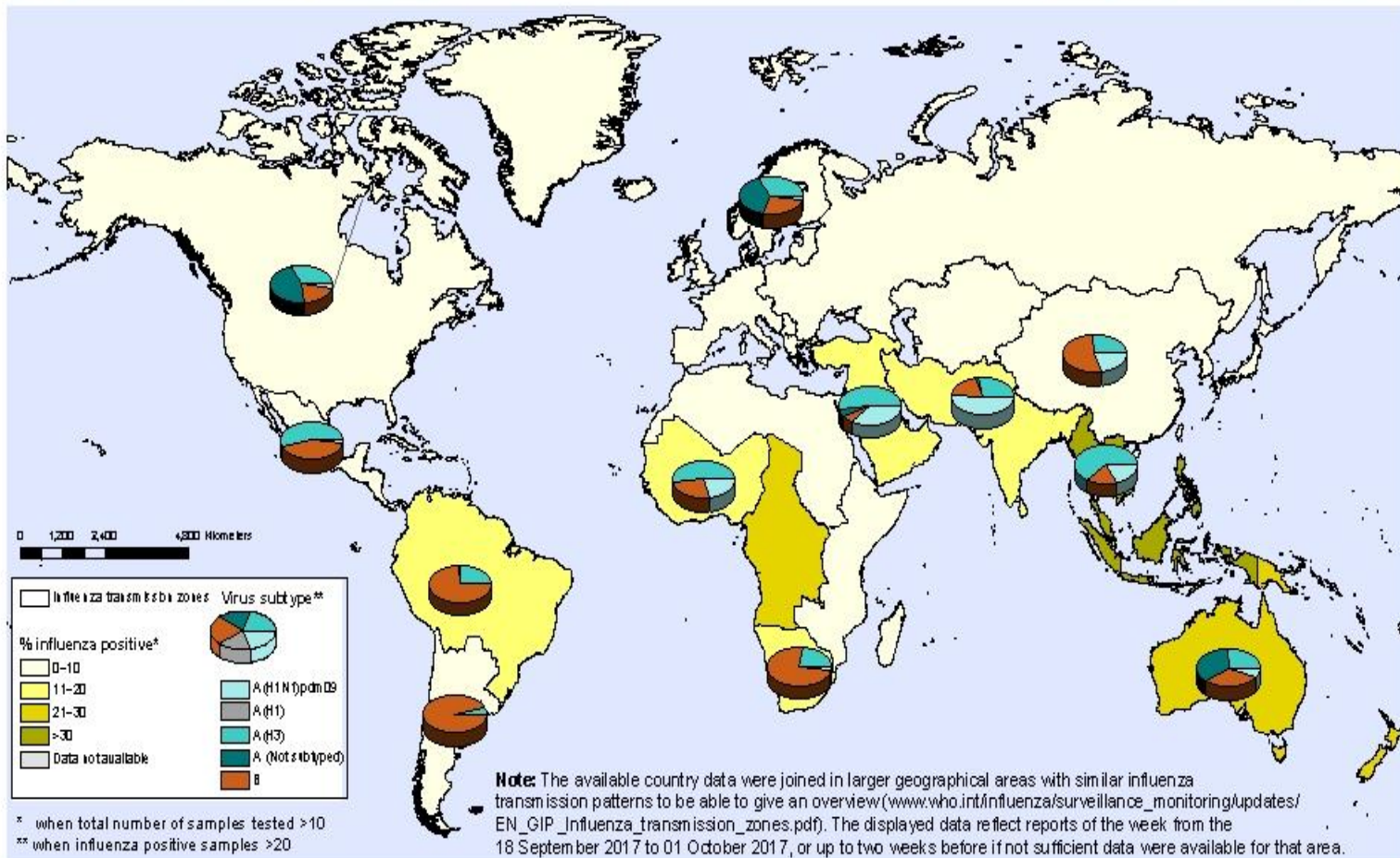
Global Surveillance: from the World Health Organization October 16, 2017

The World Health Organization report is issued every two weeks. This report includes updates from the WHO Influenza Update N° 300, published on October 16, 2017, based on data up to October 1, 2017.

- Influenza activity remained at low levels in the temperate zone of the northern hemisphere. Declining levels of influenza activity were reported in the temperate zone of the southern hemisphere and in some countries of South and South East Asia. In Central America and the Caribbean, low influenza activity was reported in a few countries. Worldwide, influenza A(H3N2) and B viruses accounted for the majority of influenza detections.

Percentage of respiratory specimens that tested positive for influenza By influenza transmission zone

Status as of 13 October 2017



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: Global Influenza Surveillance and Response System (GISRS), FluNet (www.who.int/flu-net).

 **World Health Organization**
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Influenza Prevention

Influenza vaccine effectiveness (VE) can vary from year to year among different age and risk groups and even by vaccine type. How well the vaccine works can depend in part on the match between the vaccine virus used to produce the vaccine and the circulating viruses that season. It's not possible to predict what viruses will be most predominant during the upcoming season. CDC monitors circulating viruses throughout the year and provides new and updated information about their similarity to the flu vaccine viruses as it becomes available. While vaccine effectiveness can vary, recent studies show vaccine reduces the risk of flu illness by about 40% to 60% among the overall population during seasons when most circulating flu viruses are like the vaccine viruses. Similar reductions against hospitalization have been observed too. For more information about previous vaccine effectiveness, visit [How Well Does the Seasonal Flu Vaccine Work?](#).

All influenza vaccines licensed in the United States will contain components derived from influenza viruses antigenically similar to those recommended by FDA. The 2017–18 U.S. influenza vaccines contain the following components:

- an A/Michigan/45/2015 (H1N1)pdm09–like virus,
- an A/Hong Kong/4801/2014 (H3N2)–like virus, and
- a B/Brisbane/60/2008–like virus (Victoria lineage).

In addition to vaccine, the CDC recommends the following preventive measures:

- Try to avoid close contact with sick people.
- While sick, limit contact with others as much as possible to keep from infecting them.
- If you are sick with flu-like illness, CDC recommends that you stay home for at least 24 hours after your fever is gone except to get medical care or for other necessities. (Your fever should be gone for 24 hours without the use of a fever-reducing medicine.)
- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it.
- [Wash your hands](#) often with soap and water. If soap and water are not available, use an alcohol based hand rub.
- Avoid touching your eyes, nose and mouth. Germs spread this way.
- Clean and disinfect surfaces and objects that may be contaminated with germs like the flu.

About this report: Reporting agencies include labs, hospitals, long-term care and community-based care providers, physician offices, university clinic, 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). Special thanks to all agencies who report Influenza related data weekly.

Reporting from participants may not be complete each week. Numbers may change as updated reports are received. For questions, please contact Jane Adams or Tracy Rodriguez, Summit County Public Health Communicable Disease Unit. Report was issued on October 27, 2017.