Summit County Public Health
Influenza Surveillance Report
2017 – 2018 Season
Report #2
Flu Surveillance Weeks 3 & 4 (Beginning 10/22/2017 and 10/29/2017)
Centers for Disease Control and Prevention MMWR Weeks 42 & 43

Summit County Surveillance Data:

In **Weeks 3&4** of influenza surveillance, influenza-related activity was very low in Summit County.

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

	Week 42 N (%)*	Week 43 N (%)*	Percent change from previous week	Number of weeks increasing or decreasing
Lab Reports				
Test Performed	133 (48)	144 (52)	↑8.2	**↑2**
Positive Tests (Number and %)	4	3	↓24	**↓1**
Influenza A (Number and %)	3 (2.2)	2(1.3)	↓33	**↓1**
Influenza B (Number and %)	1(0.7)	1(0.6)	_	
Acute care hospitalization for Influenza:	4	3	**↓25**	**↓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	**2**	_	--
Rimantidine Flumadine	0	**0**	--	--
Relenza	**0**	**0**	--	--
Oseltamivir Tamiflu	0	**3**	_	**↑1**
Total	**2**	**5**	--	**↑1**
Schools 7 Schools reporting**	903 (14.3)	1307(22.)	**↑45**	**↑1**
Deaths				
Pneumonia associated	2 (2.5)	1 (1.1)	↓50	**↓2**
Influenza associated	0	0	--	--
Emergency room visits (Epi Center)* **				
Constitutional Complaints	478 (7.9)	478 (7.8)	_	**↑2**
Fever and ILI	51(.85)	80 (1.3)	**↑56.86**[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 3 & 4, however there were 3 total deaths associated with pneumonia. **Figure 1** displays weekly Summit County death counts associated with pneumonia and influenza.

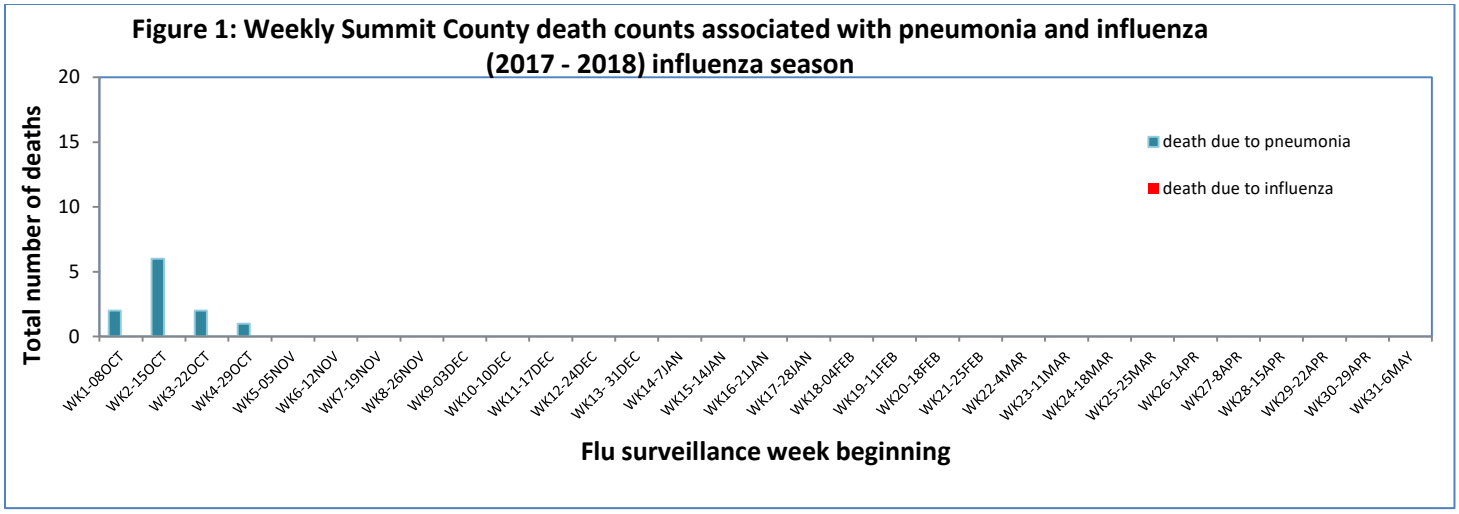
Acute Care Hospitalizations: 4 reported influenza associated hospitalizations during week 3, and 3 in week 4. **Figure 2** displays Influenza Associated Hospitalizations in Summit County.

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 week3, 0 cases of ILI were reported and Week 4 reported 1 case.

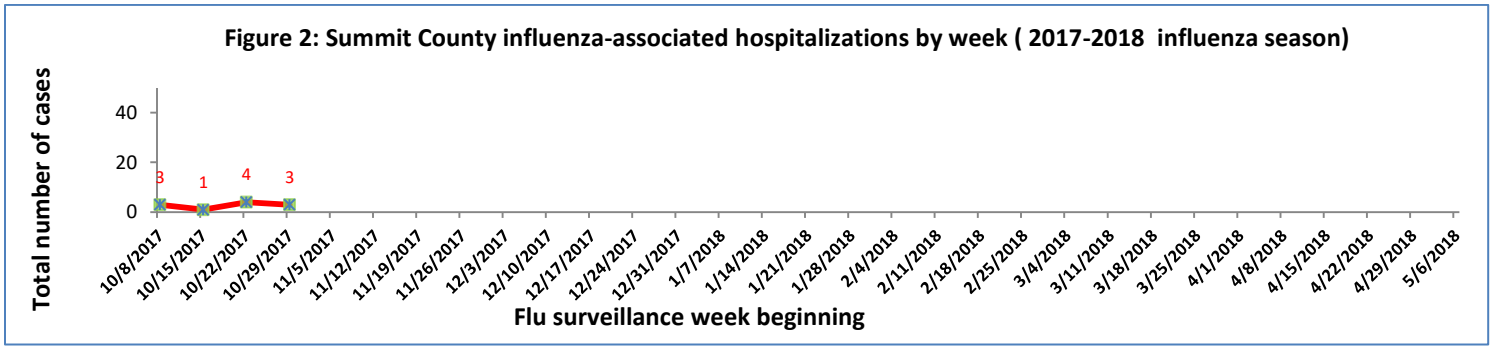
Pharmacy: Two prescriptions for Amantadine were reported during week 3; 2 prescription for week 4, as well as 3 prescriptions for Oseltamivir Tamiflu.

School absenteeism includes absences regardless of reason. In WK 3, there were 903 absences and in WK 4 there were 1307. That is a 45% change from week 3.

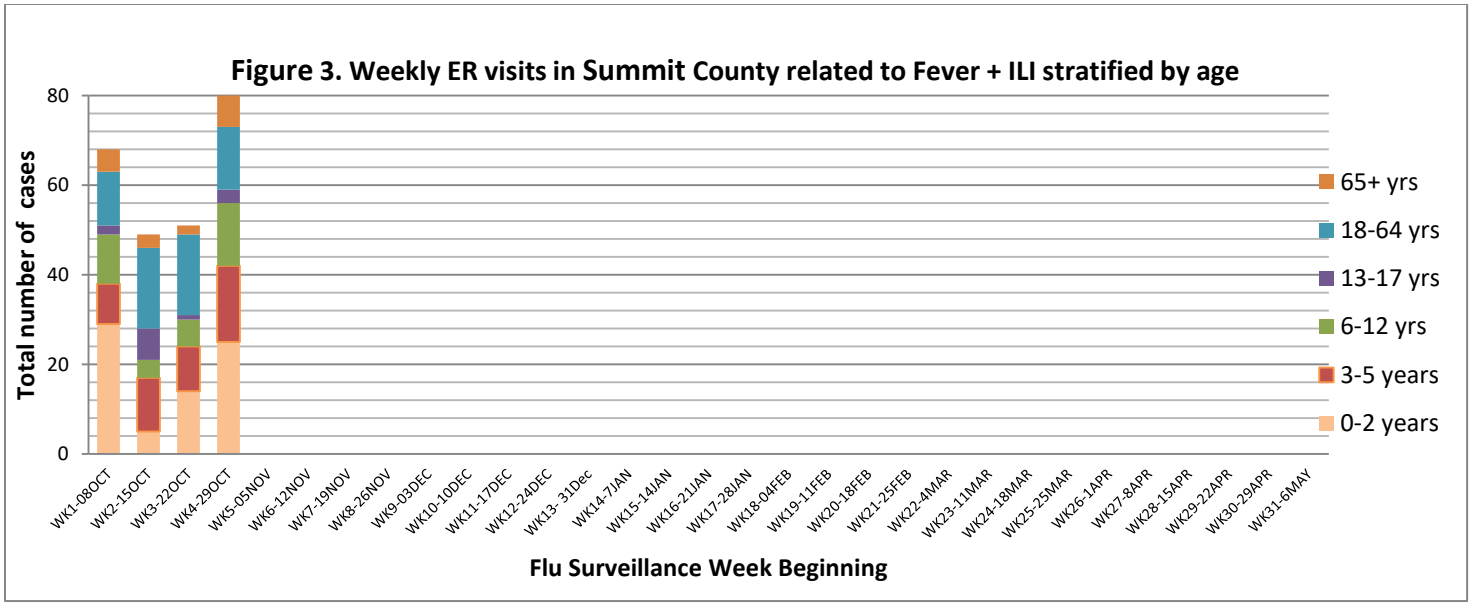
Lab reports: During weeks 3&4 of influenza surveillance, Summit County labs performed 277 tests, of which 5 tested positive for influenza A & 2 for Influenza B. See **Figure 4.**

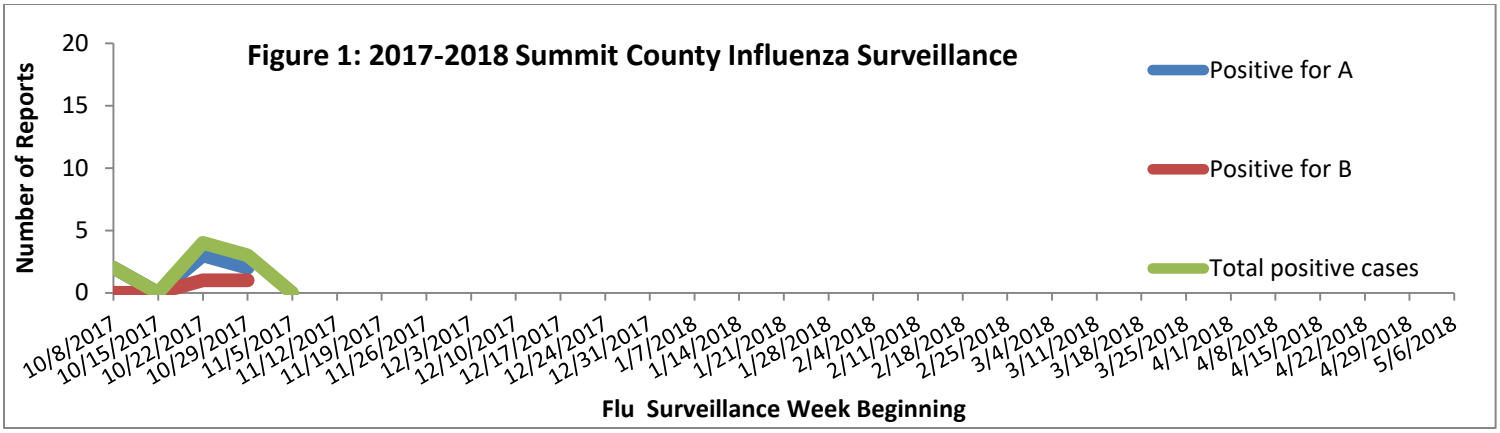


Influenza-associated hospitalization: Summit County hospitals reported 4 influenza-associated hospitalizations in WK 3 and 3 hospitalizations during week 4. **Figure 2** displays weekly confirmed hospitalization count for Summit County (**cumulative count to date = 11**).



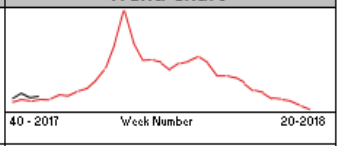
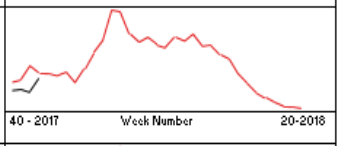
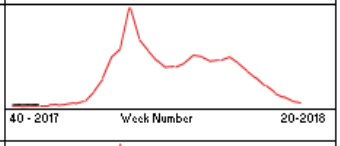
EpiCenter collects and analyzes health related data in real time to provide information about the health of the community. This system tracks ER visits related to constitutional complaints and fever and ILI. **Figures 3** displays the weekly number of ER visits related to ILI and flu symptoms in Summit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





Ohio Influenza Activity: from the Ohio Department of Health

During MMWR Week 43, 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 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 18 influenza-associated hospitalizations reported.

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)	0.74%	5.71%	↑ 1	
Thermometer Sales (National Retail Data Monitor)	1231	15.05%	↑ 1	
Fever and ILI Specified ED Visits (EpiCenter)	1.66%	7.79%	↑ 3	
Constitutional ED Visits (EpiCenter)	8.23%	2.75%	↑ 3	
Confirmed Influenza-associated Hospitalizations (Ohio Disease Reporting System)	18	12.50%	↑ 3	
Outpatient Medical Claims Data[4]	0.21%	-4.55%	↓ 1	

[1]Interpret percent changes with caution. Large variability may be exhibited in data sources with low weekly values.
[2]Number of weeks that the % change is increasing or decreasing.
[3]Black 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).
[4]Medical Claims Data provided by athenahealth®

**The seasonal threshold is 25 cases of influenza-associated hospitalizations; historical data demonstrate that once the weekly count exceeds 25 cases, the number of weekly cases thereafter will likely not decrease until after the peak of influenza activity for the season*

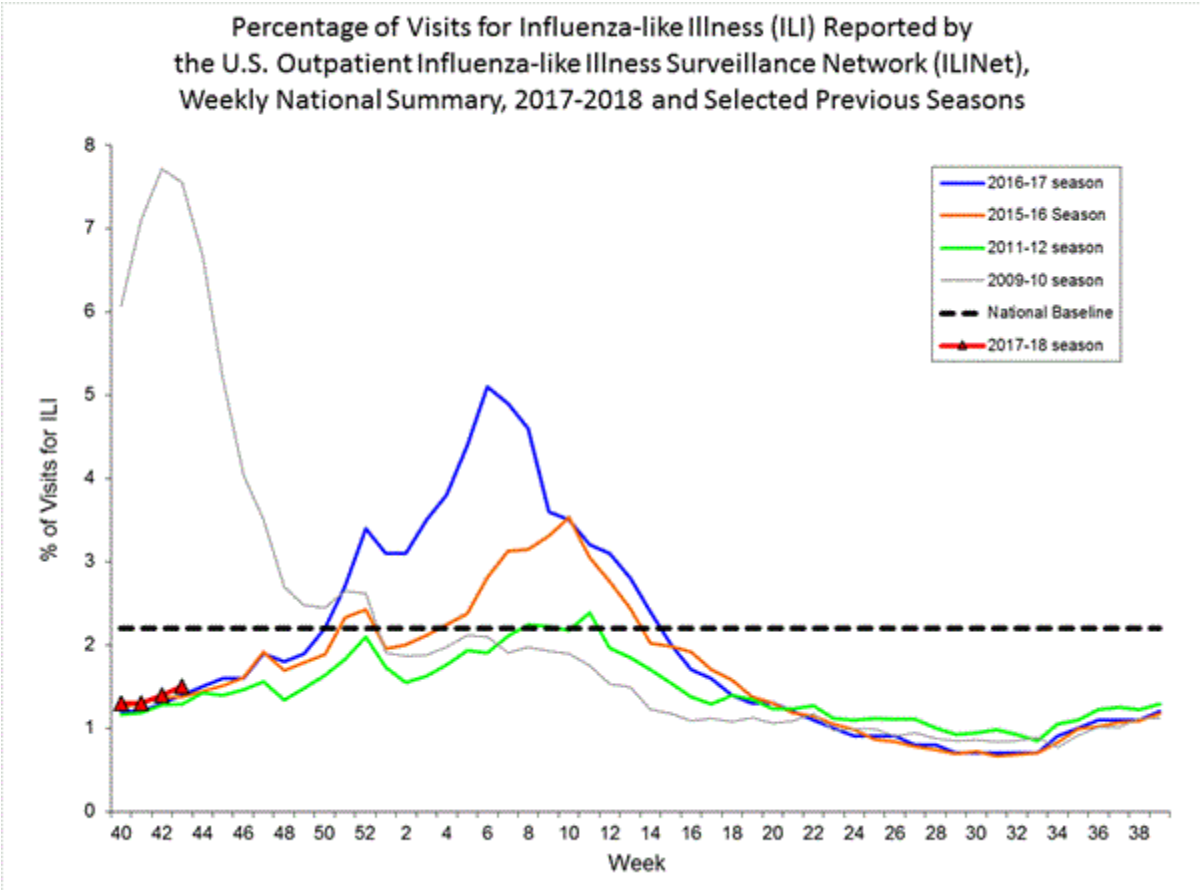
National Surveillance: from the Centers for Disease Control and Prevention (CDC):

Synopsis:

During week 43 (October 22-28, 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 43 was influenza A. The percentage of respiratory specimens testing positive for influenza in clinical laboratories is low.
- **Novel Influenza A Virus:** Three human infections with novel influenza A viruses were reported.
- **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.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 1.5%, which is below the national baseline of 2.2%. All 10 regions reported ILI below region-specific baseline levels. One state experienced moderate ILI activity, four states experienced low ILI activity, New York City and 45 states experienced minimal ILI activity, and the District of Columbia and Puerto Rico had insufficient data.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Guam and four states was reported as regional; Puerto Rico and 12 states reported local activity; the District of Columbia and 31 states reported sporadic activity; one state reported no activity; and the U.S. Virgin Islands and two states did not report.

Nationwide during week 43, 1.5% 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.)*

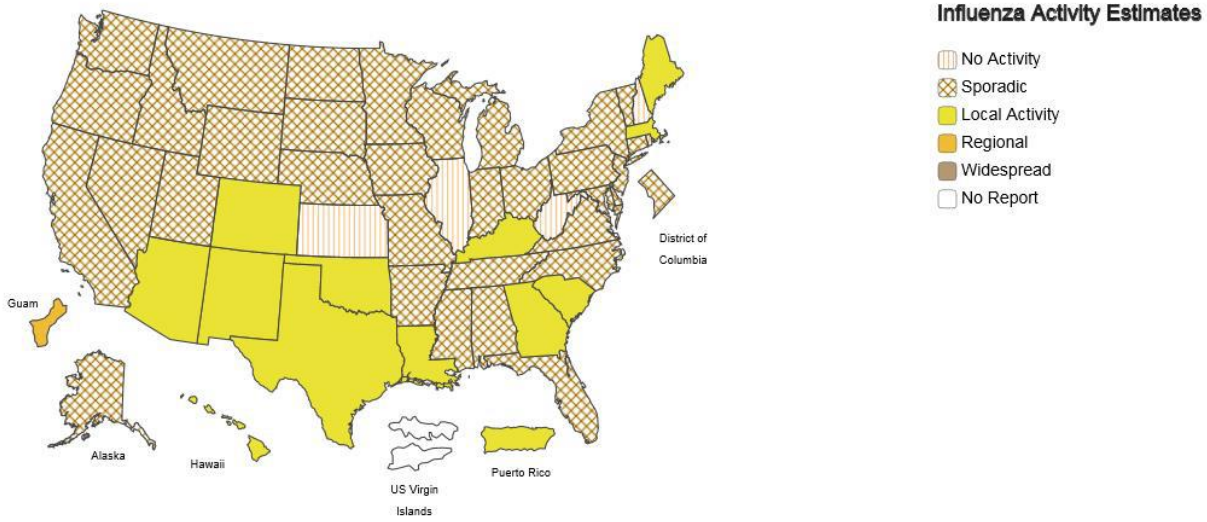


FLUVIEW

A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending Oct 21, 2017 - Week 42



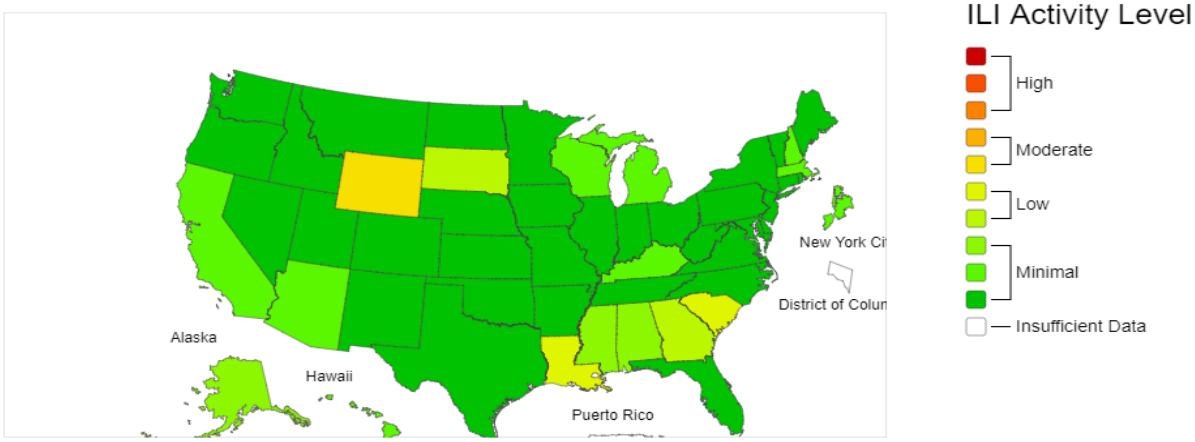
*This map indicates geographic spread and does not measure the severity of influenza activity.

FLUVIEW

A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet

2017-18 Influenza Season Week 43 ending Oct 28, 2017



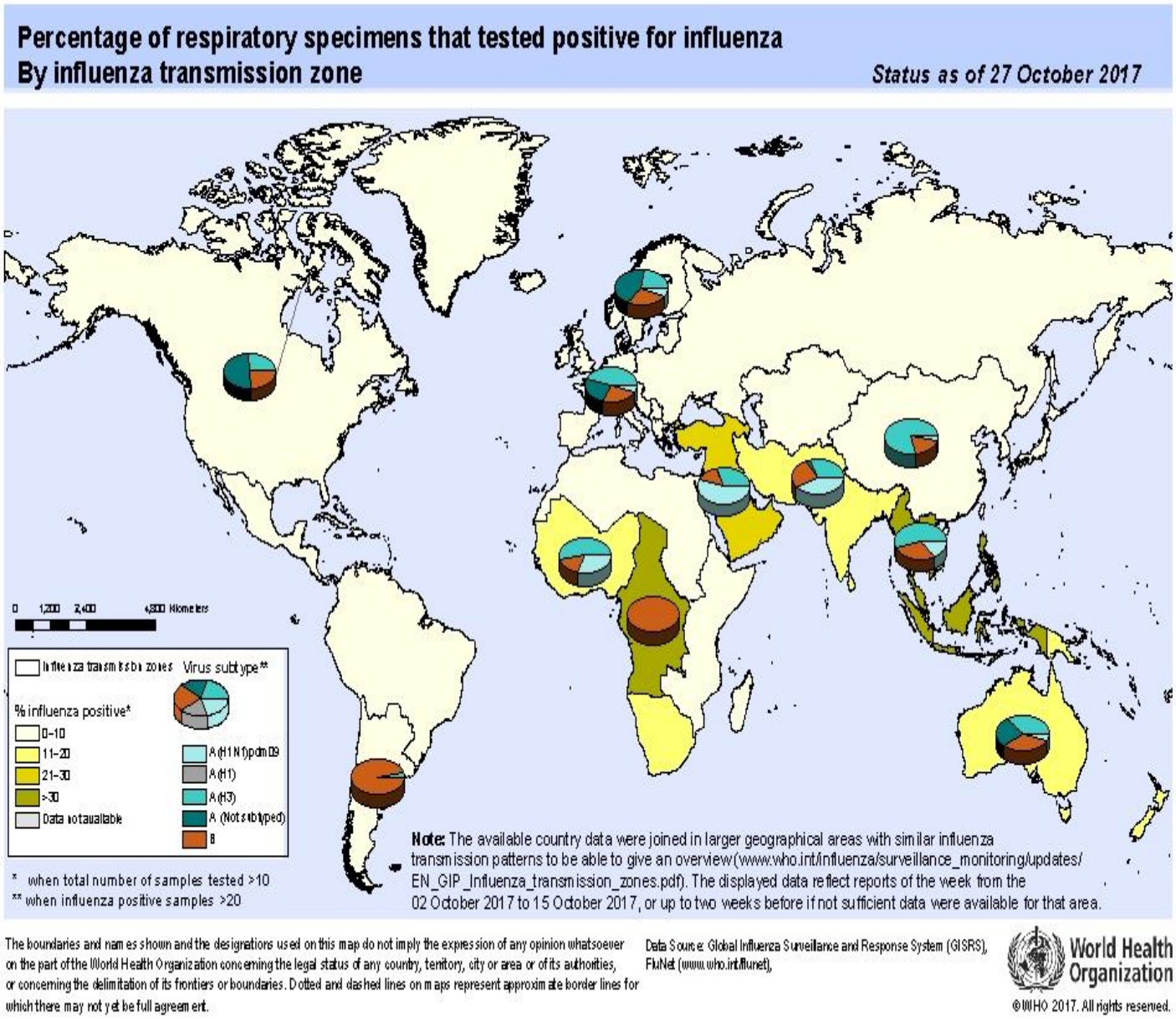
*This map uses the proportion of outpatient visits to healthcare providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the 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

The World Health Organization report is issued every two weeks. This report includes updates from the WHO Influenza Update N° 300, published on October 30, 2017, based on data up to October 15, 2017.

Summary

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. Influenza activity remained at low levels in the temperate zone of the northern hemisphere. Worldwide, influenza A(H3N2) and B viruses accounted for the majority of influenza detections.



Cold Versus Flu ?

What is the difference between a cold and the flu?

The flu and the common cold are both respiratory illnesses but they are caused by different viruses. Because these two types of illnesses have similar symptoms, it can be difficult to tell the difference between them based on symptoms alone. In general, the flu is worse than the common cold, and symptoms are more common and intense. Colds are usually milder than the flu. People with colds are more likely to have a runny or stuffy nose. Colds generally do not result in serious health problems, such as pneumonia, bacterial infections, or hospitalizations. Flu can have very serious associated complications.

How can you tell the difference between a cold and the flu?

Because colds and flu share many symptoms, it can be difficult (or even impossible) to tell the difference between them based on symptoms alone. Special tests that usually must be done within the first few days of illness can tell if a person has the flu.

What are the symptoms of the flu versus the symptoms of a cold?

The symptoms of flu can include fever or feeling feverish/chills, cough, sore throat, runny or stuffy nose, muscle or body aches, headaches and fatigue (tiredness). Cold symptoms are usually milder than the symptoms of flu. People with colds are more likely to have a runny or stuffy nose. Colds generally do not result in serious health problems.

What is the best way to prevent getting the Flu?

The best way to prevent seasonal flu is to get vaccinated every year.

Reference: ***https://www.cdc.gov/flu/about/qa/coldflu.htm***

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).*
Many 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 November 8, 2017.