



**Summit County Public Health
Influenza Surveillance Report
2017 – 2018 Season
Report #4**



**Flu Surveillance Weeks 7 & 8 (Beginning 11/19/2017 through 12/02/2017)
Centers for Disease Control and Prevention MMWR Weeks 47 & 48**

Summit County Surveillance Data:

In **Weeks 7&8** of influenza surveillance, influenza-related activity has slightly increased in Summit County.

Table 1: Overall Influenza Activity Indicators in Summit County by Week				
	Week 47 N (%)*	Week 48 N (%)*	Percent change from previous week	Number of weeks increasing or decreasing
Lab Reports				
Total Test Performed	345	310~		
Positive Tests (Number and %)	18 (5.2)	18 (5.8)		--
Influenza A (Number and %)	15(4.3)	15 (4.8)		-
Influenza B (Number and %)	3(0.8)	3(0.9)	-	-
Acute care hospitalization for Influenza:	5	8	↑60	↑1
Influenza ILI Community Report:				
Long-term Care ILI	0	0	--	--
Correctional & Addiction Facility	0	0	--	--
Physician Offices & University Clinic	0	1		↑1
Pharmacy Prescriptions				
Amantidine	2	0	↓100	↓1
Rimantidine Flumadine	0	0	--	--
Relenza	0	0	--	--
Oseltamivir Tamiflu	1	5	↑500	-
<i>Total</i>	3	5	↑66.7	↑1
Schools** 7 Schools reporting	530 (7.4)	1293(18.1.)	↑143.9	↑3
Deaths (Total)				
Pneumonia associated	2 (2.4)	5(3.3)	↑150	↑1
Influenza associated	0	0	--	--
Emergency room visits (Epi Center)***				
Constitutional Complaints	545 (9.3)	565 (8.8)	↑3.7	↑1
Fever and ILI	106(1.8)	123 (1.9)	↑16.04	↑1
* N and % are reported when available				
**Percent is from total number of students enrolled between all schools. WK 7 (7145) and WK 8 (n=7137) (All reporting)				
***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.)				
~ Incomplete Lab Reporting week of 11/26/2017				

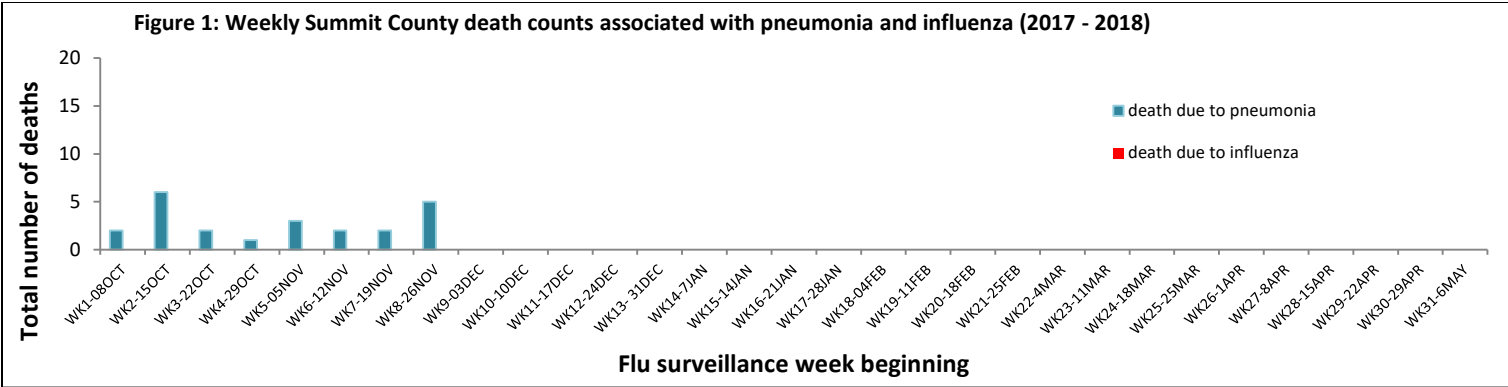
Zero deaths related to influenza were reported during WK 7 & 8, however there were 7 total deaths associated with pneumonia. **Figure 1** displays weekly Summit County death counts associated with pneumonia and influenza.

Acute Care Hospitalizations: 5 reported influenza associated hospitalizations during week7, and 8 in week 8. **Figure 2** displays Influenza Associated Hospitalizations in Summit County.

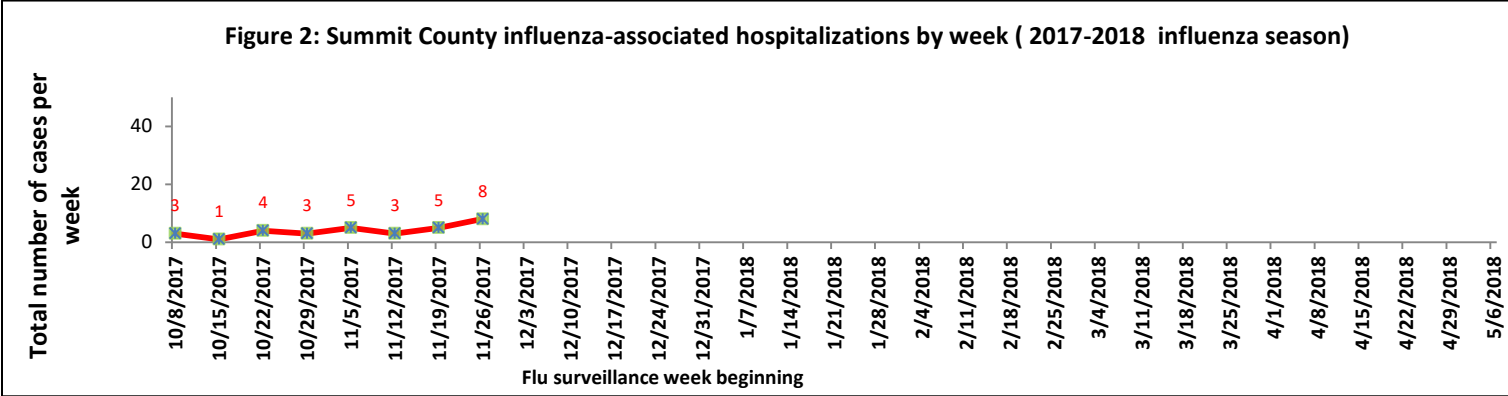
COMMUNITY ILI REPORTS: Influenza like Illness (ILI) as defined by the CDC is fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat without a known cause other than influenza. Community ILI reports:
Long Term Care Facilities: There were 0 cases ILI reported from Long Term Care facilities .**Correctional and Addiction facility:** Zero cases ILI reported **Physician Office and University Clinic:** During week7, 0 cases of ILI were reported and Week 8 reported 1 cases.

Pharmacy: Two prescription for Amantidine were reported during week 7; 0 prescriptions for week 8, as well as 6 prescriptions for Oseltamivir Tamiflu. **School absenteeism** includes absences regardless of reason. In WK7, there were 530 absences and in WK 8 there were 1293. That is a 143.9% change from week 7, however most schools were only in session for 3 days of week 7 due to Thanksgiving holiday.

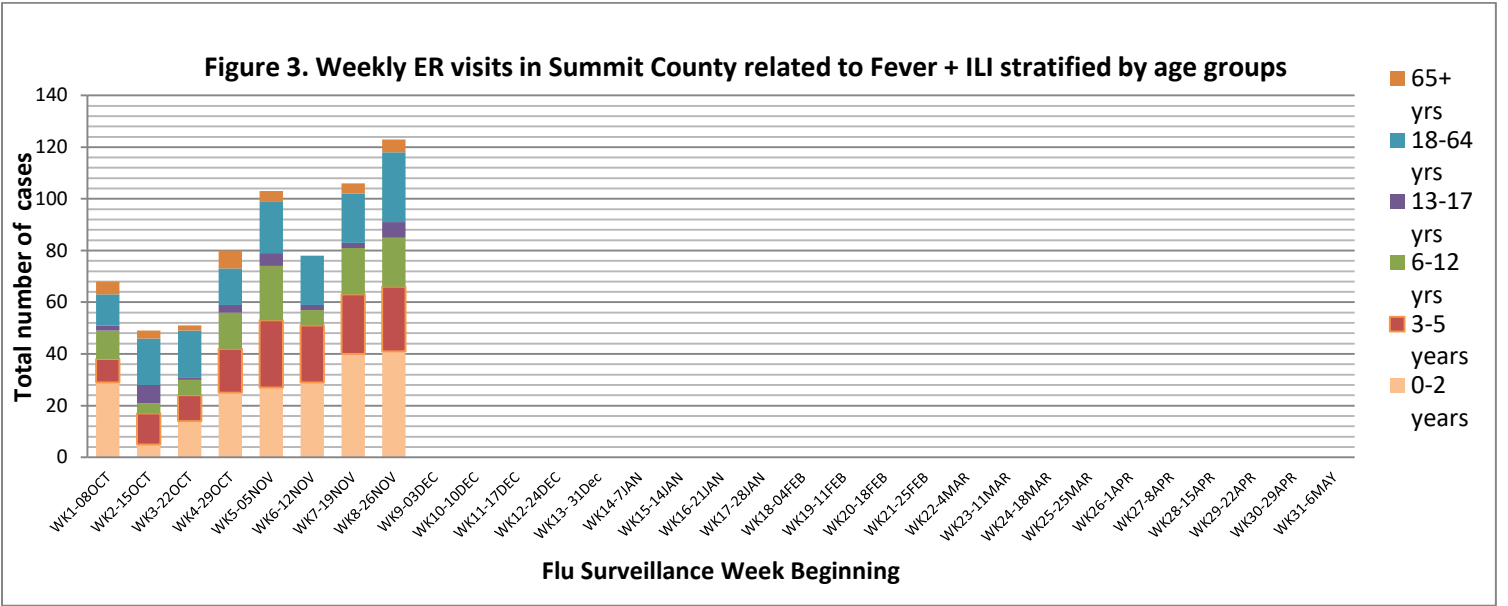
Lab reports: During weeks 7&8 of influenza surveillance, Summit County labs performed 655 tests, of which 30 tested positive for influenza A & 6 for Influenza B. The lab data for WK 8 is incomplete. See **Figure 4**.

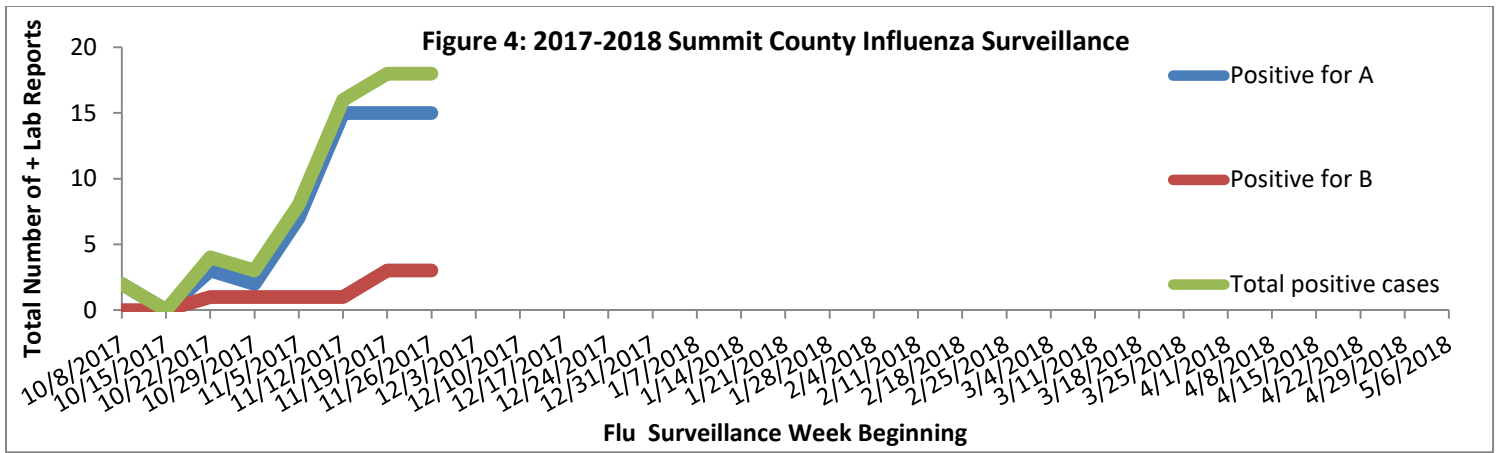


Influenza-associated hospitalization: Summit County hospitals reported 5 influenza-associated hospitalizations in WK 7 and 8 hospitalizations during week 8. **Figure 2** displays weekly confirmed hospitalization count for Summit County (cumulative count to date = 32).



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 47, 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 above the seasonal threshold*. There were 35 influenza-associated hospitalizations reported.

Ohio Influenza Activity Summary Dashboard:

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)	1.01%	-10.62%	↓ 2	
Thermometer Sales (National Retail Data Monitor)	1285	-11.87%	↓ 2	
Fever and ILI Specified ED Visits (EpiCenter)	1.92%	9.71%	↑ 7	
Constitutional ED Visits (EpiCenter)	8.89%	1.02%	↑ 2	
Confirmed Influenza-associated Hospitalizations (Ohio Disease Reporting System)	35	9.38%	↑ 2	
Outpatient Medical Claims Data⁴	0.25%	0.00%	-	

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):

According to this week's FluView report, seasonal influenza activity increased in the United States. The proportion of people seeing their health care provider for influenza-like-illness (ILI) is above the national baseline for the first time this season. Influenza A(H3N2) viruses were most commonly reported during week 47 (the week ending November 25, 2017) and have been the predominant virus so far this season. Several flu activity indicators were higher than is typically seen for this time of year. Four states reported widespread flu activity, ten states reported regional flu activity and 24 states reported local influenza activity. Flu vaccine is the best available way to protect against influenza. CDC recommends that everyone 6 months and older get an injectable flu vaccine as soon as possible. Below is a summary of the key flu indicators for the week ending November 25, 2017:

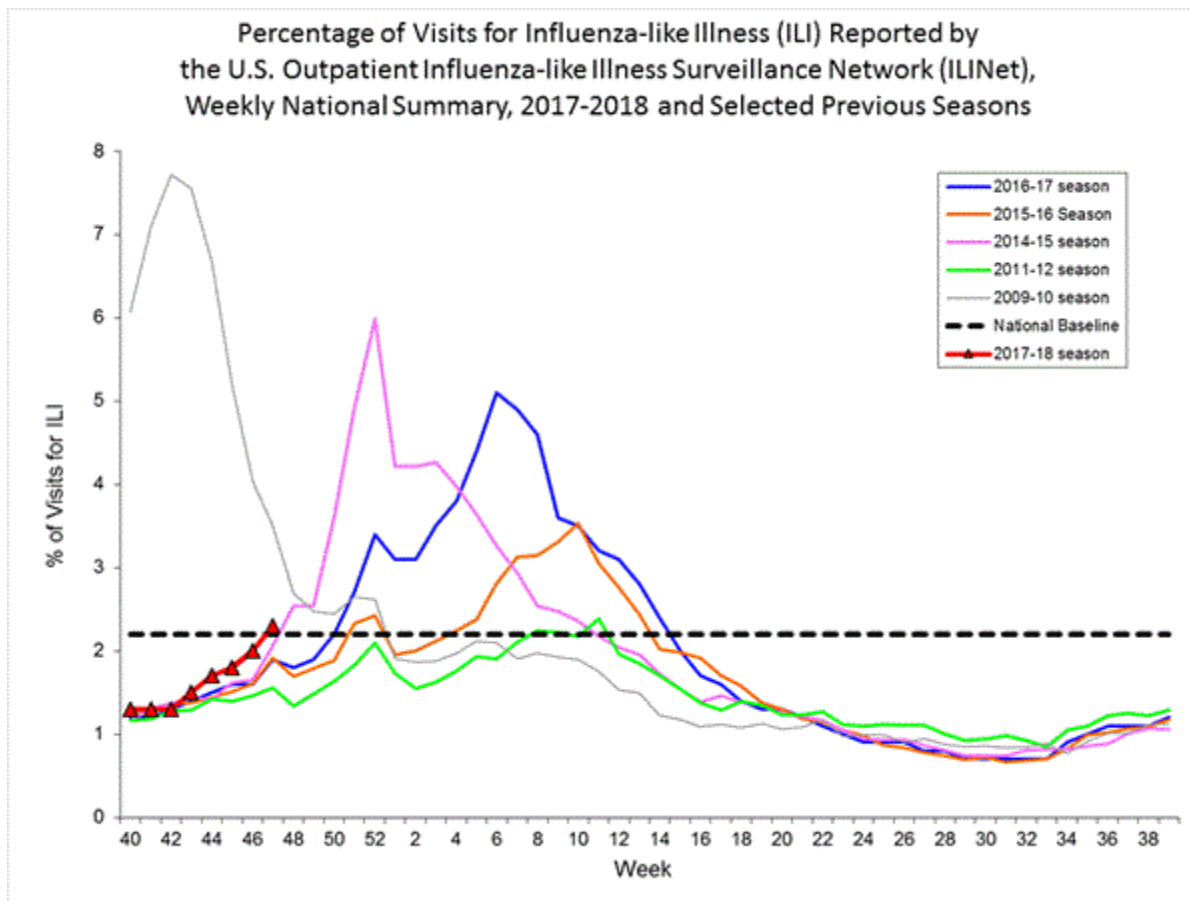
Three states experienced high ILI activity (Louisiana, Mississippi, and South Carolina).

One state experienced moderate ILI activity (Georgia).

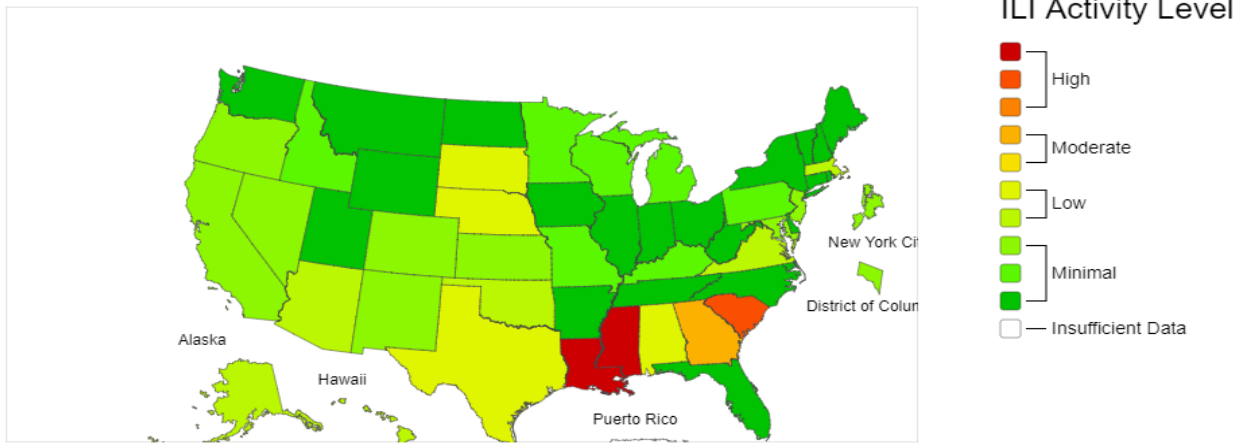
Ten states (Alabama, Alaska, Arizona, Hawaii, Massachusetts, Nebraska, Oklahoma, South Dakota, Texas, and Virginia) experienced low ILI activity.

The District of Columbia, New York City, and 36 states experienced minimal ILI activity (Arkansas, California, Colorado, Connecticut, Delaware, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Michigan, Minnesota, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, Tennessee, Utah, Vermont, Washington, West Virginia, Wisconsin and Wyoming).

Data was insufficient to calculate an ILI activity level from Puerto Rico.



2017-18 Influenza Season Week 47 ending Nov 25, 2017

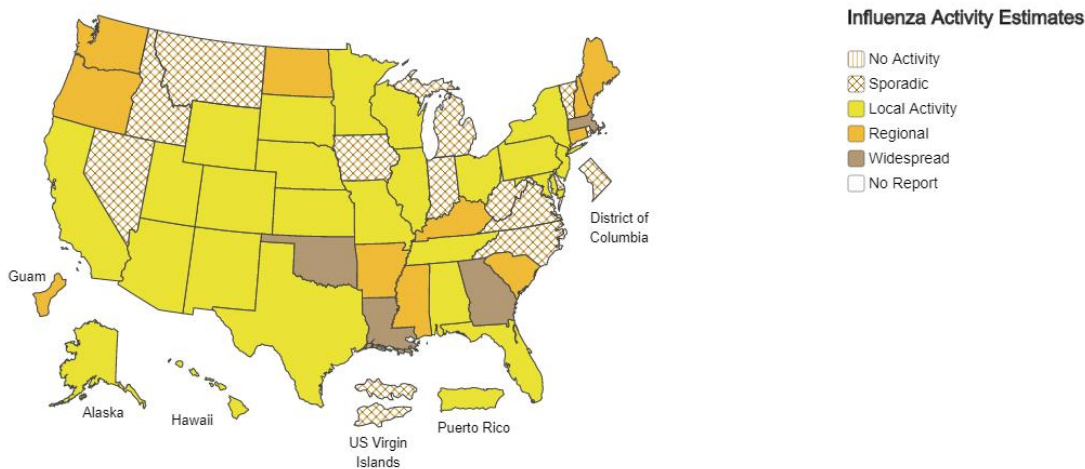


*This map uses the proportion of outpatient visits to healthcare providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the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

A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending Nov 25, 2017 - Week 47

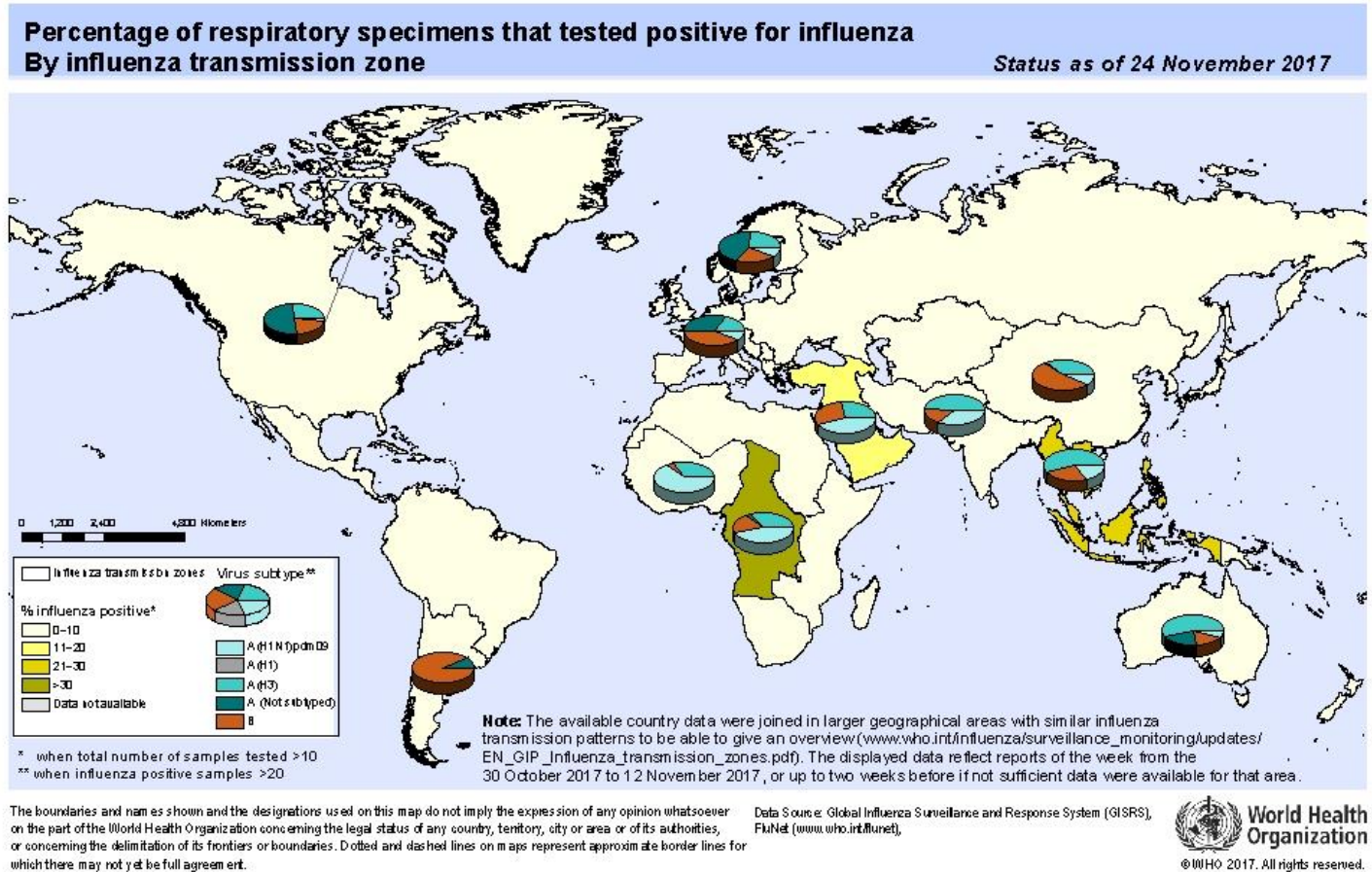


*This map indicates geographic spread and does not measure the severity of influenza activity.

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 November 13, 2017, based on data up to November 24, 2017.

Influenza activity increased slightly in the temperate zone of the northern hemisphere while in the temperate zone of the southern hemisphere activity appeared to have decreased at inter-seasonal levels. In Central America and the Caribbean, influenza activity remained low. Worldwide, influenza A(H3N2) and B viruses accounted for the majority of influenza detections.



December 3-9 is National Influenza Vaccination Week. If you haven't gotten your flu vaccine yet, now's the time! An annual flu vaccine is the first and best way to protect against flu.

The Centers for Disease Control and Prevention (CDC) recommends a yearly flu vaccination as the first and most important step in protecting against flu and its potentially serious complications. Millions of people have safely received flu vaccines for decades. Flu vaccination can reduce flu illnesses, doctors' visits, and missed work and school due to flu, as well as prevent flu-related hospitalizations.

Reasons to get a flu vaccine:

Flu vaccination can keep you from getting sick from flu.

Flu vaccination can reduce the risk of flu-associated hospitalization, including among children and older adults. A 2014 study showed that flu vaccine reduced children's risk of flu-related pediatric intensive care unit (PICU) admission by 74% during flu seasons from 2010-2012

Another study published in the summer of 2016 showed that people 50 years and older who got a flu vaccine reduced their risk of getting hospitalized from flu by 57%.

Flu vaccination is an important preventive tool for people with chronic health conditions. A 2013 study showed flu vaccination was associated with lower rates of some cardiac events among people with heart disease, especially among those who had a cardiac event in the past year.

Flu vaccination also has been shown to be associated with reduced hospitalizations among people with diabetes (79%) and chronic lung disease (52%).

Vaccination helps protect women during and after pregnancy. Getting vaccinated also protects the baby several months after birth. A study that looked at flu vaccine effectiveness in pregnant women found that vaccination reduced the risk of flu-associated acute respiratory infection by about one half.

There are studies that show that flu vaccination in a pregnant woman can reduce the risk of flu illness in her baby by up to half. This protective benefit was observed for several months after birth.

A 2017 study was the first of its kind to show that flu vaccination can significantly reduce a child's risk of dying from influenza.

Flu vaccination also may make your illness milder if you do get sick. Getting vaccinated yourself also protects people around you, including those who are more vulnerable to serious flu illness, like babies and young children, older people, and people with certain chronic health conditions.

The following is a list of all the health and age factors that are known to increase a person's risk of getting serious complications from the flu:

Asthma

Blood disorders (such as sickle cell disease)

Chronic lung disease (such as chronic obstructive pulmonary disease [COPD] and cystic fibrosis)

Endocrine disorders (such as diabetes mellitus)

Extreme obesity (people with a body mass index [BMI] of 40 or greater)

Heart disease (such as congenital heart disease, congestive heart failure and coronary artery disease)

Kidney disorders

Liver disorders

Metabolic disorders (such as inherited metabolic disorders and mitochondrial disorders)

It is especially important that people with these risk factors get a flu vaccine and seek medical treatment quickly if they get flu symptoms.

Reference: <https://www.cdc.gov/flu/about/qa/misconceptions.htm>

About this report: Reporting agencies include labs, hospitals, long-term care and community-based care providers, physician offices, university clinic, correctional facility, 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 December 7, 2017.