



**Summit County Public Health  
Influenza Surveillance Report  
2017 – 2018 Season  
Report #10**



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

**Flu Surveillance Weeks 19 & 20 (Beginning 2/11/2018 through 2/24/2018)  
Centers for Disease Control and Prevention MMWR Weeks 7 & 8**

**Summit County Surveillance Data:**

In **Weeks 19 & 20** of influenza surveillance, influenza-related activity has slightly decreased in Summit County.

<b>Table 1: Overall Influenza Activity Indicators in Summit County by Week</b>				
	<b>Week 7 N (%)*</b>	<b>Week 8 N (%)*</b>	<b>Percent change from previous week</b>	<b>Number of weeks increasing or decreasing</b>
<b>Lab Reports</b>				
Total Test Performed	1378	1112	19.3	↓1
Positive Tests (Number and %)	417 (30.3)	345 (31.0)	-17.3	↓4
Influenza A (Number and %)	234 (17.0)	161 (14.5)	-31.2	↓4
Influenza B (Number and %)	183 (13.3)	184 (16.5)	0.5	↑8
<b>Acute care hospitalization for Influenza:</b>	81	64	-21.0	↓1
<b>Influenza ILI Community Report:</b>				
Long-term Care ILI	5	2	-60.0	↓1
Correctional & Addiction Facility	0	0	NC	--
Physician Offices & University Clinic	24	15	-37.5	↓1
<b>Pharmacy Prescriptions</b>				
Amantidine	5	2	--	--
Rimantidine Flumadine	0	0	--	--
Relenza	0	0	--	--
Oseltamivir Tamiflu	65	61	-6.2	↓3
<i>Total</i>	<b>70</b>	<b>63</b>	-10.0	↓3
<b>School Absenteeism (%)**</b>	22.1	20.1	-9.0	↓1
<b>Deaths (Total)</b>	124	133		
Pneumonia associated	9 (7.3)	9 (6.8)	NC	--
Influenza associated	2 (1.6)	0 (0.0)	-100.0	↓1
<b>Emergency room visits (Epi Center)***</b>	6484	6215		
Constitutional Complaints	967 (14.9)	816 (13.1)	-15.6	↓1
Fever and ILI	183 (2.8)	127 (2.0)	-30.7	↓1
* N and % are reported when available				
**Percent is from total number of students enrolled at all schools reporting, and also accounts for weeks less than 5 days. Seven schools located throughout Summit County, with a total enrollment of approximately 7100 students, report absences.				
***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.				
º 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.)				

There were two influenza-associated deaths reported in Week 19 and none in week 20. **Figure 1** displays weekly Summit County death counts associated with pneumonia and influenza. There have been 28 influenza deaths this season, one of which was a pediatric death.

**Acute Care Hospitalizations: 81** reported influenza associated hospitalizations during Week 19, and **64** in Week 20. **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.

**Long Term Care Facilities:** There was a total of 7 cases of ILI reported from Long Term Care facilities in Weeks 19 & 20.

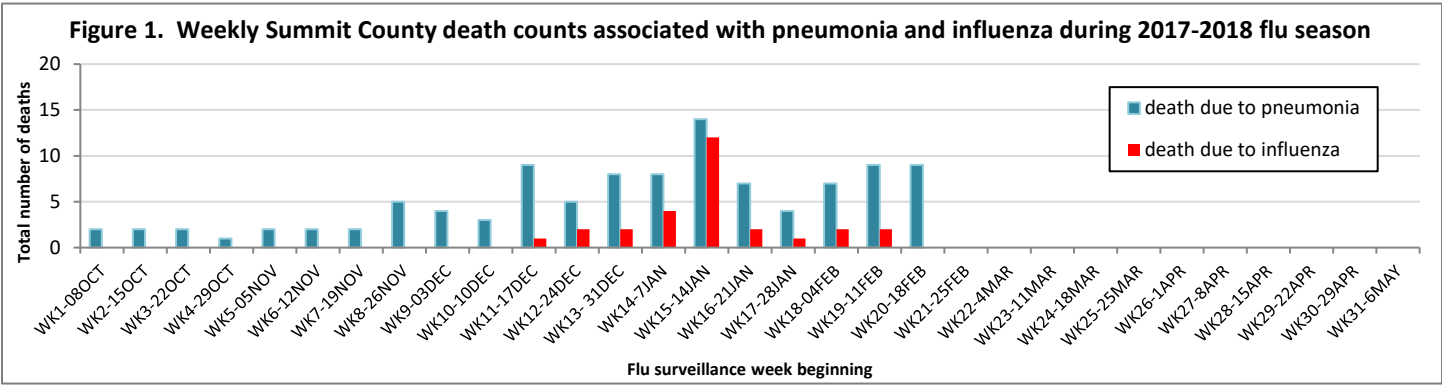
**Correctional and Addiction facility:** There were no cases of ILI reported in Weeks 19 and 20.

**Physician Office and University Clinic:** During Week 19, 24 cases of ILI were reported and Week 20 reported 15 cases.

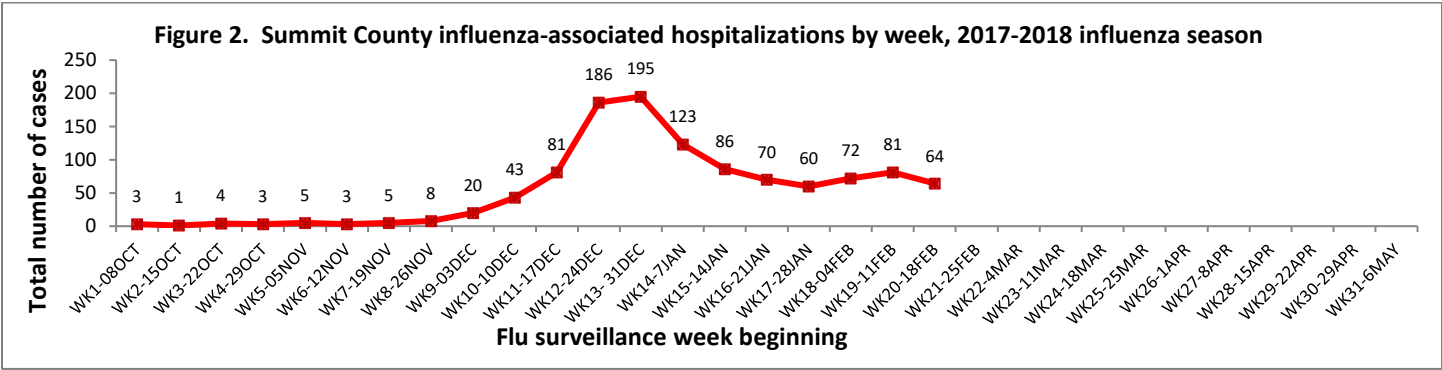
**Pharmacy:** Amantadine was prescribed 5 times in Week 19 and 2 times in Week 20. Tamiflu was prescribed 65 times in Week 20 and 61 times in Week 20.

**School absenteeism** includes absences regardless of reason. In Week 19, there was an absence rate of 22.1% and in Week 20 the absence rate was 20.1%.

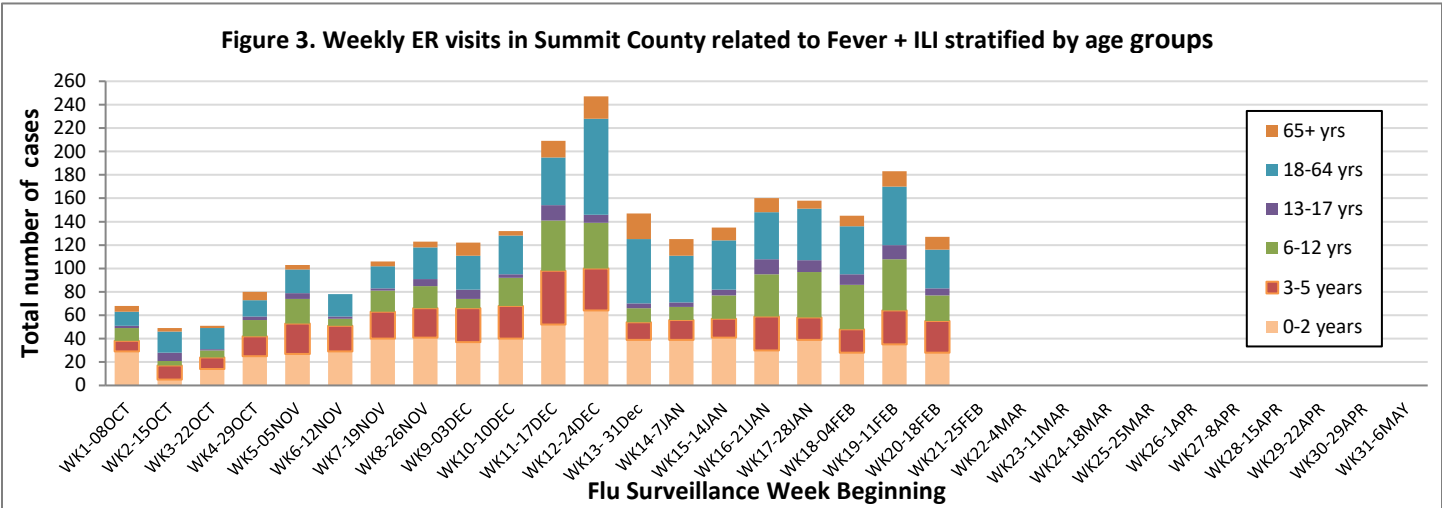
**Lab reports:** During Week 19, Summit County labs performed 1378 tests, of which 234 tested positive for influenza A and 183 for Influenza B. For Week 20, there were 1112 total tests: 161 Type A and 184 Type B. (**Figure 4**)



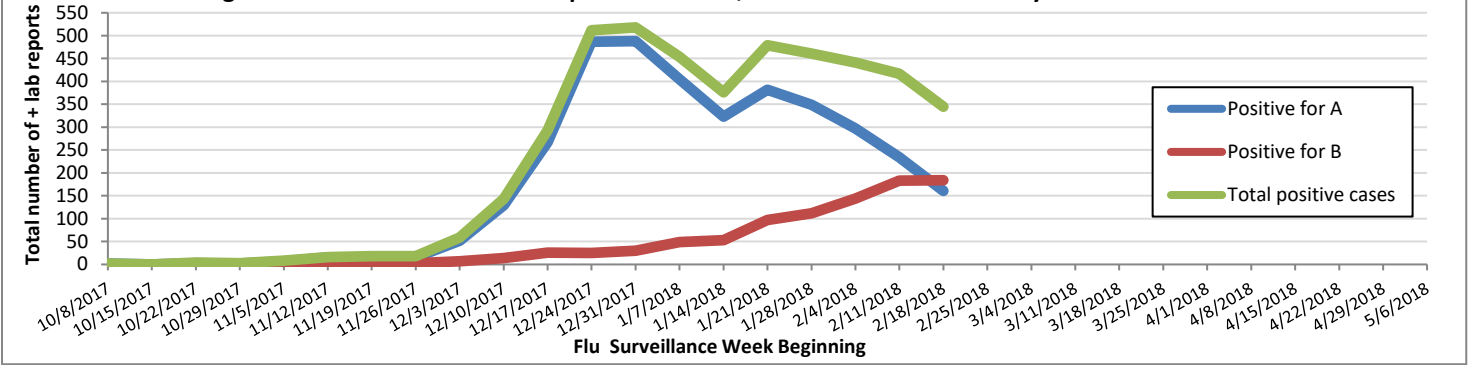
**Influenza-associated hospitalization:** Summit County hospitals reported 81 influenza-associated hospitalizations in Week 19 and 64 hospitalizations during Week 20. **Figure 2** displays weekly confirmed hospitalization count for Summit County (**cumulative count to date = 1113**).



**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, stratified by age group. During weeks 19, adults (18-64), children (6-12), and infants (0-2) and during week 20, adults (18-64) and children (0-12 years) had the most visits related to ILI.



**Figure 4: Influenza lab tests with positive results, 2017-2018 Summit County Influenza Surveillance**



**Ohio Influenza Activity: From the Ohio Department of Health:**

**Current Influenza Activity (for MMWR Week 8, February 18 – February 24, 2018):**

**Current Ohio Activity Level (Geographic Spread) – *Widespread*** Definition: Increased ILI in at least half of the regions AND recent (within the past 3 weeks) lab confirmed influenza in the state.

**Ohio Influenza Activity Summary Dashboard:**

Data Source	Current week value	Percent Change from last week <sup>1</sup>	# of weeks <sup>2</sup>	Trend Chart <sup>3</sup>
Influenza-like Illness (ILI) Outpatient Data (ILINet Sentinel Provider Visits)	3.18%	-16.75%	↓ 2	
Thermometer Sales (National Retail Data Monitor)	2725	-21.38%	↓ 3	
Fever and ILI Specified ED Visits (EpiCenter)	3.14%	-20.30%	↓ 3	
Constitutional ED Visits (EpiCenter)	14.71%	-13.22%	↓ 3	
Confirmed Influenza-associated Hospitalizations (Ohio Disease Reporting System)	1059	-6.70%	↓ 1	
Outpatient Medical Claims Data <sup>4</sup>	2.38%	-29.38%	↓ 2	

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

<sup>2</sup>Number of weeks that the % change is increasing or decreasing.

<sup>3</sup>Black lines represent current week's data; red lines represent baseline averages

<sup>4</sup>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):

During MMWR Week 8 (February 18-February 24, 2018), influenza activity decreased in the United States.

- **Viral Surveillance:** While influenza A(H3) viruses continue to be predominant this season, during week 8 the overall proportion of influenza A viruses is declining and the proportion of influenza B viruses is increasing. The percentage of respiratory specimens testing positive for influenza in clinical laboratories decreased.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was above the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- **Influenza-associated Pediatric Deaths:** Seventeen influenza-associated pediatric deaths were reported.
- **Influenza-associated Hospitalizations:** A cumulative rate of 81.7 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported.
- **Outpatient Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) was 5.0%, which is above the national baseline of 2.2%. All 10 regions reported ILI at or above region-specific baseline levels. New York City, the District of Columbia, and 32 states experienced high ILI activity; Puerto Rico and nine states experienced moderate ILI activity; six states experienced low ILI activity; and three states experienced minimal ILI activity.
- **Geographic Spread of Influenza:** The geographic spread of influenza in Puerto Rico and 45 states was reported as widespread; Guam and two states reported regional activity; the District of Columbia and three states reported local activity; and the U.S. Virgin Islands reported no activity.

**Figure 5. Percentage of visits for influenza-like illness (ILI) reported by the U.S. Outpatient Influenza-like Surveillance Network (ILINet), weekly national summary, 2017-2018 and selected previous seasons**

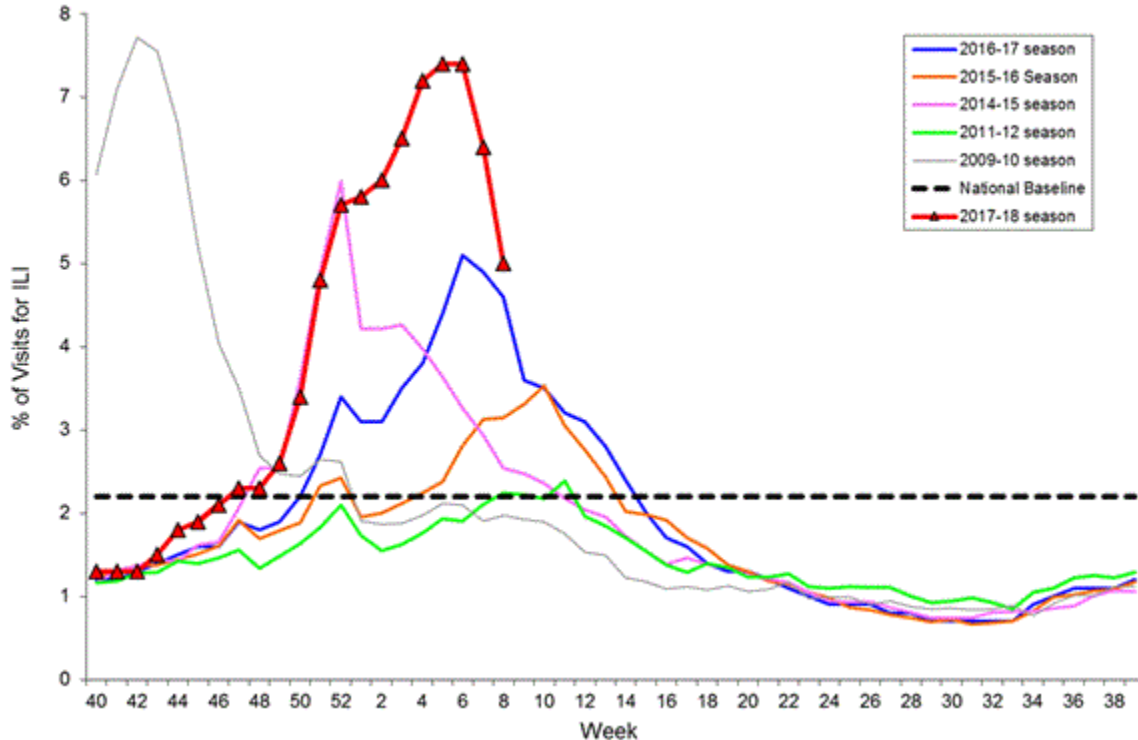


Figure 6. Influenza-like illness (ILI) activity level indicator determined by data reported to ILINet

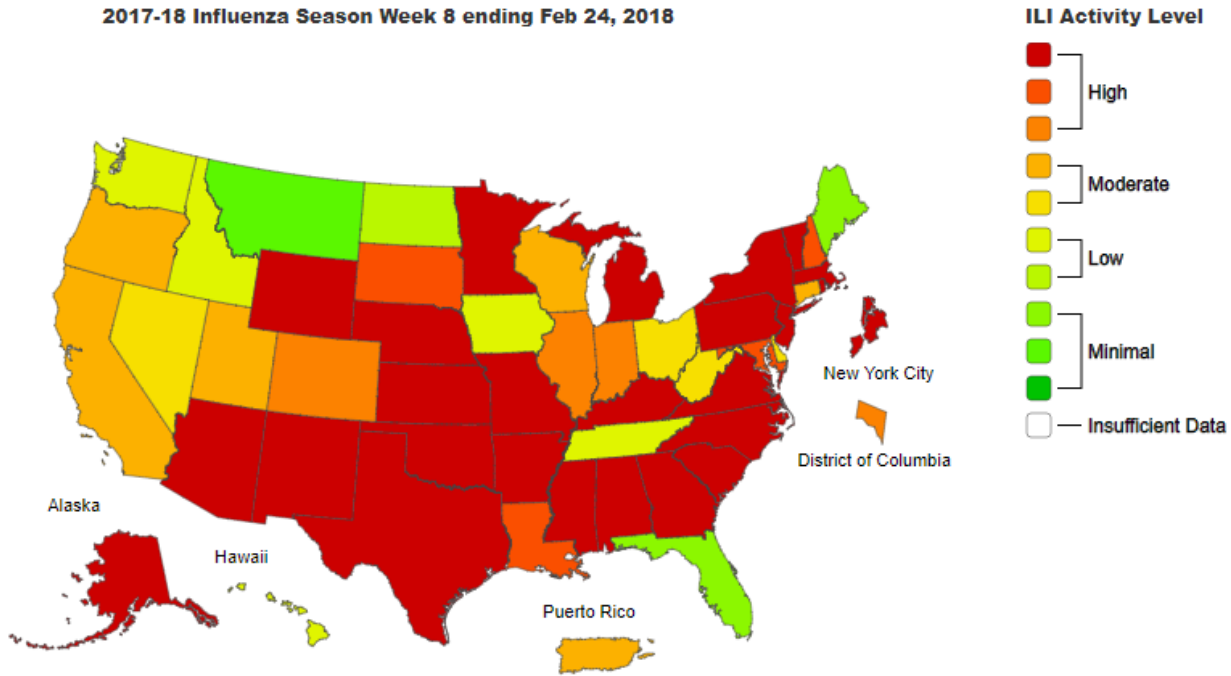
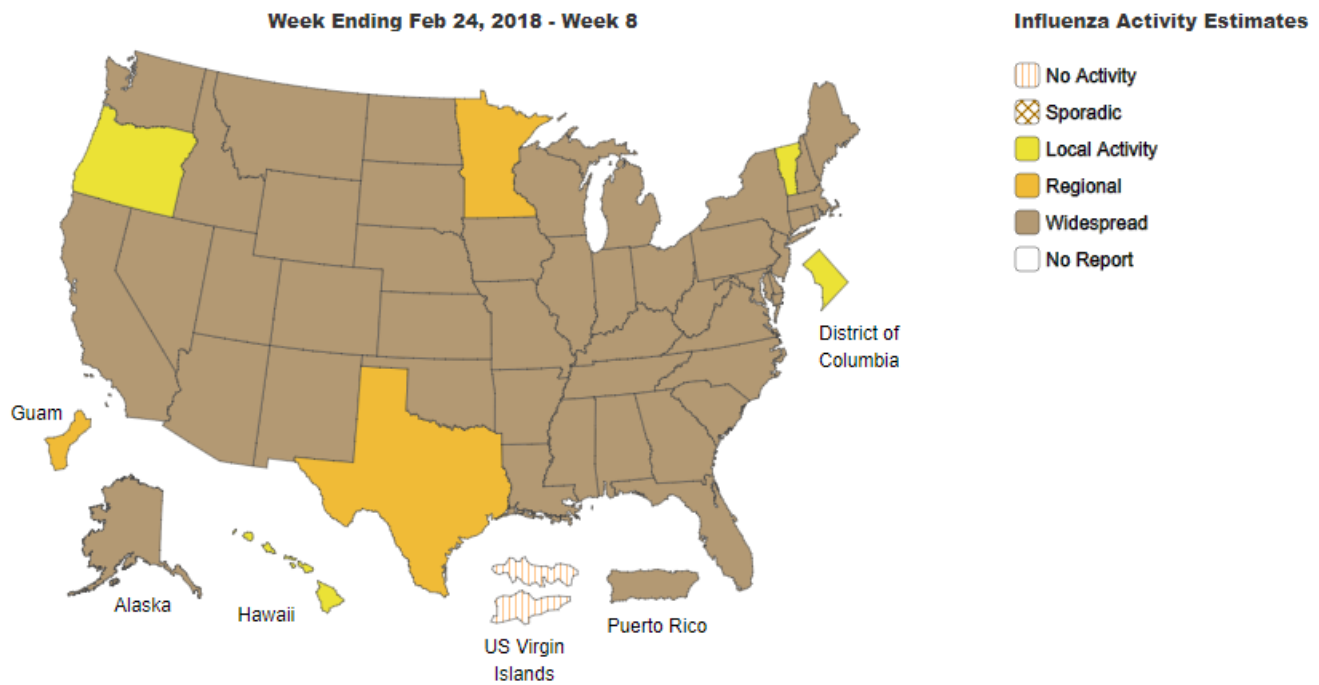


Figure 7. Weekly influenza activity (geographic spread) estimates reported by state and territorial epidemiologists



Reference: <https://www.cdc.gov/flu/weekly/fluactivitysurv.htm>

# Global Surveillance:

Influenza Update N° 309, World Health Organization (WHO), released 2/19/2018:

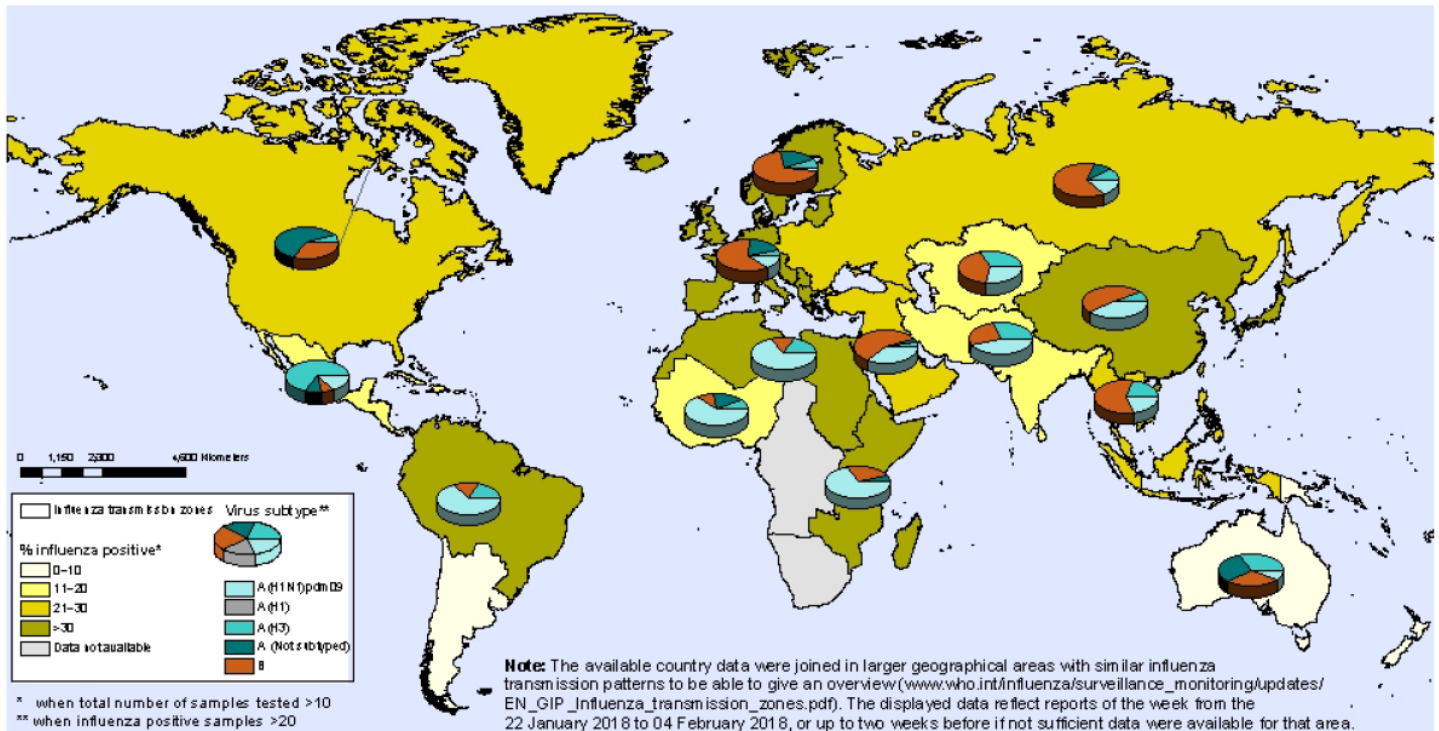
Influenza activity remained high in the temperate zone of the northern hemisphere while in the temperate zone of the southern hemisphere activity was at inter-seasonal levels. Worldwide, influenza A accounted still for the majority of influenza detections but influenza B (mostly B-Yamagata lineage) increased in recent weeks.

Up to now, the majority of countries which are in the influenza season, reported influenza- like illness reaching moderate levels in comparison with previous years, with few reaching levels exceeding those of previous years. Some countries however have reported levels of hospitalization and ICU admissions reaching or exceeding peak levels of previous influenza seasons. WHO recommends countries with current influenza activity or entering their season to adopt necessary measures for ensuring appropriate case management, compliance with infection control measures and seasonal influenza vaccination for high risk groups.

- In North America, overall influenza activity remained high. Equal proportions of types A(H3N2) and B were detected in Canada and the United States, while influenza A(H3N2) virus was predominately detected in Mexico.
- In Europe, influenza activity remained high in most countries. Influenza B remained the virus most frequently detected, but all types were co-circulating in the region. ILI activity is still increasing in Eastern and Northern European countries, but appears to have peaked in Southwestern Europe.
- In most Caribbean and Central American countries, respiratory illness indicators and influenza activity remained low in general. Influenza activity increased in Puerto Rico, with types A (H3N2) and B co-circulating.
- In the tropical countries of South America, influenza activity and respiratory illness indicators were generally low, with exceptions of Ecuador and Colombia.

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

Status as of 16 February 2018



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](http://www.who.int/flu-net)).

Reference: [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/)

## Information from the Centers for Disease Control and Prevention regarding the 2017-2018 Flu Season:

### If You Get Sick

#### What happens in the body when someone has the flu?

Influenza viruses usually infect the respiratory tract (i.e., the airways of the nose, throat and lungs). As the infection increases, the body's immune system responds to fight the virus infection. This results in inflammation that can trigger respiratory symptoms such as cough and sore throat. The immune system response can also trigger fever and cause muscle or body aches. When infected persons cough, they can spread influenza viruses in respiratory droplets to someone next to them; persons can also become infected through contact with infectious secretions or contaminated surfaces. Most people who become sick will recover in a few days to less than two weeks, but some people may become more severely ill. Following flu infection, secondary ear and sinus infections can occur. For example, some people may develop pneumonia. This can happen to anyone, but may be more likely to happen to people who have certain chronic medical conditions, or in elderly persons.

#### What should I do if I get sick with the flu?

Most people with the flu have mild illness and do not need medical care or antiviral drugs. If you get sick with flu symptoms, in most cases, you should stay home and avoid contact with other people except to get medical care.

If, however, you have symptoms of flu and are in a high risk group, or are very sick or worried about your illness, contact your health care provider (doctor, physician assistant, etc.). There are drugs your doctor may prescribe for treating the flu called "antivirals." These drugs can make you better faster and also may prevent serious complications.

Antiviral drugs are prescription drugs that can be used to treat flu illness. People at [high risk](#) of serious flu [complications](#) (such as children younger than 5 years, adults 65 years of age and older, pregnant women, people with certain long-term medical conditions, and residents of nursing homes and other long-term care facilities) and people who are very sick with flu (such as those hospitalized because of flu) should get antiviral drugs. Other people can be treated with antivirals at their health care professional's discretion. Treating high risk people or people who are very sick with flu with antiviral drugs is very important. Studies show that prompt treatment with antiviral drugs can prevent serious flu complications. Prompt treatment can mean the difference between having a milder illness versus very serious illness that could result in a hospital stay.

Treatment with antivirals works best when begun within 48 hours of getting sick, but can still be beneficial when given later in the course of illness. Antiviral drugs are effective across all age and risk groups. Studies show that antiviral drugs are under-prescribed for people who are at high risk of complications who get flu. Three FDA-approved antiviral medications are recommended for use during the 2017-2018 flu season: oseltamivir (available in generic versions and under the trade name Tamiflu®), zanamivir (Relenza®), and peramivir (Rapivab®).

**Source:** <https://www.cdc.gov/flu/about/season/flu-season-2017-2018.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 were obtained by syndromic surveillance system (Epicenter).

Many thanks to all agencies who report Influenza-related data weekly.

For additional information, please visit the 2017-2018 Influenza dashboard at: <https://www.scph.org/dashboards>

Reporting from participants may not be complete each week. Numbers may change as updated reports are received. For questions, please contact Joan Hall or Tracy Rodriguez, Summit County Public Health Communicable Disease Unit. Report was issued on March 2, 2018.