



**Summit County Public Health
Influenza Surveillance Report
2018 – 2019 Season
Report #1**



Public Health
Prevent. Promote. Protect.

**Flu Surveillance Weeks 1 & 2 (10/7/2018 to 10/20/2018)
Centers for Disease Control and Prevention MMWR Weeks 41 & 42**

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 1 MMWR 40 N (%)¹	Week 2 MMWR 41 N (%)¹	Percent change from previous week	Number of weeks increasing or decreasing
Lab Reports				
Test Performed	214	305	+ 42.5%	↑1
Positive Tests (Number and %)	1 (0.5)	1 (0.3)	--	--
Influenza A (Number and %)	1 (0.5)	0 (0.0)	- 100%	↓1
Influenza B (Number and %)	0 (0.0)	1 (0.3)	+ 100%	↑1
Acute care hospitalization for Influenza:	1	0	- 100%	↓1
Influenza ILI Community Report:				
Long-term Care ILI	0	0	--	--
Correctional & Addiction Facility	0	0	--	--
Physician Offices & University Clinic	0	0	--	--
Pharmacy Prescriptions				
Amantidine	0	0	--	--
Rimantidine Flumadine	0	0	--	--
Relenza	0	0	--	--
Oseltamivir Tamiflu	0	0	--	--
<i>Total</i>	0	0	--	--
Schools absenteeism²	3.2	3.3	+ 3.1%	↑1
Deaths				
Pneumonia associated	6 (7.2)	4 (4.1)	- 43.0%	↓1
Influenza associated	0	0	--	--
Emergency room visits (EpiCenter)³				
Constitutional Complaints	481 (8.0)	432 (7.7)	- 3.8%	↓1
Fever and ILI	68 (1.1)	50 (1.0)	- 9.1%	↓1

Zero deaths related to influenza were reported during Weeks 1 & 2, however there were 10 total deaths associated with pneumonia. **Figure 1** displays weekly Summit County death counts associated with pneumonia and influenza.

Acute Care Hospitalizations: There was 1 reported hospitalizations during Week 1 and 0 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. **Correctional and Inpatient Addiction facilities:** Zero cases ILI reported. **Physician offices and clinics:** During Weeks 1 and 2, zero cases of ILI were reported.

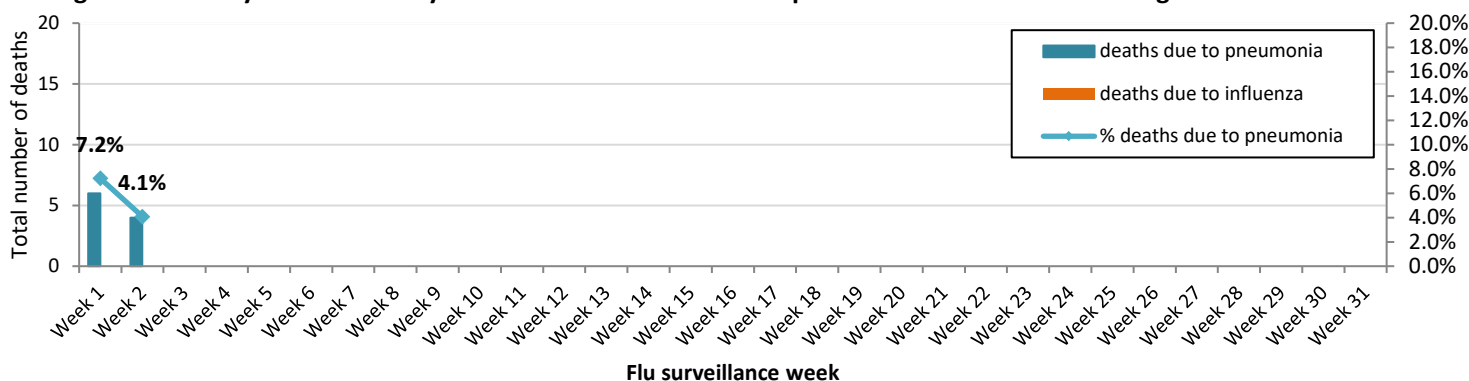
Pharmacies: Zero prescriptions for antiviral medications were reported during Weeks 1 and 2.

School absenteeism includes absences regardless of reason. In Week 1, the absence rate was 3.2% and in Week 2 the rate remained steady at 3.3%.

Lab reports: During the first 2 weeks of influenza surveillance, Summit County labs performed 519 tests, of which 2 tested positive (1 each for types A and B). **(Figure 4)** As more hospitals replace the rapid flu test with BIOFIRE respiratory panels, the number of tests performed will likely increase this year.

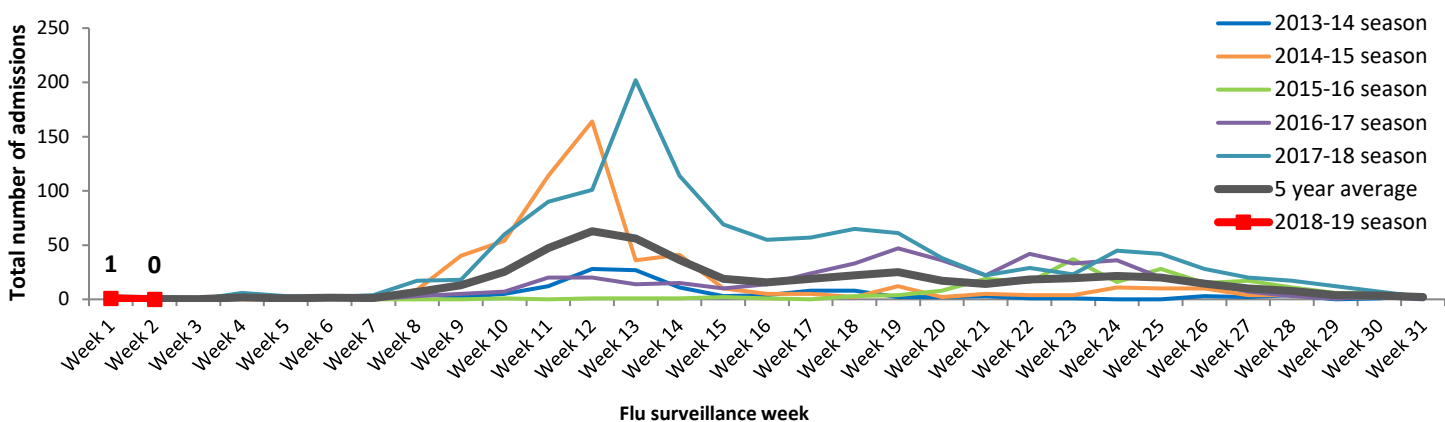
1) N and % are reported when available
 2) Absence is for any reason. Percent is from total number of students enrolled. Data was collected from 6 schools or school districts throughout Summit County (n = 10,459 students)
 3) Percent is from total number of emergency room interactions
Note: Data is provisional and may be updated as more information is received. Percentages should be interpreted with caution. Small changes in number can result in large changes in percent. When a percentage, or prevalence, is available in this table, the percent change will be calculated from those values

Figure 1. Weekly Summit County death counts associated with pneumonia and influenza during 2018-2019 flu season



Influenza-associated hospitalization: Summit County hospitals reported 1 influenza-associated hospitalization in Week 1 and 0 hospitalizations during Week 2. **Figure 2** displays weekly confirmed hospitalization count for Summit County (**cumulative count to date =2**).

Figure 2. Summit County influenza-associated hospitalizations by week, 2018-2019 season, and previous five seasons



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.

Figure 3. Weekly ER visits in Summit County related to Fever + ILI stratified by age groups, 2018 - 2019 influenza season

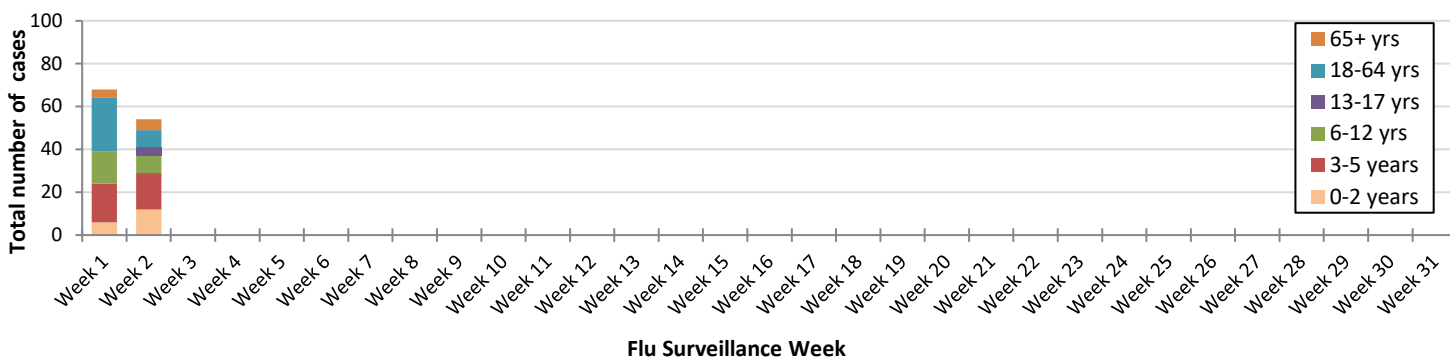
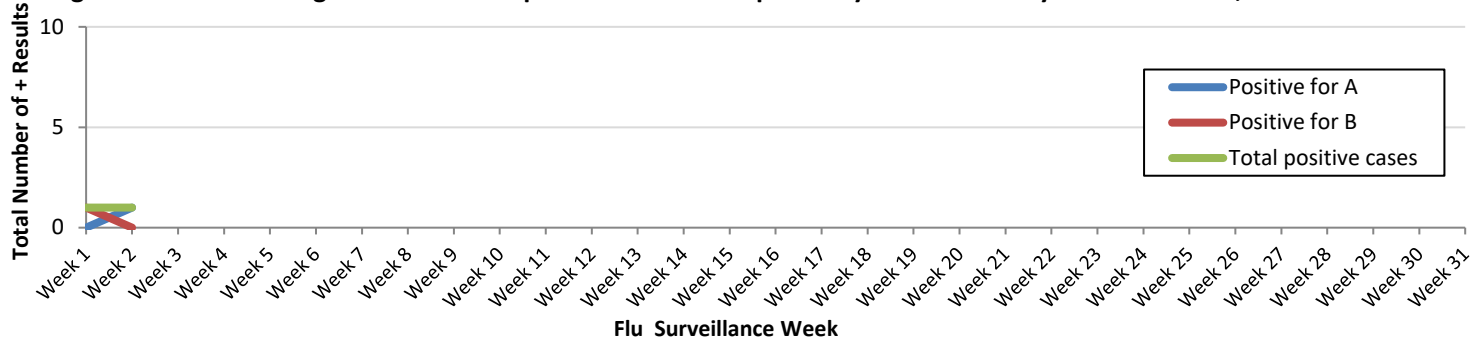


Figure 4. Influenza diagnostic tests with positive results completed by Summit County health facilities, 2018 - 2019 season



Ohio Influenza Activity: from the Ohio Department of Health:

Current Ohio Activity Level (Geographic Spread) – Sporadic Definition: 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.

During MMWR Week 42, 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 7 influenza-associated hospitalizations reported during MMWR Week 42.

Ohio Influenza Activity Summary Dashboard (October 14 – 20, 2018):

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%	2.78%	↑ 1	
Thermometer Sales (National Retail Data Monitor)	869	10.82%	↑ 1	
Fever and ILI Specified ED Visits (EpiCenter)	1.60%	11.11%	↑ 1	
Constitutional ED Visits (EpiCenter)	8.19%	2.50%	↑ 1	
Confirmed Influenza-associated Hospitalizations (Ohio Disease Reporting System)	7	-22.22%	↓ 1	
Outpatient Medical Claims Data ⁴	0.29%	38.10%	↑ 1	

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.

⁴Medical Claims Data provided by athenahealth®

Source: <https://www.odh.ohio.gov/seasflu/Ohio%20Flu%20Activity.aspx>

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

Influenza activity in the United States remains low. Influenza A(H1N1)pdm09, influenza A(H3N2), and influenza B viruses continue to co-circulate, with influenza A(H1N1)pdm09 viruses reported most commonly by public health laboratories during the most recent three weeks. Below is a summary of the key influenza indicators for the week ending October 20, 2018:

- **Viral Surveillance:** Influenza A viruses have predominated in the United States since the beginning of July. The percentage of respiratory specimens testing positive for influenza in clinical laboratories was low.
 - **Virus Characterization:** The majority of influenza viruses characterized antigenically and genetically are similar to the cell-grown reference viruses representing the 2018–2019 Northern Hemisphere influenza vaccine viruses.
 - **Antiviral Resistance:** All viruses tested since late May show susceptibility to the antiviral drugs oseltamivir, zanamivir, and peramivir.
- **Influenza-like Illness Surveillance:** The proportion of outpatient visits for influenza-like illness (ILI) remained low at 1.5%, which is below the national baseline of 2.2%. All regions reported ILI below their region-specific baseline level.
 - **ILI State Activity Indicator Map (Figure 6):** Puerto Rico and one state experienced low ILI activity; and New York City, the District of Columbia, and 49 states experienced minimal ILI activity..
- **Geographic Spread of Influenza (Figure 7):** The geographic spread of influenza in four states was reported as local; the District of Columbia, Puerto Rico, the U.S. Virgin Islands and 42 states reported sporadic activity; four states reported no activity; and Guam did not report.
- **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:** No influenza-associated pediatric deaths were reported to CDC.

National Outpatient Illness Surveillance:

Nationwide during week 42, 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.) On a regional level, the percentage of outpatient visits for ILI ranged from 0.6% to 2.5% during week 42. All regions reported a percentage of outpatient visits for ILI below their region-specific baseline.

Figure 5. Percentage of visits for influenza-like illness (ILI) reported by the U.S. Outpatient Influenza-like Surveillance Network (ILINet), weekly national summary, 2018-2019 and selected previous seasons

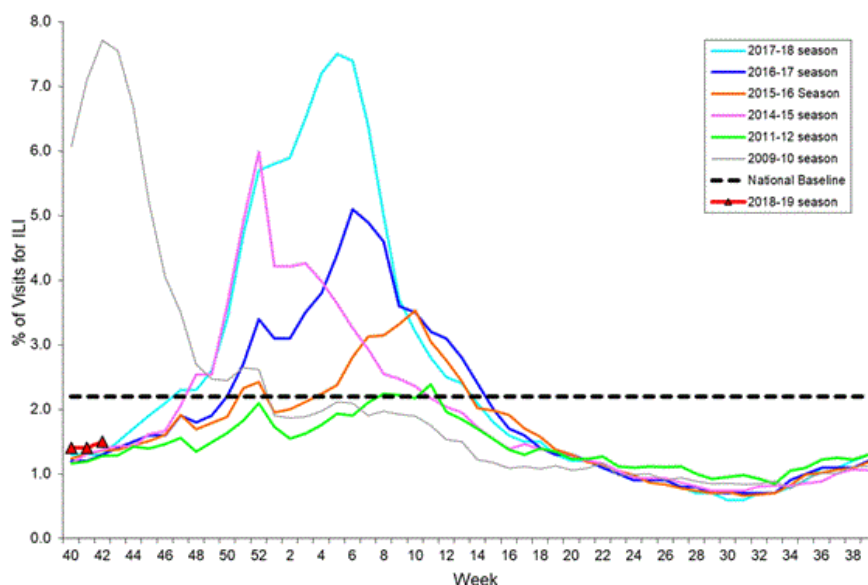


Figure 6. Influenza-like illness (ILI) activity level indicator determined by data reported to ILINet

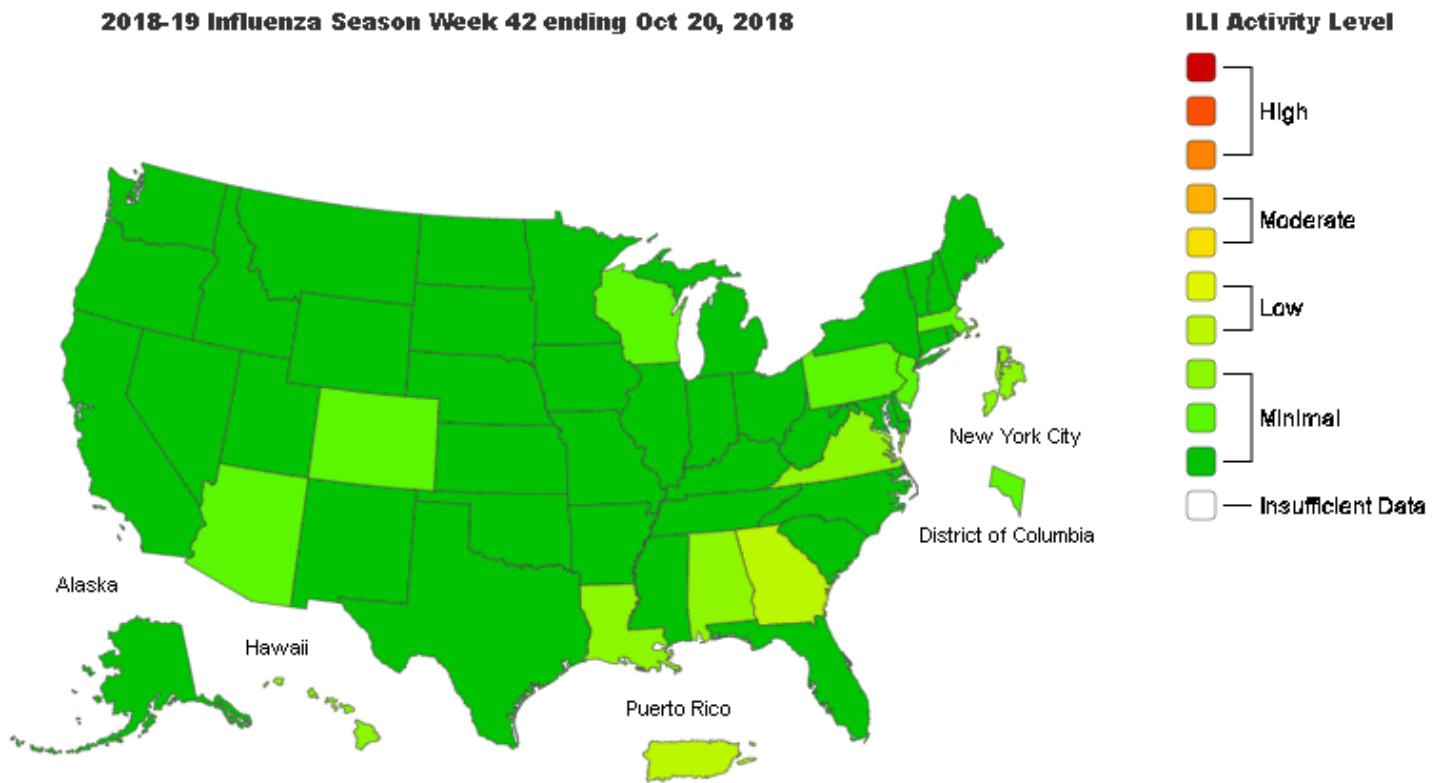
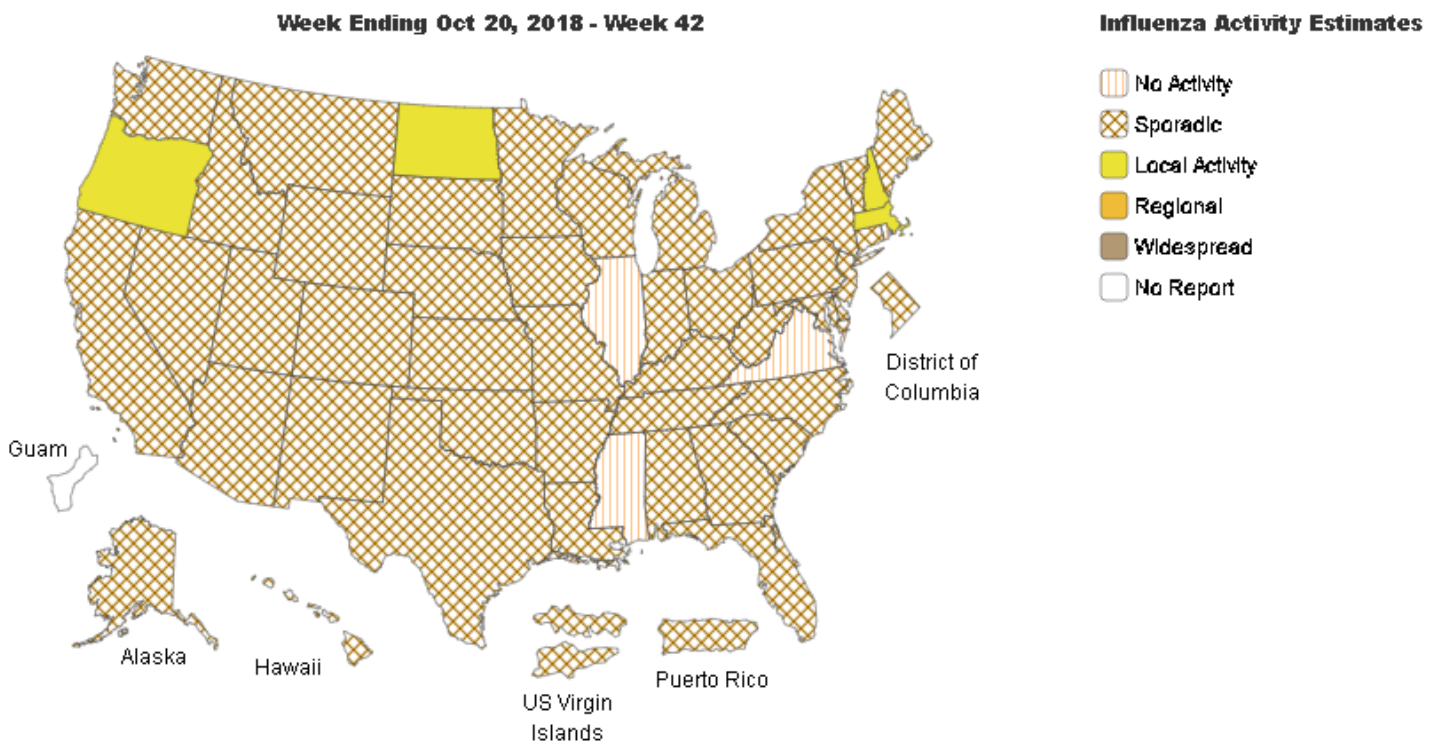


Figure 7. Weekly influenza activity (geographic spread) estimates reported by state and territorial epidemiologists



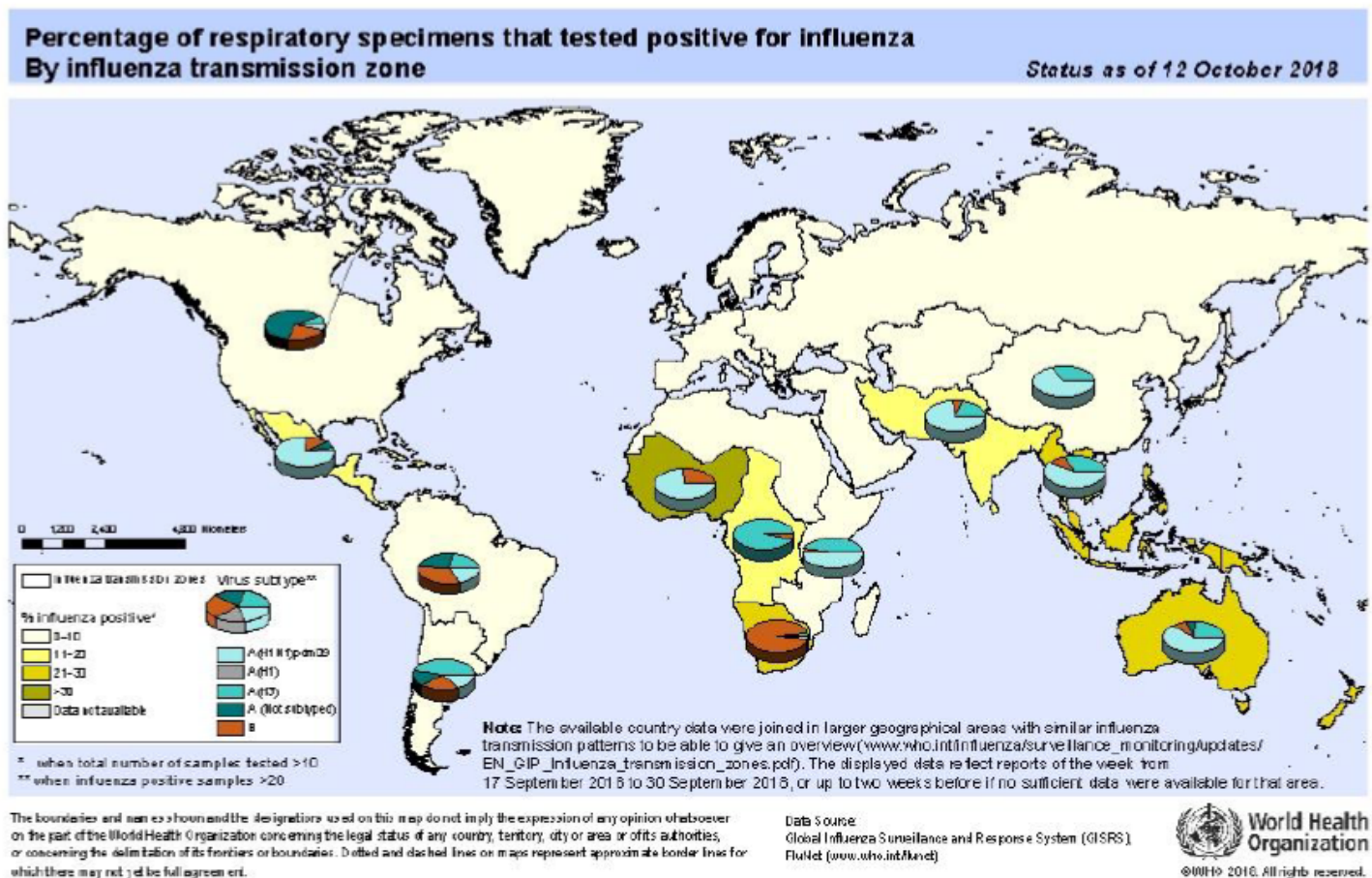
Source: <https://www.cdc.gov/flu/weekly/>

Global Surveillance:

Influenza Update N° 326, World Health Organization (WHO), published 10/15/2018, based on data up to 9/30/2018. The Update is published every two weeks:

Report Summary:

- In the temperate zones of the southern hemisphere, influenza activity appeared to decrease overall though influenza percent positivity remained elevated in Southern Africa. In Australia and New Zealand, influenza activity remained at low levels and even below seasonal threshold during the entire season. Increased influenza detections were reported in some countries of Southern and South-East Asia. In the temperate zone of the northern hemisphere influenza activity remained at inter-seasonal levels. Worldwide, seasonal influenza subtype A viruses accounted for the majority of detections.
- National Influenza Centres (NICs) and other national influenza laboratories from 95 countries, areas or territories reported data to FluNet for the time period from 17 September 2018 to 30 September 2018 (data as of 2018-10-12 03:45:25 UTC). The WHO GISRS laboratories tested more than 58772 specimens during that time period. 2124 were positive for influenza viruses, of which 1789 (84.2%) were typed as influenza A and 335 (15.8%) as influenza B. Of the sub-typed influenza A viruses, 1051 (74%) were influenza A(H1N1)pdm09 and 369 (26%) were influenza A(H3N2). Of the characterized B viruses, 51 (49%) belonged to the B-Yamagata lineage and 53 (51%) to the B-Victoria lineage.



Source: https://www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/

What's New for the 2018-2019 Flu Season?

FIGHT FLU



For the 2018-2019 flu season:

- Flu vaccines have been updated to better match circulating viruses [the B/Victoria component was changed and the influenza A(H3N2) component was updated].
- The nasal spray flu vaccine (live attenuated influenza vaccine or "LAIV") is again a recommended option for influenza vaccination for people for whom it is otherwise appropriate.

What flu vaccines are recommended this season?

For the 2018-2019 flu season flu vaccine, providers may choose to administer any licensed, age-appropriate flu vaccine including inactivated influenza vaccine or "IIV," recombinant influenza vaccine or "RIV4," or the nasal spray vaccine (live attenuated influenza vaccine or "LAIV").

Options this season include:

- [Standard dose flu shots](#). Most are given into the muscle, usually with a needle, but two can be given to some people with a jet injector. (*Note that no intradermal flu vaccine will be available during 2018-2019).
- A [high-dose shot](#) for people 65 and older.
- A [shot made with adjuvant](#) for people 65 and older.
- A [shot made with virus grown in cell culture](#).
- A shot made using a vaccine production technology ([recombinant vaccine](#)) that does not require the use of flu virus or eggs.
- [Live attenuated influenza vaccine](#) (LAIV) – or the nasal spray vaccine – is also an option for use in otherwise healthy persons 2 through 49 years of age who are not pregnant. (Note that there is a precaution against the use of LAIV for people with certain underlying medical conditions.)



Getting an annual flu vaccine is the first and best available way to protect yourself and your family from flu and its potentially serious complications. Flu vaccination can reduce flu illnesses, doctors' visits, and missed work and school due to flu, as well as prevent flu-related hospitalizations. Flu vaccine also has been shown to significantly reduce a child's risk of dying from influenza. The more people who get vaccinated, the more people will be protected from flu, including older people, young children, pregnant women and people with certain long-term health problems who are more vulnerable to serious flu illness.

For more information, visit:
www.cdc.gov/flu or www.flu.gov
or call 1-800-CDC-INFO



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What viruses do 2018-2019 flu vaccines protect against?

There are many flu viruses and they are constantly changing. The composition of U.S. flu vaccines is reviewed annually and updated to match circulating flu viruses. Flu vaccines protect against the three or four viruses that research suggests will be most common. For 2018-2019, three-component vaccines are recommended to contain:

- A/Michigan/45/2015 (H1N1)pdm09-like virus
- A/Singapore/INFIMH-16-0019/2016 A(H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus (updated)

Four component vaccines are recommended to include the same three viruses above, plus an additional B virus called B/Phuket/3073/2013-like virus (B/Yamagata lineage).

When and how often should I get vaccinated?

You should get a flu vaccine before flu begins spreading in your community. It takes about two weeks after vaccination for antibodies that protect against flu to develop in the body, so make plans to get vaccinated early in fall, before flu season begins. CDC recommends that people get a flu vaccine by the end of October. Getting vaccinated later, however, can still be beneficial and vaccination should continue to be offered throughout flu season, even into January or later.

Children who need [two doses](#) of vaccine to be protected should start the vaccination process sooner, because the two doses must be given at least four weeks apart.

Can I get a flu vaccine if I am allergic to eggs?

The recommendations for people with egg allergies are the same as the 2017-2018 season.

- People who have experienced only hives after exposure to egg can get any licensed flu vaccine that is otherwise appropriate for their age and health.
- People who have symptoms other than hives after exposure to eggs, such as angioedema, respiratory distress, lightheadedness, or recurrent emesis; or who have needed epinephrine or another emergency medical intervention, also can get any licensed flu vaccine that is otherwise appropriate for their age and health, but the vaccine should be given in a medical setting and be supervised by a health care provider who is able to recognize and manage severe allergic conditions. (Settings include hospitals, clinics, health departments, and physician offices). People with egg allergies no longer have to wait 30 minutes after receiving their vaccine.

For more information, visit:
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or call 1-800-CDC-INFO



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You can download a copy of this fact sheet from the CDC at this website:

<https://www.cdc.gov/flu/resource-center/freeresources/print/print-general.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). 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 Joan Hall or Tracy Rodriguez at the Summit County Public Health Communicable Disease Unit (330-375-2662 or cdu@schd.org). Report was issued on October 26, 2018.