



**Summit County Public Health
Influenza Surveillance Report
2019 – 2020 Season
Report #5**



**Flu Surveillance Weeks 5 & 6 (11/2/2019 to 11/16/2019)
Centers for Disease Control and Prevention MMWR Weeks 45 & 46**

Summit County Surveillance Data:

In **Week 6** of surveillance, influenza-related activity remained minimal in Summit County, but is increasing.

Table 1: Overall Influenza Activity Indicators in Summit County by Week				
	Week 5 MMWR 45 N (%)¹	Week 6 MMWR 46 N (%)¹	Percent change from previous week	Number of weeks increasing or decreasing
Lab Reports				
Test Performed	501	581	+ 16.0%	↑3
Positive Tests (Number and %)	4 (0.8)	3 (0.5)	- 37.5%	↓2
Influenza A (Number and %)	1 (0.2)	1 (0.2)	NC	NC
Influenza B (Number and %)	3 (0.6)	2 (0.3)	- 50.0%	↓1
Acute care hospitalization for Influenza:	0	0	--	--
Influenza ILI Community Report:				
Long-term Care ILI	0	3	+ 100%	↑1
Correctional & Addiction Facility	0	0	--	--
Physician Offices & University Clinic	0	0	--	--
Pharmacy Prescriptions				
Zanamivir (Relenza)	0	0	--	--
Oseltamivir (Tamiflu)	1	3	+ 200%	↑1
Baloxavir marboxil (Xofluza)	0	0	--	--
<i>Total</i>	1	3	+ 200%	↑1
Schools absenteeism²	5.7	7.3	+ 28.1%	↑1
Deaths				
Pneumonia associated	11 (9.0)	8 (5.6)	- 37.5%	↓1
Influenza associated	0	0	--	--
Emergency room visits (EpiCenter)³				
Constitutional Complaints	459 (8.0)	517 (8.8)	+ 10.4%	↑2
Fever and ILI	76 (1.3)	87 (1.5)	+ 12.2%	↑4
1) N and % are reported when available, NC = no change				
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 = 32,000 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				

Zero deaths related to influenza were reported during Week 6, and there were eight deaths associated with pneumonia. **Figure 1** displays weekly Summit County death counts associated with pneumonia and influenza.

Acute Care Hospitalizations: There were no reported hospitalizations during Week 6. **Figure 2** displays influenza associated hospitalizations in Summit County.

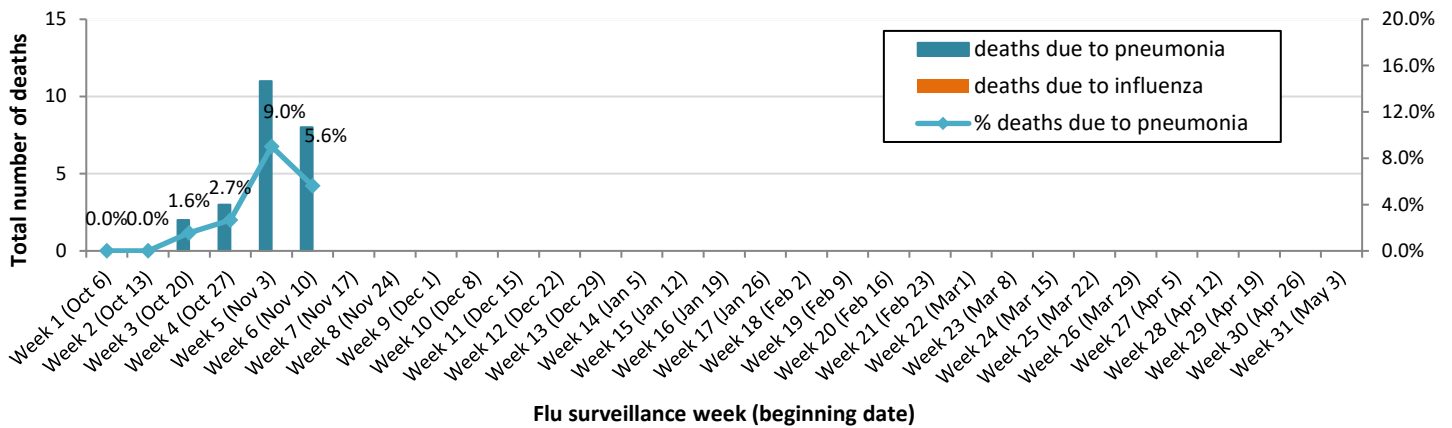
COMMUNITY ILI REPORTS: Influenza like illness (ILI) as defined by the CDC is fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat without a known cause other than influenza. Community ILI reports: **Long Term Care Facilities:** There were three cases of ILI reported. **Correctional and Inpatient Addiction facilities:** Zero cases ILI reported. **Physician offices and clinics:** During Week 6, zero cases of ILI were reported.

Pharmacies: Three prescriptions for CDC- approved antiviral medications were reported during Week 6.

School absenteeism includes absences regardless of reason. During Week 6 the rate was 7.3%, an increase of 28% from Week 5.

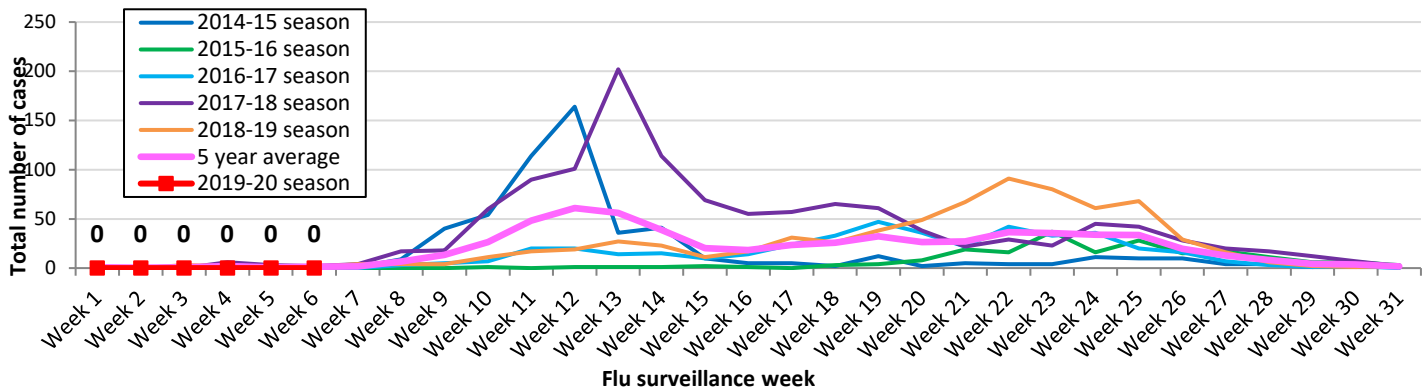
Lab reports: During Week 6 of influenza surveillance, Summit County facilities performed 581 flu tests, of which 3 were positive (Type A = 1, Type B = 2). **(Figure 4)**

Figure 1. Weekly Summit County death counts associated with pneumonia and influenza during 2019-2020 season



Influenza-associated hospitalization: Summit County hospitals reported no influenza-associated hospitalizations during Week 6. **Figure 2** displays weekly confirmed hospitalization count for Summit County (**cumulative count to date = 0**).

Figure 2. Summit County influenza-associated hospitalizations by week, 2019-2020 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. There were 87 ILI-related visits reported during Week 6, which was 1.5% of total ED visits (n = 5874). This rate was 12.2% higher than the ILI rate during Week 5.

Figure 3. Weekly ED visits in Summit County related to Fever + ILI stratified by age groups, 2019 to 2020 season

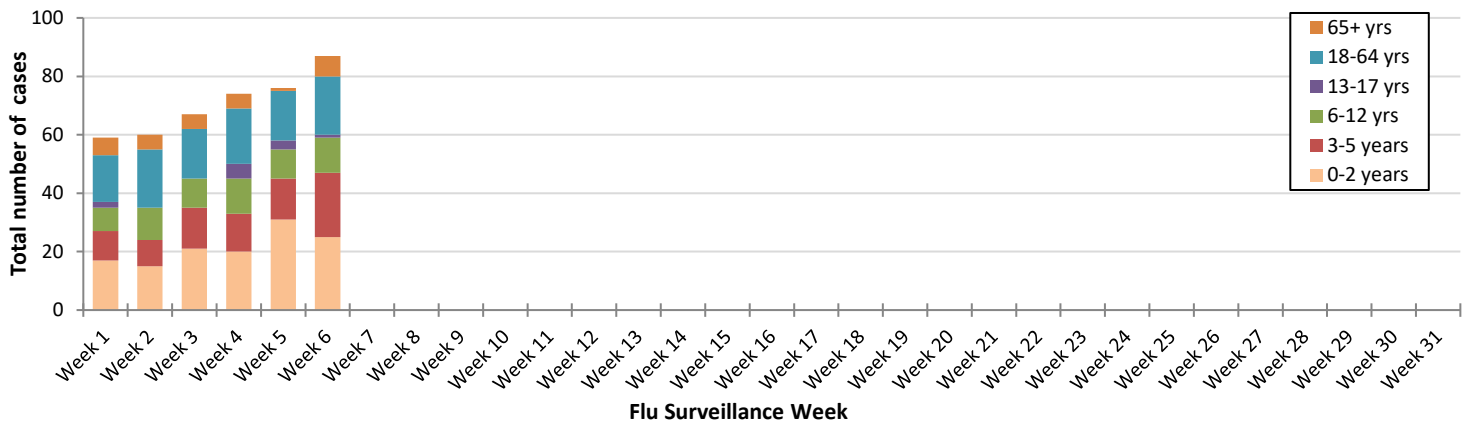
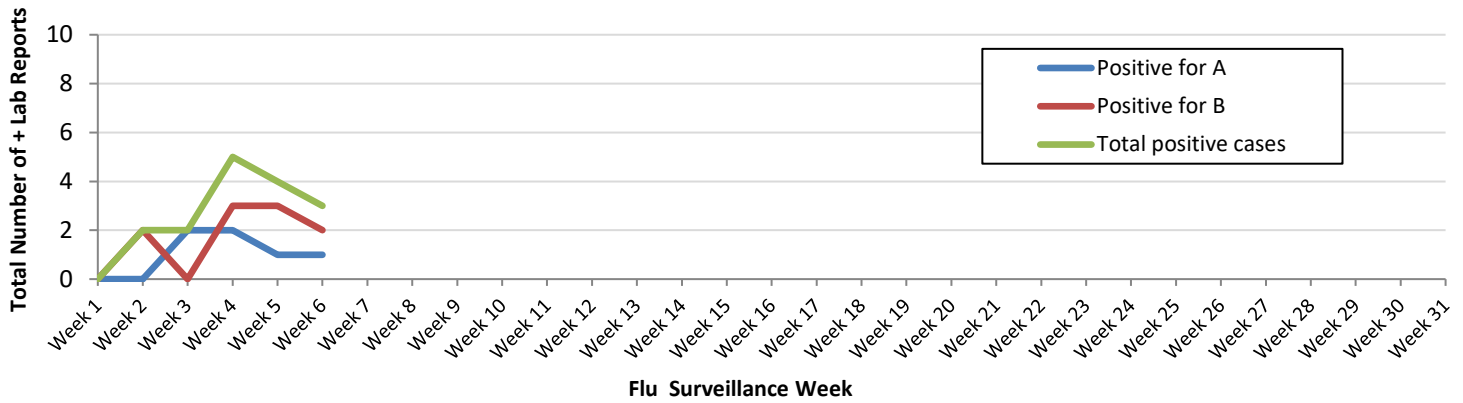


Figure 4. Influenza diagnostic tests with positive results completed by Summit County health facilities, 2019 - 2020 season



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 46, 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 also above baseline levels. Reported cases of influenza-associated hospitalizations are at the seasonal threshold (25 cases). There were 25 influenza-associated hospitalizations reported during MMWR Week 45.

ODH lab has reported 12 positive influenza tests from specimens sent from sentinel ILINet providers and hospital clinical labs. **2019-2020 influenza season results:** (1) A/pdmH1N1; (7) A/H3N2; (4) Influenza B; (through 11/16/2019).

Ohio Influenza Activity Summary Dashboard (November 10 – 16, 2019):

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)	0.65%	-32.29%	↓ 1	
Thermometer Sales (National Retail Data Monitor)	946	2.83%	↑ 2	
Fever and ILI Specified ED Visits (EpiCenter)	2.04%	5.70%	↑ 9	
Constitutional ED Visits (EpiCenter)	9.17%	2.69%	↑ 5	
Confirmed Influenza-associated Hospitalizations (Ohio Disease Reporting System)	25	316.67%	↑ 1	
Outpatient Medical Claims Data ⁴	0.44%	-15.38%	↓ 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
⁴Medical Claims Data provided by athenahealth®

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

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

According to this week's FluView report, seasonal influenza activity in the United States continues to increase but the amount of activity and the predominant influenza virus varies by region.

- **Viral Surveillance:** Nationally influenza B/Victoria viruses have been reported more frequently than other influenza viruses this season; followed by A(H1N1)pdm09 and A(H3N2) viruses, which are also circulating in significant numbers. The predominant virus varies by region and the proportion of influenza B/Victoria viruses is increasing in some regions.
 - **Virus Characterization:** All viruses that were characterized antigenically are similar to the cell grown reference viruses representing the 2019-20 Northern Hemisphere influenza vaccines.
 - **Antiviral Resistance:** the vast majority of influenza viruses tested (> 99%) show susceptibility to oseltamivir and peramivir. All influenza viruses tested showed susceptibility to zanamivir and baloxavir.
- **Influenza-like Illness Surveillance (Figure 5):** Nationwide during week 46, 2.5% 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 above the national baseline of 2.4%.* On a regional level, the percentage of outpatient visits for ILI ranged from 1.4% to 4.4% during week 46. Region 3 (Delaware, the District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia), Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee), Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas), and Region 9 (Arizona, California, Hawaii, and Nevada) reported a percentage of outpatient visits for ILI which is equal to or above their region-specific baselines. Regions 1, 2, 5, 7, 8, and 10 were below their region-specific baselines.
 - **ILI State Activity Indicator Map (Figure 6):** Puerto Rico and seven states reported high ILI activity; New York City and twelve states reported low activity; and the District of Columbia, and 30 states experienced minimal ILI activity. Data was insufficient for US Virgin Islands and Louisiana.
- **Geographic Spread of Influenza (Figure 7):** The geographic spread of influenza was reported widespread in Alabama, California, Louisiana, Massachusetts, Nevada, and South Carolina; regional in nine states, local in Puerto Rico and 23 states; the District of Columbia, the U.S. Virgin Islands and 11 states reported sporadic activity; Rhode Island reported no activity; and Guam did not report.
- **Pneumonia and Influenza Mortality:** Based on National Center for Health Statistics (NCHS) mortality surveillance data available on November 21, 2019, 5.2% of the deaths occurring during the week ending November 9, 2019 (week 45) were due to P&I. This percentage is below the epidemic threshold of 6.2% for week 45.
- **Influenza-associated Pediatric Deaths:** One influenza-associated pediatric deaths were reported to CDC during Week 46.

Figure 5. Percentage of visits for influenza-like illness (ILI) reported by the U.S. Outpatient Influenza-like Surveillance Network (ILINet), weekly national summary, 2019-2020 and selected previous seasons

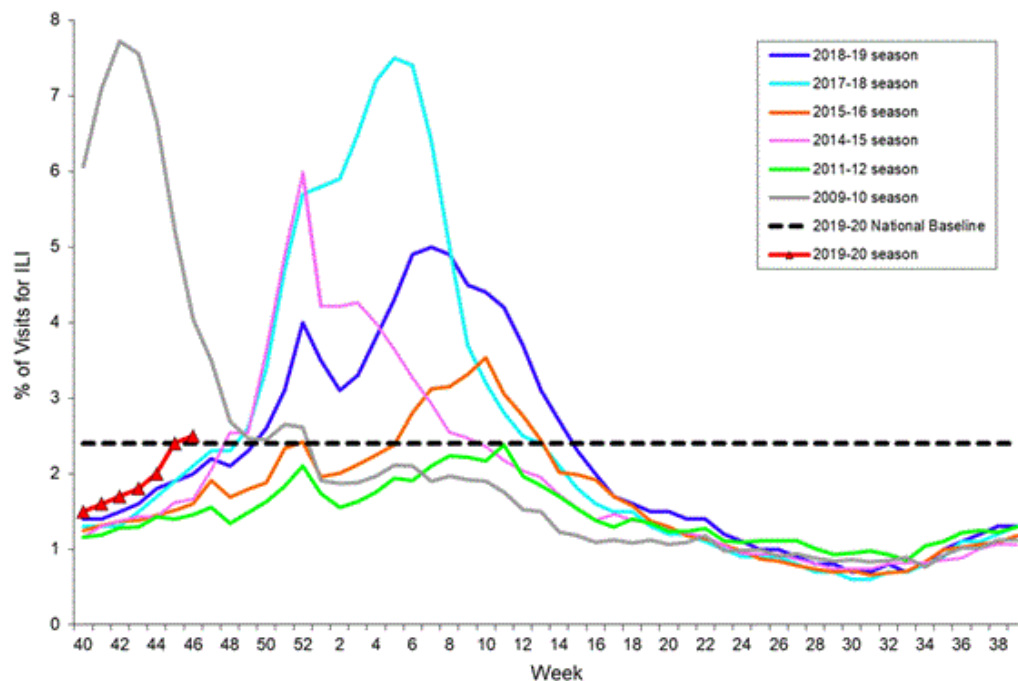


Figure 6. Influenza-like illness (ILI) activity level indicator determined by data reported to ILINet

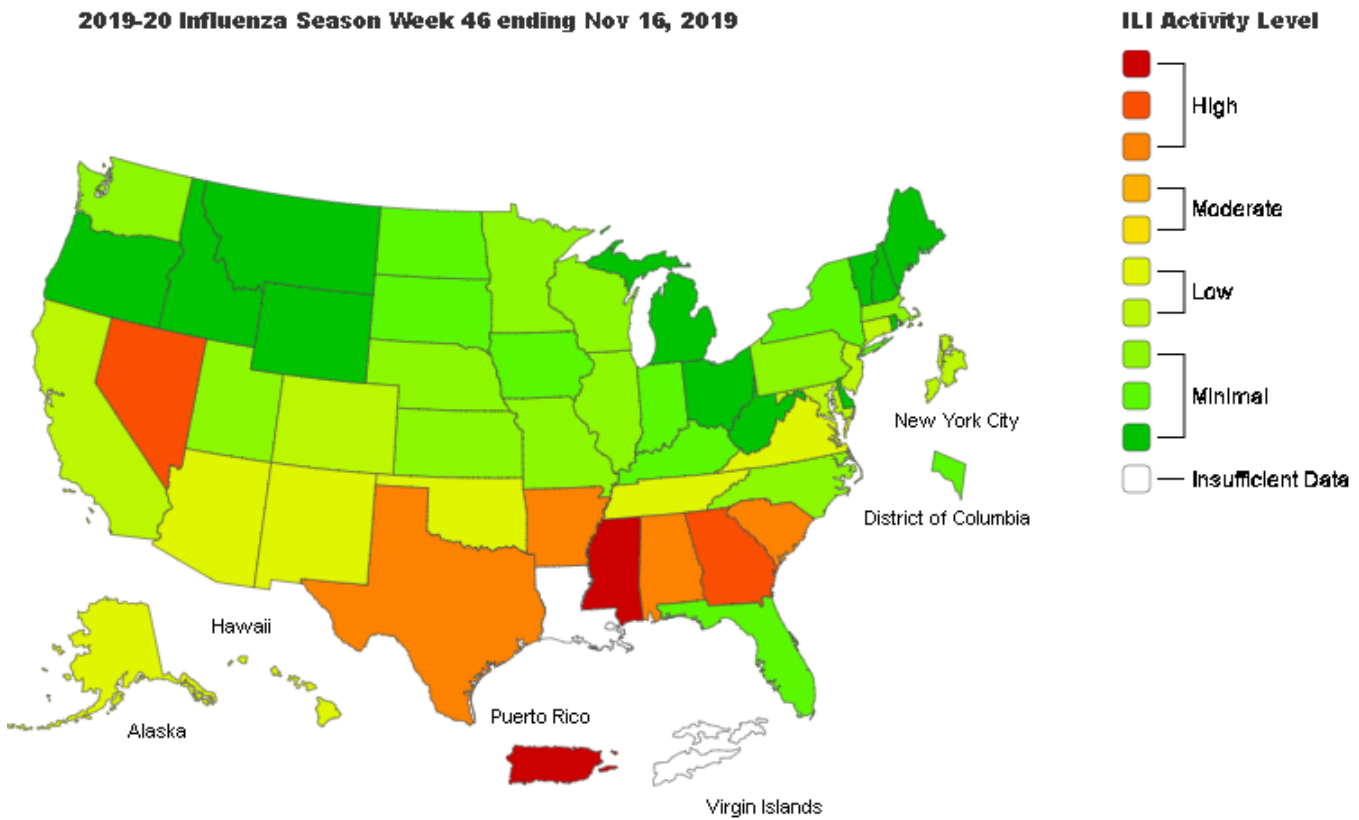
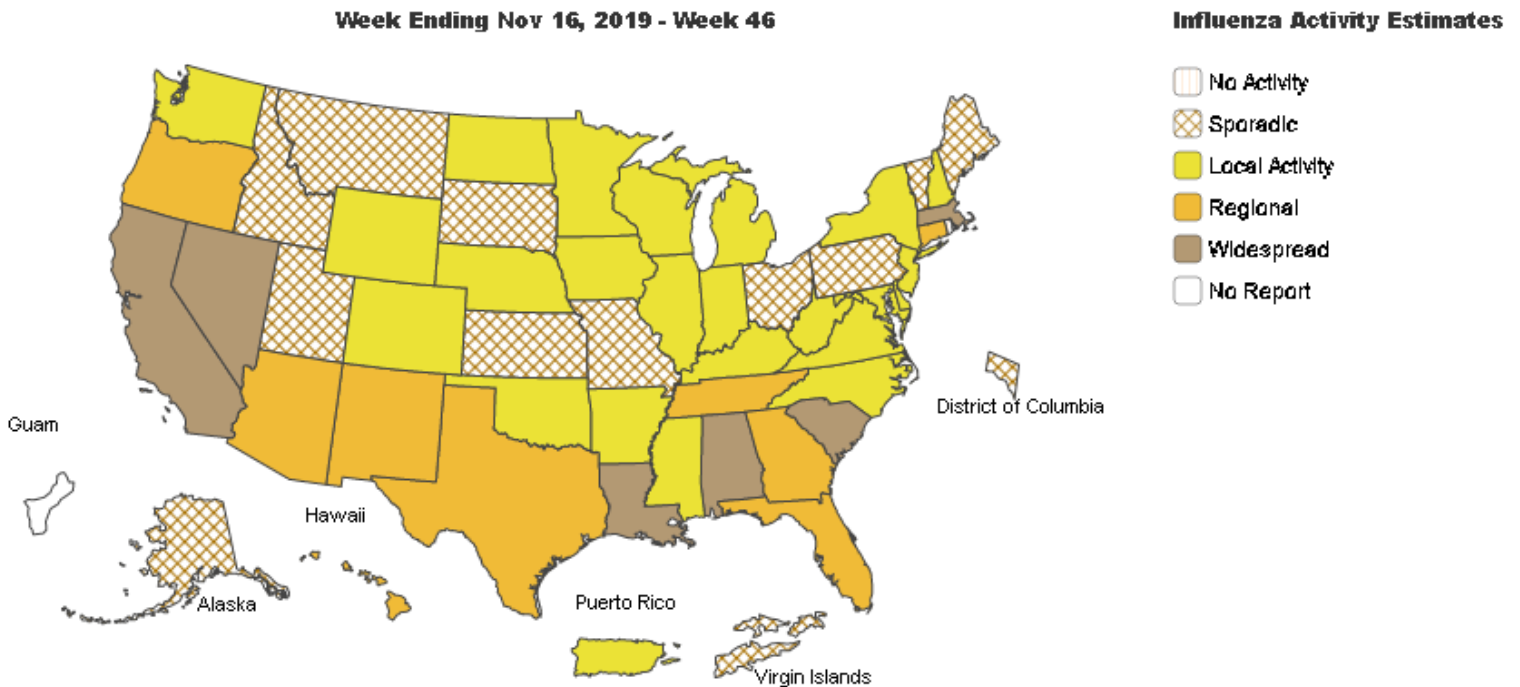


Figure 7. Weekly influenza activity (geographic spread) estimates reported by state and territorial epidemiologists



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

Global Surveillance:

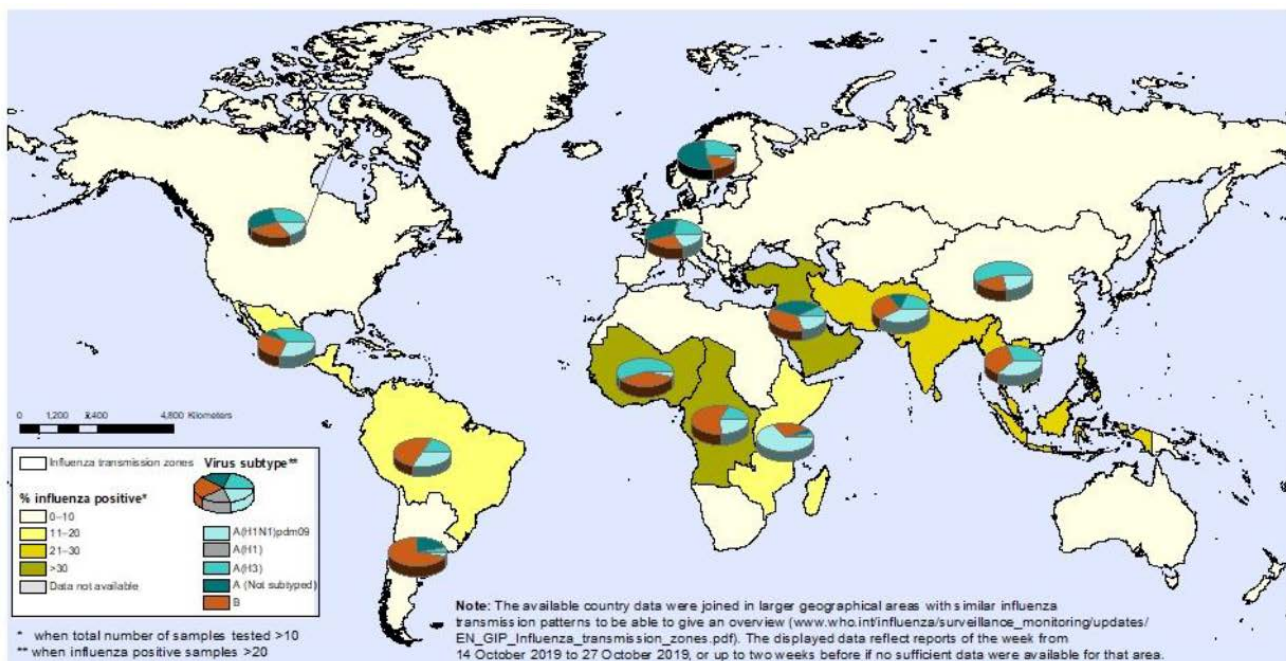
Influenza Update N° 354, World Health Organization (WHO), published 11 November 2019, based on data up to 27 October 2019. The Update is published every two weeks.

Summary

- In the **temperate zone of the northern hemisphere**, influenza activity remained at inter-seasonal levels in most countries. However, influenza activity continued to increase across the countries of the Arabian Peninsula.
- In **the Caribbean**, and tropical South American countries, influenza activity was low overall, except for Cuba and Jamaica. In Central American countries, influenza activity was elevated in El Salvador and Nicaragua.
- In **tropical Africa**, influenza activity remained elevated in some countries of Western Africa.
- In **Southern Asia**, influenza activity was low across reporting countries, but started to increase in Iran (Islamic Republic of).
- In **South East Asia**, influenza activity continued to be reported in Lao PDR.
- In the **temperate zones of the southern hemisphere**, influenza activity was low in most countries, though influenza B virus detections continued to be reported in Chile.
- **Worldwide**, seasonal influenza A viruses accounted for the majority of detections.

National Influenza Centres (NICs) and other national influenza laboratories from 106 countries, areas or territories reported data to FluNet for the time period from 14 October 2019 to 27 October 2019 (data as of 2019-11-08 03:17:31 UTC). The WHO GISRS laboratories tested more than 77099 specimens during that time period. 4227 were positive for influenza viruses, of which 2939 (69.5%) were typed as influenza A and 1288 (30.5%) as influenza B. Of the sub-typed influenza A viruses, 924 (42.7%) were influenza A(H1N1)pdm09 and 1239 (57.3%) were influenza A(H3N2). Of the characterized B viruses, 27 (4.8%) belonged to the B-Yamagata lineage and 534 (95.2%) to the B-Victoria lineage.

Figure 8. Percentage of respiratory specimens that tested positive for influenza, by influenza transmission zone (status as of 8 November 2019)



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

Influenza News from CIDRAP and NFID:

Hand sanitizer shown less effective than hand washing against flu, according to study

[Stephanie Soucheray](#) | News Reporter | CIDRAP News

Sep 19, 2019

A new study from Japanese researchers challenges the idea that ethanol-based disinfectants are effective at completely destroying influenza A viruses quickly in all situations. The study was published yesterday in *mSphere*. In a series of tests, the researchers from the Kyoto Prefectural University of Medicine found that ethanol-based disinfectants, or hand sanitizers, would have to be in contact for at least 4 minutes with the influenza A virus before killing it, a much longer duration than typical use. After 2 minutes of use, the virus was still active.

Mucus barrier: The reason ethanol-based disinfectants might not be as useful as previously thought has to do with the mucus that surrounds droplets of the influenza A virus. The mucus acts as a hydrogel and protects the virus from the ethanol, the investigators reported. "We found that the protective effect of mucus is stronger than expected," said Ryohei Hirose, MD, PhD, a lead author of the paper. Hirose explained that the mucus provides a protective coating for the virus and cannot be deactivated by ethanol-based disinfectants until the mucus is totally dry.

The finding could be a game-changer for healthcare settings, where nurses and doctors often rely on quick uses of hand sanitizers between patients. Currently, the US Centers for Disease Control and Prevention (CDC) and the World Health Organization recommend hand hygiene practices that include using ethanol-based disinfectants for 15 to 30 seconds.

"In a realistic medical setting, a sufficient time interval cannot be secured between treatments, and the next patient's treatment is performed immediately after the current patient's treatment in many cases," the authors wrote. Those recommendations likely come from previous studies that found ethanol-based disinfectants effective in killing flu, which simulated dried mucus scenarios. When mucus is dry, influenza is inactivated within 30 seconds. When the virus was contained in saline, ethanol-based sanitizers also worked in 30 seconds.

Hand washing overcomes mucus: Hirose told CIDRAP News that hand washing, even without using soap, was able to deactivate the influenza A virus within 30 seconds, even when mucus was still wet. "In our study, the hand washing was done without any soap," Hirose said. "Even hand washing without soap is effective against influenza viruses. Of course, hand washing with soap is also effective, and further increases in disinfection effects are expected."

That jibes with CDC advice, which states, "Washing hands with soap and water is the best way to reduce the number of microbes on them in most situations. If soap and water are not available, use an alcohol-based hand sanitizer that contains at least 60% alcohol." Hirose had no recommendation on the relationship between soap ingredients and virus inactivation.

See also:

Sep 18 *mSphere* [study](#)

Sep 18 American Society for Microbiology [press release](#)

CDC [Q&A on hand sanitizer use](#)

Source: <http://www.cidrap.umn.edu/news-perspective/2019/09/hand-sanitizer-shown-less-effective-hand-washing-against-flu>

New toolkit is available for education about influenza and certain chronic health conditions

The National Foundation for Infectious Diseases (NFID) has launched a new campaign (#LowerYourFluRisk) to spread awareness about the importance of influenza (flu) prevention in adults with certain chronic health conditions. Individuals with heart disease, lung disease, and diabetes and are at increased risk of flu-related complications and exacerbation of underlying disease, even when the conditions are well-managed.



You can help raise awareness about the increased risks for the millions of US adults with chronic health conditions. Read the NFID Call to Action and access tools and resources at: www.nfid.org/loweryourflurisk.

Source: <https://www.nfid.org/toolkits/flu-and-chronic-health-conditions/>

LOWER YOUR FLU RISK

If you have a chronic condition like...

- LUNG DISEASE
- HEART DISEASE
- DIABETES

there are many important things you need to do to stay healthy:

- MONITOR YOUR CONDITION
- TAKE YOUR MEDICATION
- EXERCISE
- EAT HEALTHY

But there's one thing you might not know...
Annual flu vaccination
 is also a critical part of your care

Even when your chronic condition is well-managed, **flu can worsen symptoms** and lead to **life-threatening complications**, including:

- HEART ATTACK
- STROKE
- PERMANENT PHYSICAL DECLINE
- PNEUMONIA
- HOSPITALIZATION & DEATH

Protect yourself and make annual flu vaccination a regular part of your care

National Foundation for Infectious Diseases

LEARN MORE AT www.nfid.org/flu
#LowerYourFluRisk

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). This report was issued on November 22, 2019.