



**Summit County Public Health
Influenza Surveillance Report
2018 – 2019 Season
Report #29**



**Flu Surveillance Week 30 (4/28 to 5/4/2019)
Centers for Disease Control and Prevention MMWR Week 18**

Summit County Surveillance Data:

During **Week 30**, influenza-related activity in Summit County *remained at minimal levels.*

Table 1: Overall Influenza Activity Indicators in Summit County by Week				
	Week 29 MMWR 17 N (%)¹	Week 30 MMWR 18 N (%)¹	Percent change from previous week	Number of weeks increasing or decreasing
Lab Reports				
Test Performed	459	284	- 38.1%	↓8
Positive Tests (Number and %)	10 (2.2)	4 (1.4)	- 36.4%	↓8
Influenza A (Number and %)	8 (1.7)	4 (1.4)	- 17.7%	↓8
Influenza B (Number and %)	2 (0.4)	0 (0.0)	- 100.0%	↓3
Influenza hospitalizations:	2	2	NC	NC
Influenza ILI Community Report:				
Long-term Care Facilities	0	0	--	--
Correctional & Addiction Facilities	0	0	--	--
Physician Offices & Clinics	1	1	NC	NC
Pharmacy Prescriptions				
Amantidine	4	5	+ 20.0%	↑4
Rimantidine Flumadine	0	0	--	--
Relenza	0	0	--	--
Oseltamivir Tamiflu	6	2	- 66.7%	↓8
<i>Total antiviral prescriptions</i>	10	7	- 30.0%	↓8
Schools absenteeism daily rate²	3.5	5.5	+ 57.1%	↑1
Deaths				
Pneumonia associated	5 (4.0)	8 (6.6)	+ 65.3%	↑1
Influenza associated	0	0	--	--
Emergency room visits (EpiCenter)³				
Constitutional Complaints	424 (7.4)	447 (7.6)	+ 2.7%	↑1
Fever and ILI	55 (1.0)	55 (0.9)	- 10.0%	↓1
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 8 schools or school districts throughout Summit County (n = ~37,000 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 influenza-related deaths were reported during Week 30, the season total remains at 13. There were 8 deaths associated with pneumonia reported in Week 30. **Figure 1** displays weekly Summit County death counts associated with pneumonia and flu.

Acute Care Hospitalizations: There were 2 flu-related hospitalizations, the same count as Week 29. (**Figure 2**)

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 were 0 cases of ILI reported.

Correctional and inpatient addiction facilities: There were 0 cases of ILI reported.

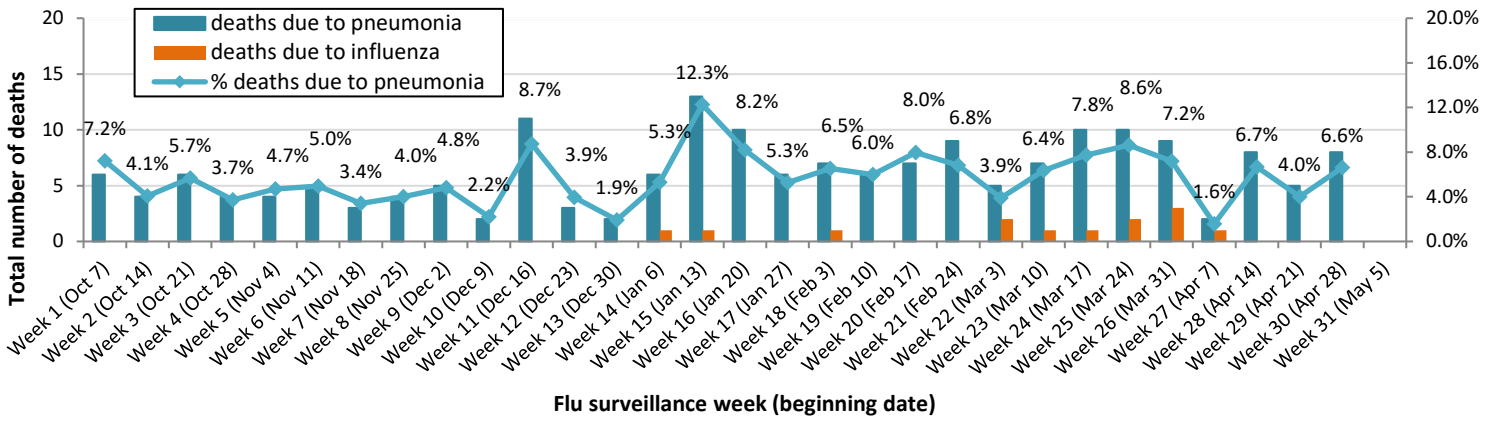
Physician offices and clinics: During Week 30, there was 1 case of ILI reported.

Pharmacies: 7 Prescriptions for antiviral medications were dispensed by reporting pharmacies during Week 30.

School absenteeism includes absences regardless of reason. During Week 30, area schools reported an average daily absence rate of 5.5%, which was 57% higher than the Week 29 rate.

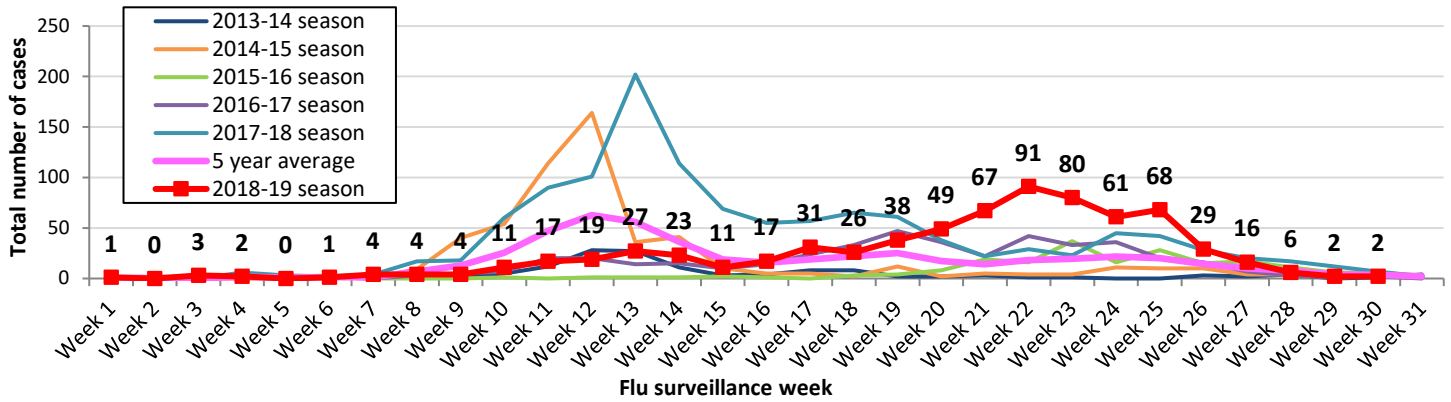
Lab reports: During Week 30, Summit County labs performed 284 influenza tests, of which 4 tested positive (4 Type A, 0 Type B). (**Figure 4**) The percentage of positive test results decreased by 36% since Week 29.

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



Influenza-associated hospitalizations: Summit County hospitals reported 2 influenza-associated hospitalizations in Week 30. **Figure 2** displays weekly confirmed hospitalization counts for Summit County (season count to date = 710).

Figure 2. Summit County influenza-associated hospitalizations by week, 2018-2019 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. **Figure 3** displays the weekly number of ER visits related to ILI and flu symptoms in Summit County. There were 55 ILI-related visits reported during Week 30, which was 0.9% of total ED visits (n = 5,898). This rate was 10% lower than the Week 29 rate.

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

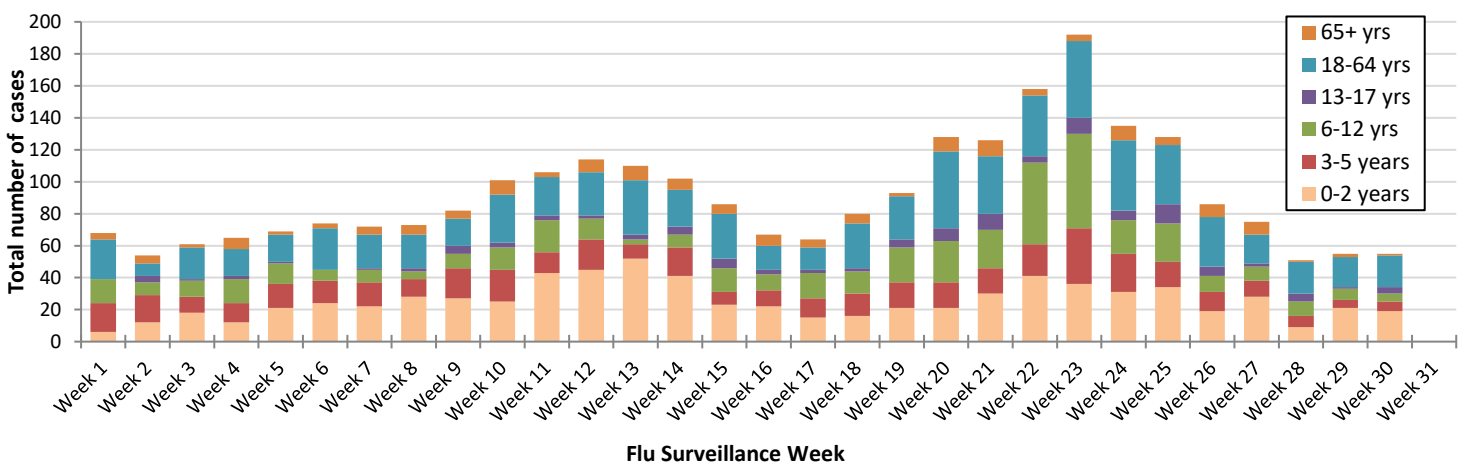
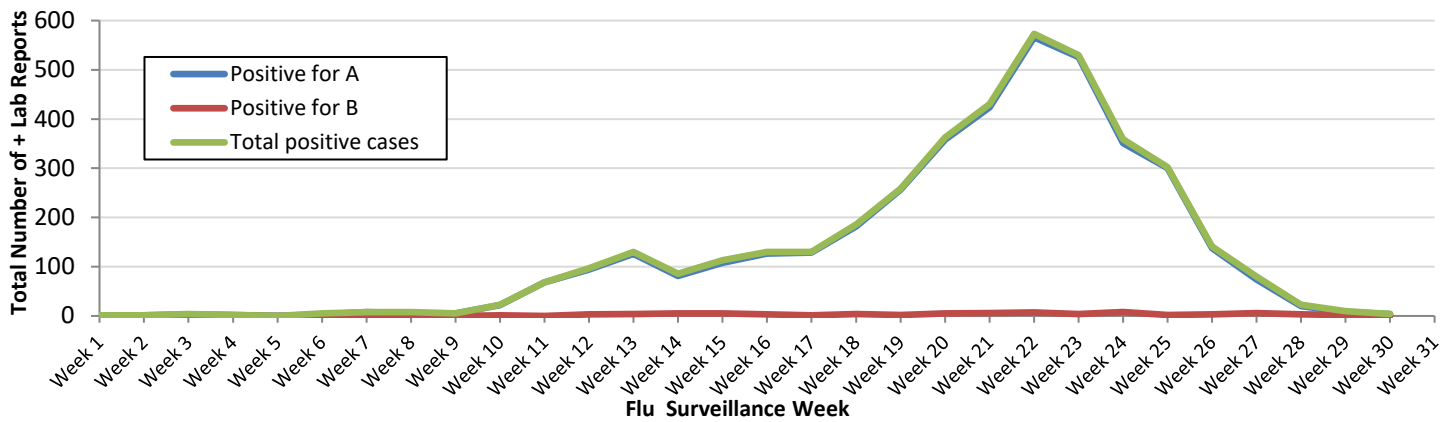


Figure 4. Influenza diagnostic tests with positive results completed by Summit County health facilities, 2018 - 2019 season



Ohio Influenza Activity:

Current Ohio Activity Level (Geographic Spread) – Regional Definition: Increased ILI in > 2 but less than half of the regions AND recent (within the past 3 weeks) lab confirmed influenza in the affected regions, OR institutional Outbreaks (ILI or lab confirmed) in > 2 but less than half of the regions AND recent (within the past 3 weeks) lab confirmed influenza in the affected regions.

During MMWR Week 18, 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 (ED) visits with patients exhibiting constitutional symptoms and fever and ILI specified ED visits **decreased** and are now below baseline levels. Reported cases of influenza-associated hospitalizations remain **above** the seasonal threshold*. There were 49 influenza-associated hospitalizations reported during MMWR Week 18.

Ohio Influenza Activity Summary Dashboard (April 28 – May 4, 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)	0.52%	-17.46%	↓ 6	
Thermometer Sales (National Retail Data Monitor)	756	-5.03%	↓ 1	
Fever and ILI Specified ED Visits (EpiCenter)	1.43%	-10.06%	↓ 8	
Constitutional ED Visits (EpiCenter)	8.10%	-3.11%	↓ 8	
Confirmed Influenza-associated Hospitalizations (Ohio Disease Reporting System)	49	-66.44%	↓ 6	
Outpatient Medical Claims Data ⁴	0.40%	-48.05%	↓ 8	

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®

Ohio Surveillance Data:

- **ODH lab** has reported 1310 **positive** influenza tests from specimens sent from various submitters. 2018-2019 influenza season positive results: **(665) A/pdmH1N1; (633) A/H3N2; (12) Influenza B;** (through 05/04/2019).
- The **National Respiratory and Enteric Virus Surveillance System (NREVSS)** has reported **77,890** influenza tests performed at participating facilities. 2018-2019 influenza season positive results: **(446) A/pdmH1N1, (567) A/H3N2, (12,731) Flu A Not Subtyped, and (306) Flu B** (through 05/04/2019).
- 4 **pediatric influenza-associated mortalities** have been reported during the 2018-2019 season (through 05/04/2019).
- No **novel influenza A virus infections** have been reported during the 2018-2019 season (through 05/04/2019).
- Incidence of confirmed **influenza-associated hospitalizations** in 2018-2019 season = 9808 (through 05/04/2019).

Source: <https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/seasonal-influenza/ohio-flu-activity/>

National Influenza Activity:

Influenza activity continues to decrease in the United States. While influenza A(H1N1)pdm09 viruses predominated from October to mid-February, influenza A(H3N2) viruses have been more commonly identified since late February. Small numbers of influenza B viruses also have been reported. Below is a summary of the key influenza indicators for the week ending May 4, 2019:

- **Viral Surveillance:** The percentage of respiratory specimens testing positive for influenza viruses in clinical laboratories decreased. During the most recent three weeks, influenza A(H3) viruses were reported more frequently than influenza A(H1N1)pdm09 viruses nationally.
 - **Virus Characterization:** The majority of influenza A(H1N1)pdm09 and influenza B viruses characterized antigenically are similar to the cell-grown reference viruses representing the 2018–2019 Northern Hemisphere influenza vaccine viruses. However, the majority of influenza A(H3N2) viruses are antigenically distinguishable from A/Singapore/INFIMH-16-0019/2016 (3C.2a1), a cell-propagated reference virus representing the A(H3N2) component of 2018-19 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.
- **Influenza-like Illness Surveillance (Figure 5):** The proportion of outpatient visits for influenza-like illness (ILI) decreased to 1.6%, which is below the national baseline of 2.2%. One region reported ILI at their region-specific baseline level.
 - **ILI State Activity Indicator Map (Figure 6):** Two states experienced low ILI activity; and New York City, the District of Columbia, Puerto Rico, the U.S. Virgin Islands and 48 states experienced minimal ILI activity.
- **Geographic Spread of Influenza (Figure 7):** The geographic spread of influenza in two states was reported as widespread; Puerto Rico and seven states reported regional activity; 18 states reported local activity; the District of Columbia, the U.S. Virgin Islands and 22 states reported sporadic activity; one state reported no activity; and Guam did not report.
- **Influenza-associated Hospitalizations:** A cumulative rate of 65.7 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported. The highest hospitalization rate is among adults 65 years and older (221.5 hospitalizations per 100,000 population).
- **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:** Five influenza-associated pediatric deaths were reported to CDC during week 18.

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

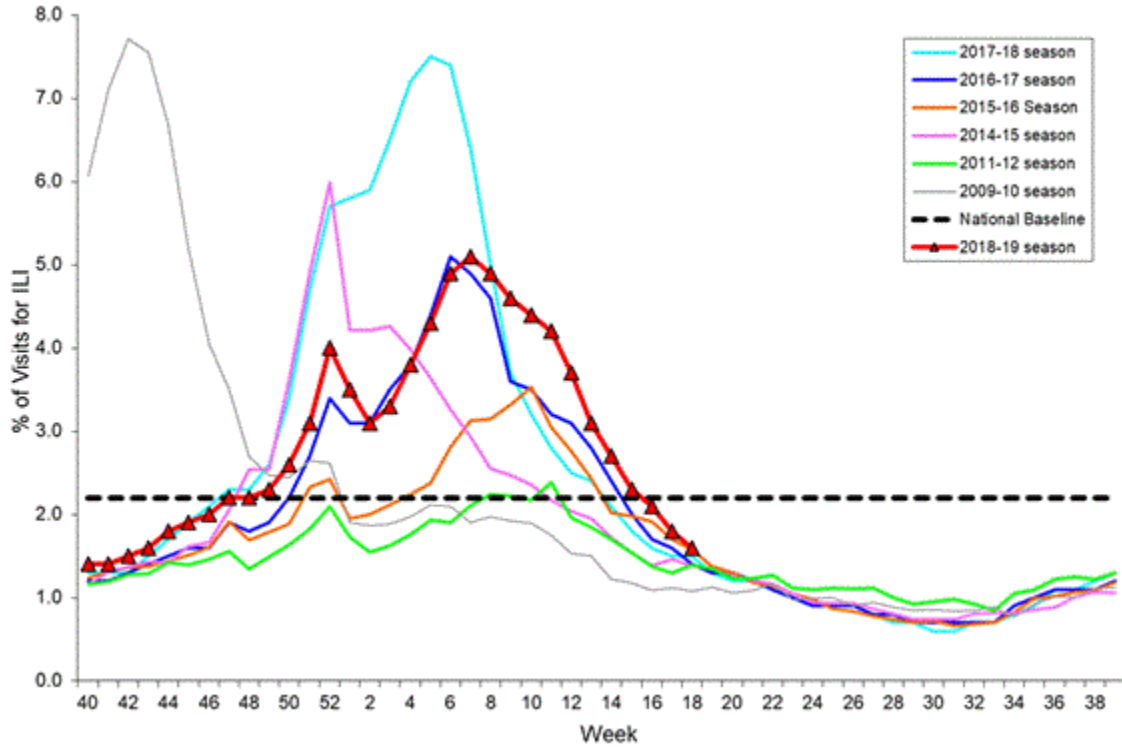


Figure 6. Influenza-like illness (ILI) activity level indicator determined by data reported to ILINet

2018-19 Influenza Season Week 18 ending May 04, 2019

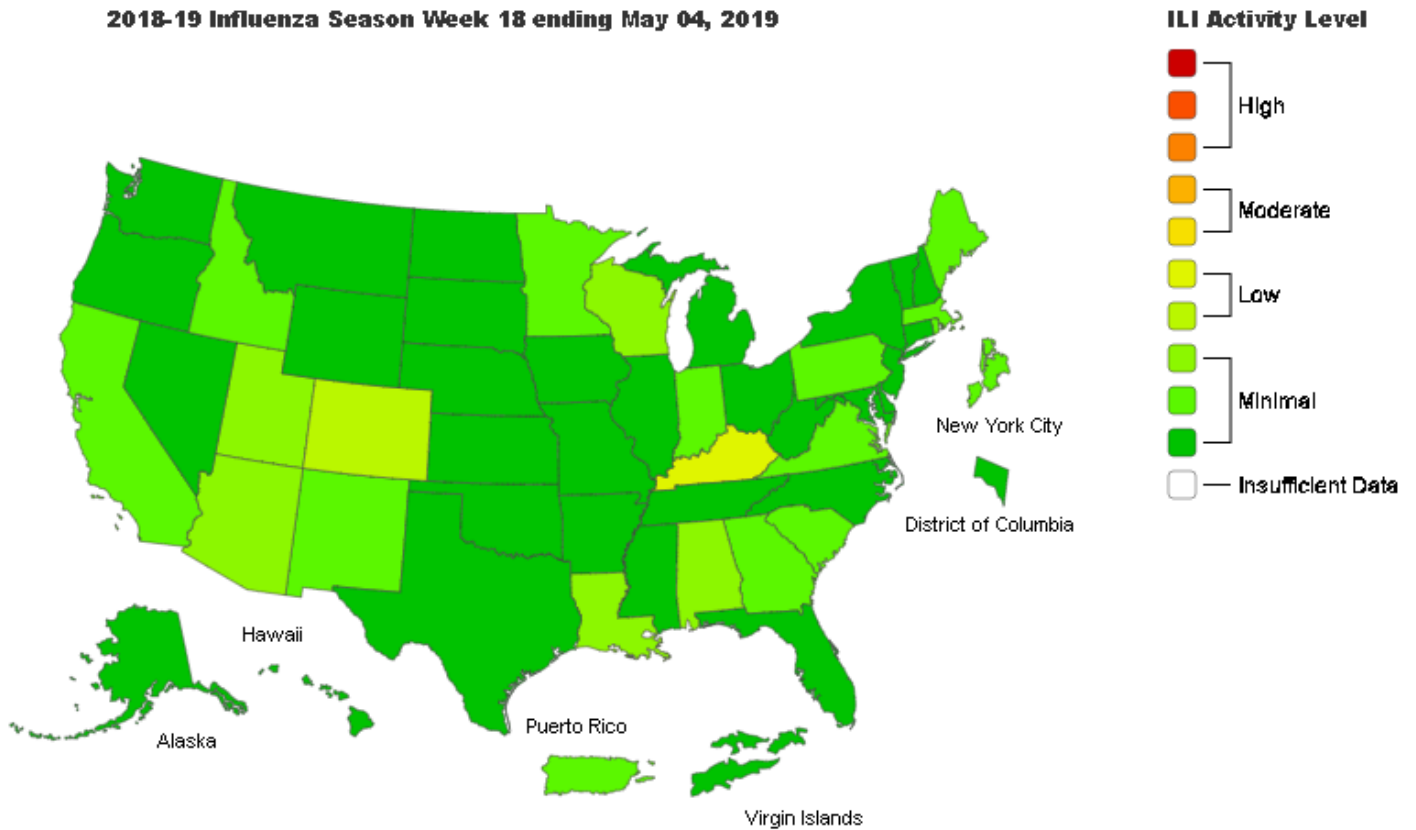
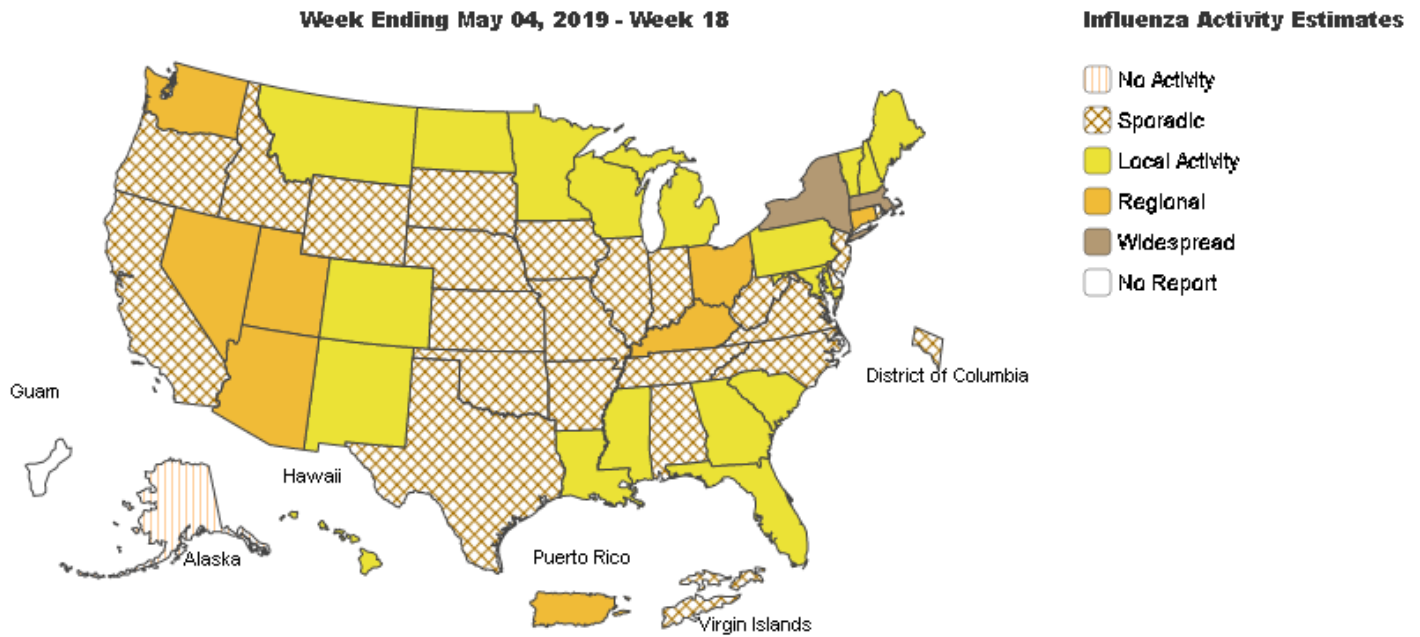


Figure 7. Weekly influenza activity (geographic spread) estimates reported by state and territorial epidemiologists



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

Global Surveillance:

Influenza Update N° 340, World Health Organization (WHO), published 29 April 2019, based on data up to 14 April 2019. The Update is published every two weeks.

Summary:

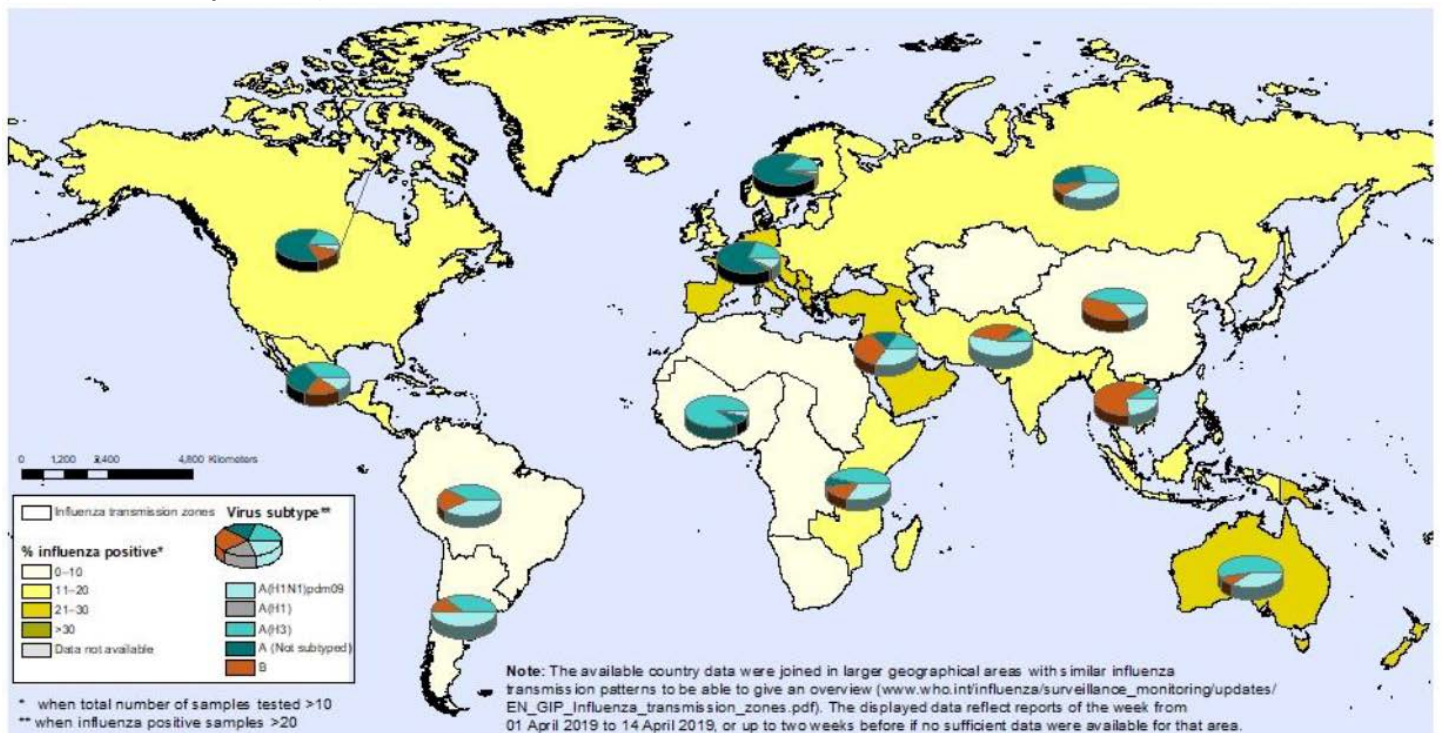
Worldwide, seasonal influenza A viruses accounted for the majority of detections.

In the temperate zone of the northern hemisphere influenza activity decreased overall.

- In **North America**, influenza activity continued to decrease with influenza A(H3N2) the dominant virus, followed by influenza B.
- In **Europe**, influenza activity decreased across the continent. Both influenza A viruses co-circulated; influenza A(H3N2) was the most frequently identified subtype.
- In **North Africa**, influenza detections were low across reporting countries.
- In **Western Asia**, influenza activity appeared to decrease overall, with exception of Saudi Arabia where activity remained elevated.
- In **East Asia**, influenza activity was reported in some countries, with influenza B viruses most frequently detected, followed by influenza A(H3N2). A second wave of influenza activity was reported in the Republic of Korea.

National Influenza Centres (NICs) and other national influenza laboratories from 124 countries, areas or territories reported data to FluNet for the time period from 01 April 2019 to 14 April 2019 (data as of 2019-04-26 03:51:00 UTC). The WHO GISRS laboratories tested more than 137187 specimens during that time period. A total of 20772 were positive for influenza viruses, of which 17422 (83.9%) were typed as influenza A and 3350 (16.1%) as influenza B. Of the sub-typed influenza A viruses, 1917 (32.8%) were influenza A(H1N1)pdm09 and 3922 (67.2%) were influenza A(H3N2). Of the characterized B viruses, 108 (8.3%) belonged to the B-Yamagata lineage and 1196 (91.7%) to the B-Victoria lineage.

Figure 8. Percentage of respiratory specimens that tested positive for influenza, by influenza transmission zone (status as of 26 April 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 the CDC

Influenza A Tops List of Eight Zoonotic Diseases Shared Between Animals and People of Most Concern in the U.S.

First-ever CDC, USDA, DOI collaborative report lists top-priority zoonoses for U.S.

The Centers for Disease Control and Prevention (CDC) and its U.S. government partners have released the first federal collaborative report listing the top zoonotic diseases of national concern for the United States. [Zoonotic diseases](#) are illnesses that can spread between animals and people.

The CDC, U.S. Department of the Interior (DOI), and U.S. Department of Agriculture (USDA) developed the report after jointly hosting a [One Health Zoonotic Disease Prioritization Workshop for the United States](#). During the workshop, agencies agreed on a list of eight zoonotic diseases that are of greatest concern to the nation and made recommendations for next steps using a One Health approach.

“Every year, tens of thousands of Americans get sick from diseases spread between animals and people. CDC’s One Health Office is collaborating with DOI, USDA, and other partners across the government to bring together disease detectives, laboratorians, physicians, and veterinarians to prevent those illnesses and protect the health of people, animals, and our environment,” said Casey Barton Behravesh, M.S., D.V.M., Dr.P.H., director, One Health Office, CDC.

The [zoonotic diseases of most concern in the U.S.](#) are:

- [Zoonotic influenza](#)
- [Salmonellosis](#)
- [West Nile virus](#)
- [Plague](#)
- Emerging coronaviruses (e.g., [severe acute respiratory syndrome](#) and [Middle East respiratory syndrome](#))
- [Rabies](#)
- [Brucellosis](#)
- [Lyme disease](#)

Six out of every 10 infectious diseases in people are zoonotic, which makes it crucial that the nation strengthen its capabilities to prevent and respond to these diseases using a One Health approach. [One Health](#) is an approach that recognizes the connection between people, animals, plants, and their shared environment and calls for experts in human, animal, and environmental health to work together to achieve the best health outcomes for all.

The U.S. One Health Zoonotic Disease Prioritization report is available online: <https://www.cdc.gov/onehealth/domestic-activities/us-ohzdp.html>

Source: <https://www.cdc.gov/media/releases/2019/s0506-zoonotic-diseases-shared.html>

First Human Infection With Avian Influenza A(H5N1) Virus Since Feb. 2017 Reported in Nepal

May 6, 2019 — The first human infection with an avian influenza A(H5N1) virus (H5N1 bird flu) since February 2017 has been reported in Nepal. This is the South Asian country's first human infection with H5N1 bird flu. Nepal has been experiencing sporadic outbreaks of H5N1 bird flu among poultry in recent months. Asian-lineage H5N1 viruses have been associated with poultry outbreaks in Asia, the Middle East, Europe and Africa since 2003. These outbreaks have been associated with high mortality in poultry and rare human infections. Nepal becomes the 17th country worldwide to report a human infection with this virus.

Most human infections with bird flu viruses have been associated with exposure to infected birds or contaminated environments, such as poultry farms or live poultry markets. Human infections with bird flu are reportable to the World Health Organization (WHO). Since 2003, 860 human infections have been reported, with about half of those people dying. Instances of person-to-person spread of Asian H5N1 viruses have been very rare, and no ongoing sustained community spread of this virus has occurred. In Nepal, no additional suspected human H5N1 bird flu infections have been reported since this first illness was identified in March.

More information about the case in Nepal and other preventative actions are available at the source link below:

Source: <https://www.cdc.gov/flu/spotlights/2018-2019/h5n1-human-infection.html>

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 May 10, 2019.