Summit County Public Health
Influenza Surveillance Report
2021 – 2022 Season
Report #13
Flu Surveillance Weeks 13 & 14 (12/26/2021 to 1/8/2022)
Centers for Disease Control and Prevention MMWR Weeks 52 & 1

Summit County Surveillance Data:

In **Week 14** of influenza surveillance, influenza-related activity decreased to a moderate level in Ohio and continued to decrease in Summit County; COVID-19 activity remained high in Summit County.

Table 1: Overall Influenza Activity Indicators in Summit County by week

	Week 13 MMWR 52 N (%)[1]	Week 14 MMWR 1 N (%)[1]	Percent change from previous week	No. of weeks increasing or decreasing
Lab Reports: Influenza				
Test Performed	2683	1574	- 41.3%	↓1
Positive Tests (Number and %)	34 (1.3)	18 (1.1)	- 9.8%	↓3
Influenza A (Number and %)	32 (1.2)	16 (1.0)	- 14.8%	↓3
Influenza B (Number and %)	2 (0.07)	2 (0.13)	+ 70.5%	↑2
Lab Reports: COVID-19				
Test Performed	4892	5389	+ 10.2%	↑2
Positive Tests (Number and %)	1570 (32.1)	1670 (31.0)	- 3.4%	↓1
Acute care hospitalizations for Influenza:	4	2	- 50.0%	↓2
Acute care hospitalizations for COVID-19:	495	505	+ 2.0%	↑8
Pharmacy Prescriptions				
Zanamivir (Relenza)	0	0	--	--
Oseltamivir (Tamiflu)	1	0	- 100.0%	↓2
Baloxavir marboxil (Xofluza)	0	0	--	--
Peramivir (Rapivab)	0	0	--	--
Total	1	0	- 100.0%	↓2
Schools absenteeism[2]	Break	12.3%	--	--
Deaths (occurred in Summit County)				
Total deaths certified	192	226	+ 17.7%	↑2
Pneumonia associated	33 (17.2)	34 (15.0)	- 12.5%	↓1
Influenza associated	0 (0.0)	0 (0.0)	--	--
COVID-19 associated	45 (23.4)	47 (20.8)	- 11.3%	↓2
Emergency room visits (EpiCenter)[3] (Figure 3)				
Total ED Visits	7099	5959	- 16.1%	↓1
Constitutional Complaints	1152 (16.2)	765 (12.8)	- 20.9%	↓1
Fever and ILI	267 (3.8)	159 (2.7)	- 29.1%	↓1

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 12 schools or school districts throughout Summit County (n = approx. 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

Lab reports: During the Week 14 of influenza surveillance, reporting Summit County facilities performed 1,574 flu tests, of which 18 had positive results (16 Type A, 2 Type B). 5,389 COVID-19 tests were completed by reporting partners, with a positivity rate of 31.0% in Week 14 (a 3.4% decrease) **(Figure 4)** ***Note: Influenza and COVID-19 testing data are collected from selected reporting partners and do not represent positivity rates for the entire county.***

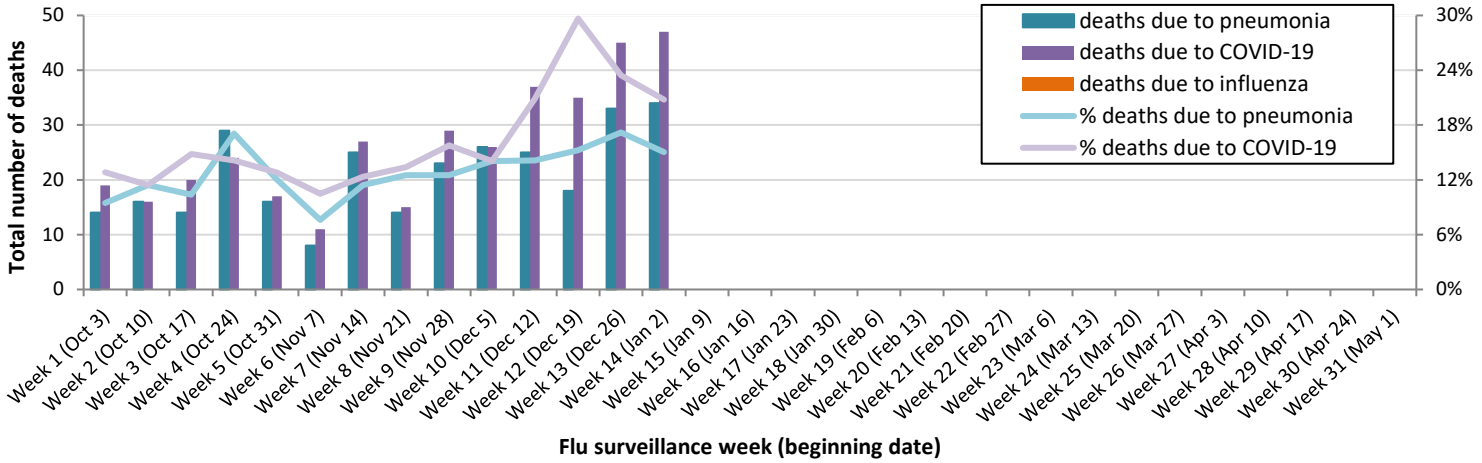
Acute Care Hospitalizations: There were two reported influenza and 505 COVID-19 admissions during Week 14. **Figure 2** displays hospitalizations in Summit County.

Pharmacies: Zero prescriptions for CDC-approved antiviral medications were reported during Week 14.

School absenteeism includes absences regardless of reason. In Week 14, the absence rate was 12.3%.

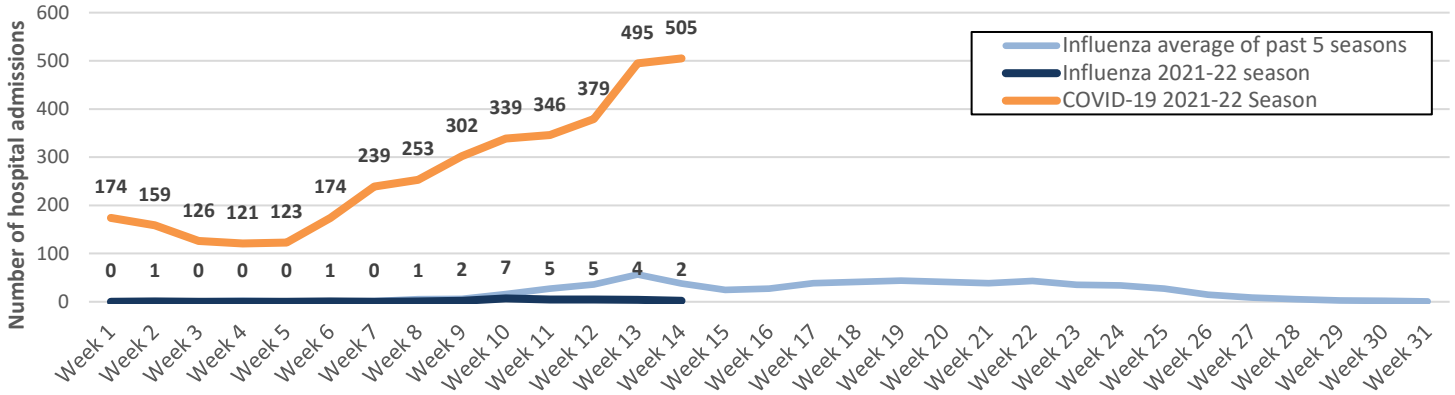
Zero deaths related to influenza, 34 pneumonia deaths and 47 COVID-19 related deaths were reported during Week 14. The rates of pneumonia deaths decreased by 12.5% and COVID-19 deaths decreased by 11.3%. **Figure 1** displays weekly counts of deaths occurring in Summit County associated with pneumonia, COVID-19 and influenza.

Figure 1. Weekly Summit County death counts associated with pneumonia and influenza during 2021-2022 season



Hospitalizations: In Week 14, participating Summit County hospitals reported two influenza-associated hospitalizations and 505 COVID-19 admissions. **Figure 2** displays weekly confirmed hospitalization counts for Summit County **(influenza cumulative count to date = 28).**

Figure 2. Summit County influenza and COVID-19 associated hospitalizations by week , 2021-2022 season



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 159 ILI-related visits reported during Week 14, which was 2.7% of total ED visits (n = 5,959). This rate was 29.1% lower than the ILI rate during Week 13.

Figure 3. Weekly ED visits in Summit County related to Fever + ILI stratified by age groups, 2021 to 2022 season

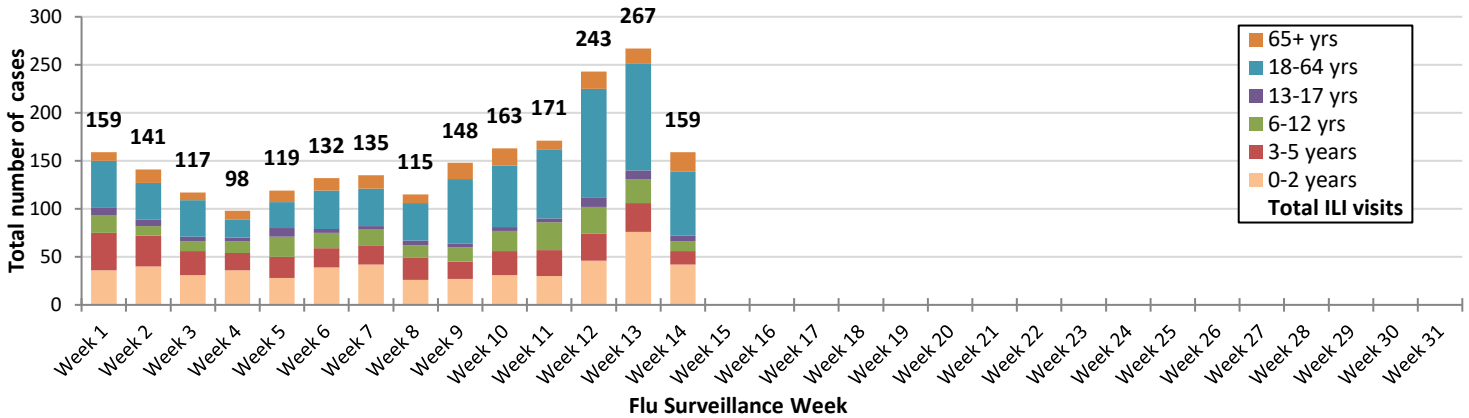
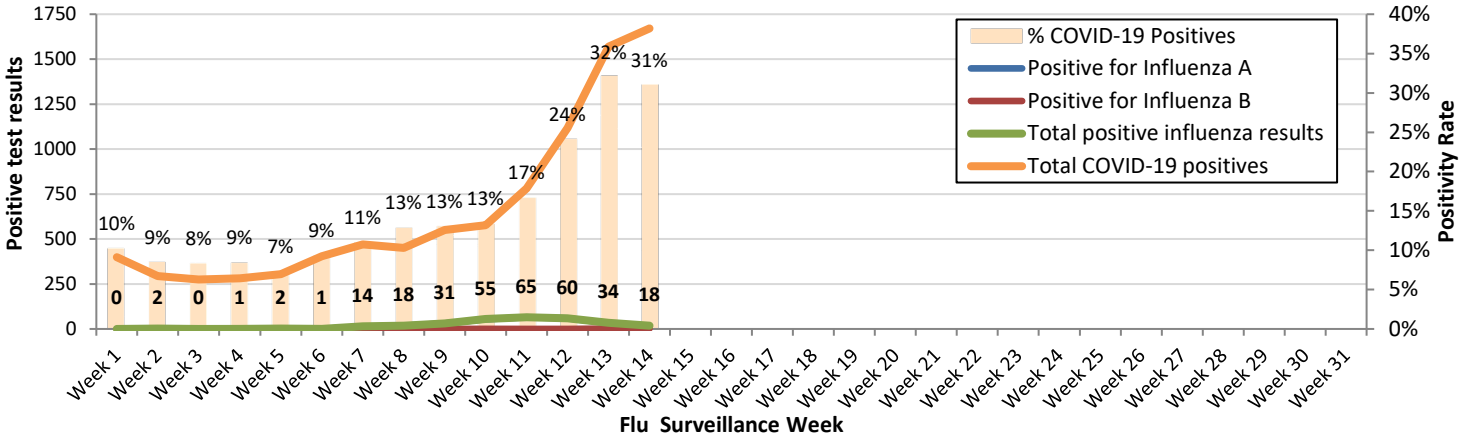


Figure 4. Influenza diagnostic tests with positive results completed by Summit County health facilities, 2021 - 2022 season

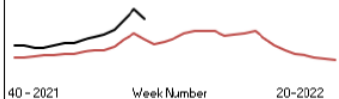
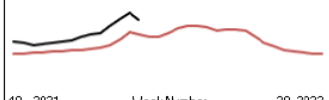
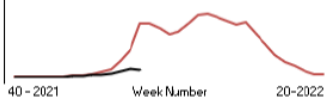


Ohio Influenza Activity: from the Ohio Department of Health:

Current Ohio Activity Level (Geographic Spread) – *Moderate*

During MMWR Week 1, public health surveillance data sources indicate Moderate intensity for influenza-like illness (ILI) in outpatient settings reported by Ohio's sentinel ILINet providers. The percentage of emergency department visits with patients exhibiting constitutional symptoms and Fever/ILI specified ED visits decreased but are still above baseline levels statewide. Reported cases of influenza-associated hospitalizations are also above the seasonal threshold*. There were 80 influenza-associated hospitalizations reported during MMWR Week 1.

Ohio Influenza Activity Summary Dashboard (January 2 – January 8, 2022):

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)	4.88%	-18.67%	↓ 1	
Thermometer Sales (National Retail Data Monitor)[4]	0.91%	-14.15%	↓ 1	
Fever and ILI Specified ED Visits (EpiCenter)	4.01%	-13.95%	↓ 1	
Constitutional ED Visits (EpiCenter)	14.96%	-9.55%	↓ 1	
Confirmed Influenza-associated Hospitalizations (Ohio Disease Reporting System)	80	-14.89%	↓ 1	

[1]Interpret percent changes with caution. Large variability may be exhibited in data sources with low weekly values.

[2]Number of weeks that the % change is increasing or decreasing.

[3]Black lines represent current week's data; red lines represent baseline averages The 2020-2021 influenza season has been omitted from the five-year baseline averages due to abnormal counts reported during the COVID-19 pandemic. A five-year average, which includes data from the 2015-2016 season through the 2019-2020 season, is displayed.

[4]Due to abnormally high thermometer sales during the COVID-19 pandemic, the 2019-2020 and 2020-2021 season data has been omitted. A 4-year average, which includes data from the 2015-2016 season through the 2018-2019 season, is shown

Source: https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/seasonal-influenza/influenza-dashboard

Ohio Surveillance Data:

- **The Ohio Department of Health Laboratory** has tested 313 specimens for influenza during the 2021-2022 influenza season: of these, **1 tested positive for influenza A(H1N1pdm09), 279 for influenza A(H3N2), 3 for influenza B, and 1 for swine variant influenza A(H3N2v)** (through 1/8/2022).
- The **National Respiratory and Enteric Virus Surveillance System (NREVSS)** and **U.S. World Health Organization (WHO) Collaborating Laboratories** reported **88,870** tests for influenza performed at participating facilities; **8 tested positive for influenza A(H1N1pdm09), 298 for influenza A(H3N2), 1906 for influenza A (subtyping not performed), and 29 for influenza B and 1 for swine variant influenza A(H3N2v)** (through 1/1/2022).
- No **pediatric influenza-associated mortalities** have been reported so far during the 2021-2022 influenza season (through 1/8/2022).
- One **novel influenza A virus infection** has been reported so far during the 2021-2022 influenza season (through 1/8/2022).
- Incidence of confirmed **influenza-associated hospitalizations** in 2021-2022 season = 408 (through 1/8/2022).

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

Seasonal influenza activity in the United States declined slightly this week but remains elevated and is expected to continue for several weeks. The amount of activity varies by region.

National Outpatient Illness Surveillance:

Nationwide during week 1, 4.3% of patient visits reported through ILINet were due to respiratory illness that included fever plus a cough or sore throat, also referred to as ILI. This percentage is at the national baseline of 2.5%. All 10 of the HHS regions are above their region-specific baselines. Multiple respiratory viruses are co-circulating, and the relative contribution of influenza virus infection to ILI can vary by location.

Figure 5. Percentage of visits for influenza-like illness (ILI) reported by the U.S. Outpatient Influenza-like Surveillance Network (ILINet), Weekly National Summary, 2021-2022 and selected previous seasons

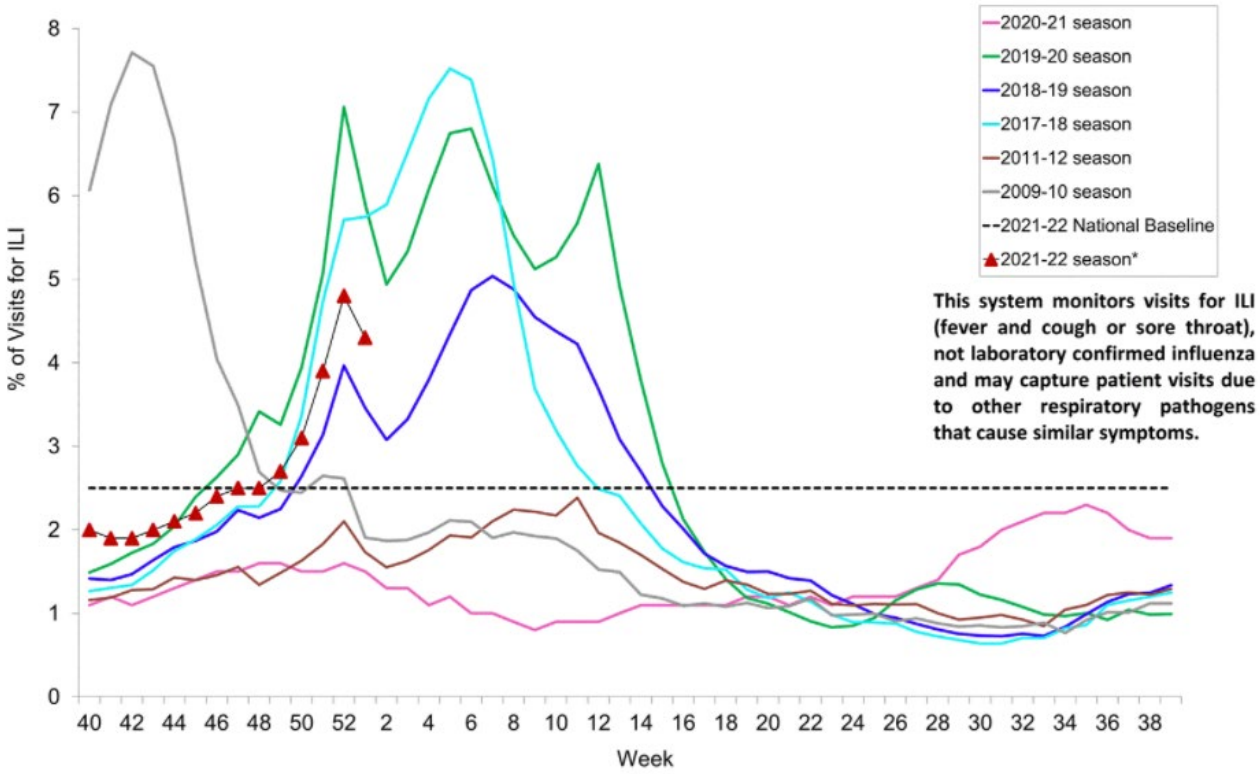
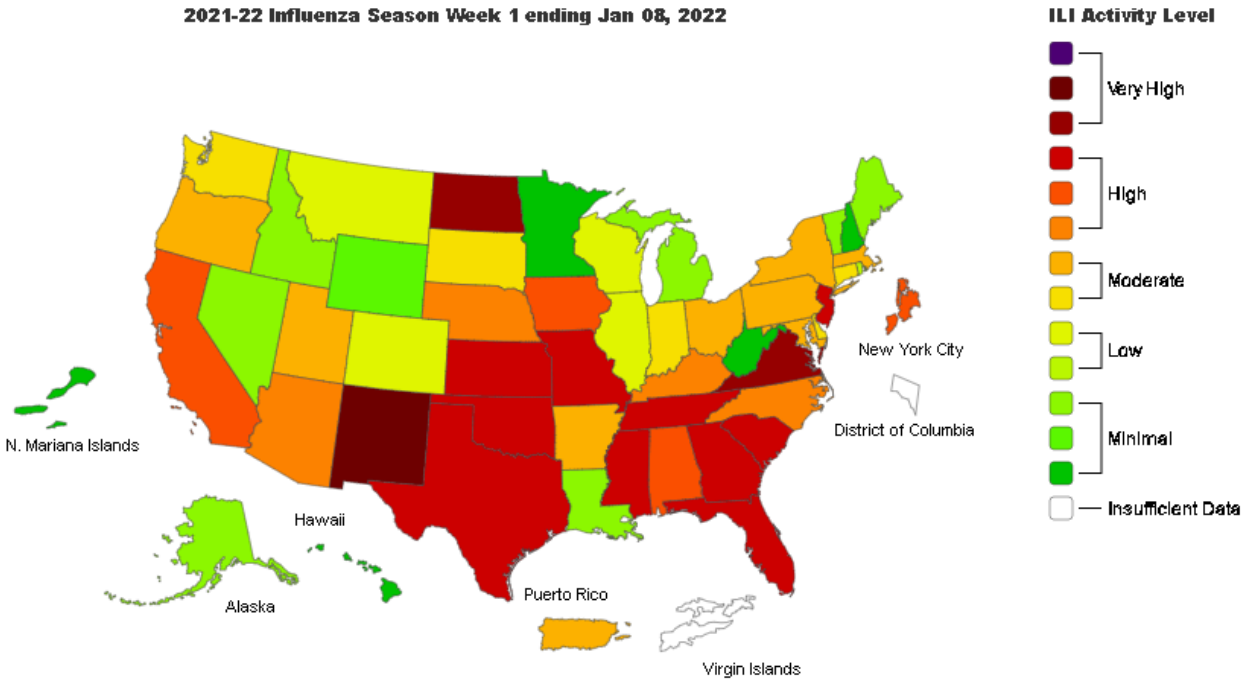


Figure 6. Influenza-like illness (ILI) activity level indicator determined by data reported to ILINet



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

Global Surveillance:

Influenza Update N° 410, World Health Organization (WHO), published 10 January 2022, based on data up to 26 December 2021. The Update is published every two weeks.

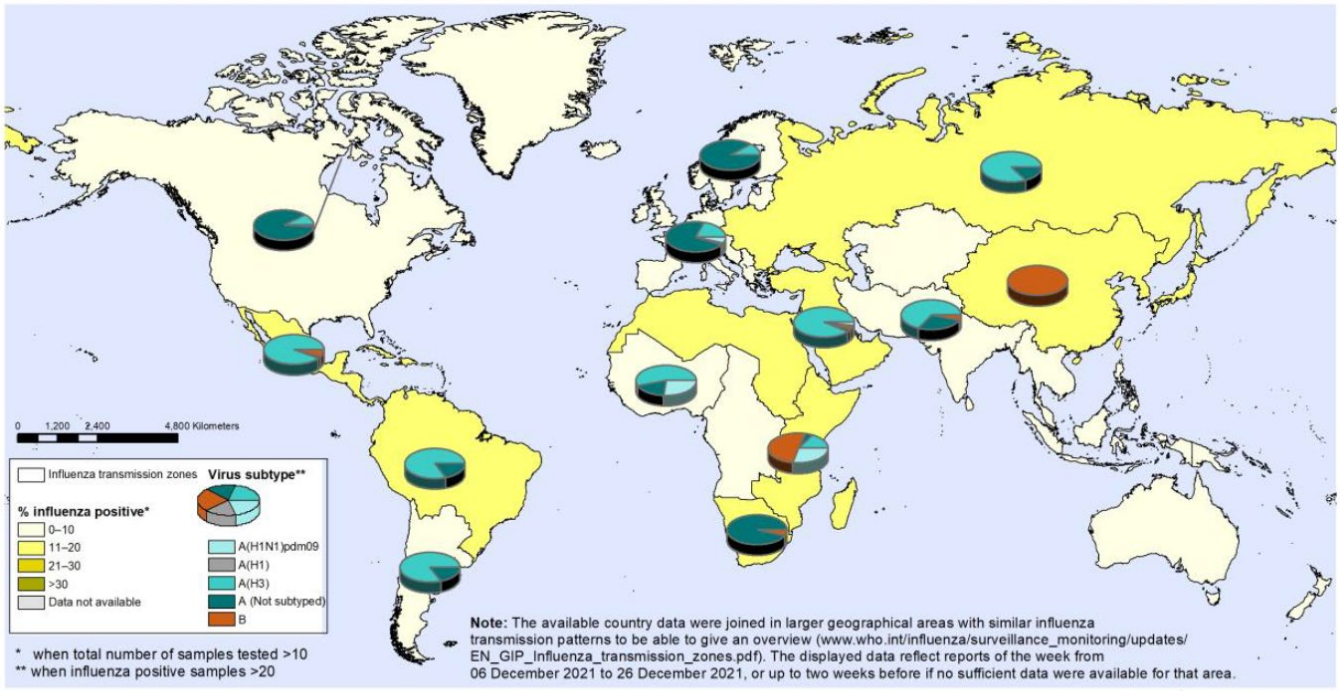
Summary

The current influenza surveillance data should be interpreted with caution as the ongoing COVID-19 pandemic has influenced to varying extents health seeking behaviours, staffing/routines in sentinel sites, as well as testing priorities and capacities in Member States. The various hygiene and physical distancing measures implemented by Member States to reduce SARS-CoV-2 virus transmission have likely played a role in reducing influenza virus transmission.

- **Globally**, influenza activity remains low but continued to increase especially in the temperate zones of the northern hemisphere. In several countries influenza activity reached the levels seen this time of year in pre-COVID-19 period.
- In the **temperate zones of the northern hemisphere**, influenza activity although still low appeared to increase in some countries with detections of mainly influenza A(H3N2) viruses and in China B-Victoria lineage viruses.
- In **North America**, influenza virus detections of predominately A(H3N2) among the subtyped increased and hospitalizations are increasing but remains low overall. RSV activity decreased in the USA and Canada.
- In **Europe**, influenza activity continued to increase. Influenza A(H3N2) predominated.
- In **East Asia**, influenza activity continued on an increasing trend in China, while influenza illness indicators and activity remained low in the rest of the subregion. Influenza B-Victoria lineage viruses predominated.
- In the **Caribbean and Central American countries**, influenza A(H3N2) and B virus detections increased in some countries.
- In **tropical South America**, influenza A(H3N2) detections increased overall. Severe acute respiratory infection (SARI) levels were reported at extraordinary levels in Bolivia (Plurinational State).
- In **tropical Africa**, overall influenza activity continued on a decreasing trend, with both influenza A and B detected.

- In **Southern Asia**, influenza virus detections of predominately influenza A(H3N2) increased overall, although decreasing in a few countries.
- In **South-East Asia**, sporadic influenza detections were reported in the Philippines.
- In the **temperate zones of the southern hemisphere**, influenza activity remained low overall, although increased detections of influenza A(H3N2) were reported in temperate South America.
- National Influenza Centres (NICs) and other national influenza laboratories from 110 countries, areas or territories reported data to FluNet for the time period from 6 December 2021 to 26 December 2021 (data as of 2022-01-07 11:00:29 UTC). The WHO GISRS laboratories tested more than 522595 specimens during that time period. A total of 27153 were positive for influenza viruses, of which 19980 (73.6%) were typed as influenza A and 7173 (26.4%) as influenza B. Of the sub-typed influenza A viruses, 352 (4.4%) were influenza A(H1N1)pdm09 and 7625 (95.6%) were influenza A(H3N2). Of the characterized B viruses, 3 (~0%) belonged to the B-Yamagata lineage and 6819 (~100%) to the B-Victoria lineage.

Figure 7. Percentage of respiratory specimens that tested positive for influenza, by influenza transmission zone. Map generated on 7 January 2022



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

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 at the Summit County Public Health Communicable Disease Unit (330-375-2662 or cdu@schd.org). This report was issued on January 14, 2022.