

Milwaukee Respiratory Virus Surveillance Update

MMWR Week 52, Ending December 30, 2023

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Overview

County

- There were 43 influenza-associated hospitalizations reported in Milwaukee County during the week ending on December 30, 2023. From October 1, 2023 through December 30, 2023, there have been 185 reported influenza-associated hospitalizations in Milwaukee County (138 City of Milwaukee residents).

State

- Influenza-like illness (ILI) levels are above baseline in the southeastern region of the state. Influenza-like illness activity is at a high level across the state.
- Influenza, RSV, and COVID-19 are circulating widely.
- The proportion of Emergency Department visits for influenza, RSV, and COVID-19 all increased in Week 52.

National

- Seasonal influenza activity is elevated and continues to increase in most parts of the country. 6 states/jurisdictions experienced moderate ILI activity while 39 experienced high or very high activity. Wisconsin had high ILI activity in outpatient visits.
- 2 influenza-associated pediatric deaths occurred during this week.
- Influenza A viruses were the most frequently reported this week.

Influenza Vaccine Composition 2022-2023 Influenza Season All standard-dose flu shots will be quadrivalent (no trivalent standard-dose flu shots will be available this season). The quadrivalent vaccines for use in the 2023-2024 influenza season contain the following:

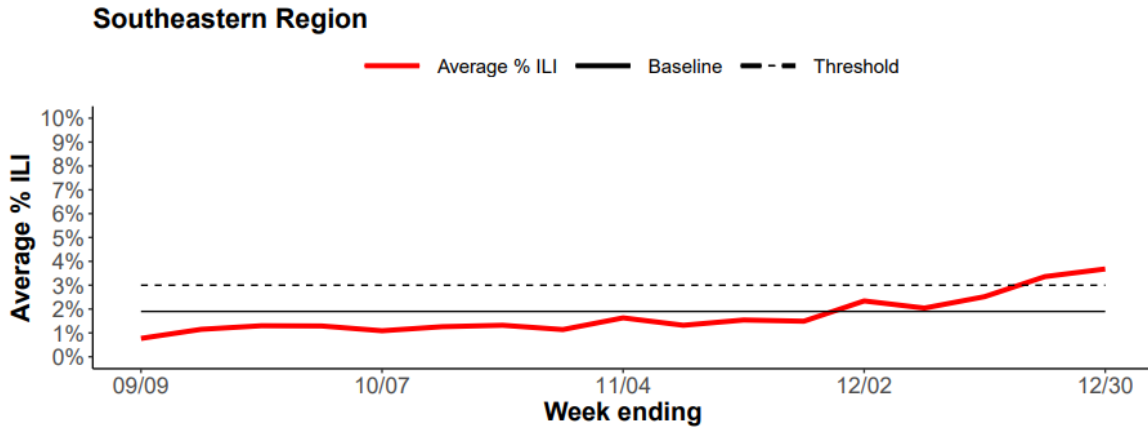
- an A/Victoria/4897/2022 (H1N1)pdm09-like virus;
- an A/Darwin/9/2021 (H3N2)-like virus;
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus; and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus

CDC Pediatric Data (Since Week 40)

2023-24 To Date: Total Deaths	2022-23 To Date: Total Deaths	Pediatric Deaths This Week	Notes on Deaths
27	118	2	Seven influenza-associated pediatric deaths occurring during the 2023-2024 season were reported to CDC during Week 52. The deaths occurred during Weeks 50, 51, and 52 of 2023 (the weeks ending December 16, December 23, and December 30, respectively). Five deaths were associated with influenza A viruses. Three of the influenza A viruses had subtyping performed; all three were A(H1N1) viruses. Two deaths were associated with influenza B viruses with no lineage determined.

Statewide and Regional Influenza Activity

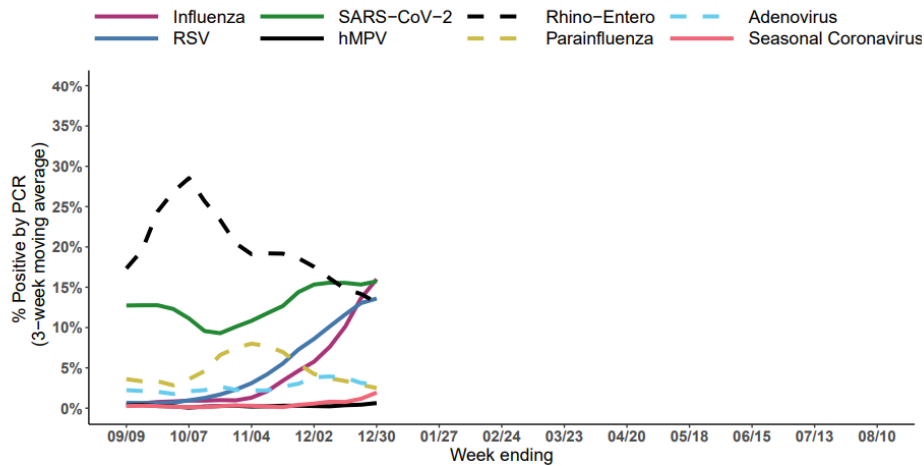
Influenza-like illness levels were above baseline statewide and above baseline in the southeastern region of the state.



Wisconsin Department of Health Services Respiratory Virus Surveillance Report, December 30, 2023

Respiratory Virus Laboratory Surveillance

Percent positivity of respiratory viruses tested by PCR, NREVSS



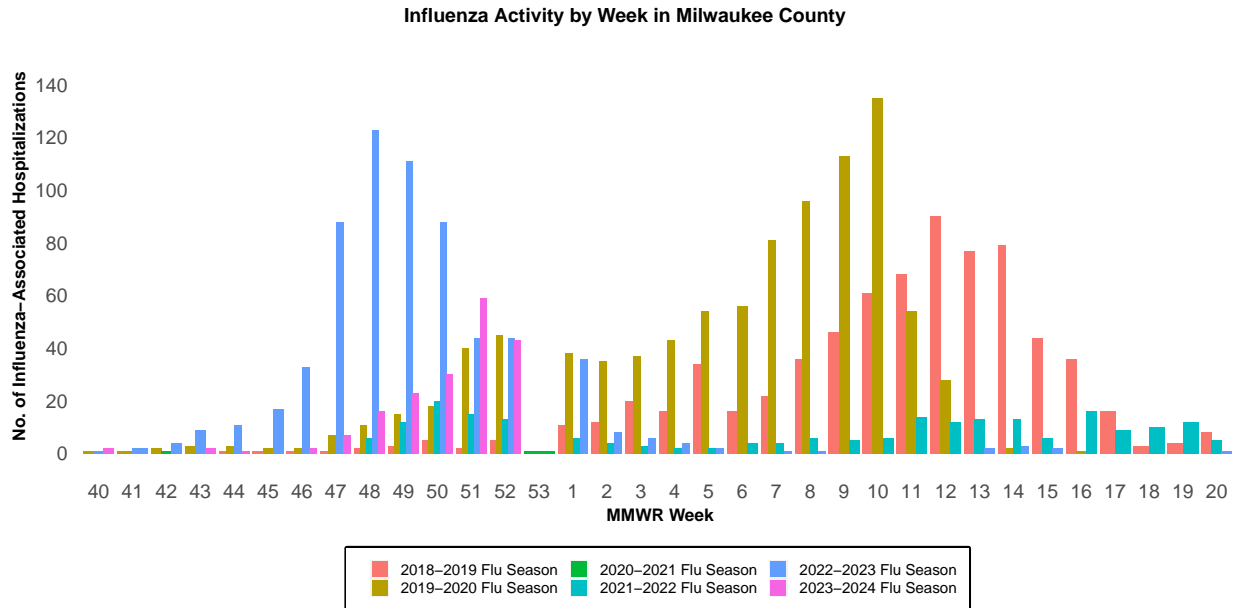
RSV = respiratory syncytial virus, hMPV = human metapneumovirus

Wisconsin Department of Health Services Respiratory Virus Surveillance Report, December 30, 2023

Milwaukee County Influenza Activity

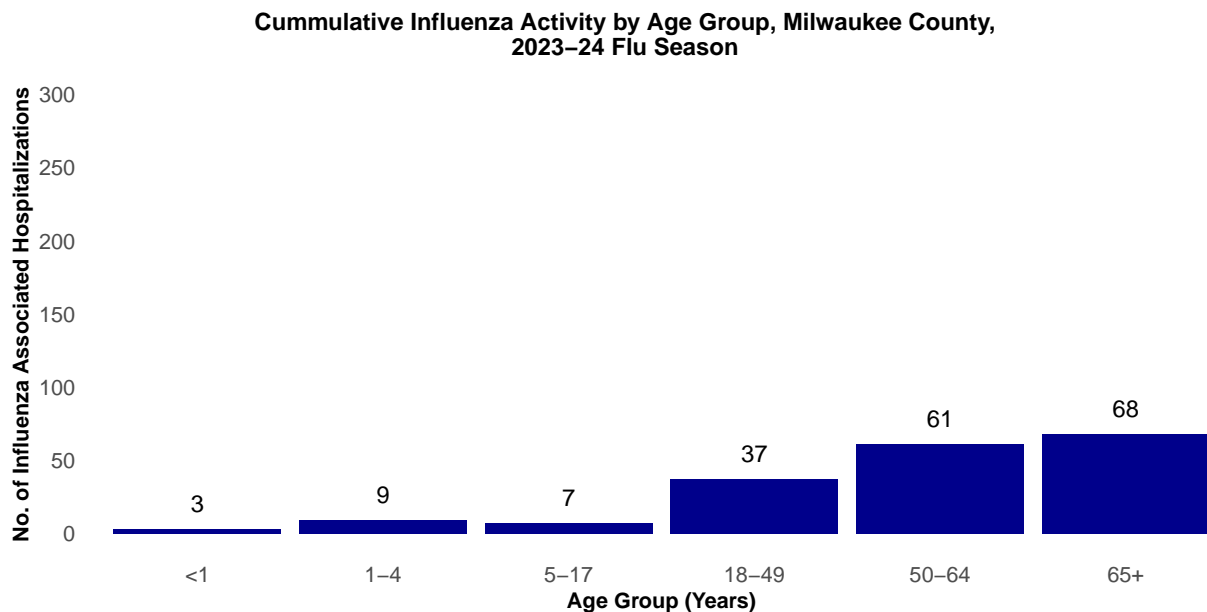
From October 1, 2023 through December 30, 2023 there have been 185 reported influenza-associated hospitalizations in Milwaukee County.

Milwaukee County Influenza-Associated Hospitalizations



*Flu activity was unusually low in the 2020-2021 flu season, despite high levels of testing. COVID-19 mitigation measures such as wearing face masks, social distancing, staying home, and school closures, in addition to flu vaccination, likely contributed to the low flu activity during this season.

Milwaukee County Influenza-Associated Hospitalizations by Age Group MMWR Week 40, 2023 through Week 52, 2023



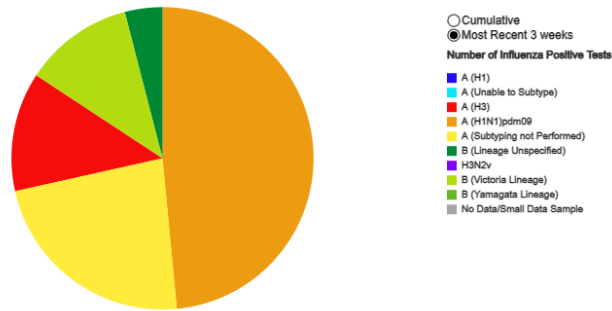
Influenza Testing Data

Public Health Laboratory Influenza Testing Data To-Date (Since Week 40)

Lab	Number Tested to date	Number Positive to date	Most Recent Week Percent Positive	Predominant A Subtype and Strain	Predominant B Strain	Predominant Type (A or B)
CDC	1,186,063	88,881	17,925/102,294(17.5%)	(H1N1)pdm09	Victoria	A
WSLH	-	-	2,123/12,161(17.5%)	Unknown	Unknown	A
MHDL	101	26	1/3(33.3%)	H3N2	Unknown	A

National Influenza Testing Data, CDC FluView

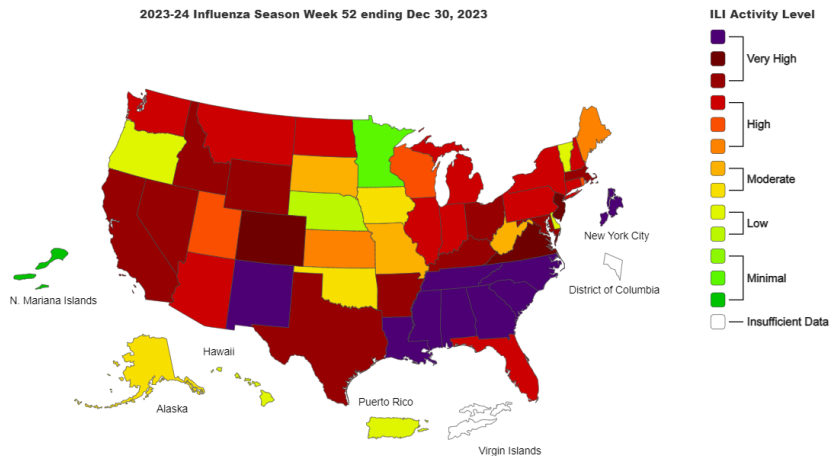
Influenza Positive Tests Reported to CDC by Public Health Laboratories, National Summary, 2023-24 Season, week ending Dec 30, 2023
Reported by: U.S. WHO/NREVSS Collaborating Laboratories and ILINet



<http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html> accessed 01/05/2024

National Influenza Activity

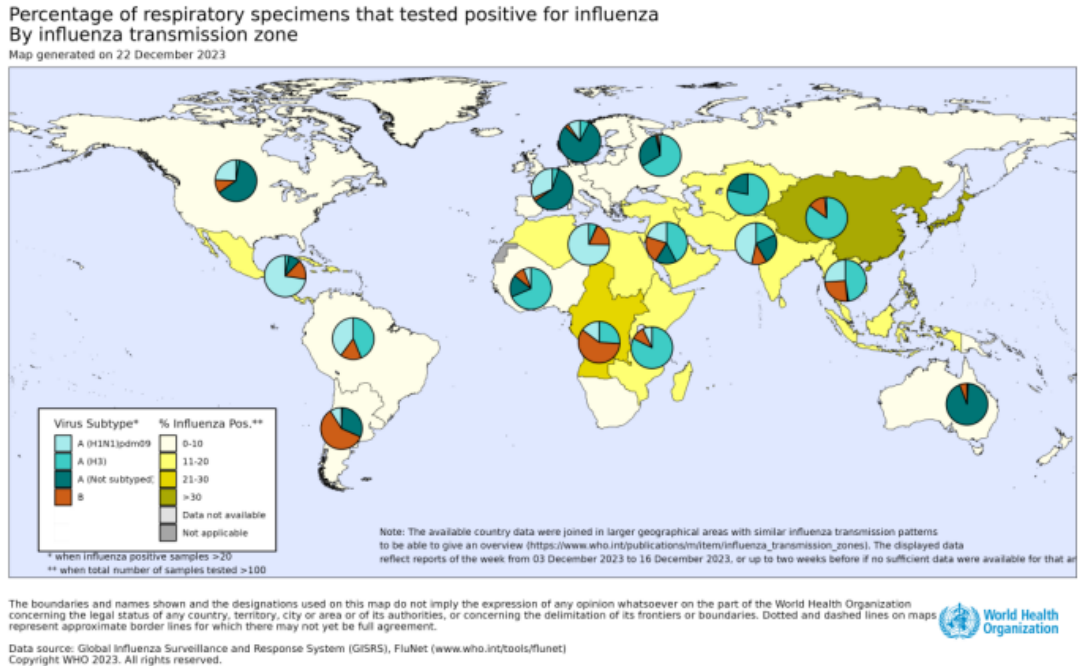
Outpatient Respiratory Illness Activity Map, CDC FluView



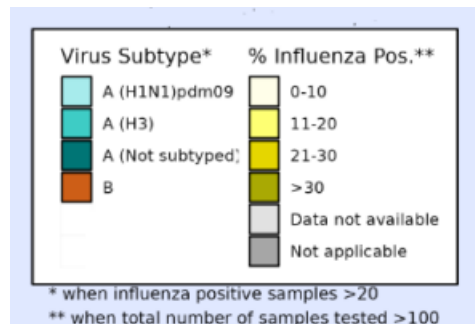
<https://www.cdc.gov/flu/weekly/index.htm#MS2> accessed 01/05/2024

Global Influenza Activity

Percentage of respiratory specimens testing positive for influenza, by influenza transmission zone¹ Map generated on 22 December 2023.



<https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates>, accessed 01/05/2024

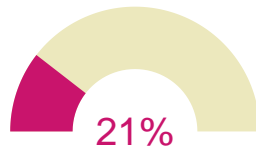


- Globally, influenza detections increased due to increases in parts of the temperate Northern hemisphere, including parts of Europe and Central Asia, North America, and Eastern and Western Asia.
- In the countries of North America, influenza detections increased and activity was above the seasonal baseline. Influenza A(H1N1)pdm09 viruses predominated among the detections.

Influenza Vaccination Uptake by City of Milwaukee Residents, 2023-2024 Season

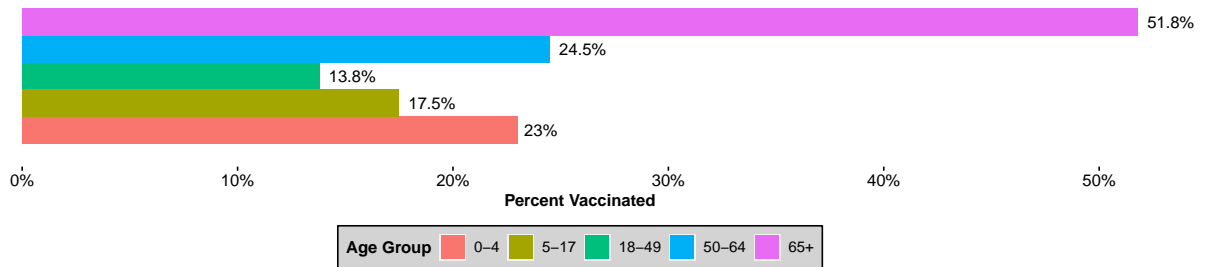
Overview

- City of Milwaukee residents who have received at least one dose of flu vaccinations as of January 02, 2023:

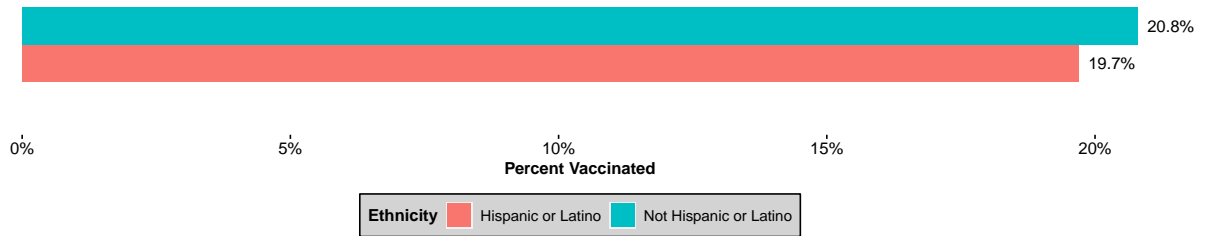


Influenza Vaccination Coverage for 2023-2024 Season by Demographics

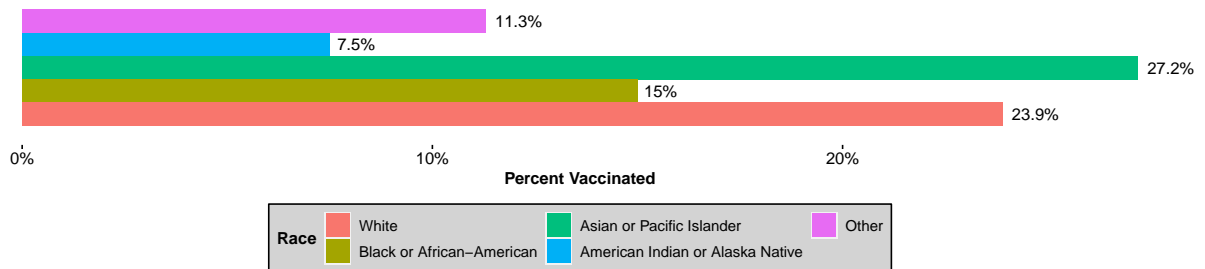
Influenza Vaccinations by Age Group



Influenza Vaccinations by Ethnicity

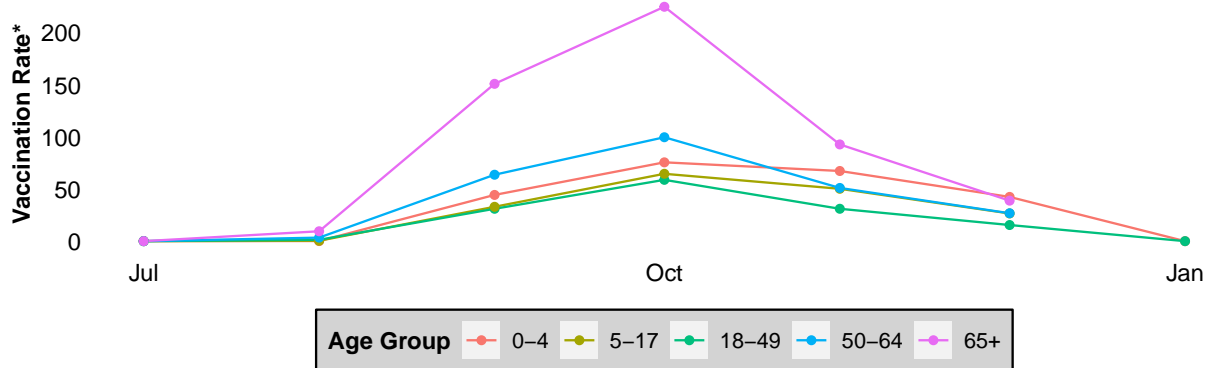


Influenza Vaccinations by Race



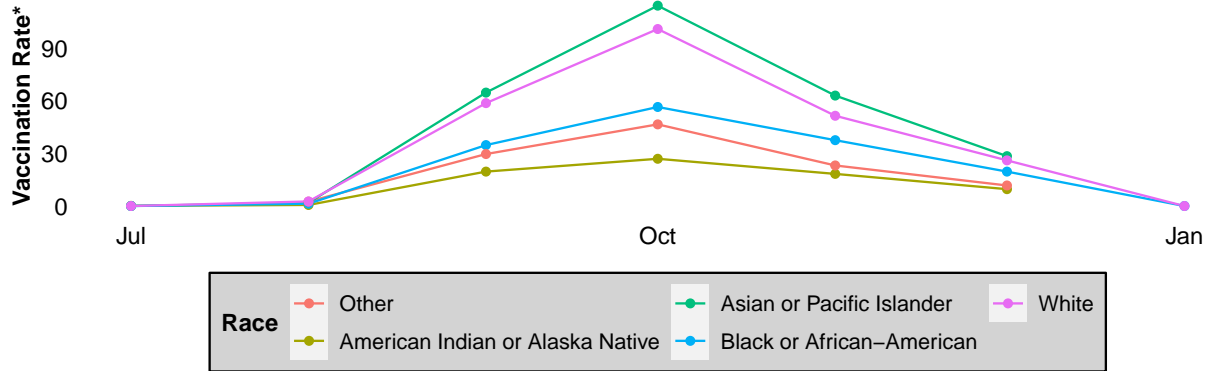
Vaccination Uptake Timelines

Influenza Vaccinations for Milwaukee Residents, 2023–24 Season by Month and Age Group



*Vaccination rates are per 1000 residents using 2021 ACS 5-year population estimates

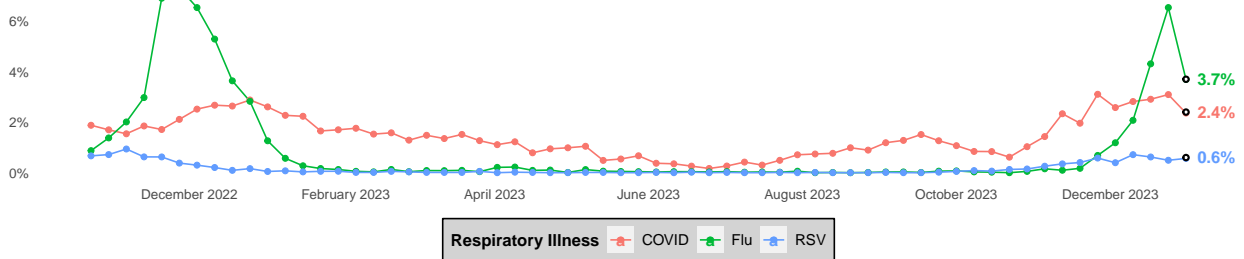
Influenza Vaccinations for Milwaukee Residents, 2023–24 Season by Month and Race



*Vaccination rates are per 1000 residents using 2021 ACS 5-year population estimates

Respiratory Illness Emergency Department Visits in Milwaukee County

Percent of All Emergency Room Visits Due to COVID, Flu, or RSV in Milwaukee County



COVID-19 Activity

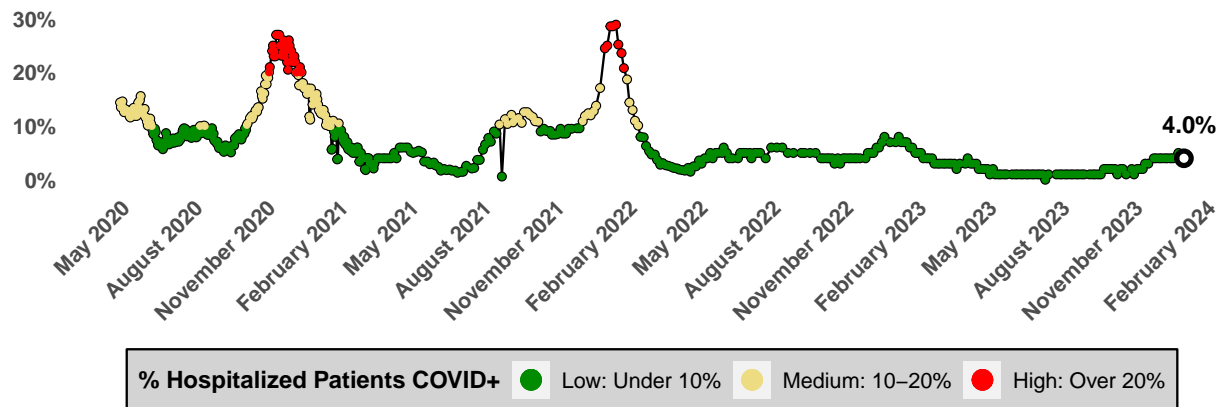
City of Milwaukee COVID-19 Vaccination Uptake

- As of January 02, 2023, 6.8% of city residents are up-to-date with their COVID-19 vaccinations.

COVID-19 Hospital Admission Metrics, Updated December 23, 2023

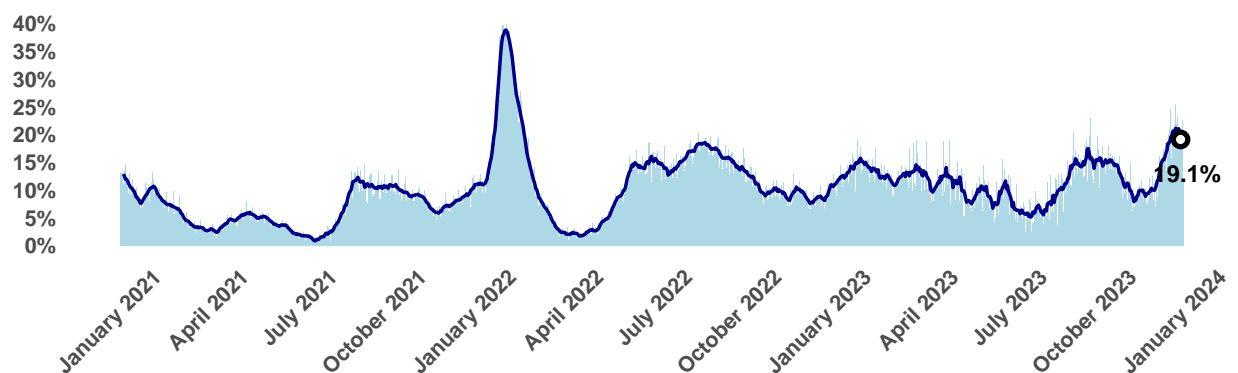
COVID-19 Hospital Admission Level - Medium		
County Weekly Metrics Used to Determine the COVID-19 Hospital Admission Level	Comparison to Prior Week	
New hospital admissions of confirmed COVID-19, past week (total)	300	Up from 266
New COVID-19 admissions per 100,000 population	19	Up from 16.9
% Staffed inpatient beds occupied by patients with confirmed COVID-19 past week (average)	4.6%	Up from 4.3%

Hospitalized Patients that are COVID-19 Positive Timeline, Milwaukee County



Data Source: HERC Region 7
Last Update: 2024-01-04

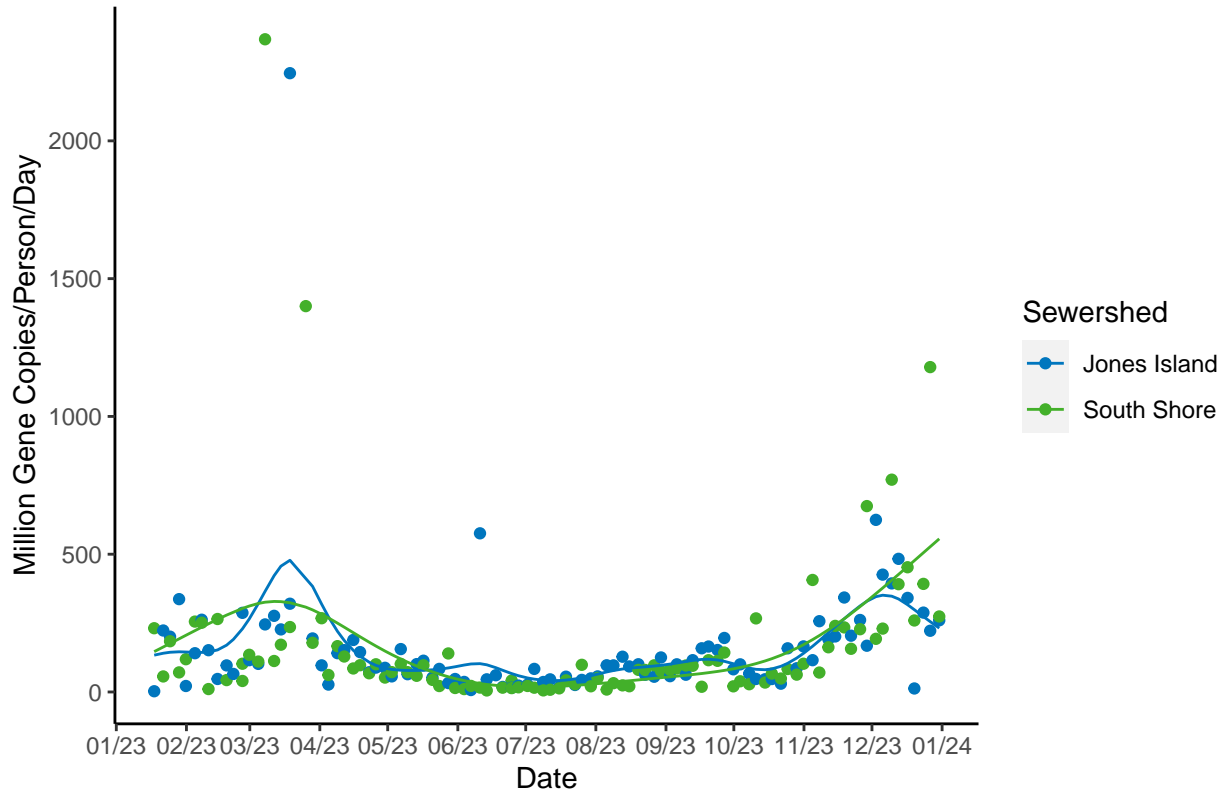
Percent Positive COVID-19 Tests by Day with 7-Day Rolling Average, City of Milwaukee



Please Note: Positivity is presented as positivity by PCR testing only. Changes to testing policies over time and rising usage of at-home tests as opposed to laboratory-based tests may affect positivity rates and incidence rates and should be interpreted accordingly.

SARS-CoV-2 Wastewater Surveillance

COVID-19 Trends in Milwaukee Sewersheds



Category: Compared to the last 6 months of data, the average of the last three most recent SARS-CoV-2 measurements are in the 80.39 percentile for Jones Island Sewershed and are in the 94.12 percentile for South Shore Sewershed. These measurements are *high* for Jones Island and *high* for South Shore.

Trajectory: Wastewater concentrations of SARS-CoV-2 *significantly increased* in the Jones Island or South Shore sewersheds.

Please note that at this time, the values reported here are slightly different than the values reported for Jones Island and South Shore on the DHS COVID-19 Wastewater Dashboard – this is not an error. The differences are due to the Milwaukee Health Department Lab (MHDL) using different methodologies than the lab who sends data to DHS.