

Milwaukee Respiratory Virus Surveillance Update

MMWR Week 48, Ending December 2, 2023

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Overview

County

- There were 7 influenza-associated hospitalizations reported in Milwaukee County during the week ending on December 2, 2023. From October 1, 2023 through December 2, 2023, there have been 20 reported influenza-associated hospitalizations in Milwaukee County (16 City of Milwaukee residents).

State

- Influenza-like illness (ILI) levels has risen above baseline in the southeastern region of the state. Percent of medical visits for an influenza-like illness continues to rise across Wisconsin
- COVID-19 activity is rising rapidly, with greater than 15% of clinical tests for COVID-19 testing positive. Activity is rising among all age groups, but especially among those greater than 64 years of age.
- RSV activity continues to increase, especially among children less than 5 years of age.

National

- Seasonal influenza activity continues to increase in most parts of the country, with the southeast and south-central areas of the country reporting the highest levels of activity. Nine states/jurisdictions experienced moderate ILI activity while sixteen experienced high or very high activity. Wisconsin had low ILI activity in outpatient visits.
- 0 influenza-associated pediatric deaths were reported 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:

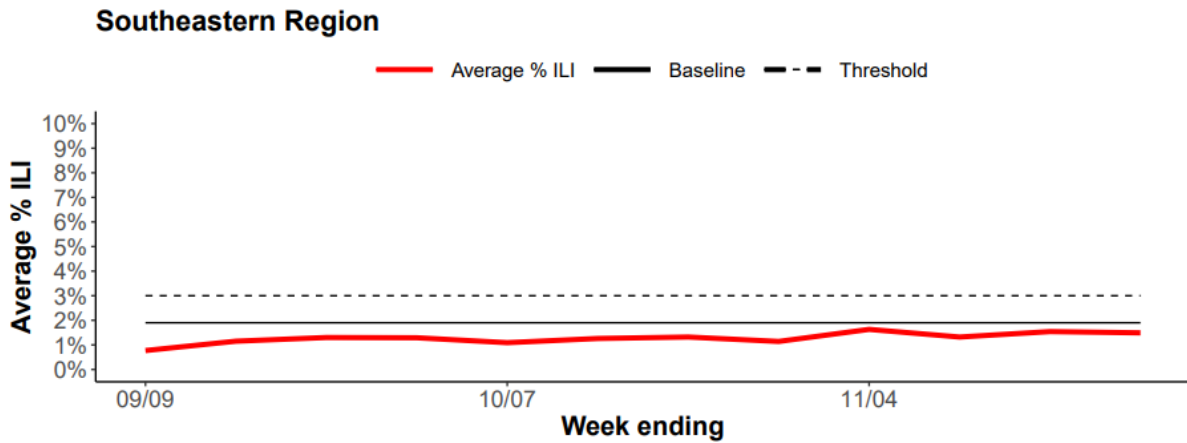
- an A/Victoria/4897/2022 (H1N1)pdm09-like virus;
- an A/Darwin/9/2021 (H3N2)-like virus;
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus; and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus

CDC Pediatric Data (Since Week 40)

| 2023-24 To Date: Total Deaths | 2022-23 To Date: Total Deaths | Pediatric Deaths Reported This Week | Notes on Deaths |
|----------------------------------------|----------------------------------------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12 | 52 | 0 | Four influenza-associated pediatric deaths occurring during the 2023-2024 season were reported to CDC during Week 48. The deaths occurred during weeks 45, 46 and 47 of 2023 (the weeks ending November 11, November 18, and November 25, respectively). Three deaths were associated with influenza A(H1N1) viruses and one death was associated with an influenza B virus with no lineage determined. |

Statewide and Regional Influenza Activity

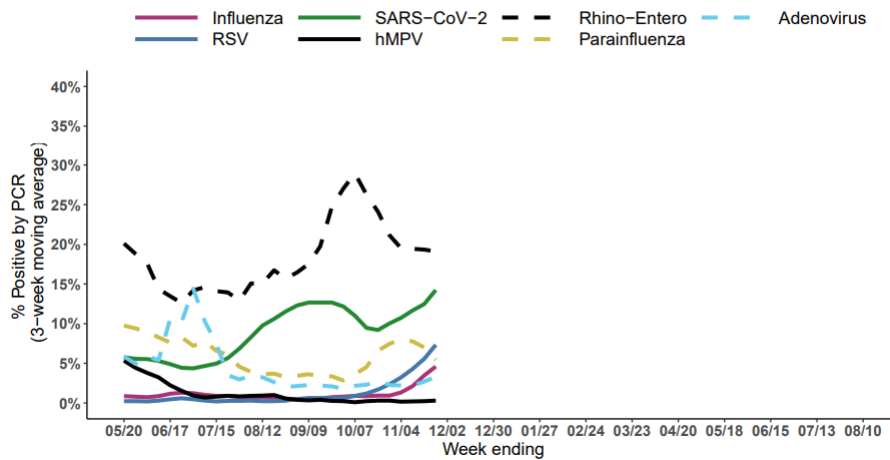
Influenza-like illness levels were below baseline statewide and in the southeastern region of the state.



Wisconsin Department of Health Services Respiratory Virus Surveillance Report, December 2, 2023

Respiratory Virus Laboratory Surveillance

Percent positivity of respiratory viruses tested by PCR, NREVSS



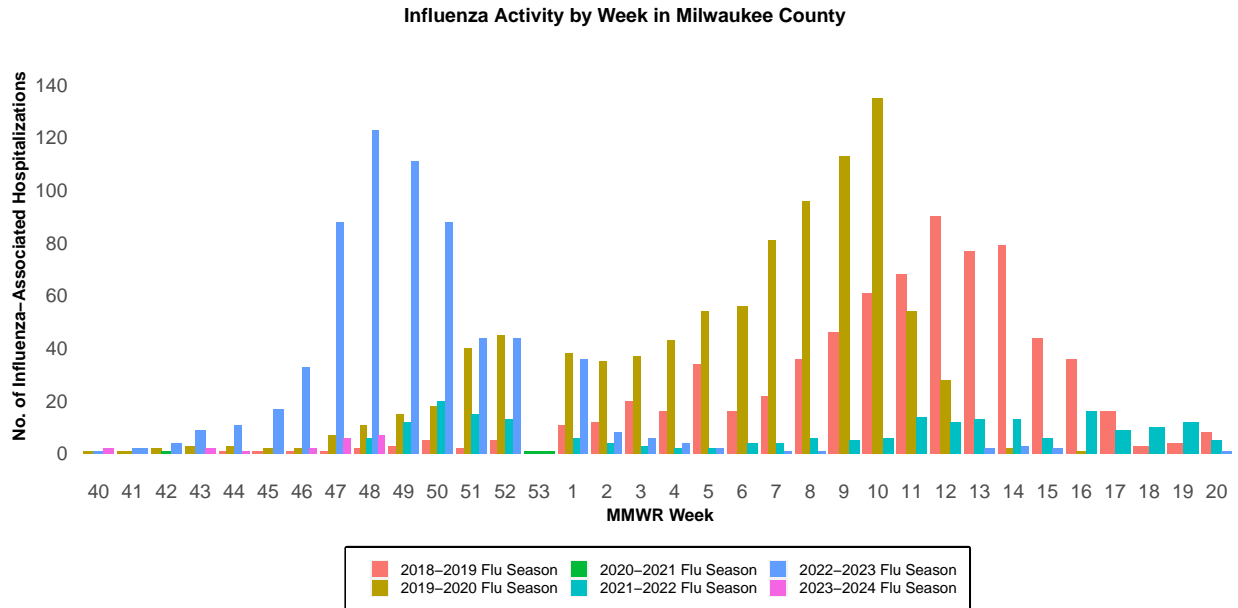
RSV = respiratory syncytial virus, hMPV = human metapneumovirus

Wisconsin Department of Health Services Respiratory Virus Surveillance Report, December 2, 2023

Milwaukee County Influenza Activity

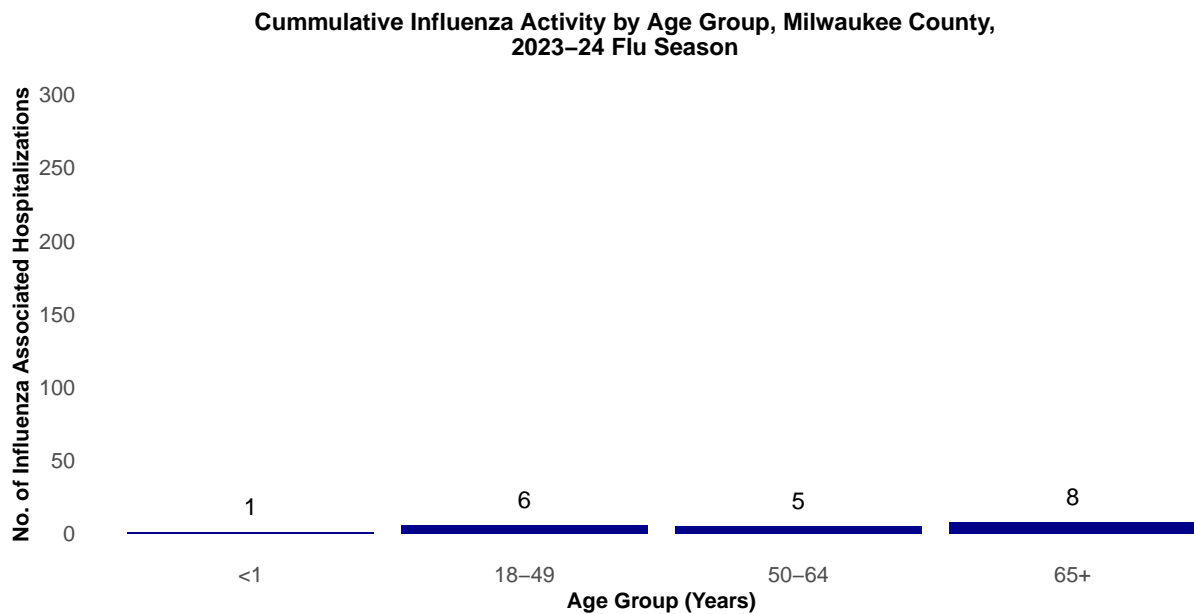
From October 1, 2023 through December 2, 2023 there have been 20 reported influenza-associated hospitalizations in Milwaukee County. Statewide hospitalization data are not yet available.

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 48, 2023



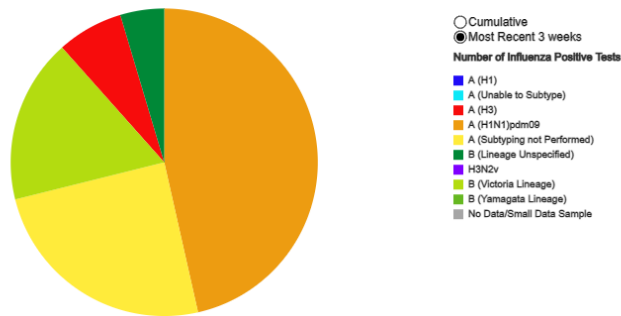
Influenza Testing Data

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 | 690,802 | 25,243 | 6,415/93,944(6.8%) | (H1N1)pdm09 | Victoria | A |
| WSLH | - | - | 1,030/15,914(6.5%) | Unknown | Unknown | A |
| MHDL | 51 | 8 | 0/14(0%) | Unknown | Unknown | A |

National Influenza Testing Data, CDC FluView

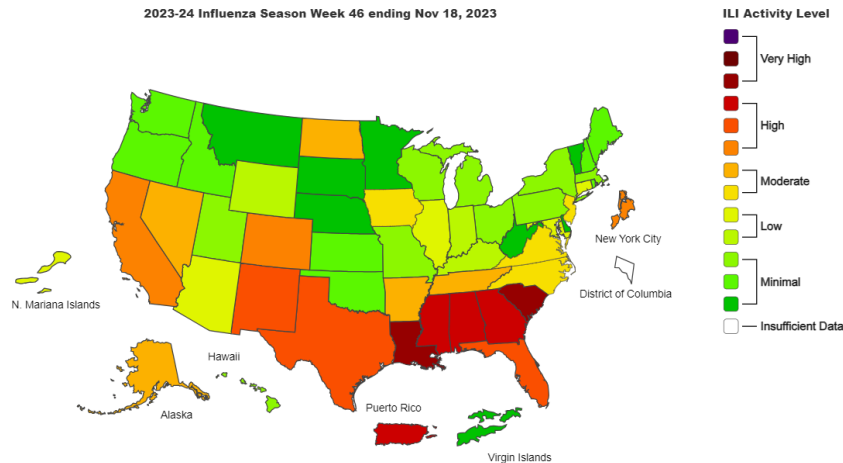
Influenza Positive Tests Reported to CDC by Public Health Laboratories, National Summary,
2023-24 Season, week ending Nov 11, 2023
Reported by: U.S. WHOINREVSS Collaborating Laboratories and ILINet



<http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html> accessed 12/08/2023

National Influenza Activity

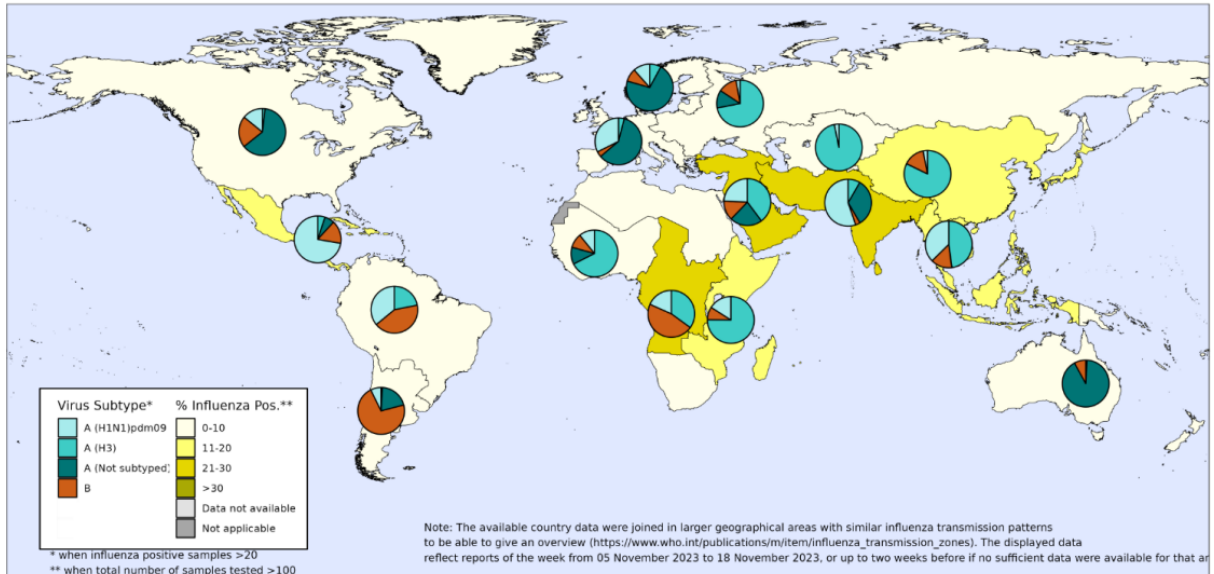
Outpatient Respiratory Illness Activity Map, CDC FluView



<https://www.cdc.gov/flu/weekly/index.htm#MS2> accessed 12/08/2023

Global Influenza Activity

Percentage of respiratory specimens testing positive for influenza, by influenza transmission zone¹ Map generated on 24 November 2023.

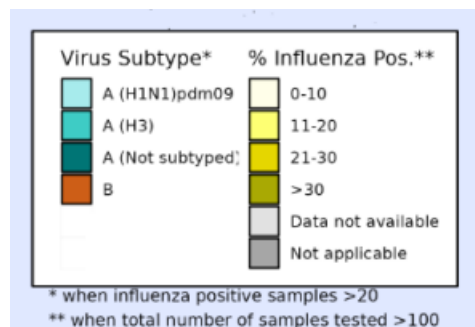


The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers 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/tools/fluNet)
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<https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates>, accessed 12/08/2023

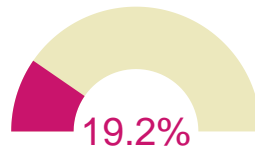


- Globally, influenza detections increased due to increases in parts of the temperate Northern hemisphere, including parts of Europe and Central Asia, North America, and Eastern and Western Asia.
- In the countries of North America, influenza detections increased but remained low or below baseline. Influenza A(H1N1)pdm09 viruses predominated among the detections. Influenza-like illness (ILI) increased above the seasonal threshold in the United States of America.

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

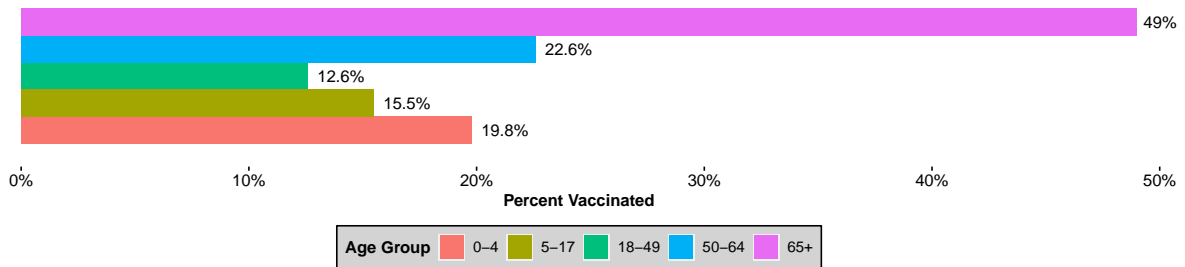
Overview

- City of Milwaukee residents who have received at least one dose of flu vaccinations as of December 7, 2023:

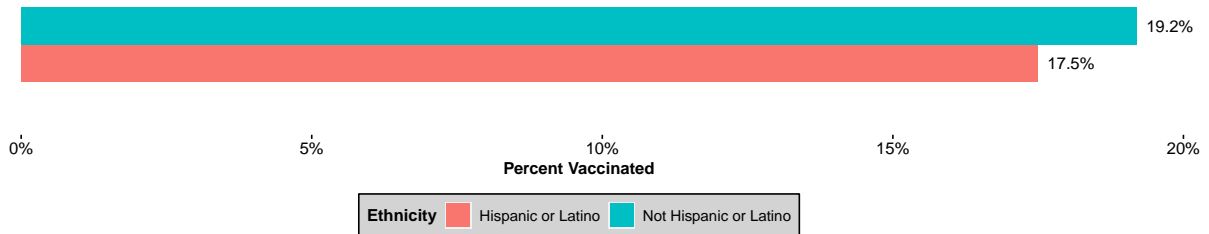


Influenza Vaccination Coverage for 2023-2024 Season by Demographics

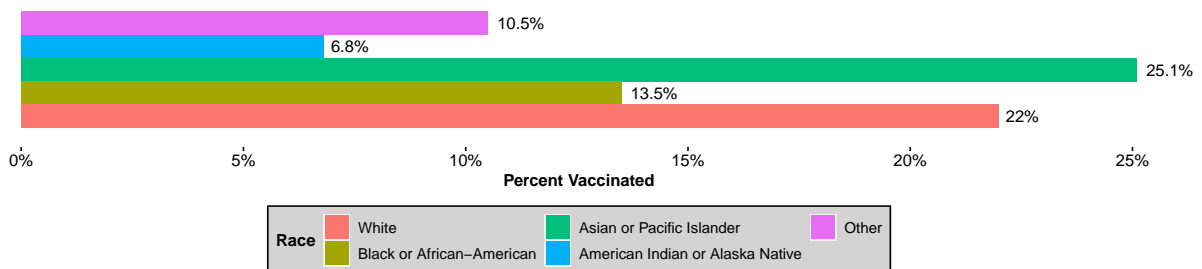
Influenza Vaccinations by Age Group



Influenza Vaccinations by Ethnicity

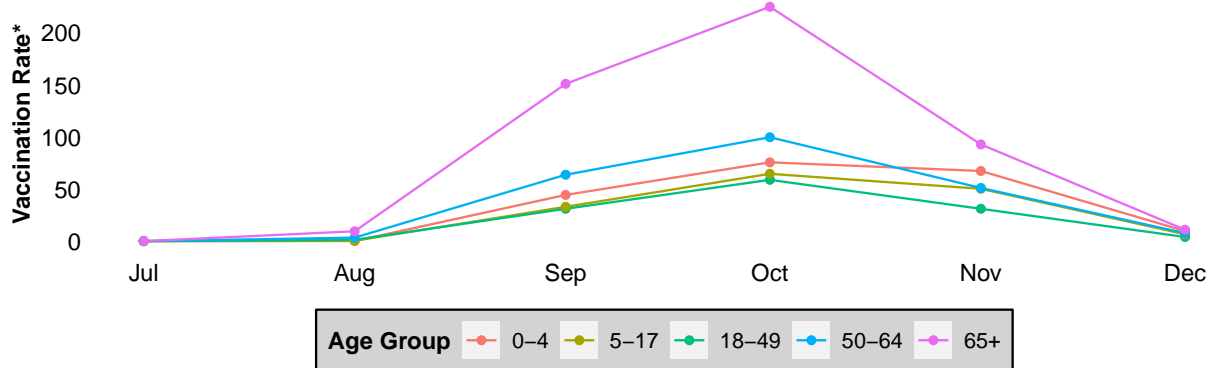


Influenza Vaccinations by Race



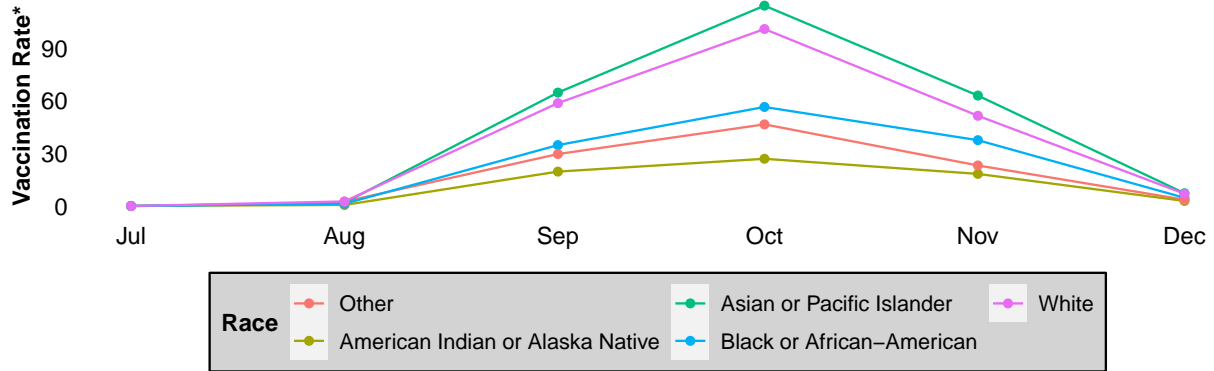
Vaccination Uptake Timelines

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

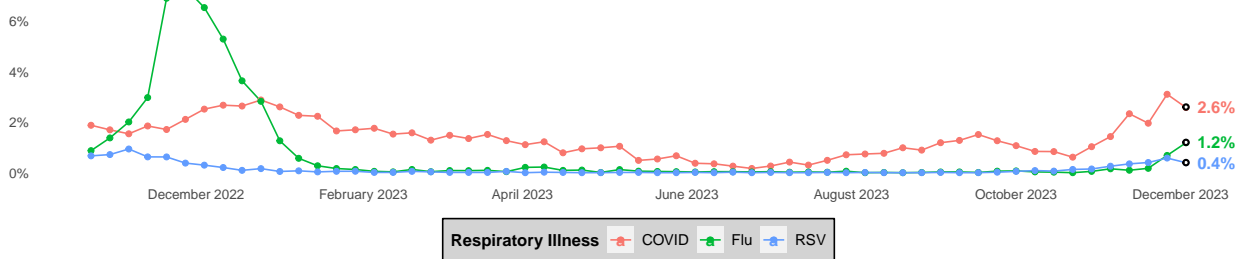
Influenza Vaccinations for Milwaukee Residents, 2023–24 Season by Month and Race



*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

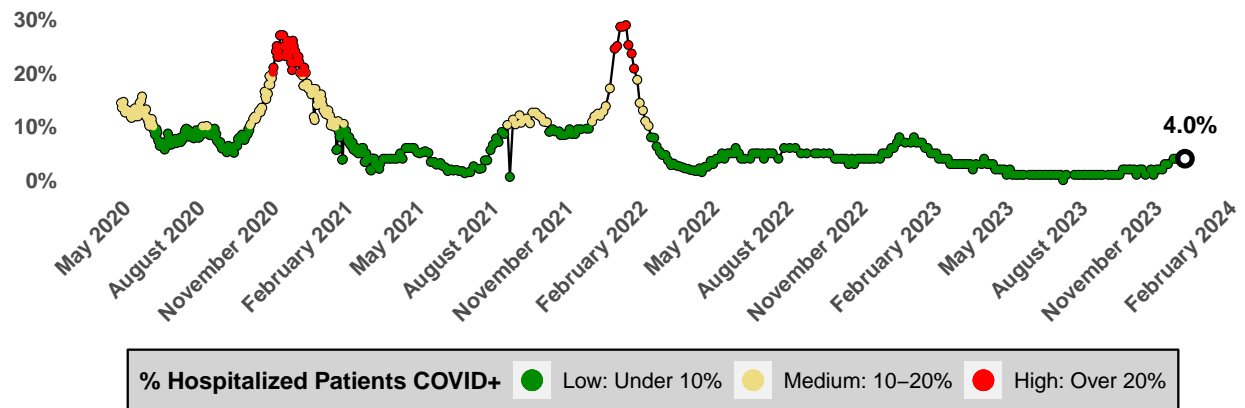
City of Milwaukee COVID-19 Vaccination Uptake

- As of December 7, 2023, 5.8% of city residents are up-to-date with their COVID-19 vaccinations.

COVID-19 Hospital Admission Metrics, Updated December 2, 2023

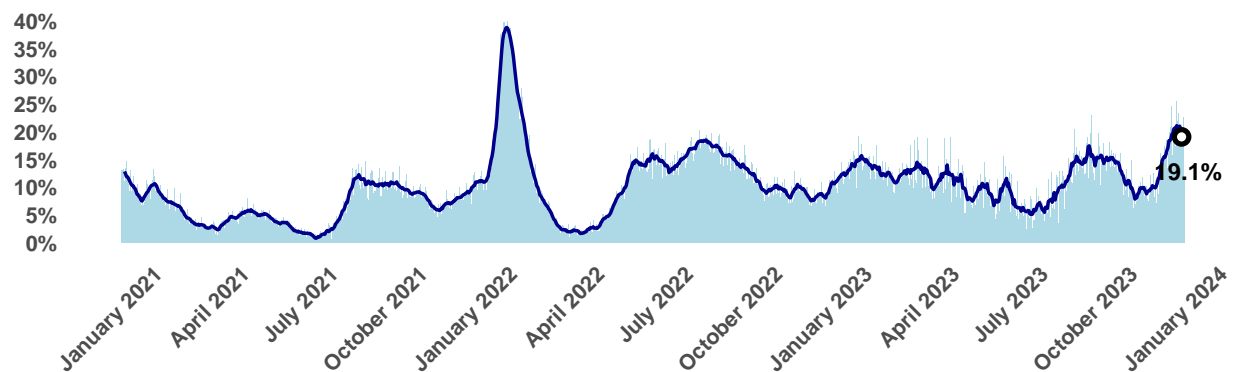
| COVID-19 Hospital Admission Level - Medium | | |
|-------------------------------------------------------------------------------------------|------|--------------------------|
| County Weekly Metrics Used to Determine the COVID-19 Hospital Admission Level | | Comparison to Prior Week |
| New hospital admissions of confirmed COVID-19, past week (total) | 254 | Up from 207 |
| New COVID-19 admissions per 100,000 population | 16.1 | Up from 13.1 |
| % Staffed inpatient beds occupied by patients with confirmed COVID-19 past week (average) | 4.4% | Up from 3.5% |

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



Data Source: HERC Region 7
Last Update: 2023-12-11

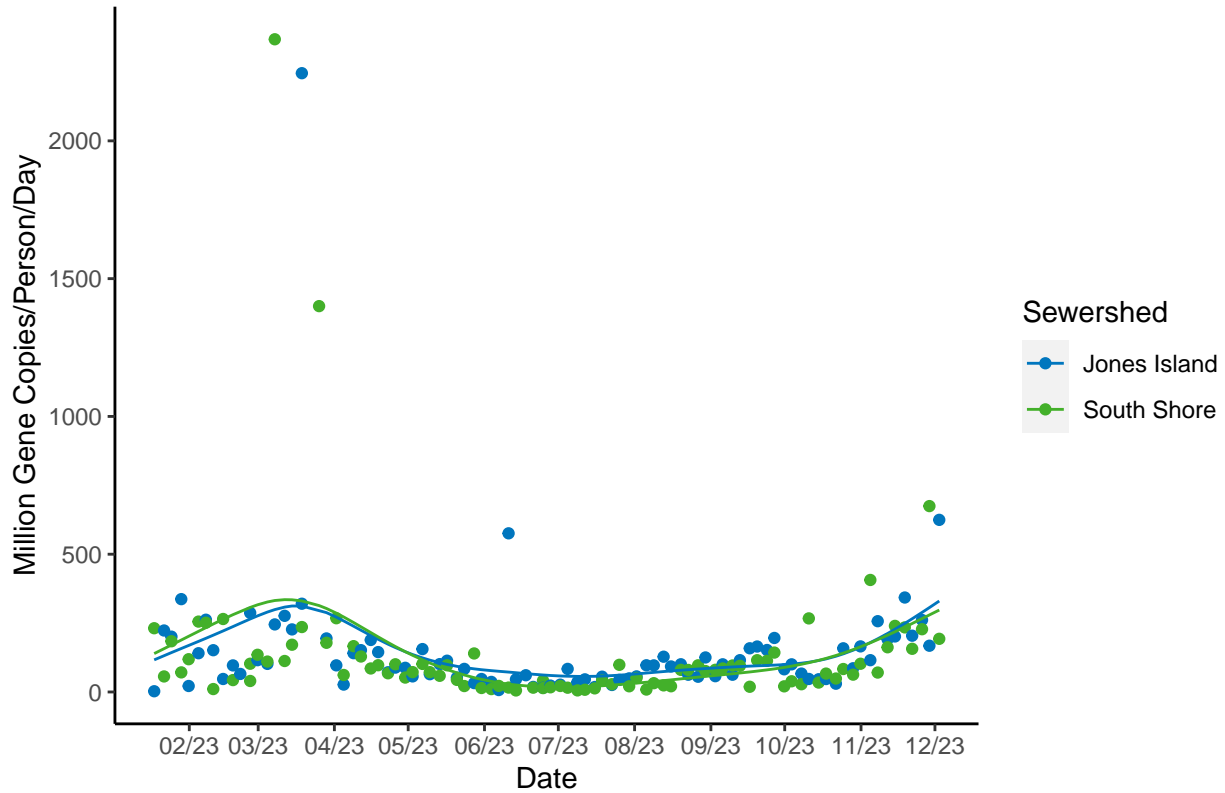
Percent Positive COVID-19 Tests by Day with 7-Day Rolling Average, City of Milwaukee



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 98 percentile for Jones Island Sewershed and are in the 96 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.