

# Milwaukee Respiratory Virus Surveillance Update

## MMWR Week 50, Ending December 16, 2023

### Contents

|   |    |
|---|----|
| Overview . . . . .  | 2  |
| Statewide and Regional Influenza Activity . . . . .                                     | 3  |
| Respiratory Virus Laboratory Surveillance . . . . .                                     | 3  |
| Milwaukee County Influenza Activity . . . . .   | 4  |
| Influenza Testing Data . . . . .  | 5  |
| National Influenza Activity . . . . .   | 5  |
| Global Influenza Activity . . . . .   | 6  |
| Influenza Vaccination Uptake by City of Milwaukee Residents, 2023-2024 Season . . . . . | 7  |
| Respiratory Illness Emergency Department Visits in Milwaukee County . . . . .           | 8  |
| COVID-19 Activity . . . . .   | 9  |
| SARS-CoV-2 Wastewater Surveillance . . . . .  | 10 |

## Overview

### County

- There were 18 influenza-associated hospitalizations reported in Milwaukee County during the week ending on December 16, 2023. From October 1, 2023 through December 16, 2023, there have been 69 reported influenza-associated hospitalizations in Milwaukee County (48 City of Milwaukee residents).

### State

- Influenza-like illness (ILI) levels is above baseline in the southeastern region of the state. Influenza-like illness activity continues to increase in Wisconsin and is at a moderate level across the state.
- Influenza, RSV, and COVID-19 are all circulating widely.
- Influenza and RSV activity are increasing.

### National

- Seasonal influenza activity is elevated and continues to increase in most parts of the country. 11 states/jurisdictions experienced moderate ILI activity while 25 experienced high or very high activity. Wisconsin had moderate ILI activity in outpatient visits.
- 0 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:

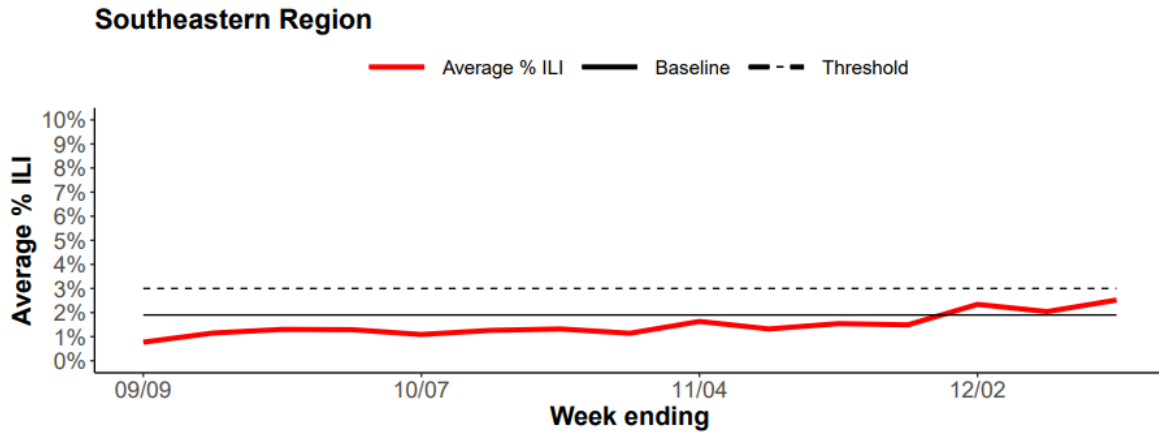
- an A/Victoria/4897/2022 (H1N1)pdm09-like virus;
- an A/Darwin/9/2021 (H3N2)-like virus;
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus; and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus

### CDC Pediatric Data (Since Week 40)

| 2023-24<br>To Date:<br>Total<br>Deaths | 2022-23<br>To Date:<br>Total<br>Deaths | Pediatric<br>Deaths This<br>Week | Notes on Deaths  |
|--|--|----------------------------------|--|
| 14                                     | 88                                     | 0                                | Two influenza-associated pediatric deaths occurring during the 2023-2024 season were reported to CDC during Week 49. One death was associated with an influenza B virus with no lineage determined and occurred during Week 46 (the week ending November 18, 2023). The other death was associated with an influenza A(H3) virus and occurred during Week 49 (the week ending December 9, 2023). |

## Statewide and Regional Influenza Activity

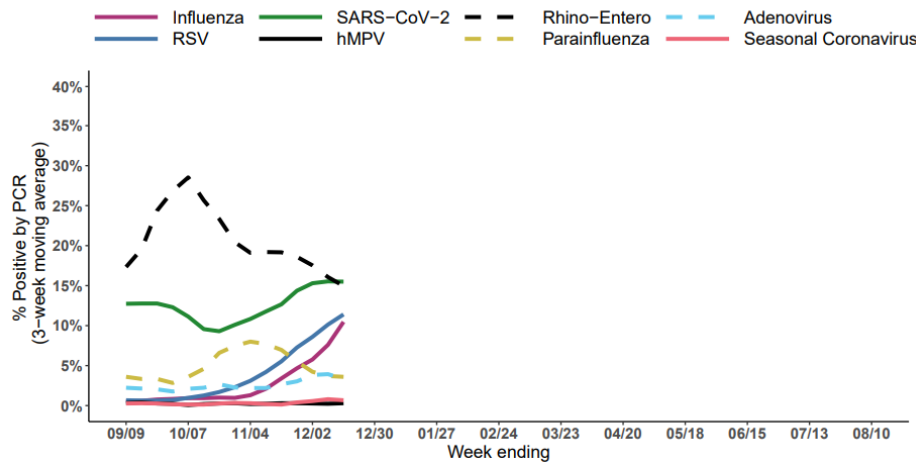
Influenza-like illness levels were paramStateBaselinebaselinestatewideandparamSEBaseline baseline in the southeastern region of the state.



Wisconsin Department of Health Services Respiratory Virus Surveillance Report, December 16, 2023

## Respiratory Virus Laboratory Surveillance

Percent positivity of respiratory viruses tested by PCR, NREVSS



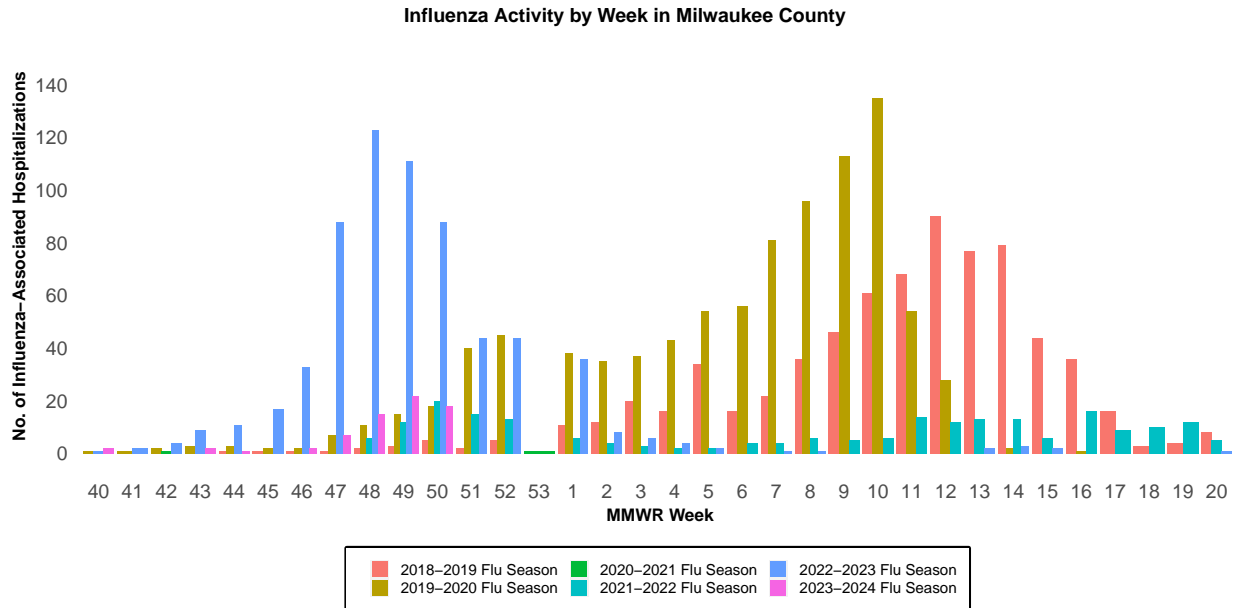
RSV = respiratory syncytial virus, hMPV = human metapneumovirus

Wisconsin Department of Health Services Respiratory Virus Surveillance Report, December 16, 2023

## Milwaukee County Influenza Activity

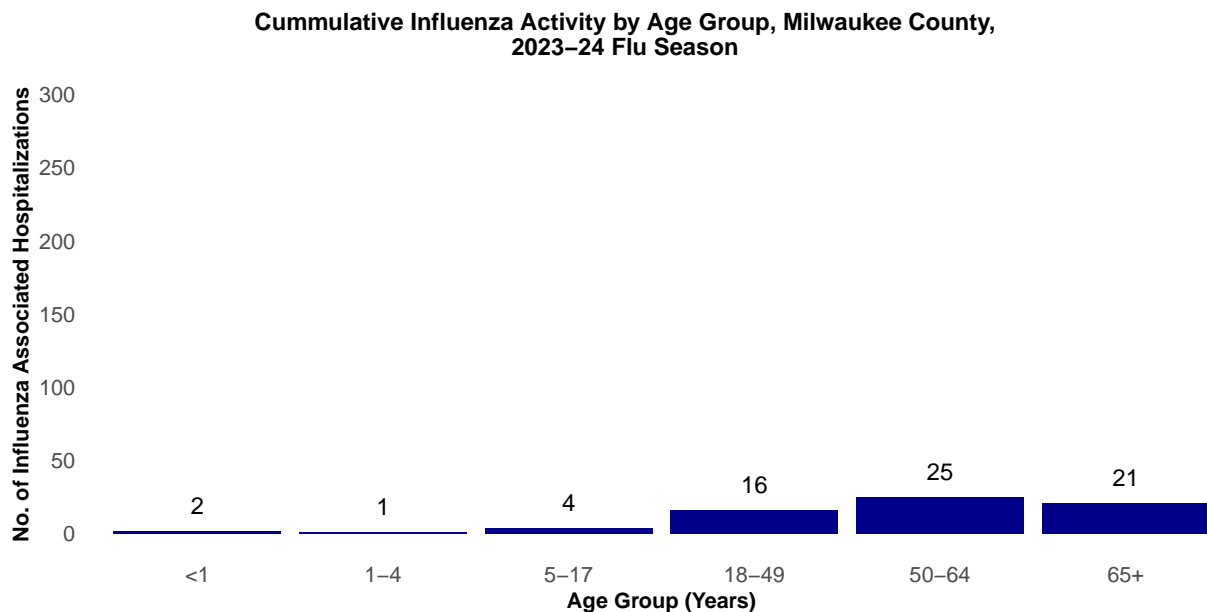
From October 1, 2023 through December 16, 2023 there have been 69 reported influenza-associated hospitalizations in Milwaukee County.

### 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 50, 2023



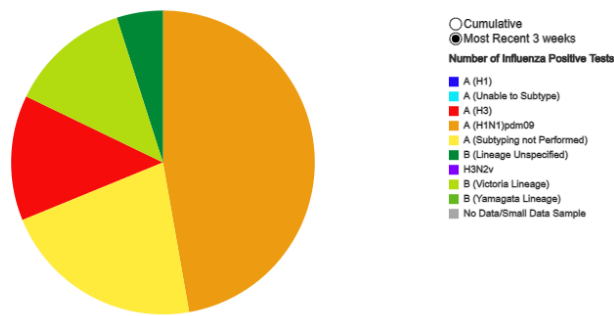
## Influenza Testing Data

### 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  | 949,819               | 52,825                  | 13,576/105,774(12.8%)             | (H1N1)pdm09                      | Victoria             | A                         |
| WSLH | -                     | -                       | 1,489/10,438(14.3%)               | Unknown                          | Unknown              | A                         |
| MHDL | 94                    | 23                      | 10/23(43.5%)                      | H3N2                             | Unknown              | A                         |

### National Influenza Testing Data, CDC FluView

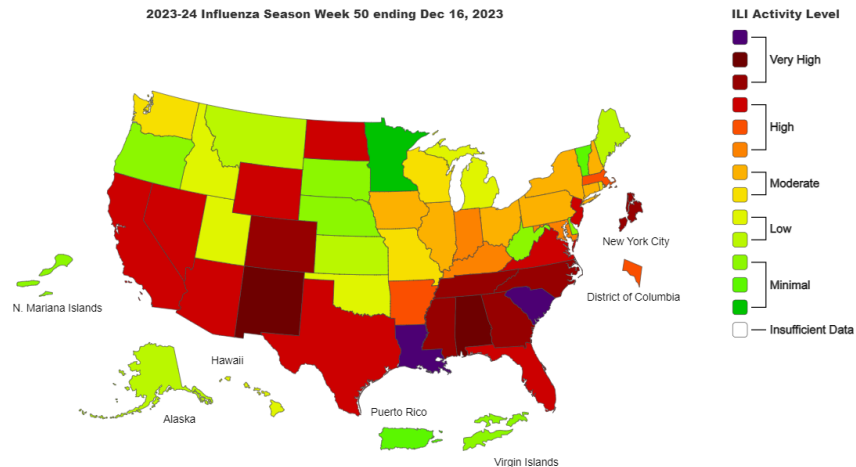
Influenza Positive Tests Reported to CDC by Public Health Laboratories, National Summary, 2023-24 Season, week ending Dec 16, 2023  
Reported by: U.S. WHOINREVSS Collaborating Laboratories and ILNet



<http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html> accessed 12/26/2023

## National Influenza Activity

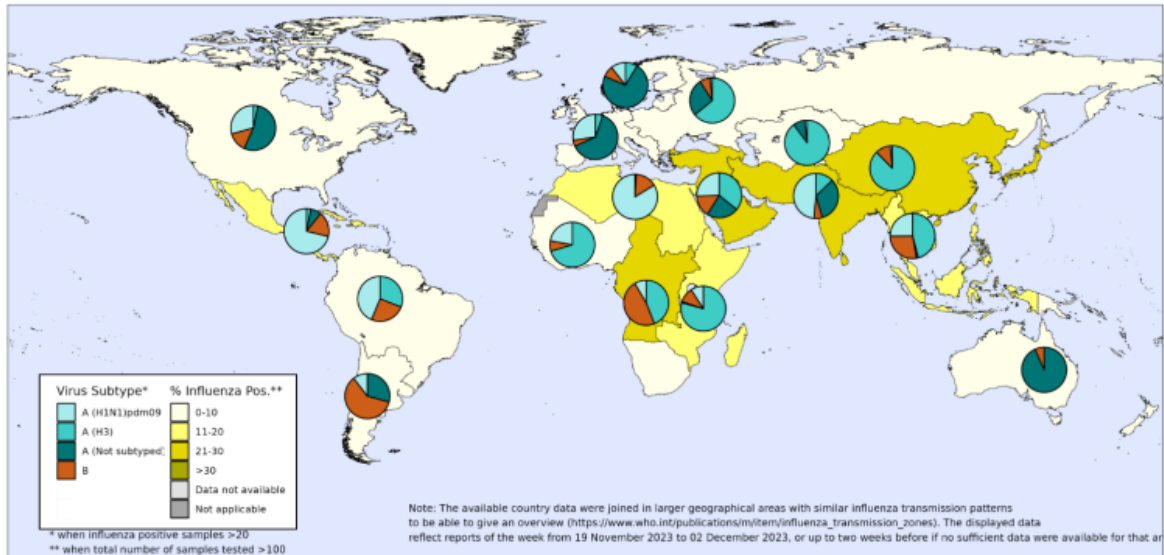
### Outpatient Respiratory Illness Activity Map, CDC FluView



<https://www.cdc.gov/flu/weekly/index.htm#MS2> accessed 12/26/2023

## Global Influenza Activity

### Percentage of respiratory specimens testing positive for influenza, by influenza transmission zone<sup>1</sup> Map generated on 08 December 2023.

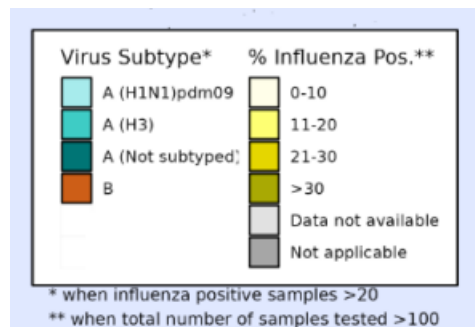


The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers 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/fluinet)  
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<https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates>, accessed 12/26/2023

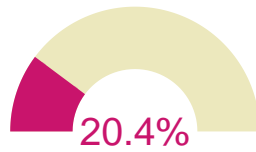


- Globally, influenza detections increased due to increases in parts of the temperate Northern hemisphere, including parts of Europe and Central Asia, North America, and Eastern and Western Asia.
- In the countries of North America, influenza detections increased and activity was above the seasonal baseline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

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

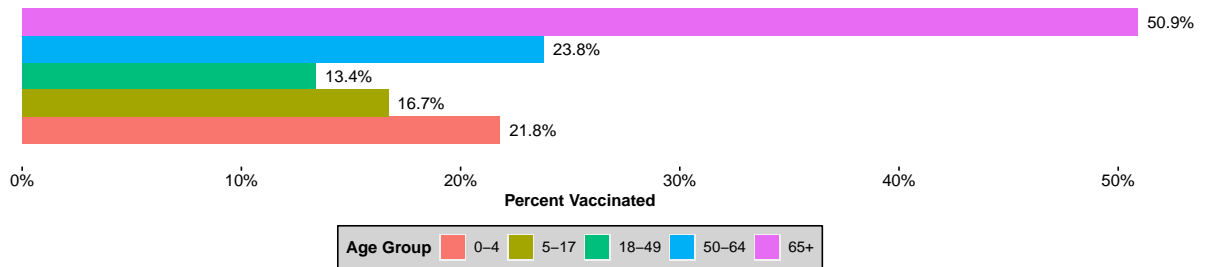
## Overview

- City of Milwaukee residents who have received at least one dose of flu vaccinations as of December 20, 2023:

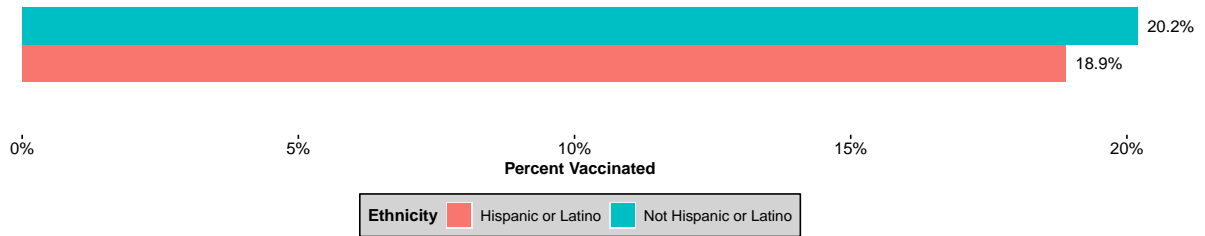


## Influenza Vaccination Coverage for 2023-2024 Season by Demographics

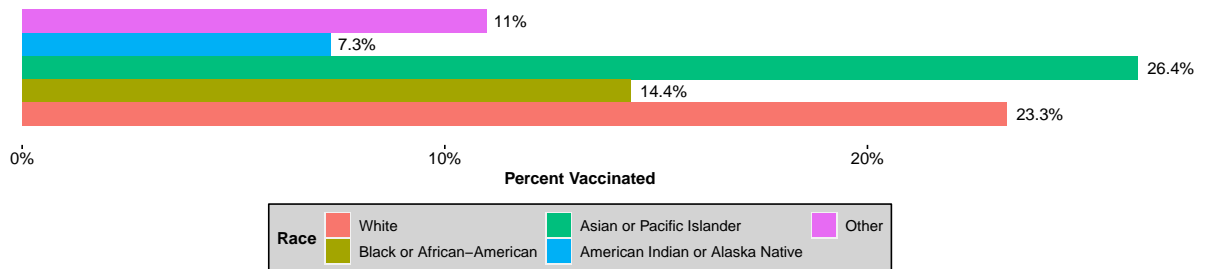
### Influenza Vaccinations by Age Group



### Influenza Vaccinations by Ethnicity

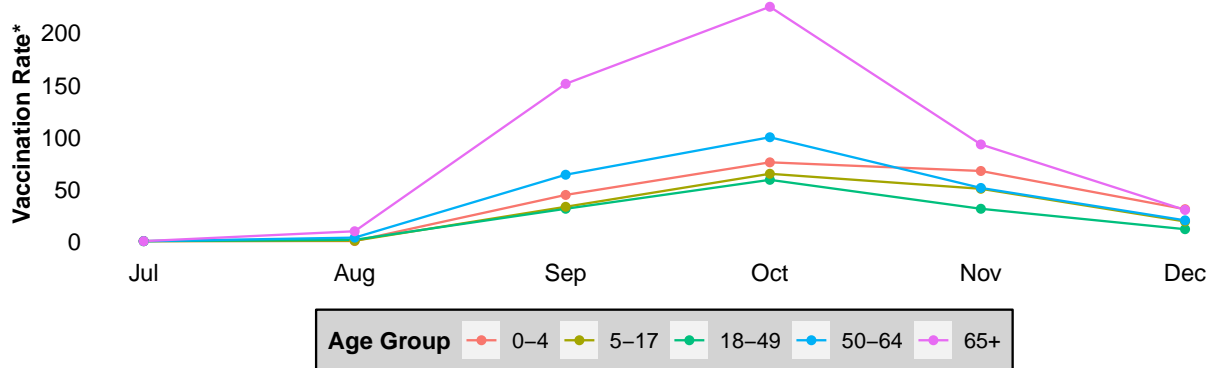


### Influenza Vaccinations by Race



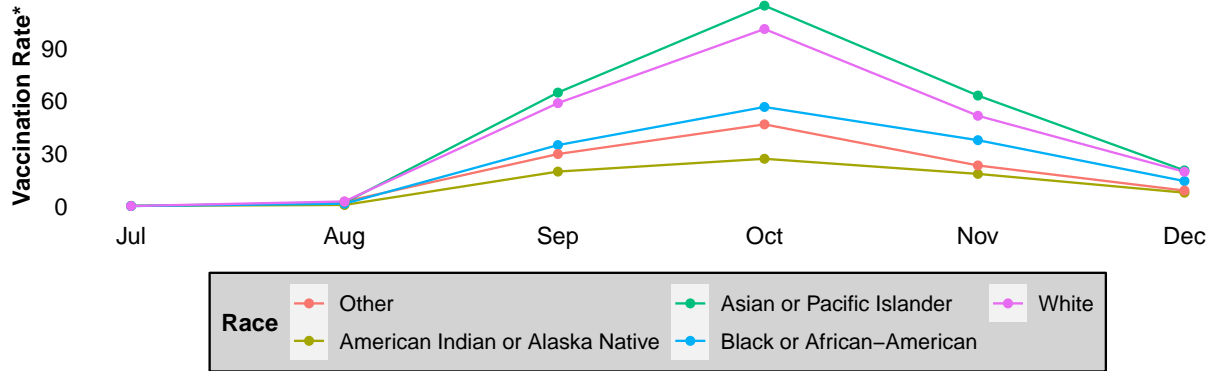
## Vaccination Uptake Timelines

### 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

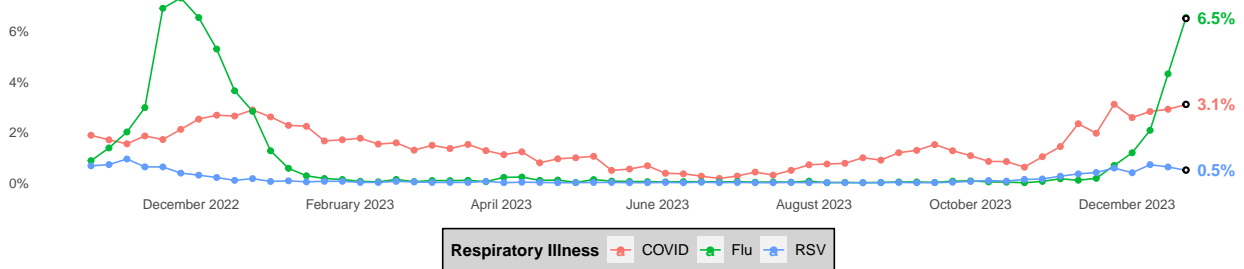
### Influenza Vaccinations for Milwaukee Residents, 2023–24 Season by Month and Race



\*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

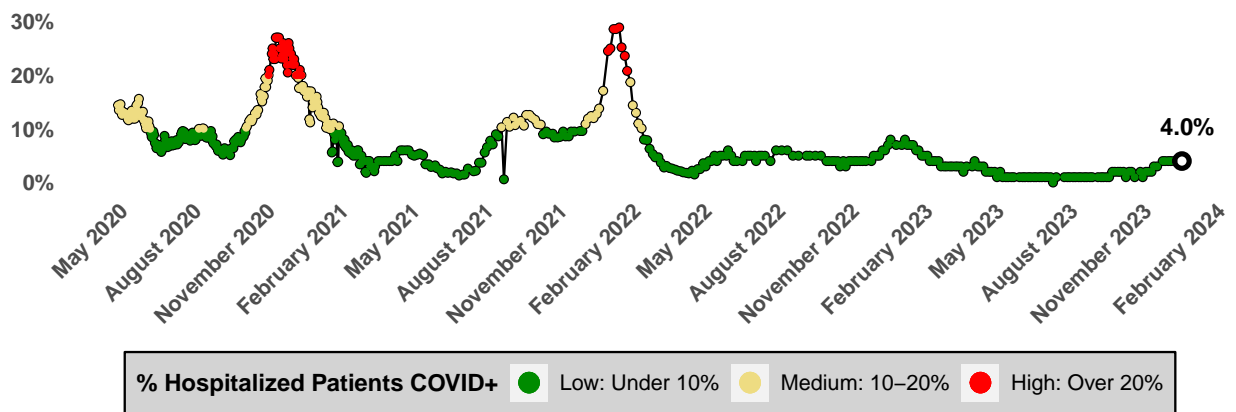
### City of Milwaukee COVID-19 Vaccination Uptake

- As of December 20, 2023, 6.4% of city residents are up-to-date with their COVID-19 vaccinations.

### COVID-19 Hospital Admission Metrics, Updated December 9, 2023

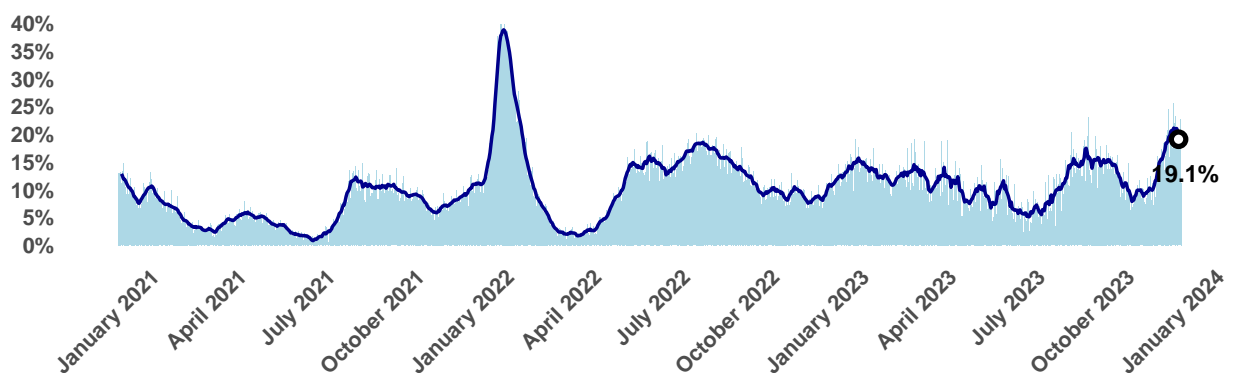
| COVID-19 Hospital Admission Level - Medium  |      |                          |
|---|------|--------------------------|
| County Weekly Metrics Used to Determine the COVID-19 Hospital Admission Level             |      | Comparison to Prior Week |
| New hospital admissions of confirmed COVID-19, past week (total)                          | 248  | Down from 254            |
| New COVID-19 admissions per 100,000 population  | 15.7 | Down from 16.1           |
| % Staffed inpatient beds occupied by patients with confirmed COVID-19 past week (average) | 4.4% | No change from 4.4%      |

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



Data Source: HERC Region 7  
Last Update: 2023-12-21

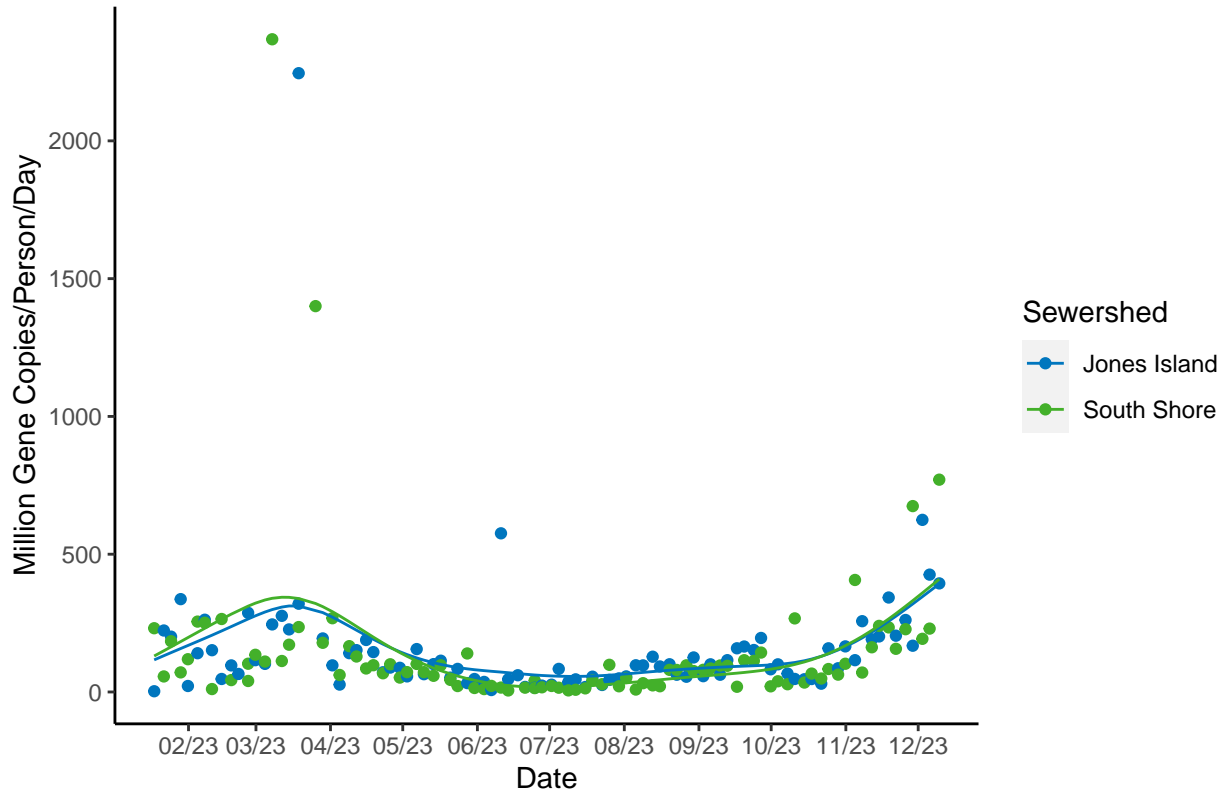
### Percent Positive COVID-19 Tests by Day with 7-Day Rolling Average, City of Milwaukee



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 97.92 percentile for Jones Island Sewershed and are in the 93.75 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.