

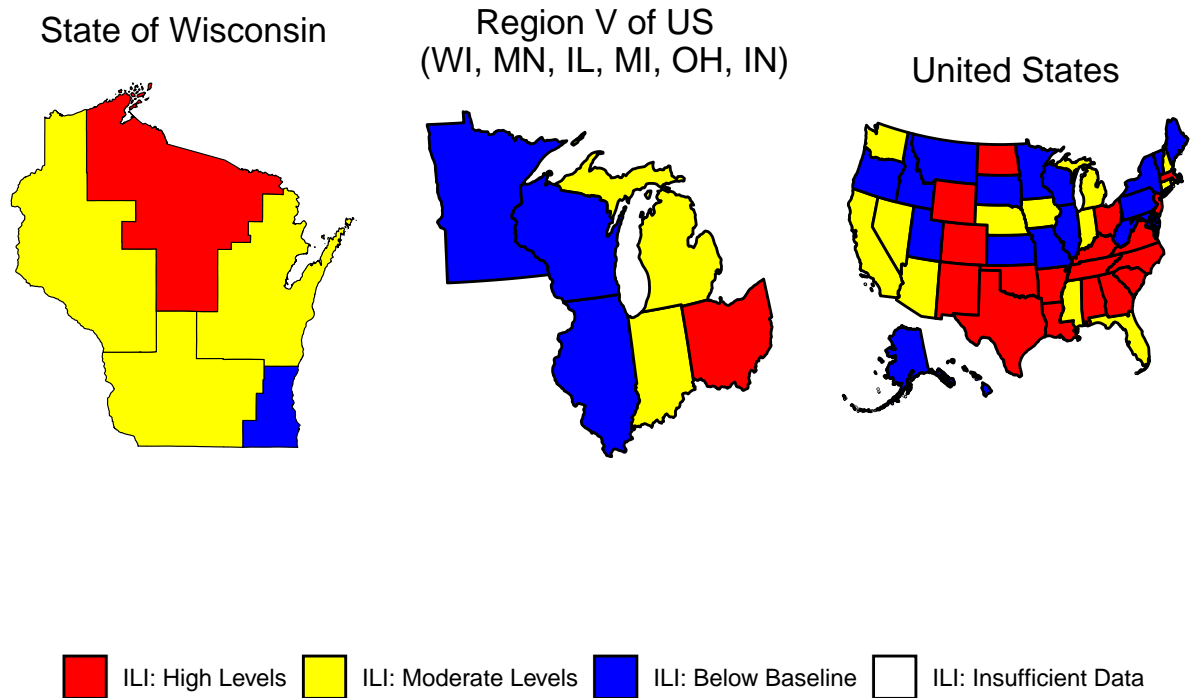


# Respiratory Virus Surveillance Report

Week 4, Ending January 27, 2024

Wisconsin Department of Health Services | Division of Public Health |  
Bureau of Communicable Diseases | Communicable Diseases Epidemiology Section |  
[www.dhs.wisconsin.gov/dph/bcd.html](http://www.dhs.wisconsin.gov/dph/bcd.html) | [dhsdphbcd@dhs.wi.gov](mailto:dhsdphbcd@dhs.wi.gov)

# Influenza-like Illness (ILI) Activity



## Weekly Respiratory Virus Data, At-A-Glance

### Predominant virus of the week:

Influenza

#### Key Messages:

- Influenza-like illness activity is decreasing across Wisconsin.
- Influenza, COVID-19, and RSV continue to circulate across Wisconsin at moderate levels. While COVID-19 and RSV activity is stable or decreasing, influenza has increased slightly over the past few weeks.
- It is not too late to get an influenza or COVID-19 vaccine. RSV vaccines are available for adults ≥60 years of age.

#### Influenza-associated pediatric deaths reported:

	Week 4, 2024	Since September 3
<i>Wisconsin</i>	0	0
<i>Nationwide</i>	8	65

For National US influenza surveillance statistics visit: [www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/)

# Respiratory Virus and Pneumonia-Associated Mortality

Percent of deaths associated with influenza, RSV, COVID-19, or pneumonia by week, Vital Records



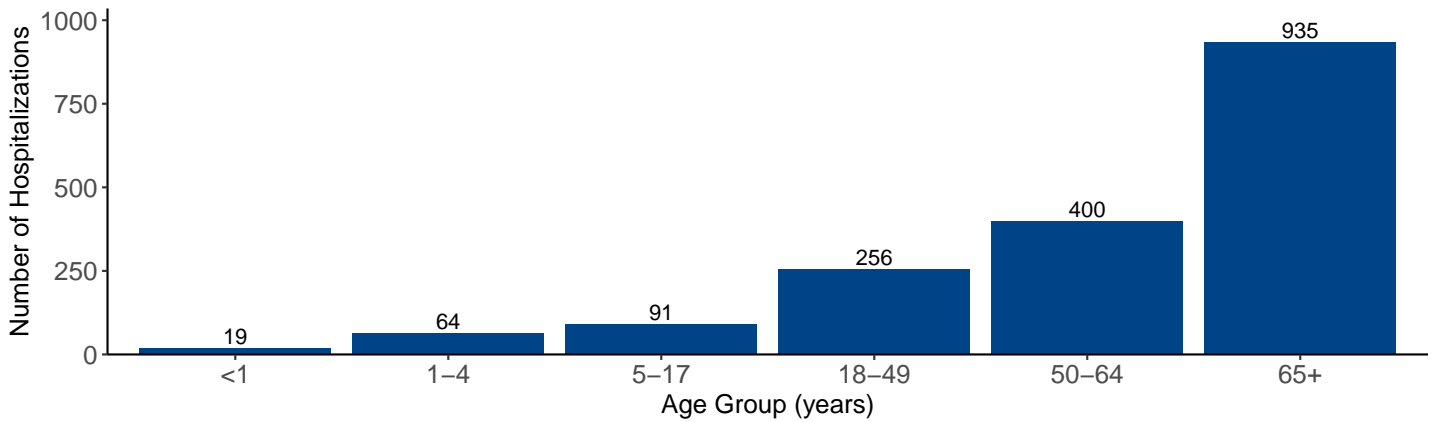
Respiratory virus and pneumonia associated deaths by most recent 3-week period, Vital Records

Season week	Pneumonia (P)	Influenza (I)	COVID-19 (C)	RSV (R)	P, I, C or R	Percent PICR of all
2	80	9	47	6	125	10%
3	93	17	36	5	123	11%
4	51	8	30	5	78	9%

# Influenza-Associated Hospitalizations

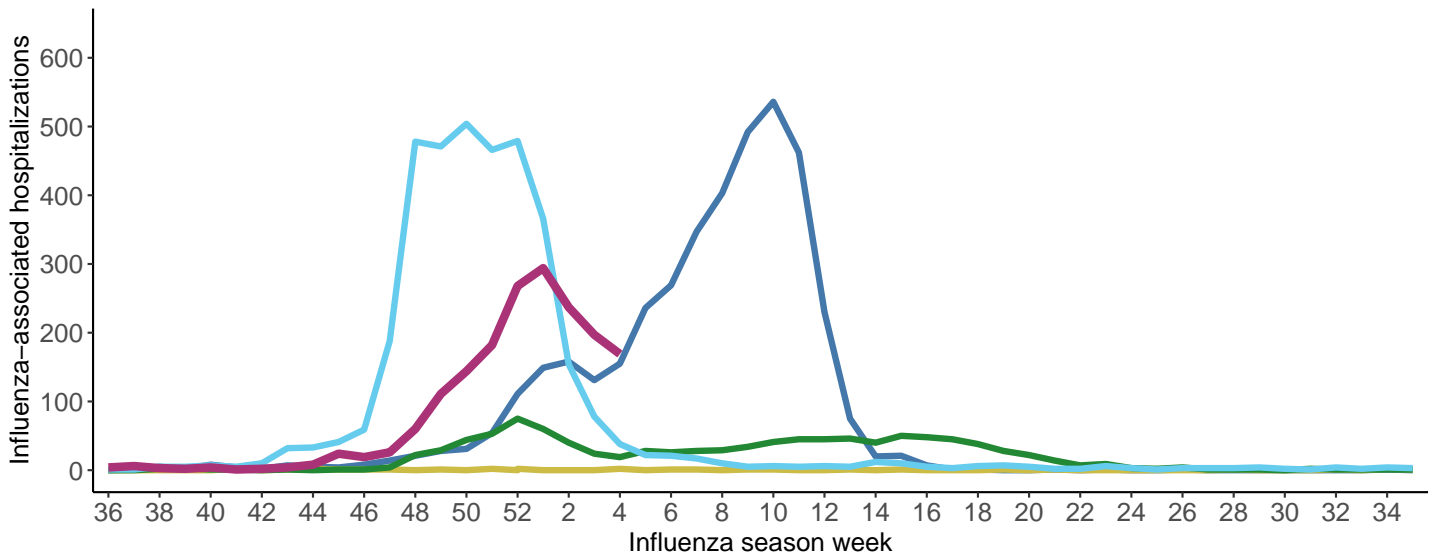
## Influenza-associated hospitalizations by age group, WEDSS

September 3, 2023 to present



## Weekly influenza-associated hospitalizations by influenza season, WEDSS

— 2019–2020 — 2020–2021 — 2021–2022 — 2022–2023 — 2023–2024

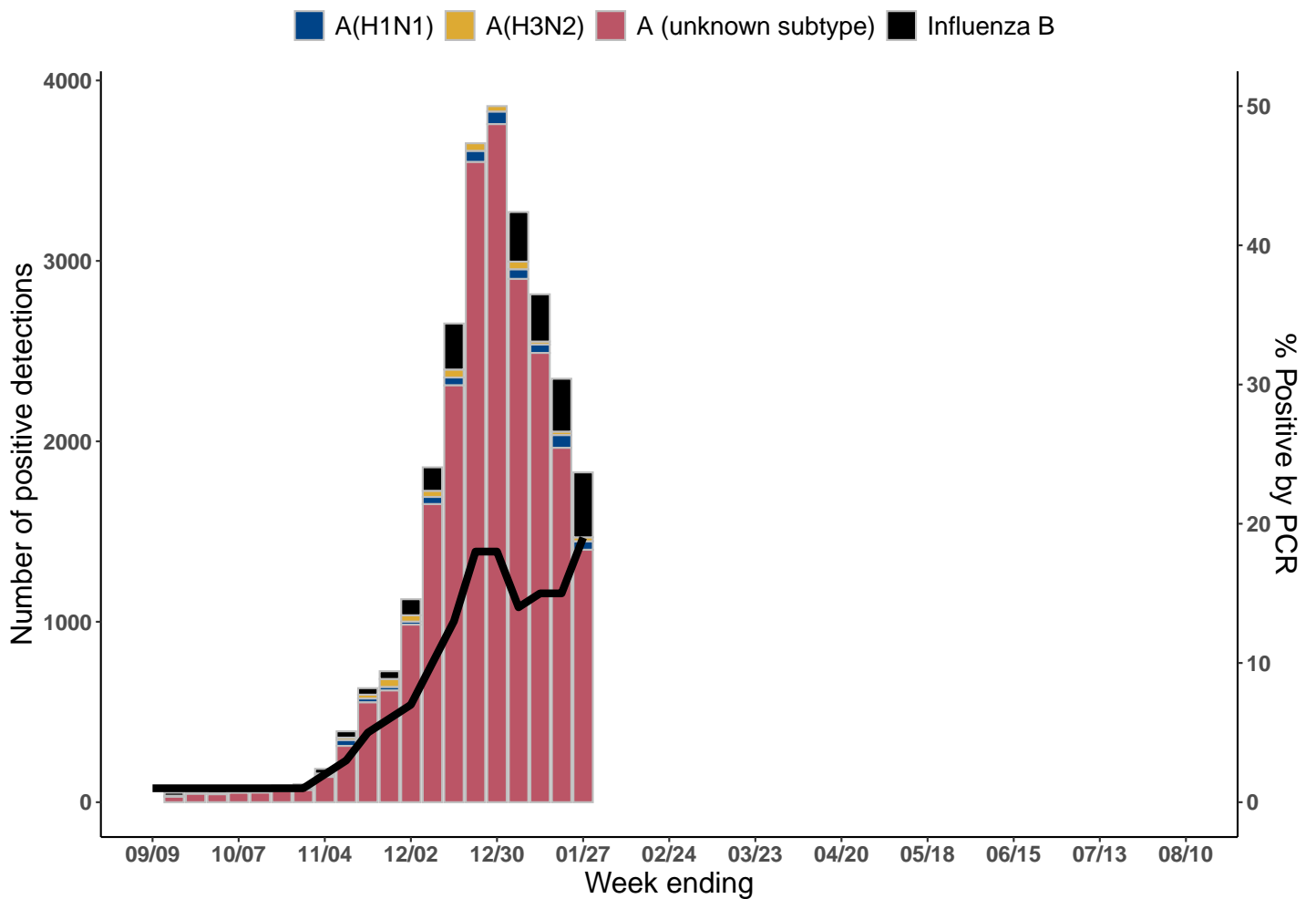


Influenza Season	Through Week 4	Entire Season
2019-2020	898	4002
2020-2021	15	28
2021-2022	380	1021
2022-2023	3,421	3609
2023-2024	1,765	-

These data are preliminary and subject to change as more information is received.

# Wisconsin Laboratory Surveillance

## Wisconsin positive influenza results and subtypes by PCR, NREVSS

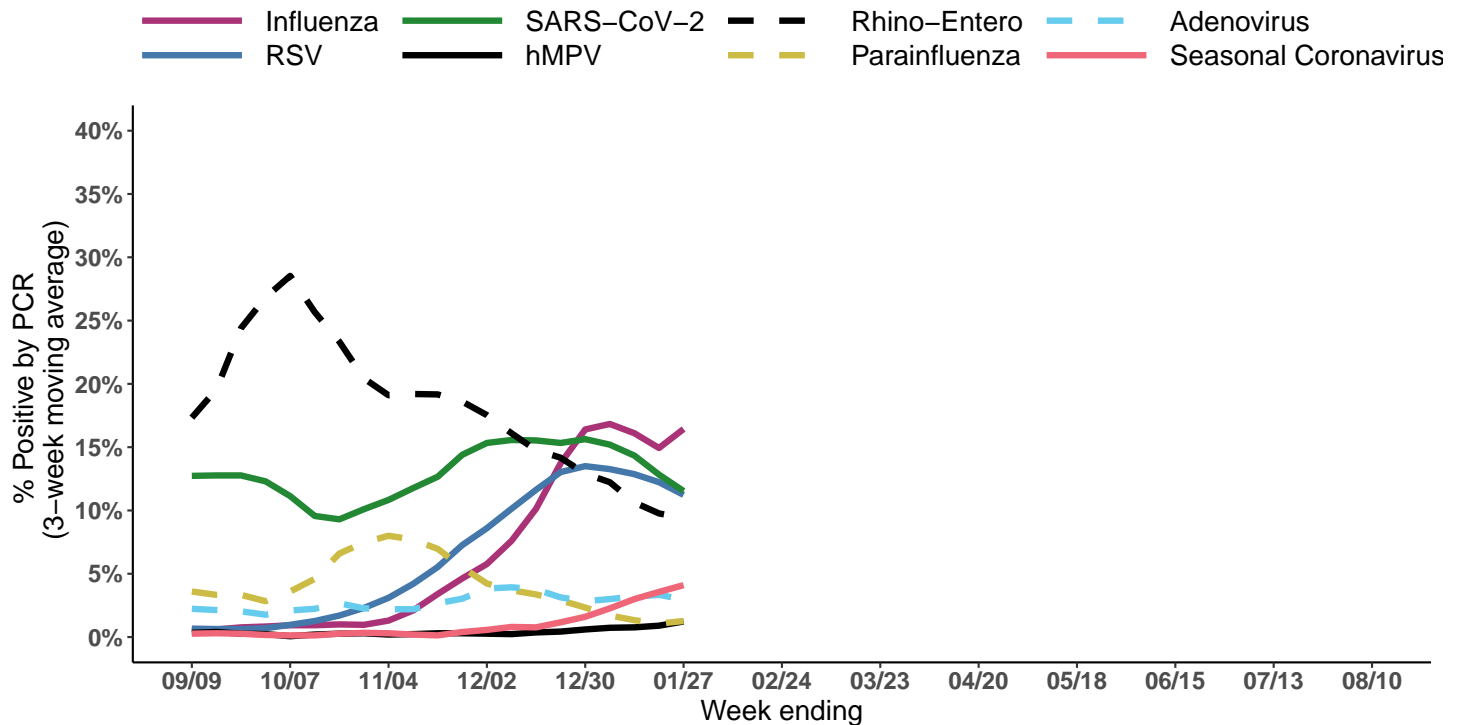


### Cumulative number of positive influenza PCR tests by subtype, NREVSS September 3, 2023 to present

Measure	Influenza A(H1N1)pdm2009	Influenza A(H3N2)	Influenza A Unknown	Influenza B	Total
Total positive (n)	593	392	23003	2511	26499
% of total positive	2%	1%	87%	9%	100%

# Wisconsin Laboratory Surveillance for Respiratory Viruses

Percent positivity of respiratory viruses tested by PCR, NREVSS



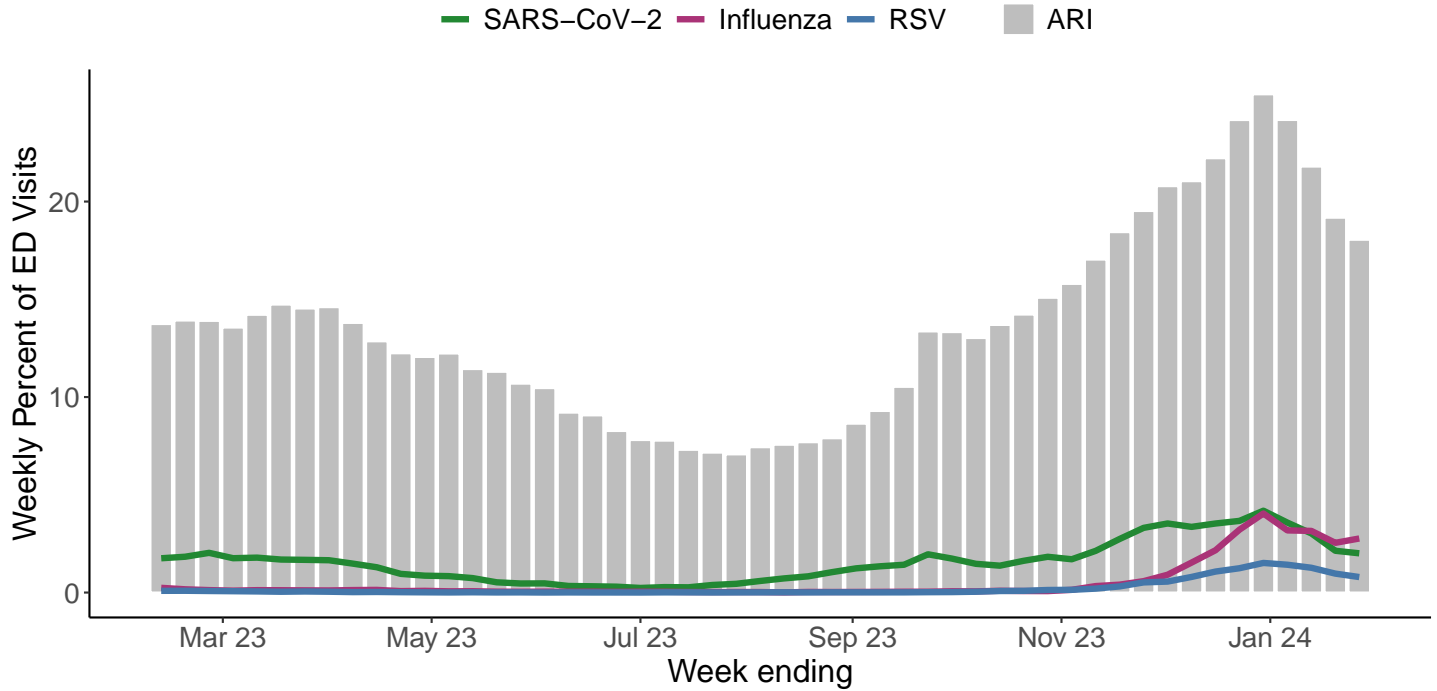
Number and percent positivity of respiratory viruses tested by PCR, NREVSS  
Week 4, Ending on January 27, 2024

Respiratory virus	Tested	Positive (n)	Positive (%)	H3N2	2009 H1N1	Unknown	Influenza B
Influenza	9,624	1,828	19%	22	47	1,399	360
Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	688	11	1.6%	6	0	3	2

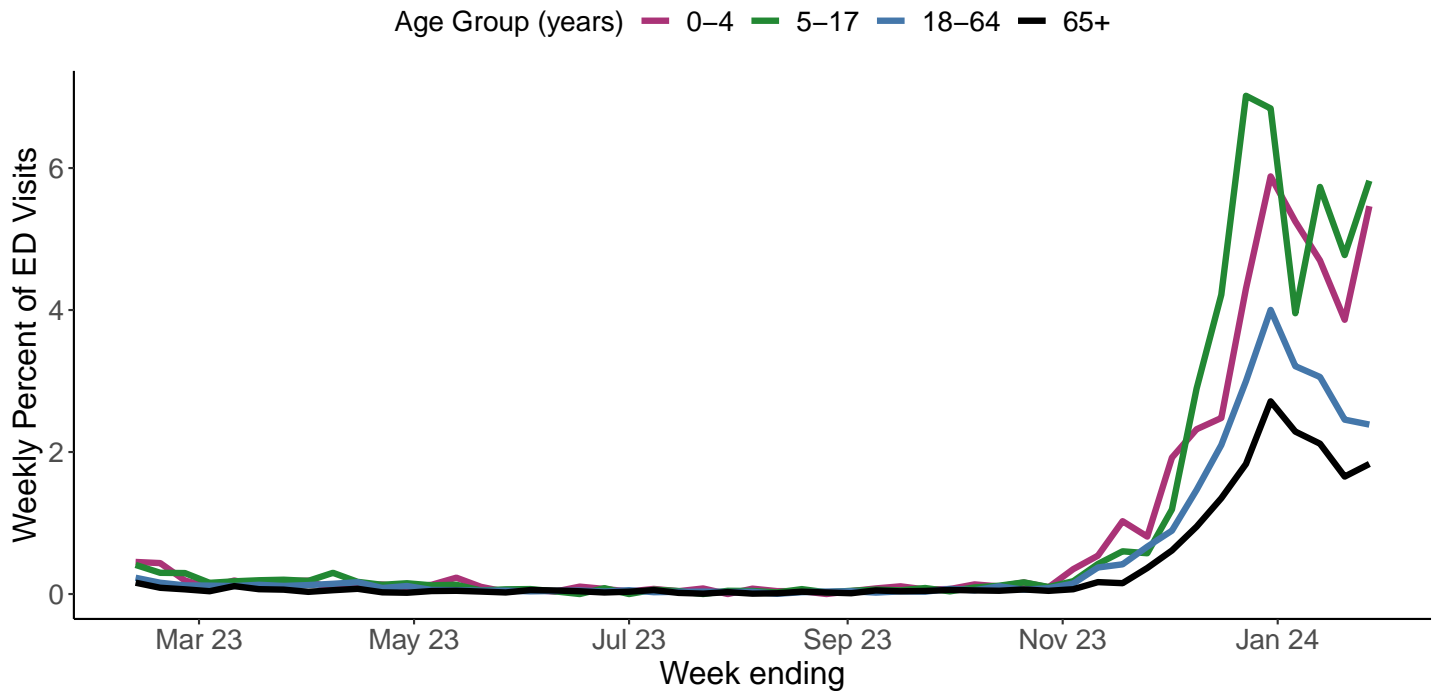
Respiratory virus	Tested	Positive (n)	Positive (%)
Respiratory Syncytial Virus	6,583	662	10.1%
Adenovirus	689	16	2.3%
Seasonal Coronavirus	607	26	4.3%
HMPV	688	13	1.9%
Rhinovirus/Enterovirus	1,285	132	10.3%
COVID-19	10,736	1,146	10.7%

# Respiratory Virus Activity in the Emergency Department (ED)

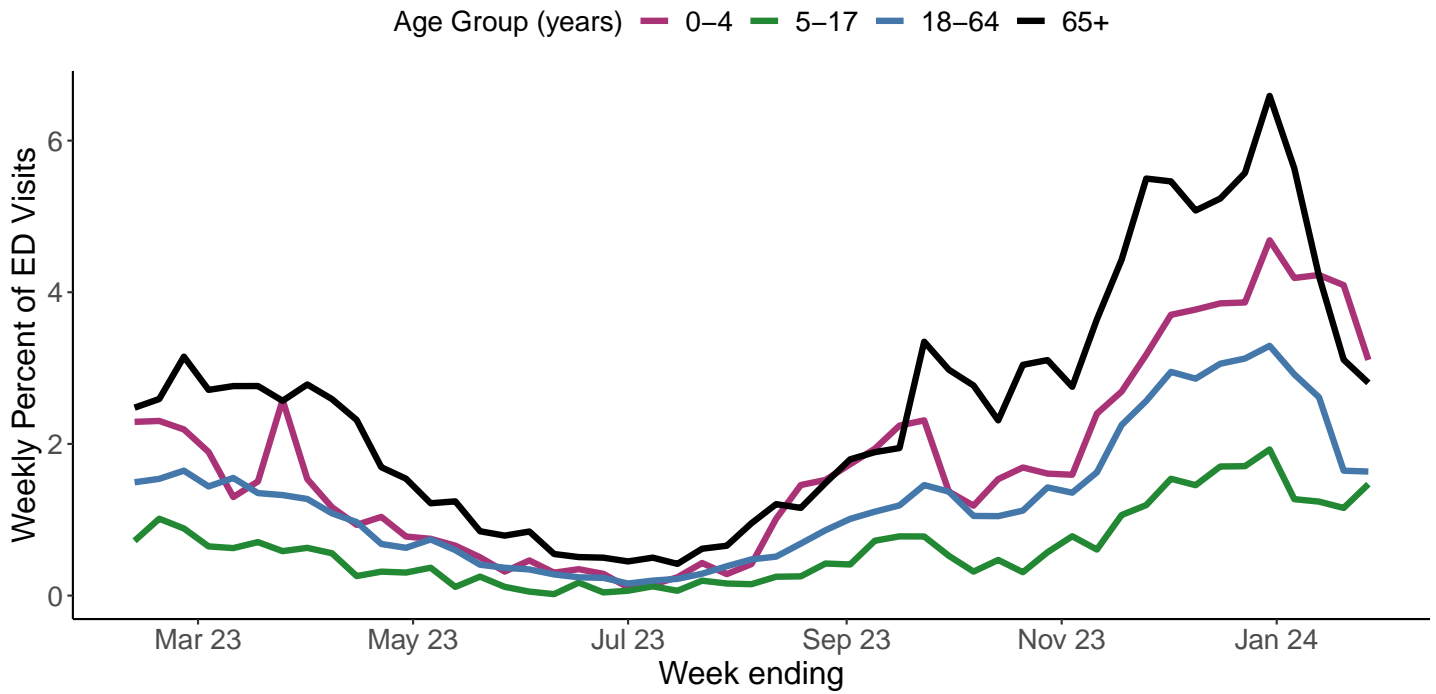
Percent of ED visits with a diagnosis for a respiratory virus or acute respiratory infection (ARI), NSSP



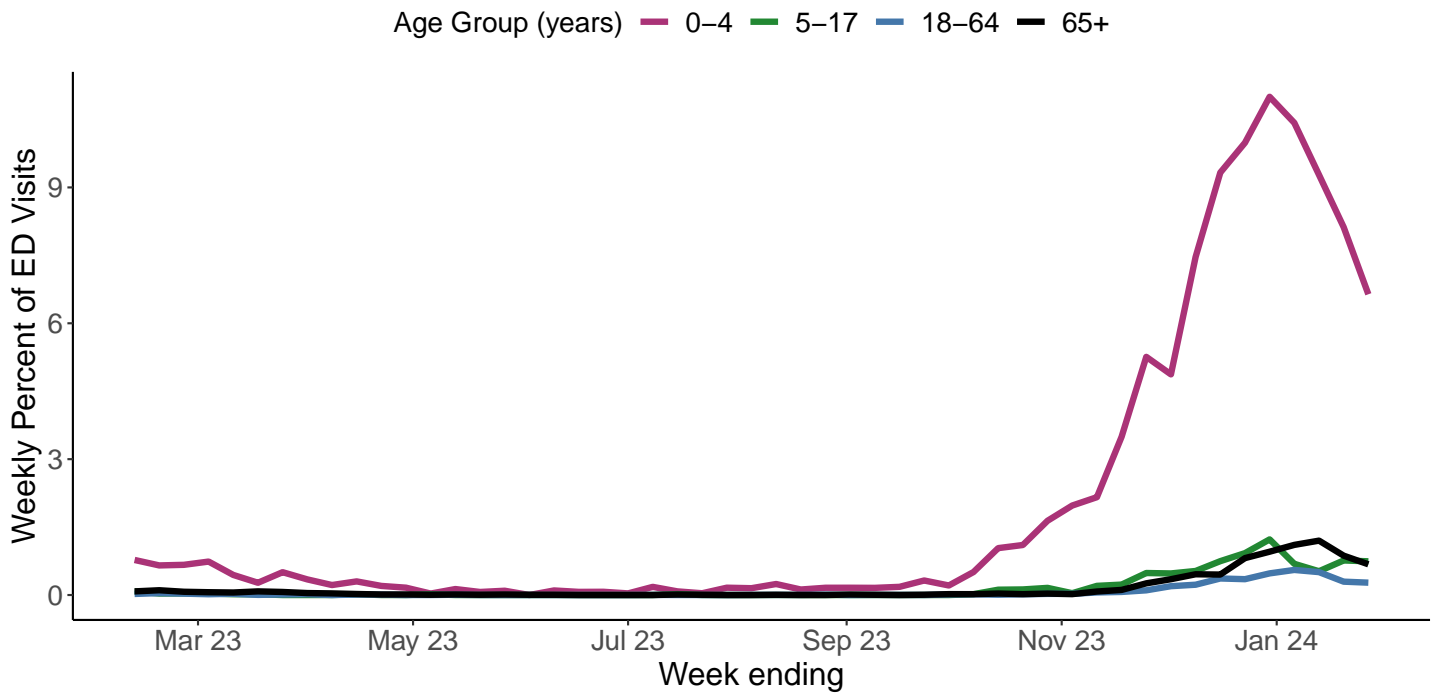
Percent of ED visits with a diagnosis for influenza by age group, NSSP



Percent of ED visits with a diagnosis for SARS-CoV-2 by age group, NSSP



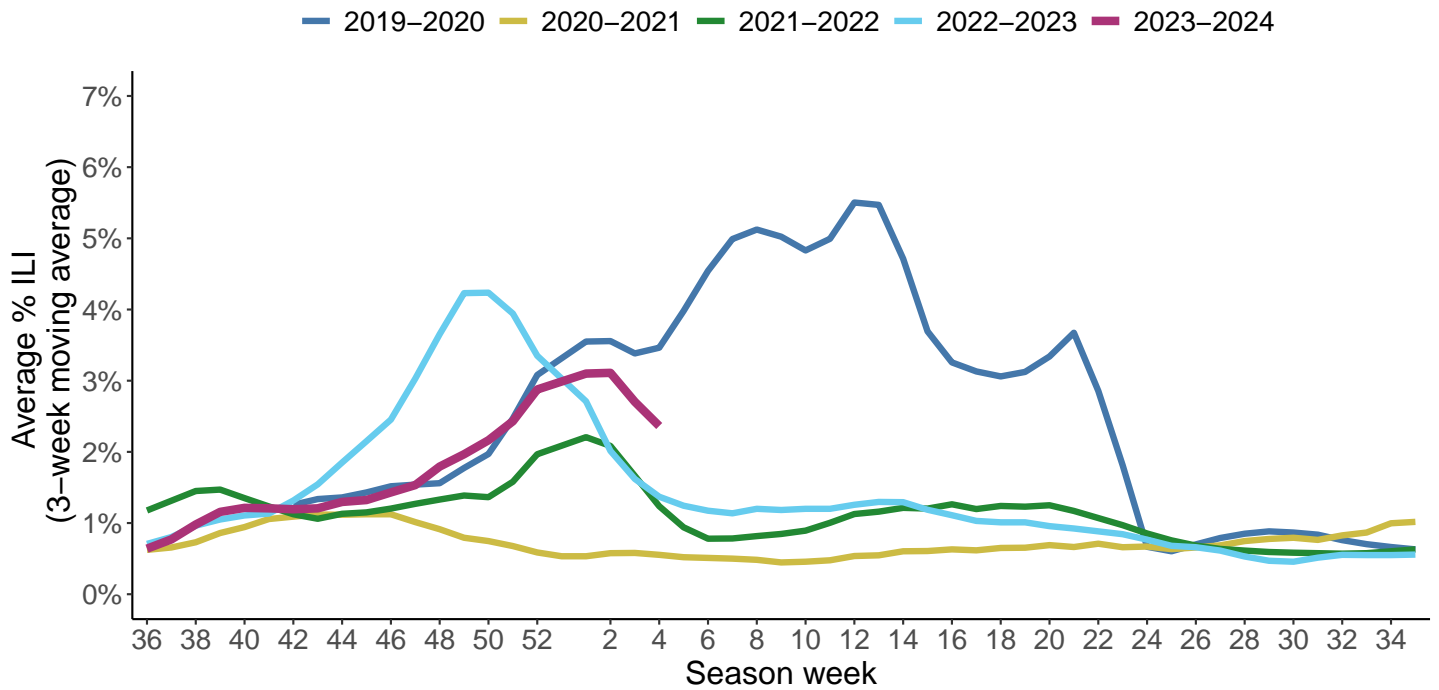
Percent of ED visits with a diagnosis for RSV by age group, NSSP





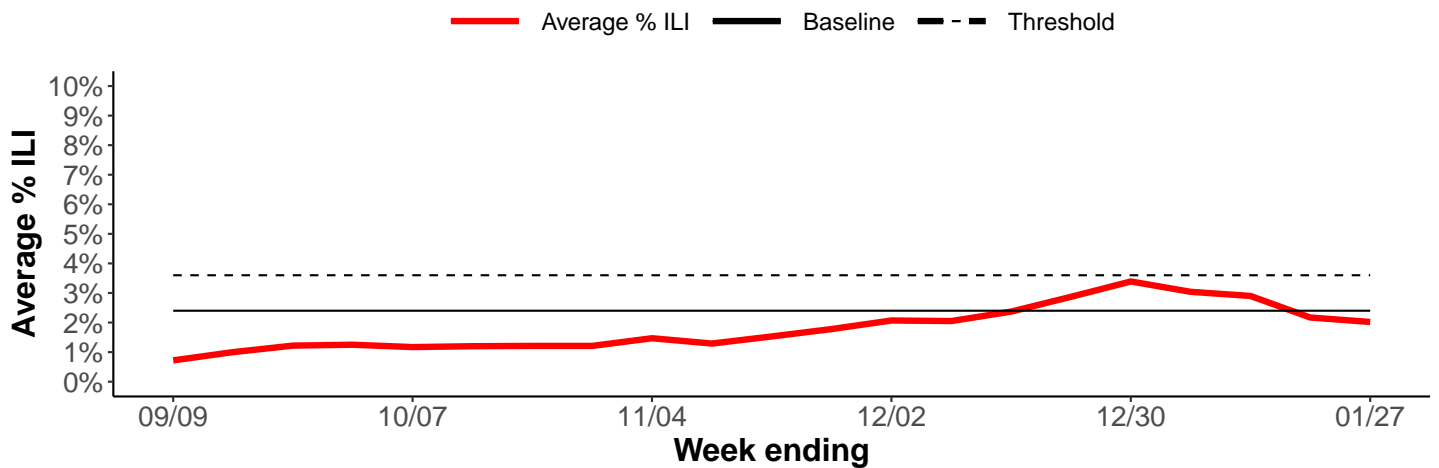
# Wisconsin ILI Activity

Three-week average percent of visits for ILI by influenza season, ILINET

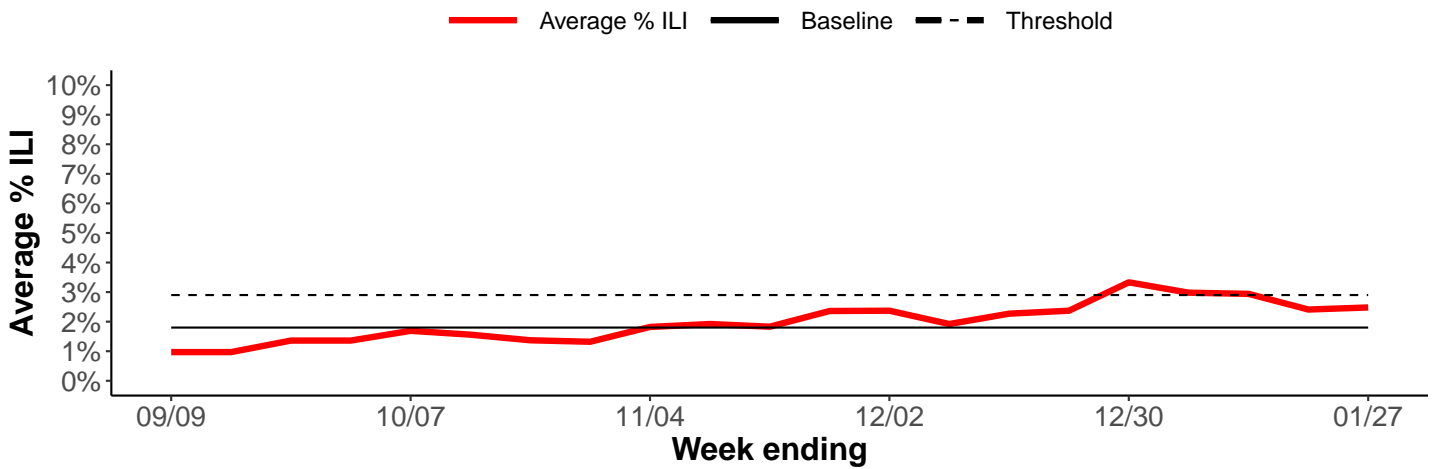


Average percent of visits for ILI by public health region, ILINET

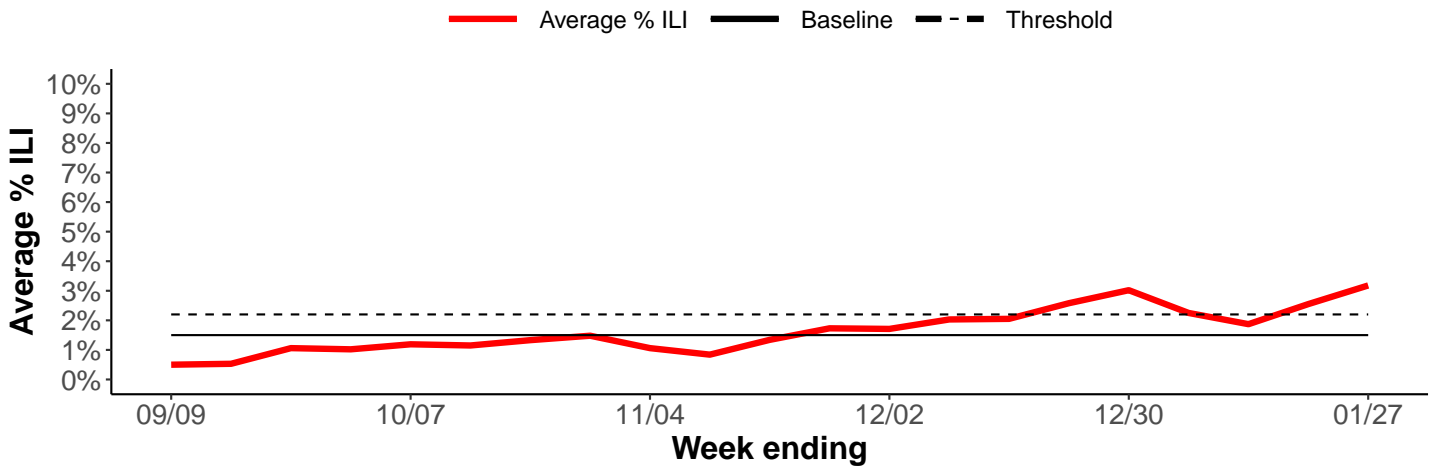
## Wisconsin



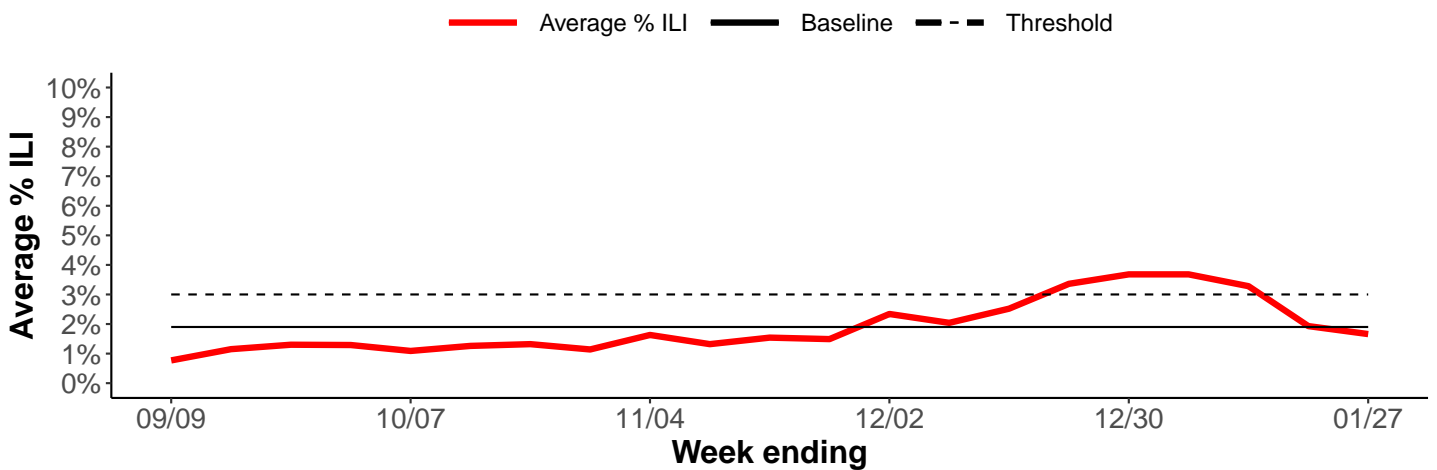
### Northeastern Region



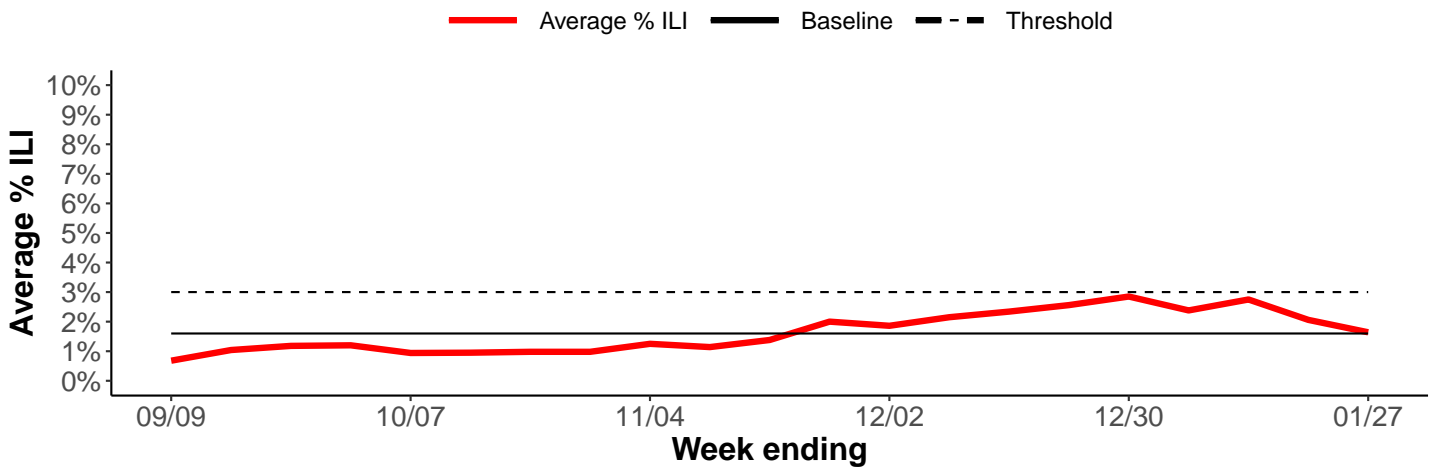
### Northern Region



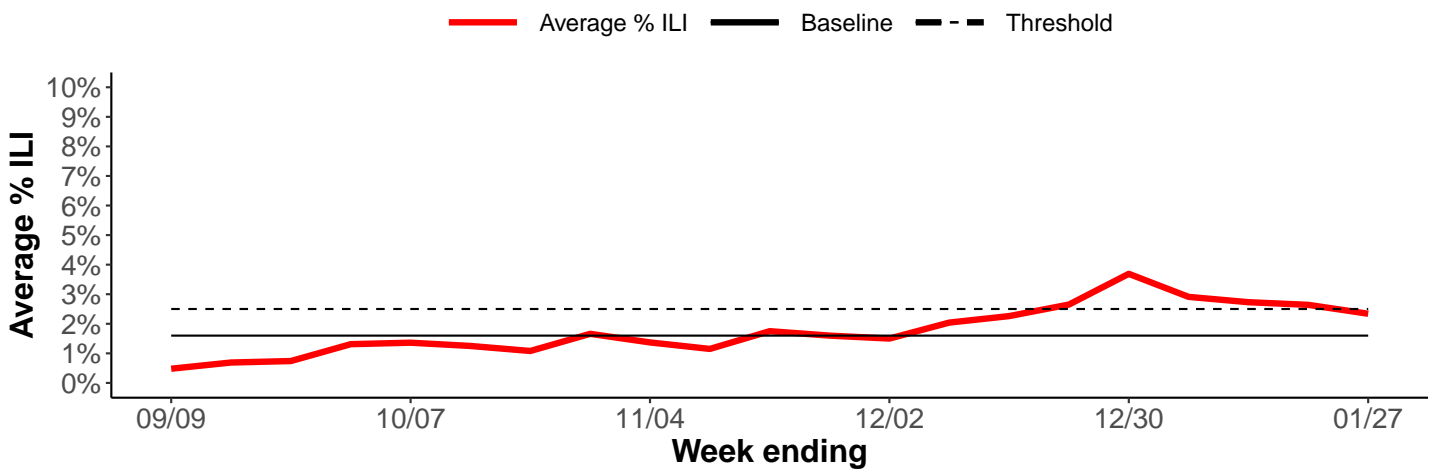
### Southeastern Region



### Southern Region



### Western Region



# Understanding the Data

## Surveillance Report Description

<b>Influenza-like Illness (ILI)</b>	Patients who present to a clinician with a fever $\geq 100$ degrees F and either a cough or sore throat.
<b>Influenza-like Illness (ILI) Activity</b>	Using baseline (expected value data used for comparison) in each of the public health regions in Wisconsin ( <a href="https://www.dhs.wisconsin.gov/lh-depts/counties/index.htm">https://www.dhs.wisconsin.gov/lh-depts/counties/index.htm</a> ), ILI below baseline is considered low activity, ILI between baseline and threshold levels is considered moderate activity and above threshold is considered high activity. (1)
<b>Acute Respiratory Illness (ARI)</b>	ARI is a broad definition designed to capture all diagnoses related to respiratory illness, including SARS-CoV-2, influenza, pneumonia, and cough
<b>Predominant virus of the week</b>	These data are compiled from over 40 laboratories in Wisconsin that perform rt-PCR testing, and shows the viruses that have the highest percentage of positive tests.(2)
<b>Influenza-Associated Pediatric Mortality</b>	Deaths among children $< 18$ years old, with influenza as the cause of associated cause of death. This is a state and nationally reportable condition. (3)
<b>Deaths Due to Pneumonia, SARS-CoV-2, Influenza and RSV</b>	Proportion of deaths due to pneumonia, RSV, influenza, and SARS-CoV-2 are extracted from Vital Records managed by the Office of Health Informatics through ICD-10 codes and death certificate text searches. (4)
<b>Respiratory Viruses by PCR</b>	A molecular laboratory method used to detect nucleic acid (DNA/RNA) in viruses, including influenza and RSV.
<b>Influenza-Associated Hospitalizations</b>	Patients hospitalized for $> 24$ hours with a laboratory-identified (by rapid antigen or rt-PCR tests) influenza.(3)
<b>Emergency Department Data</b>	These data are from the National Syndromic Surveillance Program or NSSP. Visit information from almost all EDs in Wisconsin are reported from hospital electronic medical records to NSSP in near-real-time. Diagnoses used included the CDC Broad Acute Respiratory DD v1, the CDC COVID-Specific DD v1, CDC Influenza DD v1, and the CDC Respiratory Syncytial Virus DD v1.(5)

### Additional Resources

- The CDC Influenza Homepage (<https://www.cdc.gov/flu/>)
- The National Respiratory and Enteric Virus Surveillance System (NREVSS) (<https://www.cdc.gov/surveillance/nrevss/index.html>)

### Data Sources

1. CDC Outpatient Influenza-like Illness Surveillance Network (ILINet)
2. Wisconsin Laboratory Information Network and CDC National Respiratory and Enteric Virus Surveillance System (NREVSS)
3. Wisconsin Electronic Disease Surveillance System (WEDSS)
4. Division of Public Health, Office of Health Informatics, Vital Records
5. National Syndromic Surveillance Program (NSSP) data from ESSENCE (Electronic Surveillance System for Early Notification of Community Based Epidemics).

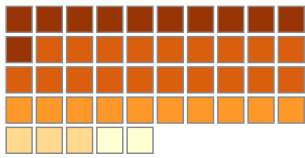
# COVID-19 Wastewater Surveillance in Wisconsin

Dashboard Updated: 2/5/2024

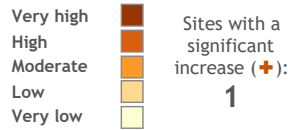
Total population served: 2,960,577

Slide to pick start date  
12/1/2022

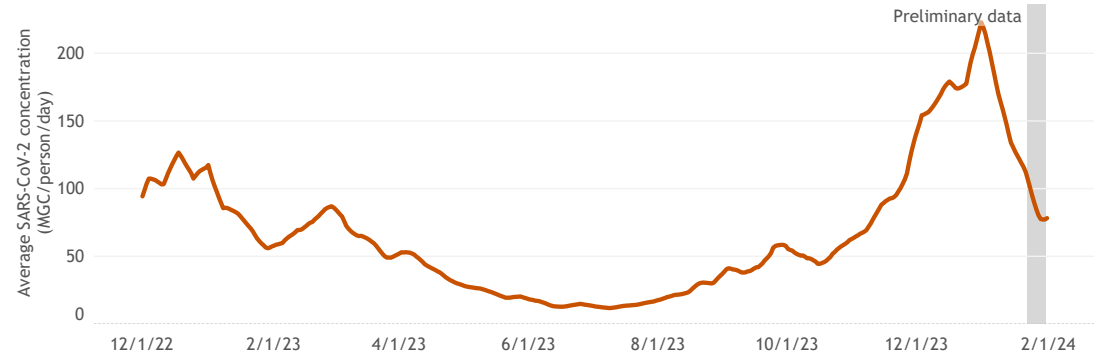
## Statewide presence of SARS-CoV-2 in wastewater



### SARS-CoV-2 concentration categories



## Statewide average SARS-CoV-2 levels in wastewater over time

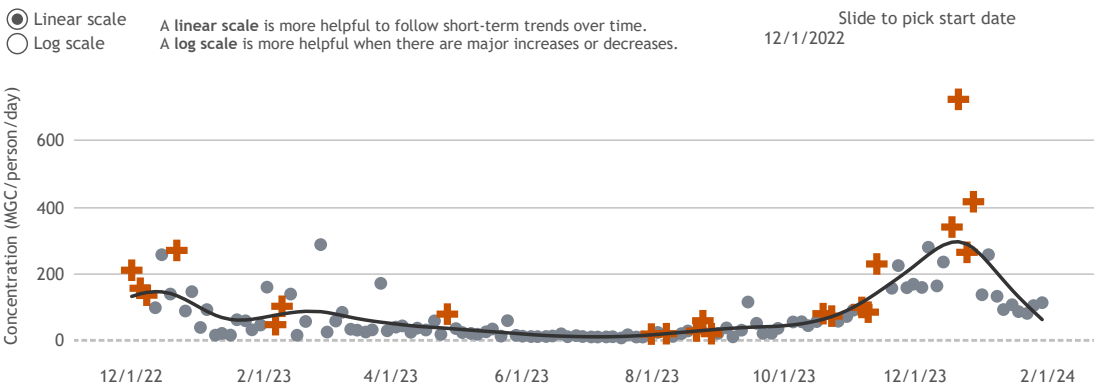


Click on the list to select a sewershed. Click again to deselect.  
Significant increase +

**Appleton** | Category: **High** | Trajectory: **No alert**  
Estimated population served: 72,810

- Appleton
- Ashland
- Baraboo
- Black River Falls
- Brookfield (Fox River)
- Clintonville
- De Pere
- Eau Claire
- Fond du Lac
- Green Bay
- Hartford
- Hayward
- Hudson
- Janesville
- Kenosha
- La Crosse
- Lodi
- Madison
- Manitowoc
- Marinette
- Marshfield
- Mauston
- Menomonie
- Merrill
- Milwaukee (Jones Island)
- Milwaukee (South Shore)
- Monroe
- Oconomowoc

## Wastewater concentration of SARS-CoV-2 within the Appleton sewershed



© 2024 Mapbox © OpenStreetMap

# COVID-19 Hospitalizations and Hospital Capacity

Wisconsin	COVID-19 Patients Hospitalized	COVID-19 Patients in ICU	
	Shrinking	No significant change	

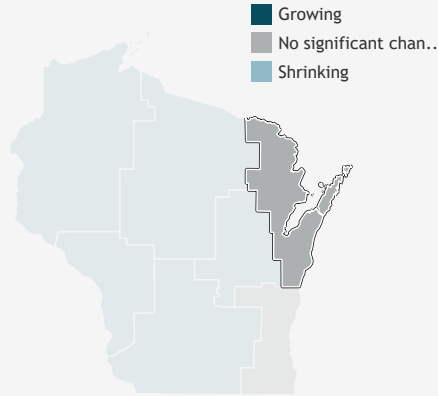
Updated: 1/27/2024

Hover over visuals and text to find more information.



Select a Region  
Wisconsin

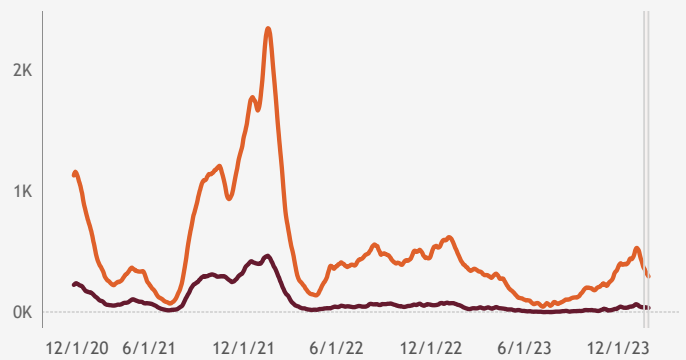
Two Week Range  
2024-01-14 -  
2024-01-27

## Trajectory of COVID Patient Hospitalizations by Region



## COVID Patients Hospitalized and in the ICU in Wisconsin

Hospital  ICU 



## Overall Hospital Capacity in Wisconsin

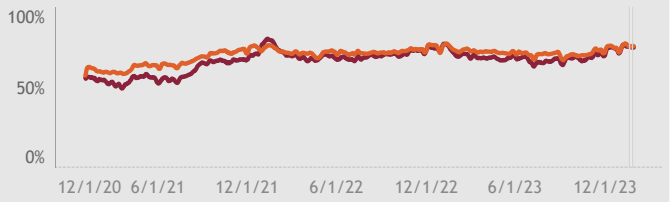
### Hospital Beds as of 1/27/2024



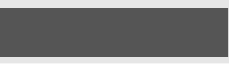
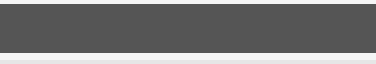
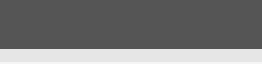
### ICU Beds as of 1/27/2024



### Hospital Bed and ICU Bed Usage



## Hospital Peak Capacity as of 1/27/2024

Median Inp Peak Rate		28.4%
Median Icu Peak Rate		47.0%
Median Med Surg Peak Rate		33.1%