



WISCONSIN DEPARTMENT
of HEALTH SERVICES

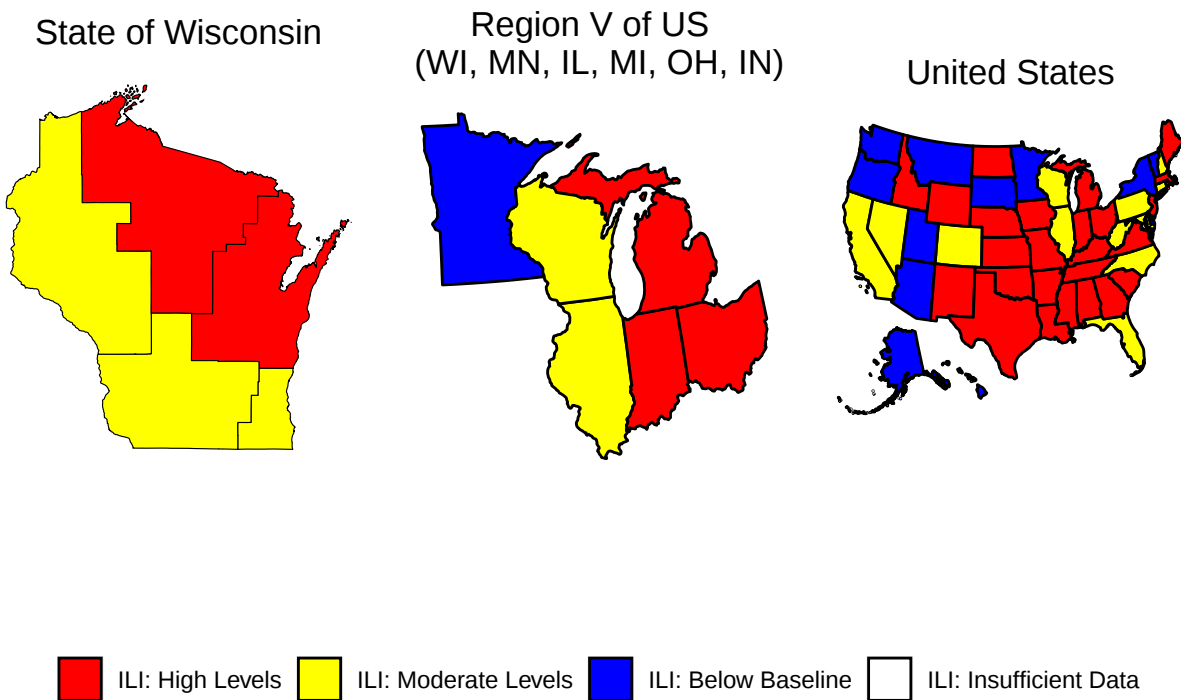


Respiratory Virus Surveillance Report

Week 8, Ending February 24, 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 | dhsdphbcd@dhs.wi.gov

Influenza-like Illness (ILI) Activity



ILI: High Levels

ILI: Moderate Levels

ILI: Below Baseline

ILI: Insufficient Data

Weekly Respiratory Virus Data, At-A-Glance

Predominant virus of the week:

Influenza

Key Messages:

- Influenza-like illness activity is at moderate or high levels in every region of Wisconsin and influenza is the predominant virus of the week.
- While influenza activity is increasing, RSV and COVID-19 are decreasing.
- Influenza A and B are co-circulating, but the proportion of influenza infections due to influenza B is increasing.
- The 5th pediatric death due to RSV this season was reported last week.

Influenza-associated pediatric deaths reported:

	Week 8, 2024	Since September 3
Wisconsin	0	0
Nationwide	2	93

For National US influenza surveillance statistics visit: 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

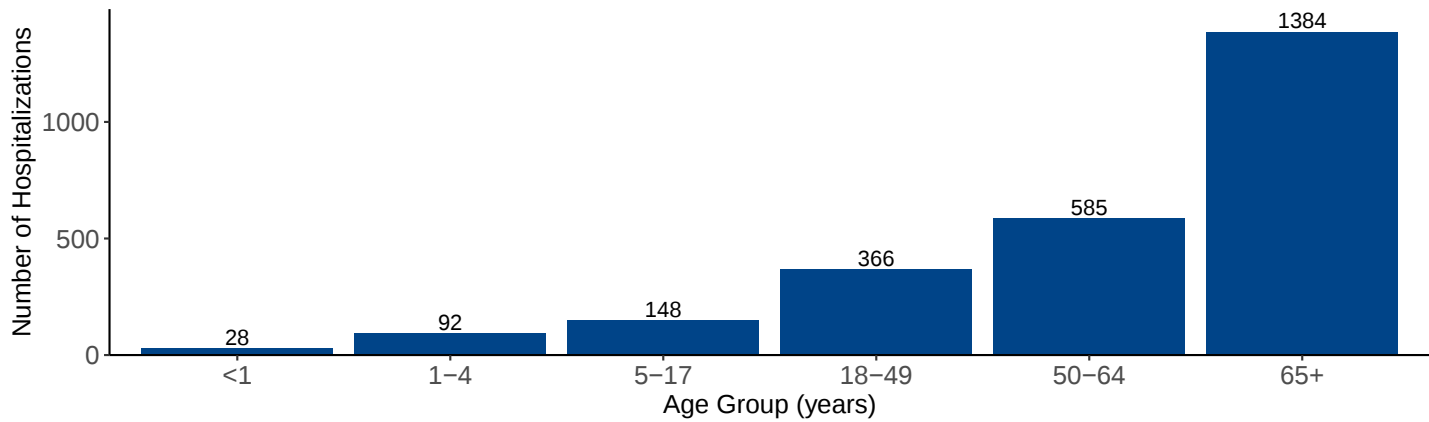


Respiratory virus and pneumonia associated deaths by most recent 3-week period, Vital Records

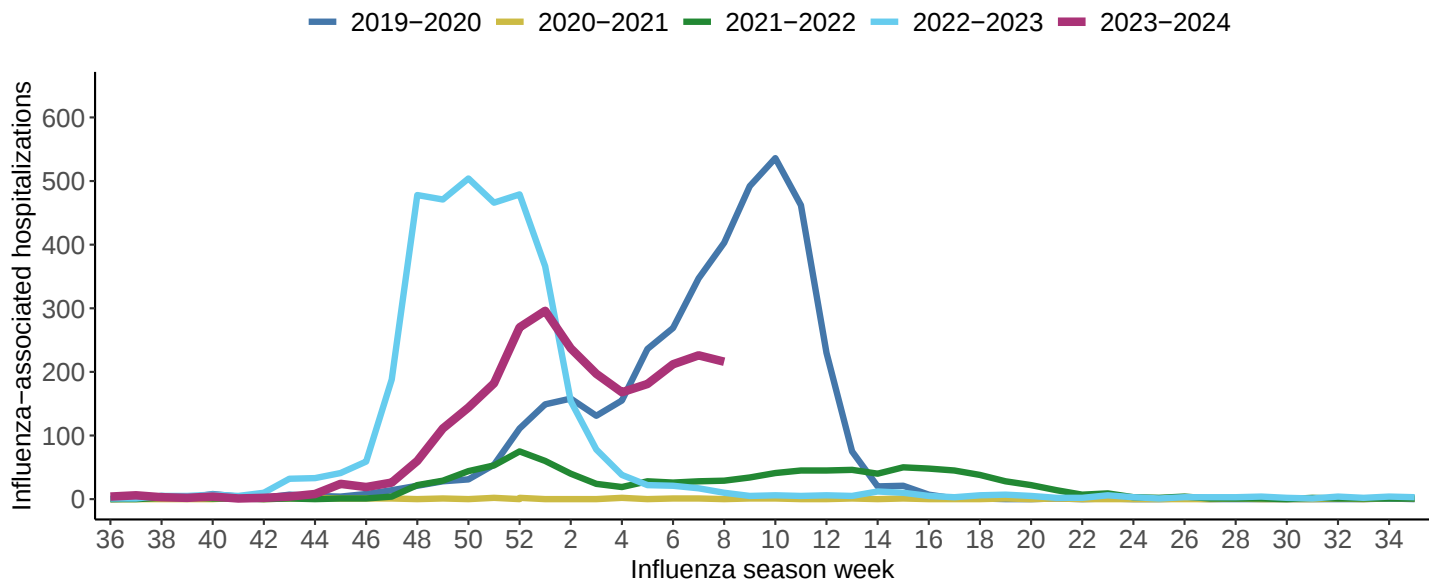
Season week	Pneumonia (P)	Influenza (I)	COVID-19 (C)	RSV (R)	P, I, C or R	Percent PICR of all
6	73	9	26	4	96	8%
7	61	10	26	4	87	8%
8	46	6	18	0	62	7%

Influenza-Associated Hospitalizations

Influenza-associated hospitalizations by age group, WEDSS
September 3, 2023 to present



Weekly influenza-associated hospitalizations by influenza season, WEDSS

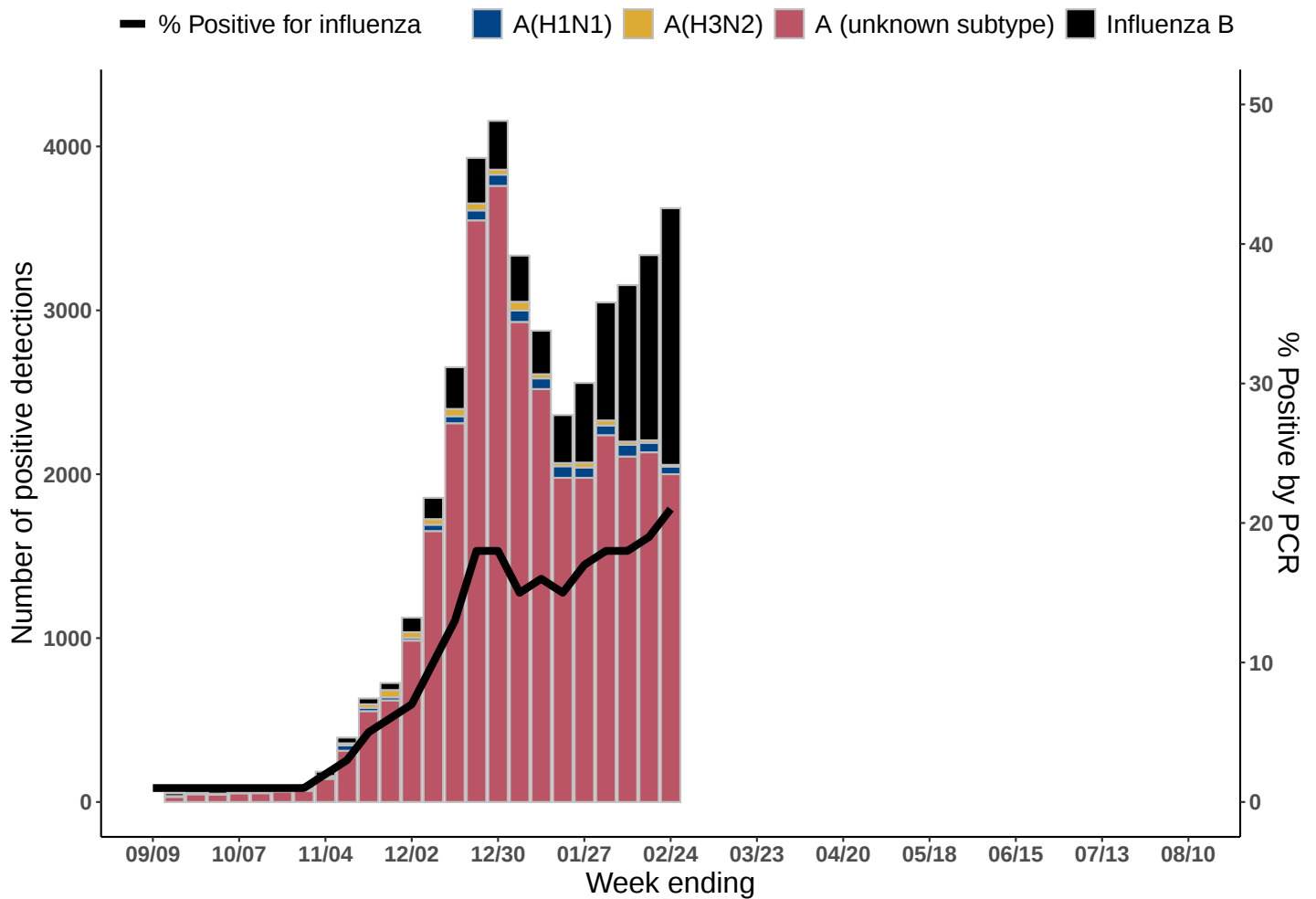


Influenza Season	Cumulative Hospitalizations Through Week 8	Entire Season
2019-2020	2153	4002
2020-2021	17	28
2021-2022	491	1021
2022-2023	3491	3609
2023-2024	2603	-

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

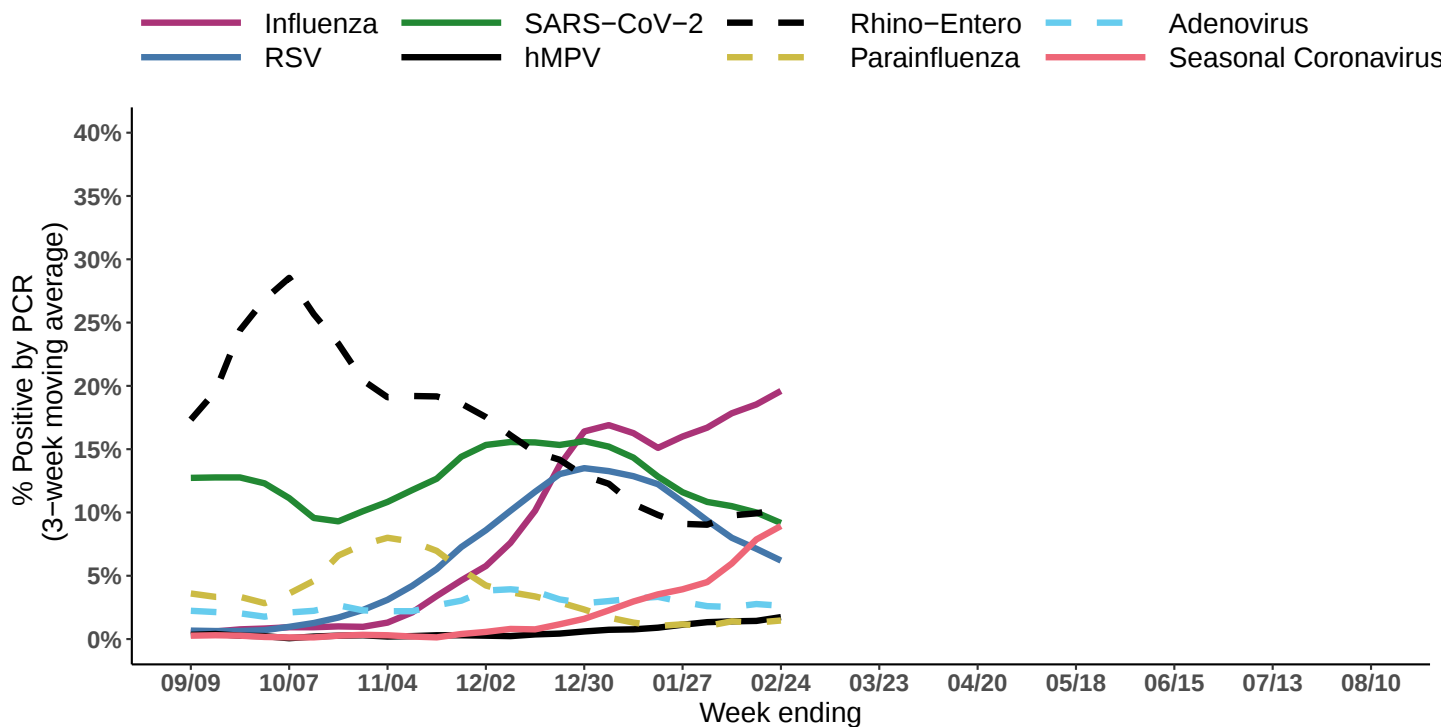


Cumulative number of positive influenza PCR tests by subtype, NREVSS
September 3, 2023 to present

Measure	Influenza A(H1N1)pdm2009	Influenza A(H3N2)	Influenza A Unknown	Influenza B	Total
Total positive (n)	884	495	32130	7019	40528
% of total positive	2%	1%	79%	17%	100%

Wisconsin Laboratory Surveillance for Respiratory Viruses

Percent postivity of respiratory viruses tested by PCR, NREVSS



Number and percent positivity of respiratory viruses tested by PCR, NREVSS
Week 8, Ending on February 24, 2024

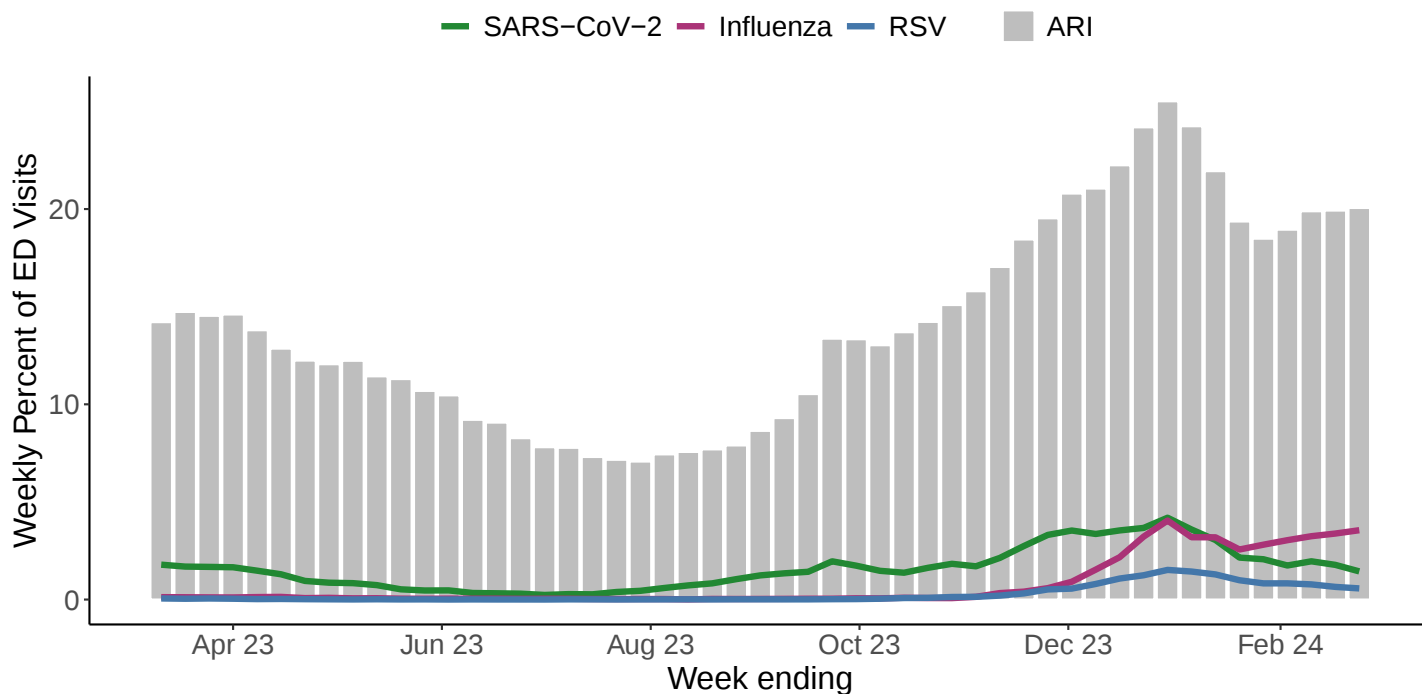
Respiratory virus	Tested	Positive (n)	Positive (%)	H3N2	2009 H1N1	Unknown	Influenza B
Influenza	17,274	3,623	21%	10	47	2,000	1,566

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	1,035	12	1.2%	1	0	7	4

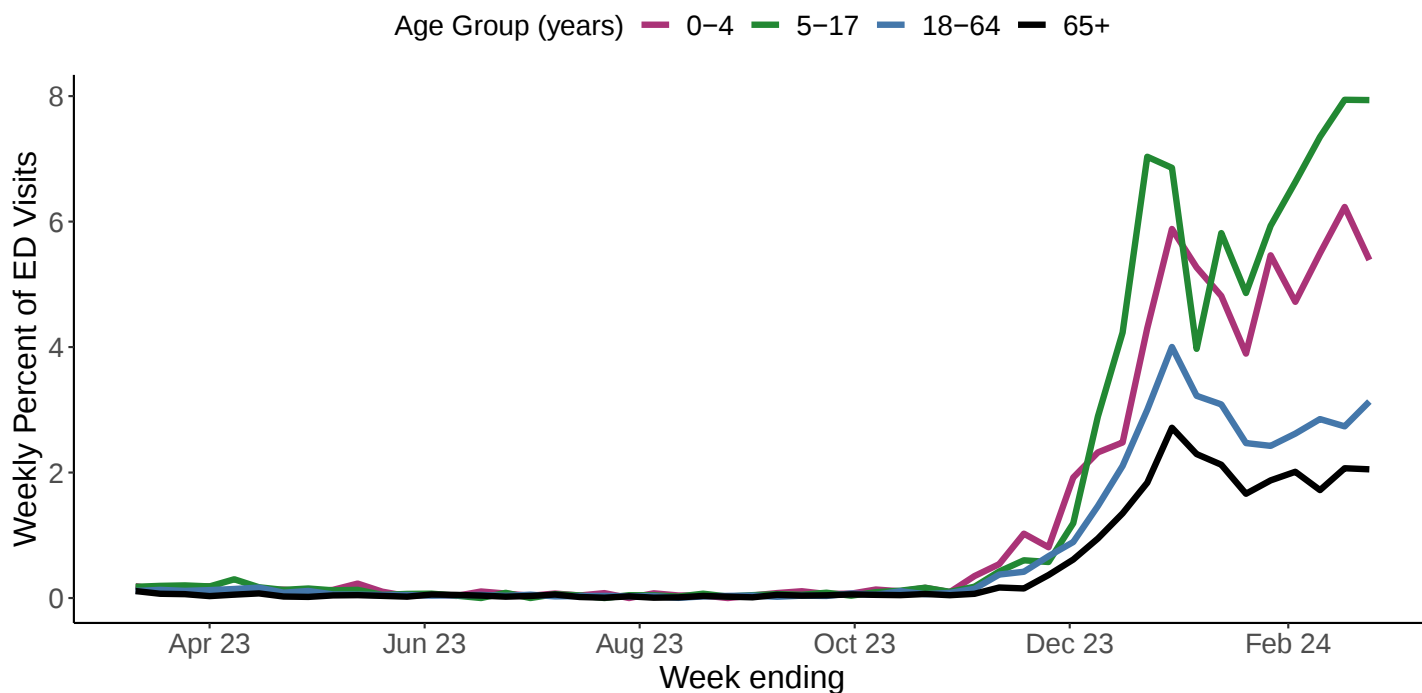
Respiratory virus	Tested	Positive (n)	Positive (%)
Respiratory Syncytial Virus	13,075	683	5.2%
Adenovirus	985	23	2.3%
Seasonal Coronavirus	973	87	8.9%
HMPV	983	21	2.1%
Rhinovirus/Enterovirus	1,603	168	10.5%
COVID-19	18,108	1,421	7.8%

Respiratory Virus Activity in the Emergency Department (ED)

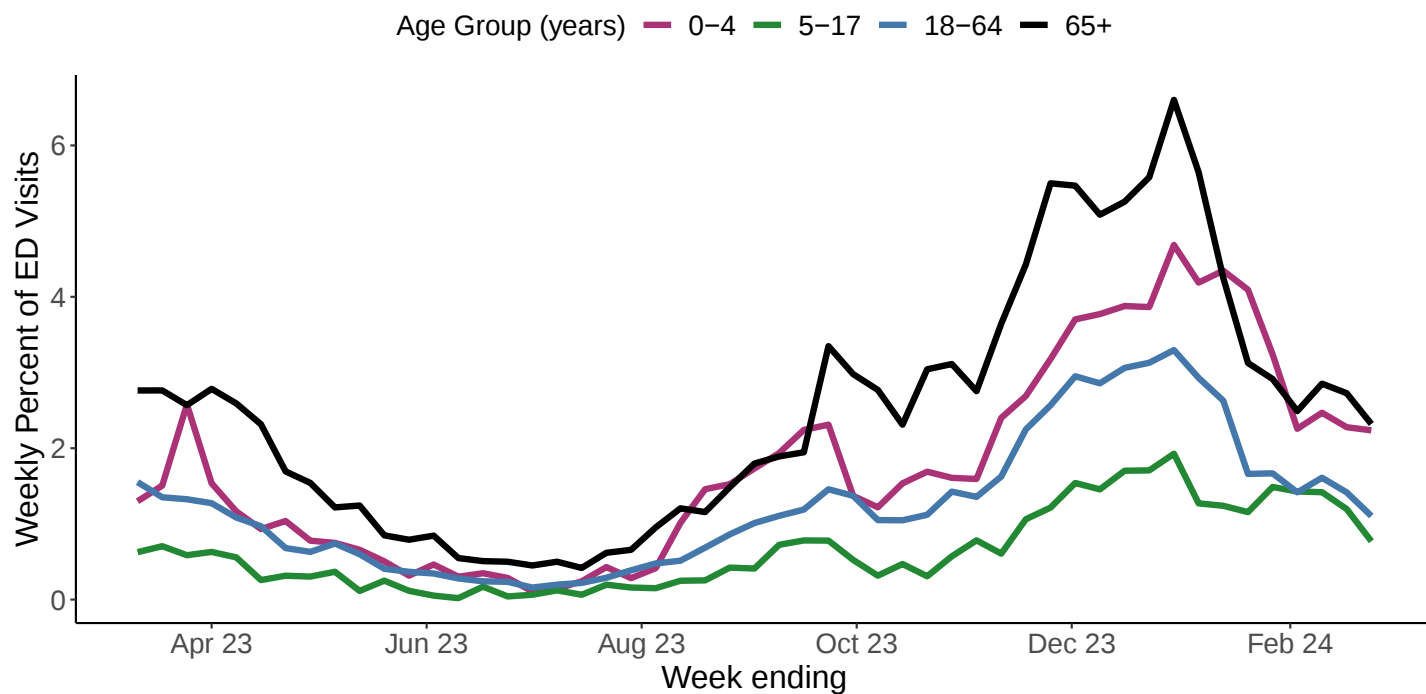
Percent of ED visits with a diagnosis for a respiratory virus or acute respiratory infection (ARI), NSSP



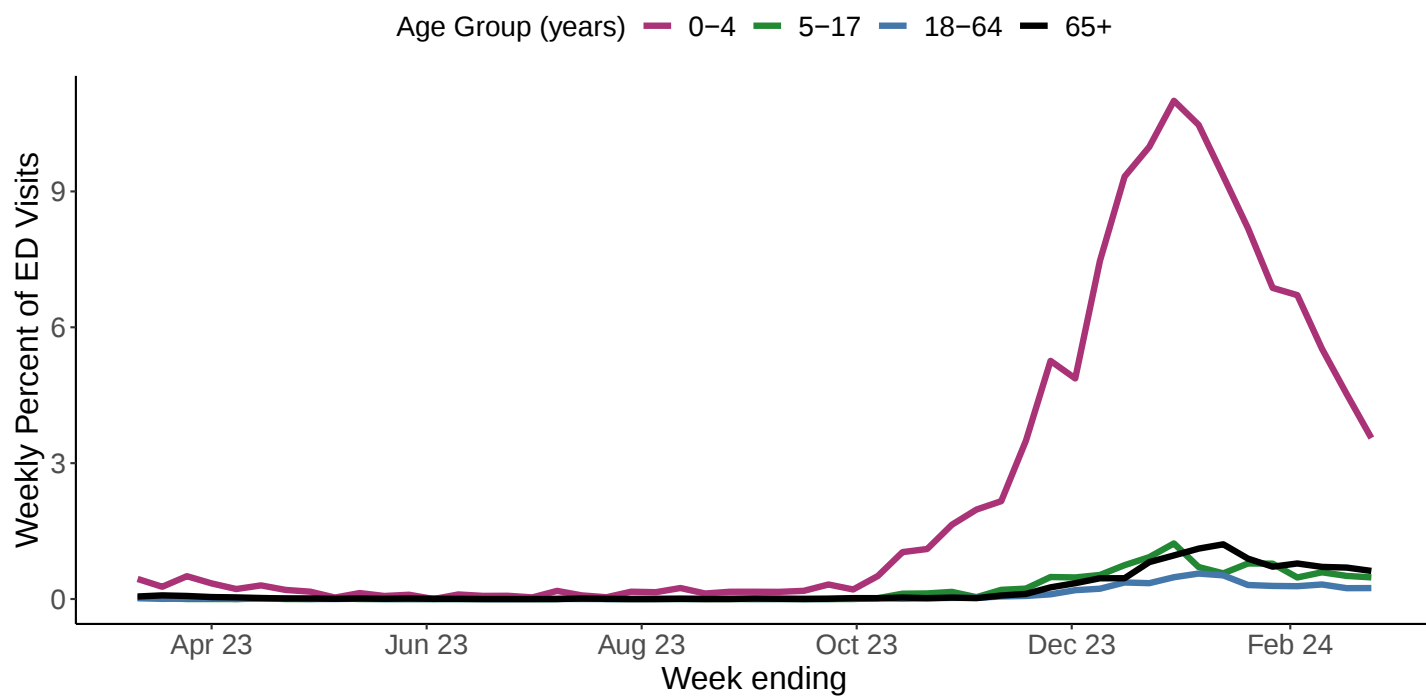
Percent of ED visits with a diagnosis for influenza by age group, NSSP



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

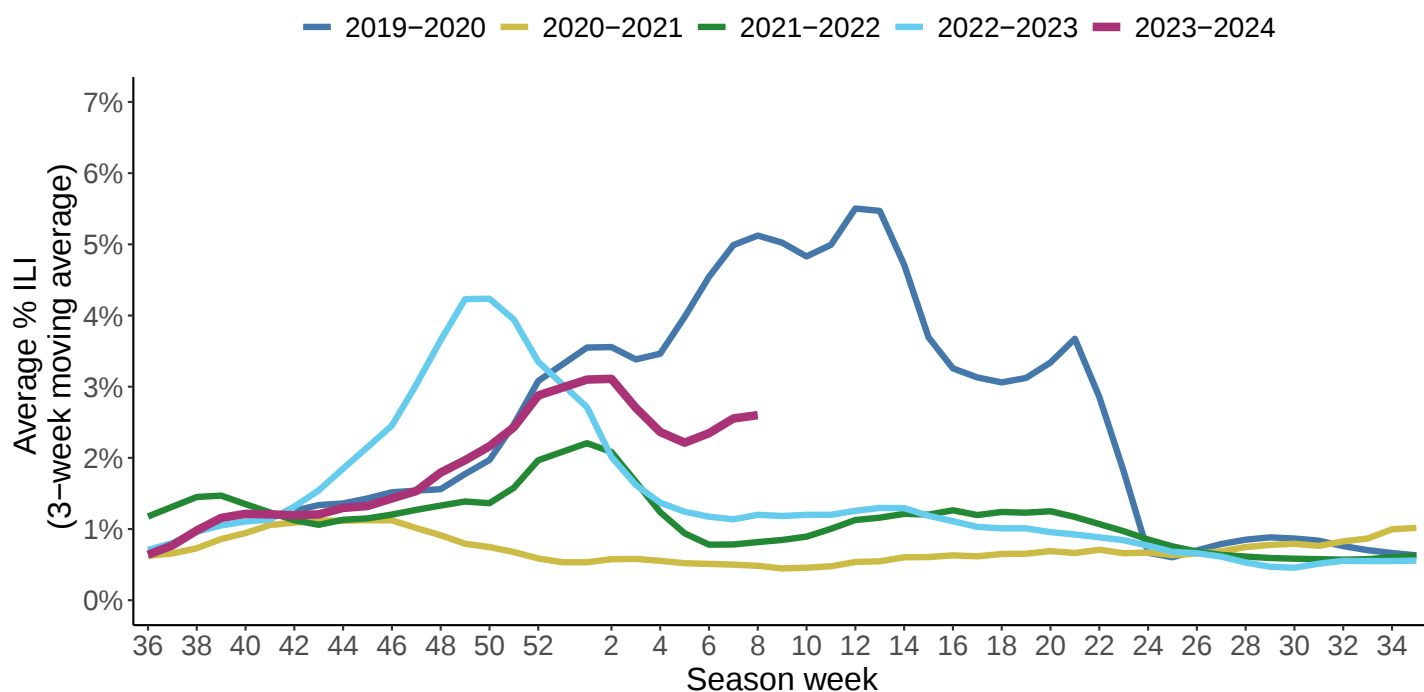


Percent of ED visits with a diagnosis for RSV by age group, NSSP



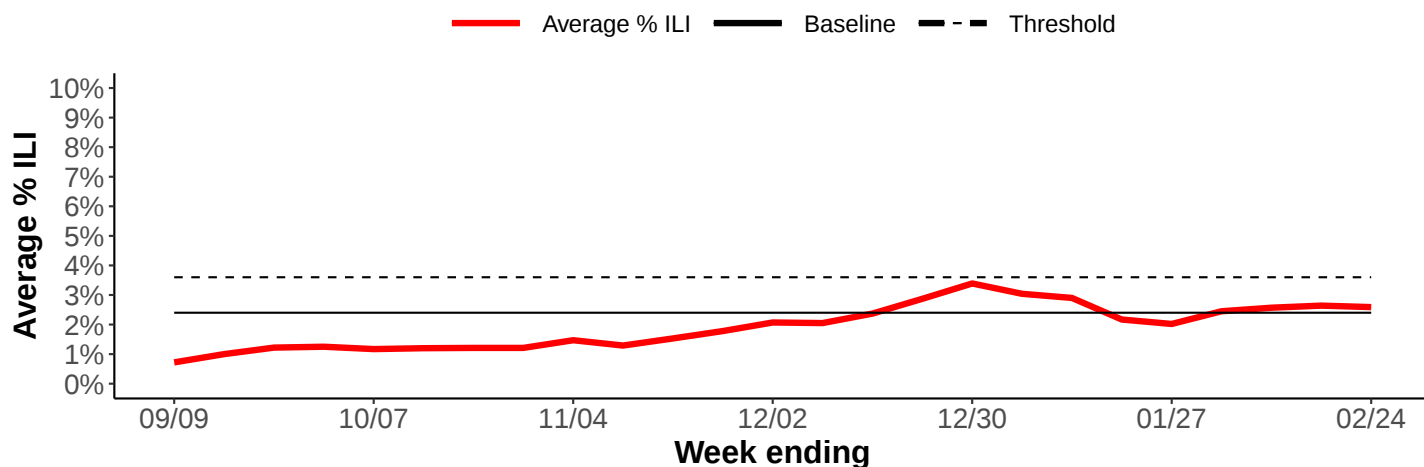
Wisconsin ILI Activity

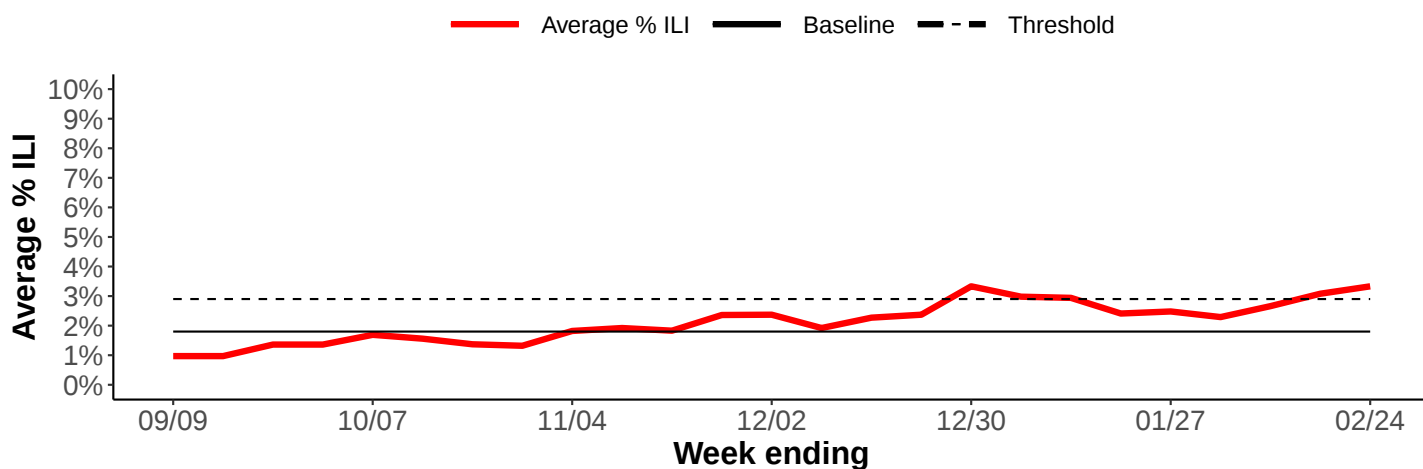
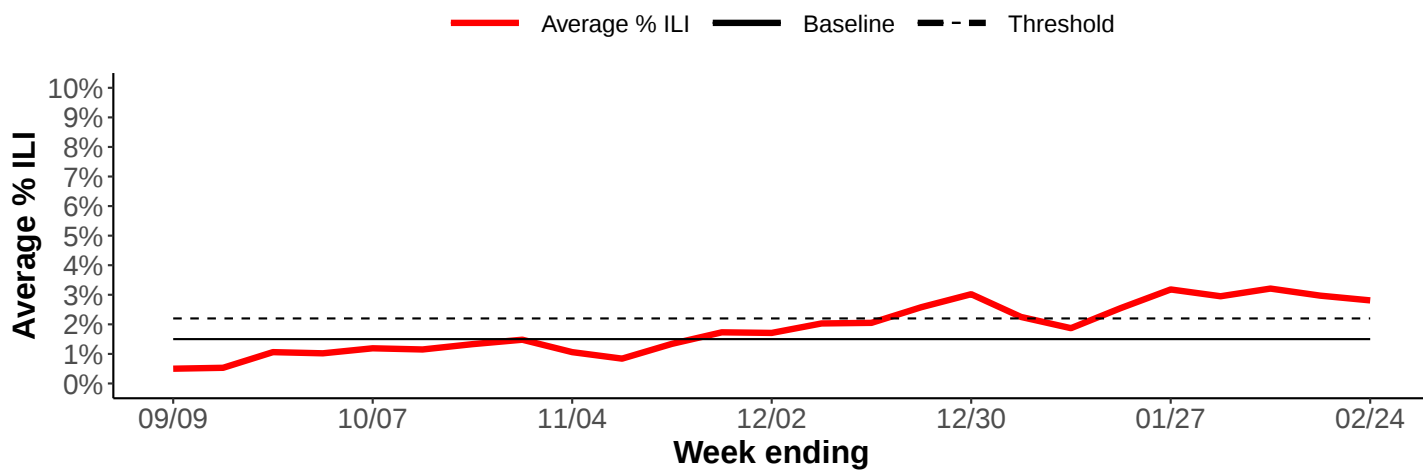
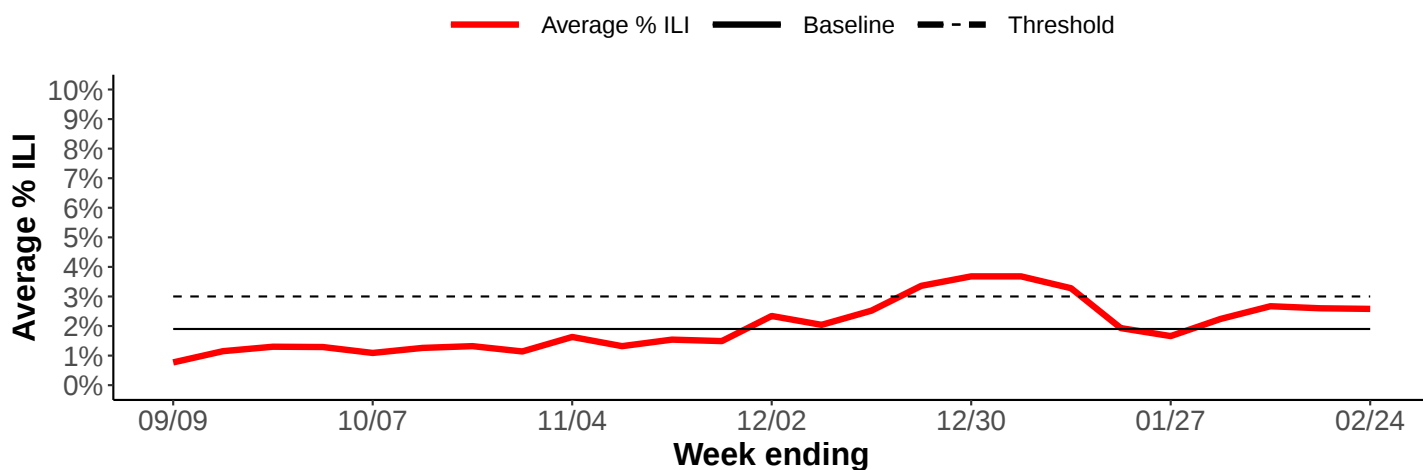
Three-week average percent of visits for ILI by influenza season, ILINET



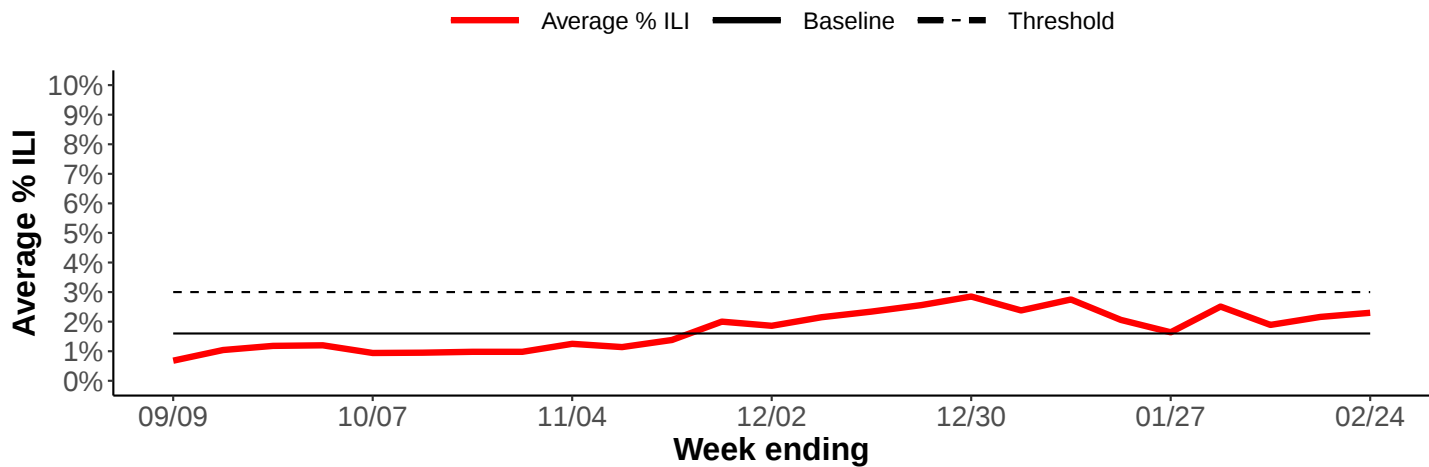
Average percent of visits for ILI by public health region, ILINET

Wisconsin

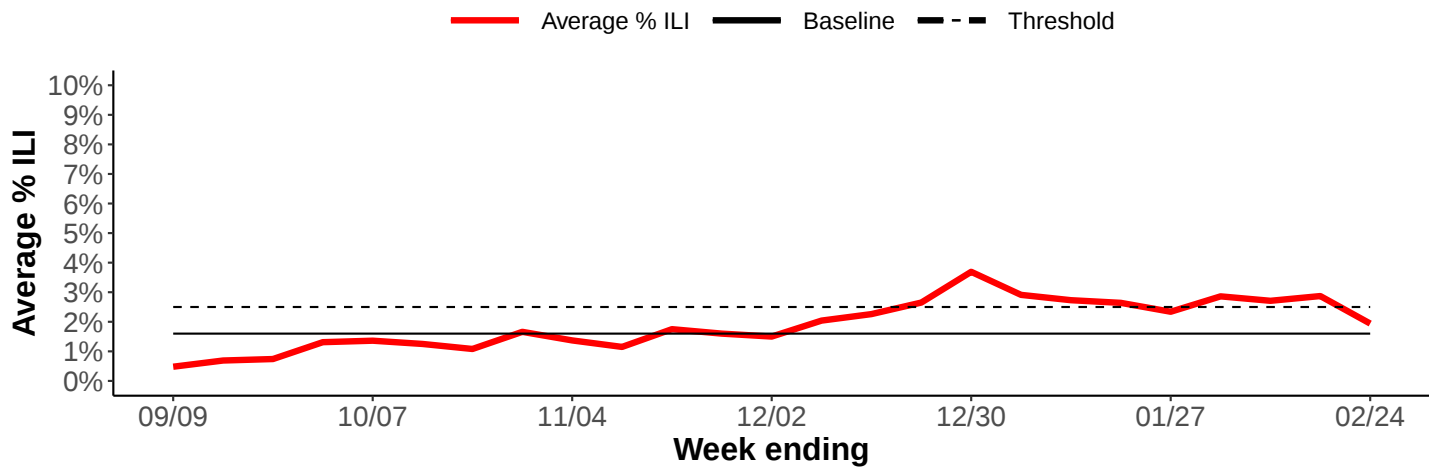


Northeastern Region**Northern Region****Southeastern Region**

Southern Region



Western Region



Understanding the Data

Surveillance Report Description

Influenza-like Illness (ILI)	Patients who present to a clinician with a fever ≥ 100 degrees F and either a cough or sore throat.
Influenza-like Illness (ILI) Activity	Using baseline (expected value data used for comparison) in each of the public health regions in Wisconsin (https://www.dhs.wisconsin.gov/lh-depts/counties/index.htm), 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)
Acute Respiratory Illness (ARI)	ARI is a broad definition designed to capture all diagnoses related to respiratory illness, including SARS-CoV-2, influenza, pneumonia, and cough
Predominant virus of the week	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)
Influenza-Associated Pediatric Mortality	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)
Deaths Due to Pneumonia, SARS-CoV-2, Influenza and RSV	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)
Respiratory Viruses by PCR	A molecular laboratory method used to detect nucleic acid (DNA/RNA) in viruses, including influenza and RSV.
Influenza-Associated Hospitalizations	Patients hospitalized for >24 hours with a laboratory-identified (by rapid antigen or rt-PCR tests) influenza.(3)
Emergency Department Data	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).



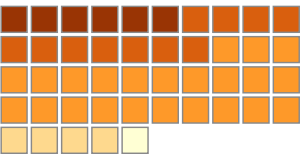
COVID-19 Wastewater Surveillance in Wisconsin

Dashboard Updated: 3/6/2024

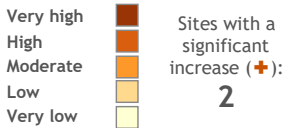
Total population served: 2,960,577

Slide to pick start date
12/29/2022

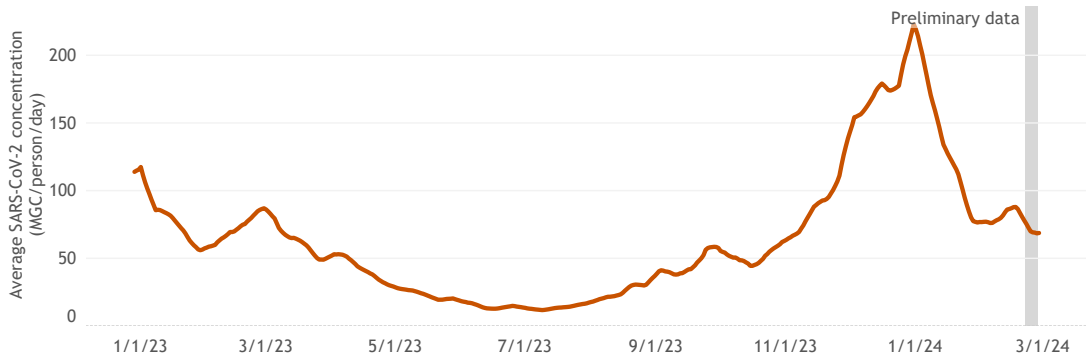
Statewide presence of SARS-CoV-2 in wastewater



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	
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	

Appleton

Estimated population served: 72,810

Category: High

Trajectory: No alert

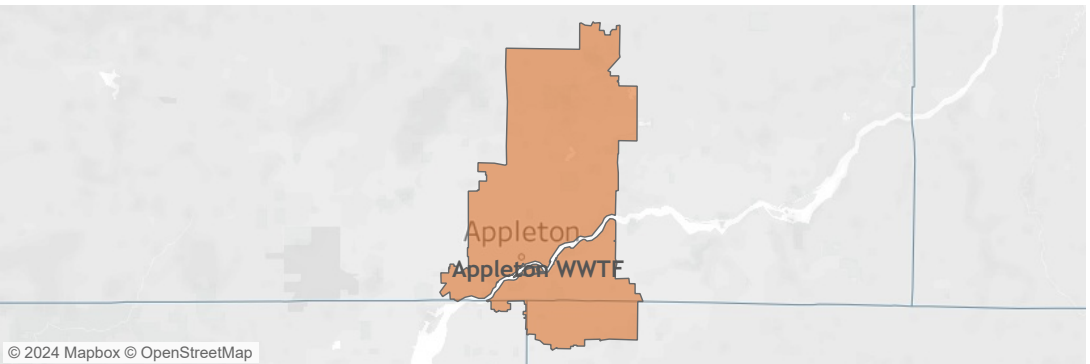
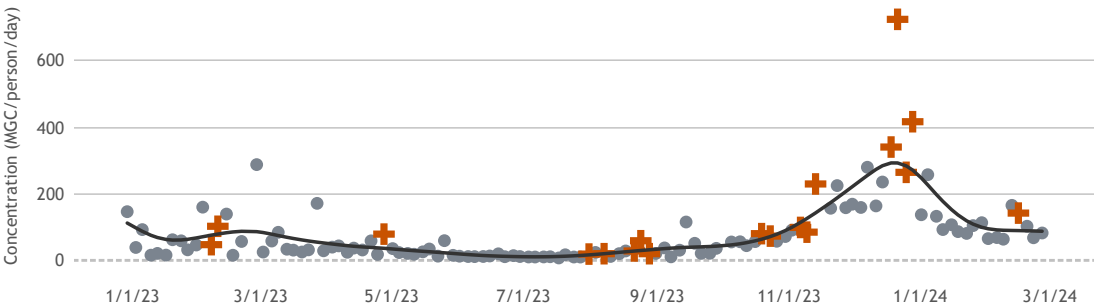


Wastewater concentration of SARS-CoV-2 within the Appleton sewershed

☒ Linear scale
☐ Log scale

A linear scale is more helpful to follow short-term trends over time.
A log scale is more helpful when there are major increases or decreases.

Slide to pick start date
12/29/2022



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