WISCONSIN DEPARTMENT of HEALTH SERVICES

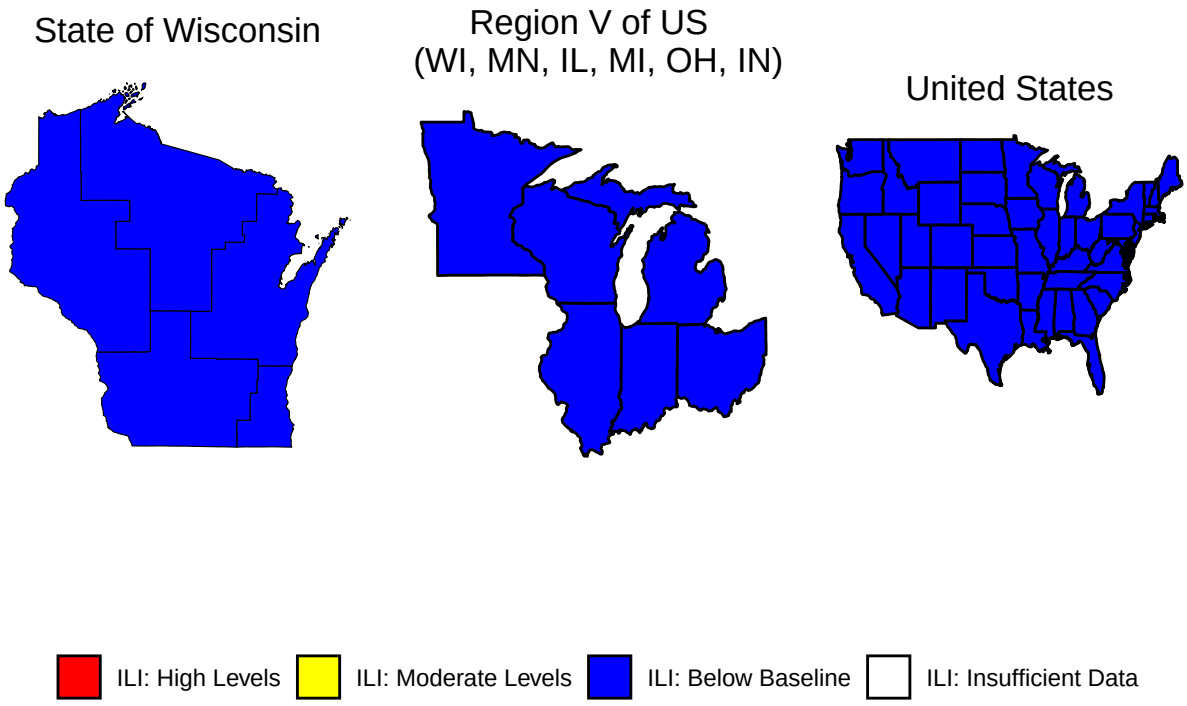
Respiratory Virus Surveillance Report

Week 45, Ending November 9, 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

P-02346

Influenza-like Illness (ILI) Activity



Weekly Respiratory Virus Data, At-A-Glance

Predominant virus of the week:

Rhinovirus/Enterovirus

Key Findings:

- COVID-19 continues to circulate at low levels based on emergency department, laboratory testing, and wastewater data.
- Influenza and RSV are circulating at low levels.
- Now is the time to get the influenza, COVID-19, and RSV vaccines for protection ahead of the holiday season.
- For updated pertussis outbreak information go to: www.dhs.wisconsin.gov/outbreaks.

Influenza–associated pediatric deaths reported:

	Week 45, 2024	Since Sep 1, 2024
Wisconsin	0	0
Nationwide	0	1

For National US influenza surveillance statistics visit: www.cdc.gov/flu/weekly/

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Respiratory Virus and Pneumonia-Associated Mortality

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

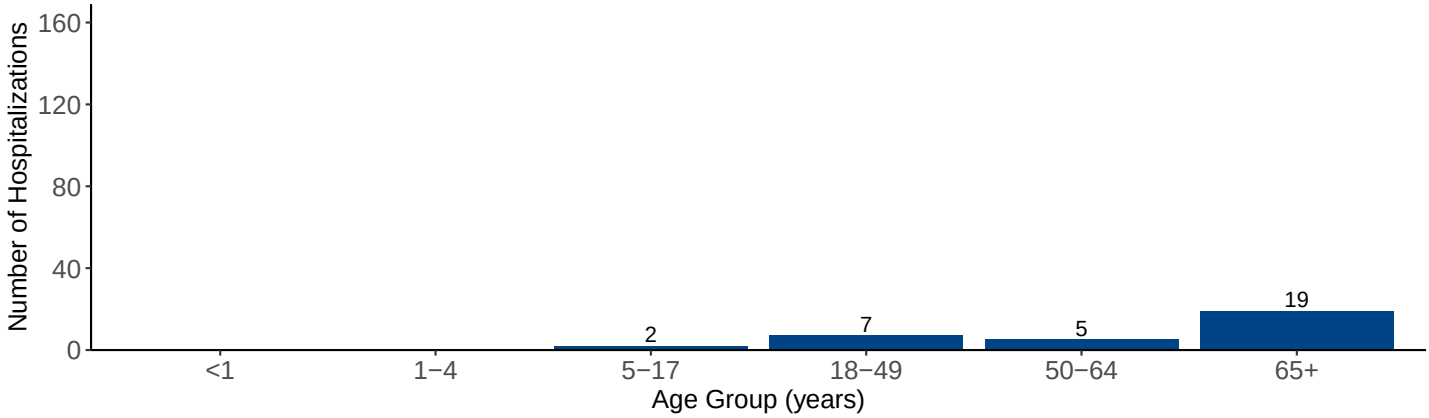
Respiratory virus and pneumonia associated deaths by most recent 3-week period, Vital Records

Season week	Pneumonia (P)	Influenza (I)	COVID-19 (C)	RSV (R)	P, I, C or R	Percent PICR of all
43	51	0	14	0	60	5%
44	54	1	20	0	66	6%
45	39	2	2	0	43	6%

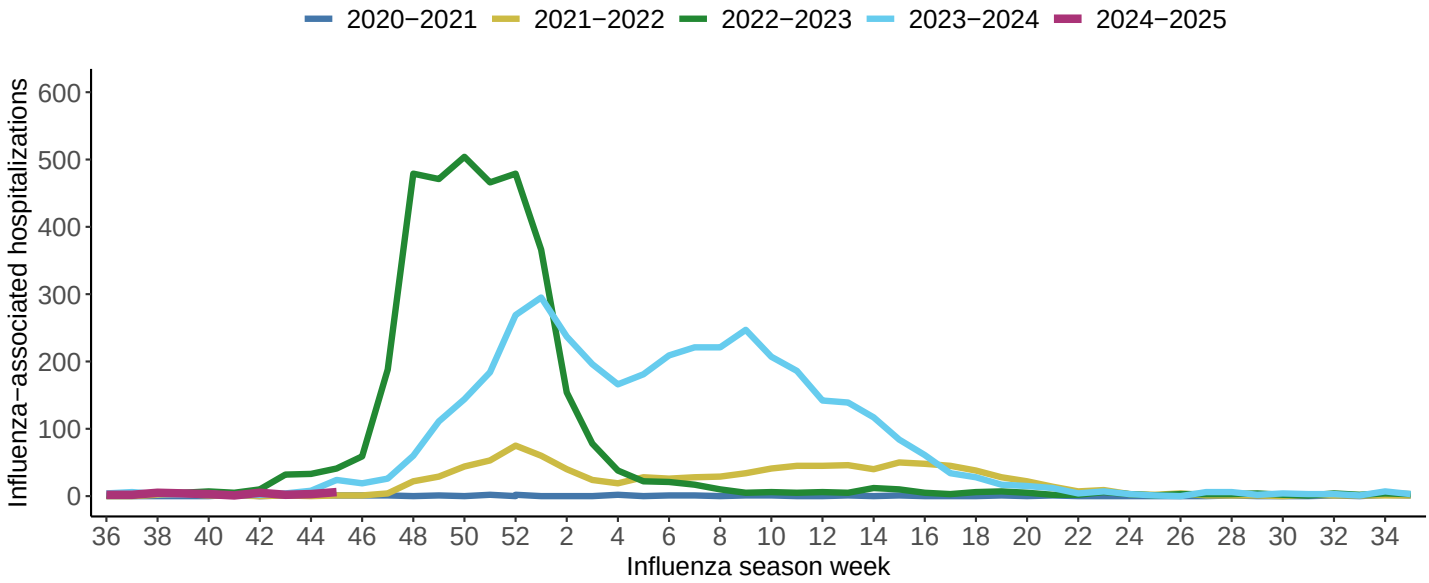
Influenza-Associated Hospitalizations

Influenza-associated hospitalizations by age group, WEDSS

September 1, 2024 to present



Weekly influenza-associated hospitalizations by influenza season, WEDSS

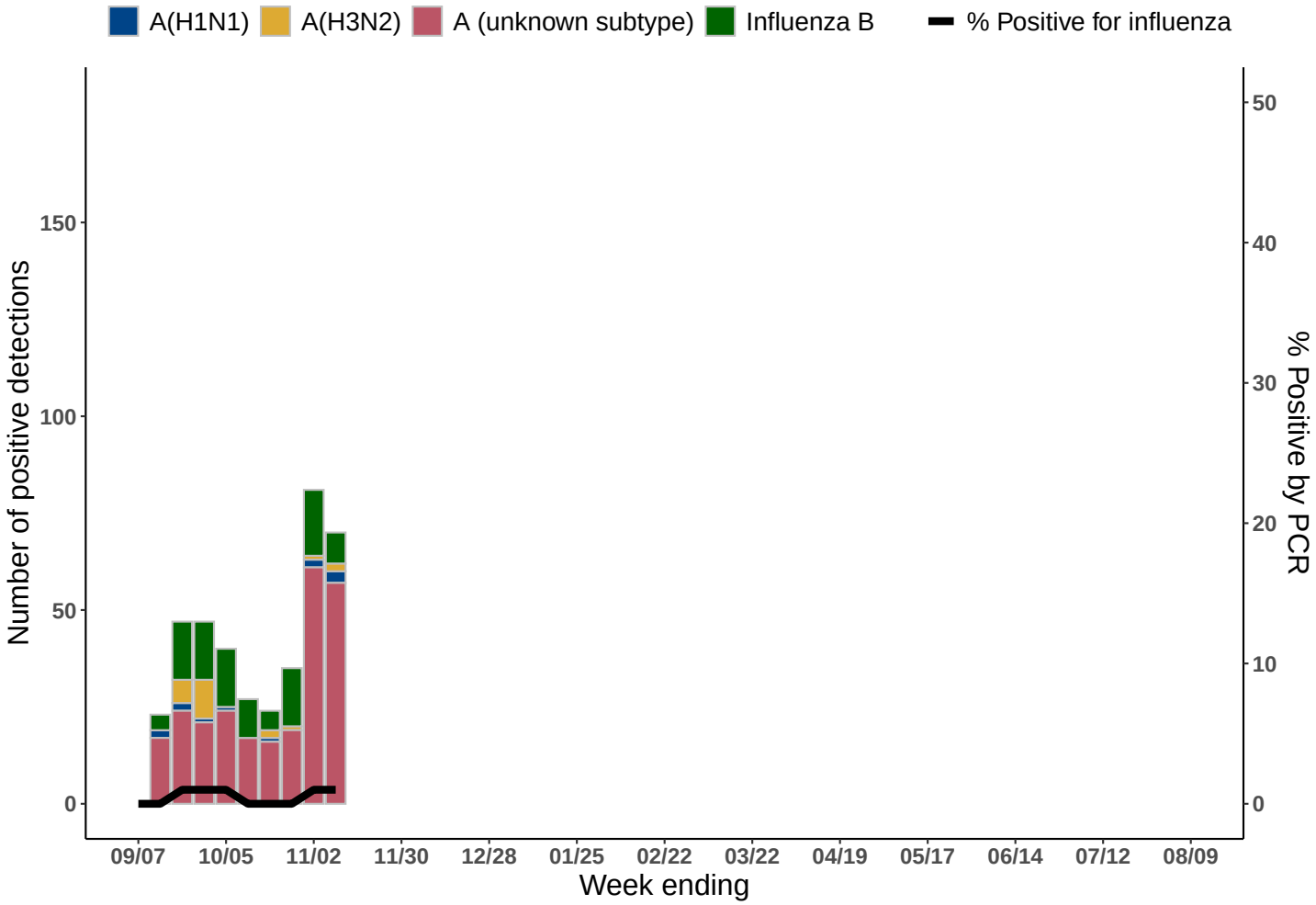


Influenza Season	Cumulative Hospitalizations Through Week 45	Entire Season
2020-2021	6	28
2021-2022	9	1021
2022-2023	140	3610
2023-2024	58	3936
2024-2025	33	-

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



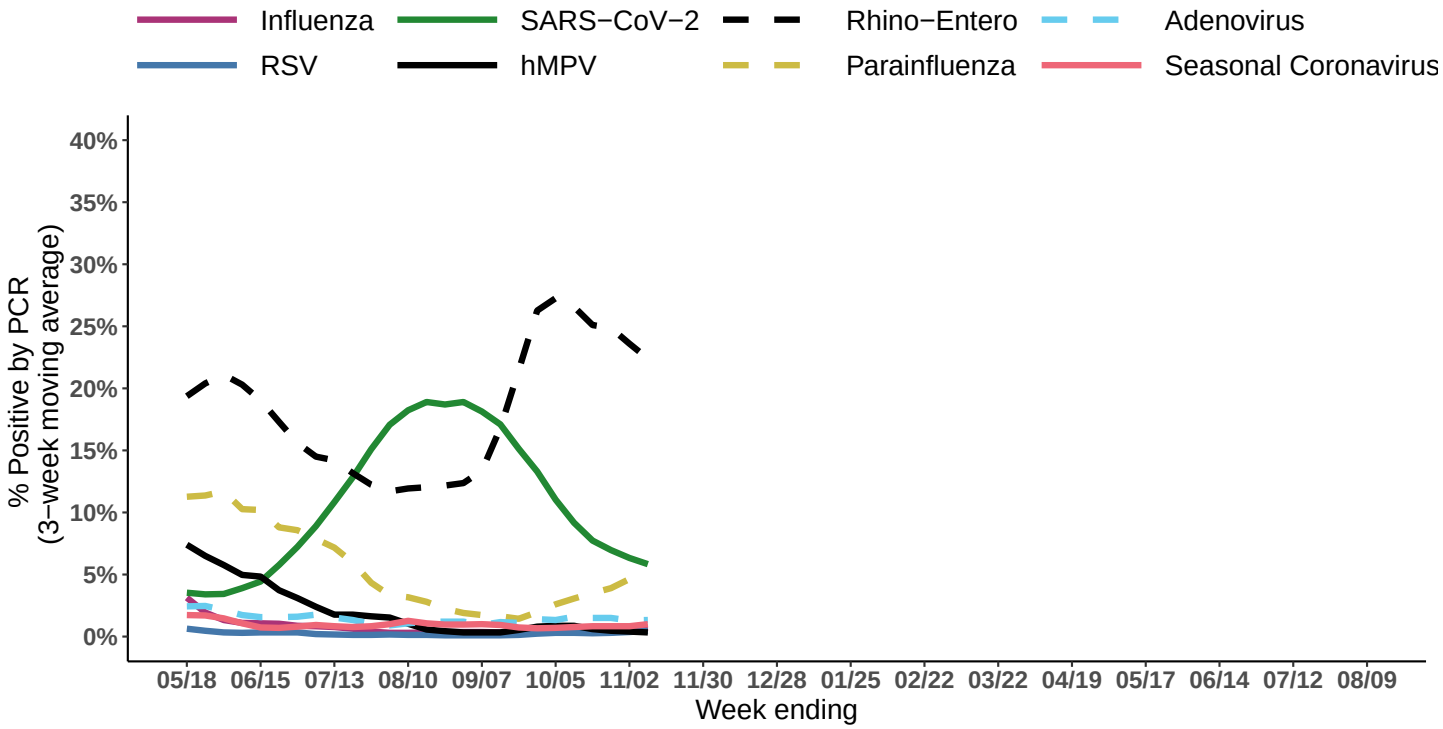
Cumulative number of positive influenza PCR tests by subtype, NREVSS

September 1, 2024 to present

Measure	Influenza A(H1N1)pdm2009	Influenza A(H3N2)	Influenza A Unknown	Influenza B	Total
Total positive (n)	12	23	274	104	413
% of total positive	3%	6%	66%	25%	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 45, Ending on November 09, 2024

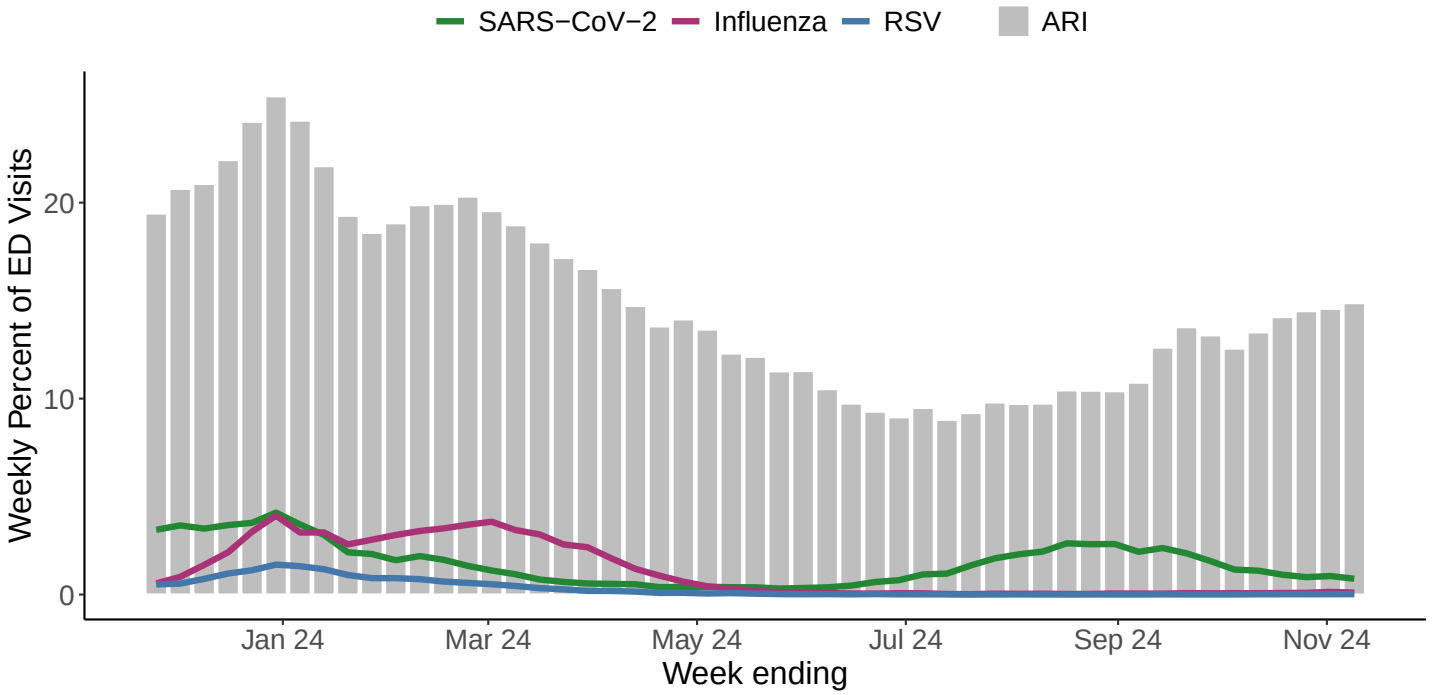
Respiratory virus	Tested	Positive (n)	Positive (%)	H3N2	2009 H1N1	A Unknown	Influenza B
Influenza	8,118	70	0.9%	2	3	57	8

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	1,144	67	5.9%	12	0	3	52

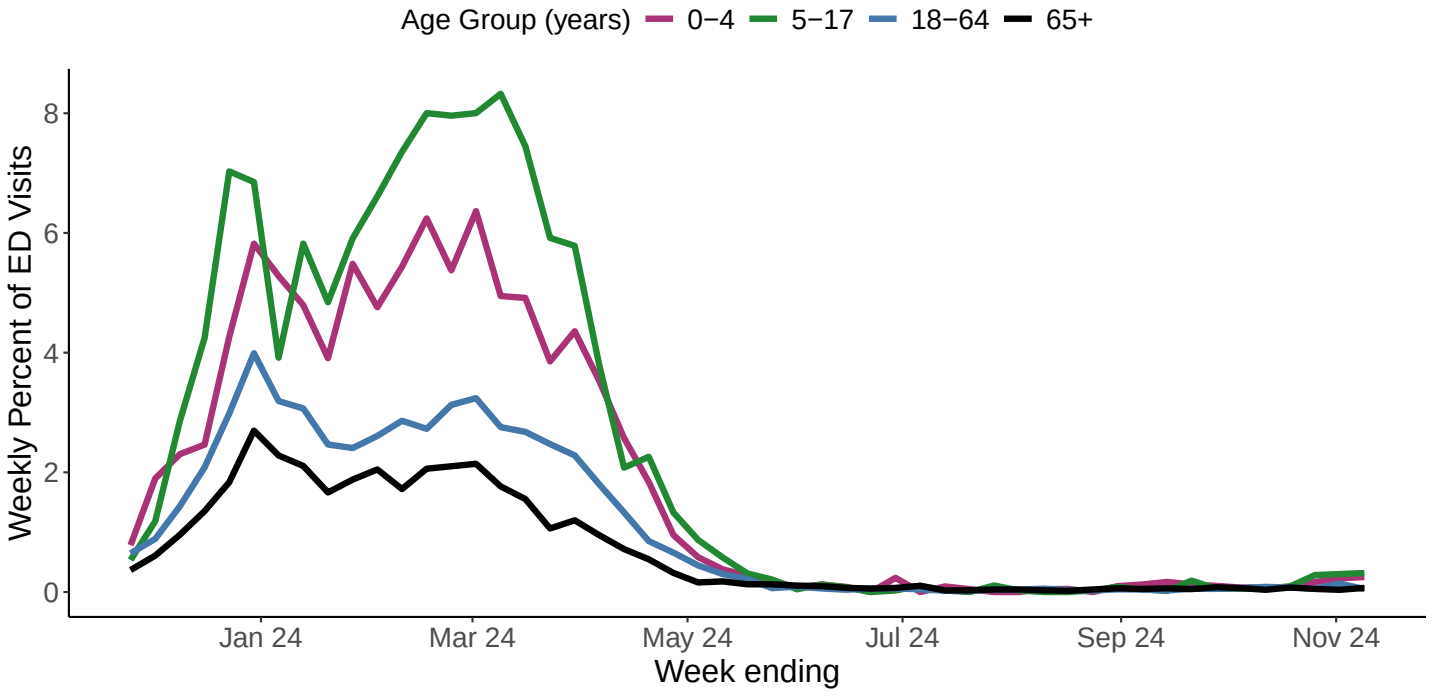
Respiratory virus	Tested	Positive (n)	Positive (%)
Respiratory Syncytial Virus	7,124	45	0.6%
Adenovirus	1,178	15	1.3%
Seasonal Coronavirus	1,104	15	1.4%
HMPV	1,177	2	0.2%
Rhinovirus/Enterovirus	1,622	347	21.4%
COVID-19	9,474	497	5.2%

Respiratory Virus Activity in the Emergency Department (ED)

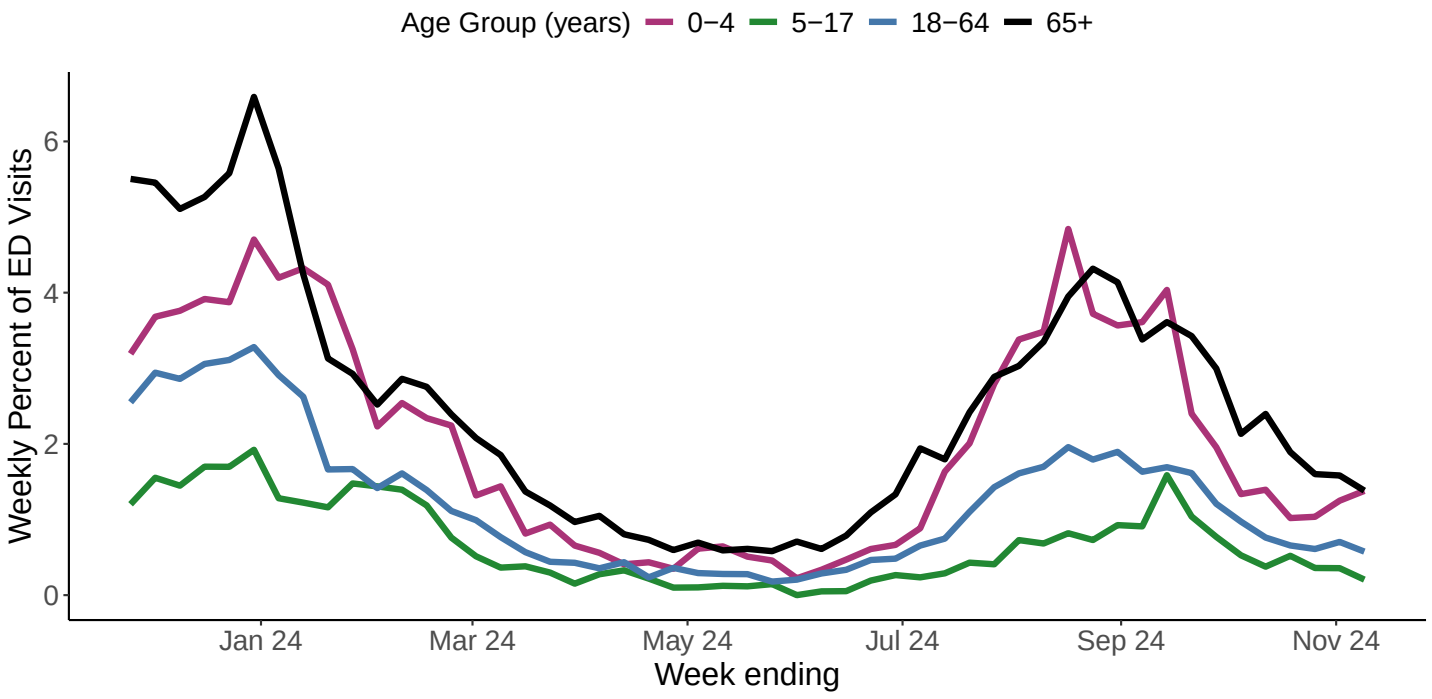
Percent of ED visits with a diagnosis for a respiratory virus or acute respiratory infection (ARI), NSSP



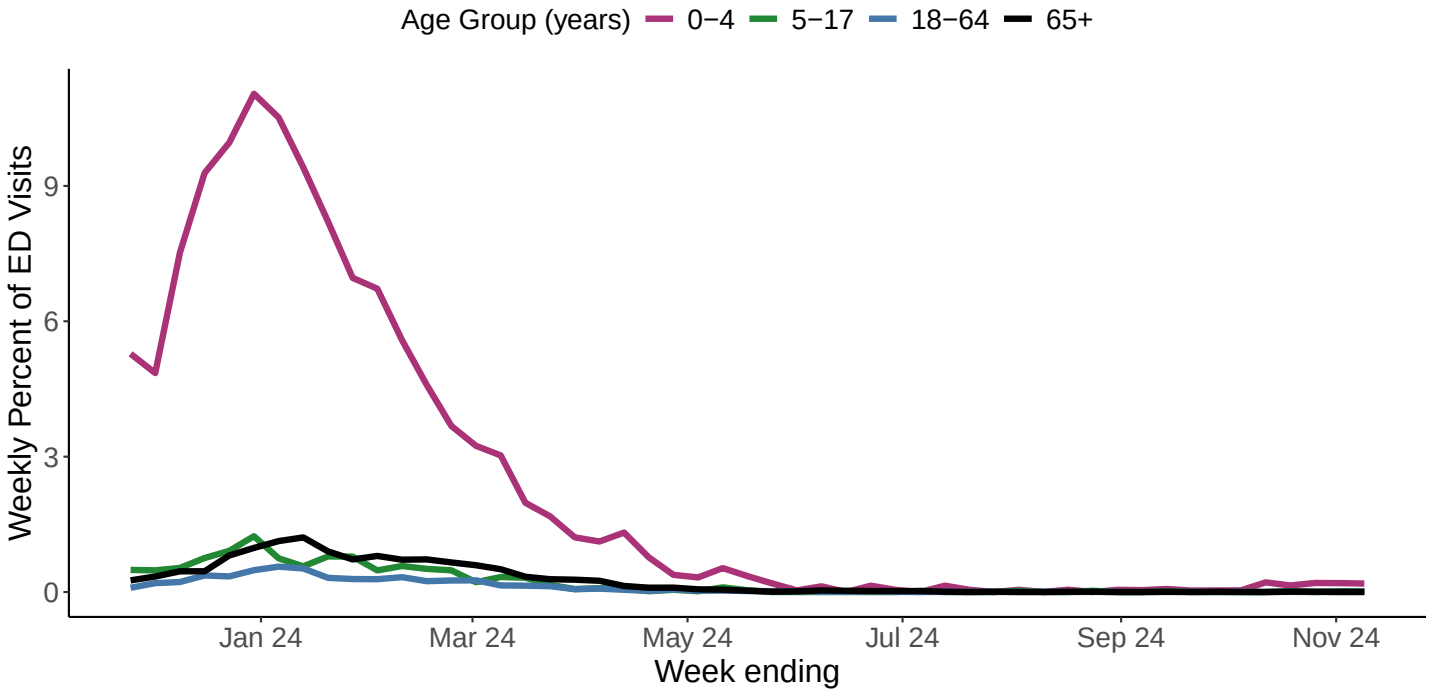
Percent of ED visits with a diagnosis for influenza by age group, NSSP



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

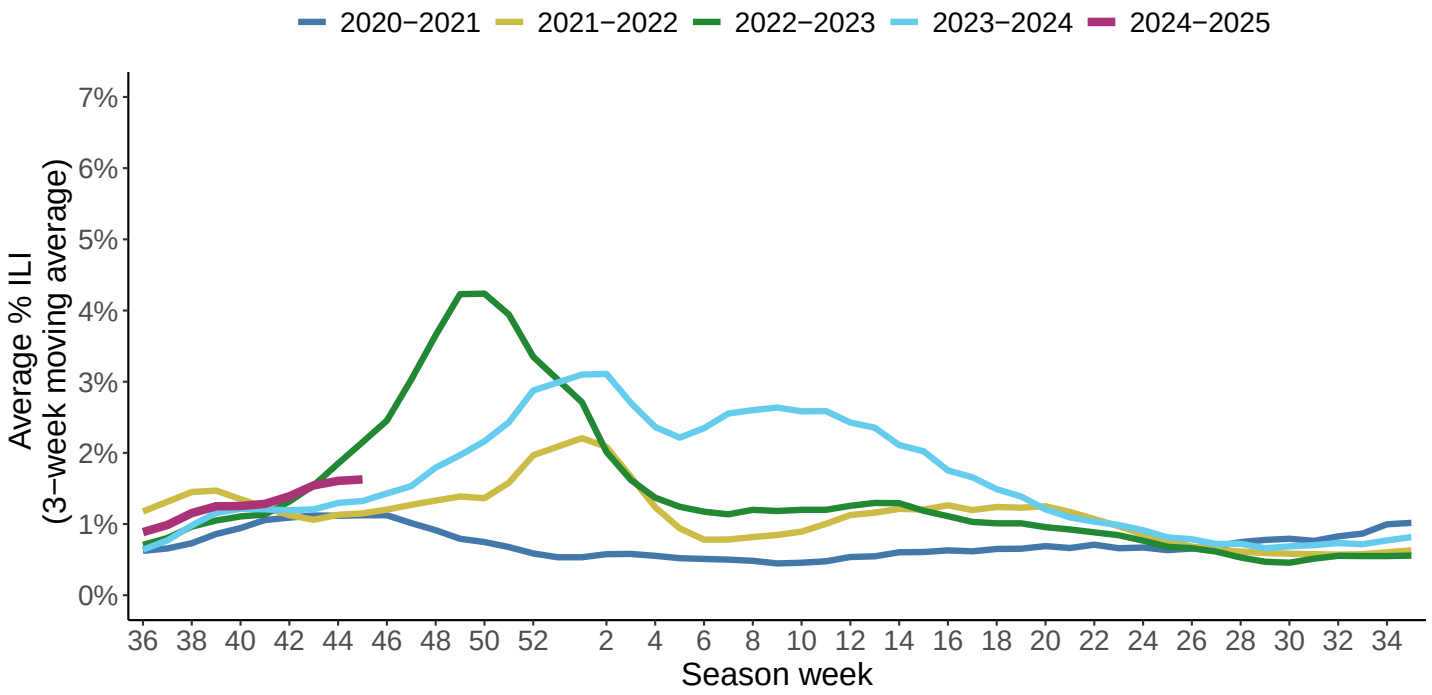


Percent of ED visits with a diagnosis for RSV by age group, NSSP

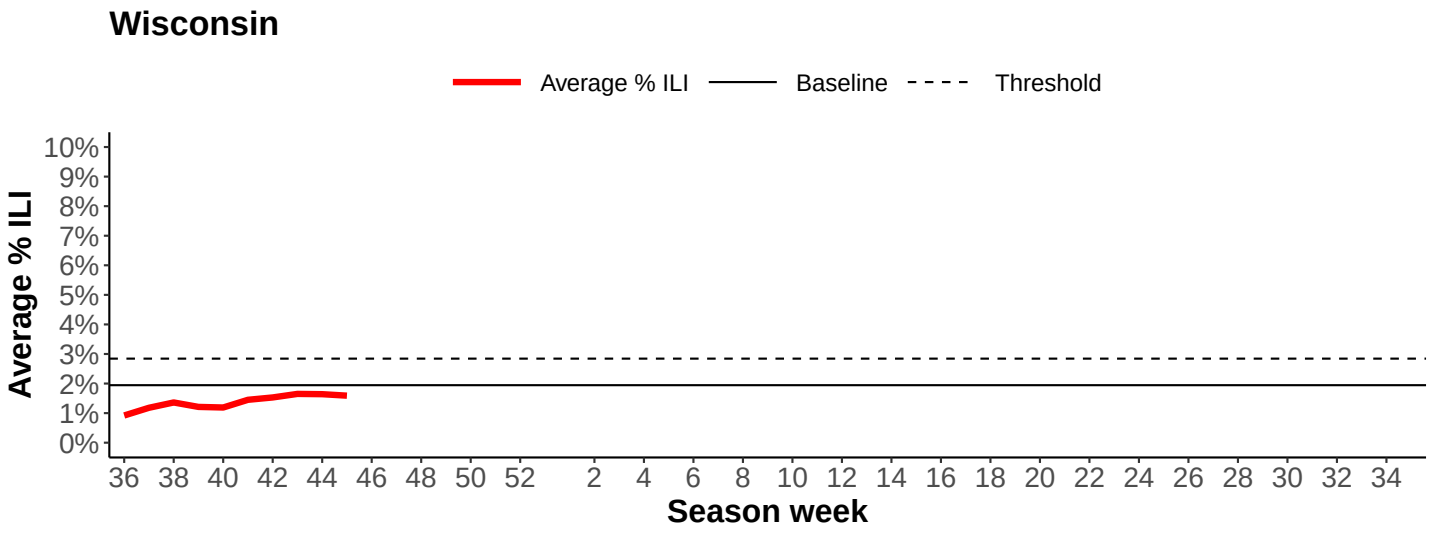


Wisconsin ILI Activity

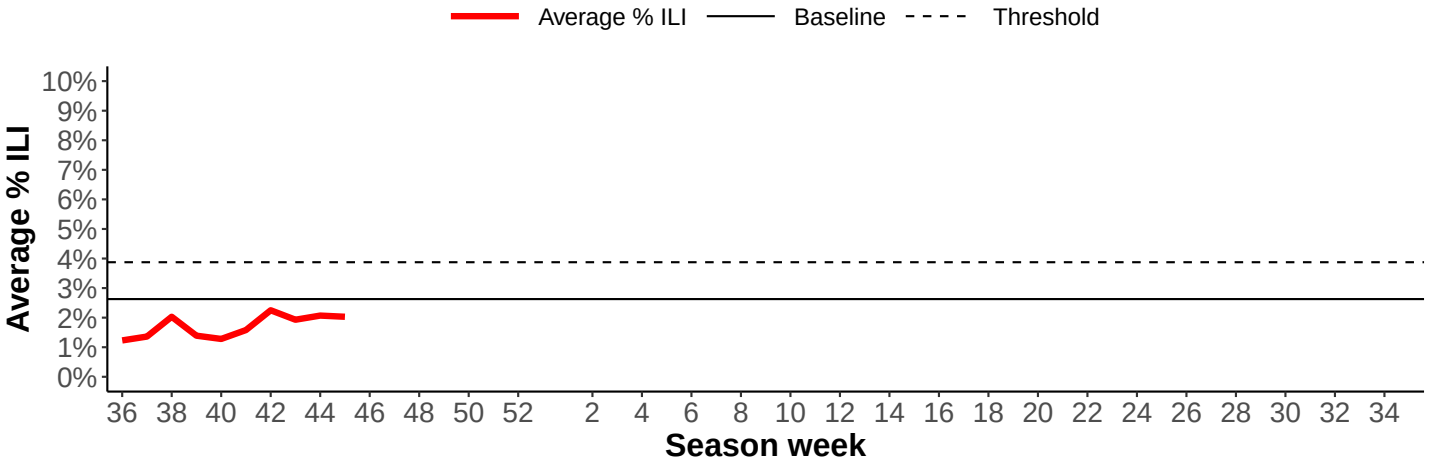
Three-week average percent of visits for ILI by influenza season, ILINET



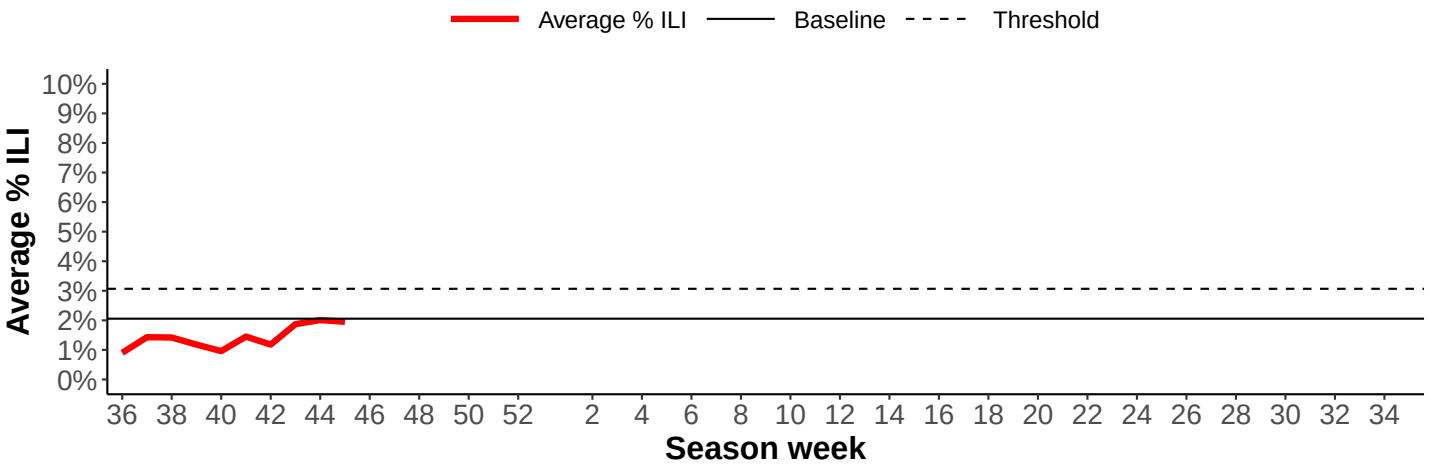
Average percent of visits for ILI by public health region, ILINET



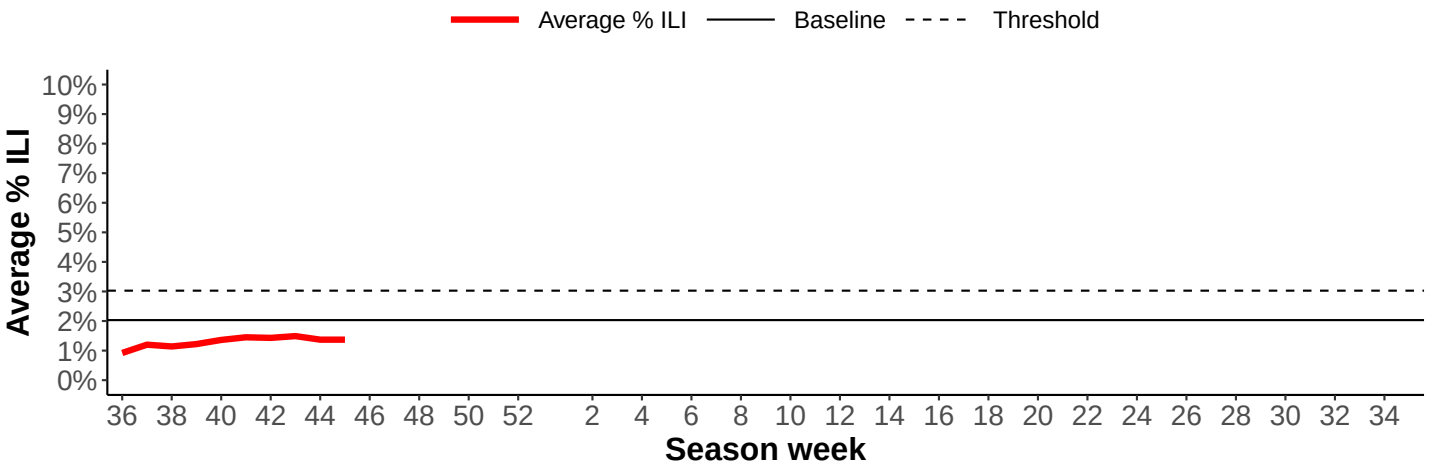
Northeastern Region



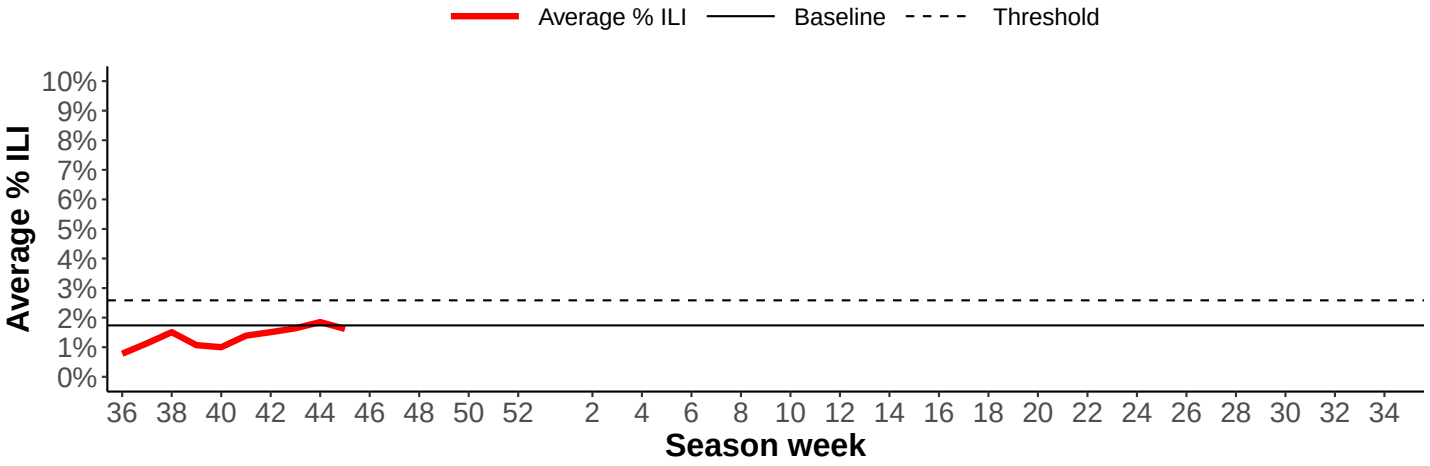
Northern Region



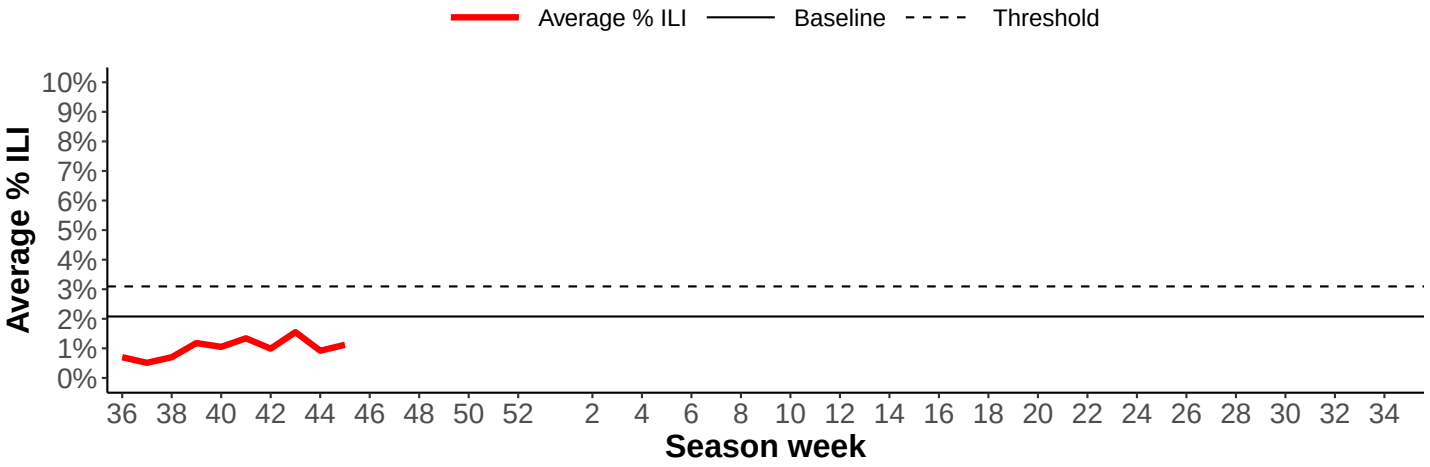
Southeastern Region



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 comparision) 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).