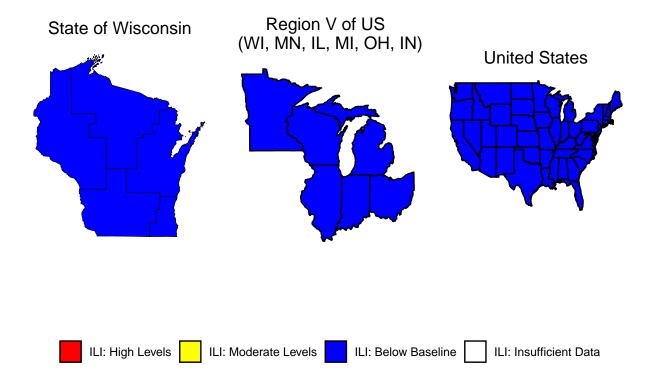




Respiratory Virus Surveillance Report
Week 35, Ending August 31, 2024

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



# Weekly Respiratory Virus Data, At-A-Glance

#### Predominant virus of the week:

COVID-19

#### **Key Findings:**

- Emergency department (ED), laboratory testing, hospitalization, and wastewater data all show that COVID-19 activity is elevated.
- ED visit data show that COVID-19 activity is highest among children under 5 years and people 65 years and older.
- Influenza and RSV continued to circulate at low levels in Wisconsin.
- Influenza-like illness activity remains low in Wisconsin.

#### Influenza-associated pediatric deaths reported:

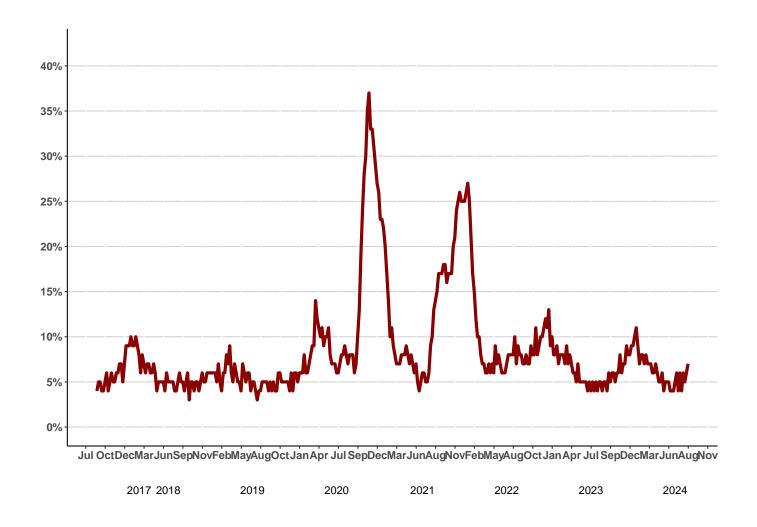
	Week 35, 2024	Since Sep 3, 2023
Wisconsin	1	2
Nationwide	2	197

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  $\,$ 



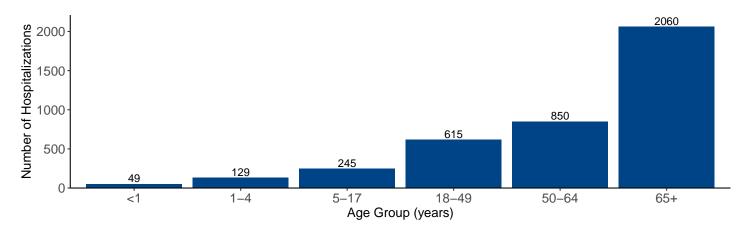
Respiratory virus and pneumonia associated deaths by most recent 3-week period, Vital Records

Season week	Pneumonia (P)	Influenza (I)	COVID-19 (C)	RSV (R)	P, I, C or R	Percent PICR of all
33	37	1	12	1	46	5%
34	43	0	14	0	55	6%
35	39	0	14	0	48	7%

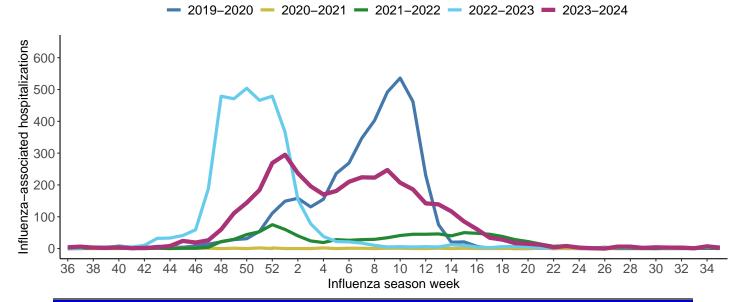


## Influenza-Associated Hospitalizations

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



Weekly influenza-associated hospitalizations by influenza season, WEDSS



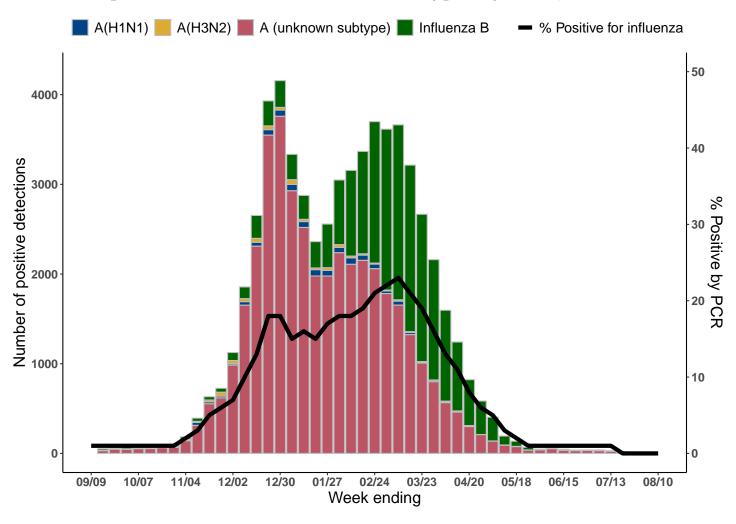
Influenza Season	Cumulative Hospitalizations Through Week 35	Entire Season
2019-2020	4002	4002
2020-2021	28	28
2021-2022	1021	1021
2022-2023	3610	3610
2023-2024	3948	3948

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



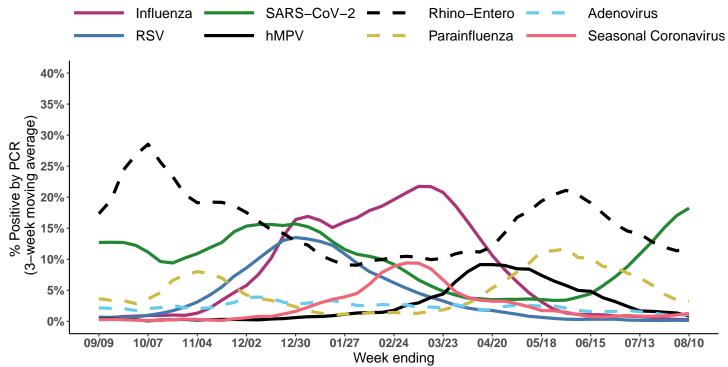
# Cumulative number of positive influenza PCR tests by subtype, NREVSS September 3, 2023 to present

Measure	$\begin{array}{c} {\rm Influenza} \\ {\rm A(H1N1)pdm2009} \end{array}$	Influenza A(H3N2)	Influenza A Unknown	Influenza B	Total
Total positive (n)	1057	584	40993	18798	61432
% of total positive	2%	1%	67%	31%	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 35, Ending on August 31, 2024

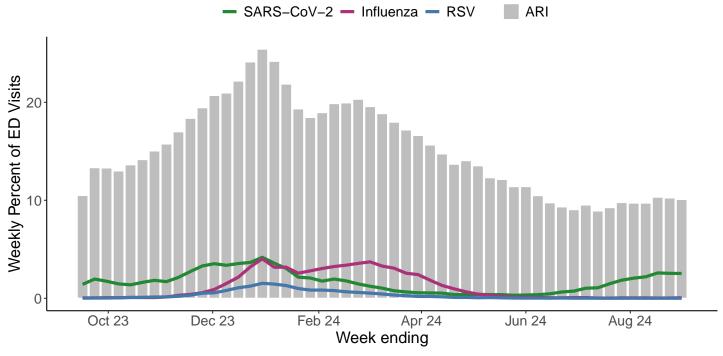
Respiratory virus	Tested	Positive (n)	Positive (%)	H3N2	2009 H1N1	Unknown	Influenza B
Influenza	5,826	20	0.3%	1	1	15	3
Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4

Respiratory virus	Tested	Positive (n)	Positive (%)
Respiratory Syncytial Virus	5,183	1	0%
Adenovirus	987	14	1.4%
Seasonal Coronavirus	897	12	1.3%
HMPV	959	0	0%
Rhinovirus/Enterovirus	1,326	170	12.8%
COVID-19	9,625	1,873	19.5%

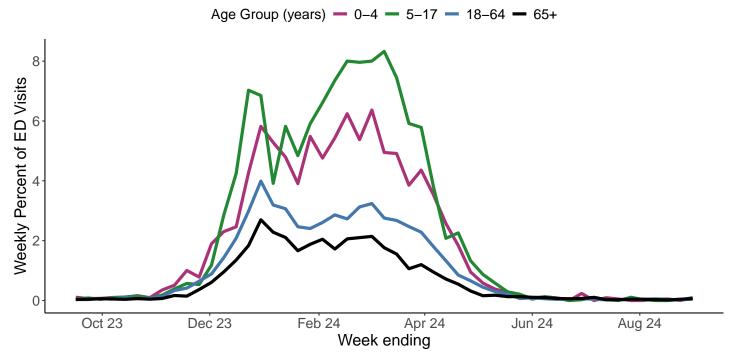


# Respiratory Virus Activity in the Emergency Department (ED)

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

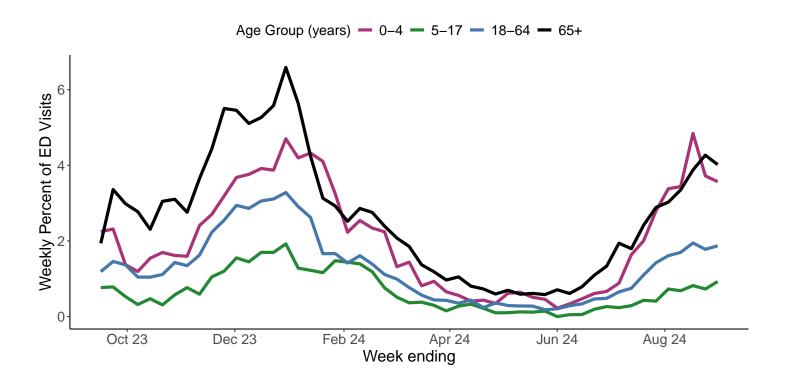


Percent of ED visits with a diagnosis for influenza by age group, NSSP

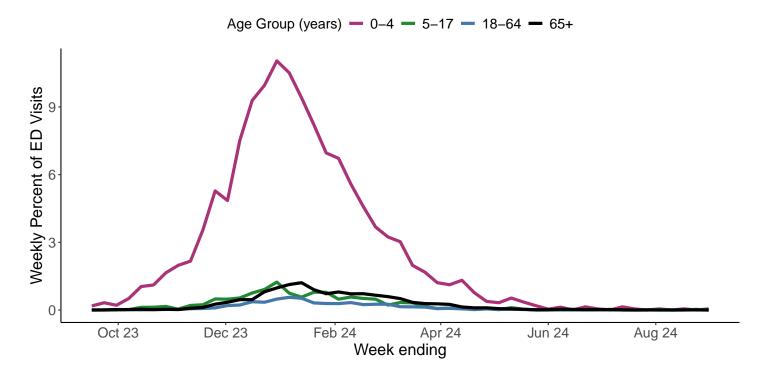




#### Percent of ED visits with a diagnosis for SARS-CoV-2 by age group, NSSP



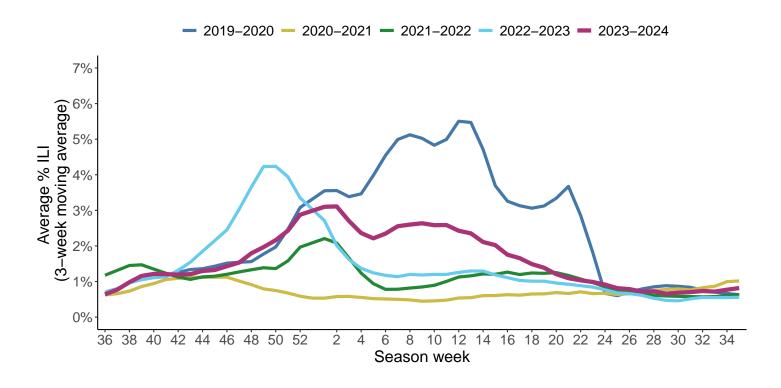
Percent of ED visits with a diagnosis for RSV by age group, NSSP



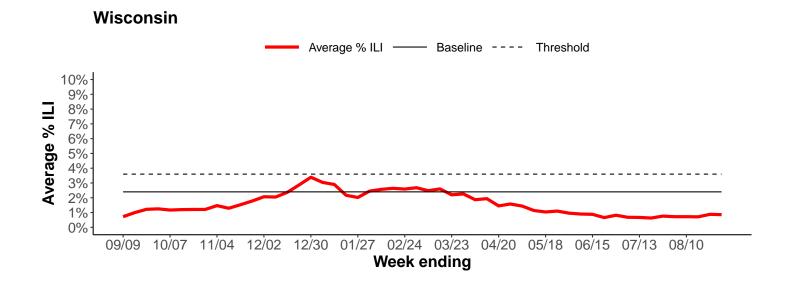


# Wisconsin ILI Activity

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

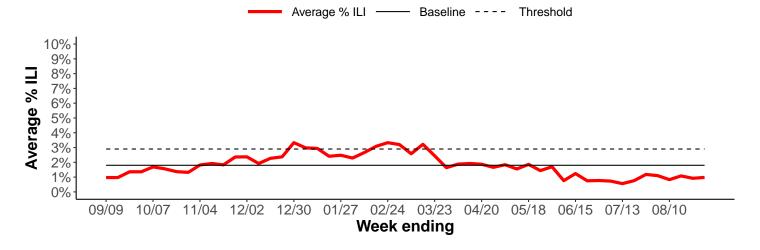


Average percent of visits for ILI by public health region, ILINET

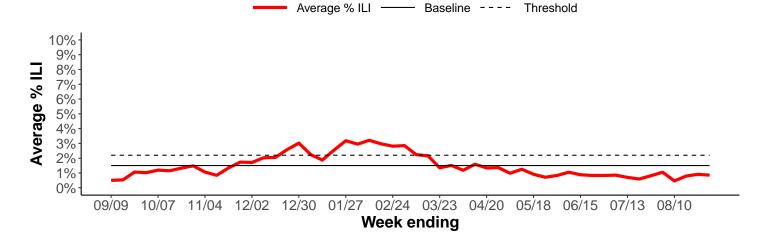




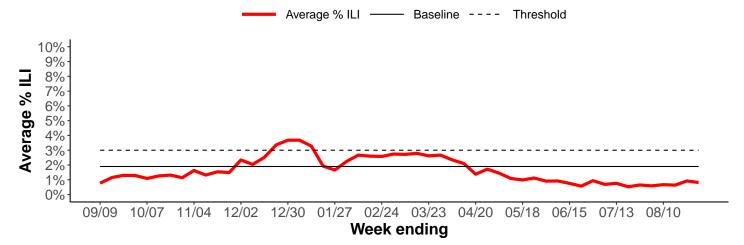
#### **Northeastern Region**



## **Northern Region**

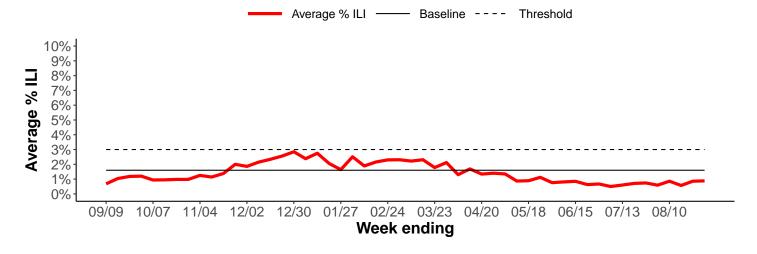


## Southeastern Region

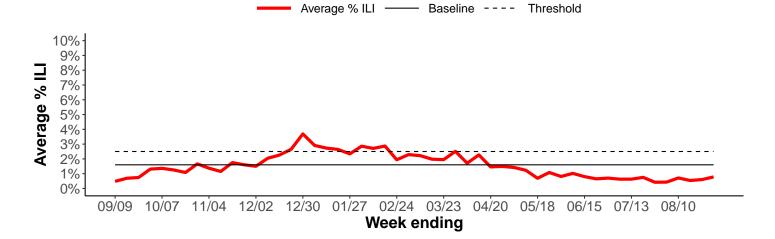




## **Southern Region**



## **Western Region**





## Understanding the Data

Surveillance Report Description

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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).

