

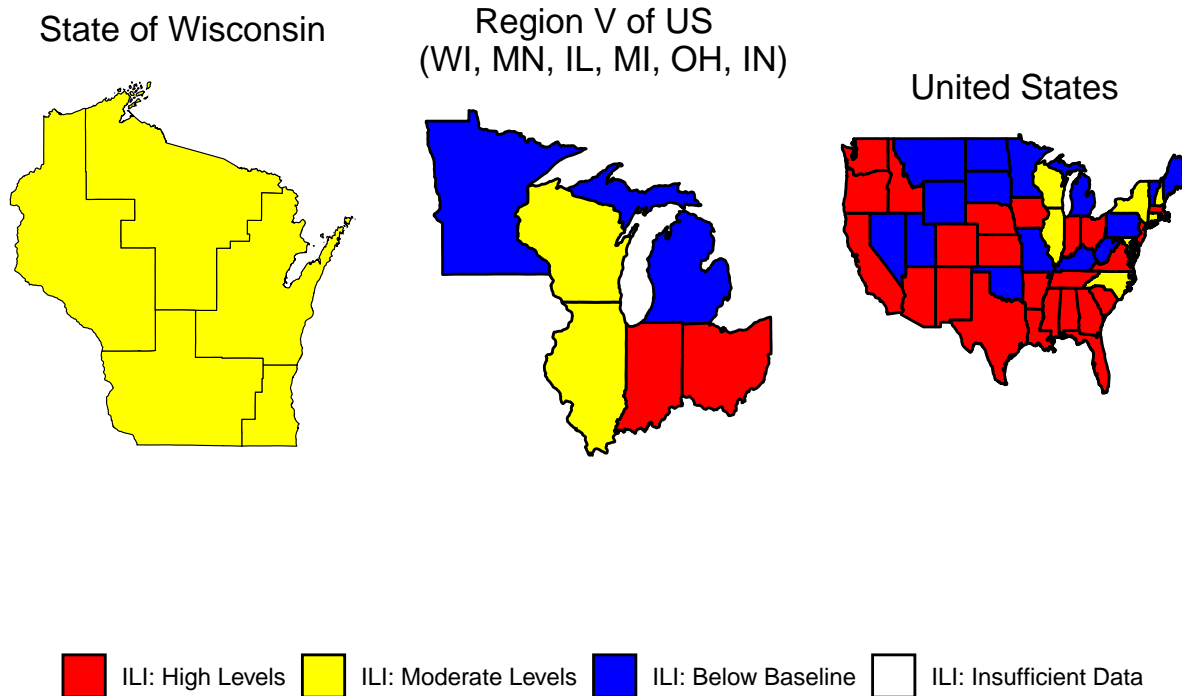


# Respiratory Virus Surveillance Report

Week 51, Ending December 21, 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:

Rhinovirus/Enterovirus

#### Key Findings:

- COVID-19 levels are moderate and increasing based on emergency department, laboratory testing, and wastewater data.
- Influenza and RSV are circulating at low levels, and activity continues to increase.
- Influenza-like illness activity is moderate.
- To read about our recent human case of highly pathogenic avian influenza A(H5N1) go to: [www.dhs.wisconsin.gov/outbreaks](http://www.dhs.wisconsin.gov/outbreaks).
- For updated pertussis outbreak information go to: [www.dhs.wisconsin.gov/outbreaks](http://www.dhs.wisconsin.gov/outbreaks).

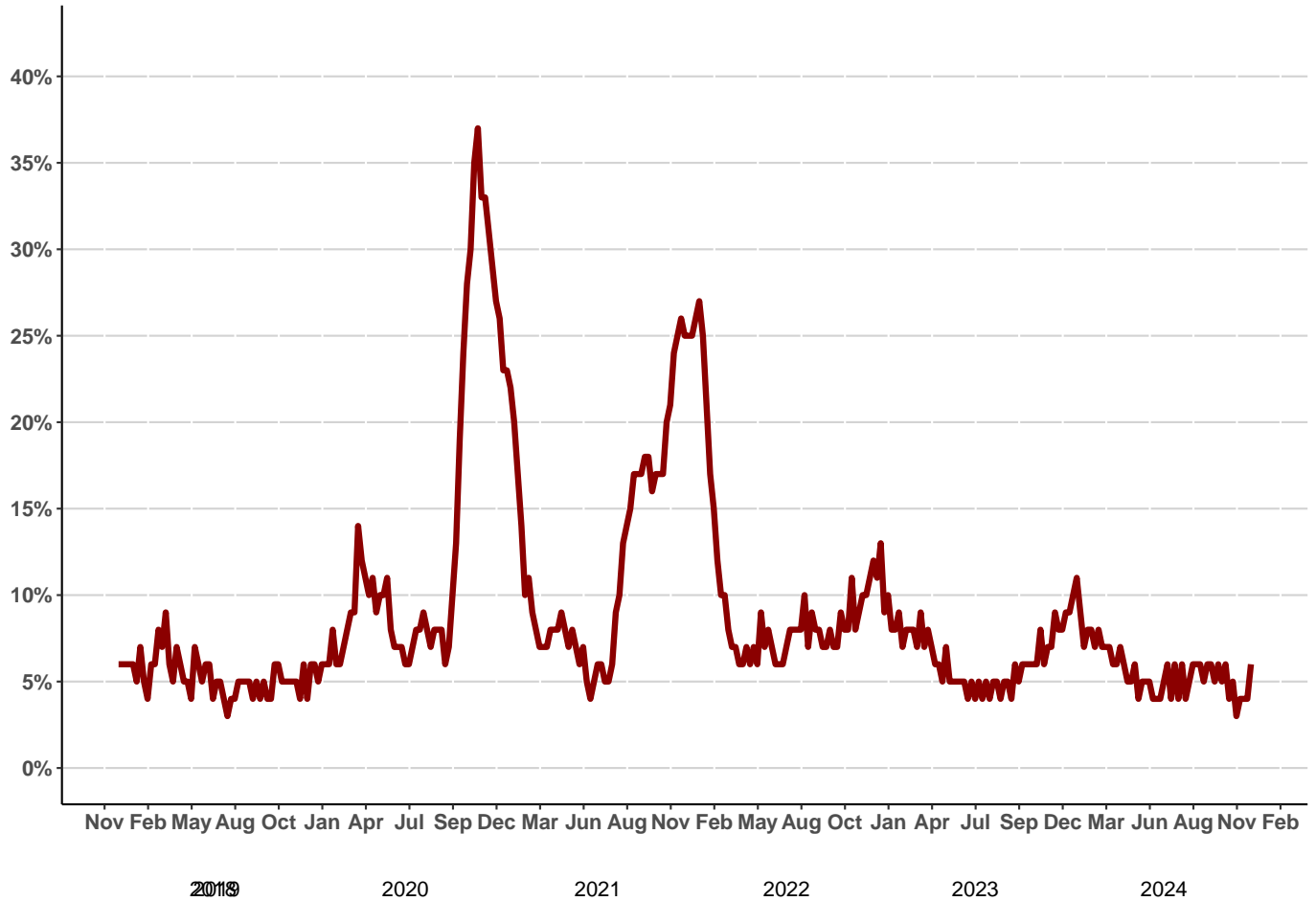
#### Influenza-associated pediatric deaths reported:

	Week 51, 2024	Since Sep 1, 2024
Wisconsin	0	0
Nationwide	5	9

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



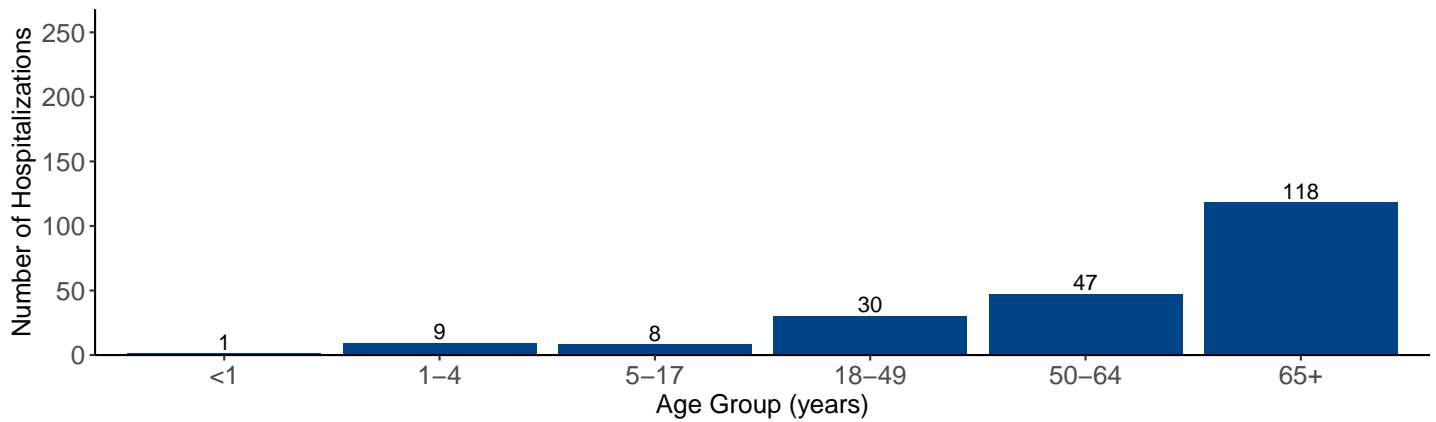
Respiratory virus and pneumonia associated deaths by most recent 3-week period, Vital Records

Season week	Pneumonia (P)	Influenza (I)	COVID-19 (C)	RSV (R)	P, I, C or R	Percent PICR of all
49	46	1	4	1	48	4%
50	33	0	11	0	37	4%
51	37	0	11	0	47	6%

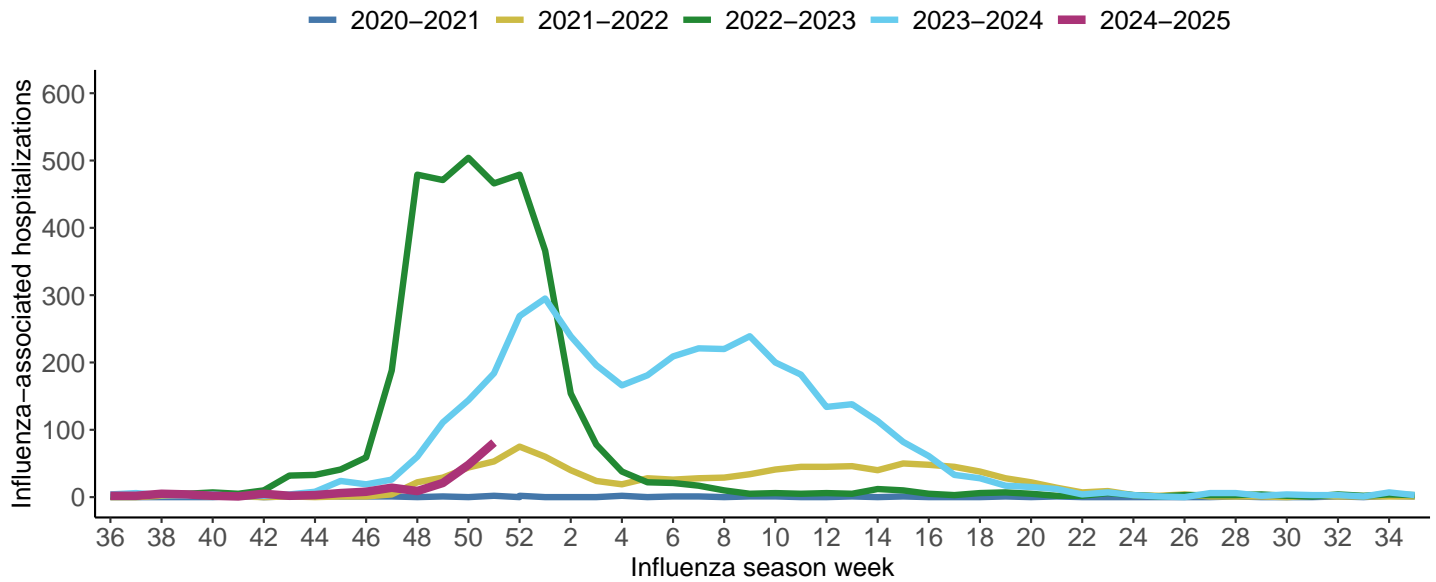
# Influenza-Associated Hospitalizations

## Influenza-associated hospitalizations by age group, WEDSS

September 1, 2024 to present



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

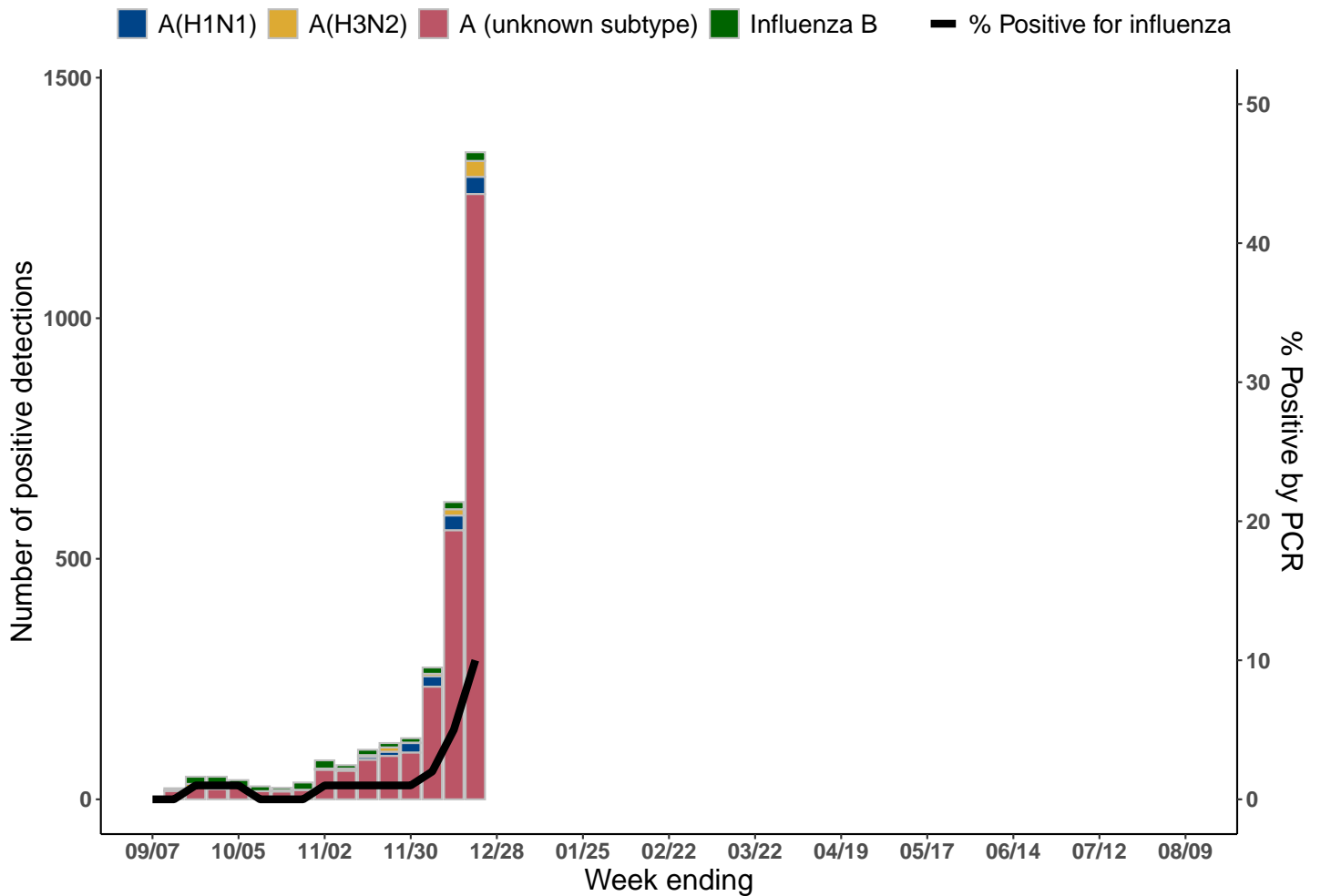


Influenza Season	Cumulative Hospitalizations Through Week 51	Entire Season
2020-2021	11	28
2021-2022	162	1021
2022-2023	2307	3610
2023-2024	602	3902
2024-2025	213	-

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

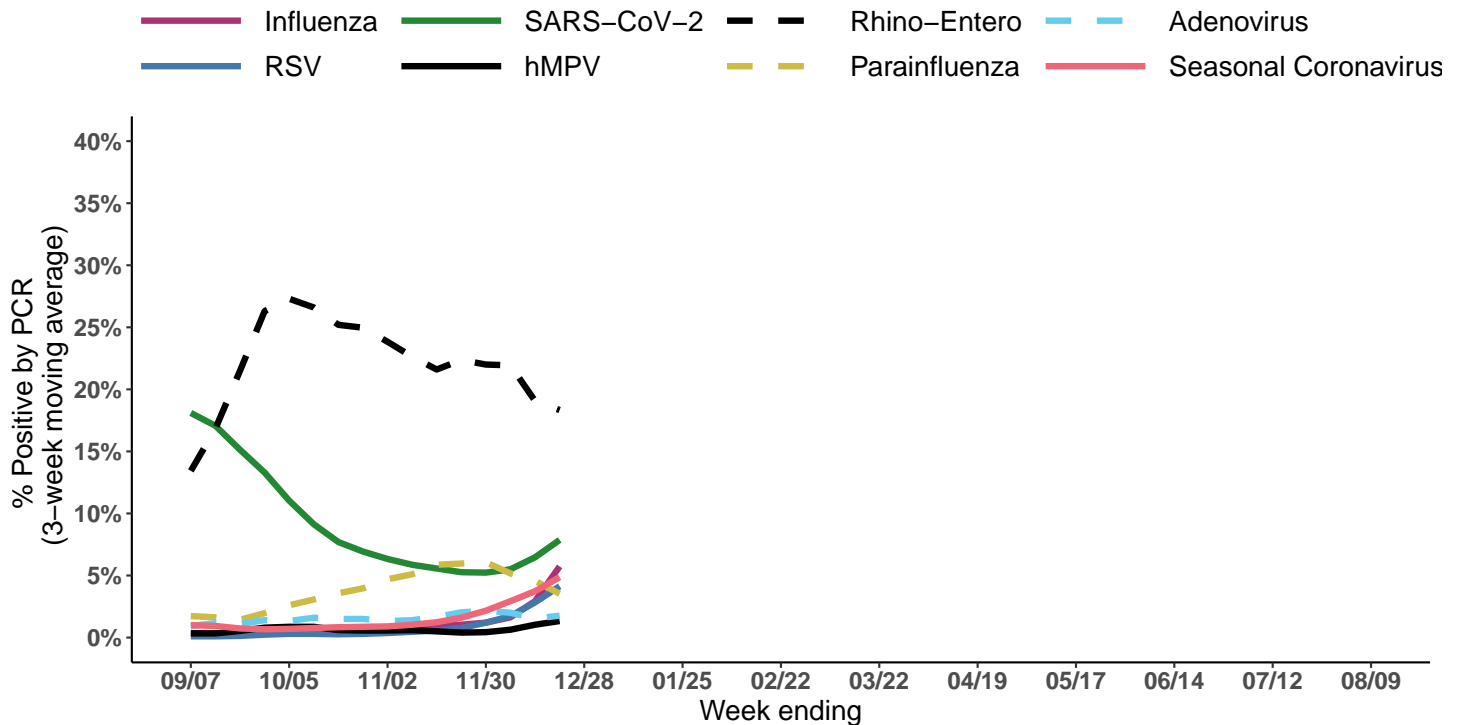


## Cumulative number of positive influenza PCR tests by subtype, NREVSS September 1, 2024 to present

Measure	Influenza A(H1N1)pdm2009	Influenza A(H3N2)	Influenza A Unknown	Influenza B	Total
Total positive (n)	136	88	2596	178	2998
% of total positive	5%	3%	87%	6%	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 51, Ending on December 21, 2024

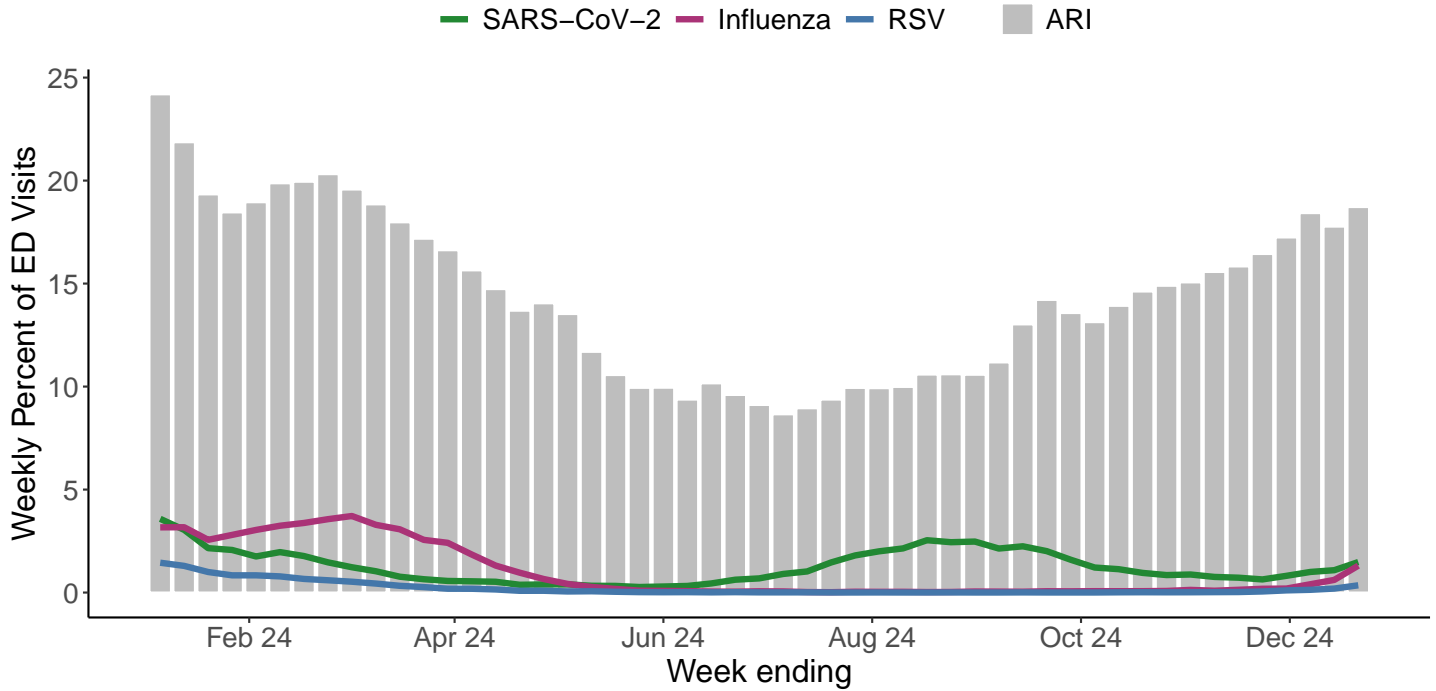
Respiratory virus	Tested	Positive (n)	Positive (%)	H3N2	2009 H1N1	A Unknown	Influenza B
Influenza	13,696	1,345	9.8%	33	36	1,258	18

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	1,593	46	2.9%	14	2	6	24

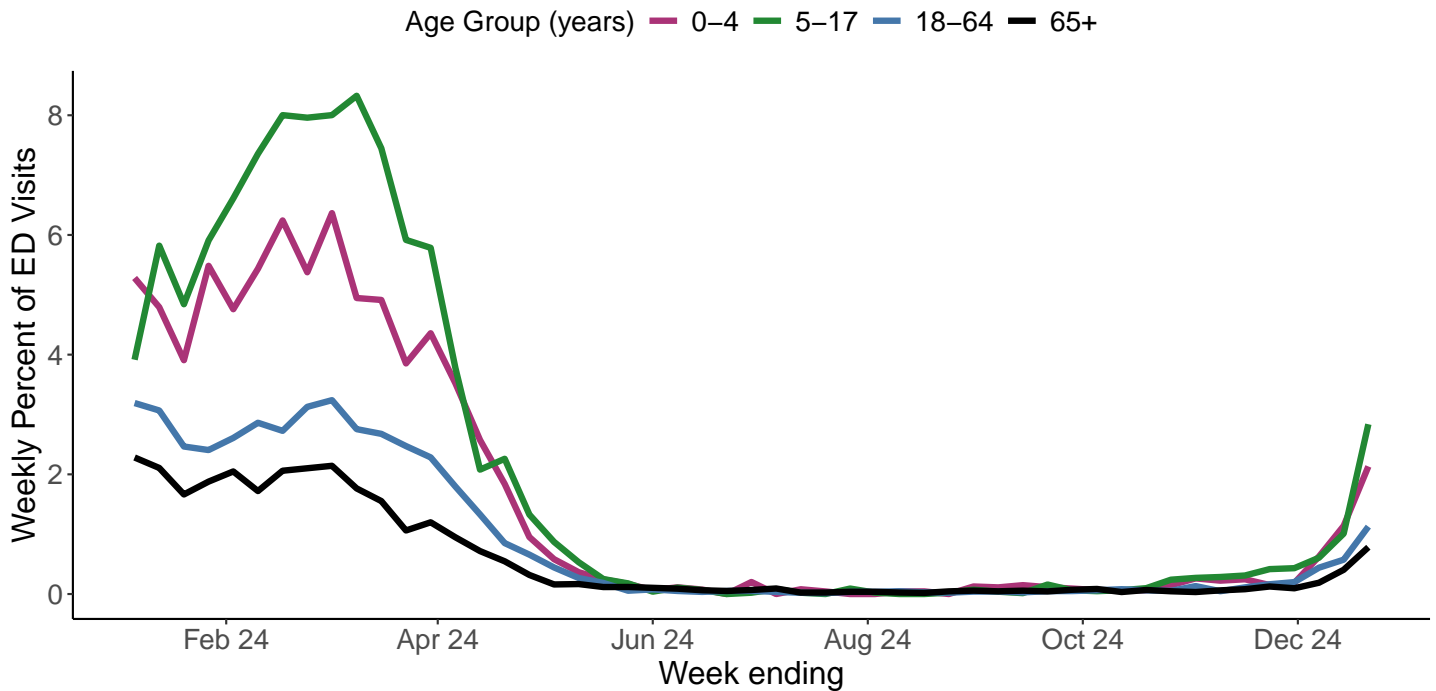
Respiratory virus	Tested	Positive (n)	Positive (%)
Respiratory Syncytial Virus	10,973	639	5.8%
Adenovirus	1,628	40	2.5%
Seasonal Coronavirus	1,542	98	6.4%
HMPV	1,628	25	1.5%
Rhinovirus/Enterovirus	2,211	405	18.3%
COVID-19	14,229	1,336	9.4%

# Respiratory Virus Activity in the Emergency Department (ED)

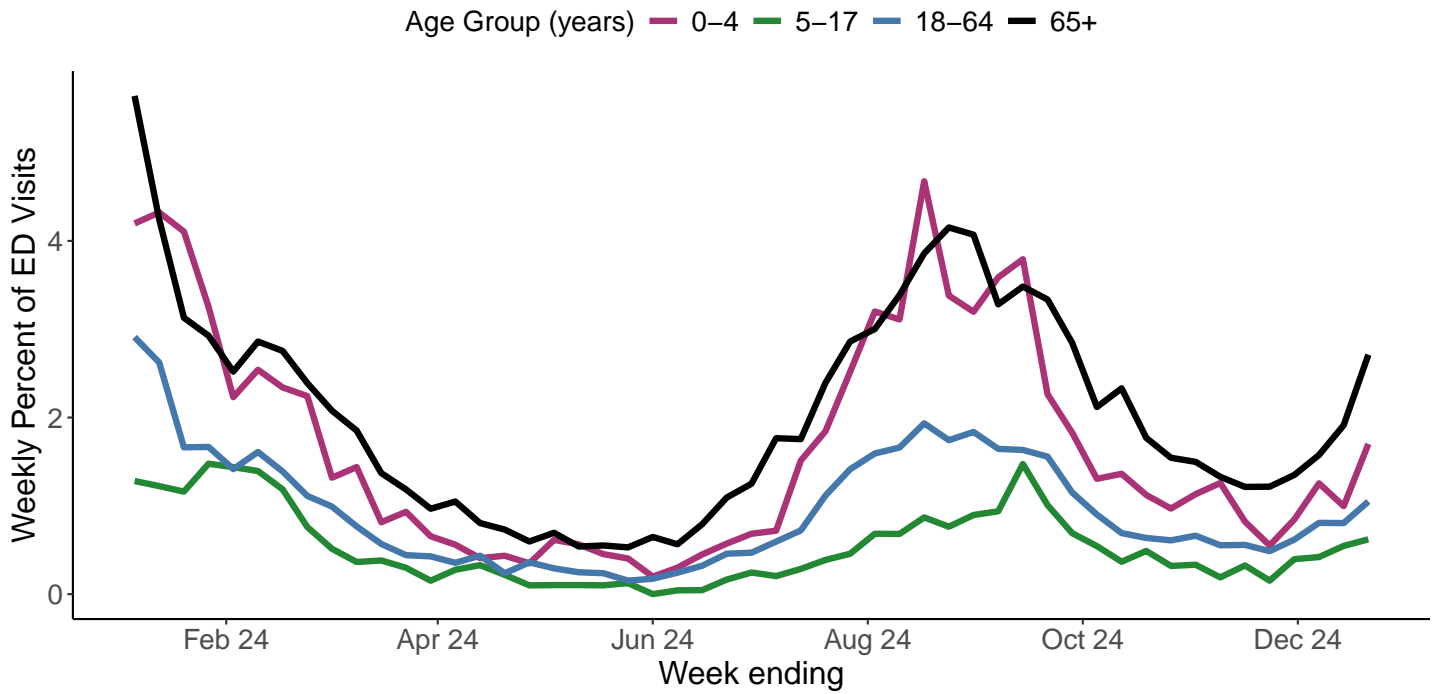
Percent of ED visits with a diagnosis for a respiratory virus or acute respiratory infection (ARI), NSSP



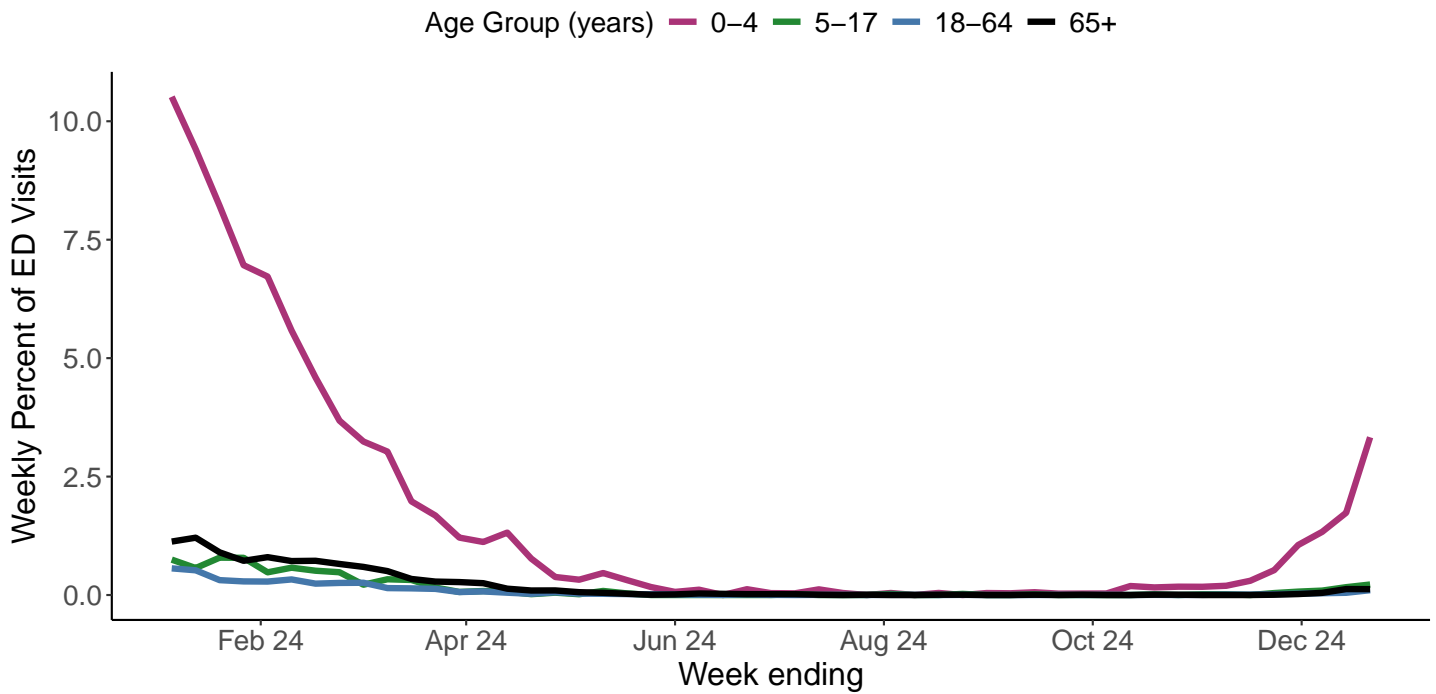
Percent of ED visits with a diagnosis for influenza by age group, NSSP



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



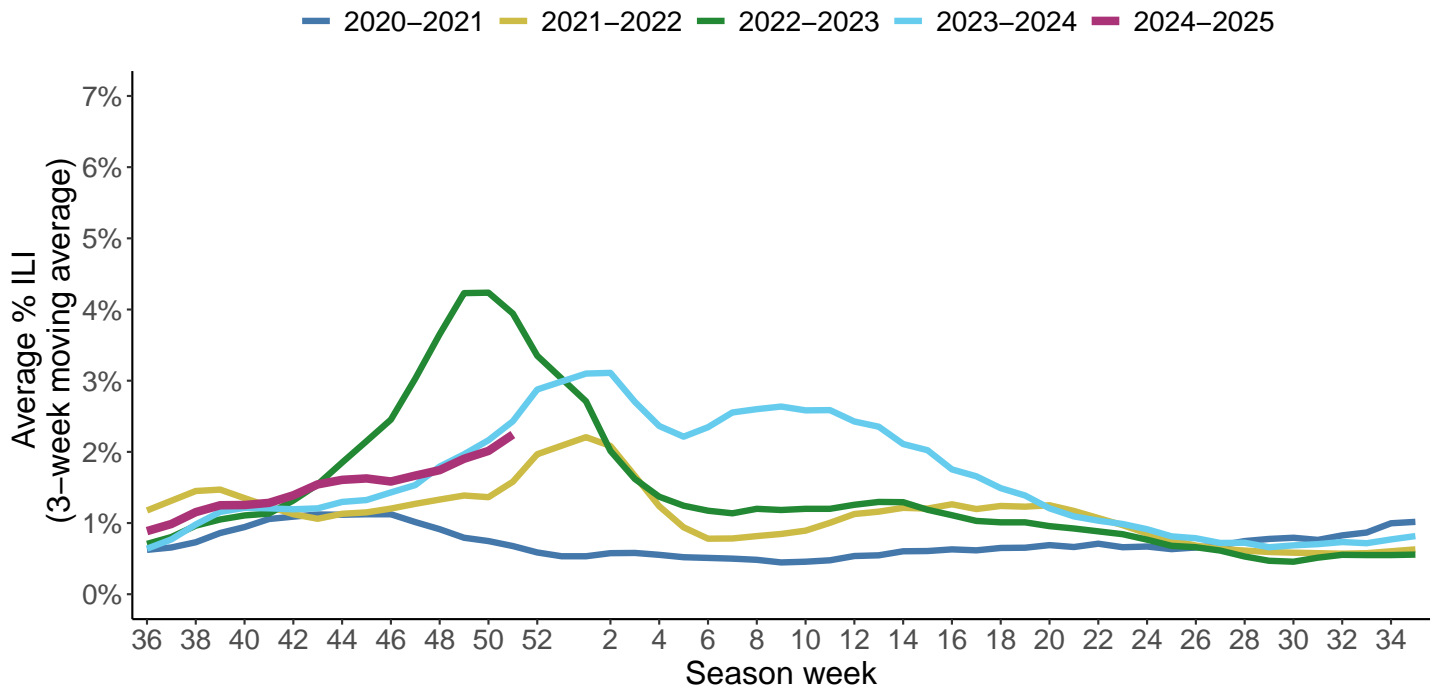
### Percent of ED visits with a diagnosis for RSV by age group, NSSP





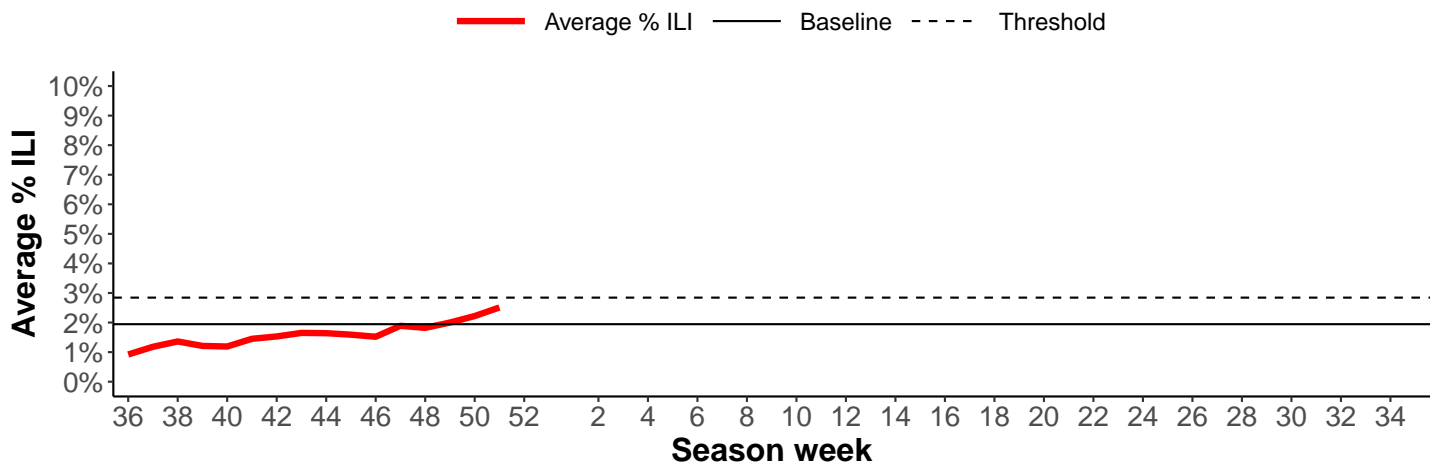
# Wisconsin ILI Activity

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

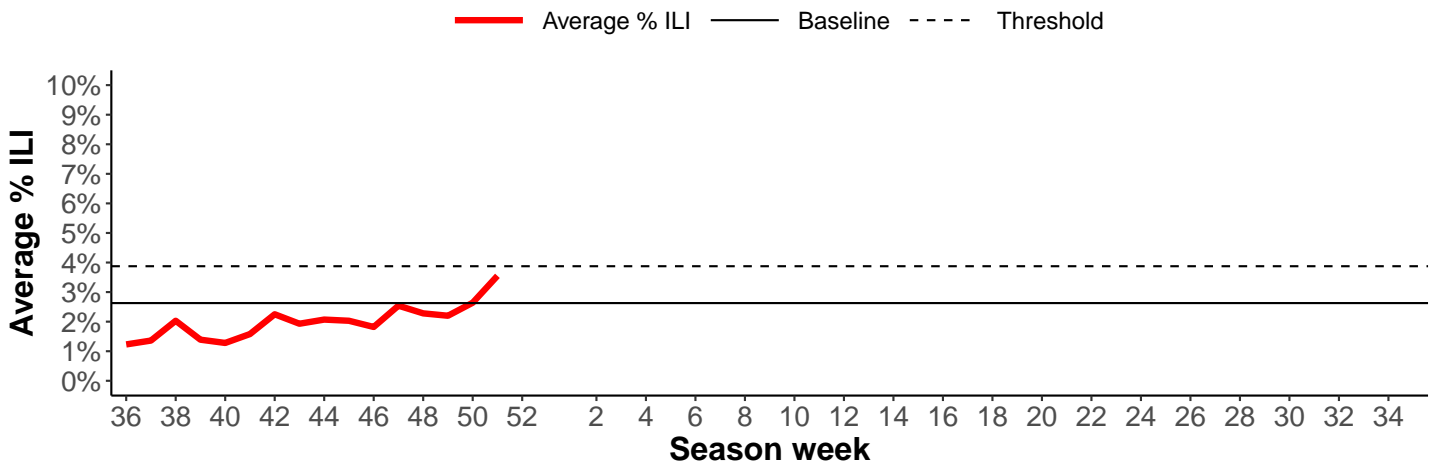


Average percent of visits for ILI by public health region, ILINET

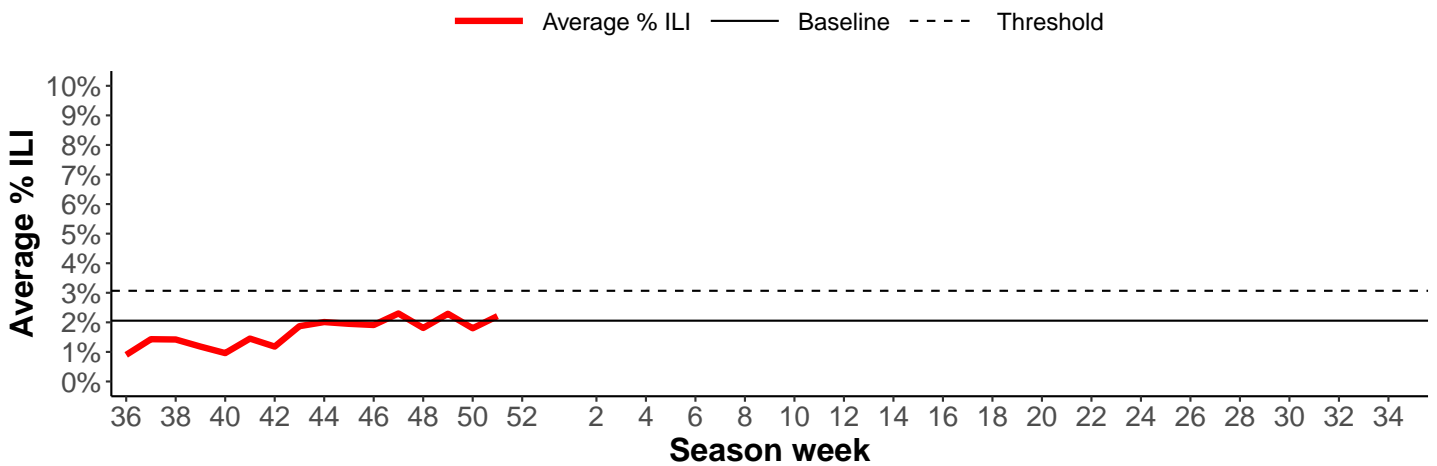
## Wisconsin



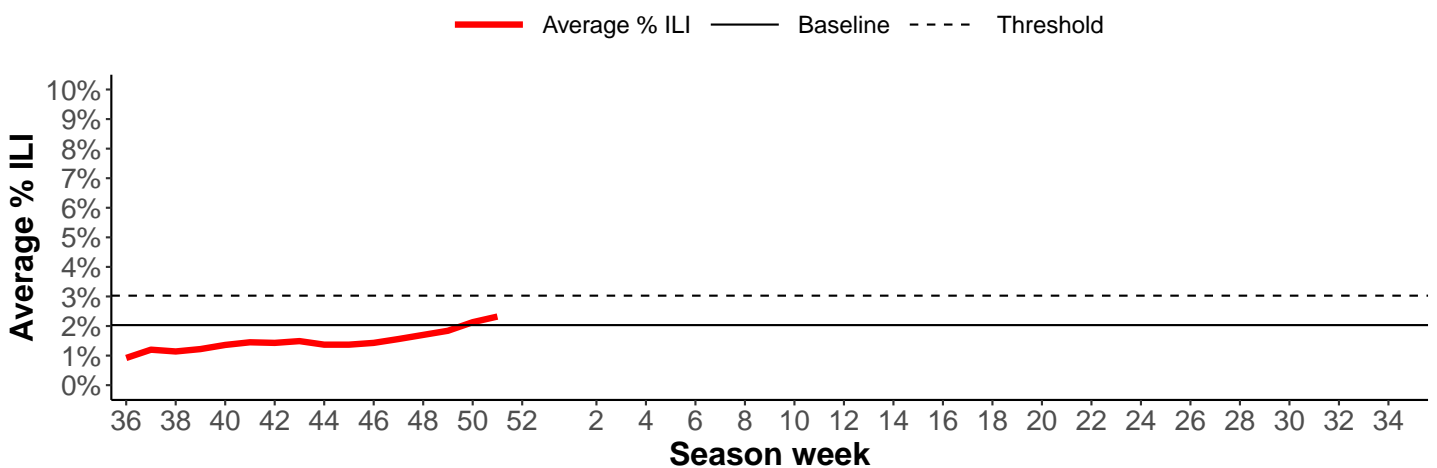
### Northeastern Region



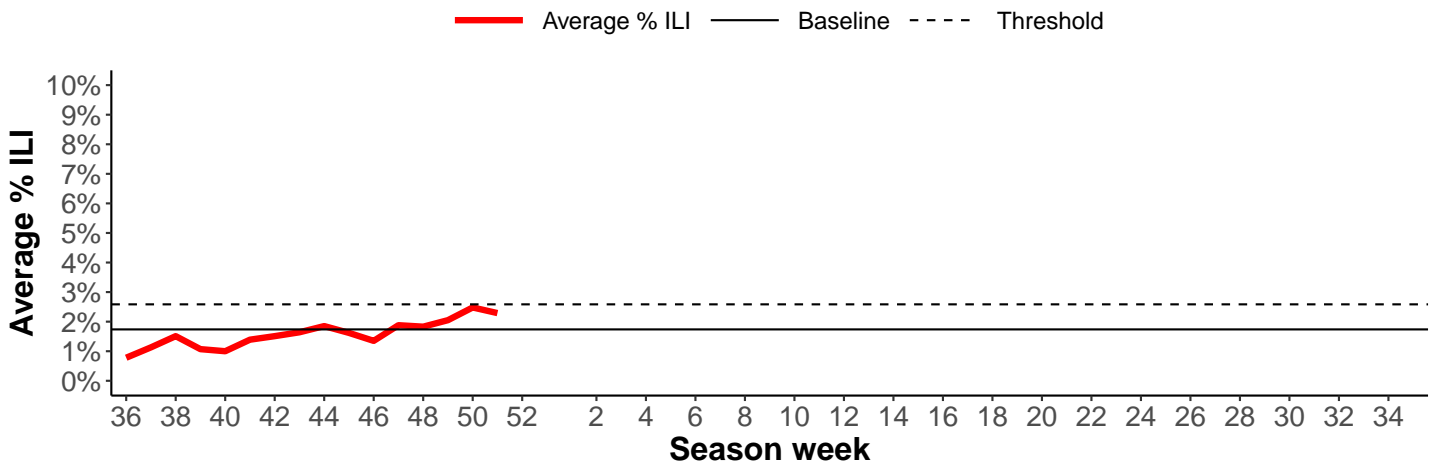
### Northern Region



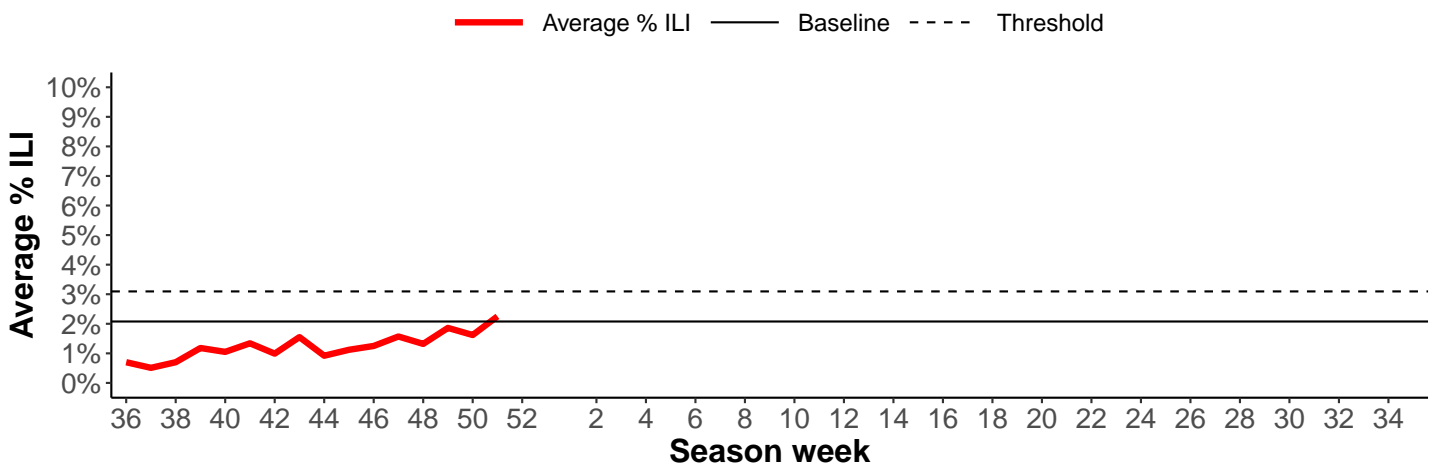
### Southeastern Region



### 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).