



# RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 15, Ending April 15, 2023

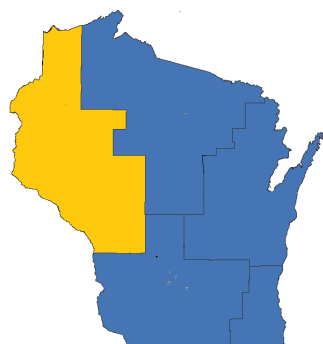
Wisconsin Department of Health Services | Division of Public Health  
Bureau of Communicable Diseases | Communicable Diseases Epidemiology Section

[www.dhs.wisconsin.gov/dph/bcd.htm](http://www.dhs.wisconsin.gov/dph/bcd.htm) | [dhdsphbcd@dhs.wi.gov](mailto:dhdsphbcd@dhs.wi.gov)





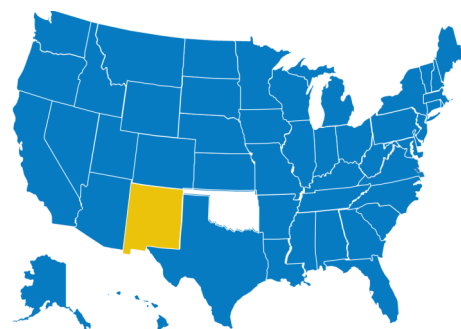
## STATE OF WISCONSIN



## REGION V OF US (WI, MN, IL, MI, OH, IN)



## United States



● ILI: HIGH LEVELS    ● ILI: MODERATE LEVELS    ● ILI: BELOW BASELINE    ○ ILI: INSUFFICIENT DATA

## AT-A-GLANCE:

### Predominant Viruses of the Week:

Rhinovirus/Enterovirus and Human Metapneumovirus are the predominant viruses this week.

### Current Alerts:

- Additional data on SARS-CoV-2 (the virus causing COVID-19) trends in Wisconsin can be found at: <https://www.dhs.wisconsin.gov/covid-19/data.htm>

## INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

	Week 15, 2023	October 1, 2022 to present
<b>Wisconsin</b>	0	3
<b>Nationwide</b>	2	143

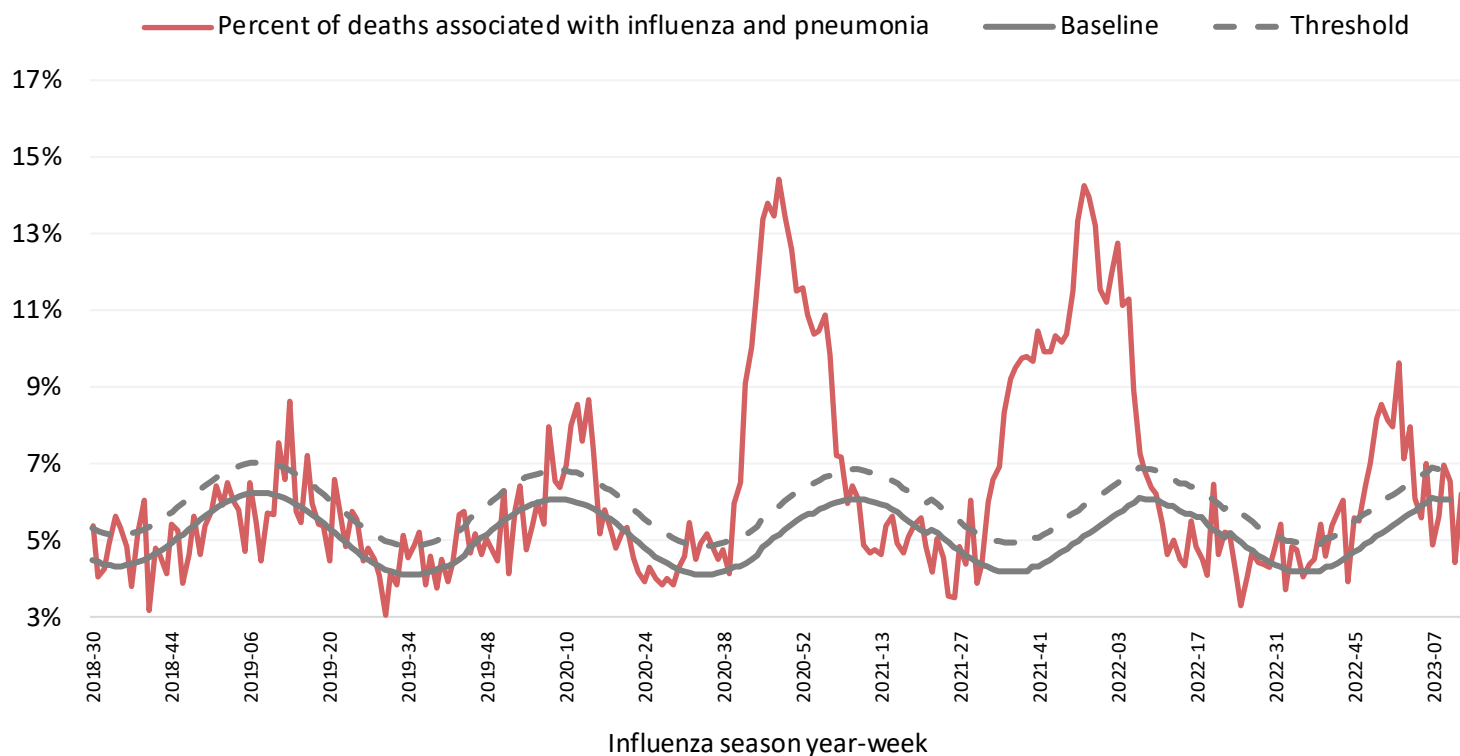
For National US influenza surveillance statistics visit: [www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/)



# INFLUENZA AND PNEUMONIA-ASSOCIATED MORTALITY

## Influenza and Pneumonia Deaths, Wisconsin

### Influenza- and pneumonia-associated deaths by influenza season year and week, Wisconsin



### Influenza- and pneumonia-associated deaths by most recent 3 week period.

Influenza season week	Influenza-associated deaths (I)	Pneumonia-associated deaths (P)	Percent I+P of all deaths	Baseline I+P of all deaths	Threshold I+P of all deaths
13	0	66	6.1%	5.8%	6.6%
14	1	52	4.9%	5.7%	6.5%
15 Preliminary Data	1	50	5.3%	5.6%	6.4%

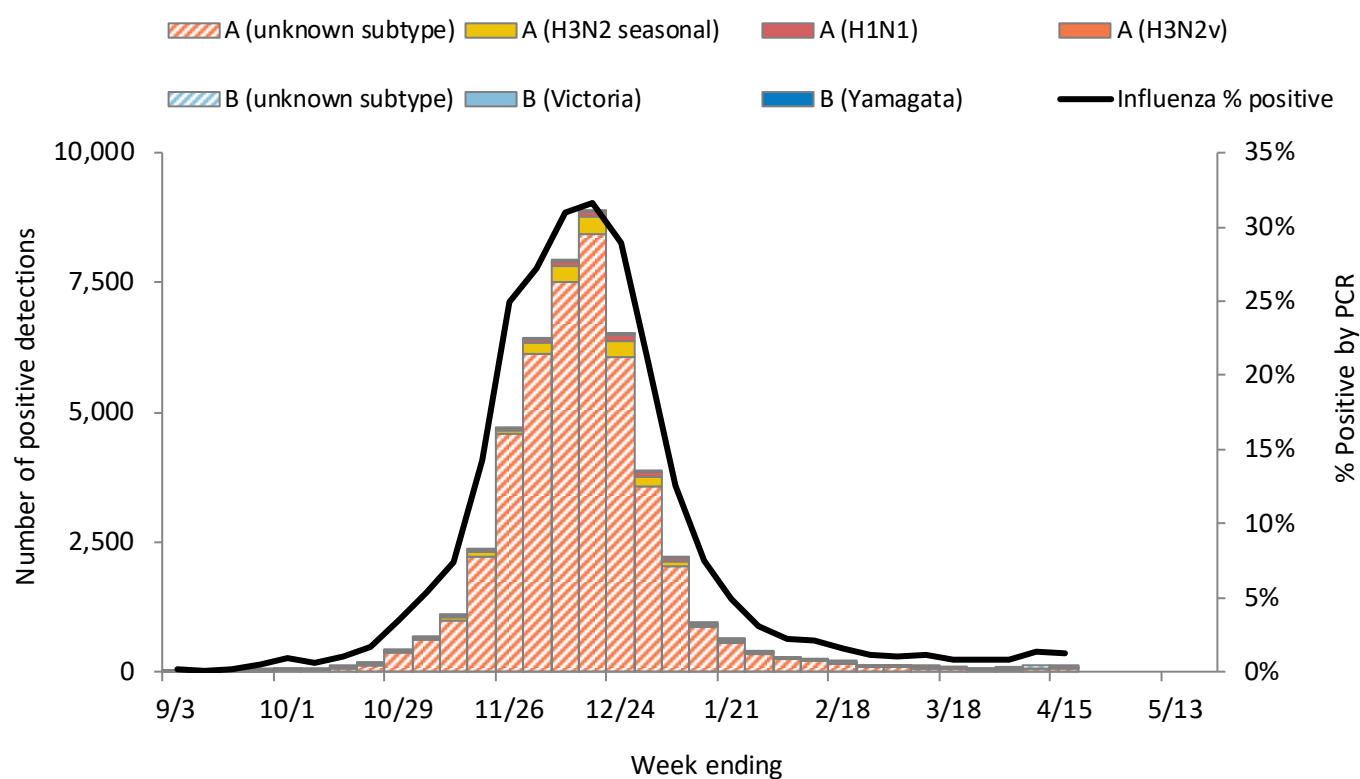
Data source: [DPH, Office of Health Informatics](#)





# WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

## Wisconsin positive influenza results and subtypes by PCR



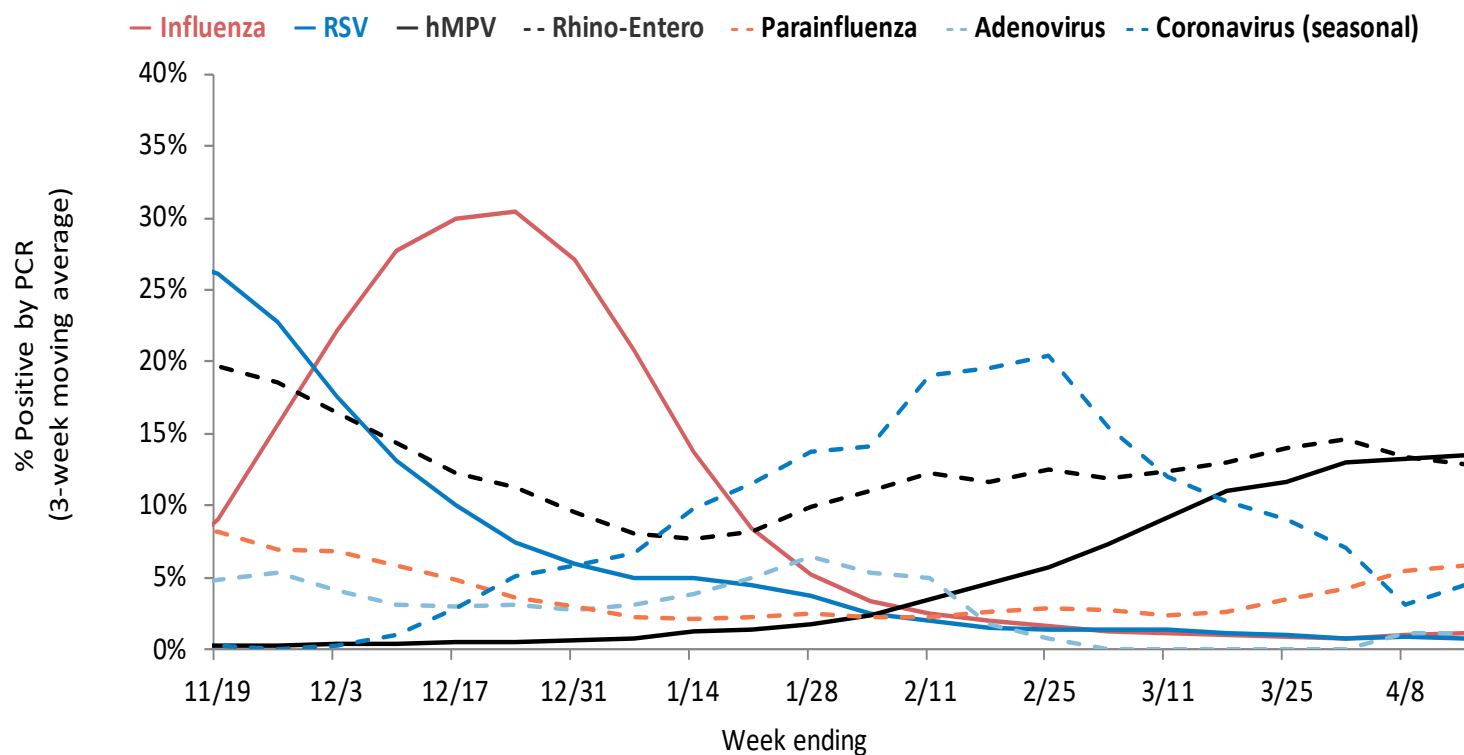
## Cumulative number of positive influenza PCR tests by subtype

October 1, 2022 to present

	A (2009 H1N1)	Influenza A: A (H3N2)	99% A (Unknown)	B (Victoria)	Influenza B: B (Yamagata)	1% B (Unknown)	Total
Total positive (n)	710	1,887	45,711	9	0	528	48,845
% of total positive	1%	4%	94%	0%	0%	1%	100%



# WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES



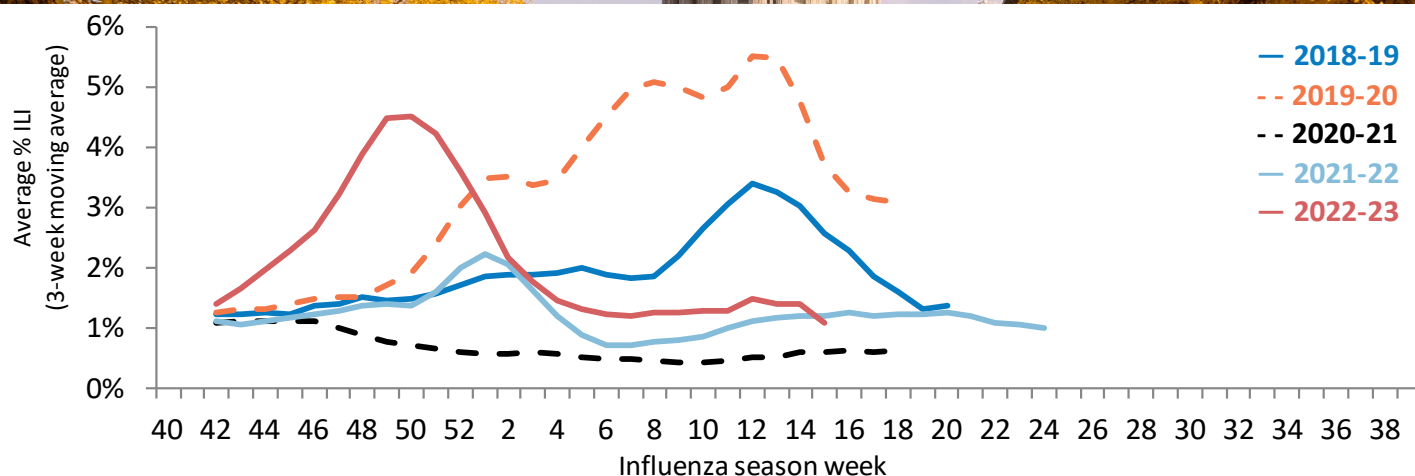
## Week 15, Ending on April 15, 2023

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	7782	100	1.3%	3	6	68	0	0	43
Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1		Parainfluenza 2	Parainfluenza 3		Parainfluenza 4
Parainfluenza	862	55	6.4%	3		5	46		1
Respiratory virus		Tested	Positive (n)	Positive (%)	CoV 229E	CoV OC43	CoV NL63		CoV HKU1
Coronavirus (seasonal)		20	2	10.0%	0	0	2		0
Respiratory virus		Tested			Positive (n)		Positive (%)		
RSV		5044			34		0.7%		
Human metapneumovirus		873			103		11.8%		
Rhino-enterovirus		824			108		13.1%		
Adenovirus		20			0		0%		



# WISCONSIN STATE SUMMARY

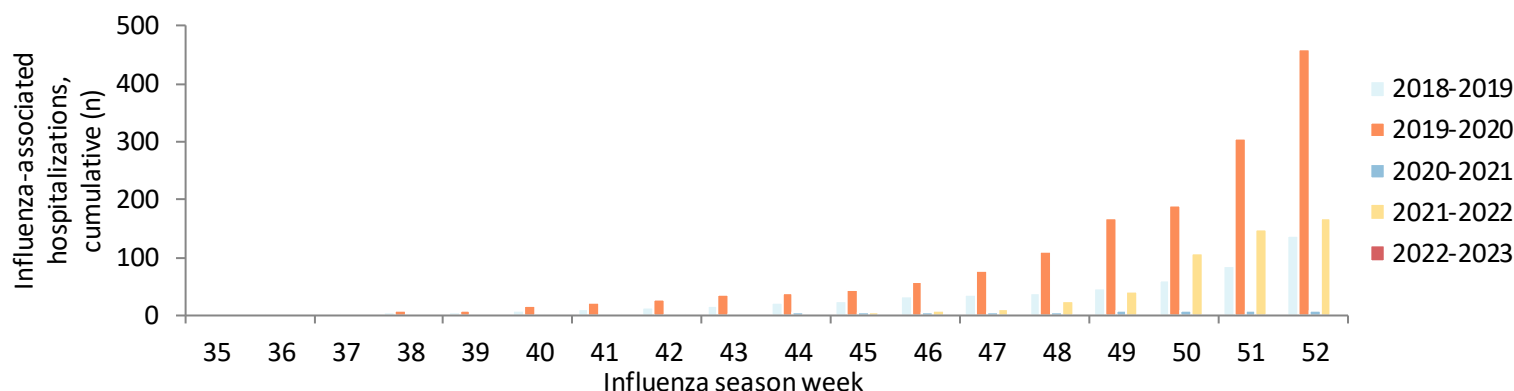
## ILI activity trend analysis by influenza season, Wisconsin



### Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System October 1, 2022 to present (Hospitalization data will be updated at a later date)

Age group (years)	Total reported (n)	Influenza subtype					Admitted to ICU	Required mechanical ventilation	Pregnant	Postpartum (≤6 weeks)
		A (2009 H1N1)	A (H3N2)	A (Unknown)	B	Not reported				
<1										
1-4										
5-17										
18-49										
50-64										
65+										
<b>Total</b>	<b>(Data will be available at a later date)</b>									

### Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin

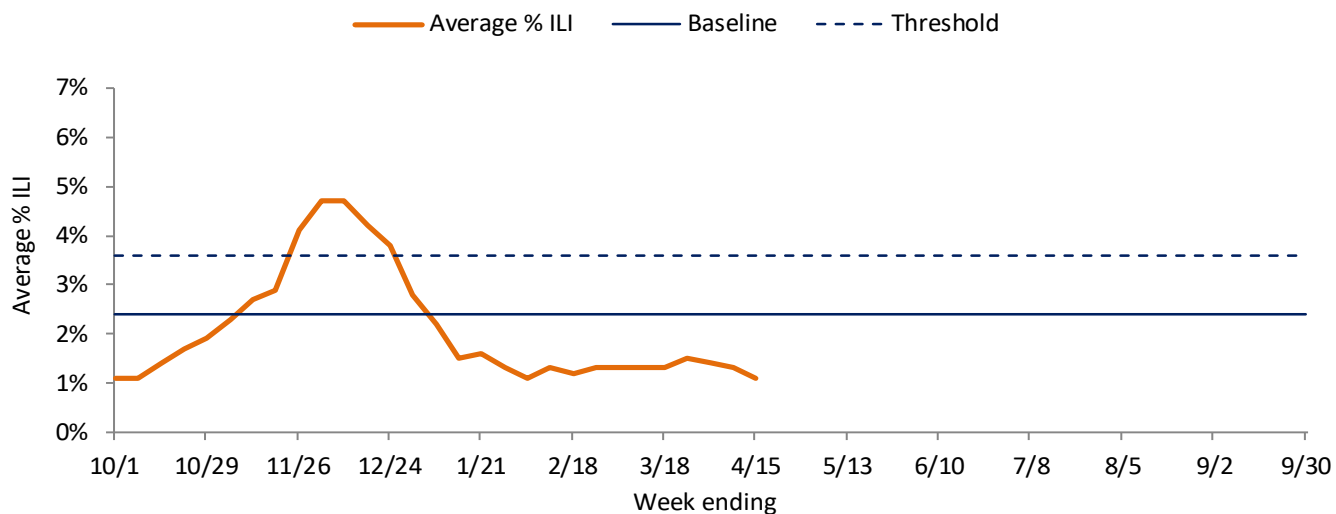


**The 2020-2021 influenza season was unusually low due much in part to the ongoing COVID-19 pandemic.** As such, numbers for that season are substantially different than previous seasons and should be considered an anomaly.

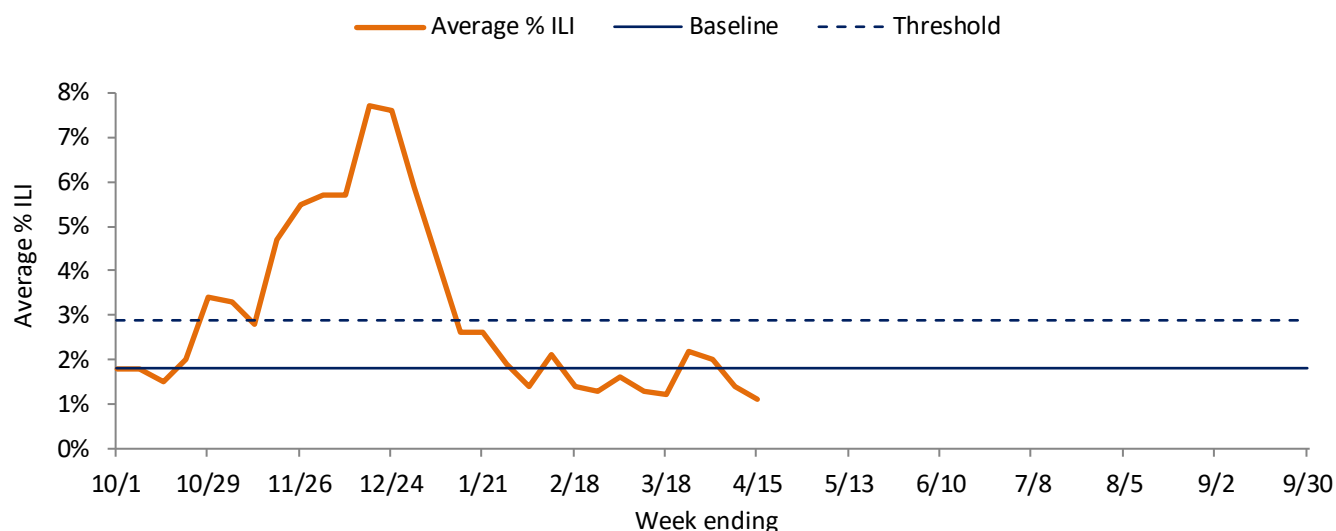


# ILI ACTIVITY TREND ANALYSIS

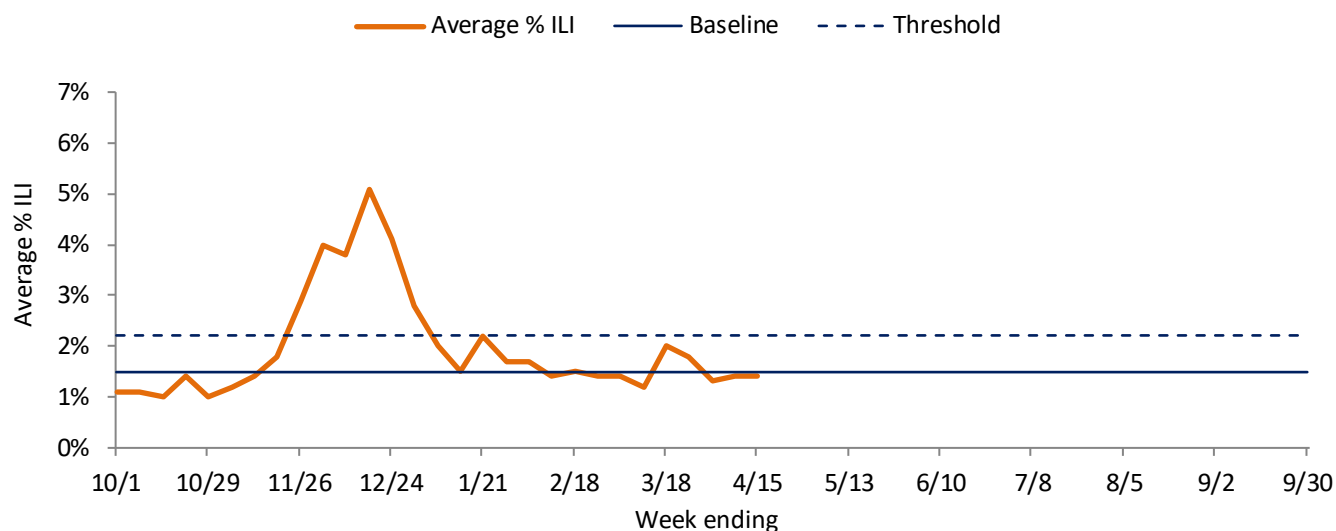
## Wisconsin



## Northeastern Region

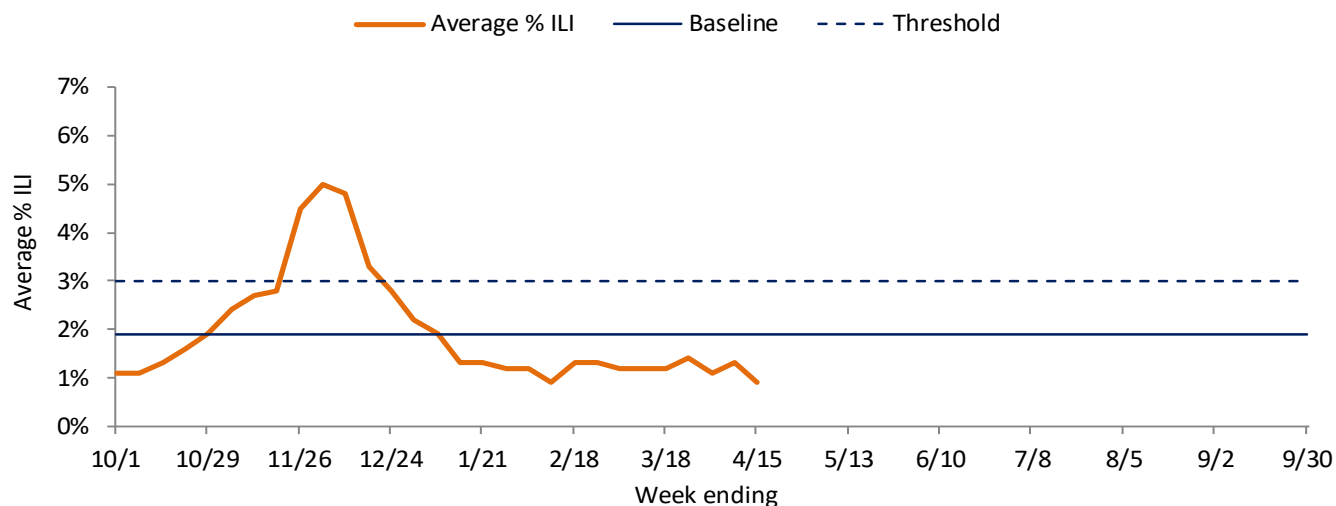


## Northern Region

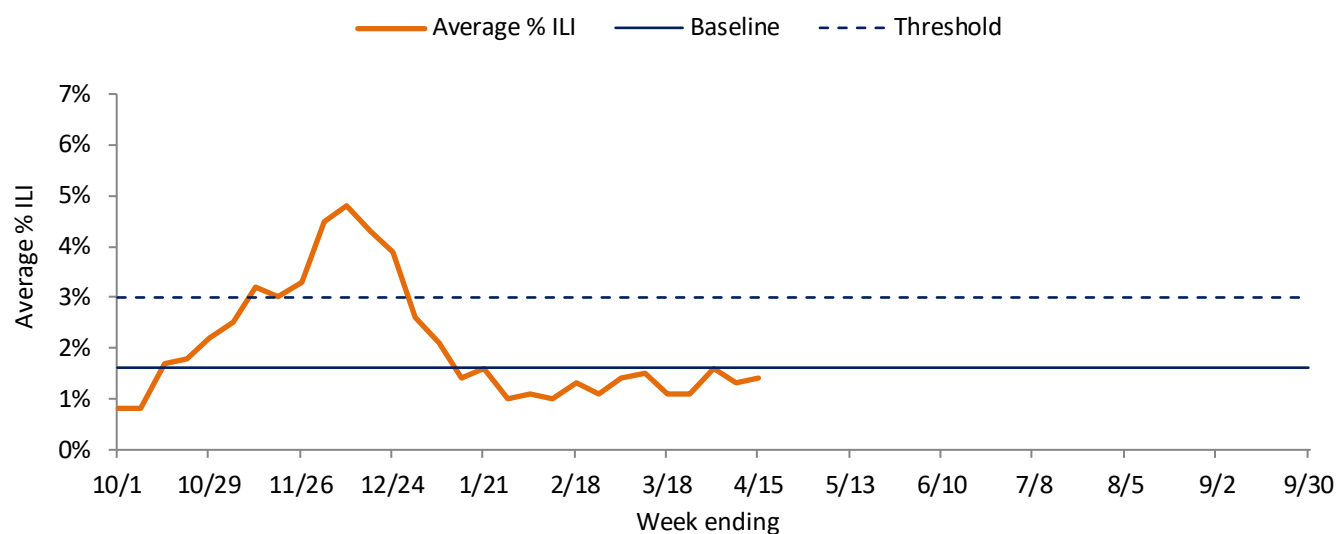


# ILI ACTIVITY TREND ANALYSIS (CONTINUED)

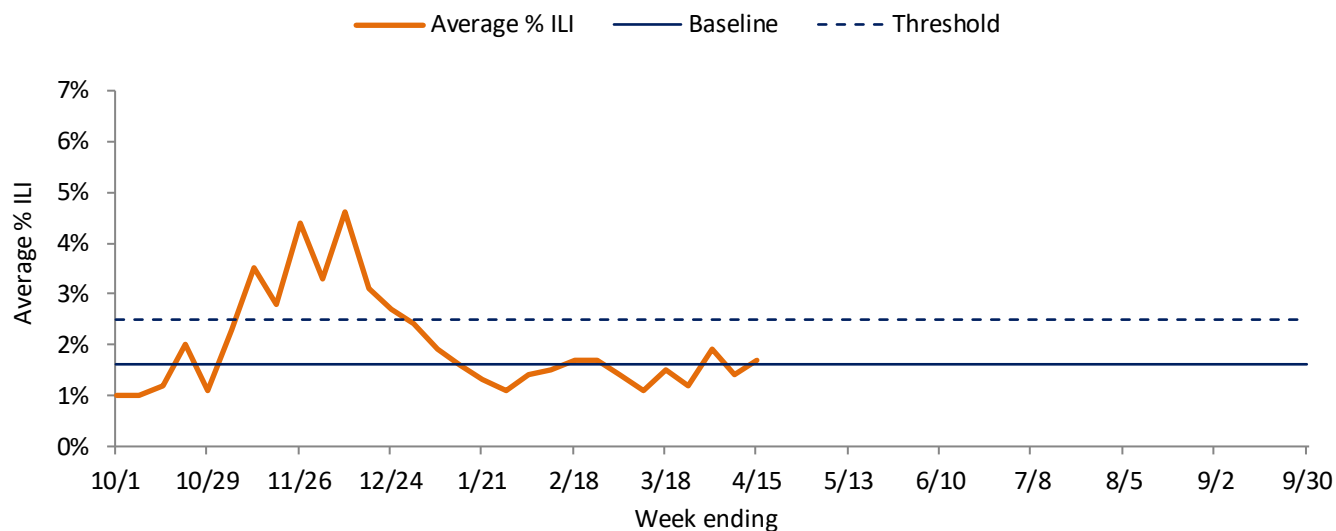
## Southeastern Region



## Southern Region



## Western Region





A detailed illustration of an influenza virus particle, showing its characteristic spherical shape with a surface covered in red and orange spikes (hemagglutinin and neuraminidase proteins) and a core of yellow and red spheres (RNA segments and proteins).

# SEASONAL INFLUENZA VACCINATION

## Influenza vaccine composition 2022-2023:

**Egg-based vaccines** are recommended to contain:

- an A/Victoria/2570/2019 (H1N1) pdm09-like virus;
- an A/Darwin/9/2021 (H3N2)-like virus (updated);
- a B/Austria/1359417/2021-like virus (B/Victoria lineage (updated));
- a B/Phuket/3073/2013-like virus (B/Yamagata lineage).

**Cell- or recombinant-based vaccines** are recommended to contain:

- an A/Wisconsin/588/2019 (H1N1) pdm09-like virus;
- an A/Darwin/6/2021 (H3N2)-like virus (updated);
- a B/Austria/1359417/2021-like virus (B/Victoria lineage) (updated);
- a B/Phuket/3073/2013-like virus (B/Yamagata lineage).

Seasonal flu vaccination data for Wisconsin based on information from the Wisconsin Immunization Registry (WIR) are available on the [DHS Influenza Vaccine Data Dashboard webpage](#).

These data are updated on a weekly basis during the influenza season.



# Understanding the Data

## Surveillance Report Description

<b>INFLUENZA-LIKE ILLNESS (ILI)</b>	Patients who present to a clinician with a fever $\geq 100^{\circ}$ F and either a cough or sore throat.
<b>INFLUENZA-LIKE ILLNESS ACTIVITY (ILI)</b>	Using baseline (expected values data used for comparison) and threshold (upper limit) ILI percentages in each of the <a href="#">public health regions in Wisconsin</a> , ILI below baseline is considered <b>low activity</b> , ILI between baseline and threshold levels is considered <b>moderate activity</b> and above threshold is considered <b>high activity</b> . <sup>1</sup>
<b>PREDOMINANT VIRUS OF THE WEEK</b>	This data is compiled from over 40 laboratories in Wisconsin that perform rt-PCR testing, and shows the viruses that have the highest percentage of positive tests. <sup>2</sup>
<b>INFLUENZA-ASSOCIATED PEDIATRIC MORTALITY</b>	Deaths among children <18 years old, with influenza as the cause or associated cause of death. This is a state and nationally reportable condition. <sup>2</sup>
<b>RESPIRATORY VIRUSES BY PCR</b>	A molecular laboratory method used to detect nucleic acid (DNA/RNA) in viruses, including influenza and RSV.
<b>RAPID ANTIGEN TEST</b>	Identification of an influenza or RSV antigen in a clinical specimen. Data resulting from these tests is used to identify regional trends of the activity of these viruses.
<b>INFLUENZA-ASSOCIATED HOSPITALIZATIONS</b>	Patients hospitalized for >24 hours with laboratory-identified (by rapid antigen or rt-PCR tests) influenza. <sup>3</sup>

### ADDITIONAL RESOURCES

- [The CDC Influenza Homepage](#)
- [The National Enteric and Respiratory Virus Surveillance System \(NREVSS\)](#)

### DATA SOURCES

1. Centers for Disease Control and Prevention (CDC), Outpatient Influenza-like Illness Surveillance Network (ILINet)
2. Wisconsin Laboratory Information Network
3. Wisconsin Electronic Disease Surveillance System (WEDSS)

