



RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 21, Ending May 28, 2023

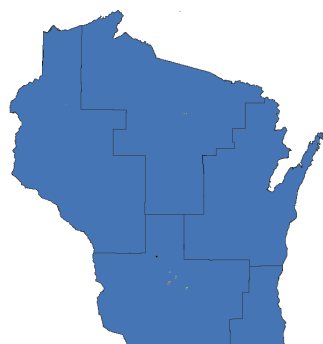
Wisconsin Department of Health Services | Division of Public Health
Bureau of Communicable Diseases | Communicable Diseases Epidemiology Section

www.dhs.wisconsin.gov/dph/bcd.htm | dhspdphbcd@dhs.wi.gov





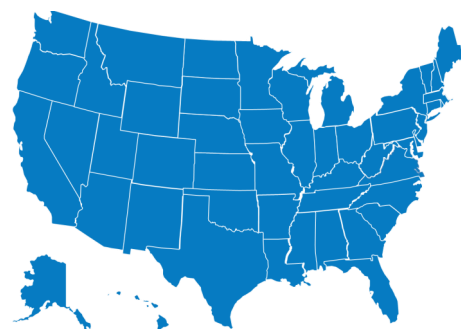
STATE OF WISCONSIN



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 is the predominant virus this week.

Current Alerts:

- Non-COVID respiratory outbreaks in long term care facilities continue to be reported. Human metapneumovirus and parainfluenza-3 have been reported most frequently in these outbreaks.
- 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 21, 2023	October 1, 2022 to present
Wisconsin	0	3
Nationwide	0	154

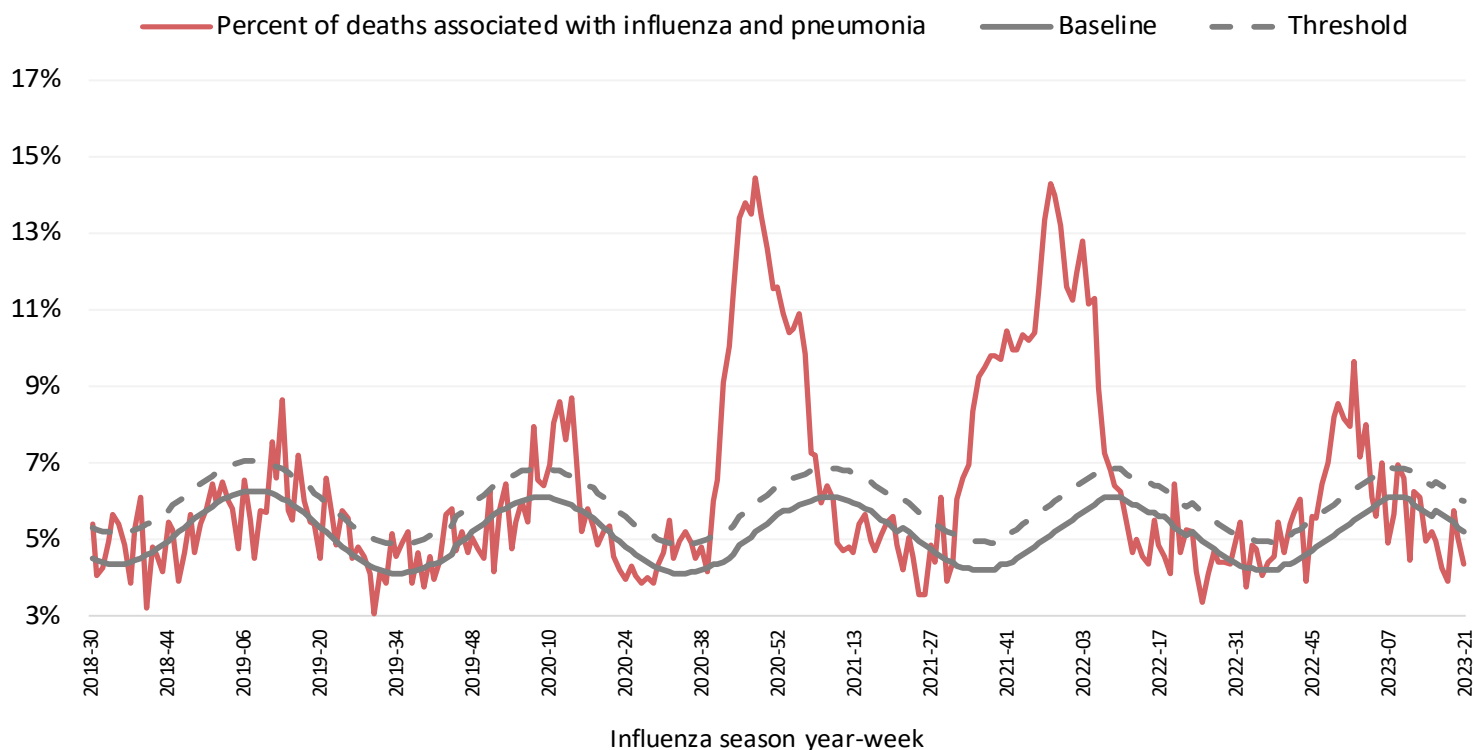
For National US influenza surveillance statistics visit: www.cdc.gov/flu/weekly/



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.

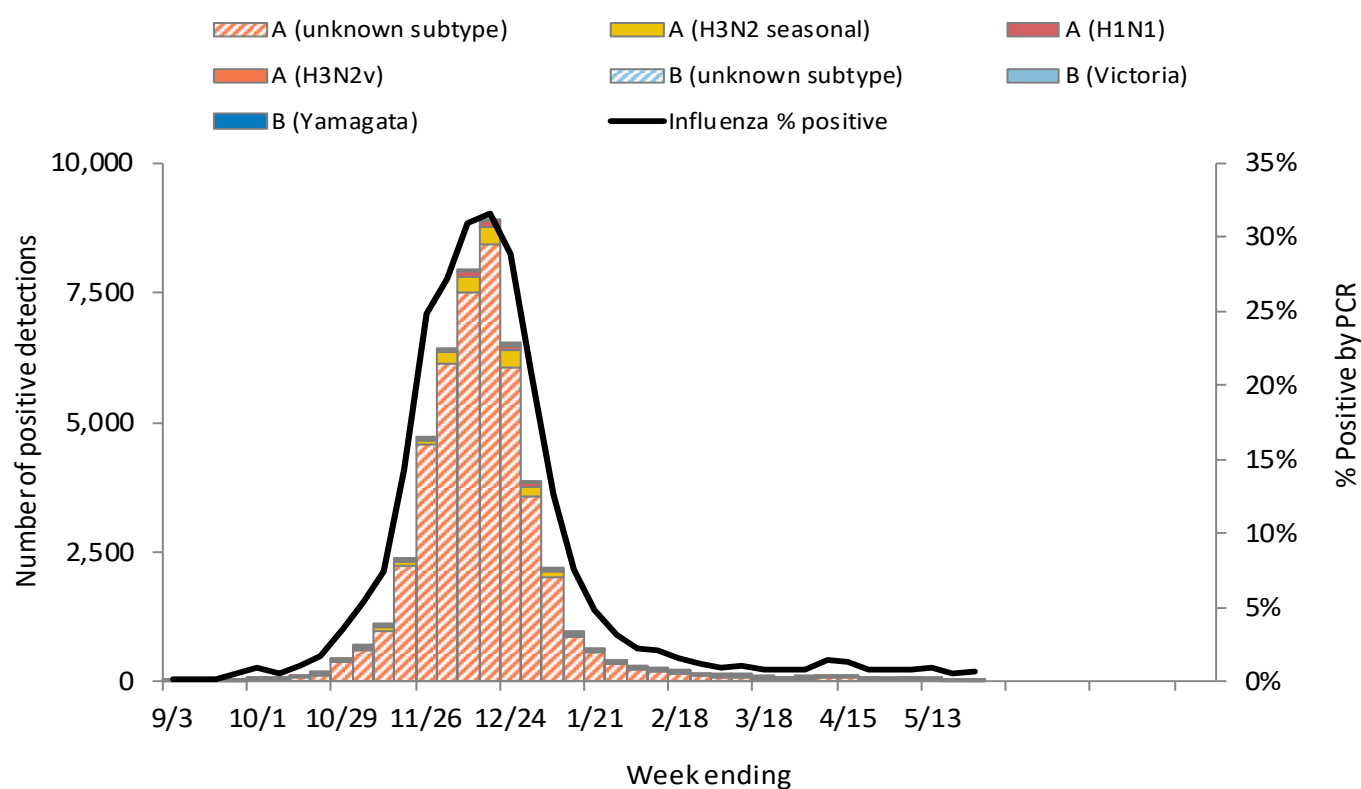
Influenza season week	Influenza-associated deaths (I)	Pneumonia-associated deaths (P)	Percent I+P of all deaths	Baseline I+P of all deaths	Threshold I+P of all deaths
19	0	60	5.7%	5.4%	6.2%
20	0	54	5.0%	5.3%	6.1%
21 Preliminary Data	1	55	4.4%	5.2%	6.0%

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

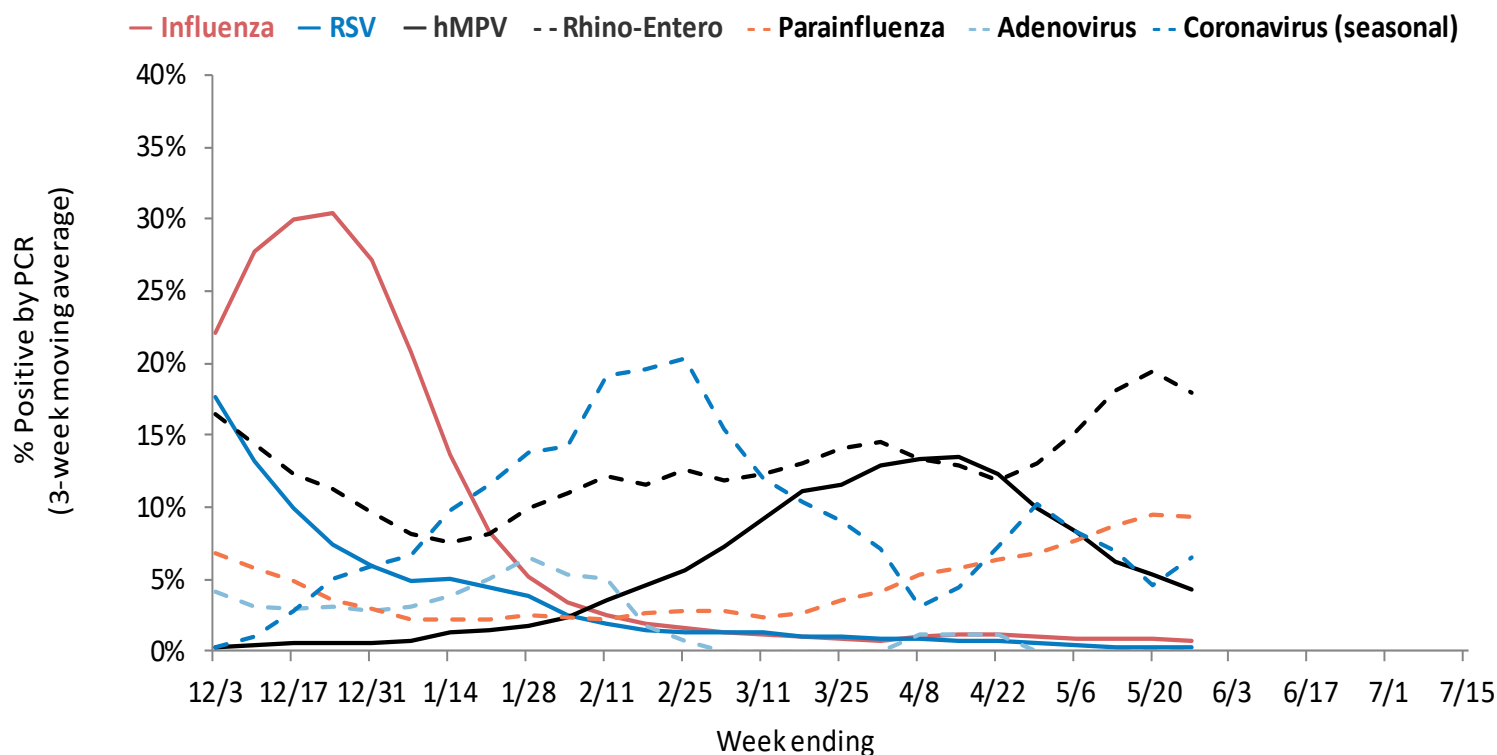
October 1, 2022 to present

Cumulative number of positive influenza PCR tests by subtype, October 1, 2022 to present

	Influenza A: 99%						Total
	A (2009 H1N1)	A (H3N2)	A (Unknown)	B (Victoria)	B (Yamagata)	B (Unknown)	
Total positive (n)	730	1,889	45,853	12	0	604	49,088
% of total positive	1%	4%	93%	0%	0%	1%	100%



WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES



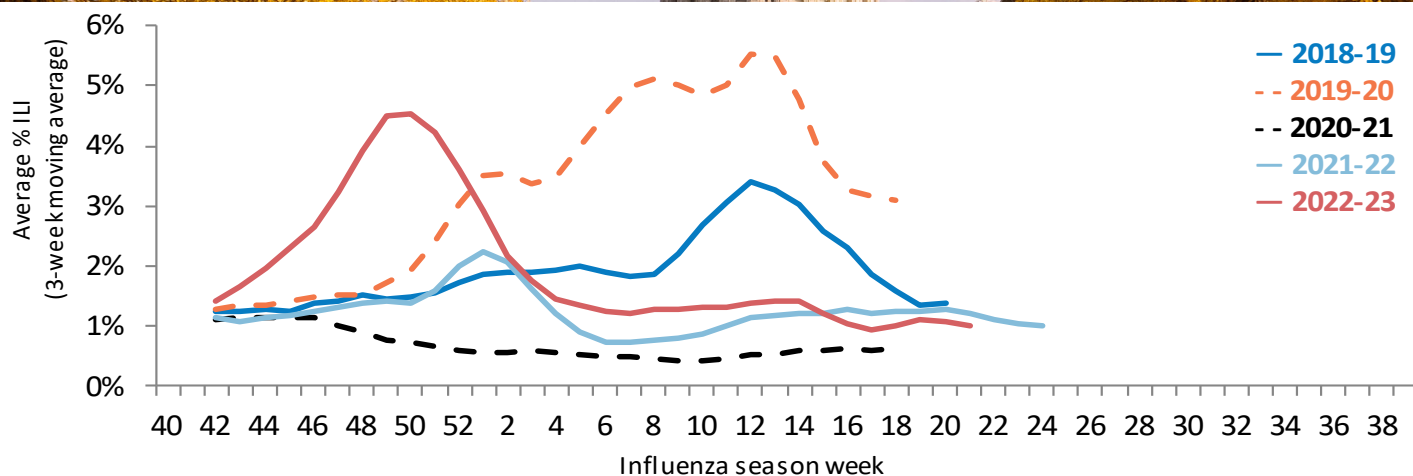
Week 21, Ending on May 28, 2023

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	3519	23	0.7%	0	2	10	1	0	10
Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1		Parainfluenza 2	Parainfluenza 3	Parainfluenza 4	
Parainfluenza	614	53	8.6%	2		5	46	0	
Respiratory virus		Tested	Positive (n)	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1	
Coronavirus (seasonal)		10	1	10%	1	0	0	0	
Respiratory virus		Tested			Positive (n)		Positive (%)		
RSV		2646			6		0.2%		
Human metapneumovirus		622			24		3.9%		
Rhino-enterovirus		577			90		15.6%		
Adenovirus		10			0		0%		



WISCONSIN STATE SUMMARY

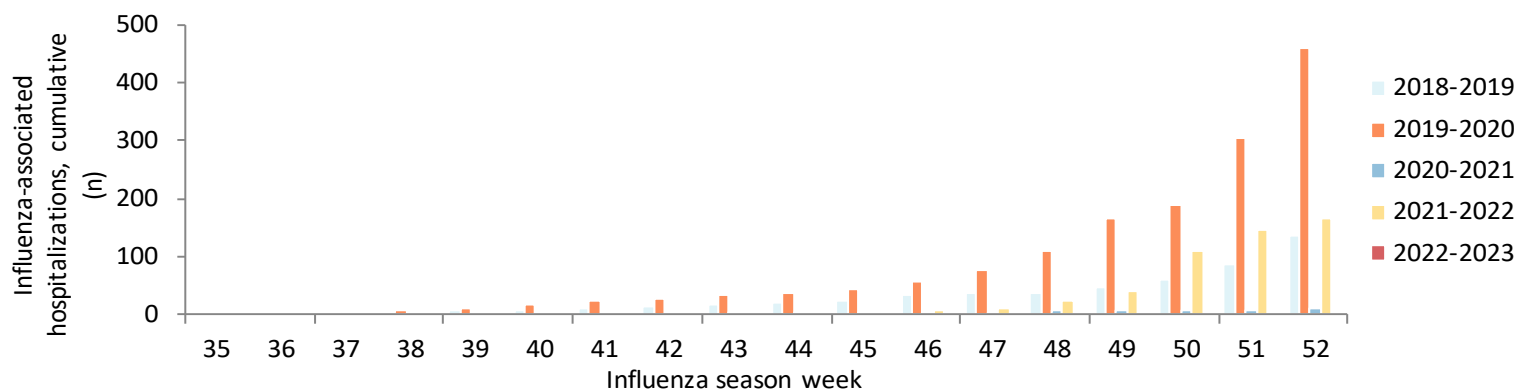
ILI activity trend analysis by influenza season, Wisconsin



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+										
Total	(Data will be available at a later date)									

Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin

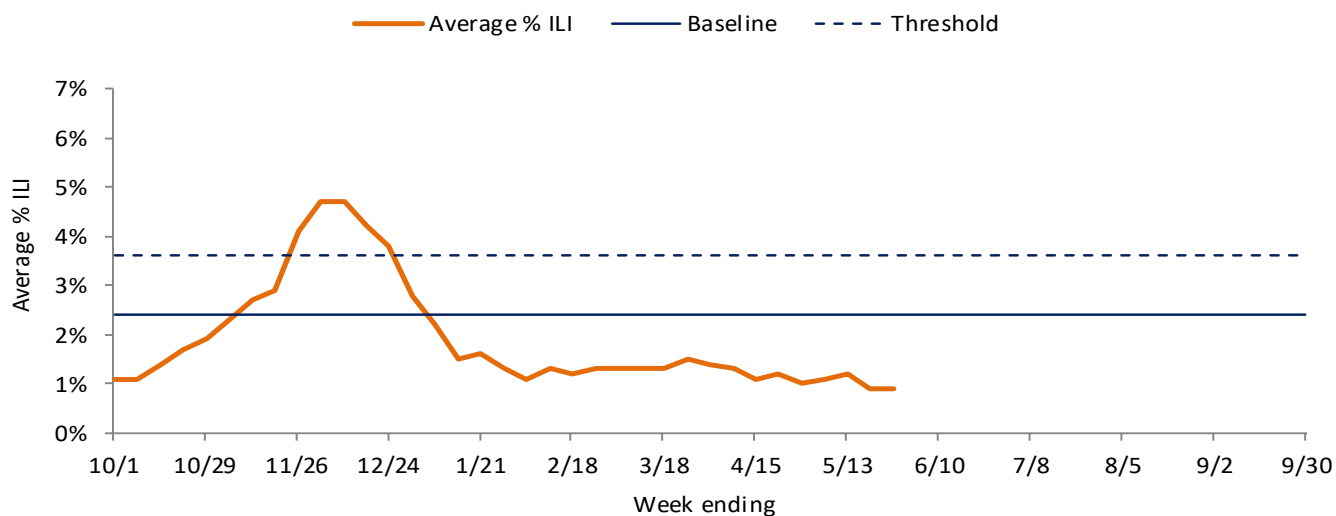


The 2020-2021 influenza season was unusually low due much in part to the ongoing COVID-19 pandemic. As such, numbers for that season are substantially different than previous seasons and should be considered an anomaly.

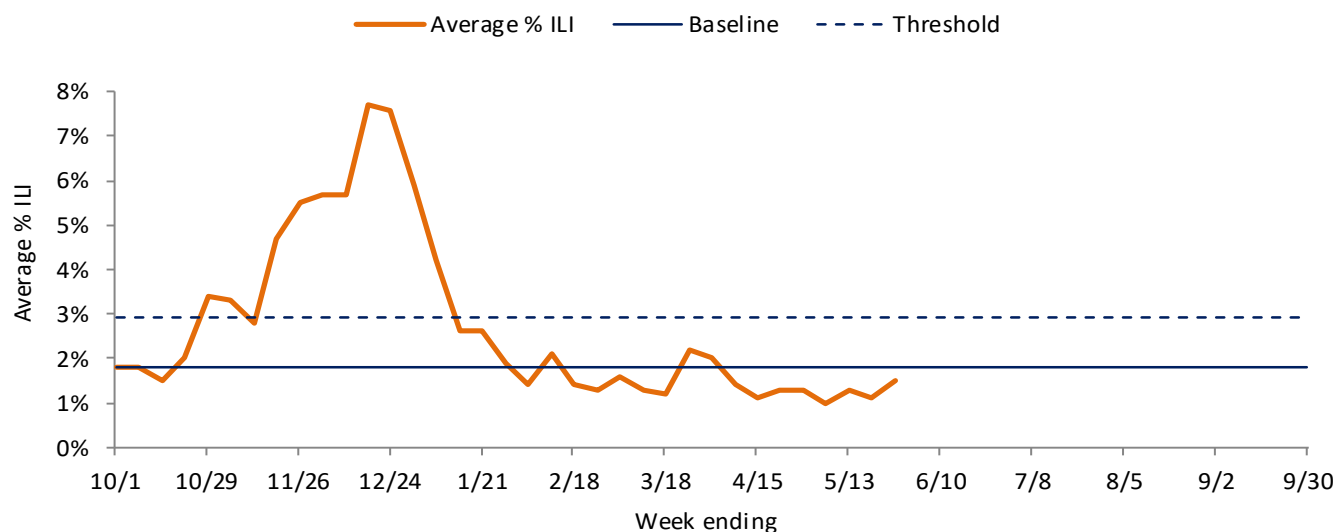


ILI ACTIVITY TREND ANALYSIS

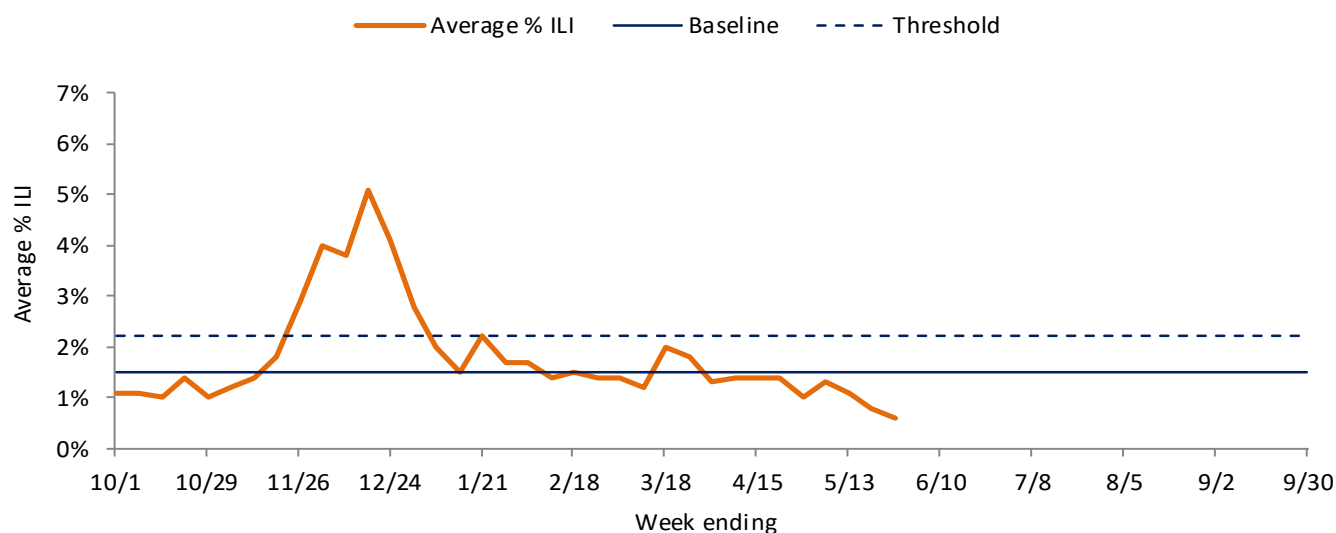
Wisconsin



Northeastern Region

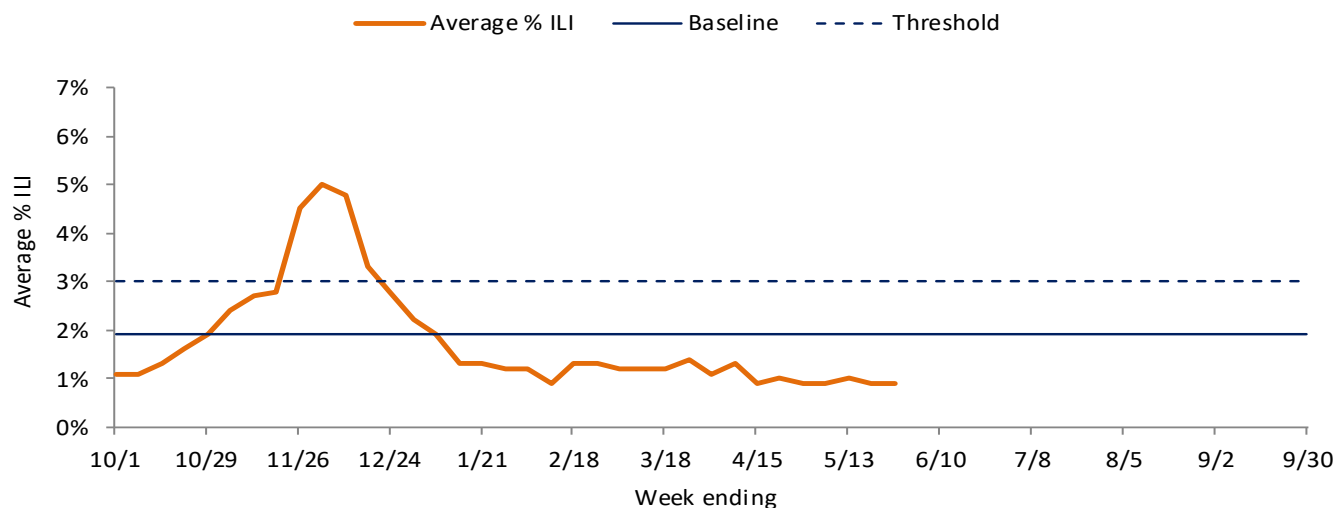


Northern Region

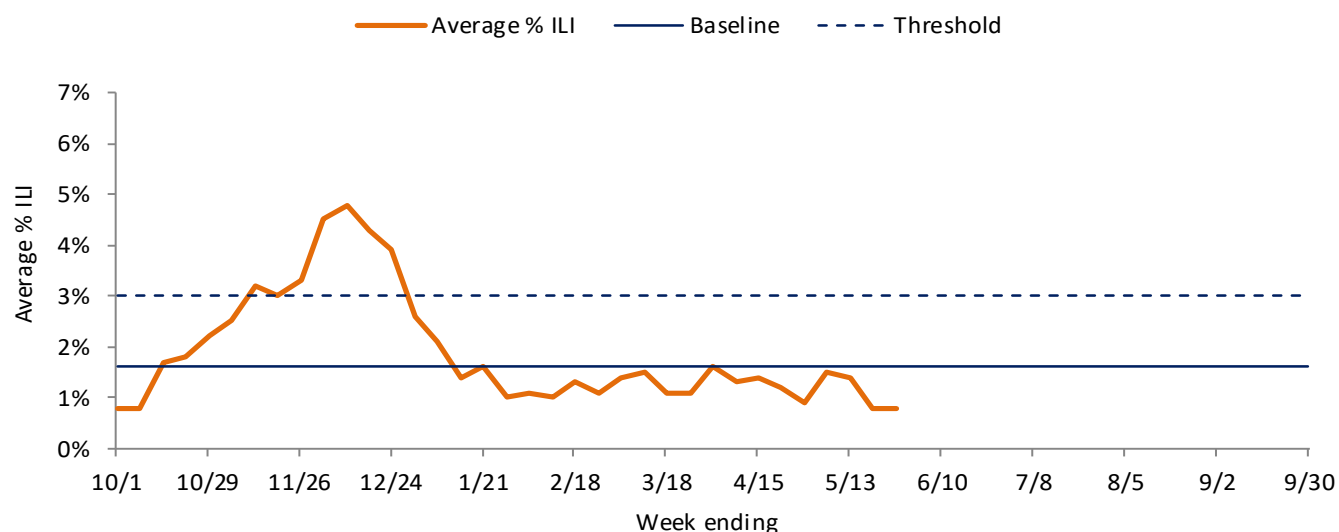


ILI ACTIVITY TREND ANALYSIS (CONTINUED)

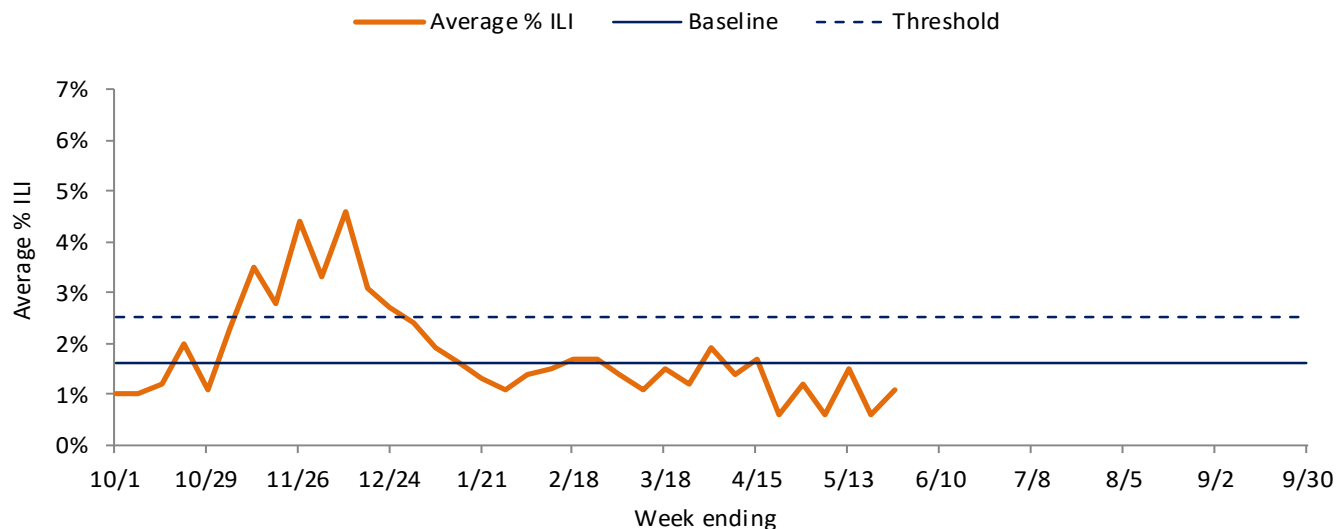
Southeastern Region



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 network of yellow and red lines representing the viral envelope and internal structure.

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

INFLUENZA-LIKE ILLNESS (ILI)	Patients who present to a clinician with a fever $\geq 100^{\circ}$ F and either a cough or sore throat.
INFLUENZA-LIKE ILLNESS ACTIVITY (ILI)	Using baseline (expected values data used for comparison) and threshold (upper limit) ILI percentages in each of the public health regions in Wisconsin , 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
PREDOMINANT VIRUS OF THE WEEK	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. ²
INFLUENZA-ASSOCIATED PEDIATRIC MORTALITY	Deaths among children <18 years old, with influenza as the cause or associated cause of death. This is a state and nationally reportable condition. ²
RESPIRATORY VIRUSES BY PCR	A molecular laboratory method used to detect nucleic acid (DNA/RNA) in viruses, including influenza and RSV.
RAPID ANTIGEN TEST	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.
INFLUENZA-ASSOCIATED HOSPITALIZATIONS	Patients hospitalized for >24 hours with laboratory-identified (by rapid antigen or rt-PCR tests) influenza. ³

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)

