











RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 12, Ending March 25, 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 | dhsdphbcd@dhs.wi.gov









🌑 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:

- Outpatient influenza-like illness has increased in the Northern and Northeast regions of Wisconsin.
- 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 12, 2023	October 1, 2022 to present
Wisconsin	0	3
Nationwide	4	138

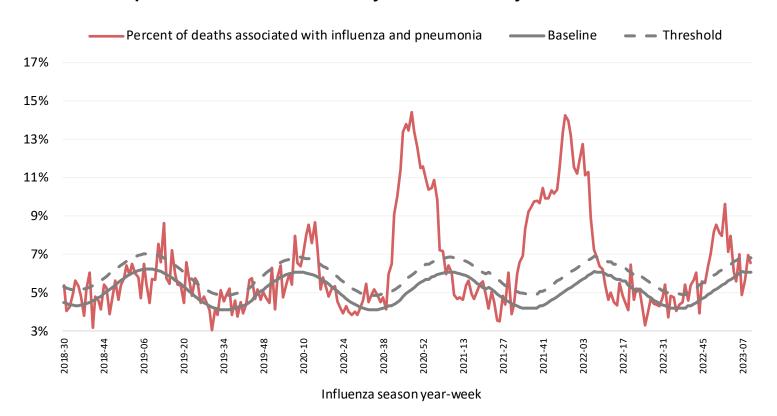
For National US influenza surveillance statistics visit: www.cdc.gov/flu/weekly/



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.

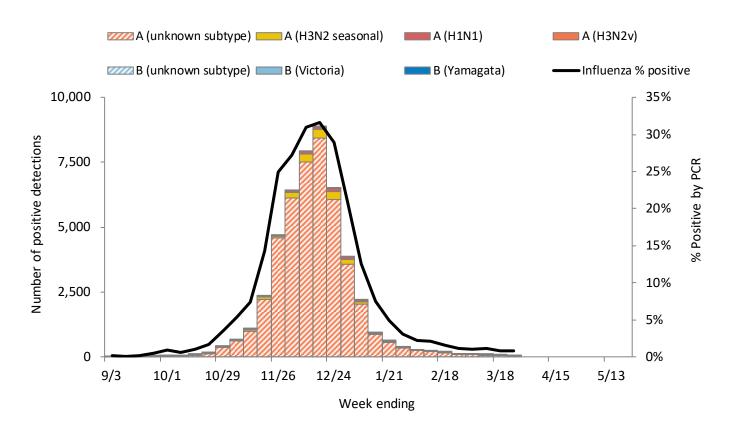
<u></u>					
Influenza season week	Influenza- associated deaths (I)	Pneumonia- associated deaths (P)	Percent I+P of all deaths	Baseline I+P of all deaths	Threshold I+P of all deaths
10	0	64	5.9%	6.1%	6.8%
11	1	47	4.3%	6.1%	6.8%
12 Preliminary Data	1	57	6.2%	6.2%	6.9%

Data source: <u>DPH, Office of Health Informatics</u>



WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

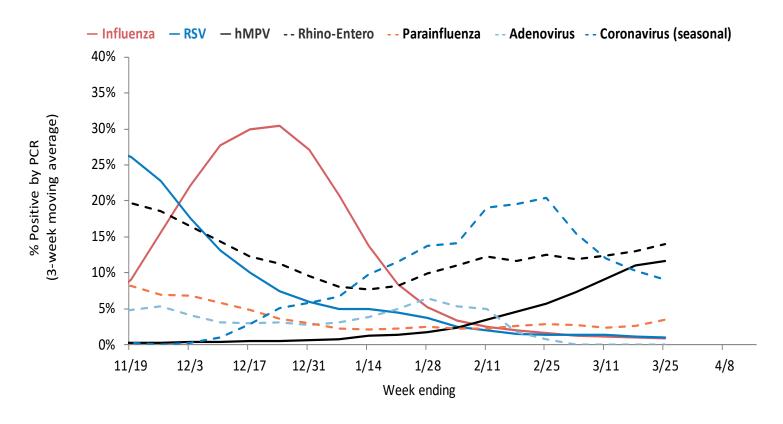
Wisconsin positive influenza results and subtypes by PCR



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)	698	1,884	45,541	6	0	416	48,545
% of total positive	1%	4%	94%	0%	0%	1%	100%

WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES

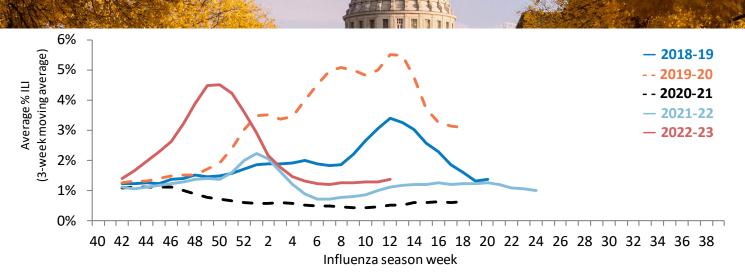


Week 12, Ending on March 25, 2023

		Positive	Positive		Influenza	Α				Influen	za B	
Respiratory viru	Respiratory virus Tested	(n)	(%)	H3N2	2009 H1N1	Unknown		Victor	Victoria Yamag		ata	Unknown
Influenza	9383	74	0.8% 2 1 49 0			0		22				
Respiratory virus	Tested	Positive (n)	Positive (%)	e Parainfluenza 1 Parainfluenza 2		Parainfluenza 3		Para	ainfluenza 4			
Parainfluenza	843	43	3 5.1% 8 9		26		0					
Respiratory	virus	Tested	Positive (n	Positive (%)	CoV 2	CoV 229E CoV (CoV NL63			CoV HKU1	
Coronavirus (se	easonal)	35	2	5.7%	0	0		0		1		1
Respiratory virus			Tested			Positive (n)				Ро	sitive	(%)
RS	RSV 64		418 62			62	1.0%					
Human metapneumovirus		94		100		11.2%						
Rhino-ent	Rhino-enterovirus 8		119			119	14.4%			6		
Adenovirus			35			0				0%		

WISCONSIN STATE SUMMARY

ILI activity trend analysis by influenza season, Wisconsin

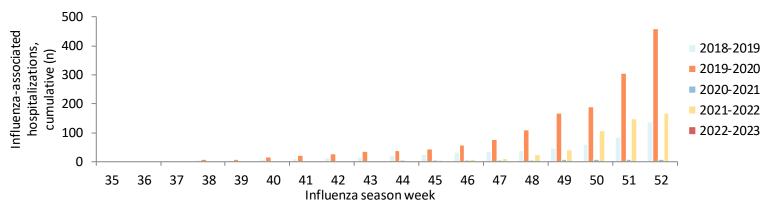


Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System October 1, 2022 to present (Hospitalization data will be updated at a later date)

Ago group	Total		Ir	nfluenza subt	уре	Admitted	Required		Postpartum	
Age group (years)	reported (n)	A (2009 H1N1)	A (H3N2)	A (Unknown)	В	Not reported	to ICU	mechanical ventilation	Pregnant	(≤6 weeks)
<1										
1-4										
5-17										
18-49										
50-64										
65+										
Total	(Data will	ho availah	le at a lat	er date)	-	-	*		•	

lotal (Data Will be available at a later date)

Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



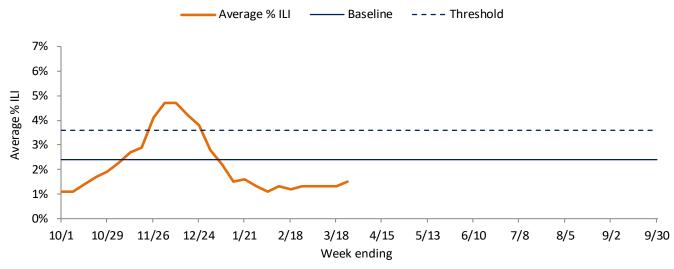
The 2020–2021 influenza season was unusually low due much in part to the ongoing COVID-19 pandemic. As such, numbers for that season are substantially different than previous seasons and should be considered an anomaly.



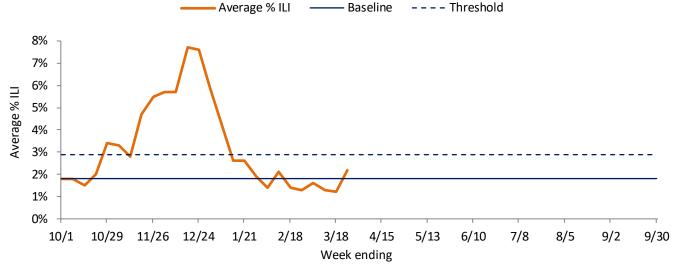
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ILI ACTIVITY TREND ANALYSIS

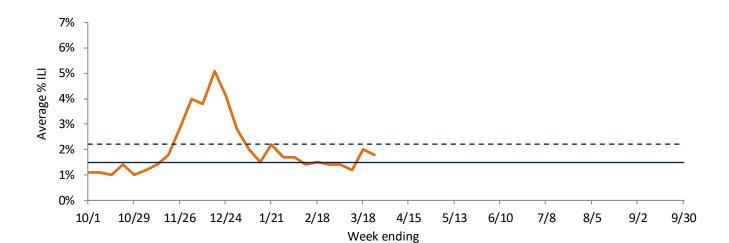
Wisconsin



Northeastern Region



Northern Region

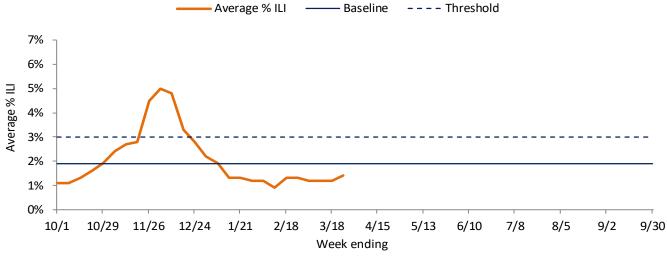


Baseline

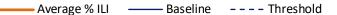
Average % ILI

ILI ACTIVITY TREND ANALYSIS (CONTINUED)

Southeastern Region



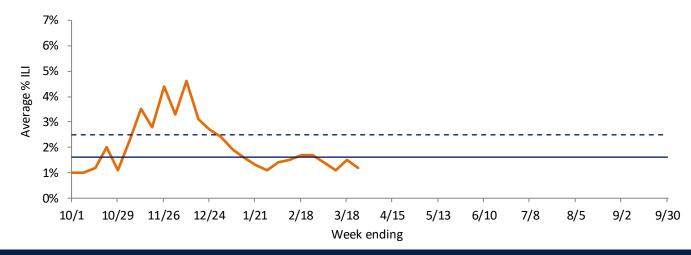
Southern Region





Western Region





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 <u>public health regions in</u> <u>Wisconsin</u> , 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)

