







# RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 51, Ending December 25, 2021

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



# INFLUENZA LIKE ILLNESS (ILI) ACTIVITY





# **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:**

Rhino/enterovirus is the predominant virus this week.

#### **Current Alerts:**

Influenza-associated hospitalizations are increasing statewide and are expected to continue to increase in the coming weeks. Influenza A/H3 is the predominant influenza virus.

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 51, 2021	October 1, 202 to present				
Wisconsin	0	0				
Nationwide	2	2				

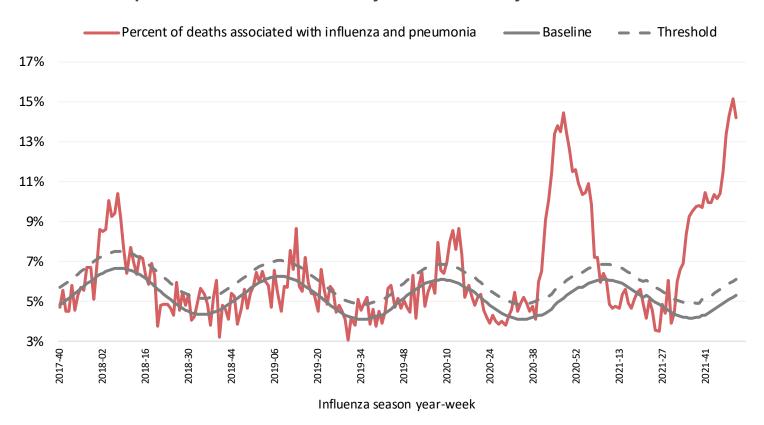
For National US influenza surveillance statistics visit: <a href="www.cdc.gov/flu/weekly/">www.cdc.gov/flu/weekly/</a>



#### 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.

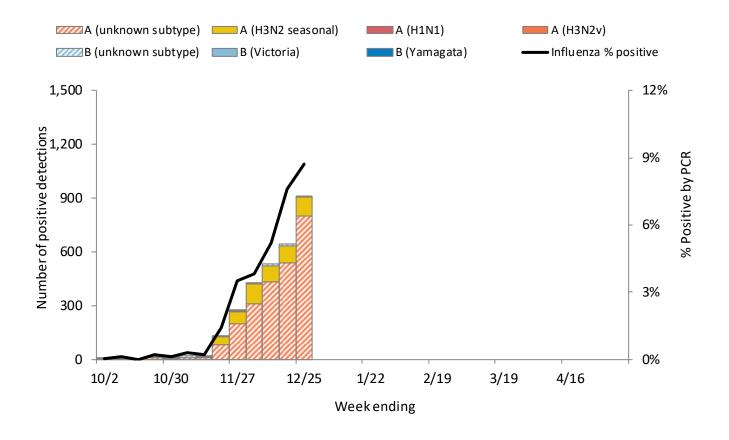
Influenza season week	Influenza- associated deaths (I)	Pneumonia- associated deaths (P)	Percent I+P of all deaths	Baseline I+P of all deaths	Threshold I+P of all deaths
49	1	205	14.2%	5.0%	5.8%
50	2	202	15.2%	5.1%	5.9%
51 Preliminary Data	0	119	14.2%	5.2%	6.0%

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

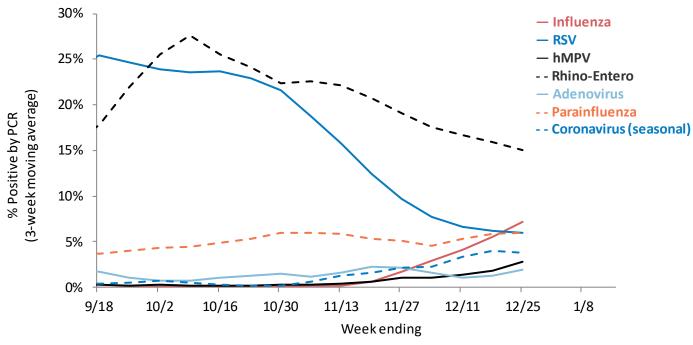


# Cumulative number of positive influenza PCR tests by subtype October 9, 2021 to present

	A (2009 H1N1)	Influenza A: A (H3N2)	98% A (Unknown)	B (Victoria)	Influenza B: B (Yamagata)	2% B (Unknown)	Total
Total positive (n)	7	521	2,393	1	0	58	2,980
% of total positive	0%	17%	80%	0%	0%	2%	100%

# WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

#### Trends in respiratory virus activity by PCR



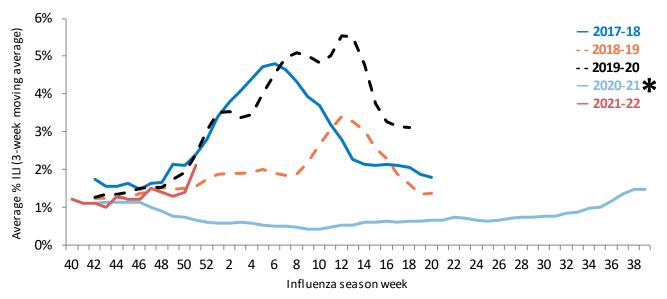
Week 51 Ending on December 25, 2021

		Posi	tive	e Positive		Influenza A				Influenza B					
Respiratory virus Tes	Tested	(n	(%)			H3N2		2009 H1N1	Unl	known	wn Victo		toria Yamagata		Unknown
Influenza	10453	91	2	8.7%	, 5	105 0 802		302	0 0			5			
Respiratory viru	ıs Te	sted		sitive (n)	Posit		Parai	nfluenza 1	Pa	rainfluen	za 2	Parainfluenza 3 Para		rainfluenza 4	
Parainfluenza	1	134	ļ	54	4.8	4.8 0 10		26		18					
Respiratory v	irus	Test	ted	Positiv	re (n)	Positive CoV 229E CoV OC		C43	CoV NL63		CoV HKU1				
Coronavirus (seasonal)		30	0	6	6 2.0		0%	% 0		6		0			0
Posnivotom, vinus				Tostod					Do	citivo (n)			Doc	41.40	(9/)

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	5592	327	5.5%
Human metapneumovirus	1144	40	3.5%
Rhino-enterovirus	1092	160	14.7%
Adenovirus	300	8	2.7%

#### WISCONSIN STATE SUMMARY

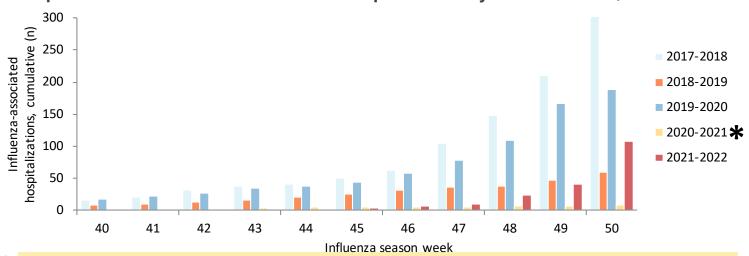
#### ILI activity trend analysis by influenza season, Wisconsin



Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System October 1, 2021 to present

Age group	Total		In	fluenza subt	уре		Admitted	Required		Postpartum
(years)	reported (n)	A (2009 H1N1)	A (H3N2)	A (Unknown)	В	Not to ICU		mechanical ventilation	Pregnant	(≤6 weeks)
<1	3	0	0	3	0	0	0	0		
1-4	5	1	0	3	1	0	4	0		
5-17	10	1	0	9	0	0	1	1		
18-49	31	0	1	29	1	0	5	0	4	0
50-64	17	0	1	14	2	0	2	0		
65+	81	0	4	66	11	0	4	1		
Total	147	2	6	124	15	0	16	2	4	0

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

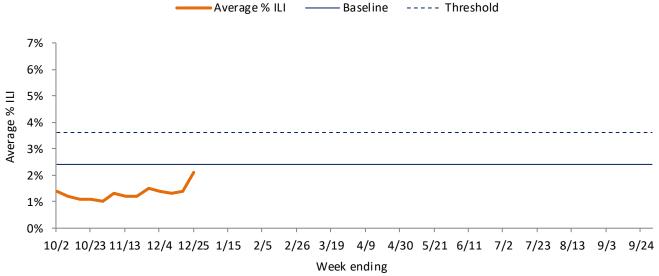


**The 2020 - 2021 influenza season was unusually low due much in part to the ongoing COVID-19 pandemic.** As such, numbers for that season are substantially different than previous seasons and should be considered an anomaly.

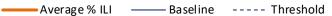


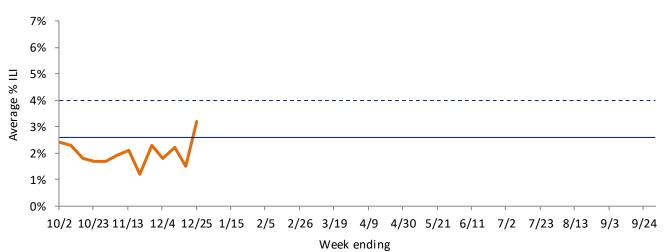
### **ILI ACTIVITY TREND ANALYSIS**

#### Wisconsin



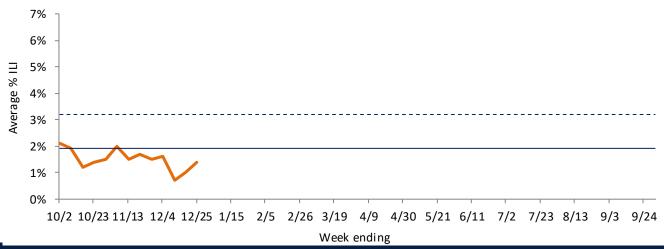
#### **Northeastern Region**





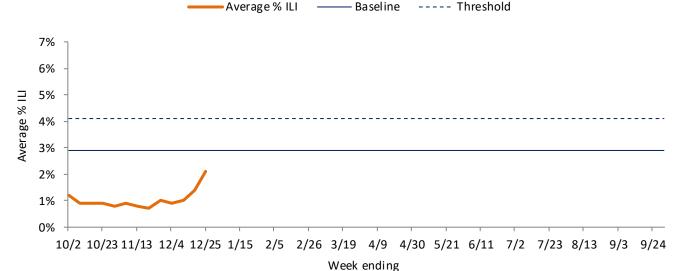
#### **Northern Region**



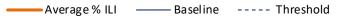


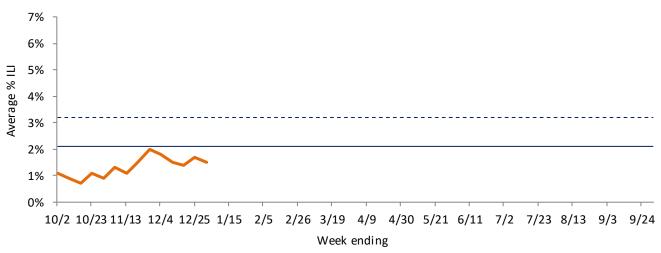
#### ILI ACTIVITY TREND ANALYSIS

#### **Southeastern Region**



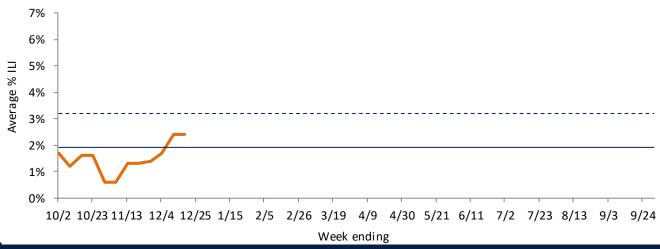
#### **Southern Region**





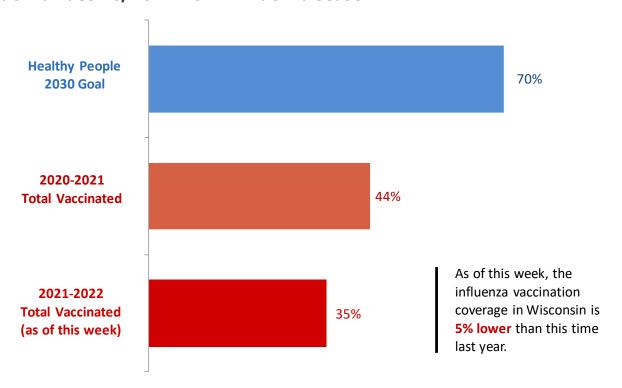
#### **Western Region**







Cumulative percentage of Wisconsin residents who received 1 or more doses of influenza vaccine, 2021-2022 influenza season



Data source: All influenza vaccination rates presented were calculated using data from the Wisconsin Immunization Registry (numerator) and Wisconsin population estimates (denominator).

# Influenza vaccine composition 2021-2022:

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

- A/Victoria/2570/2019 (H1N1) pdm09-like virus
- A/Cambodia/e0826360/2020 (H3N2)-like virus
- B/Washington/02/2019- like virus (B/Victoria lineage)
- B/Phuket/3073/2013-like virus (B/Yamagata lineage)

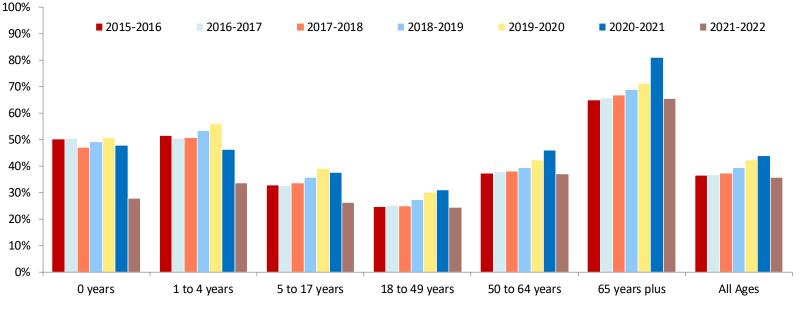
#### **Cell- or recombinant-based vaccines** are recommended to contain:

- A/Wisconsin/588/2019 (H1N1) pdm09-like virus
- A/Cambodia/e0826360/2020 (H3N2)-like virus
- B/Washington/02/2019- like virus (B/Victoria lineage)
- B/Phuket/3073/2013-like virus (B/Yamagata lineage)



# SEASONAL INFLUENZA VACCINATION

Percentage of Wisconsin residents who received one or more doses of influenza vaccine, by age group and influenza season



Each season includes doses administered during the same time period (August 1 through May 3).

Percentage of Wisconsin residents who received one or more doses of influenza vaccine, by race and ethnicity and region, 2021-2022 influenza season

