



# RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 50: Ending December 14, 2019

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) | [dhsdphbcd@dhs.wi.gov](mailto:dhsdphbcd@dhs.wi.gov)





# INFLUENZA LIKE ILLNESS (ILI) ACTIVITY

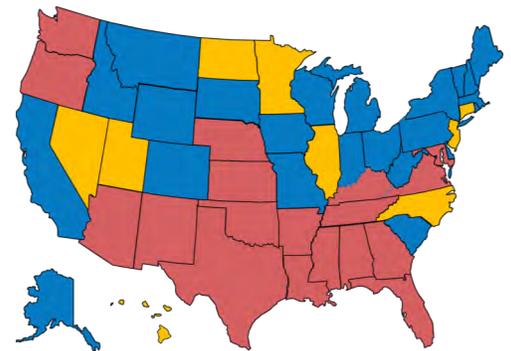
STATE OF WISCONSIN



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:

- [Weekly Respiratory Report Description](#)

- **Predominant Viruses of the Week:**

Influenza B and RSV are the predominant viruses this week.

## INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

	Week 50, 2019	October 1, 2019 to present
Wisconsin	0	0
Nationwide	9	19

## CURRENT ALERTS:

**Influenza B (Victoria lineage)** continues to be the predominant influenza virus in Wisconsin. Influenza B viruses cause increased morbidity among the younger population.



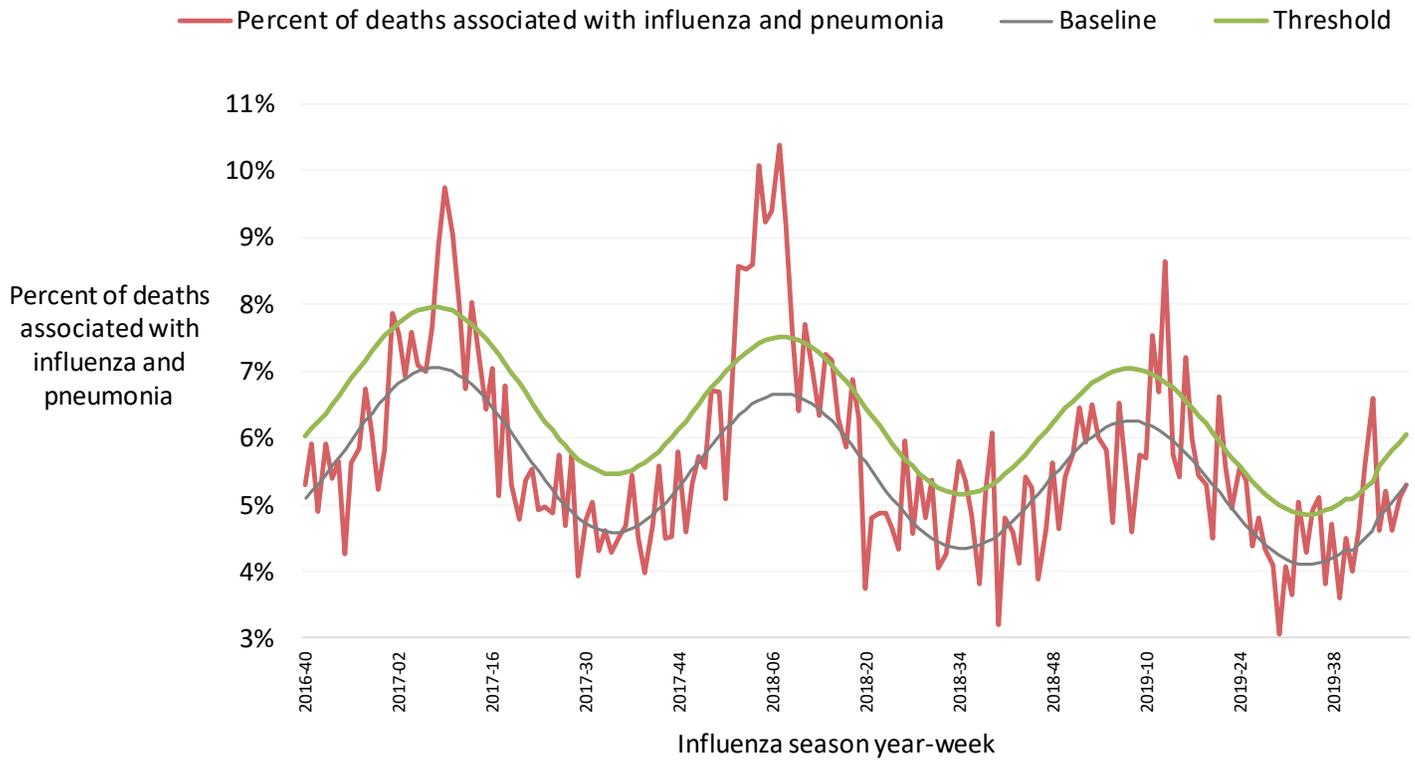
For National US influenza surveillance statistics visit: [www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/)



# 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 influenza season week, Wisconsin, 2019-2020 season

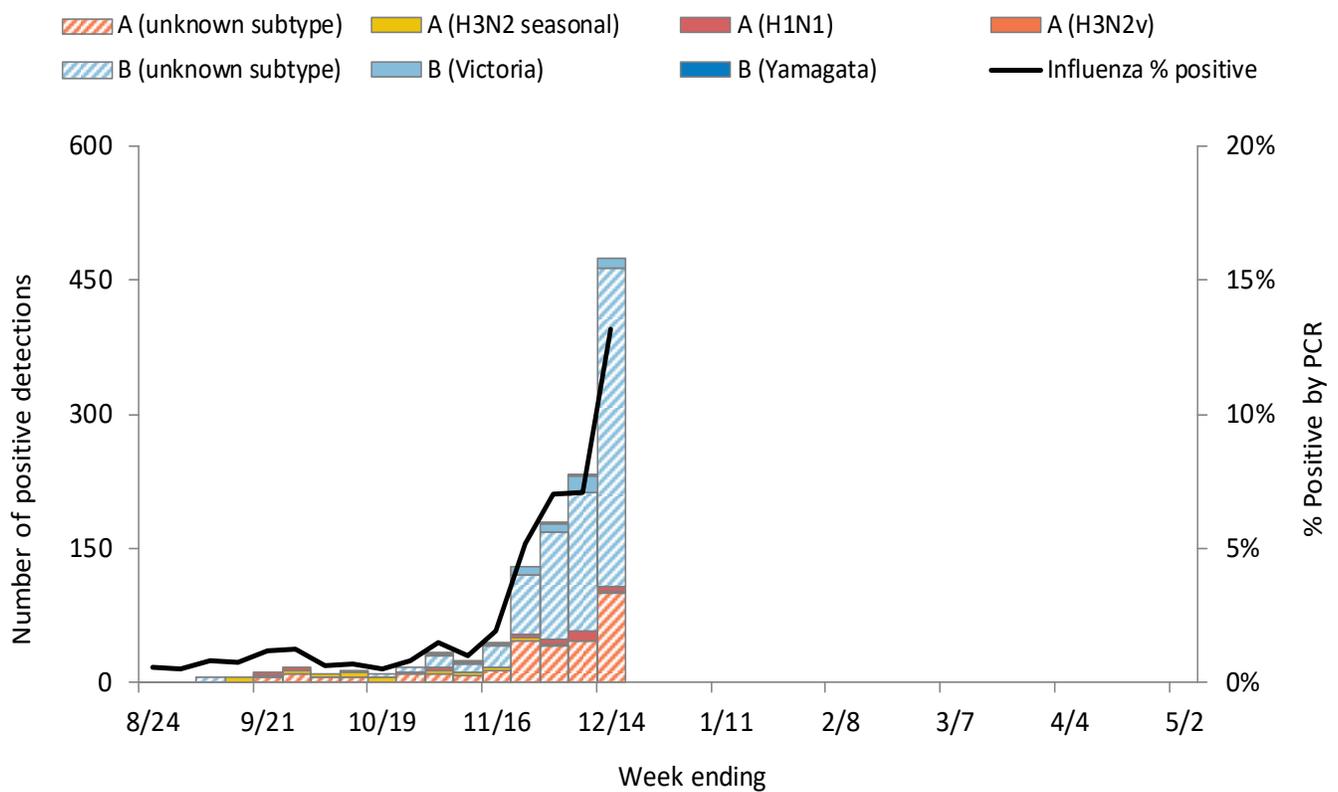
Influenza season week	Influenza-associated deaths (I)	Pneumonia-associated deaths (P)	Percent I+P of all deaths	Baseline I+P of all deaths	Threshold I+P of all deaths
48	0	52	5.1%	5.2%	5.9%
49	2	54	5.3%	5.3%	6.0%
50 (Preliminary data)	1	49	5.7%	5.4%	6.1%
<b>Seasonal total</b>	<b>9</b>	<b>798</b>	<b>4.8%</b>	<b>NA</b>	<b>NA</b>

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



# WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

## Wisconsin positive influenza results and subtypes by PCR

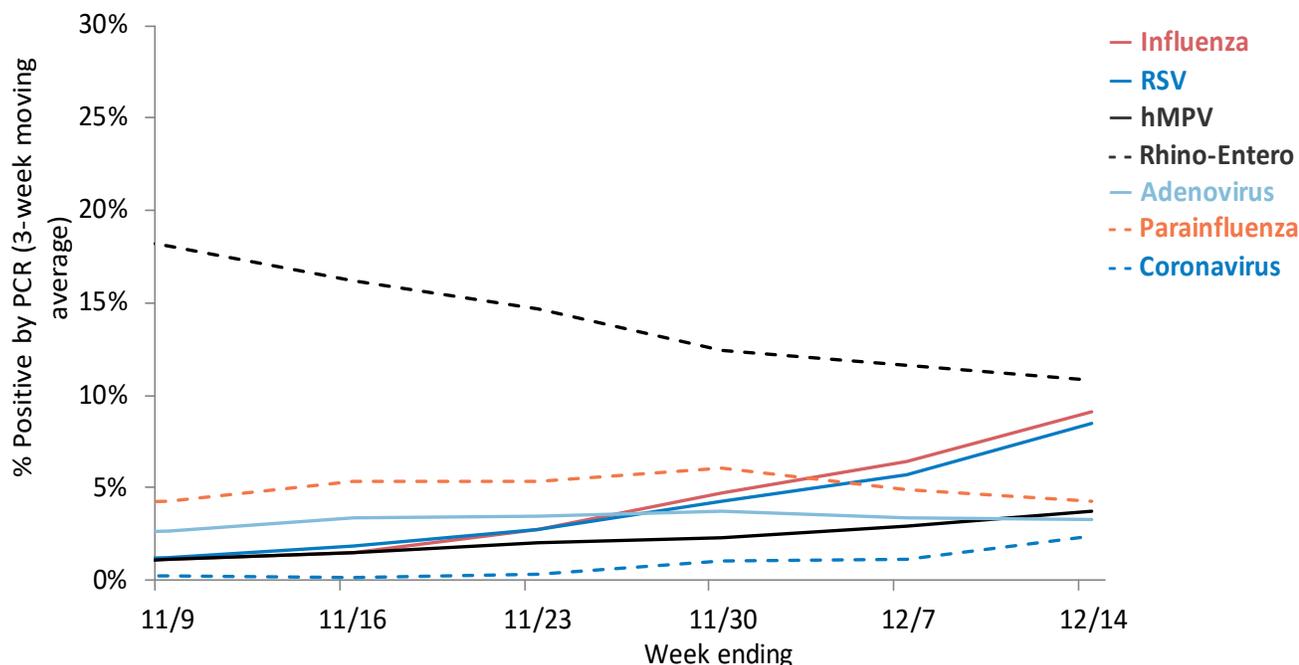


## Cumulative number of positive influenza PCR tests by subtype September 1, 2019 to present

	A (2009 H1N1)	Influenza A: 31%			Influenza B: 69%			Total
		A (H3N2)	A (Unknown)	B (Victoria)	B (Yamagata)	B (Unknown)		
Total positive (n)	39	44	290	52	8	753	1186	
% of total positive	3%	4%	24%	4%	1%	63%	100%	

# WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

## Trends in respiratory virus activity by PCR



### Week 50: Ending on December 14, 2019

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	3587	474	13.2%	2	5	99	12	0	356

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	697	23	3.3%	10	1	0	12

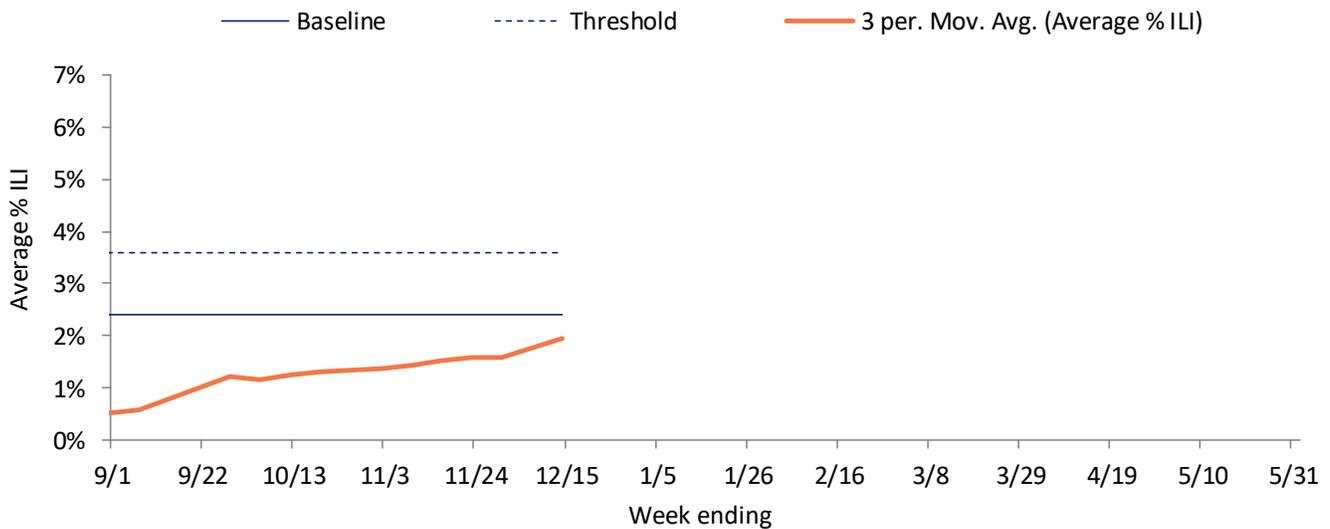
Respiratory virus	Tested	Positive (n)	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1
Coronavirus (CoV)	295	13	4.4%	1	0	0	12

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	1327	169	12.7%
Human metapneumovirus	723	34	4.7%
Rhino-enterovirus	668	71	10.6%
Adenovirus	295	10	3.4%

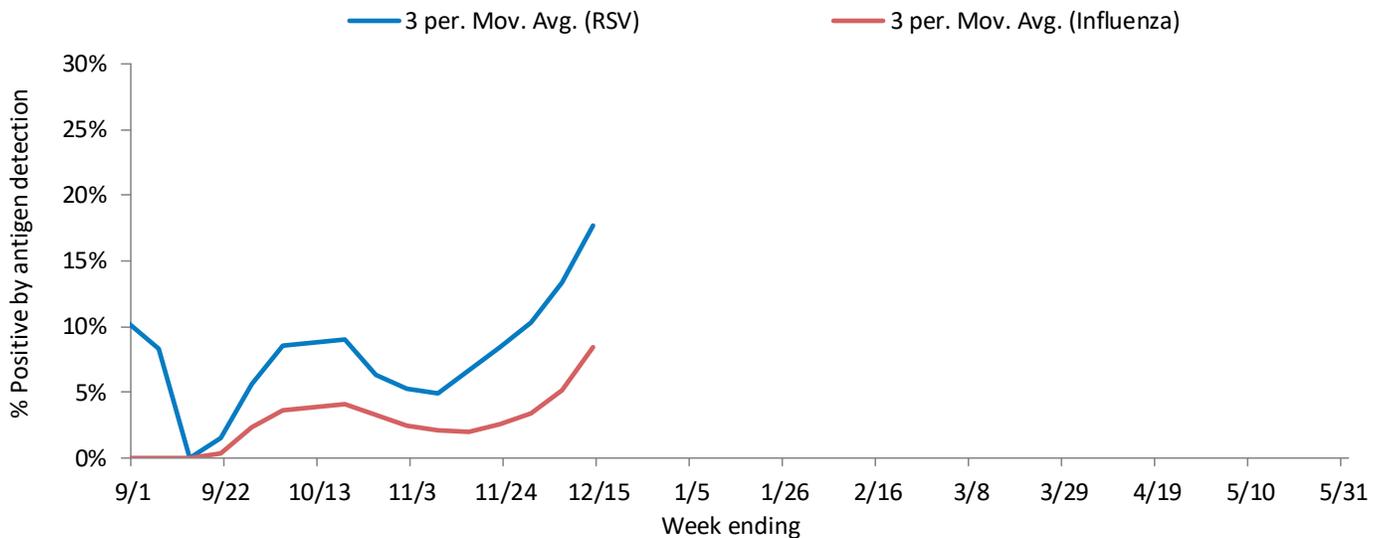
# WISCONSIN STATE SUMMARY

Influenza rapid antigen tests					RSV rapid antigen tests			Influenza-like illness (ILI)		
Tested	Positive (n)			% Positive	Tested	Positive (n)	% Positive	ILI %	Baseline	Threshold
	Influenza A	Influenza B	Total							
728	34	62	96	13.2%	162	39	24.1%	2.1%	2.4%	3.6%

## ILI activity trend analysis

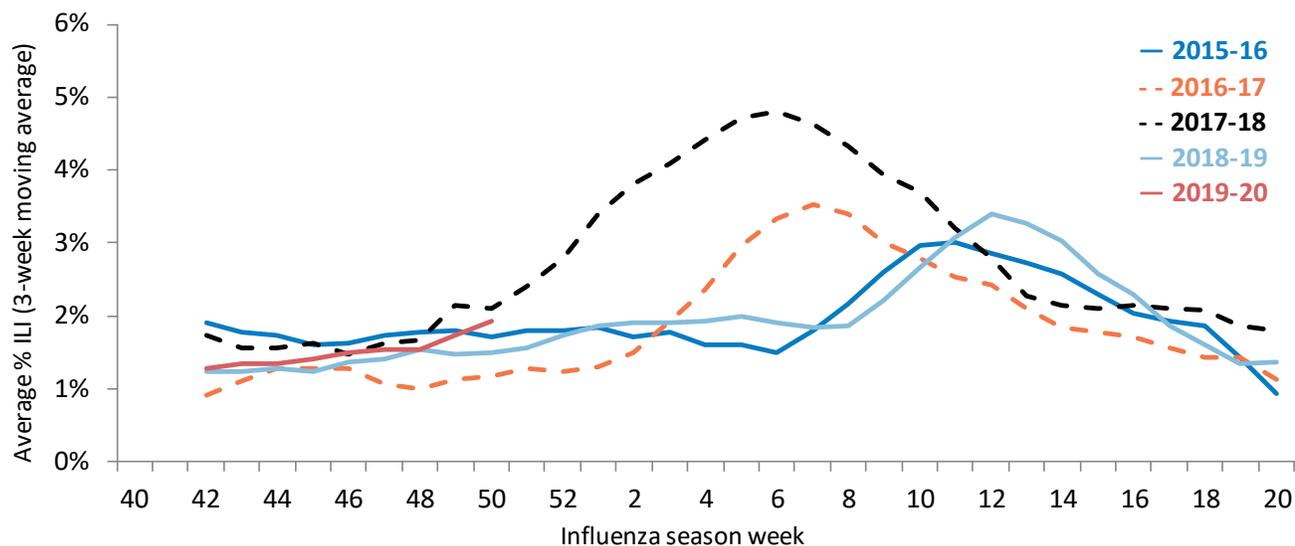


## Influenza and RSV trend analysis



# WISCONSIN STATE SUMMARY

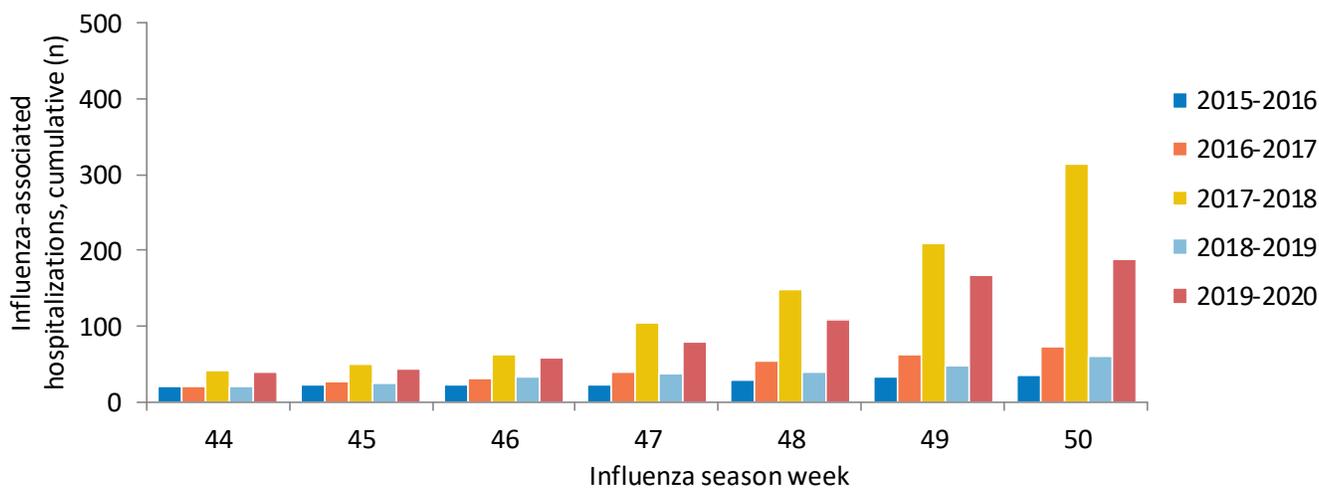
## ILI activity trend analysis by influenza season, Wisconsin



## Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System September 1, 2019 to present

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	4	0	0	1	3	0	1	1	0	0
1-4	18	0	0	7	8	3	5	1	0	0
5-17	22	2	0	3	12	5	1	0	0	0
18-49	41	1	1	11	26	2	10	1	4	2
50-64	33	4	4	13	11	1	7	3	0	0
65+	71	3	9	34	25	0	7	0	0	0
<b>Total</b>	<b>189</b>	<b>10</b>	<b>14</b>	<b>69</b>	<b>85</b>	<b>11</b>	<b>31</b>	<b>6</b>	<b>4</b>	<b>2</b>

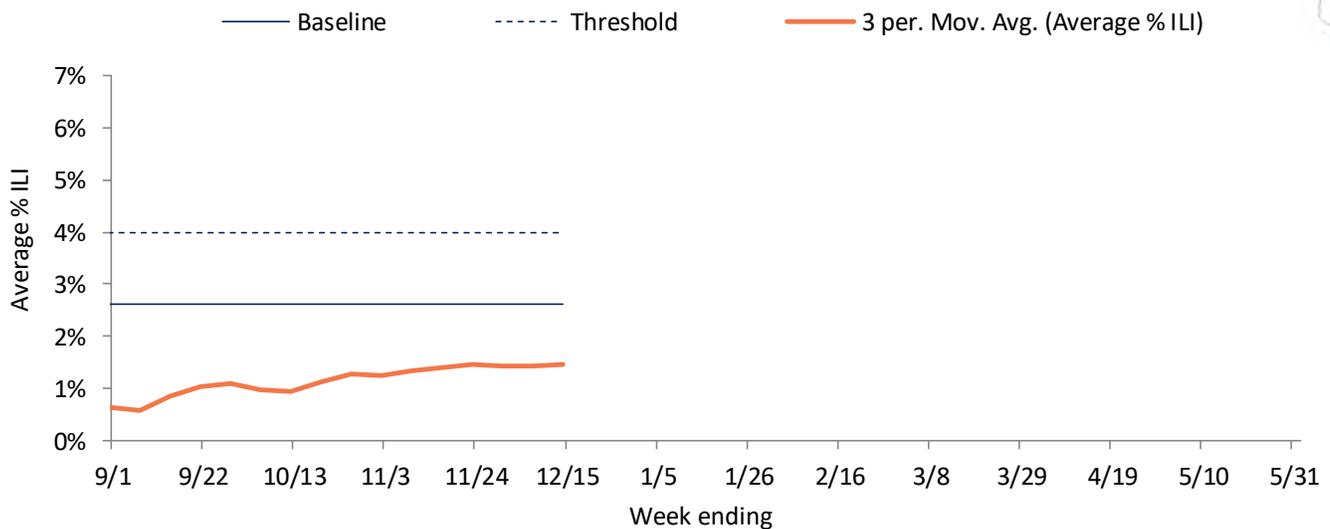
## Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



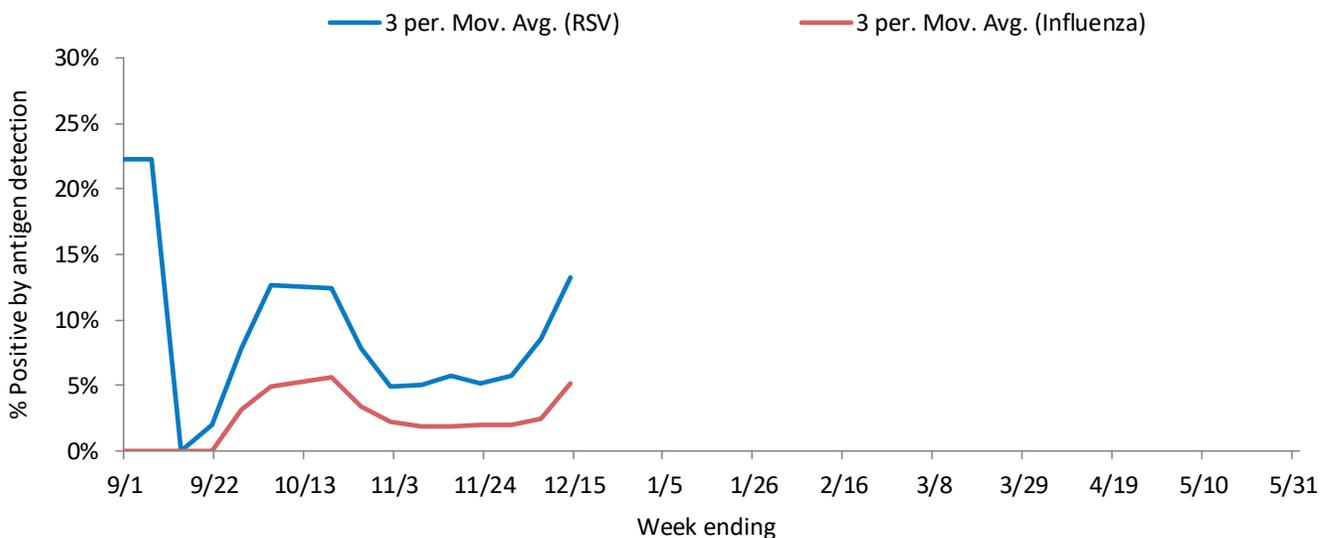
# NORTHEASTERN REGION

Influenza rapid antigen tests					RSV rapid antigen tests			Influenza-like illness (ILI)		
Tested	Positive (n)			% Positive	Tested	Positive (n)	% Positive	ILI %	Baseline	Threshold
	Influenza A	Influenza B	Total							
279	16	13	29	10.4%	67	12	17.9%	1.5%	2.6%	4.0%

## ILI activity trend analysis



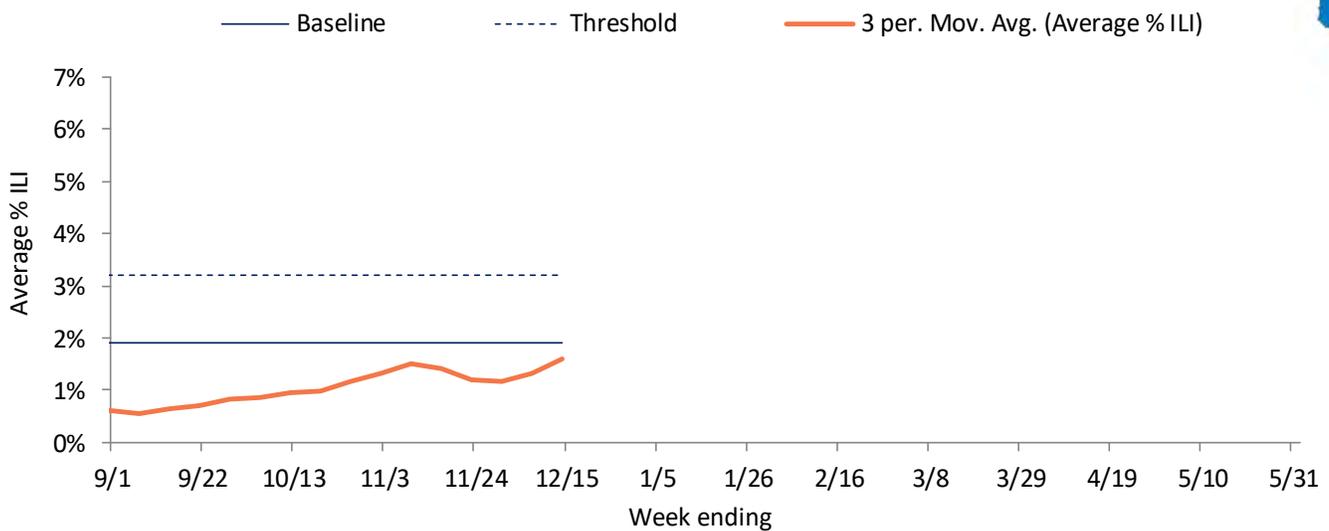
## Influenza and RSV trend analysis



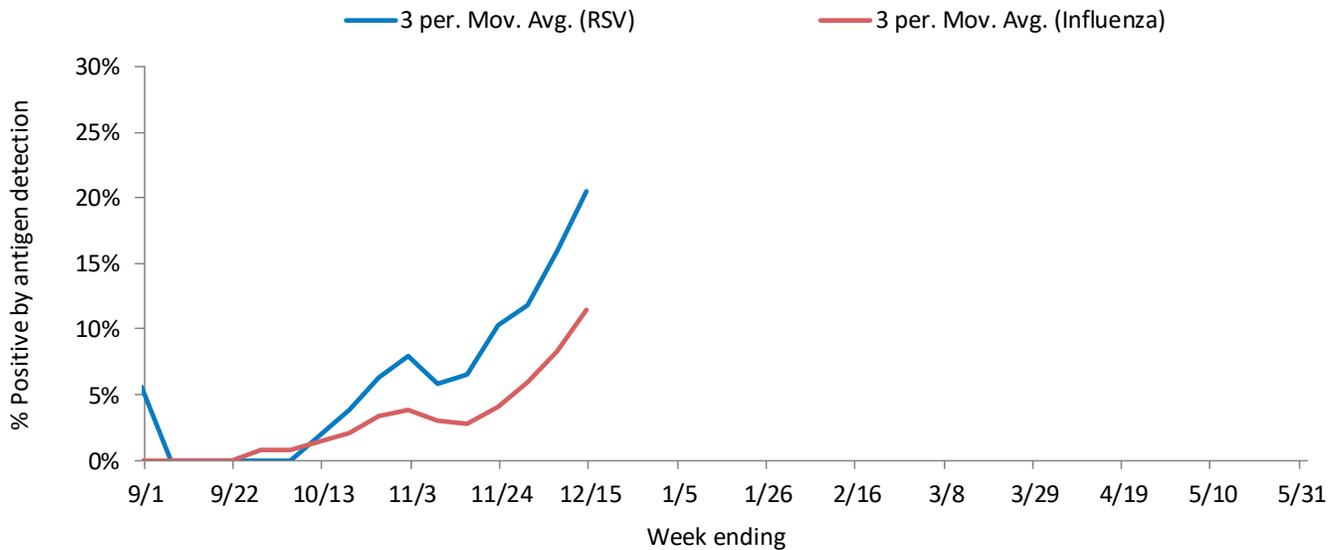
# NORTHWESTERN REGION

Influenza rapid antigen tests					RSV rapid antigen tests			Influenza-like illness (ILI)		
Tested	Positive (n)			% Positive	Tested	Positive (n)	% Positive	ILI %	Baseline	Threshold
	Influenza A	Influenza B	Total							
256	9	29	38	14.8%	73	22	30.1%	1.7%	1.9%	3.2%

## ILI activity trend analysis



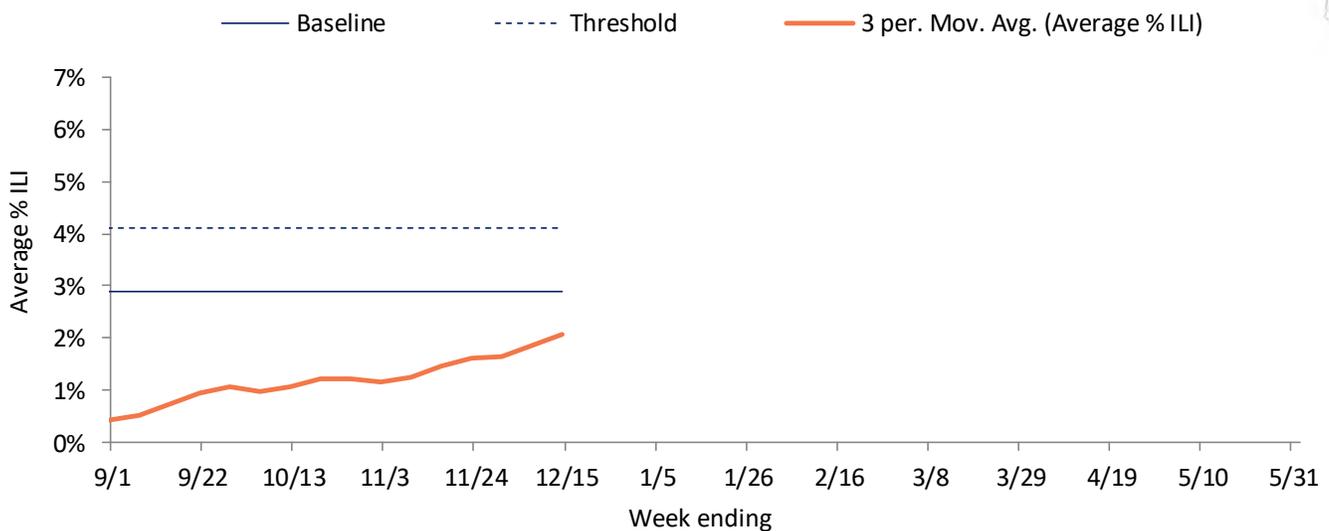
## Influenza and RSV trend analysis



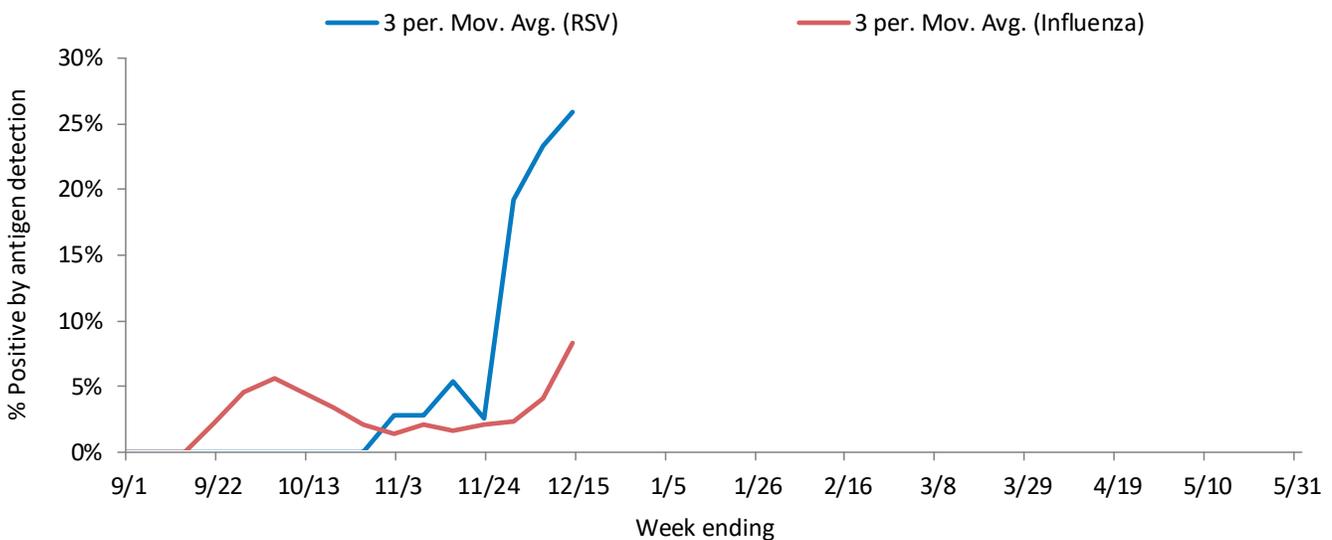
# SOUTHEASTERN REGION

Influenza rapid antigen tests					RSV rapid antigen tests			Influenza-like illness (ILI)		
Tested	Positive (n)			% Positive	Tested	Positive (n)	% Positive	ILI %	Baseline	Threshold
	Influenza A	Influenza B	Total							
165	8	17	25	15.2%	13	1	7.7%	2.3%	2.9%	4.1%

## ILI activity trend analysis



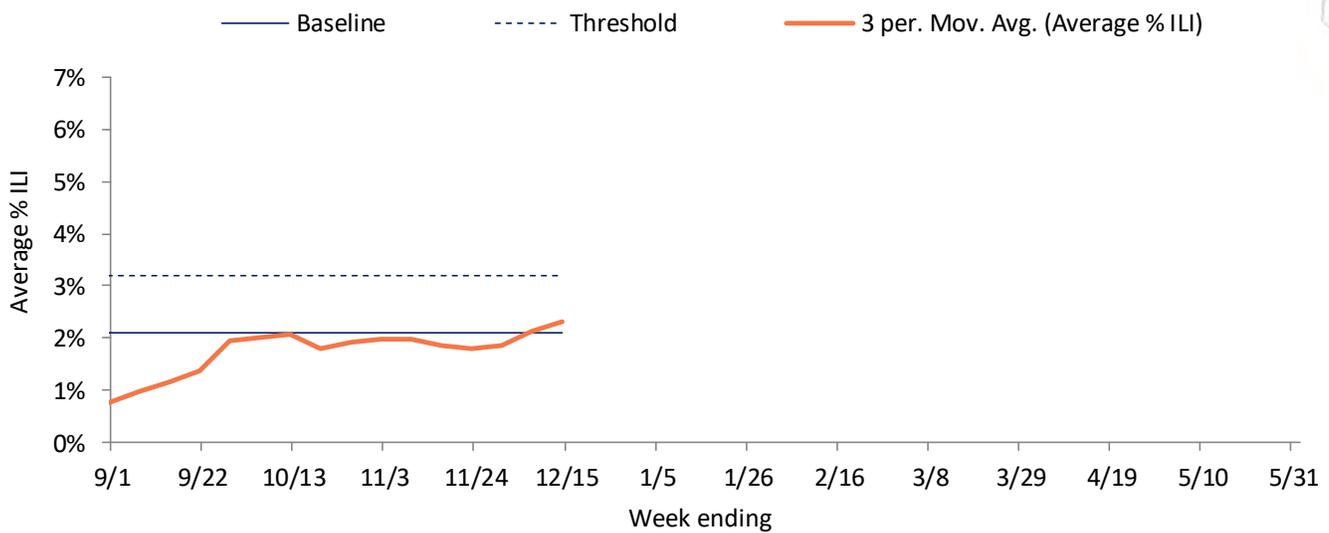
## Influenza and RSV trend analysis



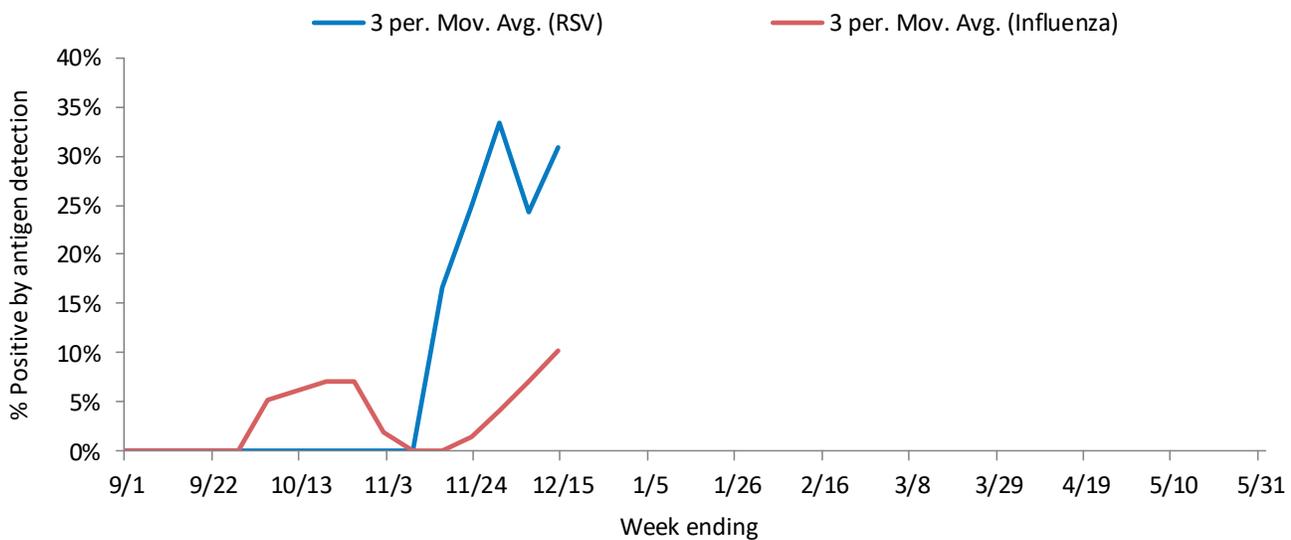
# SOUTHERN REGION

Influenza rapid antigen tests					RSV rapid antigen tests			Influenza-like illness (ILI)		
Tested	Positive (n)			% Positive	Tested	Positive (n)	% Positive	ILI %	Baseline	Threshold
	Influenza A	Influenza B	Total							
28	1	3	4	14.3%	9	4	44.4%	2.3%	2.1%	3.2%

## ILI activity trend analysis

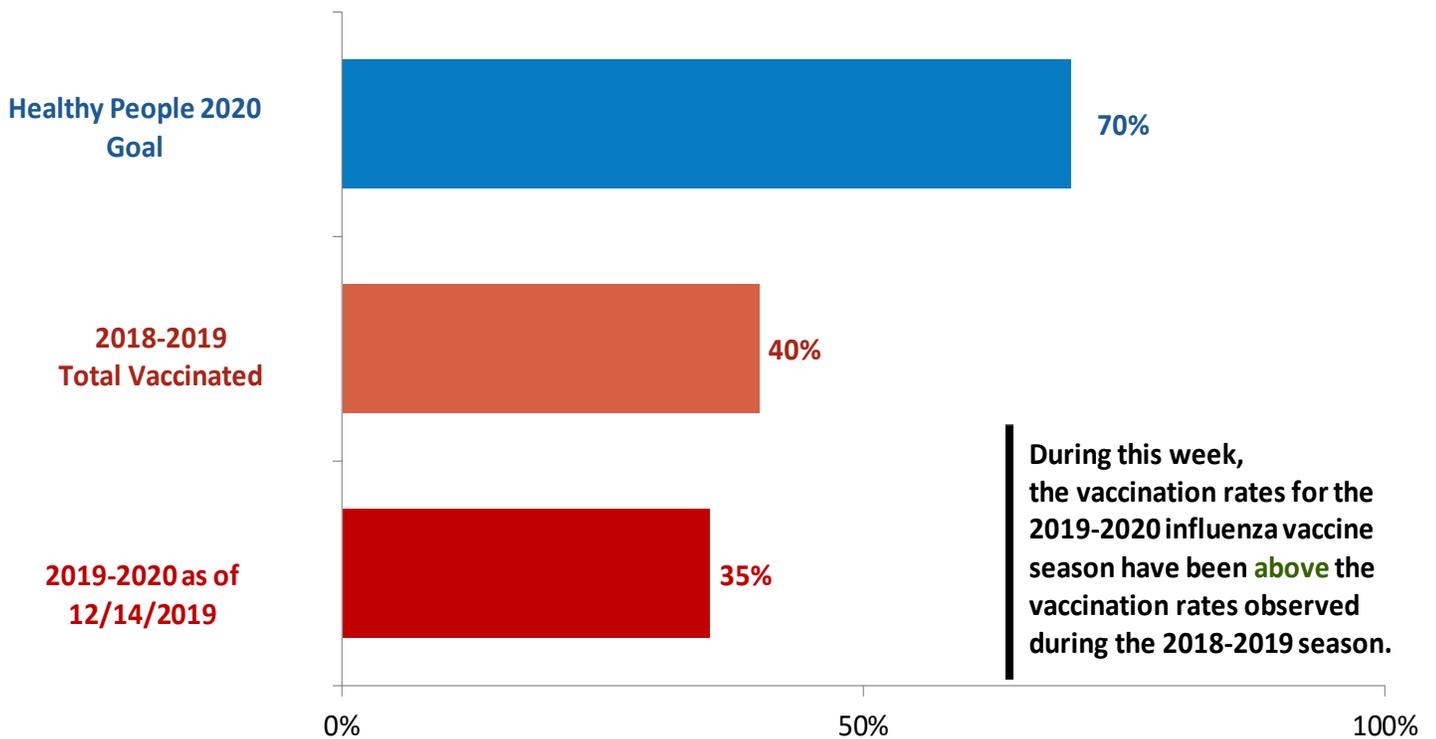


## Influenza and RSV trend analysis



# SEASONAL INFLUENZA VACCINATION

Cumulative percentage of Wisconsin residents who received 1 or more doses of influenza vaccine, 2019-2020 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 2019-2020:

The **trivalent** vaccines for use in the 2019-2020 influenza season contain the following:

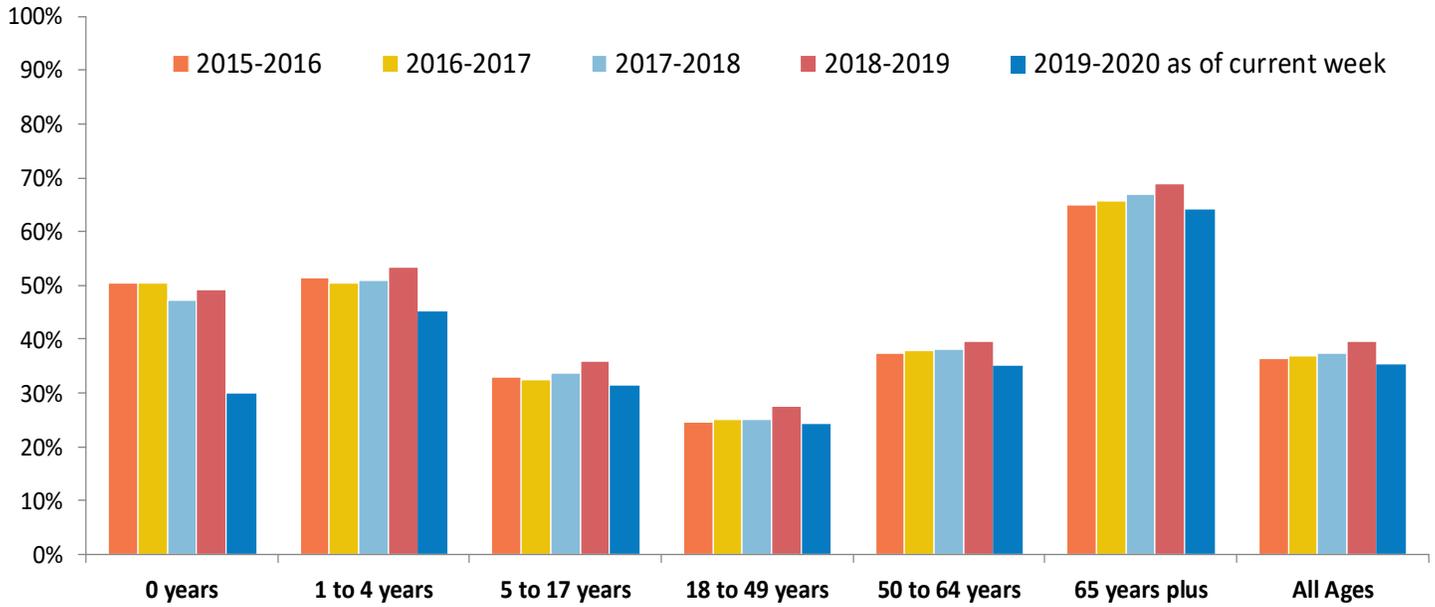
- A/Brisbane/02/2018 (H1N1)pdm09–like virus (updated)
- A/Kansas/14/2017 (H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus

It is recommended that **quadrivalent** vaccines containing two influenza B viruses contain the above three viruses and:

- B/Phuket/3073/2013-like virus (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, 2019-2020 influenza season

