



RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 51: Ending December 22, 2018

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

www.dhs.wi.gov/dph/bcd.htm | dhsdphbcd@dhs.wi.gov





INFLUENZA LIKE ILLNESS (ILI) ACTIVITY

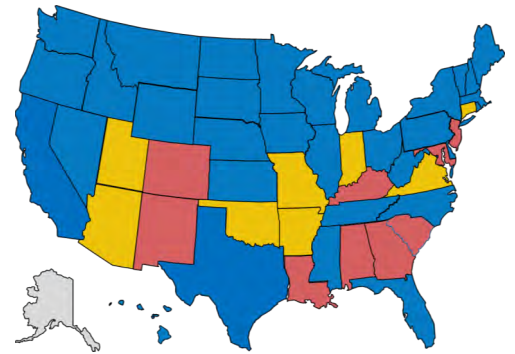
STATE OF WISCONSIN



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 Virus of the Week:**

RSV continues to be the predominant virus this week.

INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

Week 51 2018 October 1, 2018 to present

Wisconsin	0	0
Nationwide	4	11

CURRENT ALERTS:

- Influenza A/H1N1 is the predominant influenza virus nationwide and in Wisconsin
- Influenza-associated hospitalizations are increasing



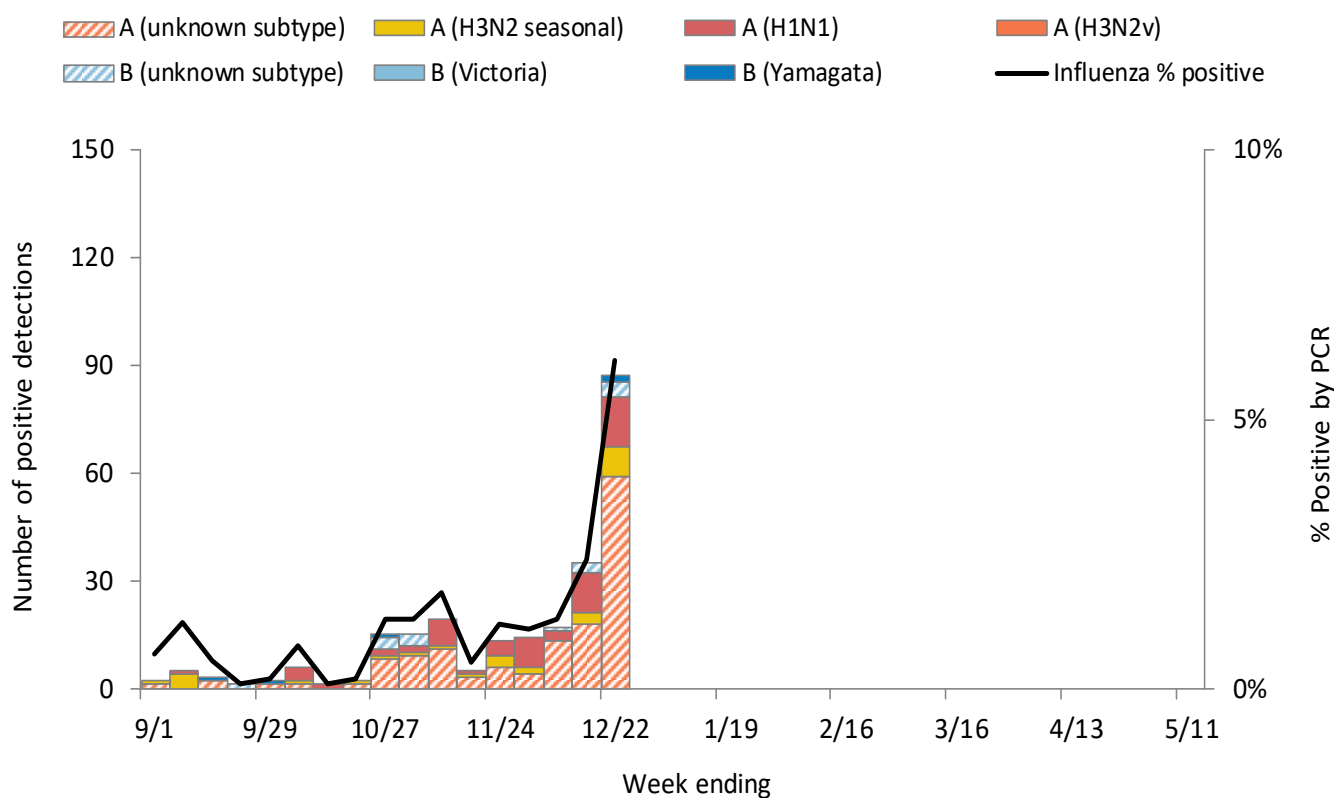
For National US influenza surveillance statistics visit: www.cdc.gov/flu/weekly/





WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Wisconsin positive influenza results and subtypes by PCR

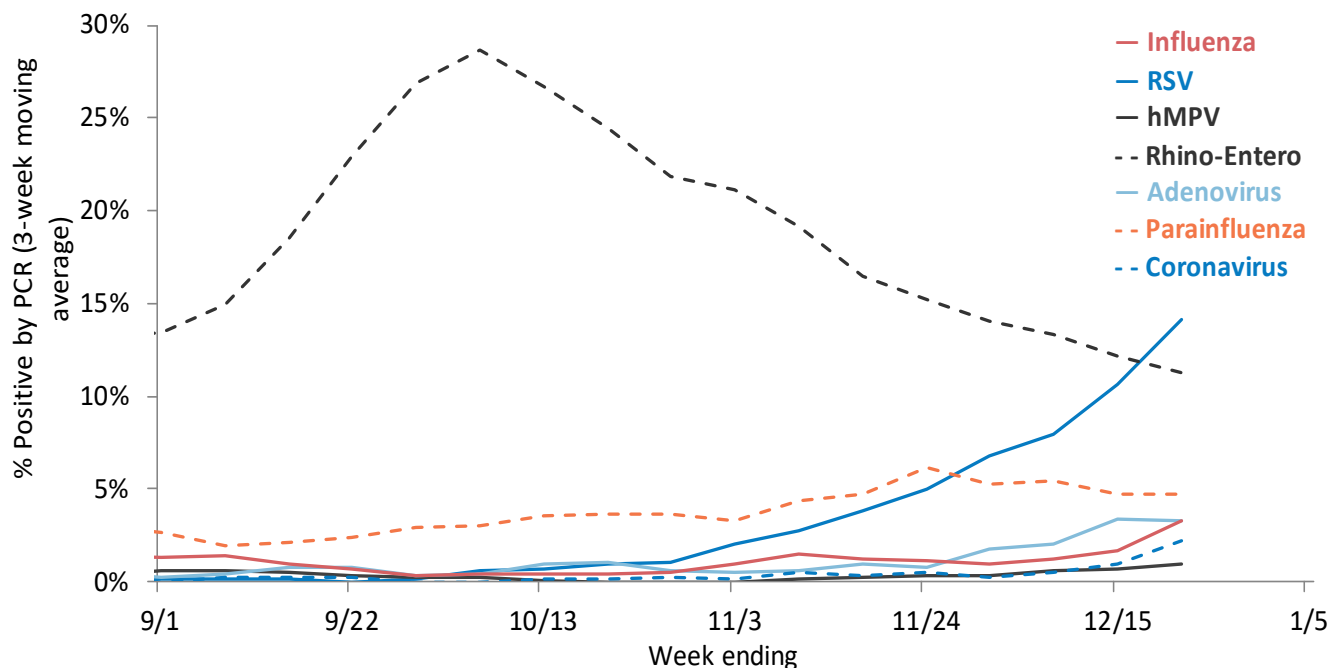


Cumulative number of positive influenza PCR tests by subtype September 1, 2018 to present

	Influenza A: 92%			Influenza B: 8%			Total
	A (2009 H1N1)	A (H3N2)	A (Unknown)	B (Victoria)	B (Yamagata)	B (Unknown)	
Total positive (n)	58	29	136	0	5	15	243
% of total positive	24%	12%	56%	0%	2%	6%	100%

WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR



Week 51: Ending on December 22, 2018

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	1419	87	6.1%	8	14	59	0	2	4

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	621	26	4.2%	1	11	9	5

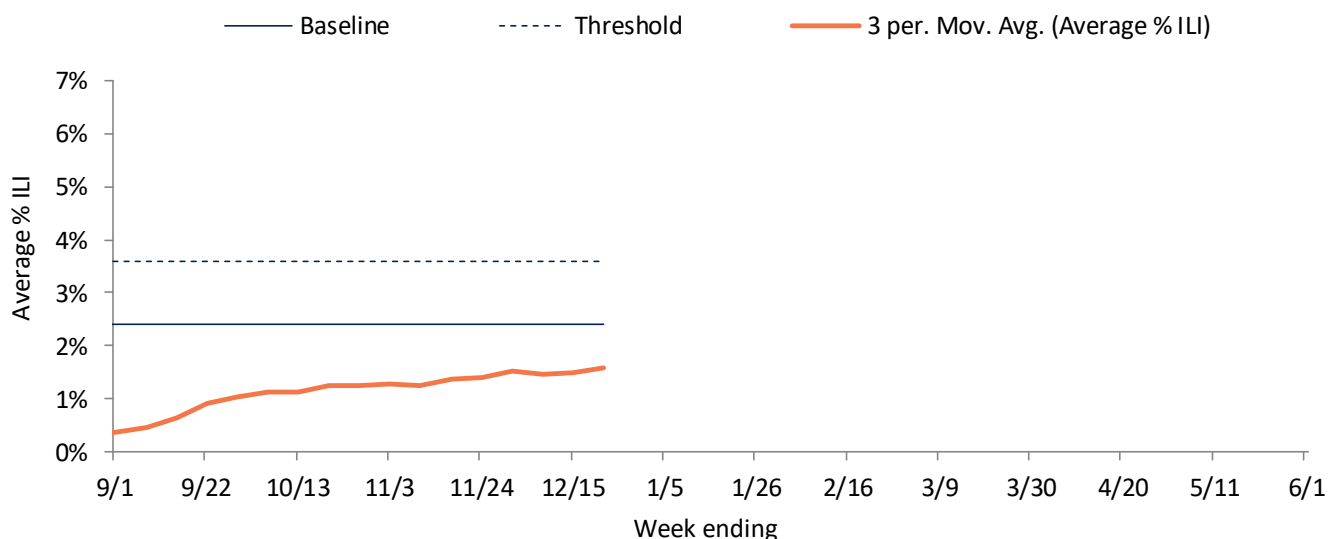
Respiratory virus	Tested	Positive (n)	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1
Coronavirus (CoV)	302	13	4.3%	3	9	1	0

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	876	168	19.2
Human metapneumovirus	646	6	0.9%
Rhino-enterovirus	602	63	10.5%
Adenovirus	302	9	3.0%

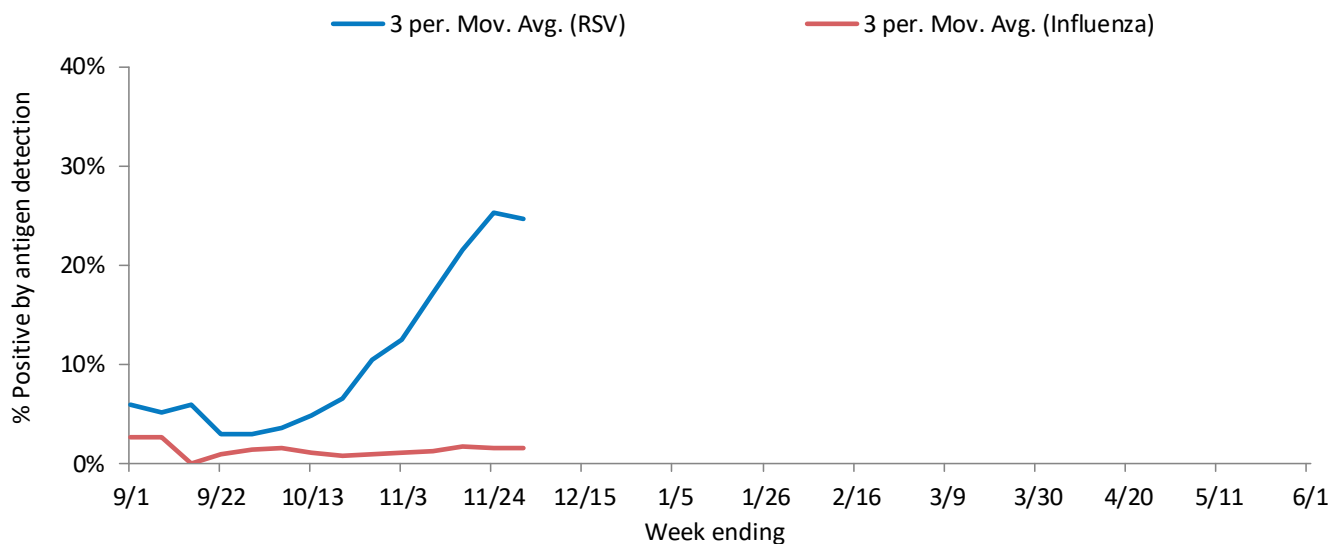
WISCONSIN STATE SUMMARY

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							
841	54	10	64	7.6%	215	80	37.2%	1.8%	2.4%	3.6%

ILI activity trend analysis

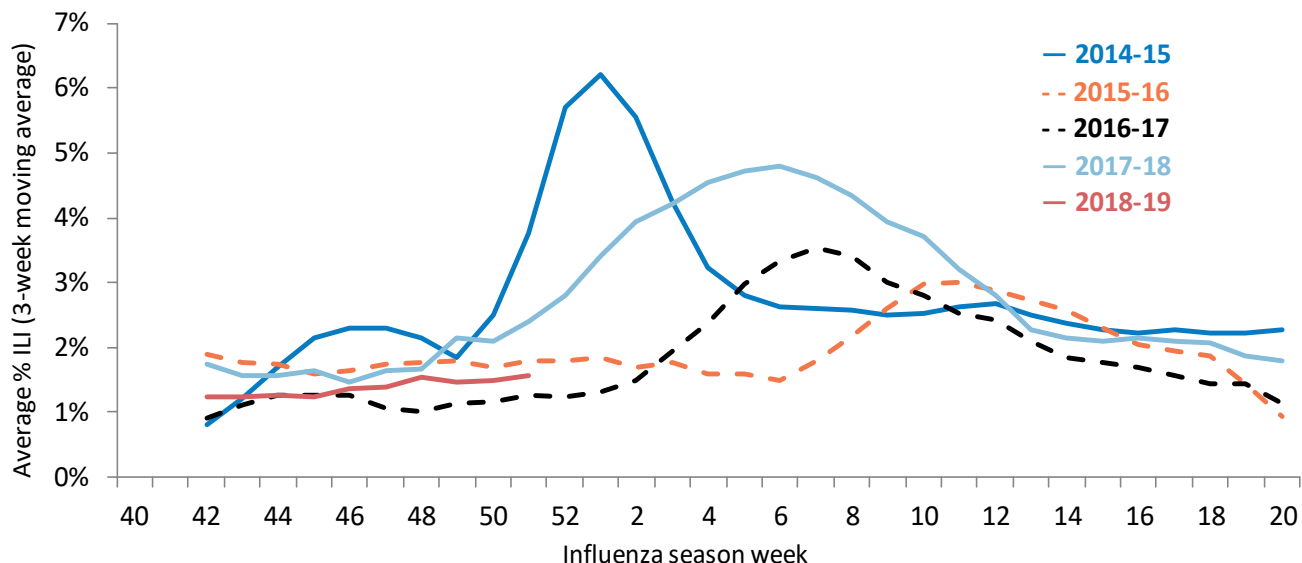


Influenza and RSV trend analysis



WISCONSIN STATE SUMMARY

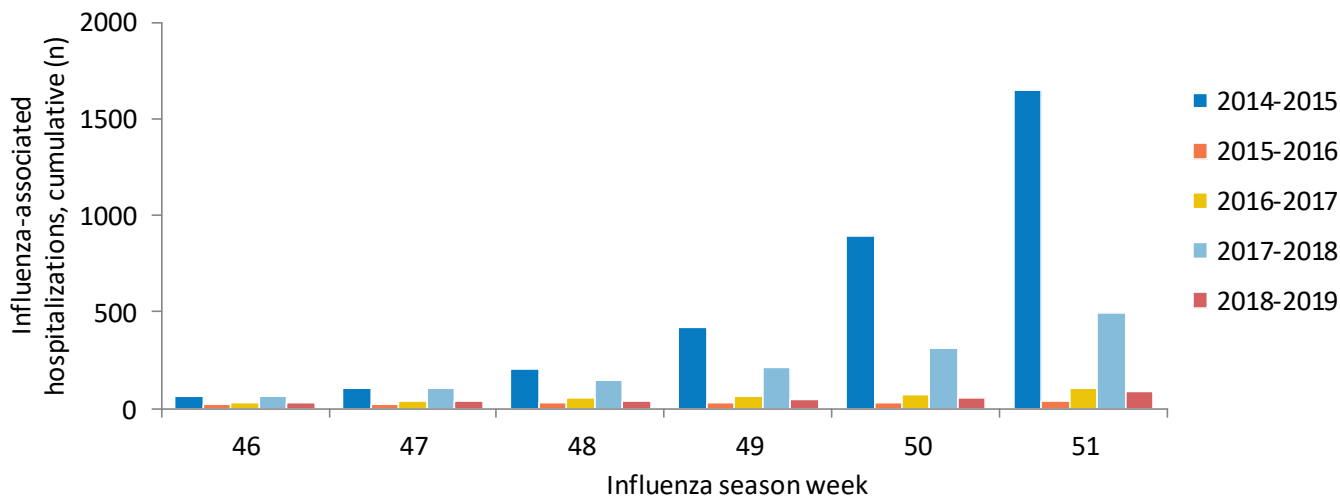
ILI activity trend analysis by influenza season, Wisconsin



Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System September 1, 2018 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	1	0	0	1	0	0	0	0	0	0
1-4	8	1	0	5	2	0	1	0	0	0
5-17	4	1	0	0	1	2	0	0	0	0
18-49	15	2	0	8	3	2	1	0	0	0
50-64	19	1	1	10	6	1	4	0	0	0
65+	39	7	3	21	8	0	9	1	0	0
Total	86	12	4	45	20	5	15	1	0	0

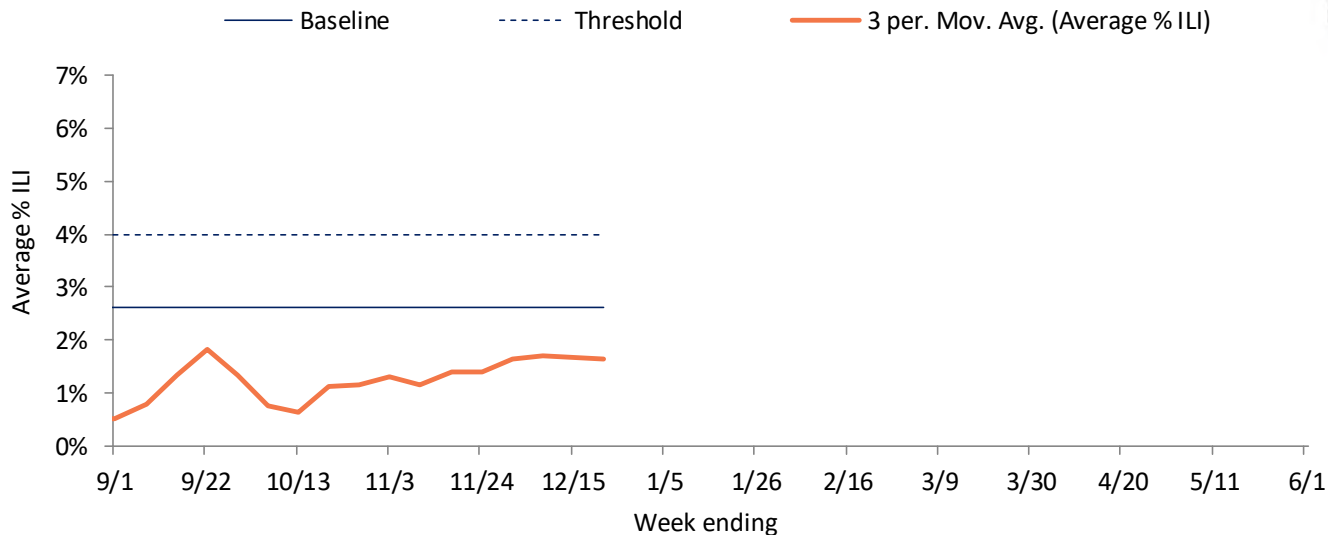
Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



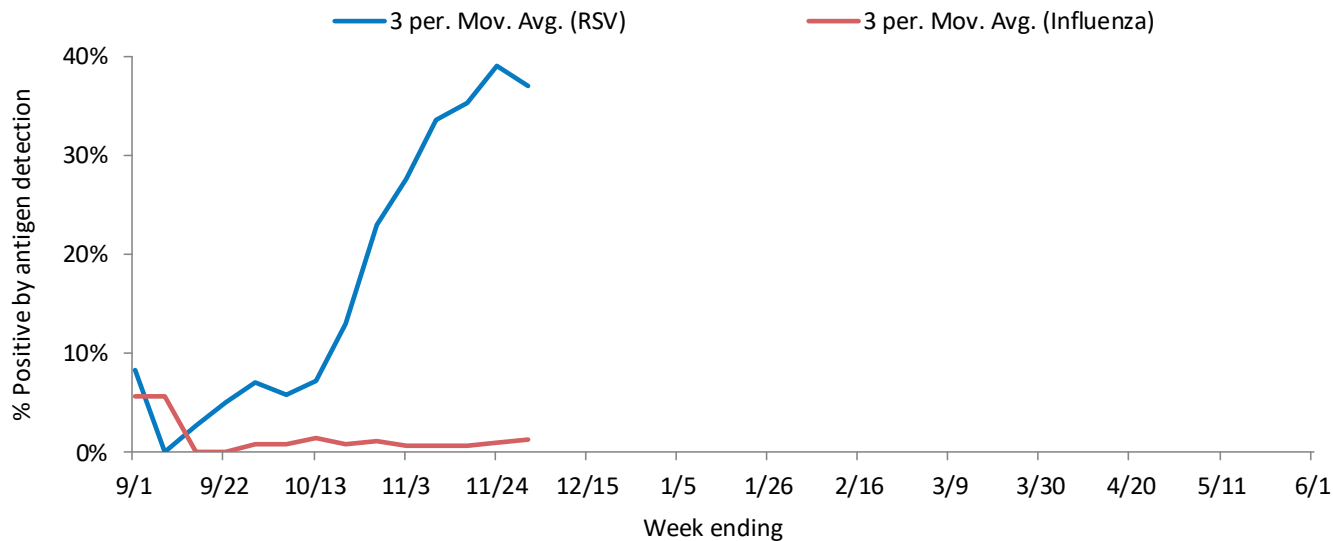
NORTHEASTERN REGION

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							
363	27	3	30	8.3%	122	48	39.3%	1.7%	2.6%	4.0%

ILI activity trend analysis



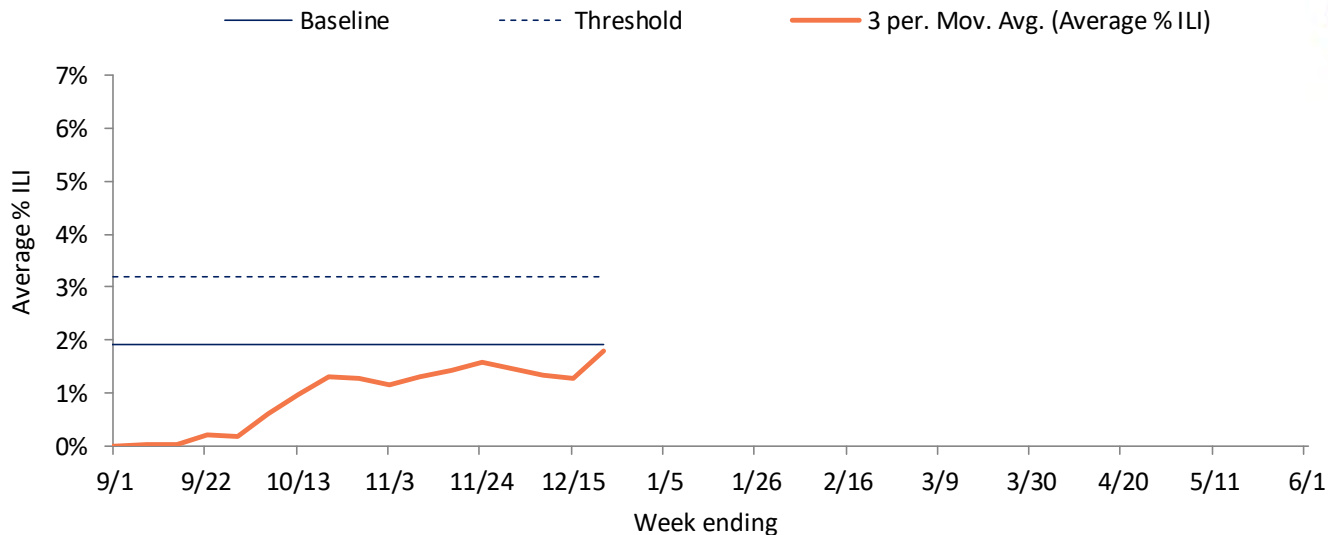
Influenza and RSV trend analysis



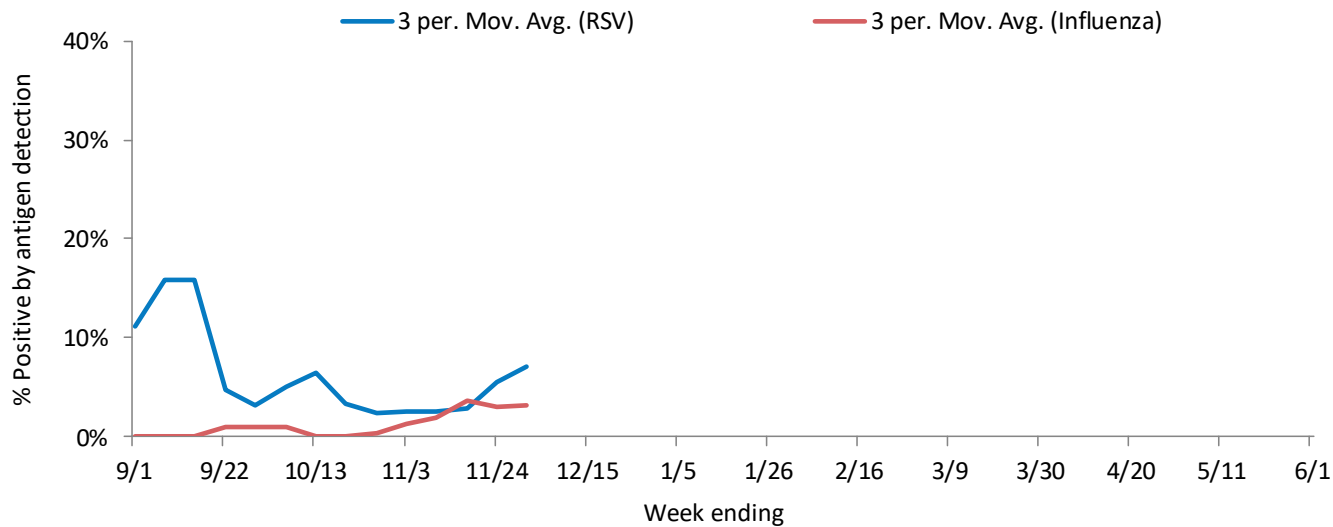
NORTHWESTERN REGION

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							
273	21	7	28	10.3%	85	31	36.5%	2.7%	1.9%	3.2%

ILI activity trend analysis



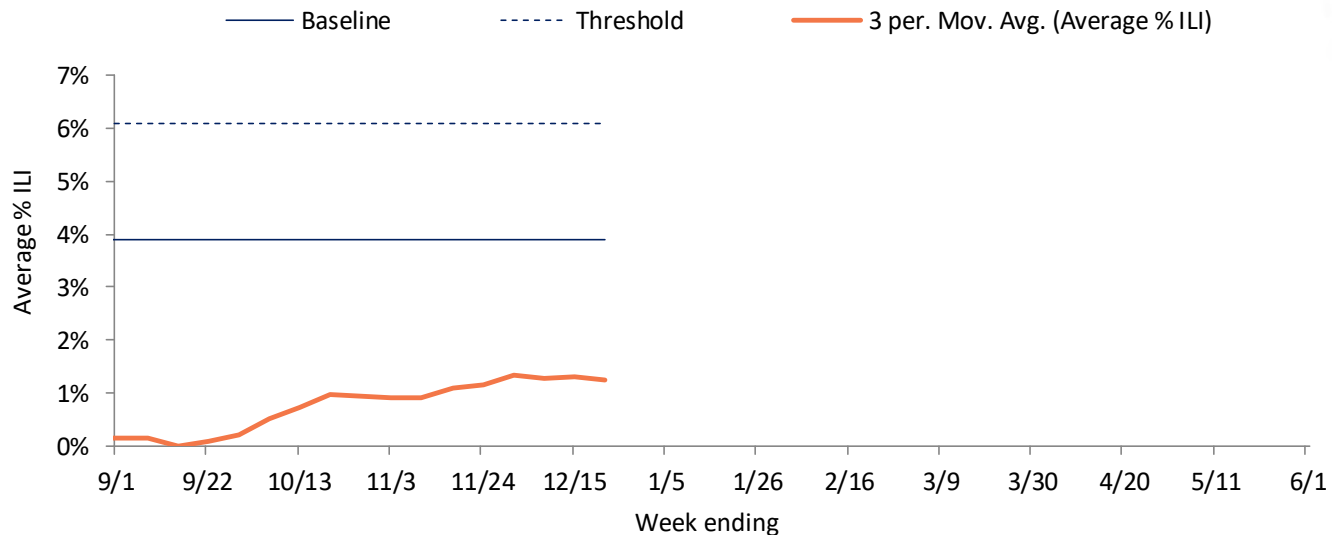
Influenza and RSV trend analysis



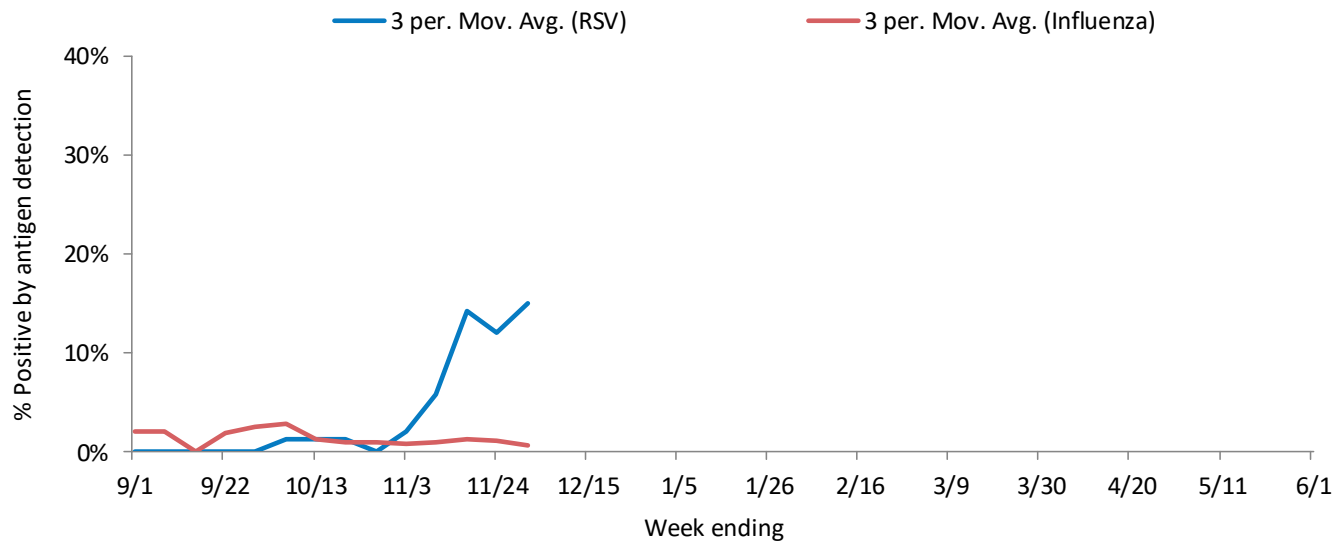
SOUTHEASTERN REGION

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							
179	6	0	6	3.4%	4	0	0.0%	1.3%	4.0%	6.1%

ILI activity trend analysis



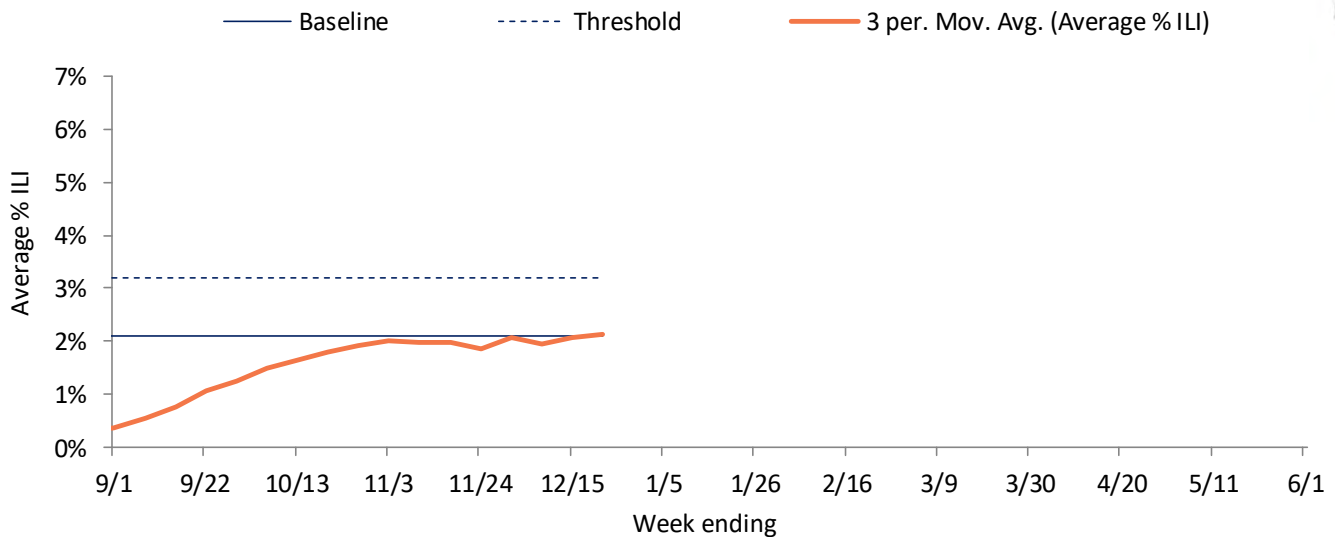
Influenza and RSV trend analysis



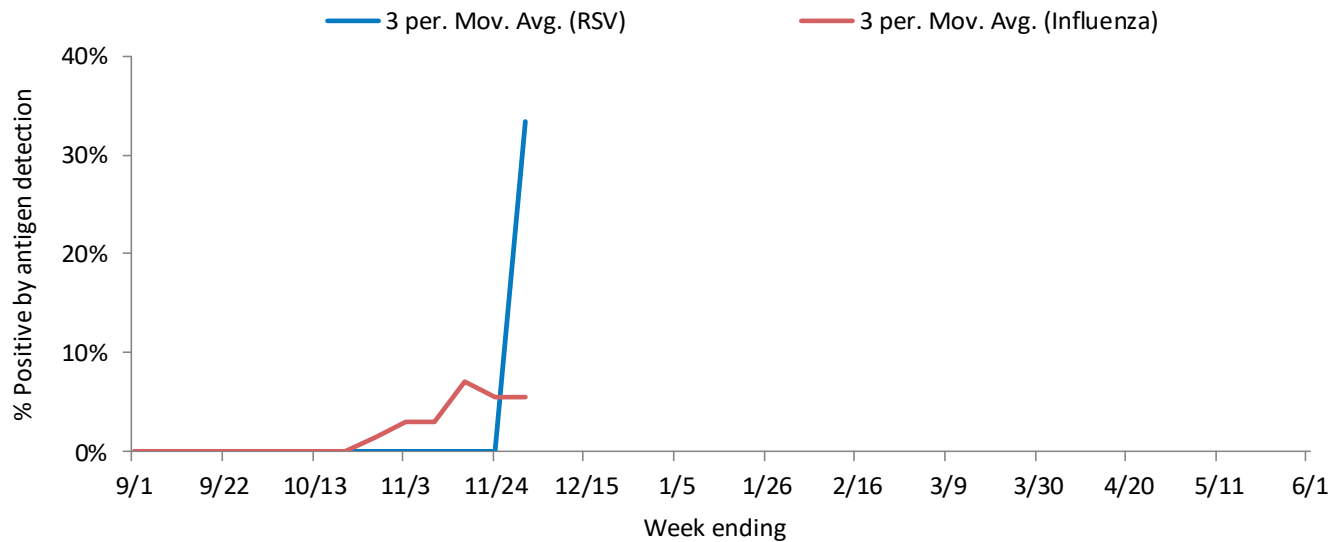
SOUTHERN REGION

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							
26	0	0	0	0.0%	4	1	25.0%	2.5%	2.1%	3.2%

ILI activity trend analysis

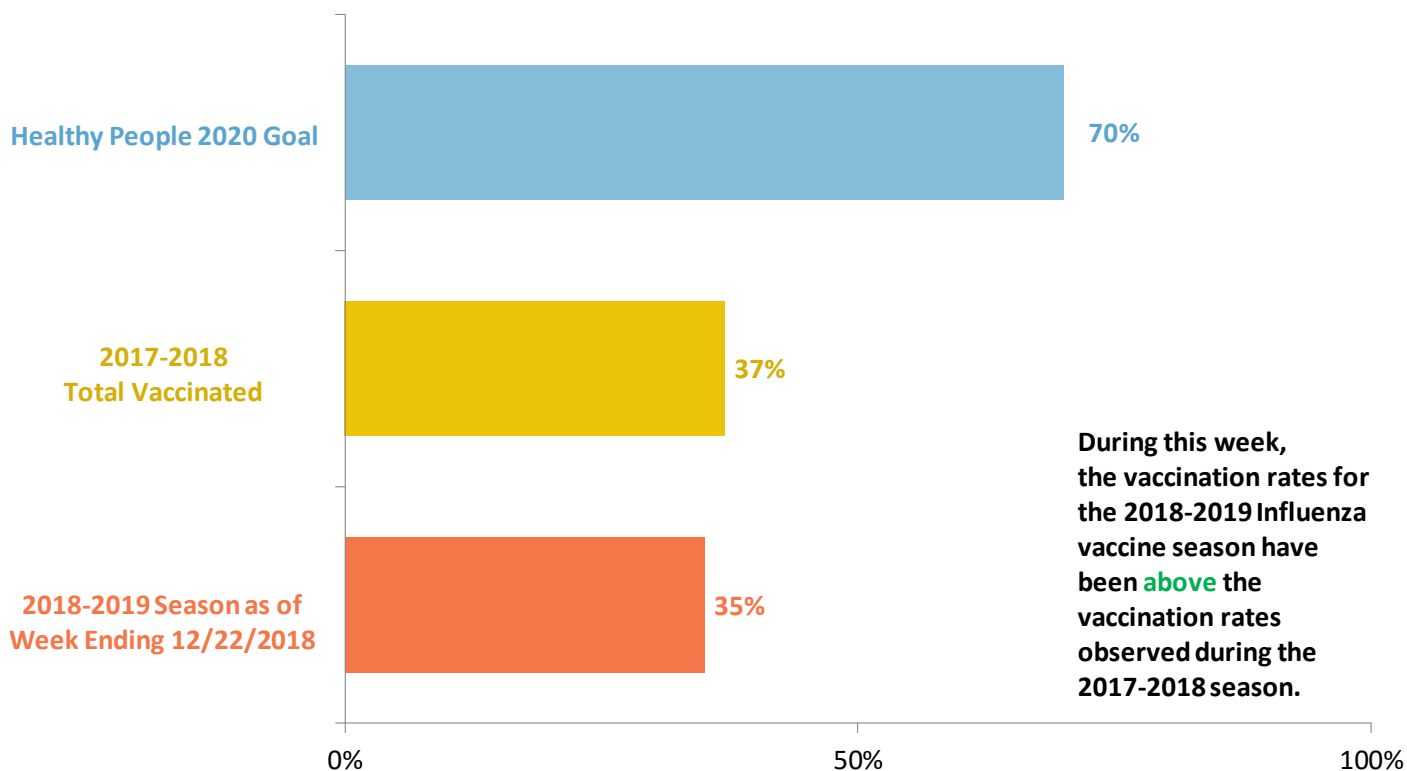


Influenza and RSV trend analysis



SEASONAL INFLUENZA VACCINATION

Cumulative percentage of Wisconsin residents who received 1 or more doses of influenza vaccine, 2018-2019 influenza season



During this week, the vaccination rates for the 2018-2019 influenza vaccine season have been **above** the vaccination rates observed during the 2017-2018 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 2018-2019:

The **trivalent** vaccines for use in the 2018-2019 influenza season contain the following:

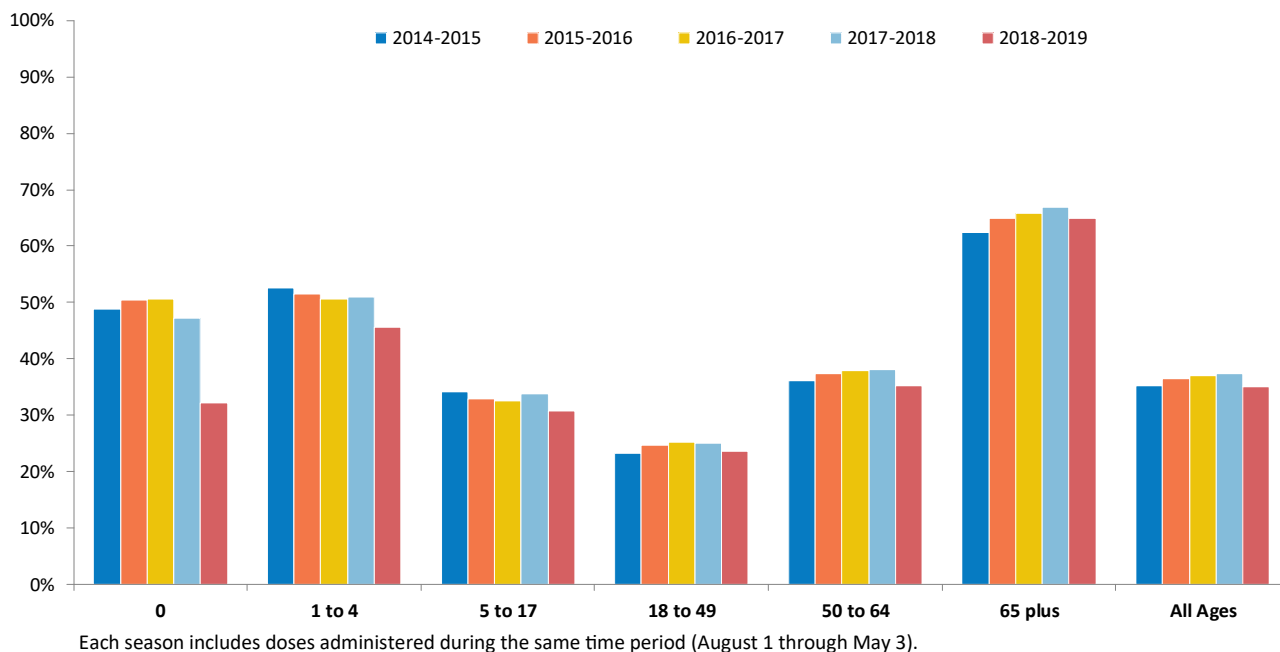
- A/Michigan/45/2015 (H1N1)pdm09-like virus
- A/Singapore/INFIMH-16-0019/2016 A(H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus (updated)

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

- 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



Percentage of Wisconsin residents who received one or more doses of influenza vaccine, by race and ethnicity and region, 2018-2019 influenza season

