RESPIRATORY VIRUS SURVEILLANCE REPORT

Week Ending November 10, 2018

Wisconsin Department of Health Services | Division of Public Health

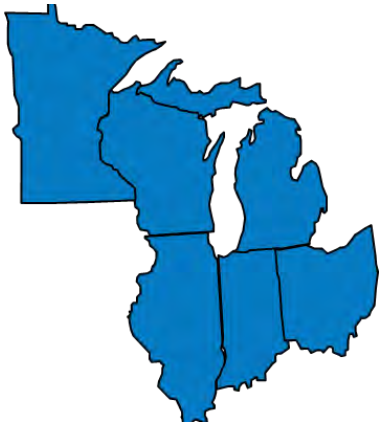
Bureau of Communicable Diseases | Communicable Diseases Epidemiology Section

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

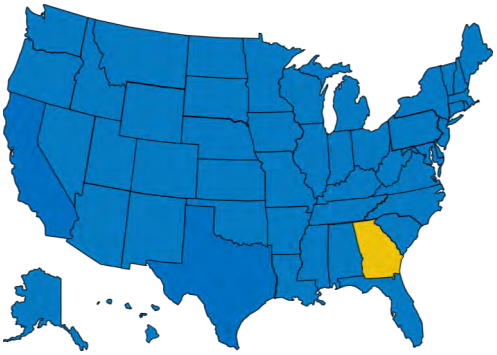
INFLUENZA LIKE ILLNESS (ILI) ACTIVITY

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:** Rhinovirus/enterovirus is the predominant virus this week.

CURRENT ALERTS:

- **Parainfluenza and RSV activity are increasing statewide.**

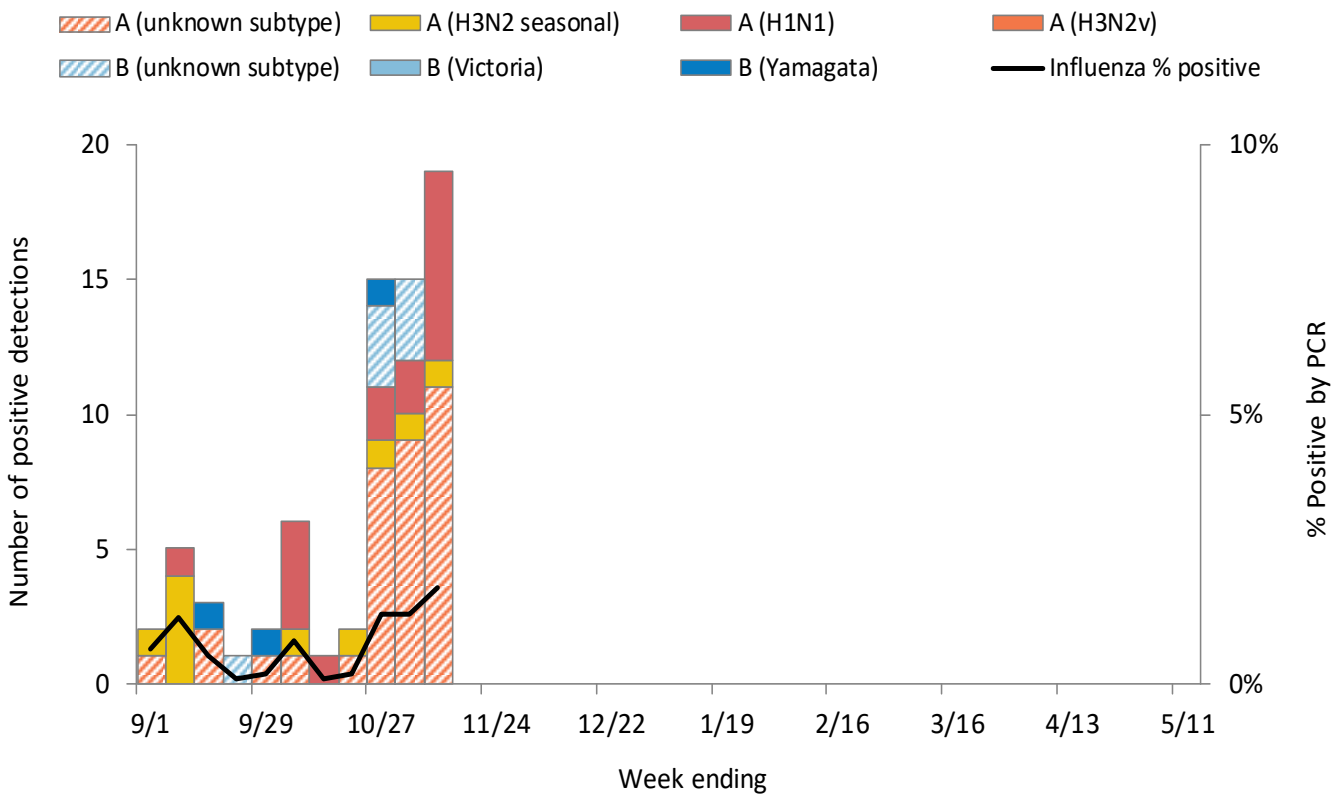
INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

	Week 45, 2018	October 1, 2018 to present
Wisconsin	0	0
Nationwide	0	2

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



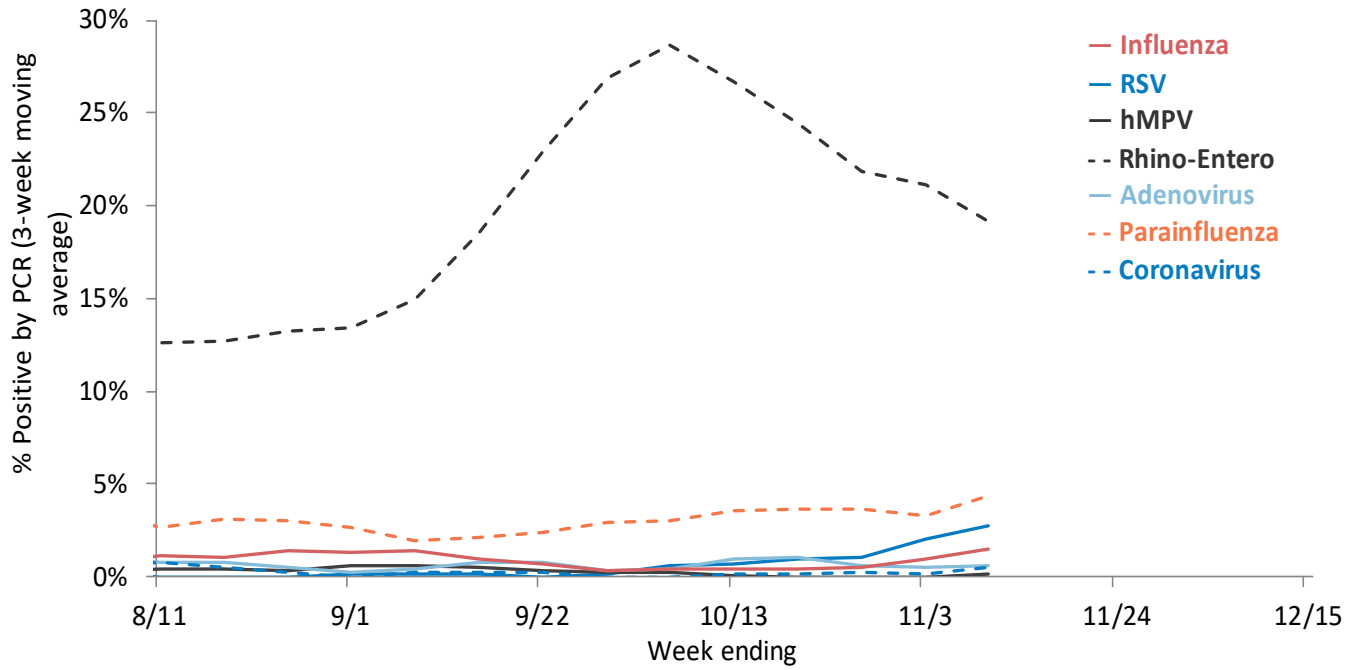
Cumulative number of positive influenza PCR tests by subtype

September 1, 2018 to present

	Influenza A: 86%			Influenza B: 14%			Total
	A (2009 H1N1)	A (H3N2)	A (Unknown)	B (Victoria)	B (Yamagata)	B (Unknown)	
Total positive (n)	17	12	33	0	3	7	**72**
% of total positive	24%	17%	46%	0%	4%	10%	**100%**

WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR



Week ending on November 10, 2018

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	1044	19	1.8%	1	9	11	0	0	0

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	500	33	6.6%	0	23	3	7

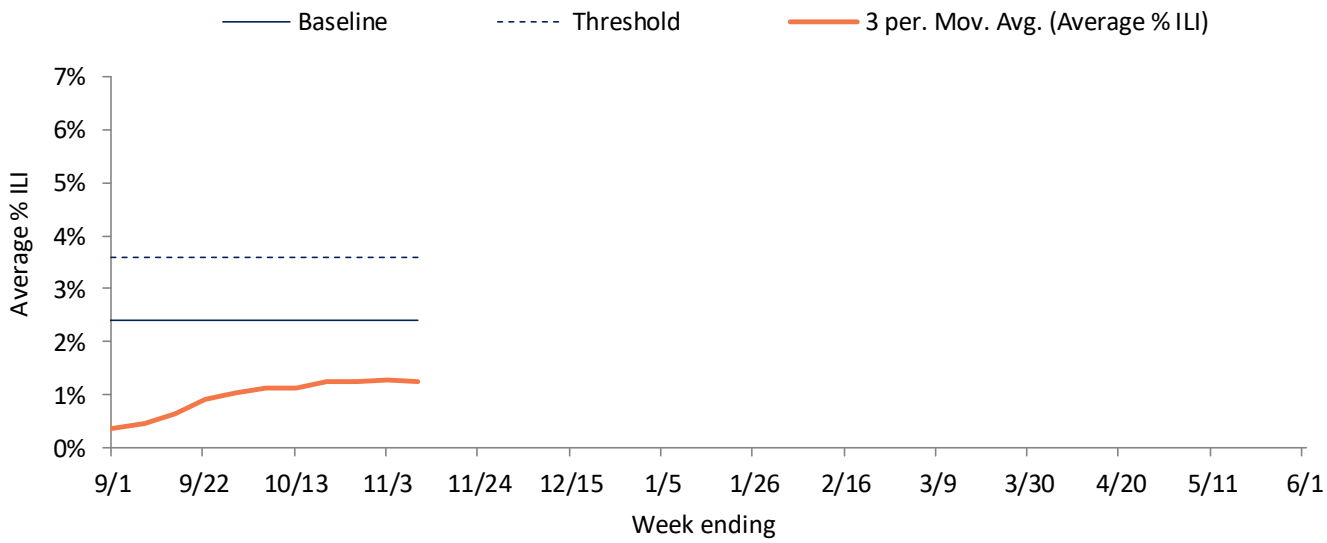
Respiratory virus	Tested	Positive (n)	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1
Coronavirus (CoV)	199	2	1.0%	0	2	0	0

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	621	20	3.2%
Human metapneumovirus	516	2	0.4%
Rhino-enterovirus	482	80	16.6%
Adenovirus	199	1	0.5%

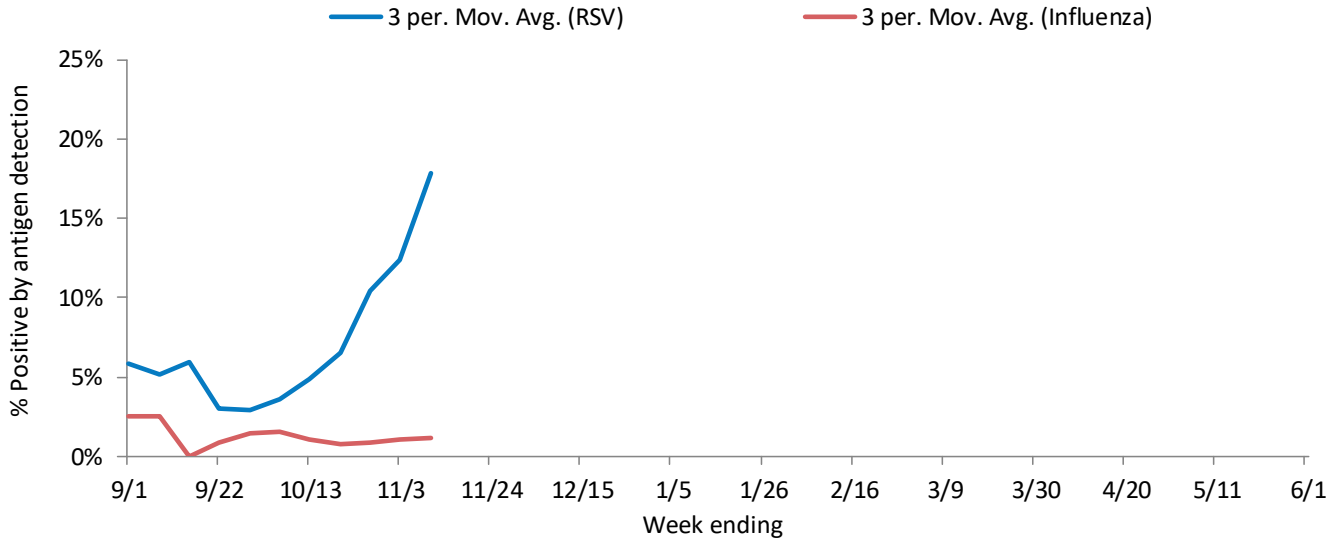
WISCONSIN STATE SUMMARY

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							
428	4	0	4	0.9%	69	18	26.1%	1.2%	2.4%	3.6%

ILI activity trend analysis

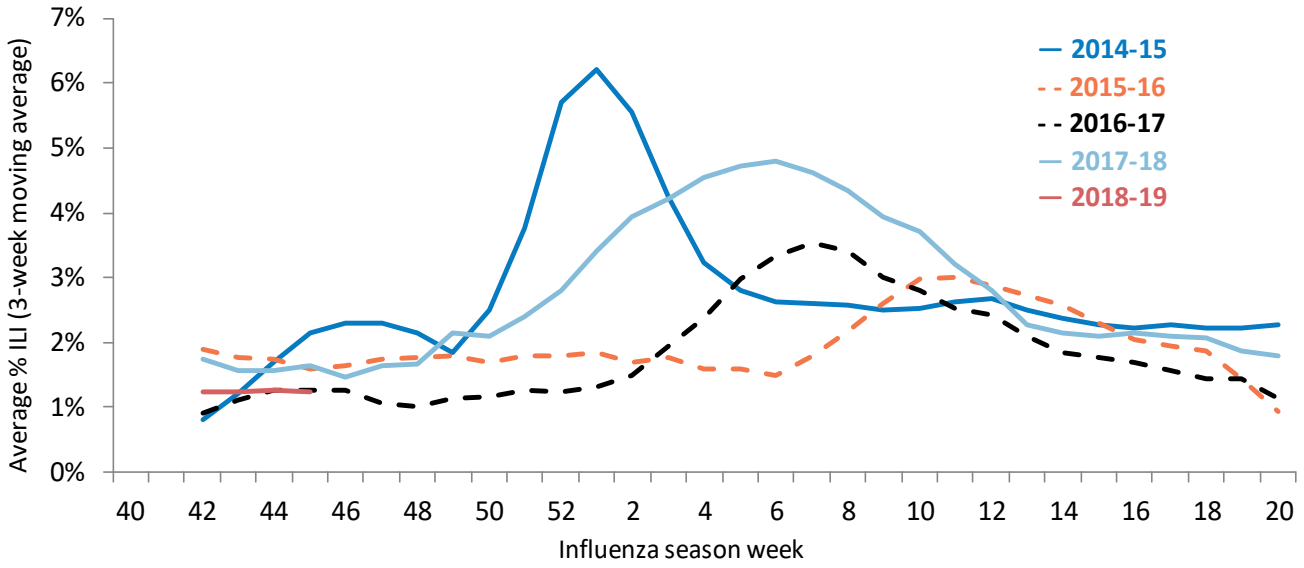


Influenza and RSV trend analysis



WISCONSIN STATE SUMMARY

ILI activity trend analysis by influenza season, Wisconsin

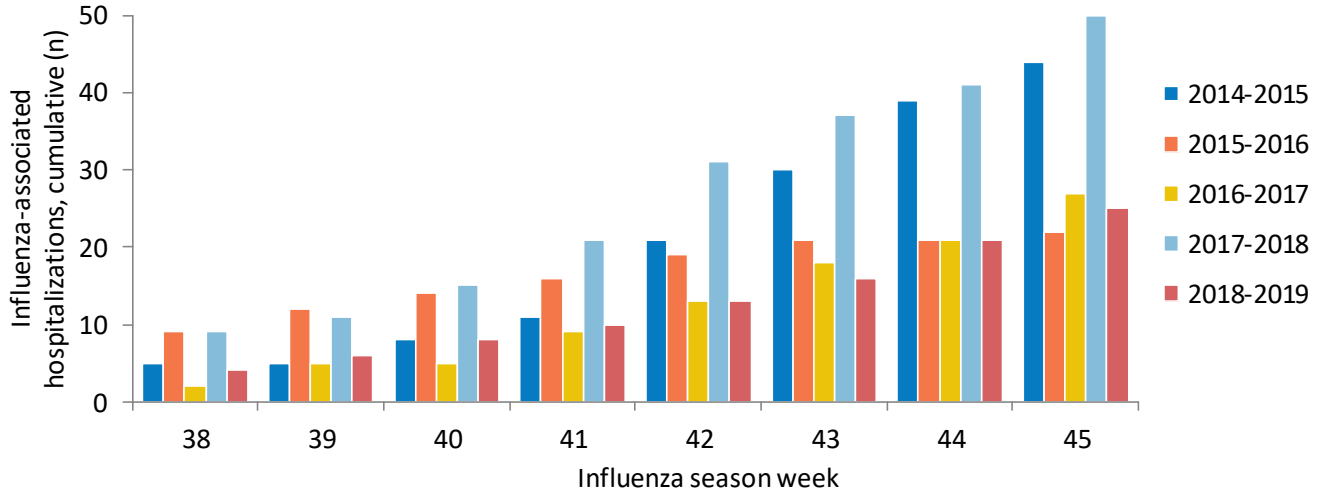


Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System

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	1	0	0	0	1	0	0	0	0	0
5-17	0	0	0	0	0	0	0	0	0	0
18-49	8	1	0	5	2	0	1	0	0	0
50-64	4	0	0	1	3	0	1	0	0	0
65+	11	1	1	6	3	0	3	1	0	0
Total	**25**	**2**	**1**	**13**	**9**	**0**	**5**	**1**	**0**	**0**

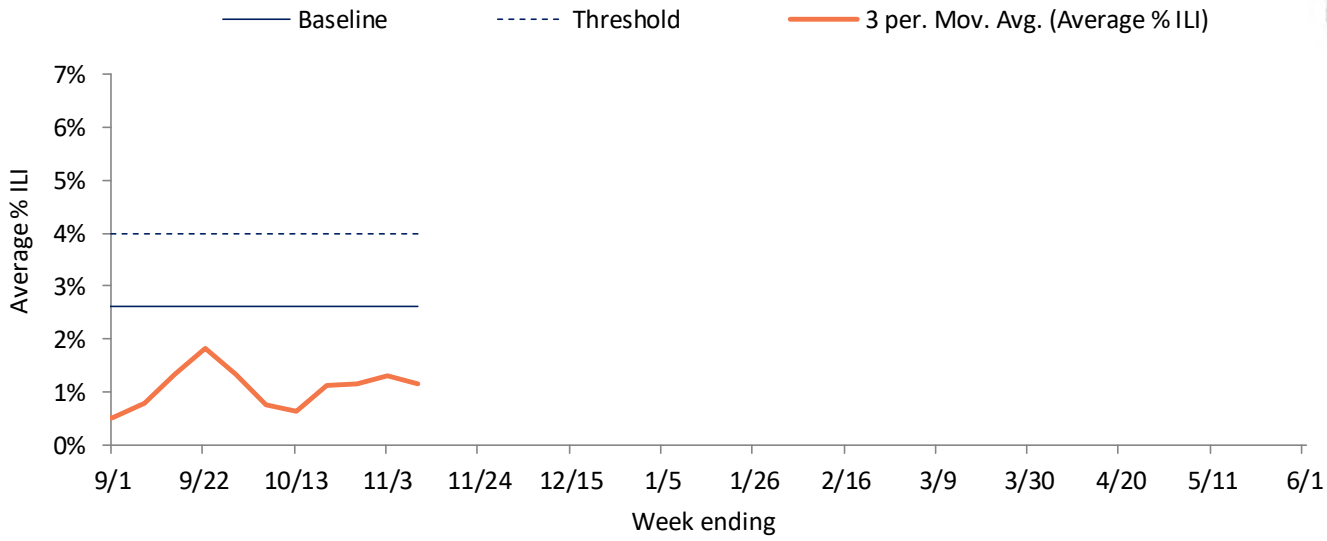
Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



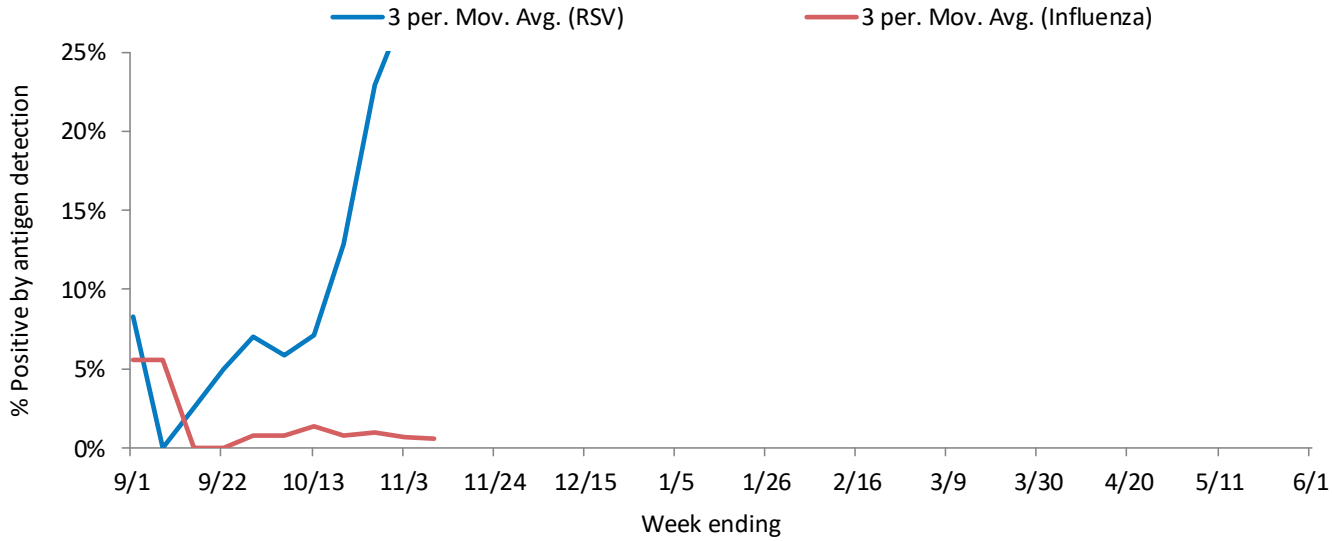
NORTHEASTERN REGION

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							
213	1	0	1	0.5%	41	17	41.5%	1.1%	2.6%	4.0%

ILI activity trend analysis



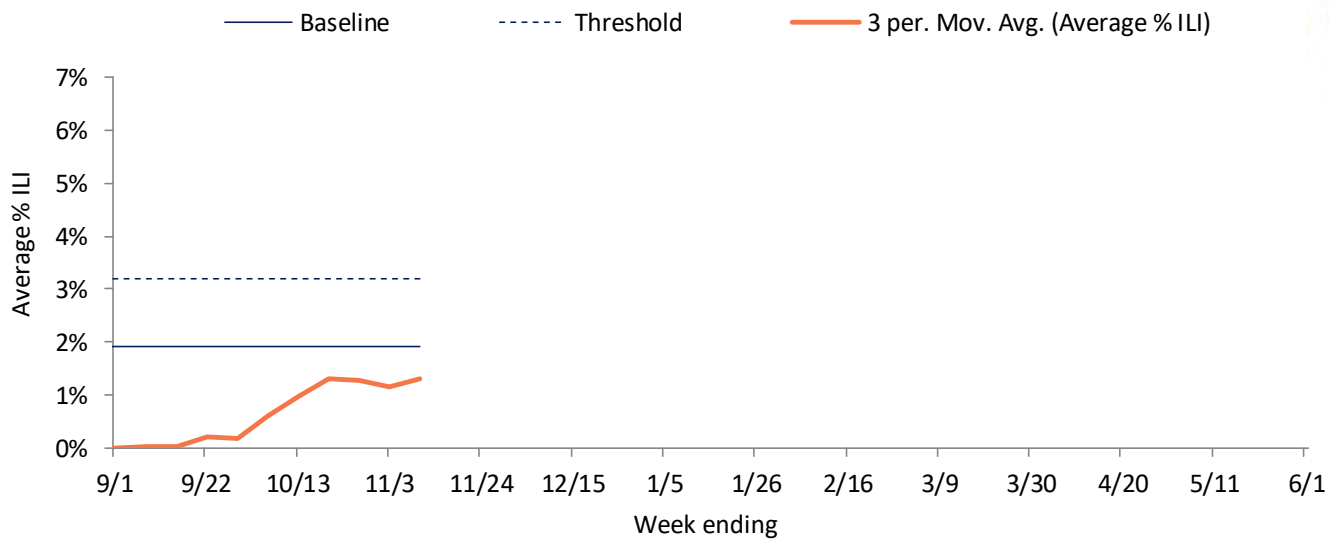
Influenza and RSV trend analysis



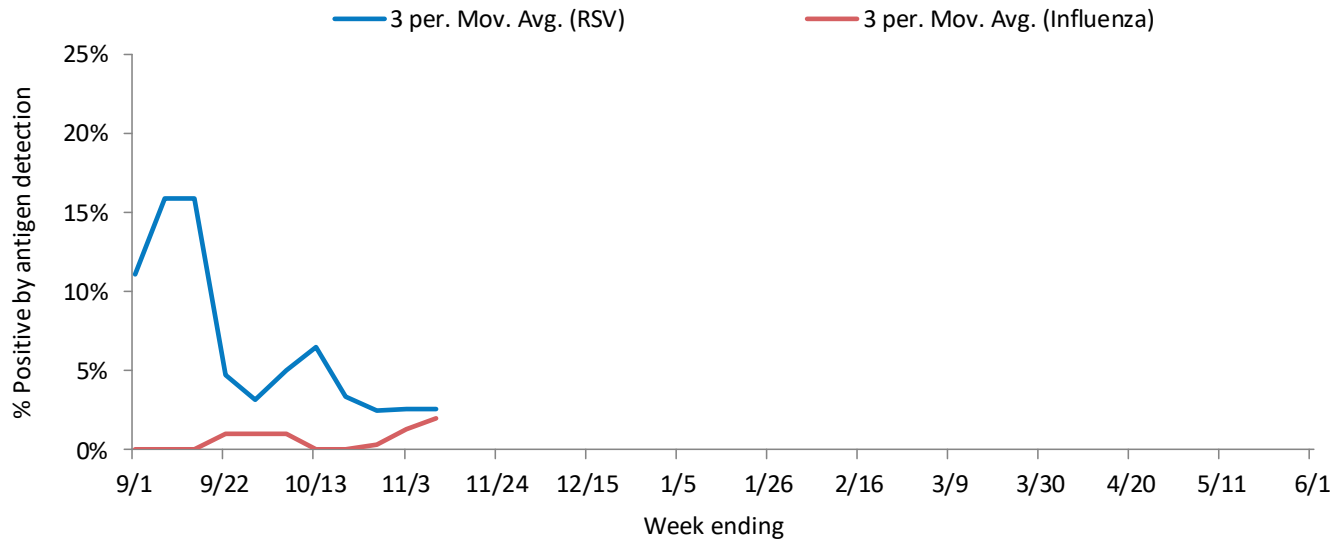
NORTHWESTERN REGION

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							
100	2	0	2	2.0%	19	0	0.0%	1.4%	1.9%	3.2%

ILI activity trend analysis



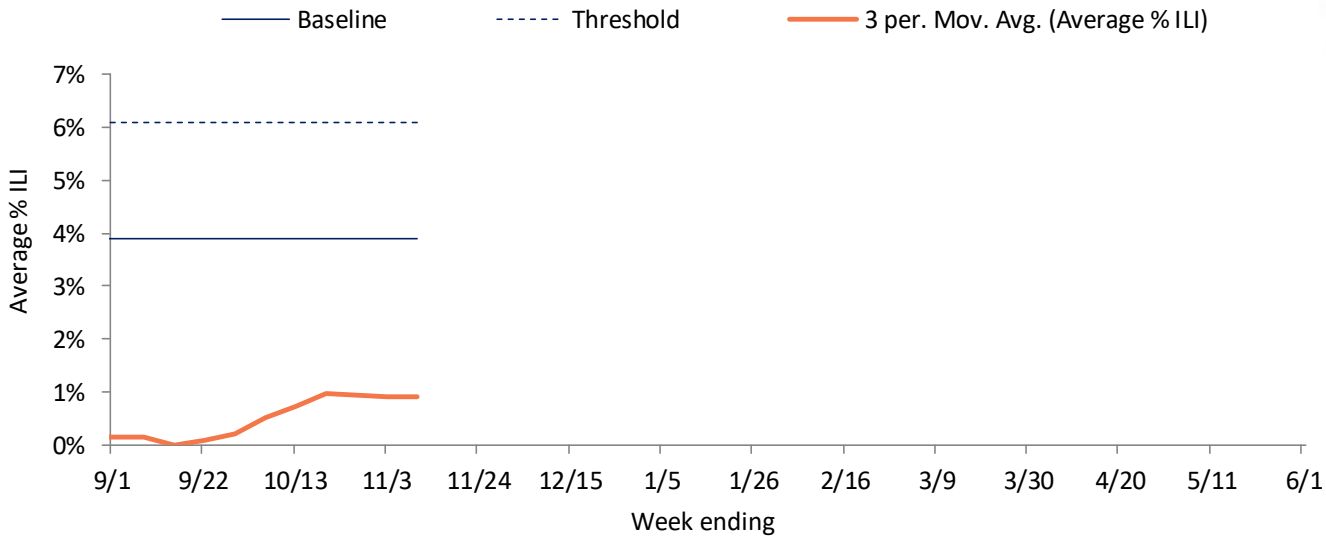
Influenza and RSV trend analysis



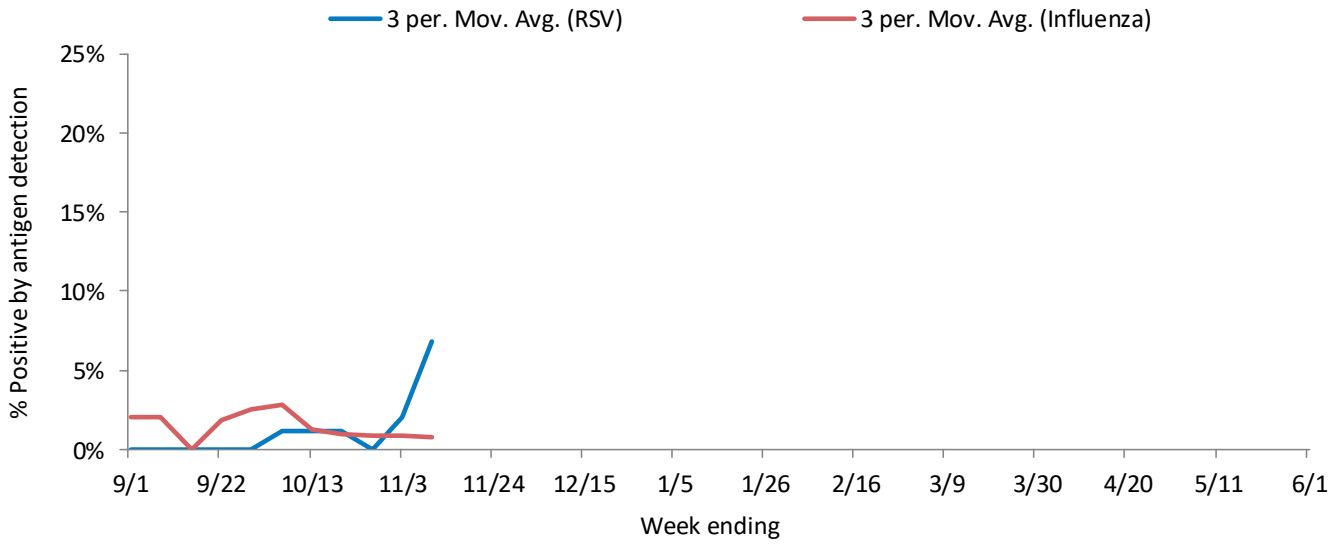
SOUTHEASTERN REGION

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							
100	1	0	1	1.0%	7	1	14.3%	1.0%	4.0%	6.1%

ILI activity trend analysis



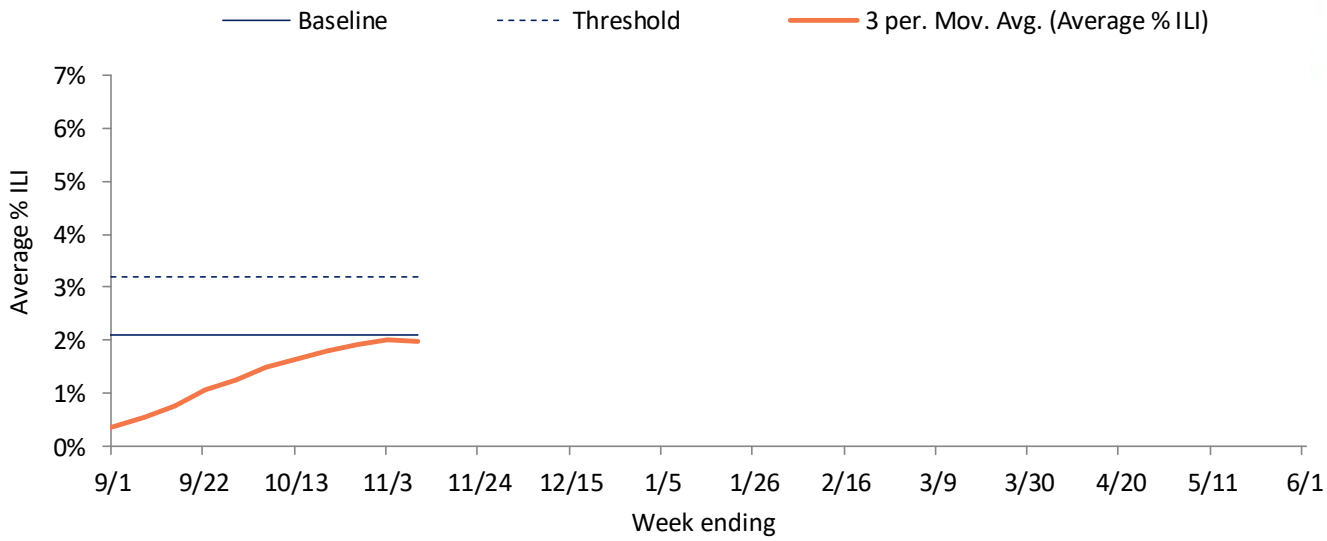
Influenza and RSV trend analysis



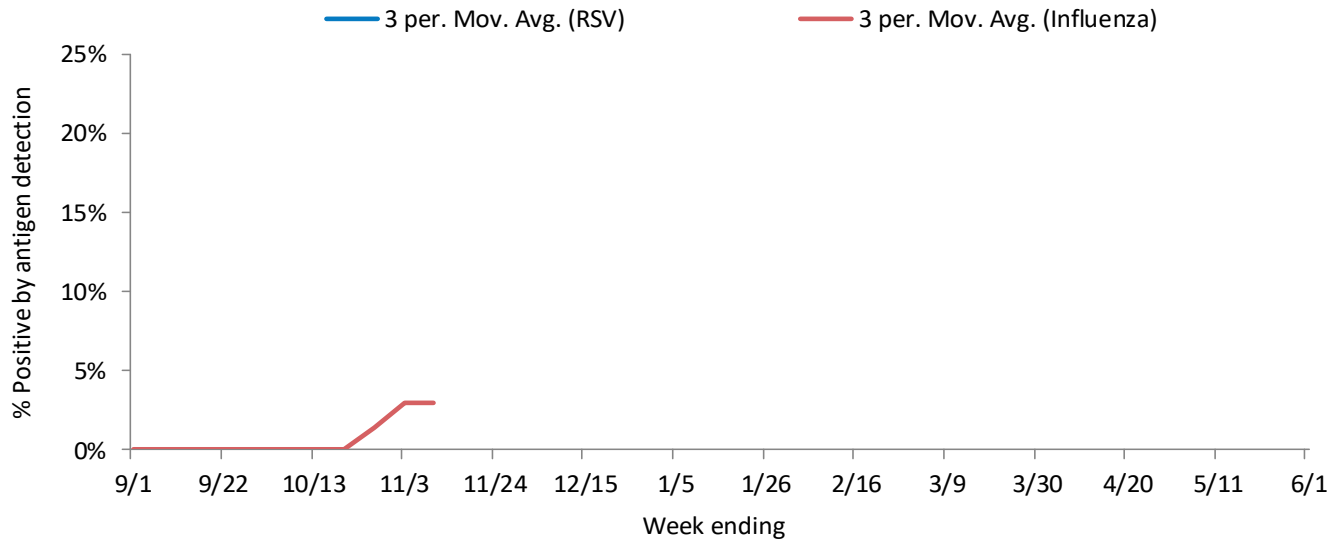
SOUTHERN REGION

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							
15	0	0	0	0.0%	2	0	0.0%	1.7%	2.1%	3.2%

ILI activity trend analysis

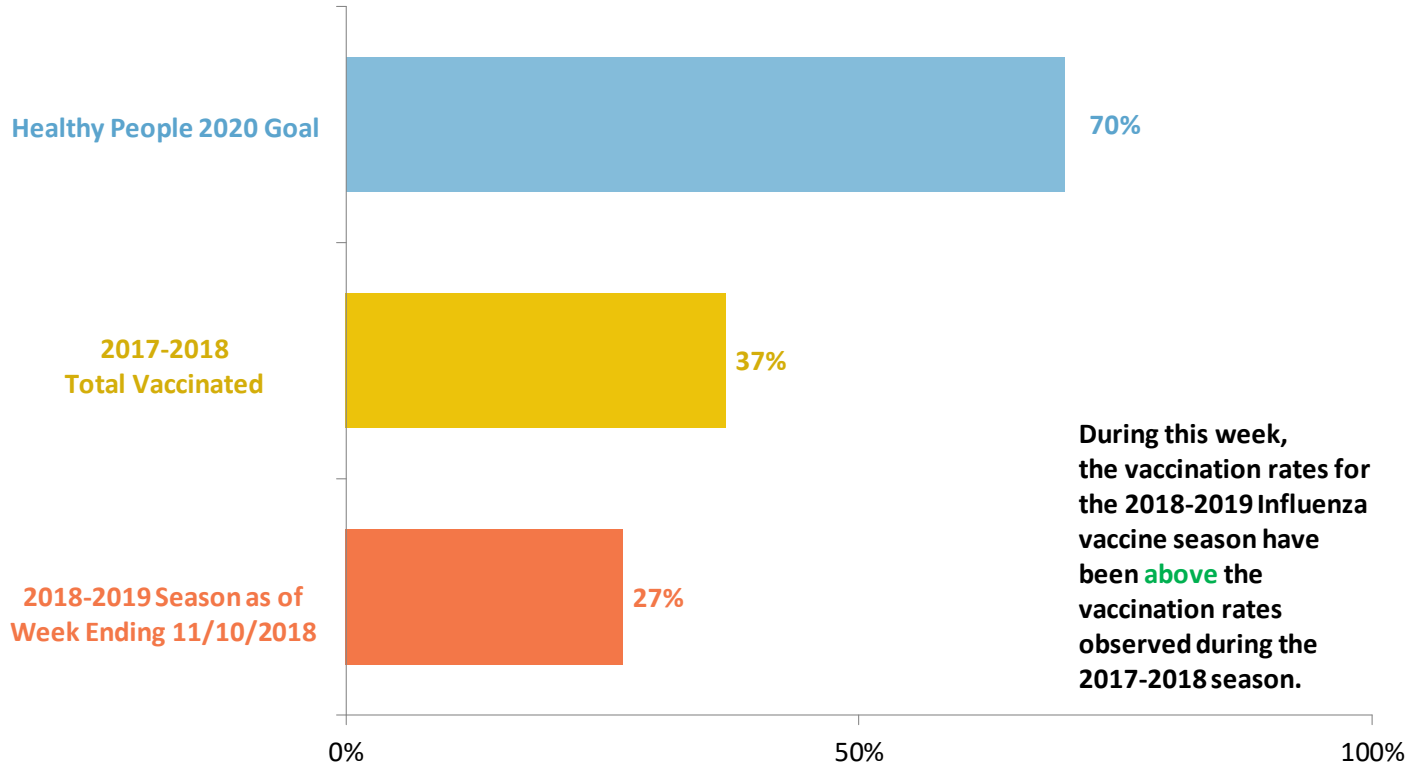


Influenza and RSV trend analysis



SEASONAL INFLUENZA VACCINATION

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



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:

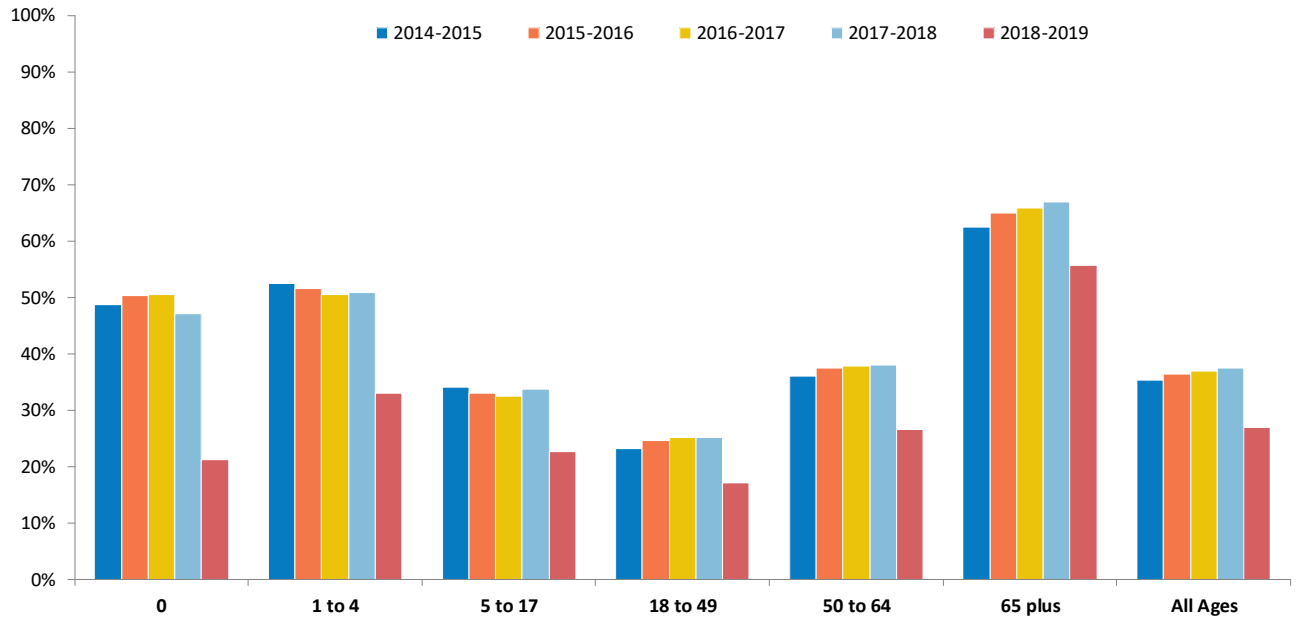
- A/Michigan/45/2015 (H1N1)pdm09-like virus
- A/Singapore/INFIMH-16-0019/2016 A(H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus (updated)

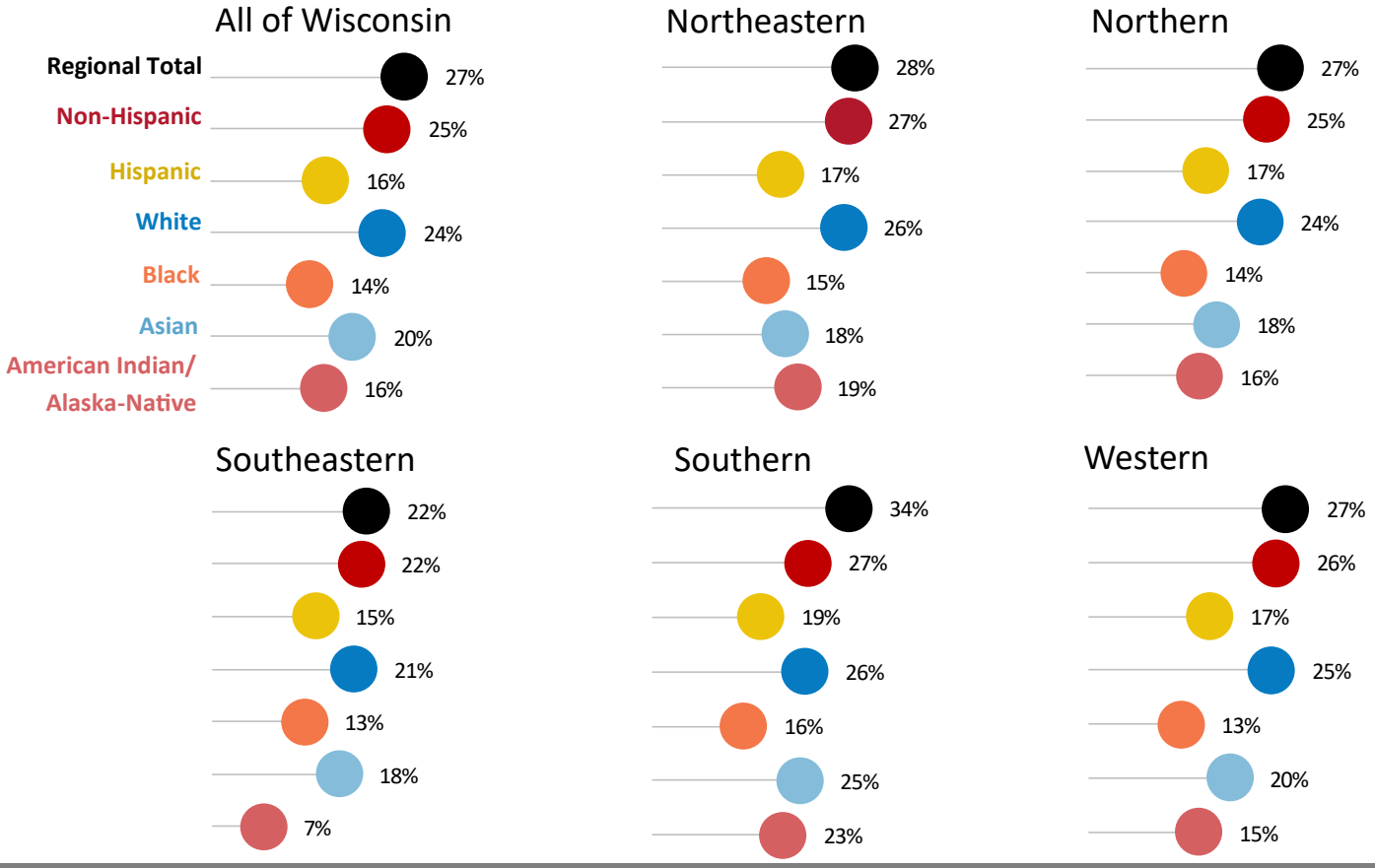
It is recommended that **quadrivalent** vaccines containing two influenza B viruses contain the above three viruses and:

- 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



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, 2018-2019 influenza season