



RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 1: Ending January 5, 2019

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

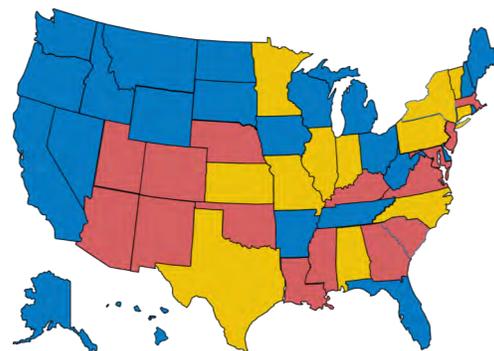
STATE OF WISCONSIN



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.

CURRENT ALERTS:

- An influenza/pneumonia mortality page has been added to this report (page 3)
- Influenza-associated hospitalizations are increasing. 72 flu-associate hospitalizations were reported this week

INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

	Week 1, 2019	October 1, 2018 to present
Wisconsin	0	0
Nationwide	3	16



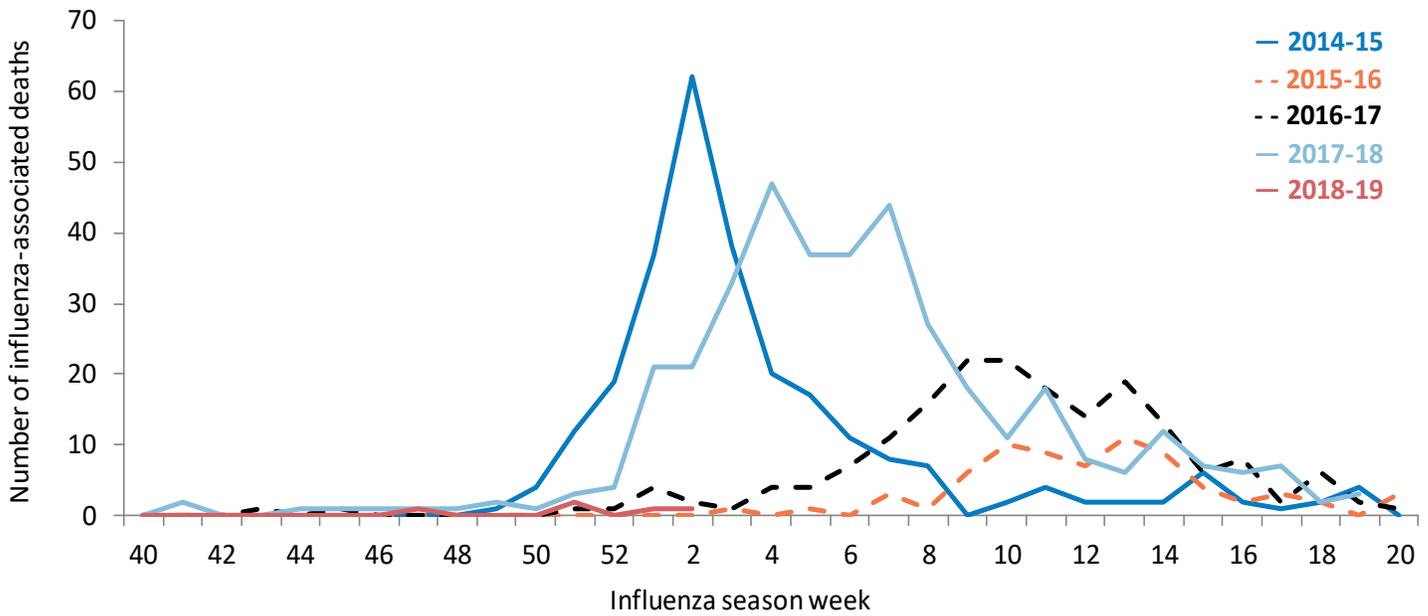
For National US influenza surveillance statistics visit: www.cdc.gov/flu/weekly/



INFLUENZA AND PNEUMONIA-ASSOCIATED MORTALITY

Influenza and Pneumonia Deaths, Wisconsin

Influenza-associated deaths by week and influenza season, Wisconsin



Influenza and pneumonia-associated deaths by age group, 2018-2019 season

September 30, 2018 to January 5, 2019

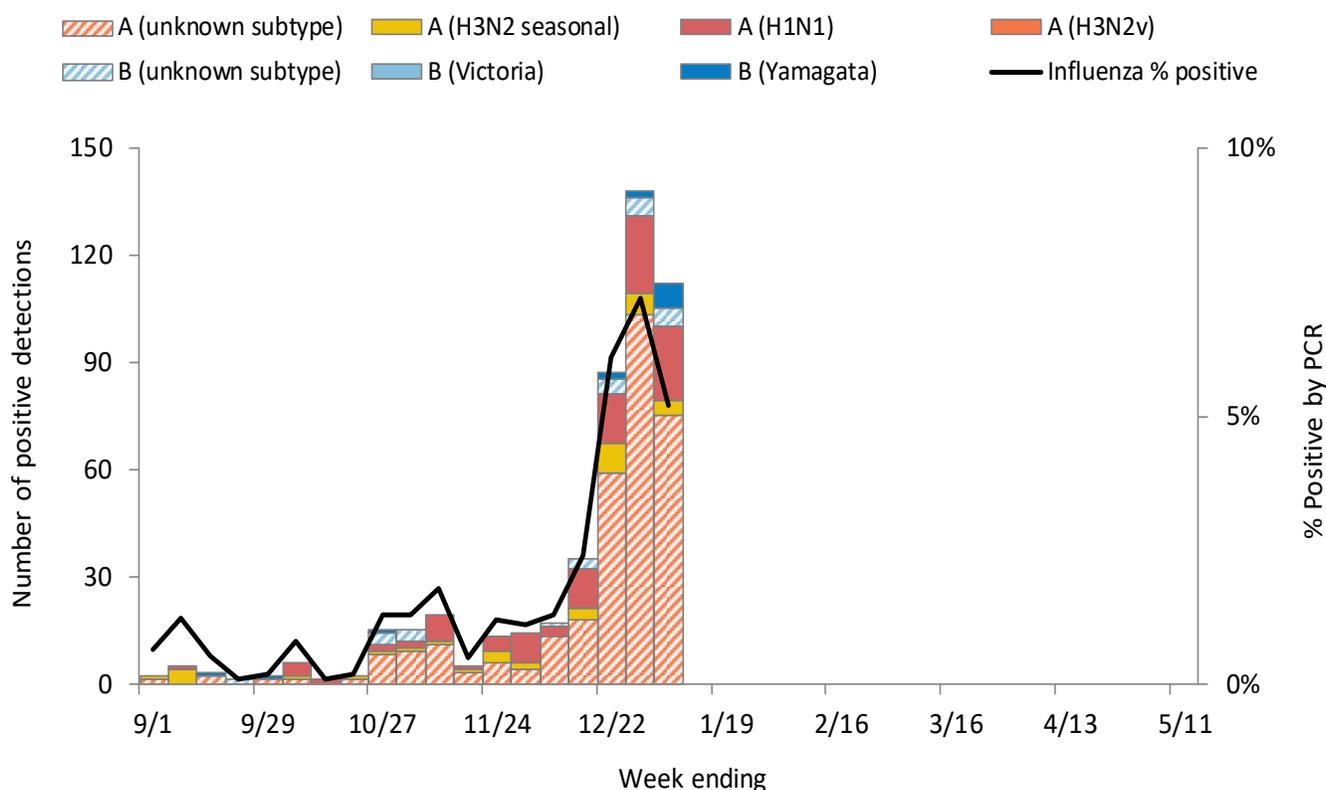
Age group (years)	Week 1, 2019			Cumulative, 2018-2019 season		
	Influenza	Pneumonia (P)	Percent I+P of all deaths	Influenza	Pneumonia (P)	Percent I+P of all deaths
0-4	0	0	0%	0	1	1.0%
5-17	0	0	0%	0	0	0%
18-49	0	2	8.0%	0	18	2.1%
50-64	0	8	11.0%	0	73	3.5%
65+	1	53	10.4%	4	629	5.6%
All ages	1	63	10.3%	4	721	5.0%

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



WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Wisconsin positive influenza results and subtypes by PCR

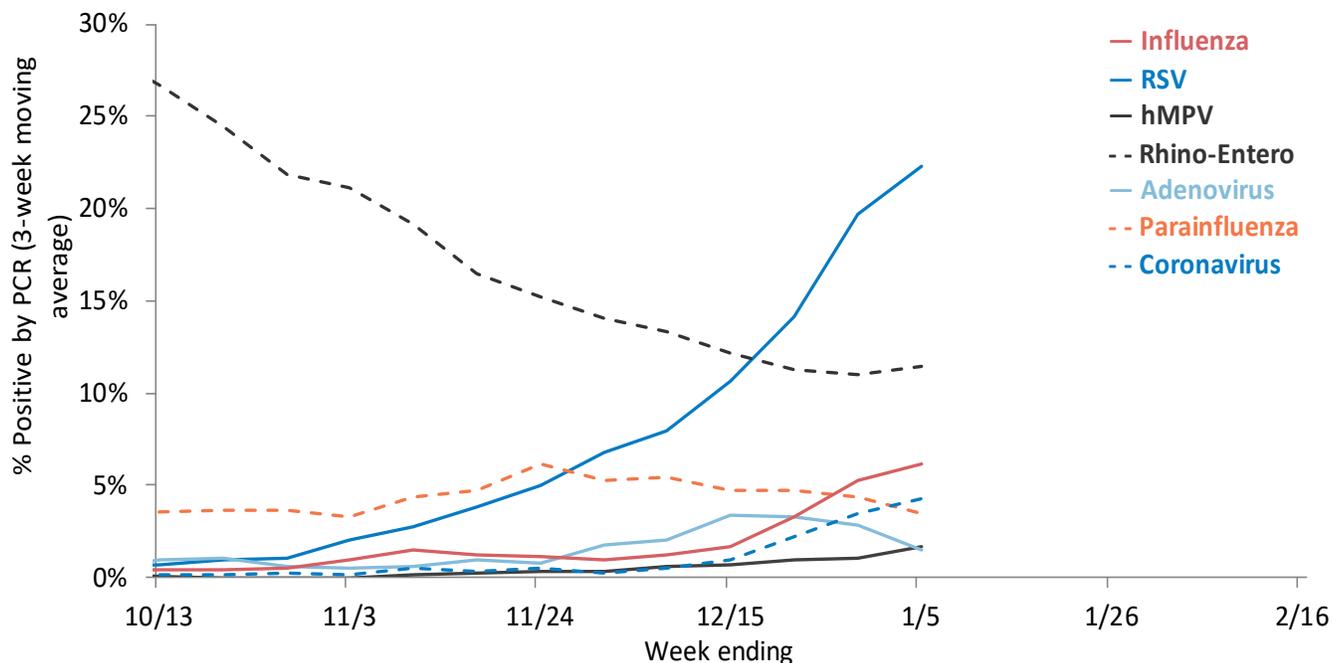


Cumulative number of positive influenza PCR tests by subtype September 1, 2018 to present

	Influenza A: 92%			Influenza B: 8%			Total
	A (2009 H1N1)	A (H3N2)	A (Unknown)	B (Victoria)	B (Yamagata)	B (Unknown)	
Total positive (n)	101	39	314	0	14	25	493
% of total positive	20%	8%	64%	0%	3%	5%	100%

WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR



Week 1: Ending on January 5, 2019

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			280Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	2168	112	5.2%	4	21	75	0	7	5

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	847	20	2.4%	1	5	5	9

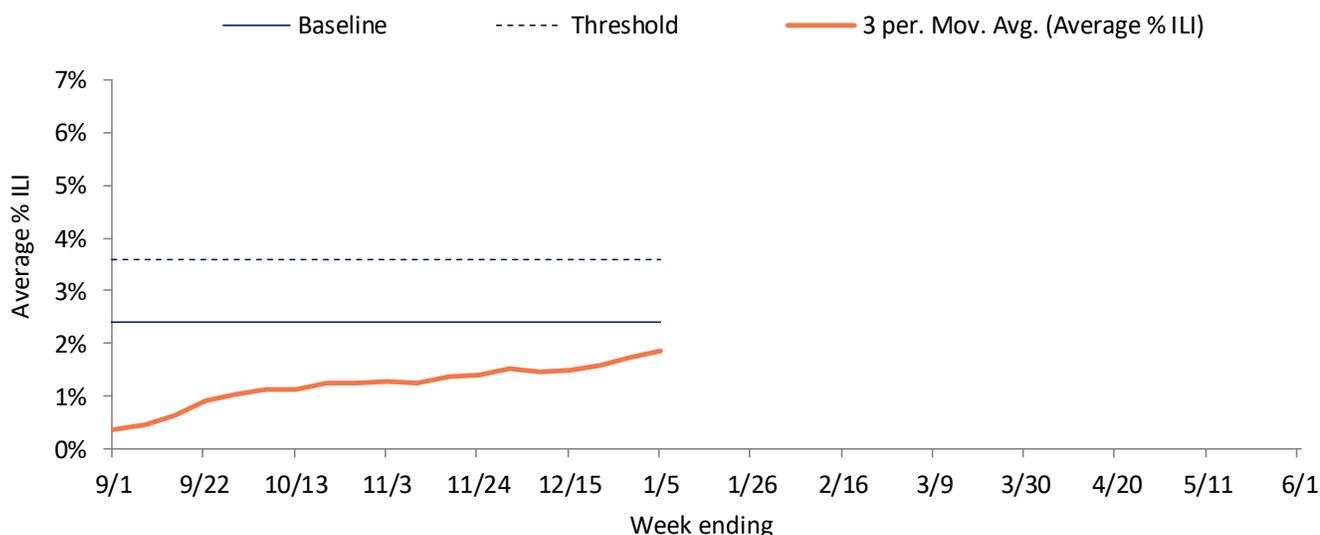
Respiratory virus	Tested	Positive (n)	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1
Coronavirus (CoV)	369	16	4.4%	2	13	1	0

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	1297	296	22.9%
Human metapneumovirus	876	23	2.7%
Rhino-enterovirus	826	98	11.9%
Adenovirus	369	3	0.9%

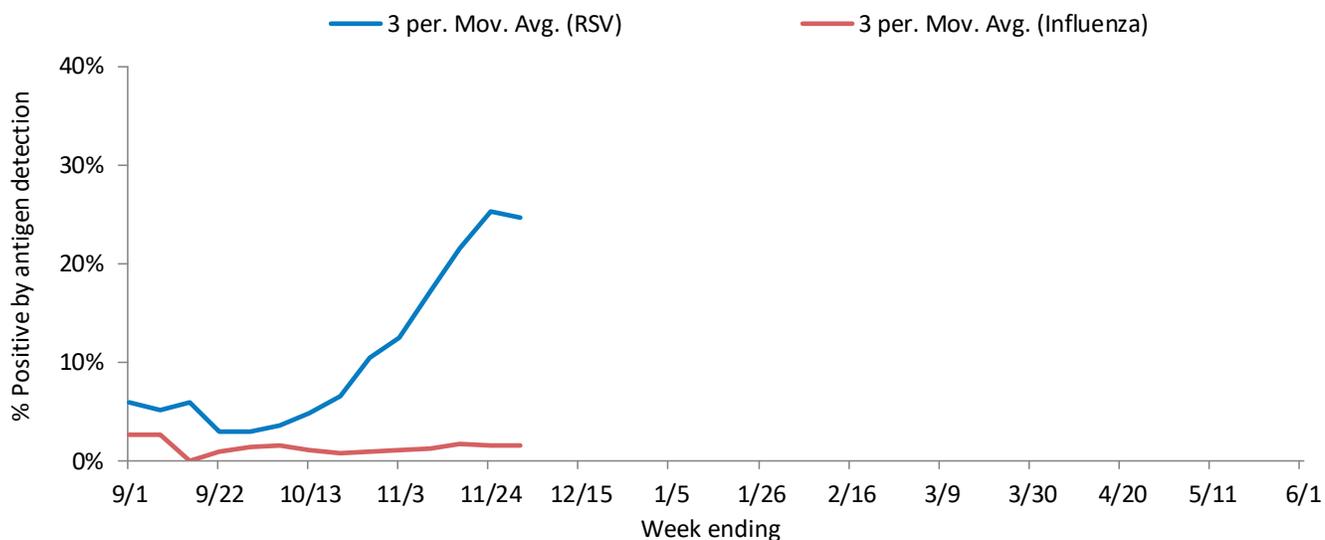
WISCONSIN STATE SUMMARY

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							
1111	66	16	82	7.4%	305	110	36.1%	1.9%	2.4%	3.6%

ILI activity trend analysis

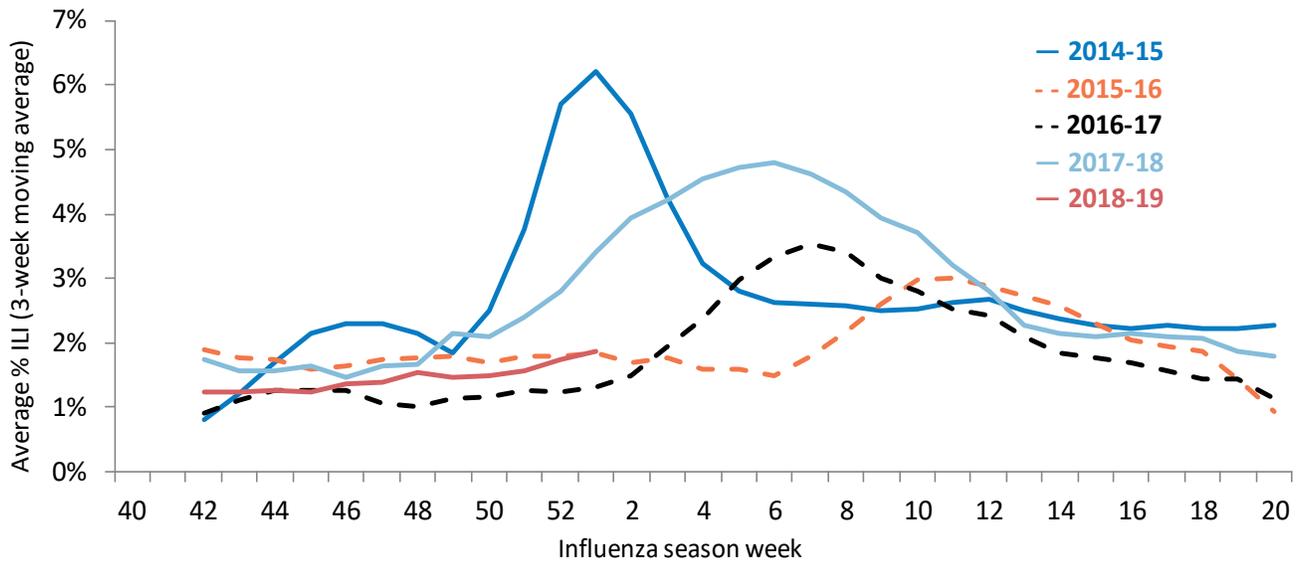


Influenza and RSV trend analysis



WISCONSIN STATE SUMMARY

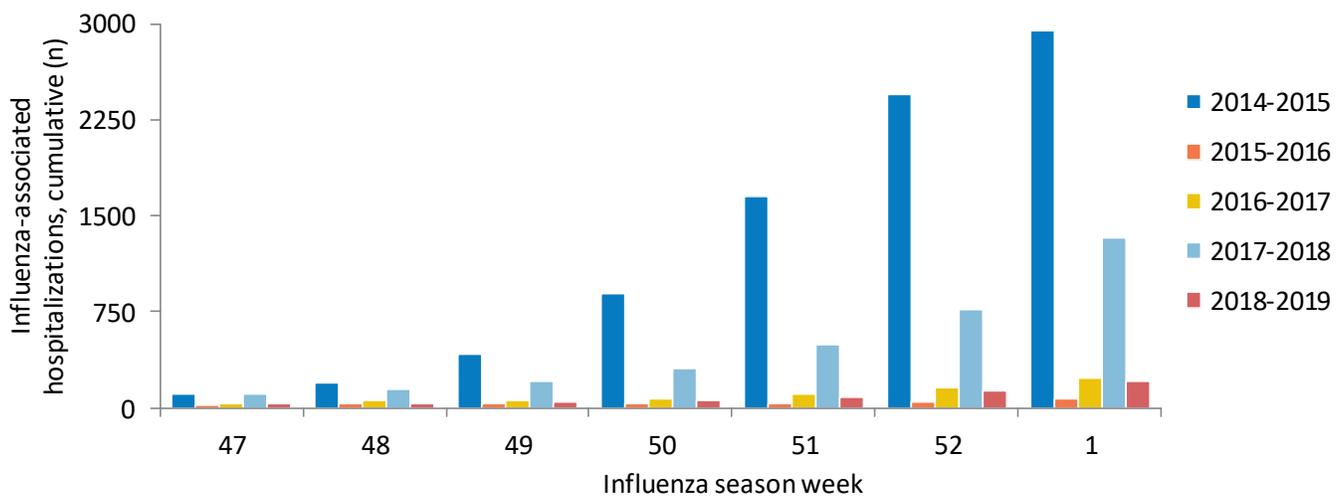
ILI activity trend analysis by influenza season, Wisconsin



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	2	0	0	1	1	0	0	0	0	0
1-4	12	1	0	7	2	2	1	0	0	0
5-17	6	1	0	2	2	1	1	0	0	0
18-49	44	5	0	30	5	4	5	2	1	0
50-64	48	10	1	27	9	1	7	1	0	0
65+	97	15	4	62	16	0	16	4	0	0
Total	209	32	5	129	35	8	30	7	1	0

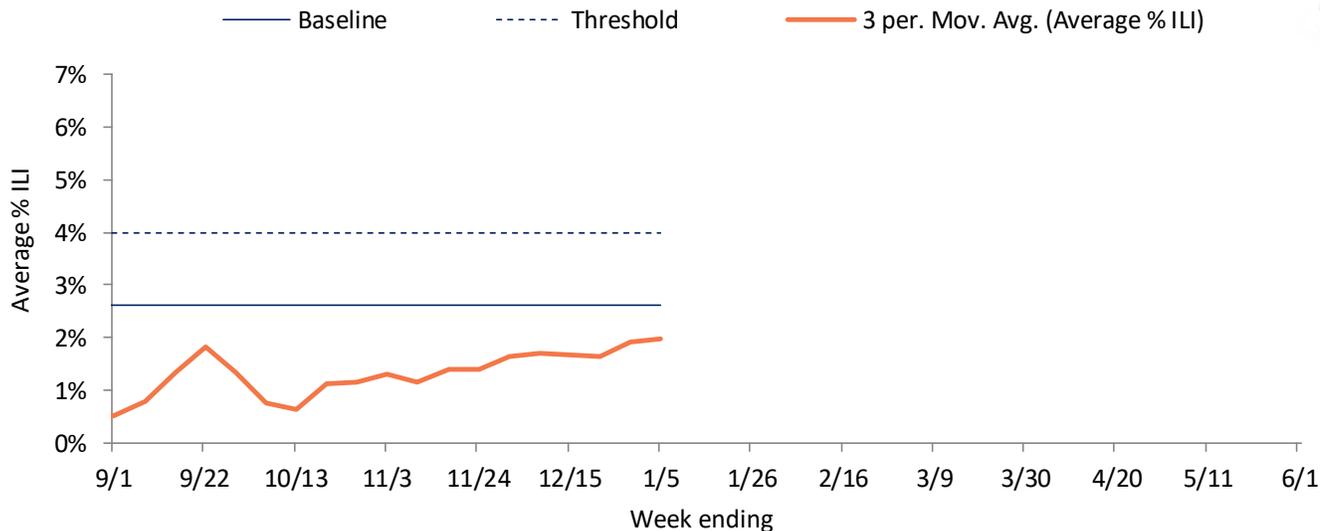
Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



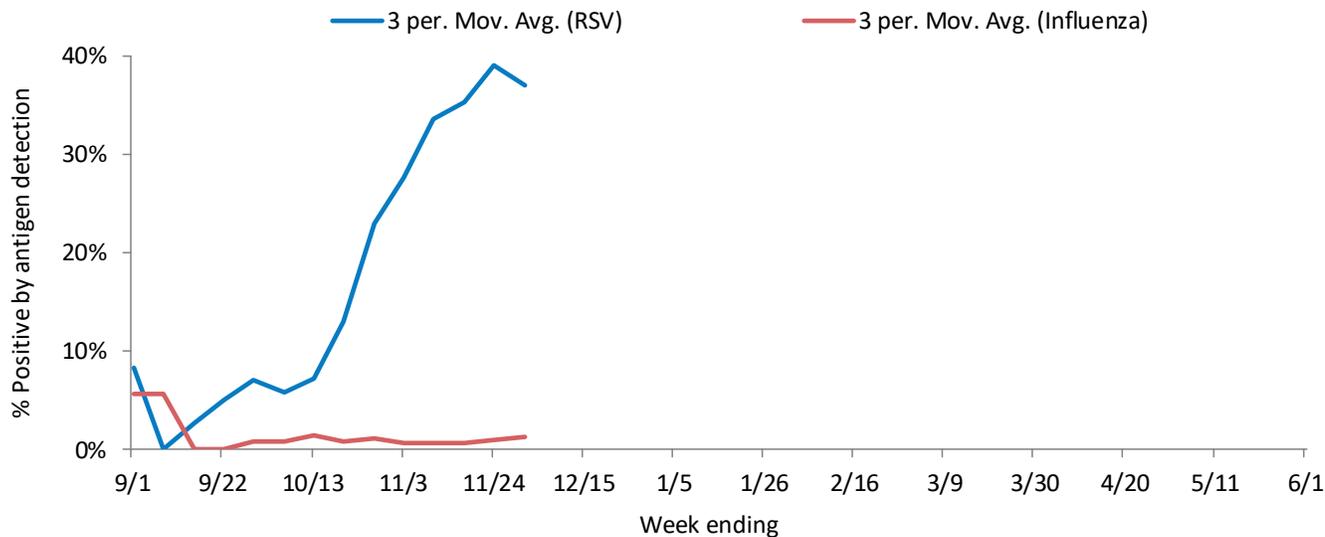
NORTHEASTERN REGION

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							
500	25	5	30	6.0%	148	54	36.5%	1.6%	2.6%	4.0%

ILI activity trend analysis



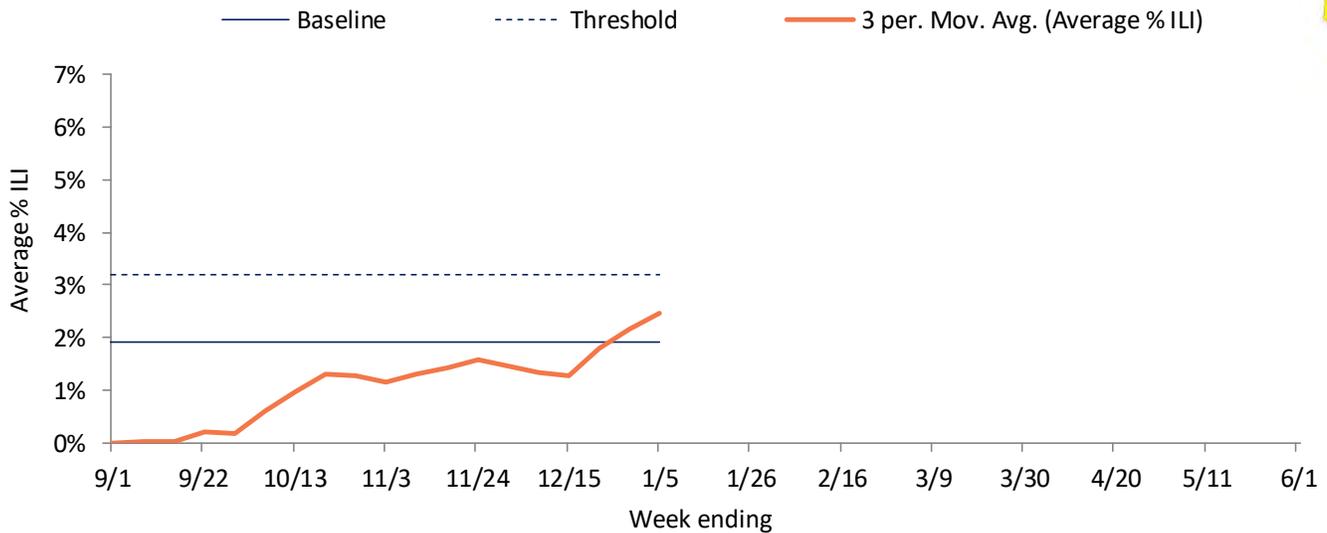
Influenza and RSV trend analysis



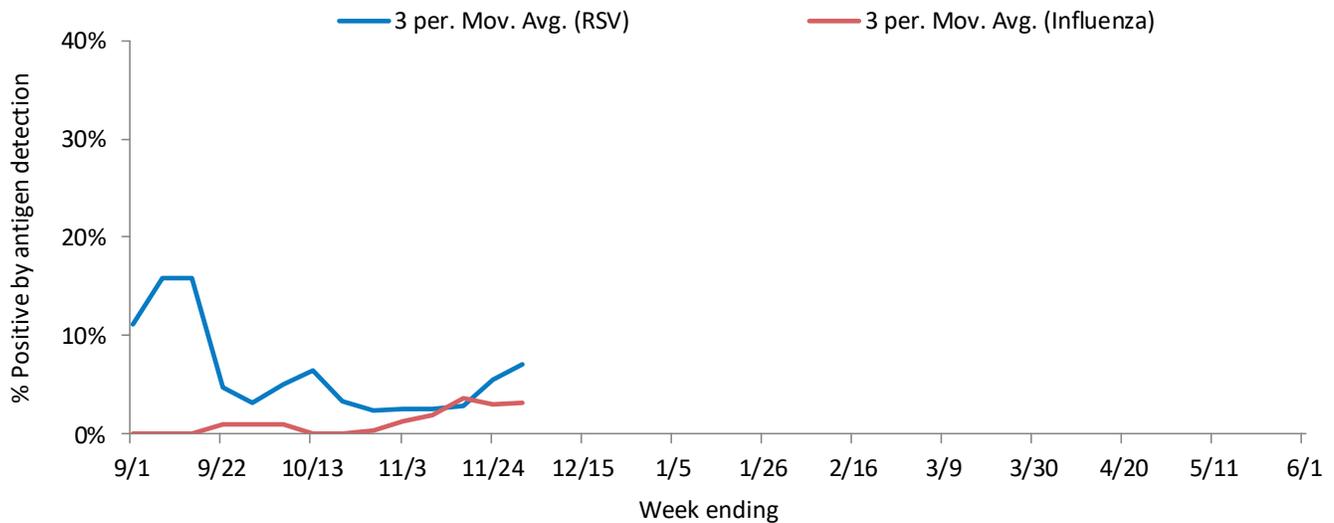
NORTHWESTERN REGION

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							
251	1	7	6	2.4%	122	45	36.9%	2.4%	1.9%	3.2%

ILI activity trend analysis



Influenza and RSV trend analysis

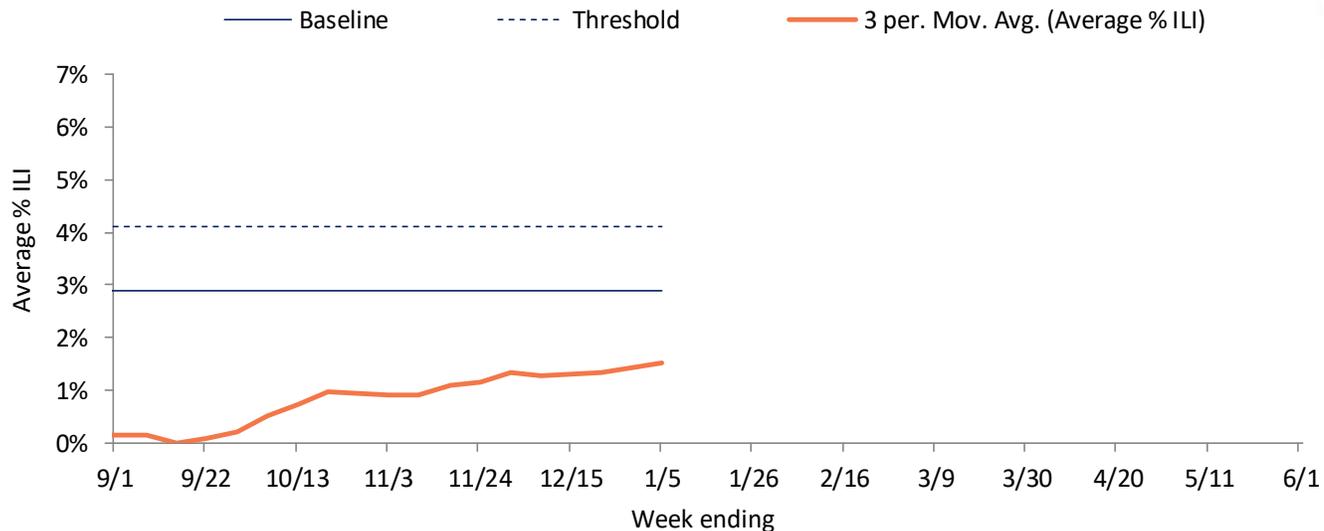




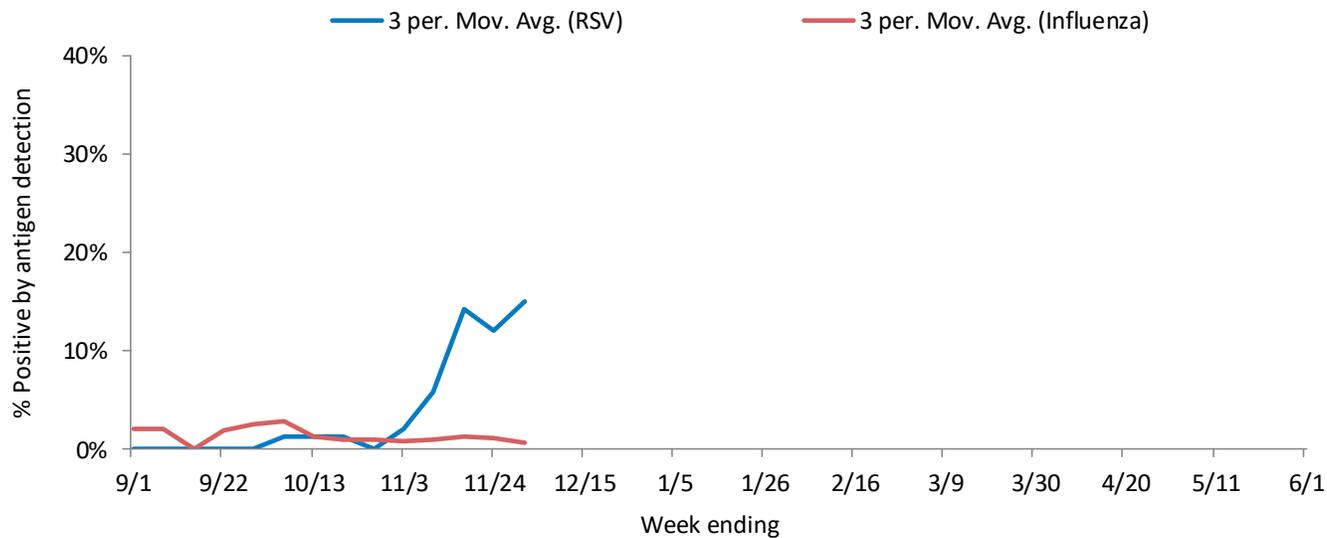
SOUTHEASTERN REGION

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							
311	22	4	26	8.4%	13	3	23.1%	1.5%	2.9%	4.1%

ILI activity trend analysis



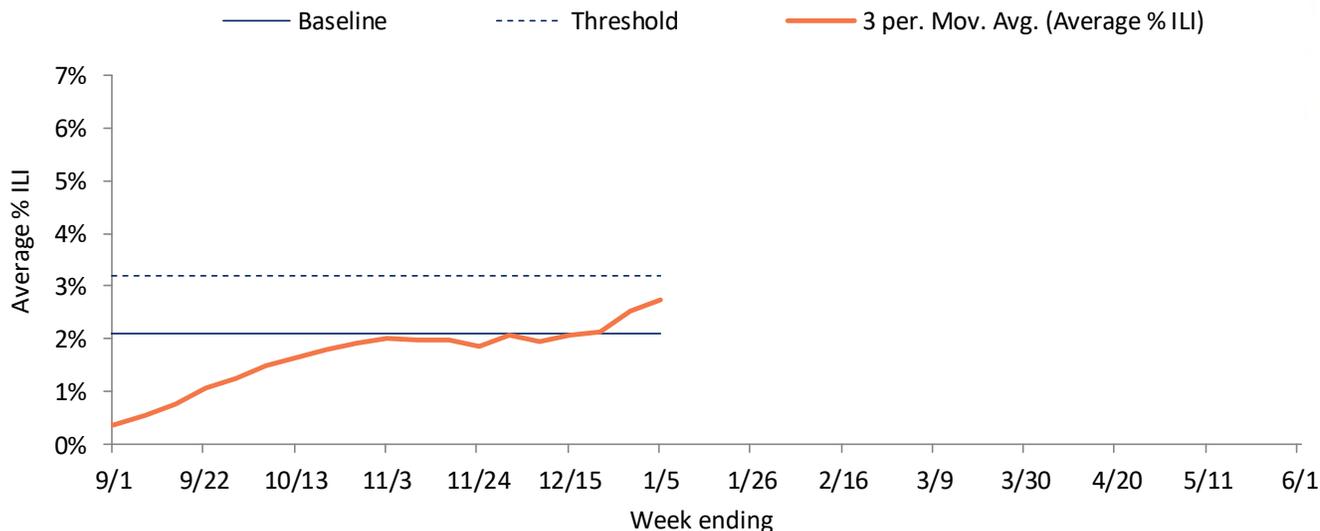
Influenza and RSV trend analysis



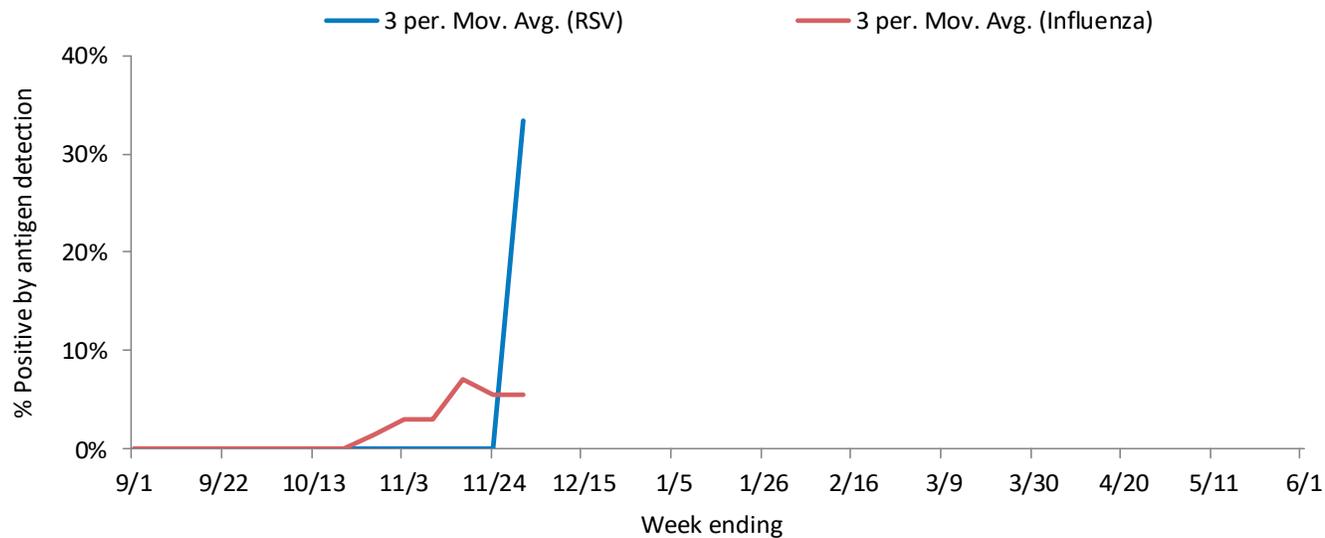
SOUTHERN REGION

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							
49	2	1	3	6.1%	22	8	36.4%	2.8%	2.1%	3.2%

ILI activity trend analysis

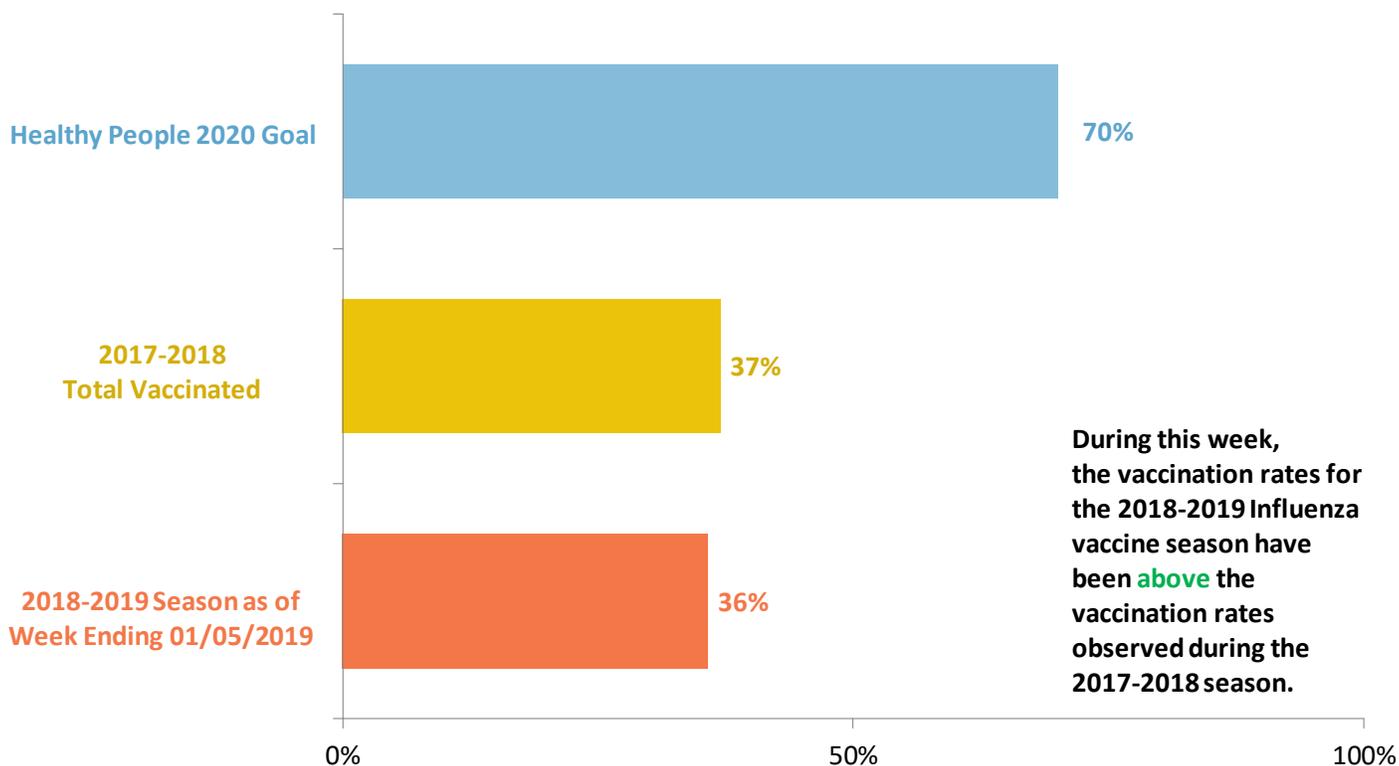


Influenza and RSV trend analysis



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:

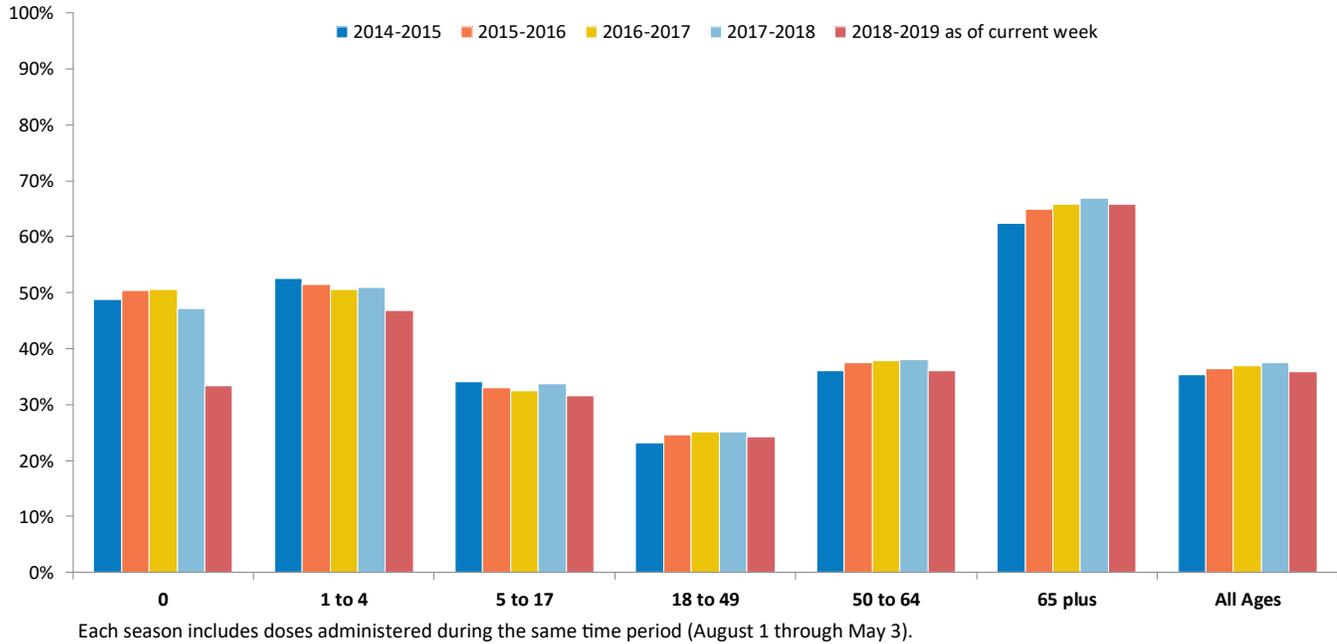
- A/Michigan/45/2015 (H1N1)pdm09-like virus
- A/Singapore/INFIMH-16-0019/2016 A(H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus (updated)

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

