



RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 7: Ending February 16, 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

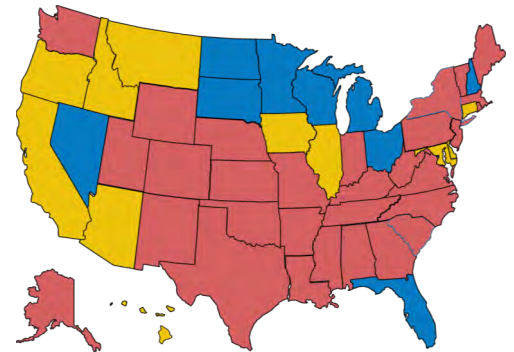
STATE OF WISCONSIN



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:**

Influenza is the predominant virus this week.

INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

	Week 7, 2019	October 1, 2018 to present
Wisconsin	0	1
Nationwide	7	41

CURRENT ALERTS:

- Influenza A/H1N1 and A/H3N2 are co-circulating in Wisconsin. A/H3N2 is the predominant influenza virus in Wisconsin for week 7.
- 142 flu-associated hospitalizations were reported this week.



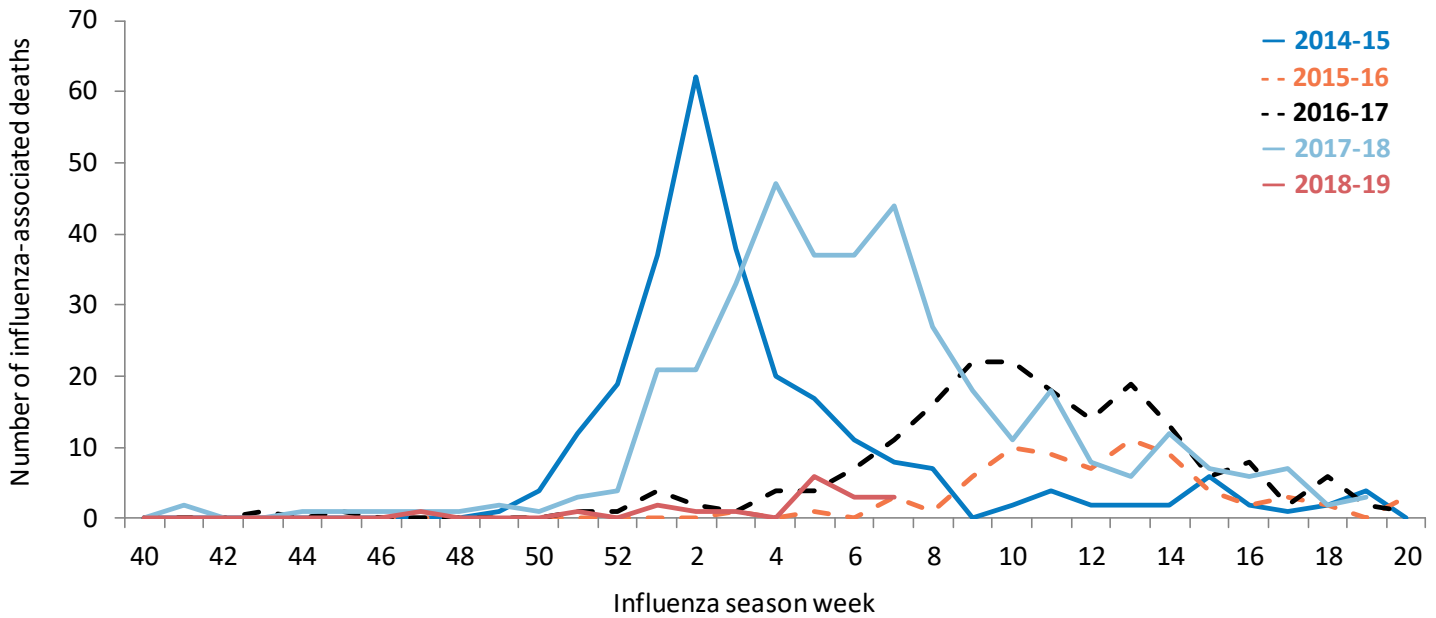
For National US influenza surveillance statistics visit: www.cdc.gov/flu/weekly/



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 February 16, 2019

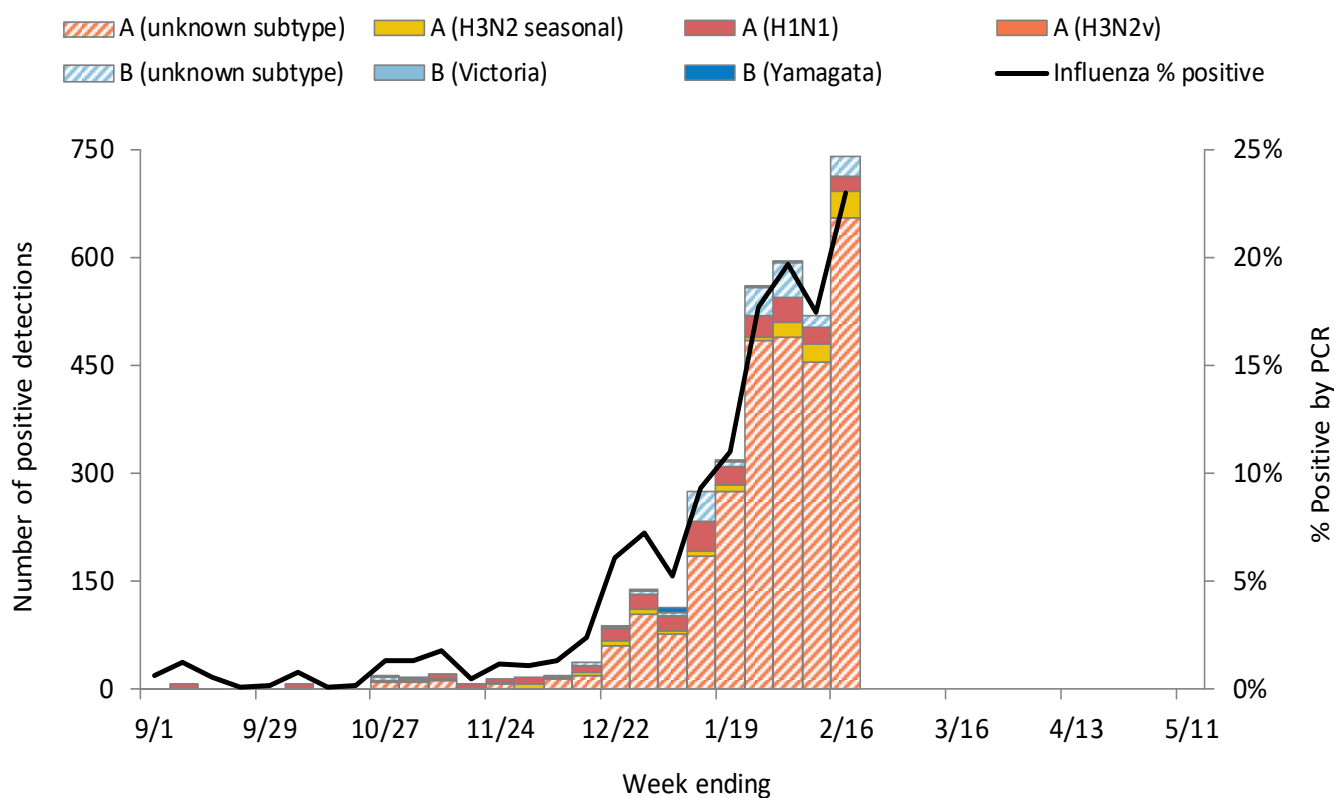
Age group (years)	Week 7, 2019			Cumulative, 2018-2019 season		
	Influenza (I)	Pneumonia (P)	Percent I+P of all deaths	Influenza (I)	Pneumonia (P)	Percent I+P of all deaths
0-4	0	0	0.0%	0	2	1.4%
5-17	0	0	0.0%	0	1	1.7%
18-49	1	2	8.4%	3	37	3.1%
50-64	1	6	5.6%	2	129	4.2%
65+	1	36	6.2%	13	937	5.7%
All ages	3	44	6.1%	18	1108	5.3%

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



WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Wisconsin positive influenza results and subtypes by PCR

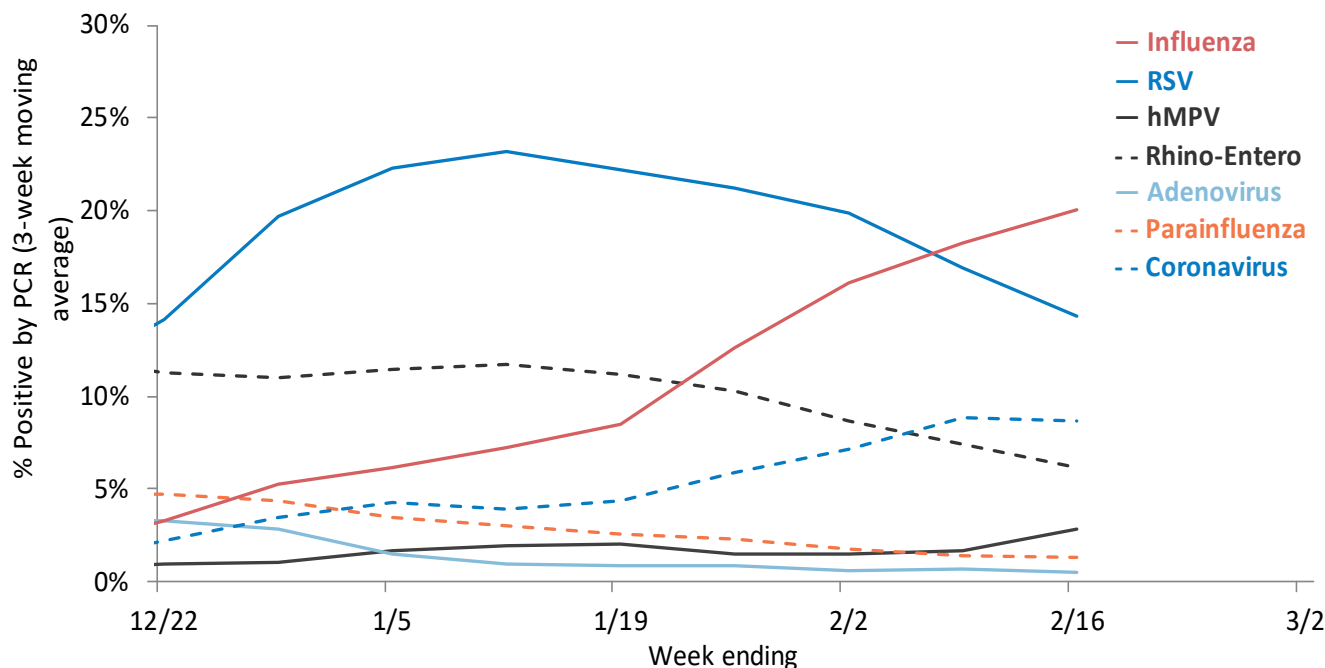


Cumulative number of positive influenza PCR tests by subtype September 1, 2018 to present

	Influenza A: 94%			Influenza B: 6%			Total
	A (2009 H1N1)	A (H3N2)	A (Unknown)	B (Victoria)	B (Yamagata)	B (Unknown)	
Total positive (n)	275	143	2851	1	17	207	3494
% of total positive	8%	4%	82%	0%	0%	6%	100%

WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR



Week 7: Ending on February 16, 2019

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	3220	740	23.0%	37	21	654	0	0	28

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	699	10	1.4%	0	5	5	0

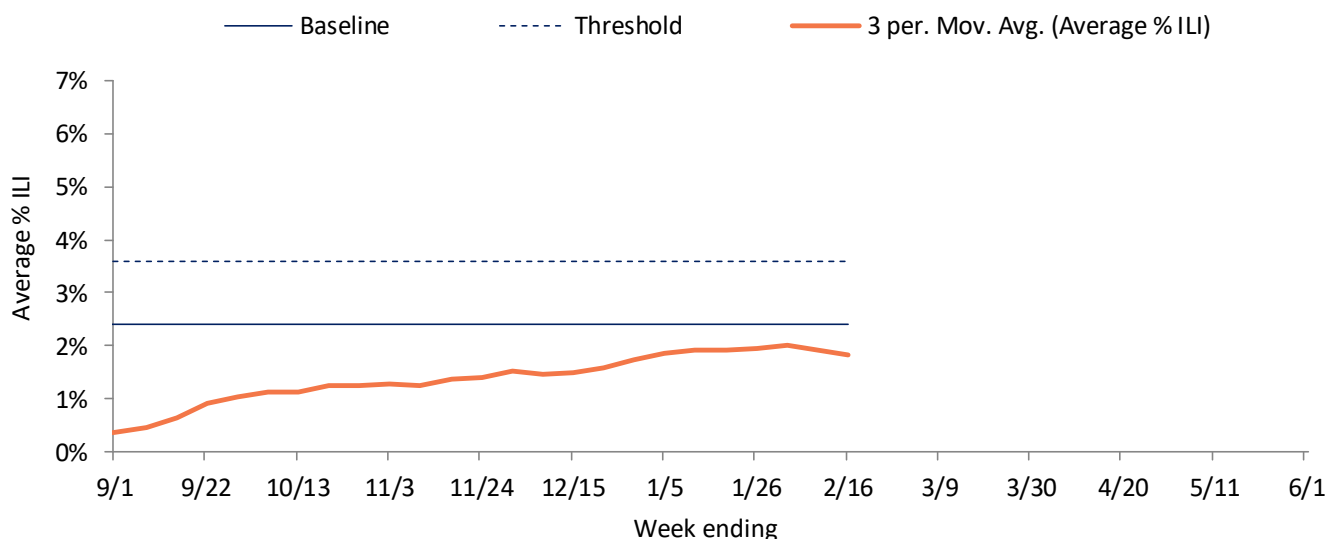
Respiratory virus	Tested	Positive (n)	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1
Coronavirus (CoV)	348	28	8.0%	4	17	5	2

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	1205	145	12.0%
Human metapneumovirus	718	32	4.5%
Rhino-enterovirus	681	37	5.4%
Adenovirus	348	0	0%

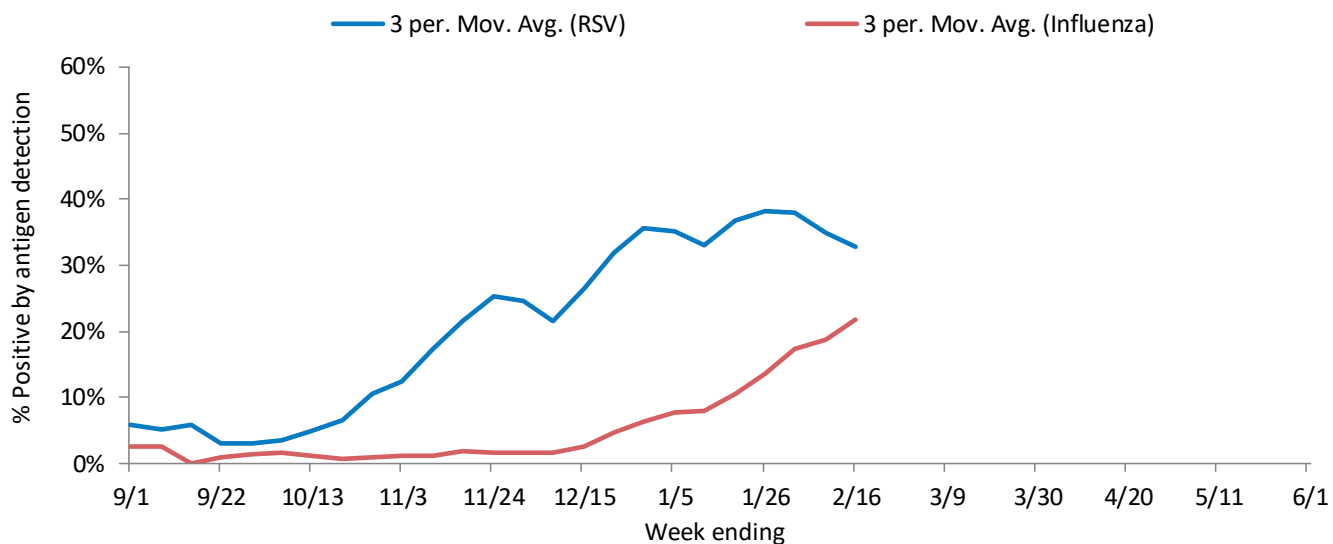
WISCONSIN STATE SUMMARY

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							
1447	350	24	374	25.8%	211	71	33.6%	1.8%	2.4%	3.6%

ILI activity trend analysis

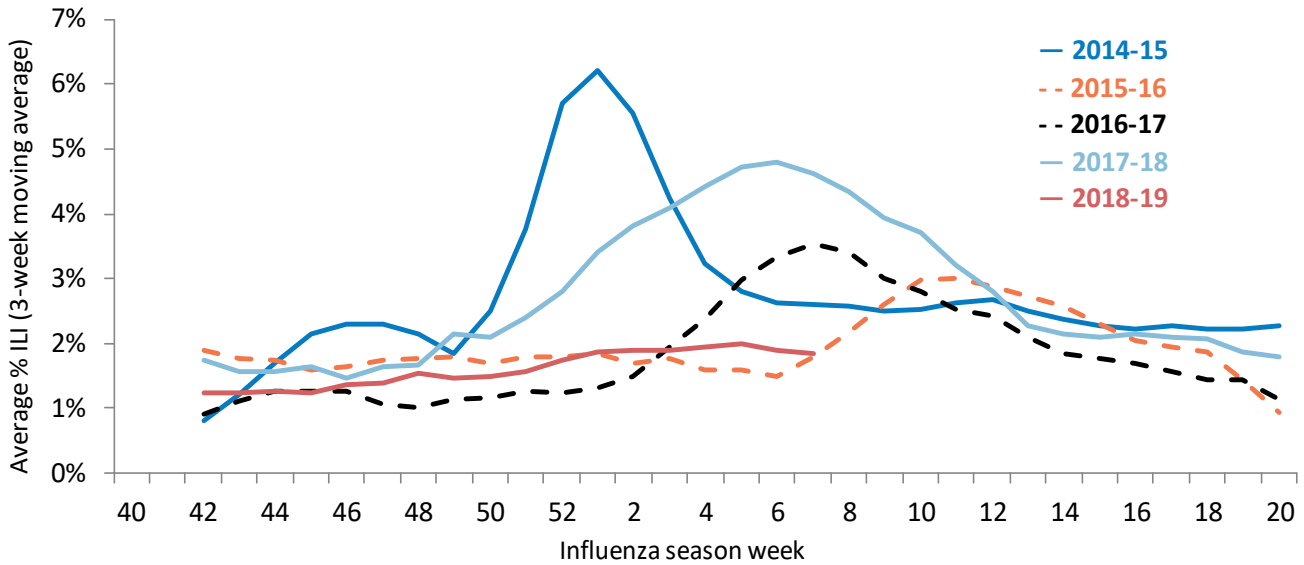


Influenza and RSV trend analysis



WISCONSIN STATE SUMMARY

ILI activity trend analysis by influenza season, Wisconsin

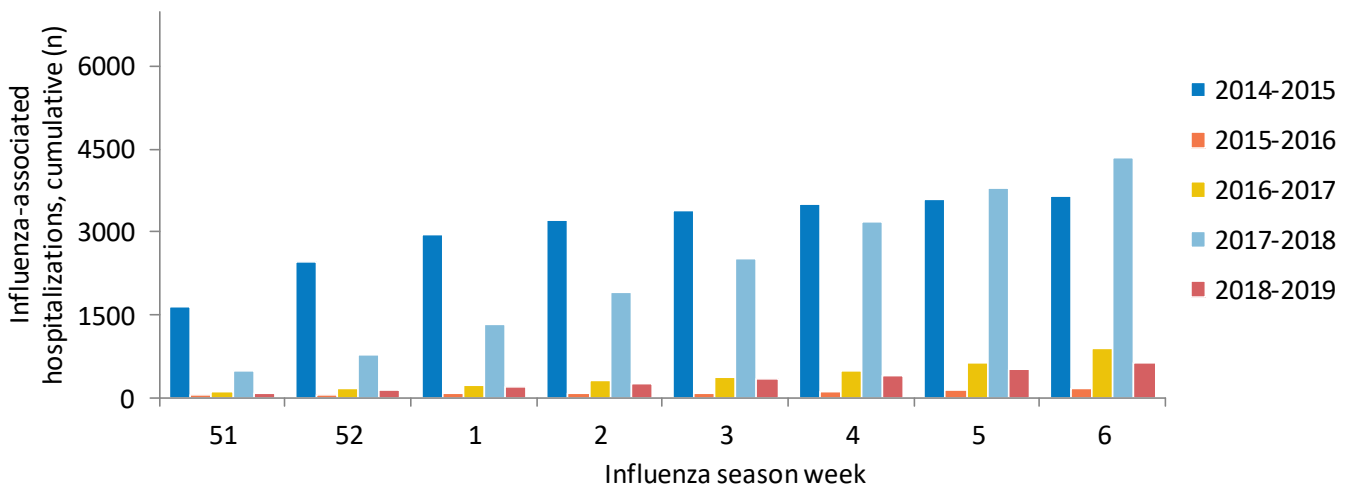


Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System

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	13	1	0	11	1	0	1	0	0	0
1-4	32	2	1	23	2	4	7	2	0	0
5-17	15	1	1	9	2	2	4	0	0	0
18-49	156	19	1	114	12	10	27	8	8	0
50-64	216	31	4	155	18	8	40	7	0	0
65+	330	39	17	238	27	9	49	20	0	0
Total	762	93	24	550	62	33	128	37	8	0

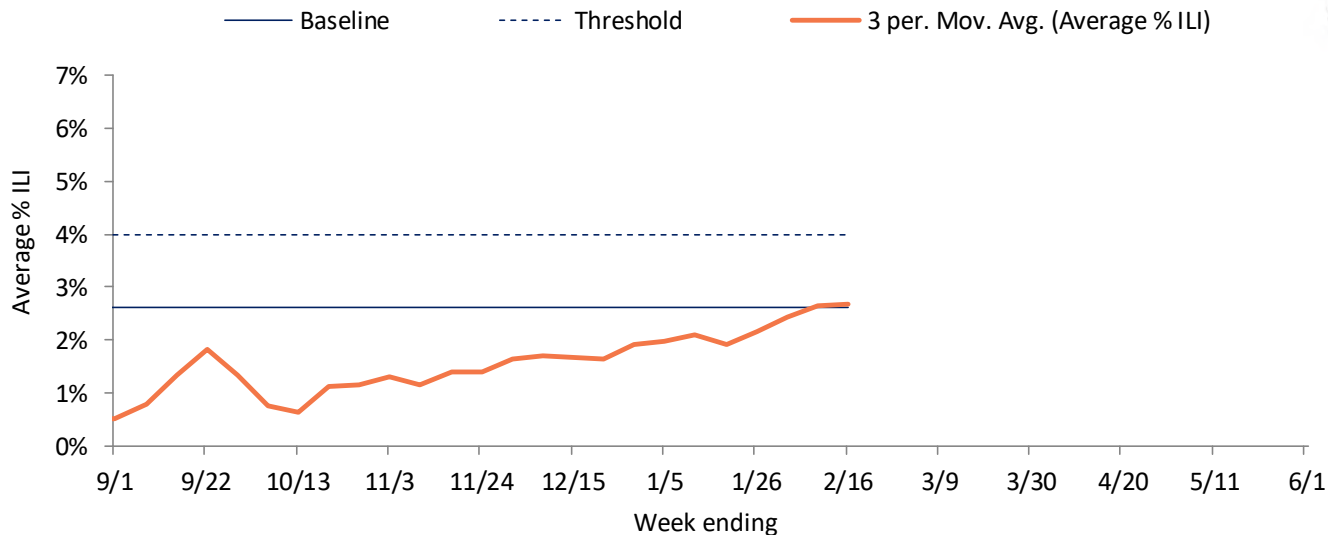
Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



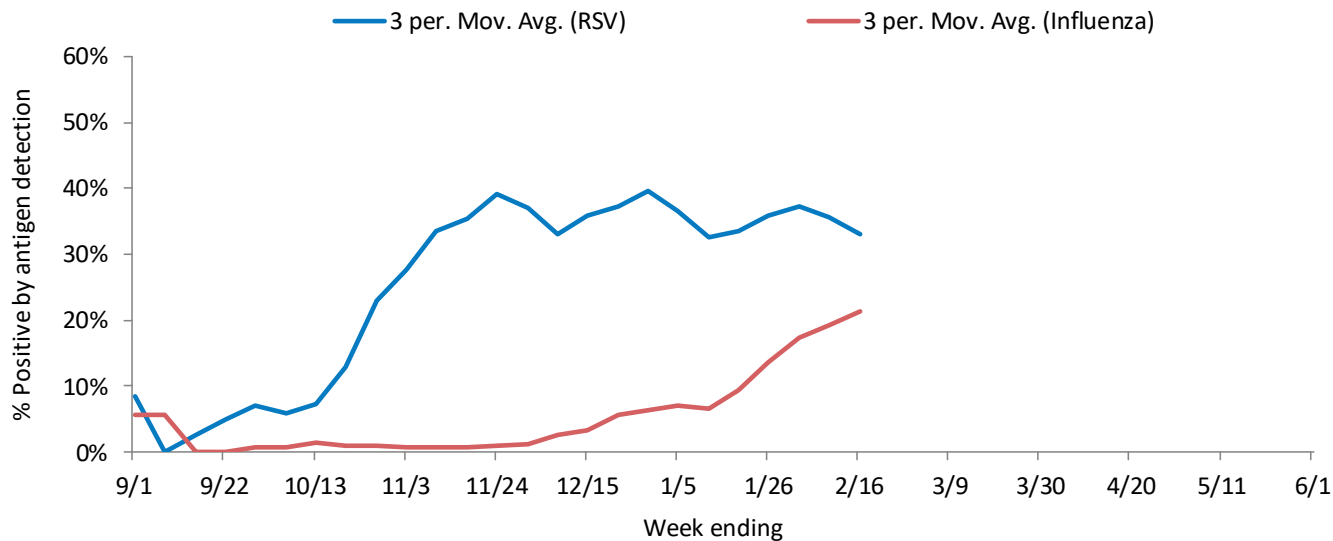
NORTHEASTERN REGION

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							
668	161	6	167	25.0%	105	37	35.2%	2.2%	2.6%	4.0%

ILI activity trend analysis



Influenza and RSV trend analysis

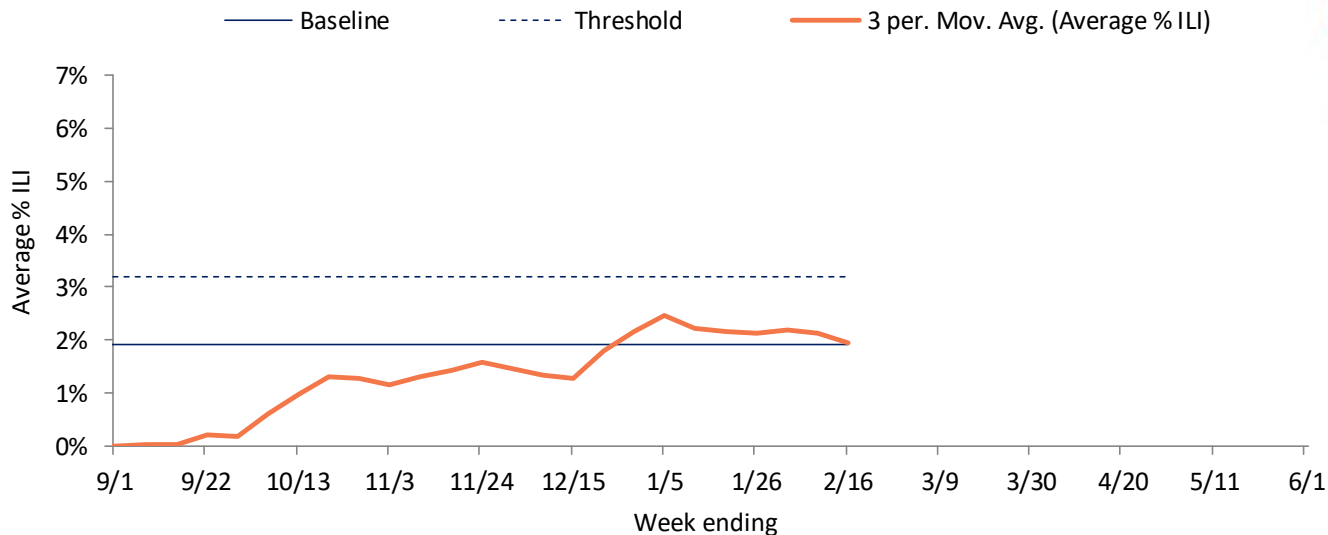




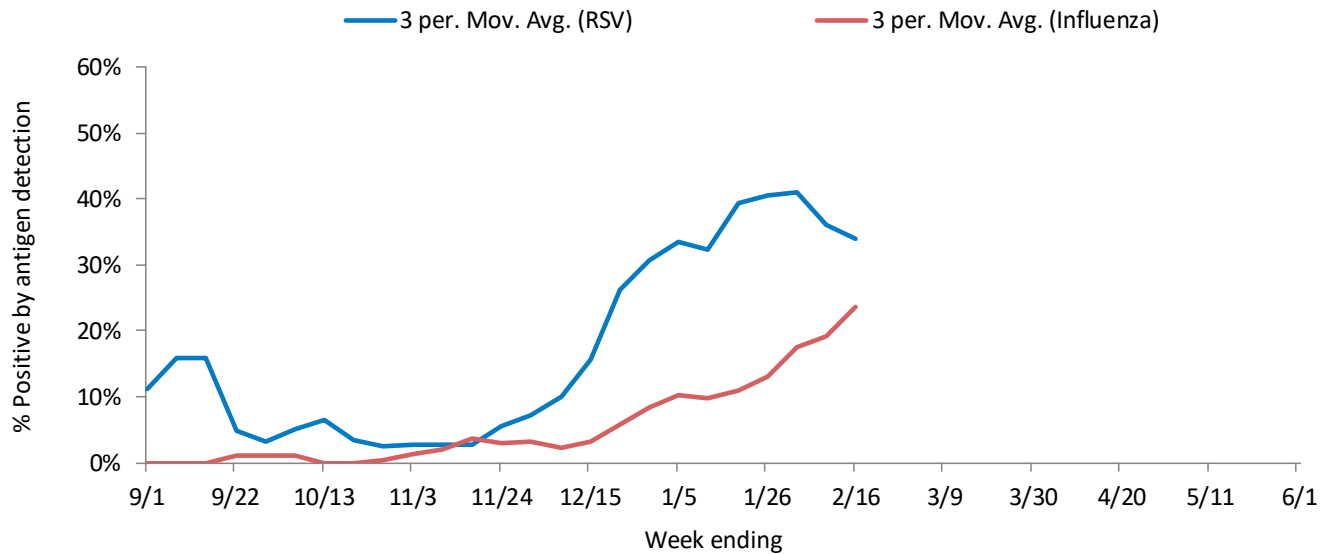
NORTHWESTERN REGION

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							
437	115	13	128	29.3%	96	33	34.4%	1.7%	1.9%	3.2%

ILI activity trend analysis



Influenza and RSV trend analysis

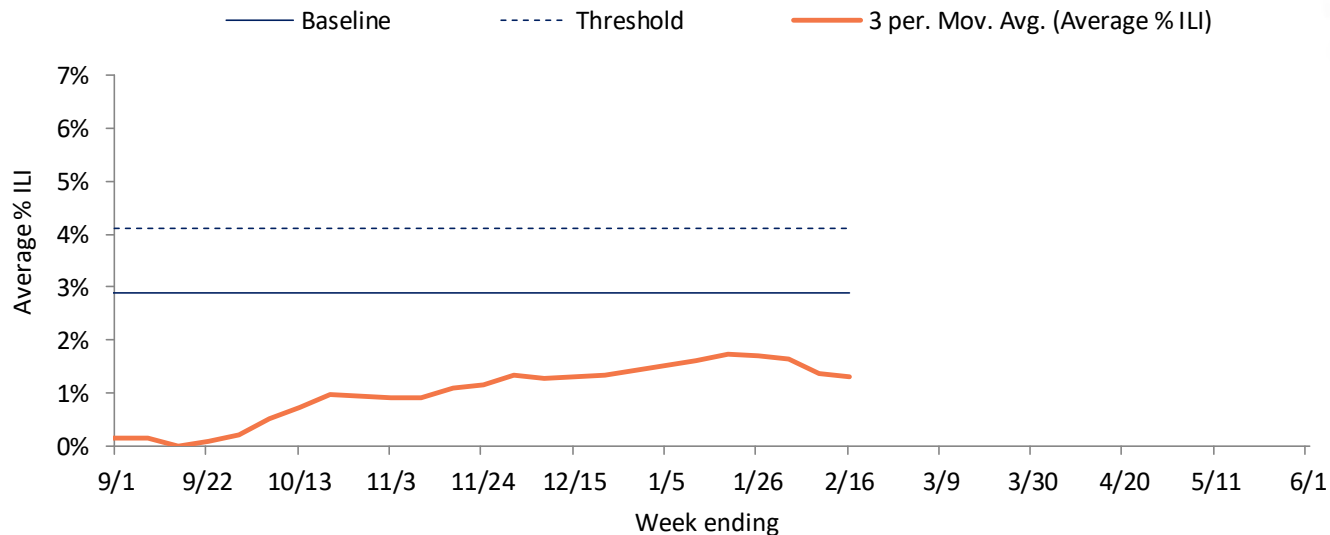




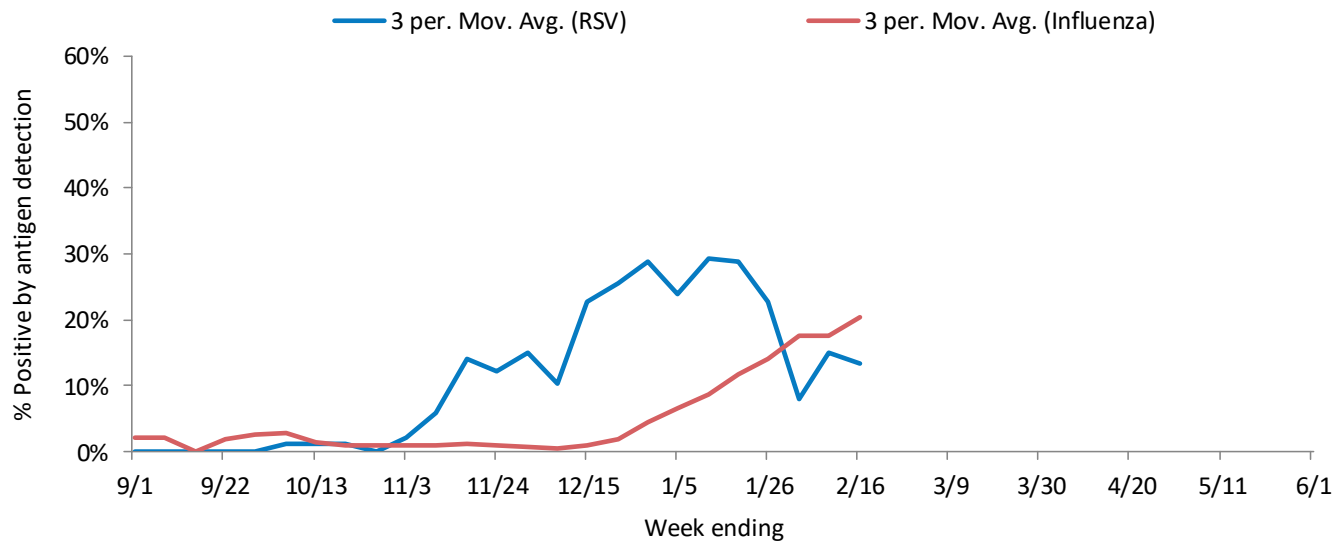
SOUTHEASTERN REGION

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							
286	63	4	67	23.4%	4	0	0.0%	1.2%	2.9%	4.1%

ILI activity trend analysis



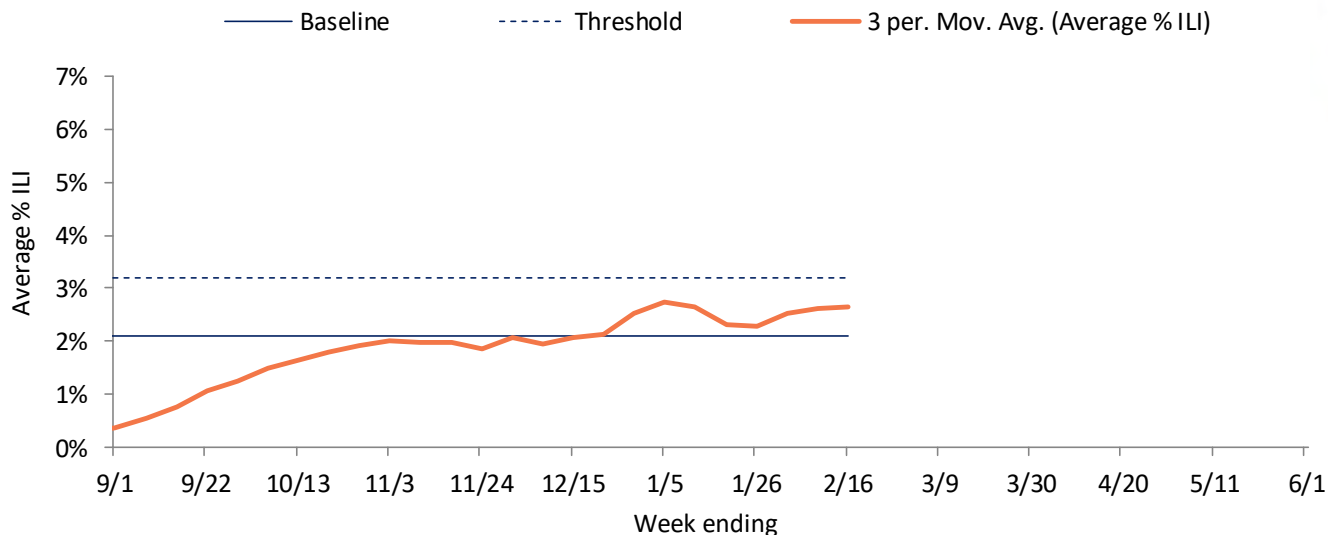
Influenza and RSV trend analysis



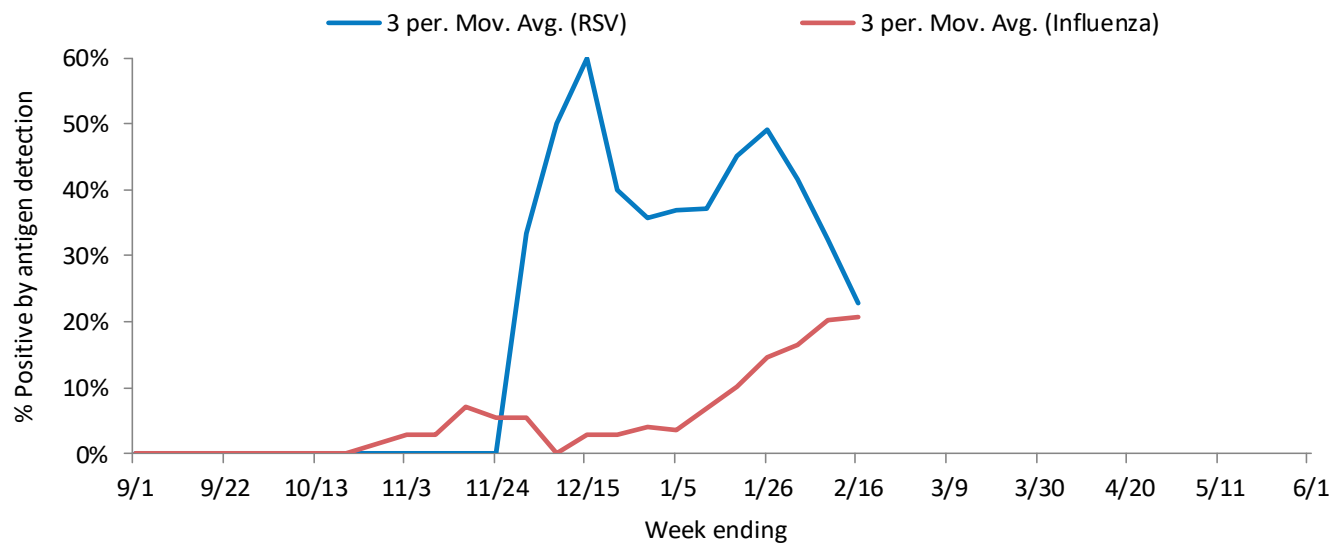
SOUTHERN REGION

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							
56	11	1	12	21.4%	6	1	16.7%	2.8%	2.1%	3.2%

ILI activity trend analysis

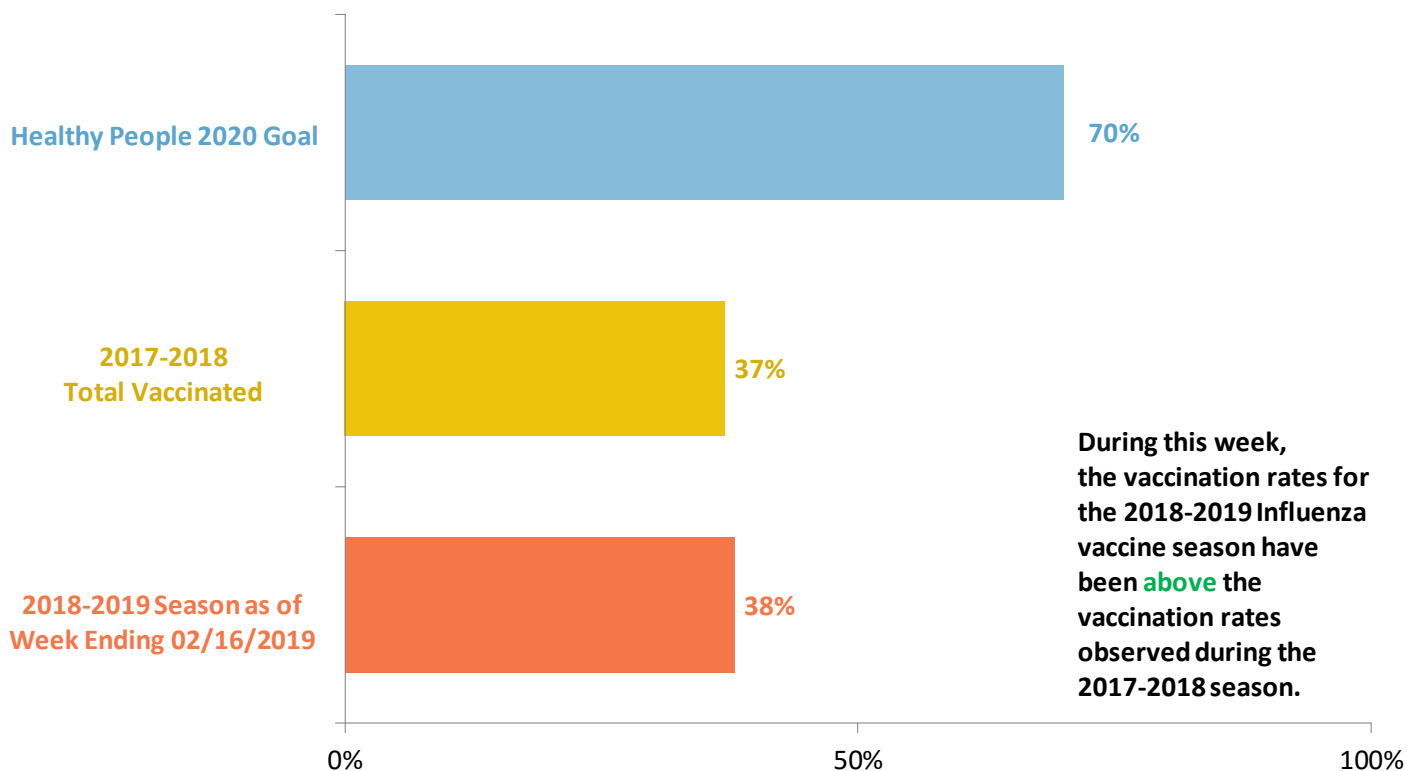


Influenza and RSV trend analysis



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:

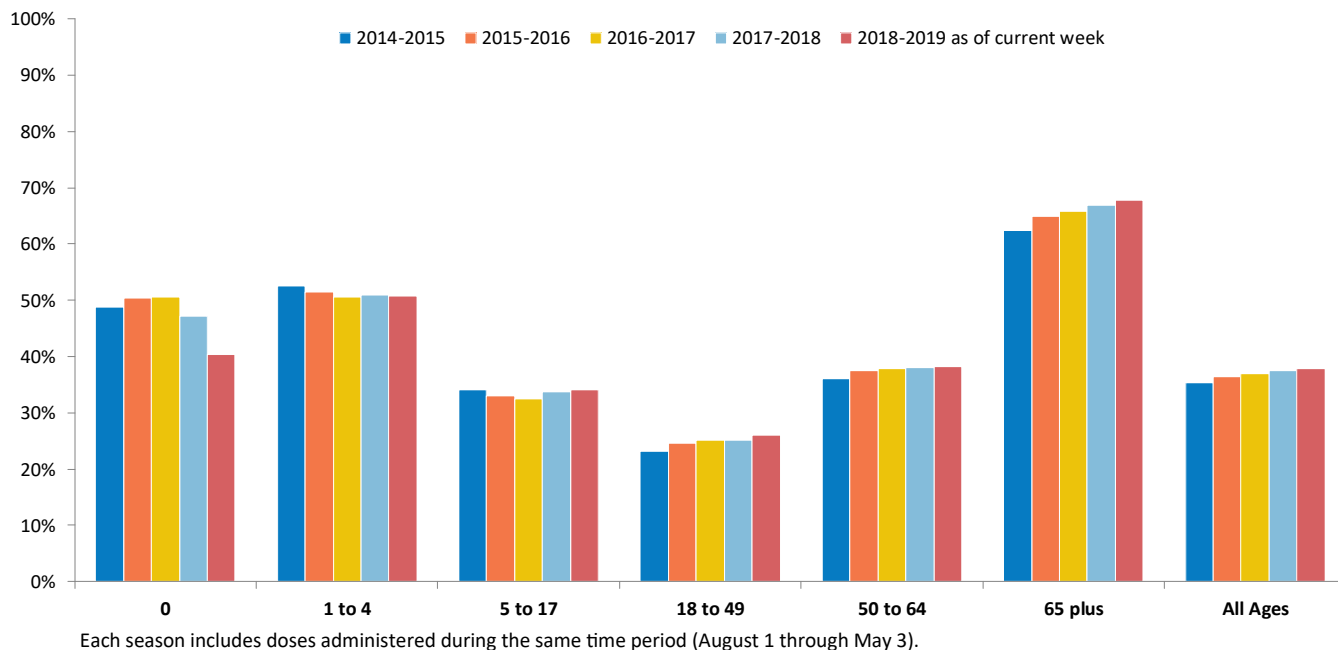
- A/Michigan/45/2015 (H1N1)pdm09-like virus
- A/Singapore/INFIMH-16-0019/2016 A(H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus (updated)

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

