



RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 18: Ending May 4, 2019

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

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





INFLUENZA LIKE ILLNESS (ILI) ACTIVITY

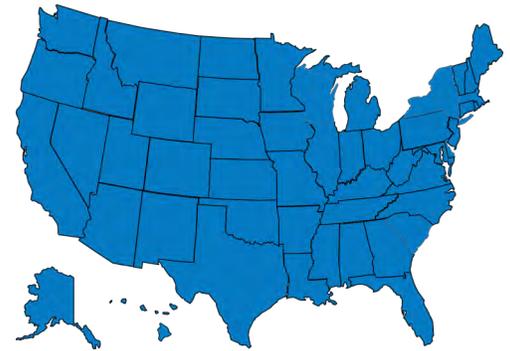
STATE OF WISCONSIN



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(es) of the Week:**

Rhino/enterovirus and parainfluenza-3 are the predominant viruses this week.

INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

Week 18, 2019 October 1, 2018 to present

Wisconsin	1	4
Nationwide	5	106

CURRENT ALERTS:

- Influenza activity continues to decline nationwide and in Wisconsin.
- 40 flu-associated hospitalizations were reported this week.



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

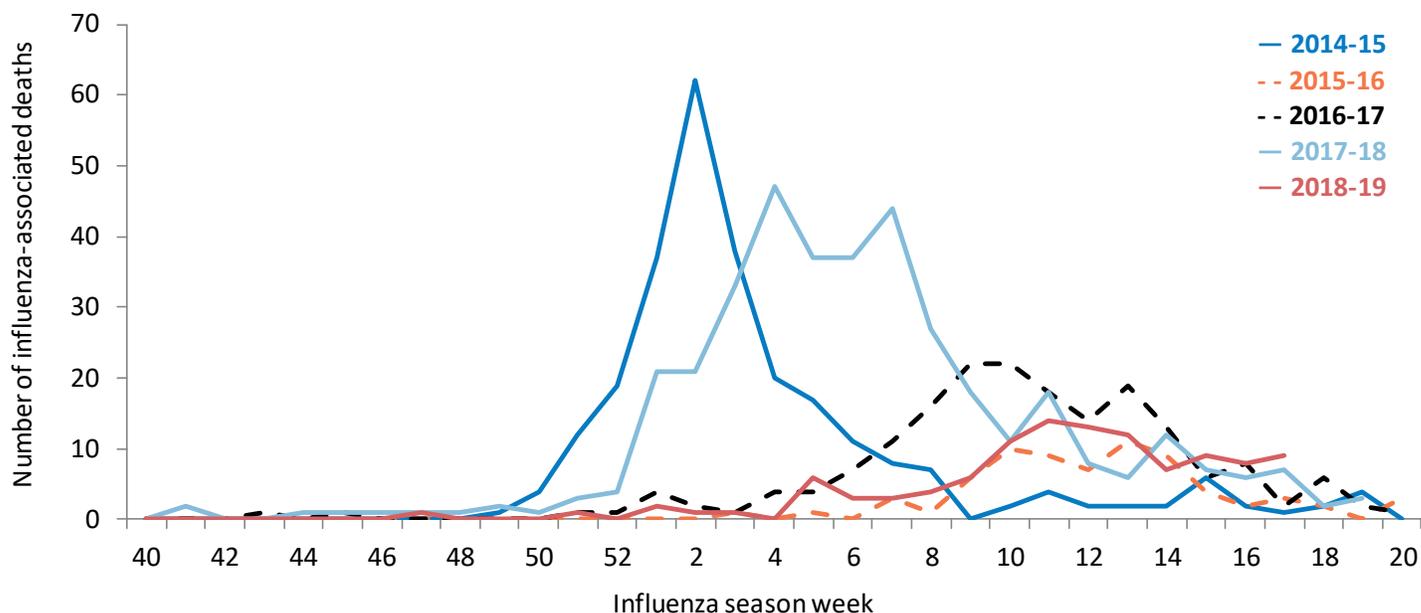




INFLUENZA AND PNEUMONIA-ASSOCIATED MORTALITY

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

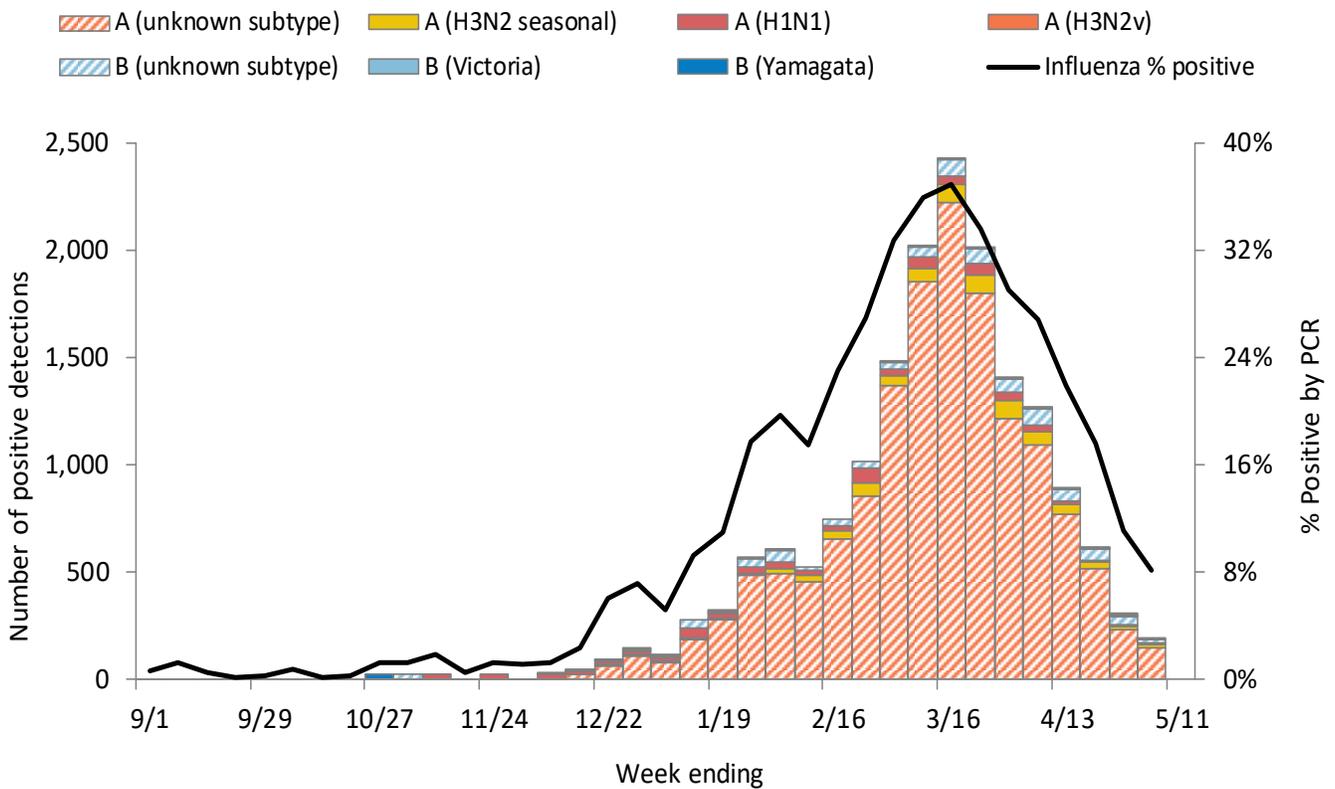
September 30, 2018 to May 4, 2019

Age group (years)	Week 18, 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	1	0	50.0%	4	5	2.1%
5-17	0	0	0.0%	0	3	2.9%
18-49	1	2	5.8%	15	78	3.8%
50-64	2	4	3.6	22	246	4.7%
65+	2	47	97.2%	80	1695	5.9%
All ages	6	53	7.0%	121	2027	5.6%



WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Wisconsin positive influenza results and subtypes by PCR

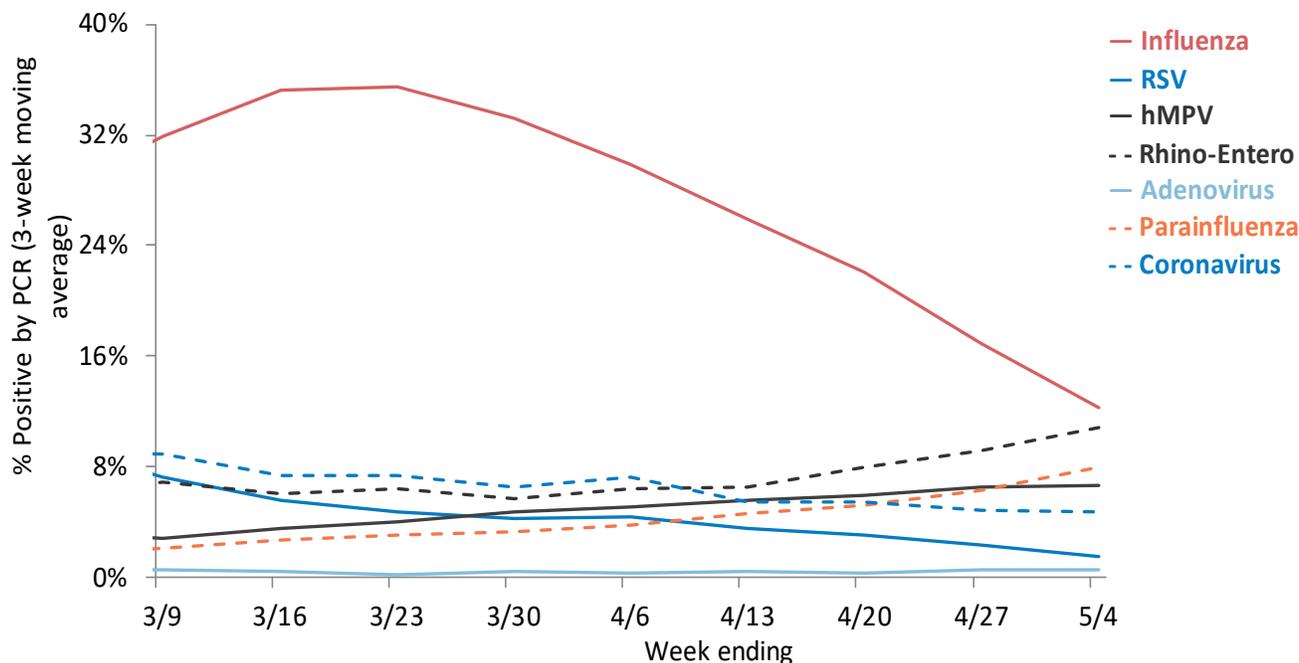


Cumulative number of positive influenza PCR tests by subtype September 1, 2018 to present

	A (2009 H1N1)	Influenza A: A (H3N2)	Influenza A: 95% A (Unknown)	B (Victoria)	Influenza B: B (Yamagata)	Influenza B: 5% B (Unknown)	Total
Total positive (n)	650	729	14879	16	28	748	17050
% of total positive	4%	4%	87%	0%	0%	4%	100%

WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR



Week 18: Ending on May 4, 2019

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	2294	186	8.1%	9	11	146	2	0	18

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	655	69	10.5%	4	3	62	0

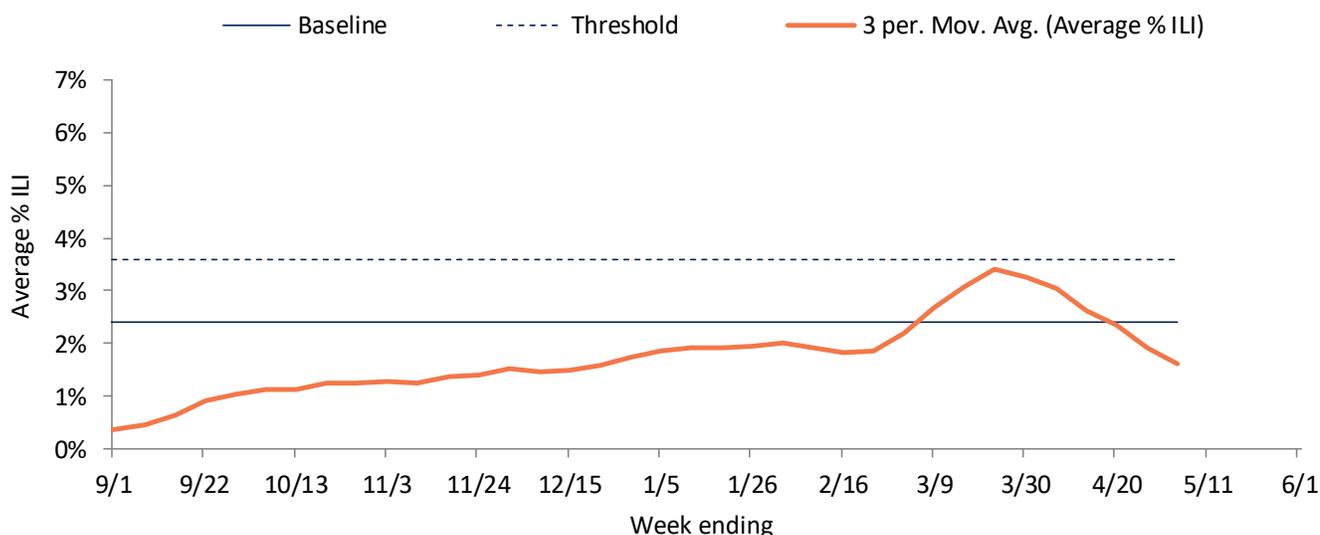
Respiratory virus	Tested	Positive (n)	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1
Coronavirus (CoV)	294	11	3.7%	3	4	3	1

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	1078	12	1.1%
Human metapneumovirus	673	43	6.4%
Rhino-enterovirus	638	77	12.1%
Adenovirus	294	1	0.3%

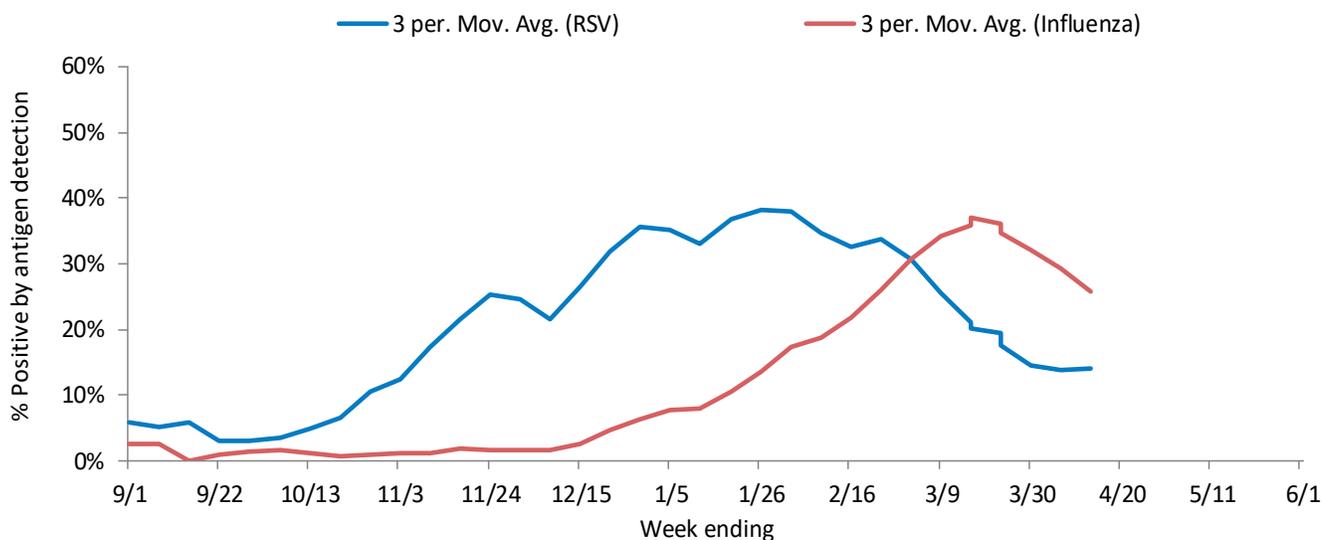
WISCONSIN STATE SUMMARY

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							
883	63	18	81	9.2%	102	12	11.8%	1.4%	2.4%	3.6%

ILI activity trend analysis

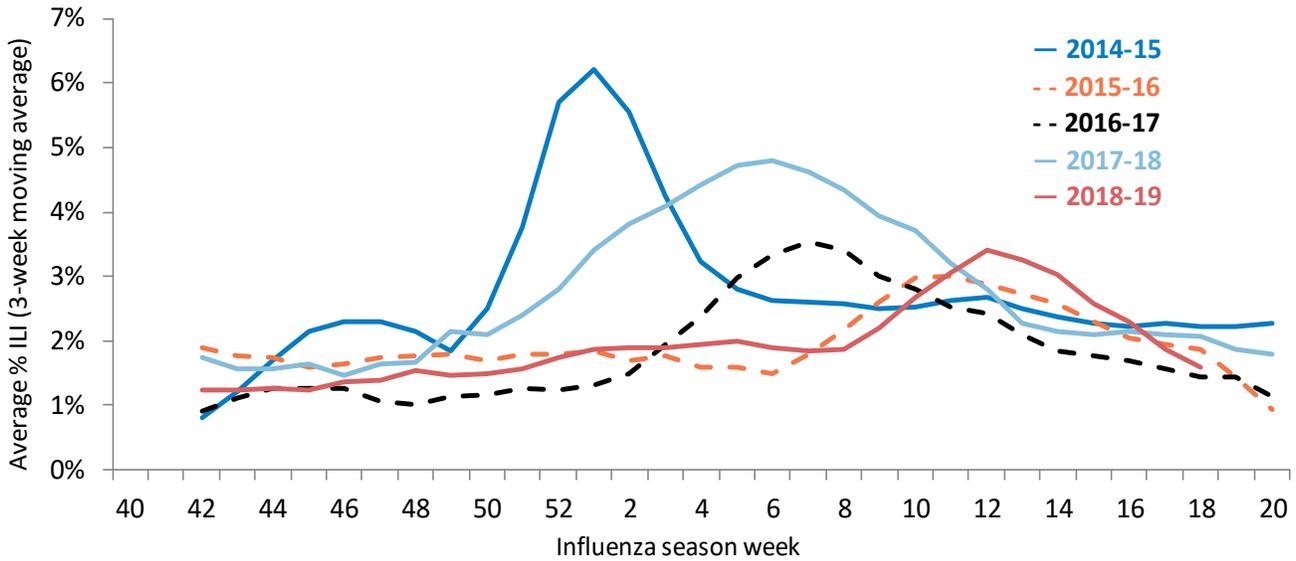


Influenza and RSV trend analysis



WISCONSIN STATE SUMMARY

ILI activity trend analysis by influenza season, Wisconsin

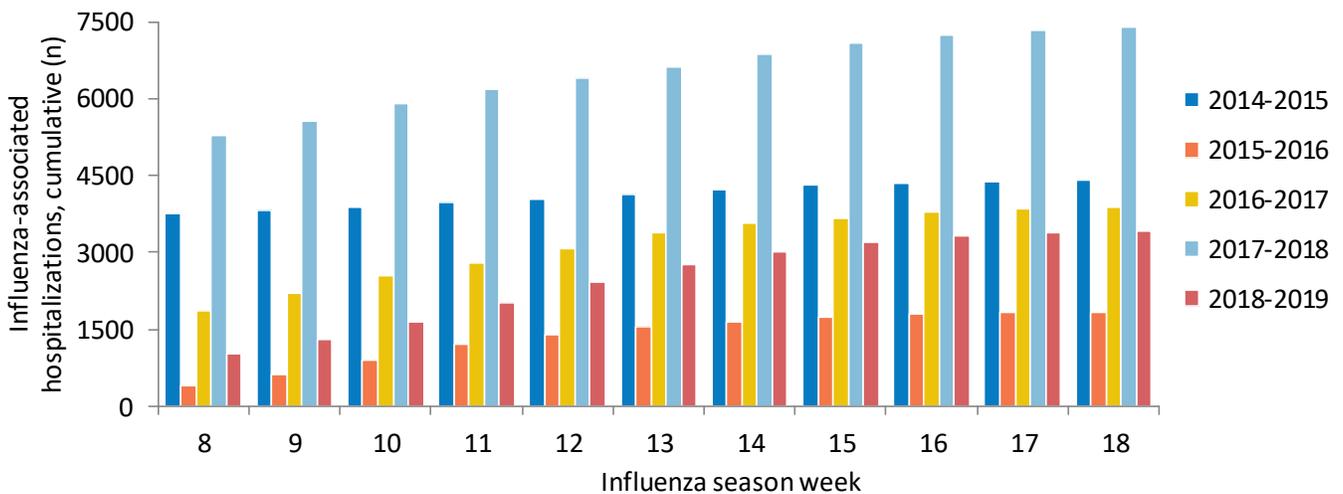


Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System

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	49	5	0	40	2	2	8	4	0	0
1-4	100	3	3	81	5	8	17	4	0	0
5-17	115	3	3	89	5	15	19	2	0	0
18-49	520	44	20	402	24	30	105	37	37	3
50-64	856	97	49	646	36	28	187	53	0	0
65+	1775	132	143	1360	89	51	254	67	0	0
Total	3415	284	218	2618	161	134	590	167	37	3

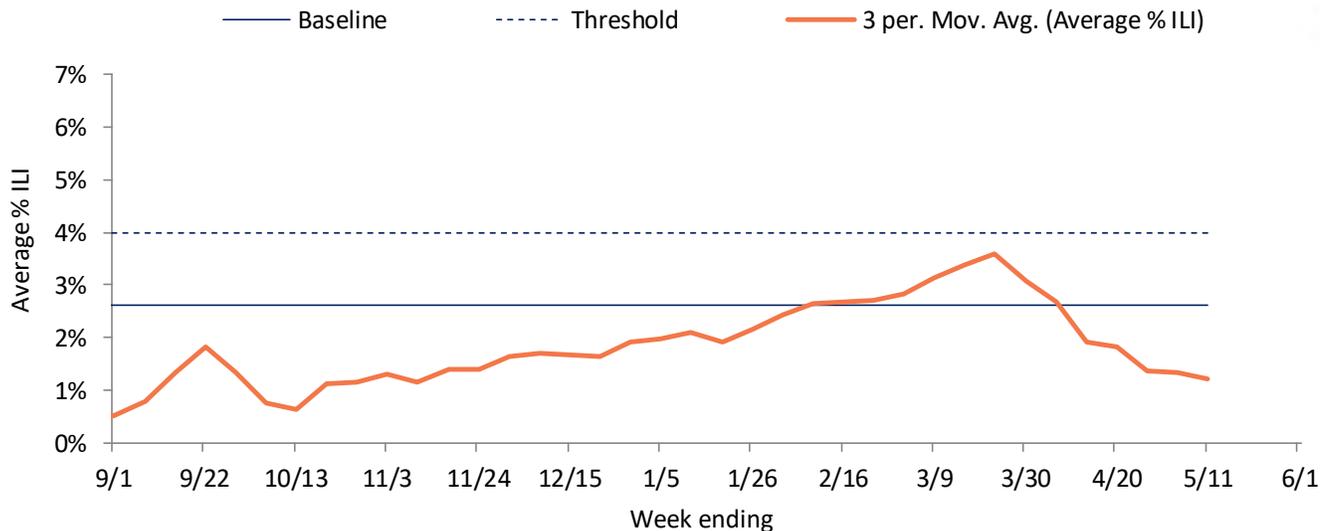
Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



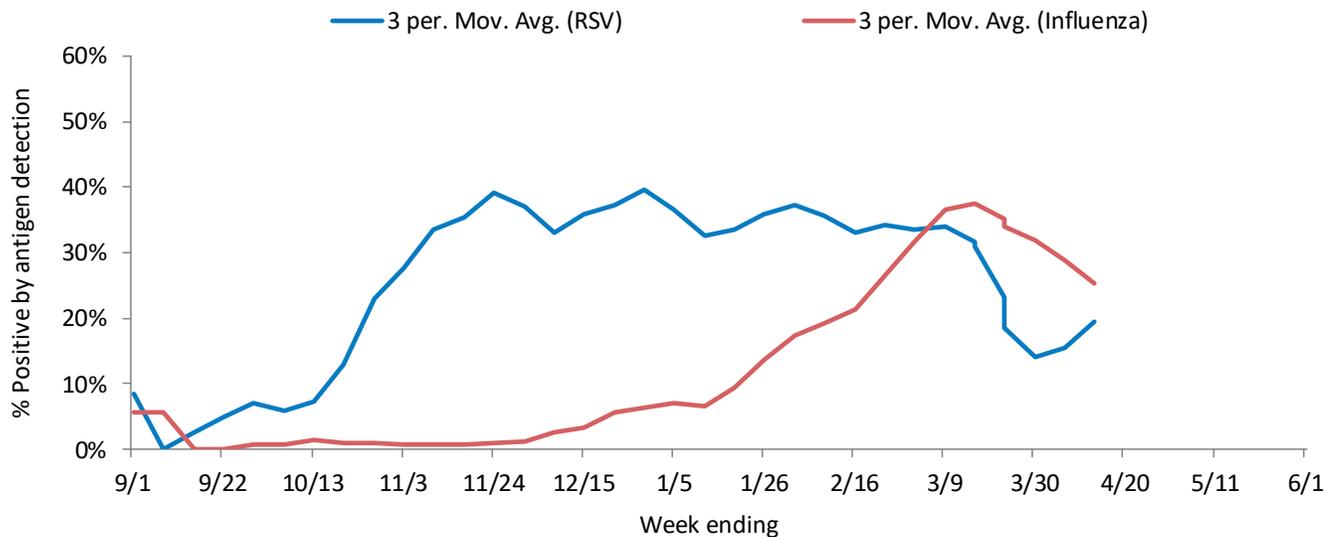
NORTHEASTERN REGION

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							
304	21	5	26	8.6%	52	8	15.4%	1.3%	2.6%	4.0%

ILI activity trend analysis



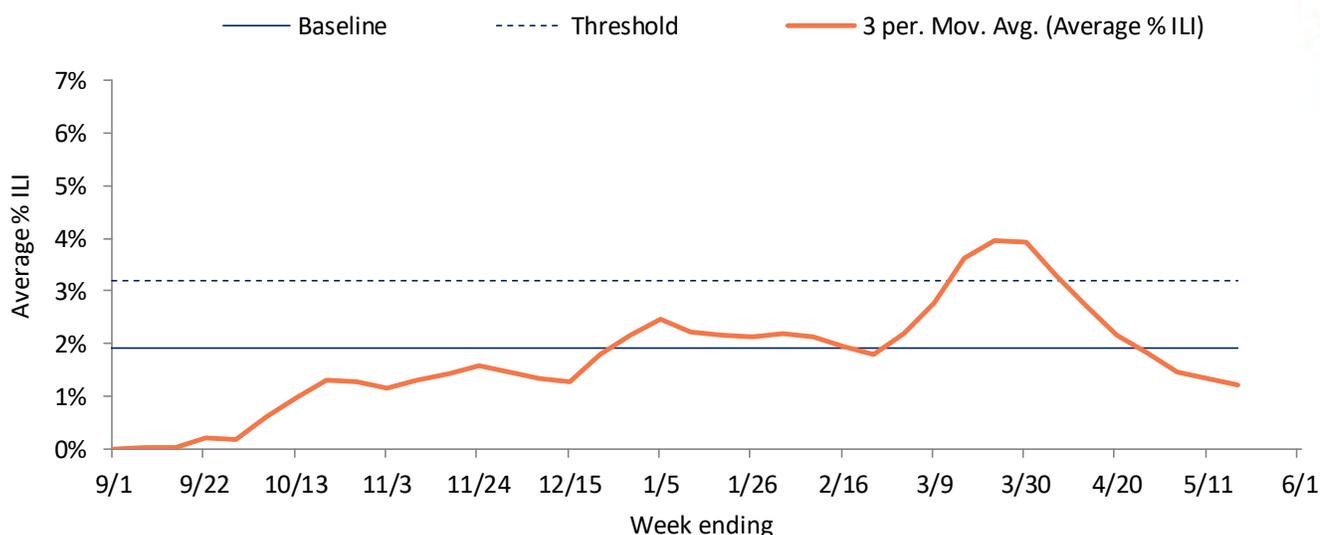
Influenza and RSV trend analysis



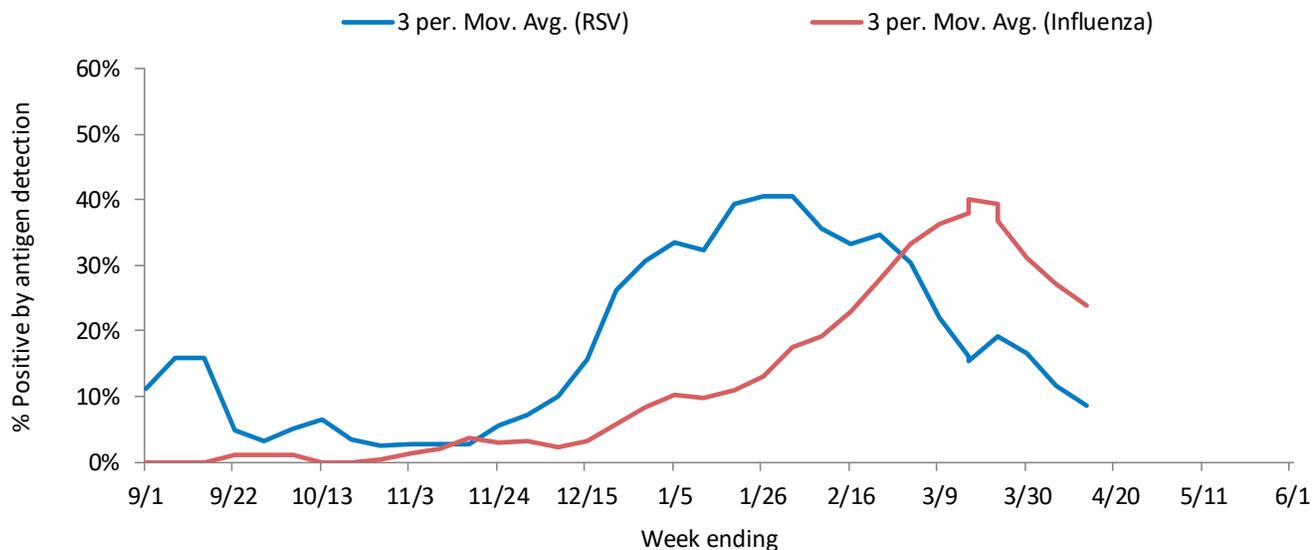
NORTHWESTERN REGION

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							
182	13	1	14	7.7%	39	3	7.7%	1.2%	1.9%	3.2%

ILI activity trend analysis



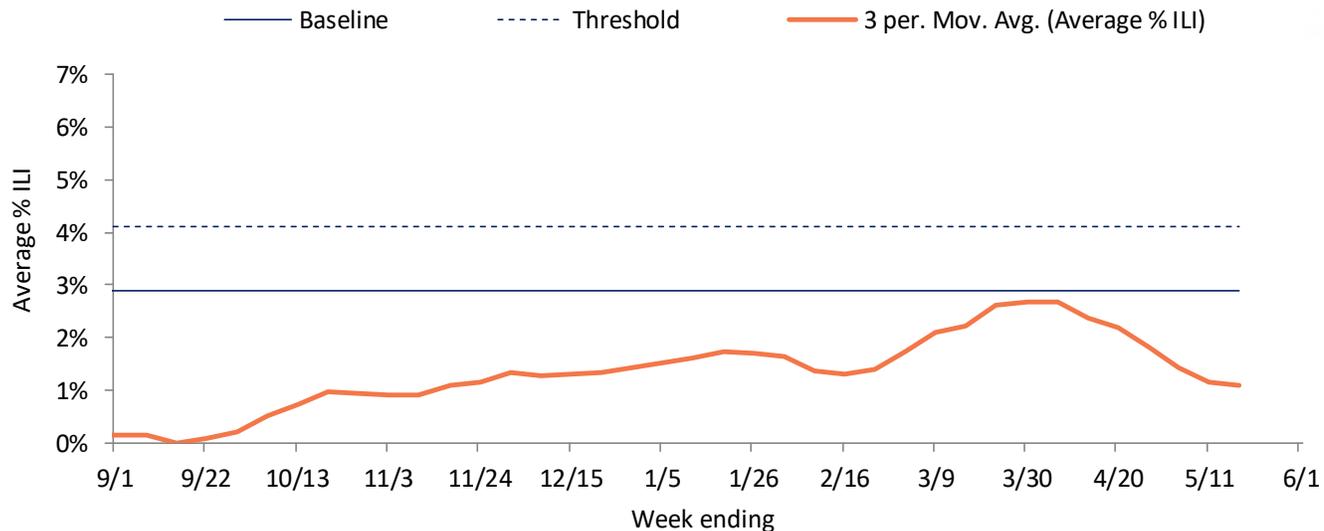
Influenza and RSV trend analysis



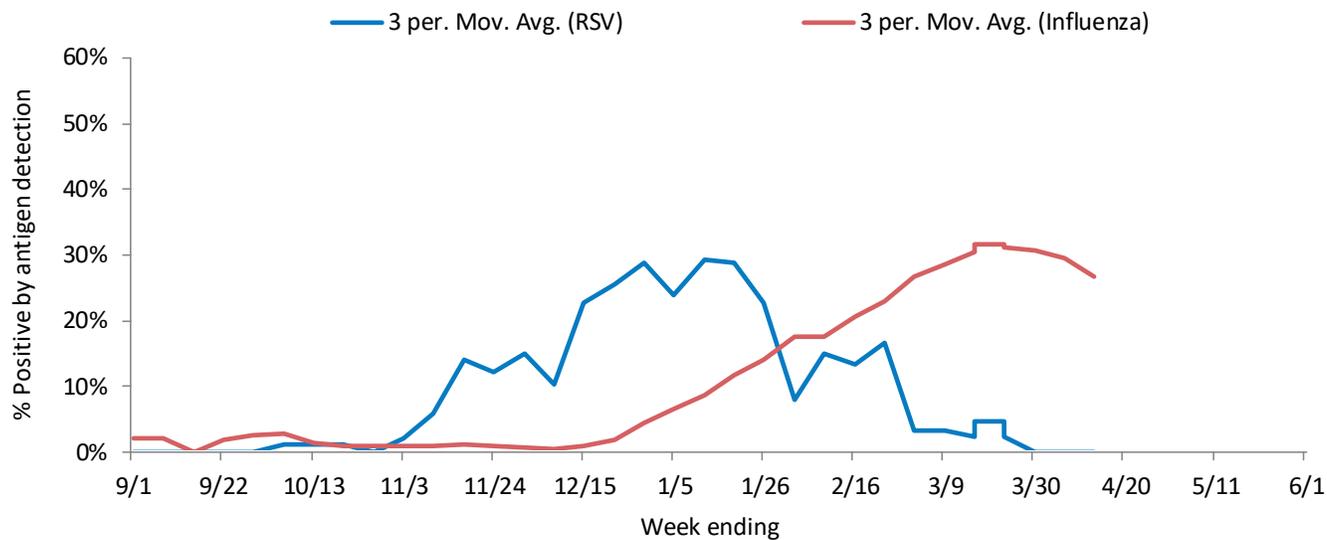
SOUTHEASTERN REGION

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							
374	24	11	35	9.4%	4	0	0.0%	1.1%	2.9%	4.1%

ILI activity trend analysis



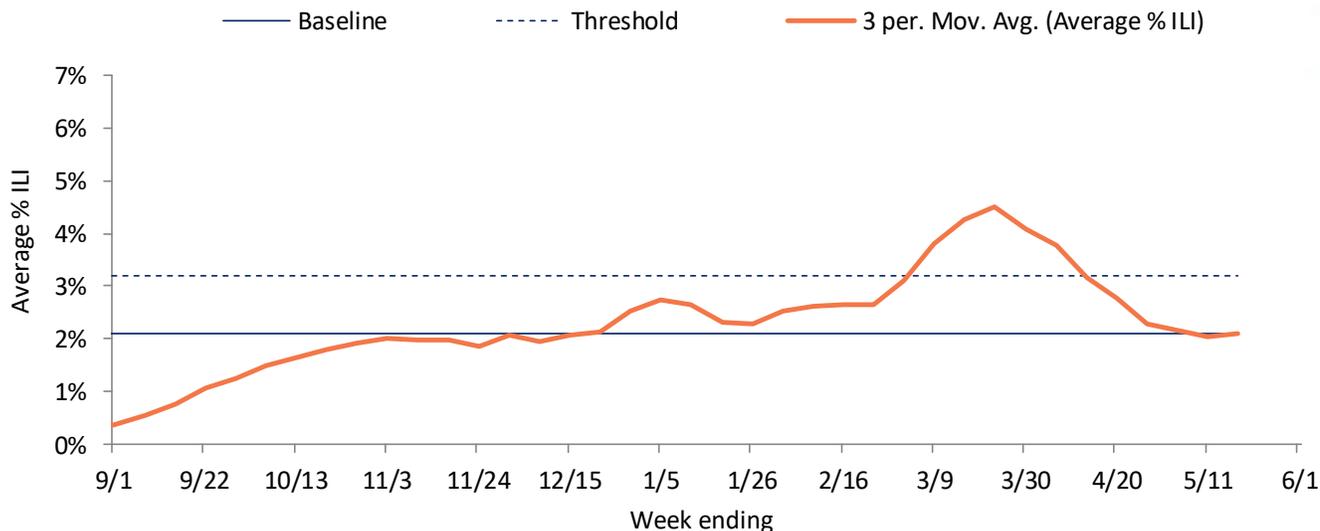
Influenza and RSV trend analysis



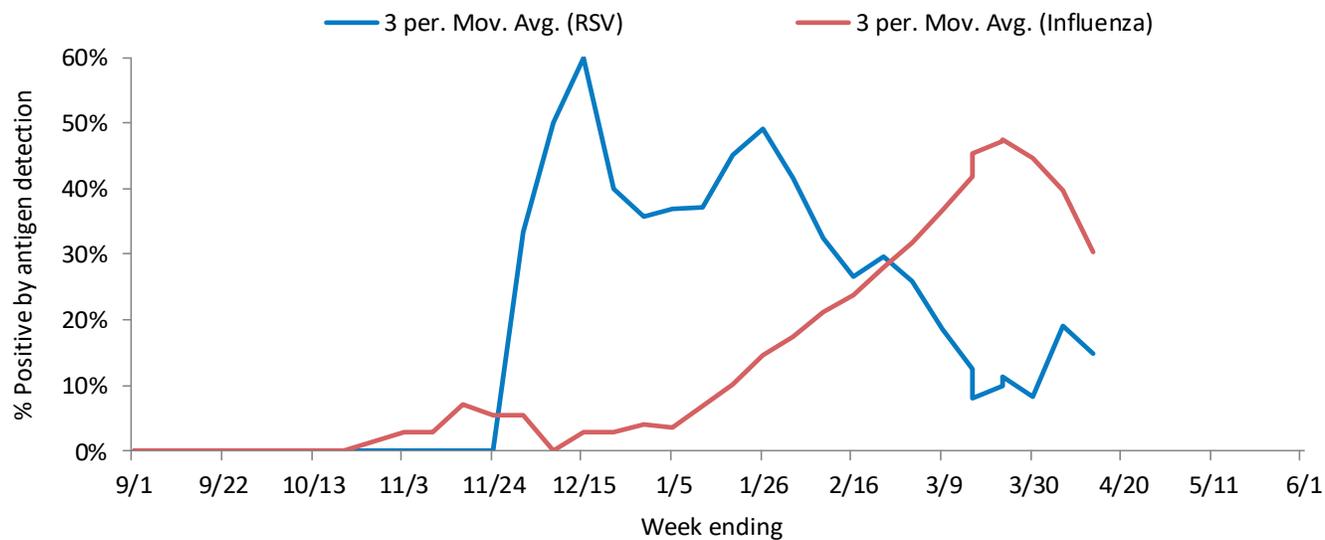
SOUTHERN REGION

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							
23	5	1	6	26.1%	7	1	14.3%	2.1%	2.1%	3.2%

ILI activity trend analysis

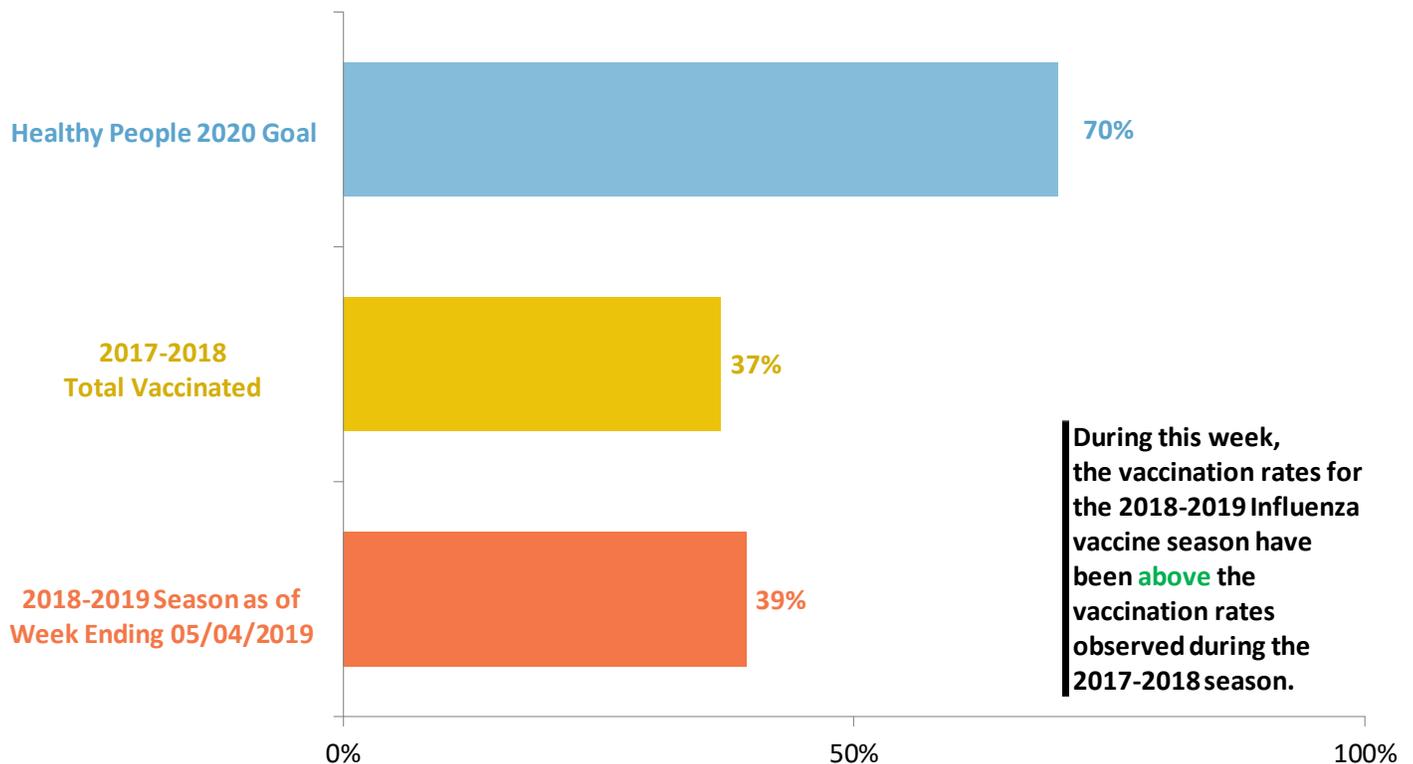


Influenza and RSV trend analysis



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:

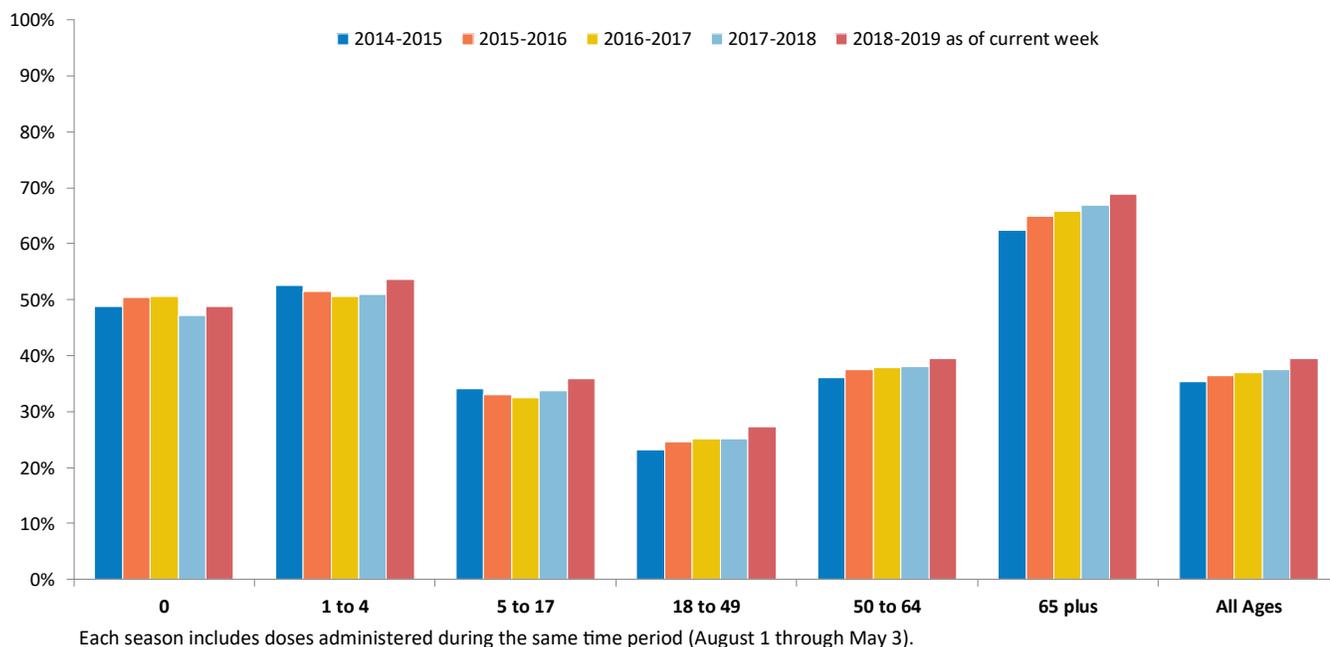
- A/Michigan/45/2015 (H1N1)pdm09-like virus
- A/Singapore/INFIMH-16-0019/2016 A(H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus (updated)

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

