



RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 11: Ending March 16, 2019

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

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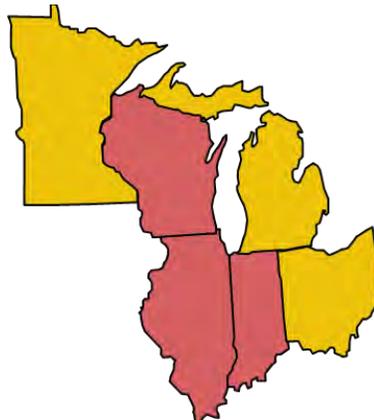


INFLUENZA LIKE ILLNESS (ILI) ACTIVITY

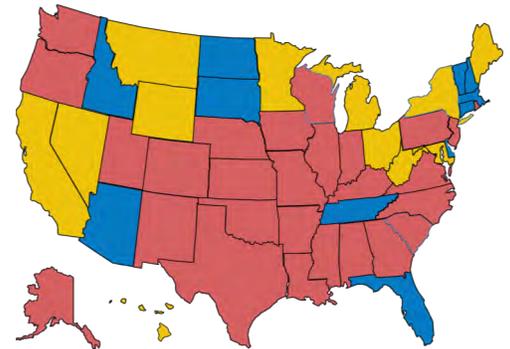
STATE OF WISCONSIN



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 A/H3 s the predominant virus this week.

INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

	Week 11, 2019	October 1, 2018 to present
Wisconsin	0	1
Nationwide	8	76

CURRENT ALERTS:

- Flu activity has not yet peaked in Wisconsin. High influenza activity will likely continue well into April, 2019.
- 390 flu-associated hospitalizations were reported this week.



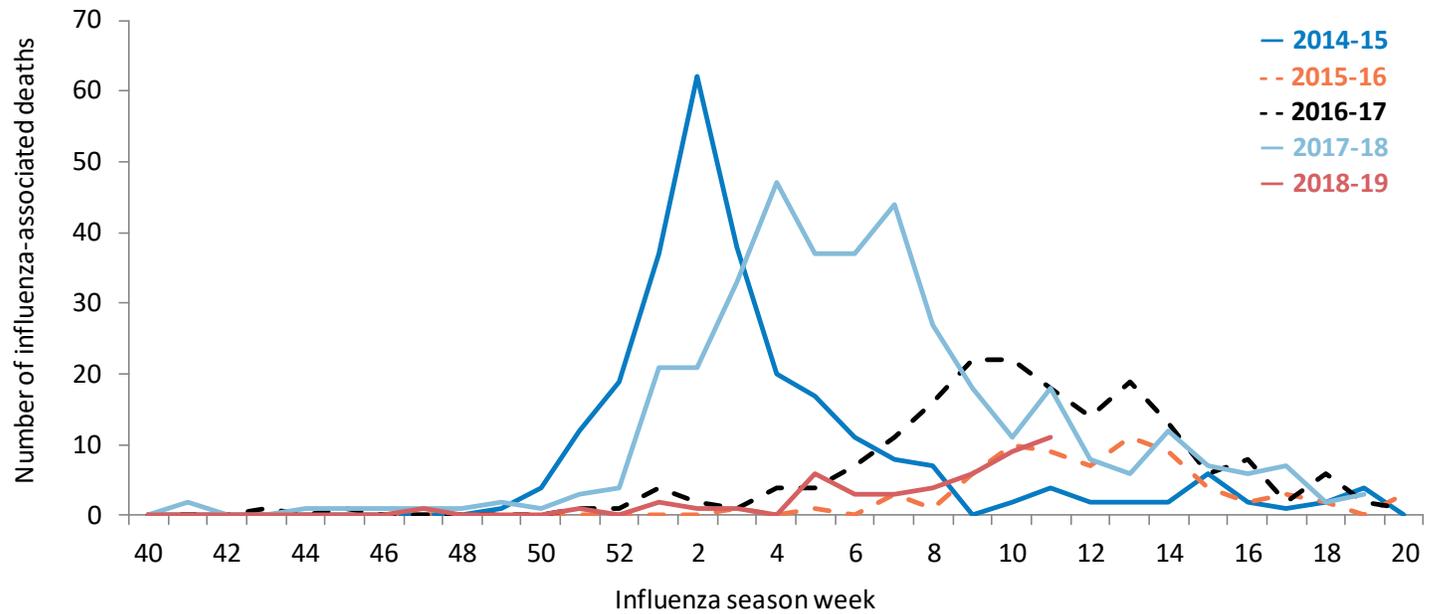
For National US influenza surveillance statistics visit: www.cdc.gov/flu/weekly/



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 March 16, 2019

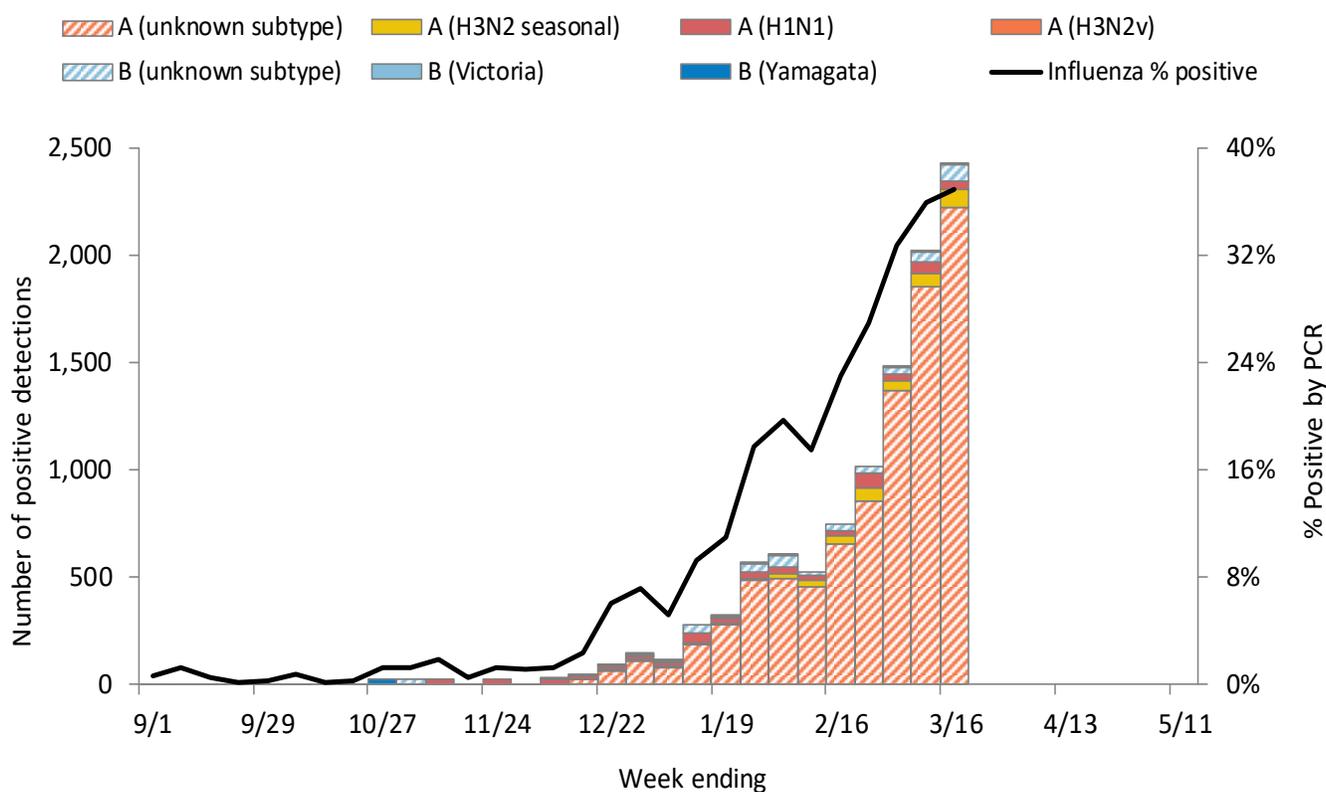
Age group (years)	Week 11, 2019			Cumulative, 2018-2019 season		
	Influenza (I)	Pneumonia (P)	Percent I+P of all deaths	Influenza (I)	Pneumonia (P)	Percent I+P of all deaths
0-4	0	0	0.0%	1	5	2.7%
5-17	0	0	0.0%	0	2	2.3%
18-49	0	4	8.3%	6	62	3.5%
50-64	5	9	9.4%	9	189	4.3%
65+	6	46	7.1%	33	313	5.6%
All ages	11	59	7.5%	49	1571	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

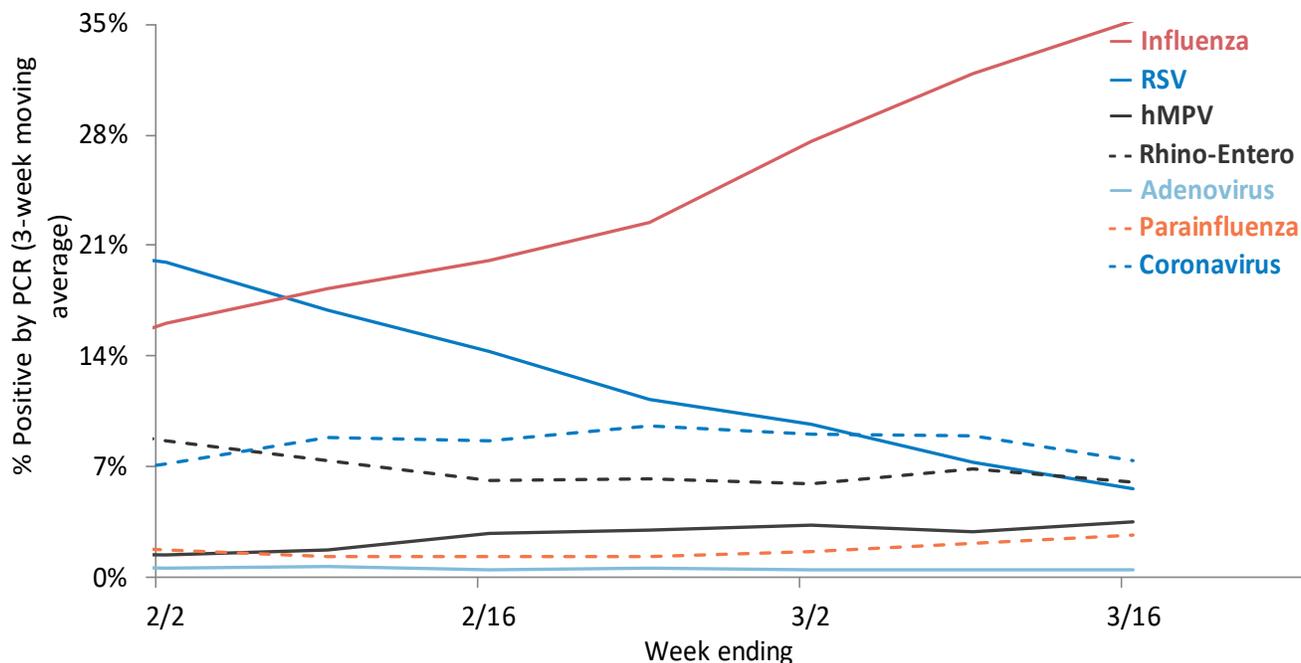


Cumulative number of positive influenza PCR tests by subtype September 1, 2018 to present

	A (2009 H1N1)	Influenza A: A (H3N2)	Influenza A: 96% A (Unknown)	B (Victoria)	Influenza B: B (Yamagata)	Influenza B: 4% B (Unknown)	Total
Total positive (n)	468	402	9133	2	21	388	10414
% of total positive	4%	4%	88%	0%	0%	4%	100%

WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR



Week 11: Ending on March 16, 2019

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	6570	2423	36.9%	85	44	2217	0	3	74

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	930	27	2.9%	5	4	17	1

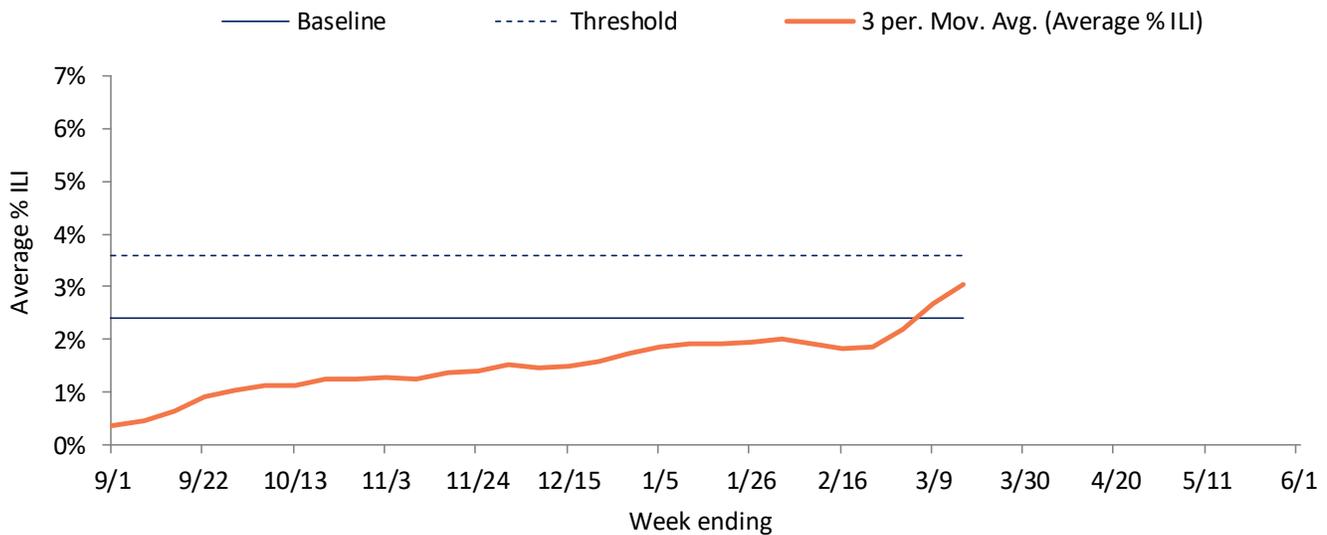
Respiratory virus	Tested	Positive (n)	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1
Coronavirus (CoV)	500	25	5.0%	8	8	9	0

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	1615	58	3.6%
Human metapneumovirus	945	41	4.3%
Rhino-enterovirus	939	38	4.0%
Adenovirus	500	3	0.6%

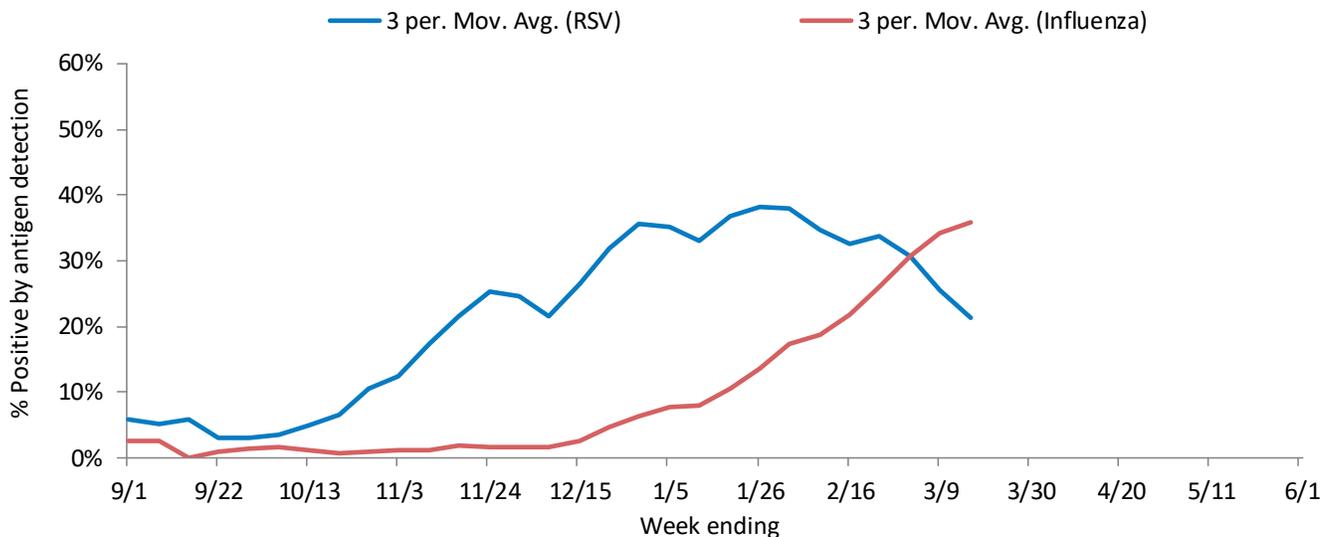
WISCONSIN STATE SUMMARY

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							
3281	1180	59	1239	37.8%	224	48	21.4%	3.3%	2.4%	3.6%

ILI activity trend analysis

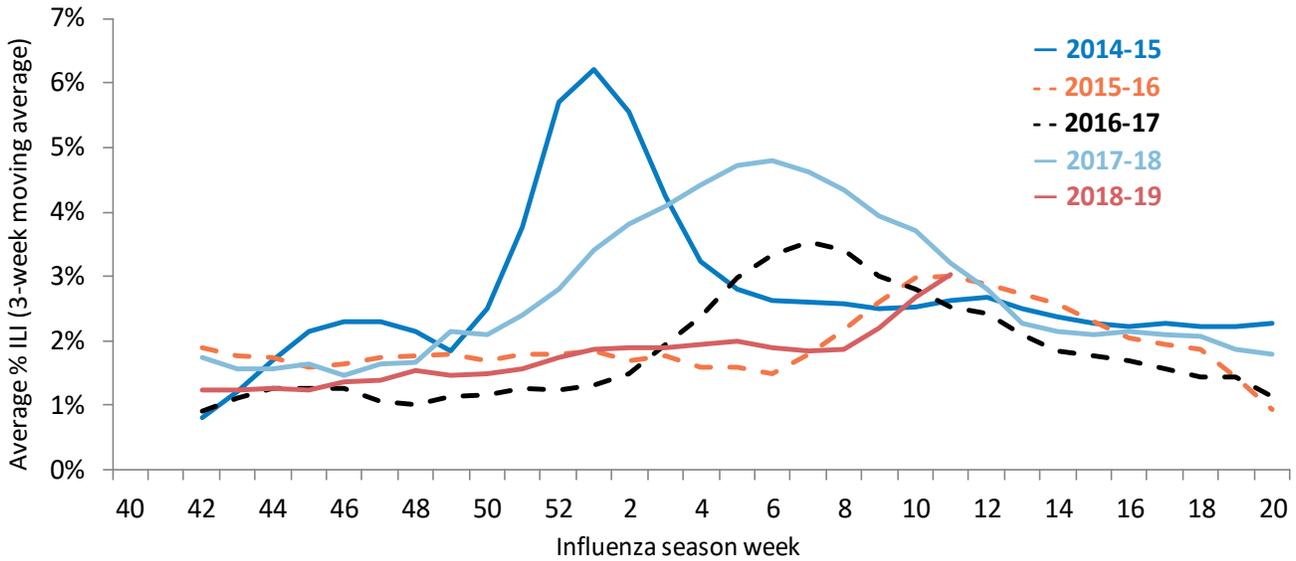


Influenza and RSV trend analysis



WISCONSIN STATE SUMMARY

ILI activity trend analysis by influenza season, Wisconsin

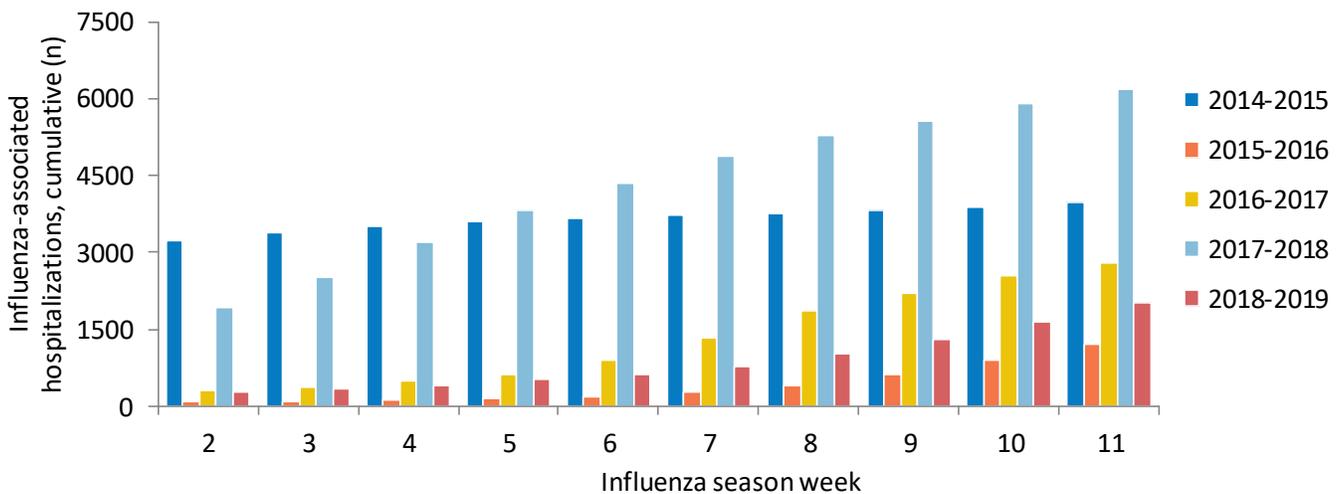


Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System

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	5	3	0	0	2	0	4	2	0	0
1-4	62	2	3	50	3	4	10	2	0	0
5-17	66	1	2	45	2	16	10	1	0	0
18-49	349	32	8	270	17	22	76	24	25	1
50-64	558	63	21	428	24	22	120	35	0	0
65+	988	86	66	744	54	38	145	43	0	0
Total	2028	187	100	1537	102	102	365	107	25	1

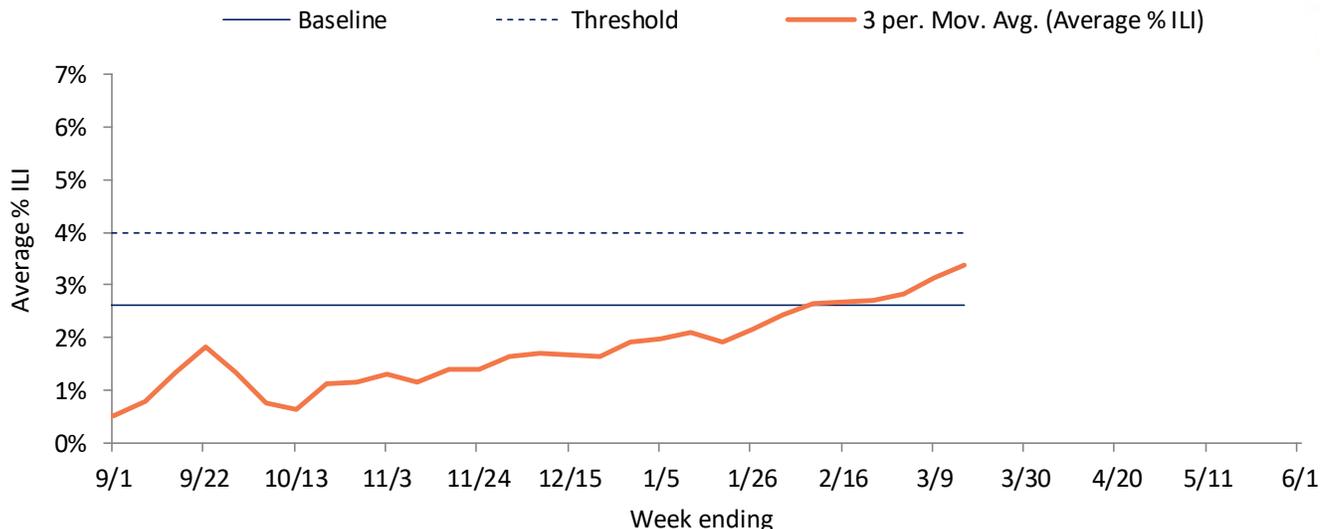
Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



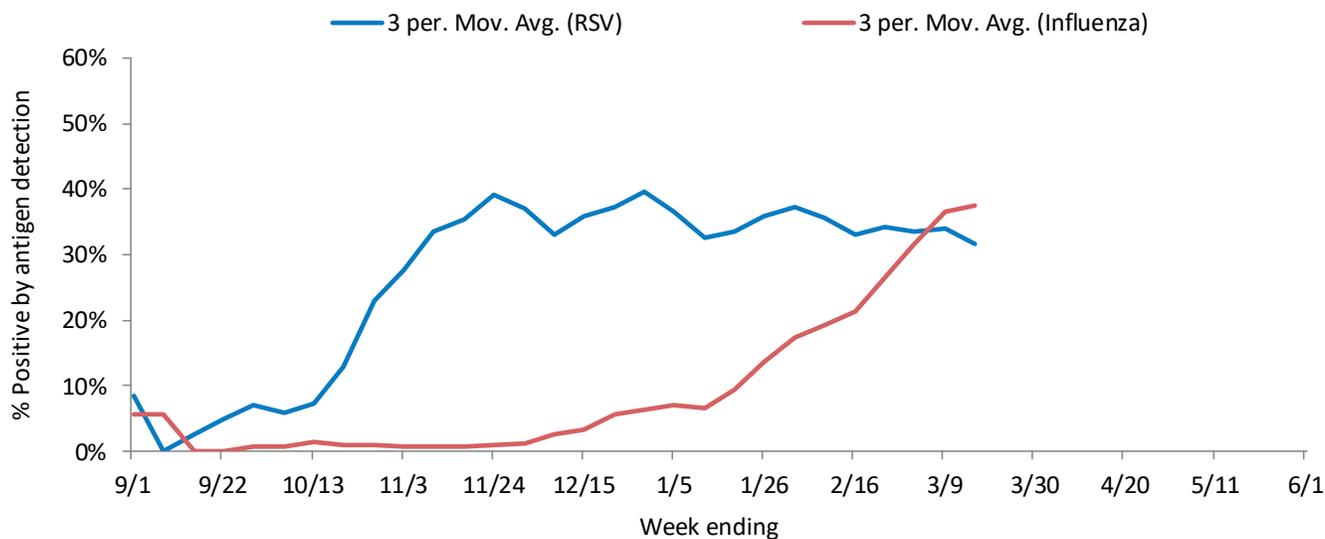
NORTHEASTERN REGION

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							
1434	485	36	521	36.3%	100	28	28.0%	3.7%	2.6%	4.0%

ILI activity trend analysis



Influenza and RSV trend analysis

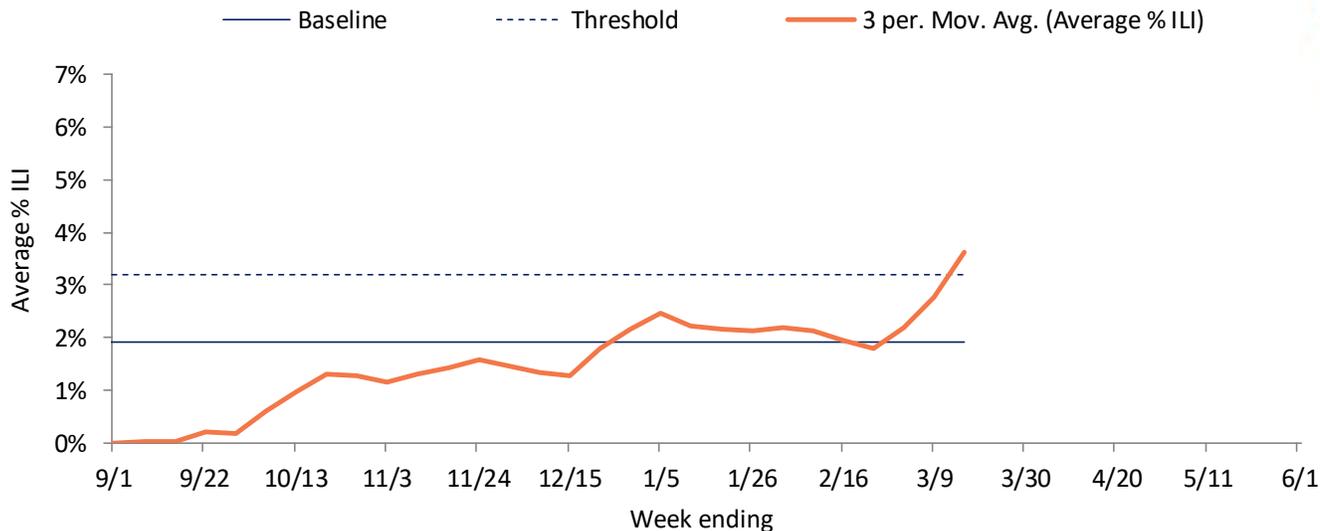




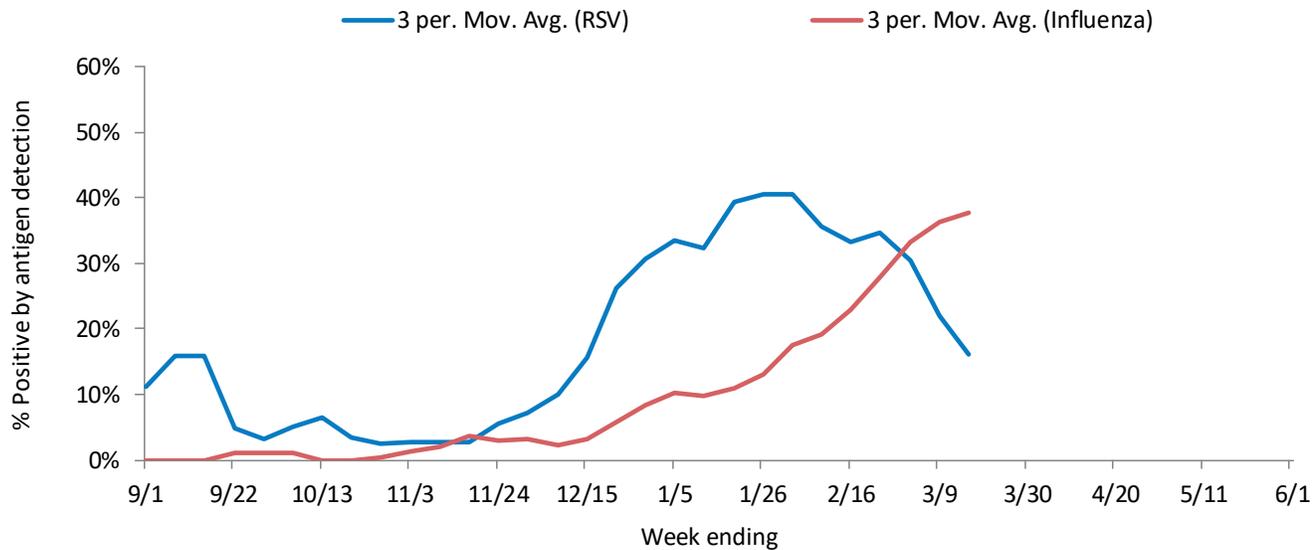
NORTHWESTERN REGION

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							
726	394	4	398	54.8%	87	17	19.5%	4.4%	1.9%	3.2%

ILI activity trend analysis



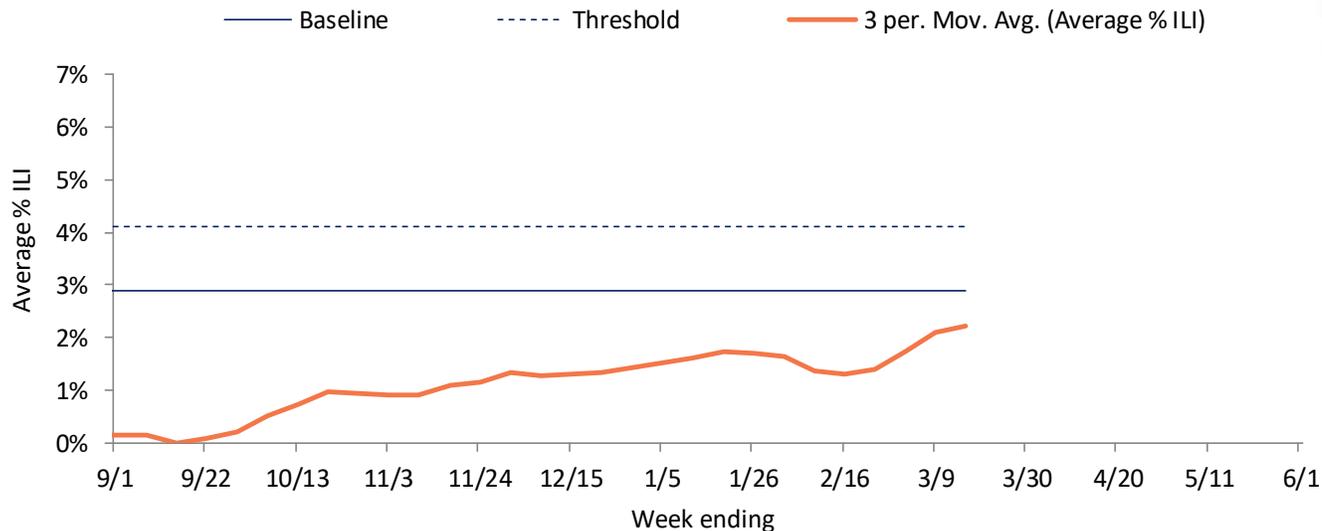
Influenza and RSV trend analysis



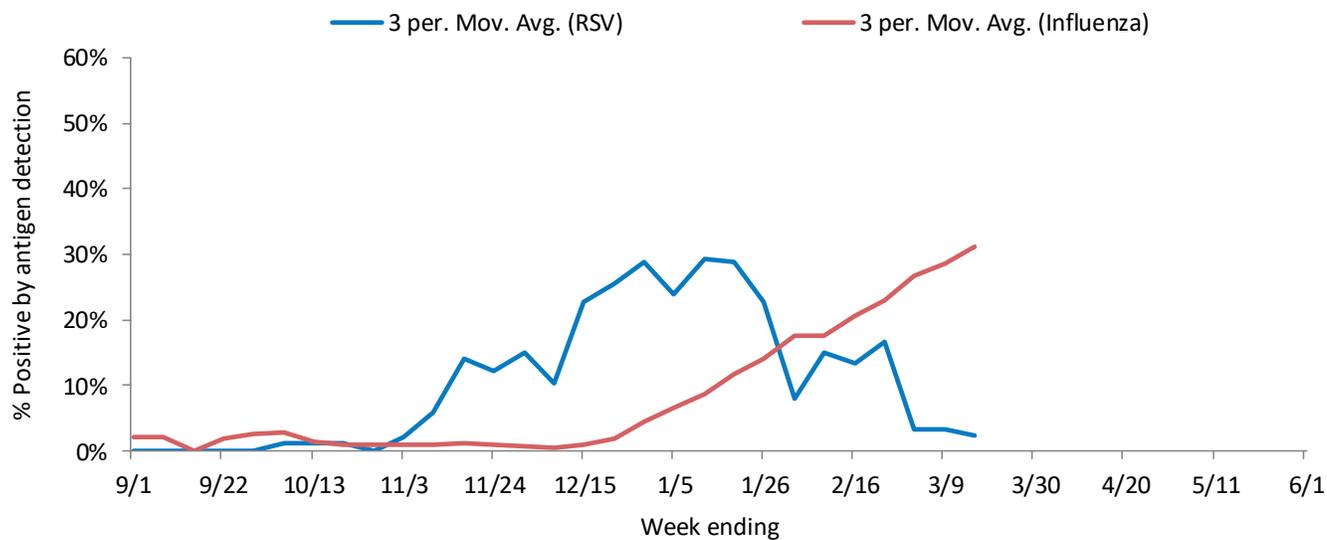
SOUTHEASTERN REGION

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							
820	270	11	281	34.3%	14	1	7.1%	2.3%	2.9%	4.1%

ILI activity trend analysis



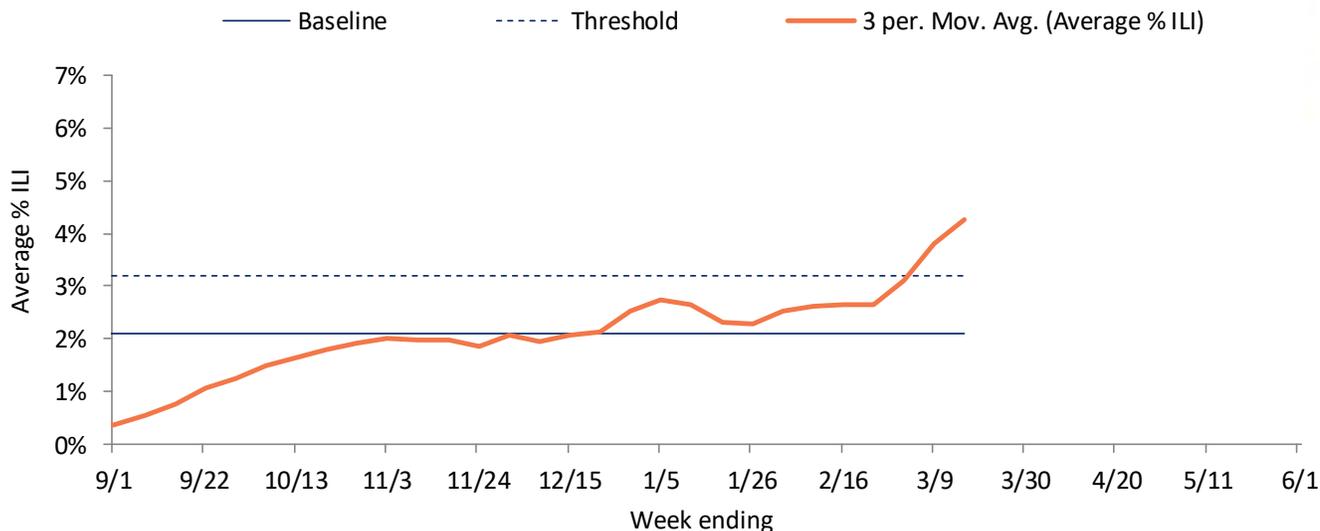
Influenza and RSV trend analysis



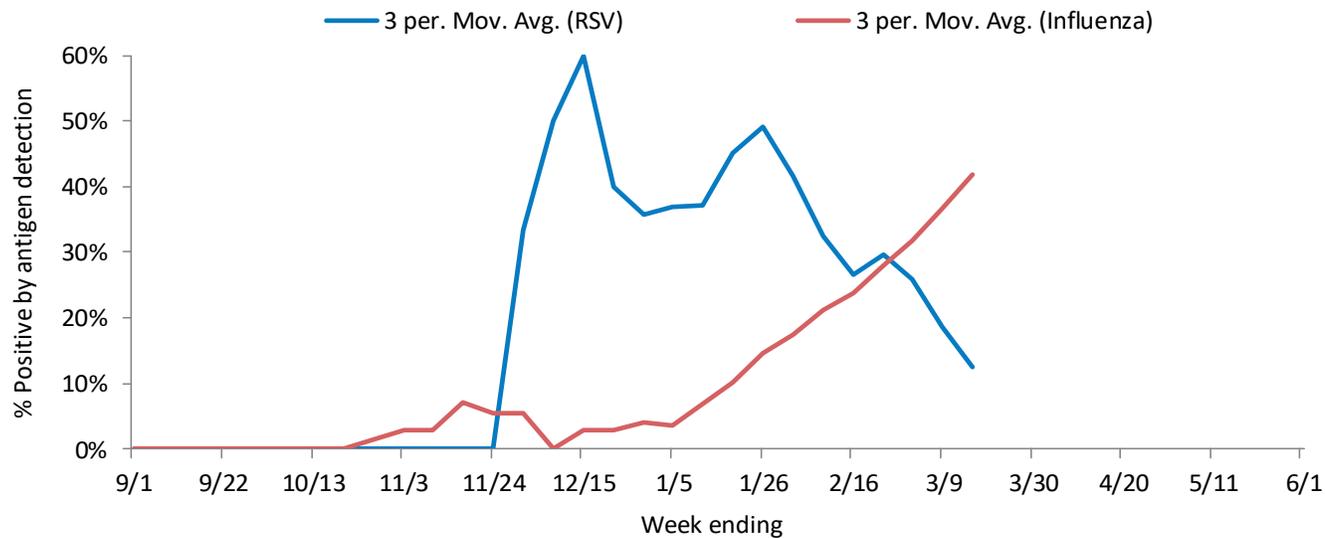
SOUTHERN REGION

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							
231	101	8	109	47.2%	23	2	8.7%	4.4%	2.1%	3.2%

ILI activity trend analysis

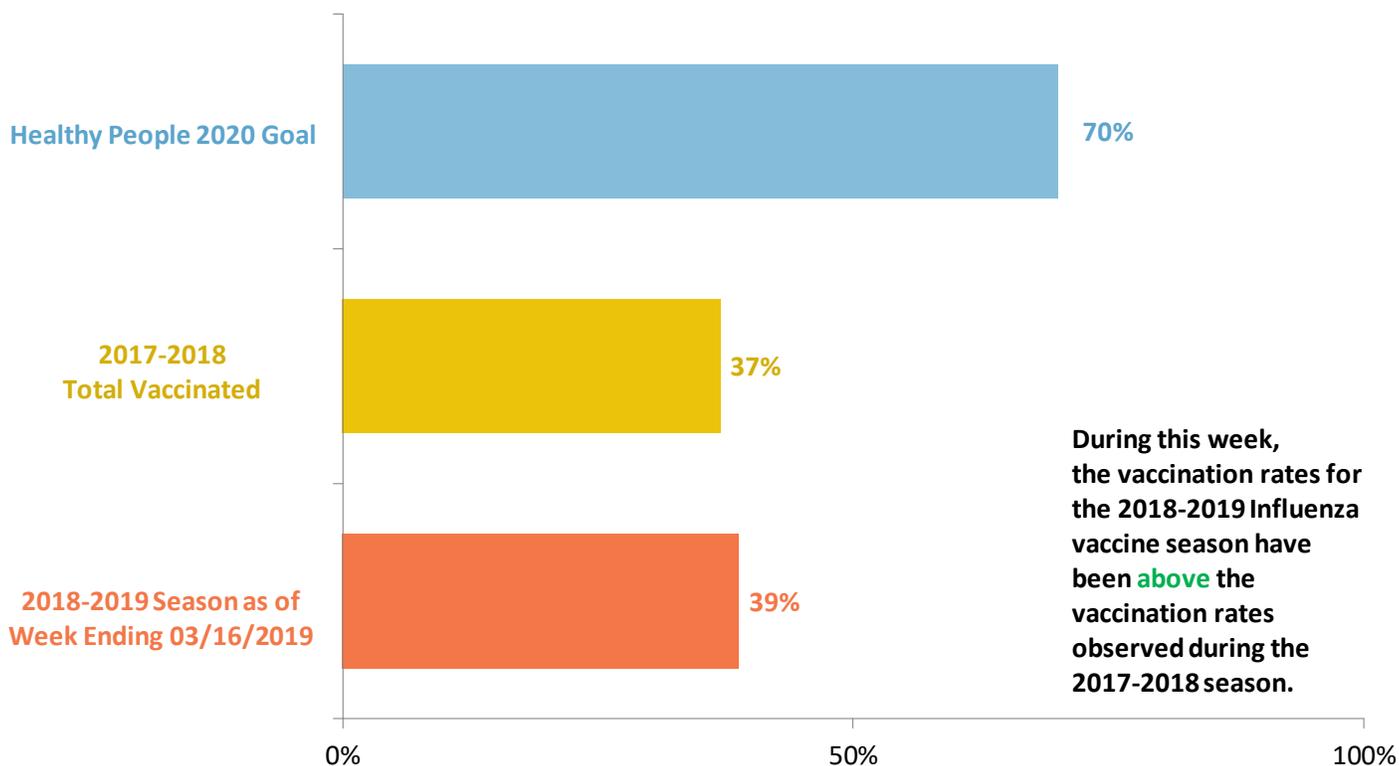


Influenza and RSV trend analysis



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:

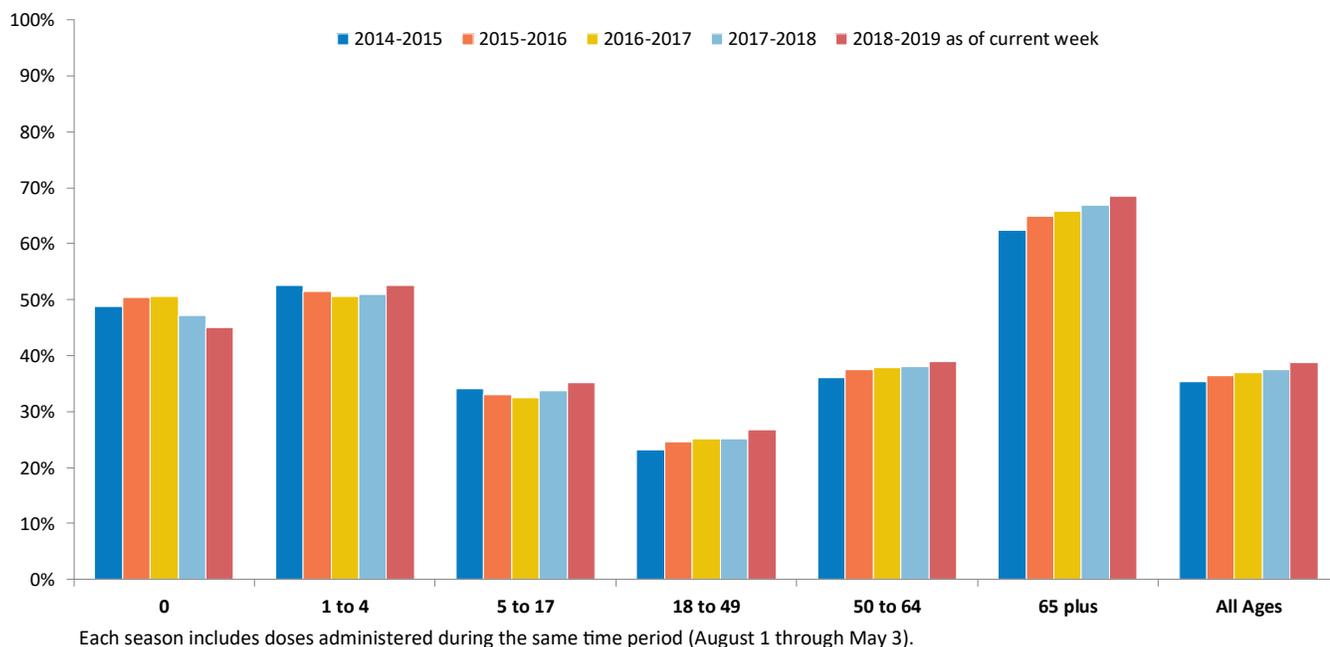
- A/Michigan/45/2015 (H1N1)pdm09-like virus
- A/Singapore/INFIMH-16-0019/2016 A(H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus (updated)

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

