

RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 4: Ending January 25, 2020

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

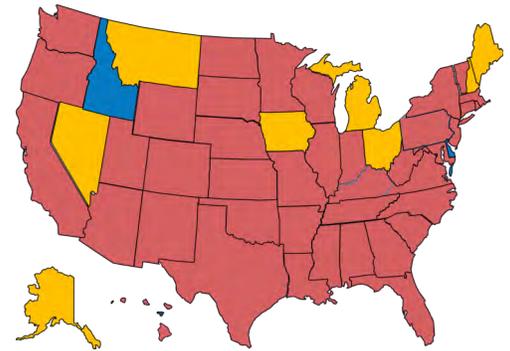
STATE OF WISCONSIN



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 Viruses of the Week:**

Influenza B and RSV are the predominant viruses this week.

CURRENT ALERTS:

Influenza B (Victoria lineage) continues to be the predominant influenza virus in Wisconsin.

An increase in influenza A/H1 has been identified nationally and in Wisconsin.

INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

	Week 4, 2020	October 1, 2019 to present
Wisconsin	0	1
Nationwide	14	68



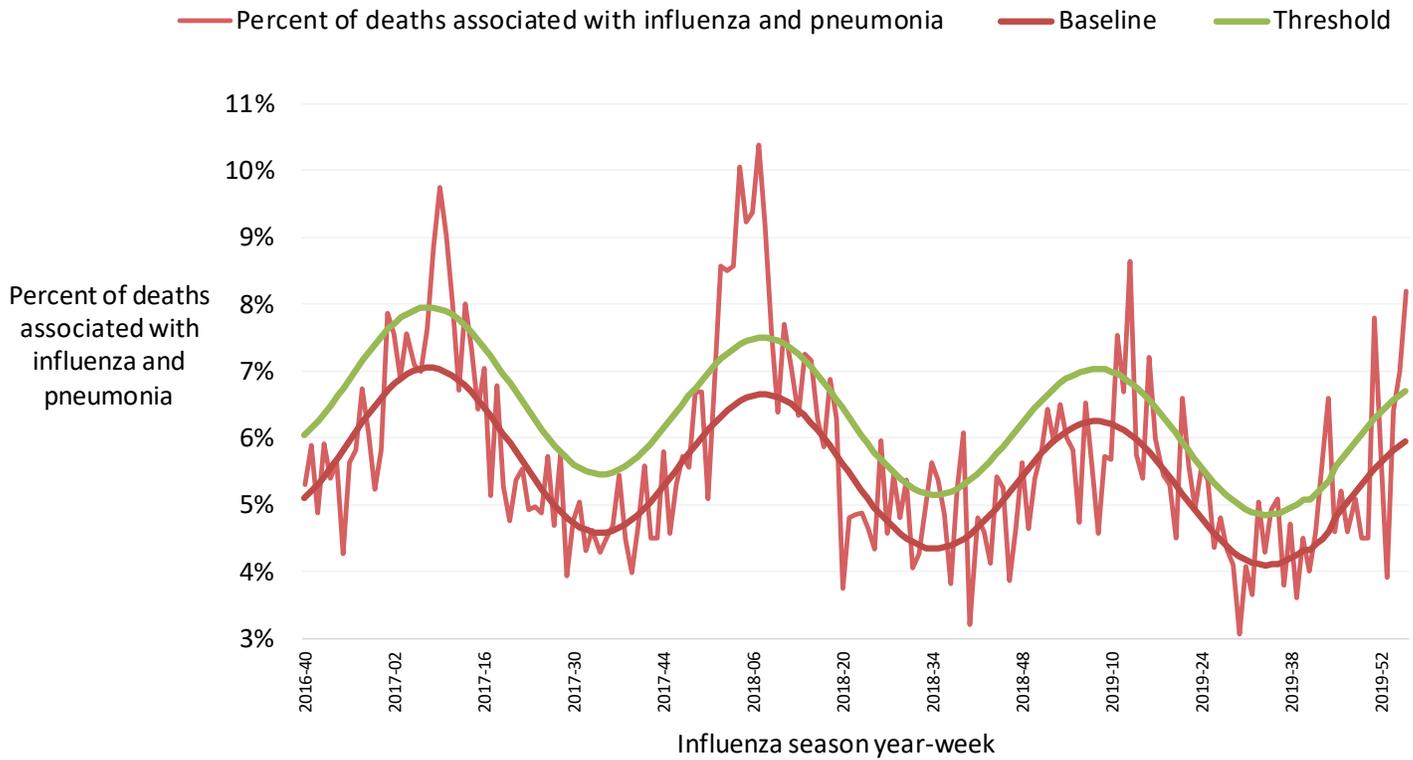
For National US influenza surveillance statistics visit: www.cdc.gov/flu/weekly/



INFLUENZA AND PNEUMONIA-ASSOCIATED MORTALITY

Influenza and Pneumonia Deaths, Wisconsin

Influenza- and pneumonia-associated deaths by influenza season year and week, Wisconsin



Influenza- and pneumonia-associated deaths by most recent influenza season week, Wisconsin, 2019-2020 season

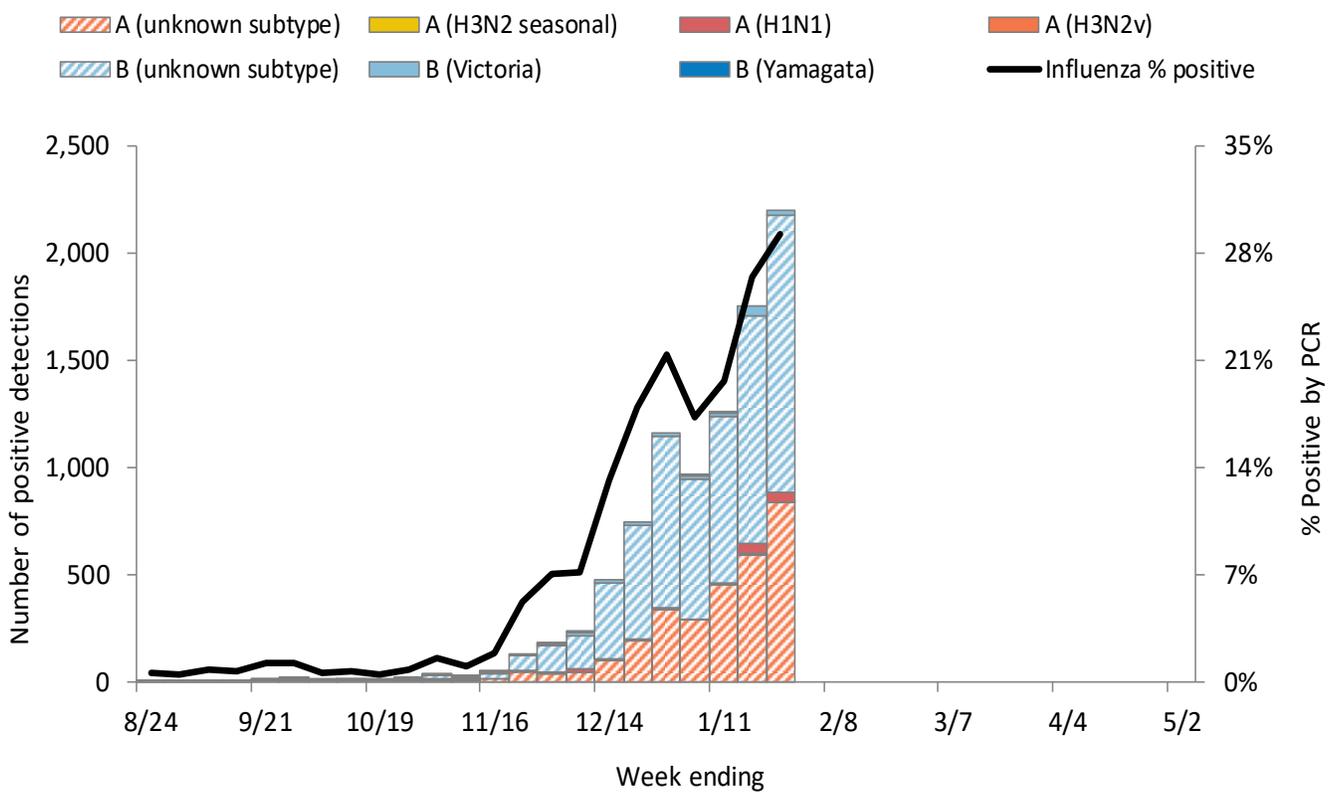
Influenza season week	Influenza-associated deaths (I)	Pneumonia-associated deaths (P)	Percent I+P of all deaths	Baseline I+P of all deaths	Threshold I+P of all deaths
2	7	66	6.4%	5.8%	6.6%
3	1	77	7.0%	5.9%	6.7%
4 Preliminary Data	3	67	8.2%	6.0%	6.8%
Seasonal total	26	1182	5.1%	NA	NA

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



WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Wisconsin positive influenza results and subtypes by PCR

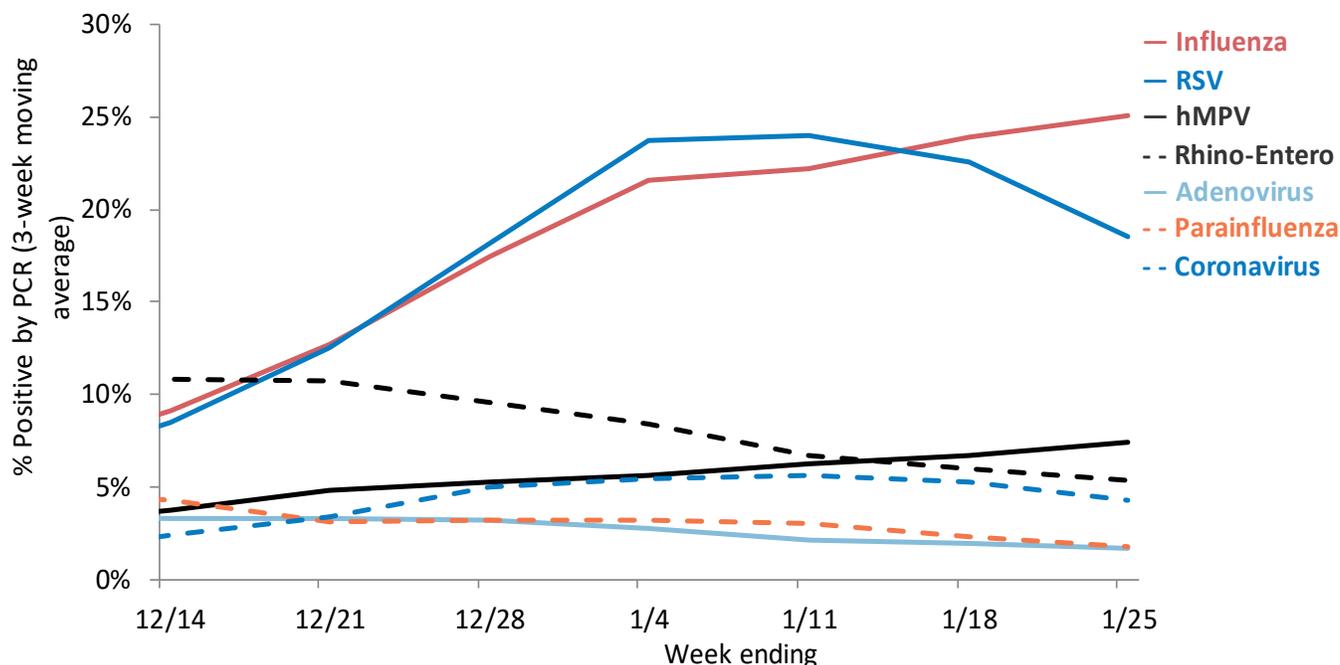


Cumulative number of positive influenza PCR tests by subtype September 1, 2019 to present

	A (2009 H1N1)	Influenza A: 35%			Influenza B: 65%			Total
	A (H3N2)	A (Unknown)	B (Victoria)	B (Yamagata)	B (Unknown)			
Total positive (n)	163	58	2978	193	10	5855	9257	
% of total positive	2%	1%	32%	2%	0%	63%	100%	

WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR



Week 4: Ending on January 25, 2020

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	7549	2201	29.2%	1	50	834	26	0	1290

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	1000	18	1.8%	8	1	1	8

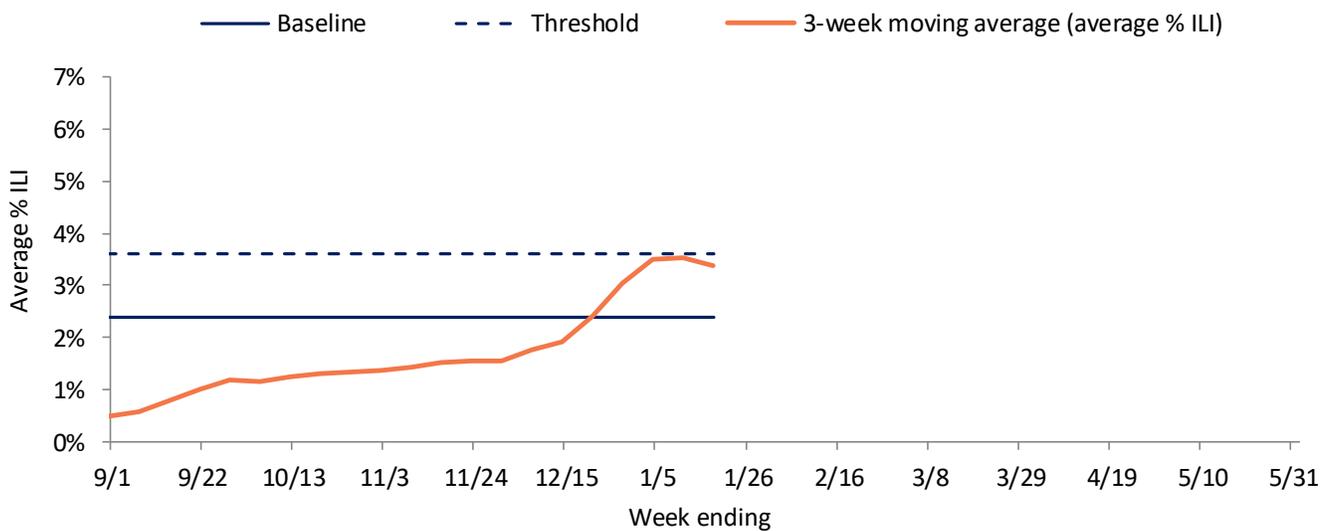
Respiratory virus	Tested	Positive	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1
Coronavirus	492	13	2.6^	0	3	1	9

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	2508	438	17.5%
Human metapneumovirus	1035	81	7.8%
Rhino-enterovirus	981	49	5.0%
Adenovirus	492	7	1.4%

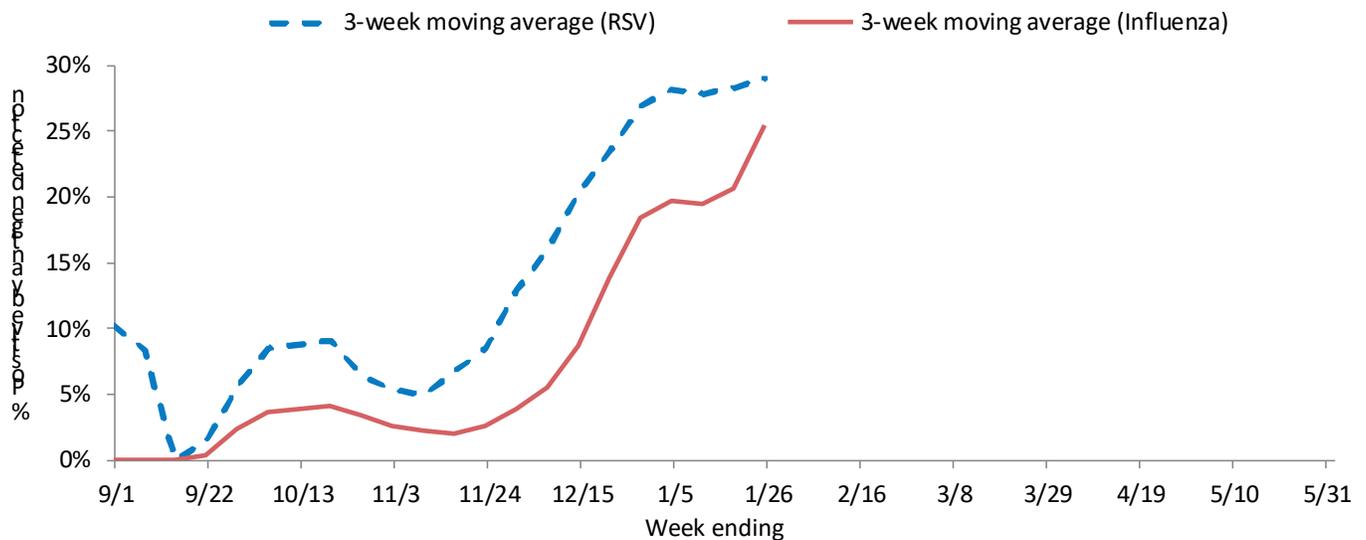
WISCONSIN STATE SUMMARY

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							
1997	274	348	622	31.1%	408	121	29.7%	3.8%	2.4%	3.6%

ILI activity trend analysis

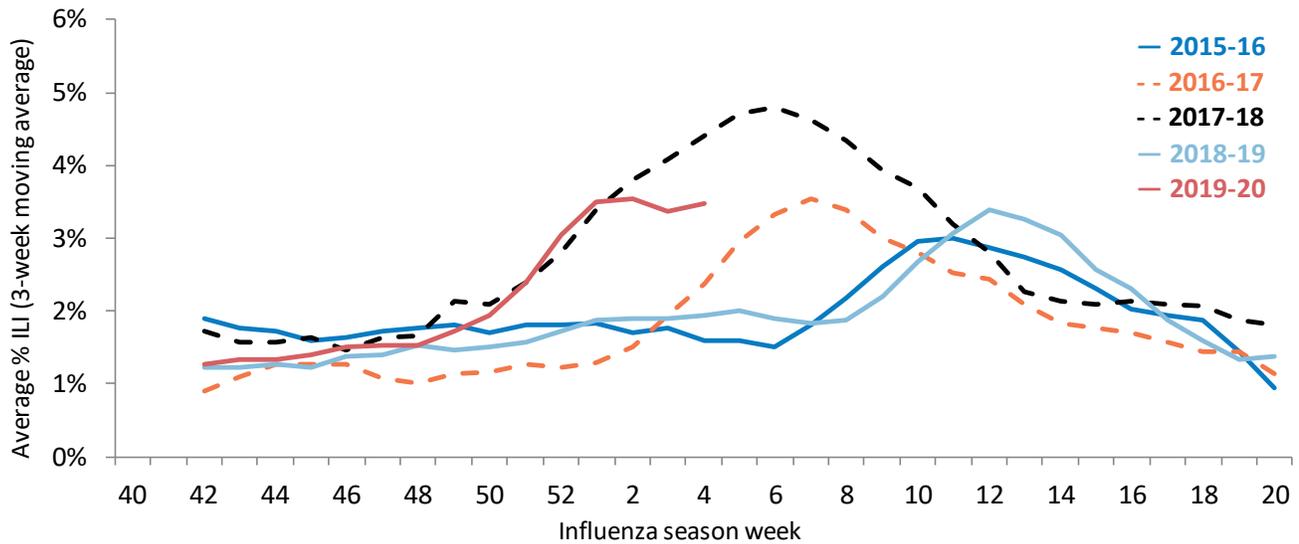


Influenza and RSV trend analysis



WISCONSIN STATE SUMMARY

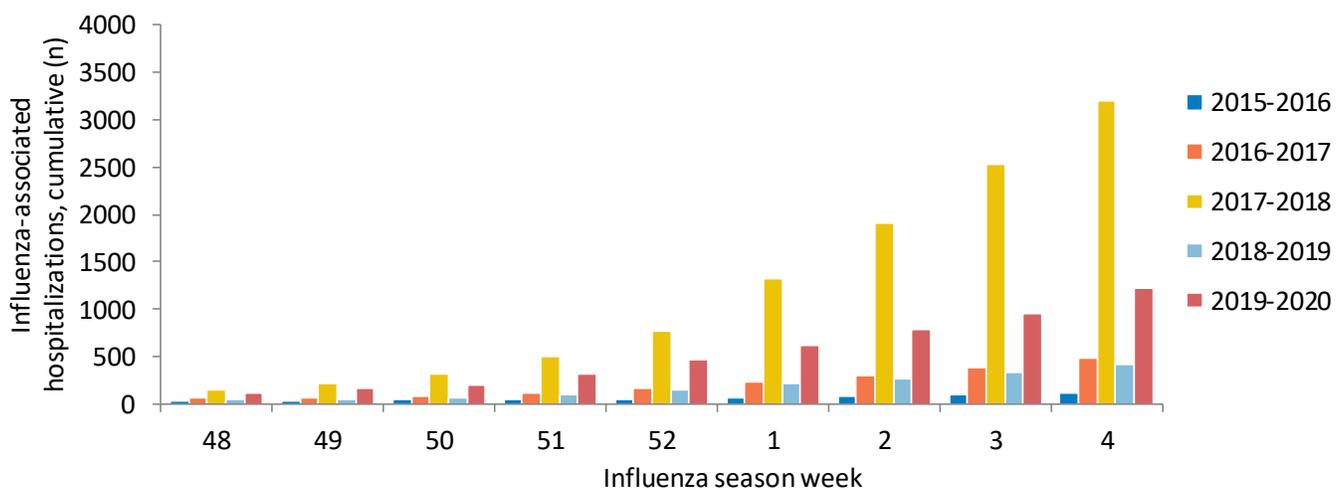
ILI activity trend analysis by influenza season, Wisconsin



Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System September 1, 2019 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	38	3		11	19	5	7	3		
1-4	77	2		15	37	23	12	5		
5-17	128	3		18	51	56	12	3		
18-49	294	12	1	124	108	49	53	17	28	4
50-64	269	18	4	148	74	25	48	13		
65+	409	29	12	215	128	25	48	8		
Total	1215	67	17	531	417	183	180	49	28	4

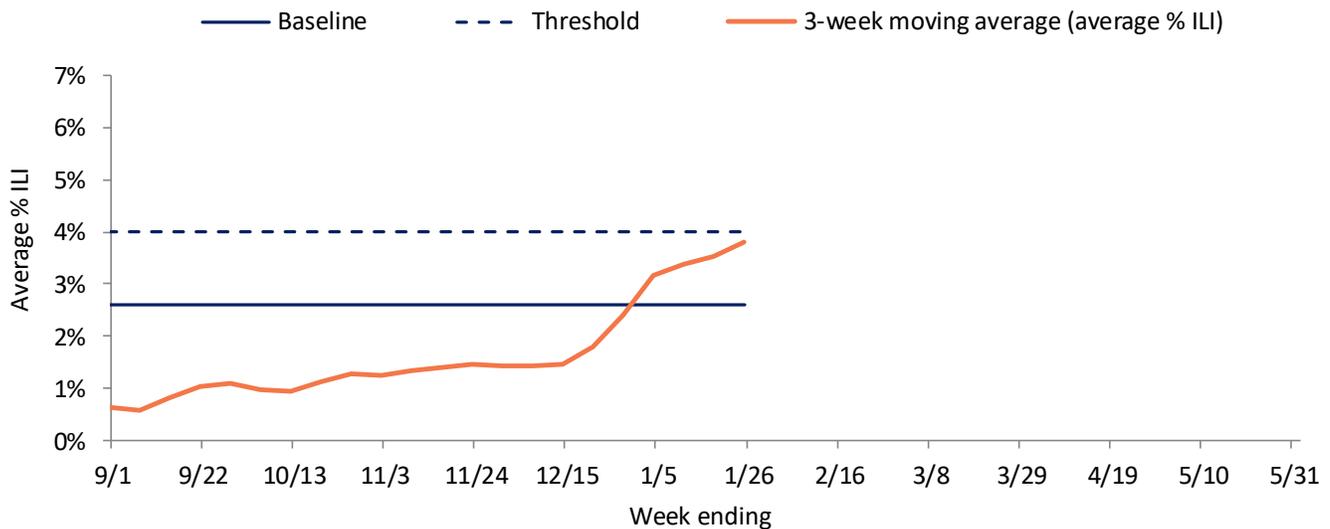
Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



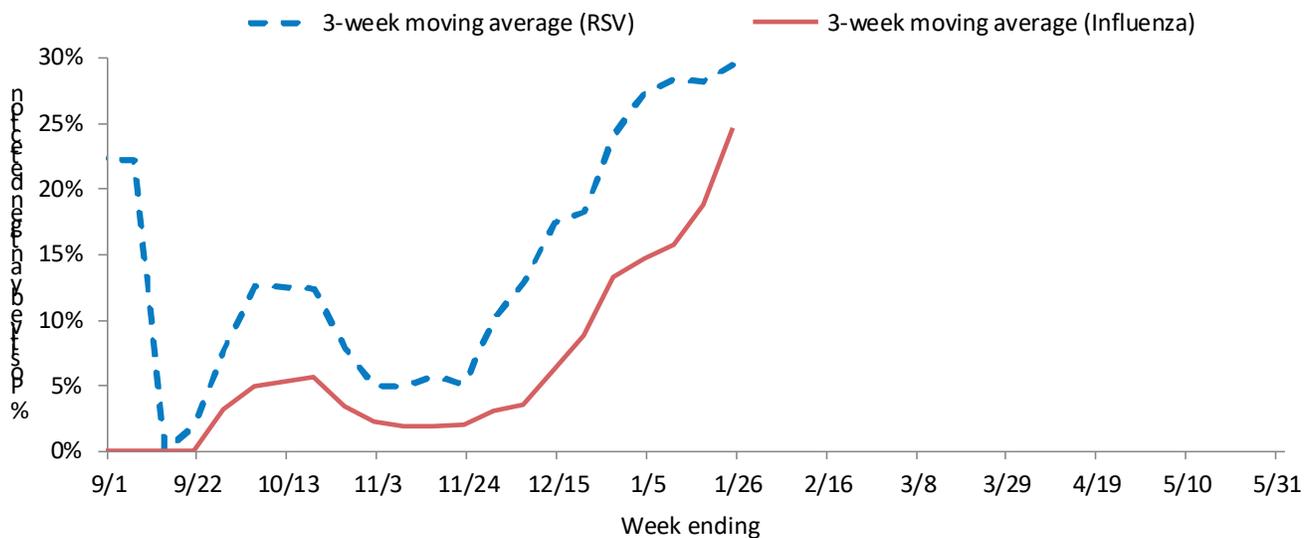
NORTHEASTERN REGION

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							
869	109	169	278	32.0%	219	69	31.5%	4.6%	2.6%	4.0%

ILI activity trend analysis



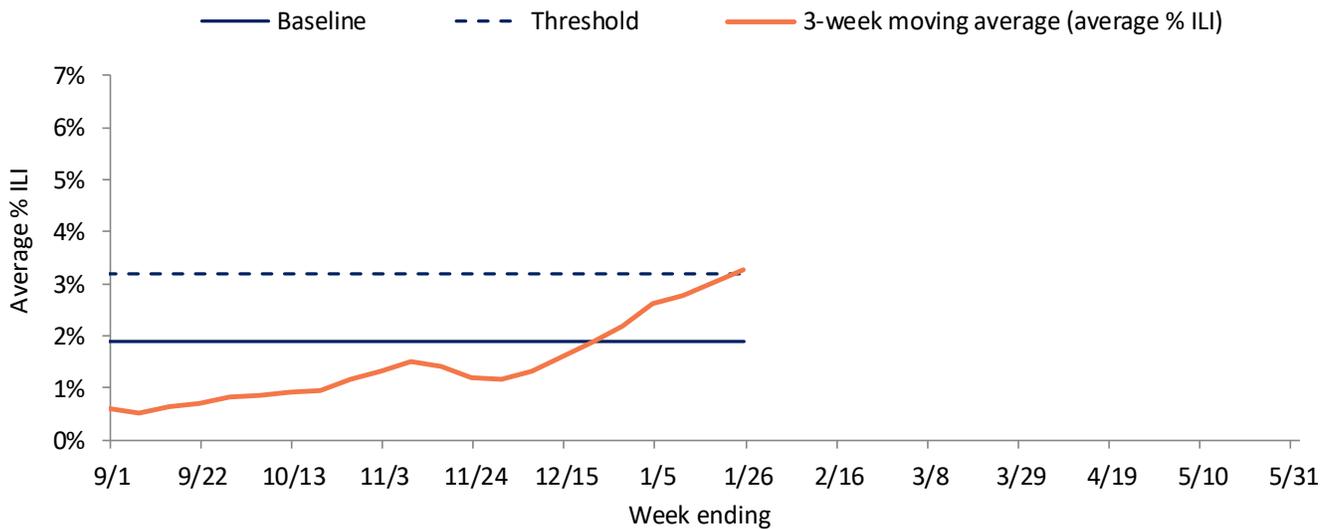
Influenza and RSV trend analysis



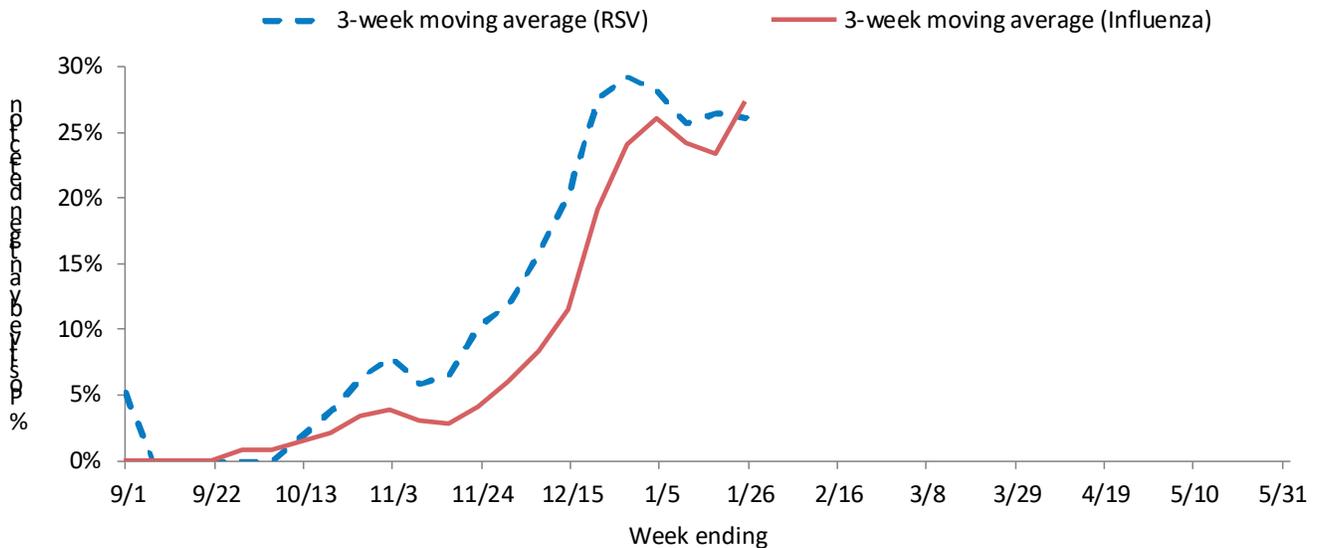
NORTHWESTERN REGION

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							
586	81	110	191	32.6%	166	42	25.3%	3.5%	1.9%	3.2%

ILI activity trend analysis



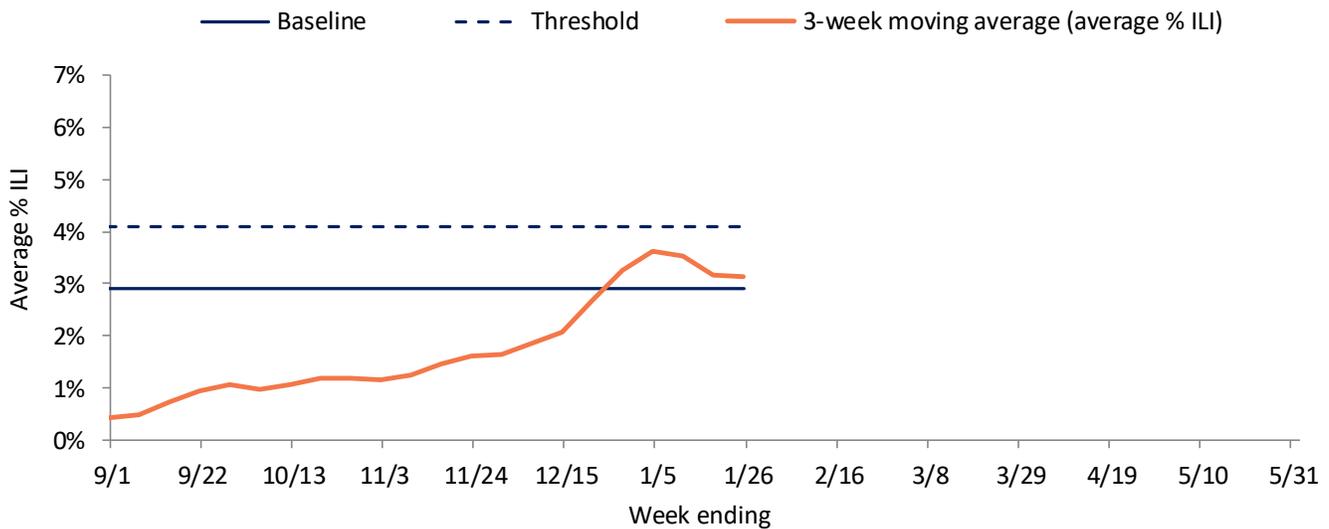
Influenza and RSV trend analysis



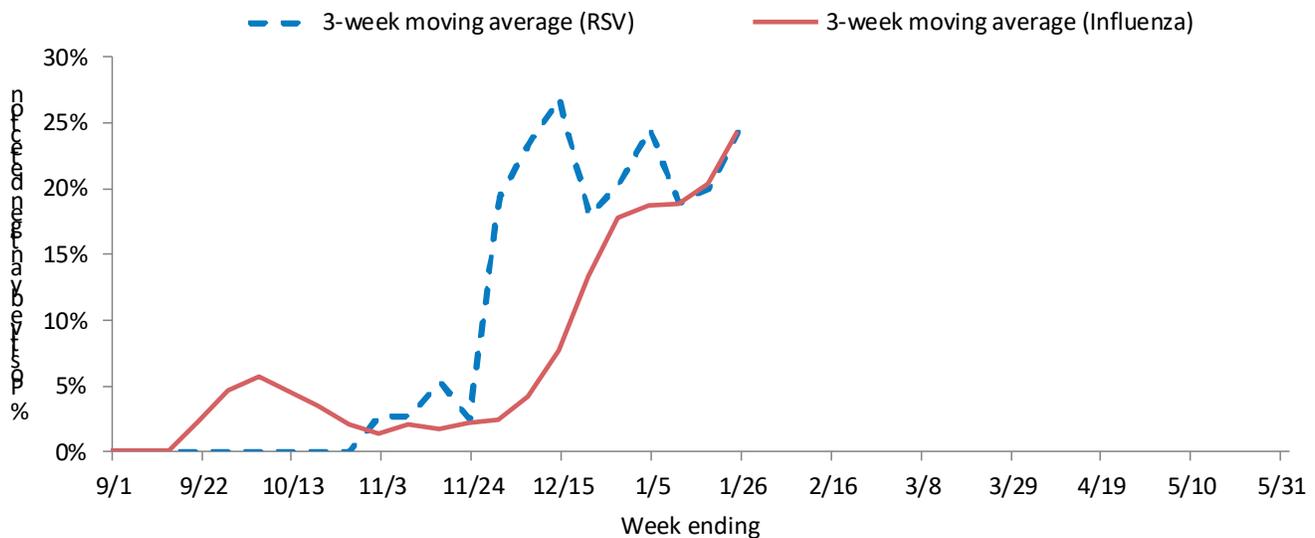
SOUTHEASTERN REGION

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							
493	81	57	138	28.0%	12	6	50.0%	3.3%	2.9%	4.1%

ILI activity trend analysis



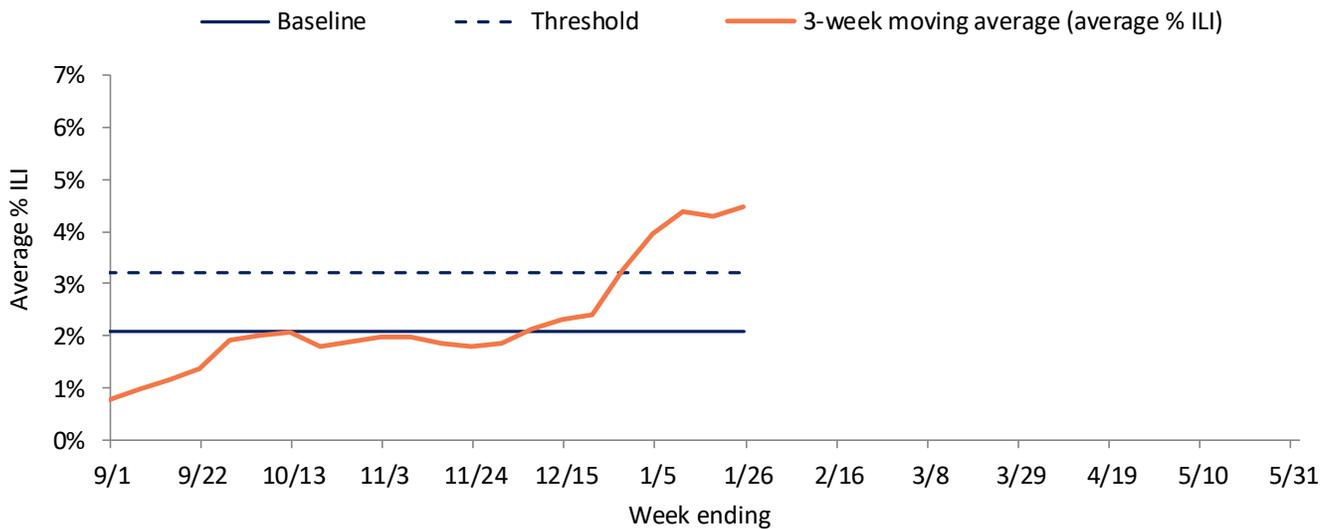
Influenza and RSV trend analysis



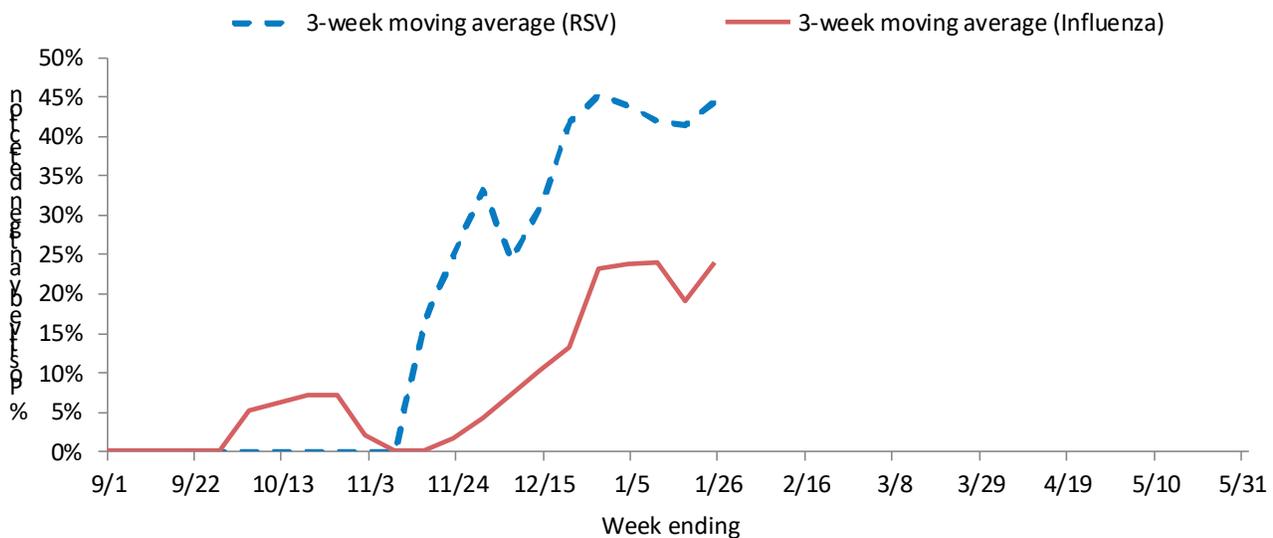
SOUTHERN REGION

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							
49	3	12	15	30.6%	12	6	50.0%	4.9%	2.1%	3.2%

ILI activity trend analysis

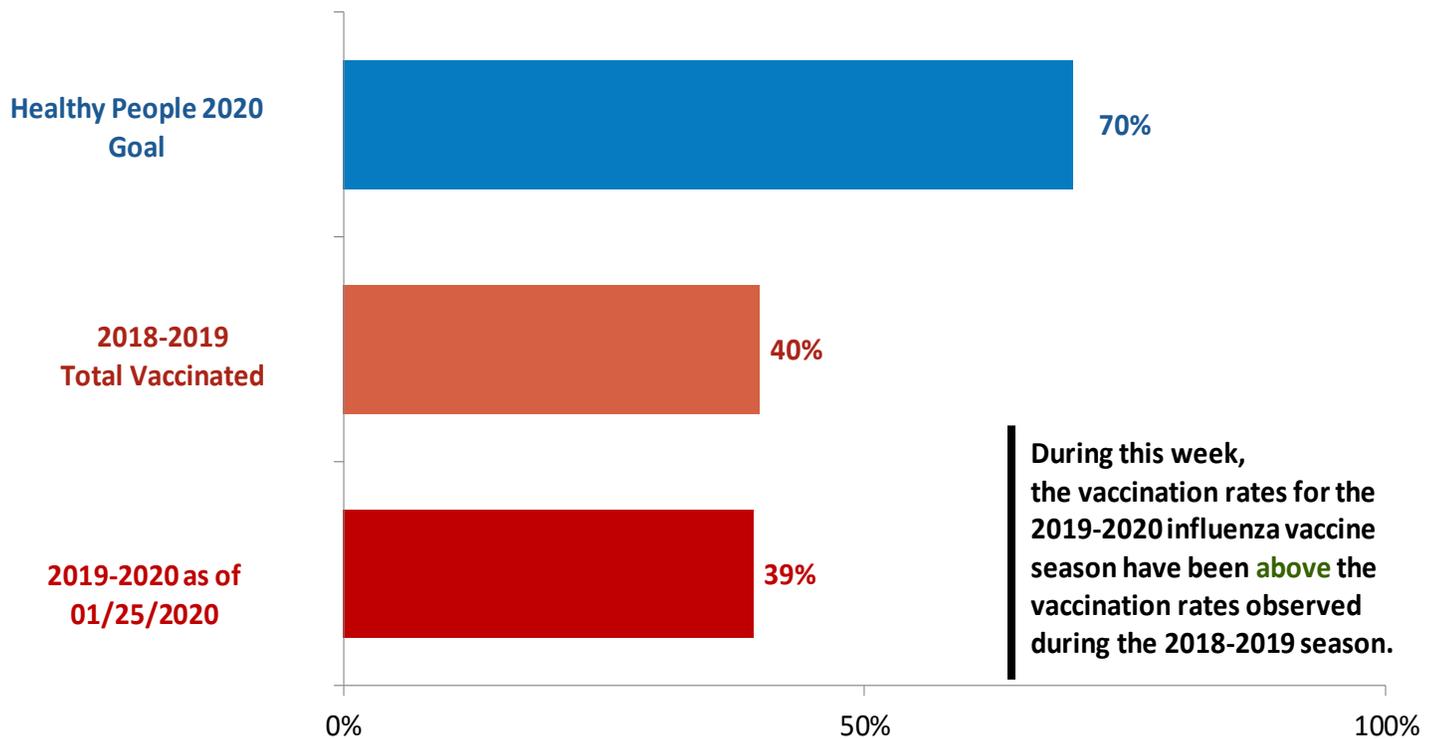


Influenza and RSV trend analysis



SEASONAL INFLUENZA VACCINATION

Cumulative percentage of Wisconsin residents who received 1 or more doses of influenza vaccine, 2019-2020 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 2019-2020:

The **trivalent** vaccines for use in the 2019-2020 influenza season contain the following:

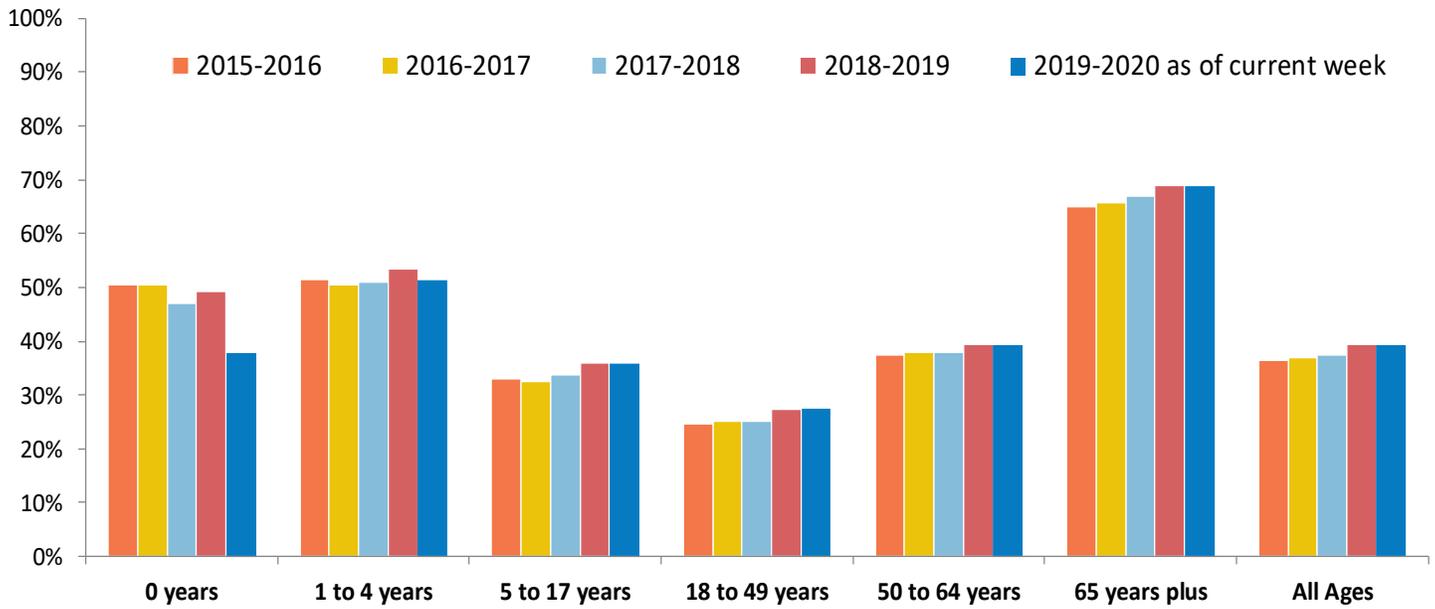
- A/Brisbane/02/2018 (H1N1)pdm09–like virus (updated)
- A/Kansas/14/2017 (H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus

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

- B/Phuket/3073/2013-like virus (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, 2019-2020 influenza season

