



RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 52: Ending December 28, 2019

Wisconsin Department of Health Services | Division of Public Health

Bureau of Communicable Diseases | Communicable Diseases Epidemiology Section

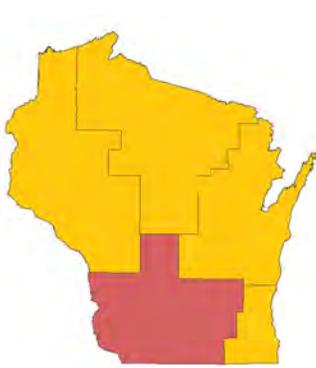
www.dhs.wisconsin.gov/dph/bcd.htm | dhsdphbcd@dhs.wi.gov



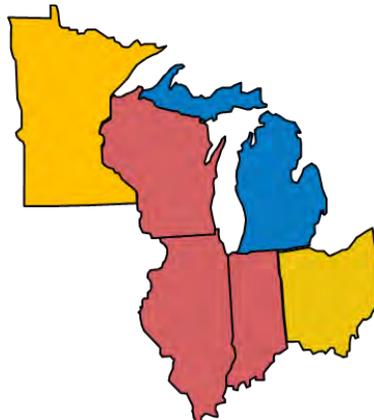


INFLUENZA LIKE ILLNESS (ILI) ACTIVITY

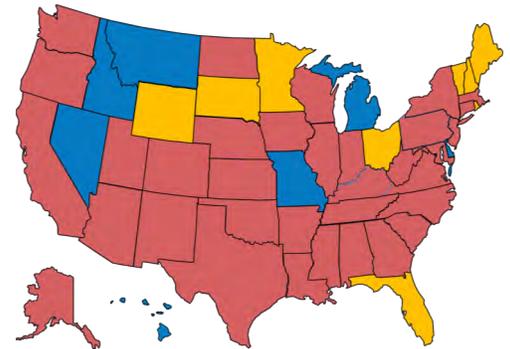
STATE OF WISCONSIN



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 Viruses of the Week:**

Influenza B and RSV are the predominant viruses this week.

INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

	Week 52, 2019	October 1, 2019 to present
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Wisconsin	0	0
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Nationwide	5	27
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CURRENT ALERTS:

Influenza B (Victoria lineage) continues to be the predominant influenza virus in Wisconsin. Influenza B viruses cause increased morbidity among the younger population.

155 influenza-associated hospitalizations were reported last week.



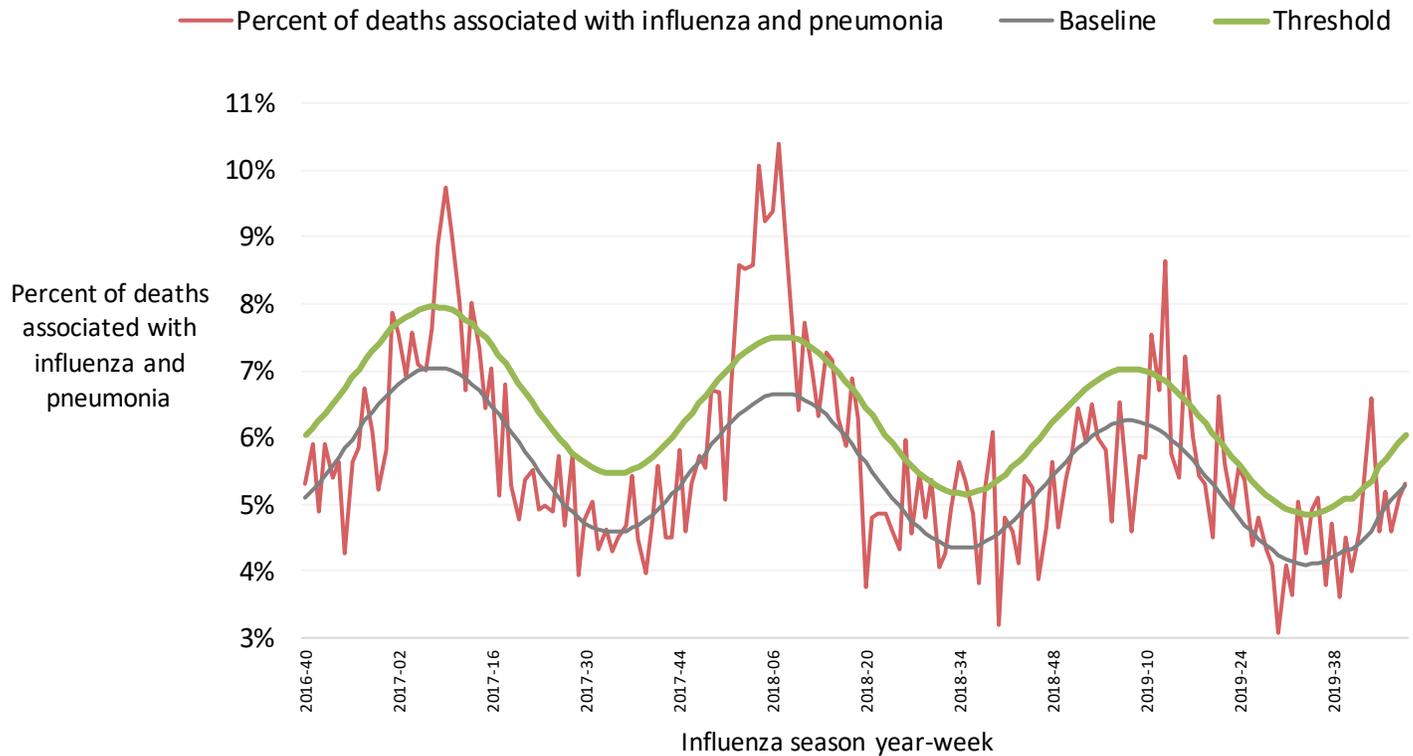
For National US influenza surveillance statistics visit: www.cdc.gov/flu/weekly/



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

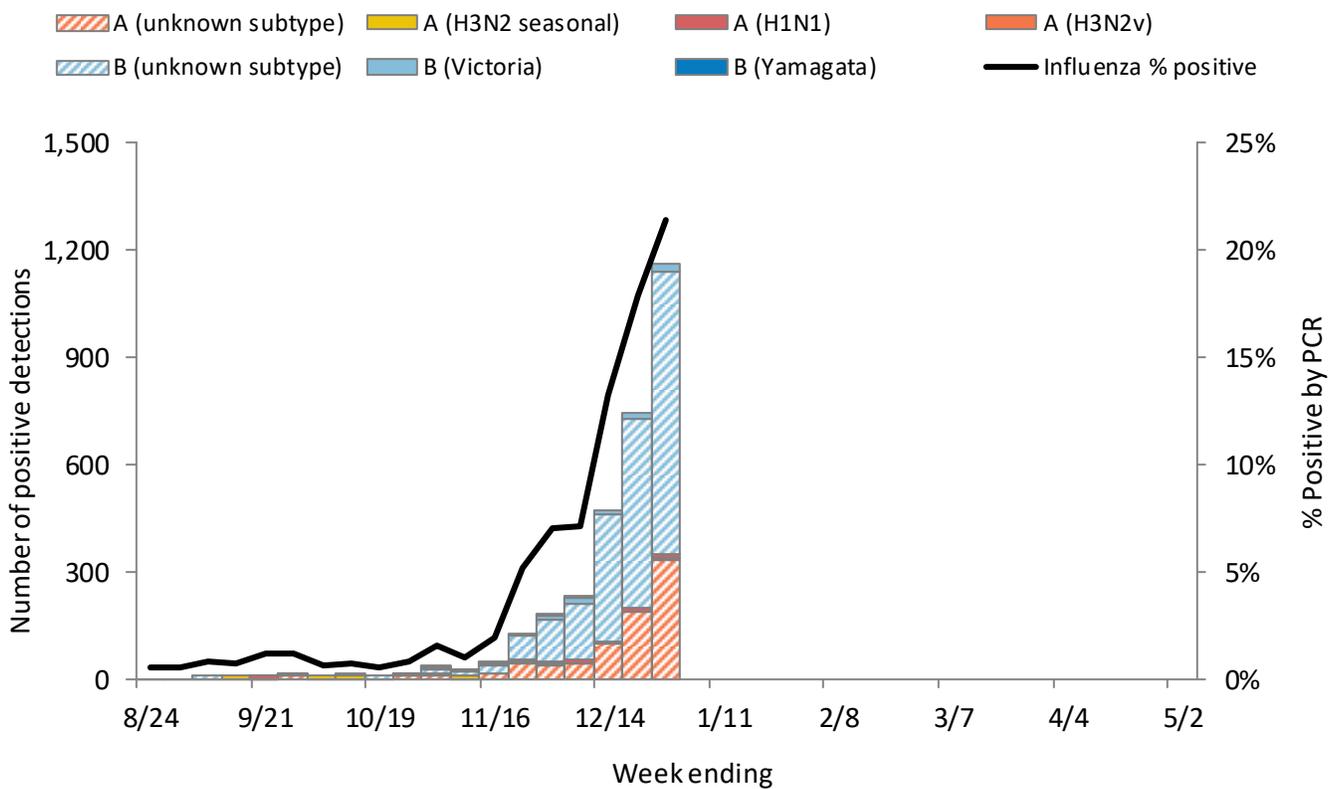
Influenza season week	Influenza-associated deaths (I)	Pneumonia-associated deaths (P)	Percent I+P of all deaths	Baseline I+P of all deaths	Threshold I+P of all deaths
50	2	54	5.3%	5.4%	6.1%
51	1	75	8.9%	5.5%	6.2%
52 (Preliminary data)	0	27	6.9%	5.6%	6.3%
Seasonal total	11	798	4.9%	NA	NA

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



WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Wisconsin positive influenza results and subtypes by PCR



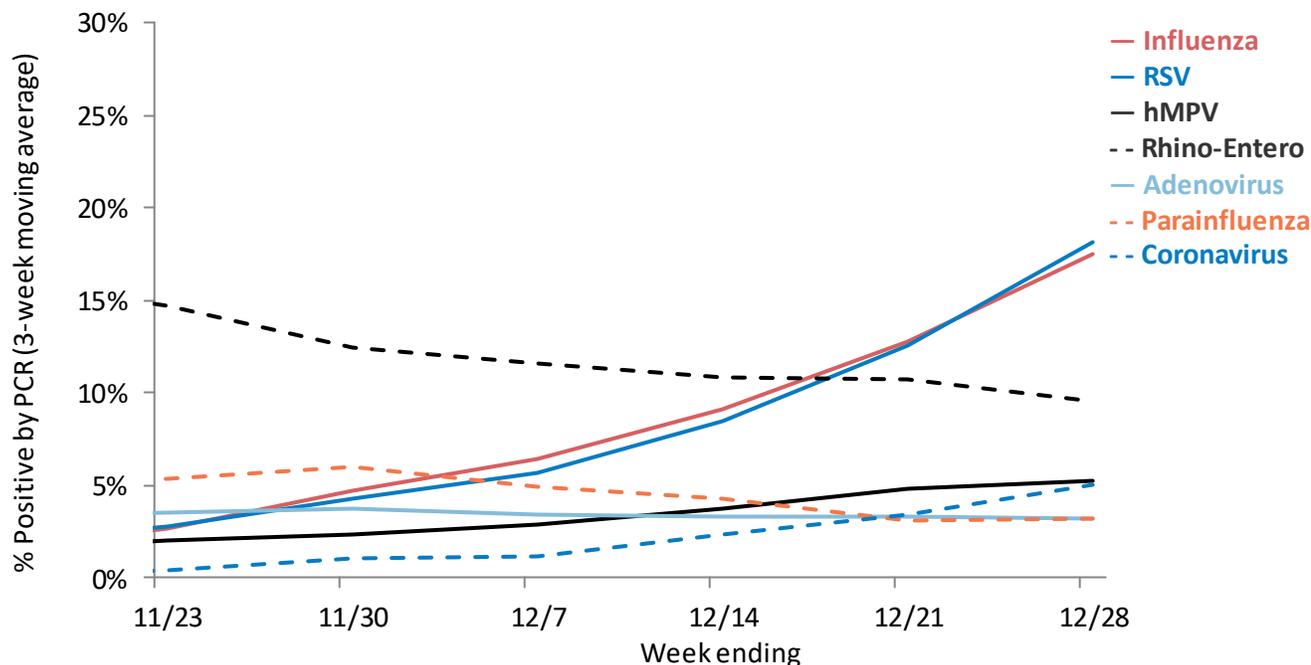
Cumulative number of positive influenza PCR tests by subtype

September 1, 2019 to present

	Influenza A: 30%			Influenza B: 70%			Total
	A (2009 H1N1)	A (H3N2)	A (Unknown)	B (Victoria)	B (Yamagata)	B (Unknown)	
Total positive (n)	58	47	813	88	8	2078	3092
% of total positive	2%	2%	26%	3%	0%	67%	100%

WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR



Week 52: Ending on December 28, 2019

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	5433	1161	21.4%	3	10	335	10	0	794

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	800	29	3.6%	8	1	0	20

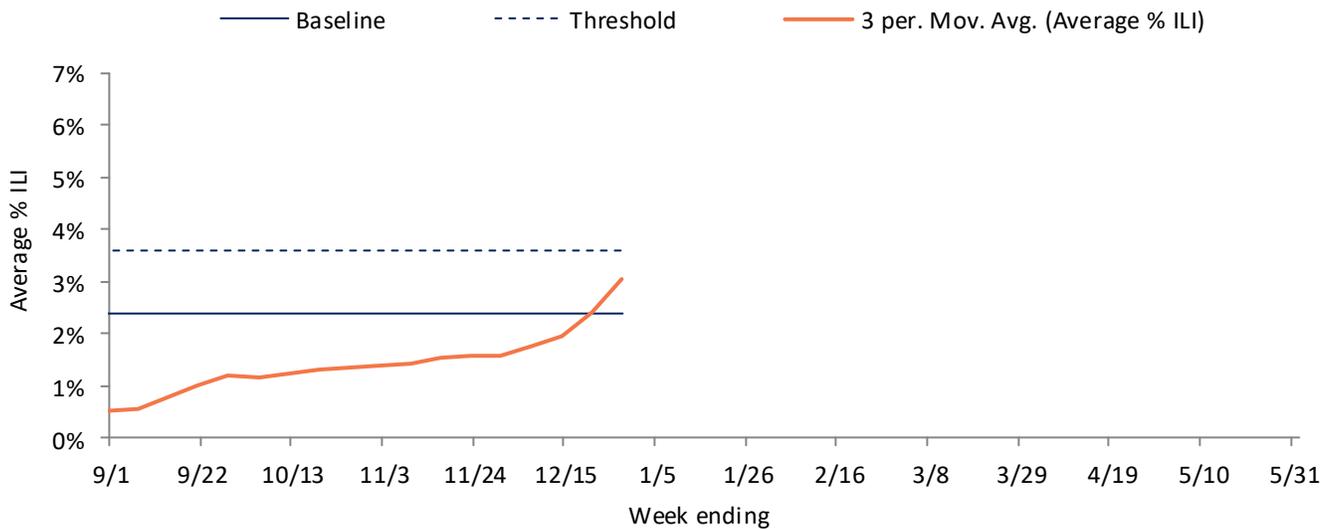
Respiratory virus	Tested	Positive	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1
Coronavirus (CoV)	388	20	5.2%	0	0	1	19

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	1746	421	24.1%
Human metapneumovirus	821	42	5.1%
Rhino-enterovirus	808	66	8.2%
Adenovirus	388	9	2.3%

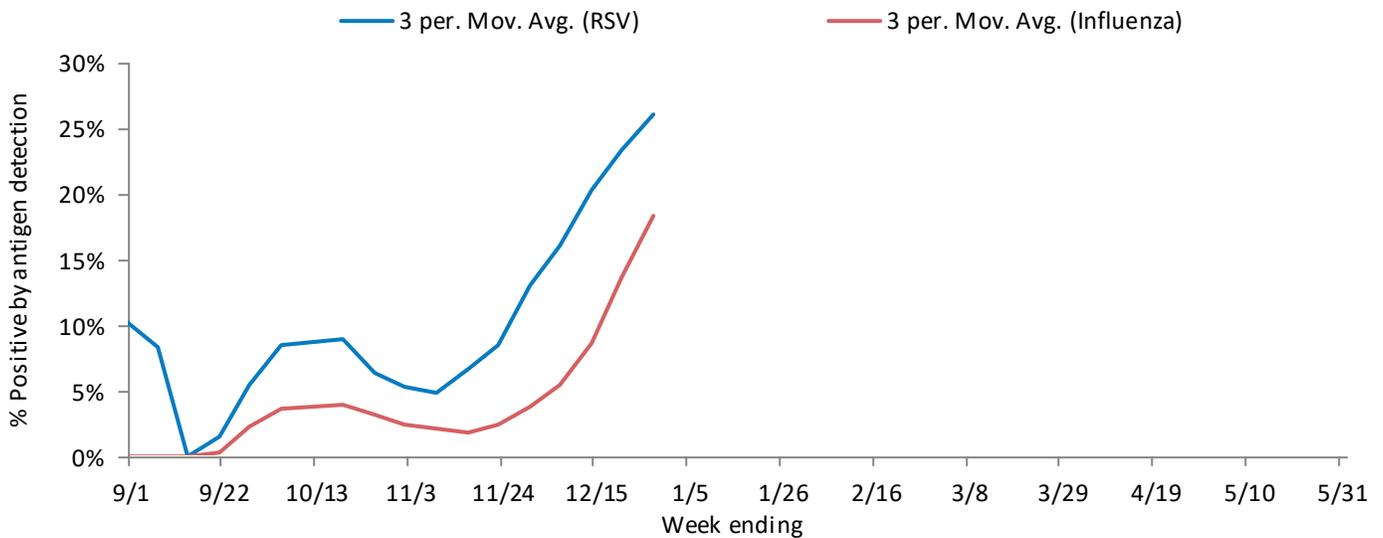
WISCONSIN STATE SUMMARY

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							
1181	109	149	258	21.8%	268	71	26.5%	3.9%	2.4%	3.6%

ILI activity trend analysis

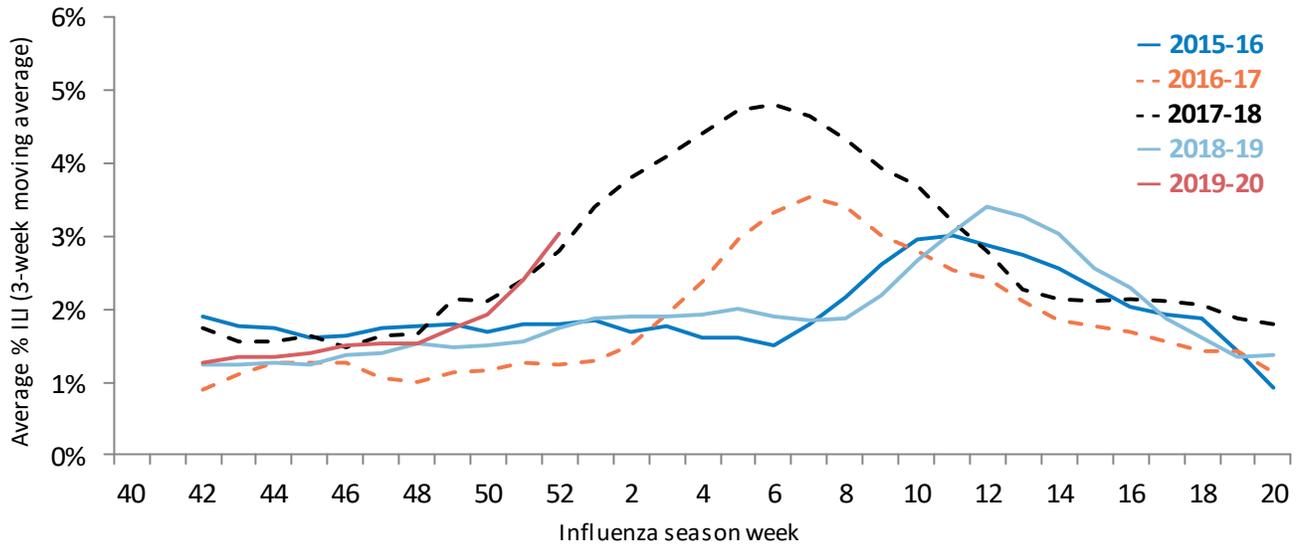


Influenza and RSV trend analysis



WISCONSIN STATE SUMMARY

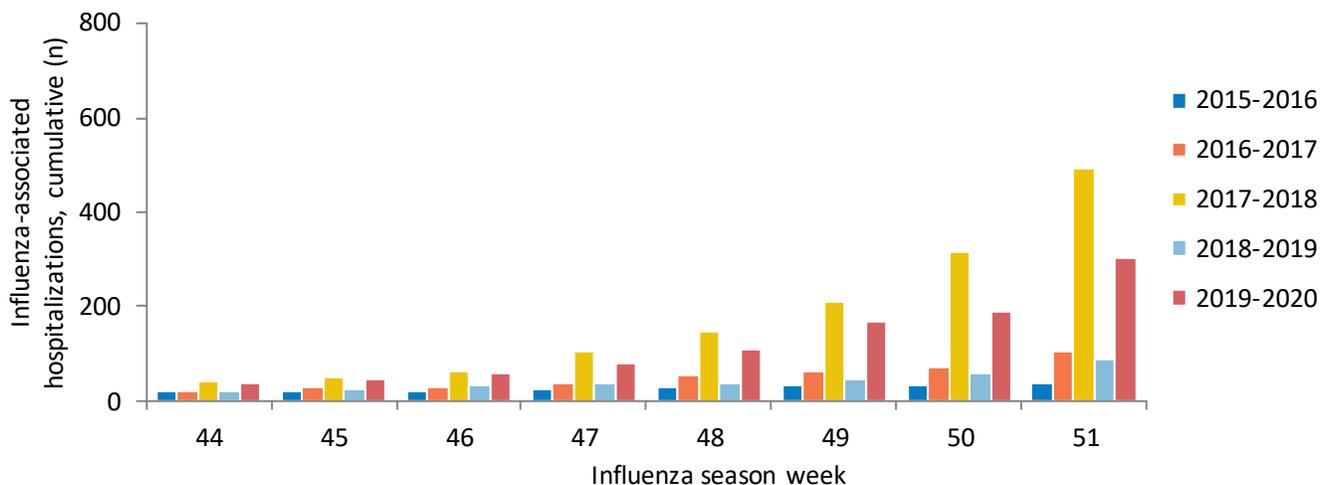
ILI activity trend analysis by influenza season, Wisconsin



Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System September 1, 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	13	1	0	2	8	2	3	1	0	0
1-4	35	0	0	9	19	7	7	2	0	0
5-17	41	2	0	5	21	13	4	1	0	0
18-49	105	4	1	27	46	27	18	6	8	2
50-64	98	9	4	43	31	11	15	4	0	0
65+	167	6	12	83	58	8	17	2	0	0
Total	459	22	17	169	183	68	64	16	8	2

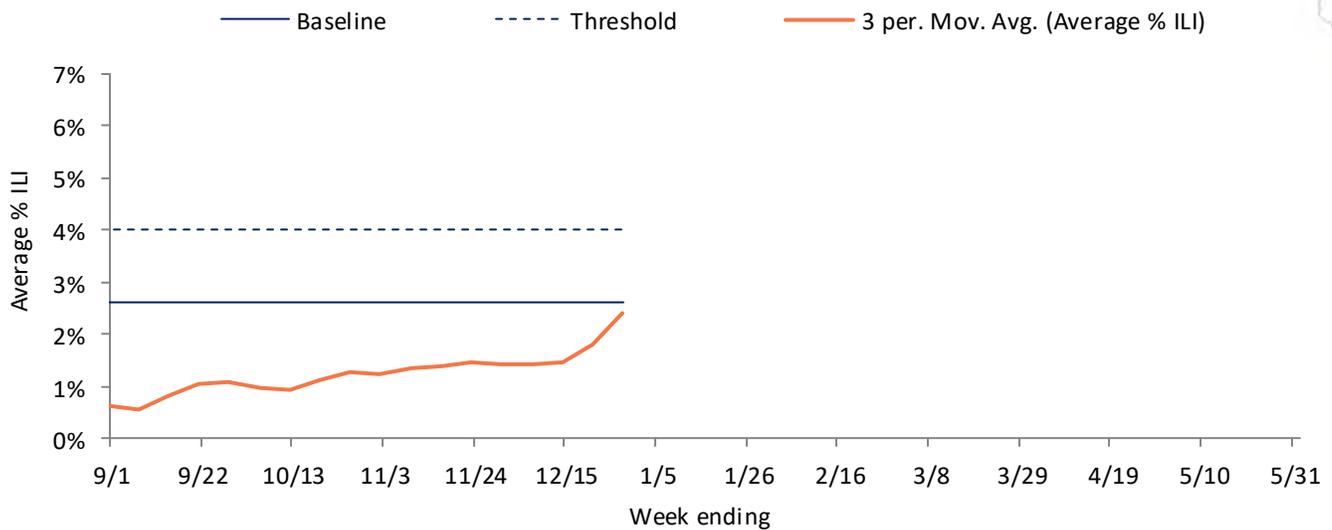
Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



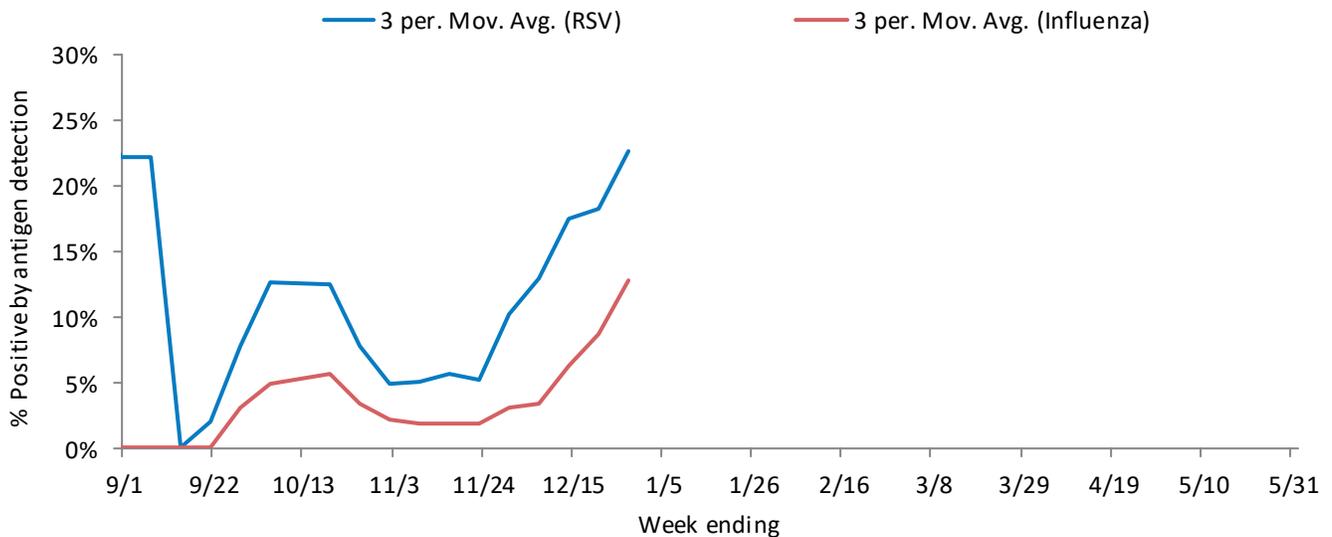
NORTHEASTERN REGION

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							
339	32	22	54	15.9%	111	30	27.0%	3.2%	2.6%	4.0%

ILI activity trend analysis



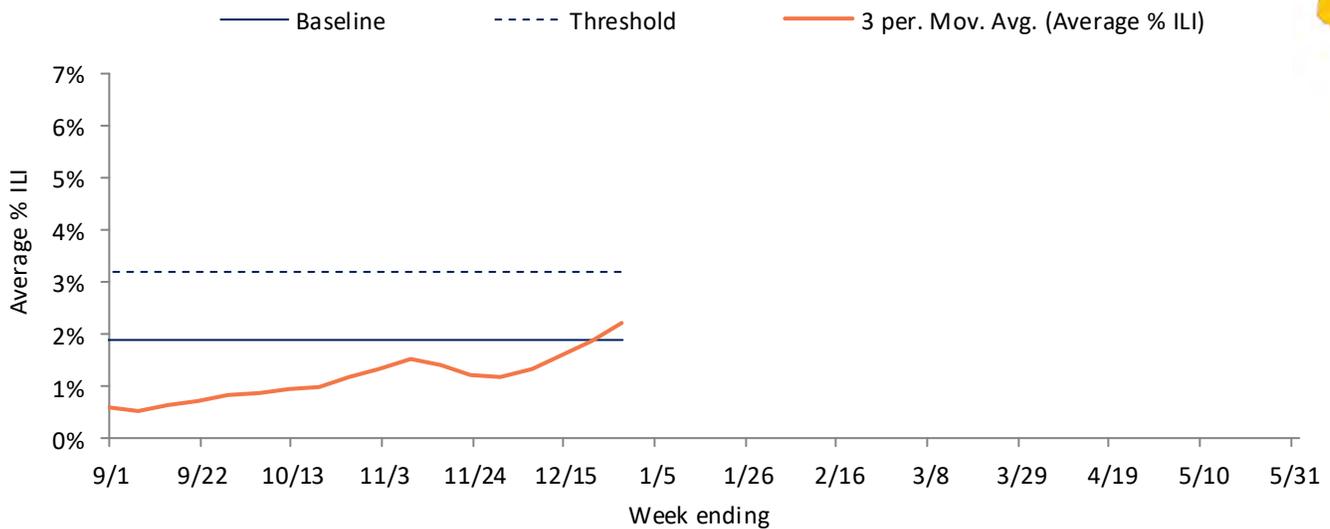
Influenza and RSV trend analysis



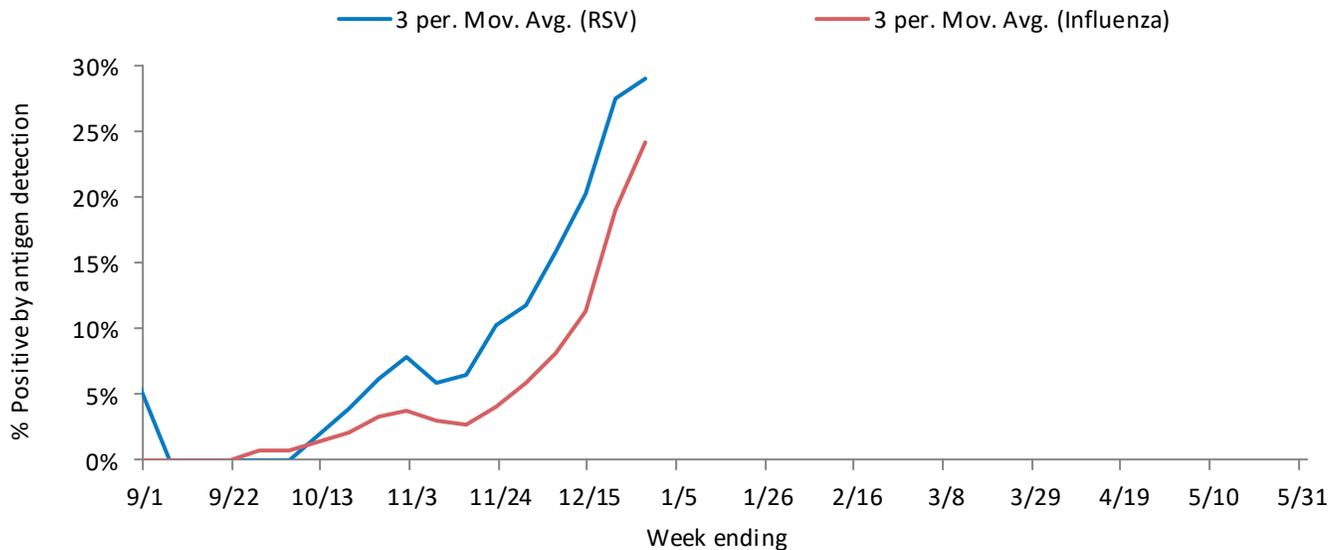
NORTHWESTERN REGION

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							
505	53	86	139	27.5%	123	32	26.0%	2.7%	1.9%	3.2%

ILI activity trend analysis



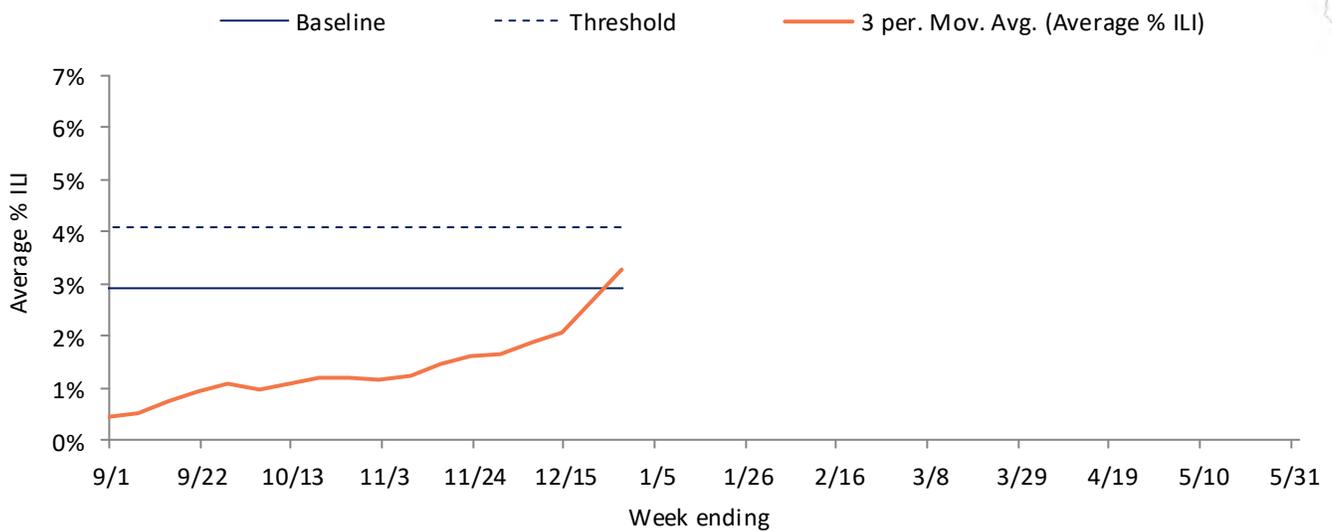
Influenza and RSV trend analysis



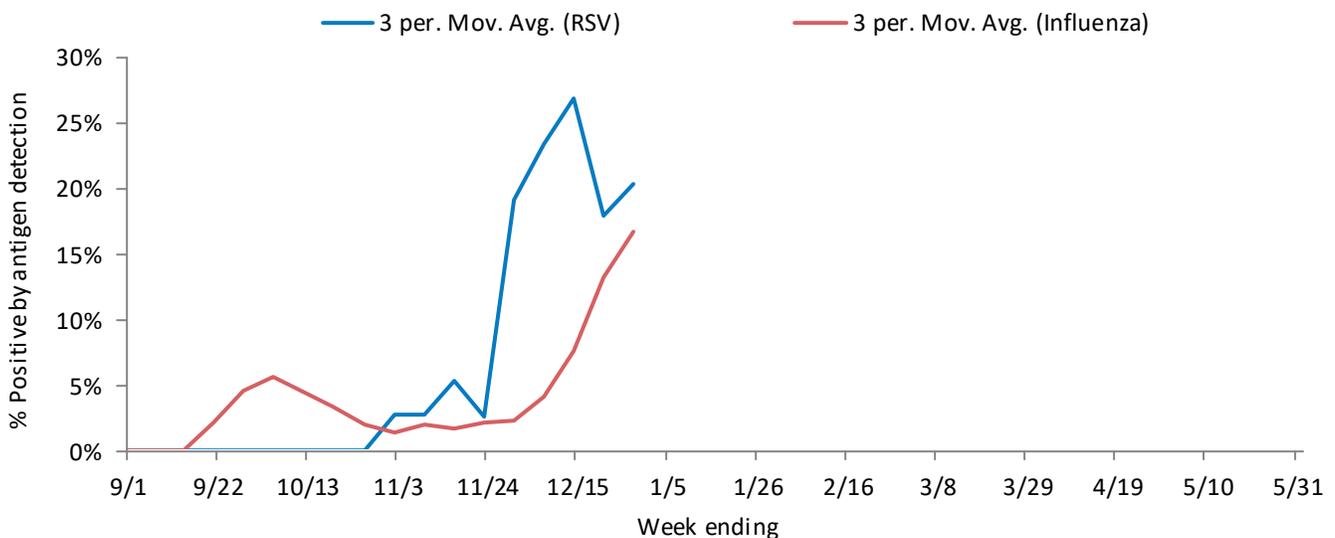
SOUTHEASTERN REGION

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							
312	18	36	54	17.3%	26	7	26.9%	4.0%	2.9%	4.1%

ILI activity trend analysis



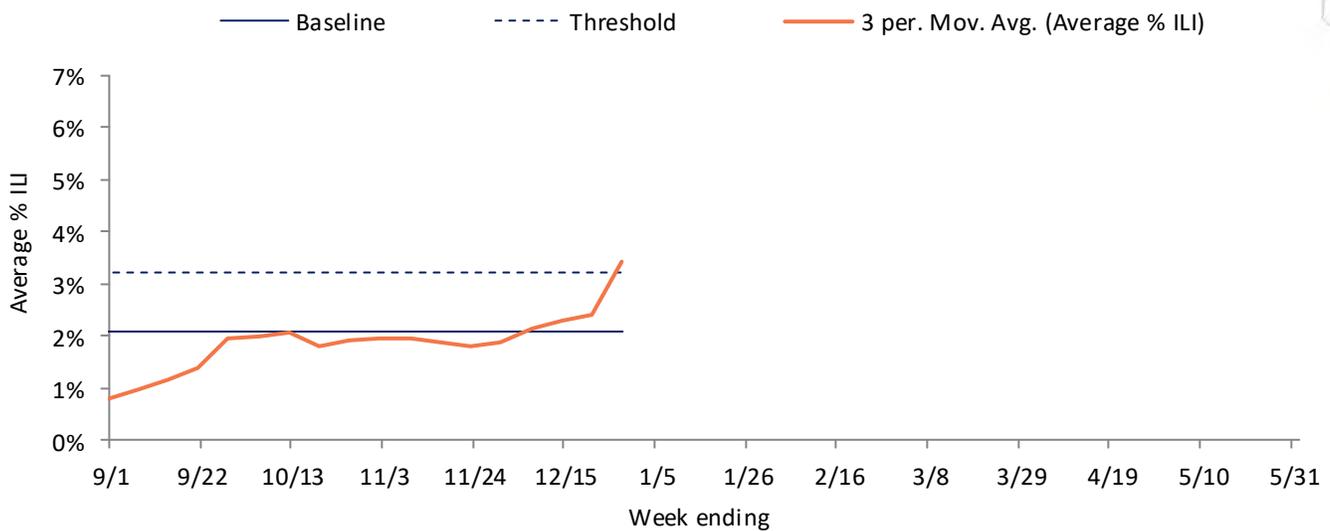
Influenza and RSV trend analysis



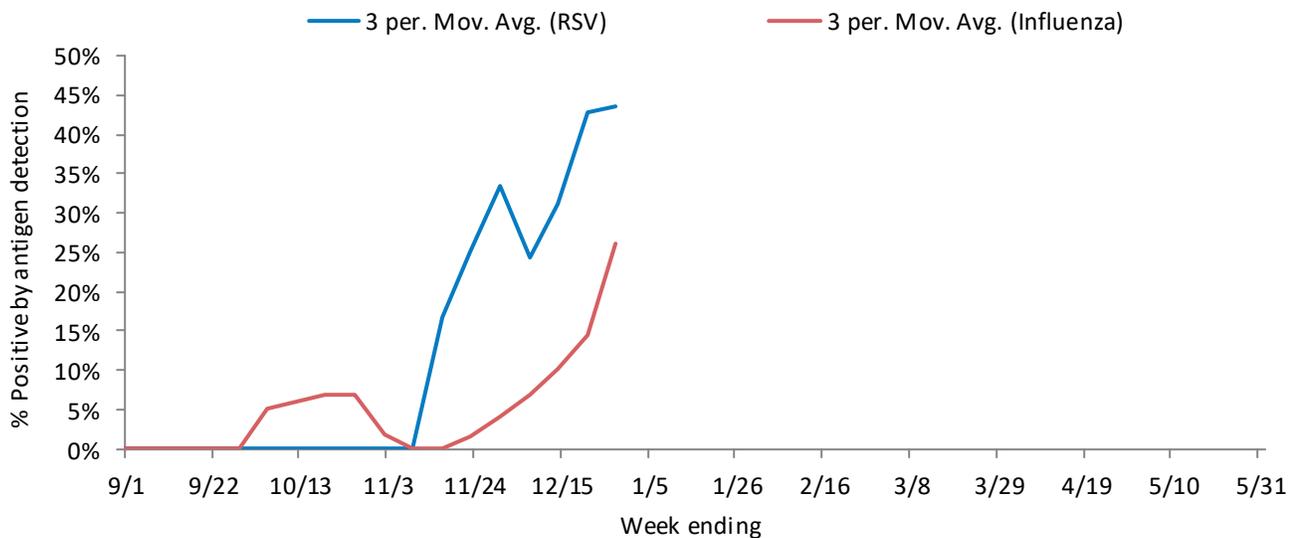
SOUTHERN REGION

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							
25	6	5	11	44.0%	26	7	26.9%	5.4%	2.1%	3.2%

ILI activity trend analysis

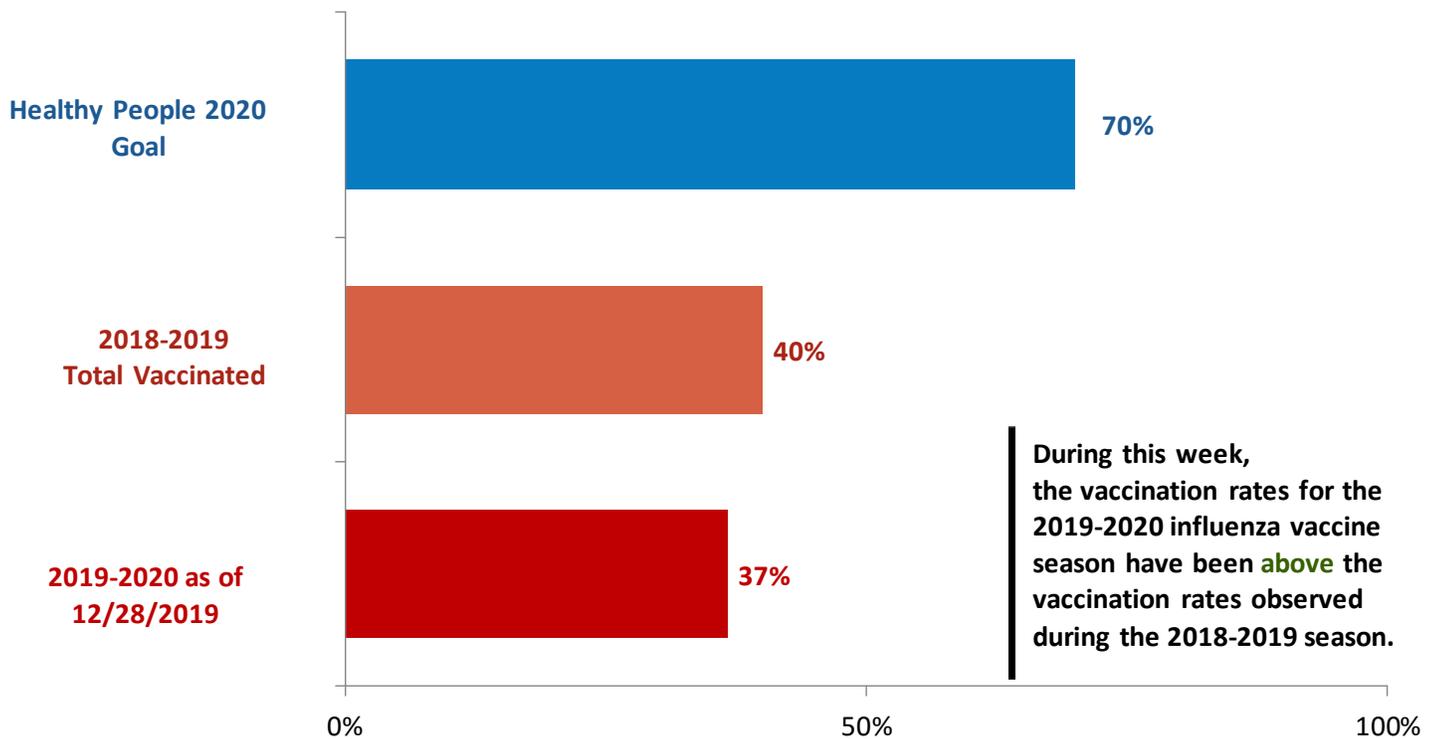


Influenza and RSV trend analysis



SEASONAL INFLUENZA VACCINATION

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

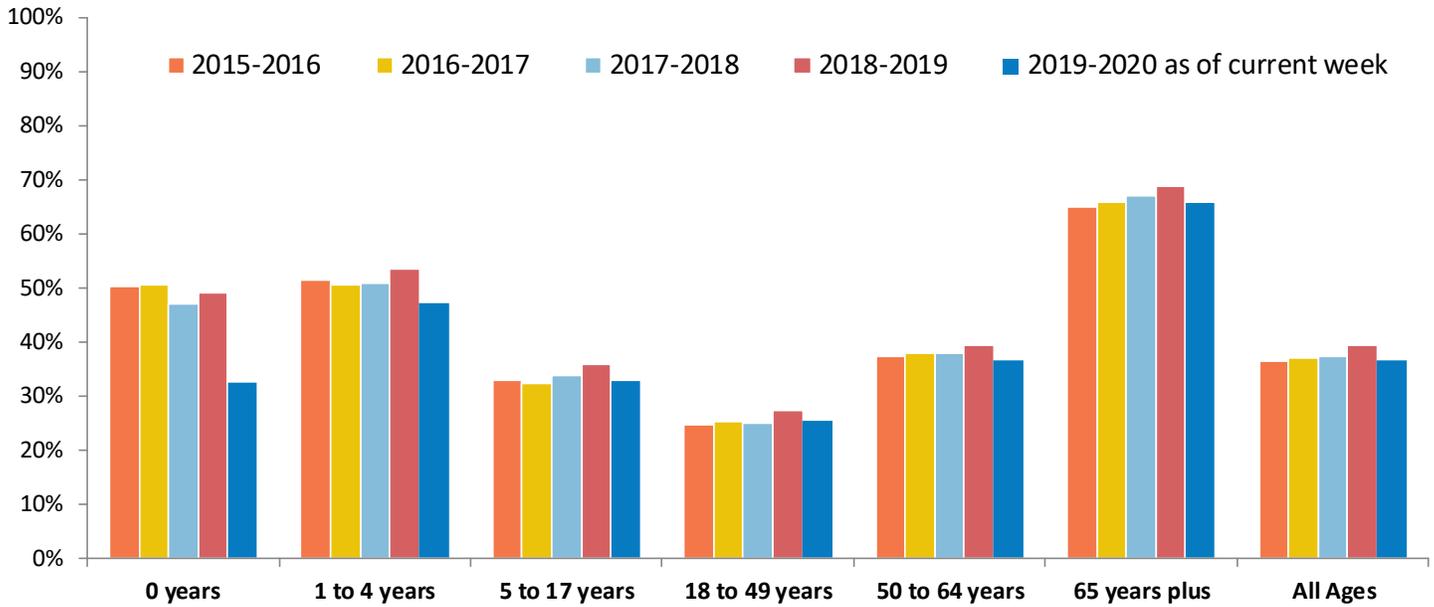
- A/Brisbane/02/2018 (H1N1)pdm09–like virus (updated)
- A/Kansas/14/2017 (H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus

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

