



RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 5 Ending February 1, 2020

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

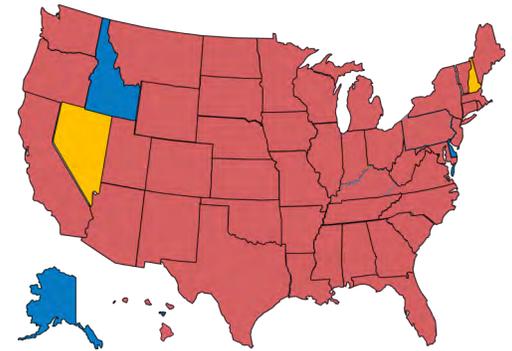
STATE OF WISCONSIN



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, Influenza A/H1 and RSV are the predominant viruses this week.

INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

Week 5, 2020 October 1, 2019 to present

Wisconsin	0	1
Nationwide	10	78

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.

335 influenza hospitalizations were reported this week.



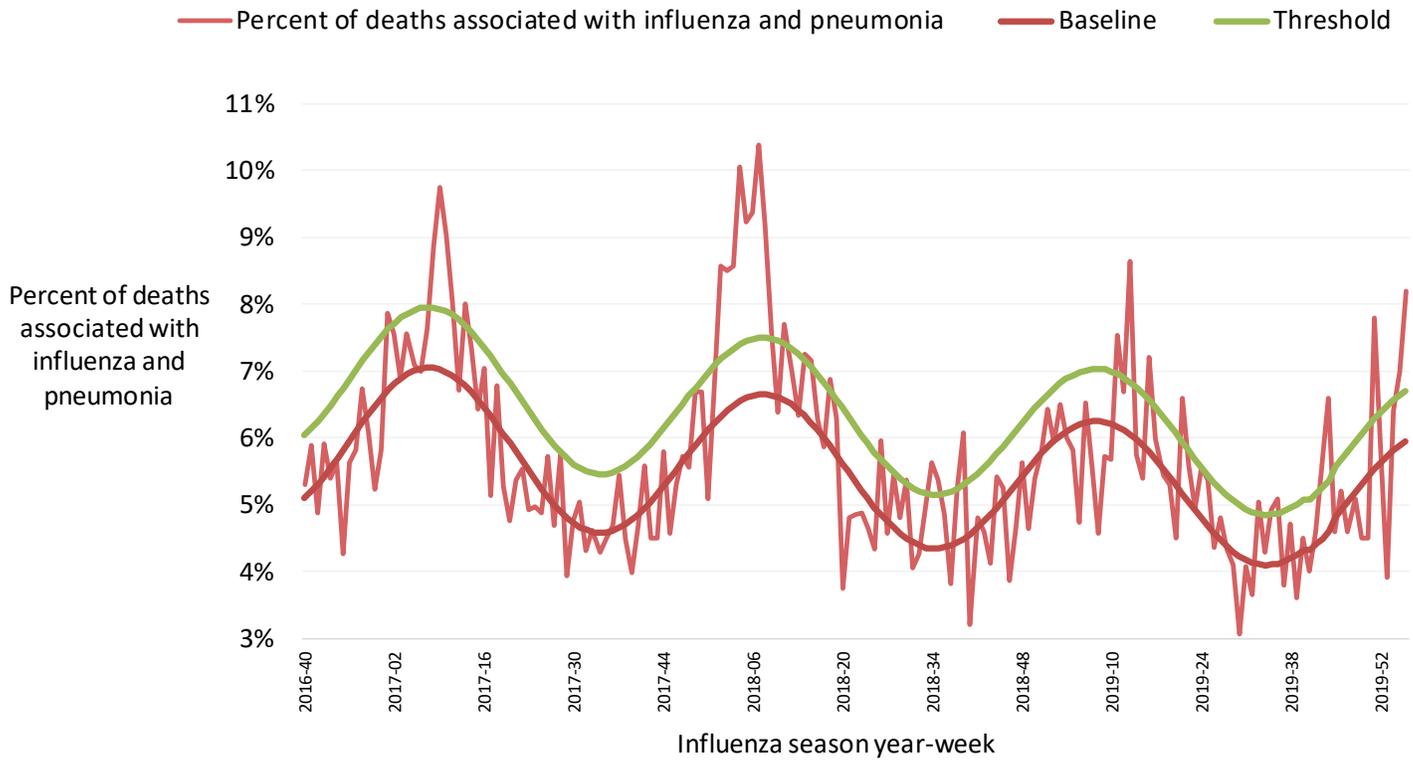
For National US influenza surveillance statistics visit: www.cdc.gov/flu/weekly/



INFLUENZA AND PNEUMONIA-ASSOCIATED MORTALITY

Influenza and Pneumonia Deaths, Wisconsin

Influenza- 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

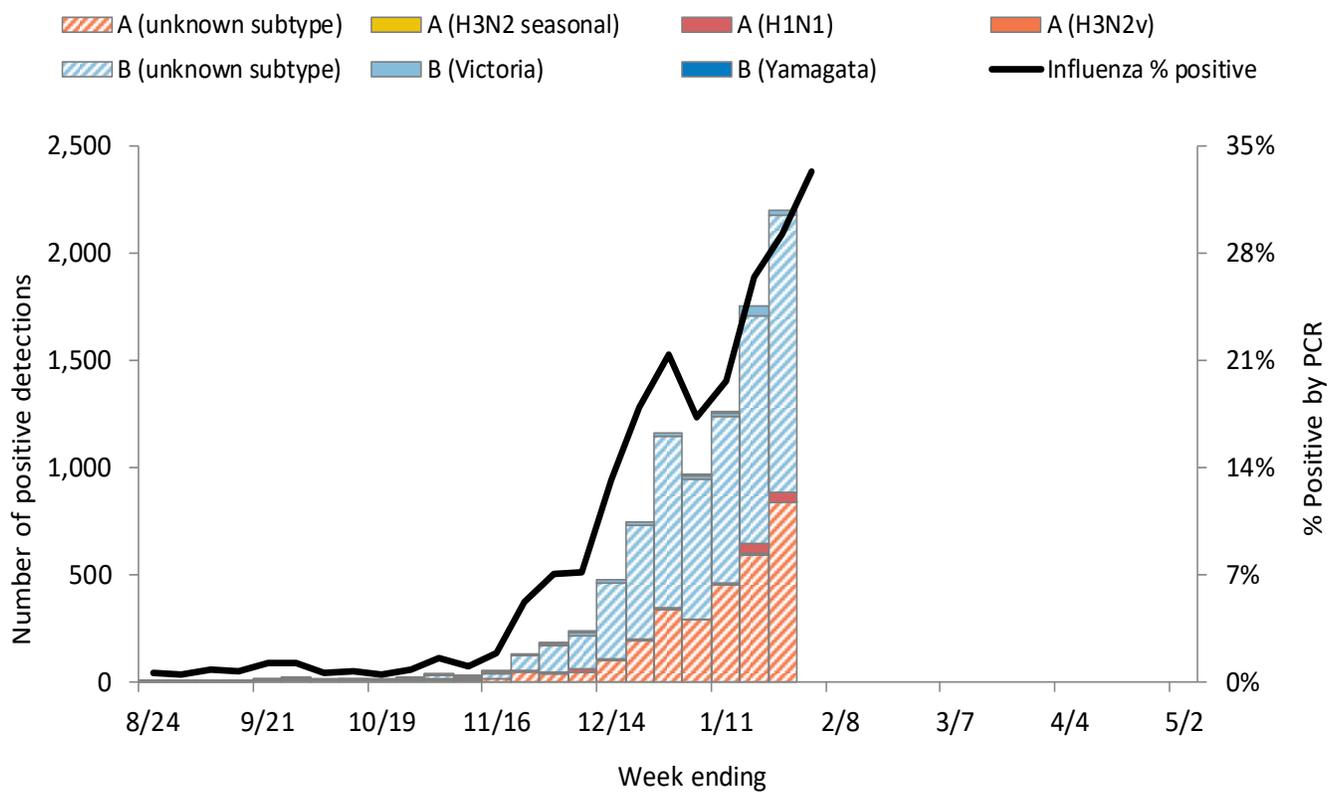
Influenza season week	Influenza-associated deaths (I)	Pneumonia-associated deaths (P)	Percent I+P of all deaths	Baseline I+P of all deaths	Threshold I+P of all deaths
3	1	60	5.2%	5.9%	6.7%
4	5	72	7.1%	6.0%	6.8%
5 Preliminary Data	2	78	7.8%	6.1%	6.9%
Seasonal total	30	1245	5.1%	NA	NA

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



WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Wisconsin positive influenza results and subtypes by PCR

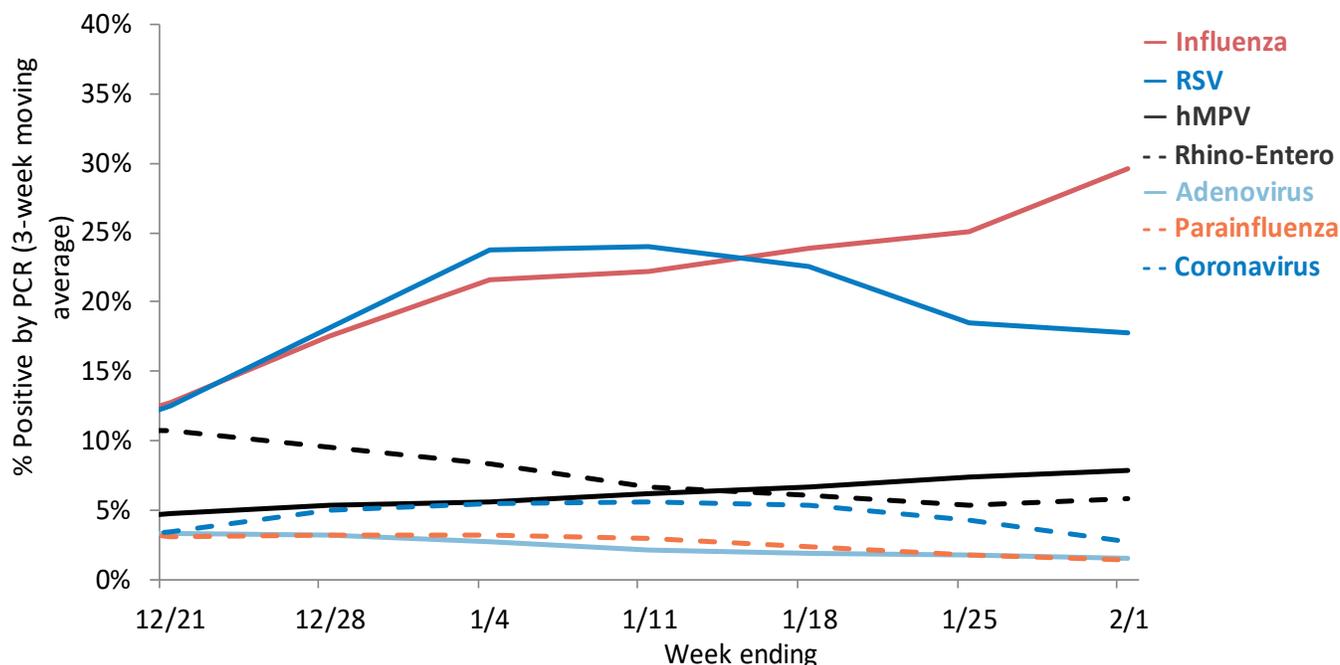


Cumulative number of positive influenza PCR tests by subtype September 1, 2019 to present

	A (2009 H1N1)	Influenza A: 37%			Influenza B: 63%			Total
	A (H3N2)	A (Unknown)	B (Victoria)	B (Yamagata)	B (Unknown)			
Total positive (n)	240	62	4123	256	10	7385	12076	
% of total positive	2%	1%	34%	2%	0%	61%	100%	

WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR



Week 5: Ending on February 1, 2020

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	8453	2819	33.3%	4	77	1145	63	0	1530

Respiratory virus	Tested	Positive	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	1110	11	1.0%	7	0	1	3

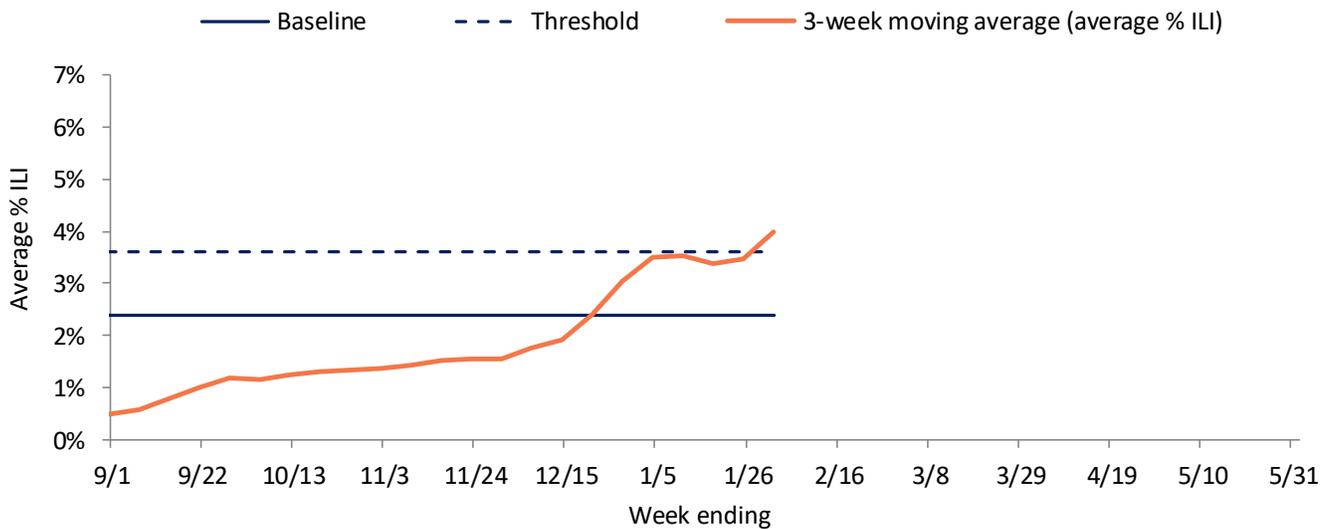
Respiratory virus	Tested	Positive	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1
Coronavirus	588	7	1.2%	1	1	0	5

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	2750	442	16.1%
Human metapneumovirus	1150	107	9.3%
Rhino-enterovirus	1091	67	6.1%
Adenovirus	588	8	1.4%

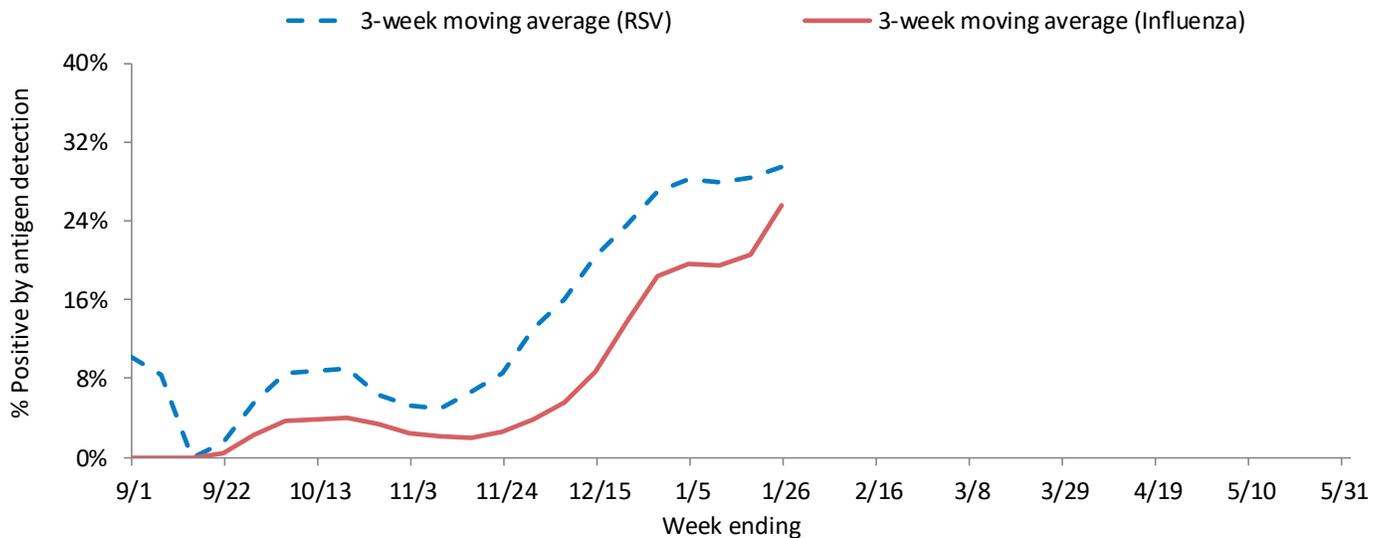
WISCONSIN STATE SUMMARY

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							
2049	258	405	663	32.4%	422	111	26.3%	4.8%	2.4%	3.6%

ILI activity trend analysis

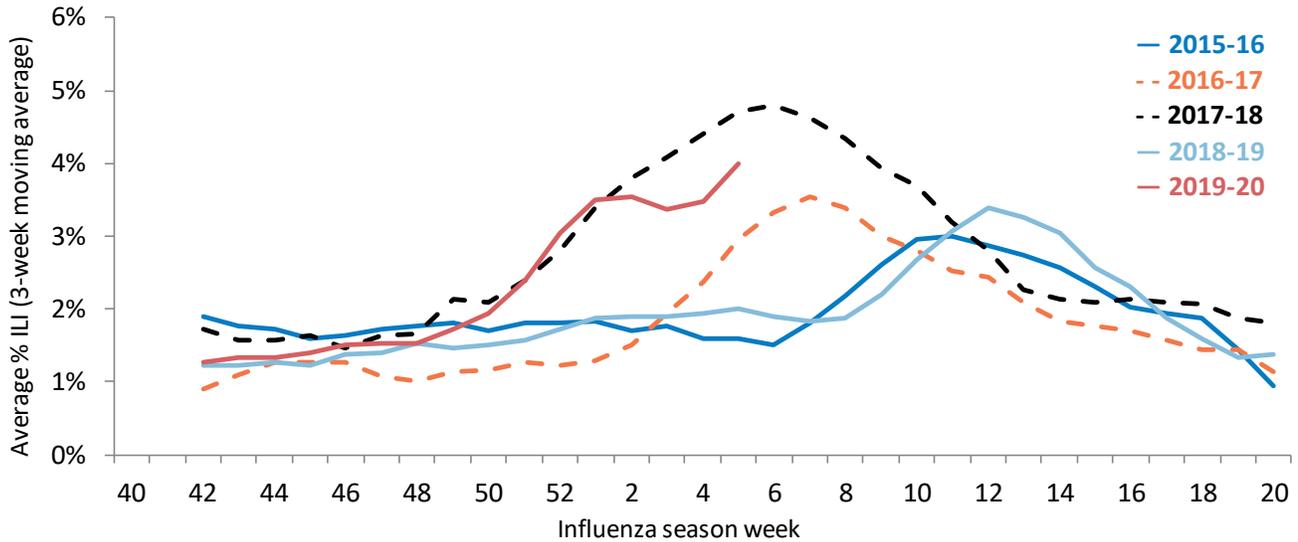


Influenza and RSV trend analysis



WISCONSIN STATE SUMMARY

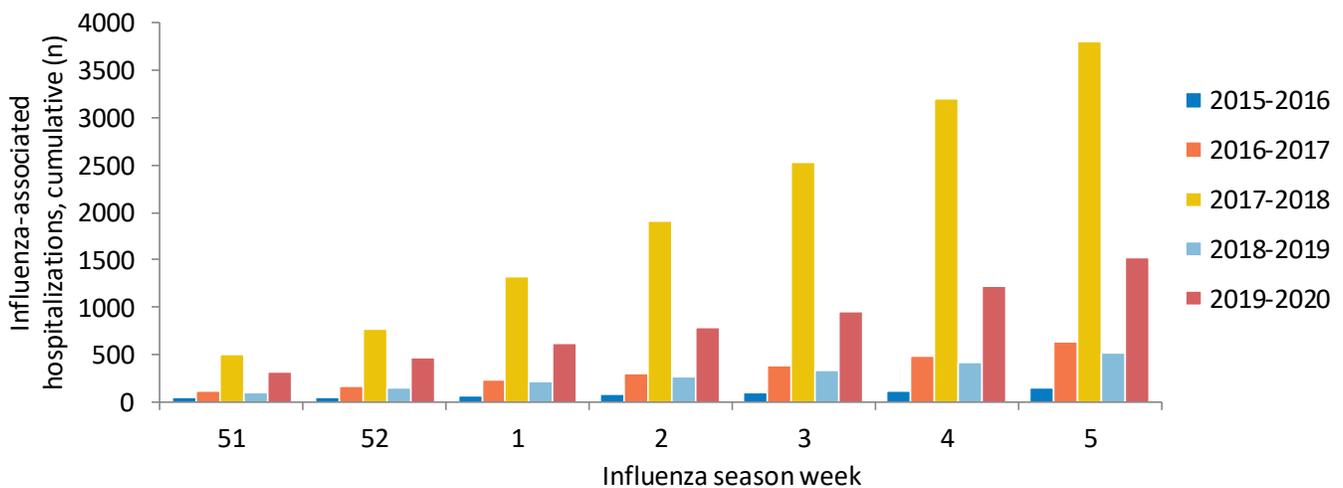
ILI activity trend analysis by influenza season, Wisconsin



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	46	3	0	15	21	7	8	3		
1-4	87	1	0	20	40	26	13	5		
5-17	181	4	0	20	58	99	14	6		
18-49	357	14	1	149	125	68	56	17	34	6
50-64	338	23	4	200	84	27	58	16		
65+	516	38	13	278	151	36	65	10		
Total	1525	83	18	682	479	263	214	57	34	6

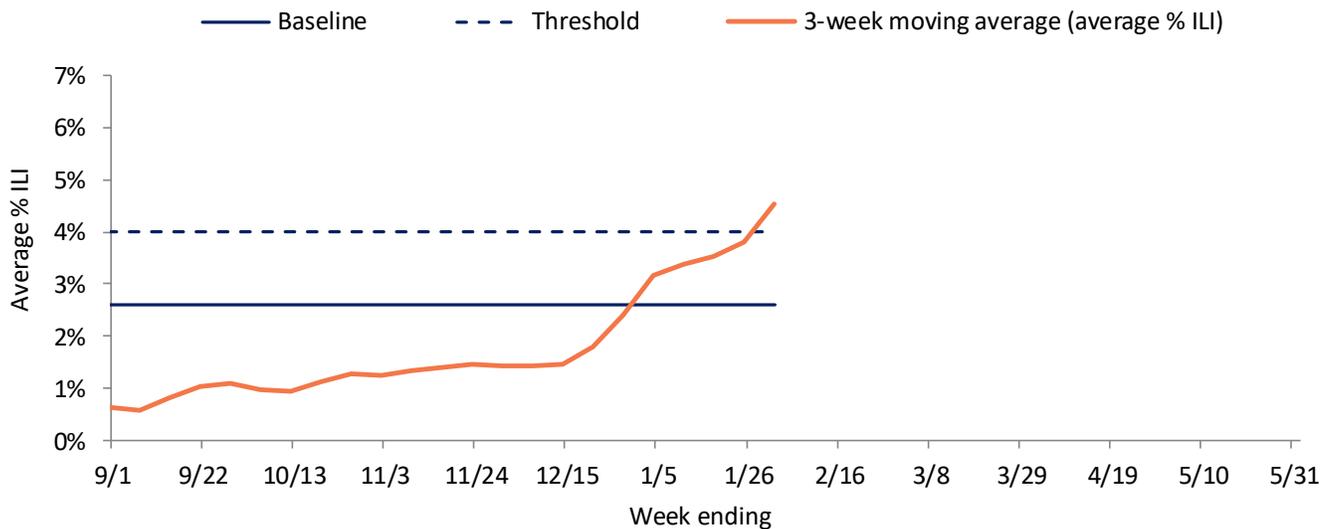
Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



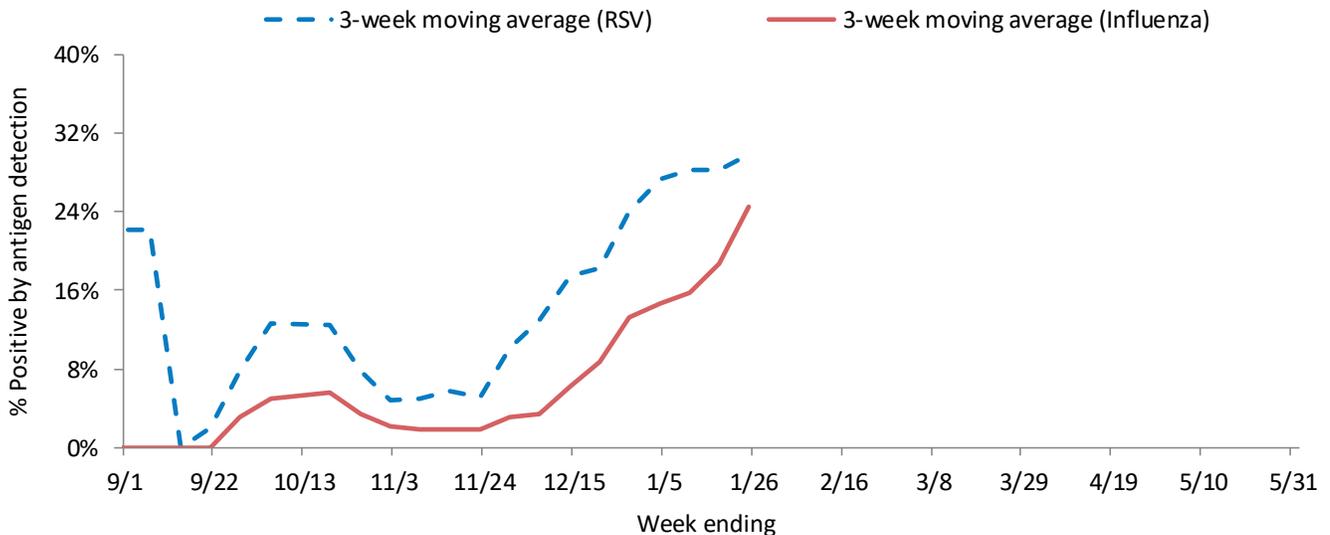
NORTHEASTERN REGION

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							
998	110	252	362	36.3%	250	73	29.2%	5.3%	2.6%	4.0%

ILI activity trend analysis



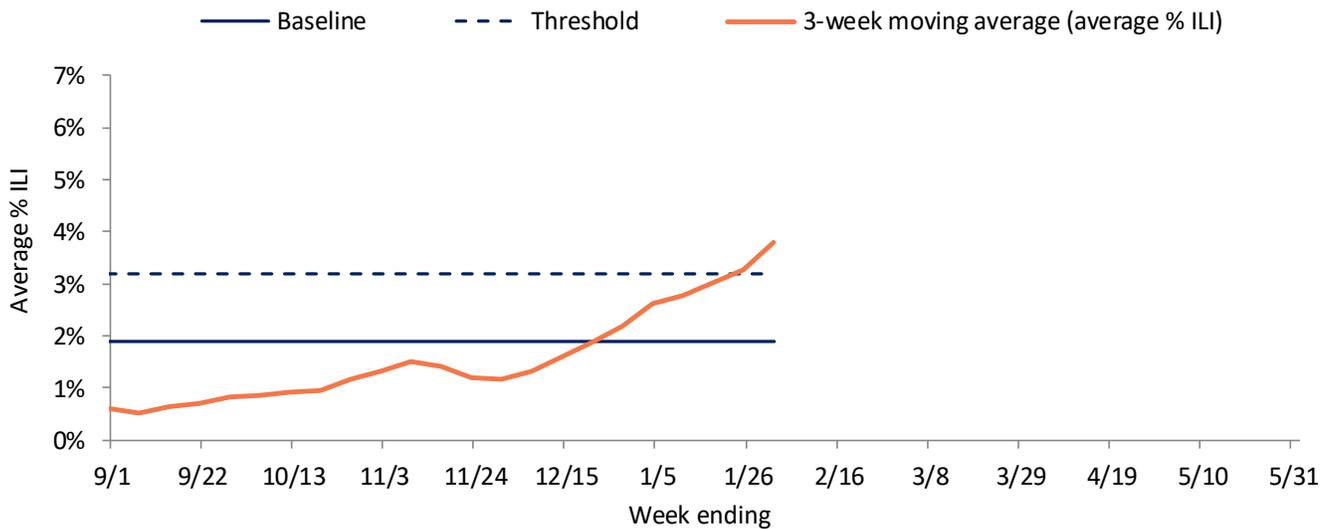
Influenza and RSV trend analysis



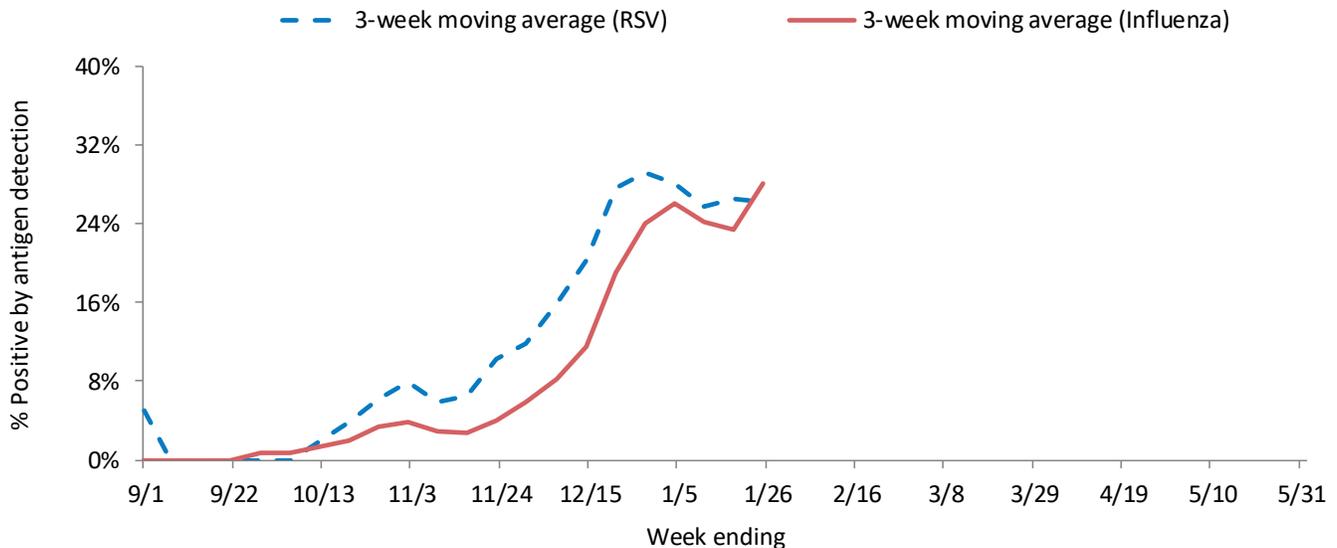
NORTHWESTERN REGION

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							
732	104	124	228	31.1%	147	35	23.8%	4.3%	1.9%	3.2%

ILI activity trend analysis



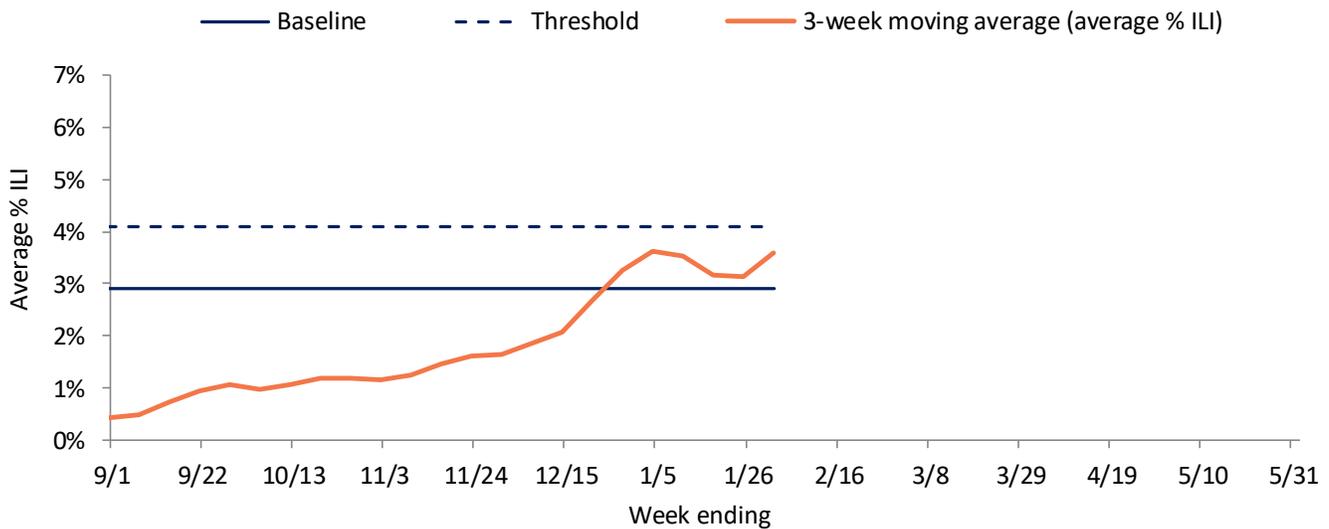
Influenza and RSV trend analysis



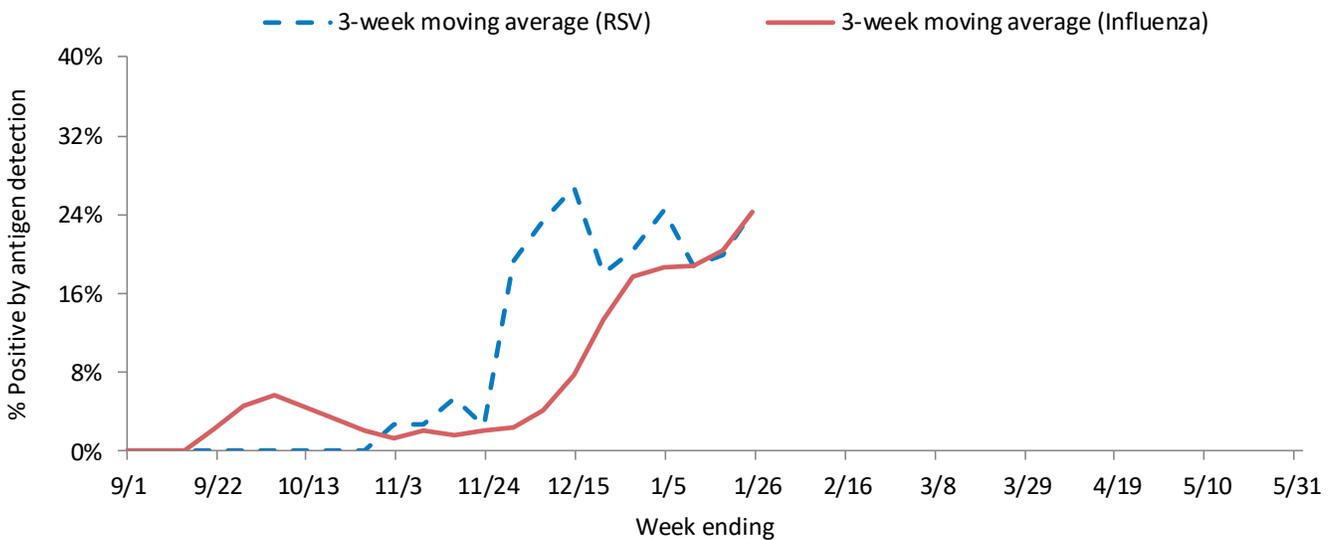
SOUTHEASTERN REGION

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							
244	36	16	52	21.3%	17	3	17.6%	4.6%	2.9%	4.1%

ILI activity trend analysis



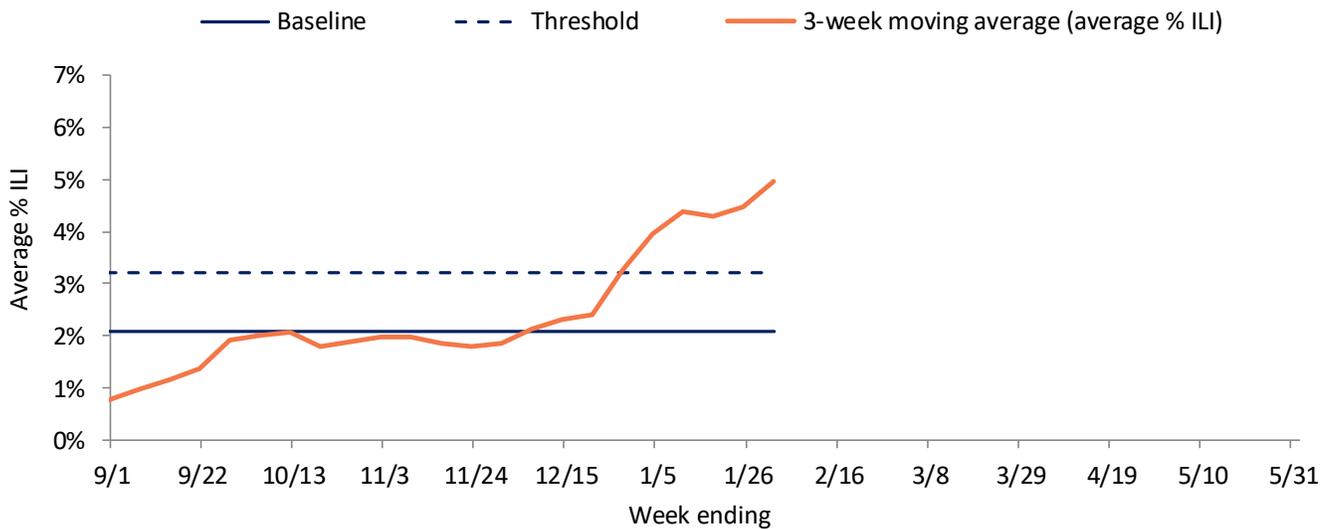
Influenza and RSV trend analysis



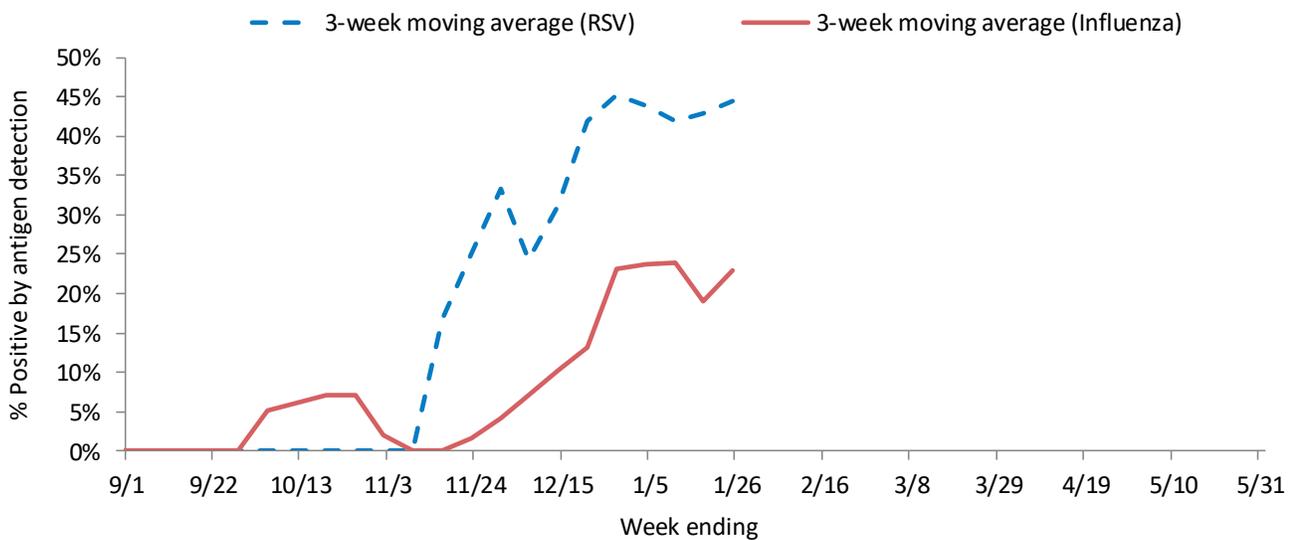
SOUTHERN REGION

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							
75	8	13	21	28.0%	8	0	0.0%	5.4%	2.1%	3.2%

ILI activity trend analysis

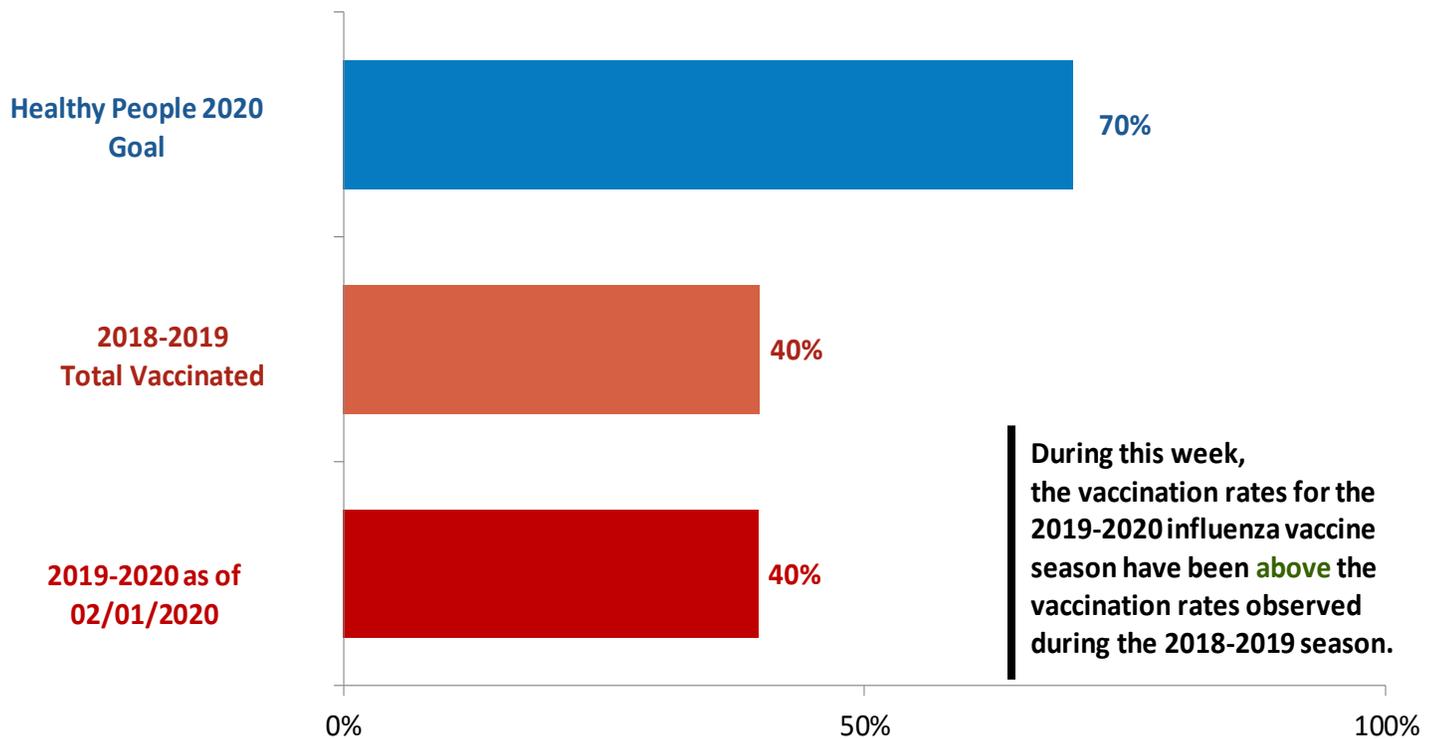


Influenza and RSV trend analysis



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:

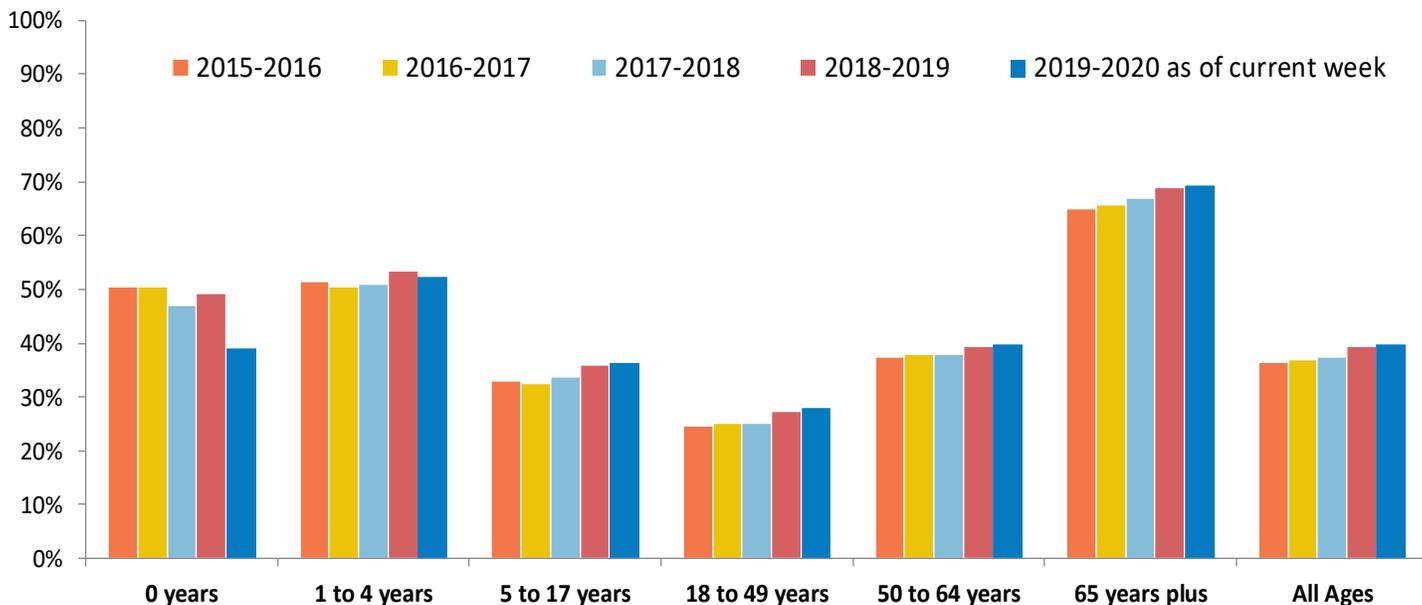
- A/Brisbane/02/2018 (H1N1)pdm09–like virus (updated)
- A/Kansas/14/2017 (H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus

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

