



RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 14, Ending April 4, 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



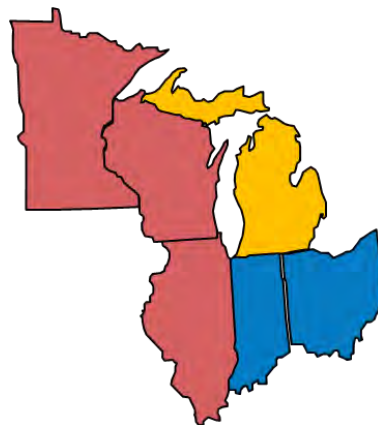


INFLUENZA LIKE ILLNESS (ILI) ACTIVITY

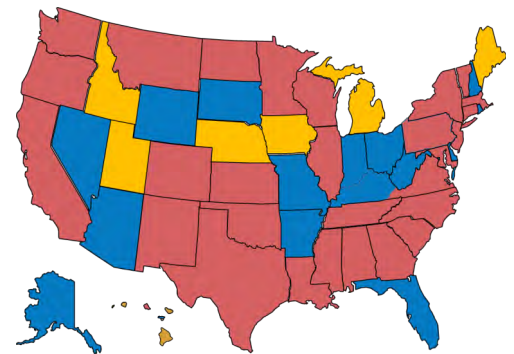
STATE OF WISCONSIN



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:

- **Predominant Viruses of the Week:**
Rhino/enterovirus and COVID-19 were the predominant viruses this week.

Current Alerts:

The percentage of deaths attributed to pneumonia and influenza (P&I) increased for the fifth consecutive week. P&I last week was 10.3%, far exceeding the state threshold of 6.8%.

P&I percentage nationally also exceeds threshold levels.

Based on the low incidence of influenza statewide and nationally, the increase in P&I deaths is likely due to COVID-19..

Additional data on COVID-19 in Wisconsin can be found at

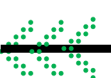
<https://www.dhs.wisconsin.gov/covid-19/data.htm>

INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

	Week 14, 2020	October 1, 2019 to present
Wisconsin	0	3
Nationwide	4	166



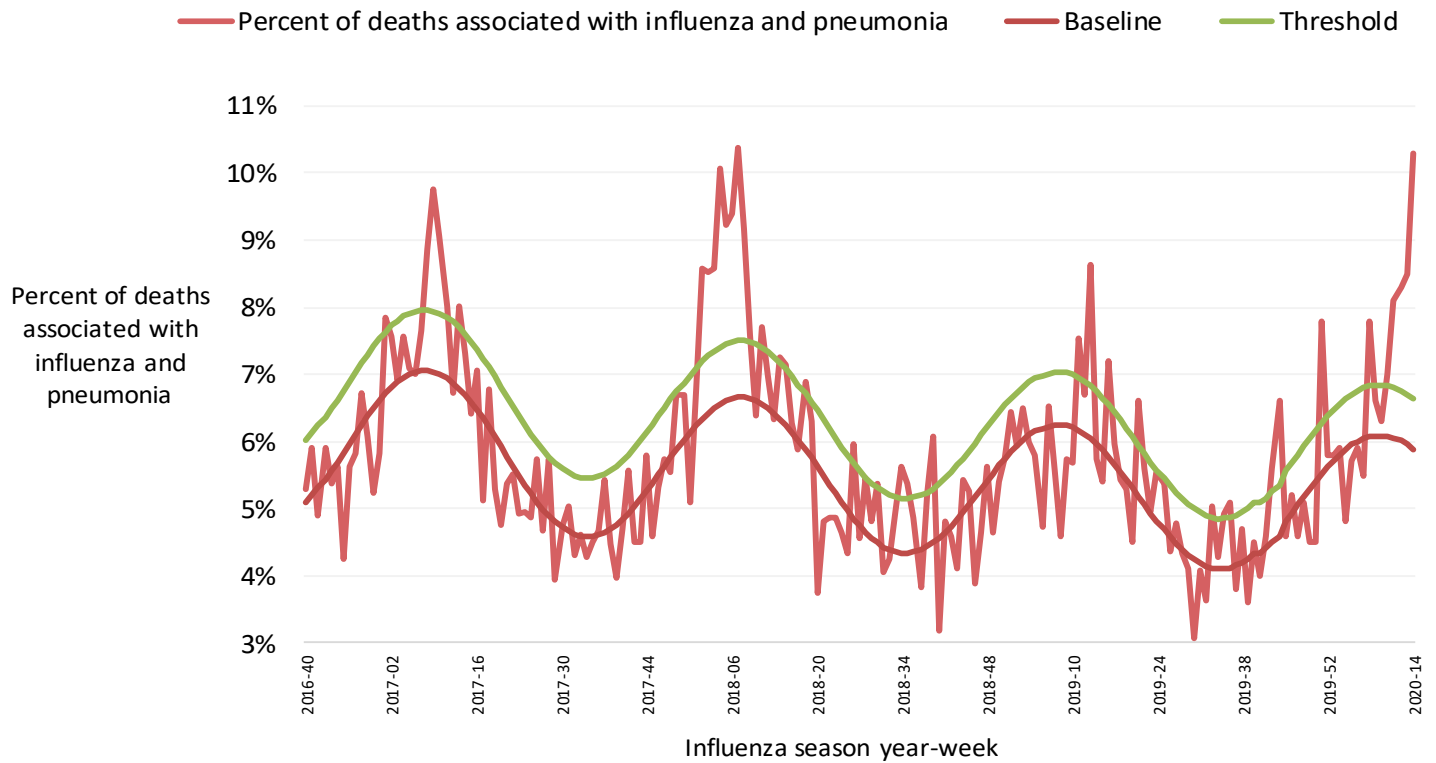
For National US influenza surveillance statistics visit: www.cdc.gov/flu/weekly/



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

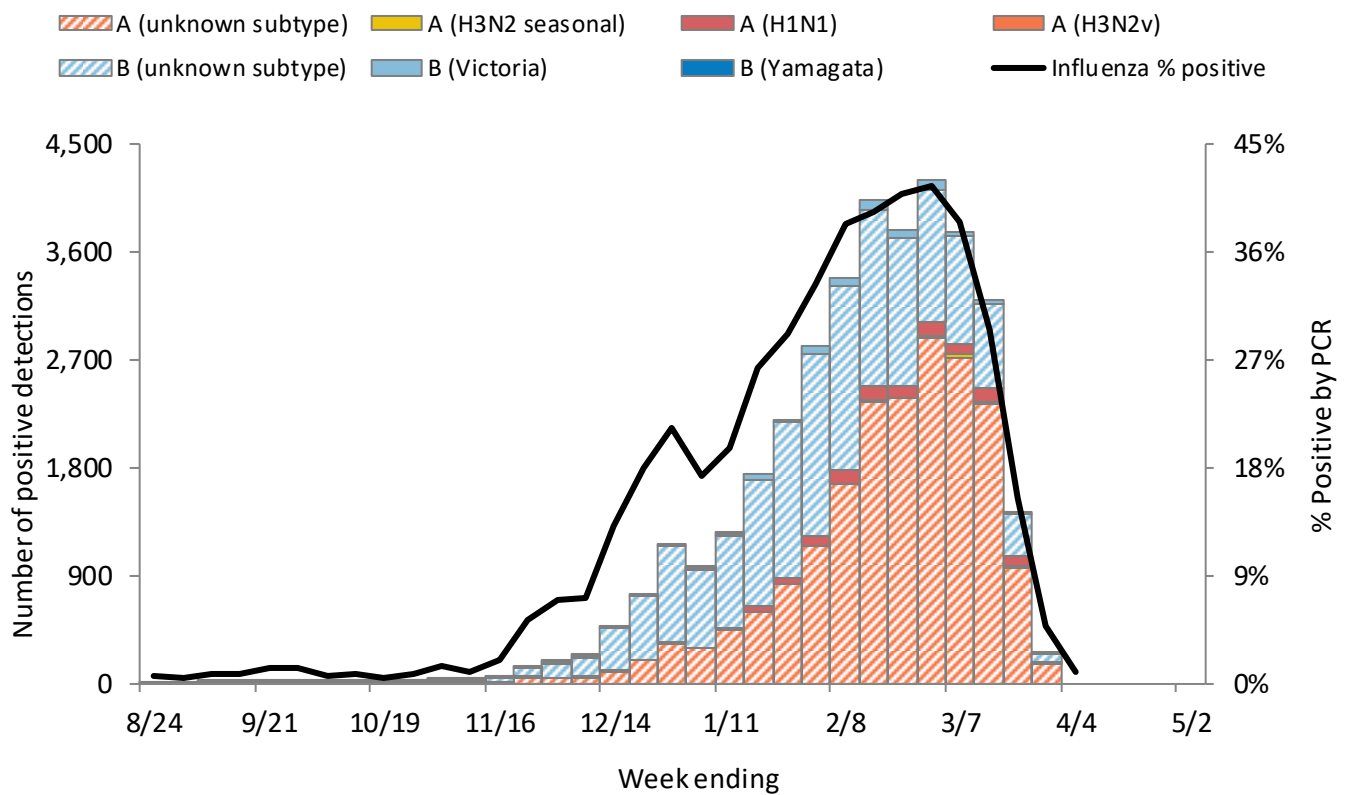
Influenza season week	Influenza-associated deaths (I)	Pneumonia-associated deaths (P)	Percent I+P of all deaths	Baseline I+P of all deaths	Threshold I+P of all deaths
12	19	92	8.3%	6.0%	6.8%
13	13	93	8.5%	6.0%	6.8%
14 Preliminary Data	7	99	10.3%	6.0%	6.8%
Seasonal total	167	2005	5.6%	NA	NA

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



WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Wisconsin positive influenza results and subtypes by PCR

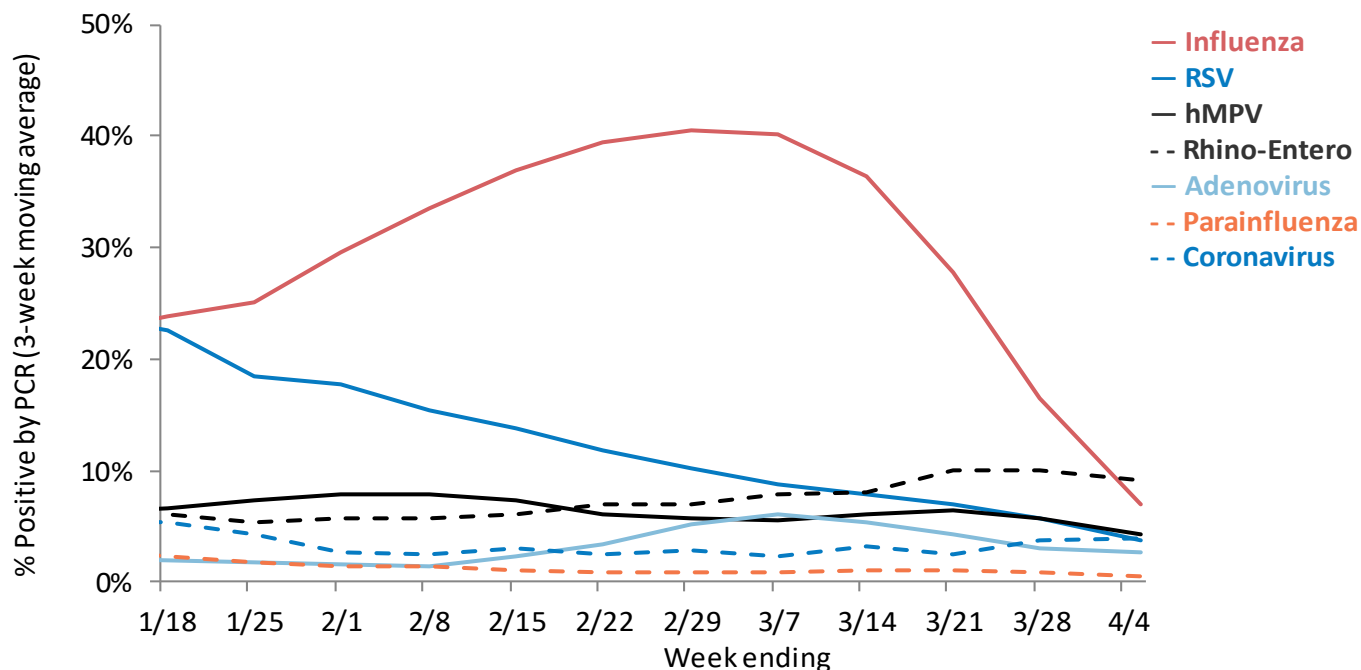


Cumulative number of positive influenza PCR tests by subtype September 1, 2019 to present

	Influenza A: 57%			Influenza B: 43%			Total
	A (2009 H1N1)	A (H3N2)	A (Unknown)	B (Victoria)	B (Yamagata)	B (Unknown)	
Total positive (n)	1003	168	19587	618	10	14770	36156
% of total positive	3%	0%	54%	2%	0%	41%	100%

WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR



Week 14: Ending on April 4, 2020

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	3937	38	1.0%	0	4	17	0	0	17

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	1079	1	0.1%	0	0	1	0

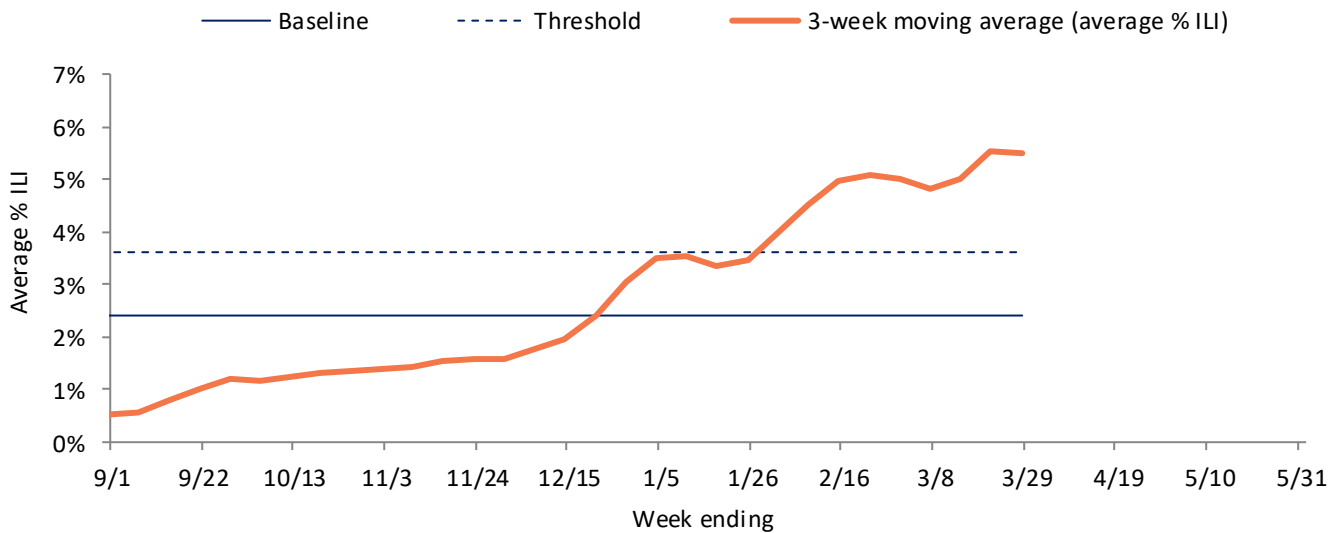
Respiratory virus	Tested	Positive (n)	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1
Coronavirus	60	2	3.3%	0	0	2	0

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	2176	42	1.9%
Human metapneumovirus	1086	25	2.3%
Rhino-enterovirus	997	65	6.5%
Adenovirus	60	1	1.7%

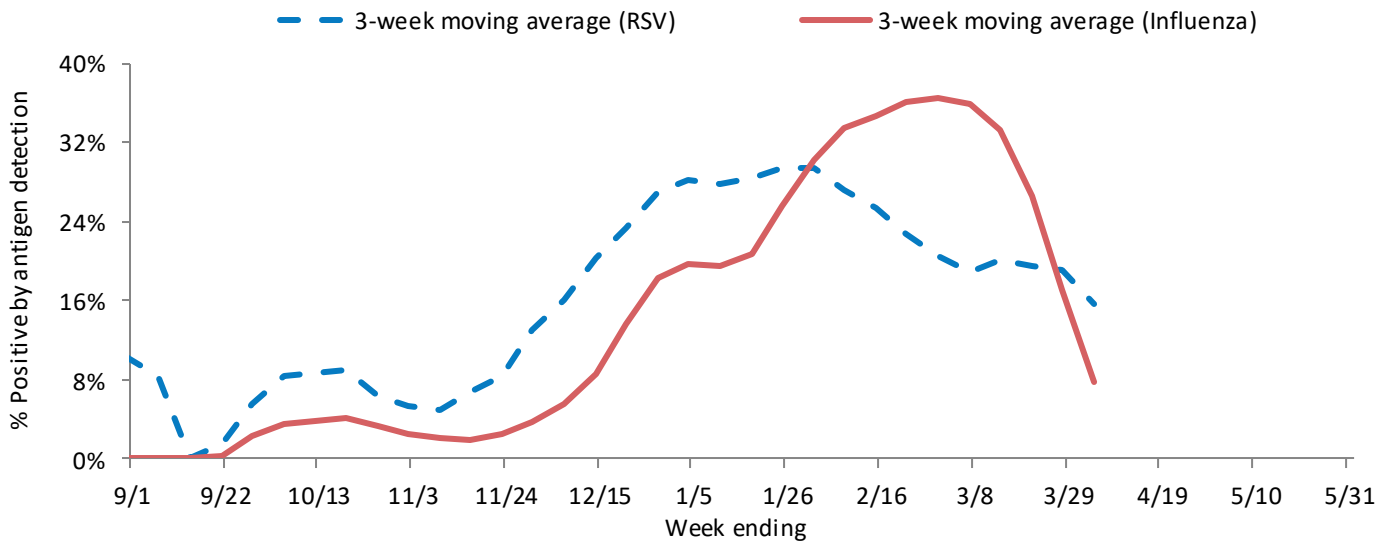
WISCONSIN STATE SUMMARY

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							
717	7	4	11	1.5%	54	7	13.0%	3.5%	2.4%	3.6%

ILI activity trend analysis

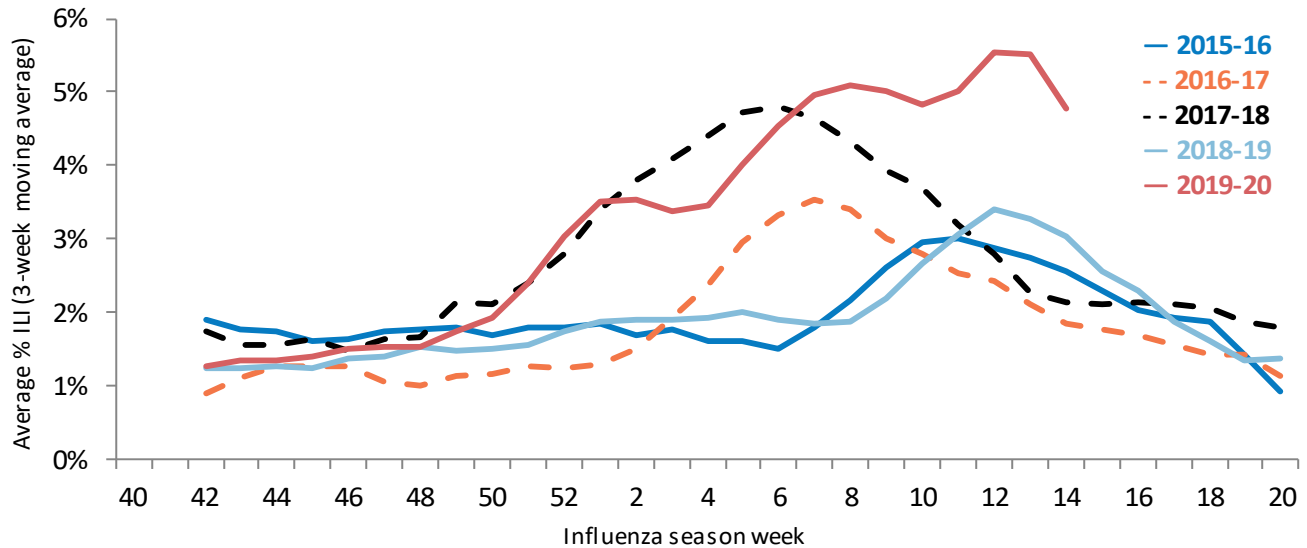


Influenza and RSV trend analysis



WISCONSIN STATE SUMMARY

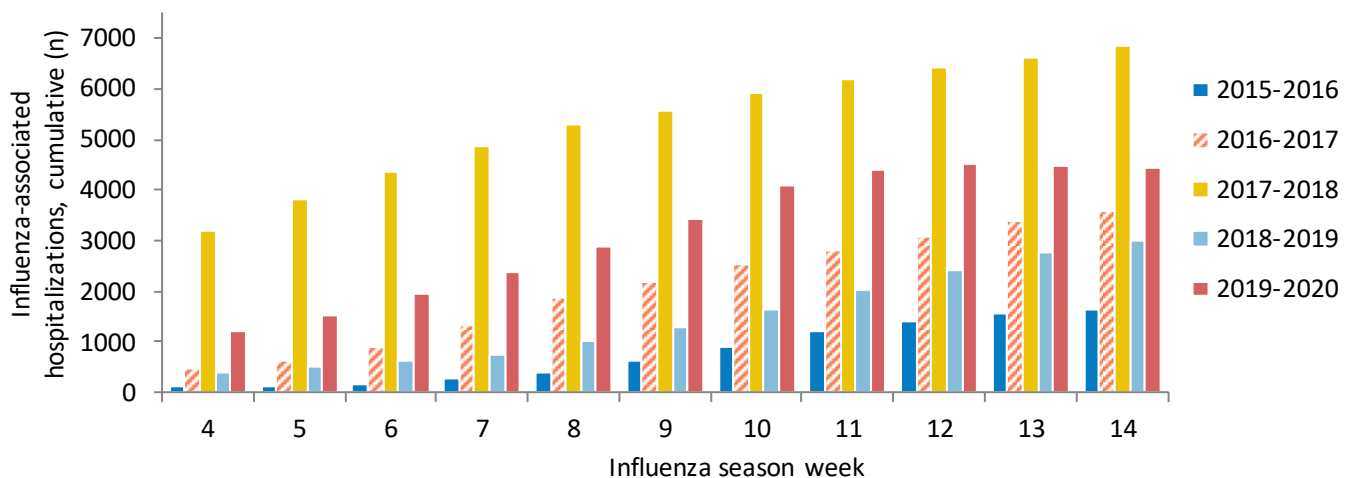
ILI activity trend analysis by influenza season, Wisconsin



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	87	5	0	35	26	21	12	4		
1-4	205	6	0	63	68	68	29	9		
5-17	313	4	0	64	98	147	28	11		
18-49	881	51	2	423	189	216	124	41	71	13
50-64	1108	95	6	774	134	99	185	53		
65+	1848	166	20	1292	272	98	246	58		
Total	4442	327	28	2651	787	649	624	176	71	13

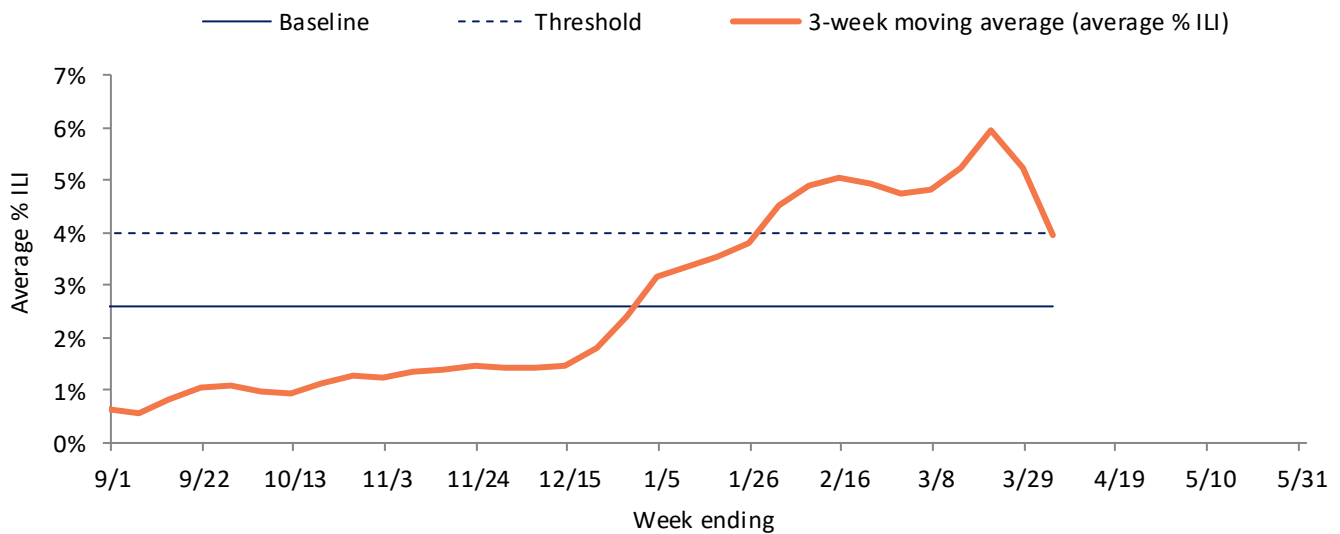
Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



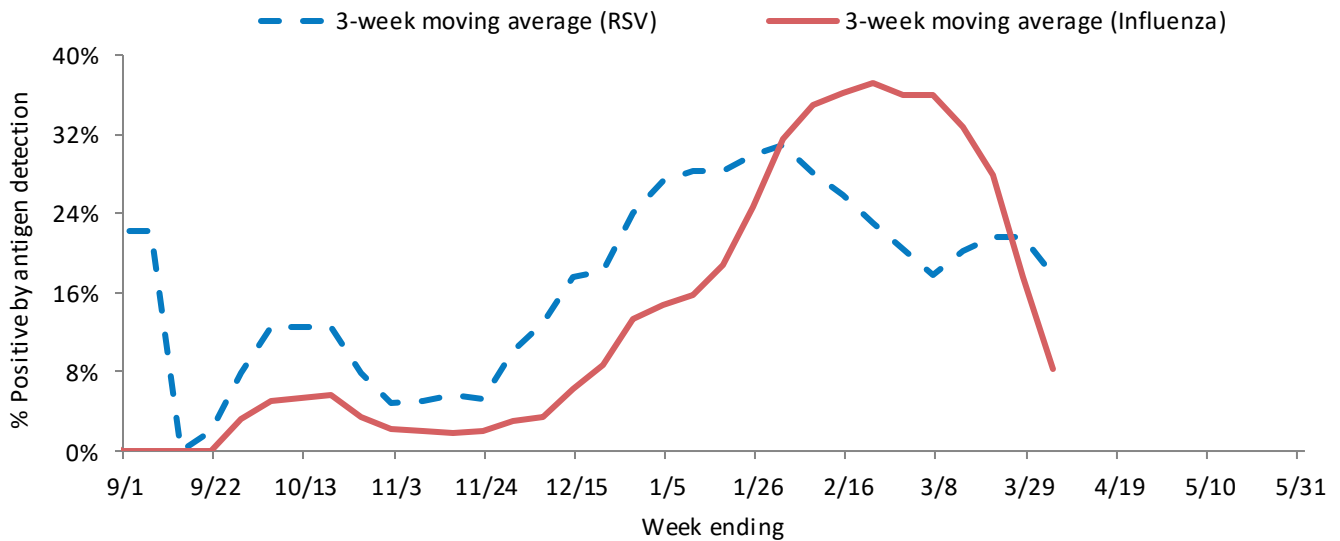
NORTHEASTERN REGION

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							
196	3	1	4	2.0%	24	4	16.7%	2.4%	2.6%	4.0%

ILI activity trend analysis



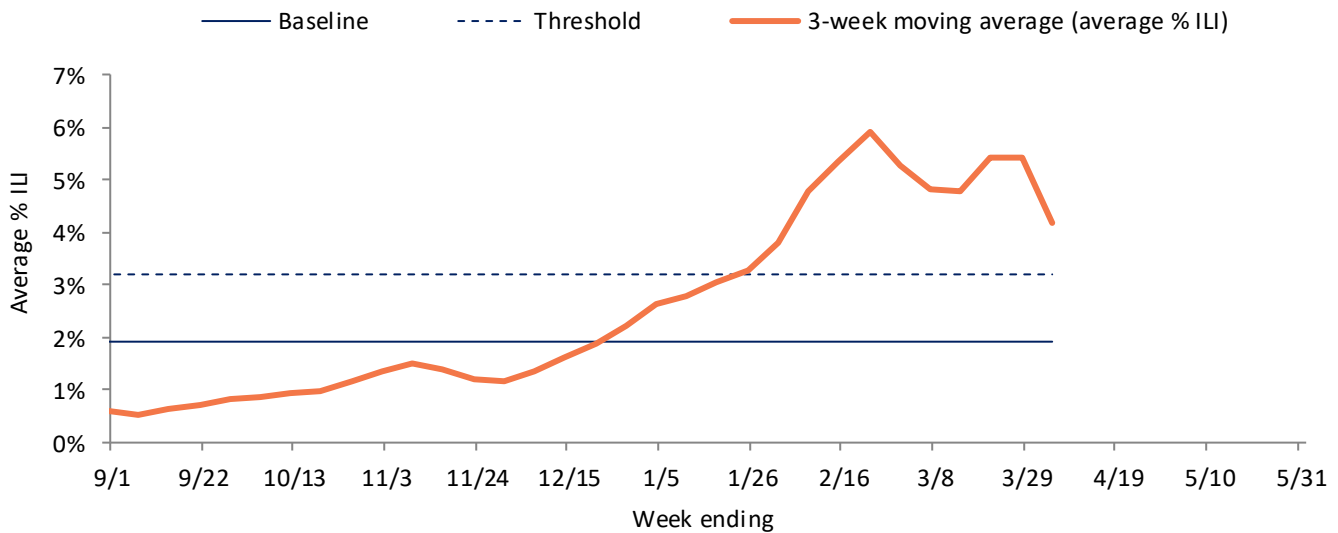
Influenza and RSV trend analysis



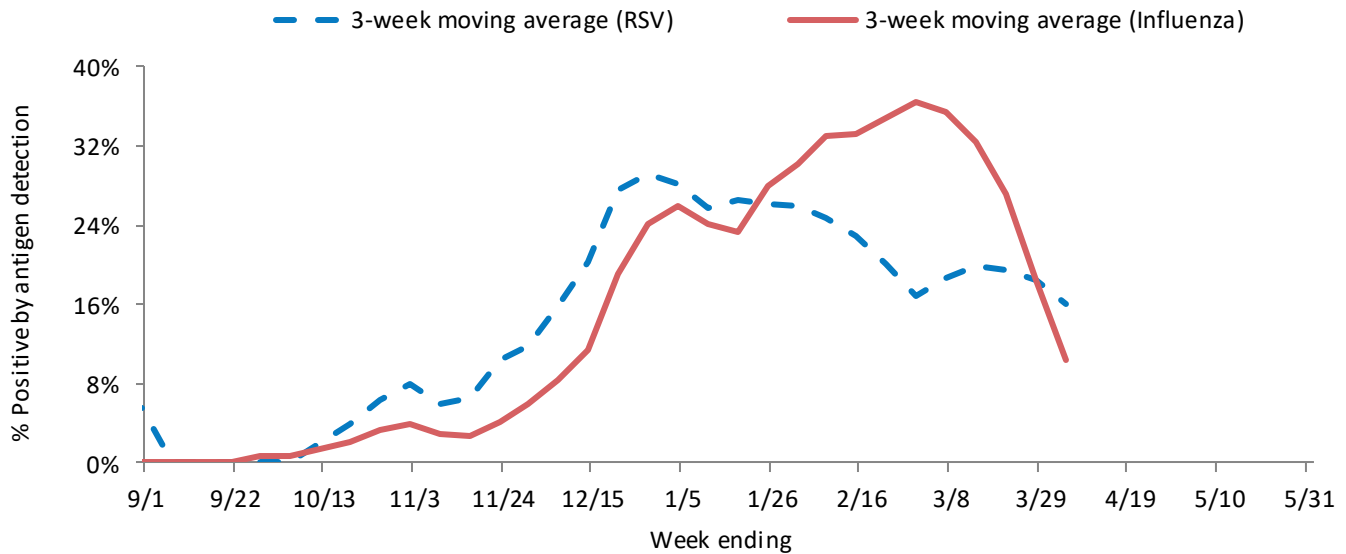
NORTHWESTERN REGION

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							
160	3	1	4	2.5%	26	3	11.5%	2.1%	1.9%	3.2%

ILI activity trend analysis



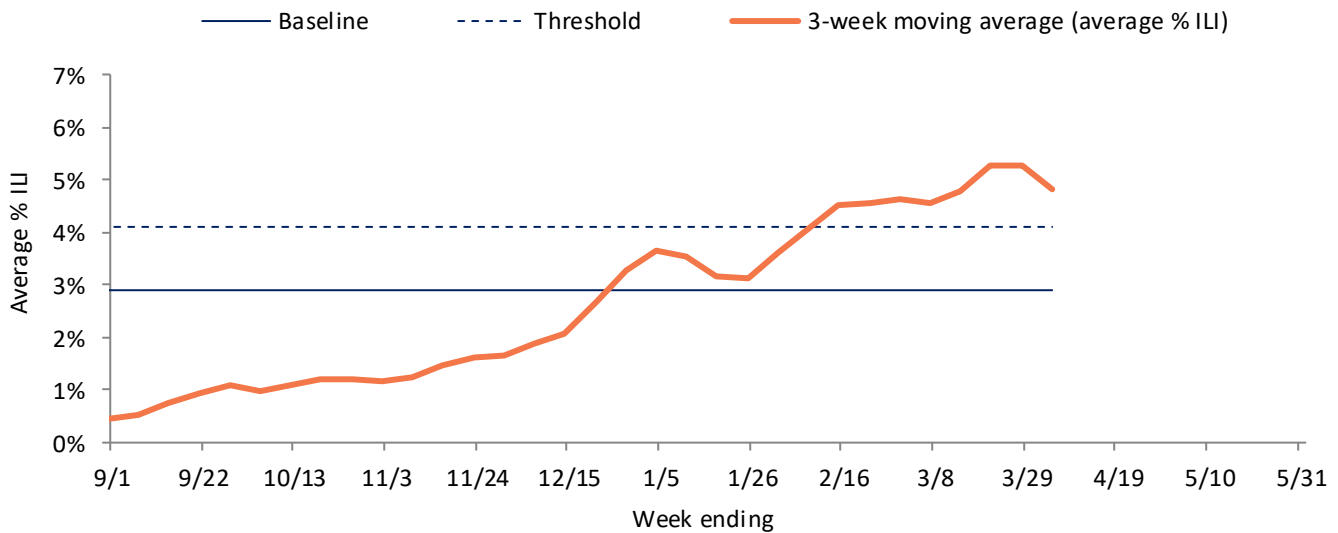
Influenza and RSV trend analysis



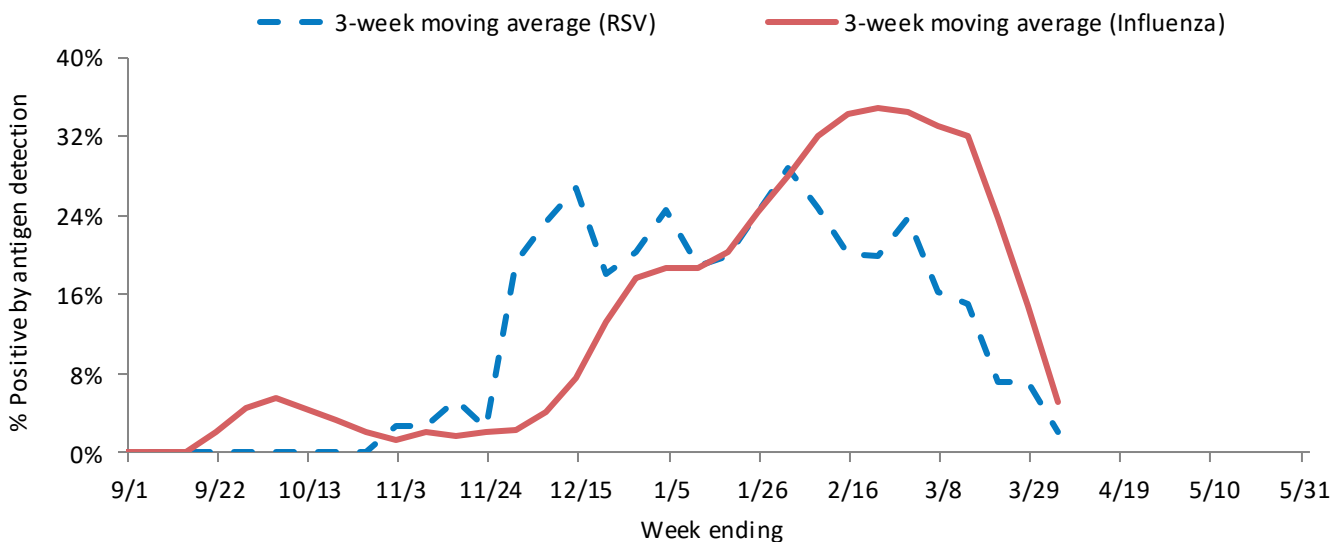
SOUTHEASTERN REGION

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							
342	1	2	3	0.9%	3	0	0.0%	4.0%	2.9%	4.1%

ILI activity trend analysis



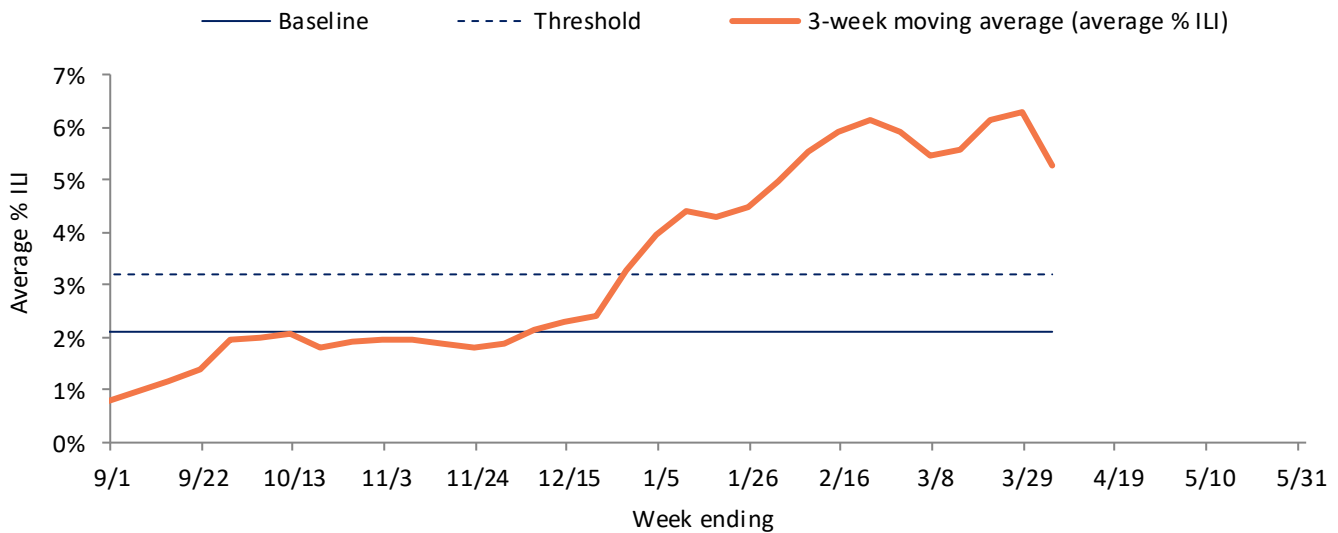
Influenza and RSV trend analysis



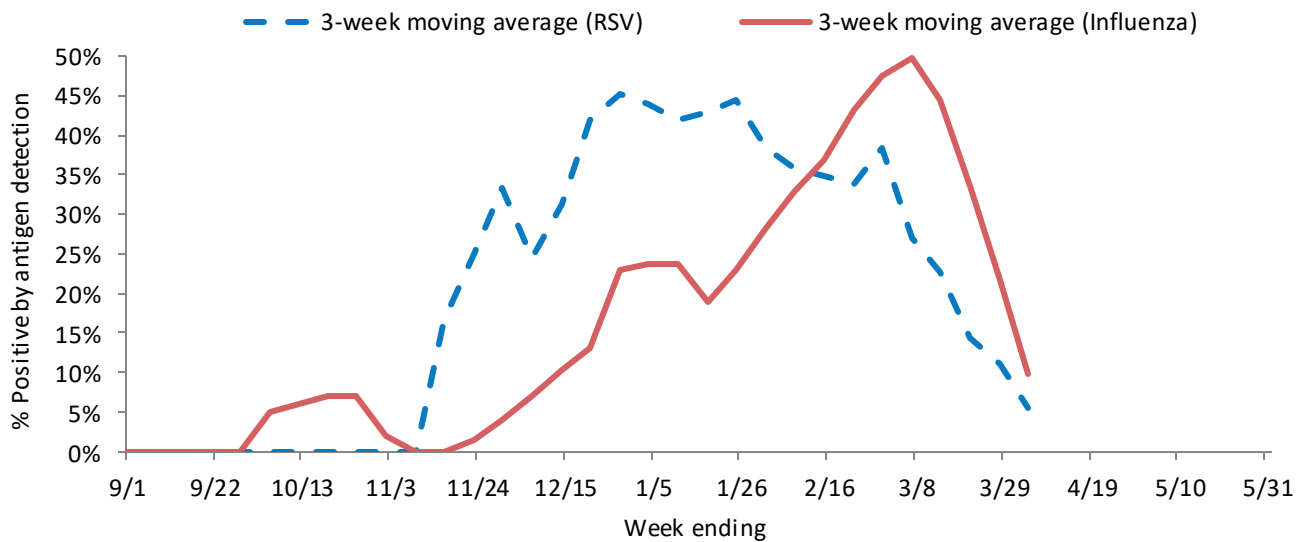
SOUTHERN REGION

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							
35	2	2	4	11.4%	8	0	0.0%	5.2%	2.1%	3.2%

ILI activity trend analysis

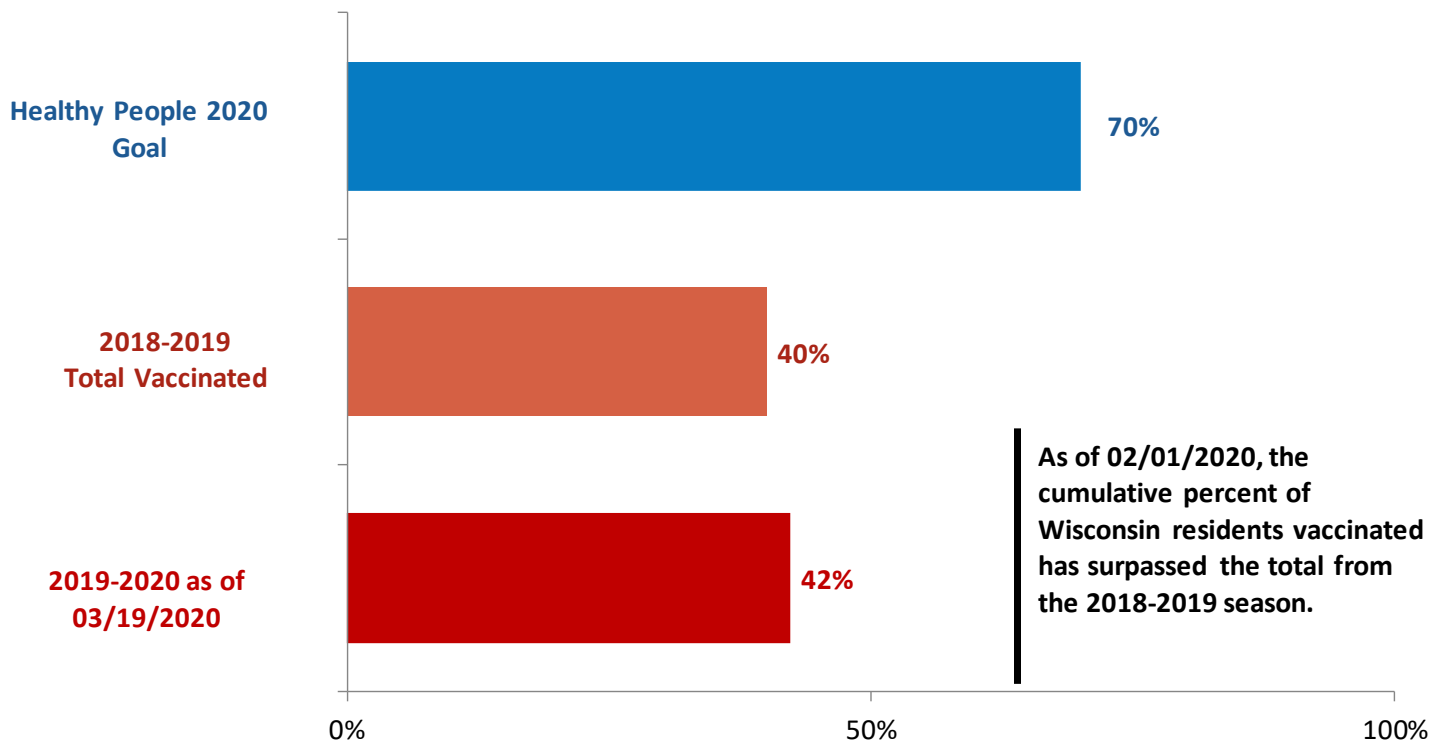


Influenza and RSV trend analysis



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:

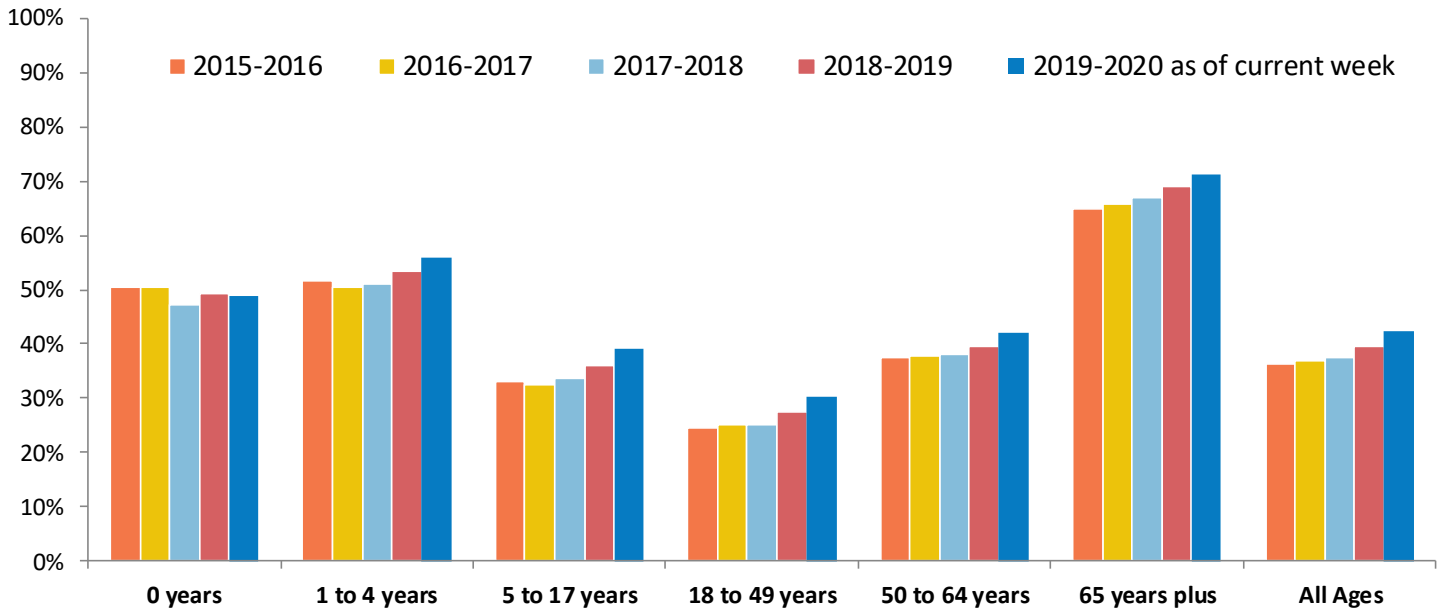
- A/Brisbane/02/2018 (H1N1)pdm09–like virus (updated)
- A/Kansas/14/2017 (H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus

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

