



RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 13, Ending March 28, 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



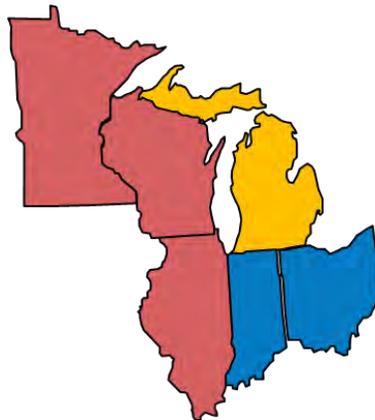


INFLUENZA LIKE ILLNESS (ILI) ACTIVITY

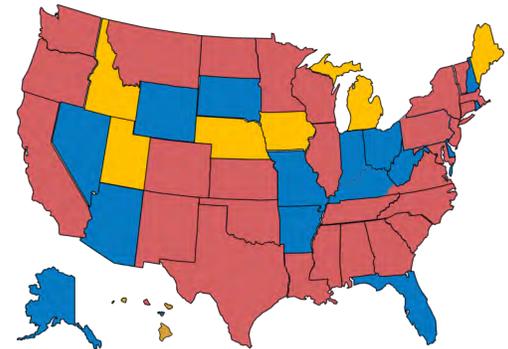
STATE OF WISCONSIN



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:

Laboratory confirmed flu has decreased significantly from 15.4% positivity last week to 4.2% positivity this week..

The percentage of outpatient visits for influenza-like illness (ILI) decreased from 7.3% last week to 5.2% this week.

The decrease in ILI is likely related to COVID-19, including fewer ILI-illnesses overall because of widespread adoption of social distancing efforts, and changes in seeking healthcare attention.

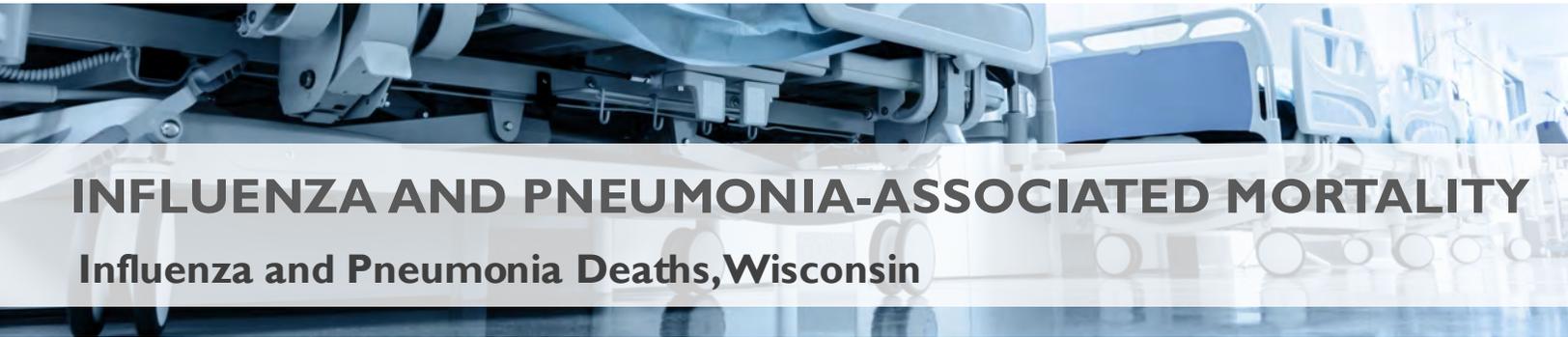
INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

	Week 13, 2020	October 1, 2019 to present
Wisconsin	0	3
Nationwide	7	162



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

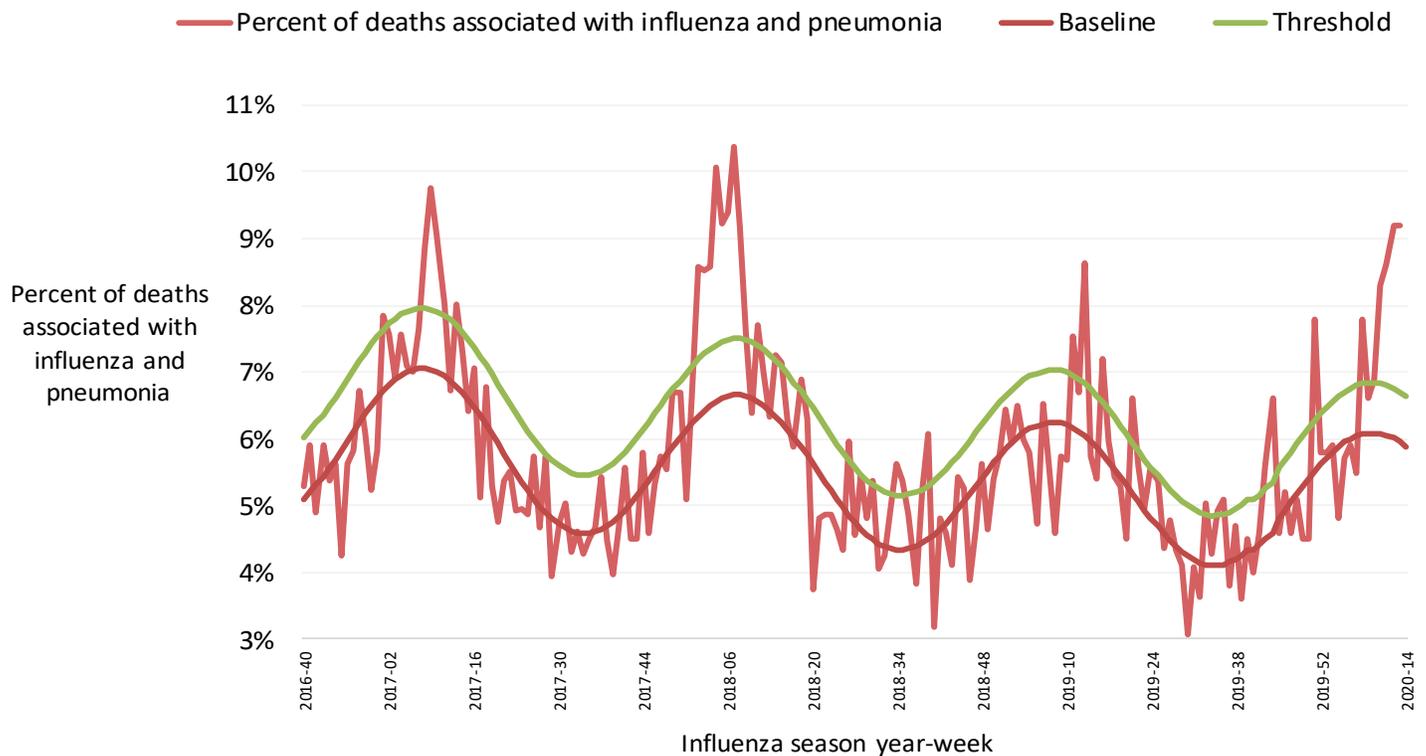




INFLUENZA AND PNEUMONIA-ASSOCIATED MORTALITY

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

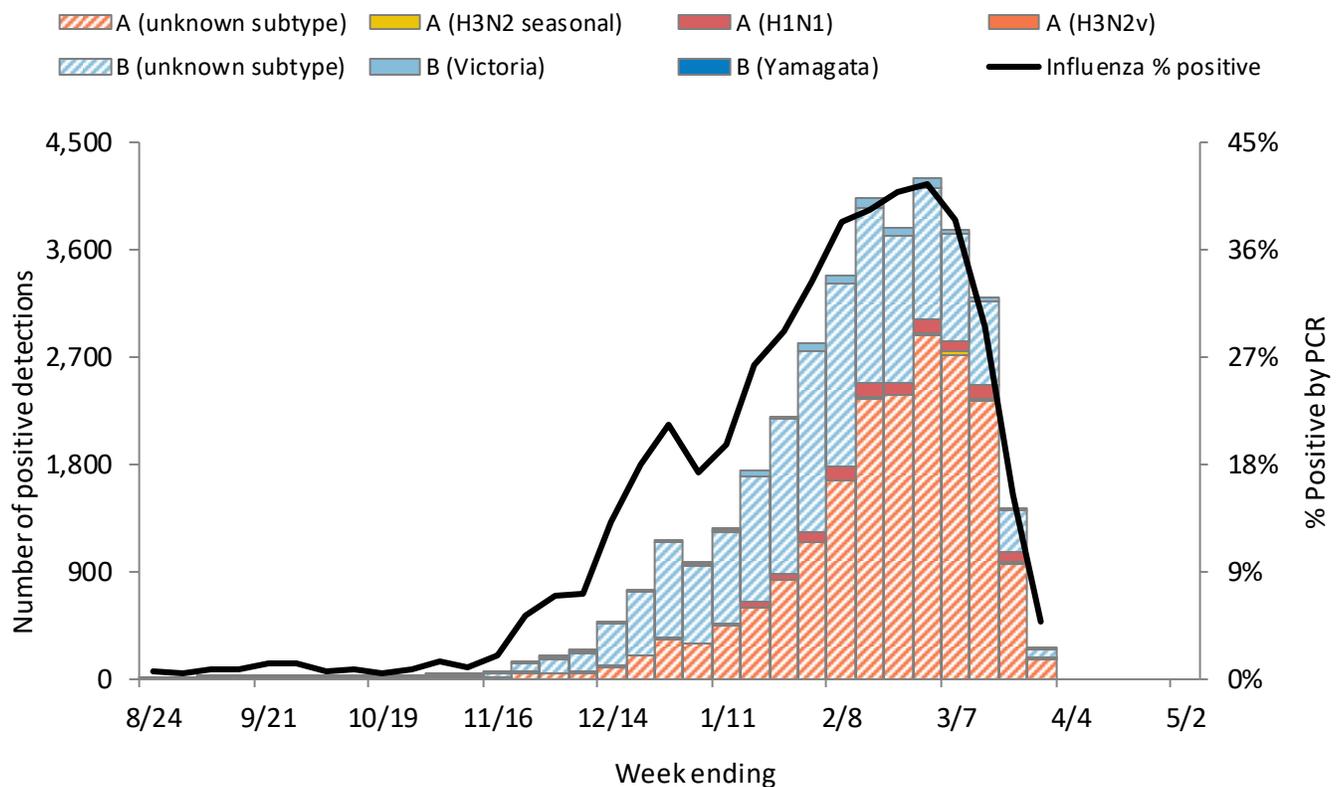
Influenza season week	Influenza-associated deaths (I)	Pneumonia-associated deaths (P)	Percent I+P of all deaths	Baseline I+P of all deaths	Threshold I+P of all deaths
11	31	80	8.6%	6.0%	6.8%
12	19	87	9.2%	6.0%	6.8%
13 Preliminary Data	11	80	9.2%	6.0%	6.8%
Seasonal total	157	1811	5.6%	NA	NA

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



WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Wisconsin positive influenza results and subtypes by PCR

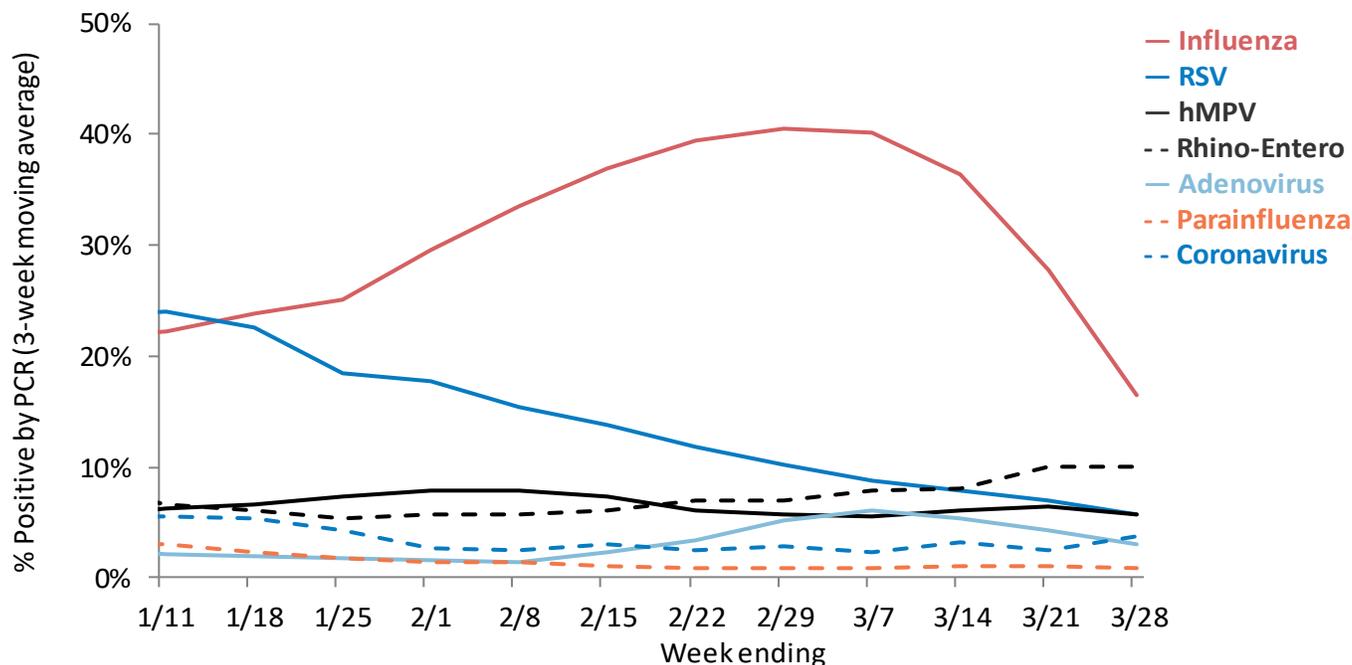


Cumulative number of positive influenza PCR tests by subtype September 1, 2019 to present

	A (2009 H1N1)	Influenza A: 57%			Influenza B: 43%			Total
	A (2009 H1N1)	A (H3N2)	A (Unknown)	B (Victoria)	B (Yamagata)	B (Unknown)		
Total positive (n)	999	168	19570	618	10	14753	36118	
% 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 13: Ending on March 28, 2020

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	5274	248	4.7%	2	16	156	1	0	73

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	1039	6	0.6%	2	0	3	1

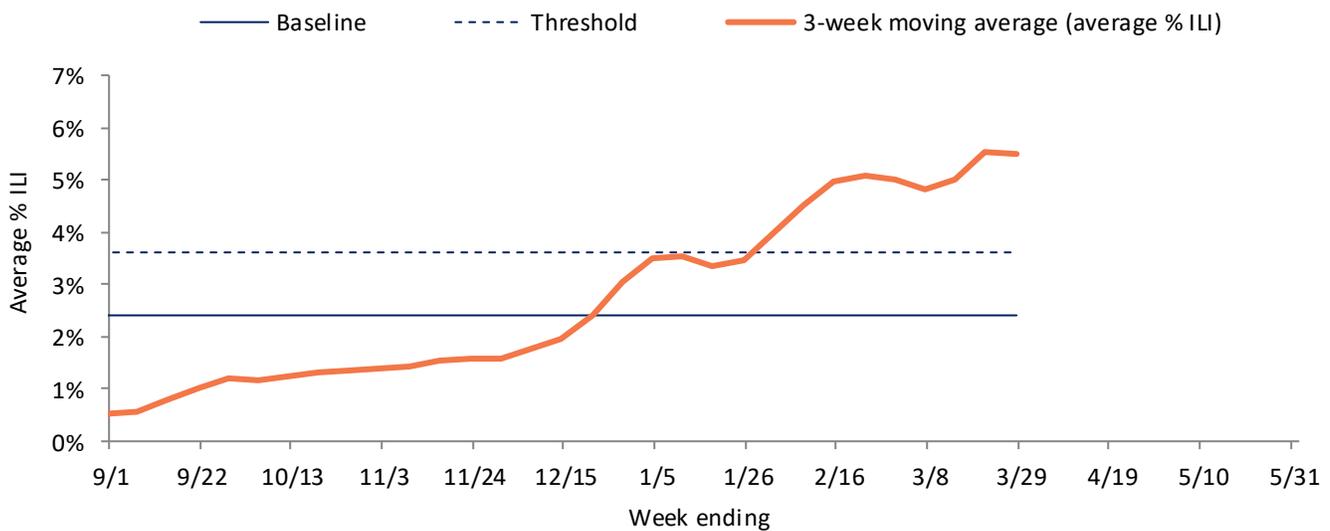
Respiratory virus	Tested	Positive (n)	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1
Coronavirus	71	4	5.6%	0	0	2	2

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	2572	104	4.0%
Human metapneumovirus	1039	43	4.1%
Rhino-enterovirus	1039	98	9.4%
Adenovirus	71	2	2.8%

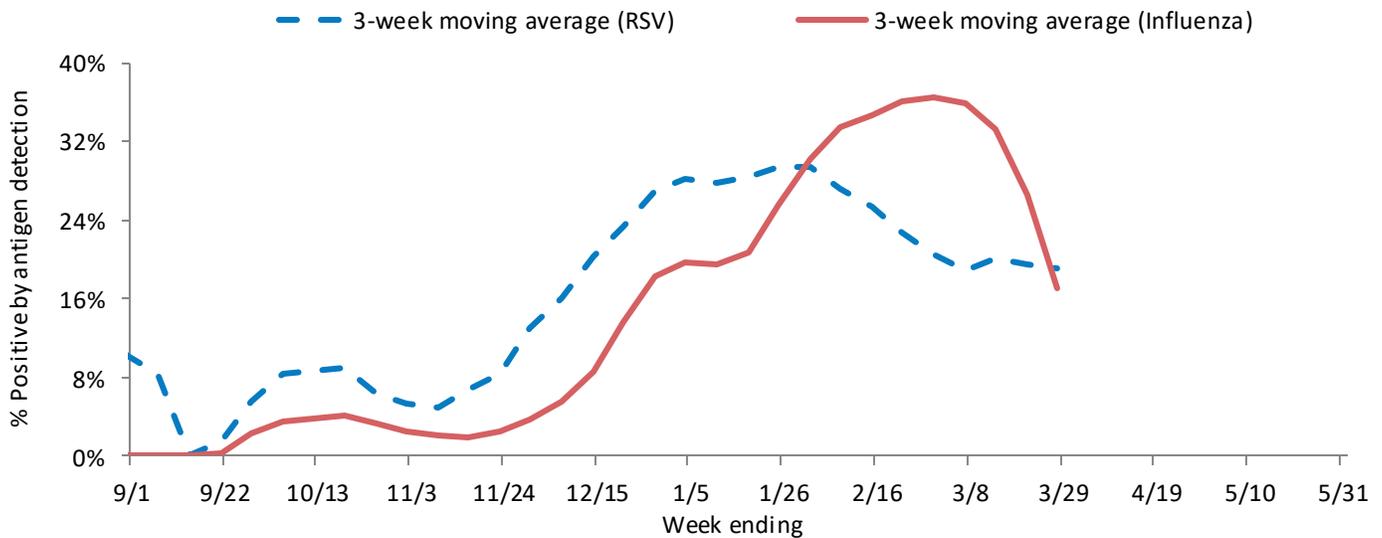
WISCONSIN STATE SUMMARY

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							
1268	33	28	61	4.8%	127	24	18.9%	4.5%	2.4%	3.6%

ILI activity trend analysis

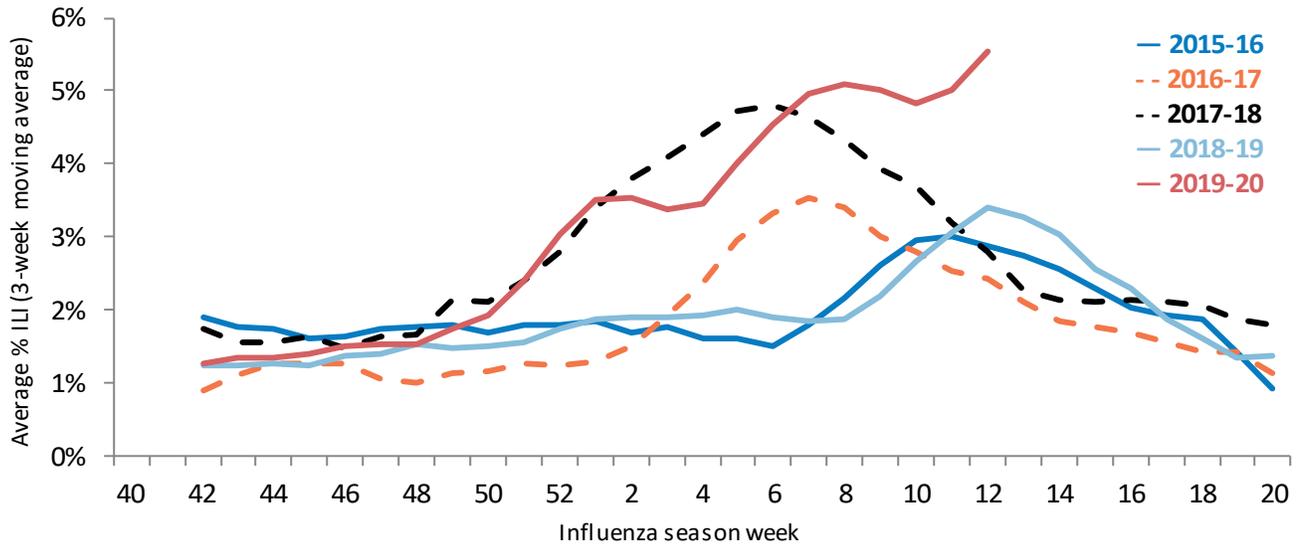


Influenza and RSV trend analysis



WISCONSIN STATE SUMMARY

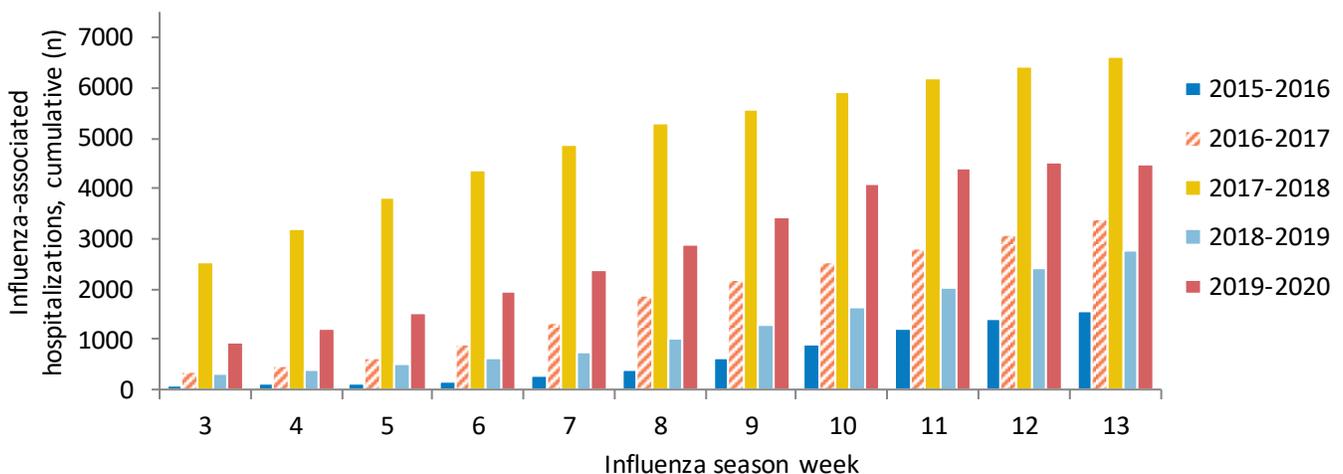
ILI activity trend analysis by influenza season, Wisconsin



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	91	5		35	26	25	12	4		
1-4	215	6		63	66	80	29	9		
5-17	326	4		64	98	160	28	11		
18-49	901	51	2	423	188	237	122	40	71	13
50-64	1113	95	6	770	134	108	182	52		
65+	1847	166	20	1288	270	103	240	57		
Total	4493	327	28	2643	782	713	613	173	71	13

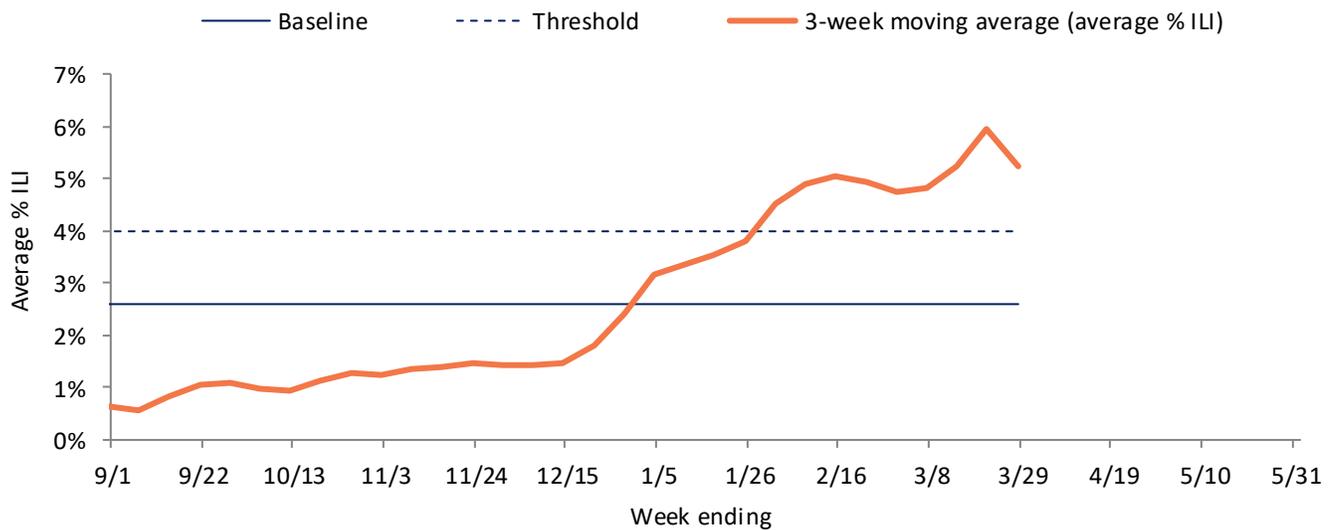
Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



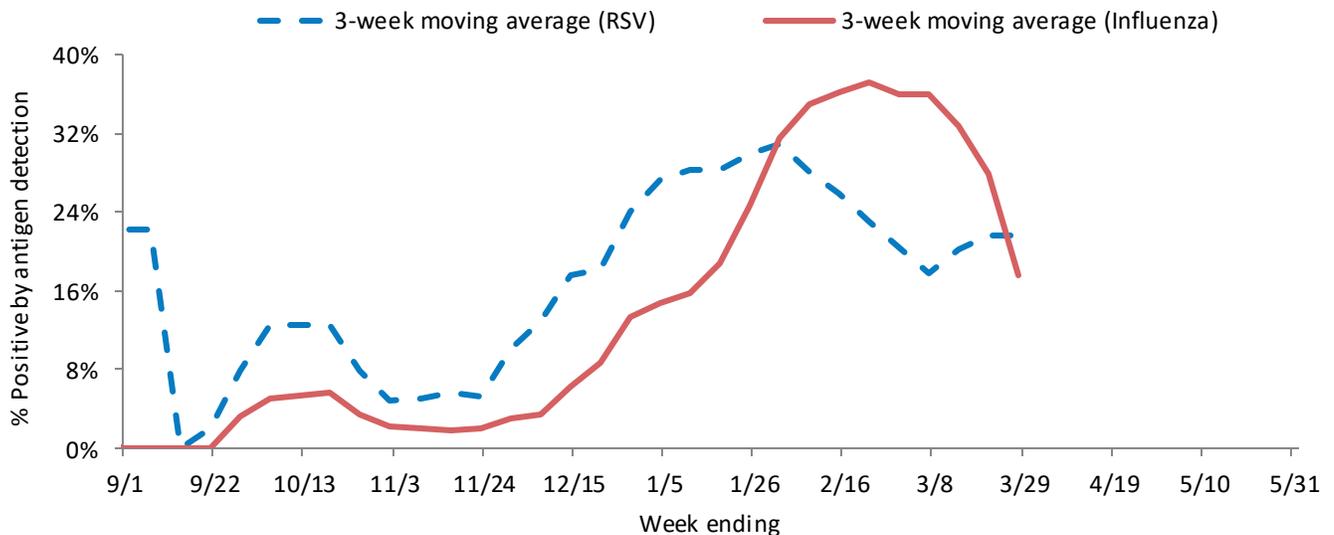
NORTHEASTERN REGION

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							
435	11	11	22	5.1%	61	11	18.0%	3.1%	2.6%	4.0%

ILI activity trend analysis



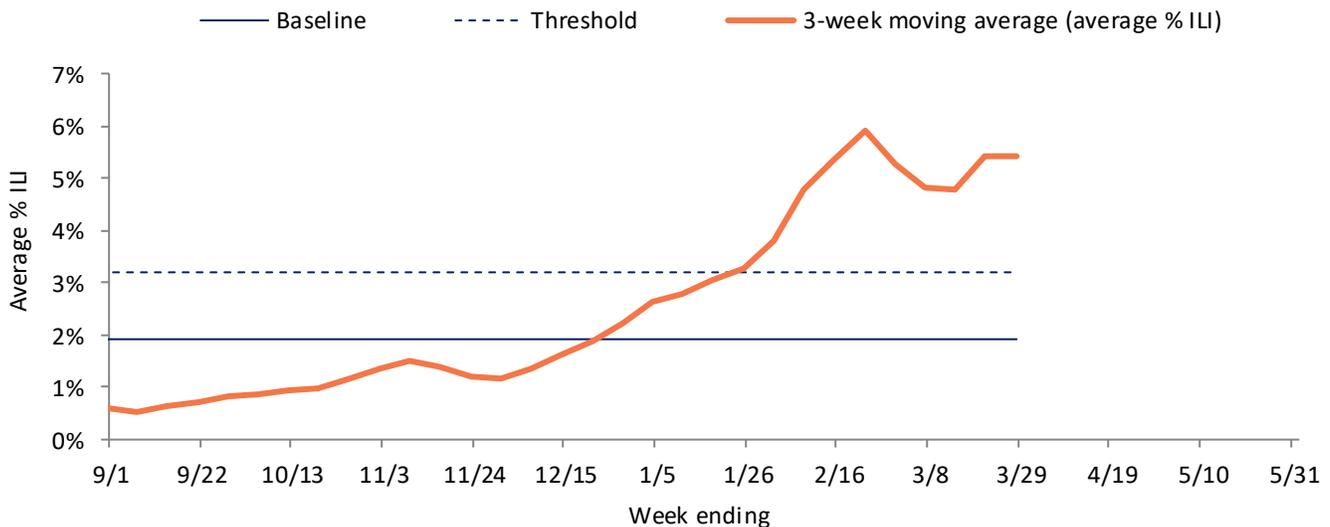
Influenza and RSV trend analysis



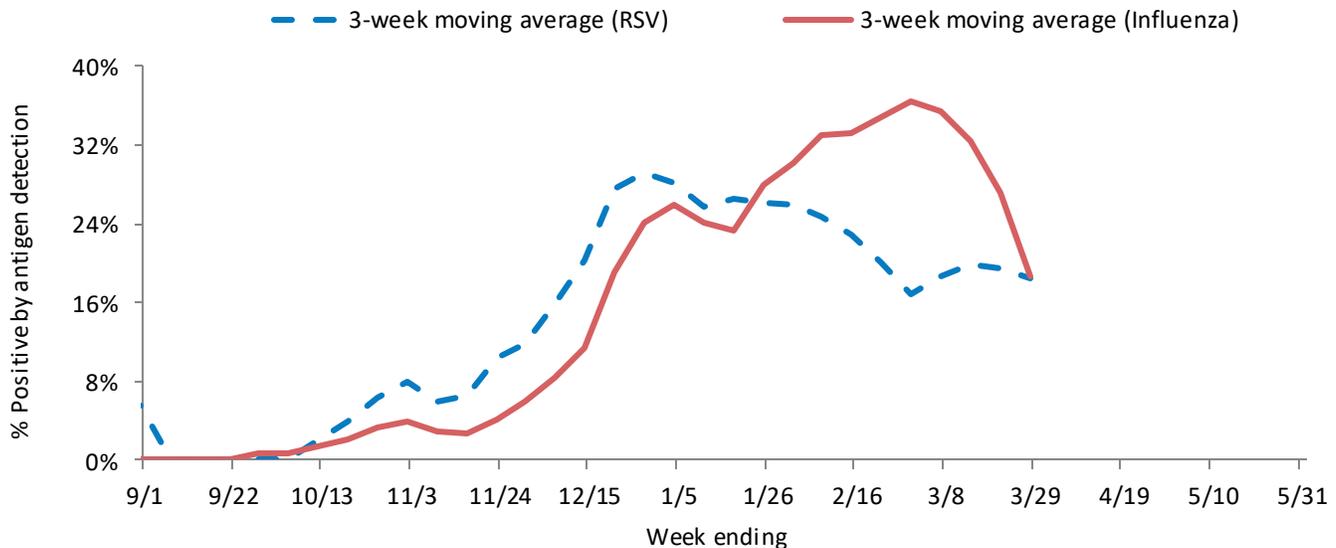
NORTHWESTERN REGION

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							
258	9	8	17	6.6%	58	13	22.4%	4.2%	1.9%	3.2%

ILI activity trend analysis



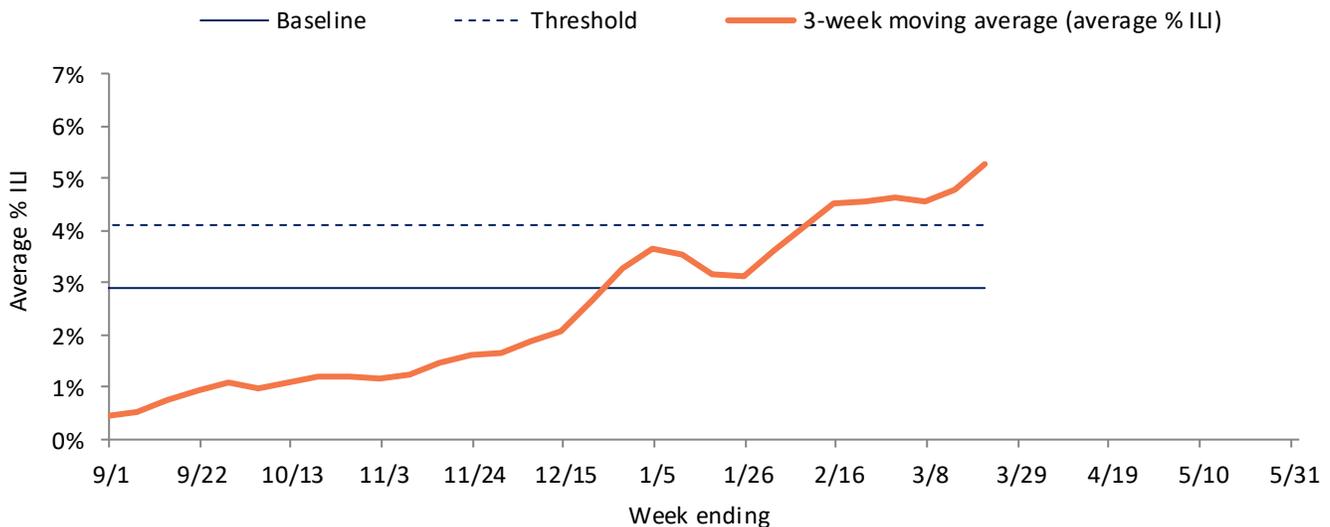
Influenza and RSV trend analysis



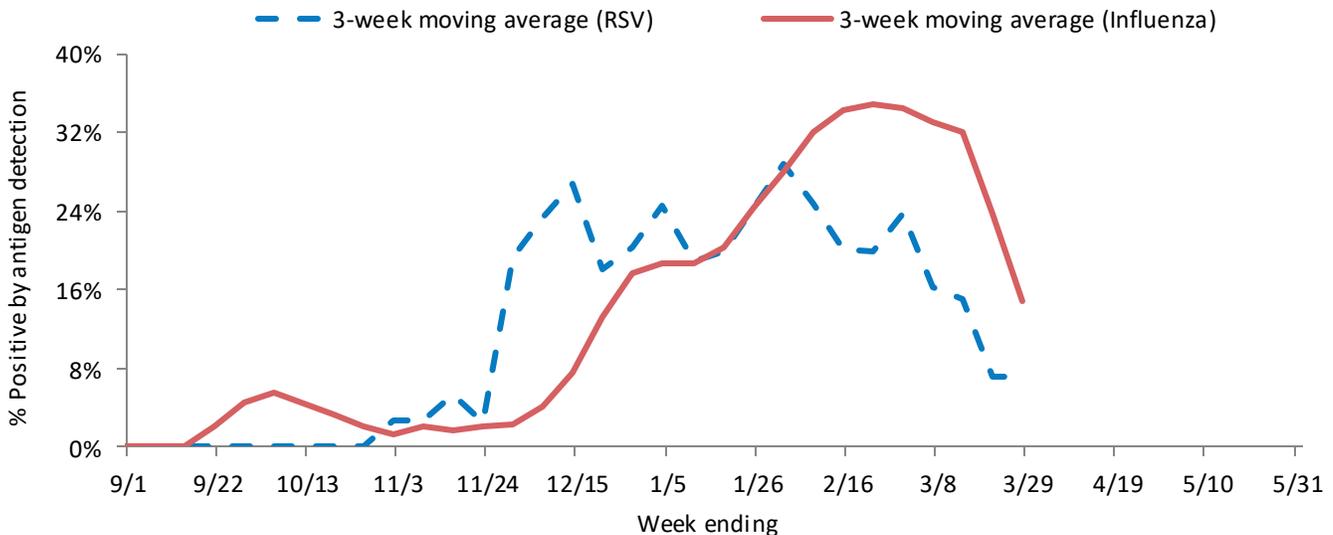
SOUTHEASTERN REGION

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							
540	11	7	18	3.3%	0	0	#DIV/0!	4.5%	2.9%	4.1%

ILI activity trend analysis



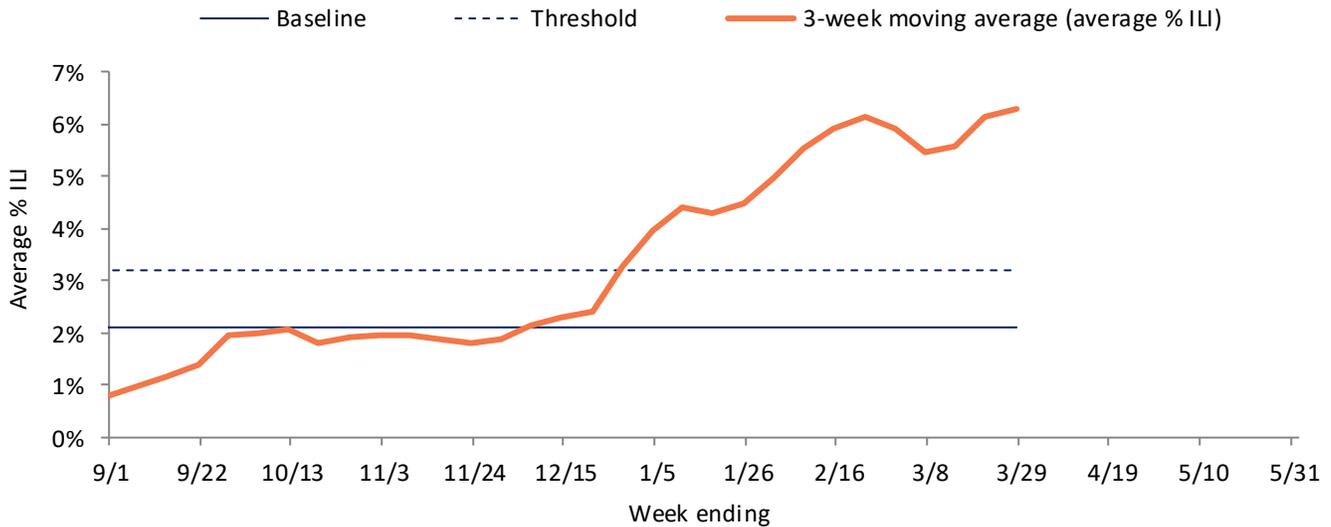
Influenza and RSV trend analysis



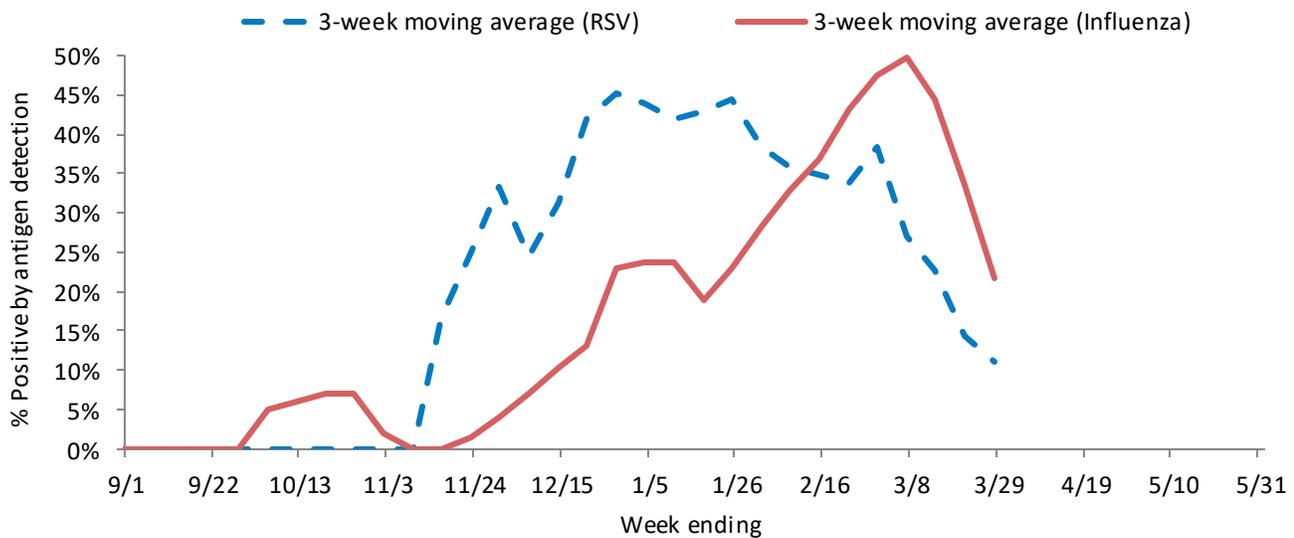
SOUTHERN REGION

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

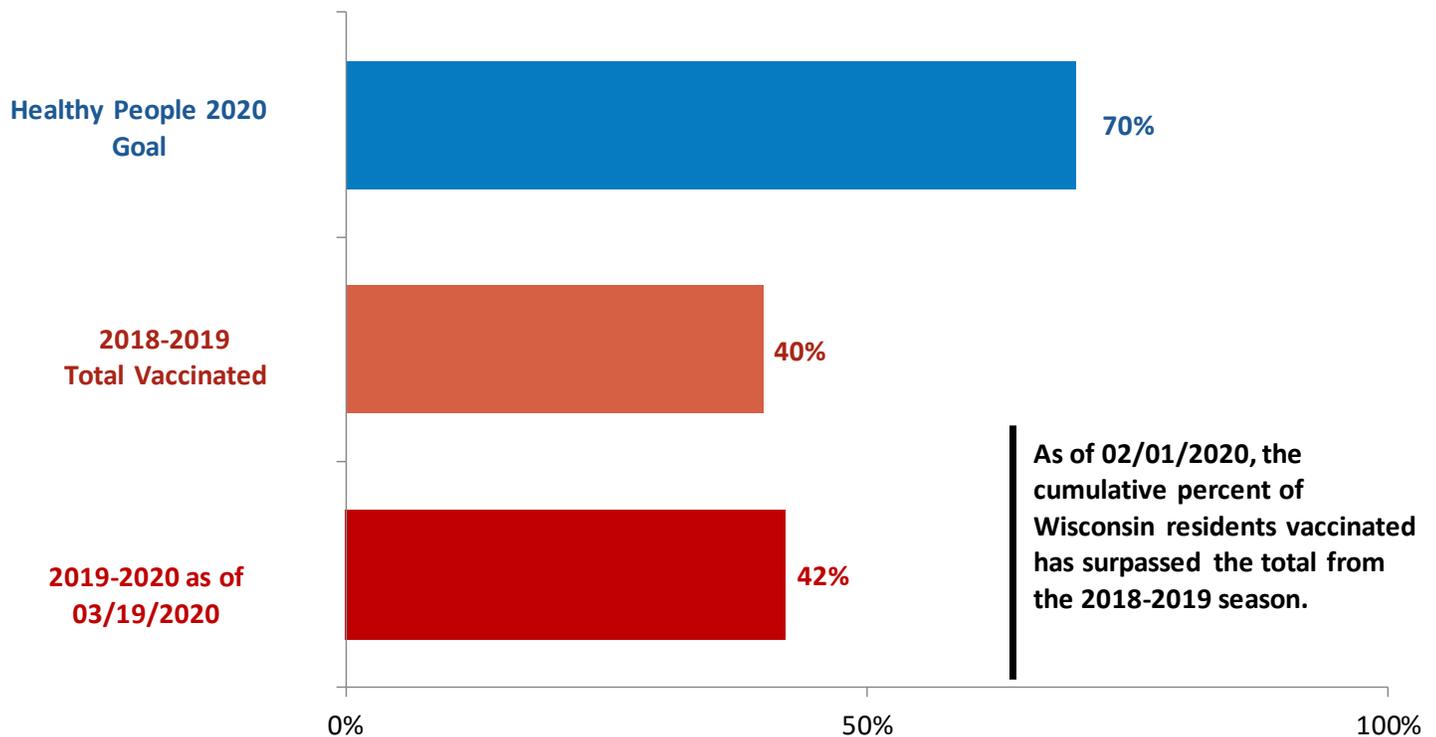


Influenza and RSV trend analysis



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:

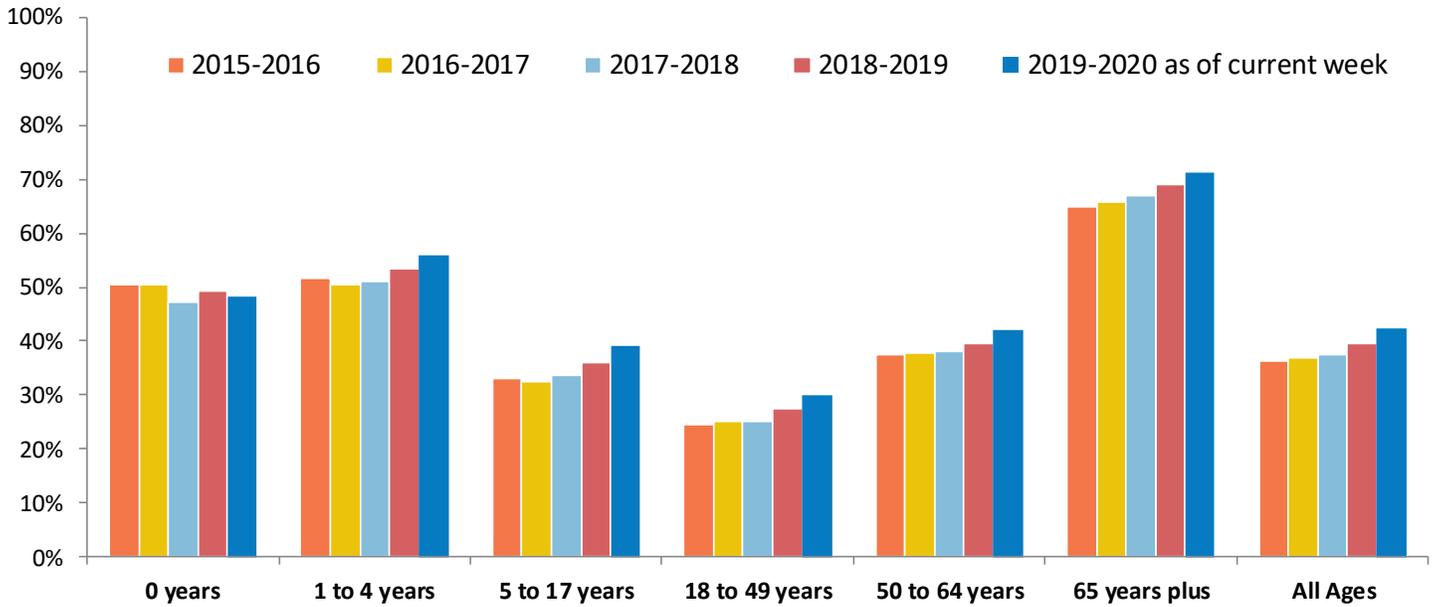
- A/Brisbane/02/2018 (H1N1)pdm09–like virus (updated)
- A/Kansas/14/2017 (H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus

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

