



RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 17: Ending April 27, 2019

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

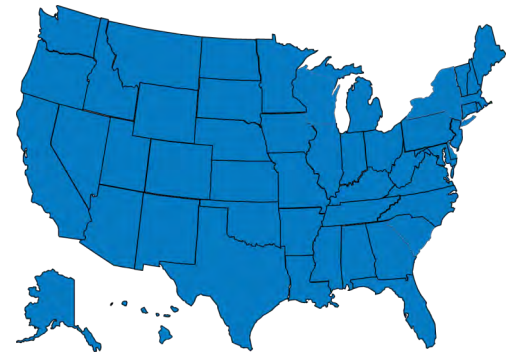
STATE OF WISCONSIN



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 Virus of the Week:**

Influenza A/H3 is the predominant virus this week.

INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

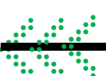
	Week 17, 2019	October 1, 2018 to present
Wisconsin	0	3
Nationwide	5	101

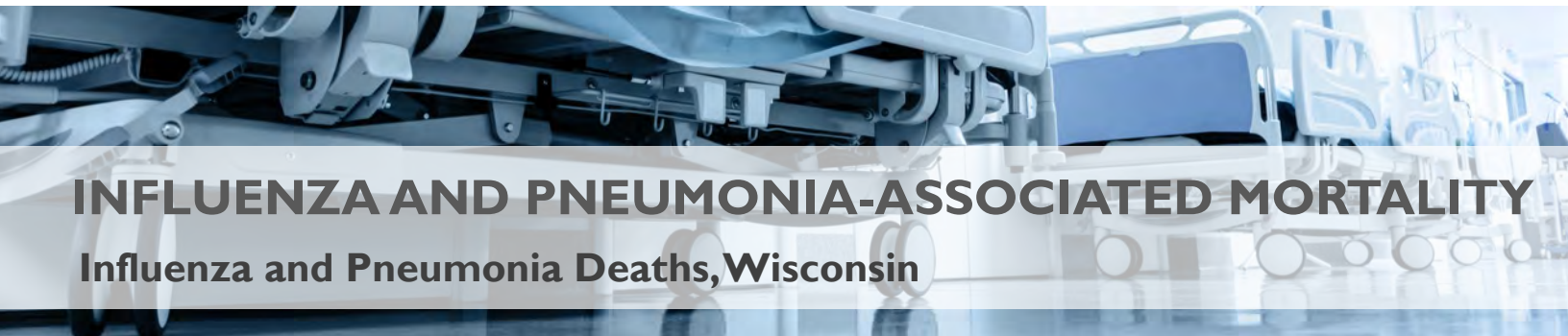
CURRENT ALERTS:

- Influenza activity is declining statewide. Human metapneumovirus and parainfluenza activity is increasing.
- 52 flu-associated hospitalizations were reported this week.



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

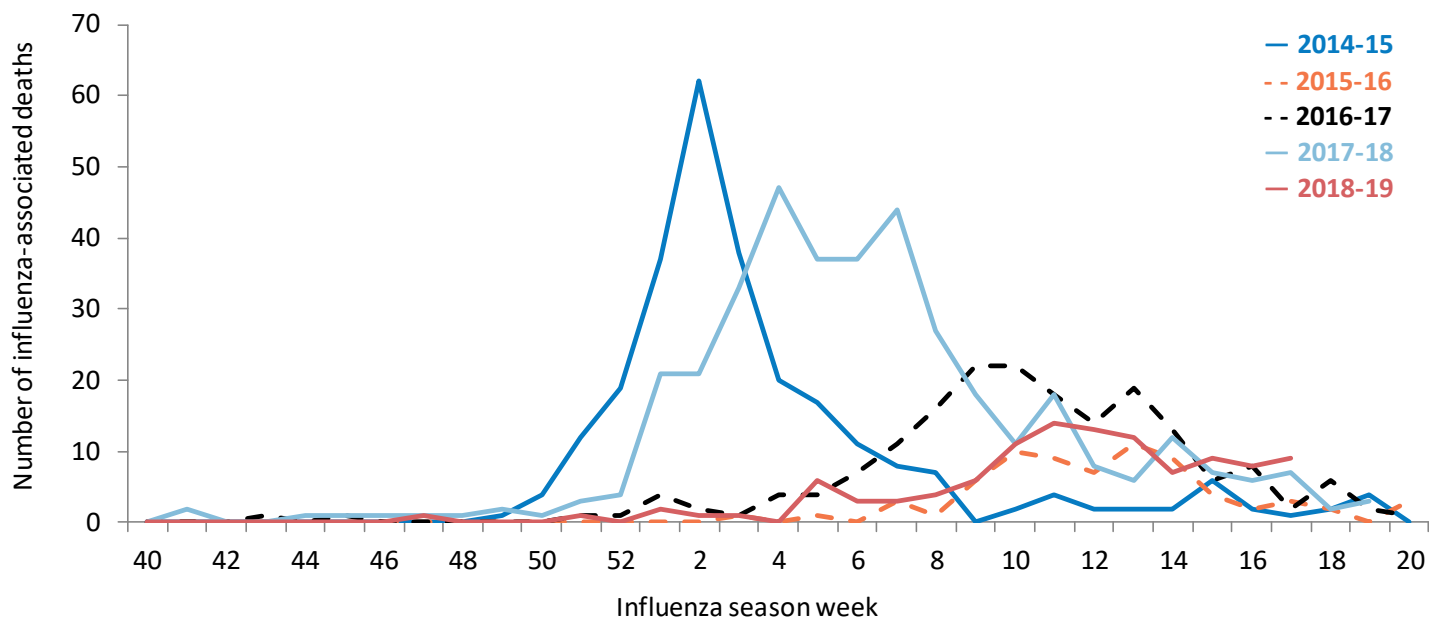




INFLUENZA AND PNEUMONIA-ASSOCIATED MORTALITY

Influenza and Pneumonia Deaths, Wisconsin

Influenza-associated deaths by week and influenza season, Wisconsin



Influenza and pneumonia-associated deaths by age group, 2018-2019 season

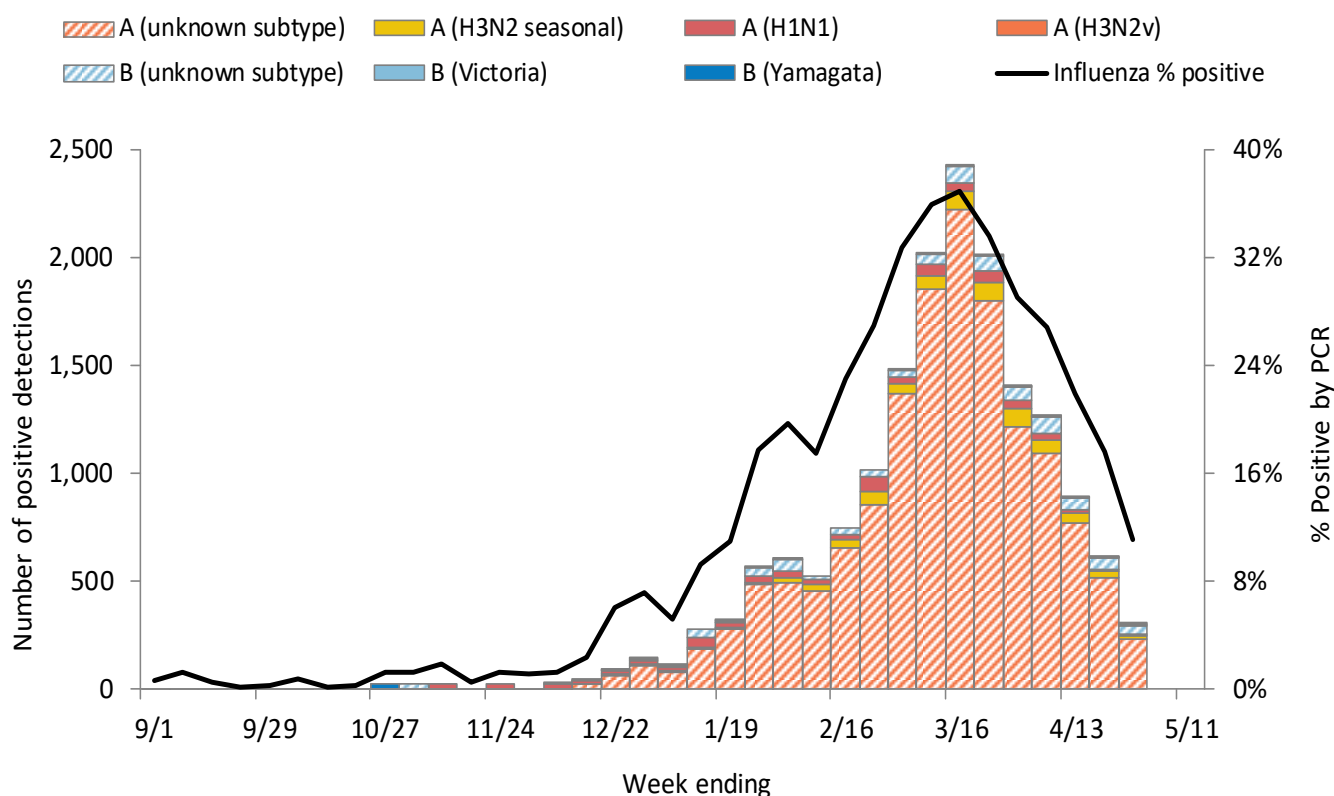
September 30, 2018 to April 27, 2019

Age group (years)	Week 17, 2019			Cumulative, 2018-2019 season		
	Influenza (I)	Pneumonia (P)	Percent I+P of all deaths	Influenza (I)	Pneumonia (P)	Percent I+P of all deaths
0-4	0	0	0.0%	3	5	2.2%
5-17	0	0	0.0%	0	3	2.9%
18-49	1	1	5.0%	14	76	3.8%
50-64	0	8	7.5%	20	239	4.7%
65+	8	59	9.2%	78	1648	5.9%
All ages	9	68	8.8%	113	1971	5.6%



WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Wisconsin positive influenza results and subtypes by PCR

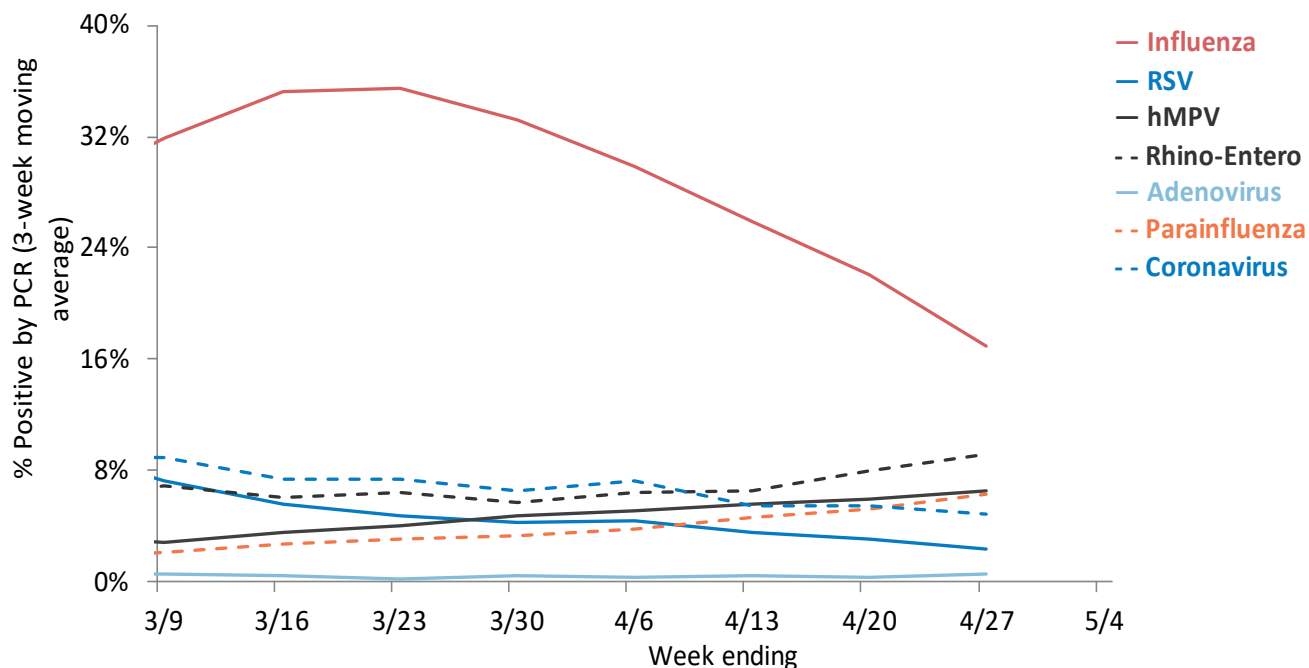


Cumulative number of positive influenza PCR tests by subtype September 1, 2018 to present

	A (2009 H1N1)	Influenza A: A (H3N2)	Influenza A: 95% A (Unknown)	B (Victoria)	Influenza B: B (Yamagata)	Influenza B: 5% B (Unknown)	Total
Total positive (n)	639	720	14733	14	28	730	16864
% of total positive	4%	4%	87%	0%	0%	4%	100%

WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR



Week 17: Ending on April 27, 2019

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	2647	295	11.1%	16	9	229	2	1	38

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	621	49	7.9%	2	3	43	1

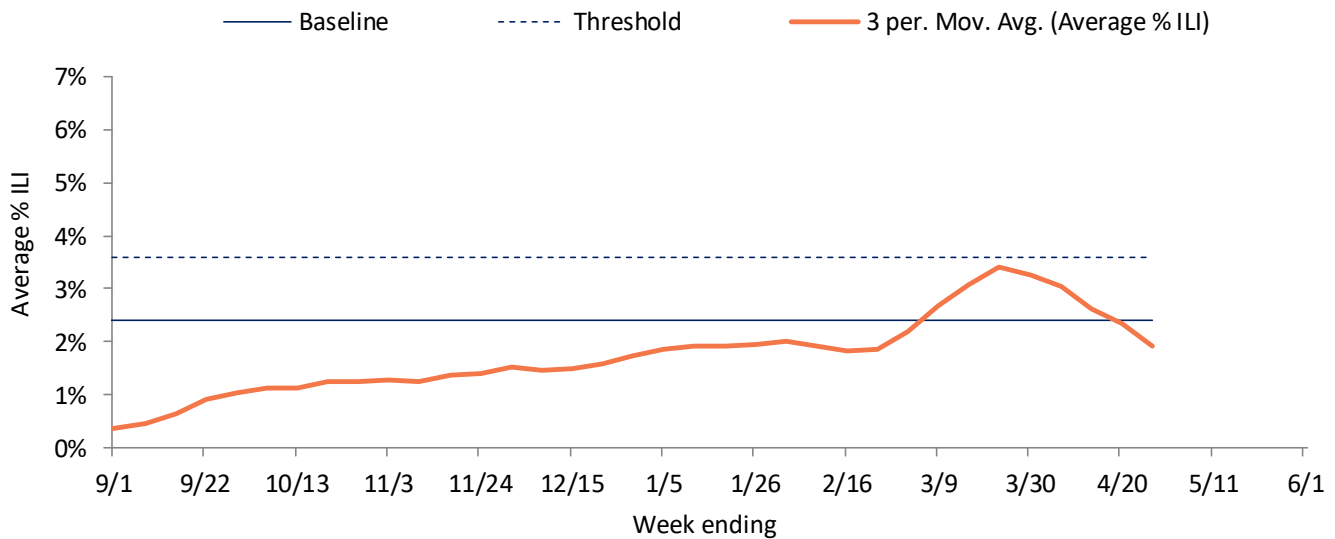
Respiratory virus	Tested	Positive (n)	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1
Coronavirus (CoV)	296	16	5.4%	9	4	3	0

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	935	17	1.8%
Human metapneumovirus	632	46	7.3%
Rhino-enterovirus	602	60	10.0%
Adenovirus	296	3	1.0%

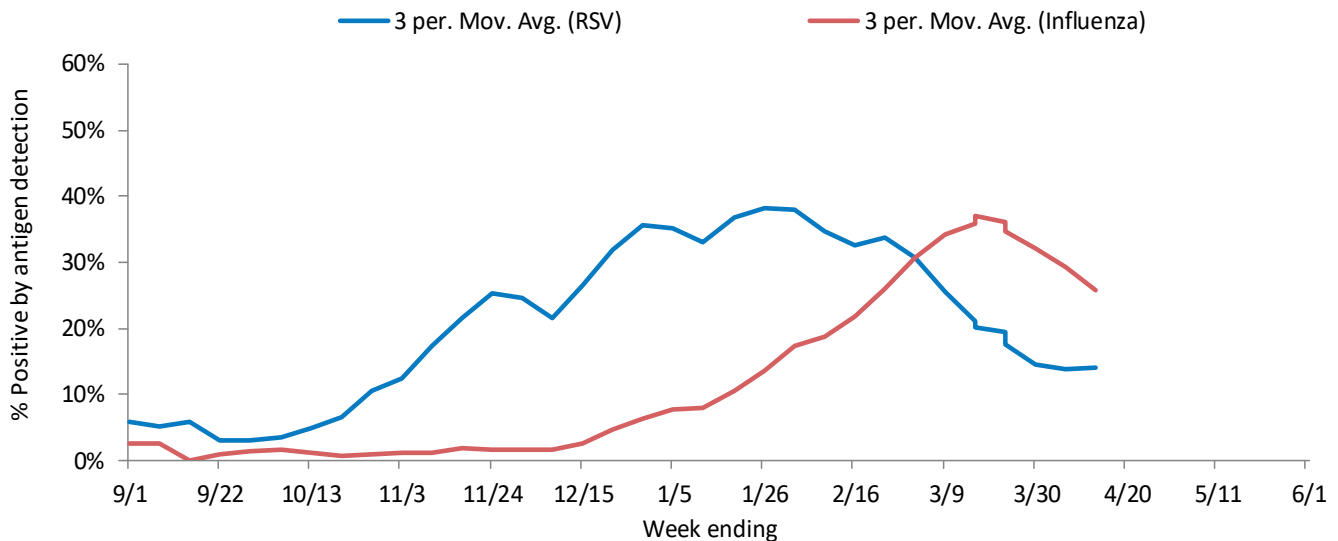
WISCONSIN STATE SUMMARY

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							
952	116	27	143	15.0%	117	10	8.5%	1.4%	2.4%	3.6%

ILI activity trend analysis

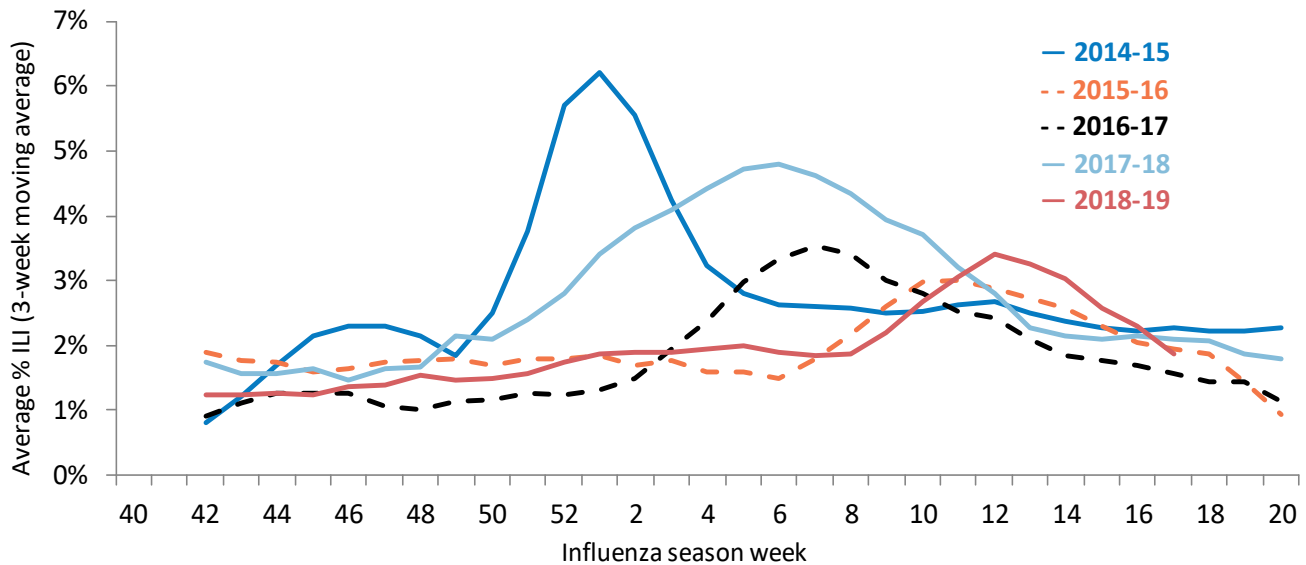


Influenza and RSV trend analysis



WISCONSIN STATE SUMMARY

ILI activity trend analysis by influenza season, Wisconsin

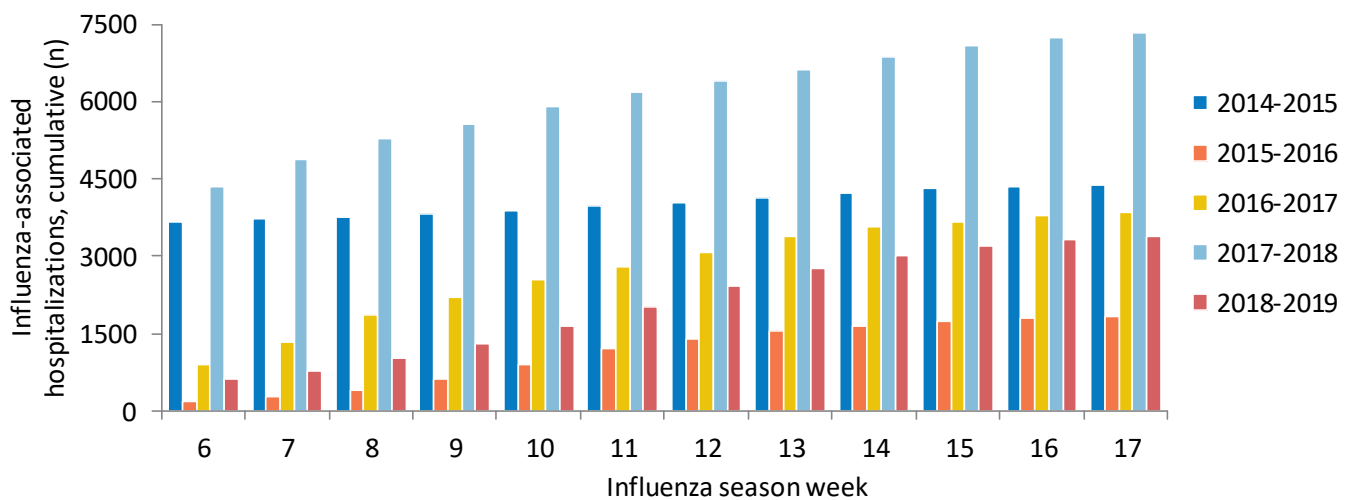


Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System

September 1, 2018 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	49	5	0	40	2	2	8	4	0	0
1-4	98	3	3	80	4	8	17	4	0	0
5-17	110	2	3	85	5	15	18	2	0	0
18-49	515	44	20	398	24	29	105	36	37	3
50-64	851	97	49	642	34	29	187	53	0	0
65+	1752	129	141	1346	88	48	250	66	0	0
Total	3375	280	216	2591	157	131	585	165	37	3

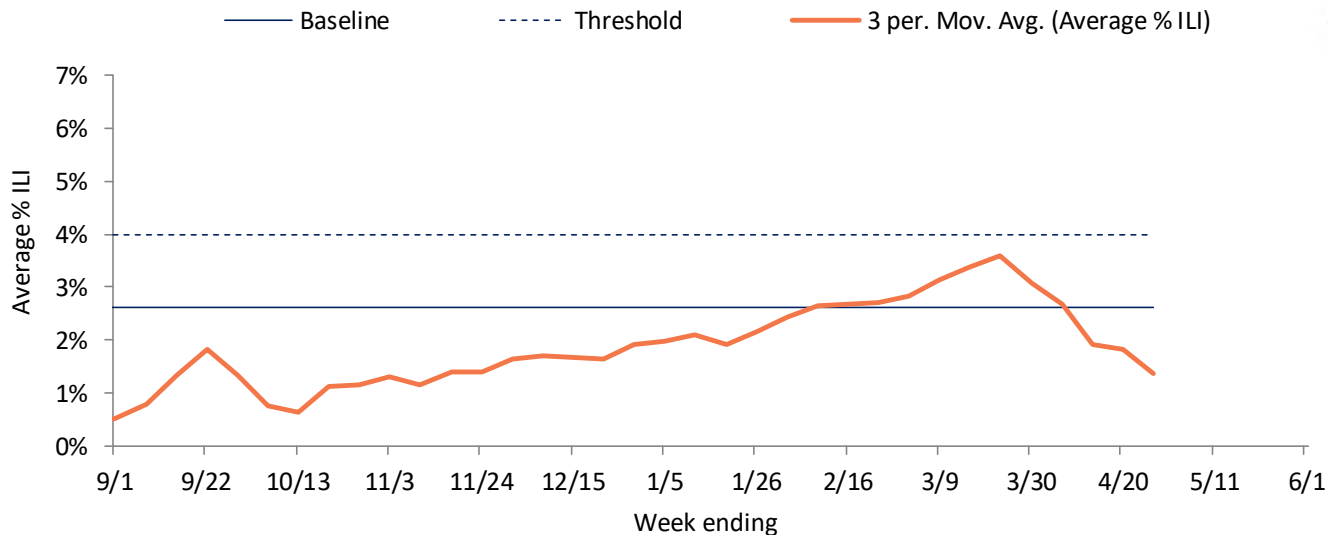
Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



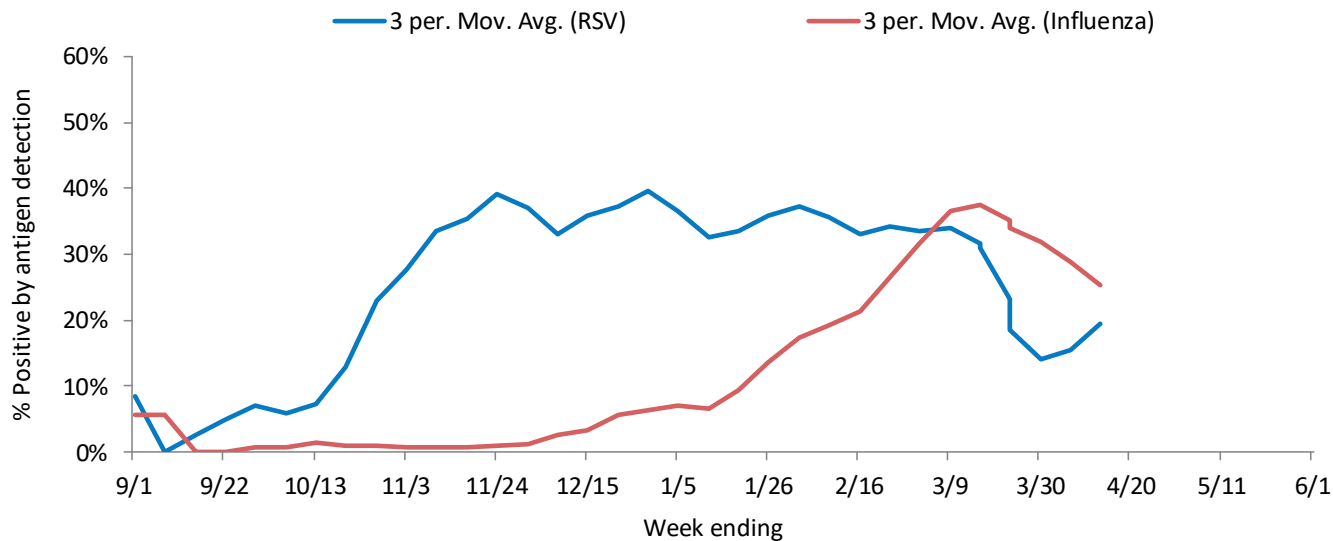
NORTHEASTERN REGION

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							
369	37	13	50	13.6%	58	9	15.5%	1.1%	2.6%	4.0%

ILI activity trend analysis



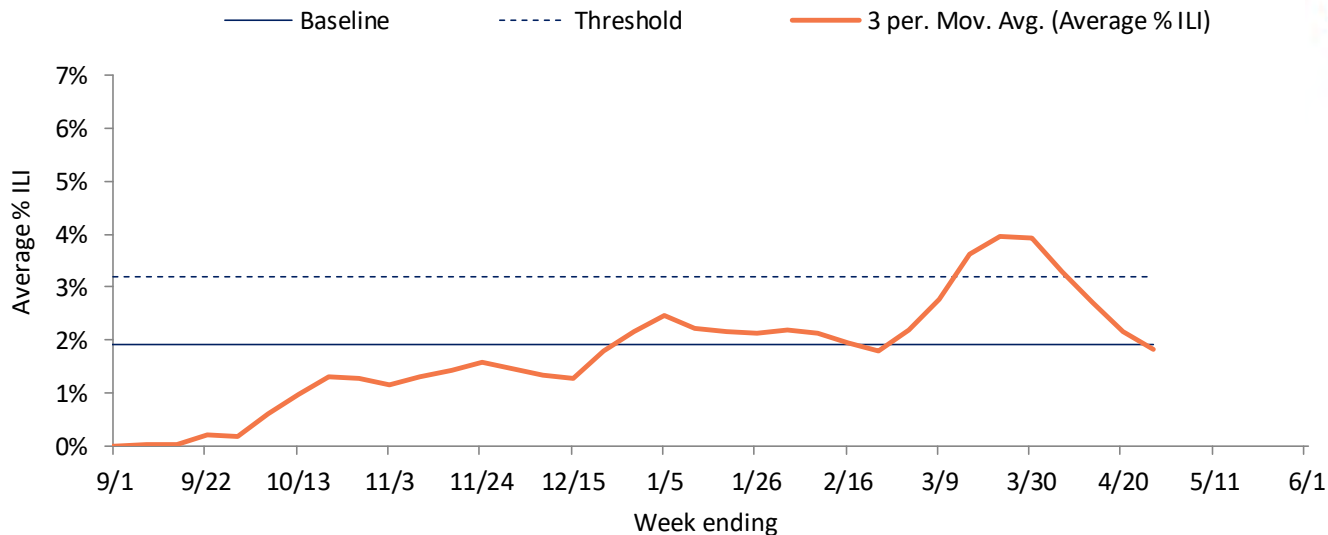
Influenza and RSV trend analysis



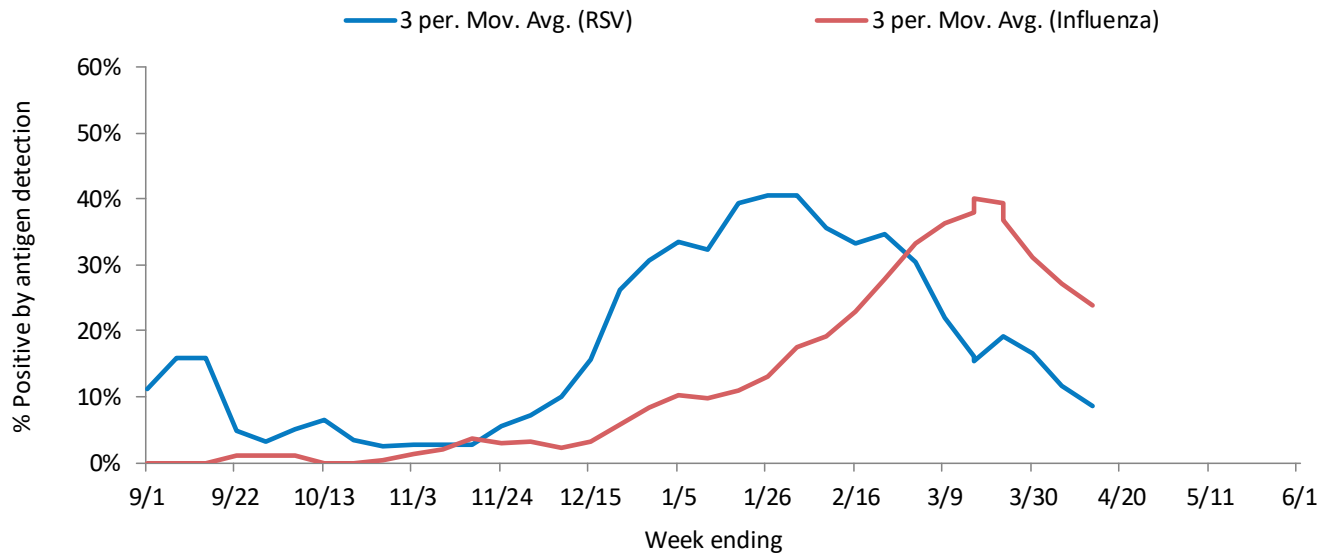
NORTHWESTERN REGION

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							
226	30	2	32	14.2%	48	1	2.1%	1.5%	1.9%	3.2%

ILI activity trend analysis



Influenza and RSV trend analysis

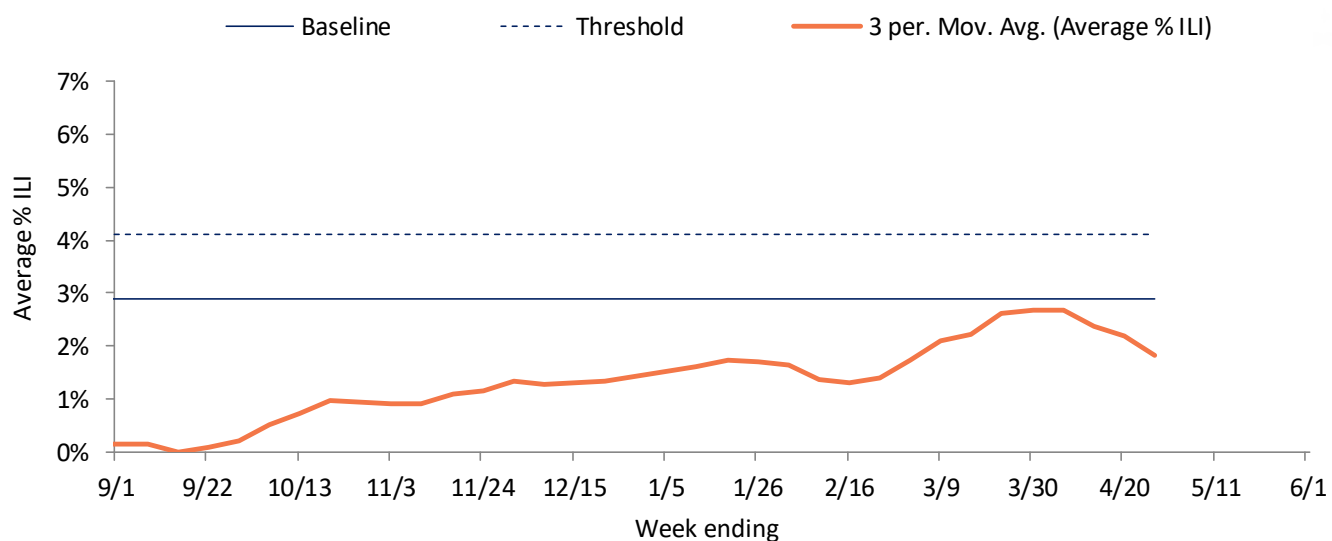




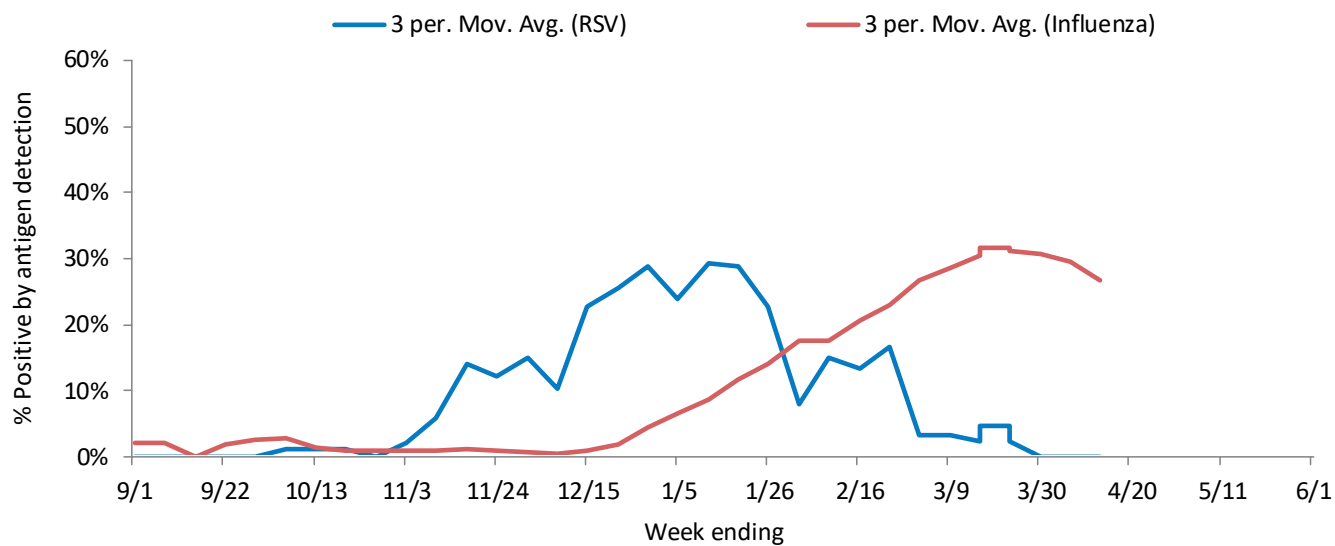
SOUTHEASTERN REGION

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							
316	43	10	53	16.8%	8	0	0.0%	1.2%	2.9%	4.1%

ILI activity trend analysis



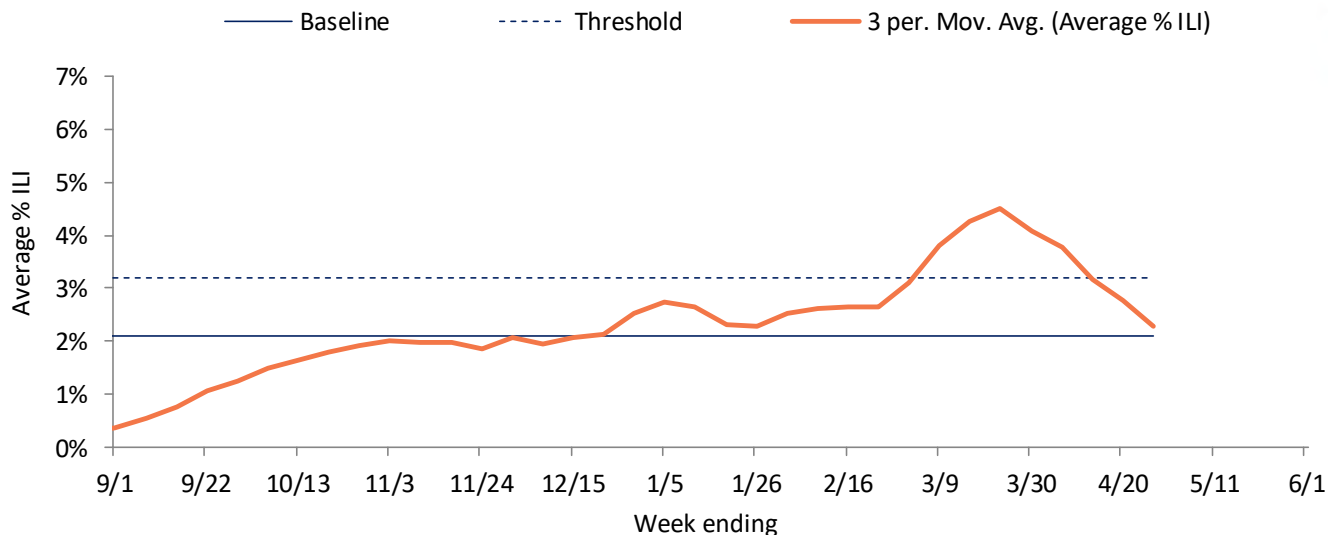
Influenza and RSV trend analysis



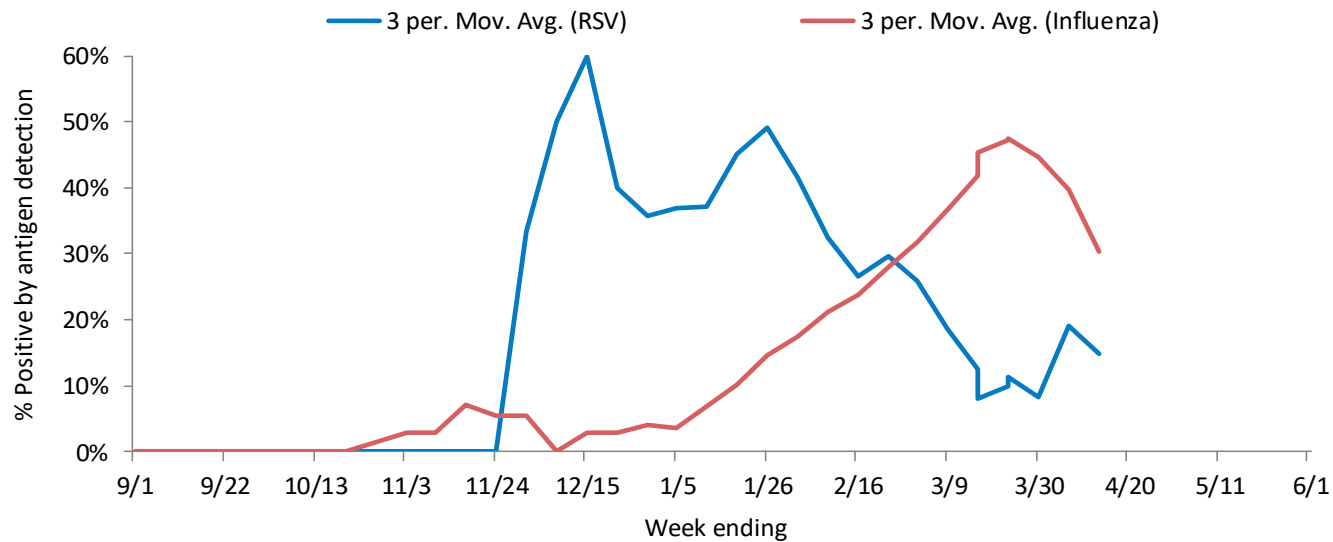
SOUTHERN REGION

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							
41	6	2	8	19.5%	3	0	0.0%	2.0%	2.1%	3.2%

ILI activity trend analysis

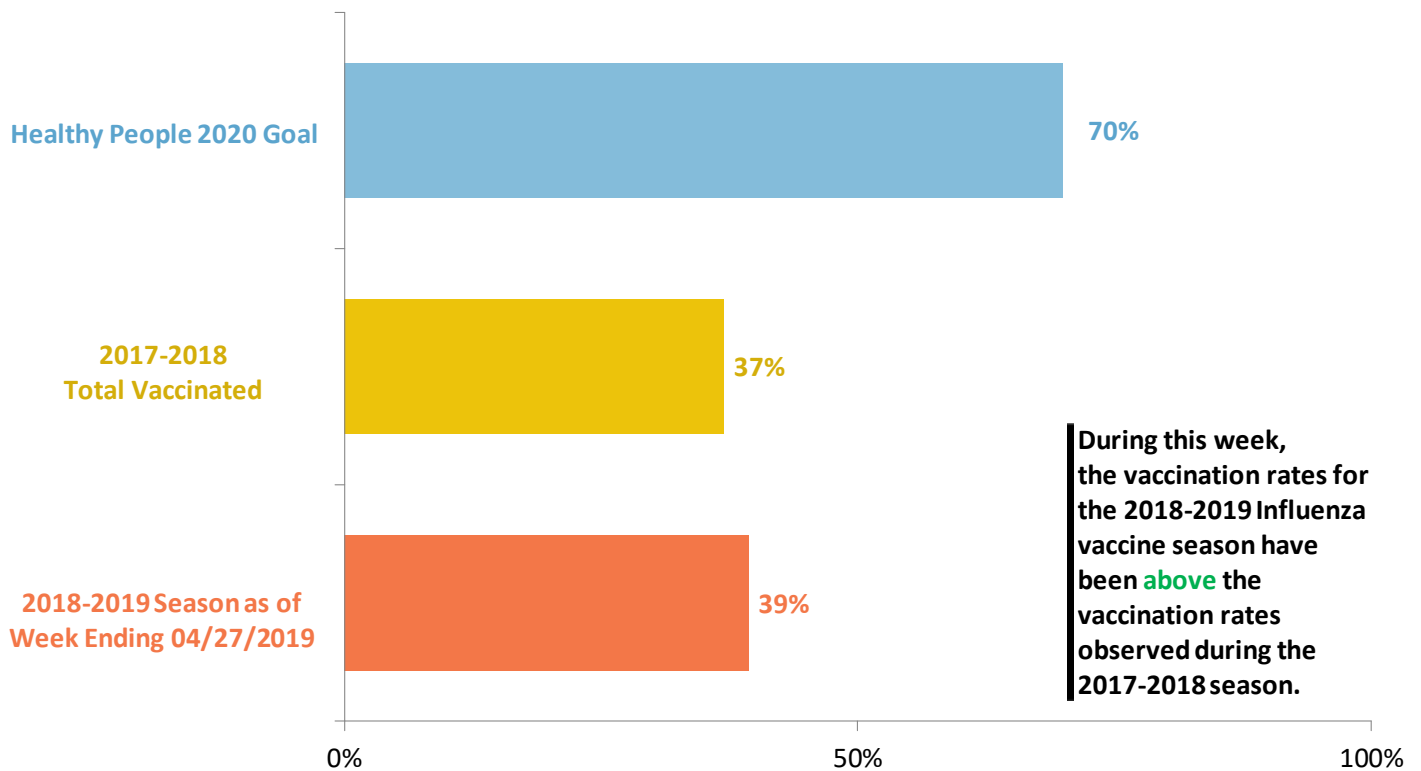


Influenza and RSV trend analysis



SEASONAL INFLUENZA VACCINATION

Cumulative percentage of Wisconsin residents who received 1 or more doses of influenza vaccine, 2018-2019 influenza season



During this week, the vaccination rates for the 2018-2019 influenza vaccine season have been **above** the vaccination rates observed during the 2017-2018 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 2018-2019:

The **trivalent** vaccines for use in the 2018-2019 influenza season contain the following:

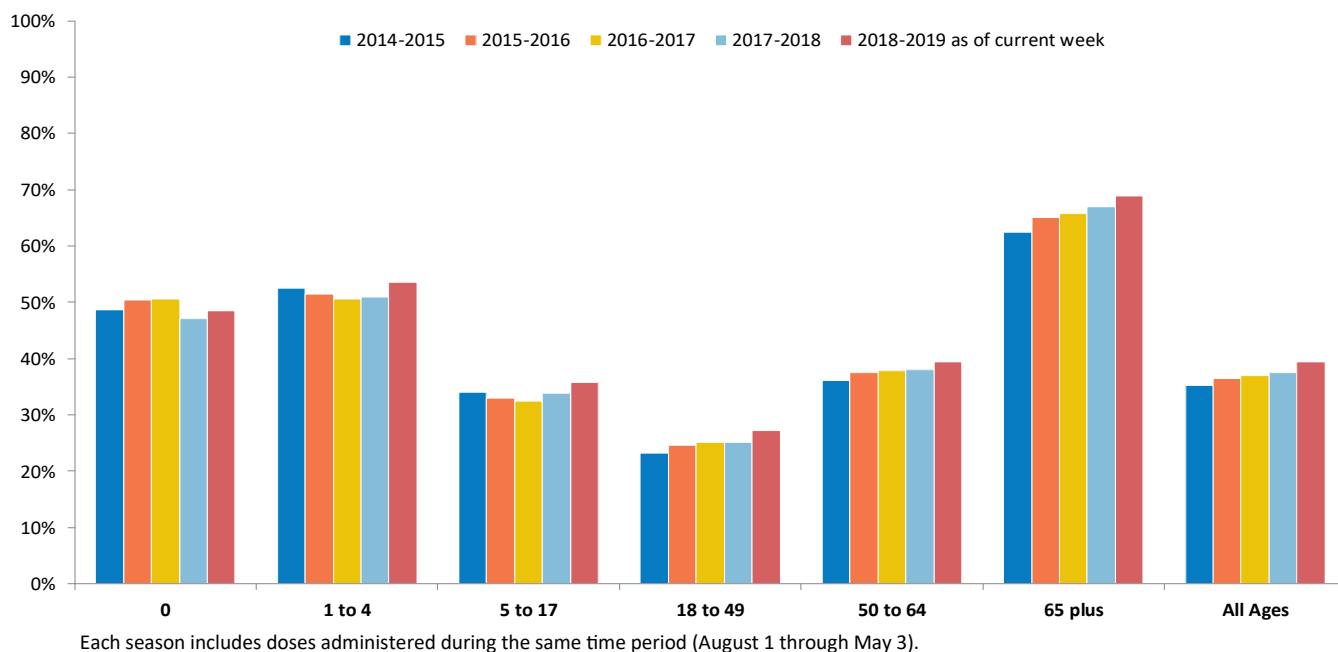
- A/Michigan/45/2015 (H1N1)pdm09-like virus
- A/Singapore/INFIMH-16-0019/2016 A(H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus (updated)

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

- B/Phuket/3073/2013-like virus (B/Yamagata lineage)

SEASONAL INFLUENZA VACCINATION

Percentage of Wisconsin residents who received one or more doses of influenza vaccine, by age group and influenza season



Percentage of Wisconsin residents who received one or more doses of influenza vaccine, by race and ethnicity and region, 2018-2019 influenza season

