



# RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 3: Ending January 18, 2020

Wisconsin Department of Health Services | Division of Public Health

Bureau of Communicable Diseases | Communicable Diseases Epidemiology Section

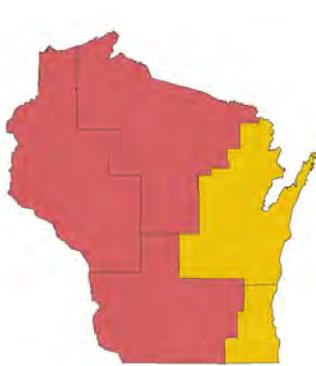
[www.dhs.wisconsin.gov/dph/bcd.htm](http://www.dhs.wisconsin.gov/dph/bcd.htm) | [dhsdphbcd@dhs.wi.gov](mailto:dhsdphbcd@dhs.wi.gov)



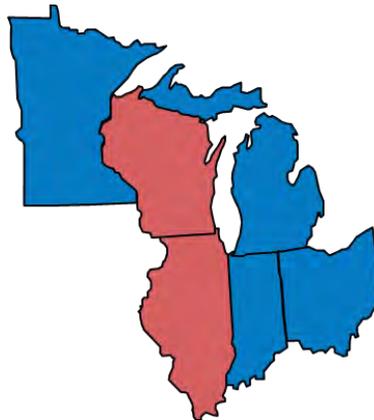


# INFLUENZA LIKE ILLNESS (ILI) ACTIVITY

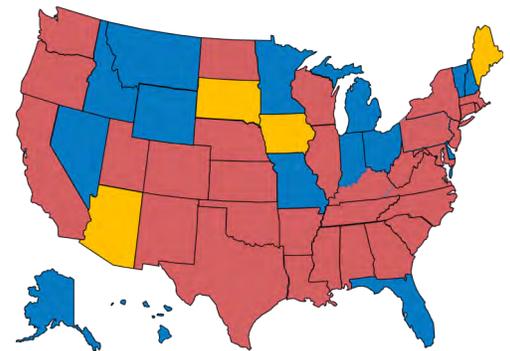
STATE OF WISCONSIN



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 3, 2020      October 1, 2019 to present

Wisconsin	0	1
Nationwide	15	54

## CURRENT ALERTS:

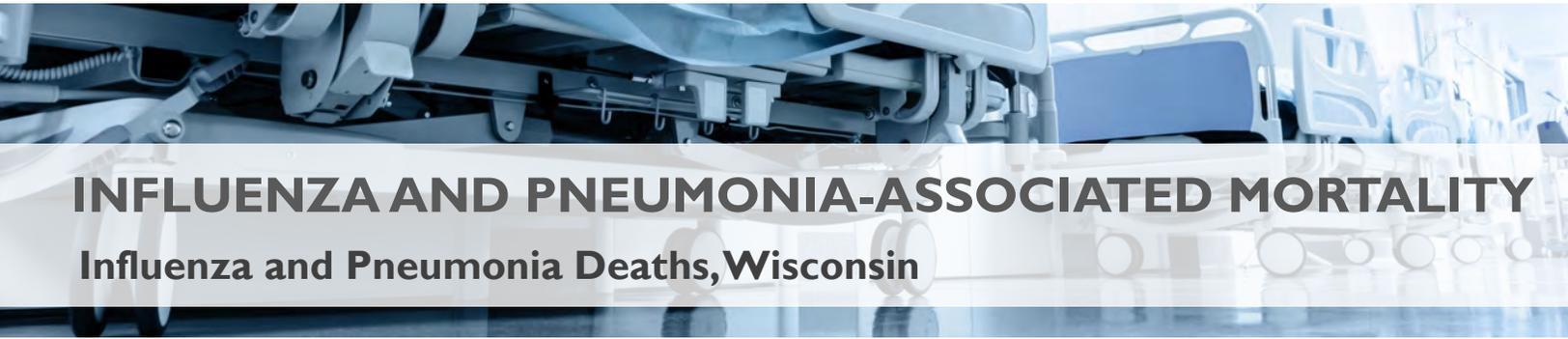
**Influenza B (Victoria lineage)** continues to be the predominant influenza virus in Wisconsin.

An increase in influenza A/H1 has been identified nationally and in Wisconsin.



For National US influenza surveillance statistics visit: [www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/)

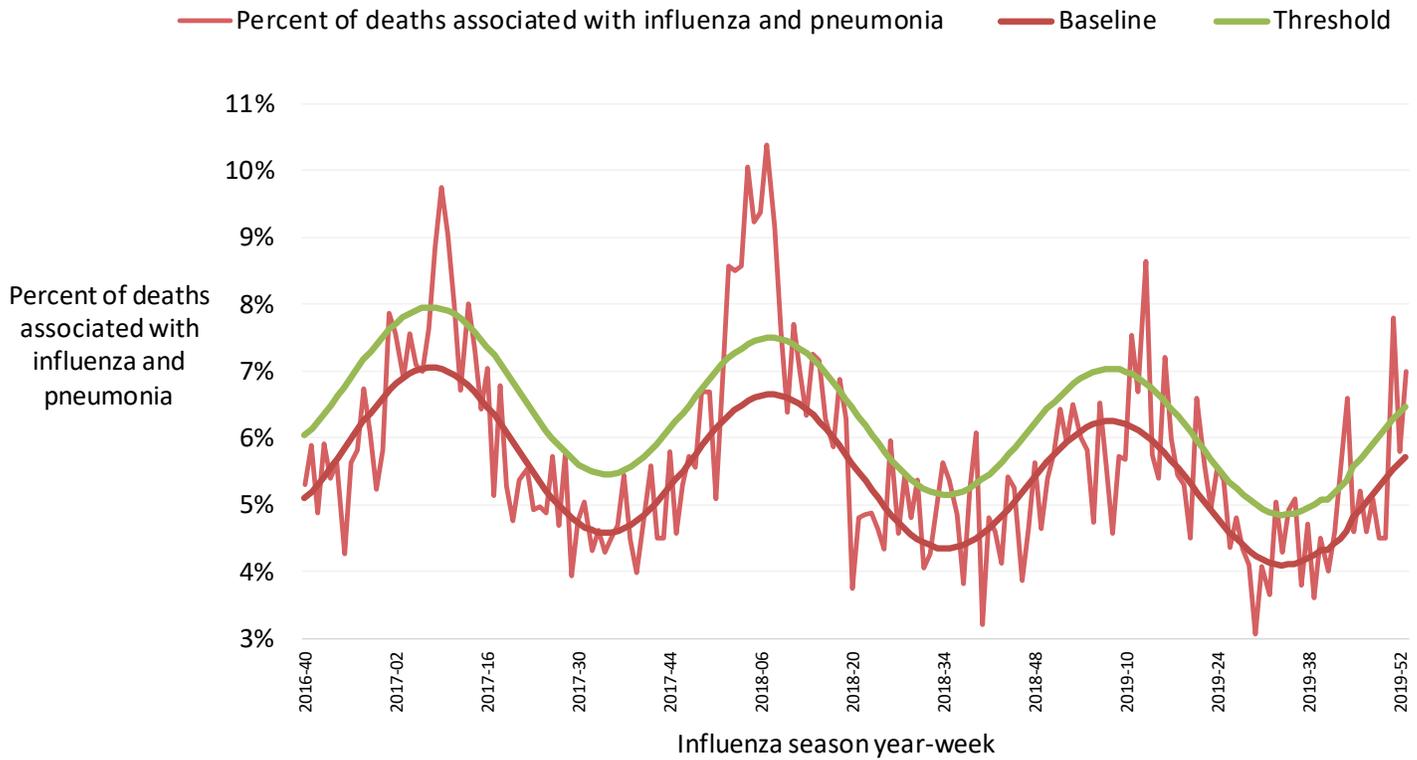




# INFLUENZA AND PNEUMONIA-ASSOCIATED MORTALITY

## 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

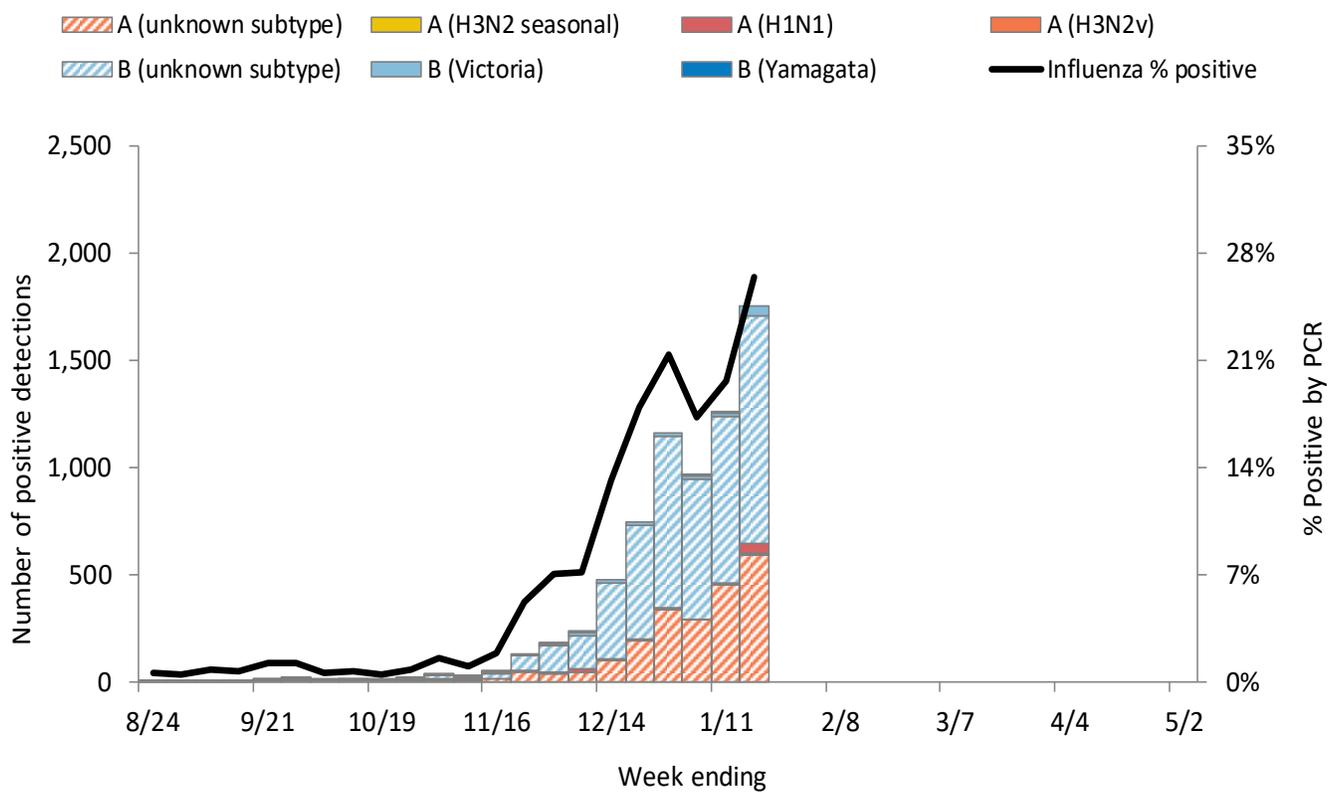
Influenza season week	Influenza-associated deaths (I)	Pneumonia-associated deaths (P)	Percent I+P of all deaths	Baseline I+P of all deaths	Threshold I+P of all deaths
1	2	73	6.7%	5.7%	6.5%
2	7	75	7.6%	5.8%	6.6%
3 Preliminary Data	1	54	6.2%	5.9%	6.7%
Seasonal total	23	1107	5.0%	NA	NA

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



# WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

## Wisconsin positive influenza results and subtypes by PCR

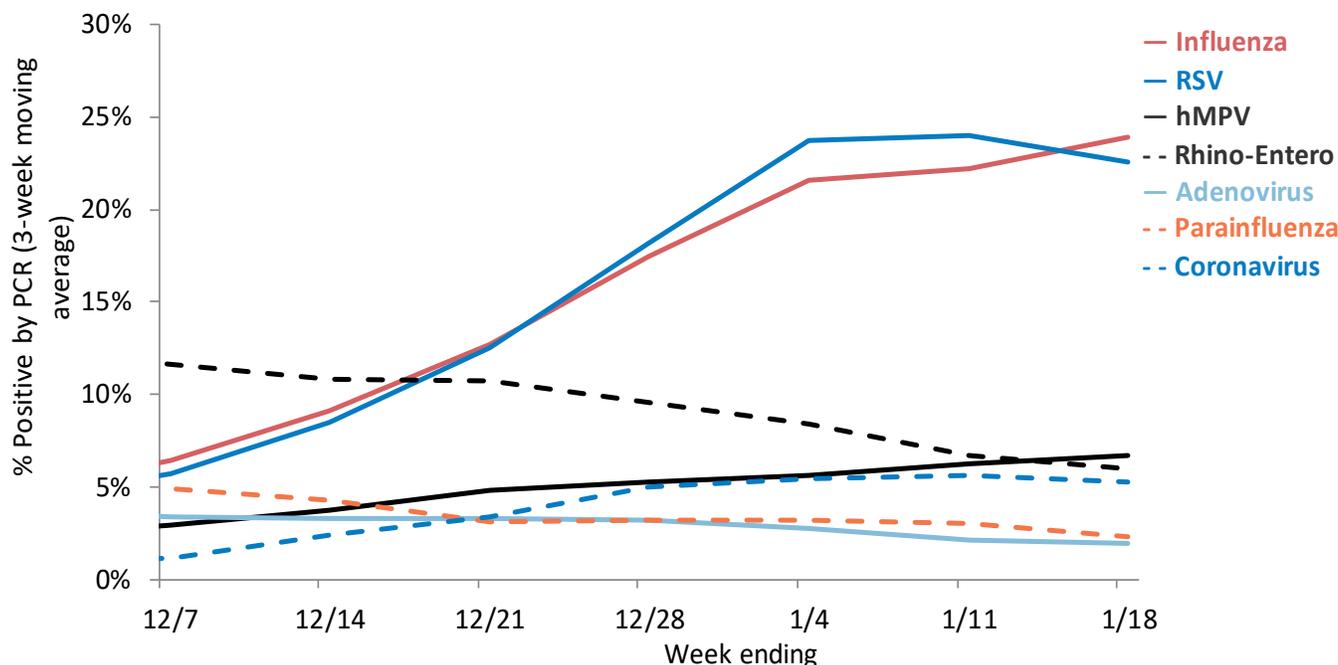


## Cumulative number of positive influenza PCR tests by subtype September 1, 2019 to present

	A (2009 H1N1)	Influenza A: 33%			Influenza B: 67%			Total
	A (H3N2)	A (Unknown)	B (Victoria)	B (Yamagata)	B (Unknown)			
Total positive (n)	113	57	2144	167	10	4565	7056	
% of total positive	2%	1%	30%	2%	0%	65%	100%	

# WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

Trends in respiratory virus activity by PCR



Week 3: Ending on January 18, 2020

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	6633	1752	26.4%	6	43	594	48	0	1061

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	984	15	1.5%	7	0	1	7

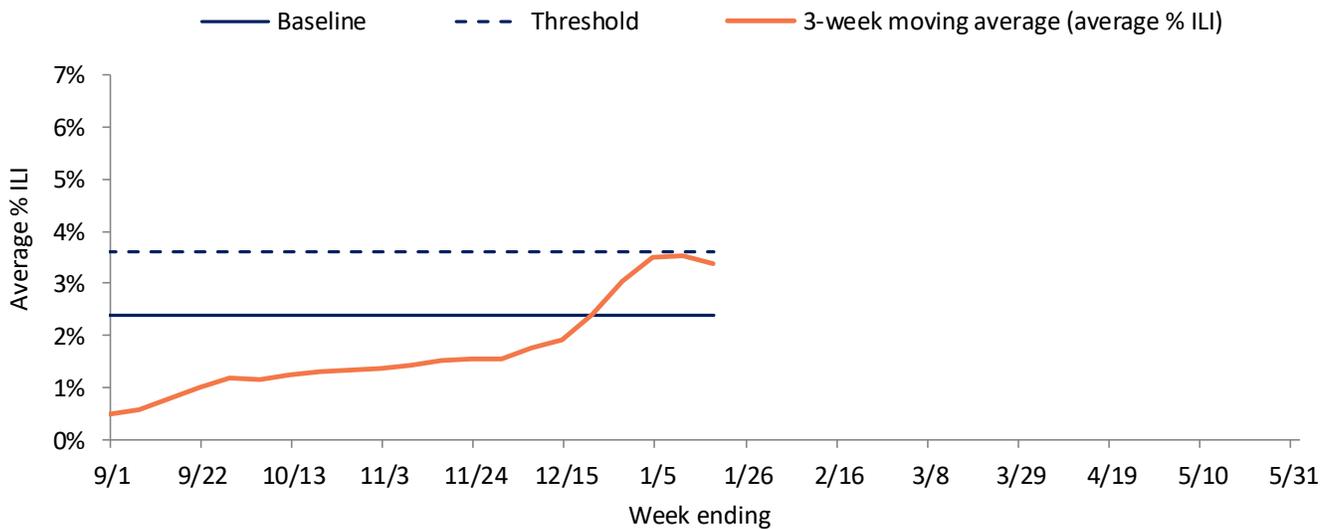
Respiratory virus	Tested	Positive	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1
Coronavirus (CoV)	458	19	4.1%	0	1	0	18

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	2723	538	19.8%
Human metapneumovirus	1022	67	6.6%
Rhino-enterovirus	954	59	6.2%
Adenovirus	458	8	1.7%

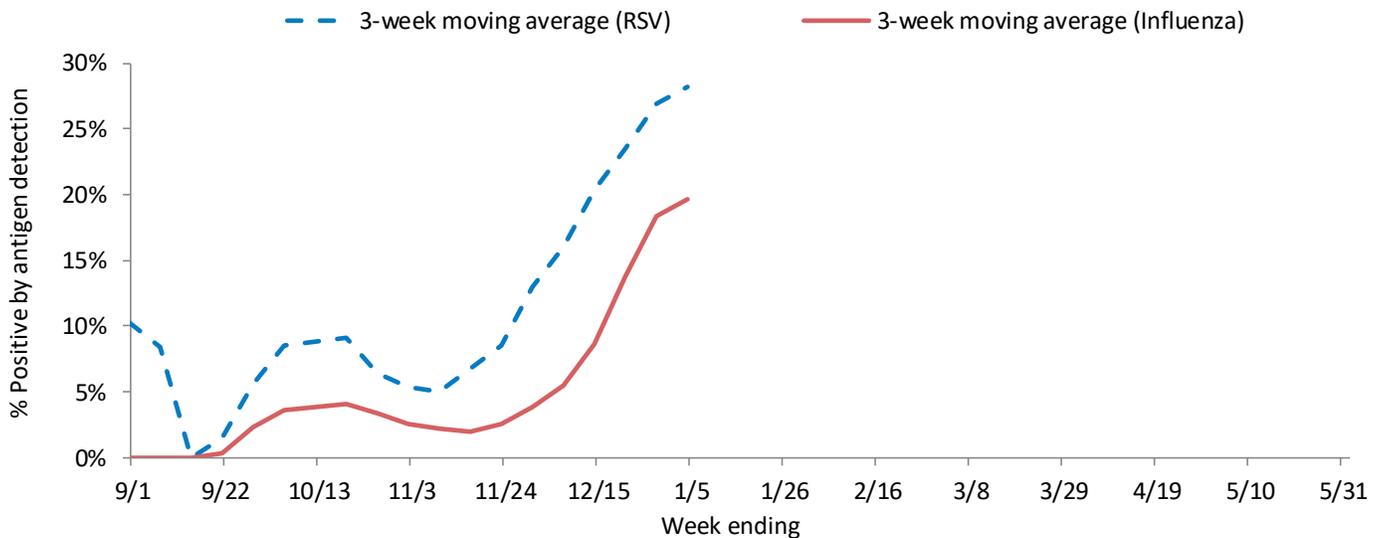
# WISCONSIN STATE SUMMARY

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							
1518	136	236	372	24.5%	377	115	30.5%	3.4%	2.4%	3.6%

## ILI activity trend analysis

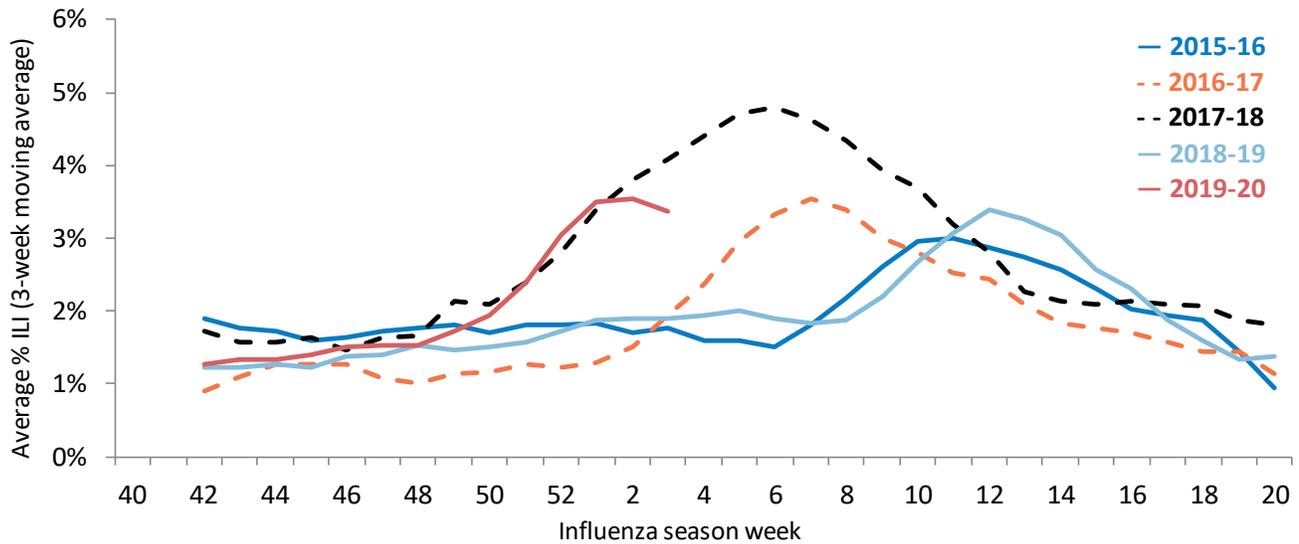


## Influenza and RSV trend analysis



# WISCONSIN STATE SUMMARY

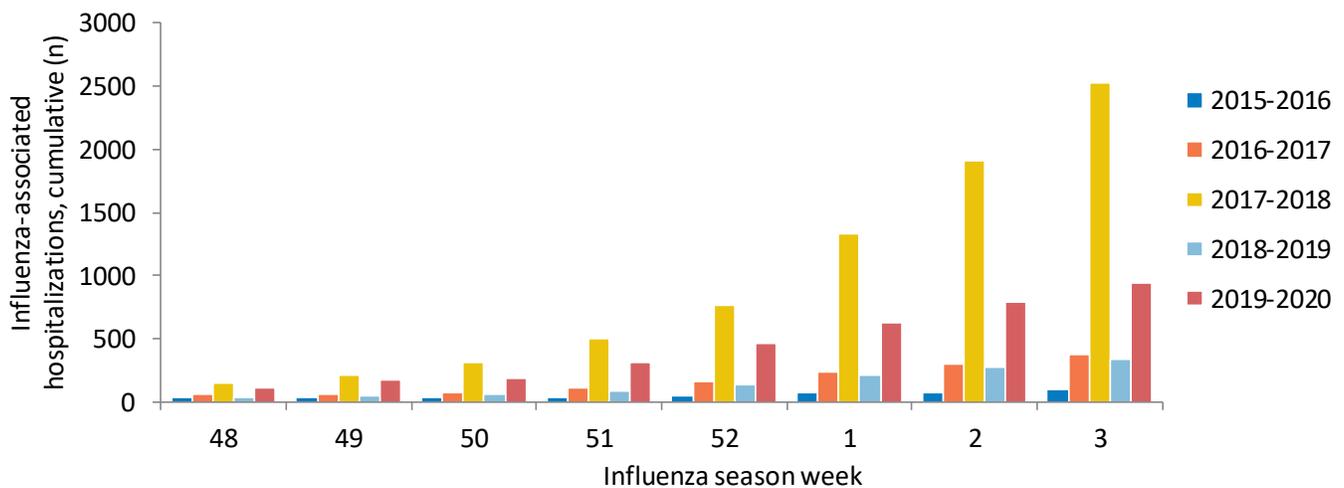
## ILI activity trend analysis by influenza season, Wisconsin



## Influenza-associated hospitalizations, Wisconsin Electronic Disease Surveillance System September 1, 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	32	3	0	8	17	4	6	2		
1-4	56	1	0	10	34	11	10	4		
5-17	94	2	0	12	41	39	7	2		
18-49	226	11	1	83	93	38	40	12	22	4
50-64	206	15	4	106	64	17	39	12		
65+	329	25	12	165	107	20	33	6		
<b>Total</b>	<b>943</b>	<b>57</b>	<b>17</b>	<b>384</b>	<b>356</b>	<b>129</b>	<b>135</b>	<b>38</b>	<b>22</b>	<b>4</b>

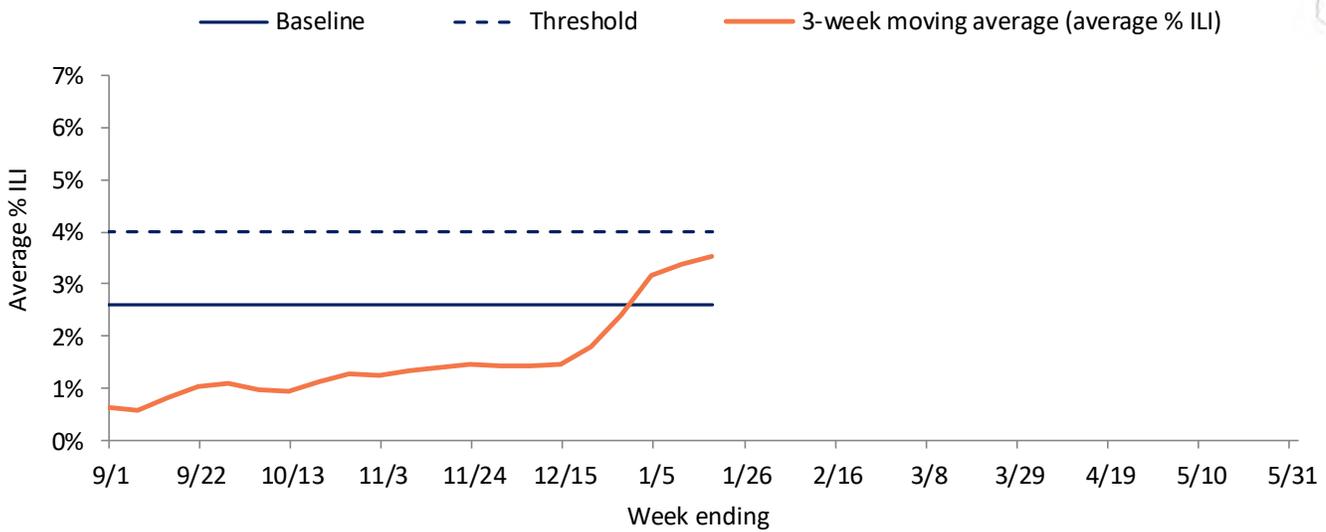
## Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



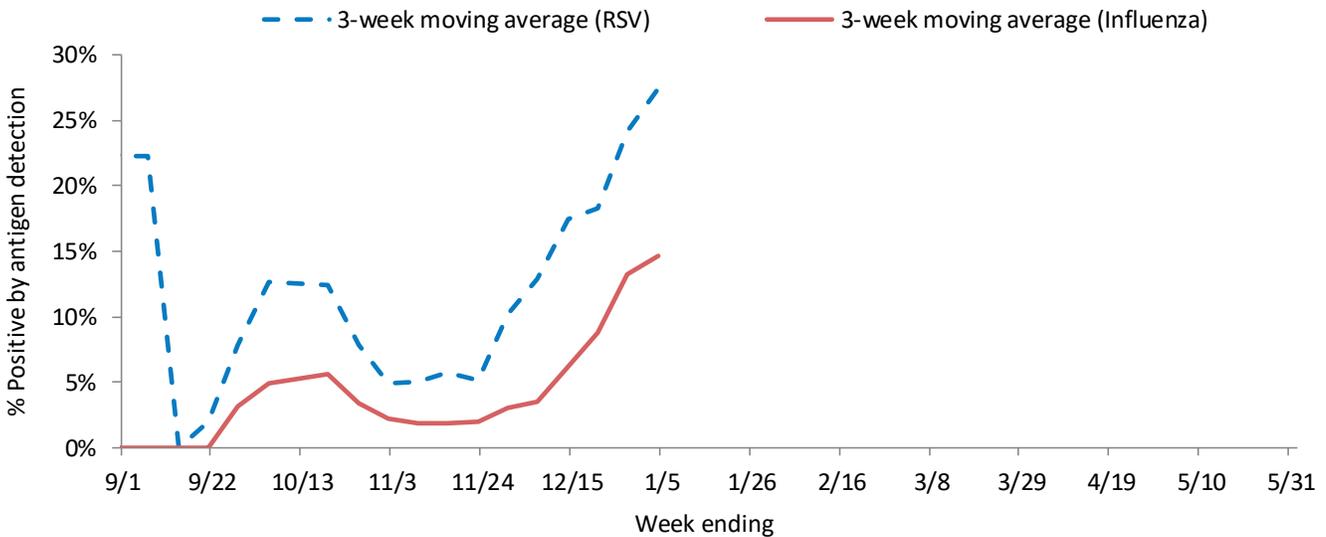
# NORTHEASTERN REGION

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							
725	74	118	192	26.5%	208	66	31.7%	3.7%	2.6%	4.0%

## ILI activity trend analysis



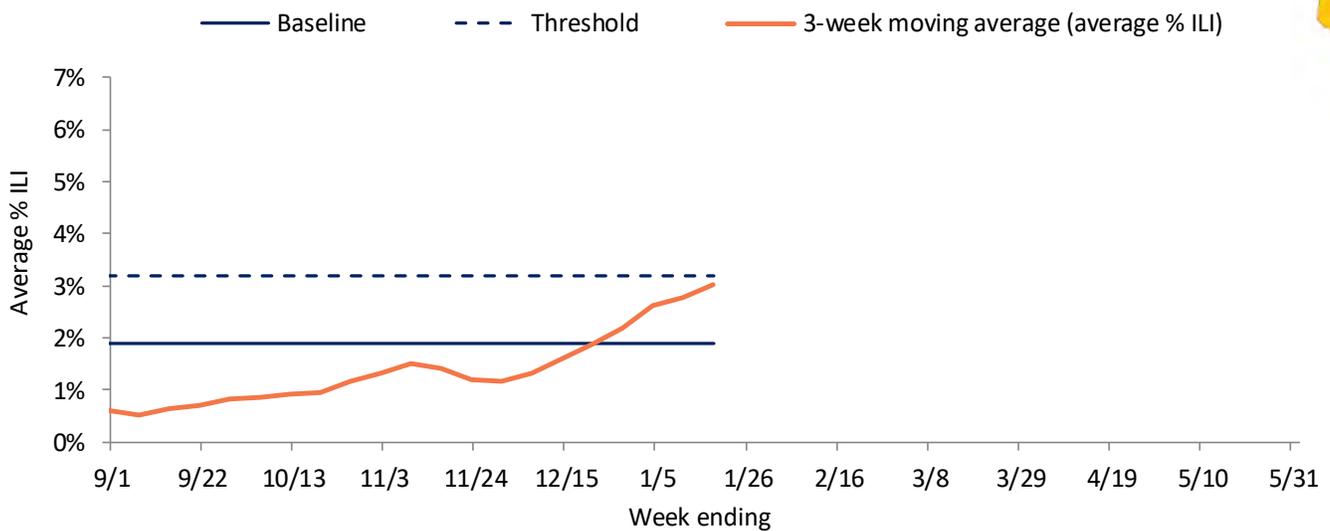
## Influenza and RSV trend analysis



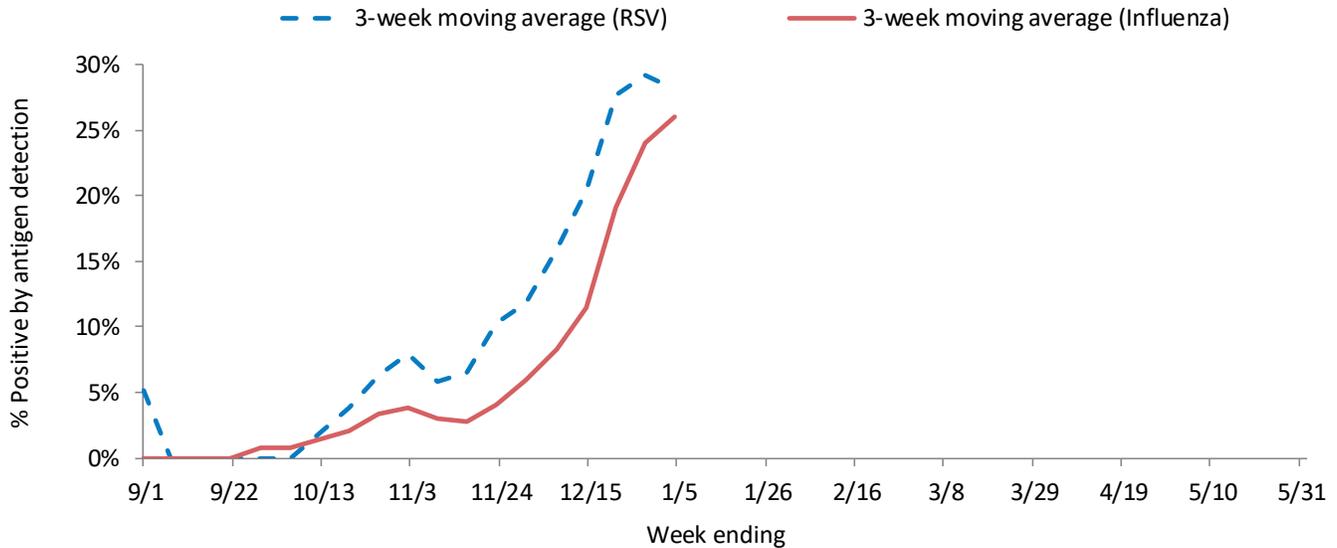
# NORTHWESTERN REGION

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	43	83	126	25.0%	137	39	28.5%	3.4%	1.9%	3.2%

## ILI activity trend analysis



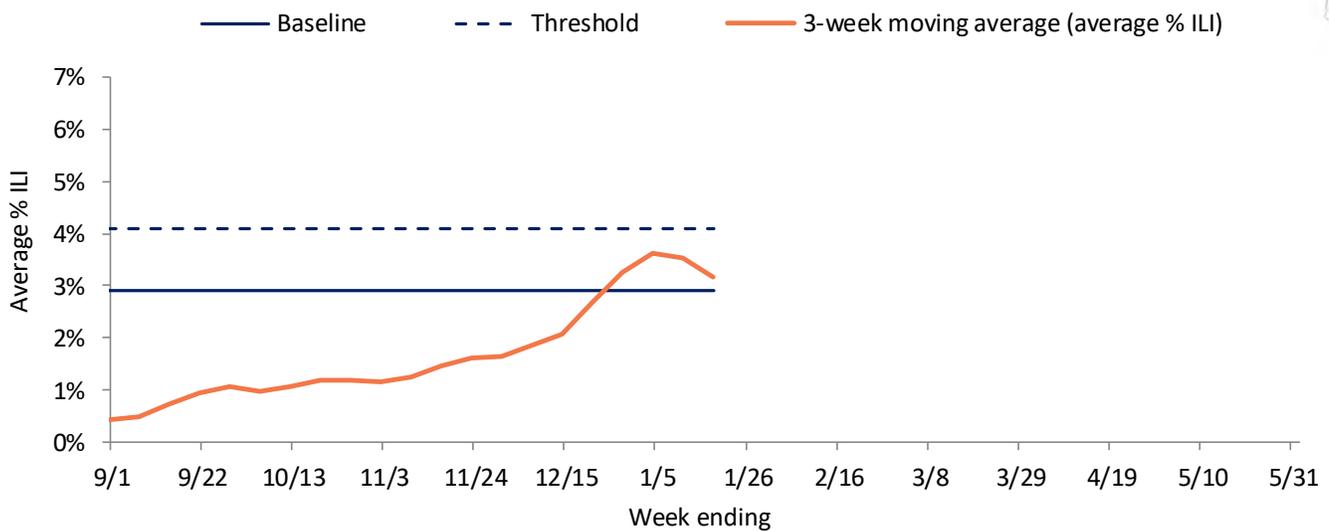
## Influenza and RSV trend analysis



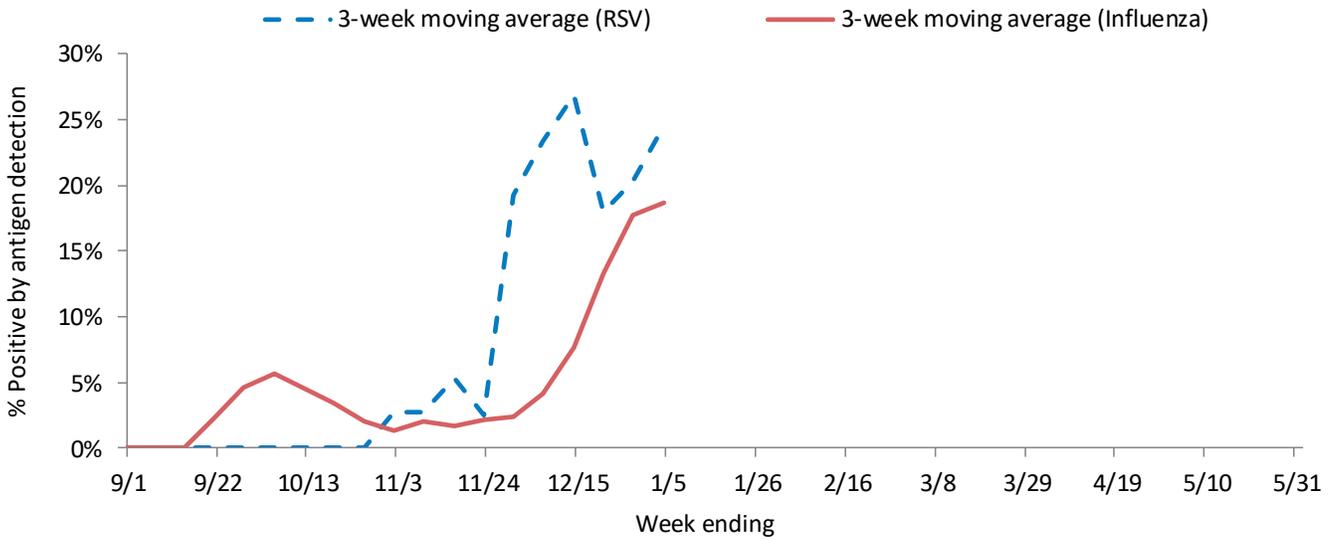
# SOUTHEASTERN REGION

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							
231	14	26	40	17.3%	10	3	30.0%	2.9%	2.9%	4.1%

## ILI activity trend analysis



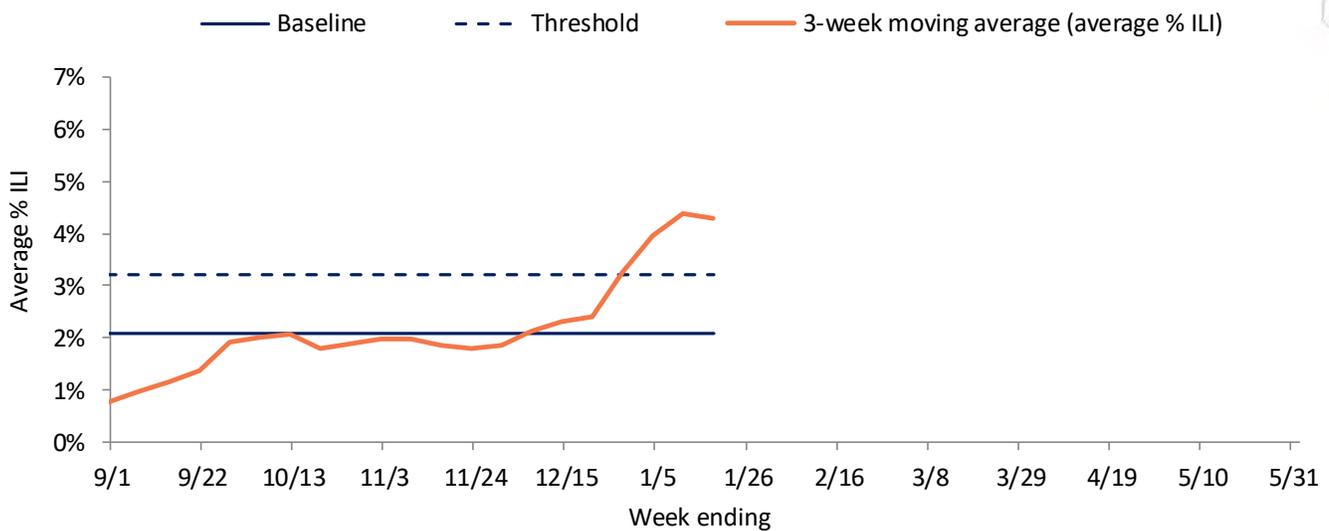
## Influenza and RSV trend analysis



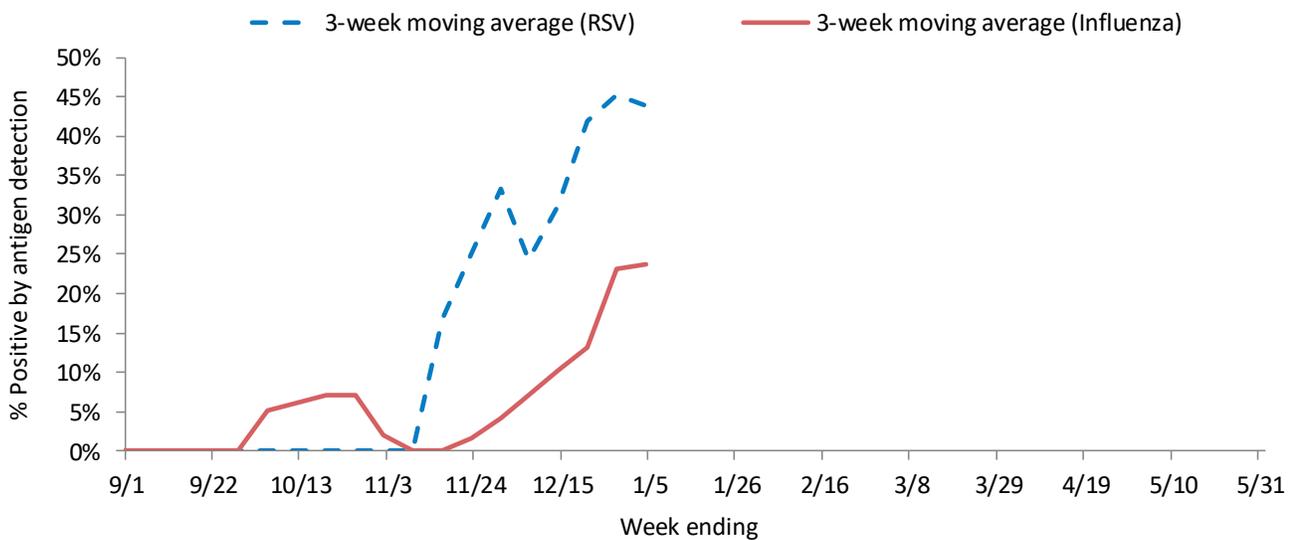
# SOUTHERN REGION

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							
57	5	9	14	24.6%	22	7	31.8%	4.6%	2.1%	3.2%

## ILI activity trend analysis

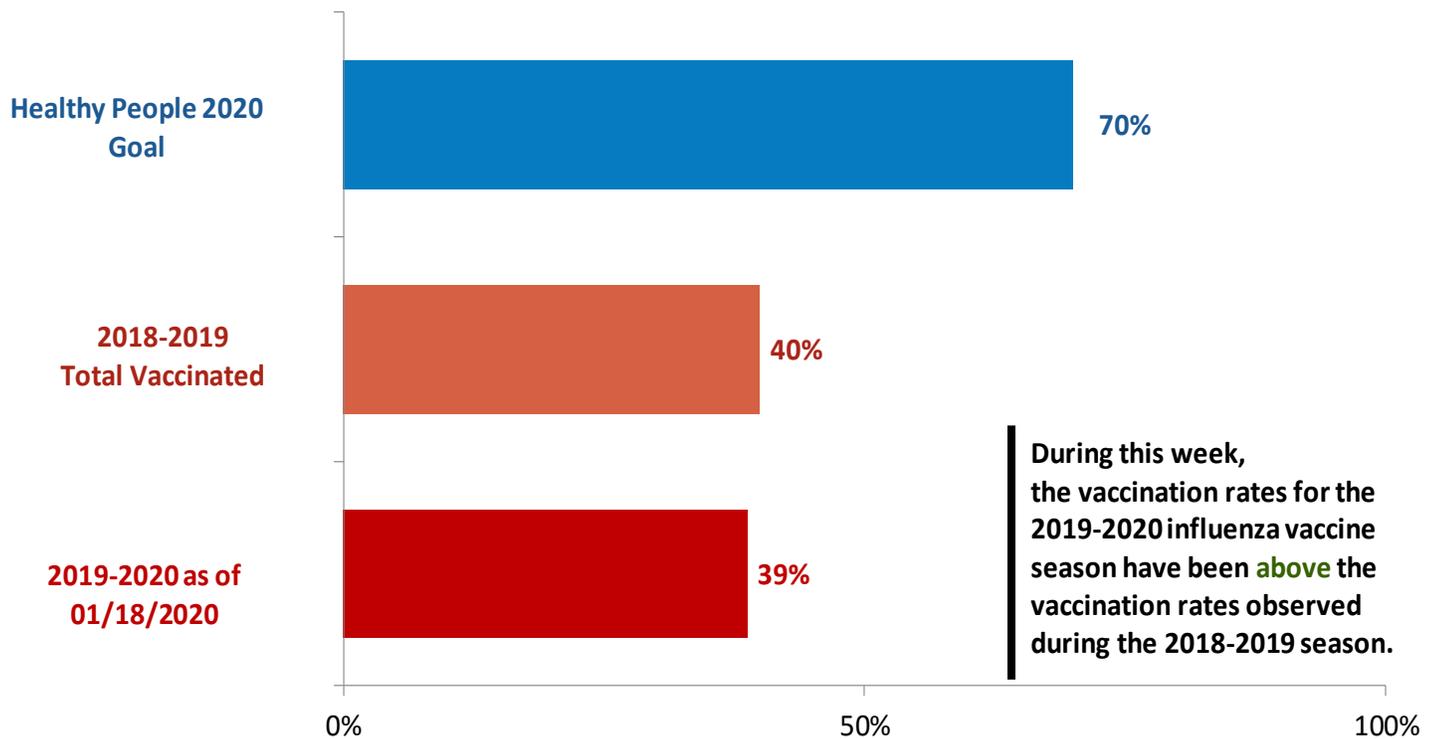


## Influenza and RSV trend analysis



# 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:

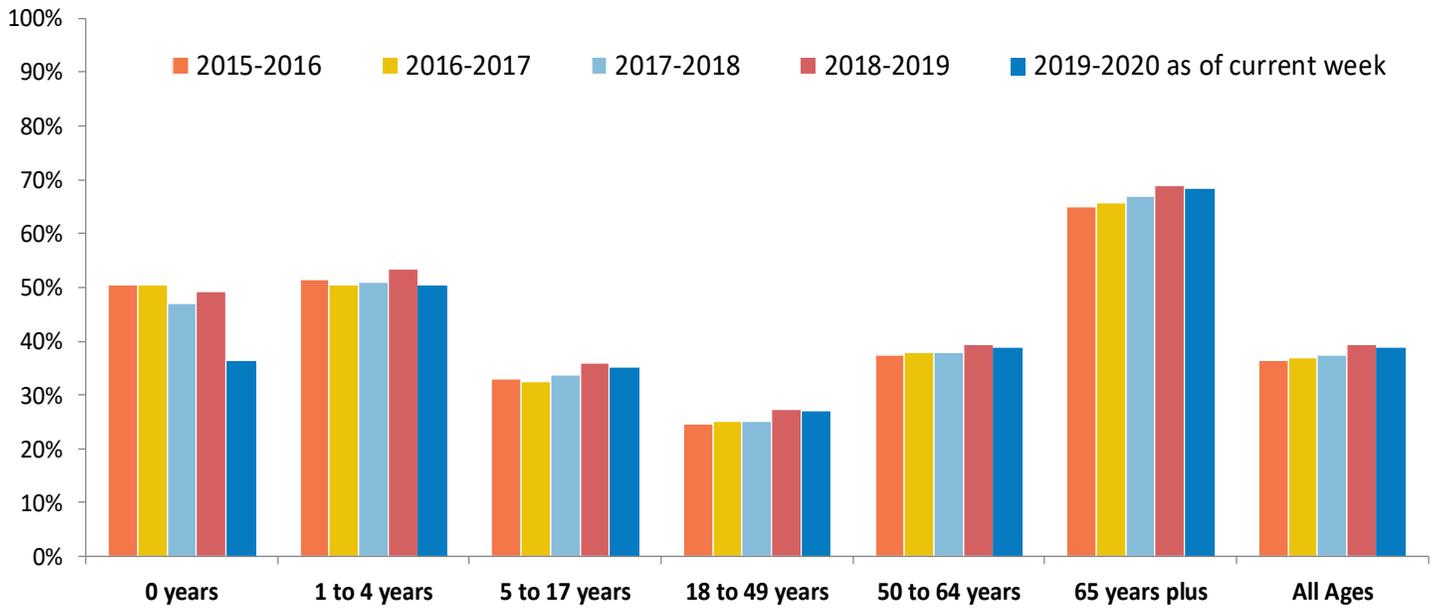
- A/Brisbane/02/2018 (H1N1)pdm09–like virus (updated)
- A/Kansas/14/2017 (H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus

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

