



# RESPIRATORY VIRUS SURVEILLANCE REPORT

Week 49: Ending December 8, 2018

Wisconsin Department of Health Services | Division of Public Health  
Bureau of Communicable Diseases | Communicable Diseases Epidemiology Section

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





# INFLUENZA LIKE ILLNESS (ILI) ACTIVITY

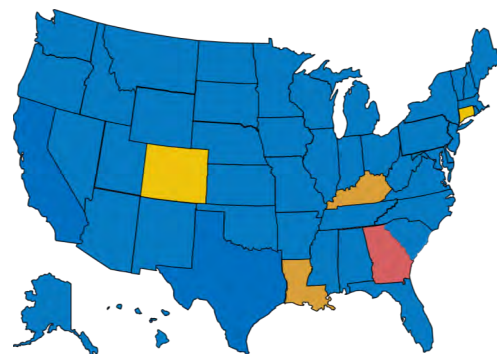
STATE OF WISCONSIN



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 Virus of the Week:**

Rhinovirus/enterovirus is the predominant virus this week.

## INFLUENZA-ASSOCIATED PEDIATRIC DEATHS REPORTED:

	Week 49, 2018	October 1, 2018 to present
Wisconsin	0	0
Nationwide	1	6

## CURRENT ALERTS:

- Parainfluenza and RSV activity are increasing statewide
- Influenza A/H1N1 is the predominant influenza virus nationwide and in Wisconsin



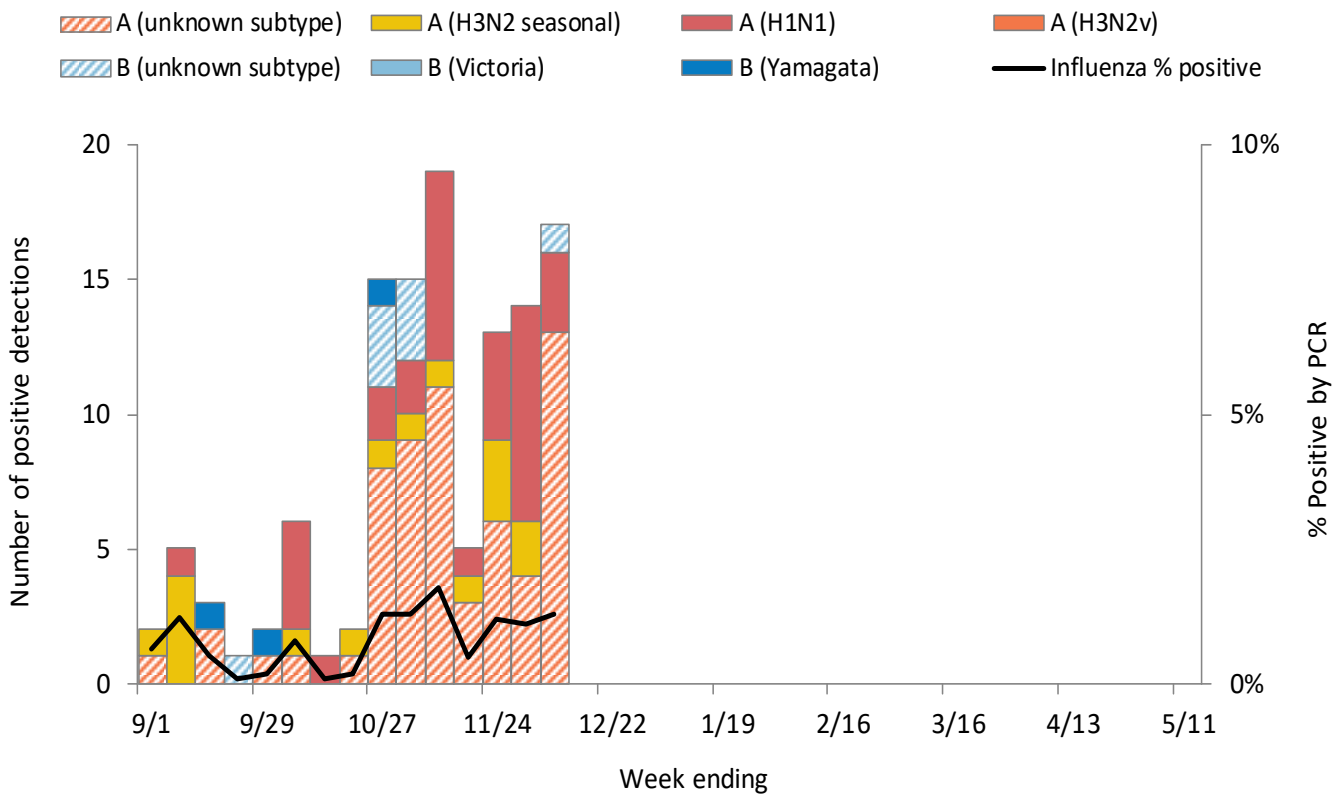
For National US influenza surveillance statistics visit: [www.cdc.gov/flu/weekly/](http://www.cdc.gov/flu/weekly/)





# WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

## Wisconsin positive influenza results and subtypes by PCR



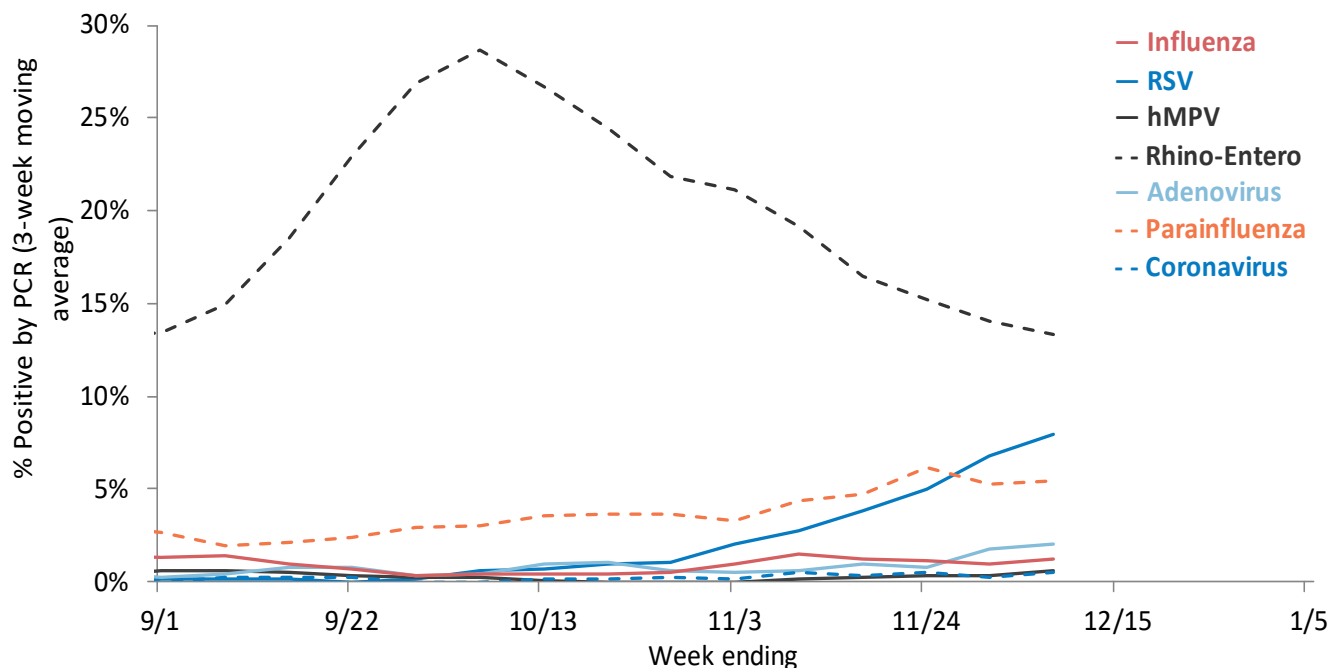
## Cumulative number of positive influenza PCR tests by subtype September 1, 2018 to present

	Influenza A: 91%			Influenza B: 9%			Total
	A (2009 H1N1)	A (H3N2)	A (Unknown)	B (Victoria)	B (Yamagata)	B (Unknown)	
<b>Total positive (n)</b>	33	18	59	0	3	8	<b>121</b>
<b>% of total positive</b>	27%	15%	49%	0%	2%	7%	<b>100%</b>



# WISCONSIN LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES BY PCR

## Trends in respiratory virus activity by PCR



Week 49: Ending on December 8, 2018

Respiratory virus	Tested	Positive (n)	Positive (%)	Influenza A			Influenza B		
				H3N2	2009 H1N1	Unknown	Victoria	Yamagata	Unknown
Influenza	1266	17	1.3%	0	3	13	0	0	1

Respiratory virus	Tested	Positive (n)	Positive (%)	Parainfluenza 1	Parainfluenza 2	Parainfluenza 3	Parainfluenza 4
Parainfluenza	599	29	4.8%	1	14	6	8

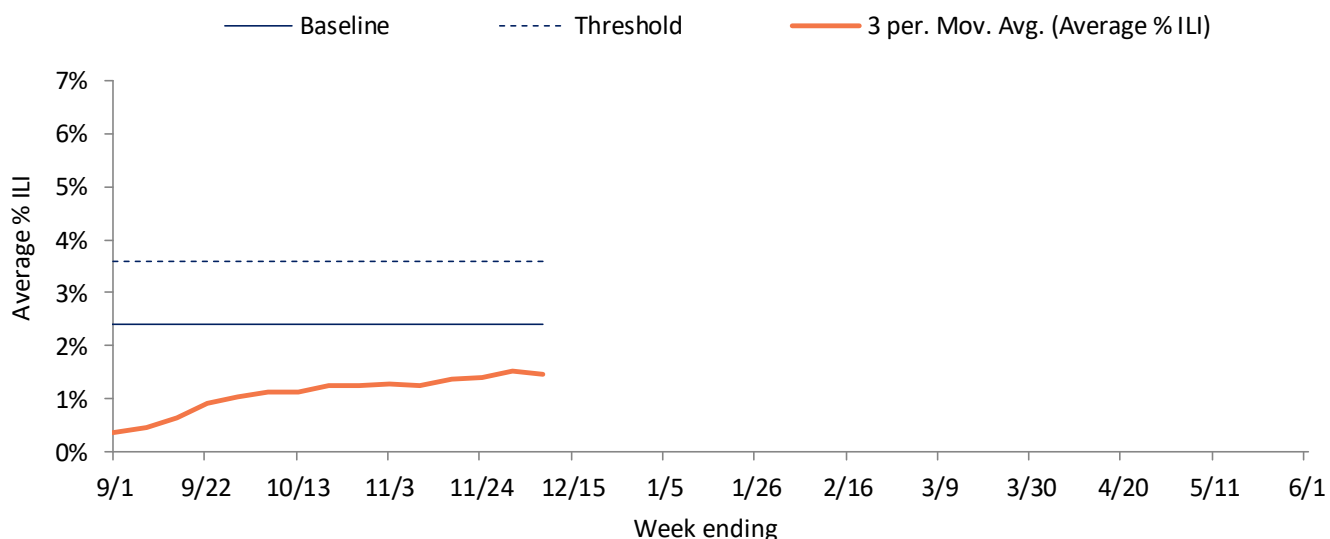
Respiratory virus	Tested	Positive (n)	Positive (%)	CoV 229E	CoV OC43	CoV NL63	CoV HKU1
Coronavirus (CoV)	280	2	0.7%	2	0	0	0

Respiratory virus	Tested	Positive (n)	Positive (%)
RSV	769	64	8.3%
Human metapneumovirus	615	7	1.1%
Rhino-enterovirus	581	75	12.9%
Adenovirus	280	6	2.1%

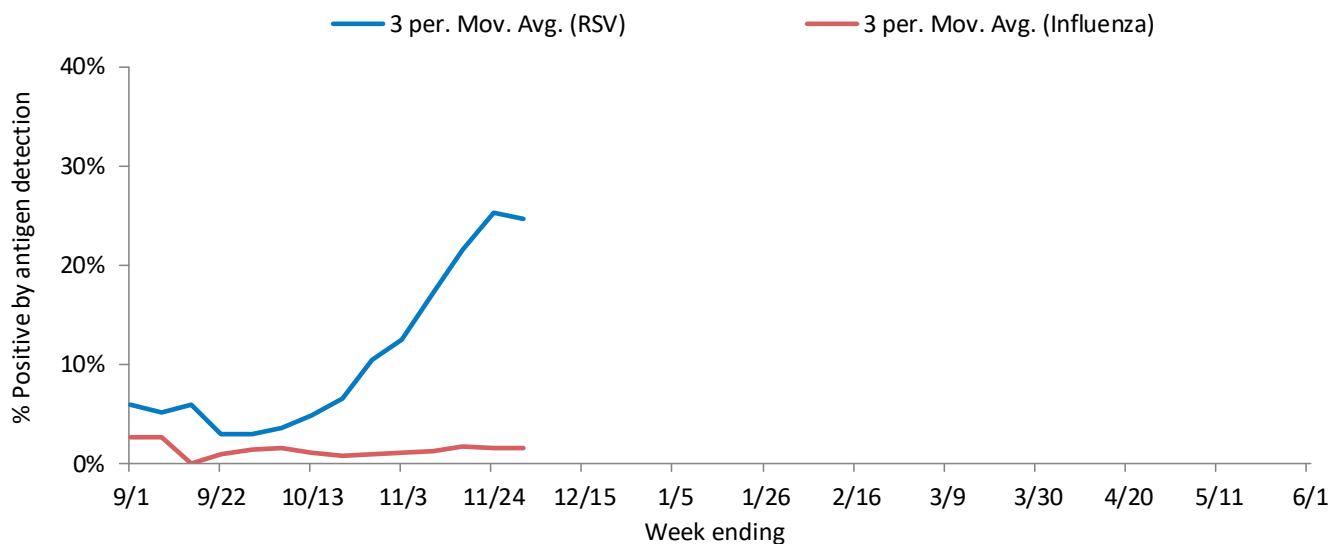
# WISCONSIN STATE SUMMARY

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							
751	19	2	21	2.8%	122	25	20.5%	1.4%	2.4%	3.6%

## ILI activity trend analysis

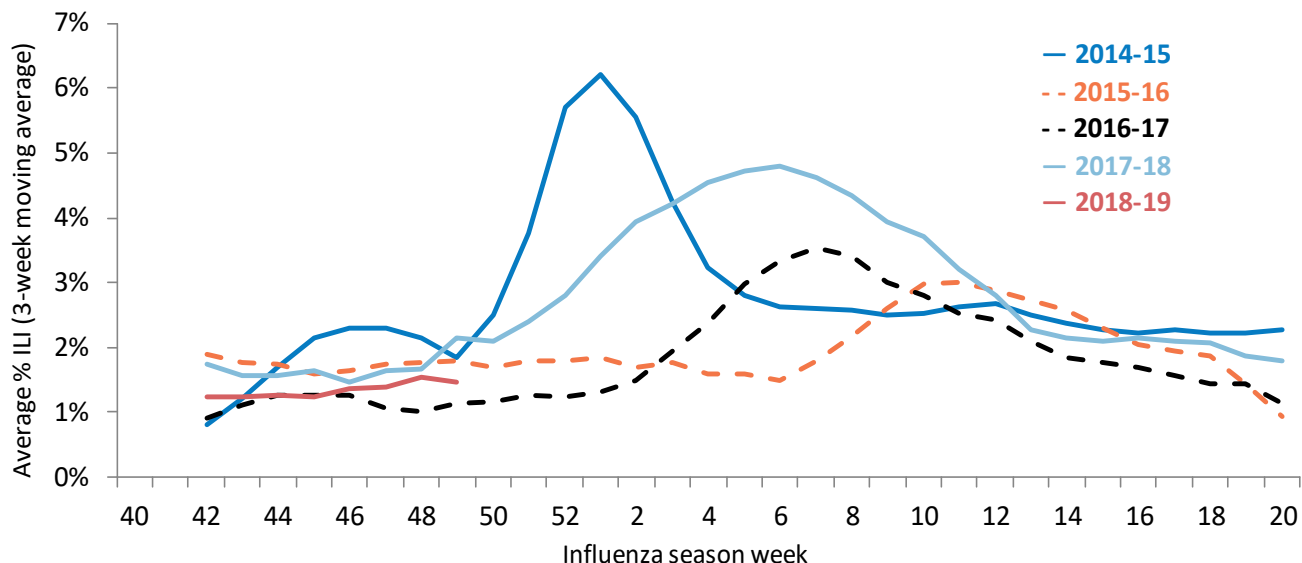


## Influenza and RSV trend analysis



# WISCONSIN STATE SUMMARY

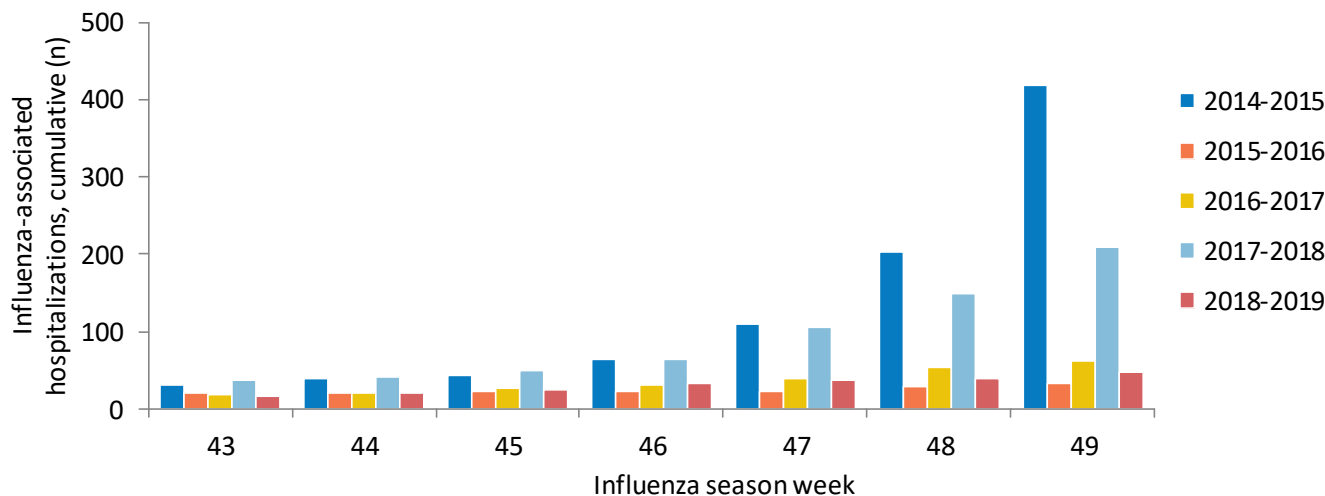
## ILI activity trend analysis by influenza season, Wisconsin



## 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	1	0	0	1	0	0	0	0	0	0
1-4	3	1	0	0	2	0	1	0	0	0
5-17	3	1	0	0	1	1	0	0	0	0
18-49	12	2	0	6	2	2	1	0	0	0
50-64	9	0	1	5	3	0	2	0	0	0
65+	19	3	1	10	5	0	3	1	0	0
<b>Total</b>	<b>47</b>	<b>7</b>	<b>2</b>	<b>22</b>	<b>13</b>	<b>3</b>	<b>7</b>	<b>1</b>	<b>0</b>	<b>0</b>

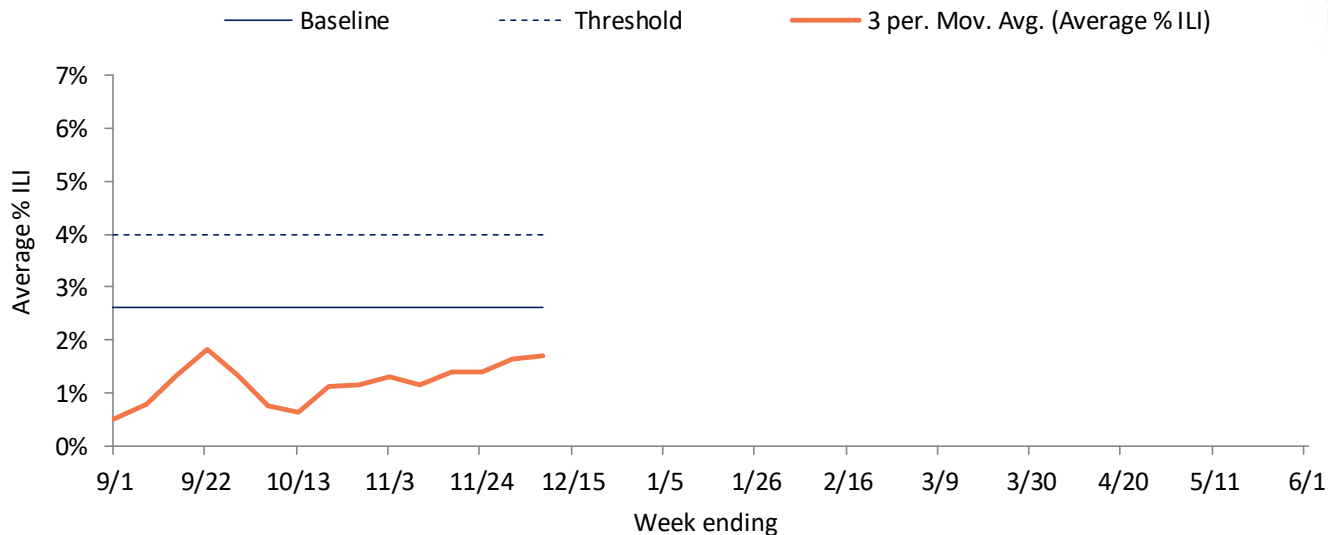
## Reported cumulative influenza-associated hospitalizations by influenza season, Wisconsin



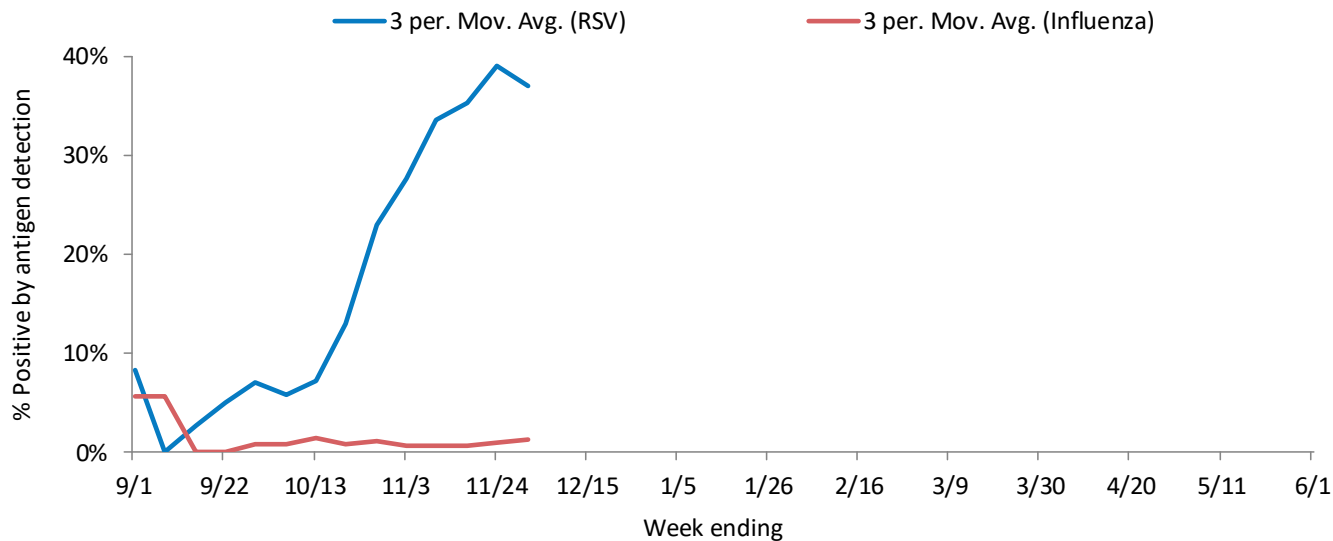
# NORTHEASTERN REGION

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							
299	13	0	13	4.3%	55	15	27.3%	1.8%	2.6%	4.0%

## ILI activity trend analysis



## Influenza and RSV trend analysis

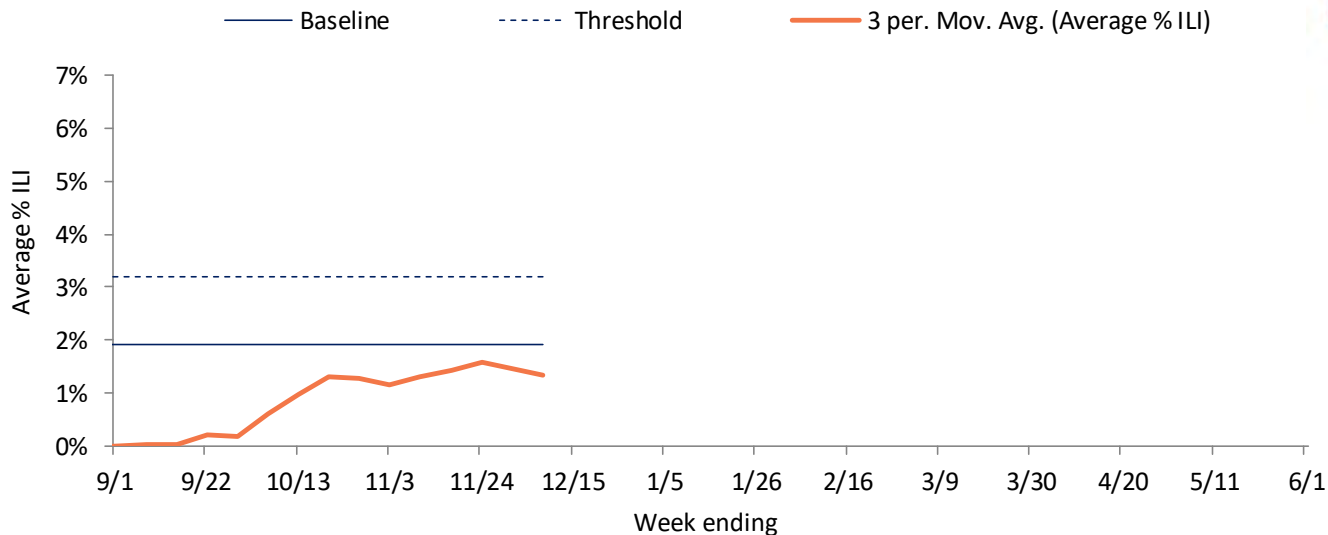




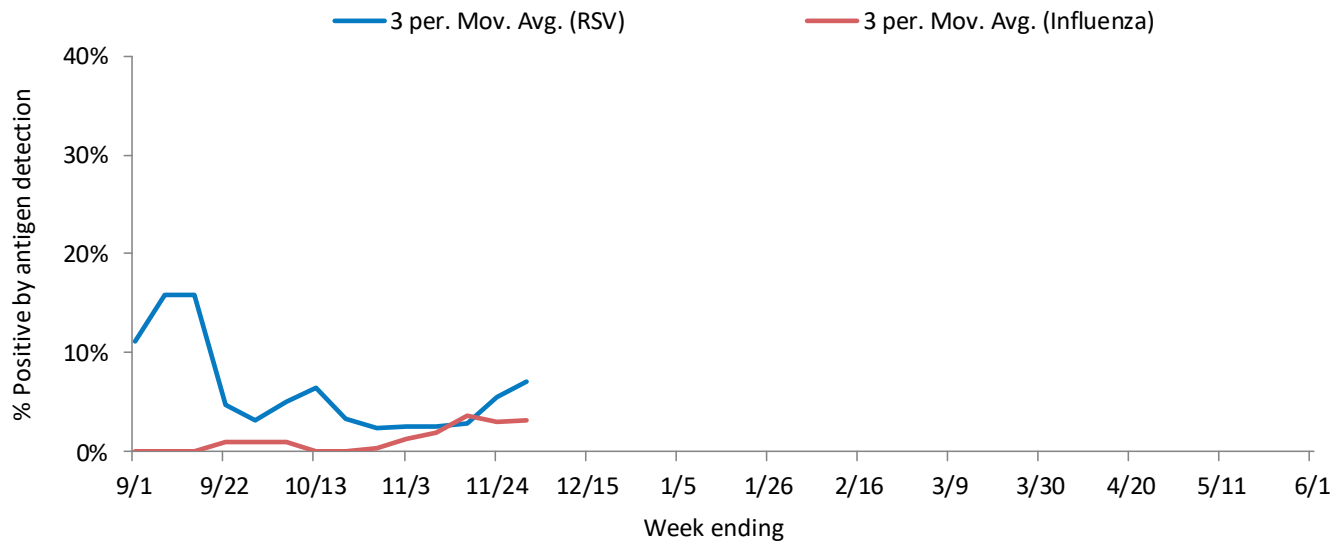
# NORTHWESTERN REGION

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							
184	5	1	6	3.3%	49	6	12.2%	1.2%	1.9%	3.2%

## ILI activity trend analysis



## Influenza and RSV trend analysis

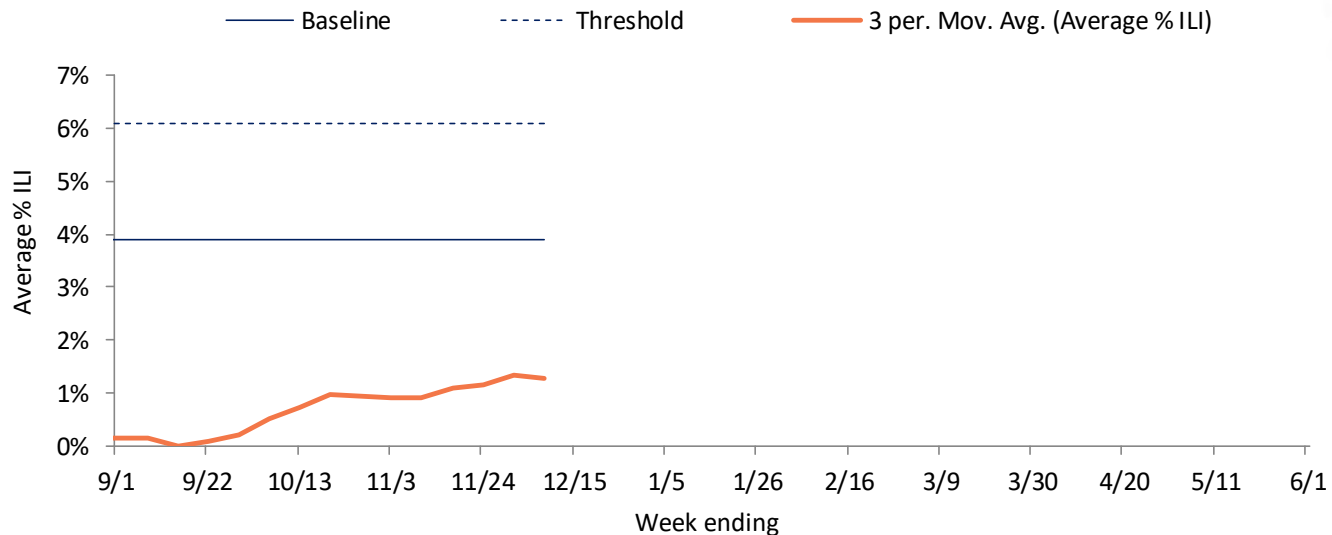




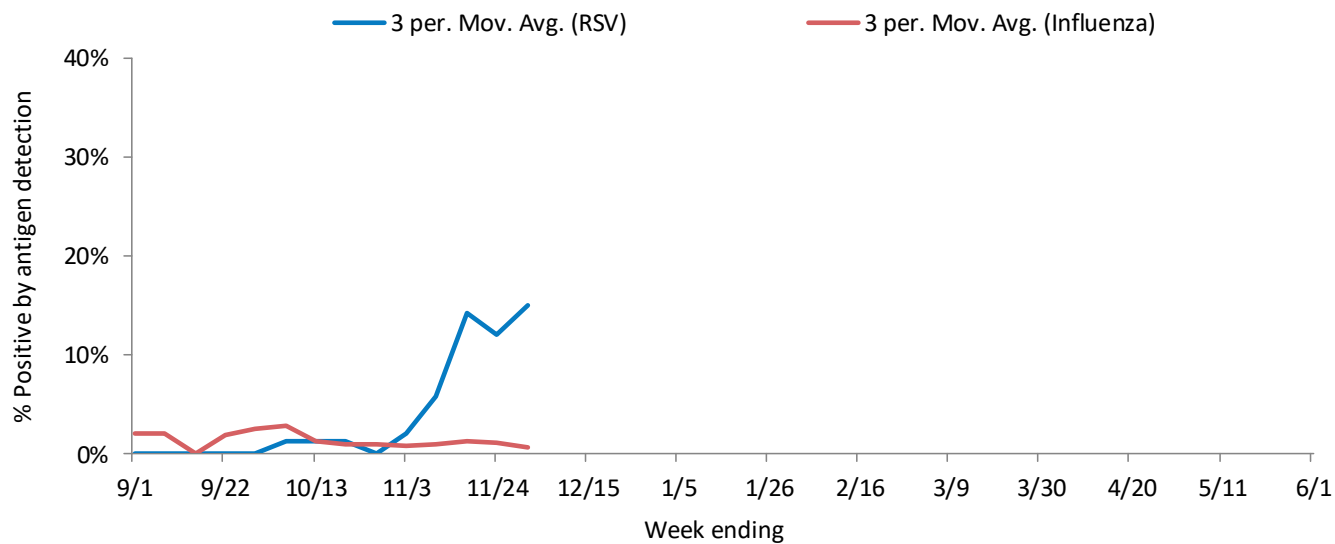
# SOUTHEASTERN REGION

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							
245	1	1	2	0.8%	14	2	14.3%	1.2%	4.0%	6.1%

## ILI activity trend analysis



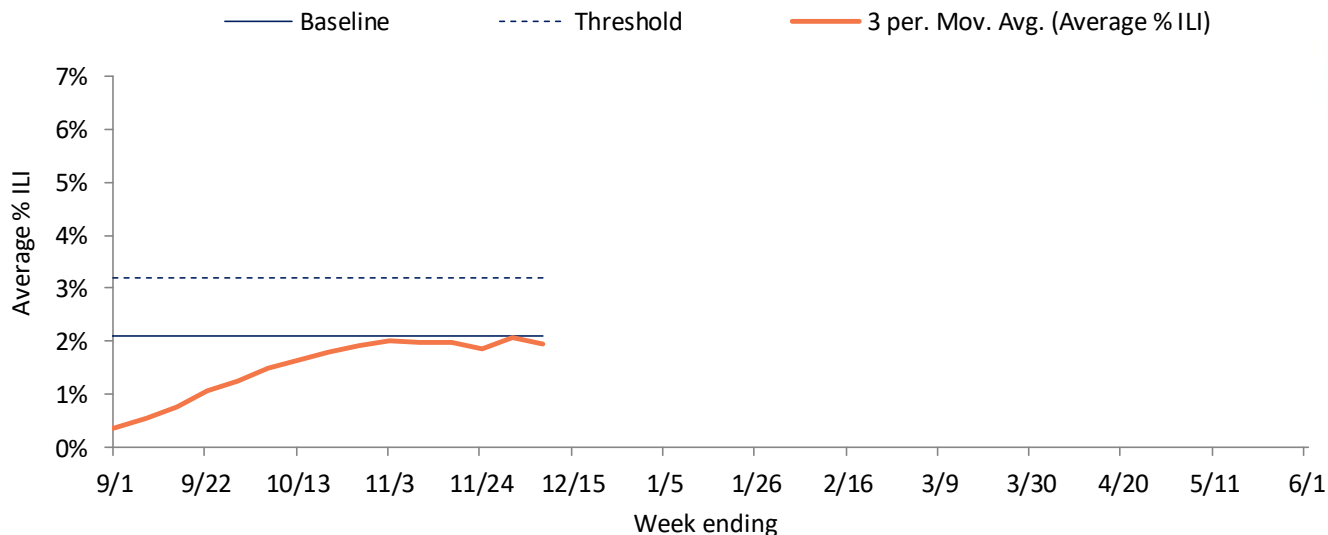
## Influenza and RSV trend analysis



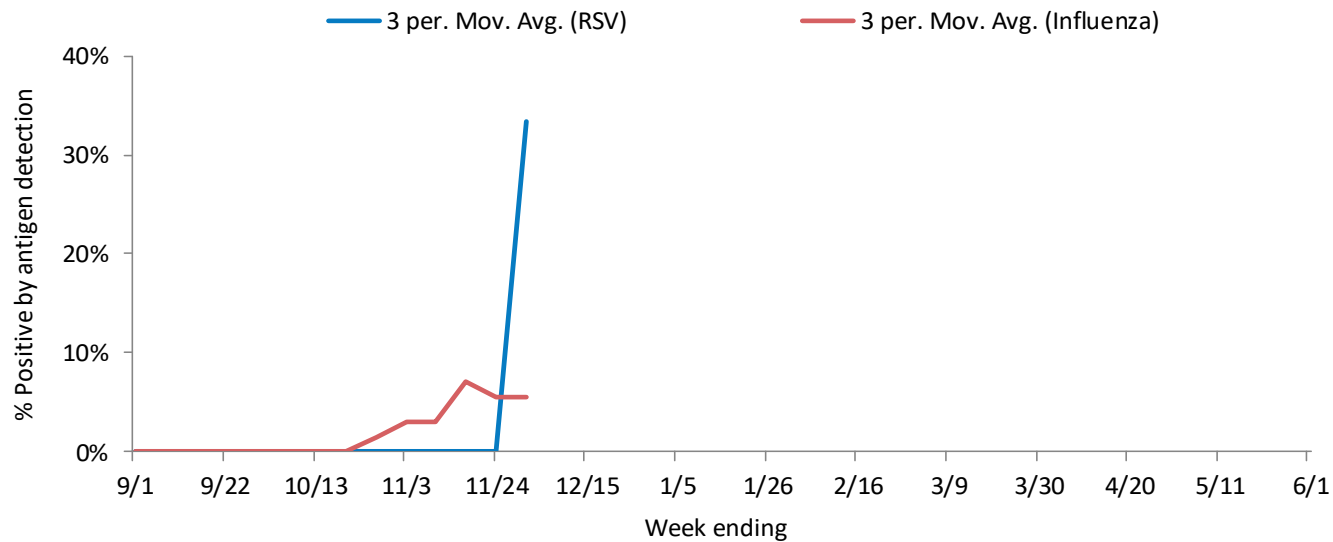
# SOUTHERN REGION

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							
23	0	0	0	0.0%	4	2	50.0%	1.7%	2.1%	3.2%

## ILI activity trend analysis

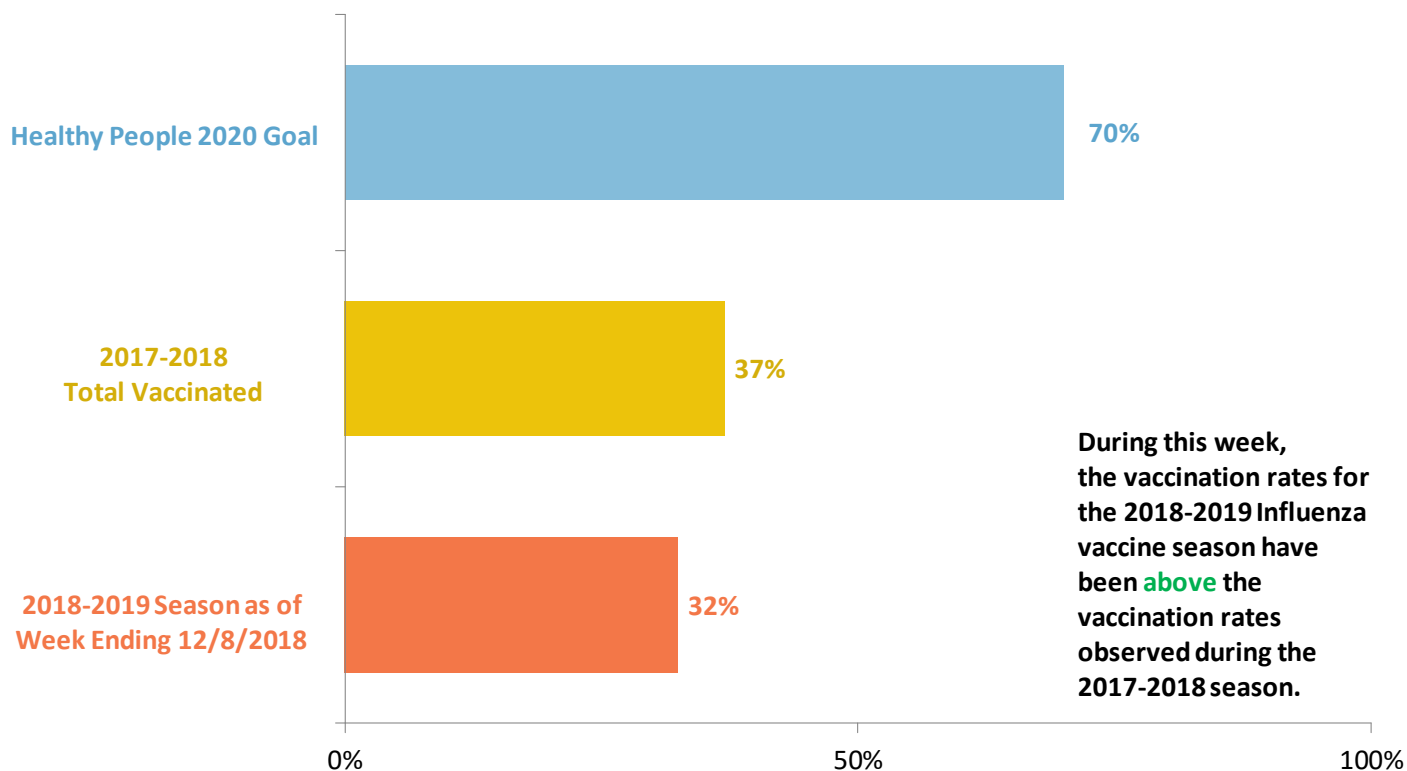


## Influenza and RSV trend analysis



# 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:

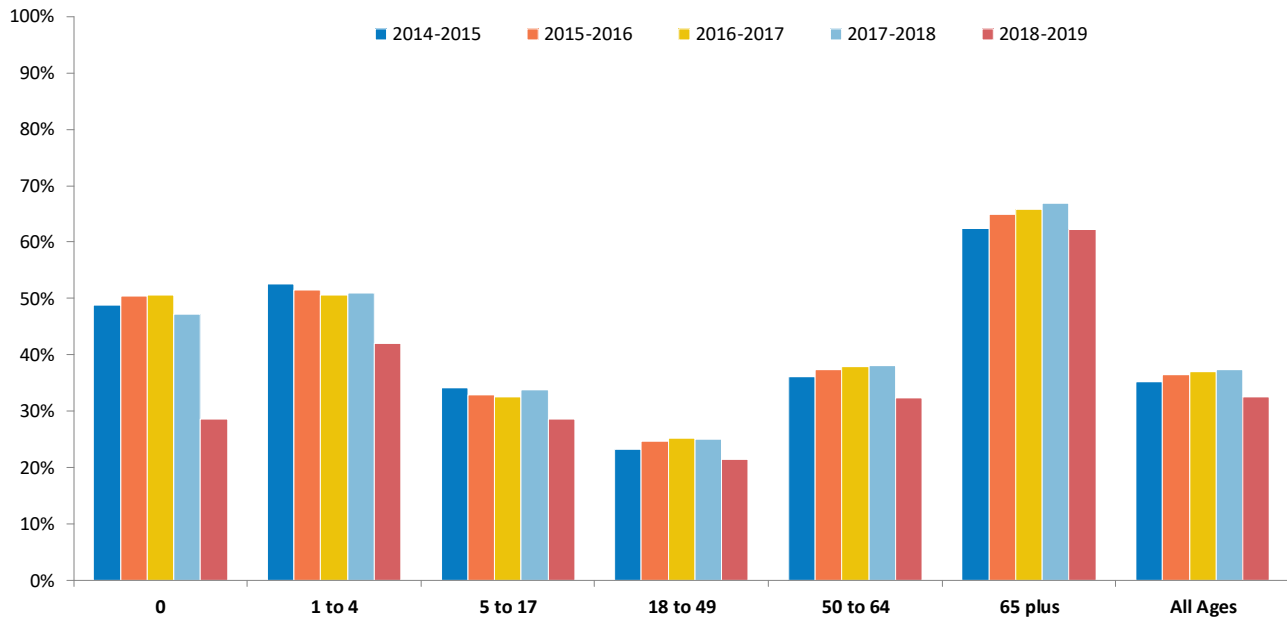
- A/Michigan/45/2015 (H1N1)pdm09-like virus
- A/Singapore/INFIMH-16-0019/2016 A(H3N2)-like virus (updated)
- B/Colorado/06/2017-like (Victoria lineage) virus (updated)

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

