



**WISCONSIN DEPARTMENT OF HEALTH SERVICES**  
**Division of Public Health**  
**Bureau of Communicable Diseases**



**Respiratory virus surveillance report for the week ending November 7, 2015 week 44-15**

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**AT-A-GLANCE**

- Respiratory viruses identified this week :  
rhinovirus and parainfluenza viruses are predominant this week.
- Influenza-like illness (ILI) activity for this week

Wisconsin	Low
Wisconsin (CDC level)	Low
Northwestern Region	Low
Northeastern Region	Low
Southeastern Region	Low
Southern Region	Low

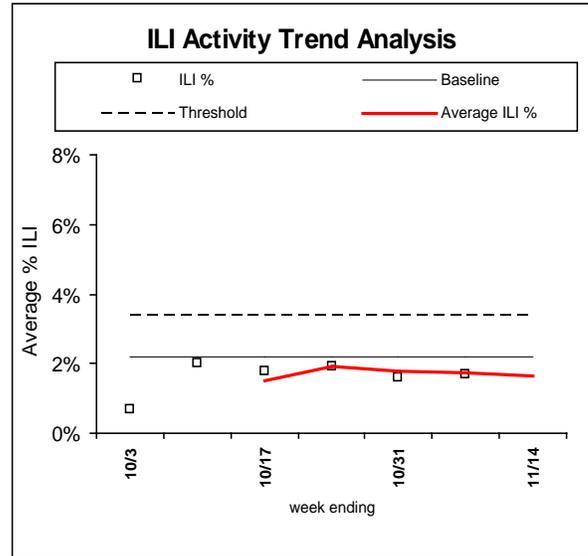
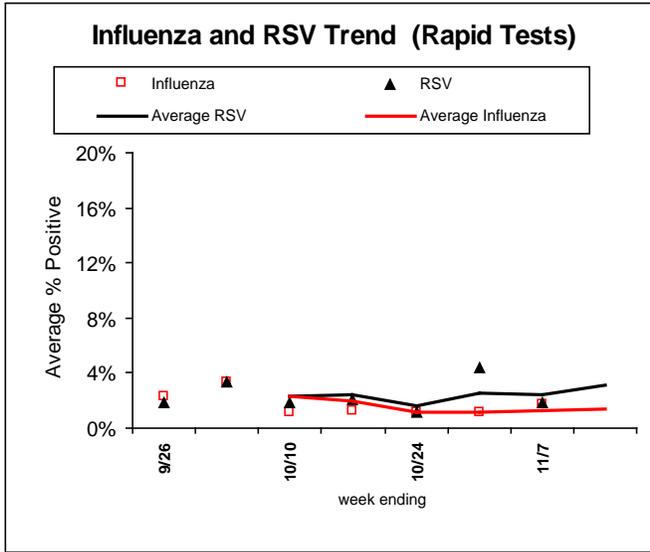
- ILI activity in Region V of the U.S. (WI, MN, IL, MI, OH, IN) is below baseline levels
- ILI activity in the U.S. is below baseline levels
- The Predictive Value Positive (PVP) for rapid influenza and RSV tests is: Low  
(PVP is the probability of disease in a patient with a positive test result)
- The Predictive Value Negative (PVN) for rapid influenza and RSV tests is: High  
(PVN is the probability of not having disease when the test result is negative)
- Influenza-associated pediatric deaths reported (October 10, 2015-present)

	<u>Week 44-15</u>	<u>Total to Date</u>
Wisconsin	0	0
Nationwide	0	0

**WISCONSIN and REGIONAL SUMMARIES**  
(Trend analysis based on 3-week moving averages)

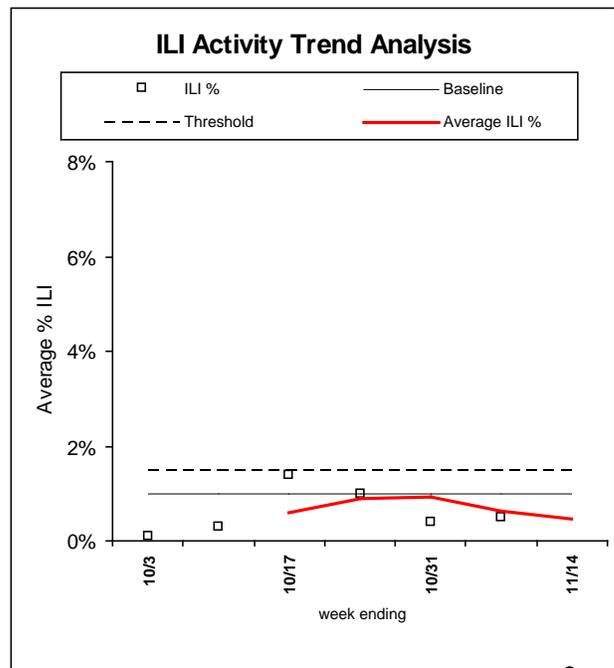
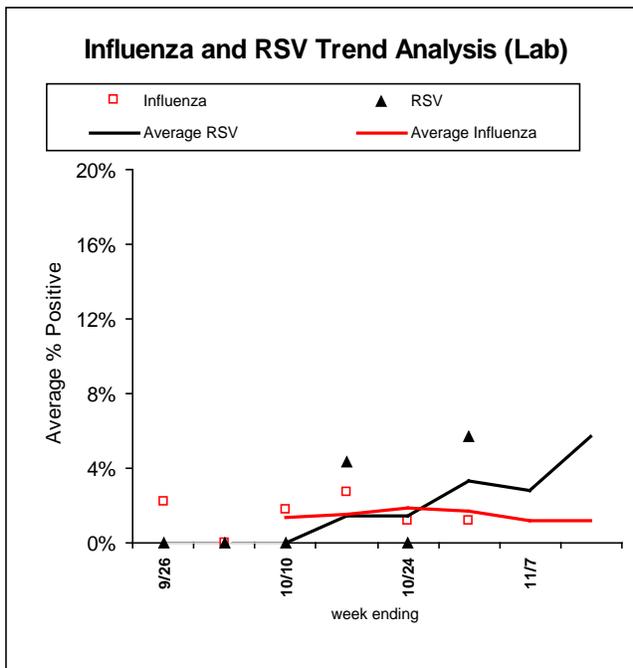
**Wisconsin (ILI activity is Low)**

INFLUENZA RAPID ANTIGEN TESTS				RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS			
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
539	6	3	9	1.7%	109	2	1.8%	1.7%	2.2%	3.4%



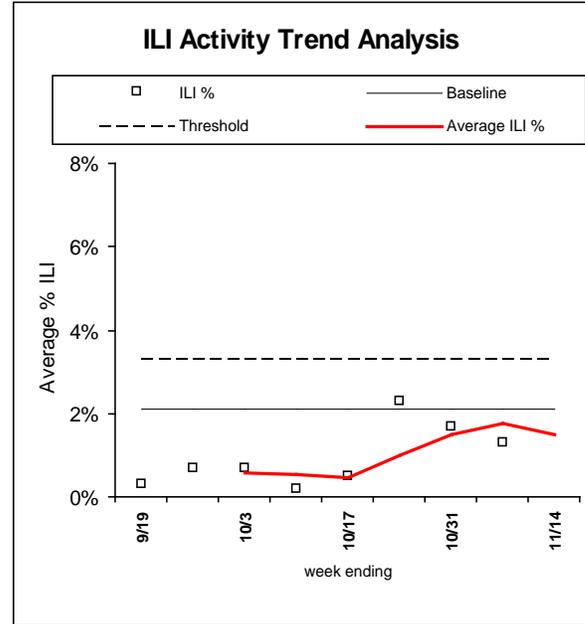
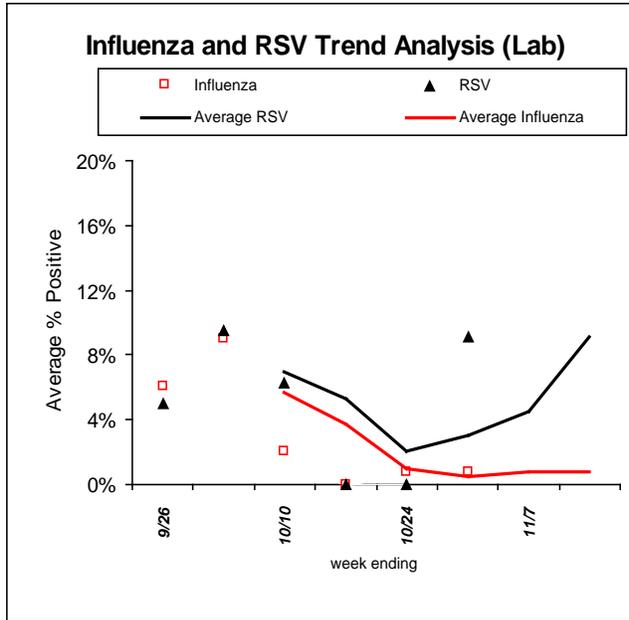
**Northwestern Region (ILI activity is Low)**

INFLUENZA RAPID ANTIGEN TESTS				RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS			
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
								0.5%	1.0%	1.5%



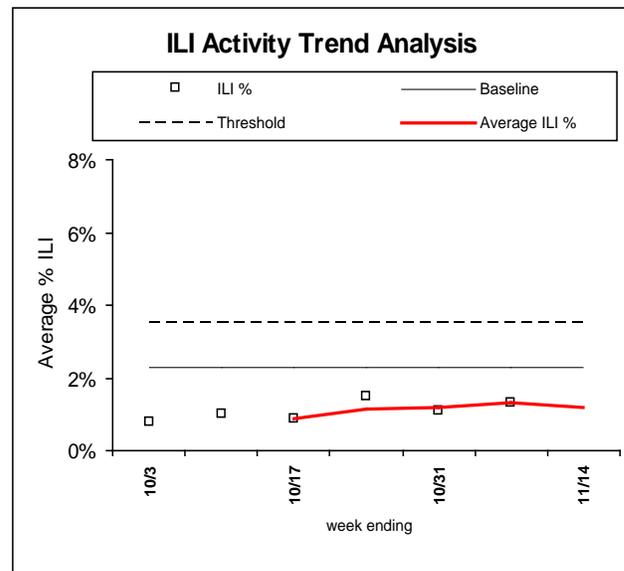
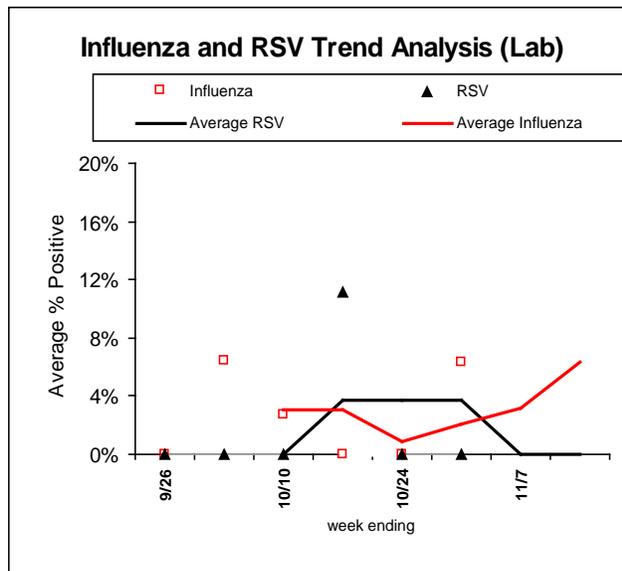
**Northeastern Region (ILI activity is Low)**

INFLUENZA RAPID ANTIGEN TESTS				RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS			
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
								1.3%	2.3%	3.4%



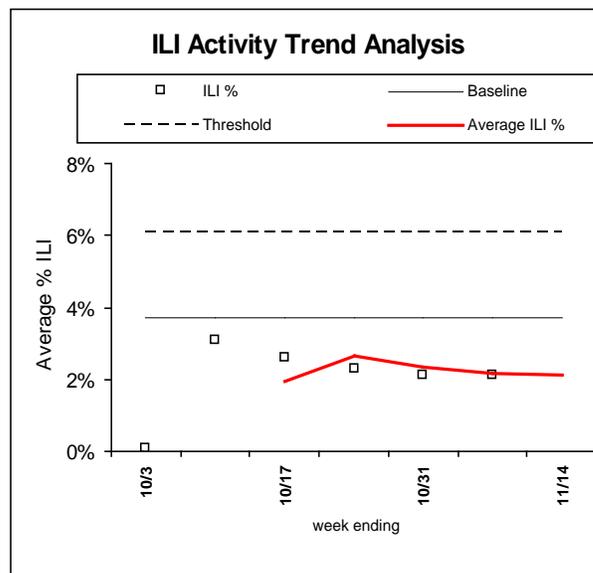
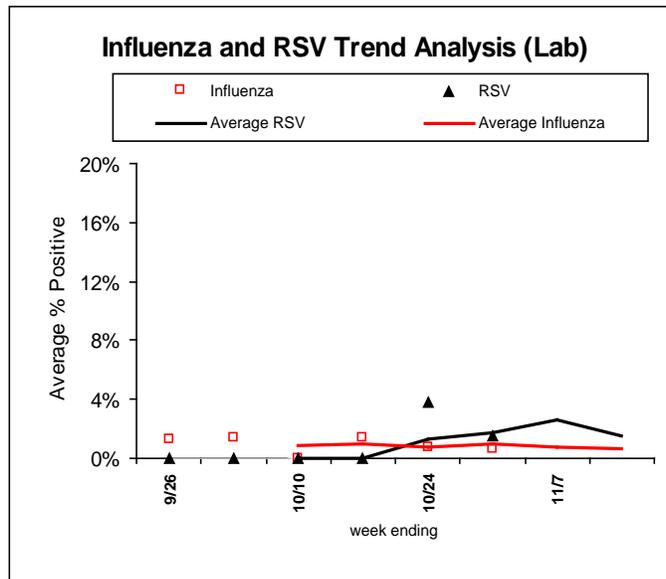
**Southern Region (ILI activity is Low)**

INFLUENZA RAPID ANTIGEN TESTS				RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS			
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
								1.3%	2.3%	3.5%



**Southeastern Region (ILI activity is Low)**

INFLUENZA RAPID ANTIGEN TESTS				RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS			
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
								2.1%	3.7%	6.1%



**For the 2015-16 influenza season, data from the Western Region and the Northern Region will be combined and referred to as the Northwestern Region. This change was made in response to the small number of providers who participate in our weekly surveillance in the Northern Region.**

**Influenza Vaccine Composition 2015-2016**

The trivalent vaccines for use in the 2015-2016 influenza season) contain the following:

- A/California/7/2009 (H1N1)pdm09-like virus;
- A/Switzerland/9715293/2013 (H3N2)-like virus;
- B/Phuket/3073/2013-like virus (Yamagata lineage).

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

- B/Brisbane/60/2008-like virus (Victoria Lineage)

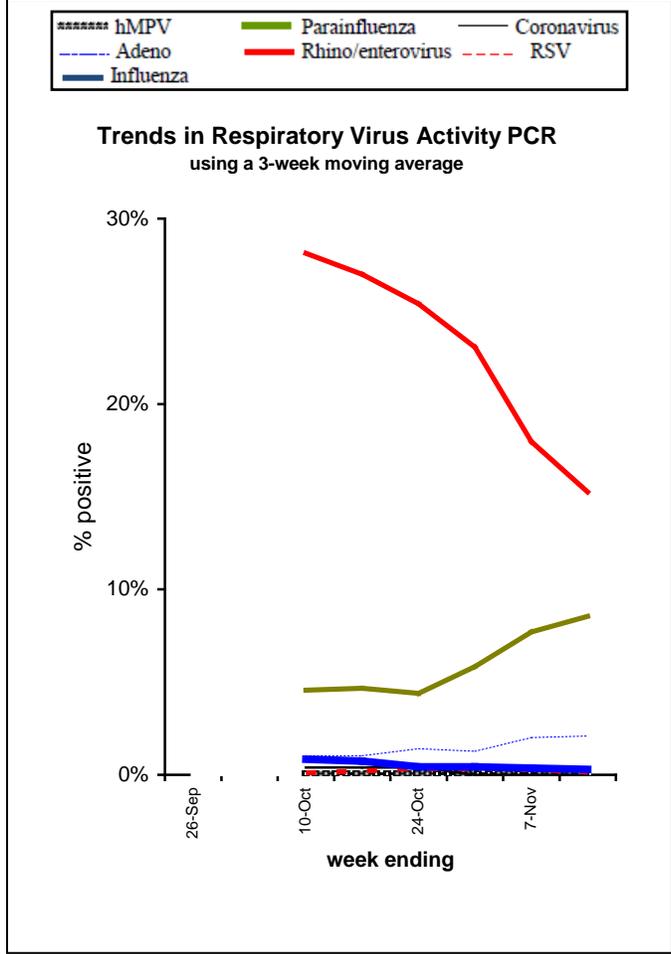
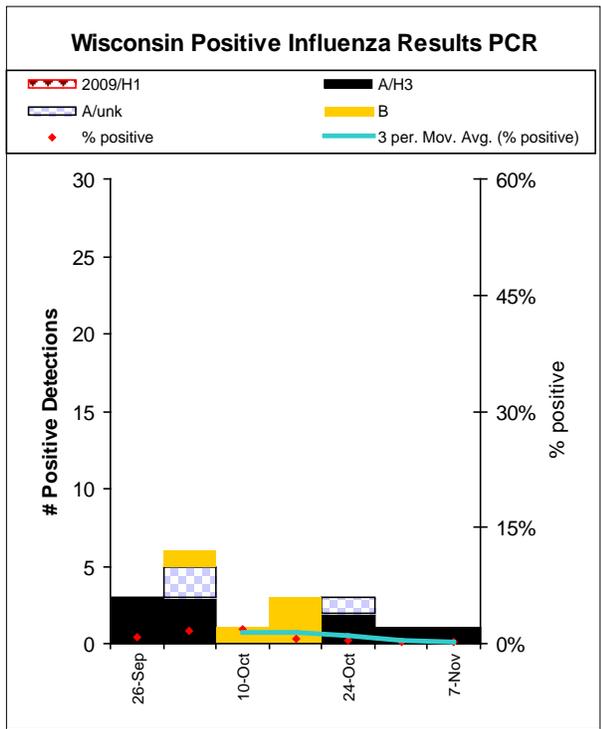
**LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES (PCR)**

Respiratory Agent	Tested	Positive	% Positive	Flu A			Flu B		
				H3	pd2009 H1	Unk	Yamagata	Victoria	Unk
Influenza	590	1	0.2%	1	0	0	0	0	0

Respiratory Agent	Tested	Positive	% Positive	PI-1	PI-2	PI-3	PI-4
Parainfluenza	277	25	9.0%	21	0	0	4

Respiratory Agent	Tested	Positive	% Positive	CoV-229E	CoV-OC43	CoV-NL63	CoV-HKU1
Coronavirus	154	0	0%	0	0	0	0

Respiratory Agent	Tested	Positive	% Positive
RSV	322	0	0%
Human Metapneumovirus	249	1	0.4%
Rhino-entero	239	30	12.6%
Adenovirus	154	5	3.3%



**Cumulative number of positive influenza tests By subtype, September 1, 2015 to present**

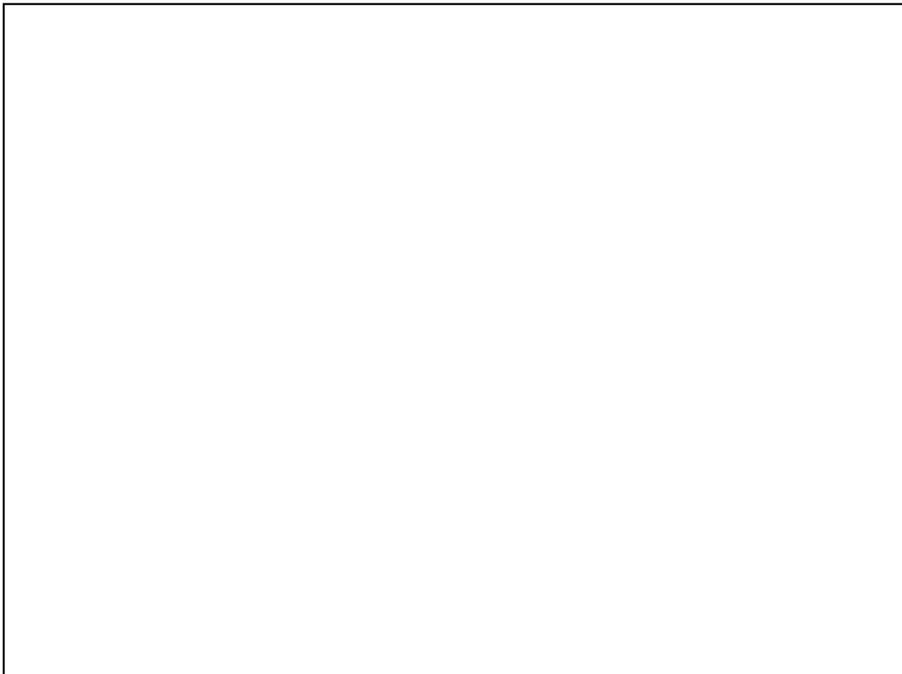
	Influenza A			Influenza B			Total
	pd2009 H1	H3	Unknown	Yamagata	Victoria	Unknown	
<b>Total Number positive</b>	1	18	9	2	1	2	33
<b>% of Total number positive</b>	3%	55%	27%	6%	3%	6%	100%

**Influenza-associated Hospitalizations, September 1, 2015 to present**

Age group	Total Number Reported (2015-16)	Influenza Subtypes				Not reported	Admitted to ICU	Required Mechanical Ventilation	Pregnant
		2009 H1N1	H3N2	A/Unknown	B				
< 1 year	0	0	0	0	0	0	0	0	
1 to 4	0	0	0	0	0	0	0	0	
5 to 17	1	0	0	1	0	0	0	0	
18 to 49	2	0	0	1	1	0	1	0	
50 to 64	2	0	0	2	0	0	0	0	
65 and over	17	0	3	10	4	0	1	0	
<b>Total</b>	<b>22</b>	<b>0</b>	<b>3</b>	<b>14</b>	<b>5</b>	<b>0</b>	<b>2</b>	<b>0</b>	

**Influenza-associated Hospitalizations by Public Health Region, September 1, 2015 to present**

Region	Week 44	Season Total
Southeastern	0	2
Southern	0	6
Northeastern	0	11
Western	1	2
Northern	0	1
Wisconsin	0	22



**Incidence/100,000**

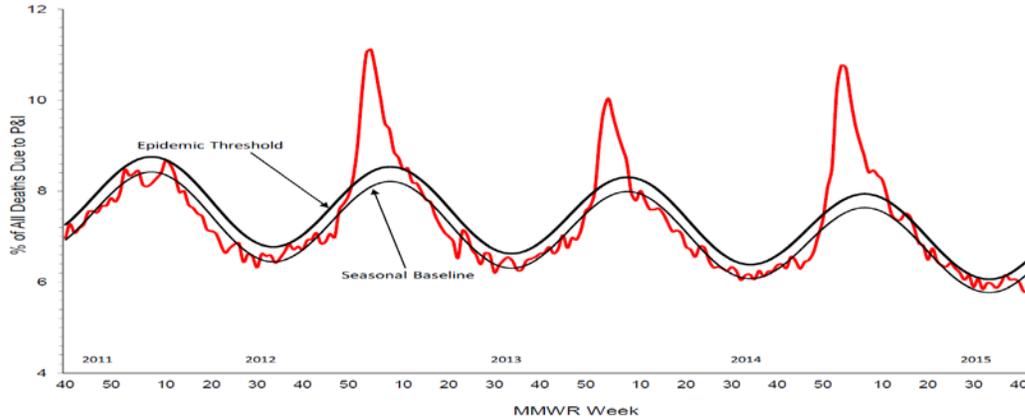
Age group	Wisconsin	National
<1		
1 to 4		
5 to 17		
18 to 49		
50 to 64		
65+		
total		

## NATIONAL INFLUENZA SURVEILLANCE

### NCHS Mortality Surveillance Data:

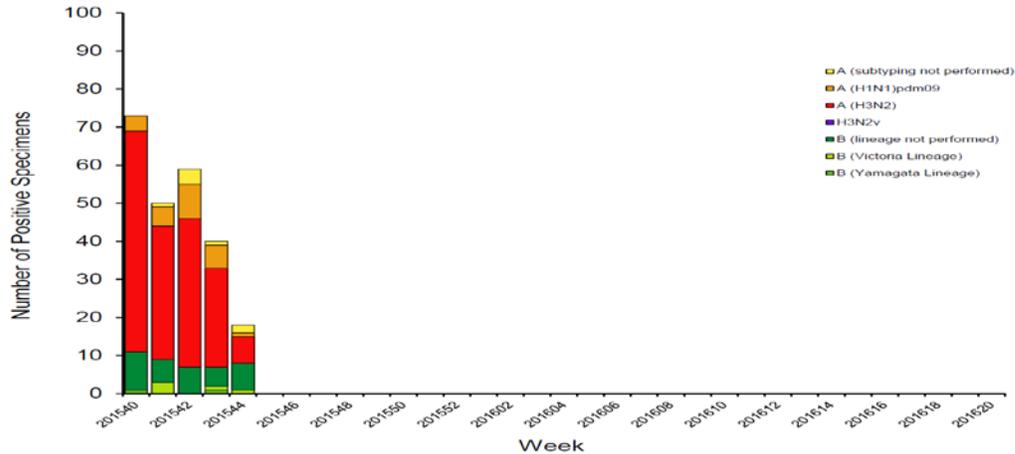
Based on NCHS mortality surveillance data available on November 12, 2015, 5.8% of the deaths occurring during the week ending October 24, 2015 (week 42) were due to P&I. This percentage is below the epidemic threshold of 6.5% for week 42.

**Pneumonia and Influenza Mortality from the National Center for Health Statistics Mortality Surveillance System Data through the week ending October 24, 2015, as of November 12, 2015**



	<b>Week 44</b>	<b>Data Cumulative since October 4, 2015 (week 40)</b>
<b>No. of specimens tested</b>	606	4,503
<b>No. of positive specimens</b>	18	240
<b>Positive specimens by type/subtype</b>		
<b>Influenza A</b>	10 (55.6%)	198 (82.5%)
<b>A(H1N1)pdm09</b>	1 (10.0%)	25 (12.6%)
<b>H3</b>	7 (70.0%)	165 (83.3%)
<b>Subtyping not performed</b>	2 (20.0%)	8 (4.0%)
<b>Influenza B</b>	8 (44.4%)	42 (17.5%)
<b>Yamagata lineage</b>	0 (0%)	2 (4.8%)
<b>Victoria lineage</b>	1 (12.5%)	5 (11.9%)
<b>Lineage not performed</b>	7 (87.5%)	35 (83.3%)

**Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, 2015-16 Season**

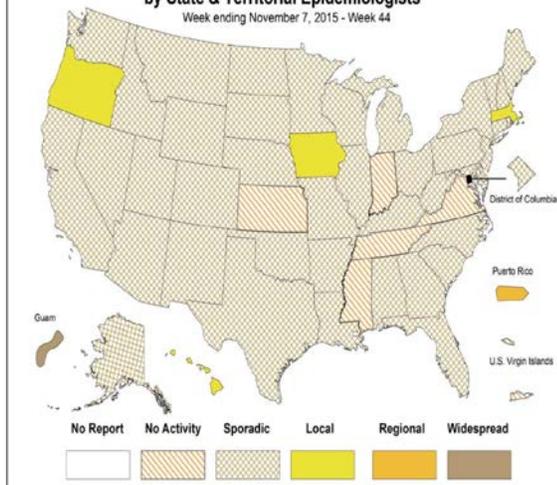


Influenza characterization data will resume in November, 2015.

Neuraminidase Inhibitor Resistance Testing Results on Samples Collected Since October 1, 2015

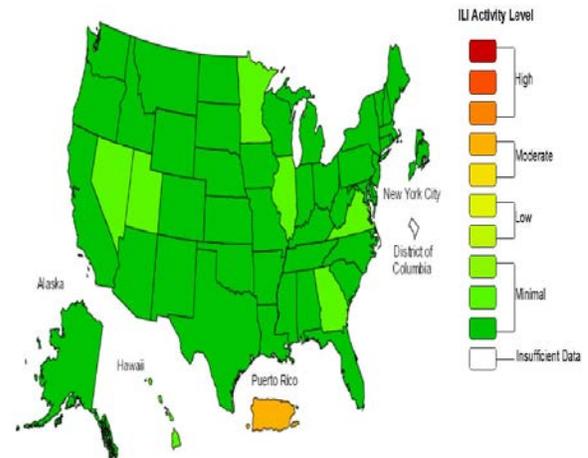
	Oseltamivir		Zanamivir		Peramivir	
	Virus Samples tested (n)	Resistant Viruses, Number (%)	Virus Samples tested (n)	Resistant Viruses, Number (%)	Virus Samples tested (n)	Resistant Viruses, Number (%)
Influenza A(H1N1)pmd09	0	0 (0.0)	0	0 (0.0)	0	0 (0.0)
Influenza A (H3N2)	13	0 (0.0)	13	0 (0.0)	13	0 (0.0)
Influenza B	0	0 (0.0)	0	0 (0.0)	0	0 (0.0)

Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists\*  
Week ending November 7, 2015 - Week 44



\* This map indicates geographic spread & does not measure the severity of influenza activity

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet  
2015-16 Influenza Season Week 44 ending Nov 07, 2015

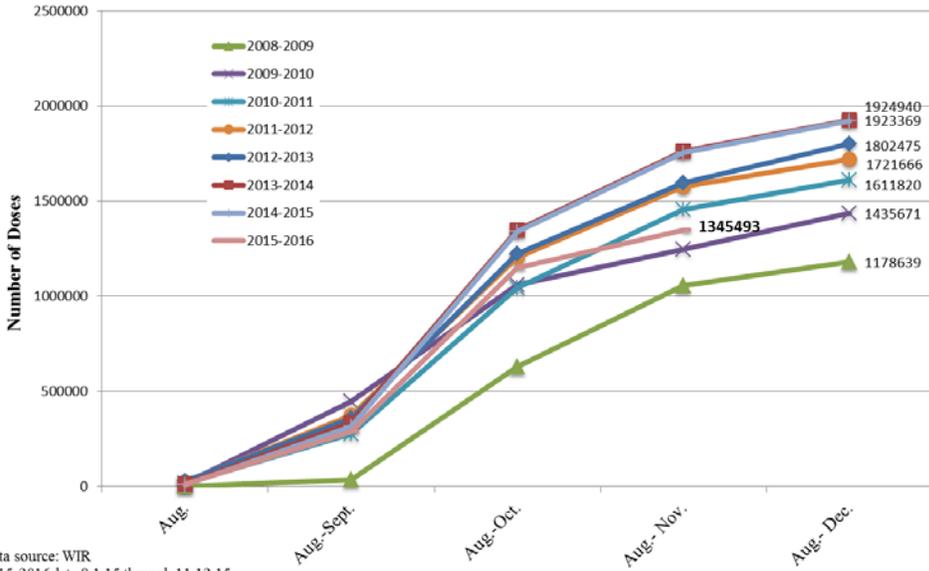


\*This map uses the proportion of outpatient visits to health care providers for influenza-like illness to measure the ILI activity level within state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state to display high activity levels.

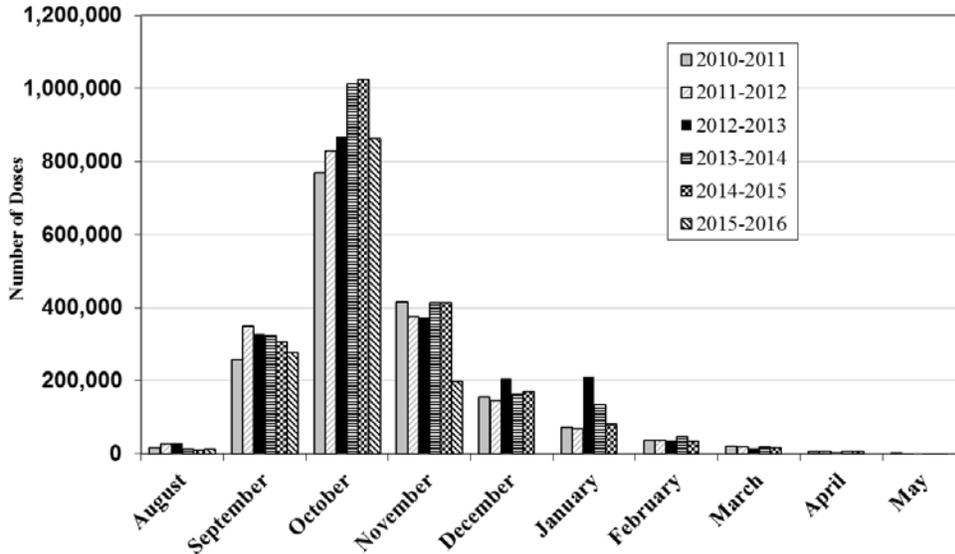
# Seasonal Influenza Vaccination in Wisconsin Based on Doses Reported to the Wisconsin Immunization Registry (WIR) November 13, 2015

**Data for 2015-2016 Season Reported for 8.1.15-11.12.15**

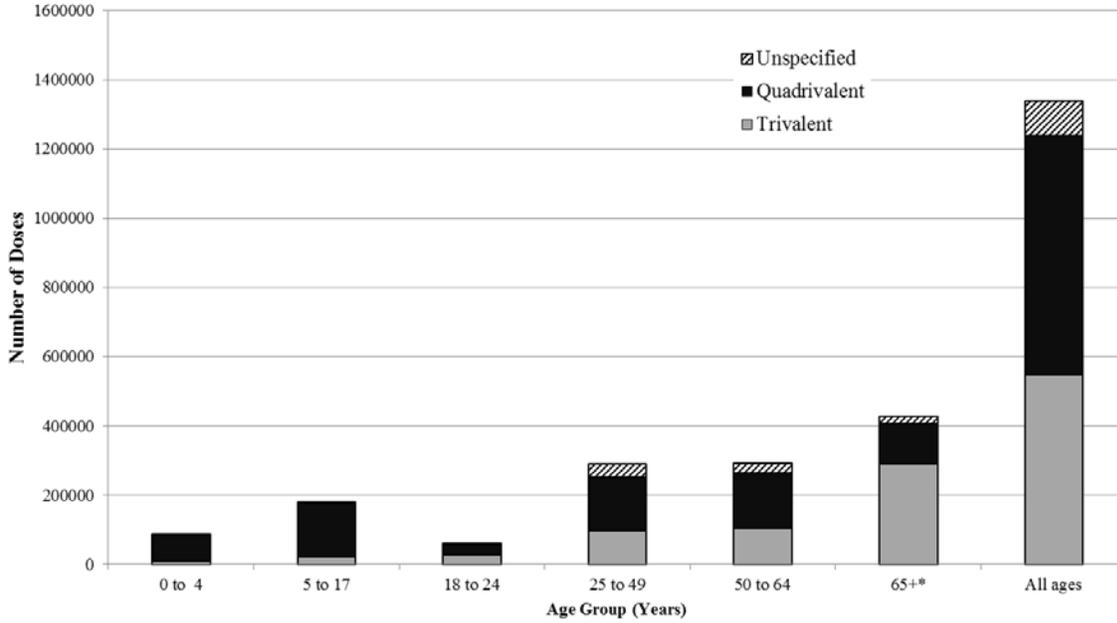
**Cumulative Doses of Seasonal Influenza Administered and Reported to the WIR,  
2008-2016 Influenza Seasons**



**Number of Doses of Seasonal Influenza Vaccine Administered and Reported  
to the WIR, by Month for Influenza Seasons 2010-2016**

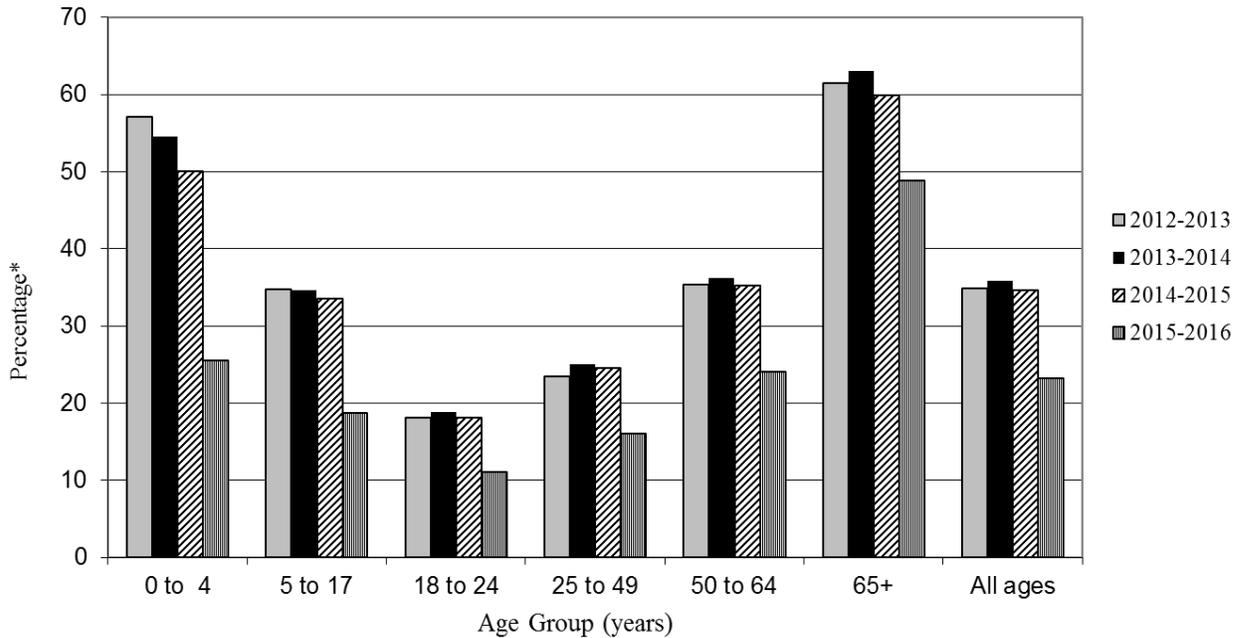


**Doses of Seasonal Influenza Vaccine Administered and Reported to WIR by Age Group and Vaccine Type, 2015-2016 Influenza Season**



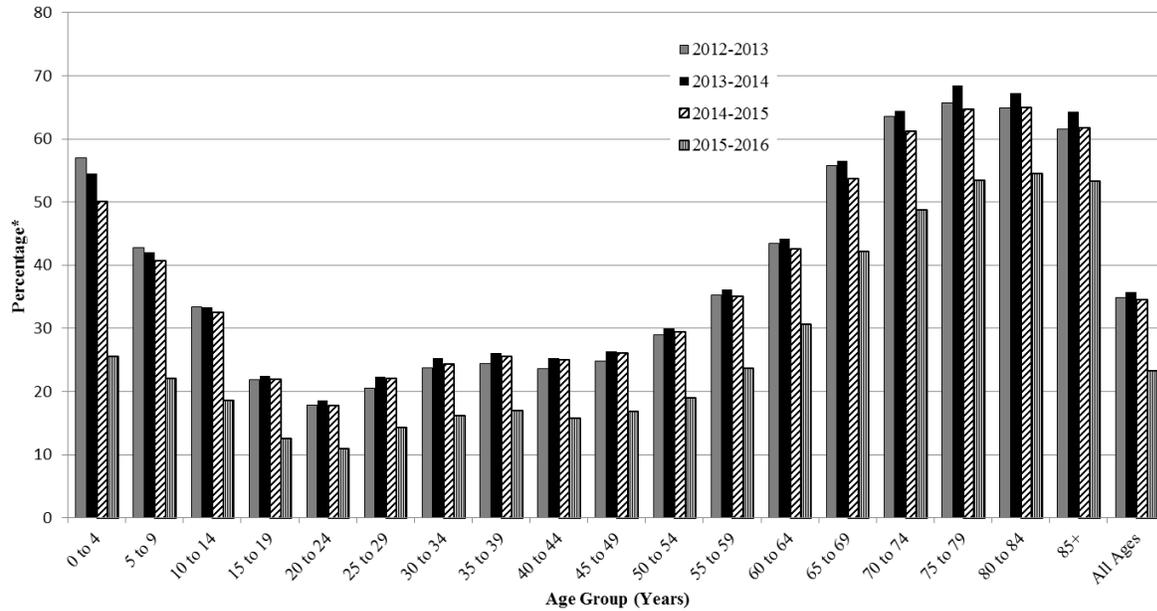
\*Of trivalent influenza doses administered between 8/1/15 and 11/12/15 and received by adult clients aged 65 years and older, 69.6% of the doses were high dose influenza vaccine.

**Rates of Influenza Vaccination in Wisconsin by Age Group, 2011-2016 Influenza Seasons, Based on Doses Reported to the Wisconsin Immunization Registry (WIR)**



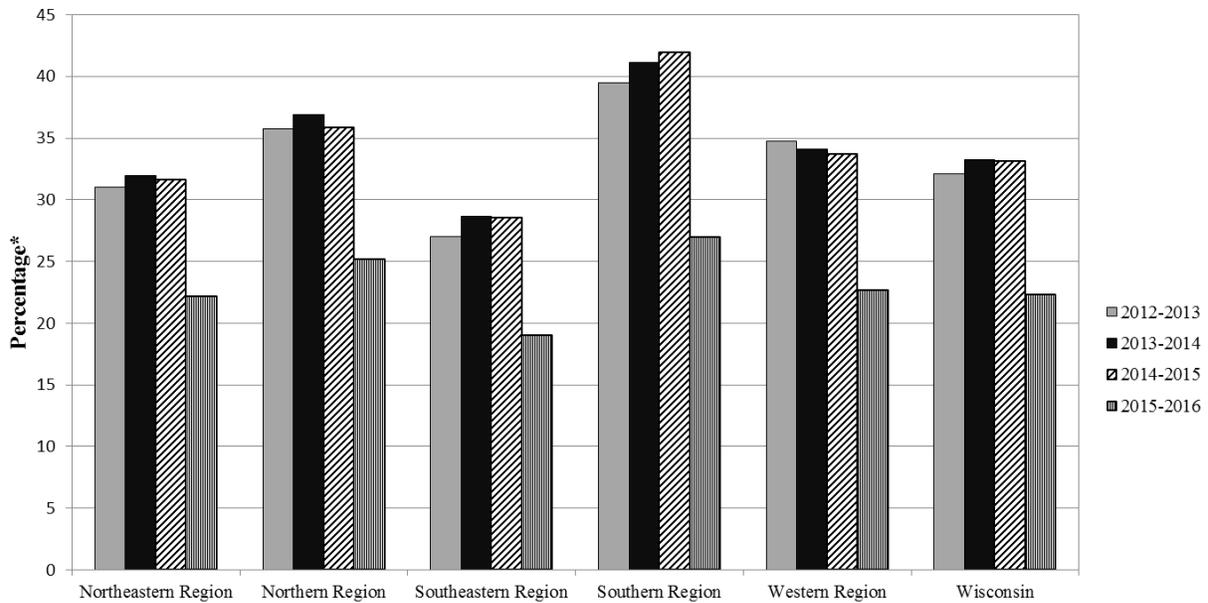
\* Numerator: Number of persons recorded in the WIR as having received at least one dose of seasonal influenza vaccine by age group. For 2012-2013 season, doses administered between 8/1/12 to 7/31/13, assessed 12/2/13. For 2013-2014, doses administered between 8/1/13 to 7/31/14, assessed 8/15/14. For 2014-2015, doses administered between 8/1/14 to 6/11/15, assessed 6/12/2015. For 2015-2016, doses administered between 8/1/15 to 11/12/15, assessed 11/13/15. Denominator source: 2012, 2013 and 2014 Wisconsin Interactive Statistics on Health (WISH) population estimates, by age group.

**Rates of Influenza Vaccination in Wisconsin by Age Group, 2011-2016 Influenza Seasons, Based on Doses Reported to the Wisconsin Immunization Registry (WIR)**



\* Numerator: Number of persons recorded in the WIR as having received at least one dose of seasonal influenza vaccine by age group. For 2012-2013 season, doses administered between 8/1/12 to 7/31/13, assessed 12/2/13. For 2013-2014, doses administered between 8/1/13 to 7/31/14, assessed 8/15/14. For 2014-2015, doses administered between 8/1/14 to 6/11/15, assessed 6/12/15. For 2015-2016 season, doses administered between 8/1/15 to 11/12/15, assessed 11/13/15. Denominator source: 2012, 2013 and 2014 Wisconsin Interactive Statistics on Health (WISH) population estimates, by age group.

**Rates of Influenza Vaccination in Wisconsin by Region, 2011-2016 Influenza Seasons, Based on Doses Reported to the Wisconsin Immunization Registry (WIR)**



\* Numerator: Number of persons recorded in the WIR as having received at least one dose of seasonal influenza vaccine by region. For 2012-2013 season, doses administered between 8/1/12 to 7/31/13, assessed 11/27/13. For 2013-2014, doses administered between 8/1/13 to 7/31/14, assessed 8/15/14. For 2014-2015, doses administered between 8/1/14 to 6/11/15, assessed on 6/12/15. For 2015-2016, doses administered between 8/1/15 to 11/12/2015, assessed on 11/13/15. Denominator source: 2012, 2013 and 2014 Wisconsin Interactive Statistics on Health (WISH) population estimates, by region.

- These graphs include only doses of seasonal influenza vaccine administered and reported to the Wisconsin Immunization Registry (WIR).
- Data for 2015-16 season is incomplete because of the expected lag between the vaccine administration date and the date reported to the WIR, which may be a short as one day or as long as several months, depending on the submitter. Therefore, the current season's data will be adjusted as additional data is received.

- While use of the WIR is not mandatory, the WIR receives data from a variety of sources, including health care providers, health maintenance organizations, local health departments and tribal health centers/clinics, schools and pharmacies.
- For additional information regarding the immunization data, please contact Ashley Petit, epidemiologist, with the Wisconsin Immunization Program at (608) 266-7797.