WISCONSIN DEPARTMENT OF HEALTH SERVICES
Division of Public Health
Bureau of Communicable Diseases and Emergency Response

Respiratory virus surveillance report for the week ending December 29, 2012 week 12-52

AT-A-GLANCE

- Respiratory viruses identified this week :
  Influenza (A/H3 and B), Rhino/enterovirus, and parainfluenza were predominant viruses.

- Influenza-like illness (ILI) activity for this week

Wisconsin	High
Wisconsin (CDC level)	Low
Western Region	Moderate
Northern Region	High
Northeastern Region	High
Southeastern Region	High
Southern Region	Low

- ILI activity in Region V of the U.S. (WI, MN, IL, MI, OH, IN) is <u>above</u> baseline levels

- ILI activity in the U.S. is <u>above</u> baseline levels

- The Predictive Value Positive (PVP) for rapid influenza tests is: moderate and increasing
  (PVP is the probability of disease in a patient with a positive test result)

- The Predictive Value Negative (PVN) for rapid influenza tests is: moderate and decreasingHigh
  (PVN is the probability of not having disease when the test result is negative)

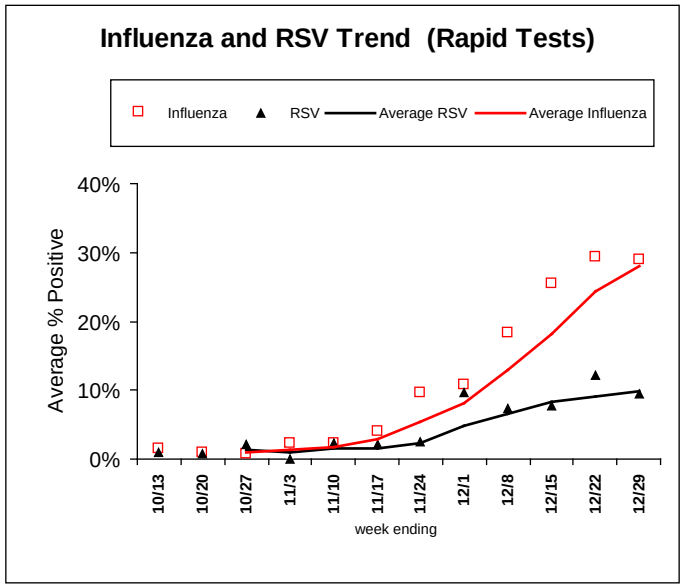
- Influenza-associated pediatric deaths (October 5, 2012-present)

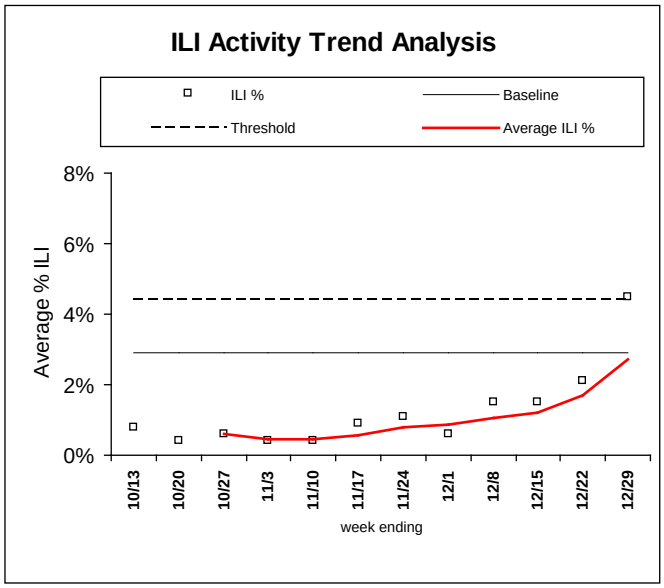
	Week 12-52	Total to Date
Wisconsin	0	1
United States	2	18

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

Wisconsin (ILI activity is High)

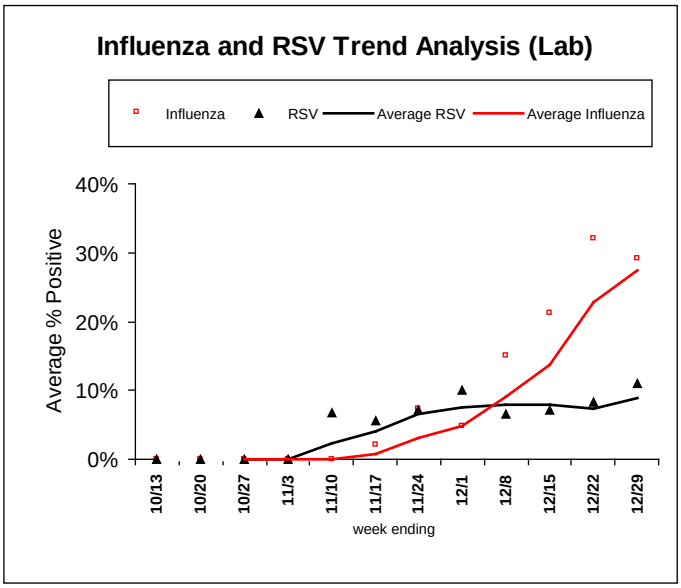
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
4186	976	239	1215	29.0%	442	42	9.5%	4.5%	2.9%	4.4%

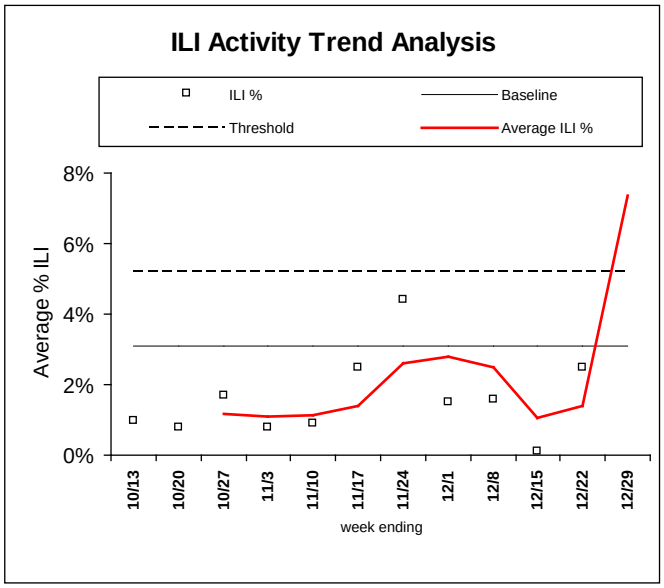




Northern Region (ILI activity is High)

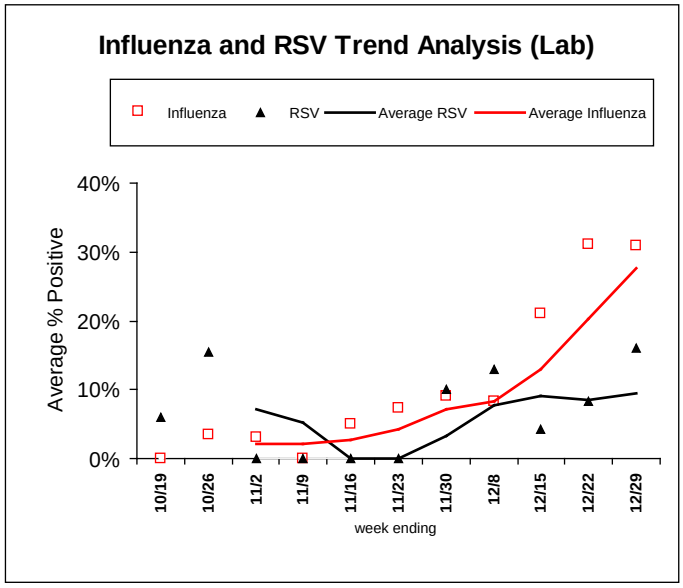
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
853	143	105	248	29.1%	81	9	11.1%	19.5%	3.1%	5.2%

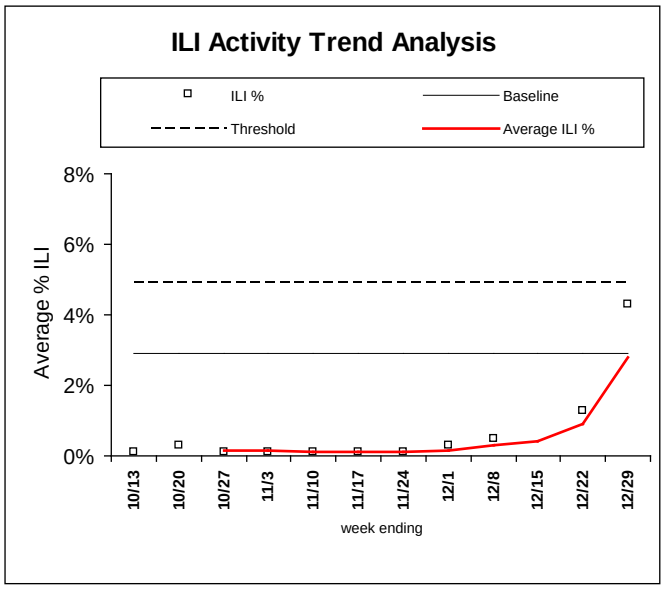




Western Region (ILI activity is Moderate)

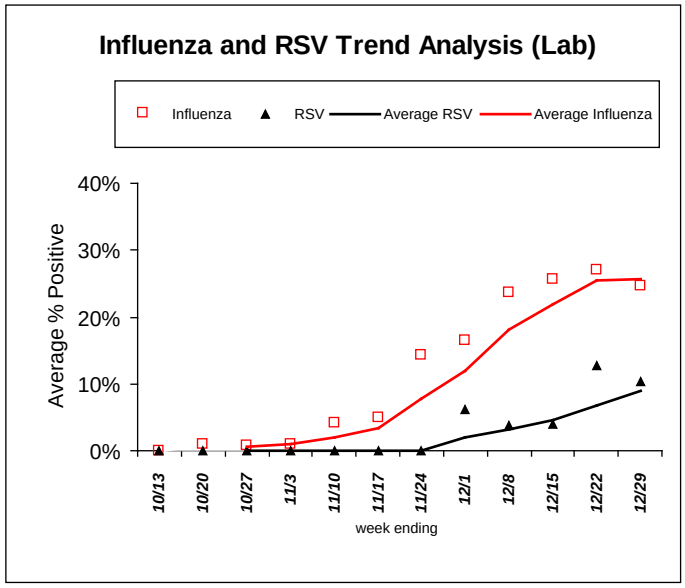
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
543	138	30	168	30.9%	50	8	16.0%	4.3%	2.9%	4.9%

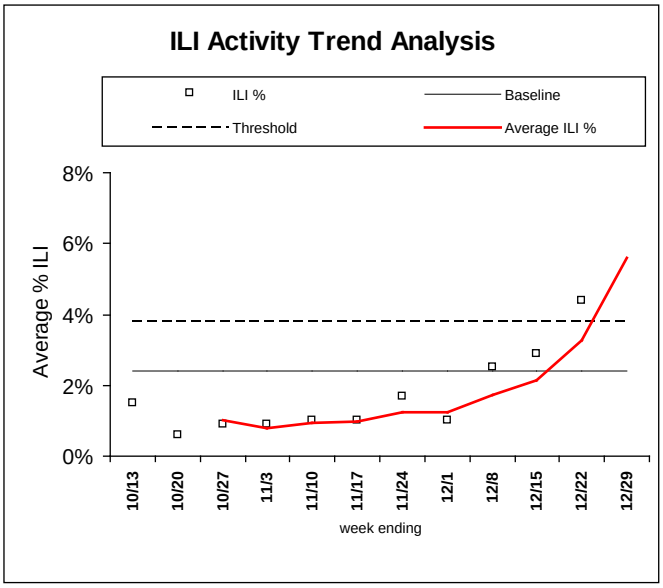




Northeastern Region (ILI activity is High)

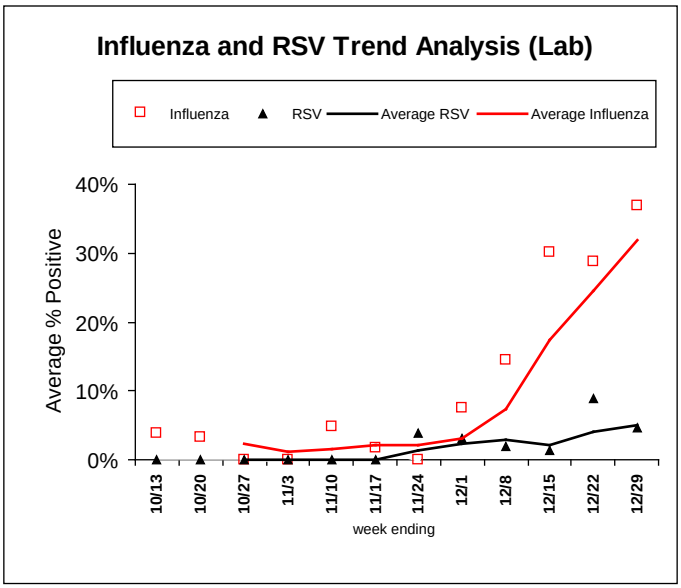
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
1356	255	78	333	24.6%	77	8	10.4%	9.5%	2.4%	3.8%

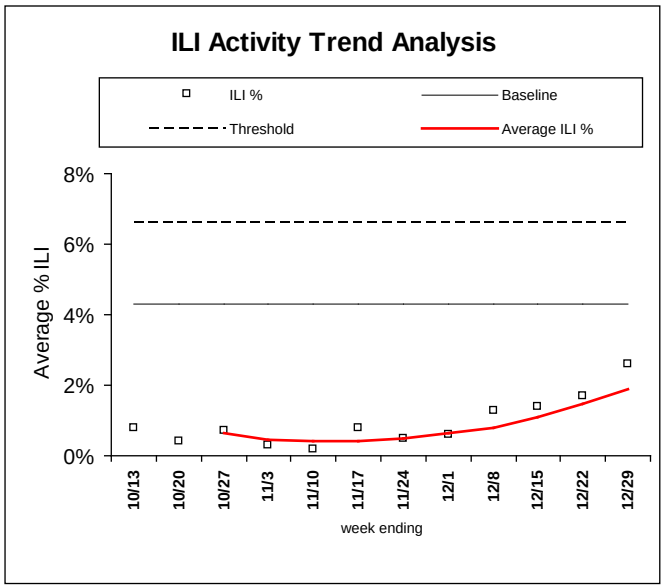




Southern Region (ILI activity is Low)

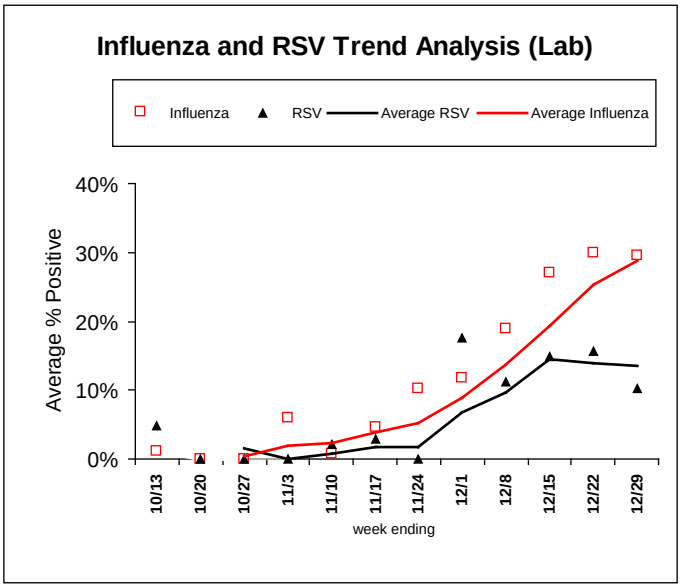
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
573	202	10	212	37.0%	127	6	4.7%	2.6%	4.3%	6.6%

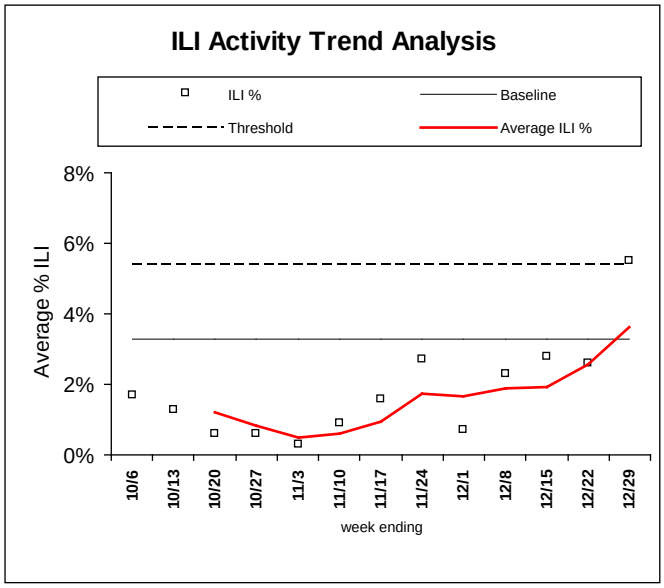




Southeastern Region (ILI activity is High)

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							
861	238	16	254	29.5%	107	11	10.3%	5.5%	3.3%	5.4%





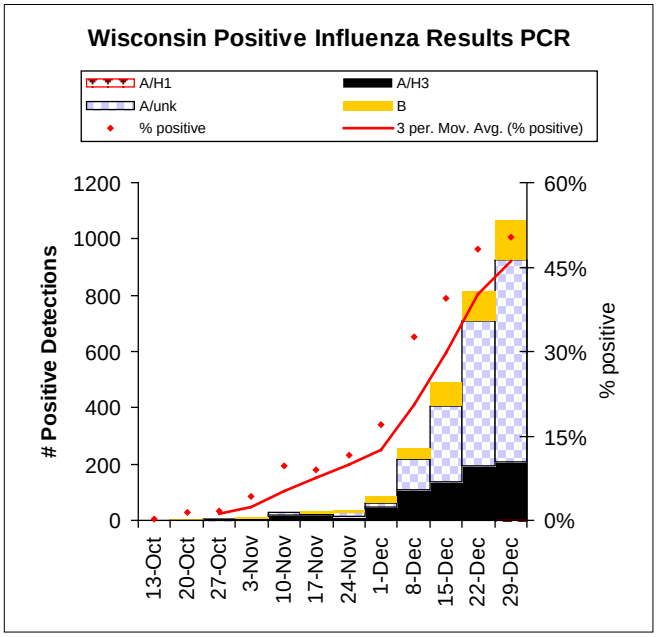
LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES (PCR)

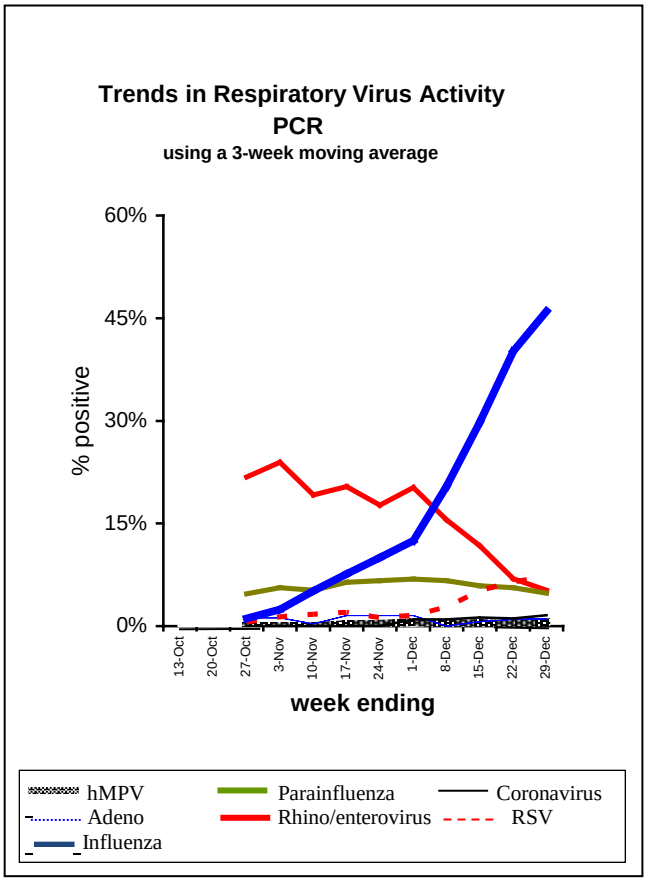
Respiratory Agent	Tested	Positive	% Positive	Flu A 2009/H1N1	Flu A Seasonal H3	Flu A (Unk)	Flu B
Influenza	2124	1069	50.3%	5	201	719	144

Respiratory Agent	Tested	Positive	% Positive	P1	P2	P3	P4
Parainfluenza	428	19	4.4%	1	4	14	0

Respiratory Agent	Tested	Positive	% Positive	CoV-229E	CoV-OC43	CoV-NL63	CoV-HKU1
Coronavirus	235	3	1.3%	0	3	0	0

Respiratory Agent	Tested	Positive	% Positive
RSV	605	45	7.4%
Human Metapneumovirus	332	3	0.9%
Rhino-entero	299	18	6.0%
Adenovirus	299	1	0,3%





Cumulative number of positive influenza tests
By subtype, October 5, 2012 to present

	2009 A/H1	Seasonal A/H3	A/Unknown	B	Total
Total Number positive	15	738	1638	436	2827
% of Total number positive	<1%	26%	58%	15%	100%
	Total Influenza A % 85%			Total Influenza B % 15%	

Influenza-associated Hospitalizations, October 5, 2012 to present

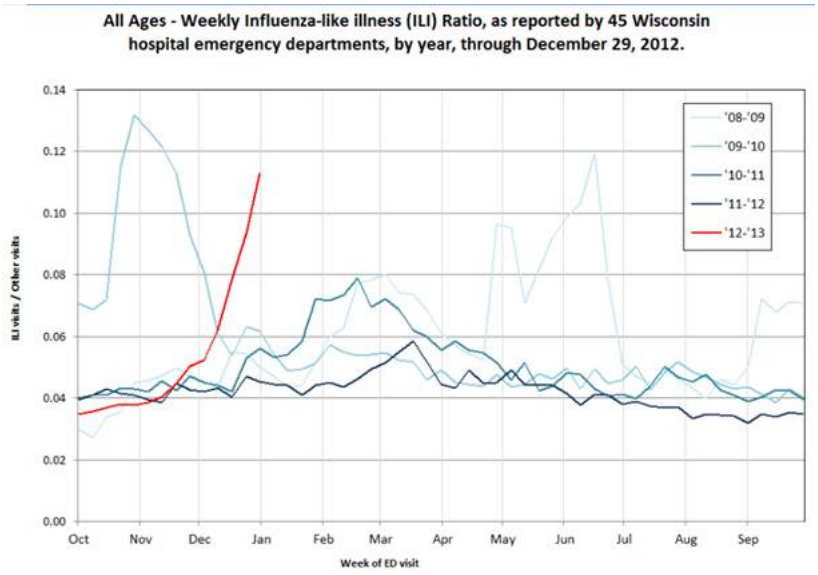
New hospitalizations this week 375

Age Group	Total Number Reported (year)	Influenza Subtypes					Admitted to ICU	Required Mechanical Ventilation
		A/H1	A/H3	A/Unknown	B	Not reported		
< 1 year								
1 to 4								
5 to 17								
18 to 49								
50 to 64								
65 and over								
Total								

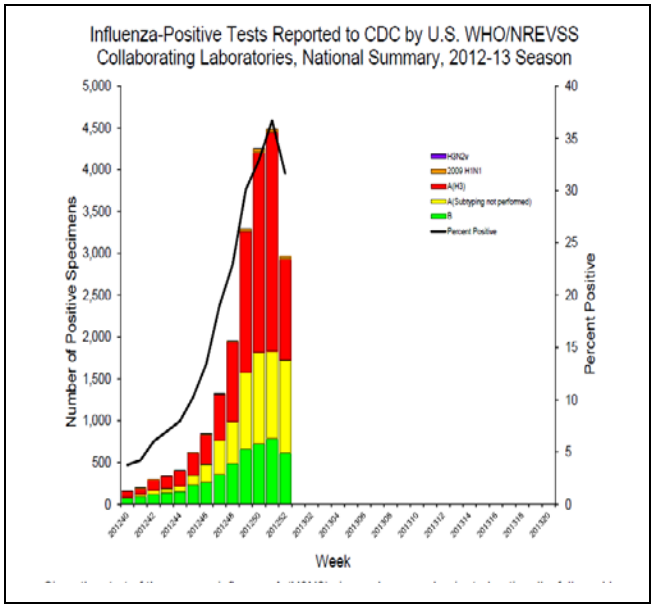
Because of time constraints, the recent surge of hospitalizations we were not able to break down the totals by age and subtype. As of Friday 1/4/12 there have been a total of 760 flu associated hospitalizations since Oct 1, 2012. During the entire 2011-2012 influenza season there were a total of 389 flu associated hospitalizations

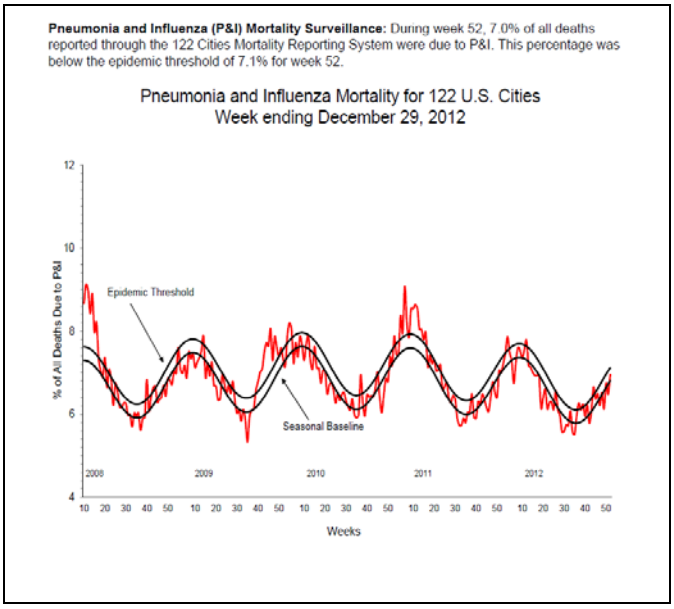
Cumulative hospitalization rate /100,000 age specific population

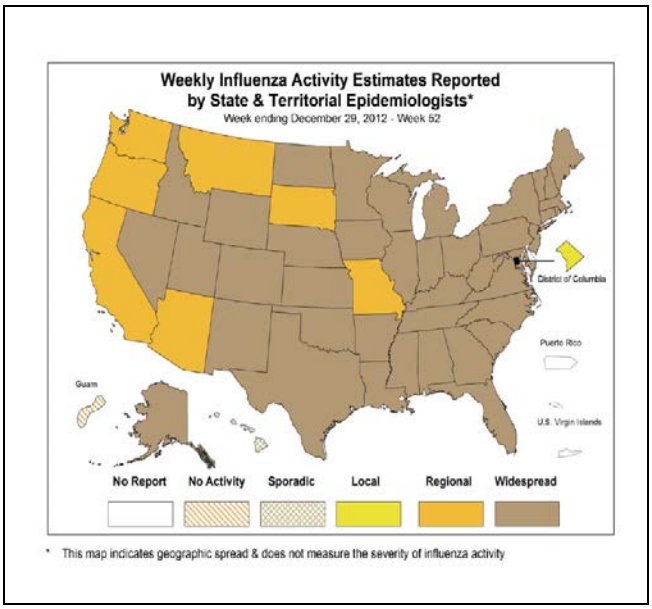
Graphs will be included later in the influenza season

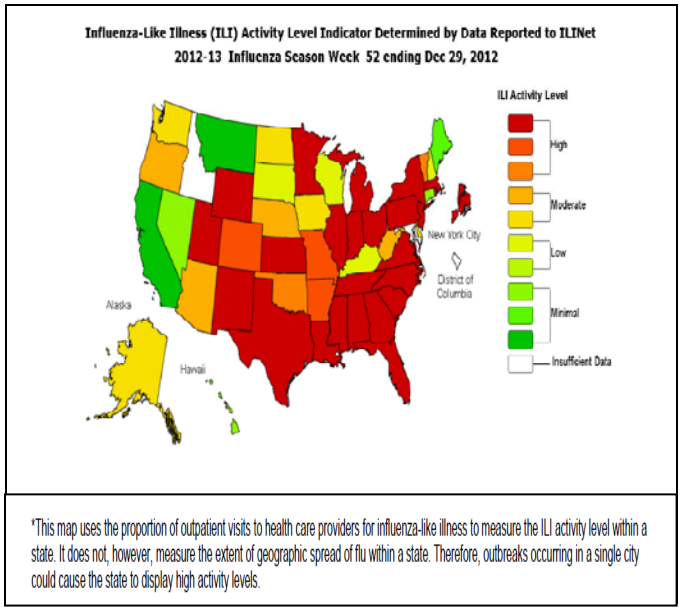


NATIONAL INFLUENZA SURVEILLANCE



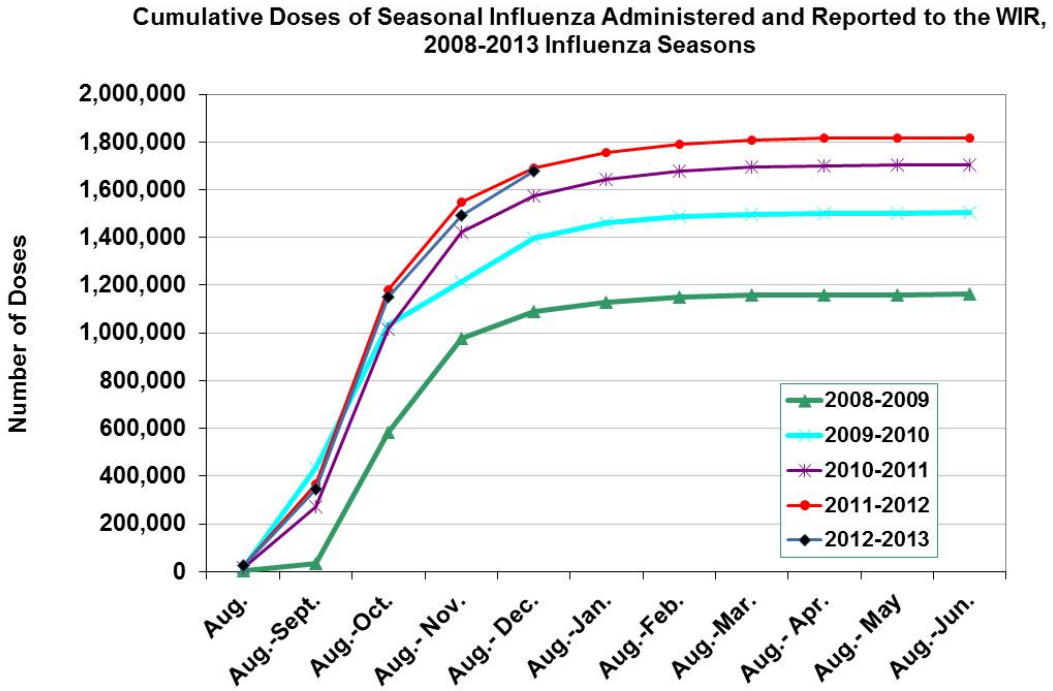




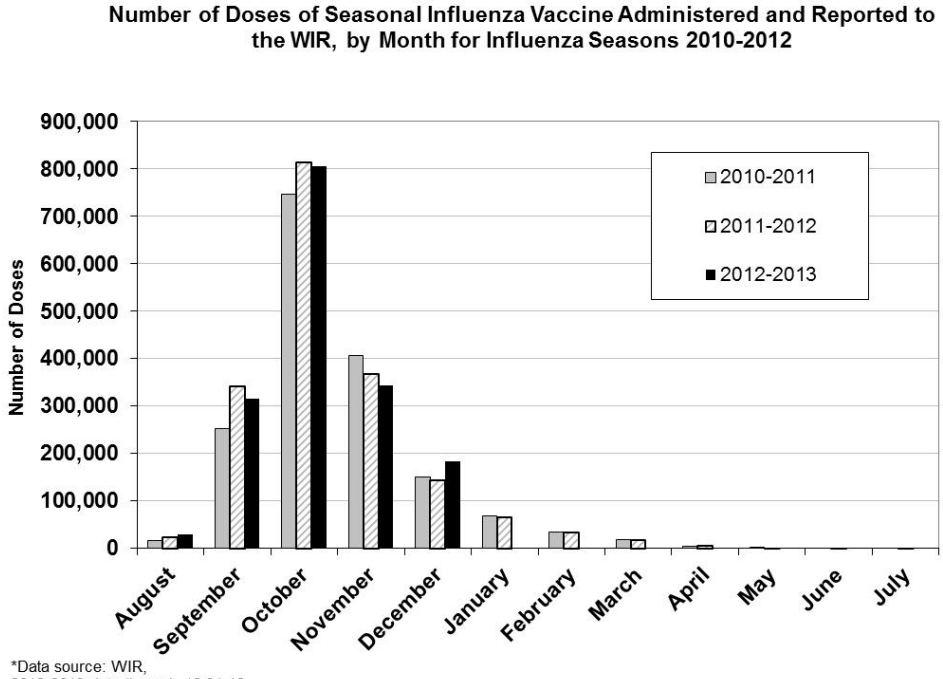


*This map uses the proportion of outpatient visits to health care providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the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

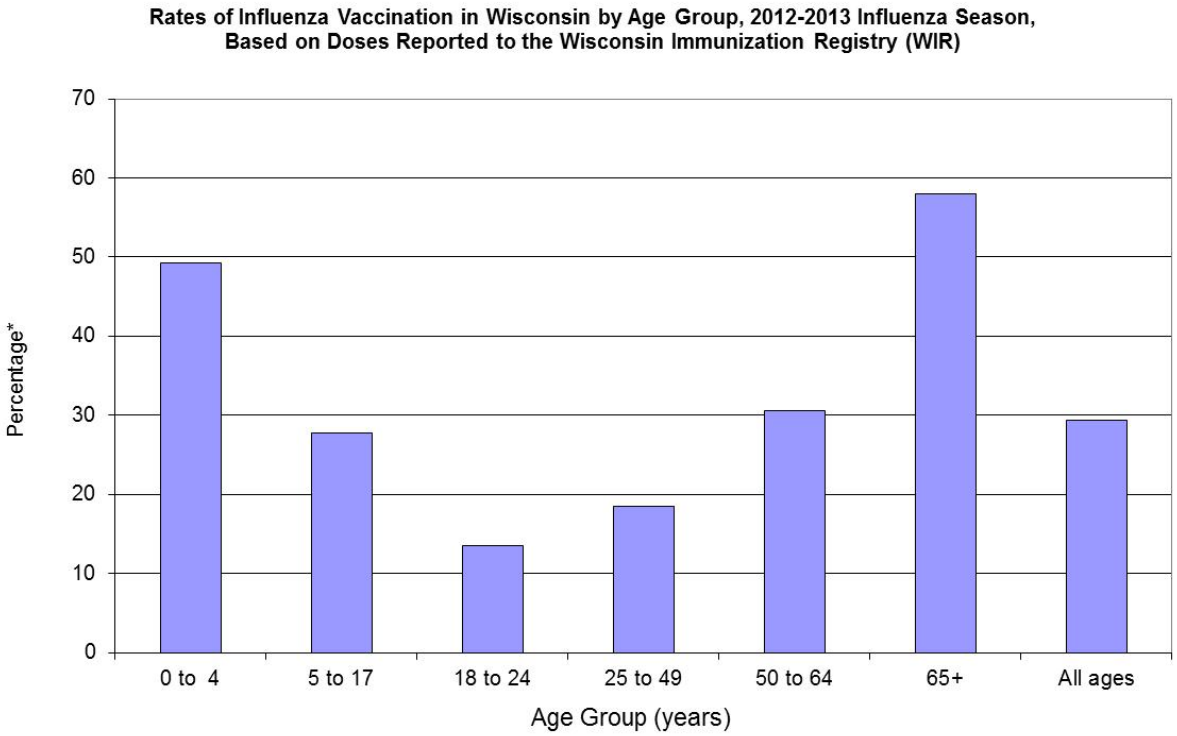
Seasonal Influenza Vaccination in Wisconsin
Based on Doses Reported to the Wisconsin Immunization Registry (WIR)
Jan. 4, 2013



Data source: WIR
2012-2013 data 8.1.12 through 12.31.12



*Data source: WIR,
2012-2013 data through 12.31.12



* Numerator: Number of persons recorded in the WIR as having received at least one dose of seasonal influenza vaccine between 8/1/2012 to 12/31/2012, by age group. Denominator source: 2010 Wisconsin Interactive Statistics on Health (WISH) population estimates, by age group

- These graphs include only doses of seasonal influenza vaccine administered and reported to the Wisconsin Immunization Registry (WIR).
- Data for 2012-2013 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 Stephanie Schauer, epidemiologist, with the Wisconsin Immunization Program at (608) 264-9884.