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 18, 2010, week 10-50

AT-A-GLANCE

- Respiratory viruses identified this week :
  Rhinovirus/enterovirus, influenza, and parainfluenza were the predominant viruses

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

Wisconsin	Low
Wisconsin (CDC level)	Minimal
Western Region	Low
Northern 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) is below baseline levels

- ILI activity in the U.S. remains below baseline levels

- The Predictive Value Positive (PVP) for rapid influenza 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 tests is: High
  (PVN is the probability of not having disease when the test result is negative)

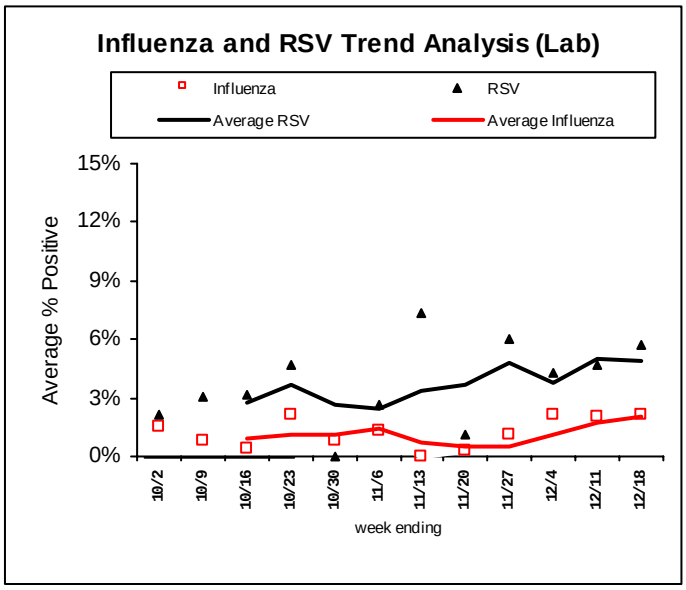
- Influenza-associated pediatric deaths (October 1, 2010-present)

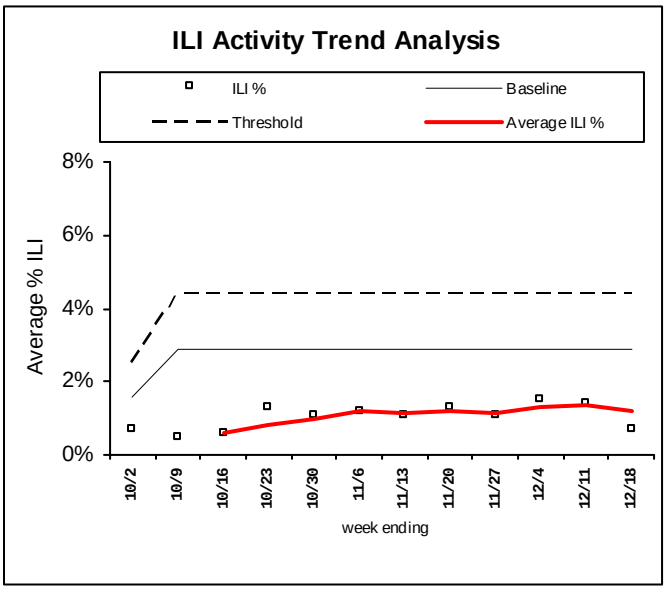
	Week 10-50	Total to Date
Wisconsin	0	0
United States	1	2

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

Wisconsin (ILI activity is Low)

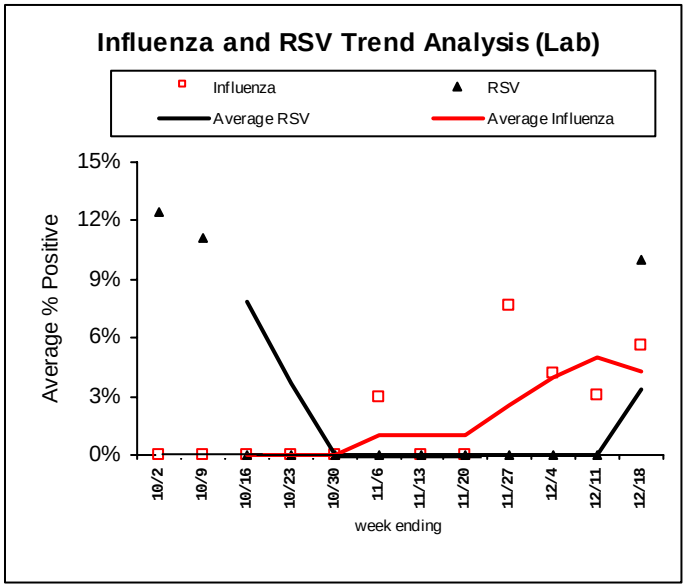
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
341	6	1	7	2.1%	140	8	5.7%	0.7%	2.9%	4.4%

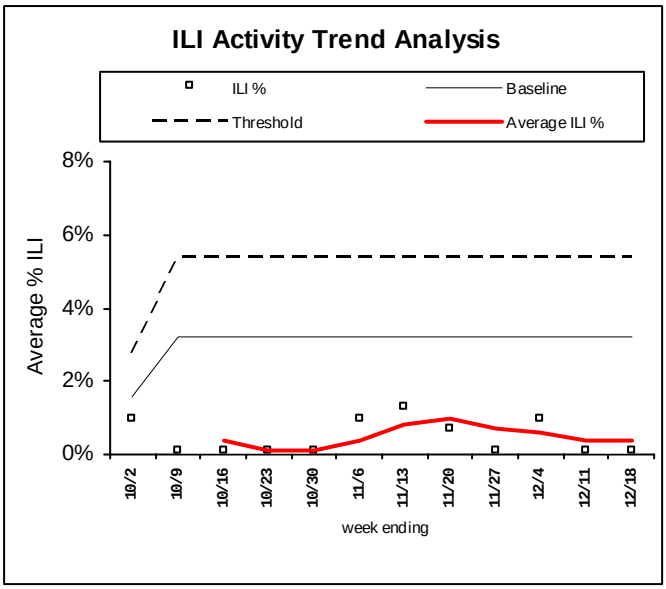




Northern Region (ILI activity is Low)

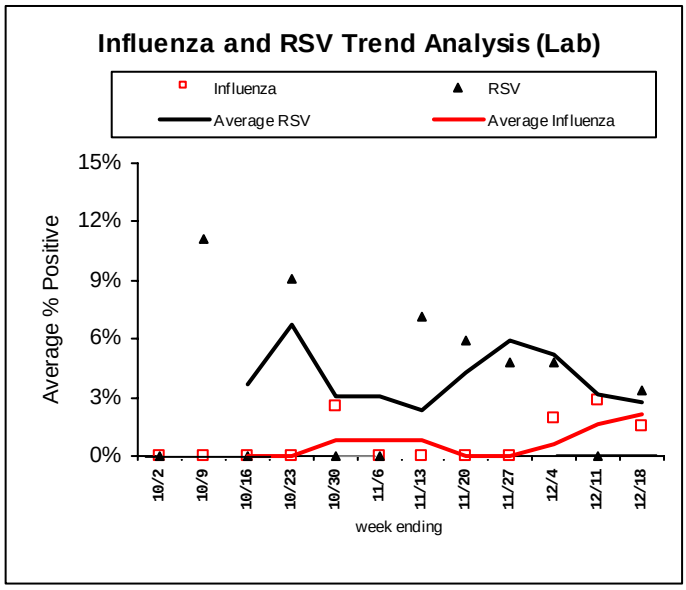
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
18	1	0	1	5.6%	10	1	10.0%	0.1%	3.2	5.4%

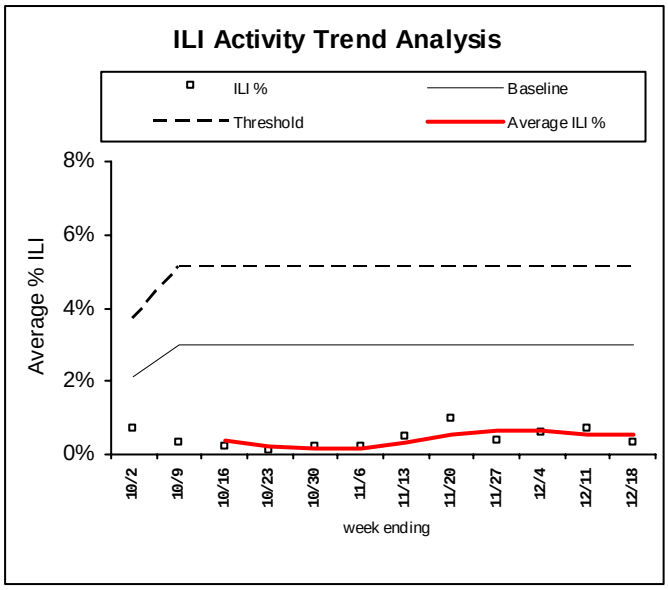




Western Region (ILI activity is Low)

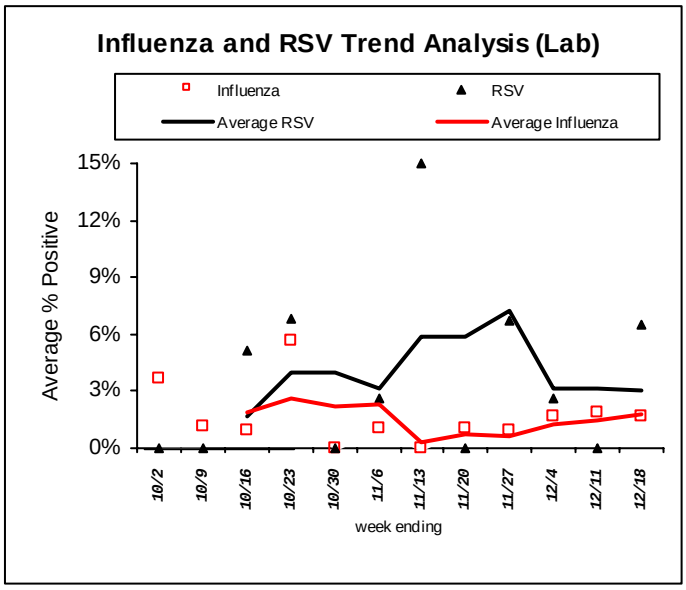
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
66	1	0	0	1.5%	19	1	3.4%	0.3%	3.0%	5.1%

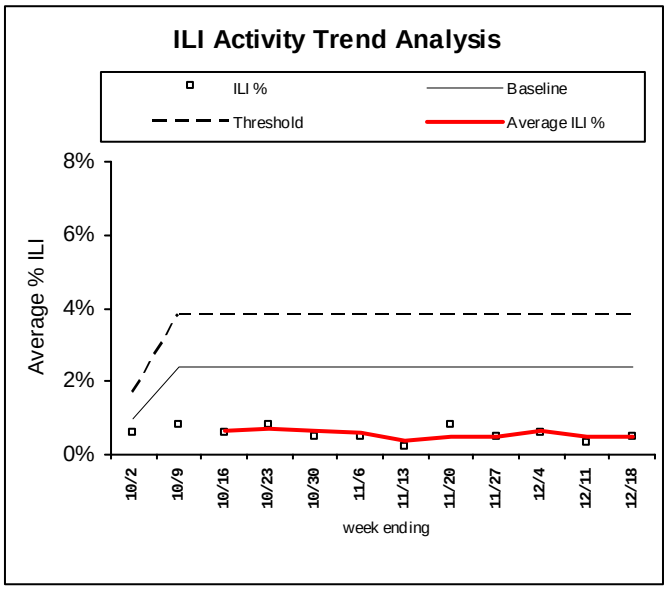




Northeastern Region (ILI activity is Low)

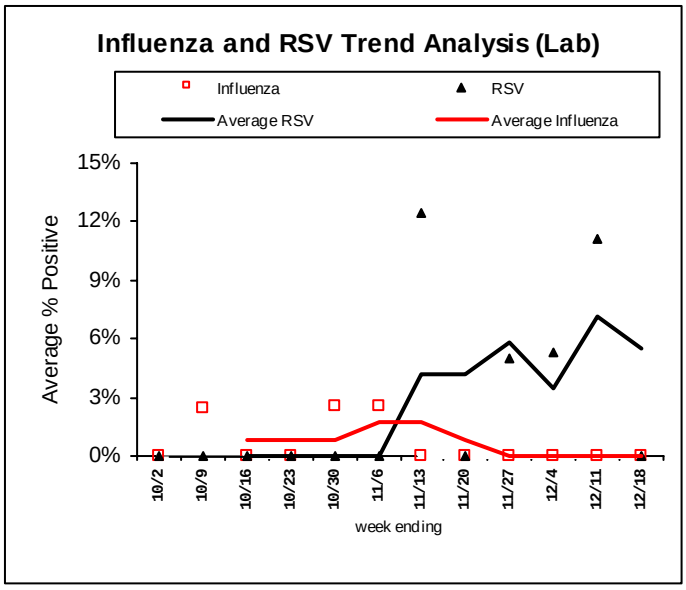
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
116	1	1	2	1.7%	31	2	6.5%	0.5%	2.4%	3.8%

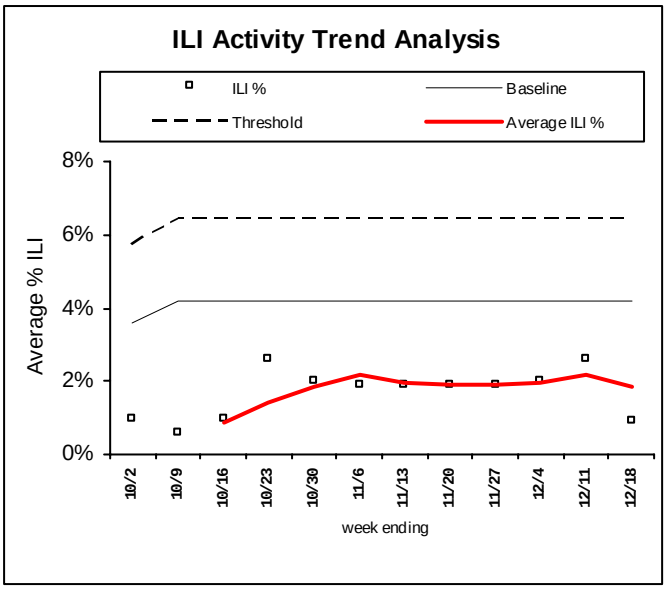




Southern Region (ILI activity is Low)

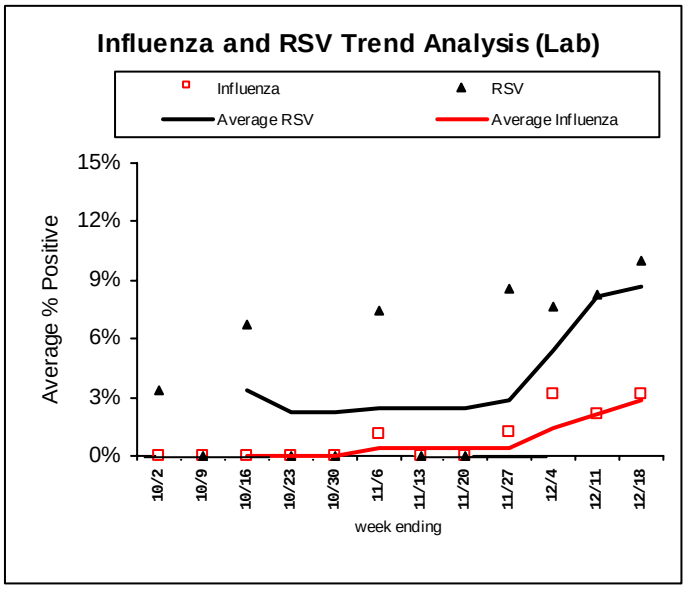
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
47	0	0	0	0.0%	30	0	0.0%	0.9%	4.2%	6.4%

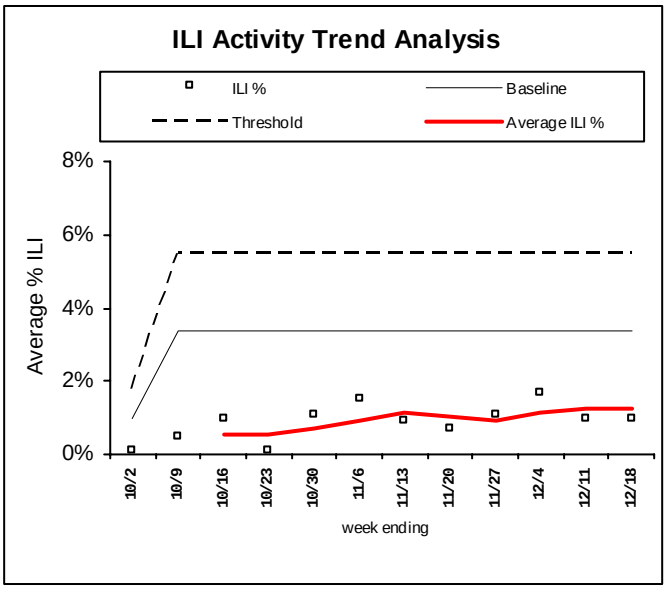




Southeastern Region (ILI activity is Low)

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							
94	3	0	0	3.2%	40	4	10.0%	1.2%	3.4%	5.5%





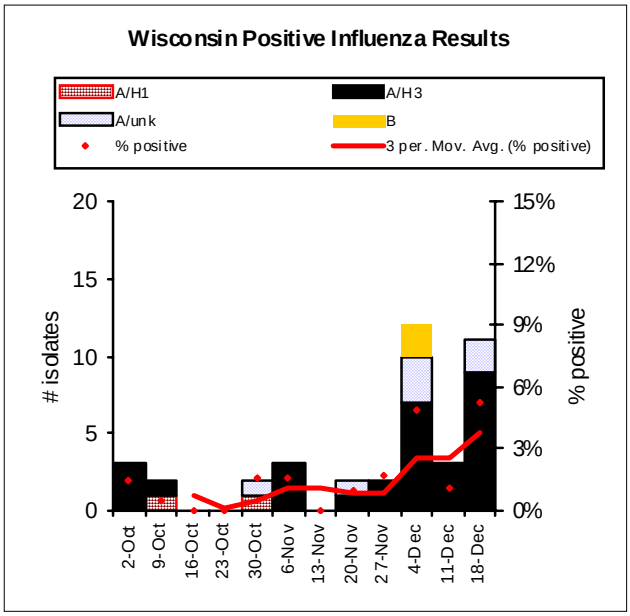
LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES (PCR)

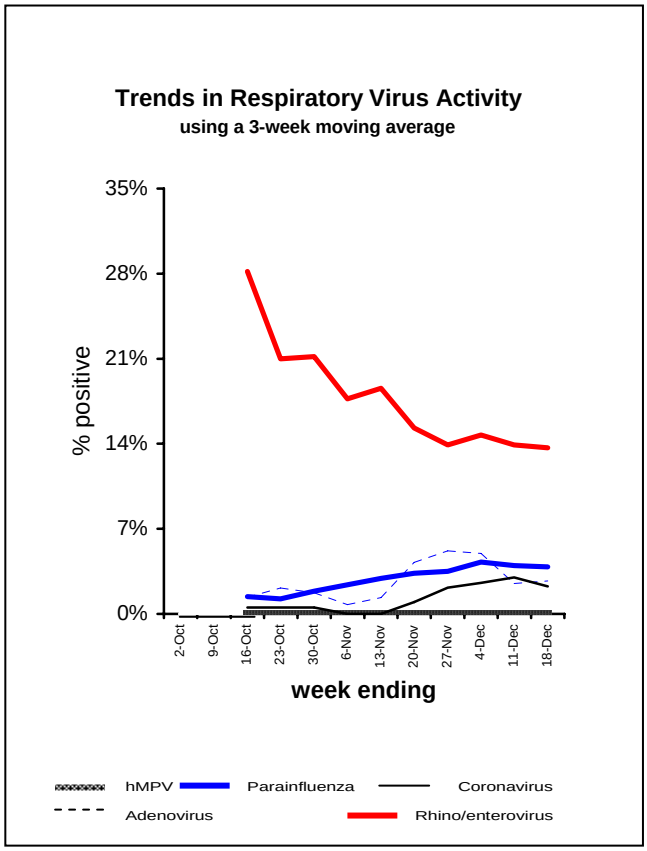
Respiratory Agent	Tested	Positive	% Positive	Flu A (H1)	Flu A (H3)	Flu A (Unk)	Flu B
Influenza	213	11	5.2%	0	9	2	0

Respiratory Agent	Tested	Positive	% Positive	P1	P2	P3	P4
Parainfluenza	161	8	4.3%	0	1	7	0

Respiratory Agent	Tested	Positive	% Positive	CoV-229E	CoV-OC43	CoV-NL63	CoV-HKU1
Coronavirus	70	1	1.4%	0	0	1	0

Respiratory Agent	Tested	Positive	% Positive
RSV	171	4	2.3%
Human Metapneumovirus	88	0	0.0%
Rhino-entero	85	10	11.8%
Adenovirus	85	3	3.5%



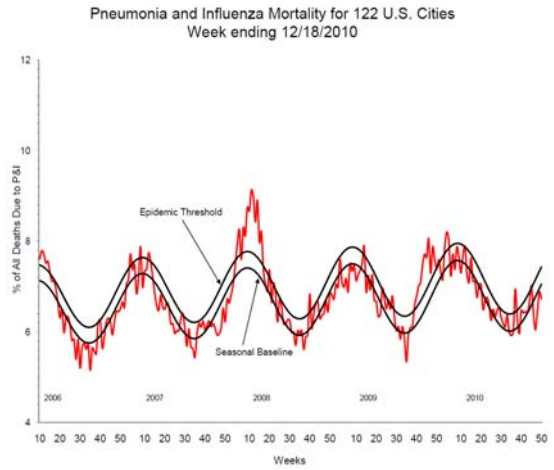


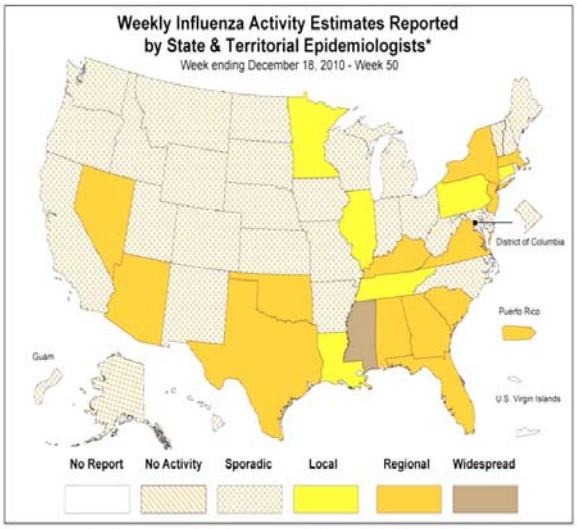
National and Regional Summary of Select Surveillance Components

	Data for current week			Data cumulative since October 3, 2010 (Week 40)				
HHS Surveillance Regions*	Out-patient ILI†	% positive for flu‡	Number of jurisdictions reporting regional or widespread activity§	A (H3)	2009 A (H1N1)	A (Subtyping not performed)	B	Pediatric Deaths
Nation	Normal	15.7%	15 of 54	1,016	174	1,056	1,661	2
Region 1	Normal	10.6%	1 of 6	65	5	0	1	0
Region 2	Normal	8.7%	3 of 4	47	2	72	7	1
Region 3	Normal	7.0%	1 of 6	77	33	8	13	0
Region 4	Elevated	20.1%	6 of 8	201	46	636	1,384	0
Region 5	Normal	12.6%	0 of 6	114	11	5	31	0
Region 6	Normal	9.7%	2 of 5	77	5	135	90	1
Region 7	Normal	5.6%	0 of 4	15	4	29	10	0
Region 8	Normal	15.4%	0 of 6	314	39	140	18	0
Region 9	Normal	8.5%	2 of 5	81	28	25	102	0
Region 10	Normal	2.1%	0 of 4	25	1	6	5	0

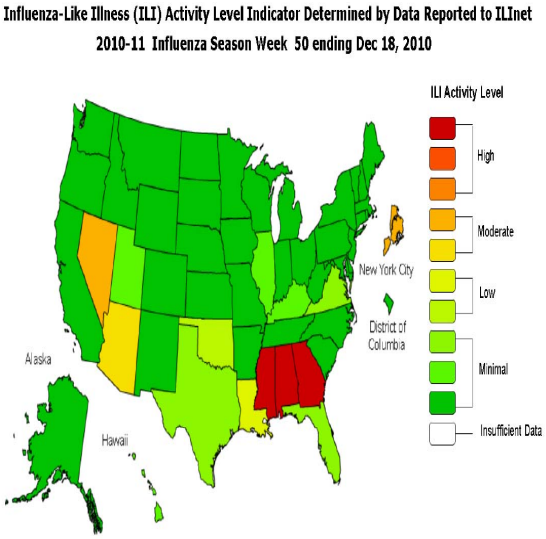
*HHS regions (Region 1 CT, ME, MA, NH, RI, VT; Region 2: NJ, NY, Puerto Rico, U.S. Virgin Islands; Region 3: DE, DC, MD, PA, VA, WV; Region 4: AL, FL, GA, KY, MS, NC, SC, TN; Region 5: IL, IN, MI, MN, OH, WI; Region 6: AR, LA, NM, OK, TX; Region 7: IA, KS, MO, NE; Region 8: CO, MT, ND, SD, UT, WY; Region 9: AZ, CA, Guam, HI, NV; and Region 10: AK, ID, OR, WA)

Pneumonia and Influenza (P&I) Mortality Surveillance: During week 50, 6.7% of all deaths reported through the 122-Cities Mortality Reporting System were due to P&I. This percentage was below the epidemic threshold of 7.4% for week 50.

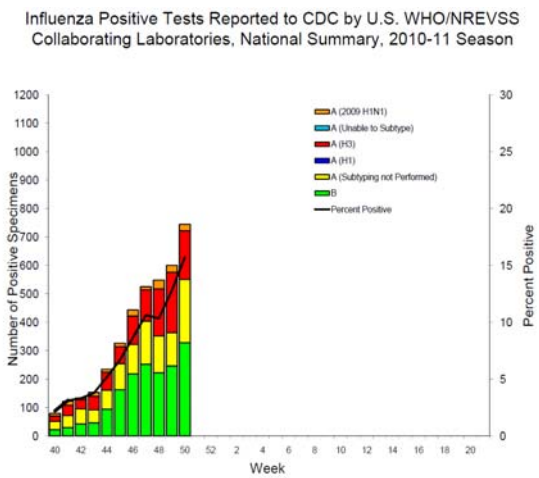




* This map indicates geographic spread & does not measure the severity of influenza activity



*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.



Antiviral Resistance:

Neuraminidase Inhibitor Resistance Testing Results on Samples Collected Since October 1, 2010.

	Viruses tested (n)	Resistant Viruses, Number (%)	Viruses tested (n)	Resistant Viruses, Number (%)
		Oseltamivir		Zanamivir
Seasonal Influenza A (H1N1)	0	0 (0.0)	0	0 (0.0)
Influenza A (H3N2)	33	0 (0.0)	33	0 (0.0)
Influenza B	54	0 (0.0)	54	0 (0.0)
2009 Influenza A (H1N1)	17	0 (0.0)	15	0 (0.0)