WISCONSIN DEPARTMENT OF HEALTH SERVICES

Division of Public Health

Bureau of Communicable Diseases and Emergency Response

Respiratory virus surveillance report for the week ending January 1, 2011, week 10-52

AT-A-GLANCE

- Respiratory viruses identified this week :
  Coronavirus, influenza, RSV and parainfluenza were 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 <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: 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)

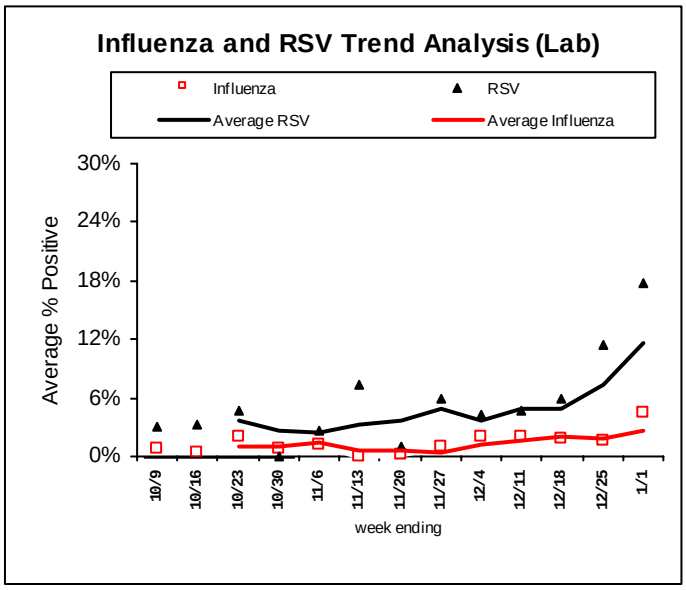
- Influenza-associated pediatric deaths (October 1, 2010-present)

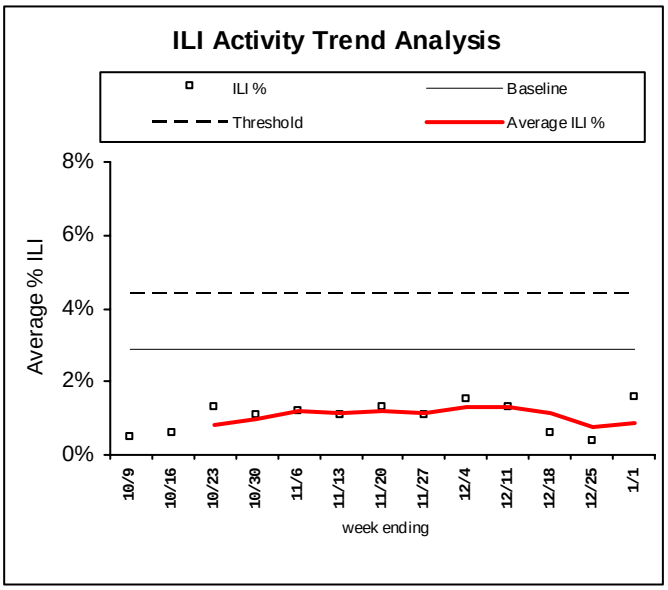
	Week 10-52	Total to Date
Wisconsin	0	0
United States	1	4

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

Wisconsin (ILI activity is Low)

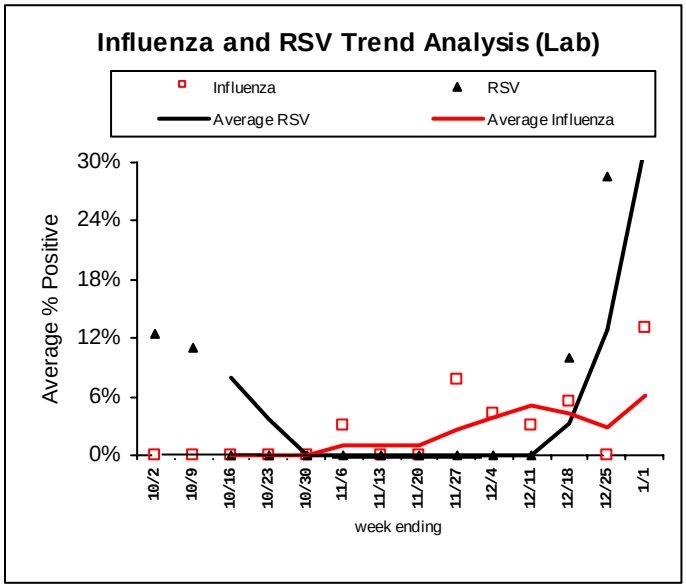
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
420	17	2	19	4.5%	147	26	17.7%	1.6%	2.9%	4.4%

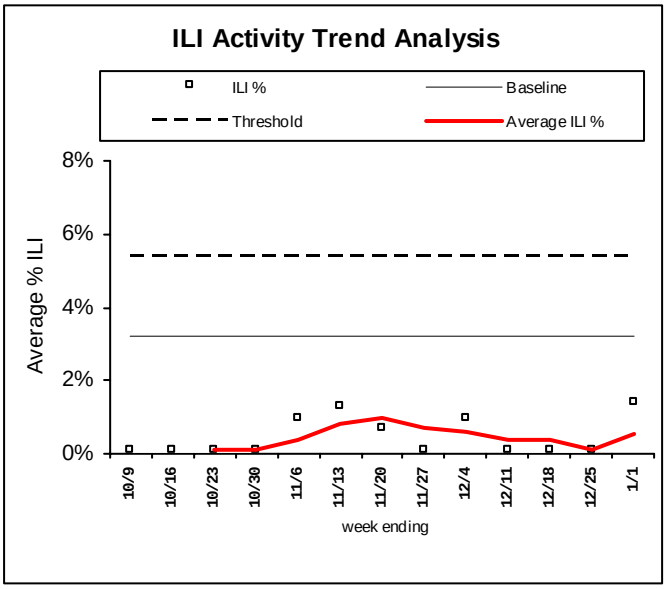




Northern Region (ILI activity is Low)

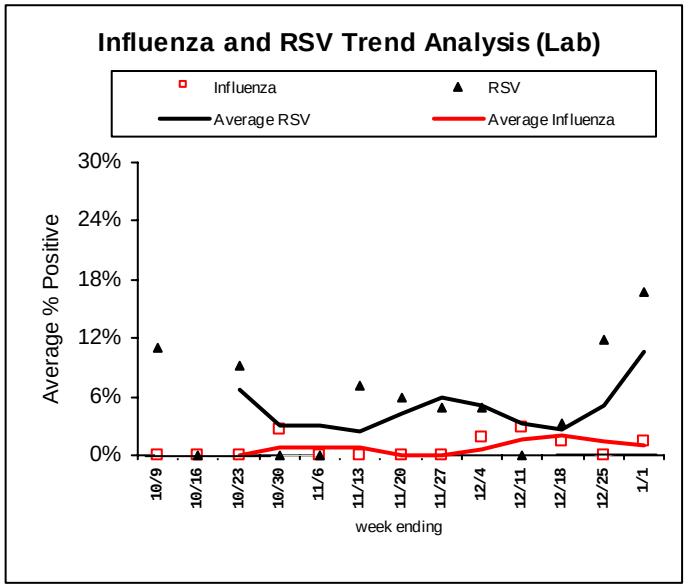
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
23	2	1	3	13.0%	7	4	57.1%	1.4%	3.2	5.4%

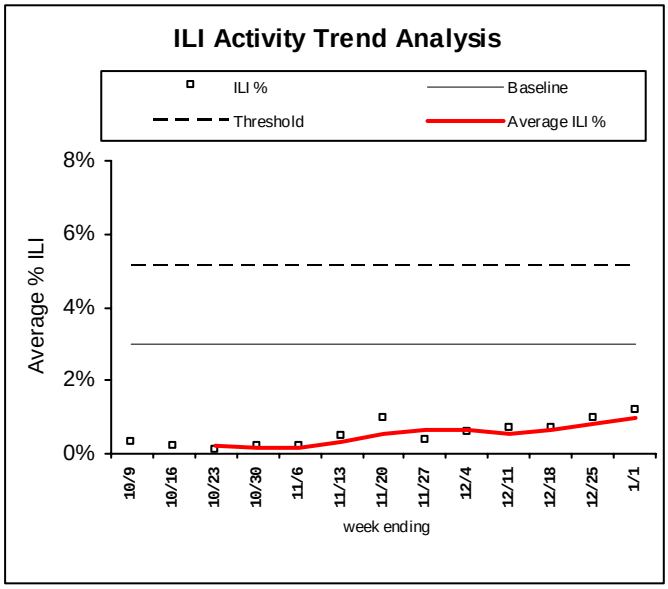




Western Region (ILI activity is Low)

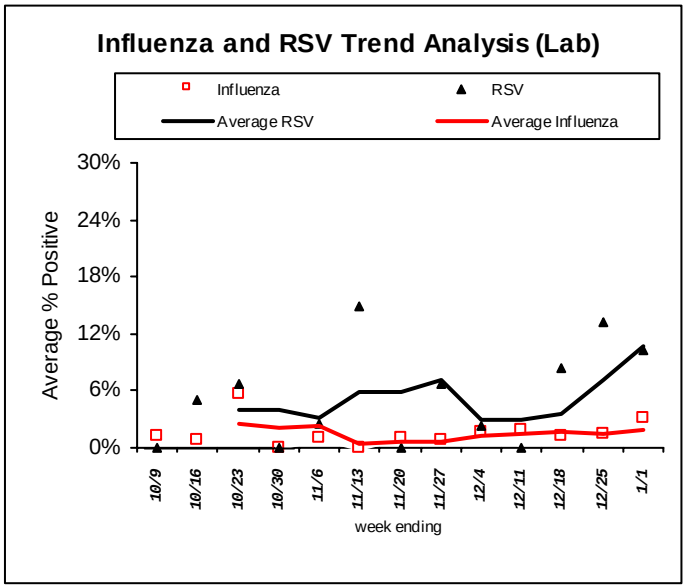
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
66	1	0	0	1.5%	12	2	16.7%	1.2%	3.0%	5.1%

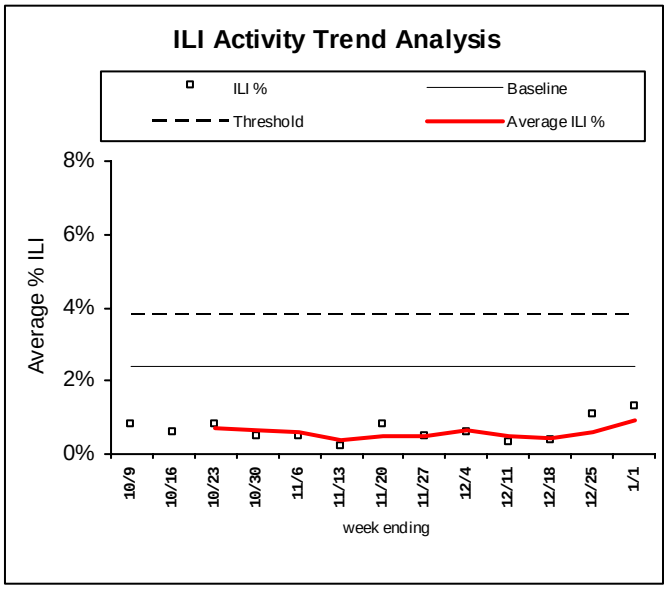




Northeastern Region (ILI activity is Low)

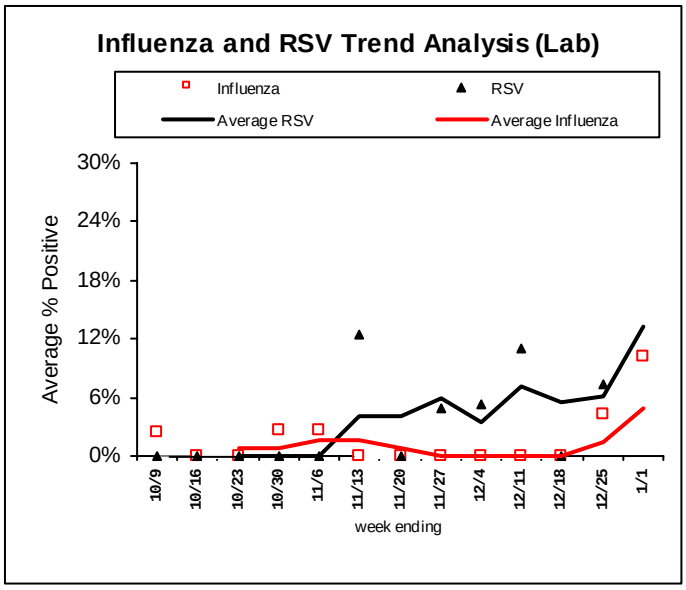
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
185	5	1	6	3.2%	68	7	17.7%	1.3%	2.4%	3.8%

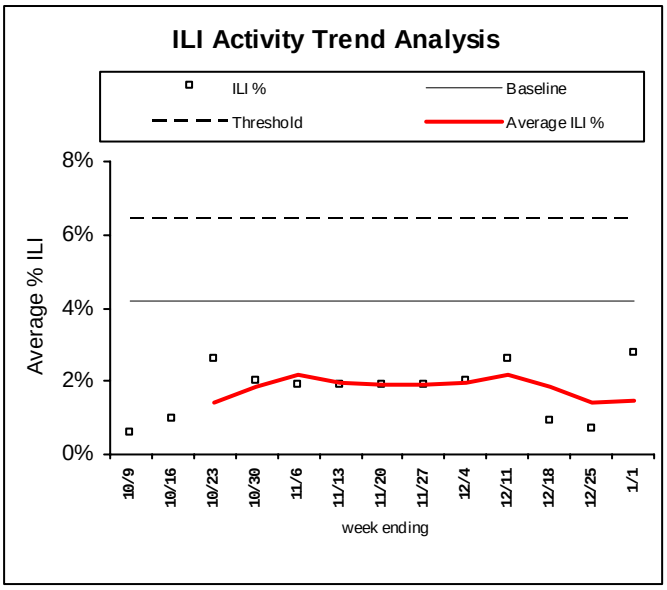




Southern Region (ILI activity is Low)

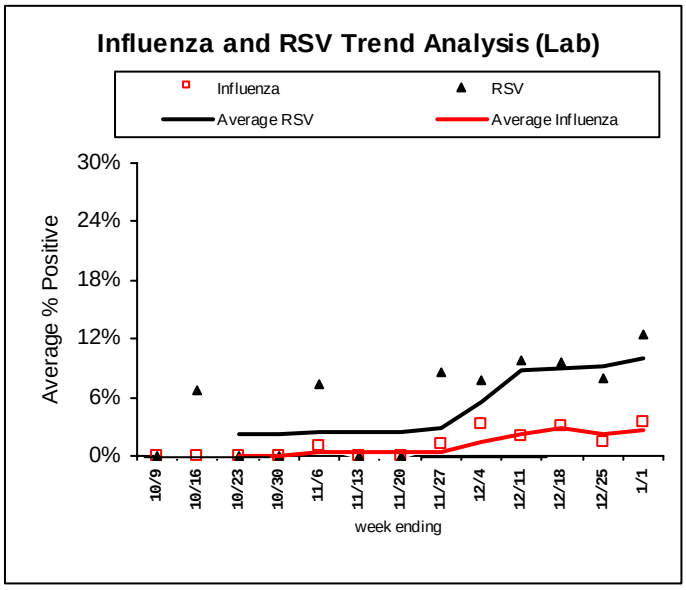
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
58	6	0	6	10.3%	28	9	32.1%	0.9%	4.2%	6.4%

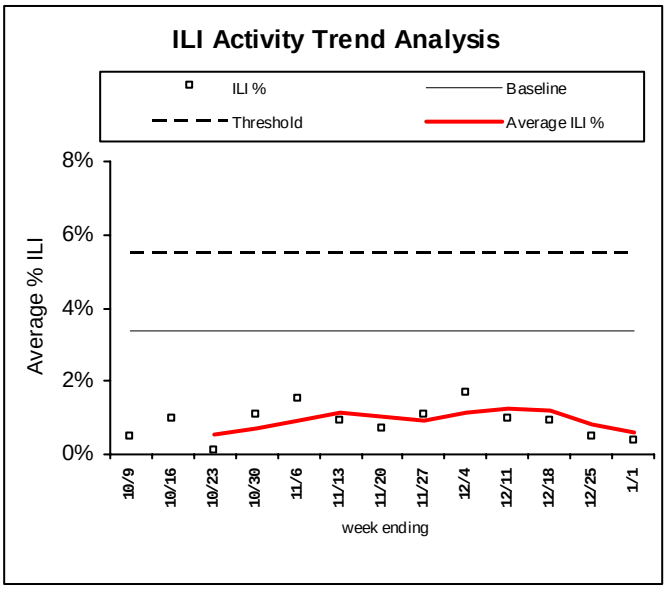




Southeastern Region (ILI activity is Low)

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							
8	3	0	0	3.4%	32	4	12.5%	0.4%	3.4%	5.5%





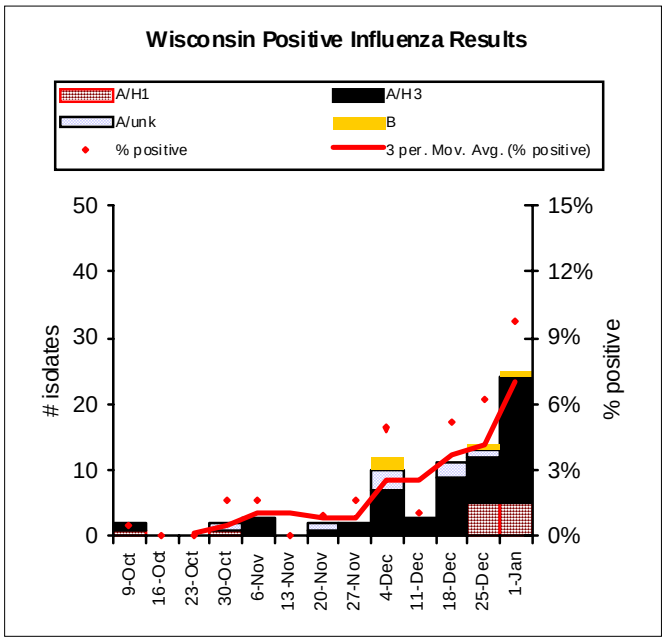
LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES (PCR)

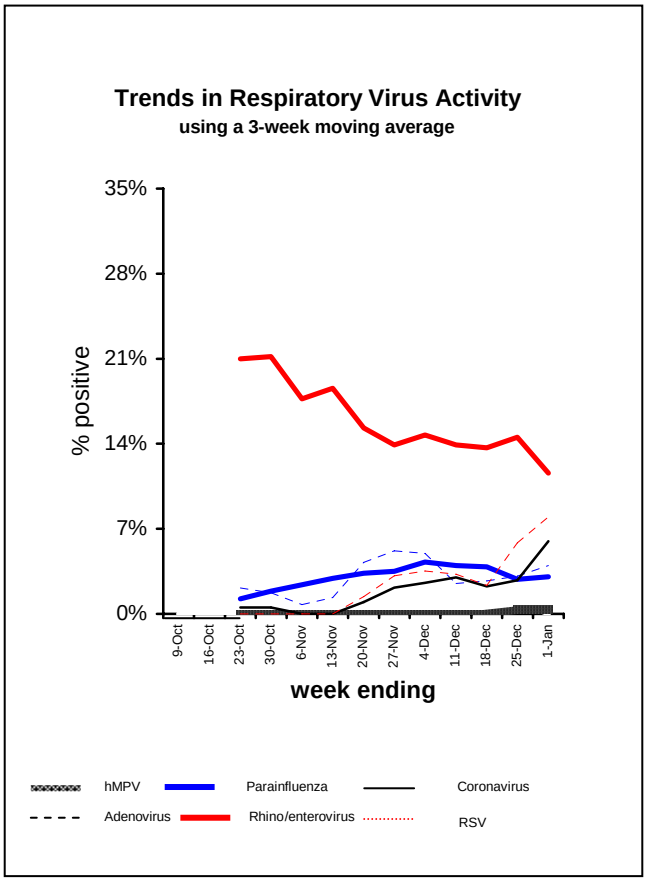
Respiratory Agent	Tested	Positive	% Positive	Flu A (H1)	Flu A (H3)	Flu A (Unk)	Flu B
Influenza	259	25	9.7%	5	19	0	1

Respiratory Agent	Tested	Positive	% Positive	P1	P2	P3	P4
Parainfluenza	172	5	2.9%	0	0	5	0

Respiratory Agent	Tested	Positive	% Positive	CoV-229E	CoV-OC43	CoV-NL63	CoV-HKU1
Coronavirus	94	13	13.8%	2	6	5	0

Respiratory Agent	Tested	Positive	% Positive
RSV	191	19	9.9%
Human Metapneumovirus	106	0	1.0%
Rhino-entero	103	4	3.9%
Adenovirus	103	4	3.9%



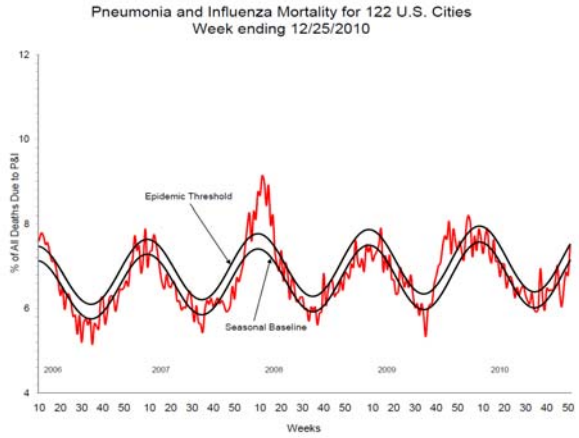


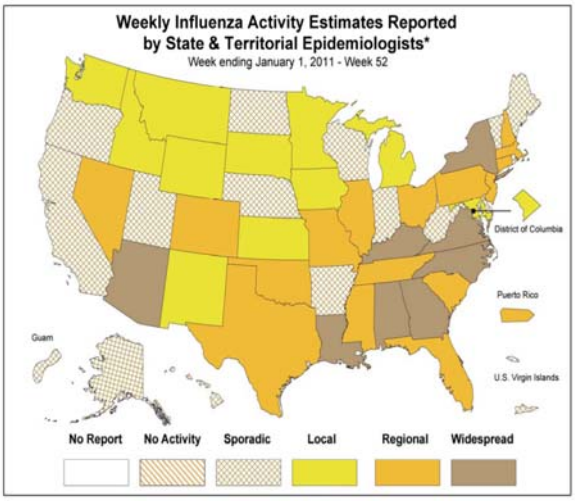
National and Regional Summary of Select Surveillance Components

	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	20.3%	25 of 54	1,975	307	1,738	2,591	4
Region 1	Normal	30.0%	3 of 6	212	16	0	9	0
Region 2	Elevated	13.1%	3 of 4	93	6	149	12	2
Region 3	Elevated	13.5%	2 of 6	183	54	27	32	0
Region 4	Elevated	23.2%	8 of 8	326	90	896	1,876	0
Region 5	Elevated	28.2%	2 of 6	203	42	26	51	0
Region 6	Normal	22.3%	3 of 5	190	7	317	345	1
Region 7	Normal	13.7%	1 of 4	45	16	81	21	0
Region 8	Normal	25.4%	1 of 6	573	42	185	23	0
Region 9	Normal	9.5%	2 of 5	100	31	49	209	1
Region 10	Normal	6.4%	0 of 4	50	3	8	13	0

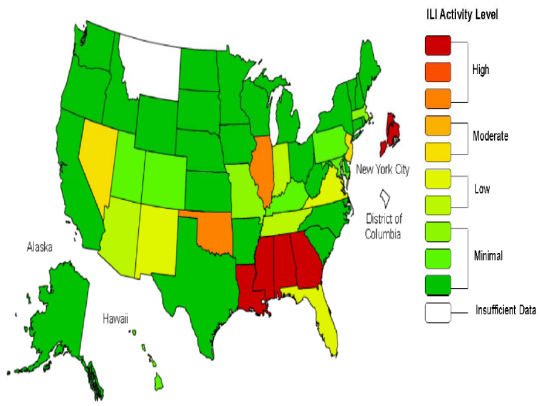
*HHS regions (Region 1 CT, ME, MA, NH, RI, VT; Region 2: NJ, NY, Puerto Rico, U.S. Virgin Islands; Region 3: DE, DC, MD, PA, VA, WV; Region 4: AL, FL, GA, KY, MS, NC, SC, TN; Region 5: IL, IN, MI, MN, OH, WI; Region 6: AR, LA, NM, OK, TX; Region 7: IA, KS, MO, NE; Region 8: CO, MT, ND, SD, UT, WY; Region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

Pneumonia and Influenza (P&I) Mortality Surveillance: During week 51, 7.5% of all deaths reported through the 122-Cities Mortality Reporting System were due to P&I. This percentage was at the epidemic threshold of 7.5% for week 51.

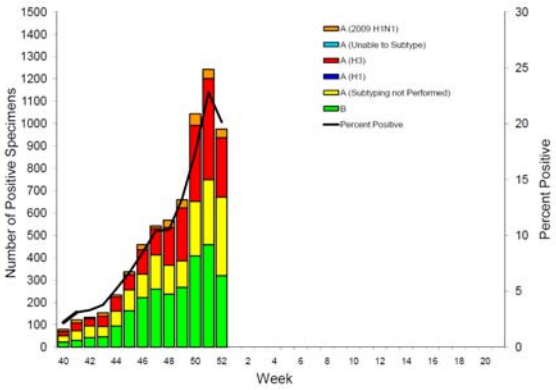




* This map indicates geographic spread & does not measure the severity of influenza activity



*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 (%) Oseltamivir	Viruses tested (n)	Resistant Viruses, Number (%) Zanamivir
Seasonal Influenza A (H1N1)	0	0 (0.0)	0	0 (0.0)
Influenza A (H3N2)	109	0 (0.0)	109	0 (0.0)
Influenza B	91	0 (0.0)	91	0 (0.0)
2009 Influenza A (H1N1)	31	0 (0.0)	21	0 (0.0)