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 8, 2011, week 11-01

AT-A-GLANCE

- Respiratory viruses identified this week :
  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 but 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: High but decreasing
  (PVN is the probability of not having disease when the test result is negative)

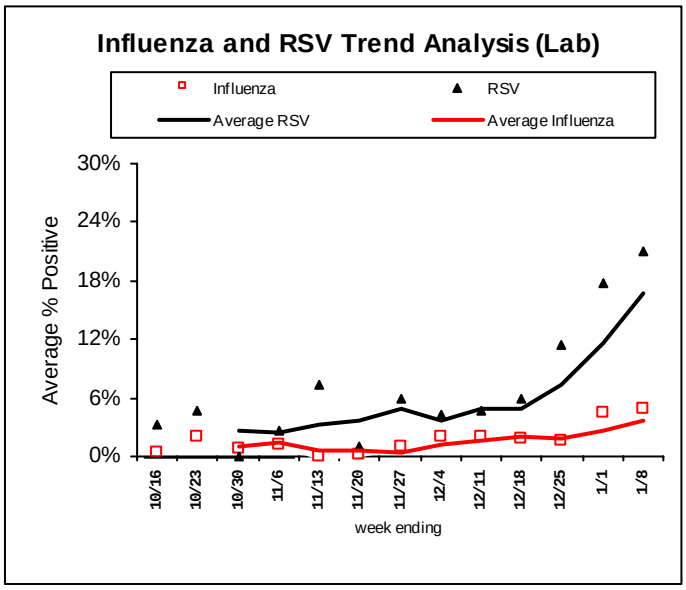
- Influenza-associated pediatric deaths (October 1, 2010-present)

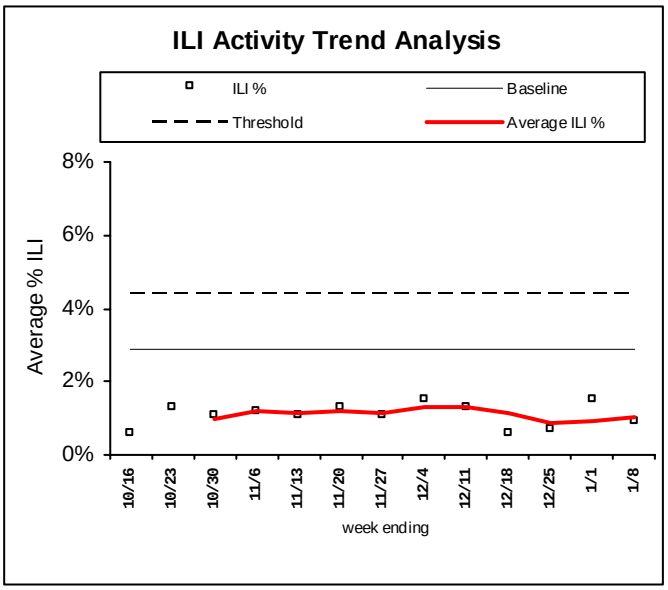
	Week 11-01	Total to Date
Wisconsin	0	0
United States	4	8

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

Wisconsin (ILI activity is Low)

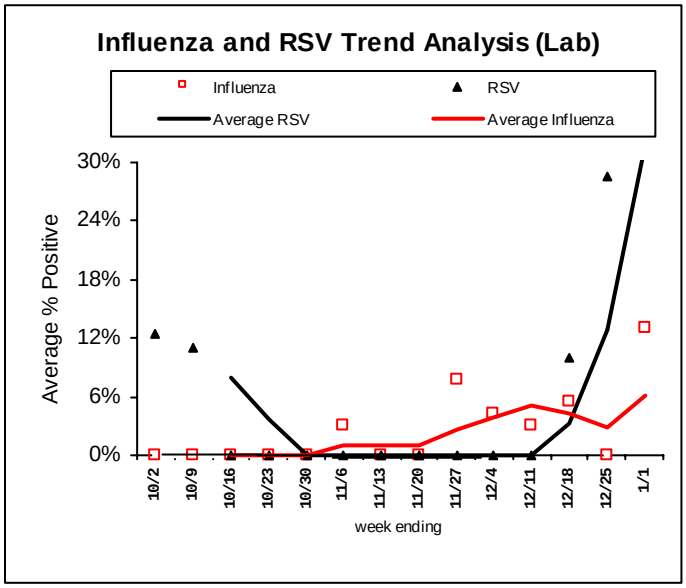
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
549	26	1	27	4.9%	185	39	21.1%	0.9%	2.9%	4.4%

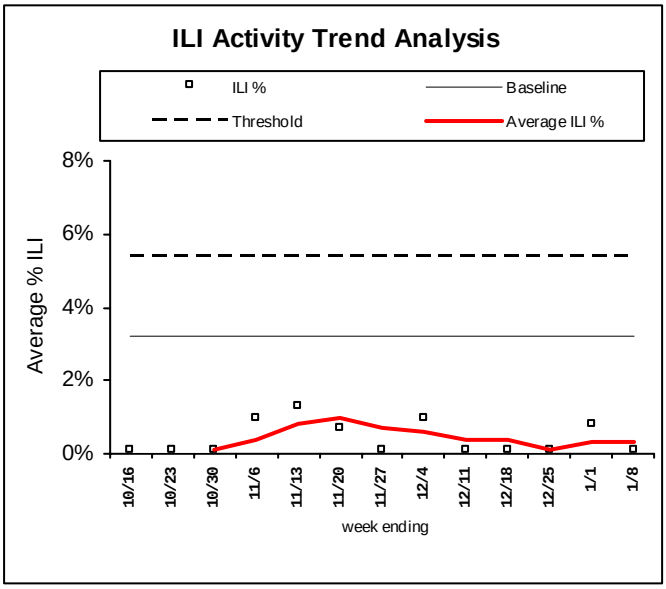




Northern Region (ILI activity is Low)

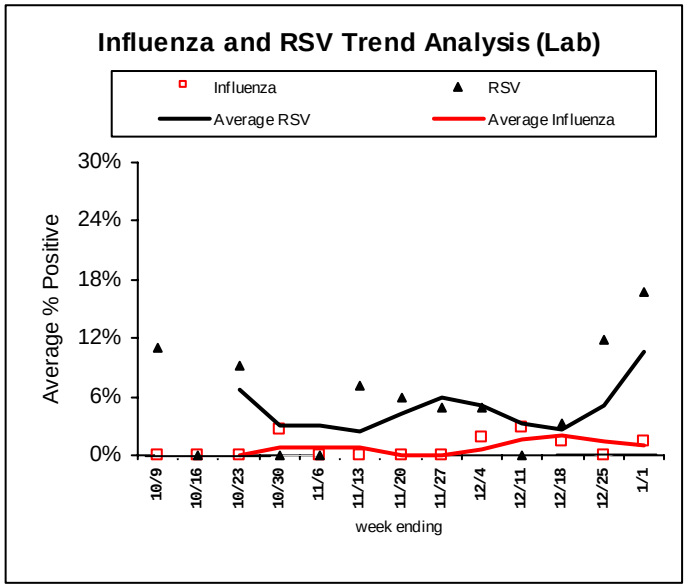
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
23	2	1	3	13.0%	7	4	57.1%	0.1%	3.2	5.4%

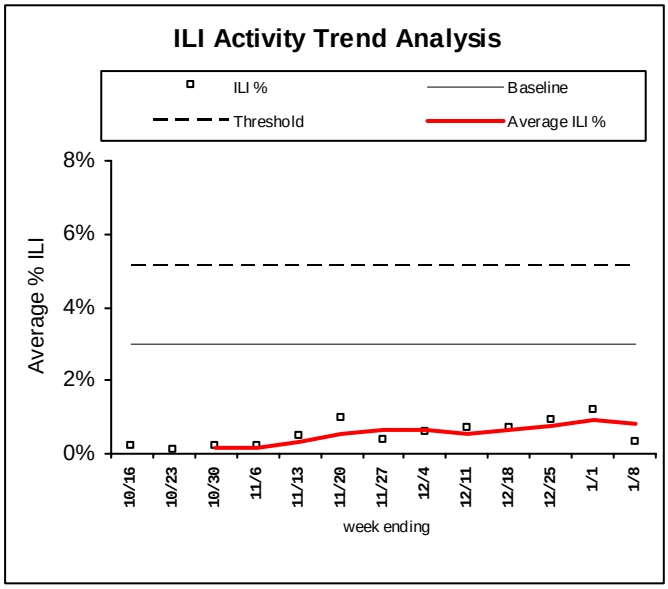




Western Region (ILI activity is Low)

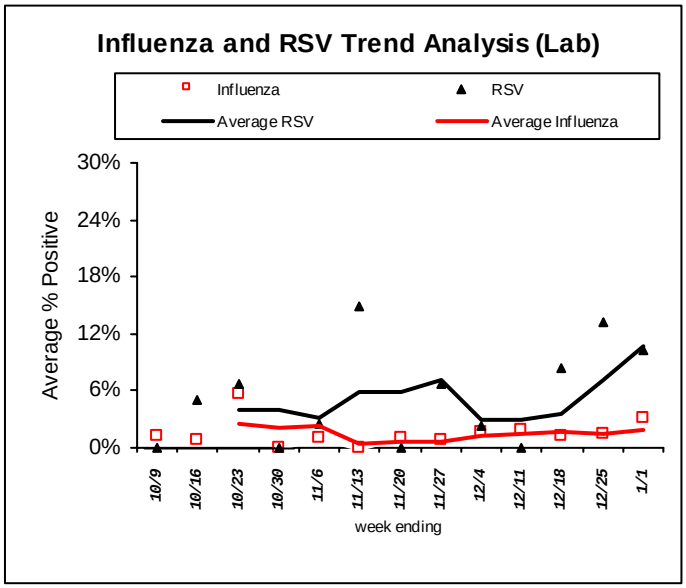
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
66	1	0	0	1.5%	12	2	16.7%	0.3%	3.0%	5.1%

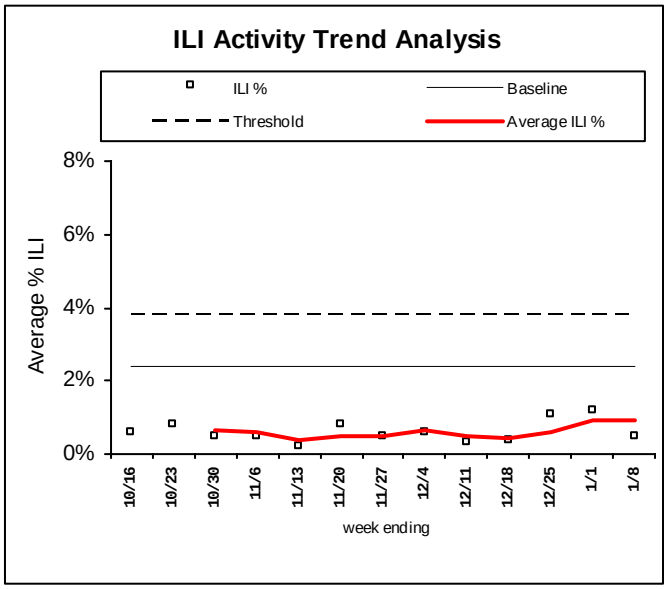




Northeastern Region (ILI activity is Low)

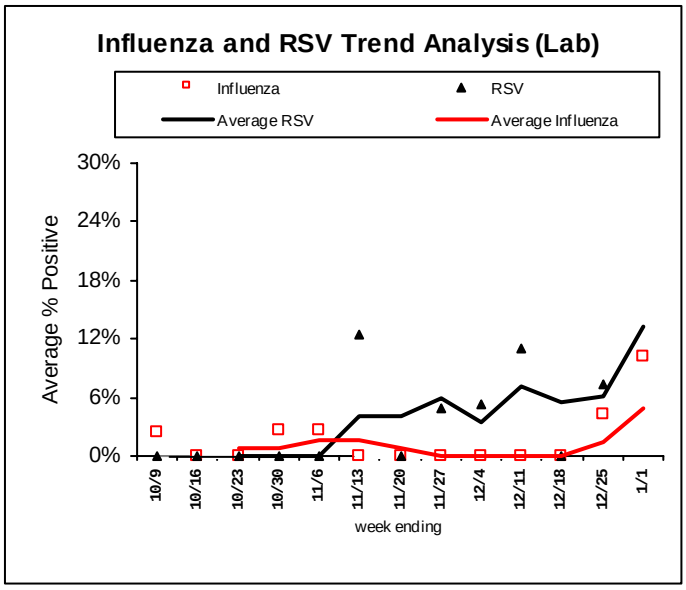
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
185	5	1	6	3.2%	68	7	17.7%	0.5%	2.4%	3.8%

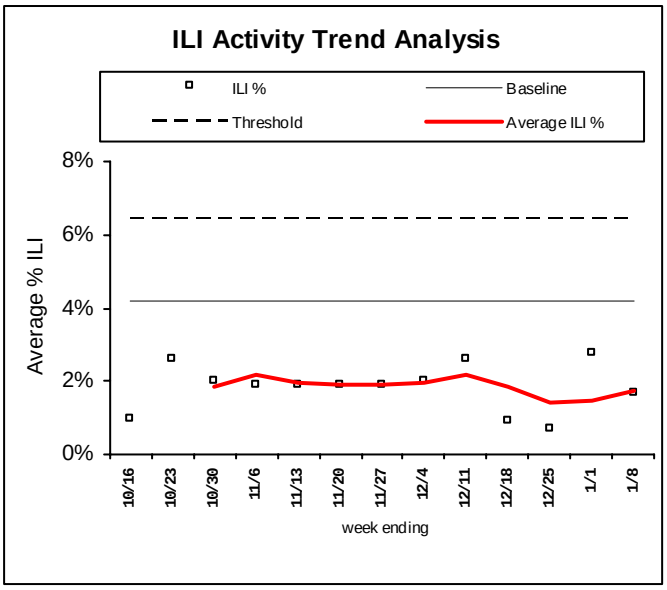




Southern Region (ILI activity is Low)

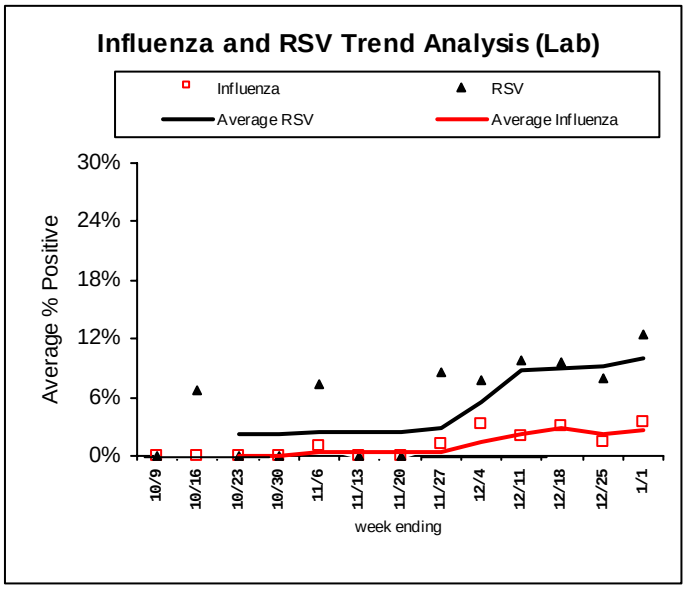
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
58	6	0	6	10.3%	28	9	32.1%	1.7%	4.2%	6.4%

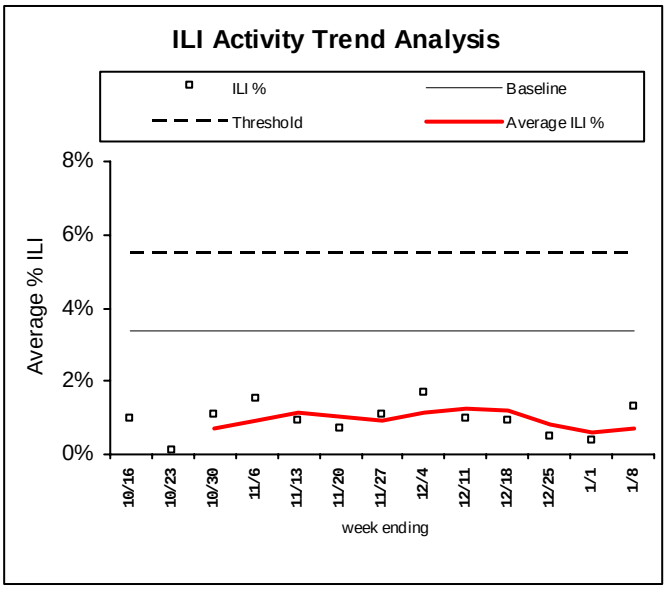




Southeastern Region (ILI activity is Low)

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%	1.3%	3.4%	5.5%





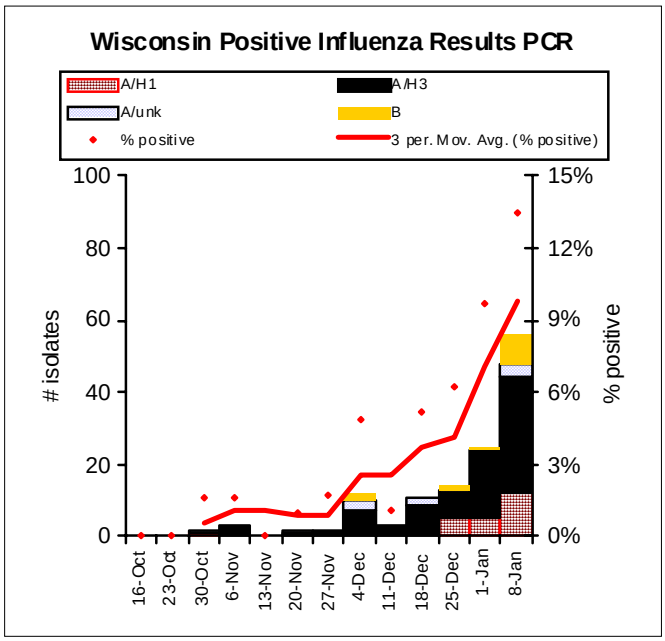
LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES (PCR)

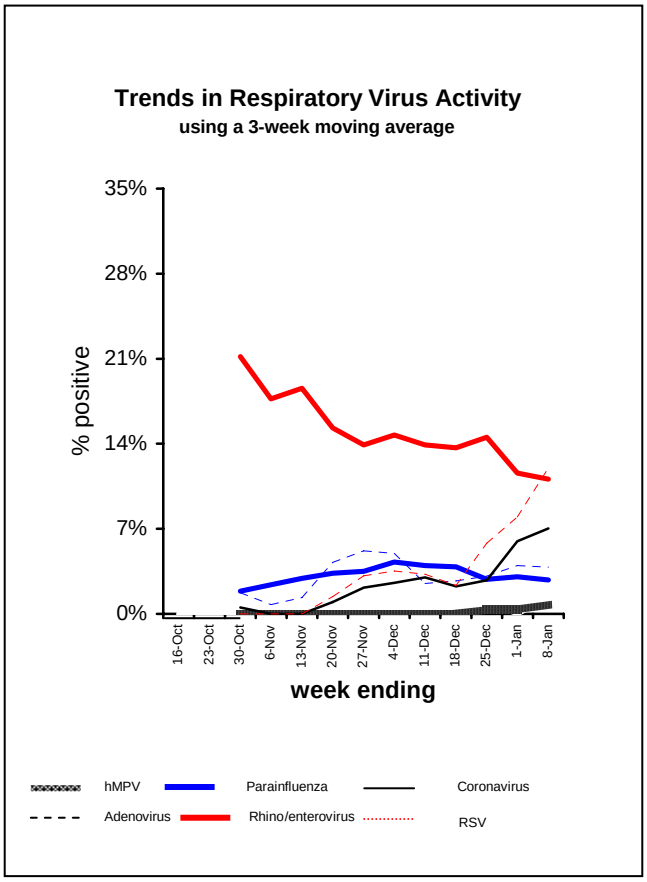
Respiratory Agent	Tested	Positive	% Positive	Flu A (H1)	Flu A (H3)	Flu A (Unk)	Flu B
Influenza	415	56	13.5%	12	32	4	8

Respiratory Agent	Tested	Positive	% Positive	P1	P2	P3	P4
Parainfluenza	231	8	3.5%	0	0	7	1

Respiratory Agent	Tested	Positive	% Positive	CoV-229E	CoV-OC43	CoV-NL63	CoV-HKU1
Coronavirus	109	5	4.6%	0	1	4	0

Respiratory Agent	Tested	Positive	% Positive
RSV	270	39	14.4%
Human Metapneumovirus	157	2	1.3%
Rhino-entero	145	15	10.3%
Adenovirus	127	4	3.1%



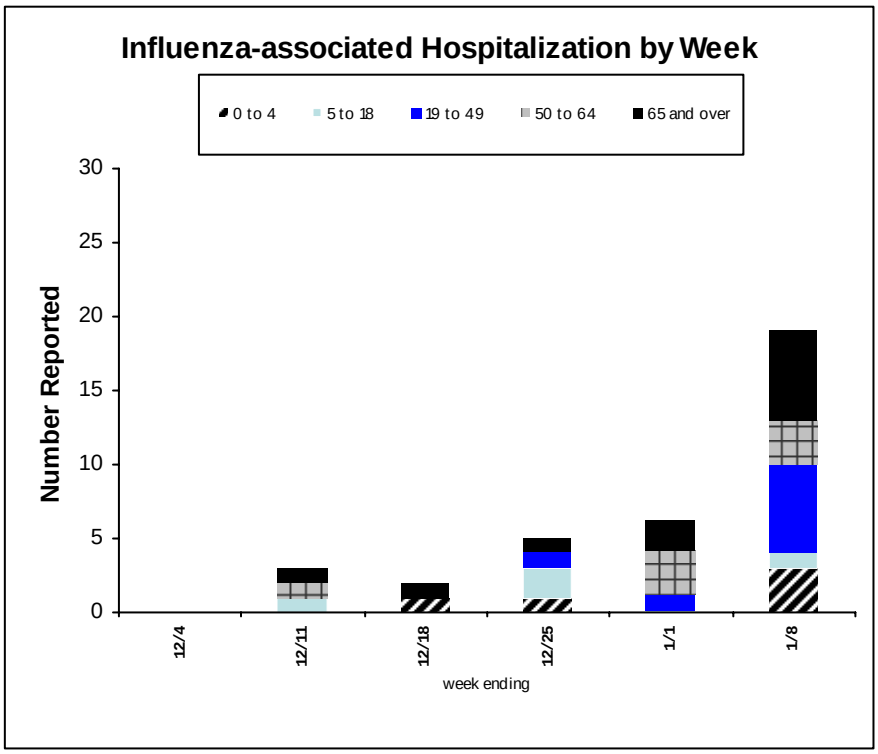


Cumulative number of positive influenza tests
By subtype, October 1, 2010 to present

	A/H1	A/H3	A/Unknown	B	Total
Total Number positive	23	83	12	12	130
% of Total number positive	18%	64%	9%	9%	100%

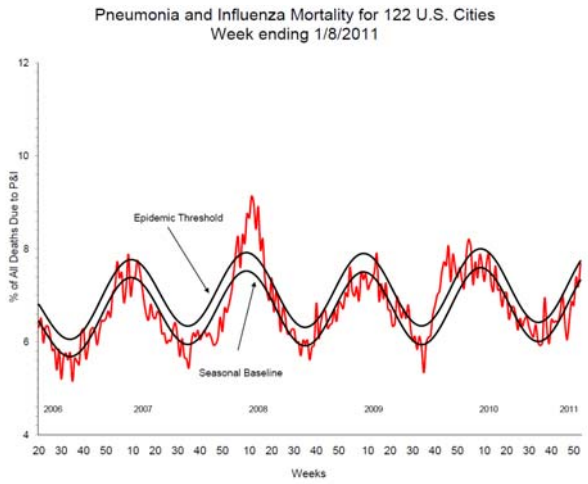
Influenza-associated Hospitalizations, December 1, 2010 to present

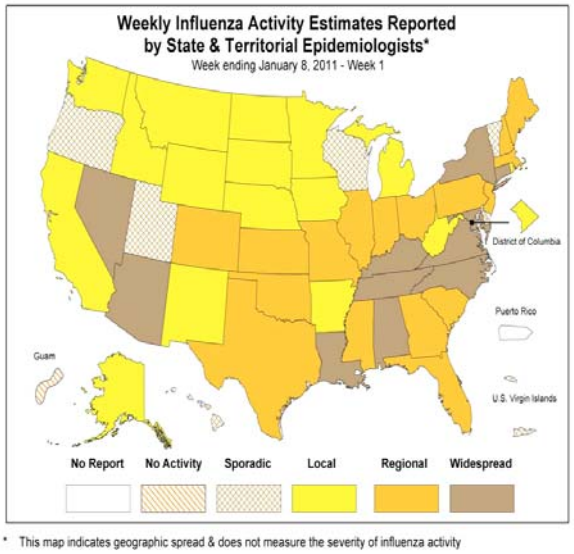
Age Group	Total Number Reported	Influenza Subtypes				Admitted to ICU	Required Mechanical Ventilation
		A/H1	A/H3	A/Unknown	B		
0 to 4	5	2	1	0	2	2	2
5 to18	4	2	2	0	0	1	1
19 to 49	8	2	3	3	0	1	0
50 to 64	8	1	4	2	1	2	0
65 and over	13	1	5	6	1	0	0
Total	38	8	15	11	4	6	3



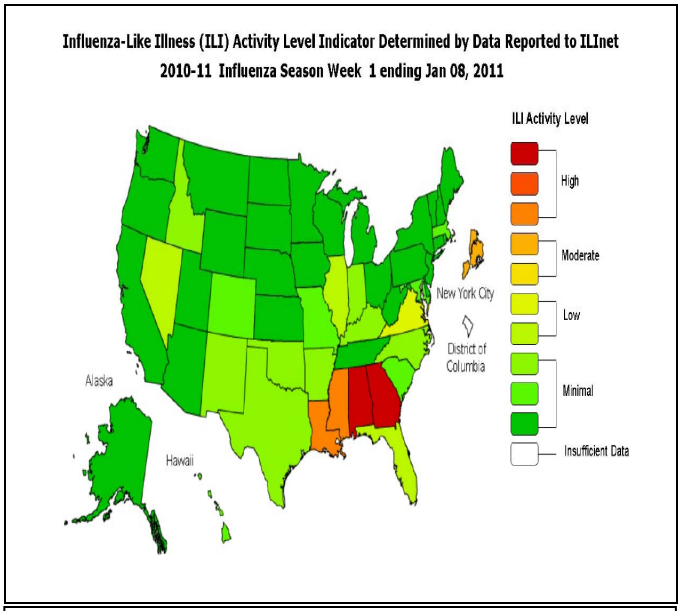
National and Regional Summary of Select Surveillance Components

	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	16.3%	29 of 54	2,850	467	2,258	3,189	8
Region 1	Normal	31.3%	4 of 6	238	22	0	12	0
Region 2	Normal	17.9%	3 of 4	150	11	207	20	3
Region 3	Normal	16.1%	3 of 6	222	61	56	41	1
Region 4	Elevated	24.2%	8 of 8	418	142	1,047	2,235	2
Region 5	Normal	38.0%	3 of 6	314	79	20	86	0
Region 6	Normal	25.6%	3 of 5	245	9	368	391	1
Region 7	Normal	14.1%	2 of 4	68	14	105	29	0
Region 8	Normal	28.2%	1 of 6	748	67	376	48	0
Region 9	Normal	19.4%	2 of 5	385	56	68	311	1
Region 10	Normal	7.9%	0 of 4	62	6	11	16	0

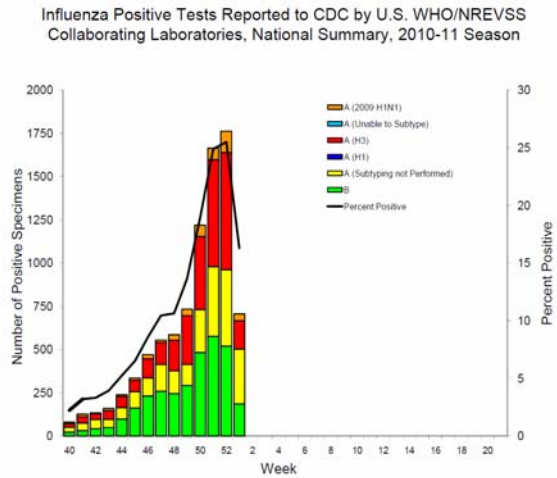




* This map indicates geographic spread & does not measure the severity of influenza activity



*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)	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)