WISCONSIN DEPARTMENT OF HEALTH SERVICES

Division of Public Health

Bureau of Communicable Diseases and Emergency Response

Respiratory virus surveillance report for the week ending March 26, 2011, week 11-12

AT-A-GLANCE

- Respiratory viruses identified this week :
  Influenza A (H1,H3) and B, and RSV viruses are predominant

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

Wisconsin	Low
Wisconsin (CDC level)	Minimal
Western Region	Low
Northern Region	Low
Northeastern Region	Moderate
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 tests is: High (PVP is the probability of disease in a patient with a positive test result)

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

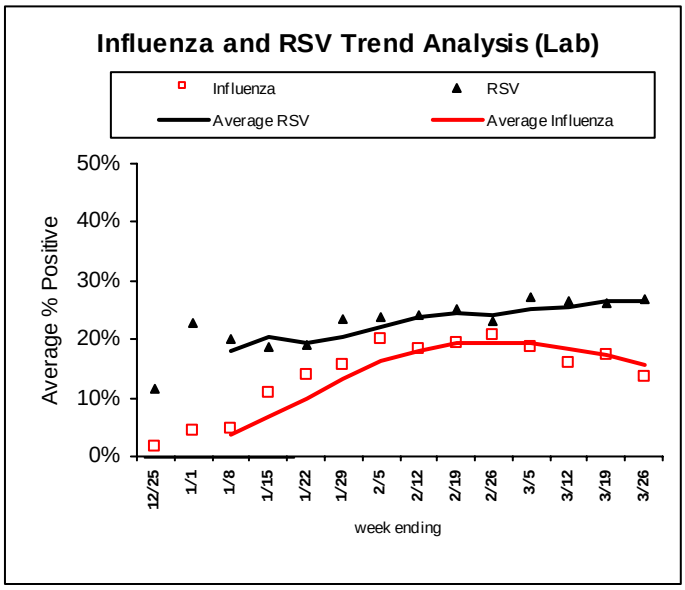
- Influenza-associated pediatric deaths (October 1, 2010-present)

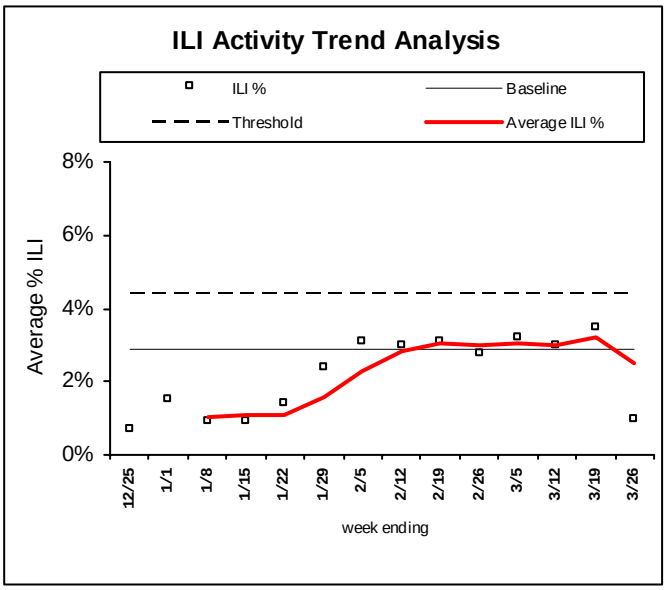
	Week 11-12	Total to Date
Wisconsin	1	2
United States	12	89

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

Wisconsin (ILI activity is Low)

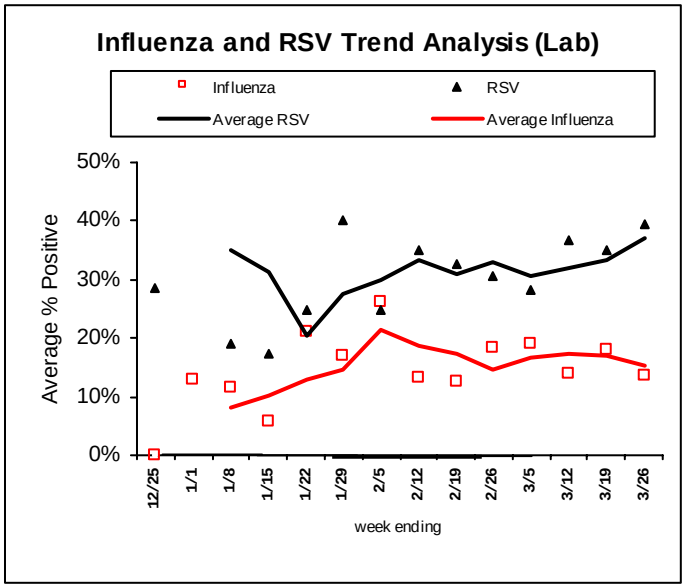
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
1195	122	39	161	13.5%	425	114	26.8%	1.0%	2.9%	4.4%

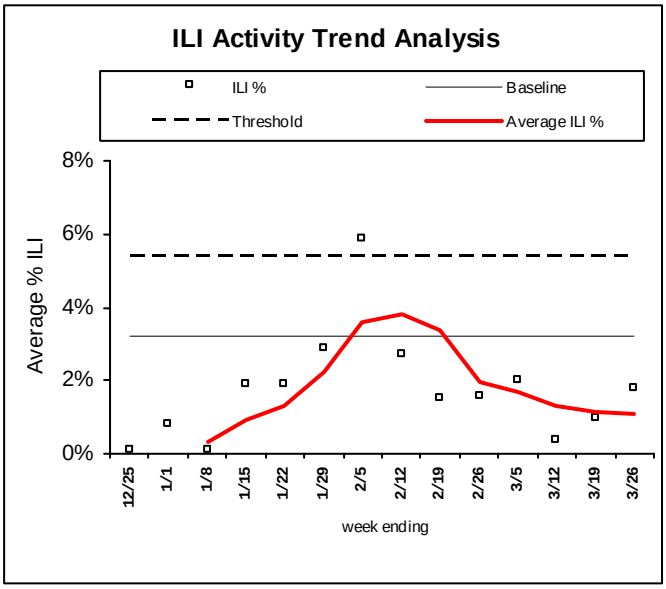




Northern Region (ILI activity is Low)

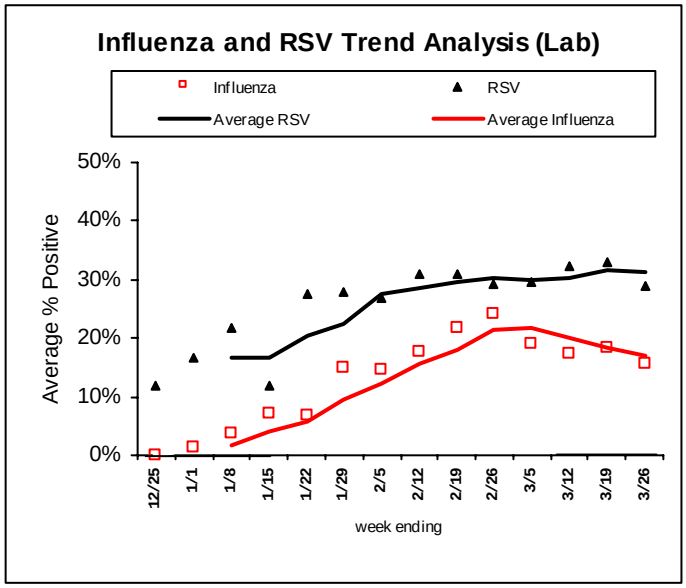
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
89	12	0	12	13.5%	66	26	39.4%	1.8%	3.2%	5.4%

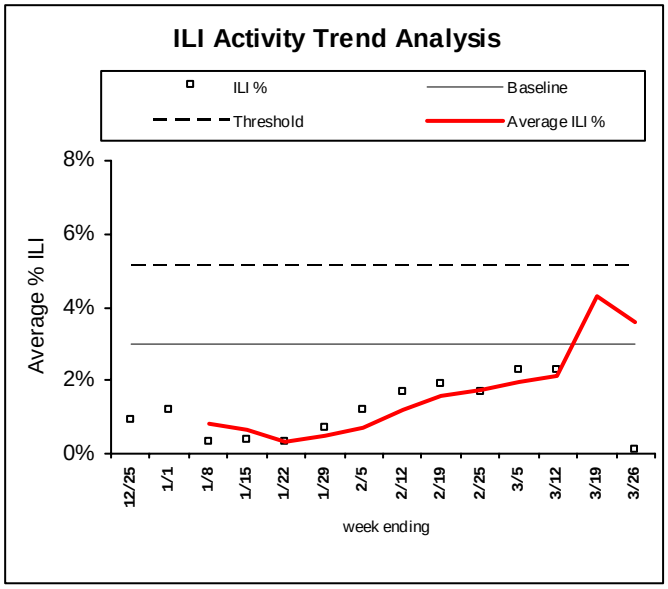




Western Region (ILI activity is Low)

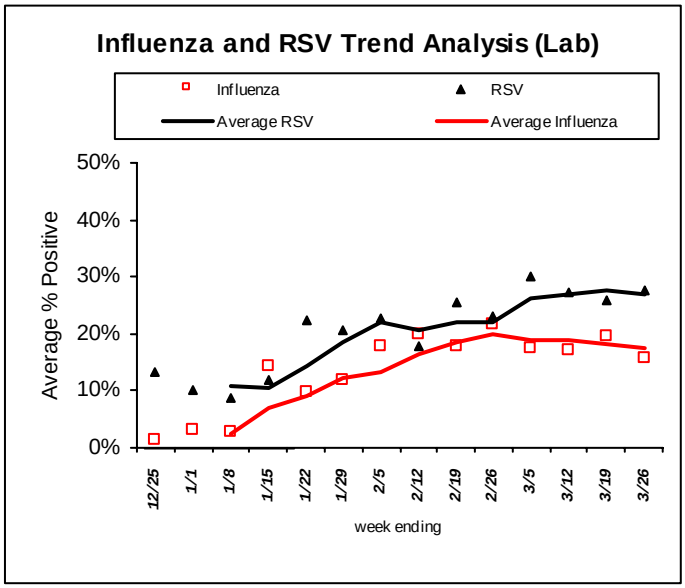
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
250	29	10	39	15.6%	66	19	28.8%	0.1%	3.0%	5.1%

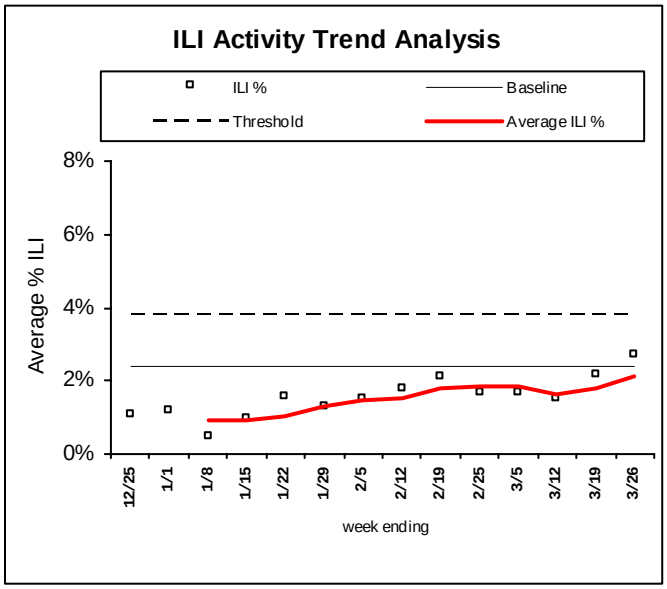




Northeastern Region (ILI activity is Moderate)

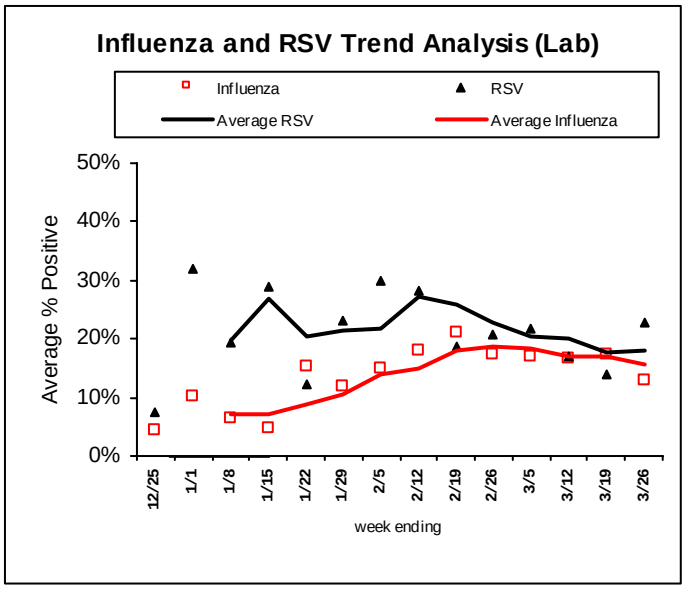
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
380	51	9	60	15.8%	109	30	27.5%	2.7%	2.4%	3.8%

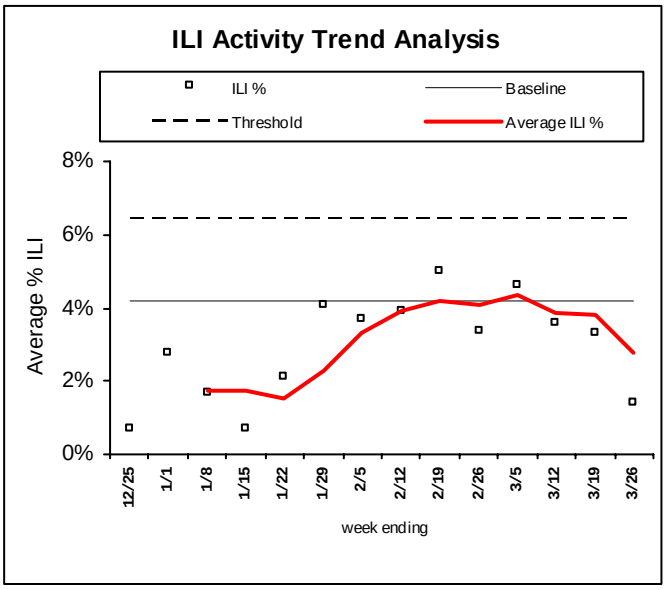




Southern Region (ILI activity is Low)

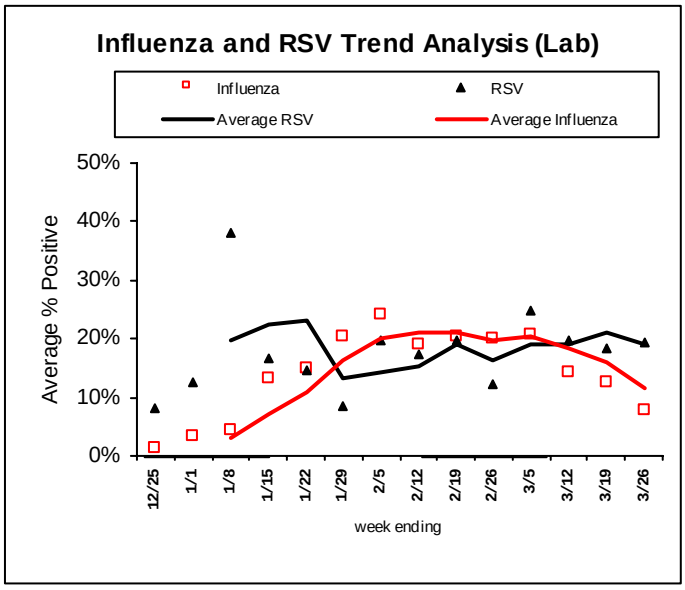
INFLUENZA RAPID ANTIGEN TESTS					RSV RAPID ANTIGEN TESTS			INFLUENZA-LIKE ILLNESS		
Tested	Positive			% Positive	Tested	Positive	% Positive	ILI %	Baseline	Threshold
	Flu A	Flu B	Total							
257	24	9	33	12.8%	101	23	22.8%	1.4%	4.2%	6.4%

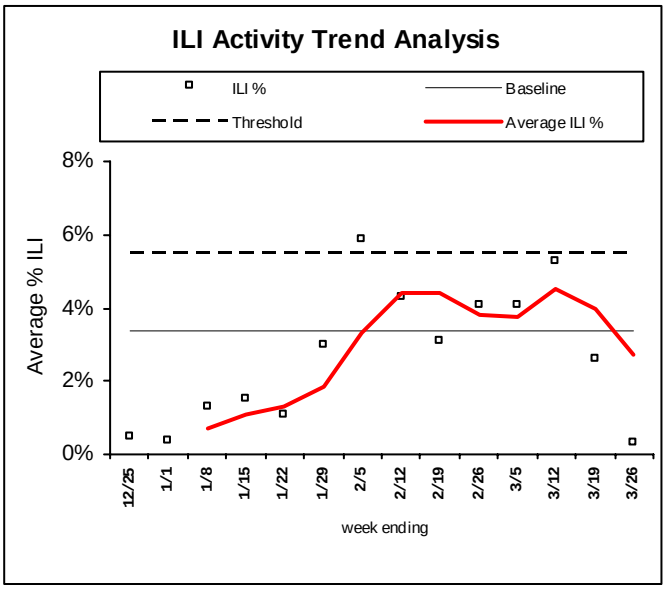




Southeastern Region (ILI activity is Low)

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							
219	6	11	17	7.8%	101	23	22.8%	0.3%	3.4%	5.5%





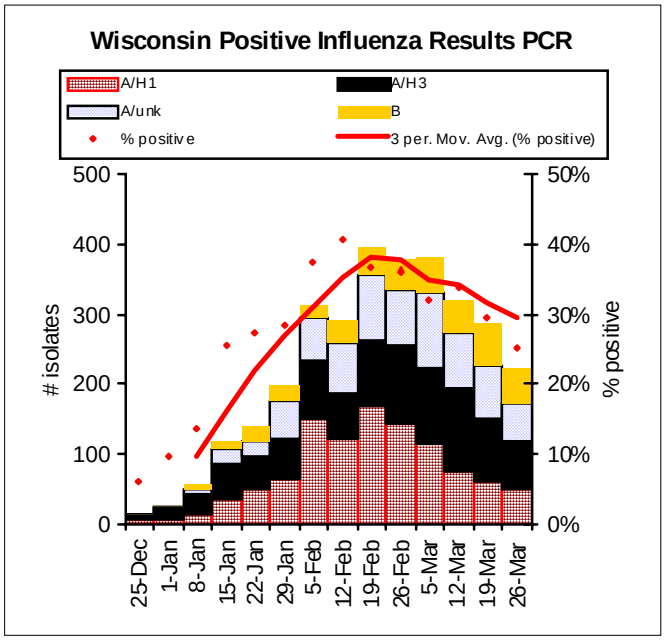
LABORATORY SURVEILLANCE FOR RESPIRATORY VIRUSES (PCR)

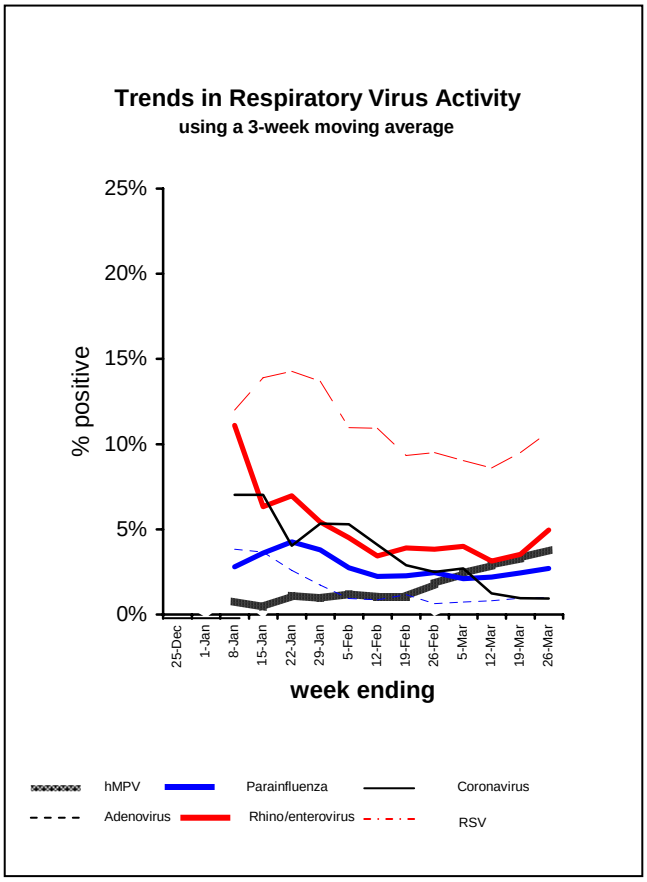
Respiratory Agent	Tested	Positive	% Positive	Flu A (H1)	Flu A (H3)	Flu A (Unk)	Flu B
Influenza	887	223	25.1%	48	70	54	51

Respiratory Agent	Tested	Positive	% Positive	P1	P2	P3	P4
Parainfluenza	351	11	3.1%	1	0	10	0

Respiratory Agent	Tested	Positive	% Positive	CoV-229E	CoV-OC43	CoV-NL63	CoV-HKU1
Coronavirus	173	3	1.7%	0	3	0	0

Respiratory Agent	Tested	Positive	% Positive
RSV	378	50	13.2%
Human Metapneumovirus	248	12	4.8%
Rhino-entero	231	17	7.4%
Adenovirus	216	2	0.9%



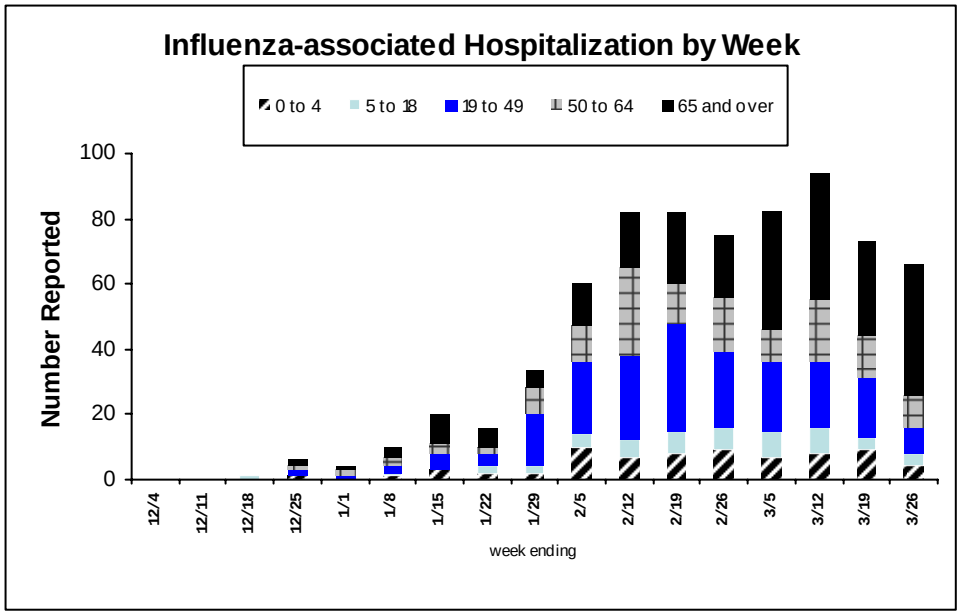


Cumulative number of positive influenza tests
By subtype, October 1, 2010 to present

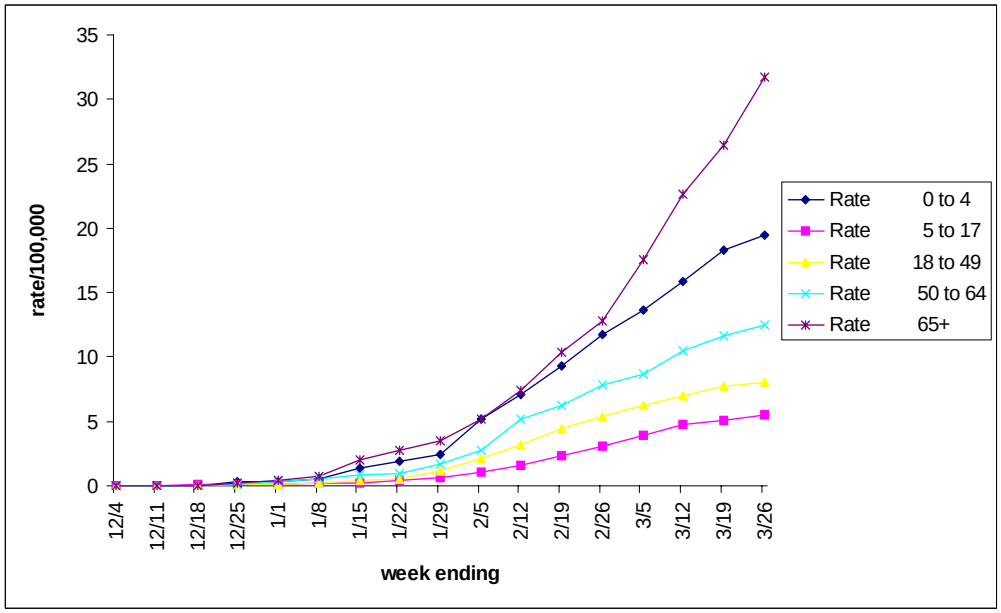
	2009 A/H1	A/H3	A/Unknown	B	Total
Total Number positive	**1052**	**979**	**740**	**406**	**3177**
% of Total number positive	**33%**	**31%**	**23%**	**13%**	**100%**

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	70	19	10	31	10	14	11
5 to 17	55	19	6	20	10	14	6
18 to 49	198	44	9	134	11	37	20
50 to 64	136	33	13	85	5	41	20
65 and over	248	13	38	185	12	31	12
Total	707	128	76	455	48	137	69

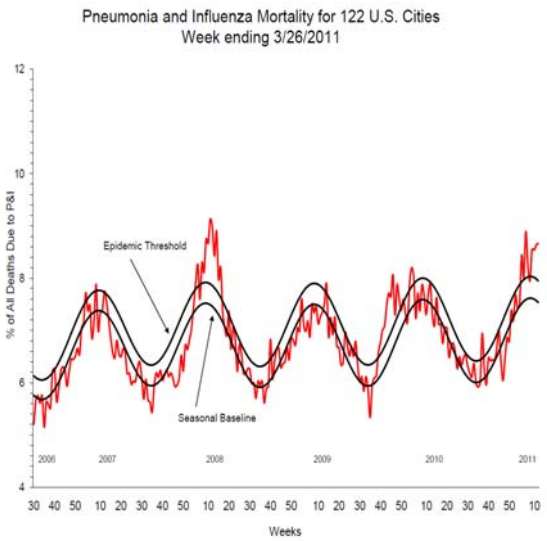


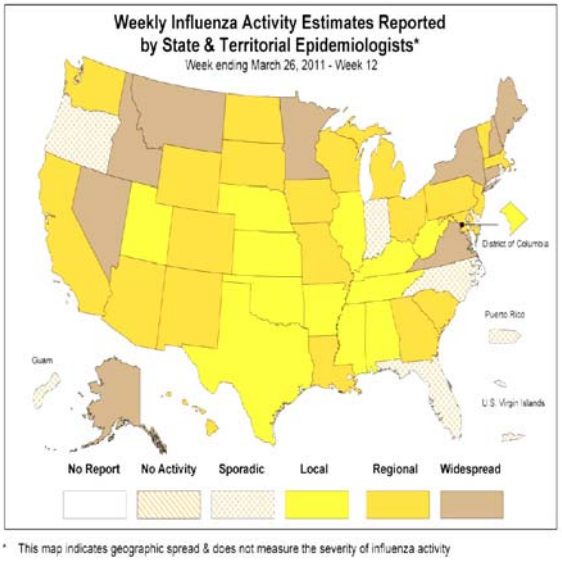
Influenza Hospitalizations, by week and age group

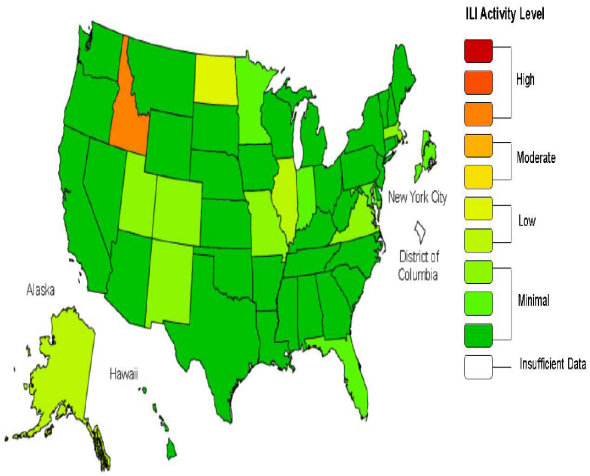


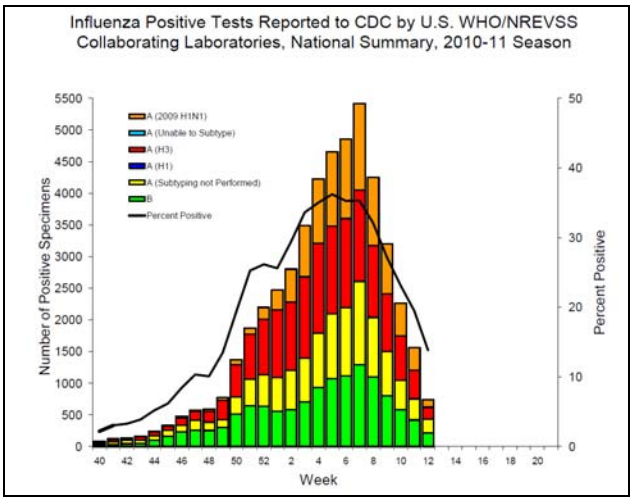
National and Regional Summary of Select Surveillance Components

	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	13.9%	32 of 54	15,565	9,843	10,857	12,595	89
Region 1	Normal	32.3%	5 of 6	1,598	838	86	323	2
Region 2	Elevated	19.7%	2 of 4	675	319	1,055	348	9
Region 3	Normal	20.8%	3 of 6	2,820	2,480	816	836	10
Region 4	Normal	10.6%	2 of 8	1,326	1,357	3,095	3,894	16
Region 5	Normal	36.8%	4 of 6	1,809	1,335	354	1,065	16
Region 6	Normal	9.9%	2 of 5	2,161	528	2,281	2,539	16
Region 7	Normal	20.1%	2 of 4	675	529	275	646	1
Region 8	Normal	18.8%	5 of 6	1,674	632	1,998	1,715	6
Region 9	Normal	18.2%	4 of 5	1,847	1,123	737	1,116	11
Region 10	Elevated	28.0%	3 of 4	980	702	160	113	2









Antiviral Resistance:

*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.

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

	Virus Samples tested (n)	Resistant Viruses, Number (%) Oseltamivir	Virus Samples tested (n)	Resistant Viruses, Number (%) Zanamivir
Seasonal Influenza A (H1N1)	0	0 (0.0)	0	0 (0.0)
Influenza A (H3N2)	490	0 (0.0)	490	0 (0.0)
Influenza B	474	0 (0.0)	474	0 (0.0)
2009 Influenza A (H1N1)	910	7 (0.8)	305	0 (0.0)