DEPARTMENT OF HEALTH SERVICES
DIVISION OF PUBLIC HEALTH

Weekly Surveillance Report
For the Week Ending February 27, 2010 (week 10-08)

AT A GLANCE

1. Predominant respiratory viruses in Wisconsin:
RSV, Human metapneumovirus, and Rhinovirus with sporadic 2009/H1N1

2. Influenza-like illness activity in Wisconsin and five public health regions:

	Current Week 10-08	Previous Week 10-07
Wisconsin	Low	Low
Northeastern Region	Low	Low
Northern Region	Low	Low
Southeastern Region	Low	Low
Southern Region	Low	Low
Western Region	Low	Low

3. Influenza-like illness percentage:

	Current week 10-08	Baseline
United States	1.9%	2.3%
Wisconsin	1.4%	3.1%
Region V (WI, MN, IL, MI, OH)	1.9%	1.7%

4. 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)

5. 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)

Use of the influenza rapid test to diagnose 2009 H1N1 is discouraged

6. Antiviral resistance: (August 31 2009 –present) * State lab counts reflect tests on Wisconsin residents

ADAMANTANE RESISTANCE

		Influenza Subtype					
		Seasonal A/H1		2009 A/H1N1		A/H3	
Season/Lab		Tested	Resistant	Tested	Resistant	Tested	Resistant
09-10	WSLH						
09-10	CDC	1	0%	1454	99.7%	12	100.0%

OSELTAMIVIR RESISTANCE

		Influenza Subtype							
		Seasonal A/H1		2009 A/H1N1		A/H3		B	
Season/Lab		Tested	Resistant	Tested	Resistant	Tested	Resistant	Tested	Resistant
09-10	WSLH			72	0%				
09-10	CDC	1	100%	3881	1.2%	12	0%	11	0%

ZANAMIVIR RESISTANCE

		Influenza Subtype							
		Seasonal A/H1		2009 A/H1N1		A/H3		B	
Season/Lab		Tested	Resistant	Tested	Resistant	Tested	Resistant	Tested	Resistant
09-10	CDC			1429	0%				

7. Influenza-associated pediatric deaths (August 31, 2009-present)

	Current Week 10-08	2009-10 Season Total	Due to 2009 H1N1
United States	1	265	217
Wisconsin	0	4	4

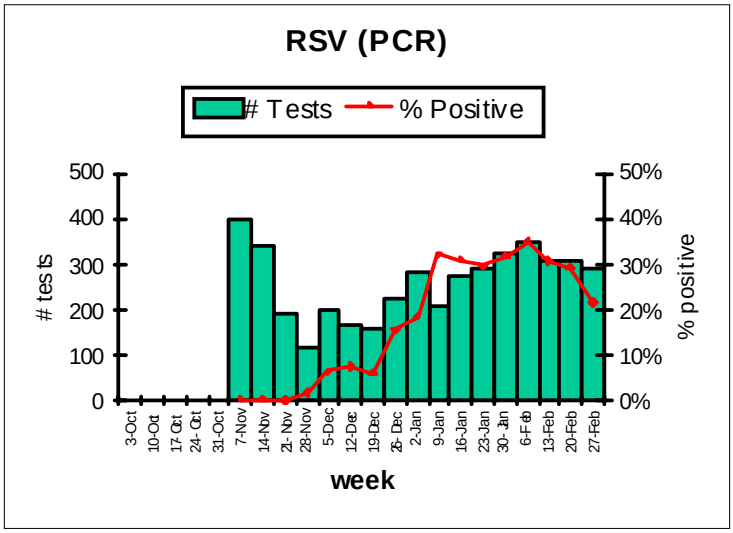
8. Pneumonia and influenza mortality (P&I), United States,

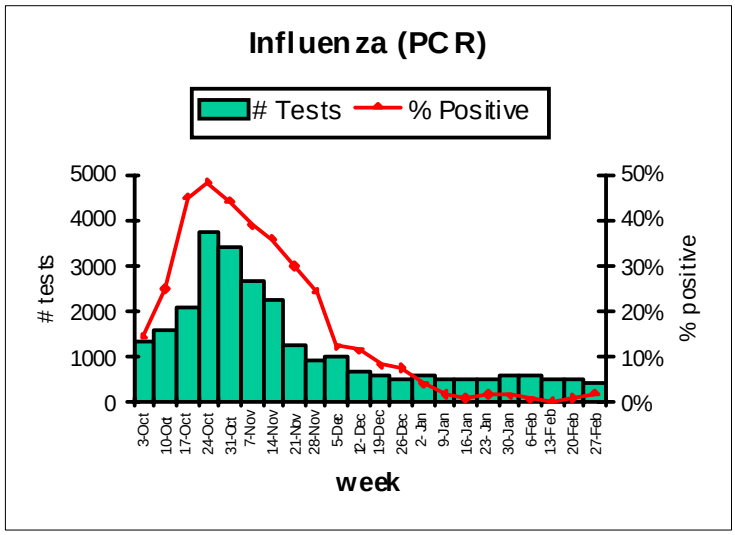
	Current Week 10-08	Previous Week 10-07
P&I %	7.8%	7.4%
National P&I threshold %	7.9%	7.9%

WISCONSIN LABORATORY SURVEILLANCE
For Influenza and other Respiratory Viruses (week 10-08)

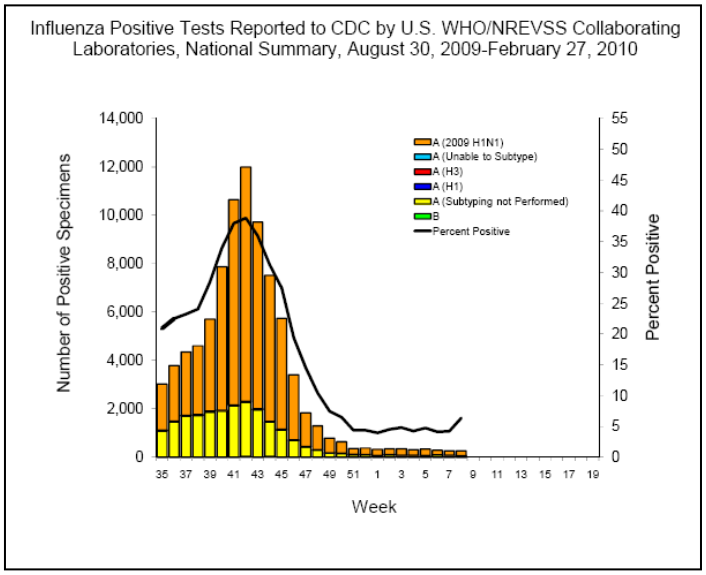
VIRUS CULTURE Based on 130 tests		RAPID TESTS			SELECT PCR TESTS	
Test Type	% Positive	Virus	# Tests	% Positive	Test Type	Positive/ total number
Total % Positive	12.3%					
Influenza (Tot.)	3.8%	Influenza (Tot)	349	1.4%	Influenza A & B	8/404
Influenza A	3.1%				Influenza A	0/0
Influenza B	0.7%	Influenza A		1.4%	# A/H1	0
					2009 A/H1	7
hMPV	0.0%	Influenza B		0.0%	# A/H3	0
					# A/not subtyped	0
		Influenza Unk.*		0.0%	# B	1
RSV	7.7%	RSV	632	37.2%	RSV	63/293
Adenovirus	0.0%	Adenovirus	21	0.0%	Adenovirus	0/144
Parainfluenza	0.0%				Parainfluenza	6/214
					Corona OC43	0/123
Rhinovirus	0.0%	*Influenza unknown (Unk) are positive influenza test results that cannot be distinguished between Type A and B			Corona NL63	0/123
					Corona HUK1	0/123
Enterovirus	0.8%				Rhinovirus	12/144
hMPV	0.0%				hMPV	25/144

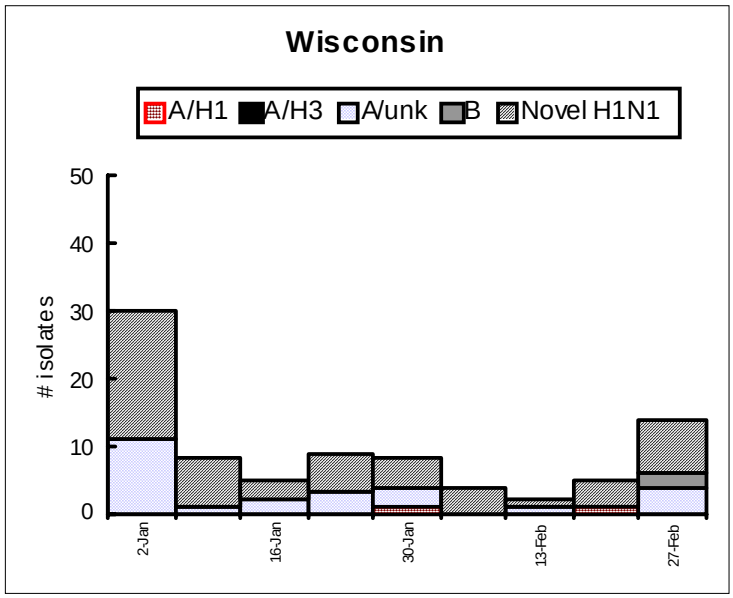
WISCONSIN TREND. RSV AND INFLUENZA PCR POSITIVE TESTS





WISCONSIN AND U.S. TREND INFLUENZA SUBTYPES (CULTURE/PCR) August 2009-Present





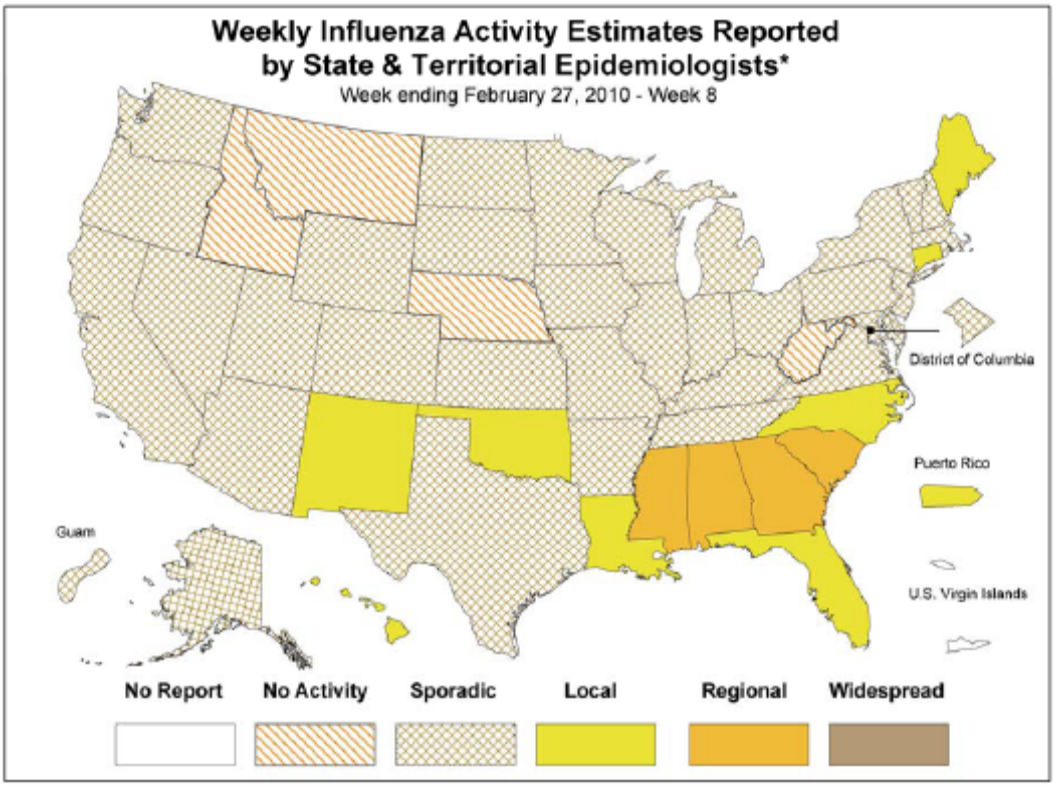
NATIONAL SUMMARY
(Wisconsin is in Region 5)
Current week 10-08

National and Regional Summary of Select Surveillance Components

	Data for current week			Data cumulative since August 30, 2009 (Week 35)*						
HHS Surveillance Regions**	Out-patient ILI†	% positive for flu‡	Number of jurisdictions reporting regional or widespread activity§	A (H1)	A (H3)	2009 A (H1N1)	A (unable to sub-type)¥	A (Subty-ping not perfor-med)	B	Pediatric Deaths
Nation	Normal	6.4%	4 of 54	33	62	64,355	294	21,122	269	265
Region 1	Normal	3.5%	0 of 6	4	4	3,390	14	499	11	6
Region 2	Normal	2.8%	0 of 4	8	5	1,751	0	2,062	12	18
Region 3	Normal	1.8%	0 of 6	3	10	10,661	48	1,449	18	14
Region 4	Elevated	14.4%	4 of 8	0	7	8,951	95	4,453	78	50
Region 5	Normal	2.6%	0 of 6	8	25	9,435	52	1,568	19	36
Region 6	Normal	2.7%	0 of 5	1	3	4,016	19	4,842	47	69
Region 7	Normal	4.9%	0 of 4	3	1	3,399	3	803	9	8
Region 8	Normal	1.4%	0 of 6	4	2	9,829	1	3,923	56	16
Region 9	Elevated	2.1%	0 of 5	0	4	8,322	49	1,200	17	38
Region 10	Normal	0.3%	0 of 4	2	1	4,601	14	323	2	10

*Influenza season officially begins each year at week 40. This season data from week 35 will be included to show the trend of influenza activity before the official start of the 2009-10 influenza season.

**HHS regions (Region 1 CT, ME, MA, NH, RI, VT; Region 2: NJ, NY, Puerto Rico, US 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). Use of the national baseline for regional data or regional baselines for state data is not appropriate.

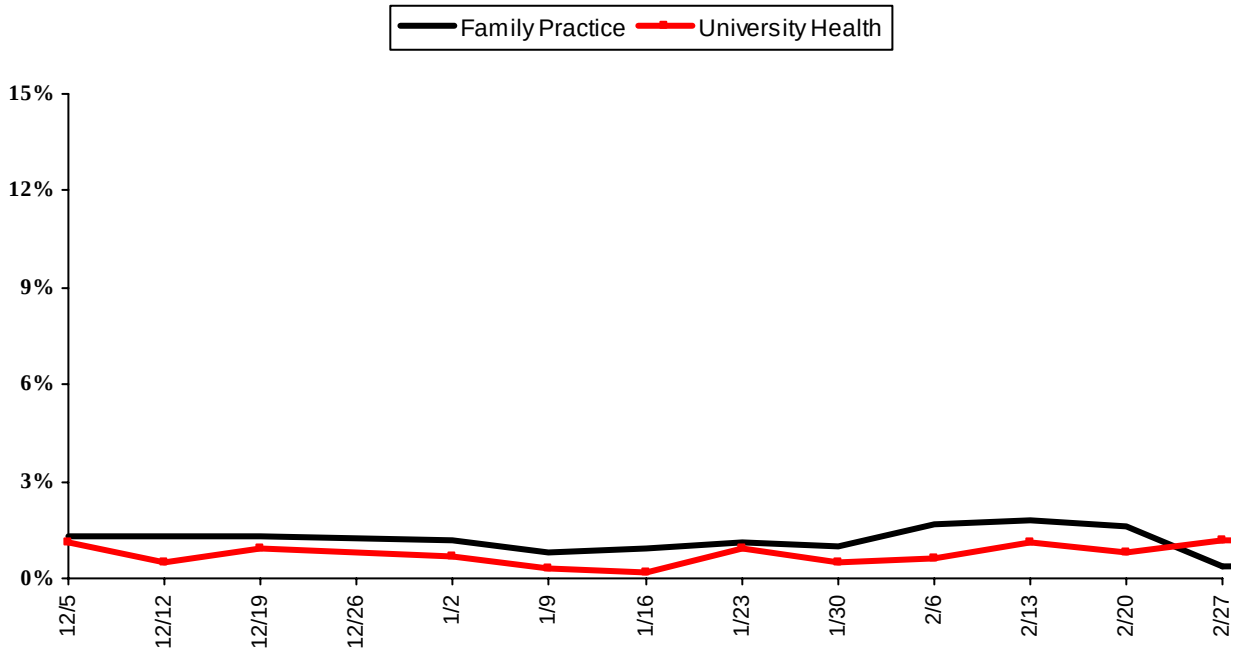


* This map indicates geographic spread & does not measure the severity of influenza activity

ILI Activity Statewide

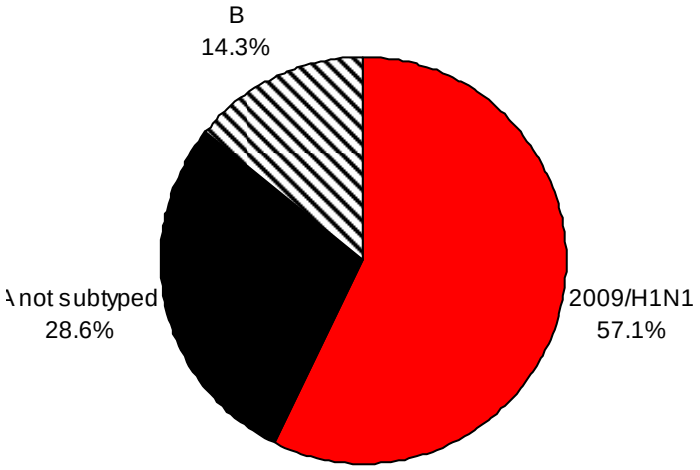
Family Practice Clinicians and University Student Health Clinicians

December 5, 2009 to present



Influenza Strains Wisconsin Week 06

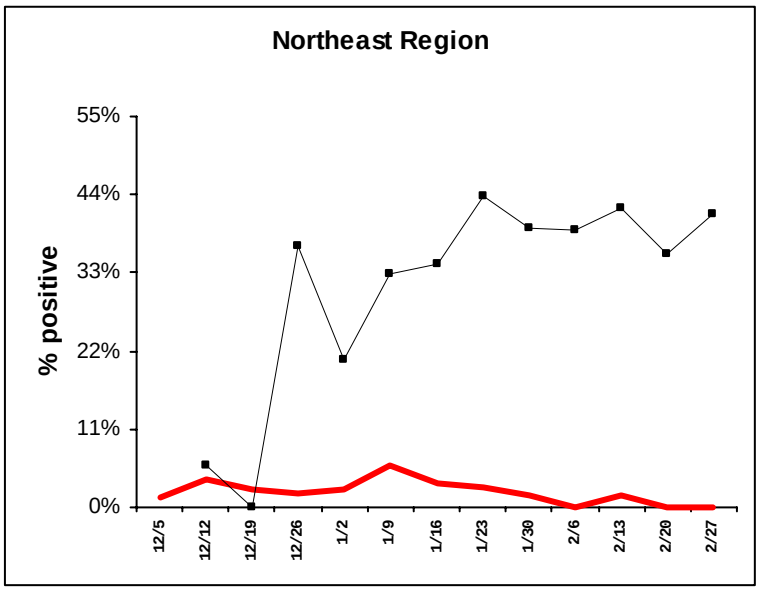
86% Influenza A
14% Influenza B
Of those Influenza A subtyped:
8/8 were 2009/ H1N1

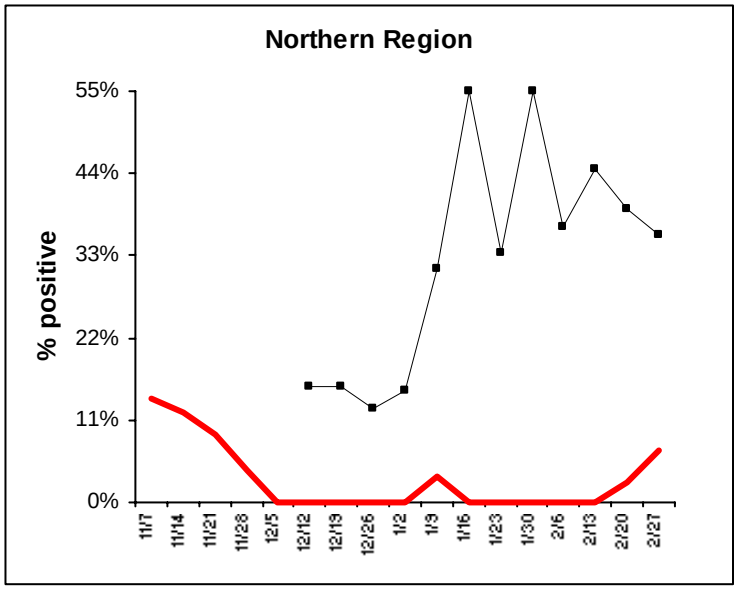


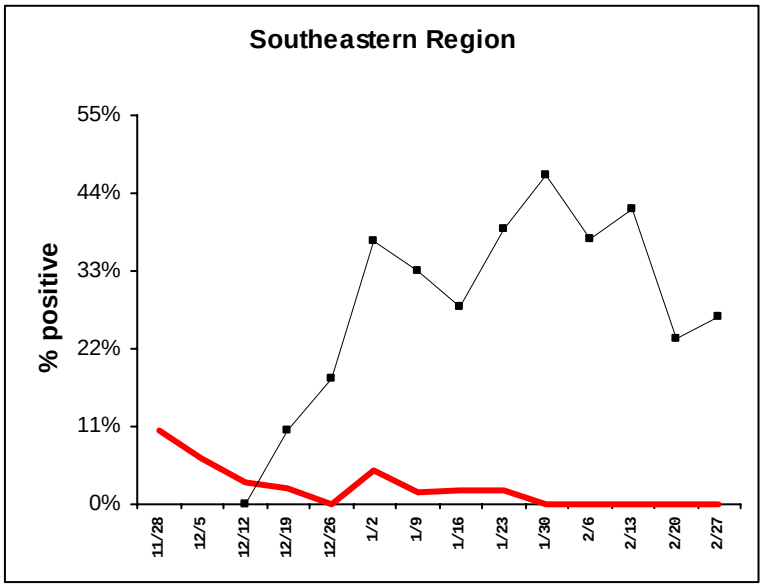
RAPID TEST SITE DATA (CHART) BY REGION

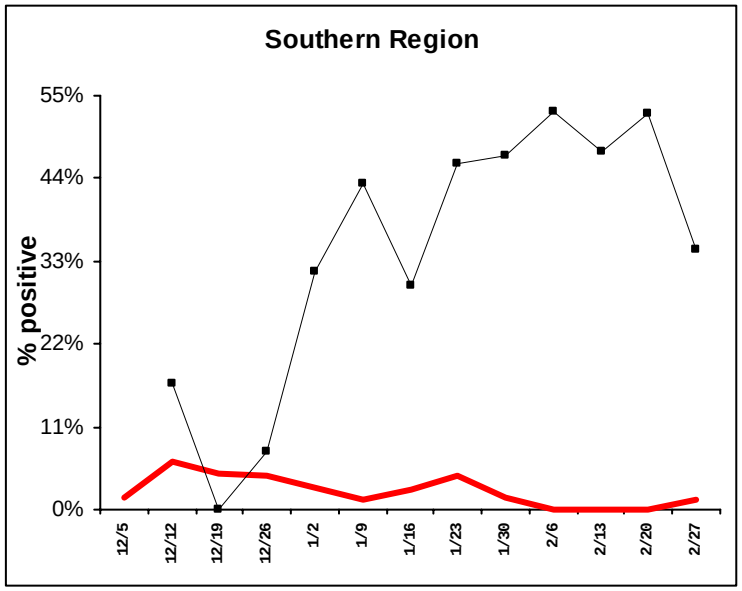
Percent Positive Rapid Tests for Influenza and RSV

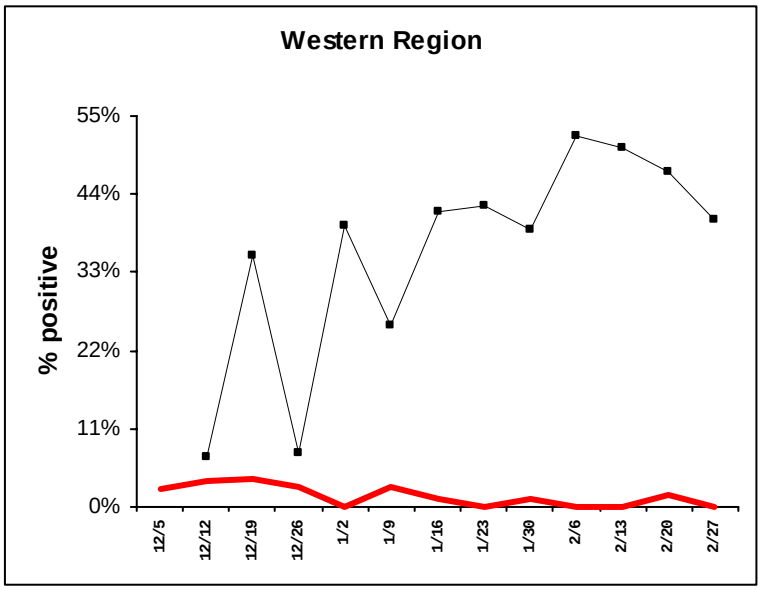
Influenza — RSV

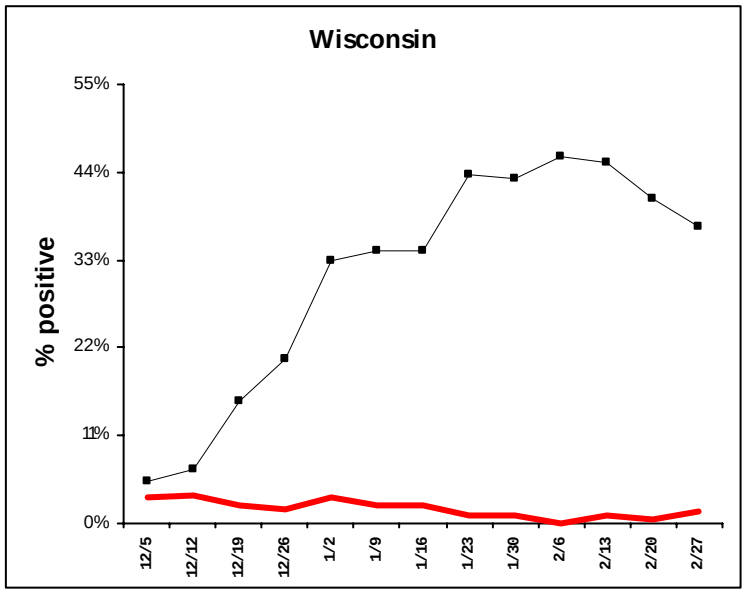




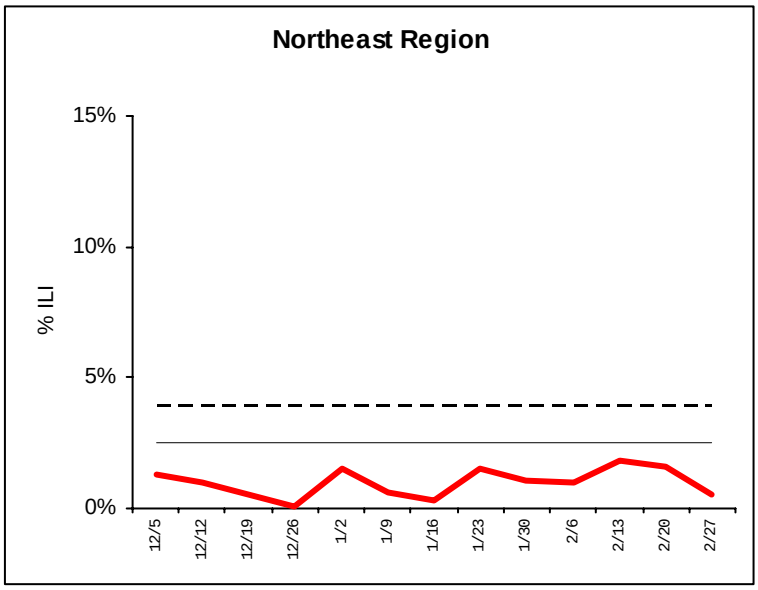
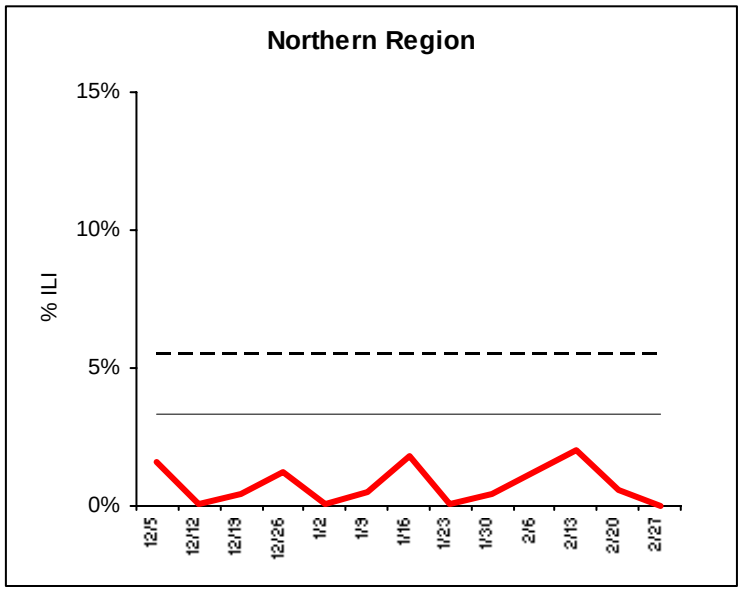
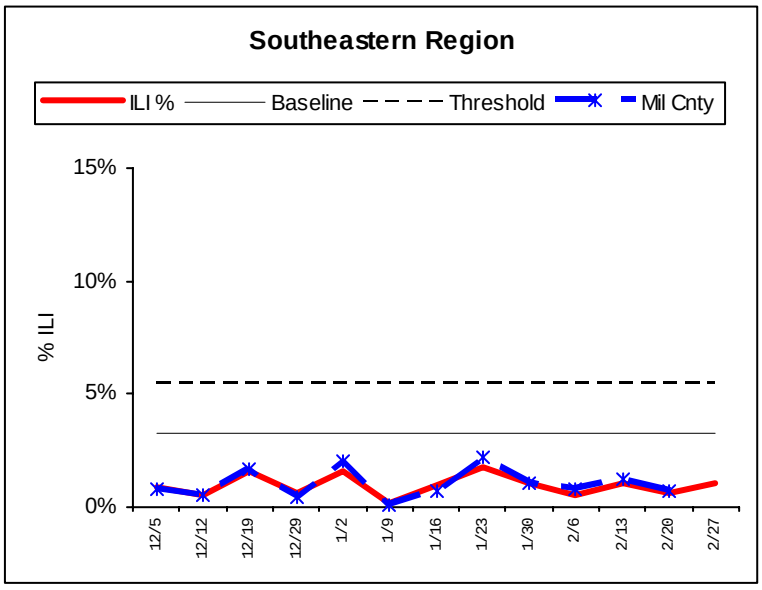
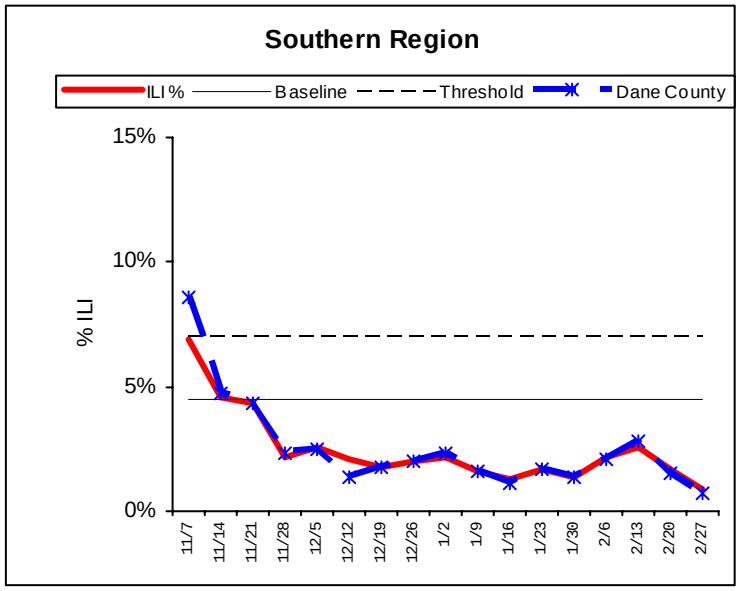
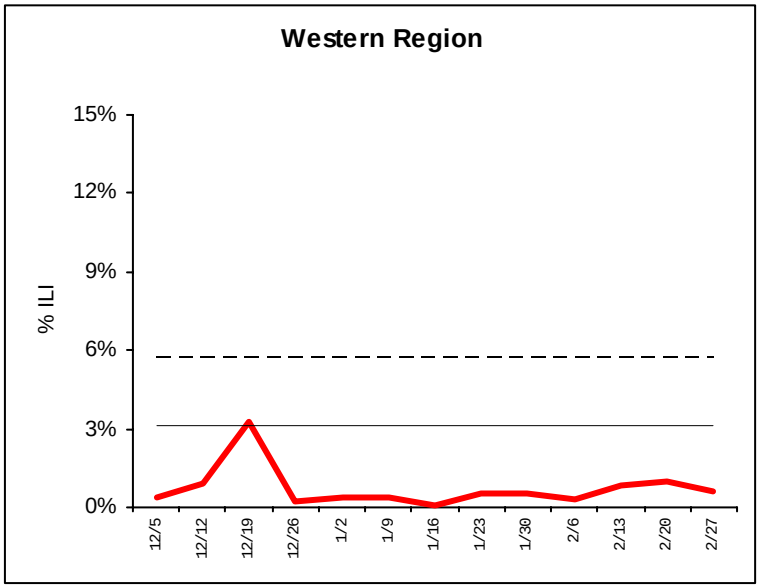
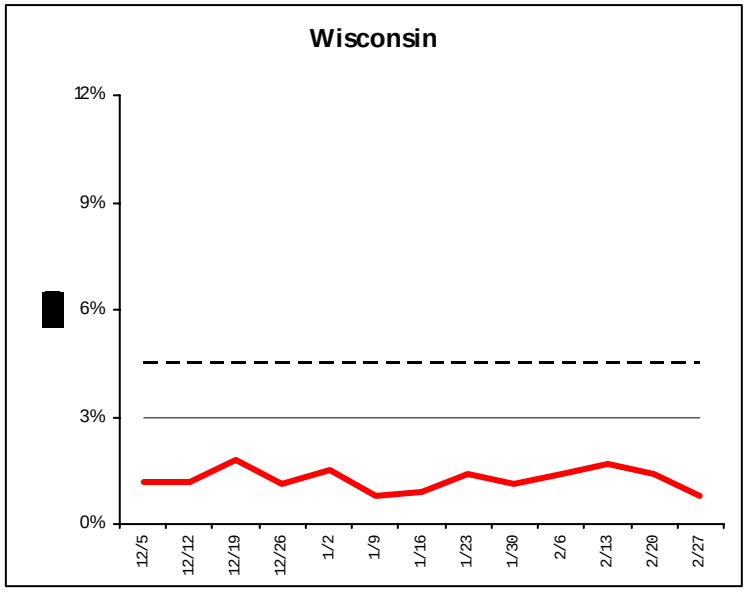








INFLUENZA-LIKE ILLNESS DATA (CHART) BY REGION

Source: US Outpatient Influenza-like Illness Surveillance Network (ILINet)

ILI % — Baseline % — Threshold %