DEPARTMENT OF HEALTH SERVICES
DIVISION OF PUBLIC HEALTH

Weekly Surveillance Report
For the Week Ending April 24, 2010 (week 10-16)

AT A GLANCE

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

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

	Current Week 10-16	Previous Week 10-15
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 10-16	Baseline
United States	1.0%	2.3%
Wisconsin	0.6%	3.1%
Region V (WI, MN, IL, MI, OH)	0.6%	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%	1,705	99.8%	13	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			87	0%				
09-10	CDC	1	100%	4,545	1.1%	13	0%	23	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			1,725	0%				

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

	Current Week 10-15	2009-10 Season Total	Due to 2009 H1N1
United States	0	272	221
Wisconsin	0	4	4

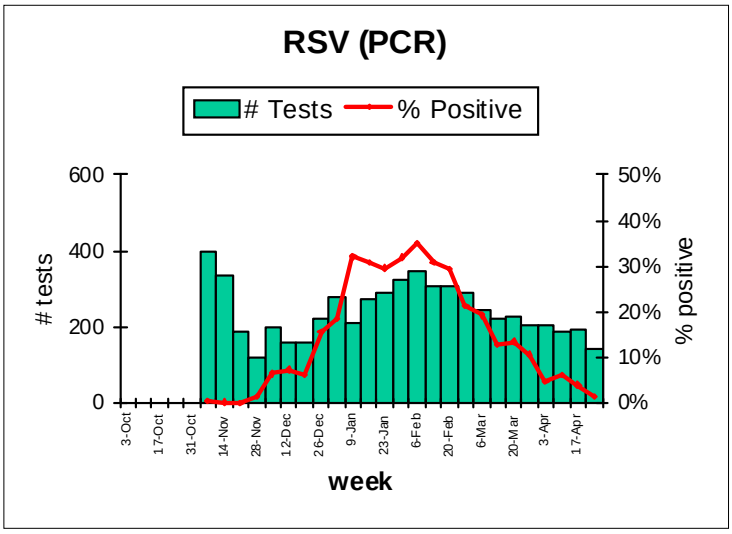
8. Pneumonia and influenza mortality (P&I), United States,

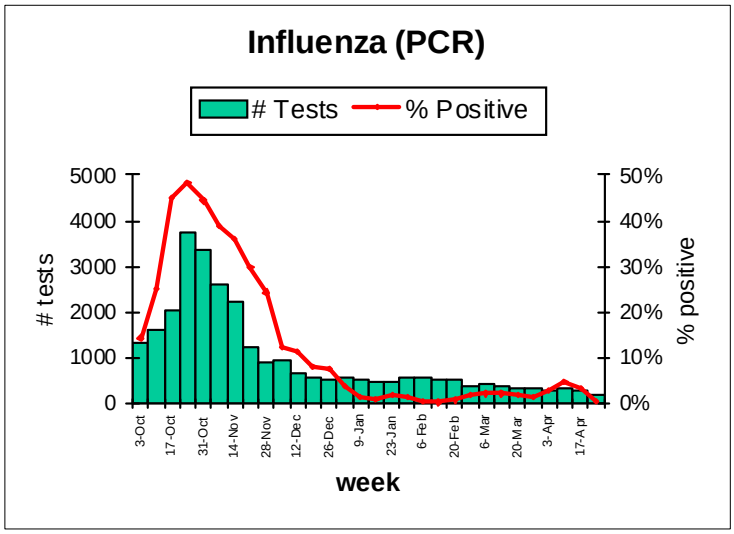
	Current Week 10-15	Previous Week 10-14
P&I %	7.0%	7.6%
National P&I threshold %	7.6%	7.6%

WISCONSIN LABORATORY SURVEILLANCE
For Influenza and other Respiratory Viruses (week 10-16)

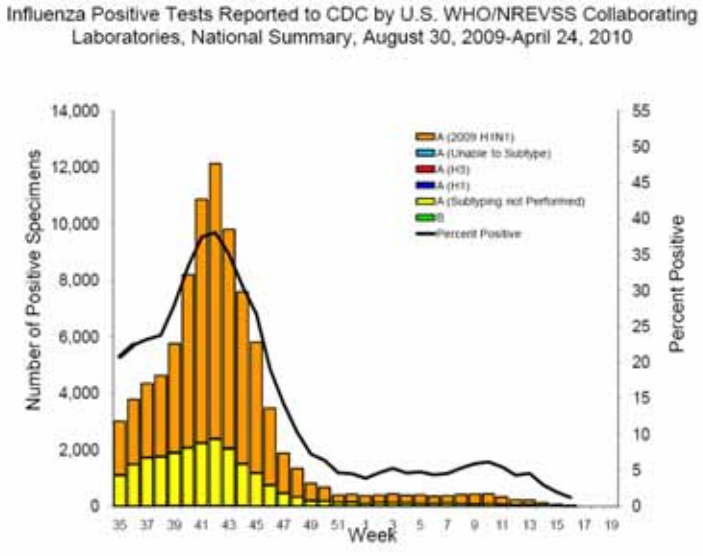
VIRUS CULTURE Based on 58 tests		RAPID TESTS			SELECT PCR TESTS	
Test Type	% Positive	Virus	# Tests	% Positive	Test Type	Positive/ total number
Total % Positive	5.9 %					
Influenza (Tot.)	0.0%	Influenza (Tot)	109	0.0%	Influenza A & B	1/205
Influenza A	0.0%				Influenza A	0/3
Influenza B	0.0%	Influenza A		0.0%	# A/H1	0
					2009 A/H1	1
hMPV	0.0%	Influenza B		0.0%	# A/H3	0
					# A/not subtyped	0
		Influenza Unk.*		0.0%	# B	0
RSV	0.0%	RSV	75	6.6%	RSV	2/142
Adenovirus	1.5%	Adenovirus	3	0.0%	Adenovirus	2/83
Parainfluenza	2.9%				Parainfluenza	7/113
					Corona OC43	0/80
Rhinovirus	1.5%	*Influenza unknown (Unk) are positive influenza test results that cannot be distinguished between Type A and B			Corona NL63	2/80
					Corona HUK1	0/80
Enterovirus	0.0%				Corona 229 E	3/80
					Rhinovirus	17/83
hMPV	0.0%				hMPV	5/83

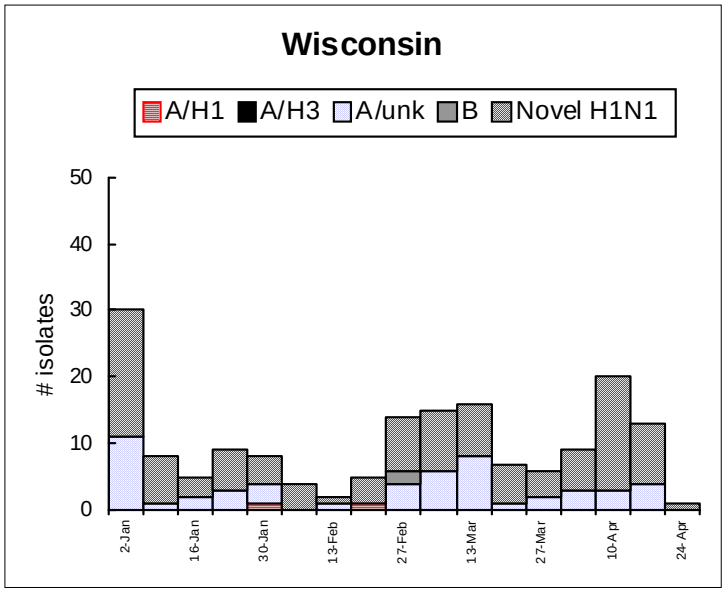
WISCONSIN TREND. RSV AND INFLUENZA PCR POSITIVE TESTS





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





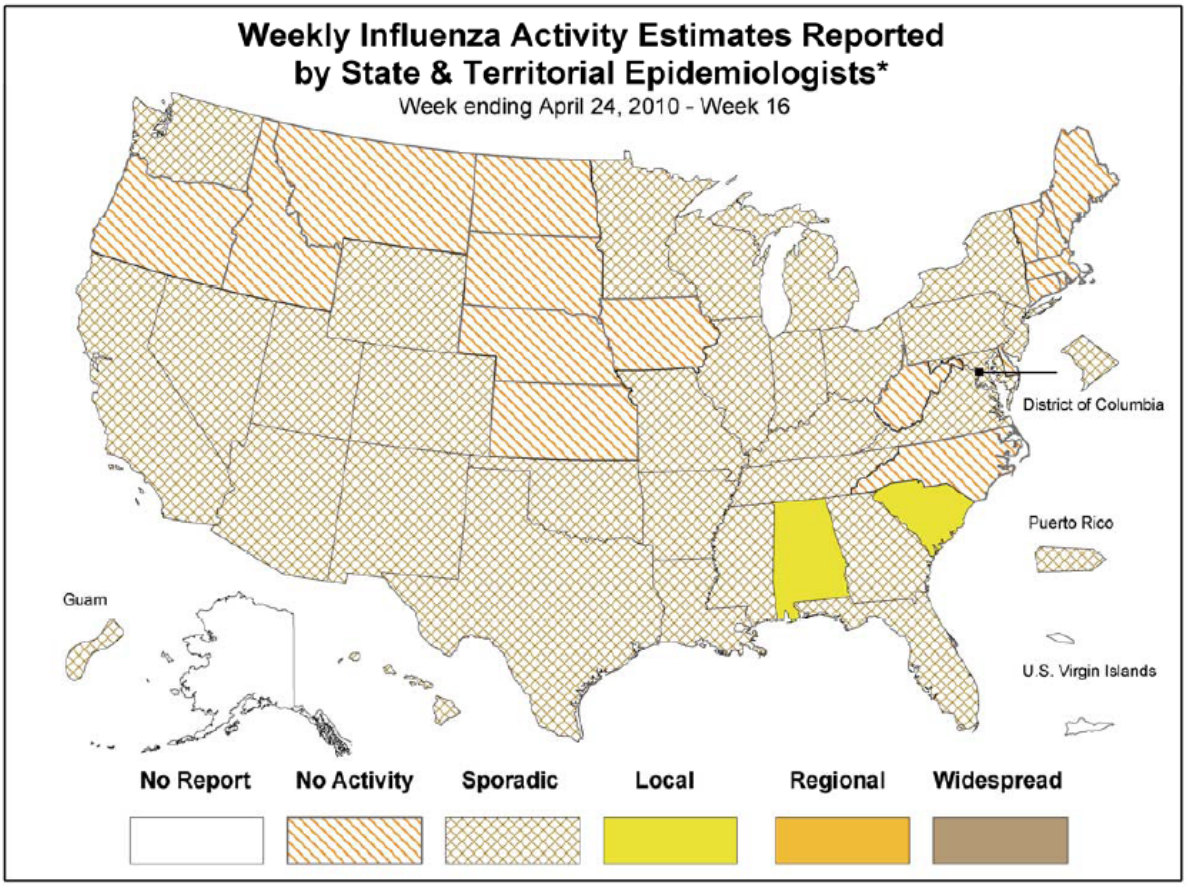
NATIONAL SUMMARY
(Wisconsin is in Region 5)

Current week 10-16

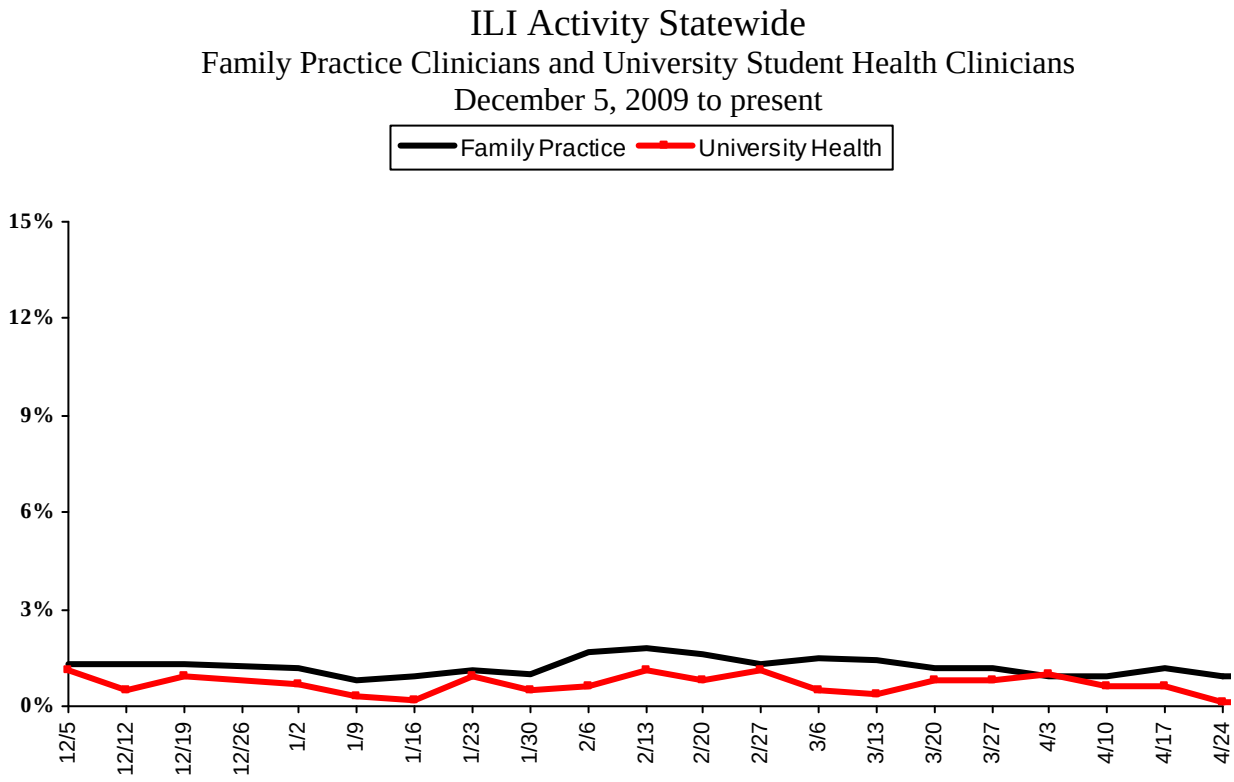
National and Regional Summary of Select Surveillance Components

	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	1.2%	0 of 54	34	67	66,754	287	22,412	300	272
Region 1	Normal	2.1%	0 of 6	4	5	3,409	14	503	12	6
Region 2	Normal	0.2%	0 of 4	8	6	1,811	0	2,405	14	19
Region 3	Normal	0.8%	0 of 6	3	13	10,719	48	1,453	18	14
Region 4	Normal	5.1%	0 of 8	0	7	9,881	94	4,707	92	52
Region 5	Normal	3.2%	0 of 6	8	25	9,516	46	1,580	19	36
Region 6	Normal	1.4%	0 of 5	2	3	5,200	19	5,419	56	73
Region 7	Normal	4.9%	0 of 4	3	1	3,300	3	847	9	8
Region 8	Normal	2.0%	0 of 6	4	2	9,880	0	3,946	56	16
Region 9	Normal	1.2%	0 of 5	0	4	8,348	49	1,204	20	38
Region 10	Normal	0.5%	0 of 4	2	1	4,690	14	348	4	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.
† Elevated means the % of visits for ILI is at or above the national or region-specific baseline.
‡ National data are for current week; regional data are for the most recent three weeks.
§ Includes all 50 states, the District of Columbia, Guam, Puerto Rico, and U.S. Virgin Islands.
¥ Subtyping results for the majority of specimens in this category were inconclusive because of low virus titers.



* 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
Family Practice
University Health
15%
12%
9%
6%
3%
0%
12/5
12/12
12/19
12/26
1/2
1/9
1/16
1/23
1/30
2/6
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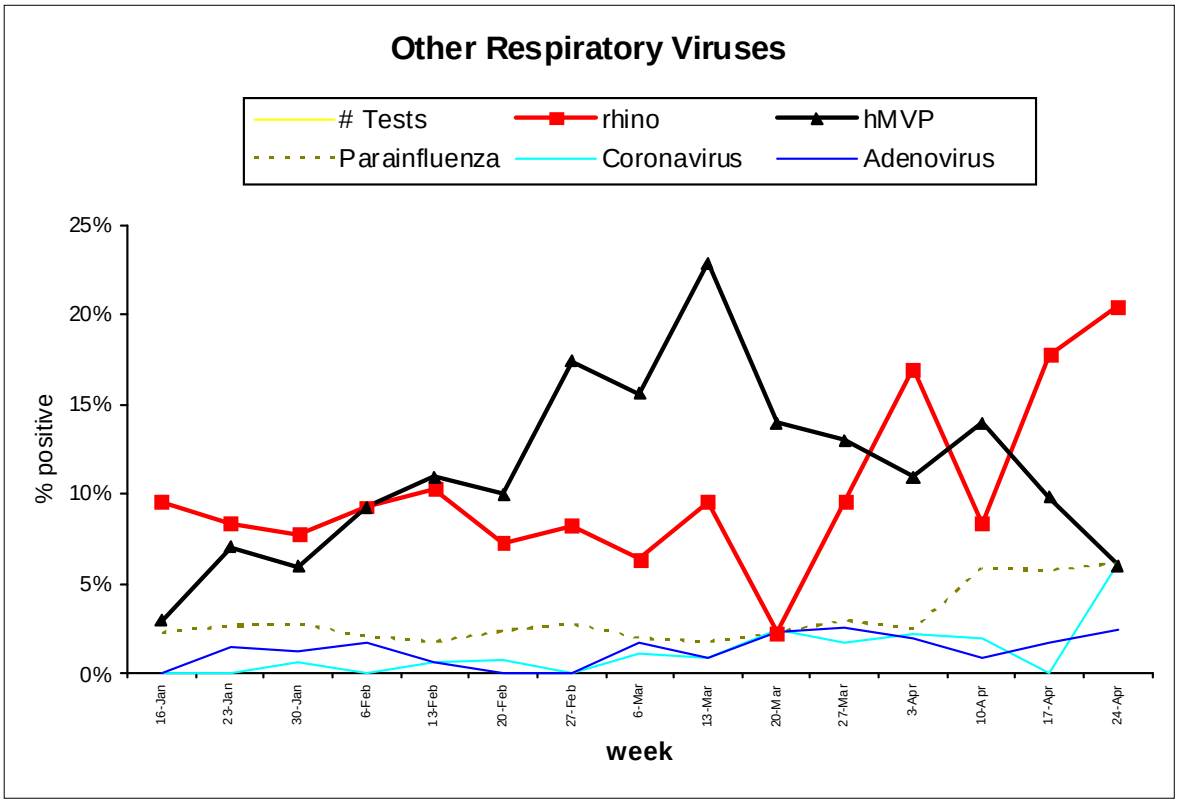
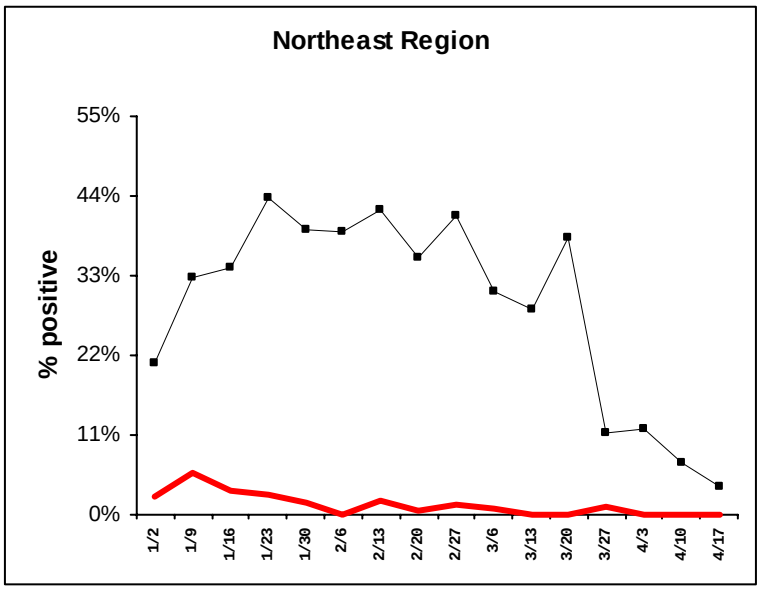
4/10
4/17
4/24

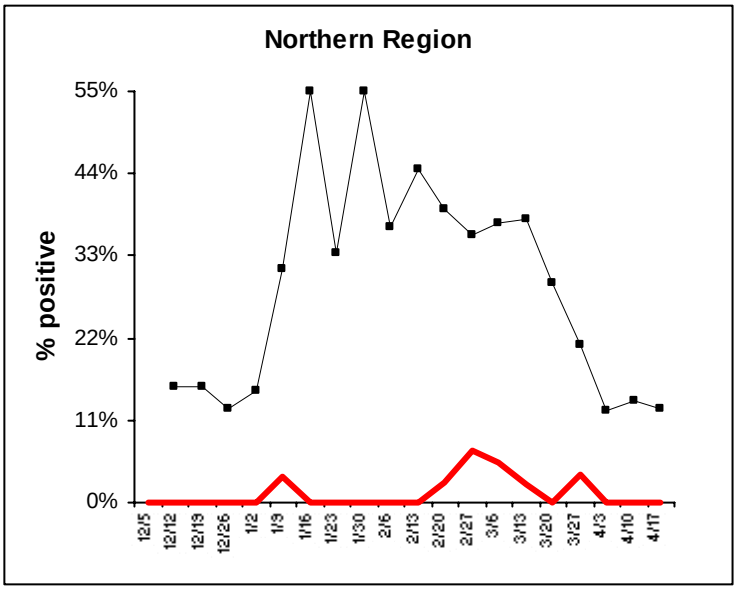

Other Respiratory Viruses
Tests
rhino
hMVP
Parainfluenza
Coronavirus
Adenovirus
25%
20%
15%
10%
5%
0%
% positive
16-Jan
23-Jan
30-Jan
6-Feb
13-Feb
20-Feb
27-Feb
6-Mar
13-Mar
20-Mar
27-Mar
3-Apr
10-Apr
17-Apr
24-Apr
week

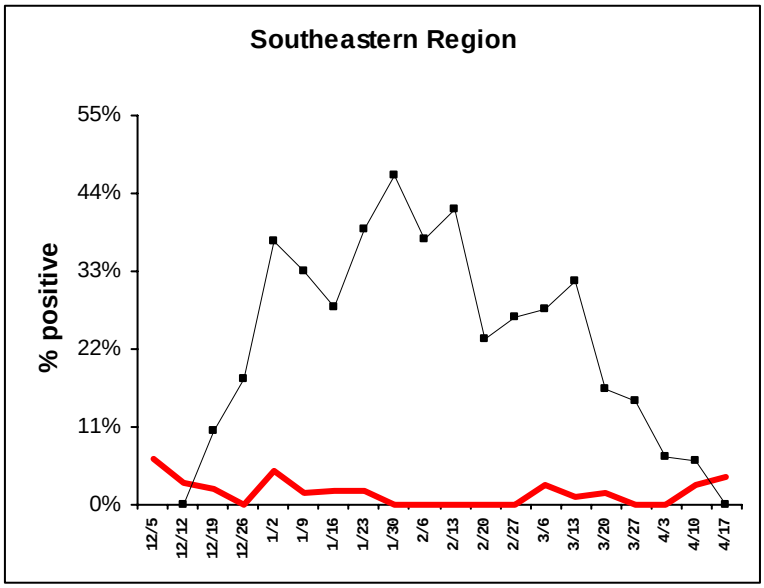
RAPID TEST SITE DATA (CHART) BY REGION

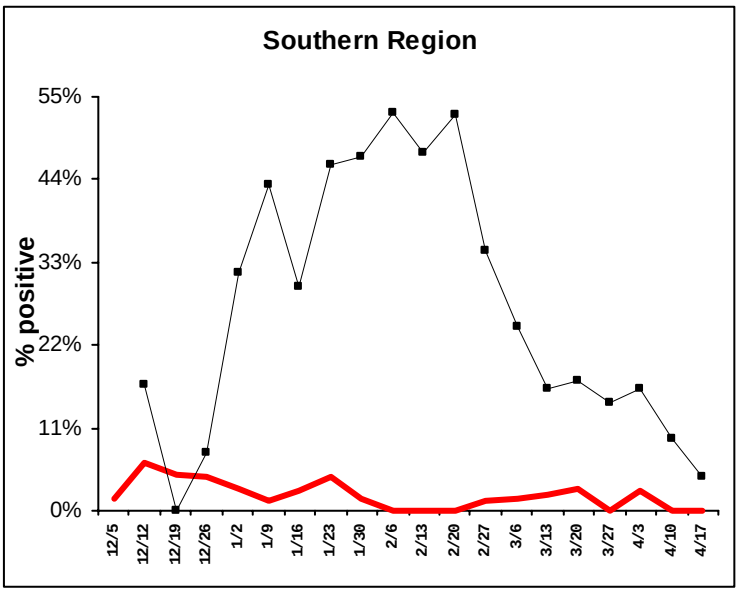
Percent Positive Rapid Tests for Influenza and RSV

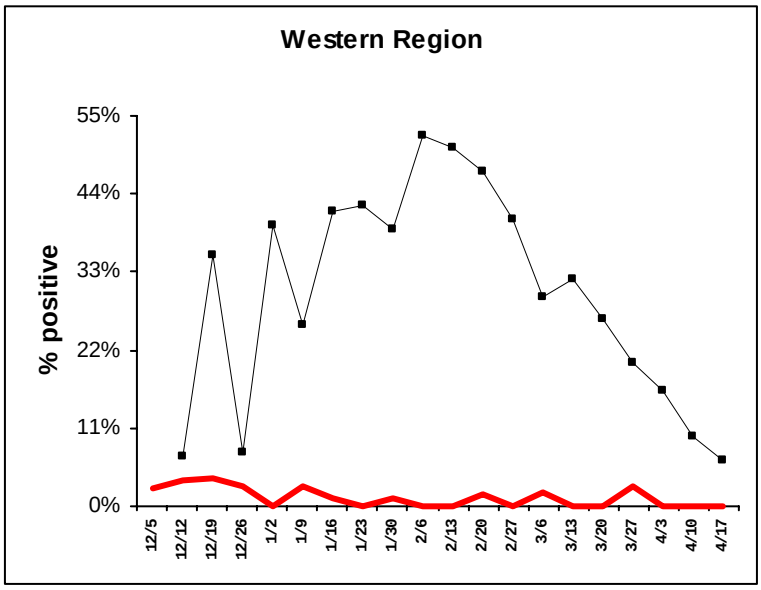
Influenza RSV

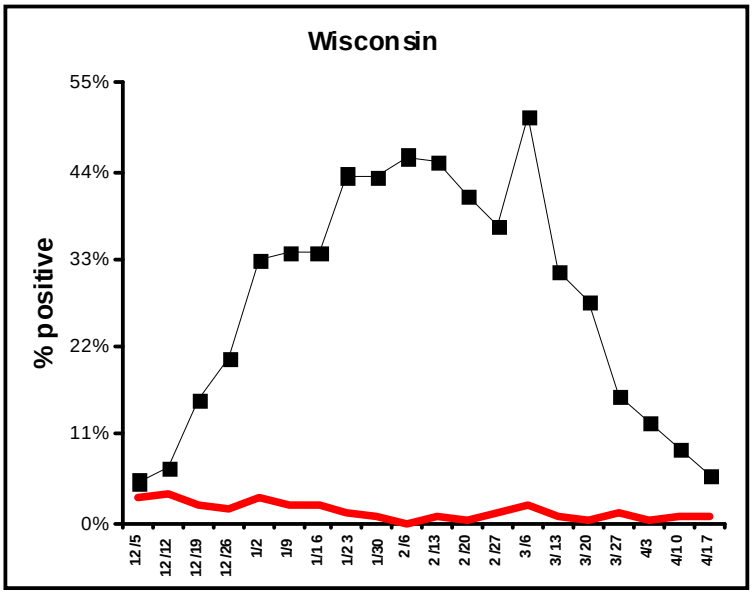




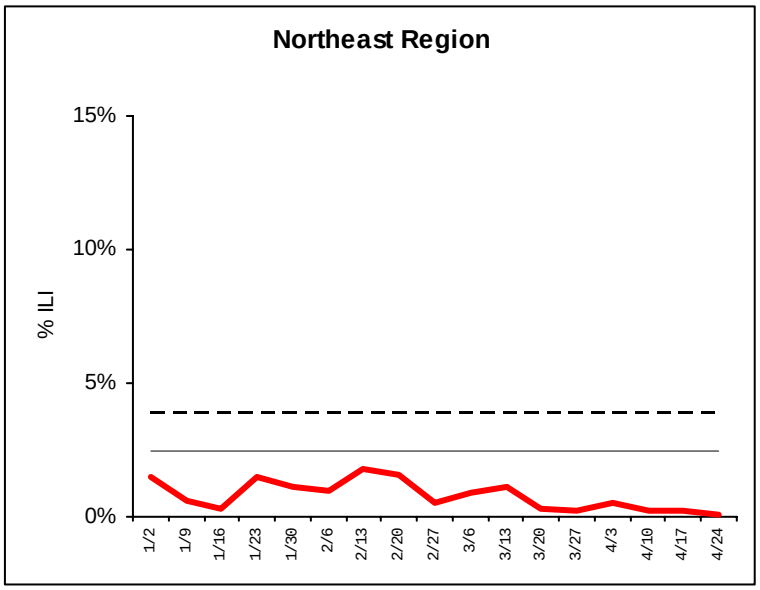
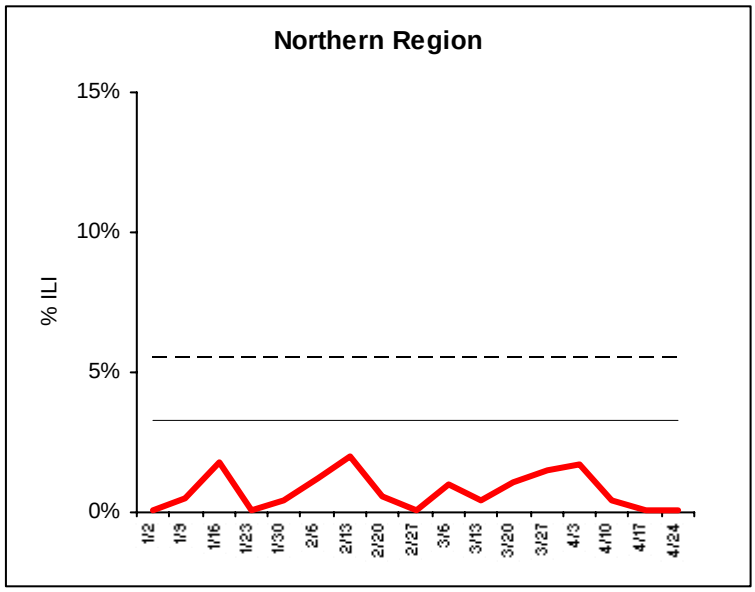
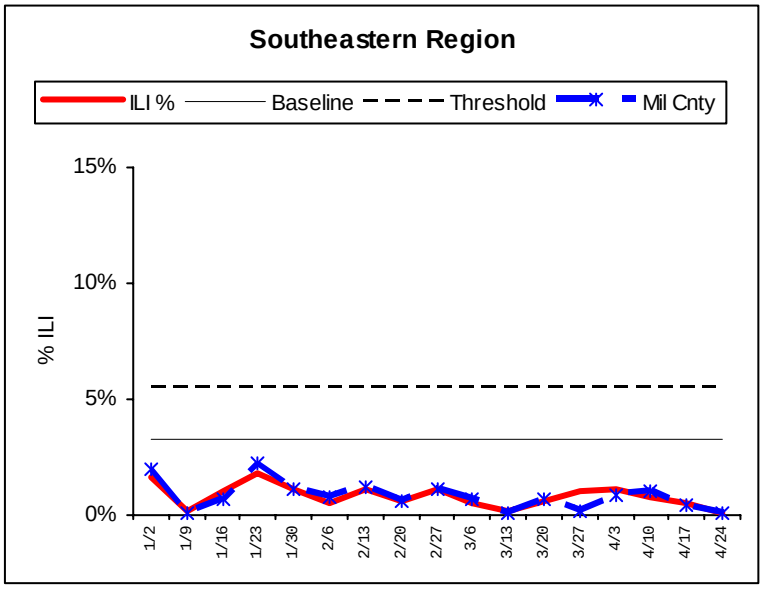
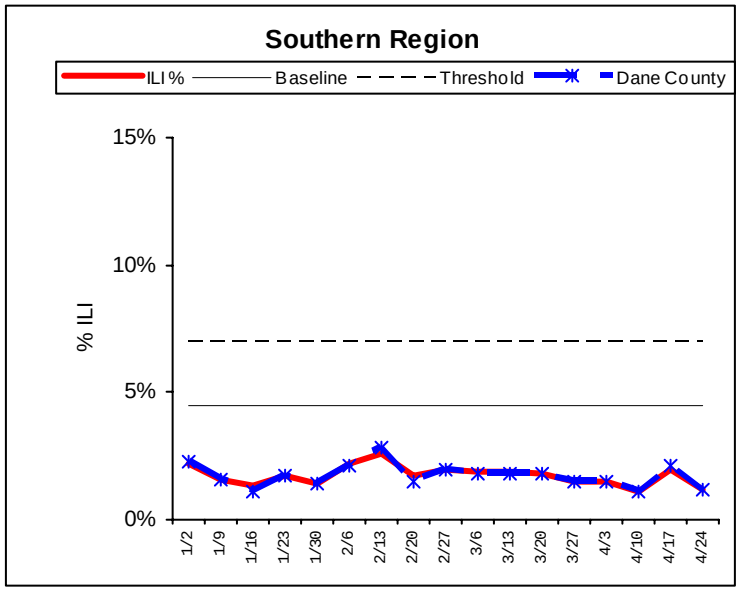
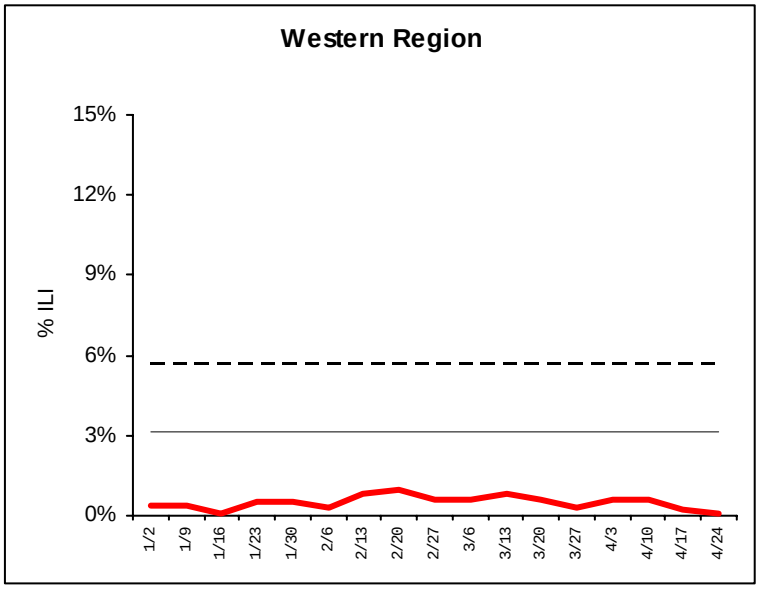
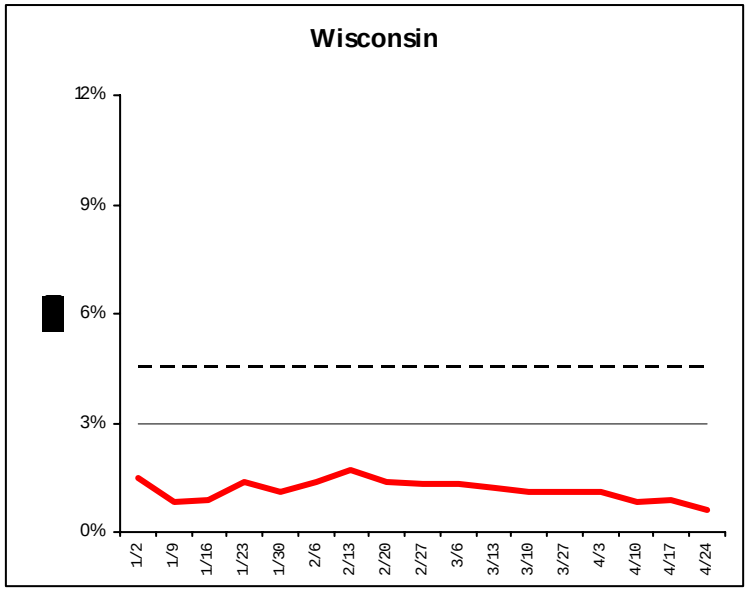








INFLUENZA-LIKE ILLNESS DATA (CHART) BY REGION

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

ILI % — Baseline % — Threshold %