DEPARTMENT OF HEALTH SERVICES
DIVISION OF PUBLIC HEALTH

Weekly Surveillance Report
For the Week Ending April 10, 2010 (week 10-14)

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 10-14	Previous Week 10-13
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 10-14	Baseline
United States	1.0%	2.3%
Wisconsin	0.8%	3.1%
Region V (WI, MN, IL, MI, OH)	0.7%	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

Season/Lab		Influenza Subtype: Seasonal A/H1 Tested	Seasonal A/H1 Resistant	2009 A/H1N1 Tested	2009 A/H1N1 Resistant	A/H3 Tested	A/H3 Resistant
09-10	WSLH						
09-10	CDC	1	0%	1,705	99.8%	13	100.0%

OSELTAMIVIR RESISTANCE

Season/Lab		Influenza Subtype: Seasonal A/H1 Tested	Seasonal A/H1 Resistant	2009 A/H1N1 Tested	2009 A/H1N1 Resistant	A/H3 Tested	A/H3 Resistant	B Tested	B Resistant
09-10	WSLH			87	0%				
09-10	CDC	1	100%	4,453	1.2%	13	0%	23	0%

ZANAMIVIR RESISTANCE

Season/Lab		Influenza Subtype: Seasonal A/H1 Tested	Seasonal A/H1 Resistant	2009 A/H1N1 Tested	2009 A/H1N1 Resistant	A/H3 Tested	A/H3 Resistant	B Tested	B Resistant
09-10	CDC			1,617	0%				

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

	Current Week 10-09	2009-10 Season Total	Due to 2009 H1N1
United States	3	272	221
Wisconsin	0	4	4

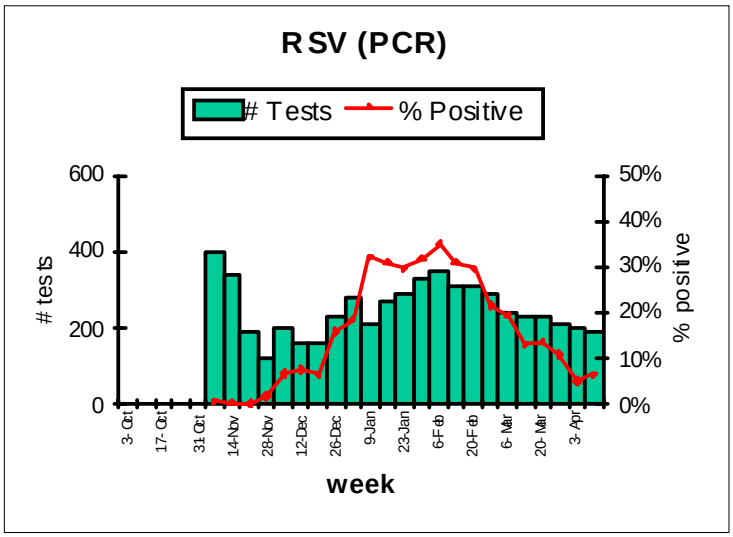
8. Pneumonia and influenza mortality (P&I), United States,

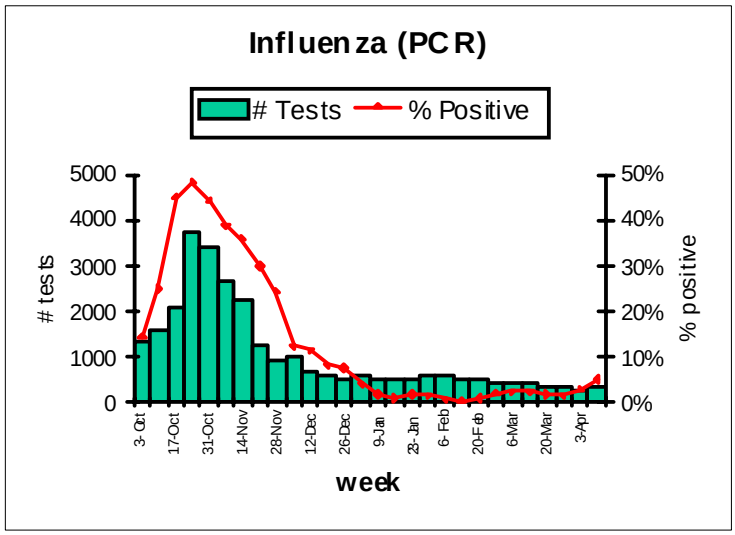
	Current Week 10-14	Previous Week 10-13
P&I %	7.0%	7.2%
National P&I threshold %	7.7%	7.7%

WISCONSIN LABORATORY SURVEILLANCE
For Influenza and other Respiratory Viruses (week 10-14)

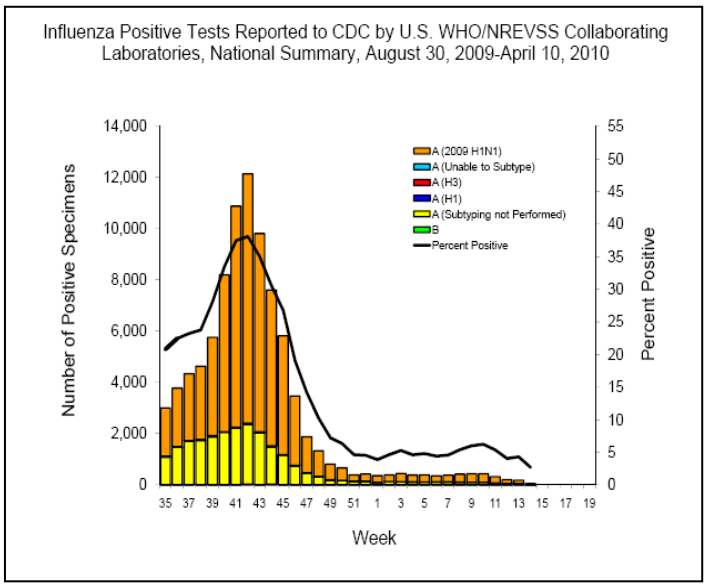
VIRUS CULTURE Based on 92 tests		RAPID TESTS			SELECT PCR TESTS	
Test Type	**% Positive**	**Virus**	**# Tests**	**% Positive**	**Test Type**	**Positive/ total number**
Total % Positive	4.3 %					
Influenza (Tot.)	3.3%	Influenza (Tot)	157	0.6%	Influenza A & B	17/336
Influenza A	3.3%				Influenza A	0/4
Influenza B	0.0%	Influenza A		0.6%	# A/H1	0
					2009 A/H1	17
hMPV	0.0%	Influenza B		0.0%	# A/H3	0
					# A/not subtyped	0
		Influenza Unk.*		0.0%	# B	0
RSV	0.0%	RSV	132	9.1%	RSV	12/187
Adenovirus	0.0%	Adenovirus	18	0.0%	Adenovirus	1/107
Parainfluenza	1.0%				Parainfluenza	8/136
					Corona OC43	1/100
Rhinovirus	0.0%	*Influenza unknown (Unk) are positive influenza test results that cannot be distinguished between Type A and B			Corona NL63	0/100
					Corona HUK1	0/100
Enterovirus	0.0%				Corona 229 E	1/100
					Rhinovirus	9/107
hMPV	0.0%				hMPV	15/107

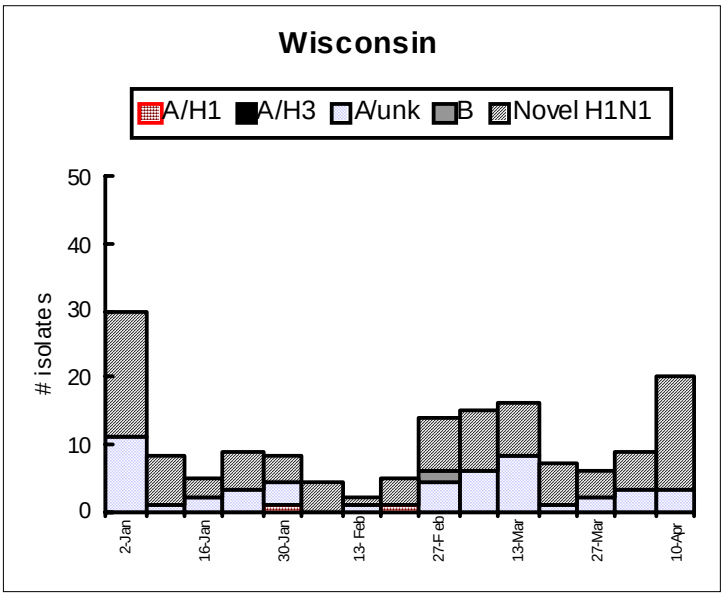
WISCONSIN TREND. RSV AND INFLUENZA PCR POSITIVE TESTS





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



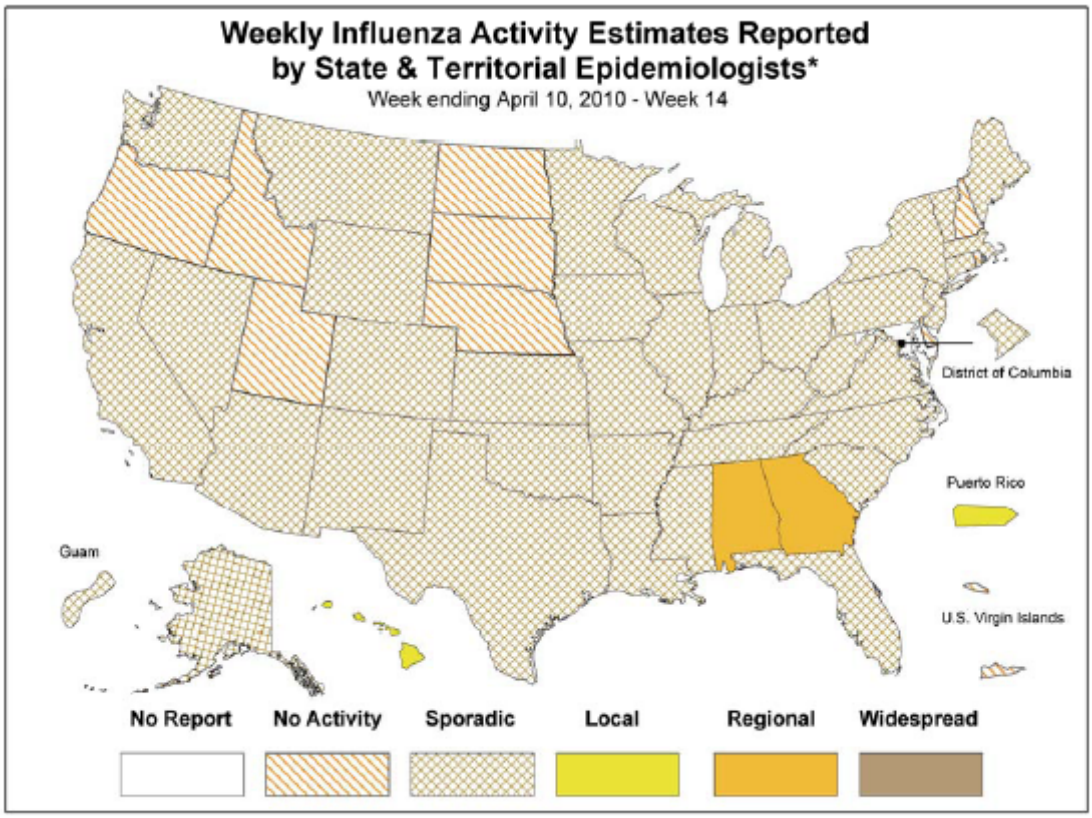


NATIONAL SUMMARY
(Wisconsin is in Region 5)
Current week 10-14

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	2.7%	2 of 54	34	65	66,605	288	22,408	295	272
Region 1	Normal	0.6%	0 of 6	4	5	3,403	14	503	12	6
Region 2	Normal	0.7%	0 of 4	8	6	1,809	0	2,404	14	19
Region 3	Normal	1.9%	0 of 6	3	11	10,714	48	1,453	18	14
Region 4	Normal	9.6%	2 of 8	0	7	9,813	95	4,679	89	52
Region 5	Normal	3.2%	0 of 6	8	25	9,495	46	1,579	19	36
Region 6	Normal	4.2%	0 of 5	2	3	5,185	19	5,408	56	73
Region 7	Normal	5.1%	0 of 4	3	1	3,292	3	847	9	8
Region 8	Normal	1.4%	0 of 6	4	2	9,863	0	3,941	56	16
Region 9	Normal	1.1%	0 of 5	0	4	8,344	49	1,246	18	38
Region 10	Normal	1.3%	0 of 4	2	1	4,687	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.

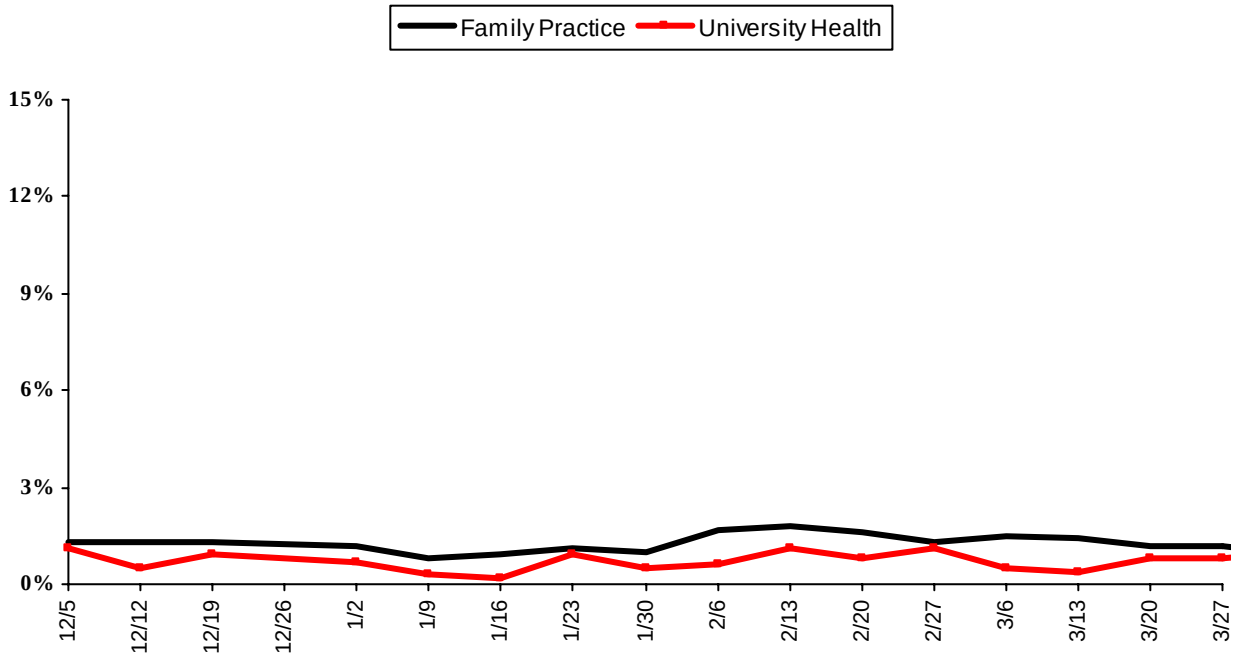


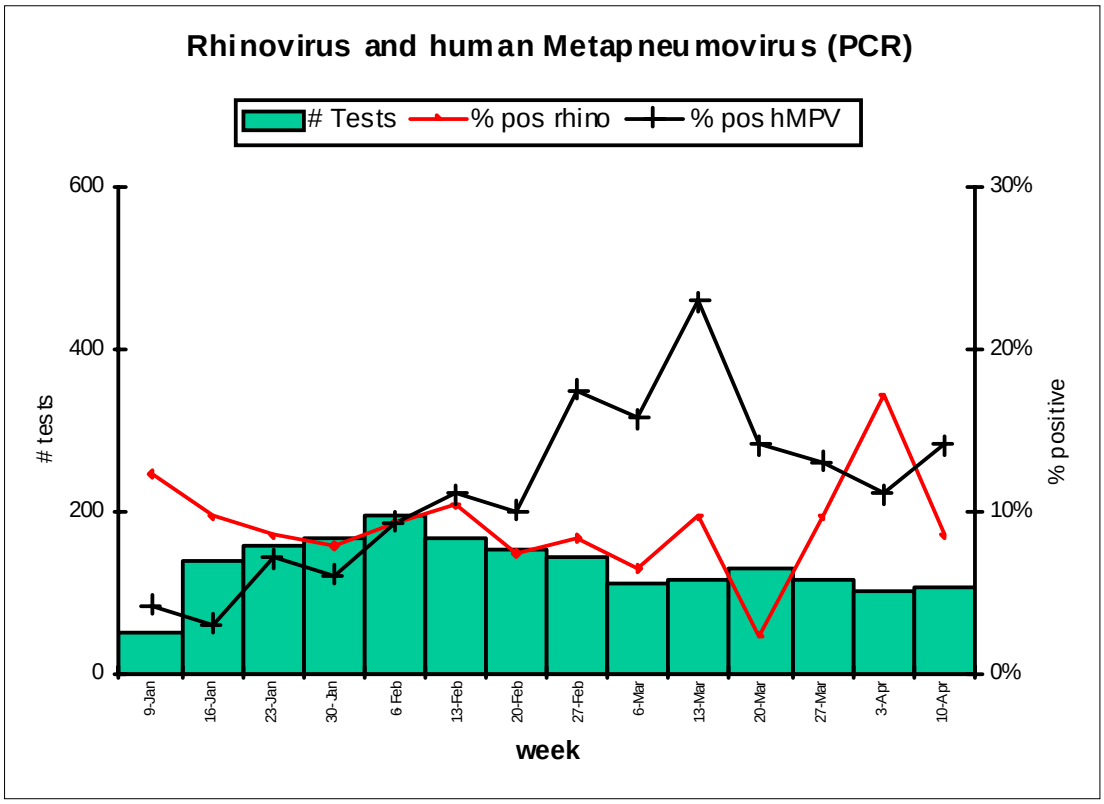
* This map indicates geographic spread & does not measure the severity of influenza activity

ILI Activity Statewide

Family Practice Clinicians and University Student Health Clinicians

December 5, 2009 to present

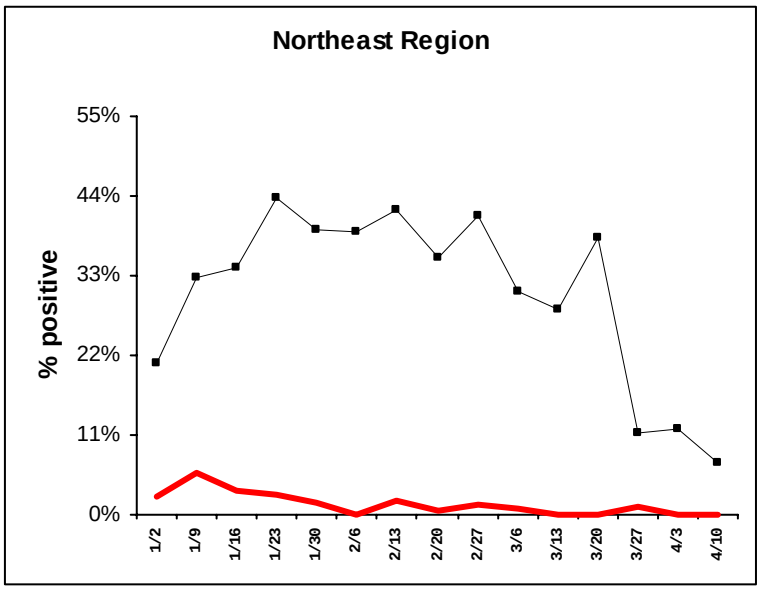


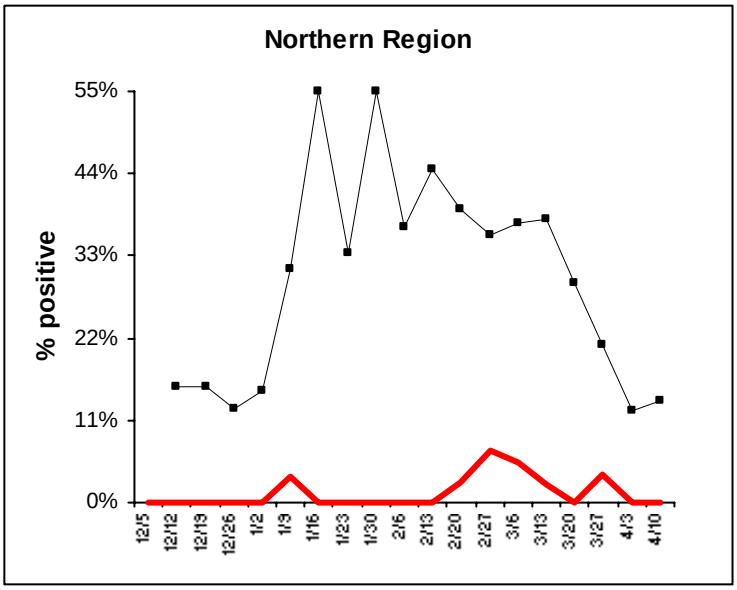


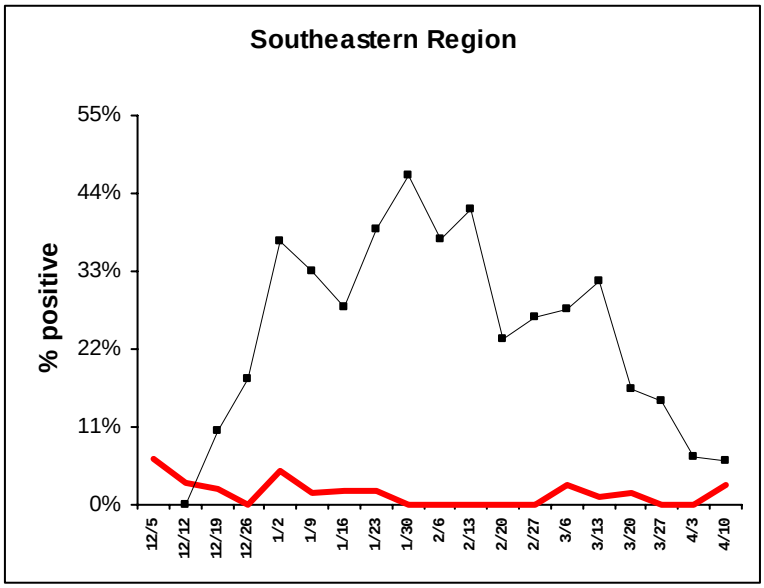
RAPID TEST SITE DATA (CHART) BY REGION

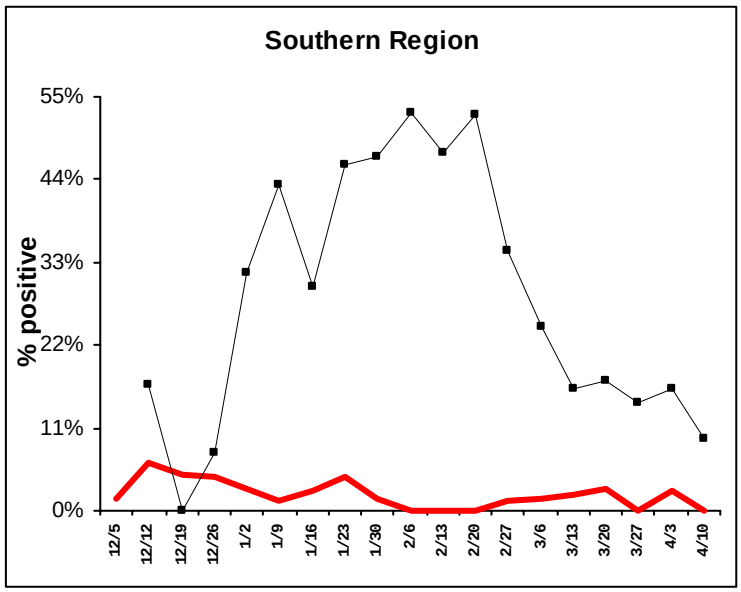
Percent Positive Rapid Tests for Influenza and RSV

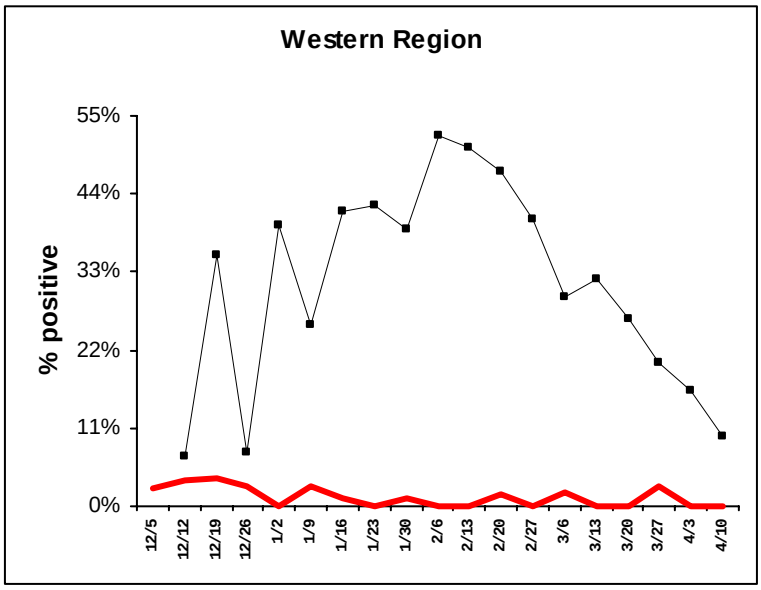
Influenza RSV

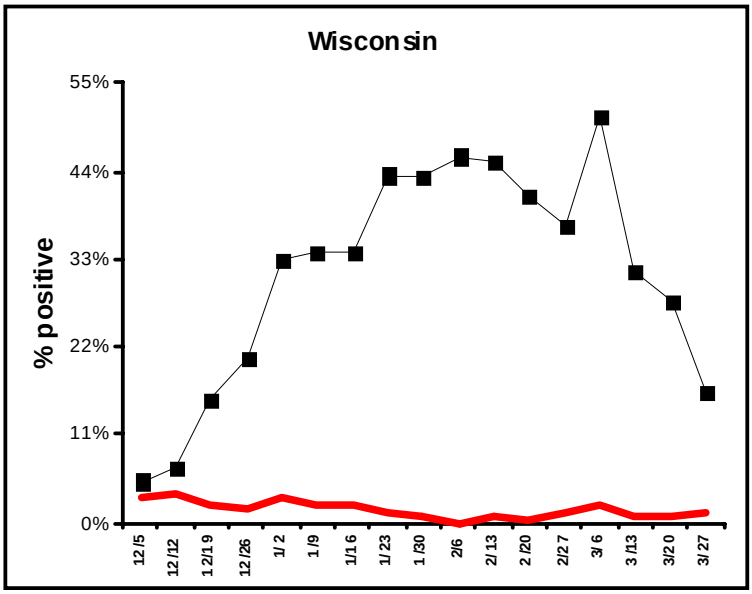




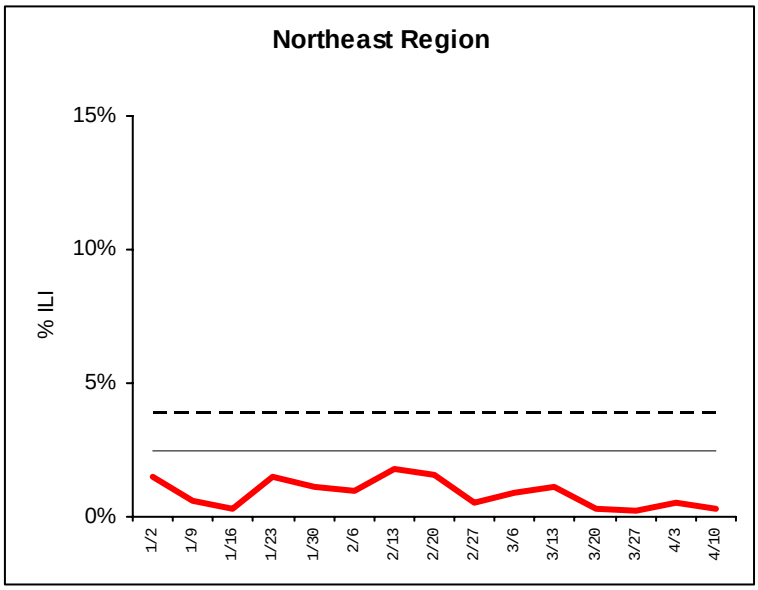
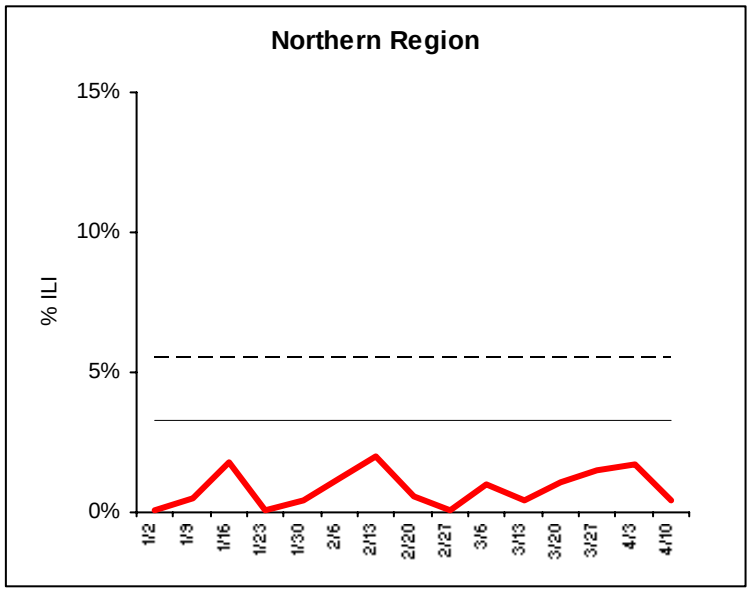
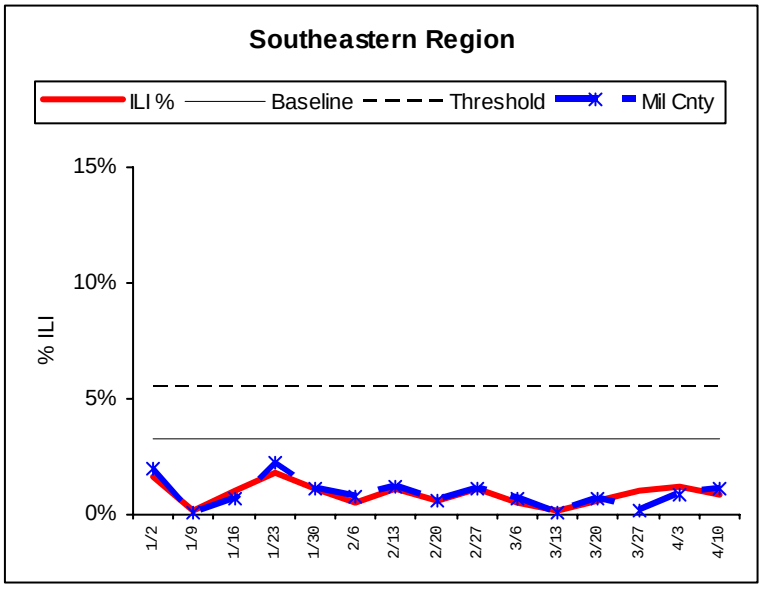
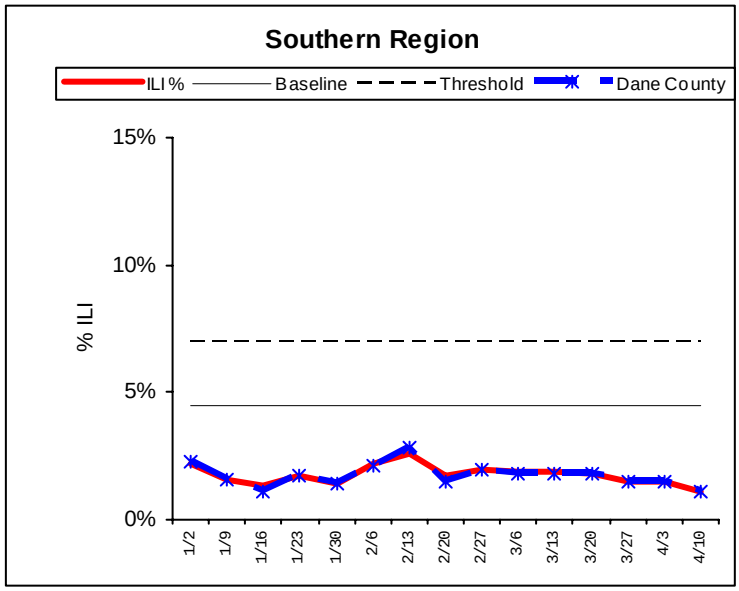
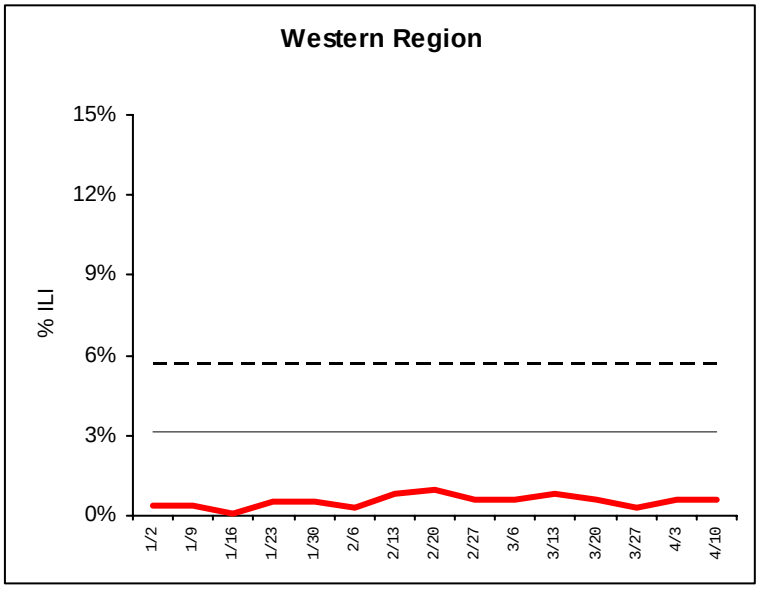
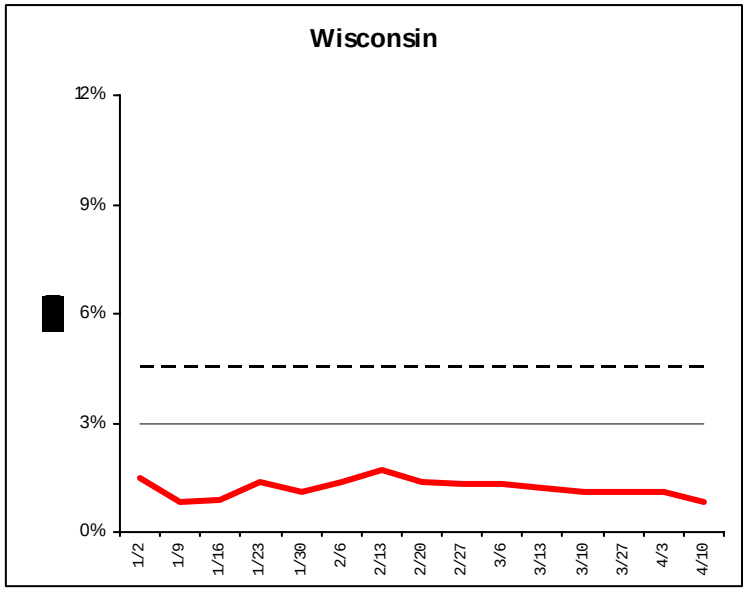








INFLUENZA-LIKE ILLNESS DATA (CHART) BY REGION

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

ILI % — Baseline % — Threshold %