DEPARTMENT OF HEALTH SERVICES
DIVISION OF PUBLIC HEALTH

Weekly Surveillance Report
For the Week Ending March 20, 2010 (week 10-11)

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 10-11	Previous Week 10-10
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 10-11	Baseline
United States	1.8%	2.3%
Wisconsin	0.6%	3.1%
Region V (WI, MN, IL, MI, OH)	1.0%	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%	1,608	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			72	0%				
09-10	CDC	1	100%	4,161	1.2%	13	0%	17	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			1,588	0%				

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

	Current Week 10-09	2009-10 Season Total	Due to 2009 H1N1
United States	1	268	218
Wisconsin	0	4	4

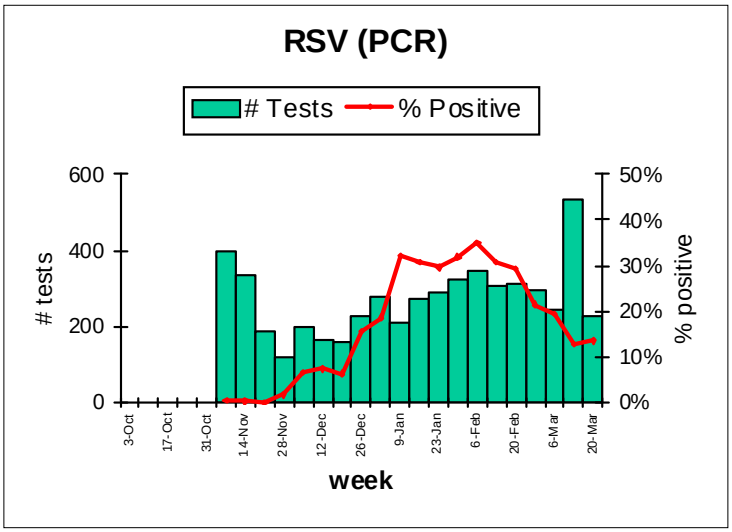
8. Pneumonia and influenza mortality (P&I), United States,

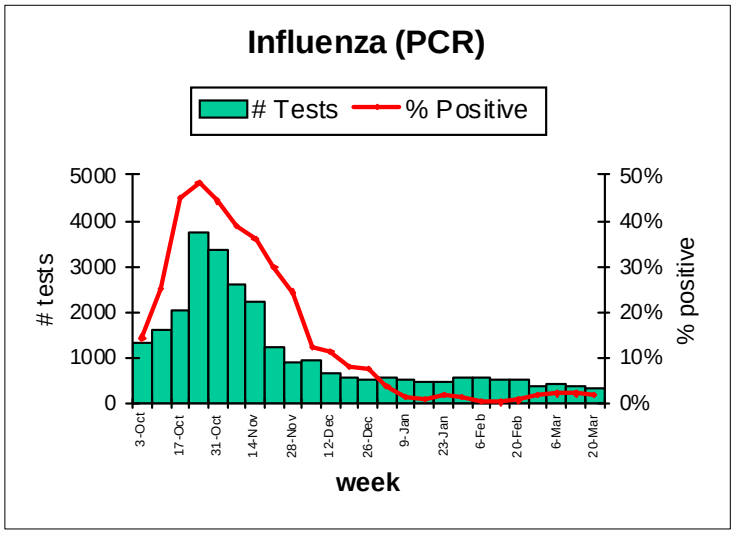
	Current Week 10-11	Previous Week 10-10
P&I %	7.7%	7.3%
National P&I threshold %	7.8%	7.9%

WISCONSIN LABORATORY SURVEILLANCE
For Influenza and other Respiratory Viruses (week 10-11)

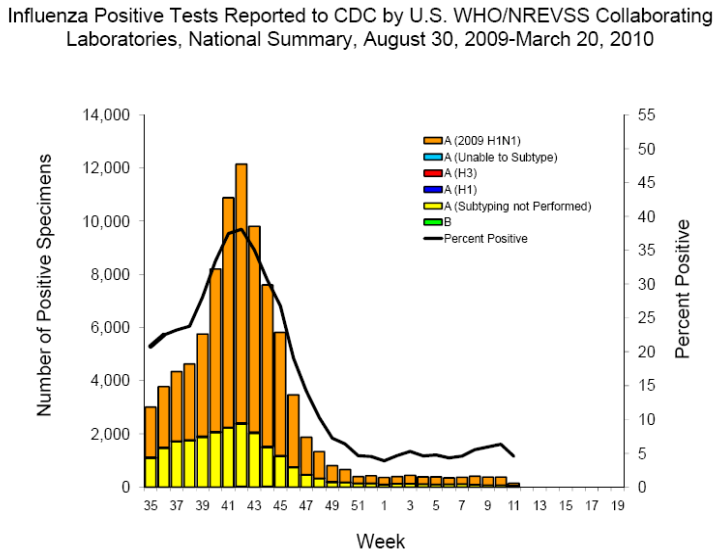
VIRUS CULTURE Based on 81 tests		RAPID TESTS			SELECT PCR TESTS	
Test Type	% Positive	Virus	# Tests	% Positive	Test Type	Positive/ total number
Total % Positive	8.6%					
Influenza (Tot.)	4.9%	Influenza (Tot)	244	0.8%	Influenza A & B	7/364
Influenza A	4.9%				Influenza A	0/3
Influenza B	0.0%	Influenza A		0.8%	# A/H1	0
					2009 A/H1	6
hMPV	0.0%	Influenza B		0.0%	# A/H3	0
					# A/not subtyped	1
		Influenza Unk.*		0.0%	# B	0
RSV	3.7%	RSV	351	27.9%	RSV	31/229
Adenovirus	0.0%	Adenovirus	20	0.0%	Adenovirus	3/129
Parainfluenza	0.0%				Parainfluenza	4/172
					Corona OC43	1/121
Rhinovirus	0.0%	*Influenza unknown (Unk) are positive influenza test results that cannot be distinguished between Type A and B			Corona NL63	1/121
					Corona HUK1	1/121
Enterovirus	0.0%				Rhinovirus	3/129
hMPV	0.0%				hMPV	18/129

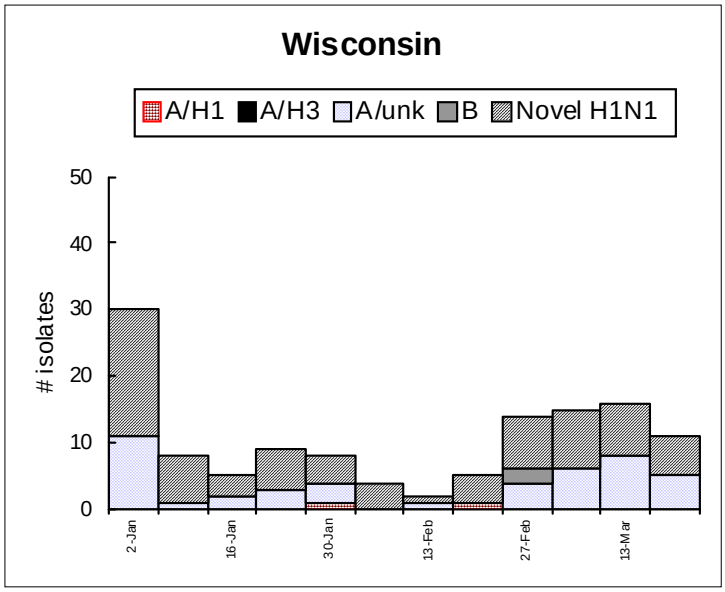
WISCONSIN TREND. RSV AND INFLUENZA PCR POSITIVE TESTS





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





NATIONAL SUMMARY
(Wisconsin is in Region 5)

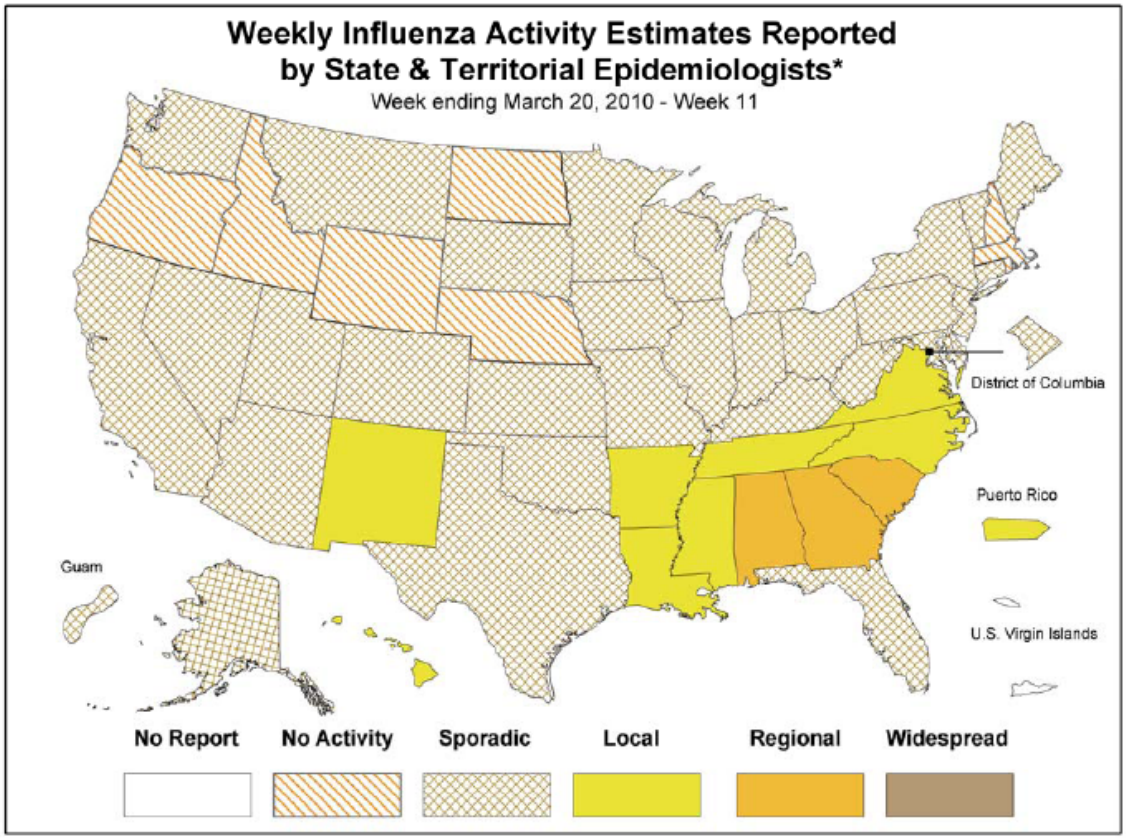
Current week 10-11

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	4.6%	3 of 54	34	63	66,050	289	22,199	284	268
Region 1	Normal	1.5%	0 of 6	4	4	3,402	14	502	11	6
Region 2	Normal	1.7%	0 of 4	8	5	1,794	0	2,395	12	18
Region 3	Normal	1.9%	0 of 6	3	11	10,686	48	1,452	18	14
Region 4	Elevated	15.2%	3 of 8	0	7	9,527	95	4,598	85	51
Region 5	Normal	3.7%	0 of 6	8	25	9,474	47	1,576	19	36
Region 6	Normal	6.6%	0 of 5	2	3	5,069	19	5,342	54	71
Region 7	Elevated	7.2%	0 of 4	3	1	3,247	3	843	9	8
Region 8	Normal	1.2%	0 of 6	4	2	9,845	0	3,931	56	16
Region 9	Elevated	0.3%	0 of 5	0	4	8,326	49	1,214	17	38
Region 10	Normal	1.1%	0 of 4	2	1	4,680	14	346	3	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.

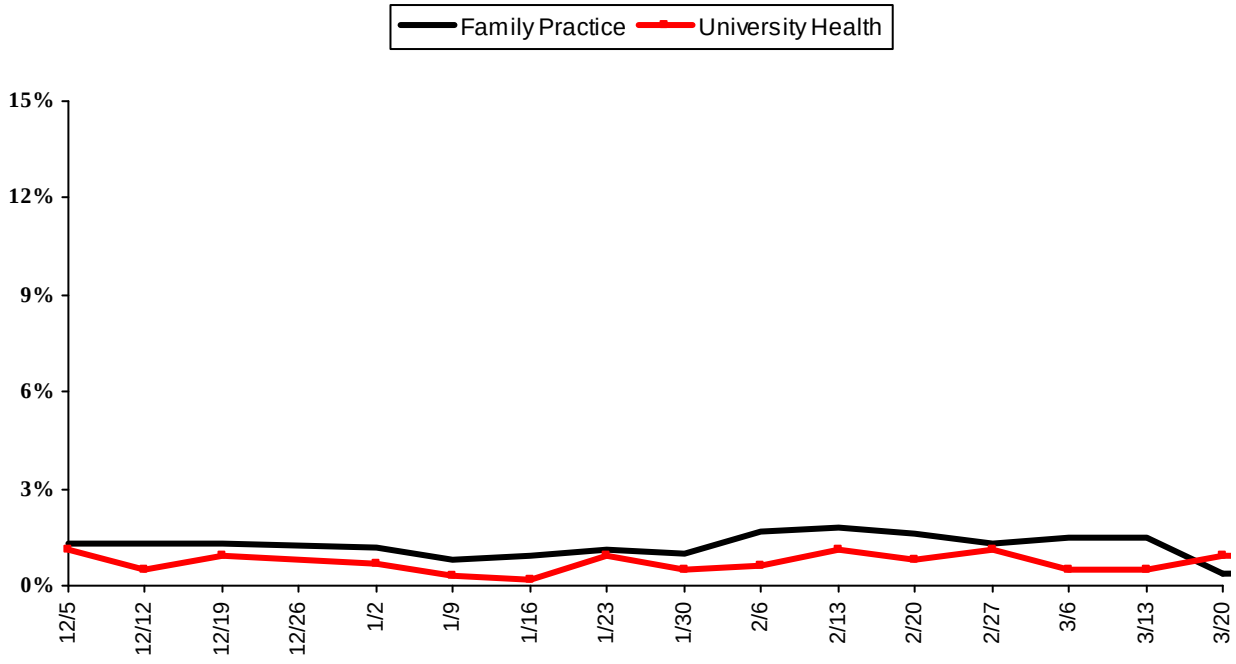


* This map indicates geographic spread & does not measure the severity of influenza activity

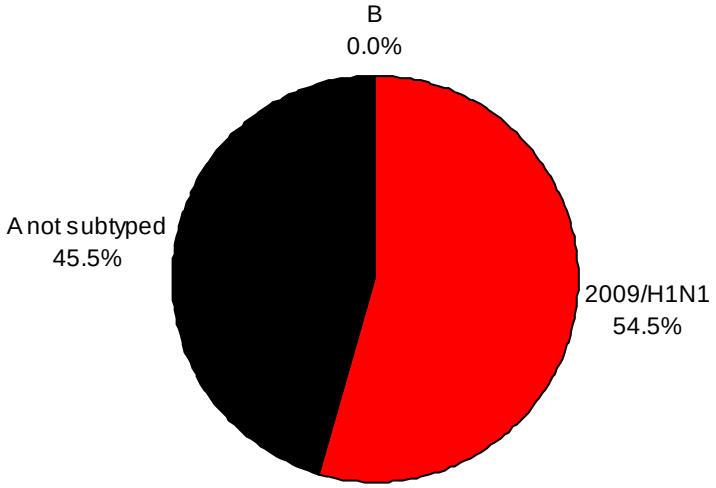
ILI Activity Statewide

Family Practice Clinicians and University Student Health Clinicians

December 5, 2009 to present



Influenza Strains Wisconsin Week 06

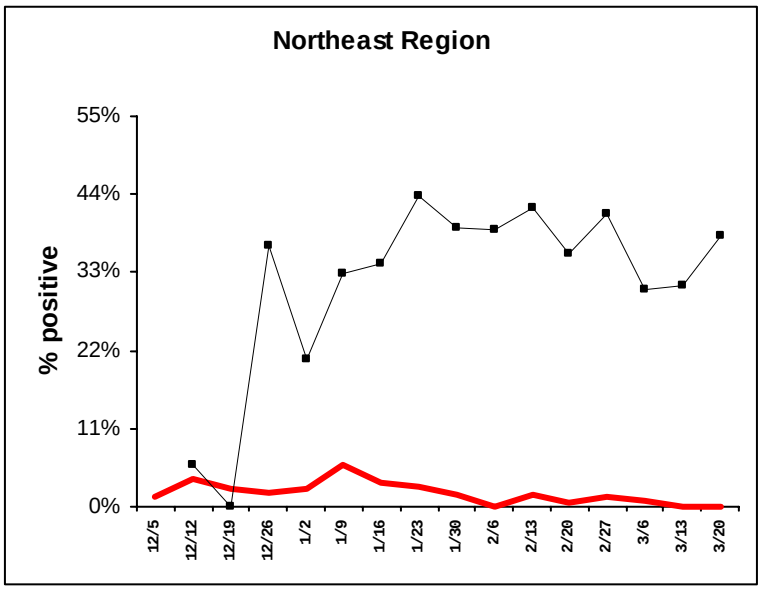


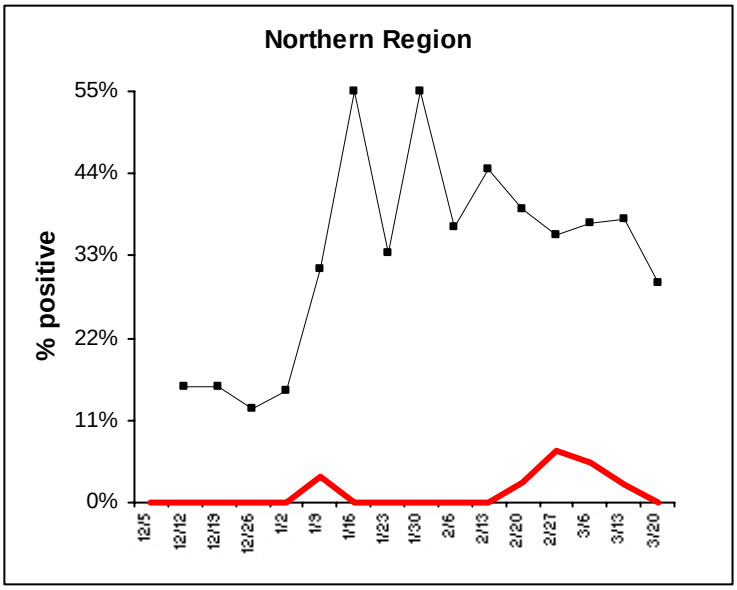
100% Influenza A
0% Influenza B
Of those Influenza A subtyped:
6/6 were 2009/ H1N1

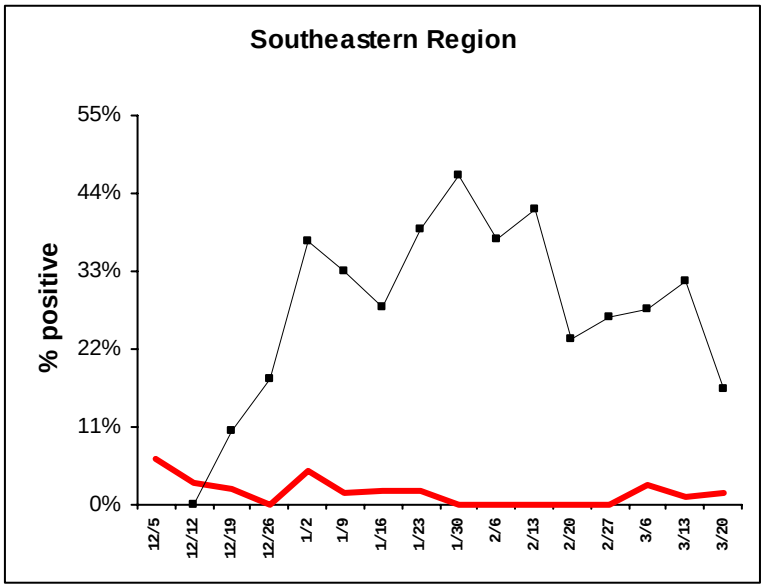
RAPID TEST SITE DATA (CHART) BY REGION

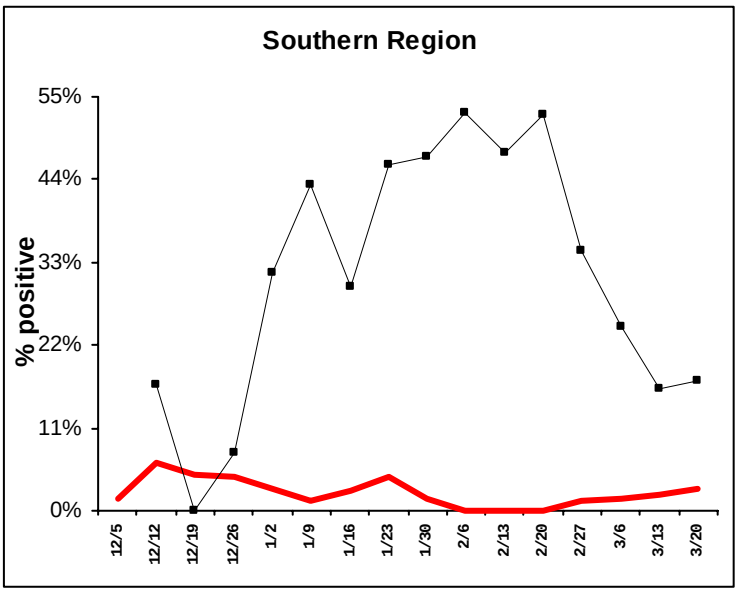
Percent Positive Rapid Tests for Influenza and RSV

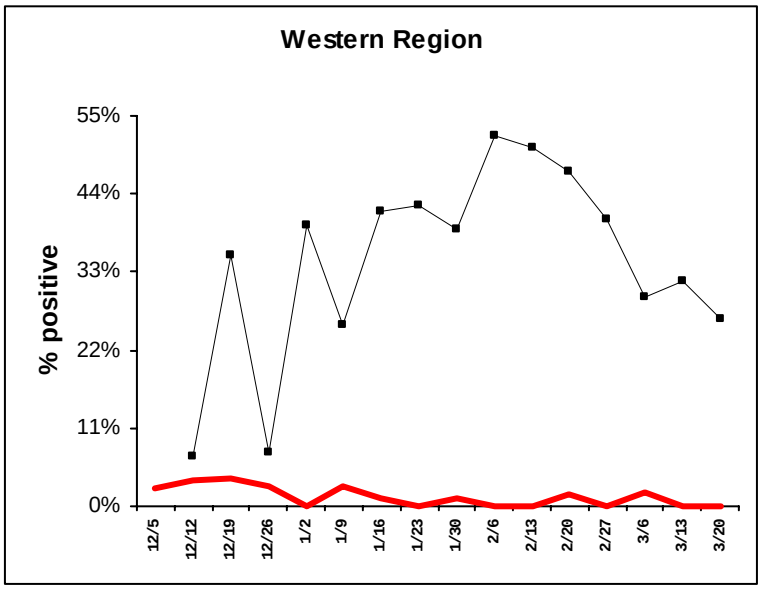
Influenza RSV

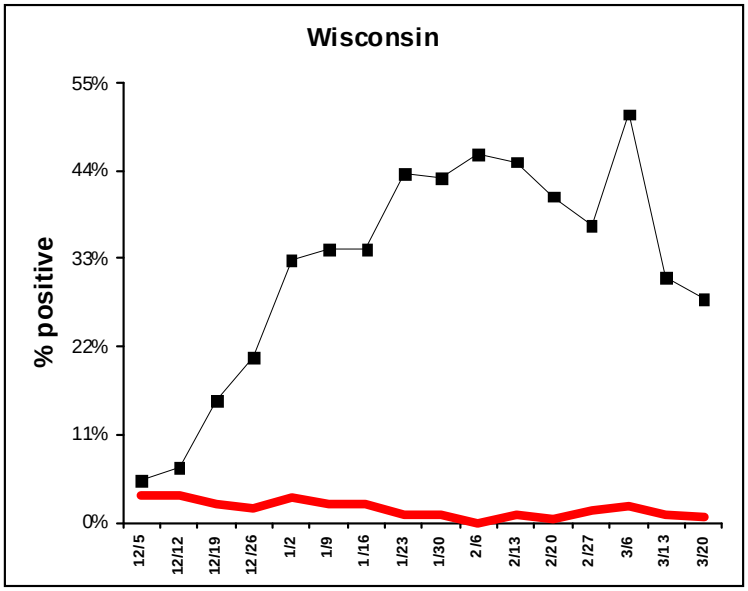




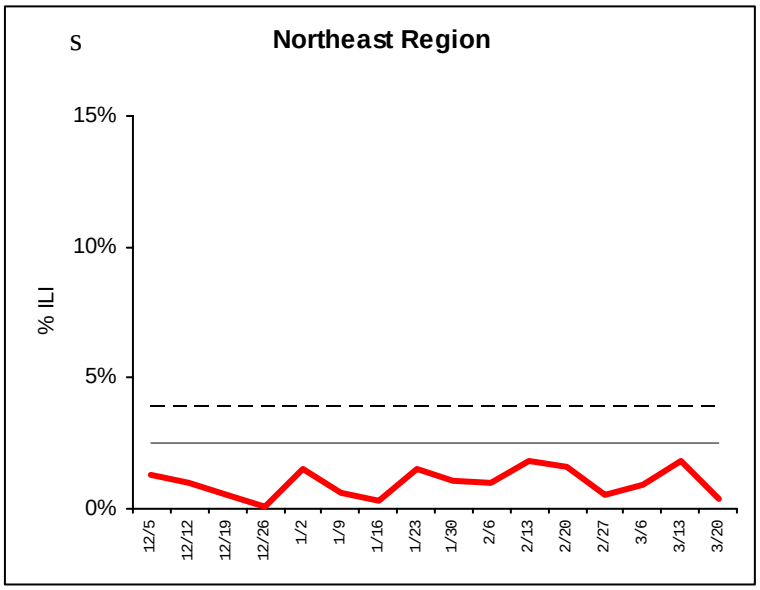
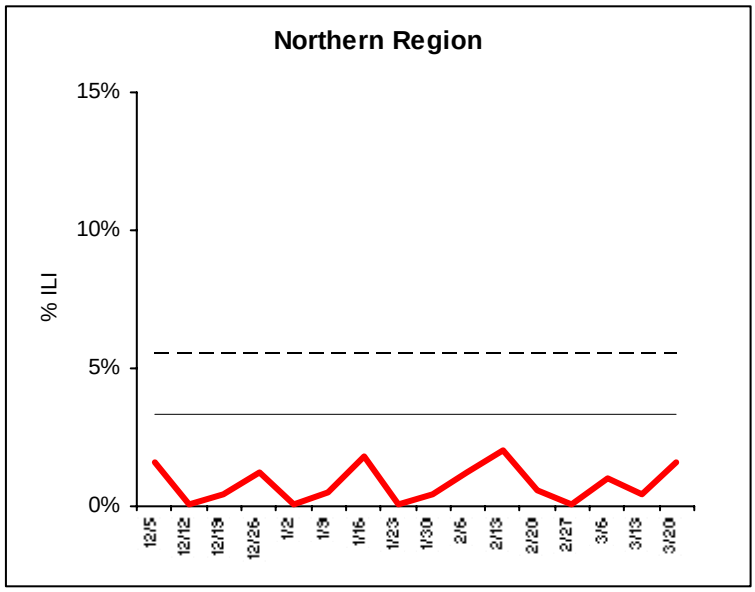
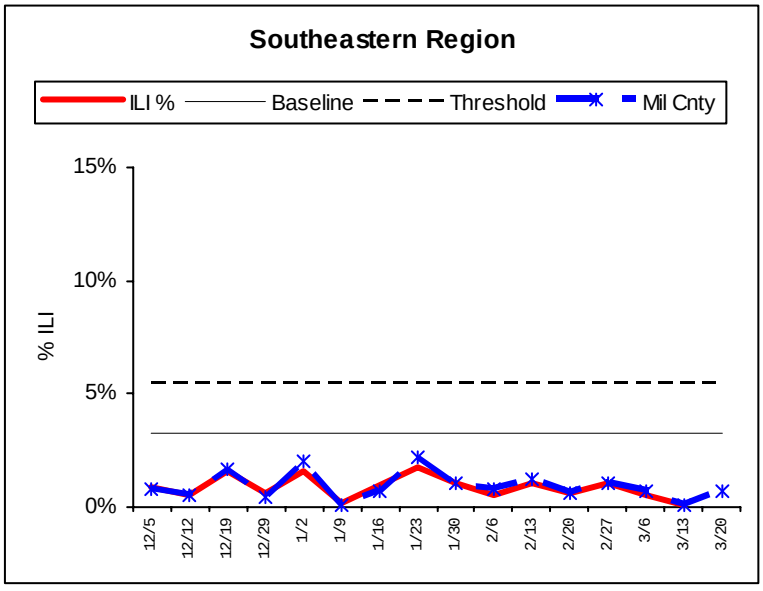
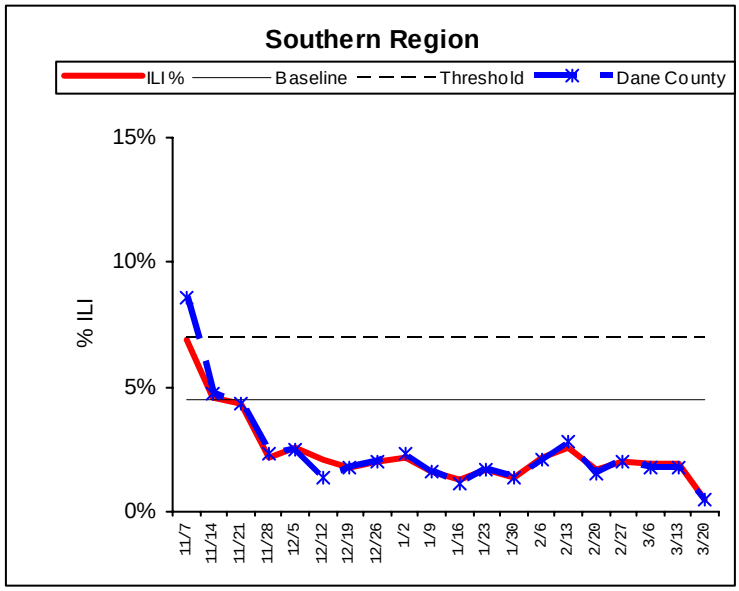
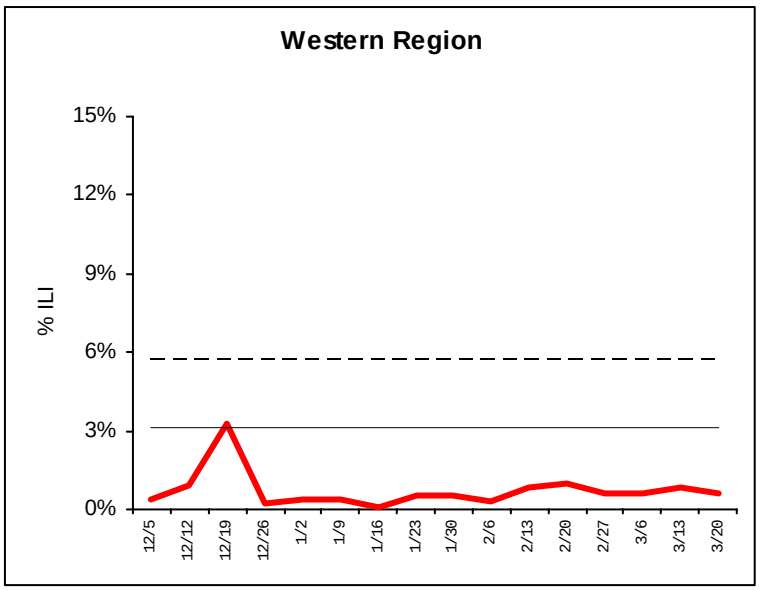
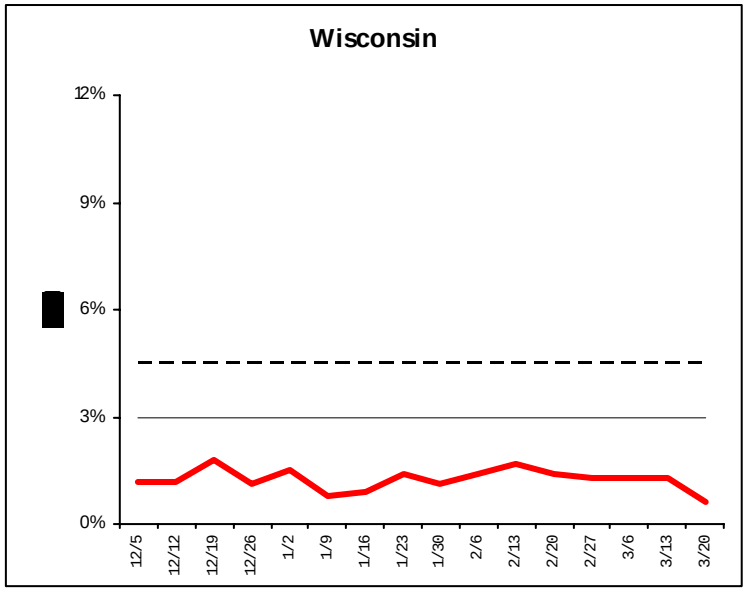








INFLUENZA-LIKE ILLNESS DATA (CHART) BY REGION

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

ILI % — Baseline % — Threshold %