DEPARTMENT OF HEALTH SERVICES
DIVISION OF PUBLIC HEALTH

Weekly Surveillance Report
For the Week Ending November 21, 2009 (week 09-46)

AT A GLANCE

1. Predominant respiratory viruses in Wisconsin:
2009 A/H1N1 , and Parainfluenza

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

	Current Week 09-46	Previous Week 09-45
Wisconsin	Moderate	High
Northeastern Region	Low	Low
Northern Region	Low	Moderate
Southeastern Region	High	High
Southern Region	Low	Low
Western Region	Moderate	High

*Note: Beginning week 40, baseline and threshold levels have changed to reflect the 2009-2010 influenza season activity

3. Influenza-like illness percentage:

	Current week 09-46	Baseline
United States	5.5%	2.3%
Wisconsin	4.0%	3.1%
Region V (WI, MN, IL, MI, OH)	6.4%	1.7%

4. The Predictive Value Positive (PVP) for rapid influenza tests is:
(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:
(PVN is the probability of not having disease when the test result is negative)

Although a positive Influenza A rapid test is likely to be a true positive, we are seeing many false negative rapid test results. Therefore Use of the influenza rapid test to diagnose 2009 H1N1 is discouraged

6. Antiviral resistance: (August 31 2009 –present)

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			182	99.5%	1	100%

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			140	0%				
09-10	CDC			1209	0.8%				

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			353	0%				

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

	Current Week 09-45	2009-10 Season Total	Due to 2009 H1N1
United States	21	138	113
Wisconsin	0	3	3

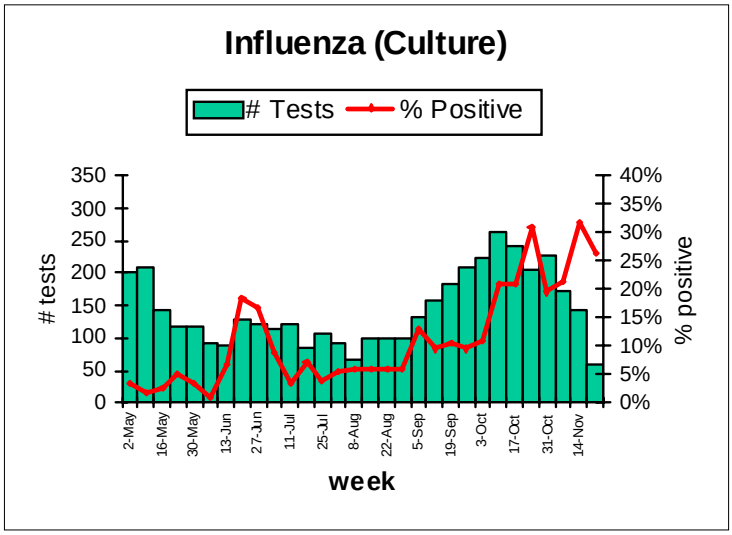
8. Pneumonia and influenza mortality (P&I), United States,

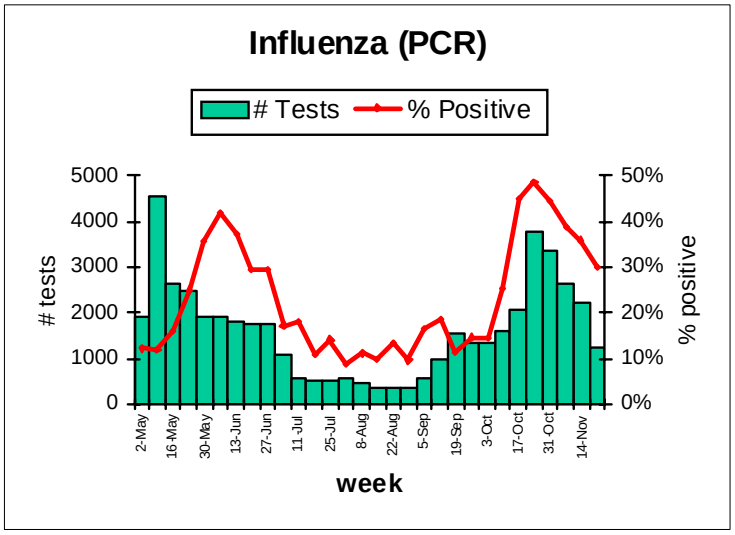
	Current Week 09-46	Previous Week 09-45
P&I %		7.5%
National P&I threshold %		6.9%

WISCONSIN LABORATORY SURVEILLANCE
For Influenza and other Respiratory Viruses (week 09-46)

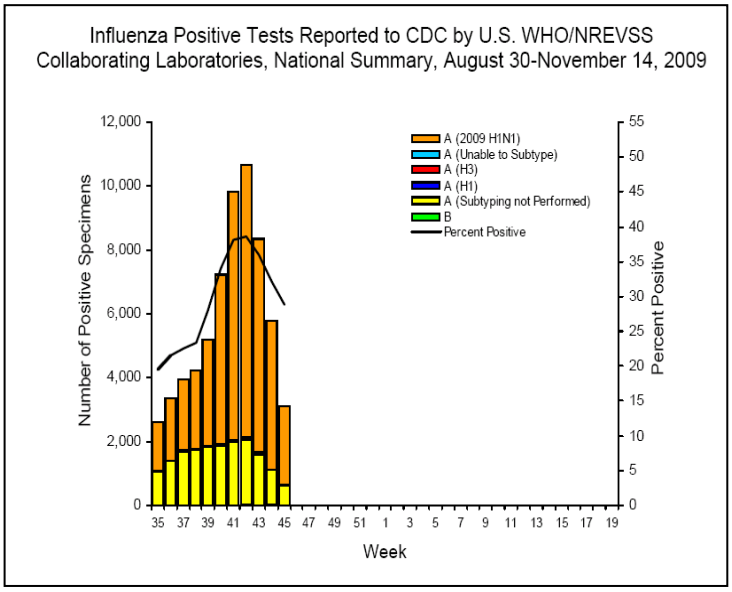
VIRUS CULTURE Based on 61* tests		RAPID TESTS			SELECT PCR TESTS	
Test Type	% Positive	Virus	# Tests	% Positive	Test Type	Positive/ total number
Total % Positive	26.2%					
Influenza (Tot.)	19.7%	Influenza (Tot)	761	10.6%	Influenza A & B	296/945
Influenza A	19.7%				Influenza A	79/260
Influenza B	0.0%	Influenza A		10.0%	# A/H1	0
					2009 A/H1	304
hMPV	0.0%	Influenza B		0.3%	# A/H3	1
					# A/not subtyped	70
		Influenza Unk.*		0.3%	# B	1
RSV	0.0%	RSV	71	4.2%	RSV	0/188
Adenovirus	0.0%	Adenovirus	34	0.0%	Adenovirus	1/47
Parainfluenza	4.9%				Parainfluenza	2/172
					Corona OC 43	0/47
Rhinovirus	1.6%	*Influenza unknown (Unk) are positive influenza test results that cannot be distinguished between Type A and B			Rhinovirus	1/47
					hMPV	0/47
Enterovirus	0.0%				Enterovirus	0/1

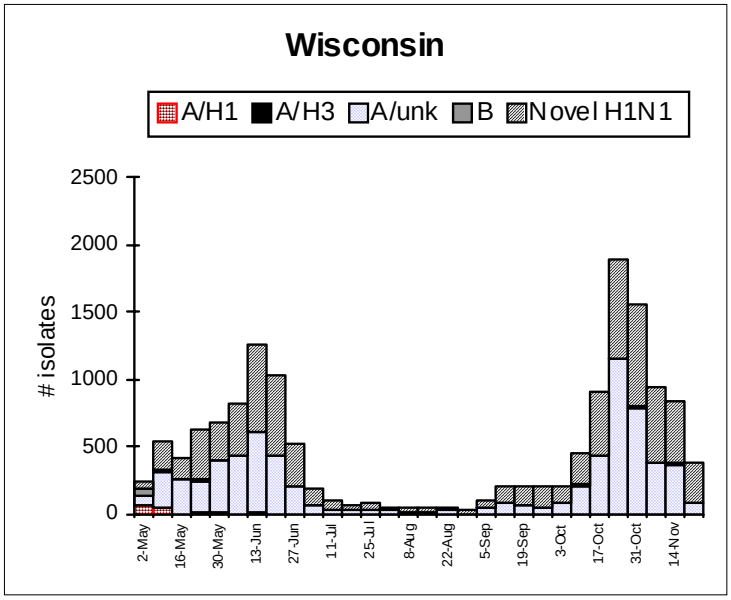
WISCONSIN TREND April 2009-Present . INFLUENZA PCR AND CULTURE POSITIVE





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

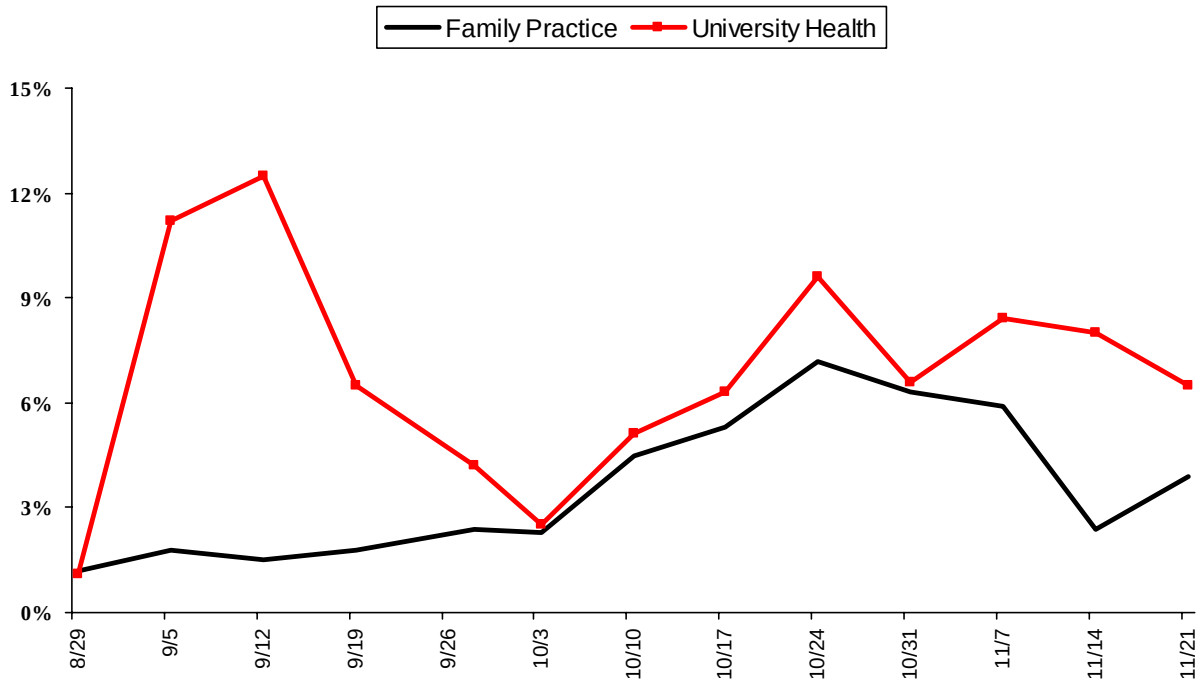




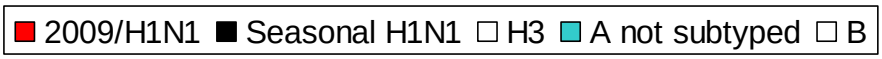
ILI Activity Statewide

Family Practice Clinicians and University Student Health Clinicians

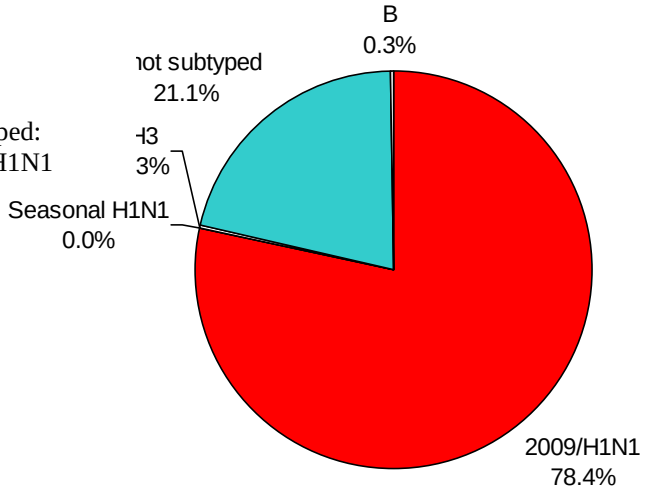
August 29, 2009 to present



Influenza Strains Wisconsin Week 45

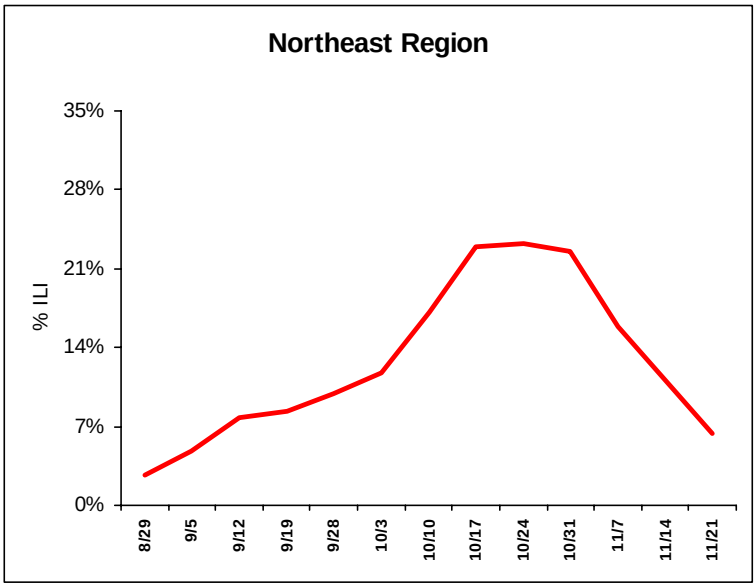


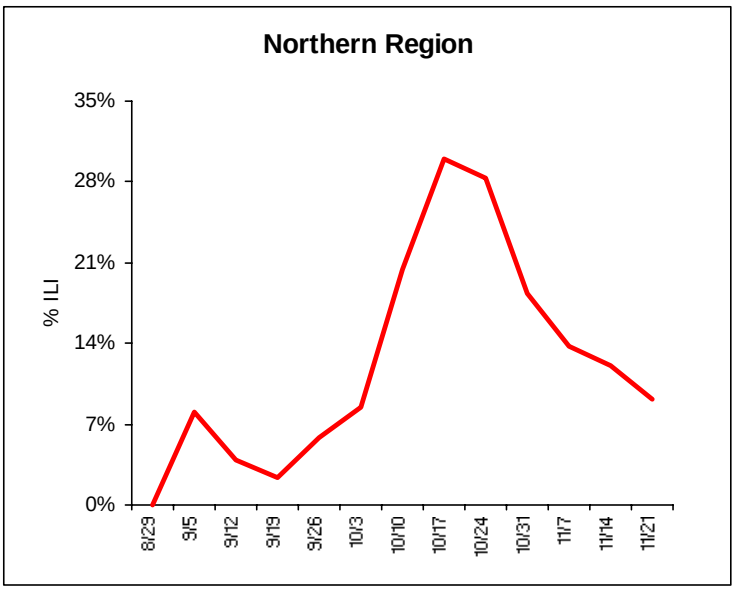
99.7% Influenza A
0.3% Influenza B
Of those Influenza A subtyped:
304/305 (99.7%) are 2009/ H1N1

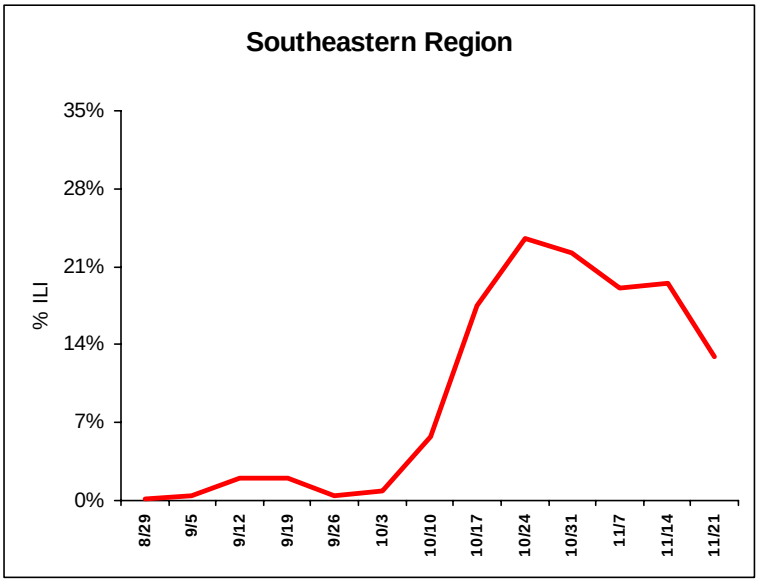


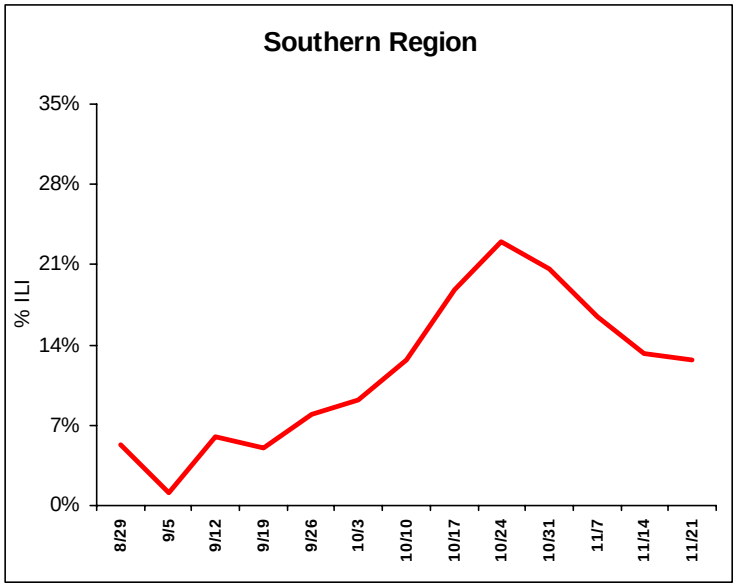
RAPID TEST SITE DATA (CHART) BY REGION

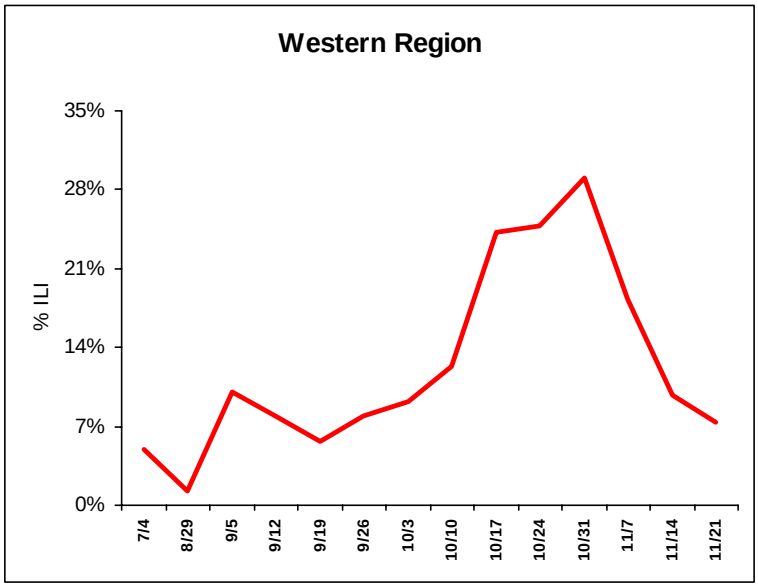
Percent Positive Rapid Tests for Influenza and RSV
(RSV will appear later in the year)

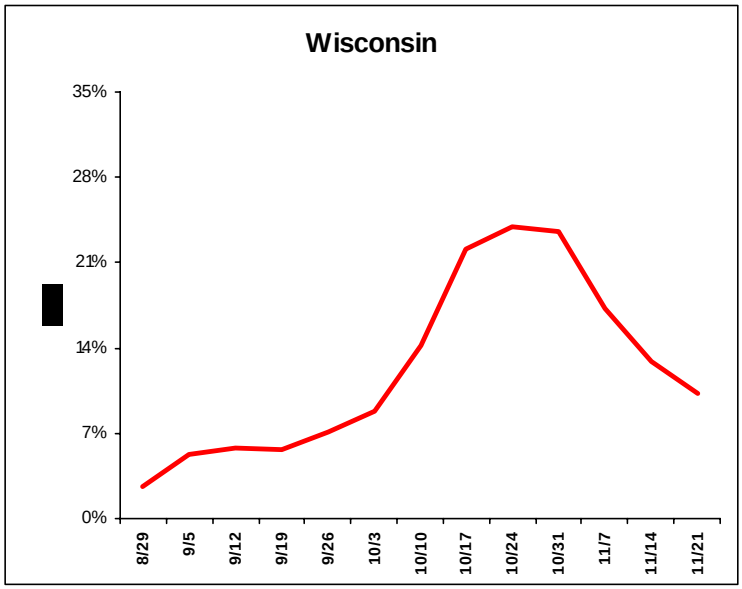




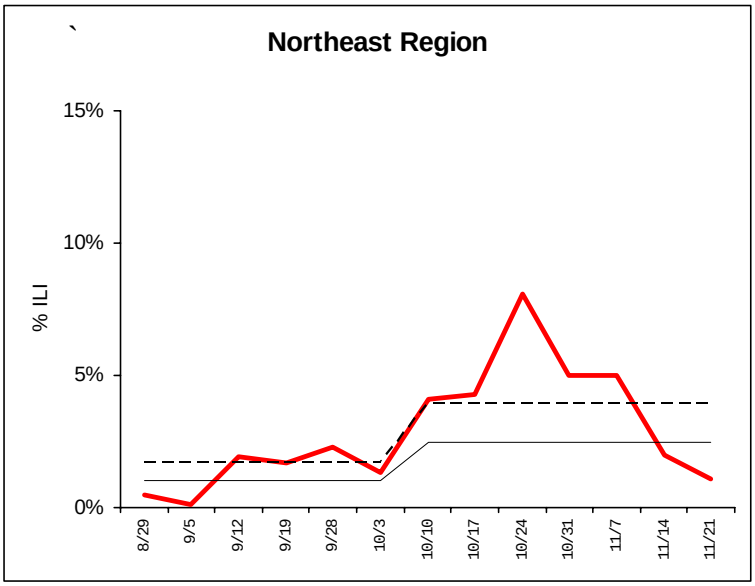
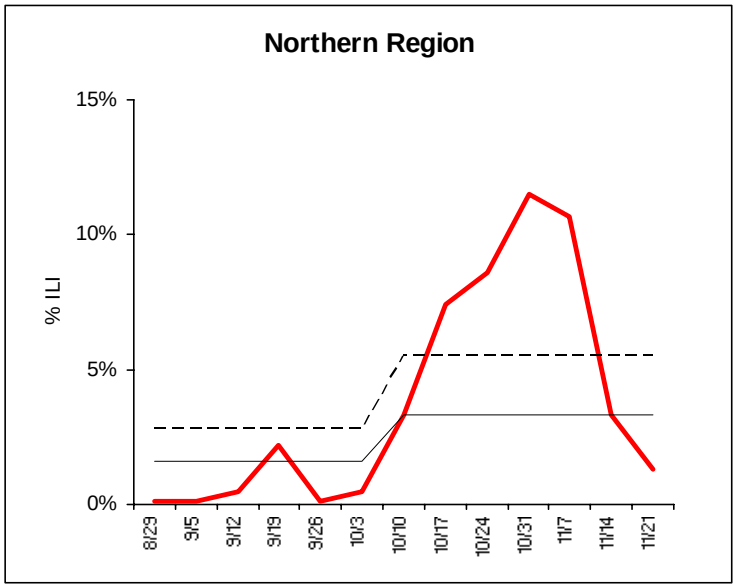
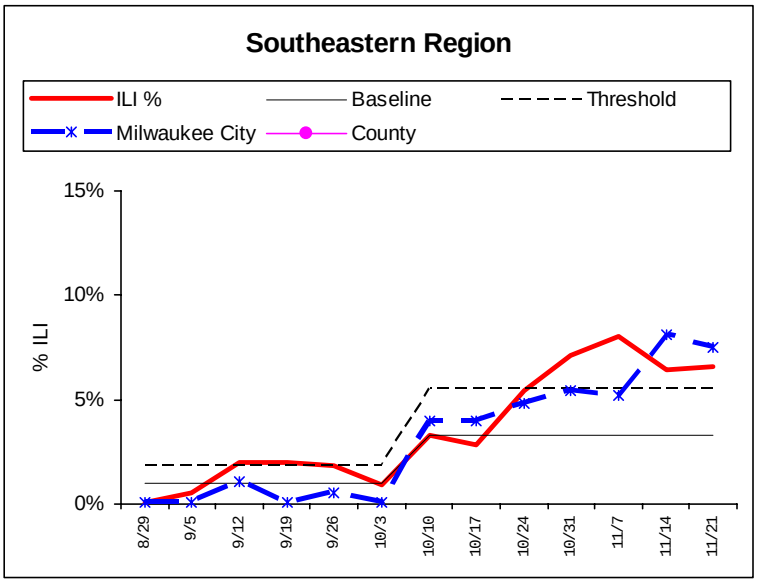
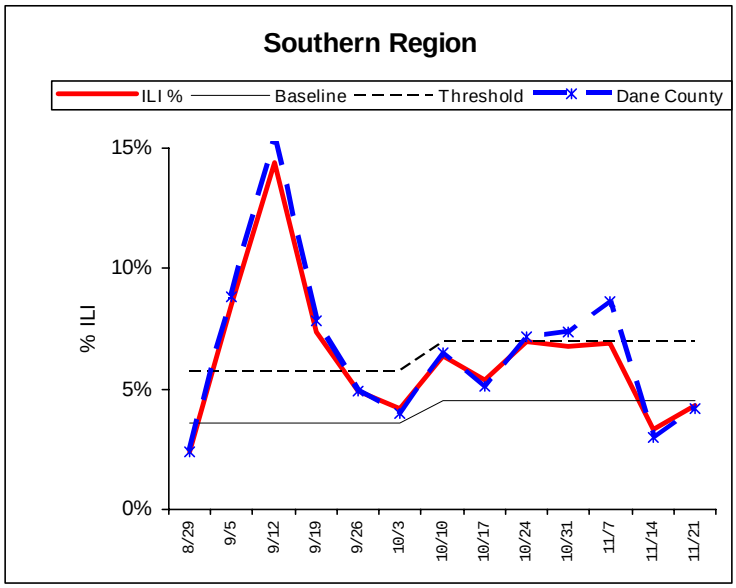
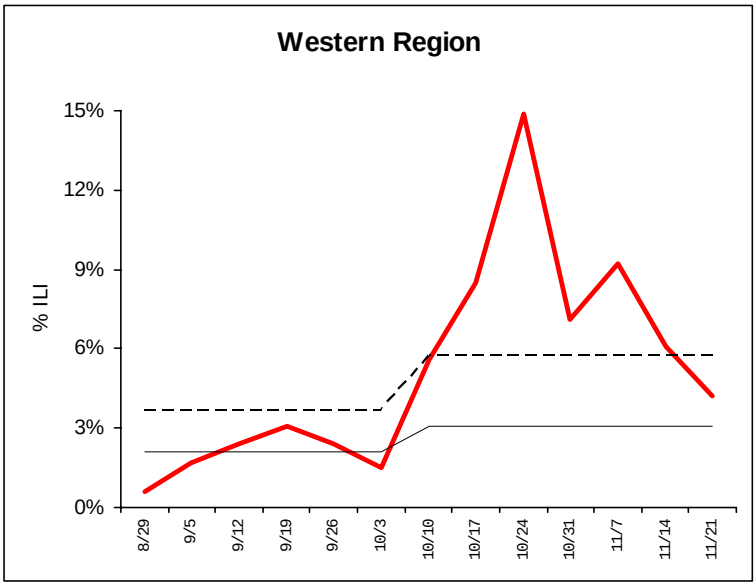
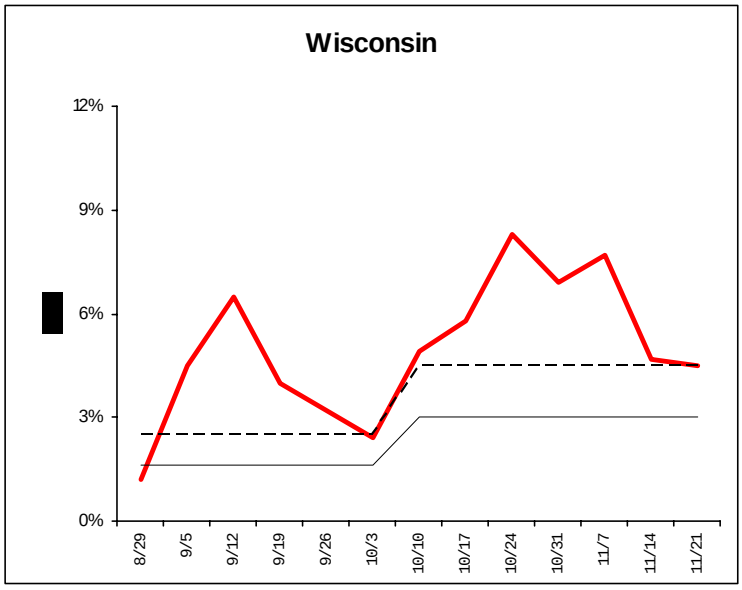








INFLUENZA-LIKE ILLNESS DATA (CHART) BY REGION

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

ILI % — Baseline % — Threshold %