DEPARTMENT OF HEALTH SERVICES
DIVISION OF PUBLIC HEALTH

Weekly Surveillance Report
For the Week Ending October 31, 2009 (week 09-43)

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 09-43	Previous Week 09-42
Wisconsin	High	High
Northeastern Region	High	High
Northern Region	High	High
Southeastern Region	High	High
Southern Region	High	High
Western Region	High	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 09-42	Baseline
United States	7.7%	2.3%
Wisconsin	7.1%	3.1%
Region V (WI, MN, IL, MI, OH)	9.8%	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			152	100%	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			40	0%				
09-10	CDC			884	0.2%				

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

	Current Week 09-42	2009-10 Season Total	Due to 2009 H1N1
United States	18	85	73
Wisconsin	0	2	2

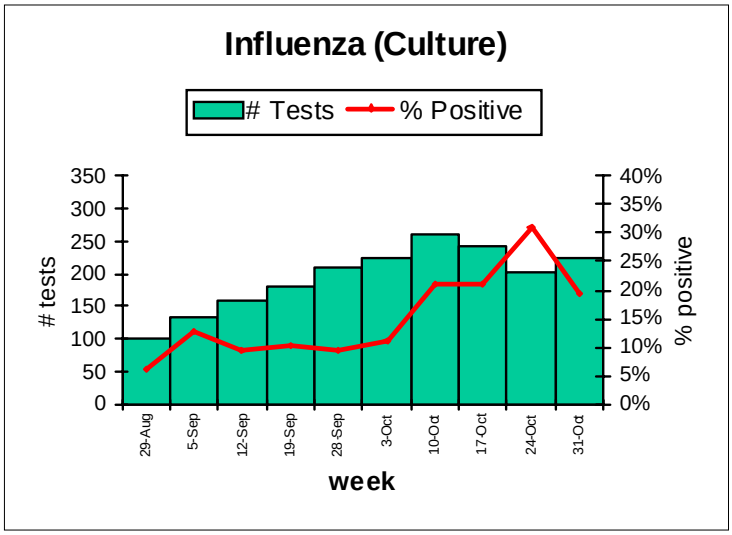
8. **Pneumonia and influenza mortality (P&I), United States,**

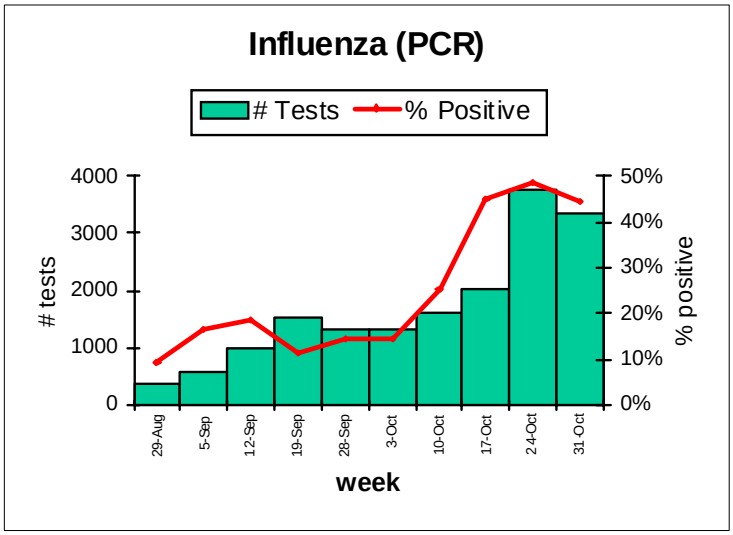
	Current Week 09-43	Previous Week 09-42
P&I %	7.4%	7.1%
National P&I threshold %	6.7%	6.6%

WISCONSIN LABORATORY SURVEILLANCE
For Influenza and other Respiratory Viruses (week 09-43)

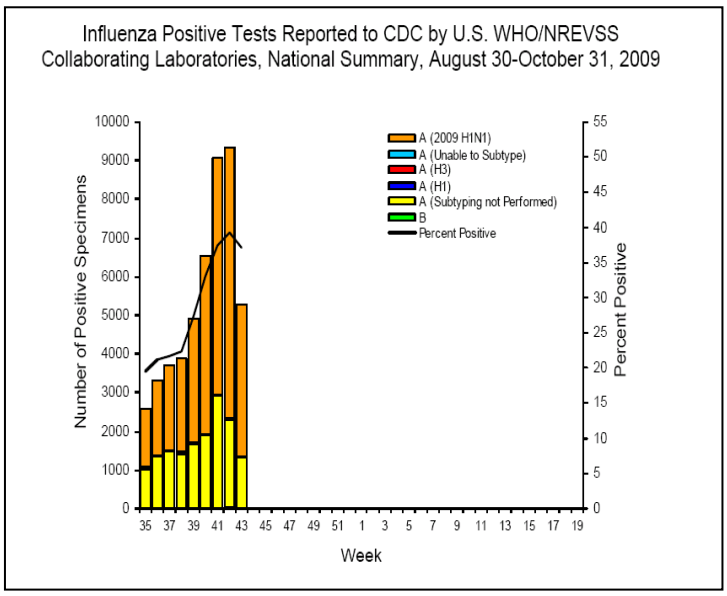
VIRUS CULTURE Based on 226 tests		RAPID TESTS			SELECT PCR TESTS	
Test Type	% Positive	Virus	# Tests	% Positive	Test Type	Positive/ total number
Total % Positive	23.0%					
Influenza (Tot.)	19.5%	Influenza (Tot)	3271	24.9%	Influenza A & B	1233/2791
Influenza A	19.5%				Influenza A	260/536
Influenza B	0.0%	Influenza A		23.4%	# A/H1	1
					2009 A/H1	761
hMPV	0.0%	Influenza B		0.1%	# A/H3	1
					# A/not subtyped	728
		Influenza Unk.*		1.3%	# B	2
RSV	0.0%	RSV	227	1.7%	RSV	2/440
Adenovirus	0.4%	Adenovirus	0	0.0%	Adenovirus	2/47
Parainfluenza	2.2%				Parainfluenza	14/349
Rhinovirus	0.4%	*Influenza unknown (Unk) are positive influenza test results that cannot be distinguished between Type A and B			Rhinovirus	6/41
Enterovirus	0.4%				Enterovirus	2/6

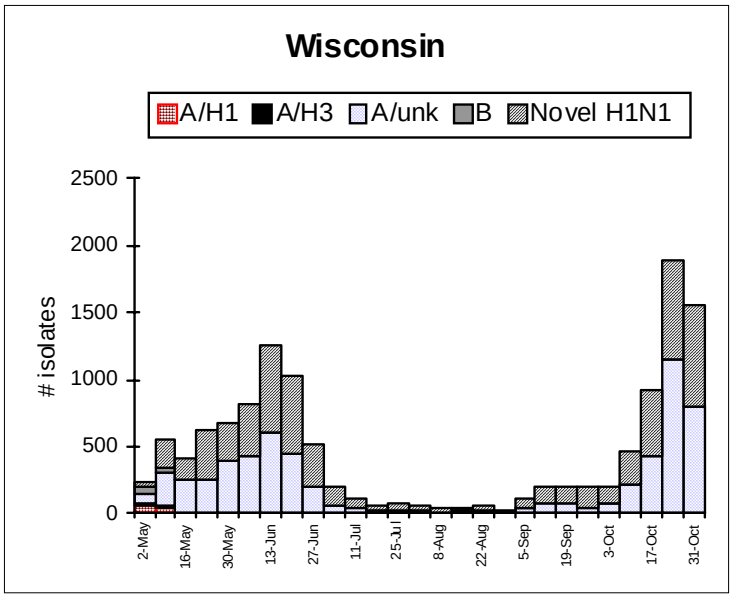
WISCONSIN. 10-WEEK TREND. INFLUENZA PCR AND CULTURE POSITIVE TESTS





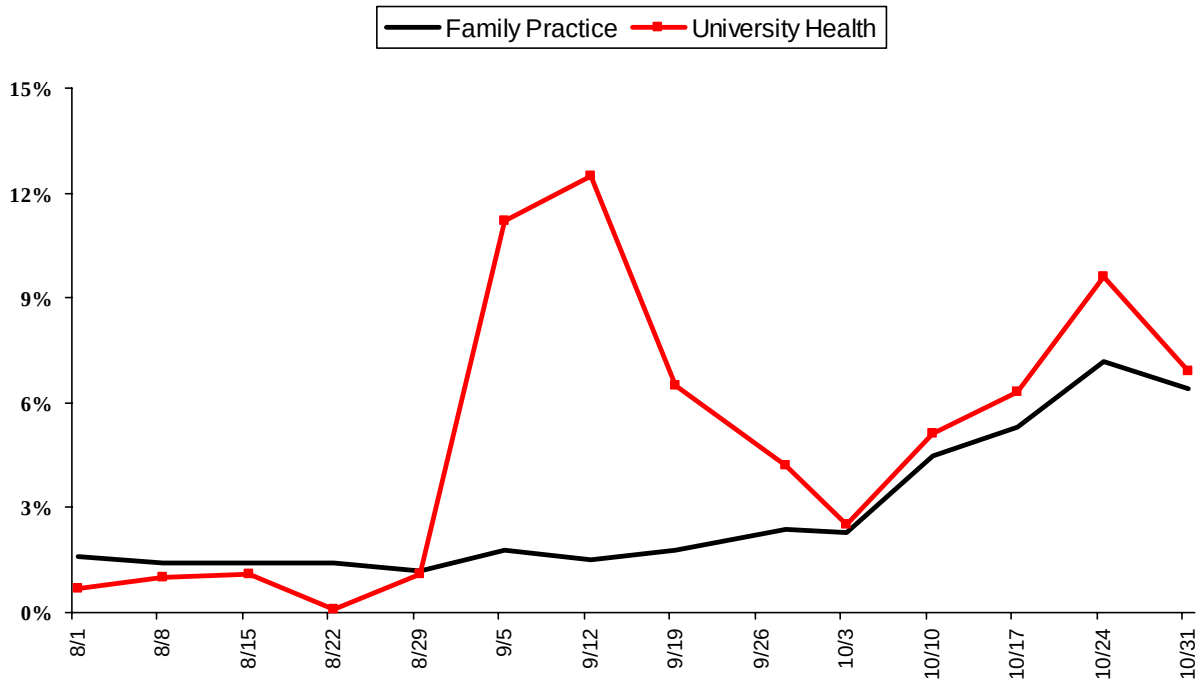
WISCONSIN AND U.S. TREND INFLUENZA SUBTYPES (CULTURE/PCR) April 2009-Present





ILI Activity Statewide

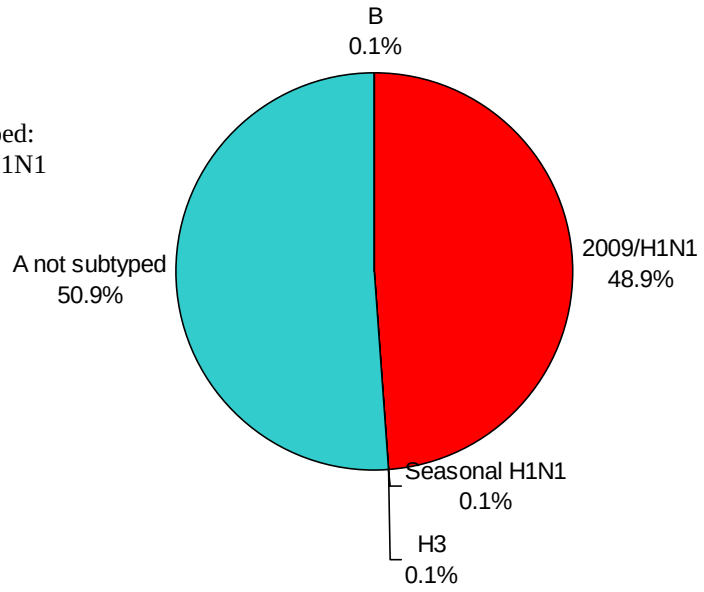
Family Practice Clinicians and University Student Health Clinicians
August 2009 to present



Influenza Strains Wisconsin Week 42

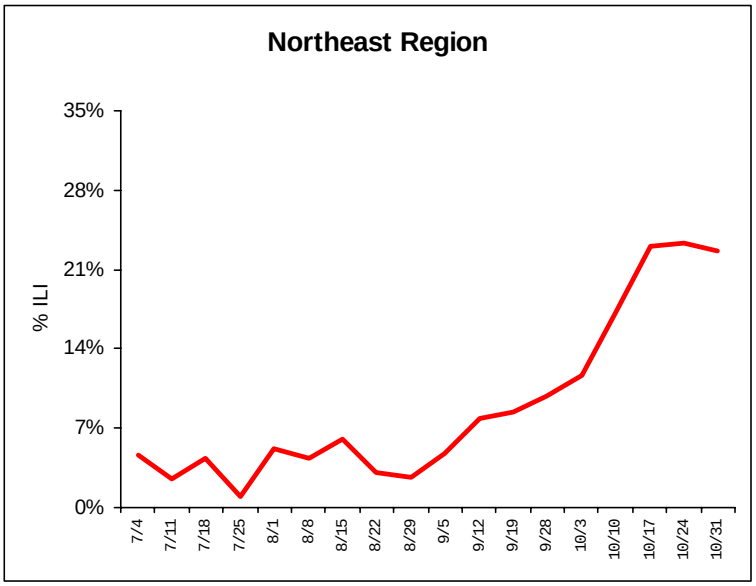
2009/H1N1 ■ Seasonal H1N1 □ H3 ■ A not subtyped □ B

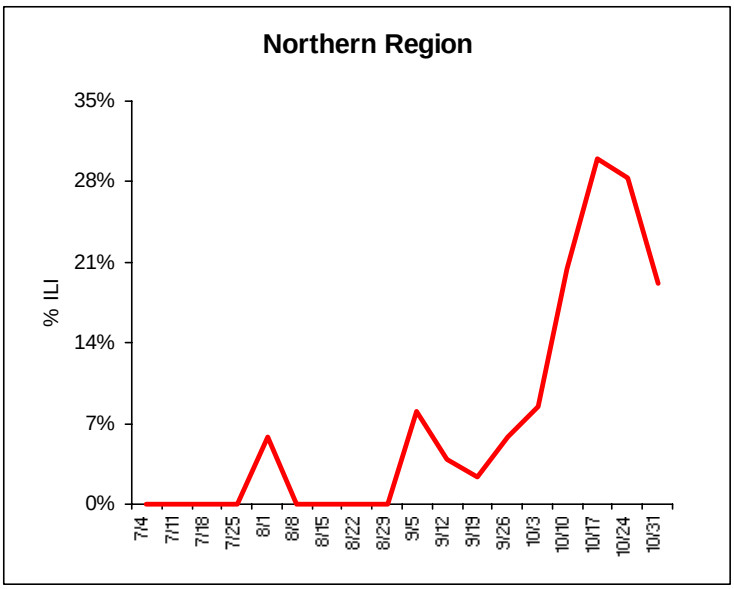
99.9% Influenza A
0.1% Influenza B
Of those Influenza A subtyped:
761/763 (99.7%) are 2009/ H1N1

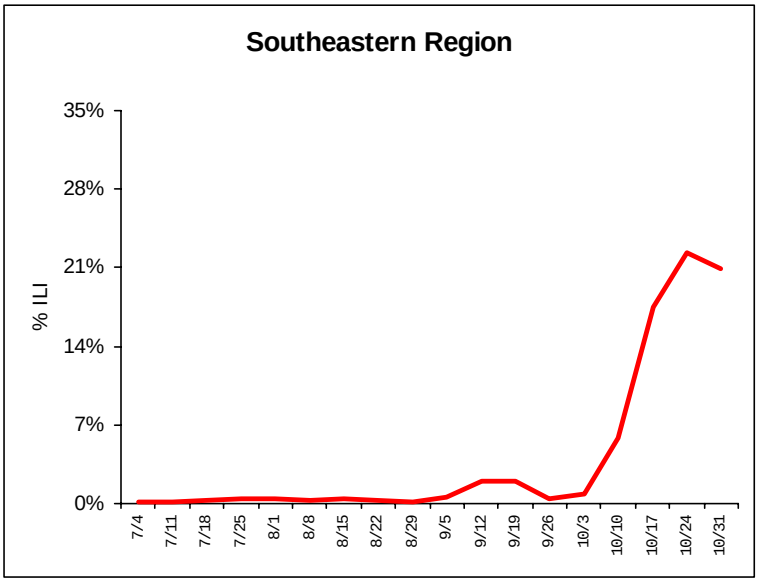


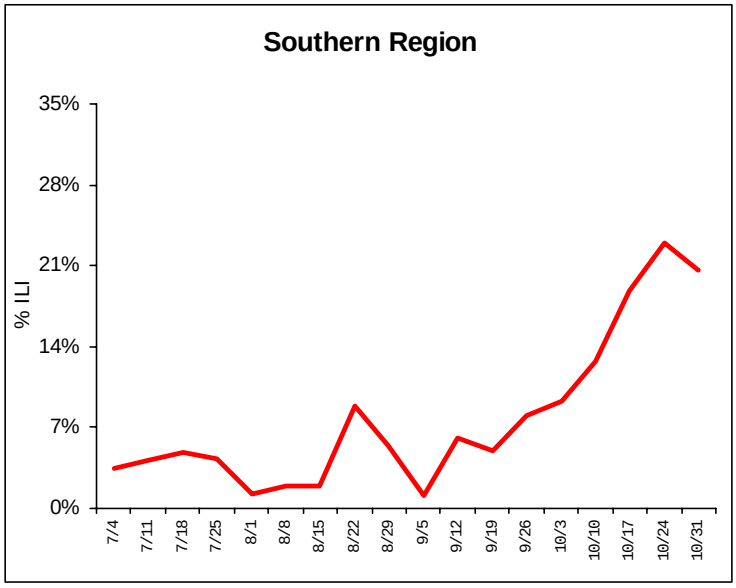
RAPID TEST SITE DATA (CHART) BY REGION

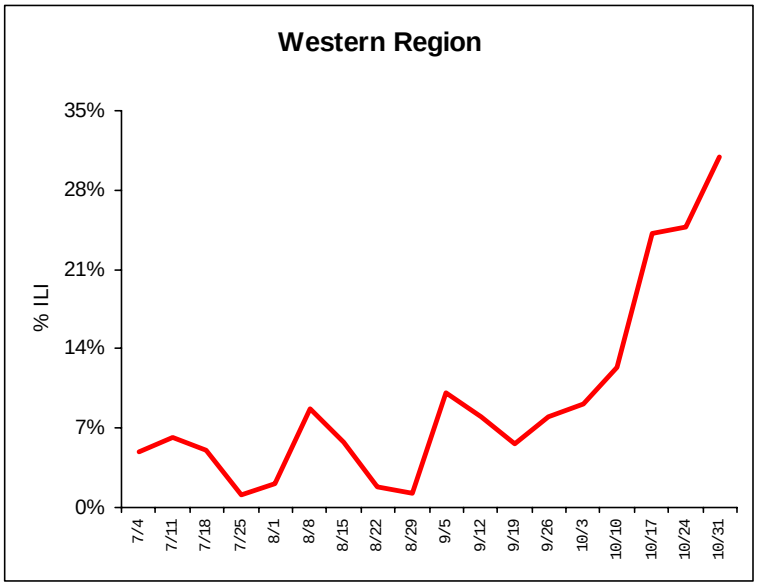
Percent Positive Rapid Tests for Influenza and RSV
(RSV will appear later in the year)

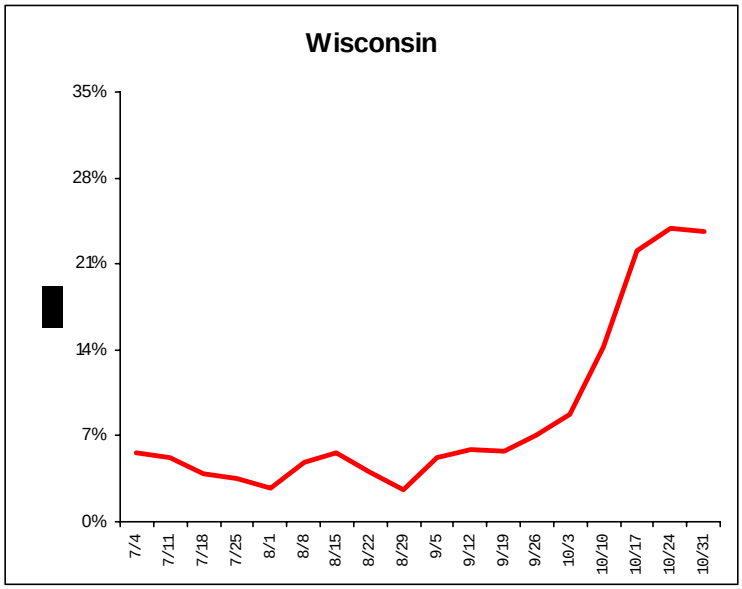




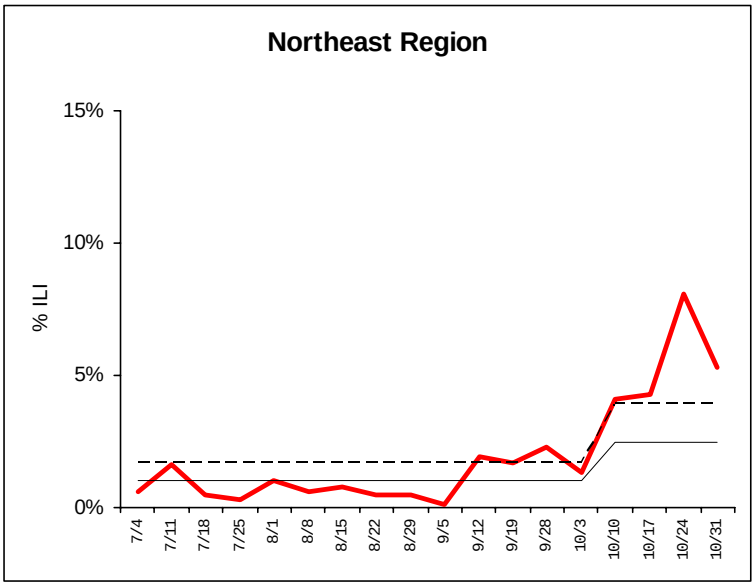
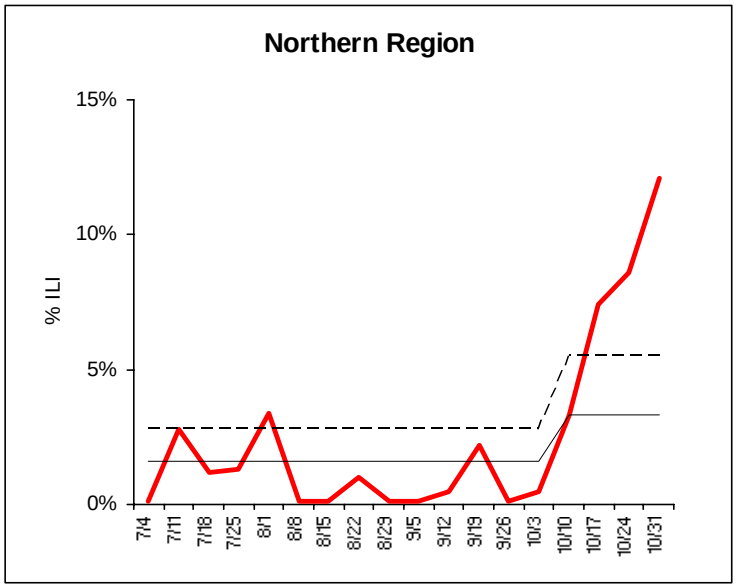
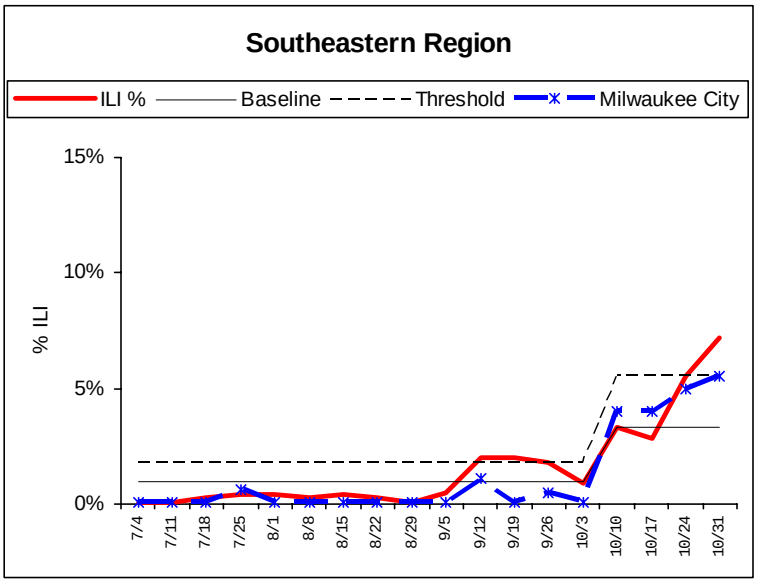
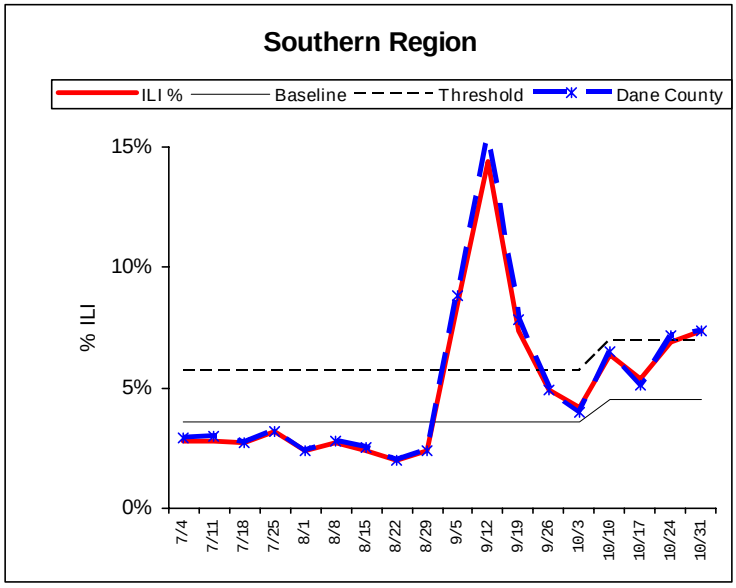
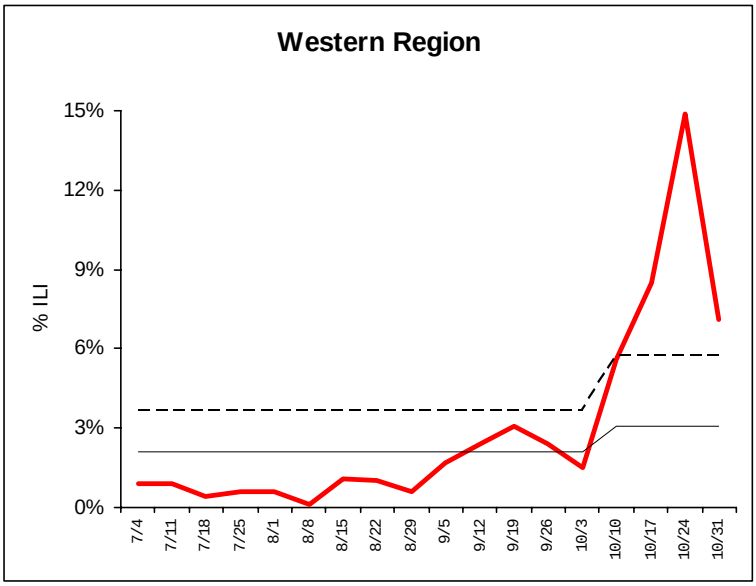
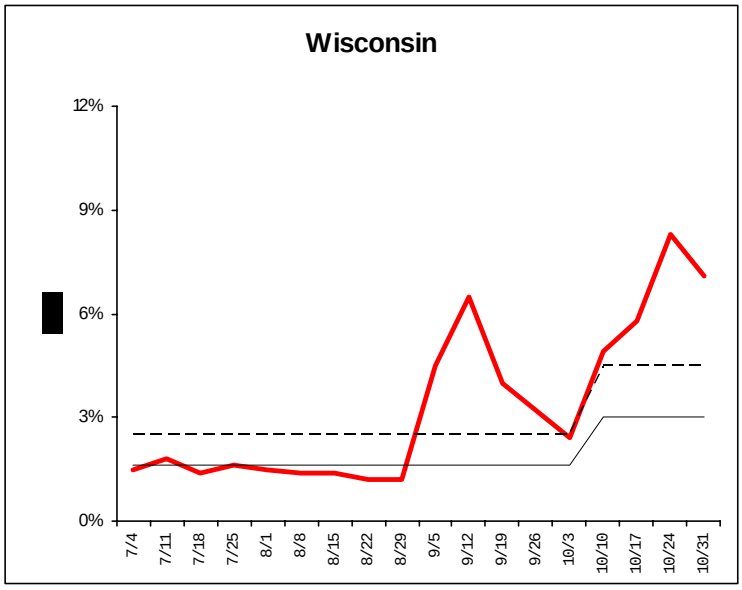








INFLUENZA-LIKE ILLNESS DATA (CHART) BY REGION

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

ILI % — Baseline % — Threshold %