

TEXAS INFLUENZA SURVEILLANCE 2011-2012

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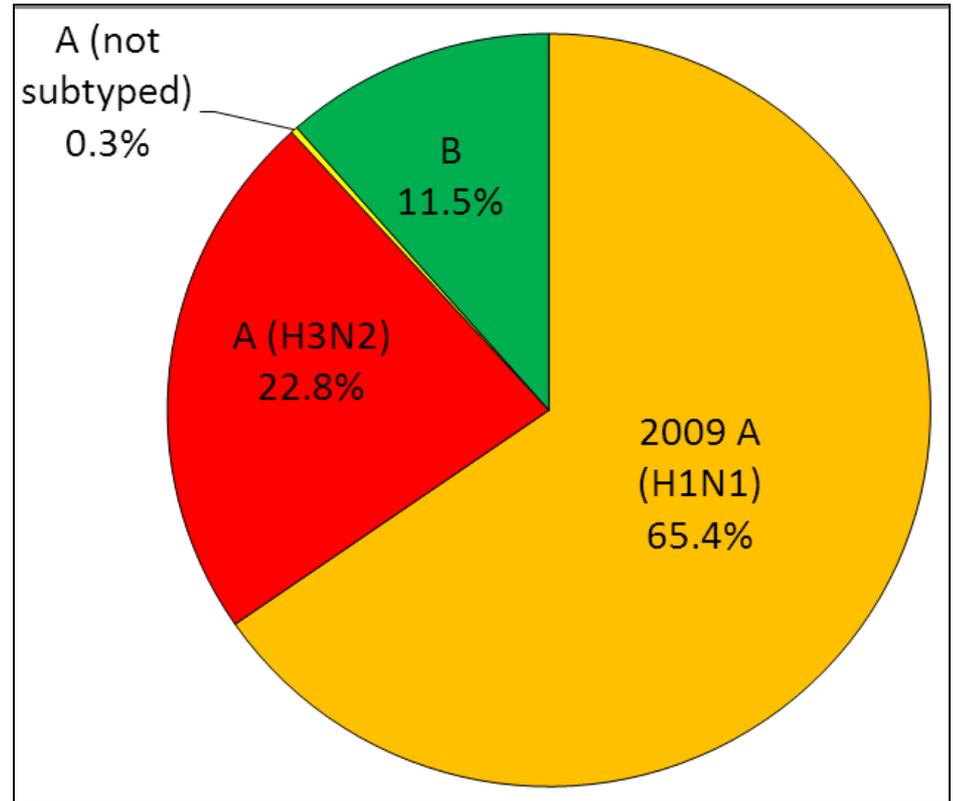
Outline

- Laboratory data
 - Oseltamivir-resistant influenza
- ILI surveillance
 - ILI Activity
 - ILINet (US Outpatient Influenza-like Illness Surveillance Network)
 - IISp (Influenza Incidence Surveillance Project)
- Institutional outbreaks and school closures
- Influenza-associated pediatric mortality

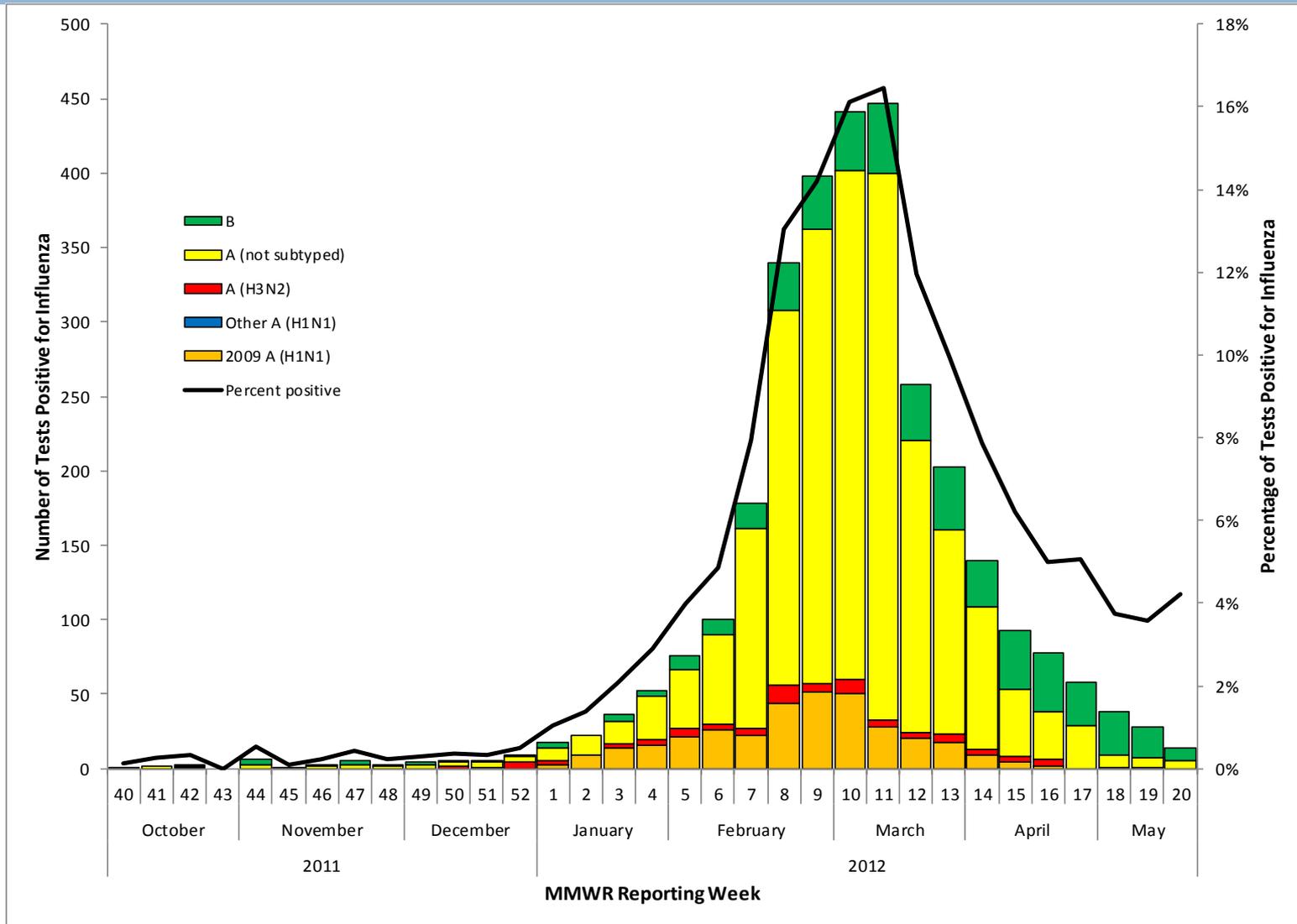
Texas Flu Summary

- Predominant influenza type: Flu A
 - ▣ Subtype: 2009 H1N1

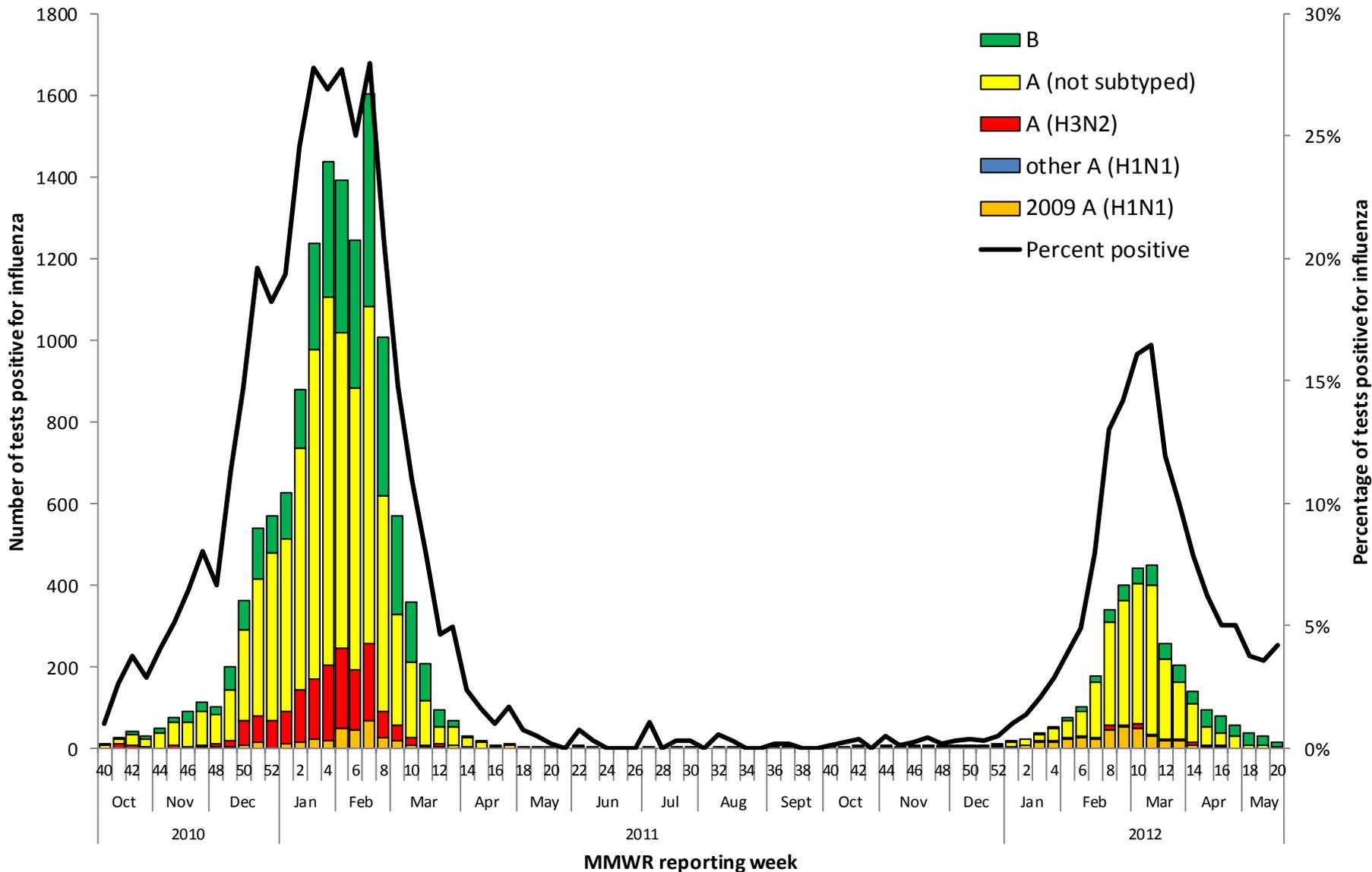
- Seasonal peaks
 - ▣ ILINet peak: week 11
 - ▣ Laboratory peaks:
 - DSHS & LRNs: week 11
 - NREVSS: week 11



NREVSS Laboratory Data



Number and Percentage of Tests Positive for Influenza by Type and Subtype Reported by NREVSS Laboratories in Texas, 2010-2012 Seasons



Antigenic Characterization Testing

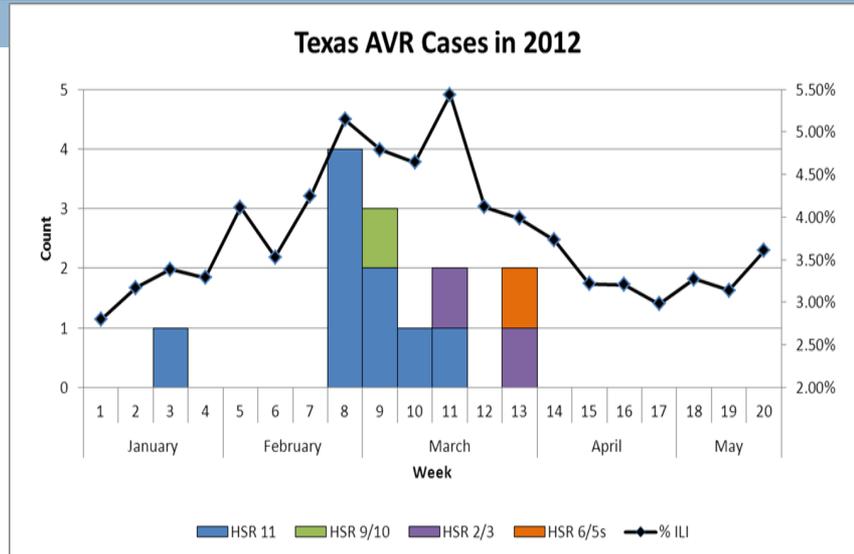
- Antigenic characterization
 - ▣ Results on 27 Texas influenza viruses tested by CDC
 - Influenza A (H1N1): 15 viruses tested
 - 100% match to vaccine strain
 - Influenza A (H3N2): 6 viruses tested
 - 67% match to vaccine strain
 - 33% showed reduced match
 - Influenza B (Victoria lineage): 6 viruses tested
 - 50% match to vaccine strain

Antiviral Resistance Testing

- Antiviral resistance testing – Texas specimens
 - 13 cases of 2009 influenza A (H1N1) with mutation that confers oseltamivir resistance
 - 11 surveillance-related viruses
 - 9 in Region 11
 - 2 in Region 2/3
 - 2 viruses from diagnostic testing requests
 - Case-control study initiated in May in HSR 11
 - No zanamivir resistance reported

Antiviral Resistance in Texas - 2012

- AVR in 2012
 - ▣ 13 AVR influenza cases identified in Texas
 - All were resistant to oseltamivir
 - All were 2009 H1N1
 - ▣ Texas percentage higher than national percentage



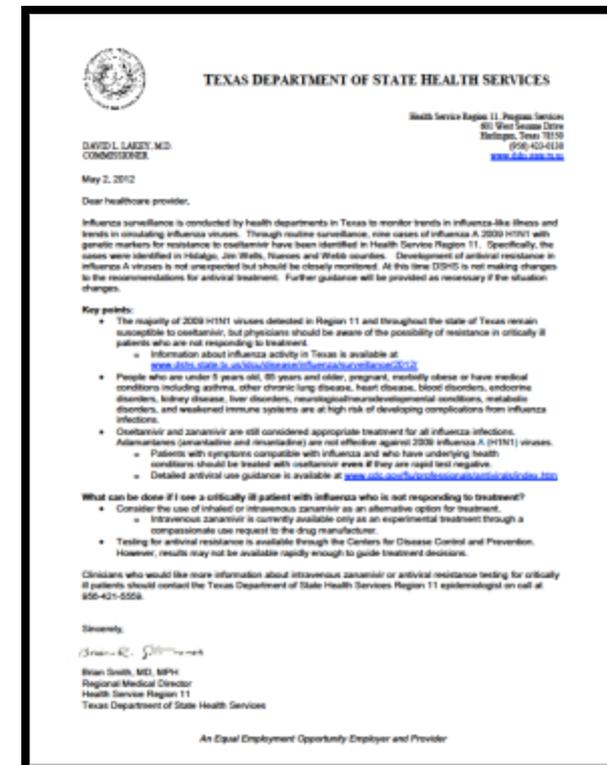
Region	Nonsurveillance Count	Surveillance Count	Total AVR's	Percentage of positive flu specimens that are 2009 H1N1	Percentage of 2009 H1N1 specimens tested for resistance that are resistant to antivirals
Region 1	0	0	0	70.59%	0.00%
Region 2/3	0	2	2	68.27%	0.76%
Region 4/5N	0	0	0	0.00%	0.00%
Region 6/5S	1	0	1	46.94%	0.00%
Region 7	0	0	0	63.16%	0.00%
Region 8	0	0	0	88.00%	0.00%
Region 9/10	1	0	1	37.00%	0.00%
Region 11	0	9	9	94.06%	8.74%
State Totals	2	11	13	66.38%	2.96%

South Texas Cluster

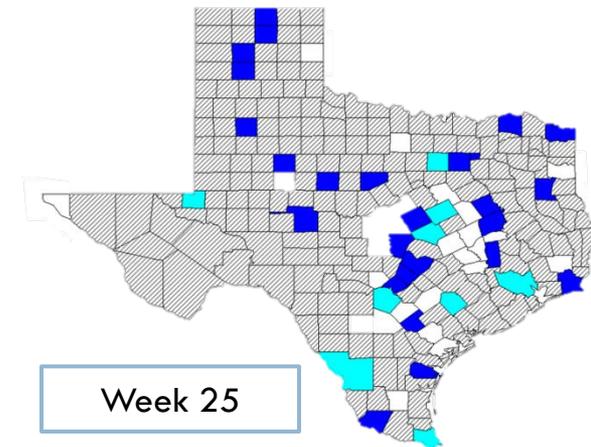
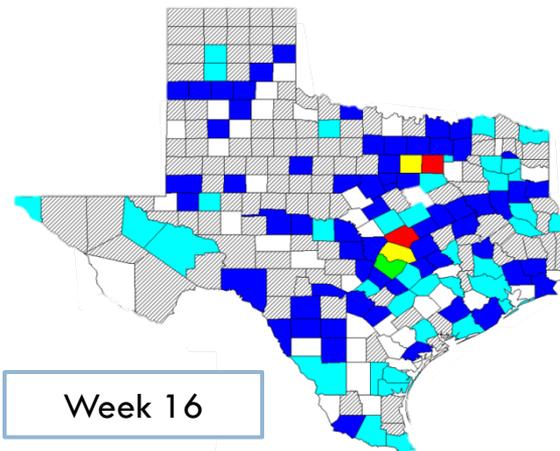
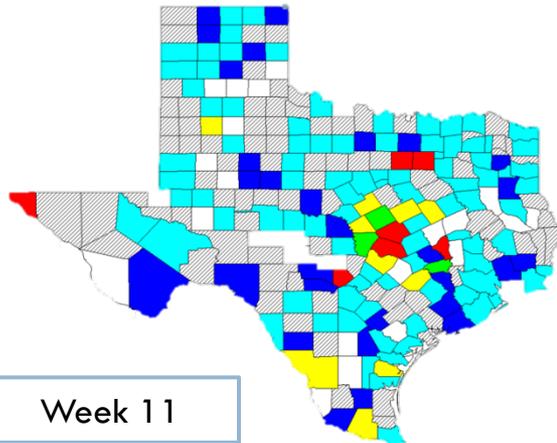
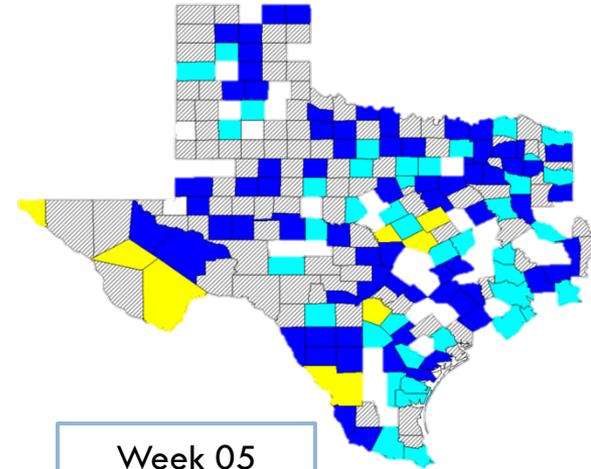
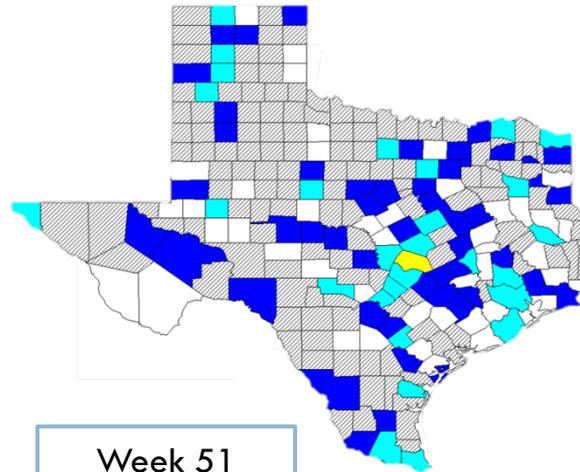
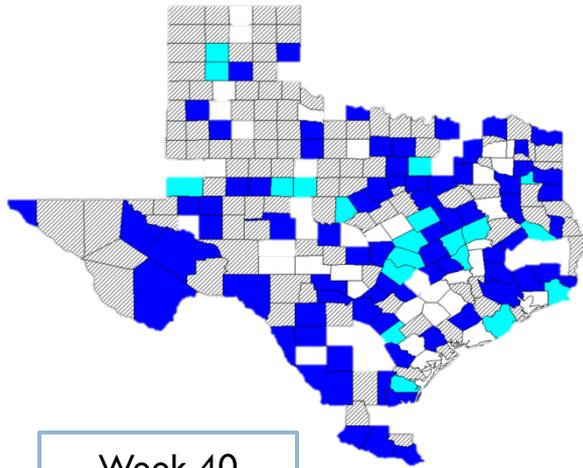
- South Texas Cases
 - ▣ Age range: <1 to 28 years old
 - ▣ 64% were not on AV at the time of test
 - ▣ 37% had no underlying health conditions

- Public Health Response
 - ▣ Increased surveillance
 - ▣ Letter to clinicians
 - ▣ Case-control study in progress

- No additional cases identified - yet



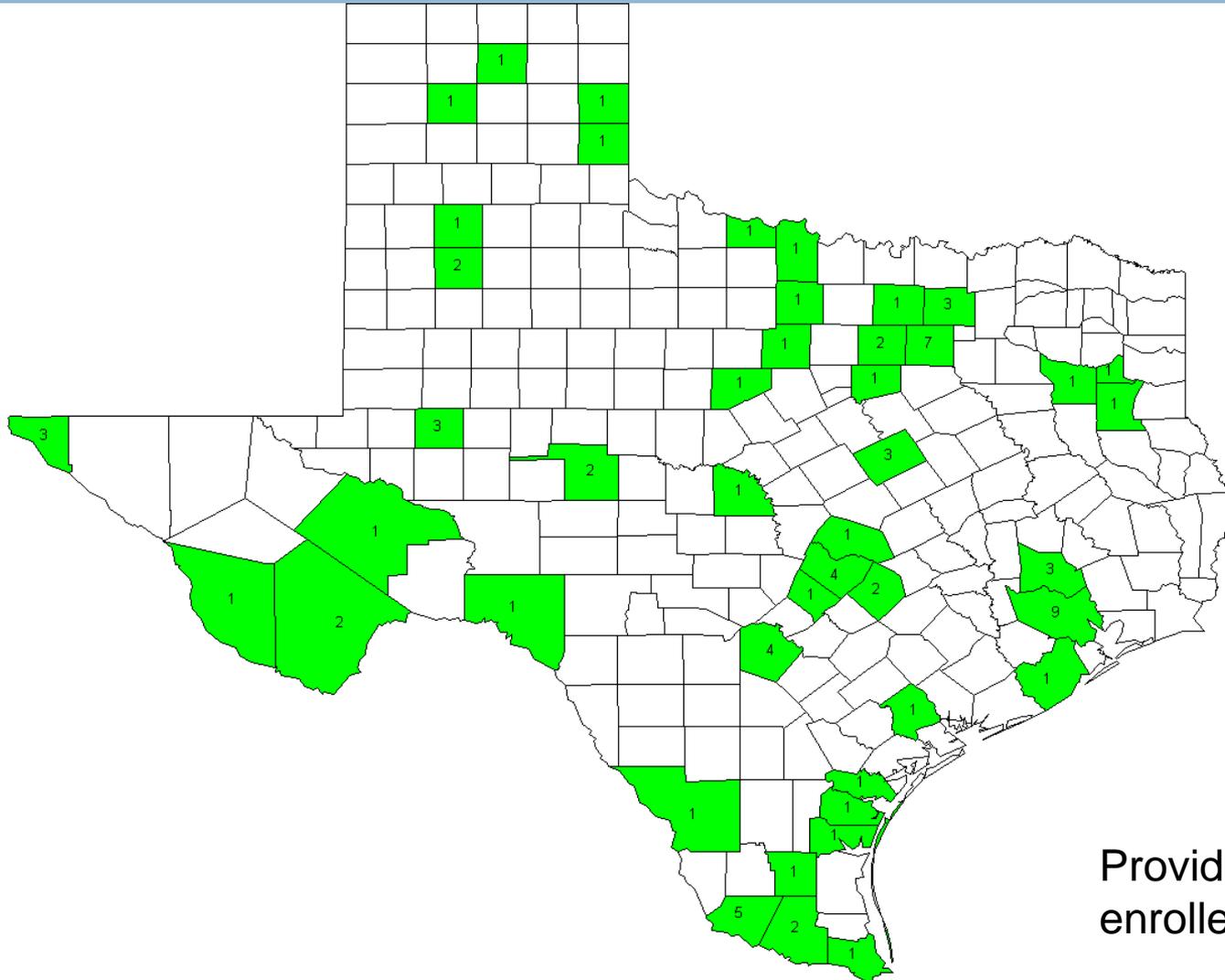
ILI Activity Reporting



ILINet Overview

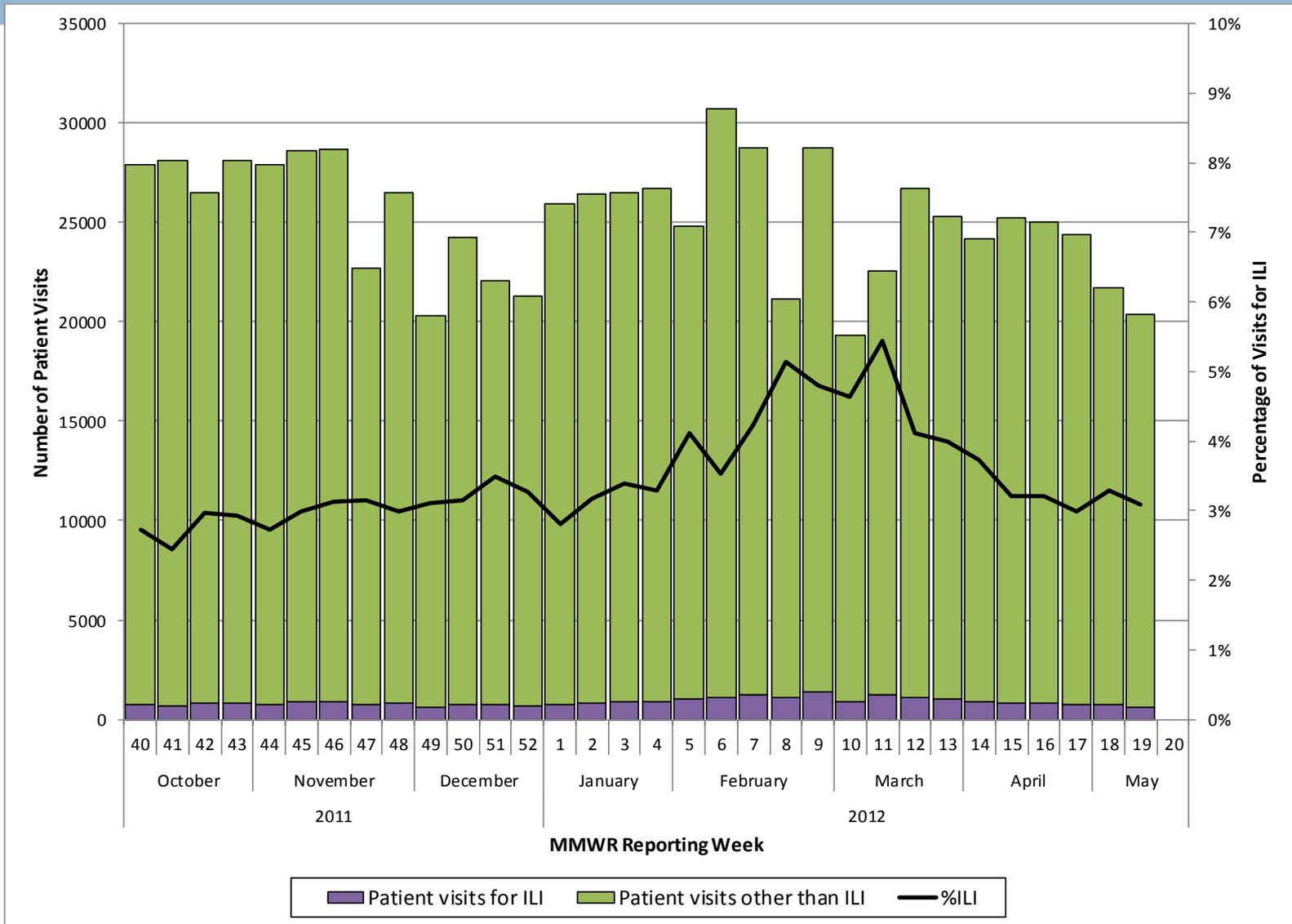
- US Outpatient Influenza-like Illness Surveillance Network
- CDC project
- Project ongoing since 1997-1998 season
- Texas ILINet coordinator funded by CDC
- Data reporting:
 - Providers report total number of patients seen each week and number of patients with ILI by age group

Active Texas ILINet Reporters (N=85)



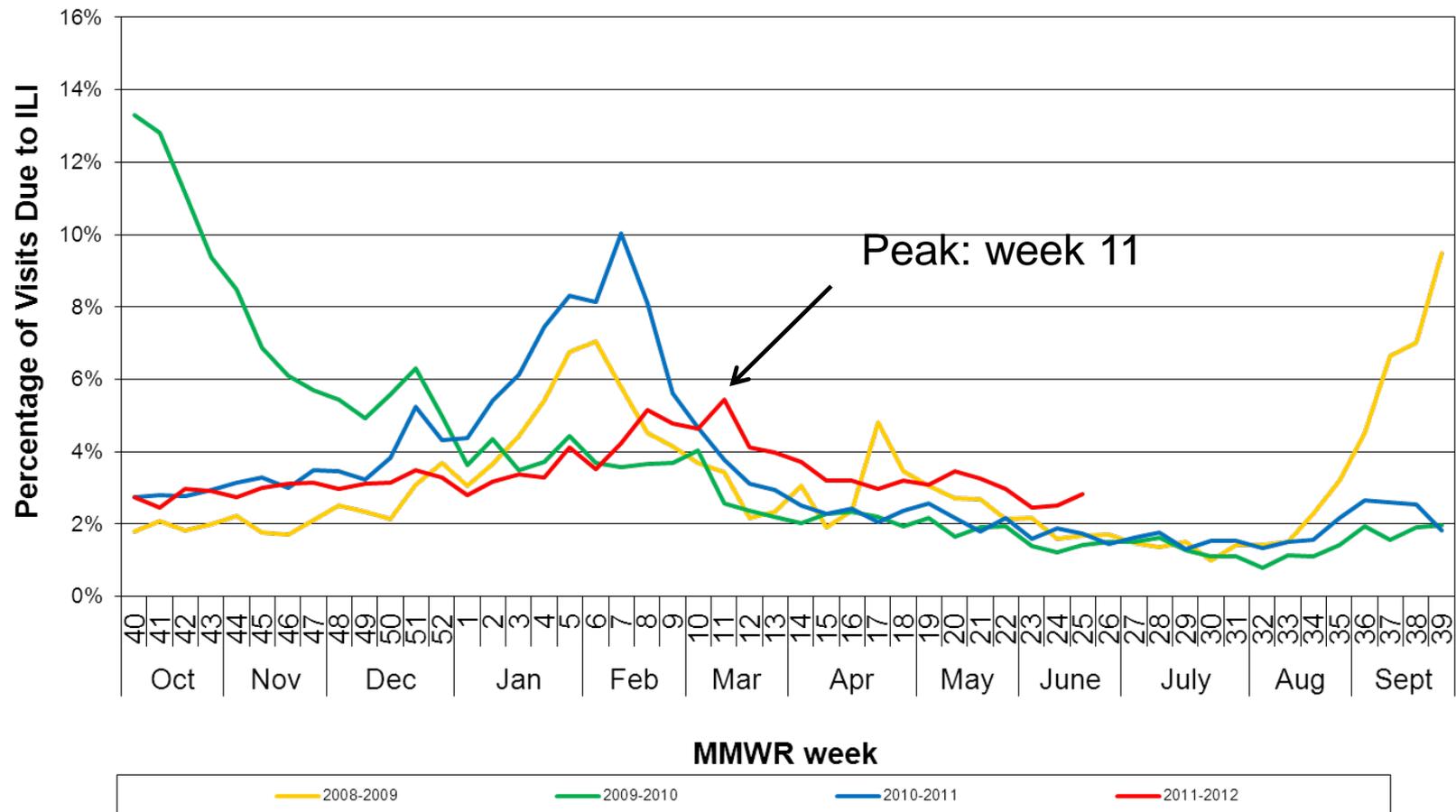
Providers
enrolled: 119

Influenza-Like Illness Visits and Total Patient Visits, Texas ILINet Participants, 2011-2012 Influenza Season



ILINet Data, 2008-2012 Seasons

Percentage of Visits Due to Influenza-like Illness
Reported by Texas Participants in ILINet, 2008-2012 Seasons



Influenza and ILI Outbreaks

- Institutional outbreaks
 - Only 6 influenza or ILI outbreaks reported
 - Correctional facility: 1
 - Late January/early February
 - ILI and 1 influenza positive (type/subtype unknown) among inmates
 - Long-term care: 1
 - Early March
 - Rapid tests positive for influenza A (not subtyped)
 - Staff and residents ill
 - Remainder were community wide
- No school closures or outbreaks reported!

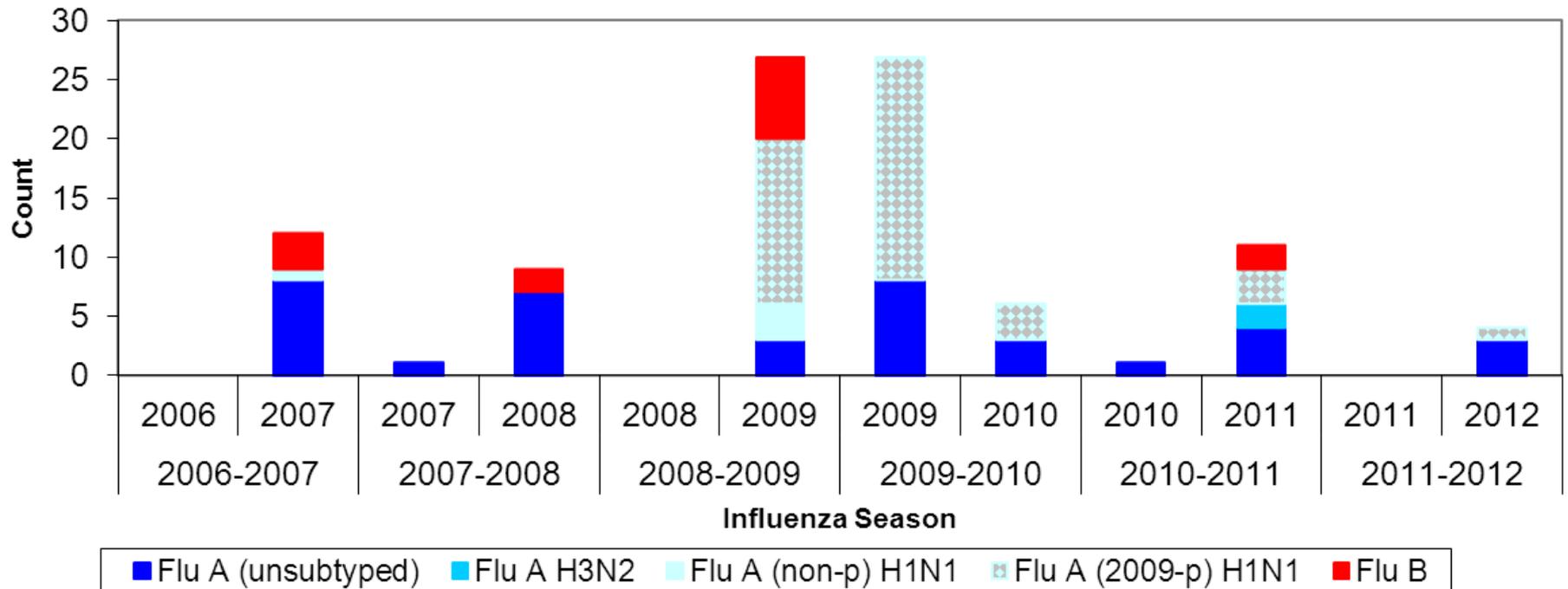
Influenza-Associated Pediatric Mortality

- Laboratory-confirmed influenza death in a person under 18 years of age

- 4 deaths in reported 2011-2012 season:
 - Age range: <1 to 13 years of age
 - 1 2009 H1N1, 3 Flu A (not subtyped), 0 Flu B
 - Underlying medical condition: 3 (75%)
 - Not vaccinated for flu (vaccination status known): 2/2 (100%)
 - 1 unknown and 1 not eligible

Influenza-Associated Pediatric Mortality

Influenza-Associated Pediatric Mortality 2007-2012



Additional

- Sign up for flu report notifications:
<http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/2012/>

- Handbook updates
 - ▣ To be posted on the website soon

- Flu mailbox: flutexas@dshs.state.tx.us



Questions?