

# TEXAS INFLUENZA SURVEILLANCE 2011-2012

Lesley Brannan  
Influenza Surveillance Coordinator  
Infectious Disease Control Unit



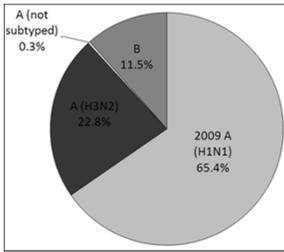
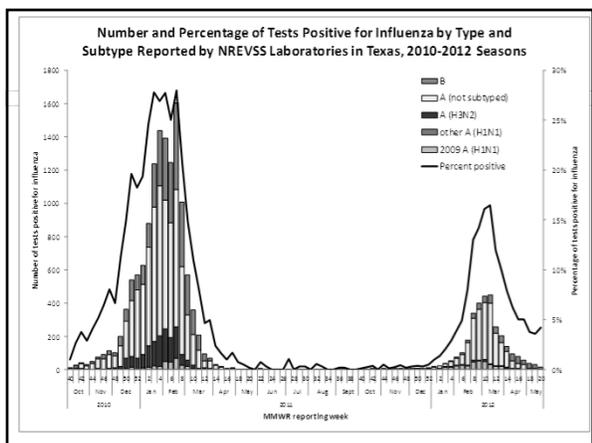
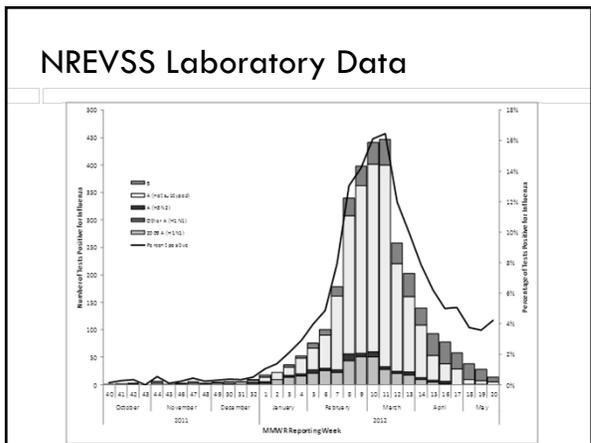
July 10, 2012

## 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

## Antigenic Characterization Testing

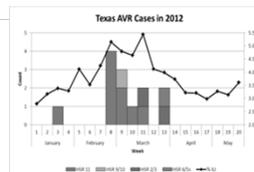
- Antigenic characterization
  - Results on 27 Texas influenza viruses tested by CDC
    - Influenza A (H1N1): 15 viruses tested
      - 100% match to vaccine strain
    - Influenza A (H3N2): 6 viruses tested
      - 67% match to vaccine strain
      - 33% showed reduced match
    - Influenza B (Victoria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



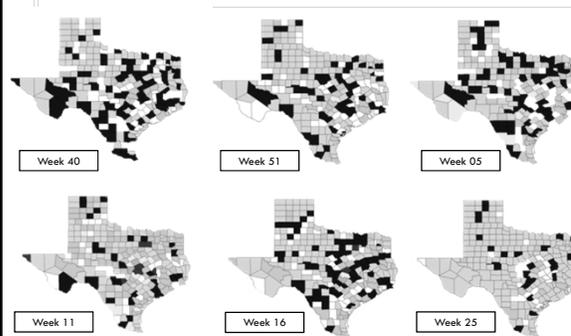
Region	Non-surveillance Count	Surveillance Count	Total AVR	Percentage of positive flu specimens that are 2009 H1N1 resistant to amivir	Percentage of 2009 H1N1 specimens tested for resistance that are resistant to amivir
Region 1	0	0	0	0.00%	0.00%
Region 2/3	0	1	1	68.27%	0.76%
Region 4/5/6	0	0	0	0.00%	0.00%
Region 6/9/8	1	0	1	48.84%	0.00%
Region 7	0	0	0	63.26%	0.00%
Region 8	0	0	0	68.00%	0.00%
Region 9/10	1	0	1	37.00%	0.00%
Region 11	0	9	9	94.06%	8.74%
State Total	2	11	13	68.38%	2.88%

## 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

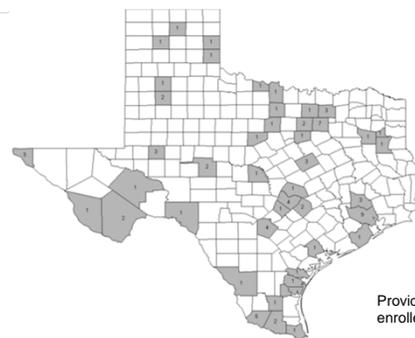


## ILINet Overview

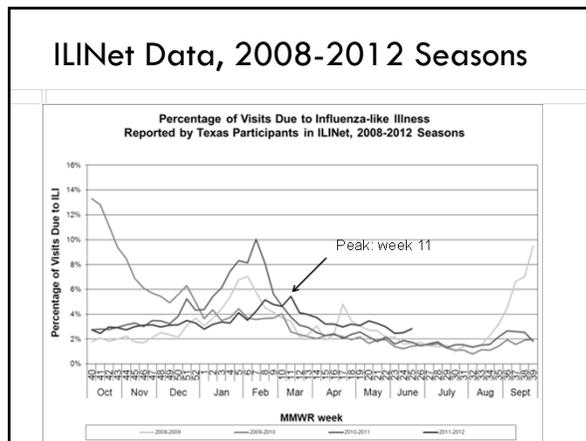
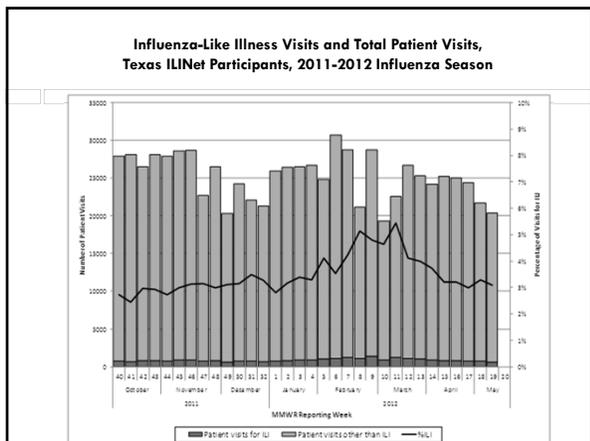
- US Outpatient Influenza-like Illness Surveillance Network
- CDC project
- Project ongoing since 1997-1998 season
- Texas ILINet coordinator funded by CDC
- Data reporting:
  - Providers report total number of patients seen each week and number of patients with ILI by age group



## Active Texas ILINet Reporters (N=85)

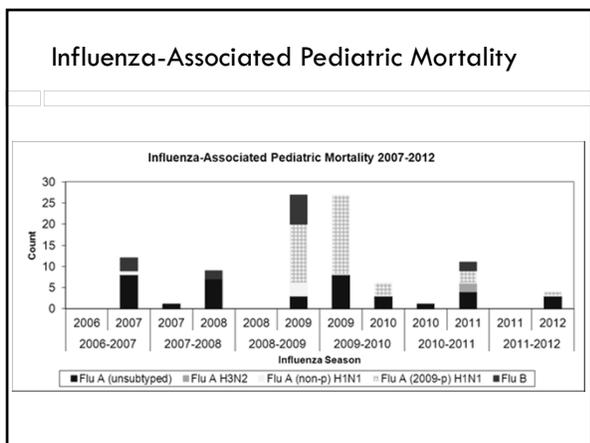


Providers enrolled: 119



- ## Influenza 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



- ## 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](mailto:flutexas@dshs.state.tx.us)

**Questions?**