Houston Department of
Health and Human Services

Office of Surveillance & Public Health Preparedness
Bureau of Epidemiology

Influenza Surveillance Weekly Report

CDC MMWR Week 02: January 11ð 17, 2015

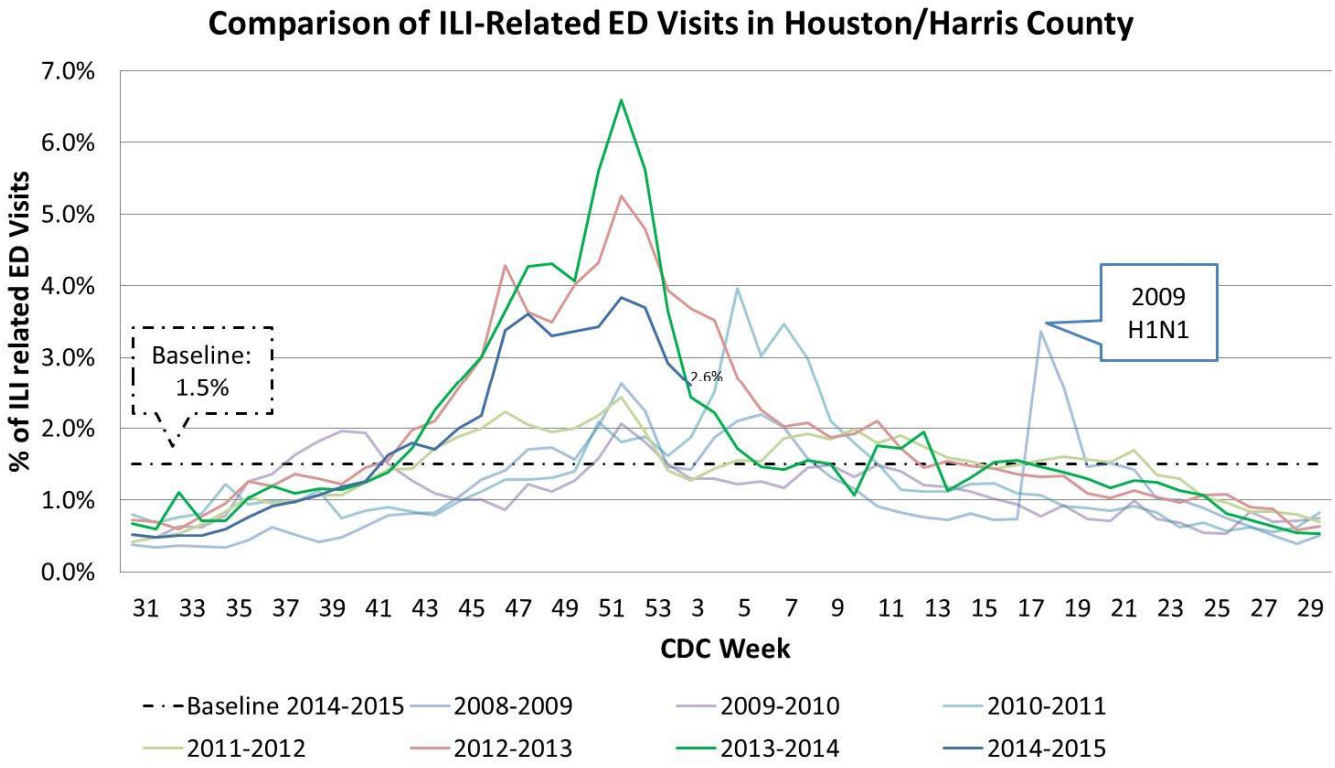
Influenza Activity by County, State, and National Levels

Houston/ Harris County: Week 02	Texas: Week 02	CDC: Week 02
Widespread	Widespread	Widespread

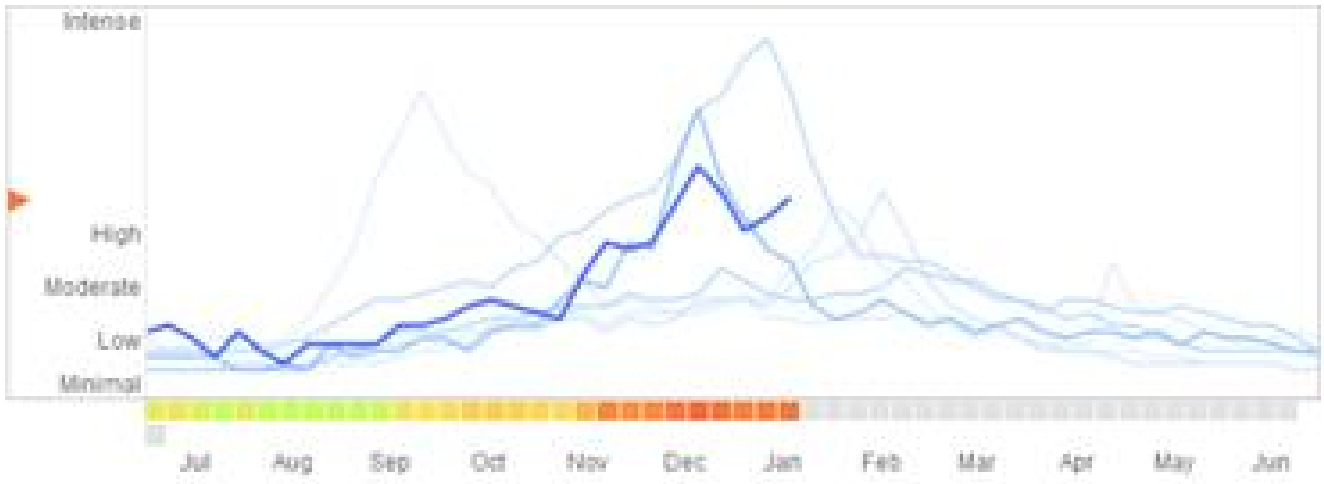
Highlights

- The percentage of reported influenza-like illness (ILI) in Houston/Harris county ***decreased*** from 3.0% in week 01 to 2.6% in week 02.
- The percentage of flu test positives in Houston was 43% in week 02.
- During the 2014-2015 influenza season, zero (0) Houston influenza-associated pediatric deaths have been reported.
- In week 02, seven (7) surveillance specimens were tested by the City of Houston Bureau of Laboratory Services. The following types and number of viruses were detected in these specimens:
  Influenza A H3 (2), Influenza A H1N1 (0), Influenza B (1).
- Cumulatively this season, the City of Houston Bureau of Laboratory Services has tested 237 surveillance specimens. Of the 114 positive lab results, the Influenza A/H3 accounts for 102 (89%) of the positives.
- At the national level during week 02, 19.5 % of specimens tested and reported to the CDC were positive for influenza. The proportion of out-patient visits for ILI 4.5% was ***above*** the national baseline 2.0% and the proportion of deaths attributed to pneumonia and influenza 9.3% was ***above*** the epidemic threshold of 7.1% for week 02.

Syndromic Surveillance: 2014-2015 Influenza Season

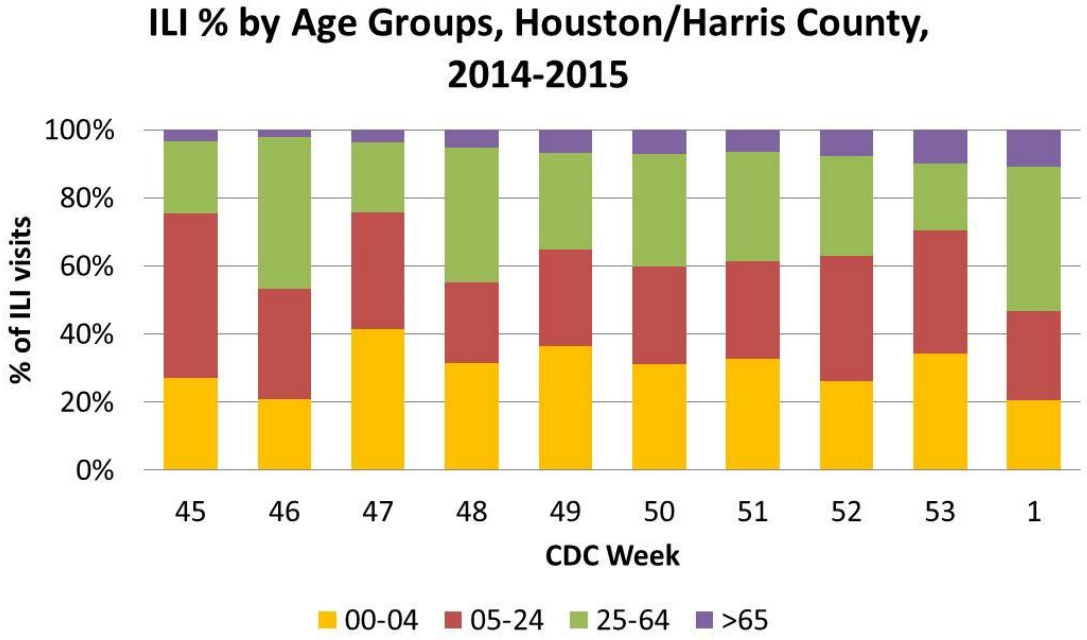


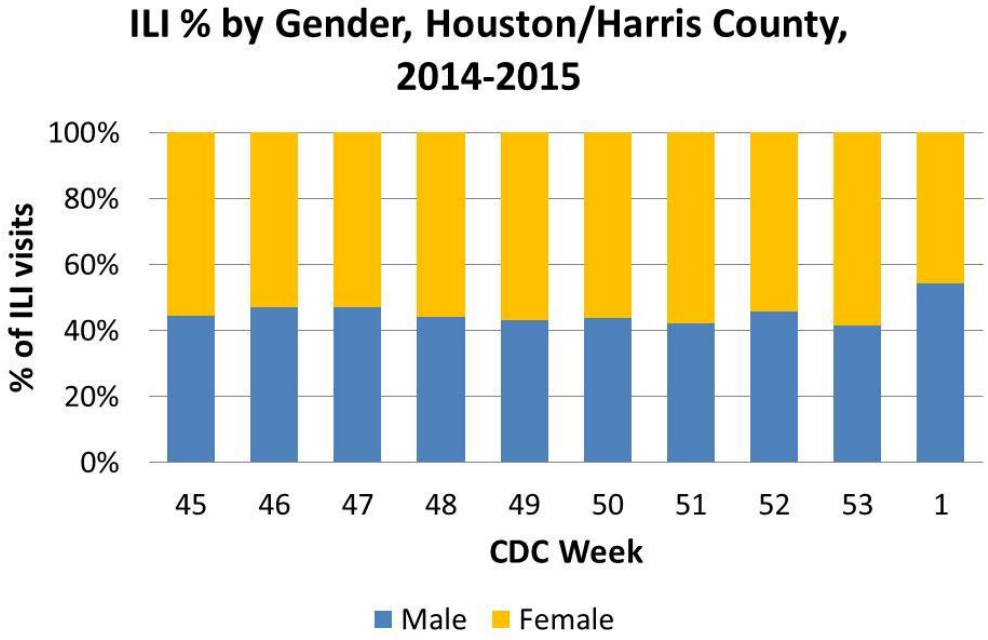
Google Flu Trends—Houston



NOTE: Houston/Harris County ILI activity is assessed using information provided by surveillance participants in the Real-time Outbreak Disease Surveillance System (RODS). For week 02, 36 surveillance participants reported ILI information to Houston Department of Health and Human Services. Influenza-like illness (ILI) is defined as the mention of fever AND cough, OR fever AND sore throat, OR flu in the patient's ED chief complaint. These data do not represent laboratory confirmed cases of influenza nor do they represent all ED visits in Houston/Harris County.

Syndromic Surveillance: 2014-2015 Influenza Season Age and Gender Distribution

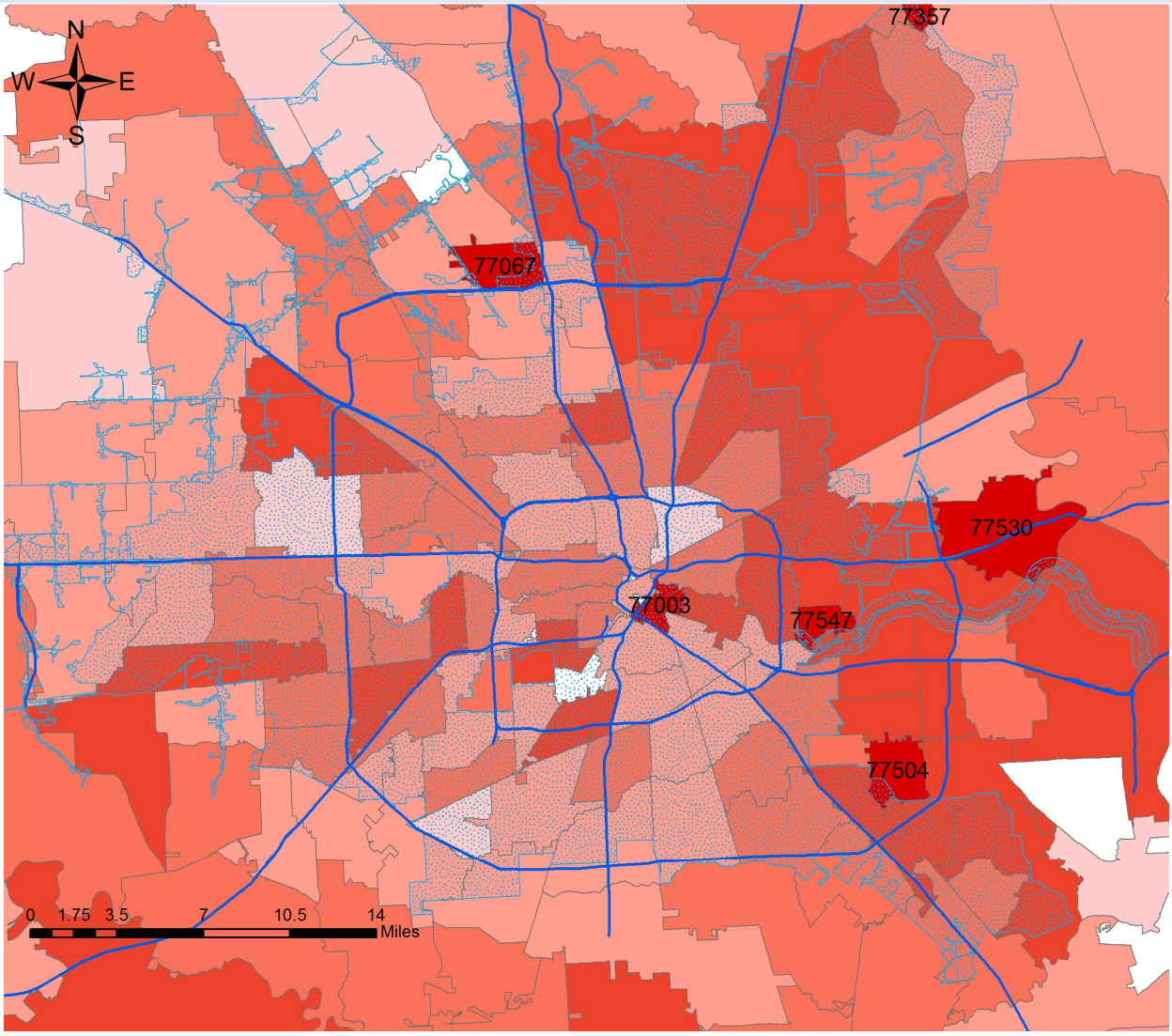




In week 02, 2.6% of emergency department (ED) visits were due to influenza-like illness (ILI) complaints. Of the 957 patients presenting with ILI, the age group that recorded the most ED visits was the 05 to 24 year olds 36.0%.

NOTE: Houston/Harris County ILI activity is assessed using information provided by surveillance participants in the Real-time Outbreak Disease Surveillance System (RODS). For week 02, 36 surveillance participants reported ILI information to Houston Department of Health and Human Services. Influenza-like illness (ILI) is defined as the mention of fever AND cough, OR fever AND sore throat, OR flu in the patient's ED chief complaint. These data do not represent laboratory confirmed cases of influenza nor do they represent all ED visits in Houston/Harris County.

Syndromic Surveillance: Geographic Distribution Map



Legend

City of Houston City Limit

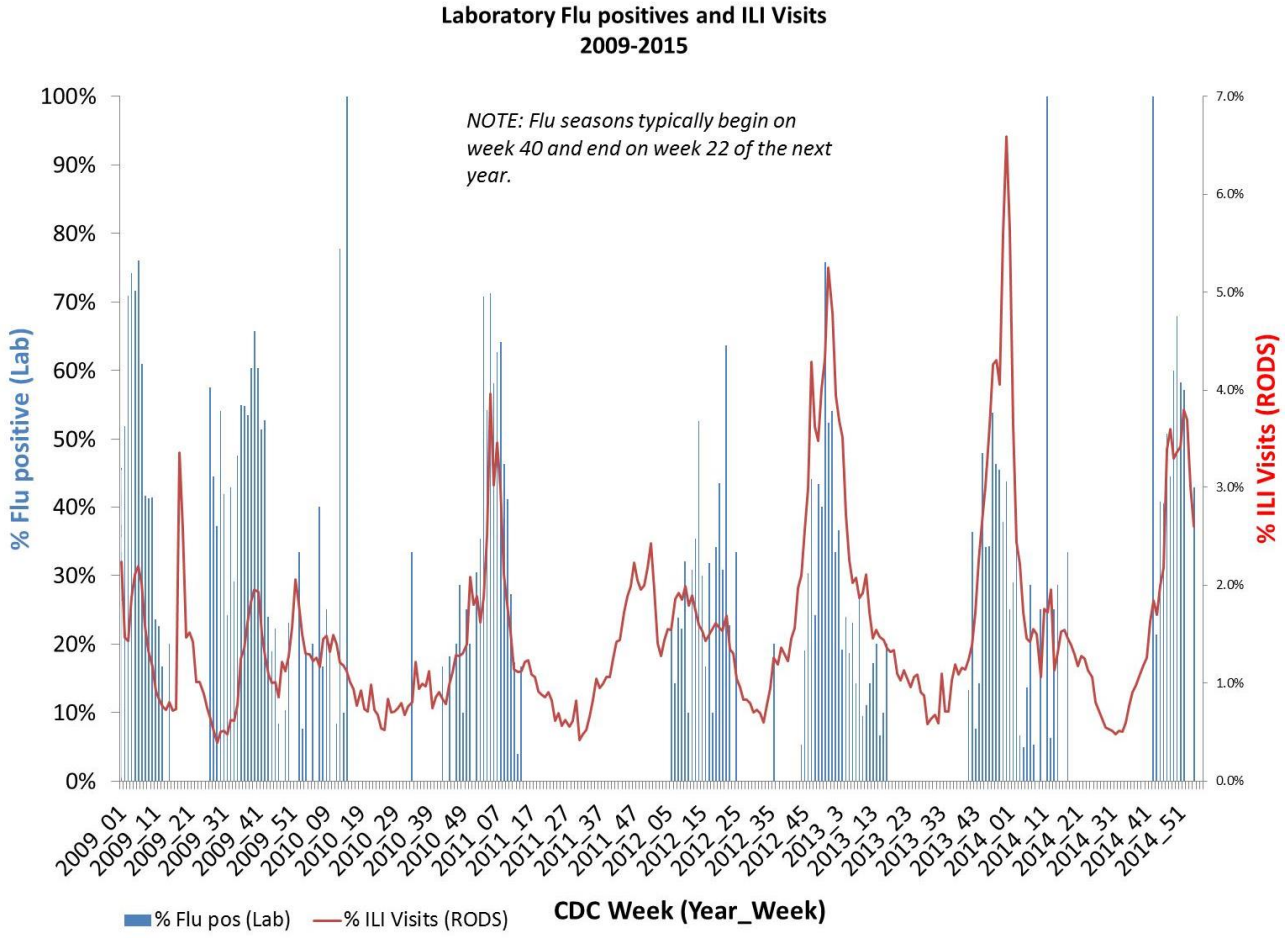
2013-2014 %ILI of ED Visits by Zip Code

- 0% - 1.1%
- 1.11% - 2.5%
- 2.51% - 4%
- 4.01% - 6%
- 6.01% - 12.5%

During week 02, the ZIP codes that have the greatest percentage of ED visits related to ILI (6.0% or greater) are: 77357, 77067, 77530, 77003, 77547, 77504

NOTE: Houston/Harris County ILI distribution map was created using data provided by 36 hospitals that voluntarily provide data based on chief complaints in the Real-time Outbreak Disease Surveillance System (RODS). This map reflects the percentage of ILI cases from each zip code from the total amount of cases seen in each zip code during the current week of reporting. Influenza-like illness (ILI) is defined as the mention of fever AND cough, OR fever AND sore throat, OR flu in the patient's ED chief complaint. These data do not represent laboratory confirmed cases of influenza nor do they represent all ED visits in Houston/Harris County.

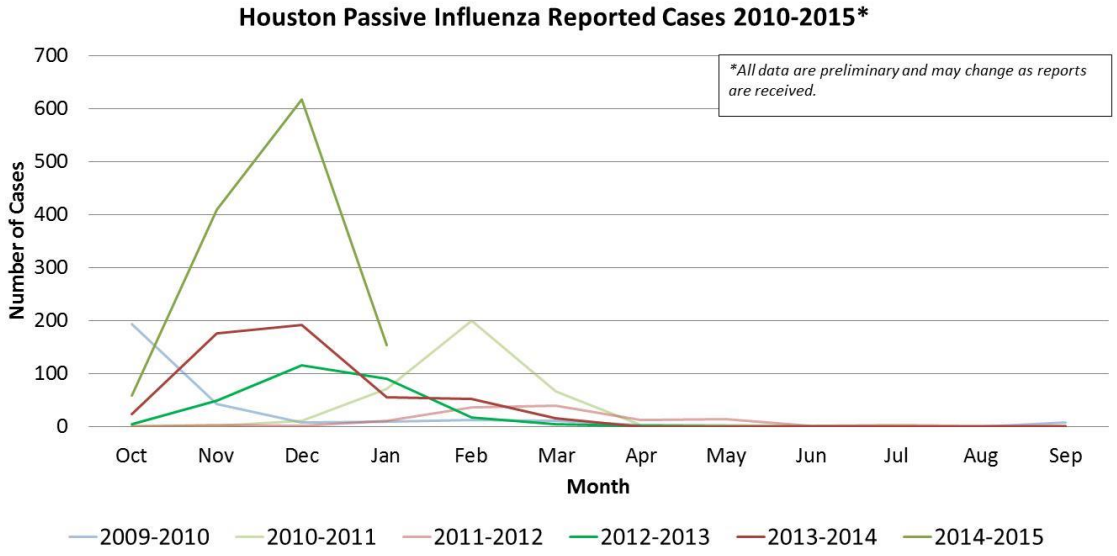
Laboratory Surveillance: Influenza Rapid Test Results, Houston



CDC Week Number	53 (Dec 28 to Jan 03)	01 (Jan 04 to Jan 10)	02 (Jan 11 to Jan 17)
# of Influenza Tests Performed	1	0	7
% Influenza Positive	0.0%	0.0%	43%
# Influenza A Positive	0	0	2
% Influenza A Positive	0.0%	0.0%	67%
# Influenza B Positive	0	0	1
% Influenza B Positive	0.0%	0.0%	33%
# Non-differentiated Positive	0	0	0
% Non-differentiated Positive	0.0%	0.0%	0.0%

Passive Surveillance

From January 1 to January 10 there were 154 lab results for influenza. Flu A accounted for 87.6% of the labs. The majority of the positive lab results were among those in the age group 25 to 64 (74 cases) and females (87 cases).



School Surveillance

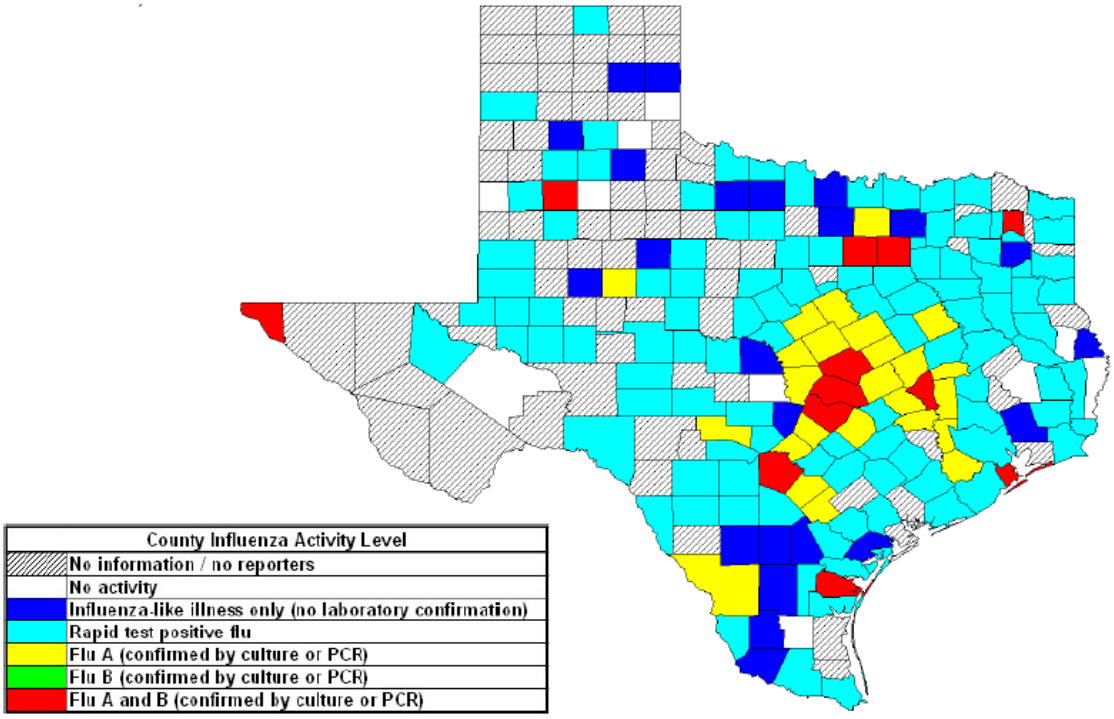
Table 1: ILI and Influenza Cases by Type and School Type[1] per Month

	Total Cases	Lab Confirmed		Flu A	Flu B	A+B	Unclassified		Elem Schools	Middle Schools	High Schools	Multi-Level Schools
		#	%									
Aug												
Sep	1	0	0	0	0	0	0		1	0	0	0
Oct	131	8	6%	3	0	0	5		127	4	0	0
Nov	307	49	16%	12	2	1	25		218	24	21	44
Dec	279	45	16%	9	1	0	35		161	26	46	46
Jan												
Feb												
Mar												
Apr												
Total												

ILI and influenza cases decreased from November to December. There were 45 laboratory confirmed flu cases seen in December and nine were confirmed as influenza A.

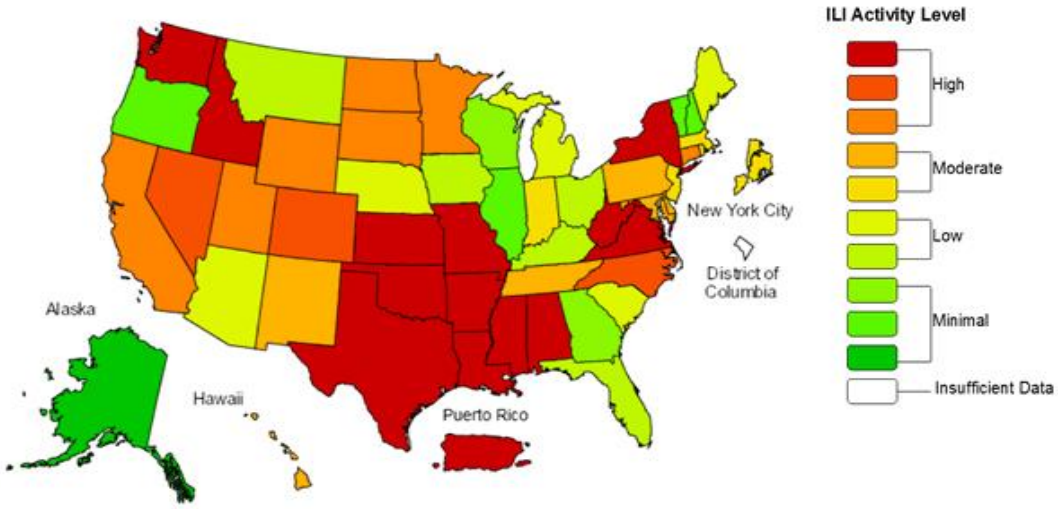
NOTE: Data on student ILI and influenza cases is collected from 306 schools within Houston Independent School District. [1]School will be counted more than once if more than one case from the same school is reported during the

Texas and National Influenza and ILI Activity



NOTE: Influenza activity level corresponds to current MMWR week only and does not reflect previous weeks' activity. The majority of influenza cases are not reportable by law to the Texas Department of State Health Services. This map contains data from sentinel sites and does not represent all influenza cases in the state. Positive laboratory results are reported according to specimen collection date or date received in the lab if the former is unknown.
http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/2015/

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2014-15 Influenza Season Week 2 ending Jan 17, 2015



NOTE: Data collected in ILINet are used to produce a measure of ILI activity by state. Activity levels are based on the percent of outpatient visits in a state due to ILI and are compared to the average percent of ILI visits that occur during spring and fall weeks with little or no influenza virus circulation. This map uses the proportion of outpatient visits to health care providers for influenza-like illness to measure the ILI activity level within a state. It does not, however, measure the extent of geographic spread of flu within a state. Therefore, outbreaks occurring in a single city could cause the state to display high activity levels. Data collected in ILINet may disproportionately represent certain populations within a state, and therefore, may not accurately depict the full picture of influenza activity for the whole state. http://www.cdc.gov/flu/weekly/

The Houston Influenza Surveillance Weekly Report is available on the Houston Department of Health and Human Services web site at:

http://www.houstontx.gov/health/weekly-flu-report

NOTE:

Influenza-like Illness (ILI) is defined as fever (temperature ≥ 100°F) plus a cough OR a sore throat, in the absence of a known cause other than influenza.

Houston ILI baselines were determined using the same method as the Centers for Disease Control and Prevention Regional ILI baselines. The baseline is developed by calculating the mean percentage ILI of ED visits during non-influenza weeks for the previous three seasons and adding two standard deviations. A non-influenza week is defined as periods of two or more consecutive weeks in which each week accounted for less than 2% of the season's total number of specimens that tested positive for influenza.

Additional information regarding Houston, Texas and national ILI activity can be accessed at:

http://www.houstontx.gov/health/

http://http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/2015/

http://www.cdc.gov/flu/weekly/

http://www.who.int/csr/don/en/

Houston Department of Health and Human Services

Office of Surveillance and Public Health Preparedness

Bureau of Epidemiology

8000 N. Stadium Dr, 4th Floor

Houston, TX 77054

Main Epidemiology Phone Number: (832) 393-5080

Disease Reporting Fax Number: (832) 393-5232

24-Hour Contact Number: (832) 393-5080