



Houston Department of
Health and Human Services

Office of Surveillance & Public Health Preparedness
Bureau of Epidemiology

Influenza Surveillance Weekly Report
CDC MMWR Week 10: March 08 - 14, 2015

Influenza Activity by County, State, and National Levels

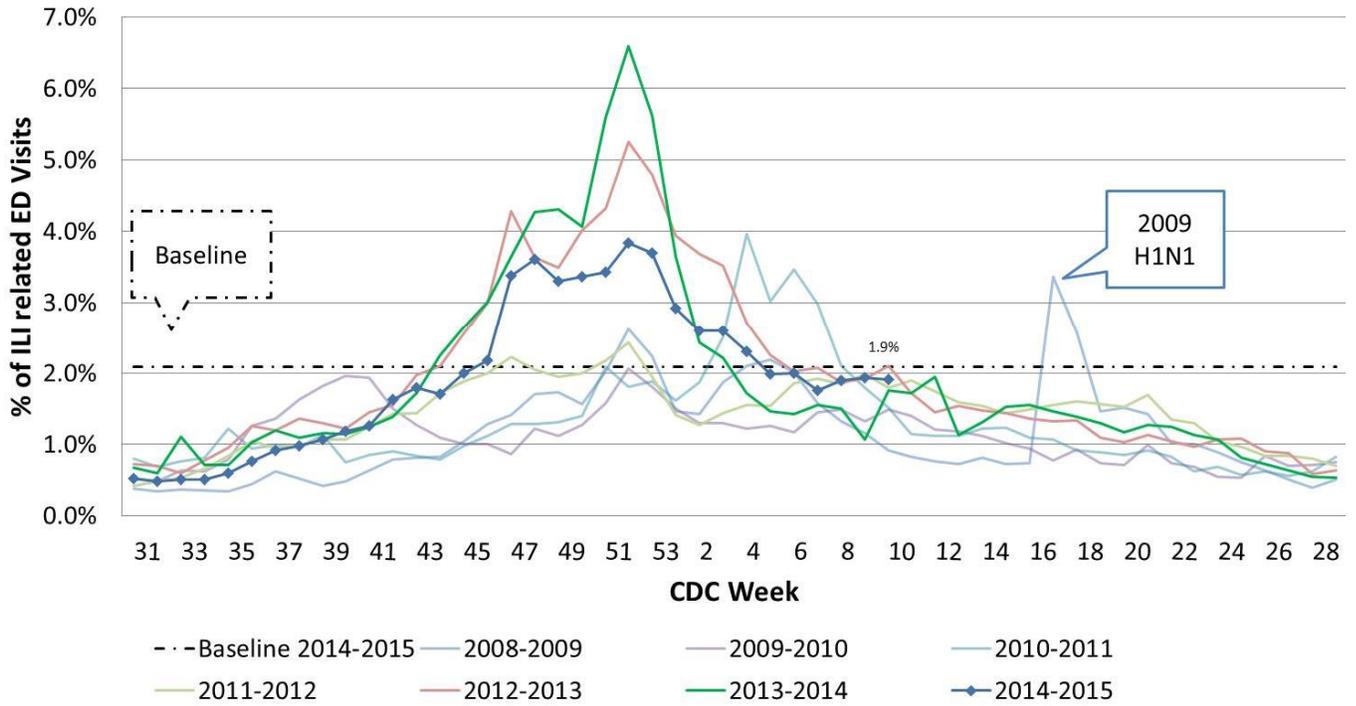
Houston/ Harris County: Week 10	Texas: Week 10	CDC: Week 10
Regional	Regional	Elevated

Highlights

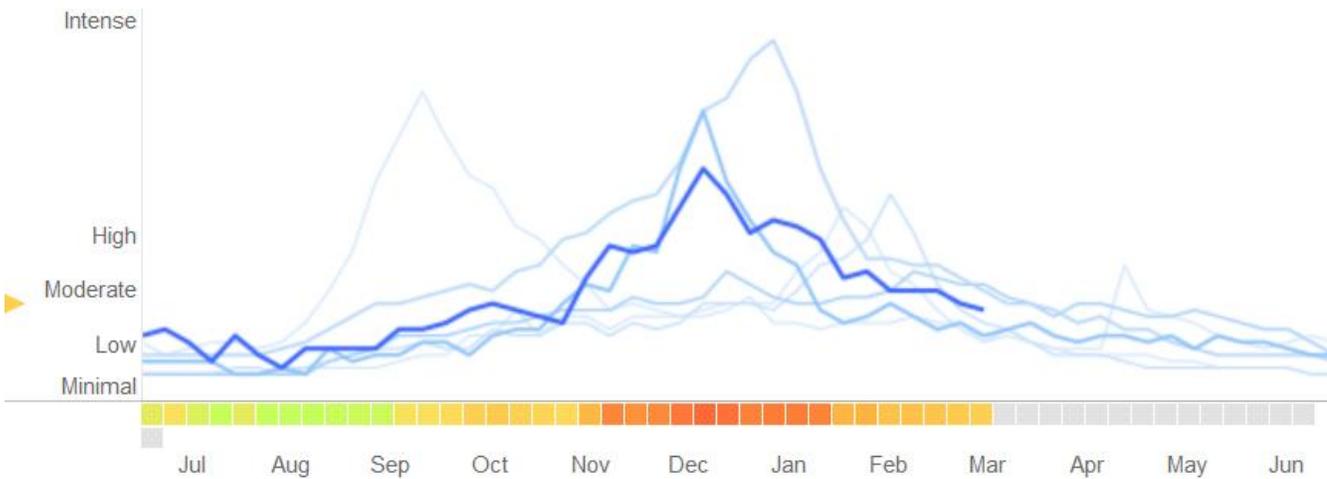
- The percentage of reported influenza-like illness (ILI) in Houston/Harris county **did not change** from 1.9% in week 09 to 1.9% in week 10.
- The percentage of flu test positives in Houston **increased** from 15% in week 09 to 16.7% in week 10.
- During the 2014-2015 influenza season, zero (0) Houston influenza-associated pediatric deaths have been reported.
- In week 10, 12 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 (1), Influenza A H1N1 (0), Influenza B (1).
- Cumulatively this season, the City of Houston Bureau of Laboratory Services has tested 337 surveillance specimens. Of the 133 positive lab results, the Influenza A/H3 accounts for 108 (32.0%) of the positives.
- At the national level during week 10, 11.2 % of specimens tested and reported to the CDC were positive for influenza. The proportion of outpatient visits for ILI 2.3% was **above** the national baseline 2.0% and the proportion of deaths attributed to pneumonia and influenza 7.6% was **above** the epidemic threshold of 7.2% for week 10.

Syndromic Surveillance: 2014-2015 Influenza Season

Comparison of ILI-Related ED Visits in Houston/Harris County



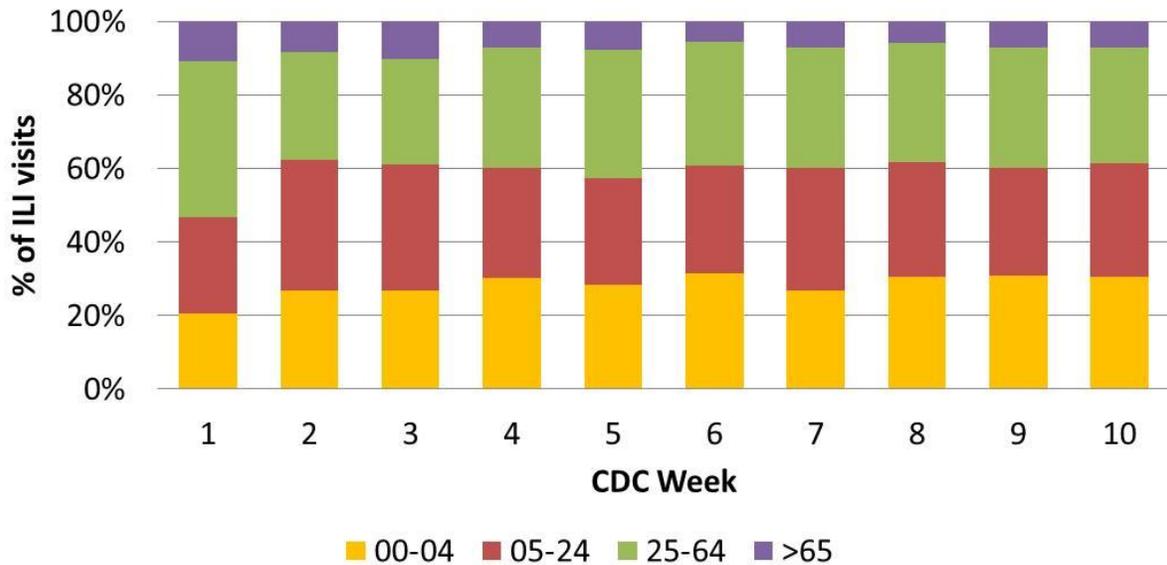
Google flu trends in Houston



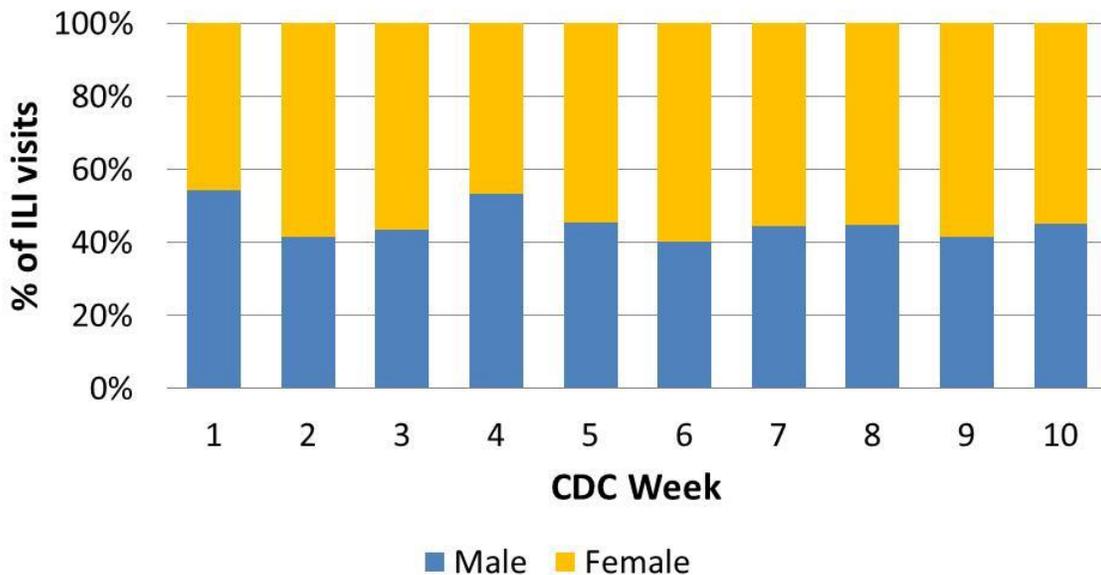
NOTE: Houston/Harris County ILI activity is assessed using information provided by surveillance participants in the Real-time Outbreak Disease Surveillance System (RODS). For week 10, 36 surveillance participants reported ILI information to Houston Department of Health and Human Services. Influenza-like 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

ILI % by Age Groups, Houston/Harris County, 2014-2015



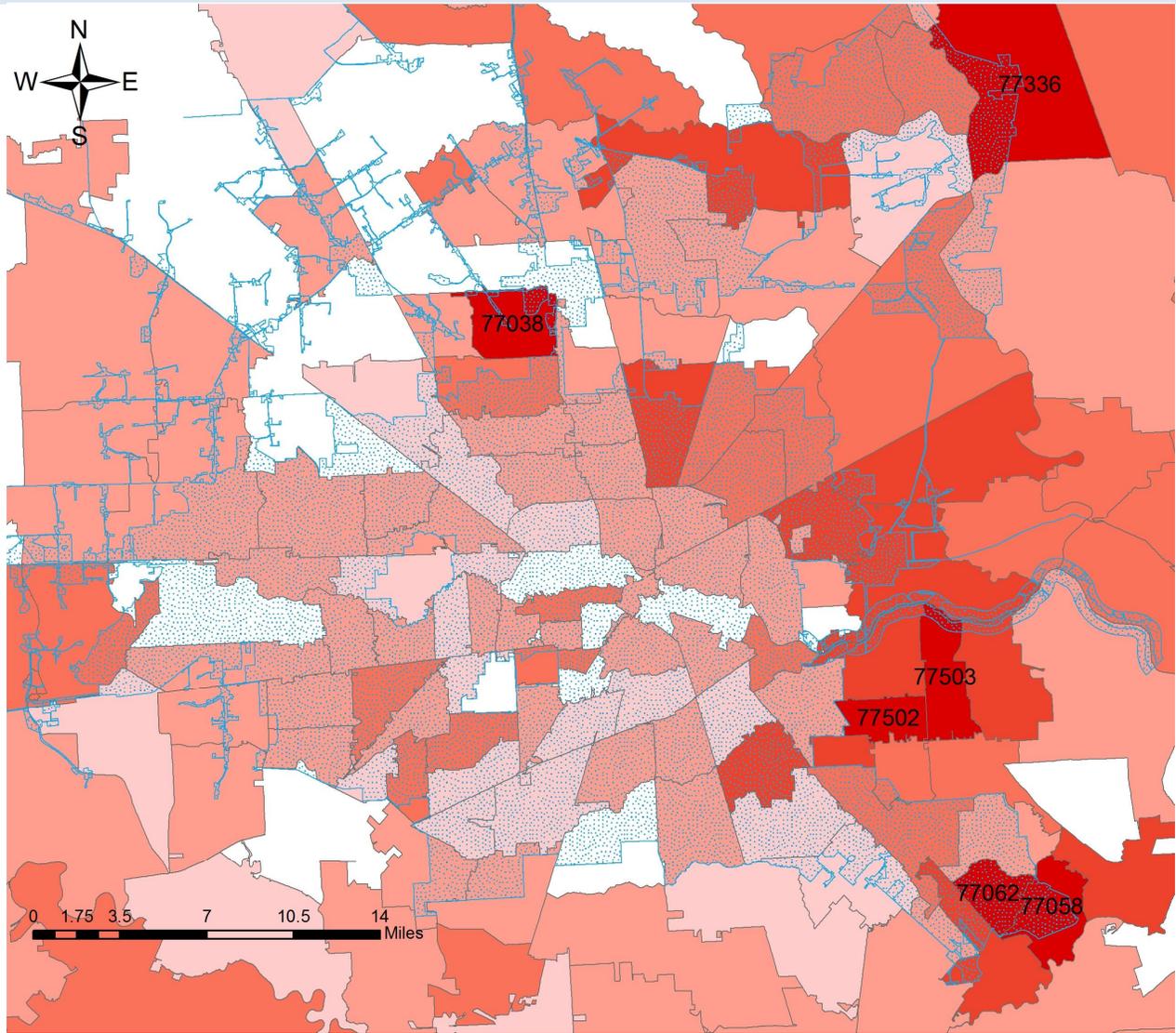
ILI % by Gender, Houston/Harris County, 2014-2015



In week 10, 1.9% of emergency department (ED) visits were due to influenza-like illness (ILI) complaints. Of the 733 patients presenting with ILI, three age groups presented each accounted for 31.0% of ED visits, for a total of 93%. Females accounted for 55% and males accounted for 45% of ED visits due to ILI.

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 10, 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

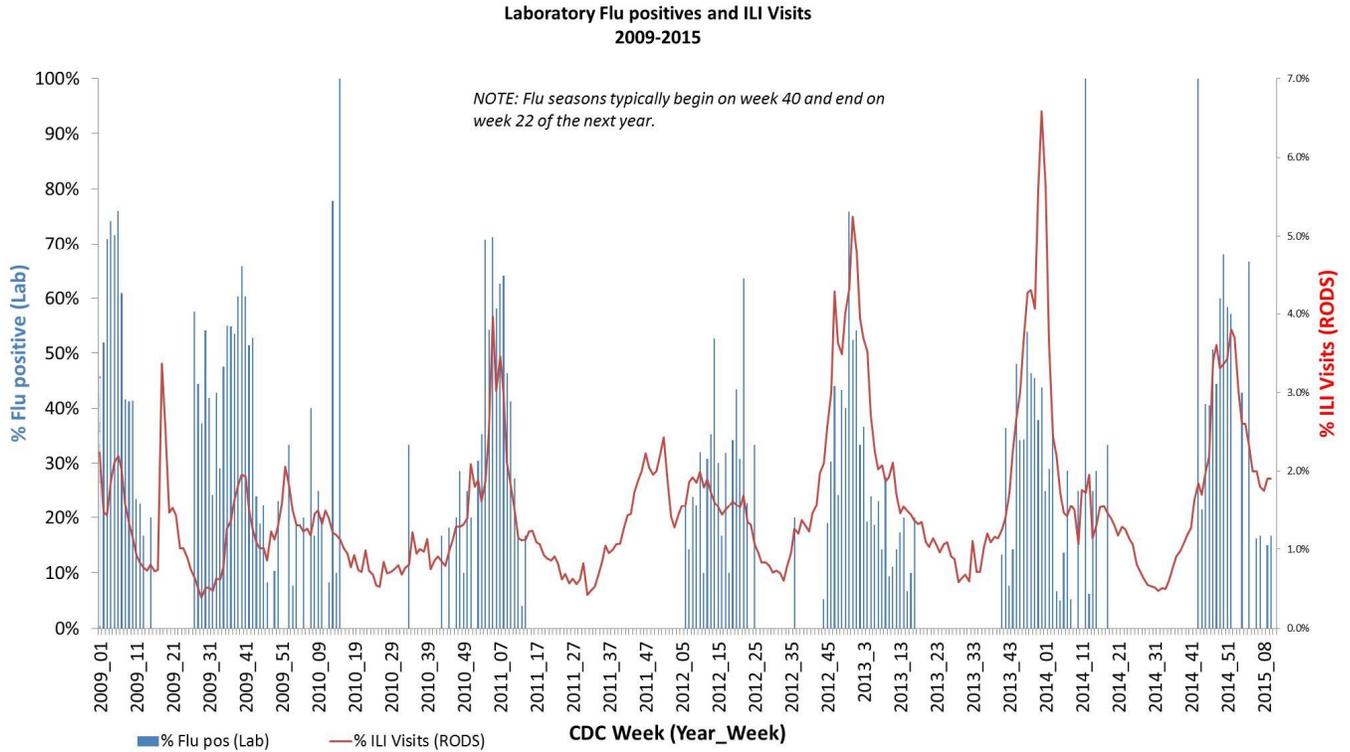
2013-2014 %ILI of ED Visits by Zip Code

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

During week 10, the zip codes that have the greatest percentage of ED visits related to ILI (6.0% or greater) are: 77336, 77038, 77503, 77502, 77062, 77058

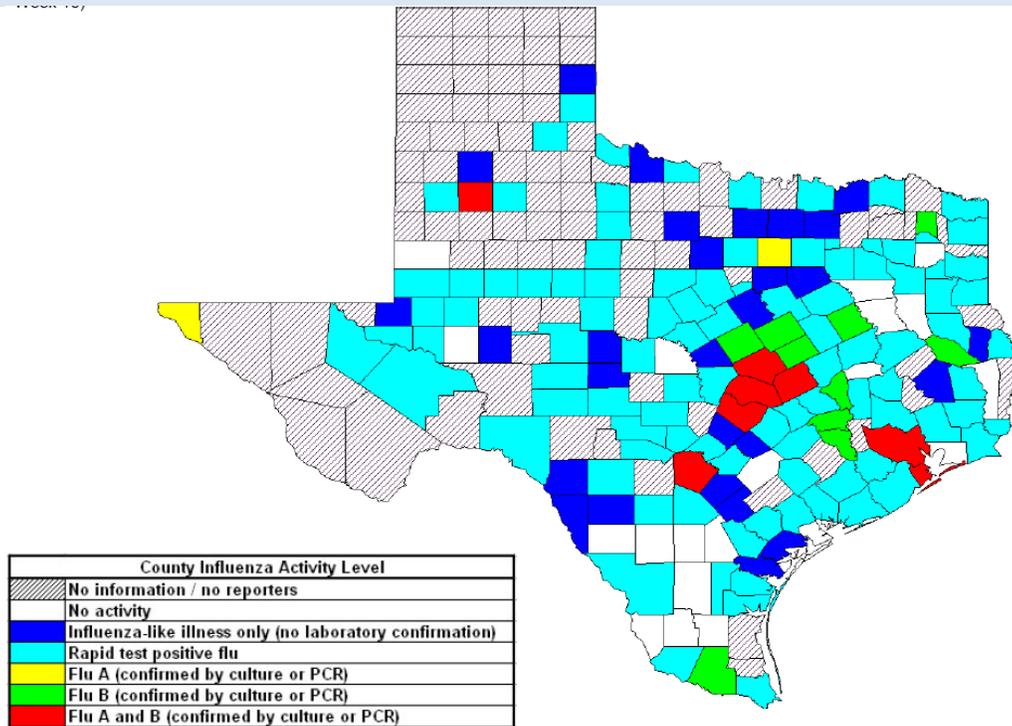
NOTE: Houston/Harris County ILI distribution map was created using data provided by 36 hospitals that voluntarily provide data based on chief complaints in the Real-time Outbreak Disease Surveillance System (RODS). This map reflects the percentage of ILI cases from each zip code from the total amount 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



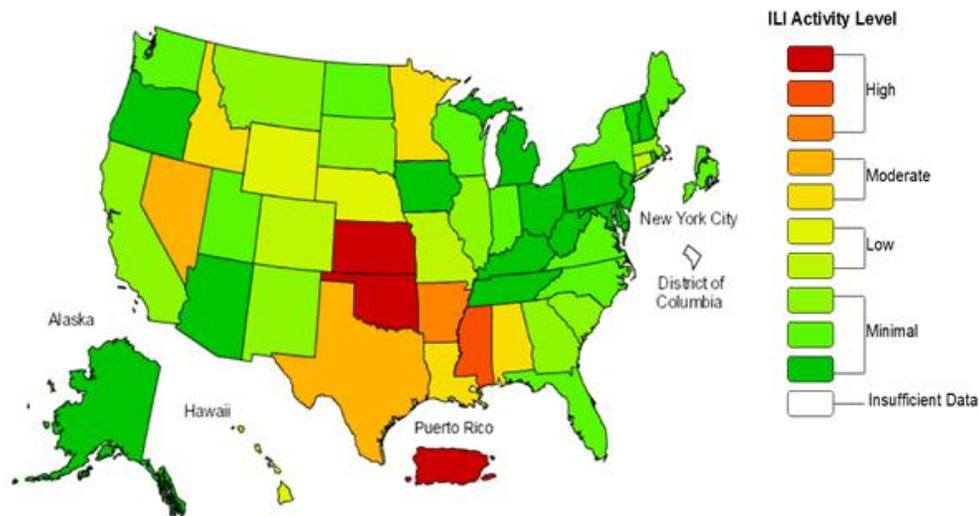
CDC Week Number	08 (Feb 22–28)	09 (Mar 01–07)	10 (Mar 08–14)
# of Influenza Tests Performed	0	20	12
% Influenza Positive	0%	15.0%	16.7%
# Influenza A Positive	0	0	1
% Influenza A Positive	0%	0%	50.0%
# Influenza B Positive	0	3	1
% Influenza B Positive	0%	100.0%	50.0%
# Non-differentiated Positive	0	0	0
% Non-differentiated Positive	0%	0%	0%

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 10 ending Mar 14, 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 $\geq 100^{\circ}\text{F}$) 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