



HOUSTON HEALTH
DEPARTMENT

Office of Surveillance & Public Health Preparedness
Program of Public Health Informatics

Influenza Surveillance Weekly Report
CDC MMWR Week 05: January 31—February 06, 2016

Influenza Activity by County, State, and National Levels

Houston/ Harris County: Week 05	Texas: Week 05	CDC: Week 05
Low but widespread	Slowly increasing	Increased slightly

Highlights

- The Houston Health Department (HHD) Conducts seasonal influenza surveillance from October (week 40) 2015 to May (week 22) 2016. In Week 05, flu activity increased from the previous week. ILI activity is widespread. Flu activity typically peaks in Feb. There is still time to get a flu vaccine which covers this season’s circulating types of influenza.

Influenza Like Illness

- The percentage of reported influenza-like illness (ILI) detected from emergency departments in Houston/Harris County **increased** from 1.0% in week 04 to 1.1% in week 05. The proportion of ILI was below/above the baseline of 2.6%.
- The percentage of FNY users reporting ILI **increased** from 1.0% to 1.9%.

Virology

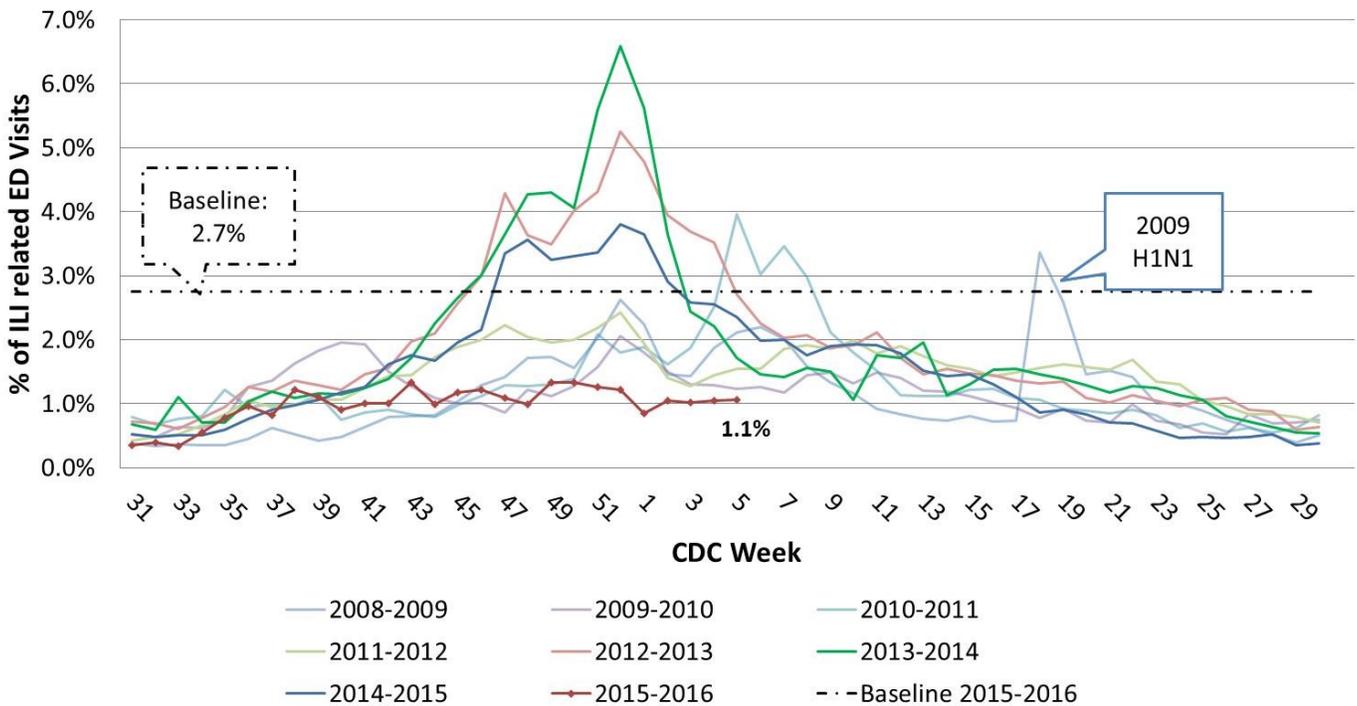
- The percentage of flu test positives from sentinel providers in Houston **increased** from 9.4% in week 04 to 15.8% in week 05.
- In week 05, 19 surveillance specimens were tested by the City of Houston Bureau of Laboratory Services. The following types and number of viruses were detected in the specimens: **Influenza A H3 (1), Influenza A H1N1 (1), Influenza B (1)**
- Cumulatively this season, the City of Houston Bureau of Laboratory Services has tested 270 surveillance specimens. Of the six positive lab results, the Influenza 2009 A/H1N1 strain accounts for 3 (50%) of the positives.

Pediatric Mortality

- During the 2015-2016 influenza season, zero (0) Houston influenza-associated pediatric deaths have been reported.

Syndromic Surveillance: 2015-2016 Influenza Season

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



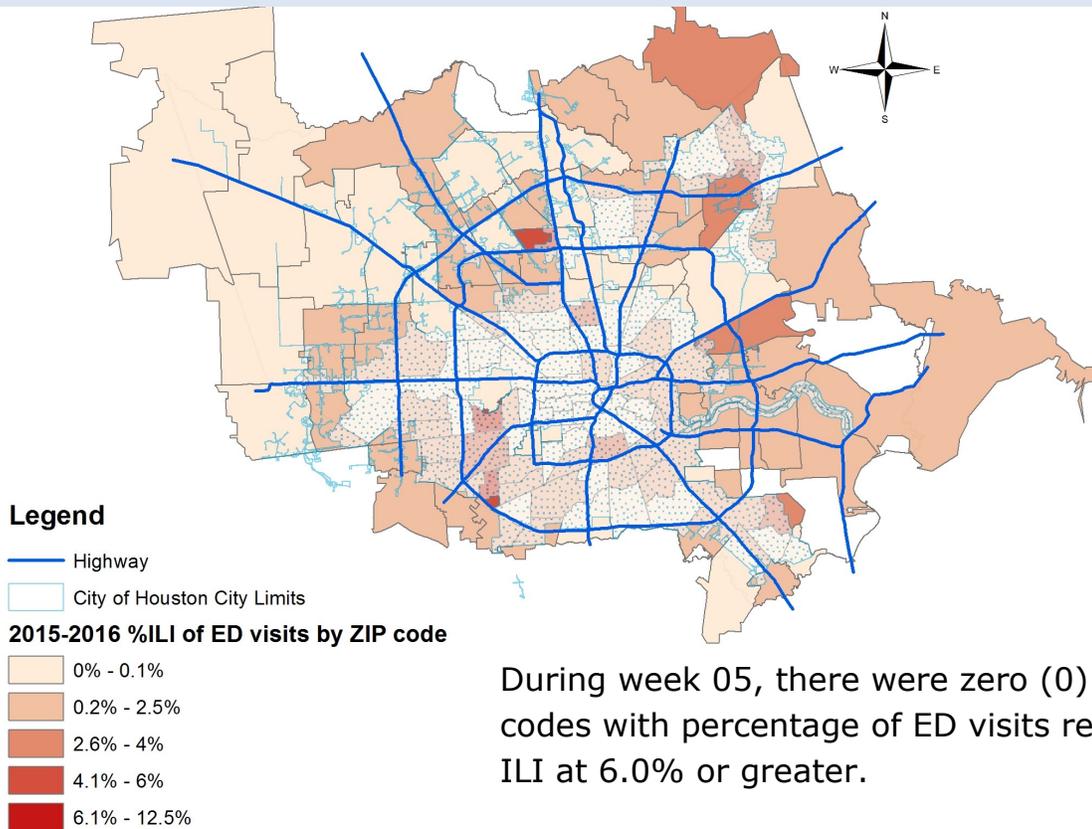
Syndromic Surveillance: 2015-2016 Influenza Season Age and Gender Distribution



In Week 05, 1.1% of emergency department (ED) visits were due to influenza-like illness (ILI) complaints. Of the 145 patients presenting with ILI, the age group that recorded the most ED visits was the 05 to 25 year olds (39%). Females accounted for 57% of patients presenting with ILI.

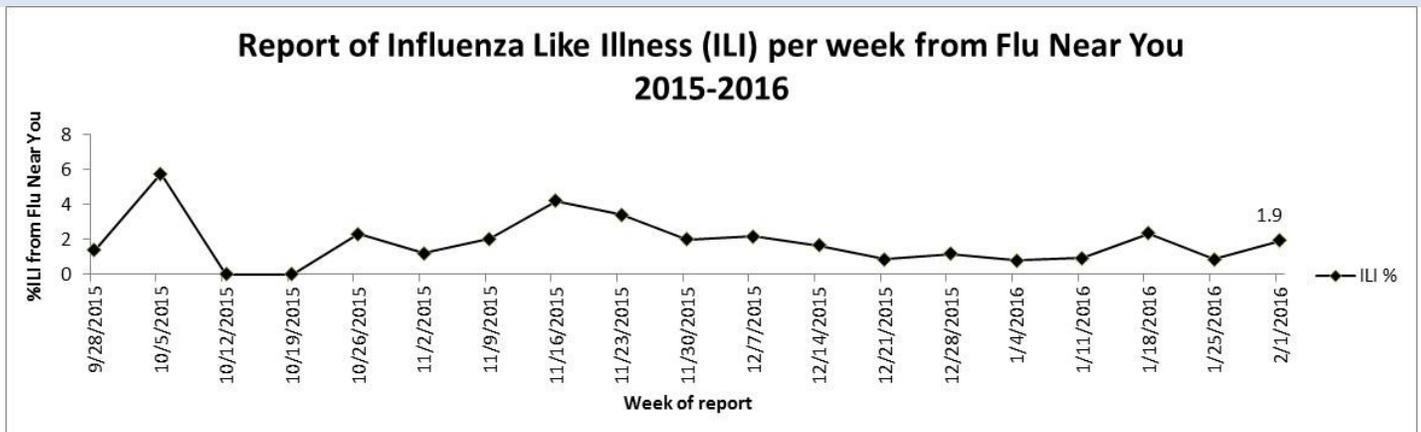
NOTE: Houston/Harris County ILI activity is assessed using information provided by surveillance participants in the Real-time Outbreak Disease Surveillance System (RODS). For week 05, 36 surveillance participants reported ILI information to Houston Health Department. Influenza-like illness (ILI) is defined 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



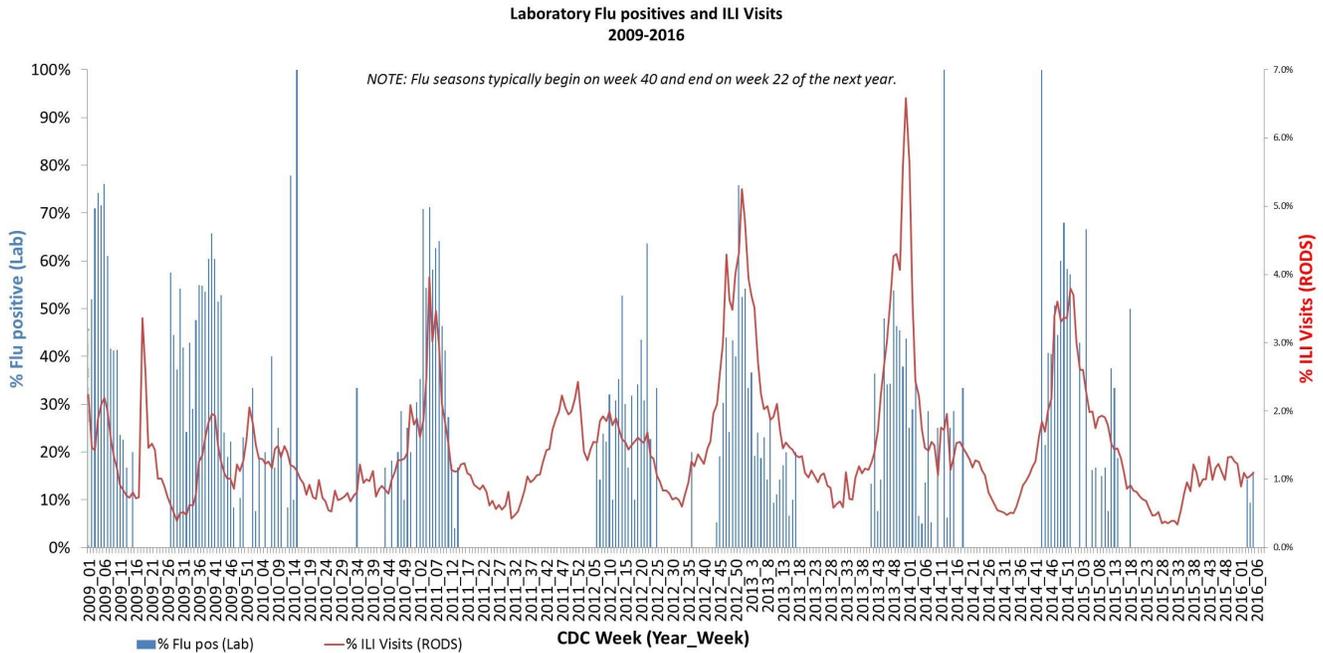
NOTE: Houston/Harris County ILI distribution map was created using data provided by 36 hospitals that voluntarily provide data based on chief complaints in the Real-time Outbreak Disease Surveillance System (RODS). This map reflects the percentage of ILI cases from each zip code from the total amount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

Flu Near You: ILI per week



Flu Near You (FNY) is a participatory surveillance tool which compliments traditional disease surveillance. The percentage of FNY users reporting ILI decreased from 1.0% on 01/25/2016 to 1.9% on 02/01/2016. See the last page for information on how to participate.

Laboratory Surveillance: Influenza Rapid Test Results, Houston

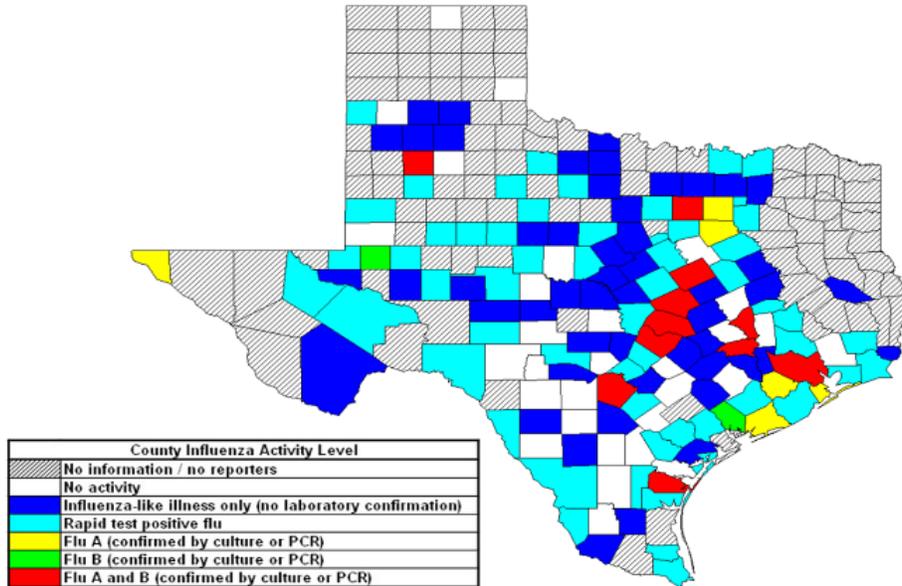


CDC Week Number	03 (Jan 17–23)	04 (Jan 24–30)	05 (Jan 31–Feb 06)
# of Influenza Tests Performed	21	32	19
% Influenza Positive	14.3%	9.4%	15.8%
# Influenza A Positive	3	2	2
% Influenza A Positive	100%	66.7%	66.7%
# Influenza B Positive	0	1	1
% Influenza B Positive	0%	33.3%	33.3%
# Non-differentiated Positive	0	0	0
% Non-differentiated Positive	0%	0%	0%

Texas and National Influenza and ILI Activity

Statewide Influenza Activity Map

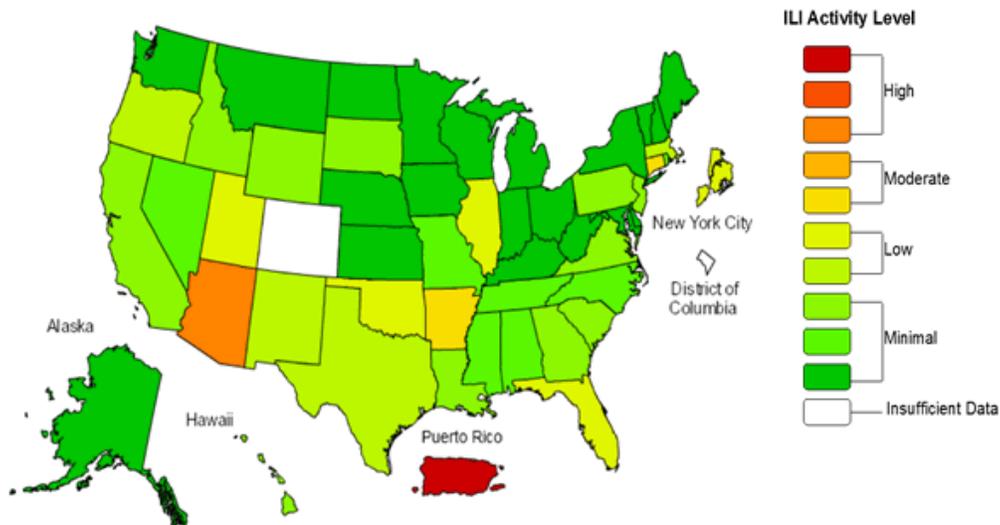
Figure 4. Texas Map Displaying the Highest Level of Influenza or ILI Activity Reported by County for the Week Ending Feb. 06, 2016 (MMWR Week 5)



Please note: The majority of influenza cases are not reportable by law in Texas. This map contains data from sentinel sites and only displays influenza and ILI cases that were reported to public health. Positive laboratory results are reported according to specimen collection date, or date received in the laboratory if the former is unknown.

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 2015-16 Influenza Season Week 5 ending Feb 06, 2016



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 Health Department web site at:

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

Flu Near You is a participatory surveillance (crowd sourcing) tool which compliments traditional disease surveillance activities. Registered users can obtain real-time information on flu activity and influenza vaccine in the Greater Houston Metropolitan Area. Flu Near You features include:

- Report symptoms
- Find vaccines
- Map flu cases in the Greater Houston Metropolitan area
- Get flu news
- Share on social media



This season HHD invites you to register for Flu Near You at <https://flunearyou.org>

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/>

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