



Houston Department of
Health and Human Services

Office of Surveillance & Public Health Preparedness
Bureau of Epidemiology

Influenza Surveillance Weekly Report
CDC MMWR Week 03: January 18—24, 2015

Influenza Activity by County, State, and National Levels

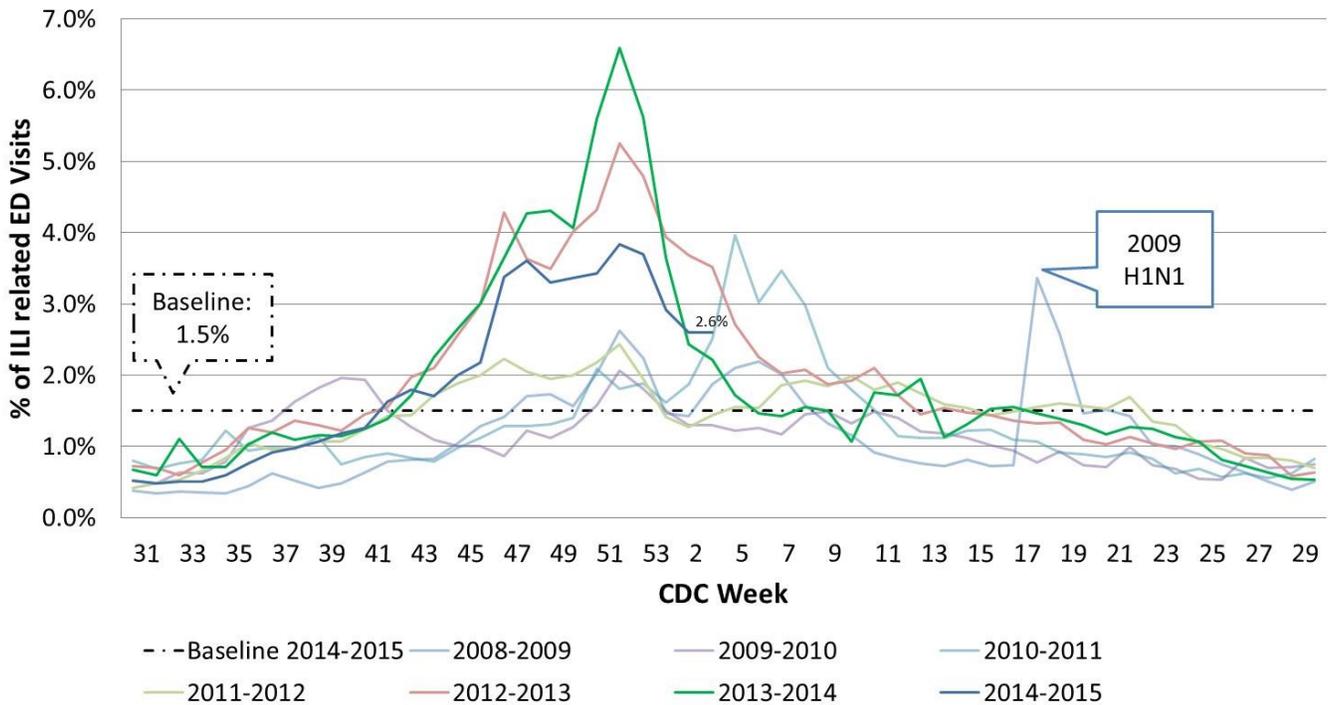
Houston/ Harris County: Week 03	Texas: Week 03	CDC: Week 03
Elevated	Widespread	Elevated

Highlights

- The percentage of reported influenza-like illness (ILI) in Houston/Harris county **remained the same** from 2.6% in week 02 to 2.6% in week 03.
- During the 2014-2015 influenza season, zero (0) Houston influenza-associated pediatric deaths have been reported.
- In week 03, zero (0) 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 (0), Influenza A H1N1 (0), Influenza B (0).
- 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 03, 19.9 % of specimens tested and reported to the CDC were positive for influenza. The proportion of outpatient visits for ILI 4.4% was **above** the national baseline 2.0% and the proportion of deaths attributed to pneumonia and influenza 9.1% was **above** the epidemic threshold of 7.1% for week 03.

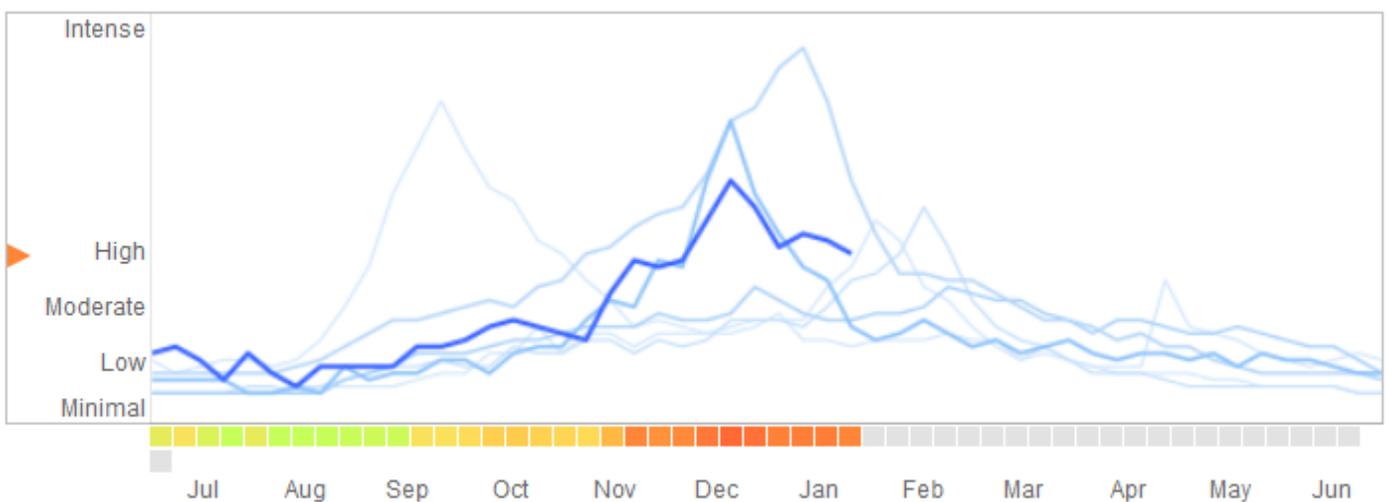
Syndromic Surveillance: 2014-2015 Influenza Season*

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



* Data drop occurred during week 03.

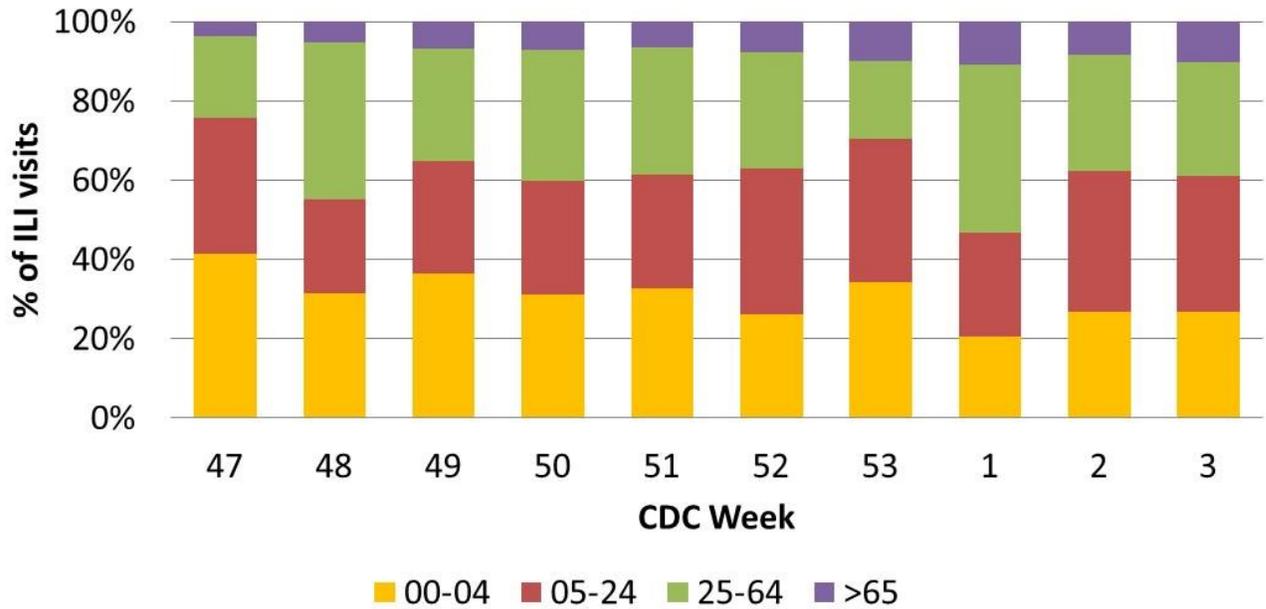
Google Flu Trends



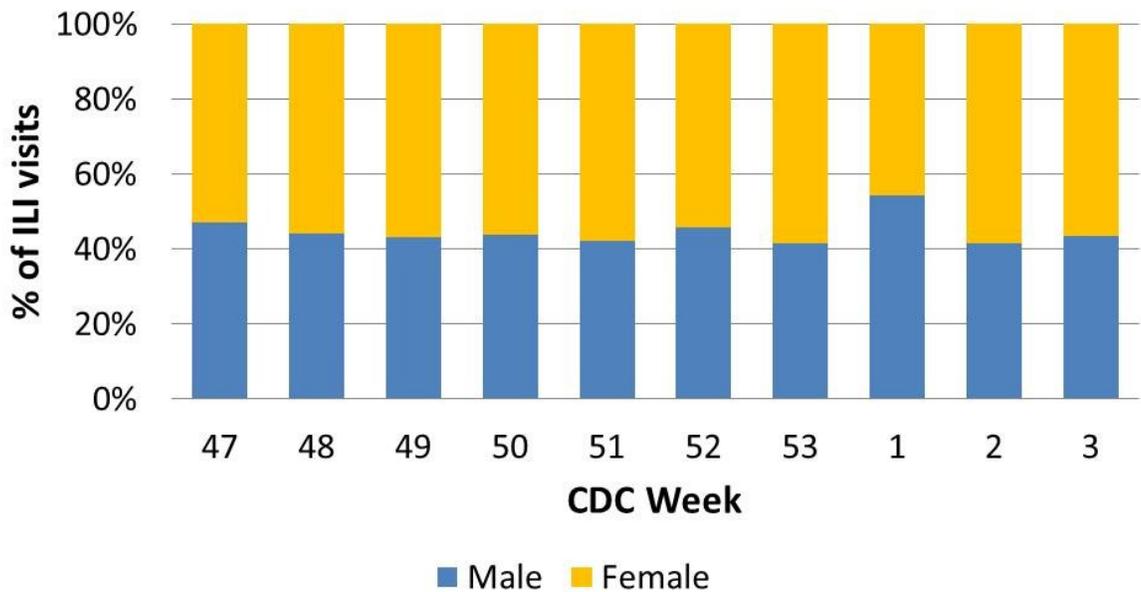
NOTE: Houston/Harris County ILI activity is assessed using information provided by surveillance participants in the Real-time Outbreak Disease Surveillance System (RODS). For week 03, 36 surveillance participants reported ILI information to Houston Department of Health and Human Services. Influenza-like 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

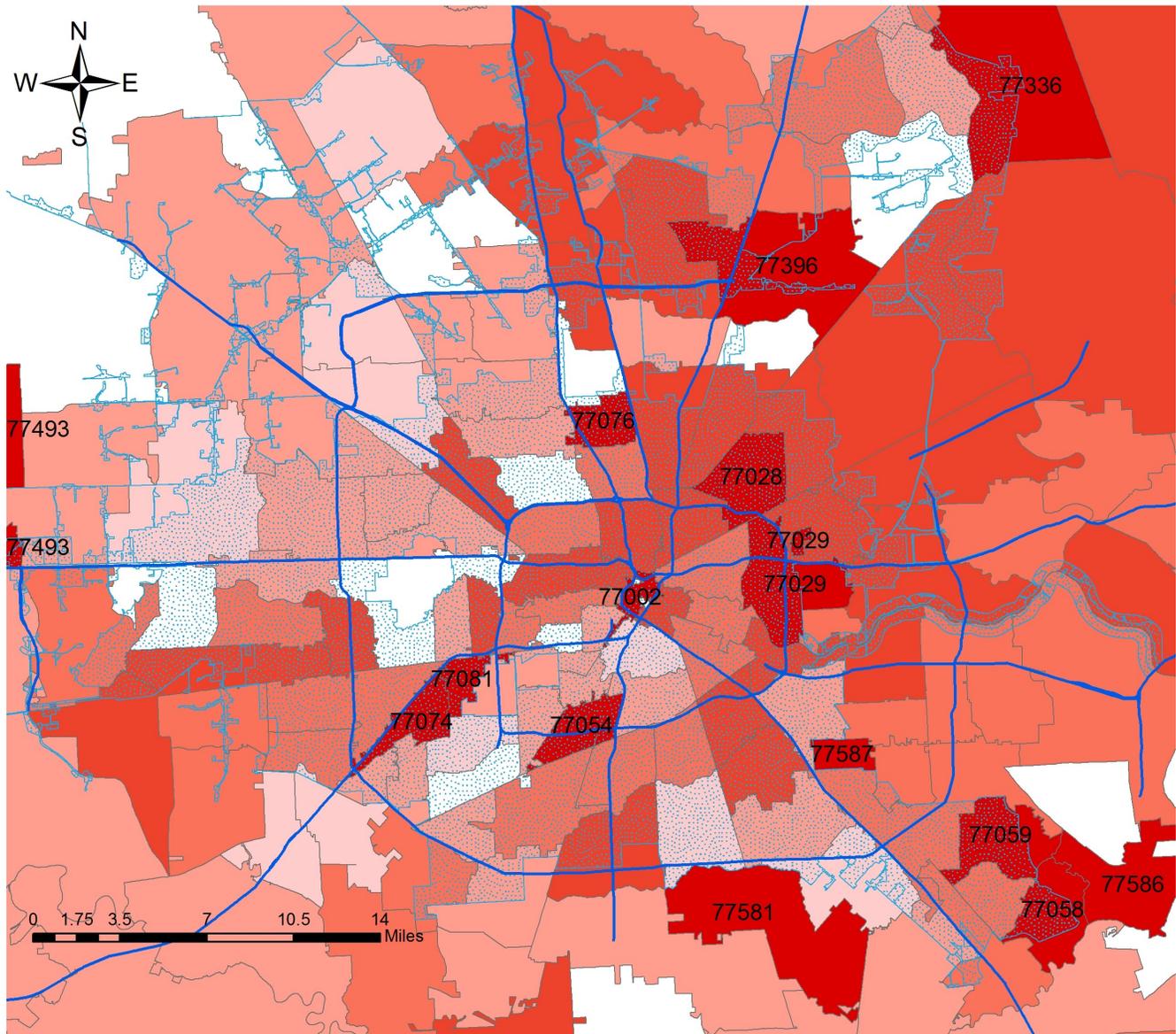


ILI % by Gender, Houston/Harris County, 2014-2015



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 03, 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 03, the ZIP codes that have the greatest percentage of ED visits related to ILI (6.0% or greater) are:

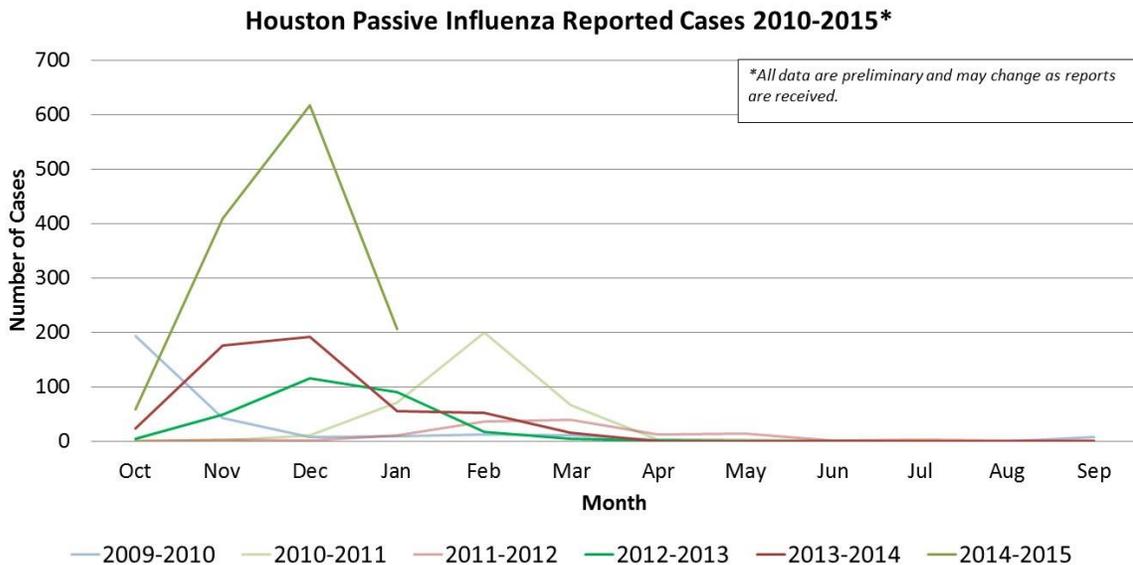
77336, 77396, 77076, 77028, 77029, 77002, 77081, 77074, 77054, 77587, 77059, 77586, 77058, 77581

* Data drop occurred during week 03.

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.

Passive Surveillance

In week 03, there were 52 additional laboratory confirmed influenza cases from the prior week. Flu A accounted for 79% and 21% of the flu positive results in week 03.



School Surveillance

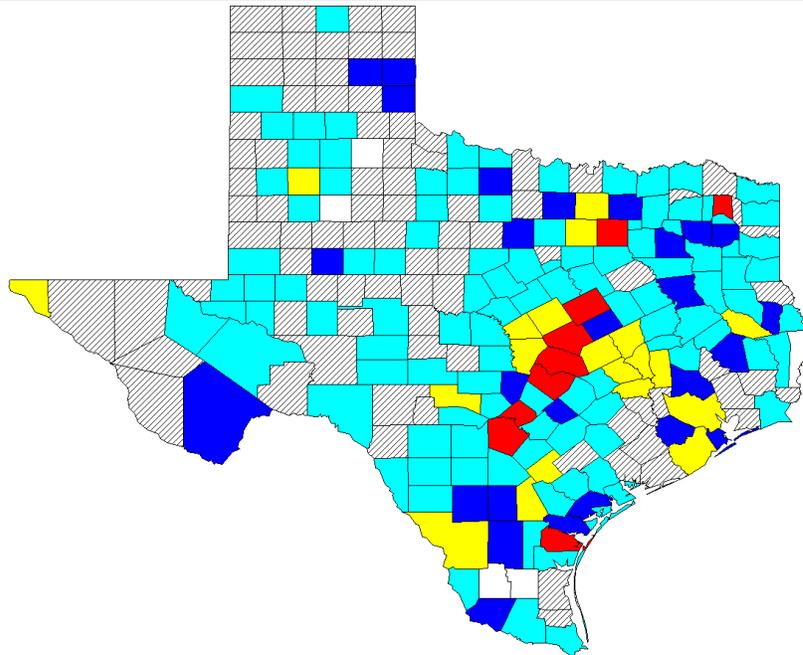
Table 1: ILI and Influenza Cases by Type and School Type¹ per Month

	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.

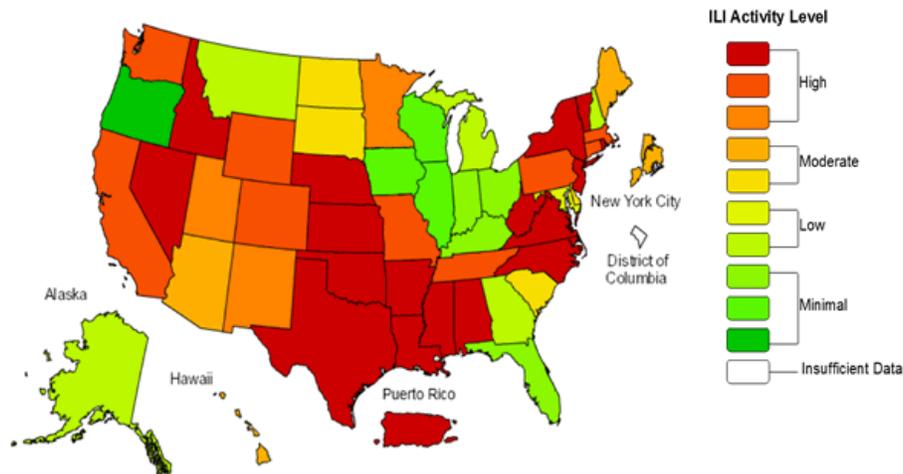
NOTE: Data on student ILI and influenza cases is collected from 306 schools within Houston Independent School District. ¹School will be counted more than once if more than one case from the same school is reported during the

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 3 ending Jan 24, 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/>

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