



Houston Department of
Health and Human Services

Office of Surveillance & Public Health Preparedness
Bureau of Epidemiology

Influenza Surveillance Weekly Report
CDC Week 51: December 14 - 20, 2014

Influenza Activity by County, State, and National Levels

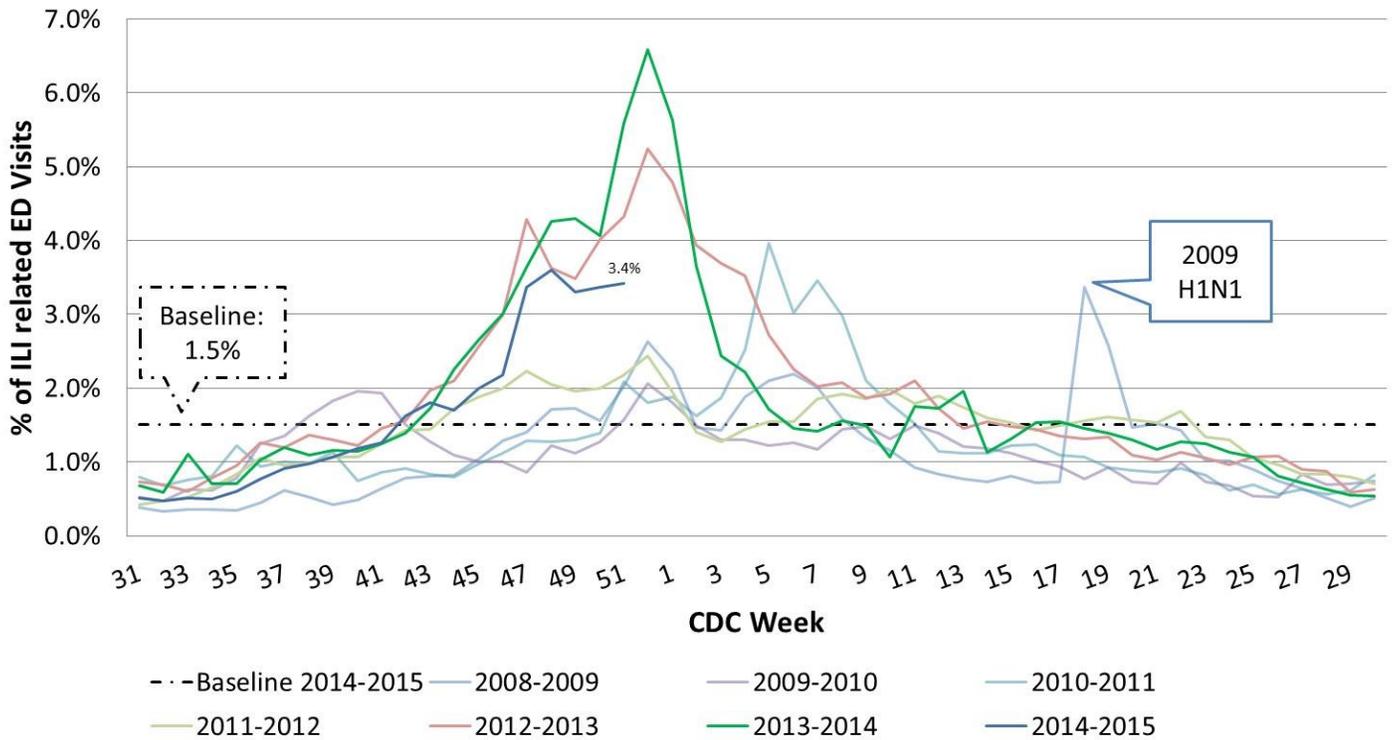
Houston/ Harris County: Week 51	Texas: Week 51	CDC: Week 51
Increased	Not available*	Not available*

Highlights

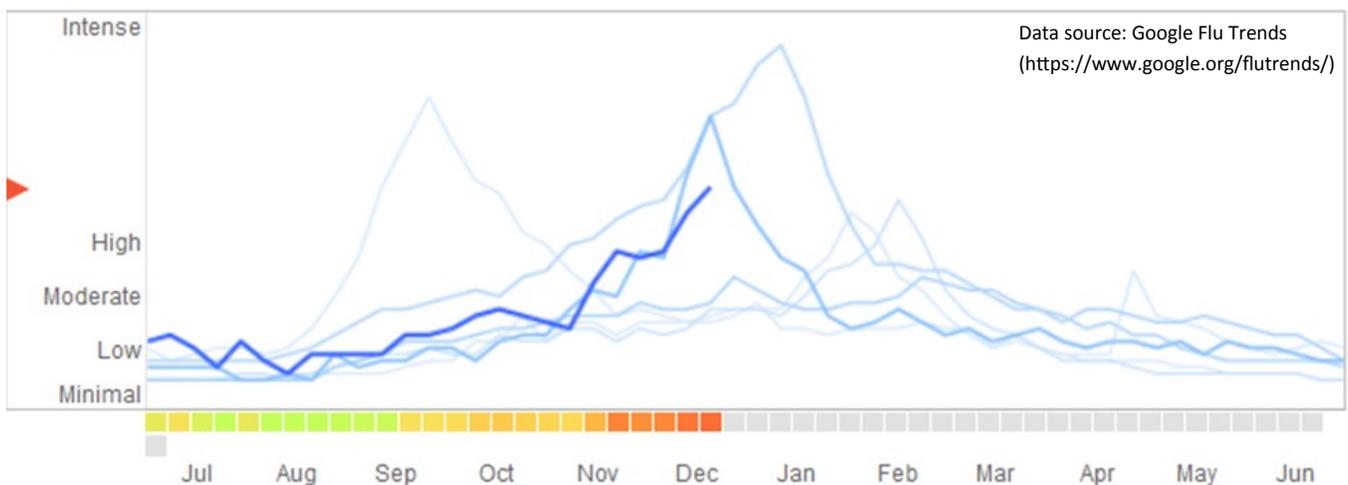
- The percentage of reported influenza-like illness (ILI) in Houston/Harris county **remain unchanged** from 3.4% in week 50 to 3.4% in week 51.
- The percentage of flu test positives in Houston **decreased** from 68.0% in week 50 to 58.3% in week 51.
- During the 2014-2015 influenza season, number zero (0) Houston influenza-associated pediatric deaths have been reported.
- In week 51, 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 (4), Influenza A H1N1 (0), Influenza B (3).
- Cumulatively this season, the City of Houston Bureau of Laboratory Services has tested 222 surveillance specimens. Of the 107 positive lab results, the Influenza A/H3 strain accounts for 97 (90.7%) of the positives.
- *Influenza Activity by State and National level for week 51 are not available as of 12/26/2014.

Syndromic Surveillance: 2014-2015 Influenza Like Illness

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



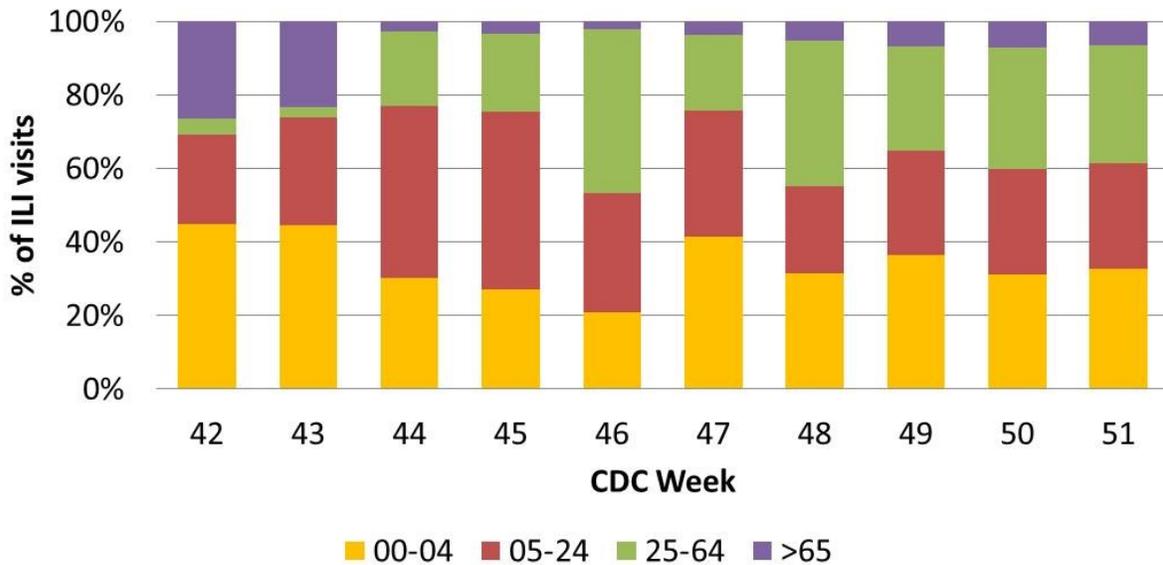
Google Flu Trends in Houston



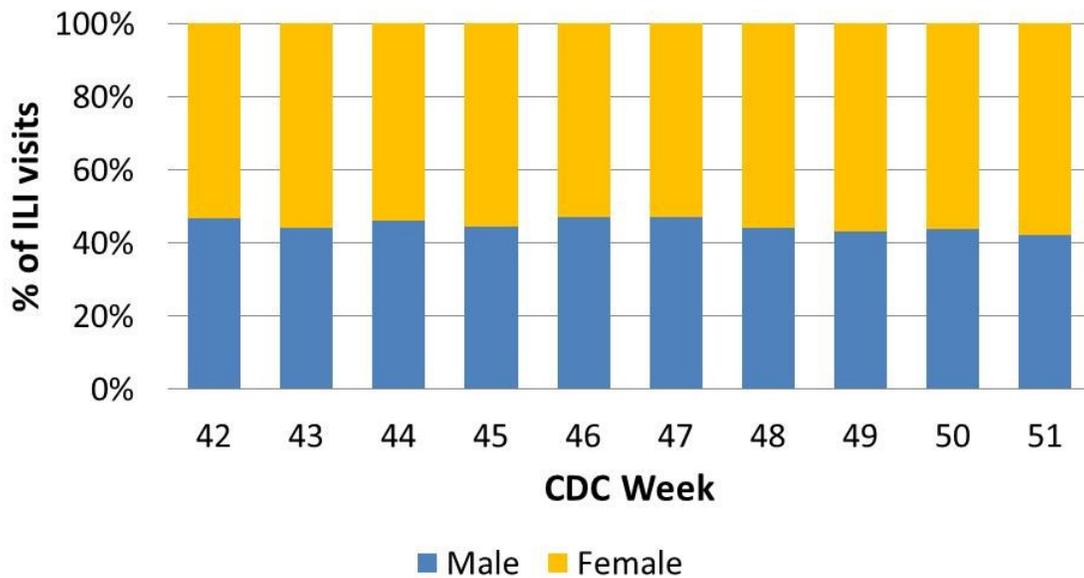
NOTE: Houston/Harris County ILI activity is assessed using information provided by surveillance participants in the Real-time Outbreak Disease Surveillance System (RODS). For week 51, 36 surveillance participants reported ILI information to Houston Department of Health and Human Services. Influenza-like 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 by Age and Gender Distribution

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



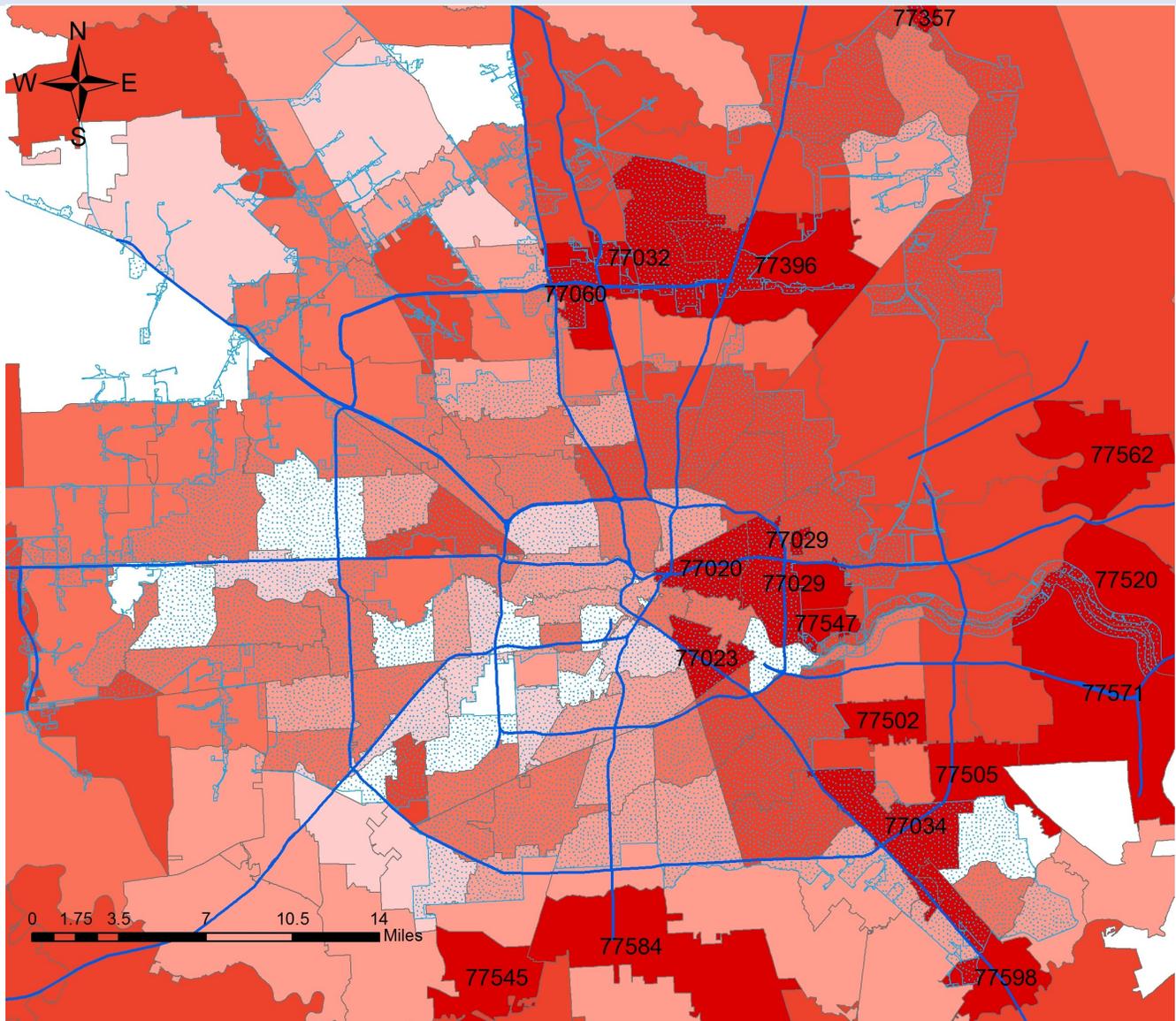
ILI % by Gender, Houston/Harris County, 2014-2015



In week 51, 3.4% of emergency department (ED) visits were due to influenza-like illness (ILI) complaints. Of the 1314 patients presenting with ILI, the age groups that recorded the most ED visits were the 00-04 (33%), 05-24 (29%) and 25-64 year olds (32%).

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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%

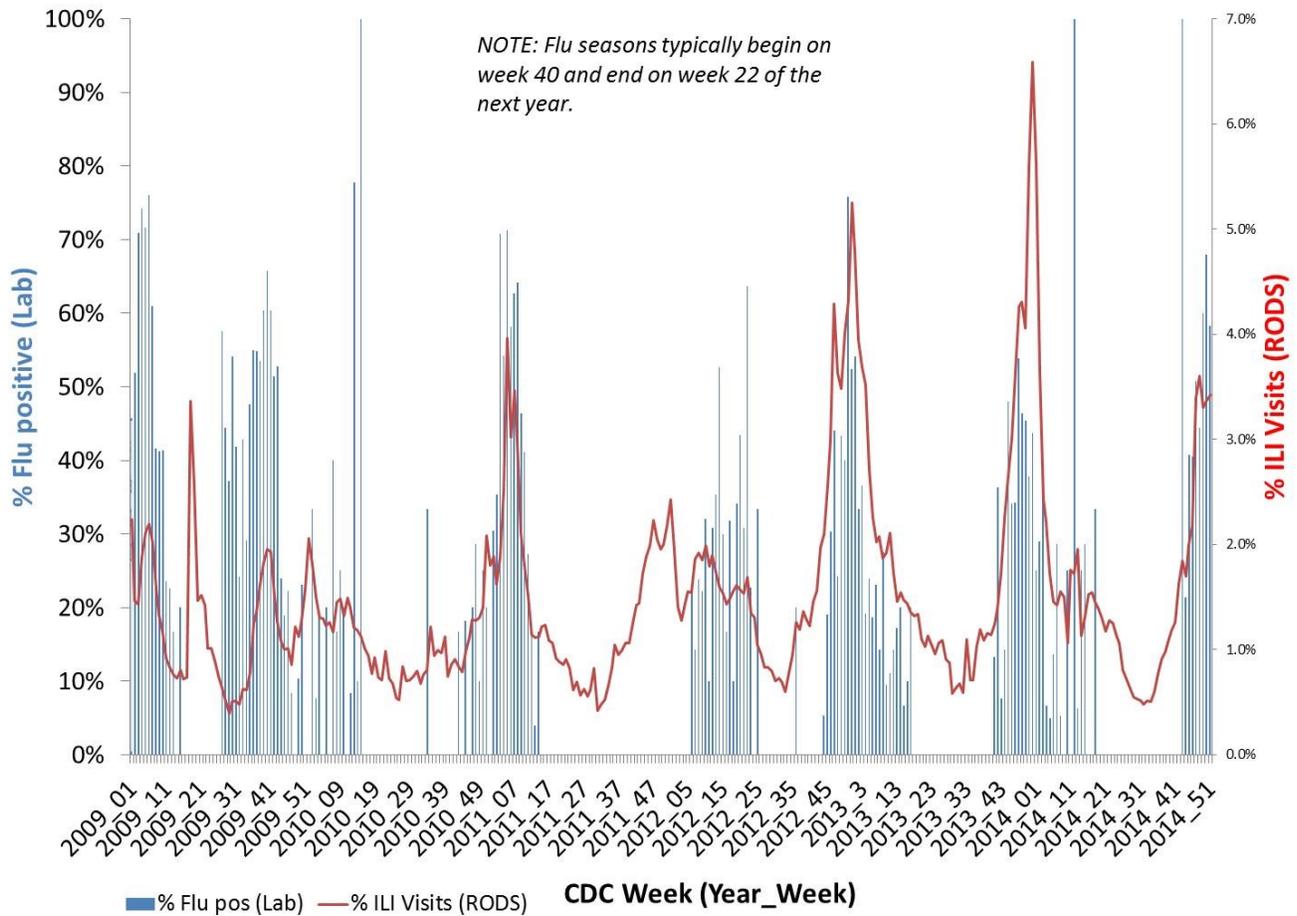
During week 51, the zip codes that have the greatest percentage of ED visits related to ILI (6.0% or greater) are: 77831, 77000, 77448, 77347, 77492, 77512, 77701, 77777, 77705, 77233, 77032, 77547, 77404, 77476, 77485, 77592, 77598, 77396, 77420, 77575, 77502, 77357, 77301, 77514, 77563, 77306, 77505, 77562

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.

HDHHS Influenza Surveillance Report (12/20/14, Week 51)

Laboratory Surveillance: Influenza Rapid Test Results, Houston

Laboratory Flu positives and ILI Visits
2009-2014

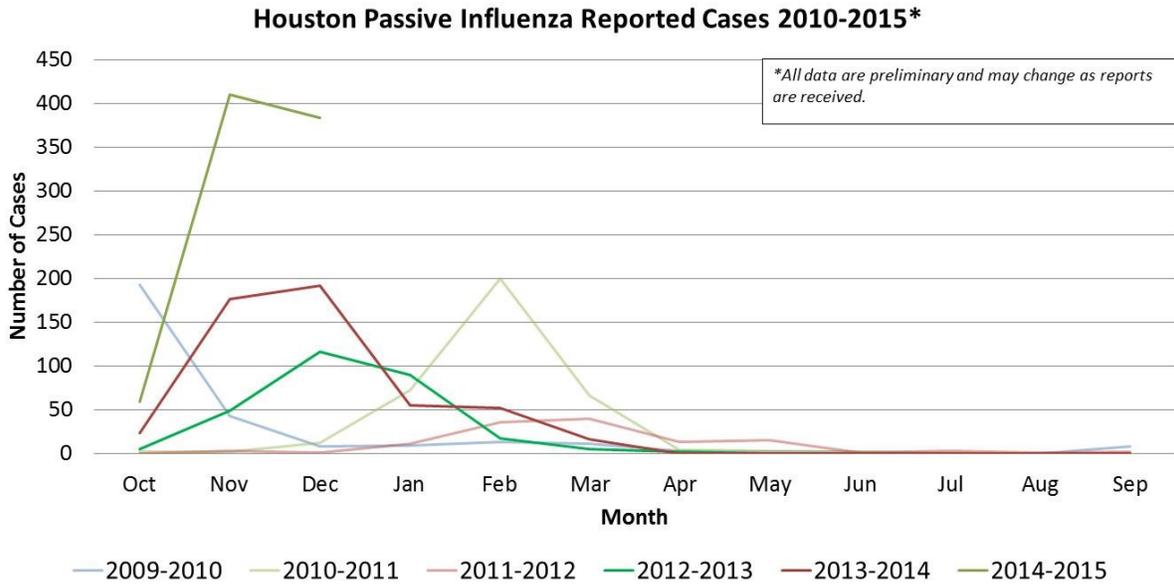


CDC Week Number	49 (Nov 30 – Dec 6)	50 (Dec 7–13)	51 (Dec 14–20)
# of Influenza Tests Performed	15	25	12
% Influenza Positive	60.0%	68.0%	58.3%
# Influenza A Positive	9	16	4
% Influenza A Positive	81.8%	94.1%	57.1%
# Influenza B Positive	0	1	3
% Influenza B Positive	0.0%	5.9%	42.9%
# Non-differentiated Positive	2	0	0
% Non-differentiated Positive	18.2%	0.0%	0.0%

HDHHS Influenza Surveillance Report (12/20/14, Week 51)

Passive Surveillance

In week 51, there were eight-one (81) additional influenza cases from the prior week.



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												
Jan												
Feb												
Mar												
Apr												
Total												

ILI cases in HISD students increased in November compared to October.

There were 49 laboratory confirmed flu cases seen in November and 12 were confirmed as influenza A.

NOTE: Absenteeism and student ILI 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 month.

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://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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