



Houston Department of
Health and Human Services

Office of Surveillance & Public Health Preparedness
Bureau of Epidemiology

Influenza Surveillance Weekly Report
CDC Week 19: May 5-11, 2013

Influenza Activity by County, State, and National Levels

Houston/ Harris County: Week 19	Texas: Week 19	CDC: Week 19
Low	Low	Low

Highlights

- The WHO has identified 131 H7N9 cases in China but human-to-human transmission has not been detected.
- The percentage of reported influenza-like illness (ILI) in Houston/Harris county **increased** from 1.2% in week 18 to 1.3% in week 19.
- The percentage of flu test positives in Houston **stabilized** from 0.0% in week 18 to 0.0% in week 19.
- During the 2012-2013 influenza season, two (2) Houston influenza-associated pediatric deaths have been reported.
- Since last report, 8 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 1,048 surveillance specimens.
- The percentage of all cause absenteeism was 3.8% in week 19.
- At the national level during week 19, 5.1% of specimens tested and reported to the CDC were positive for influenza. The proportion of outpatient visits for ILI (0.9%) was **below** the national baseline (2.2%) and the proportion of deaths attributed to pneumonia and influenza (6.4%) was **below** the epidemic threshold of 7.5% for week 19.

Update on Avian Influenza A (H7N9) Virus

Situation Summary (May 17, 2013)

- To date, there are a total of 131 laboratory confirmed human cases with influenza A(H7N9) virus including 36 deaths.
- So far, there is no evidence of ongoing human-to-human transmission.
- WHO does not advise special screening at points of entry with regard to this event, nor does it recommend that any travel or trade restrictions be applied.

What CDC Is Doing

- CDC is following this situation closely and coordinating with domestic and international partners, including CDC China and the World Health Organization.
- CDC will provide updated information as it becomes available.

What HDHHS Is Doing

- HDHHS is actively monitoring influenza activity through syndromic surveillance and through monthly conference calls with sentinel influenza providers.

What YOU Can Do

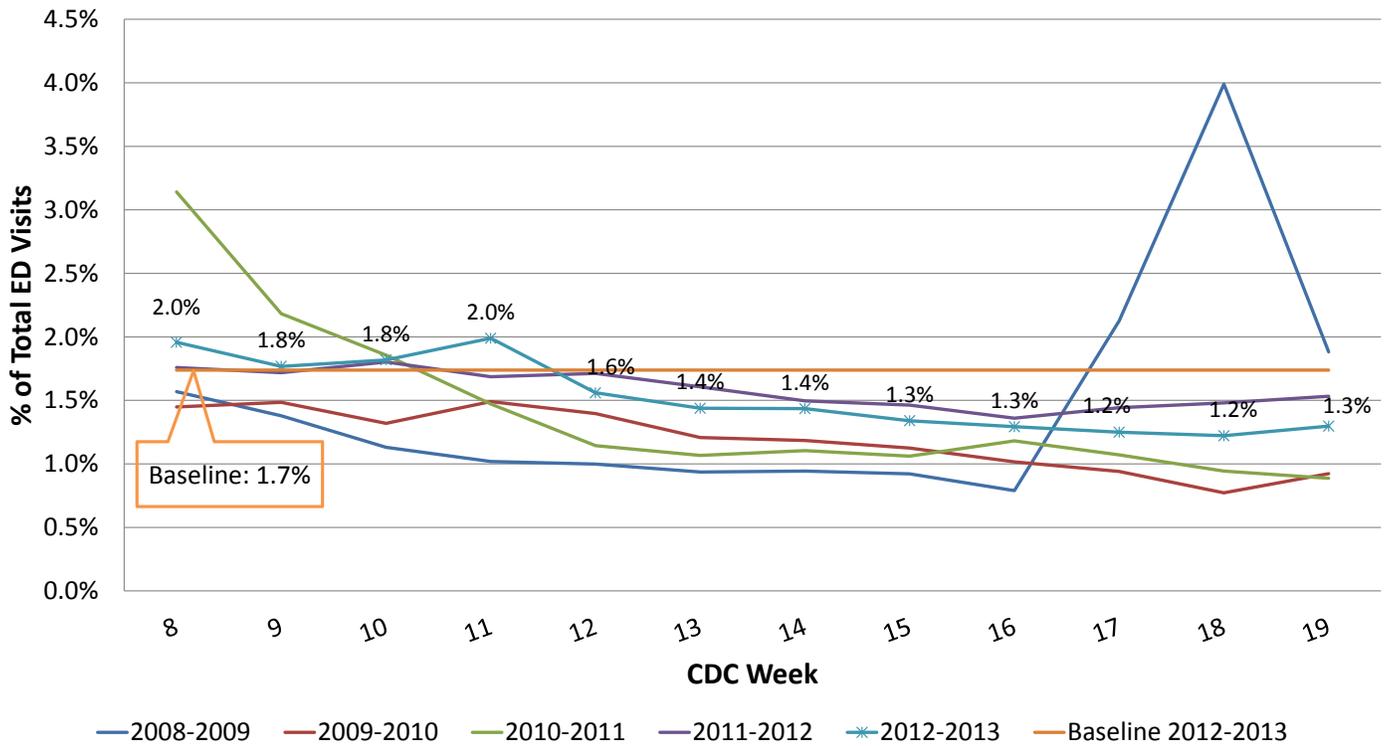
- Please report any patients with influenza-like illness with:
 - a recent travel history (last 10 days) to China
 - or who are known contacts with a confirmed case.
- H7N9 testing can be arranged for patients meeting the case definition.
- For more information, please contact:
HDHHS Bureau of Epidemiology (832) 393-5080

Links to Additional Information

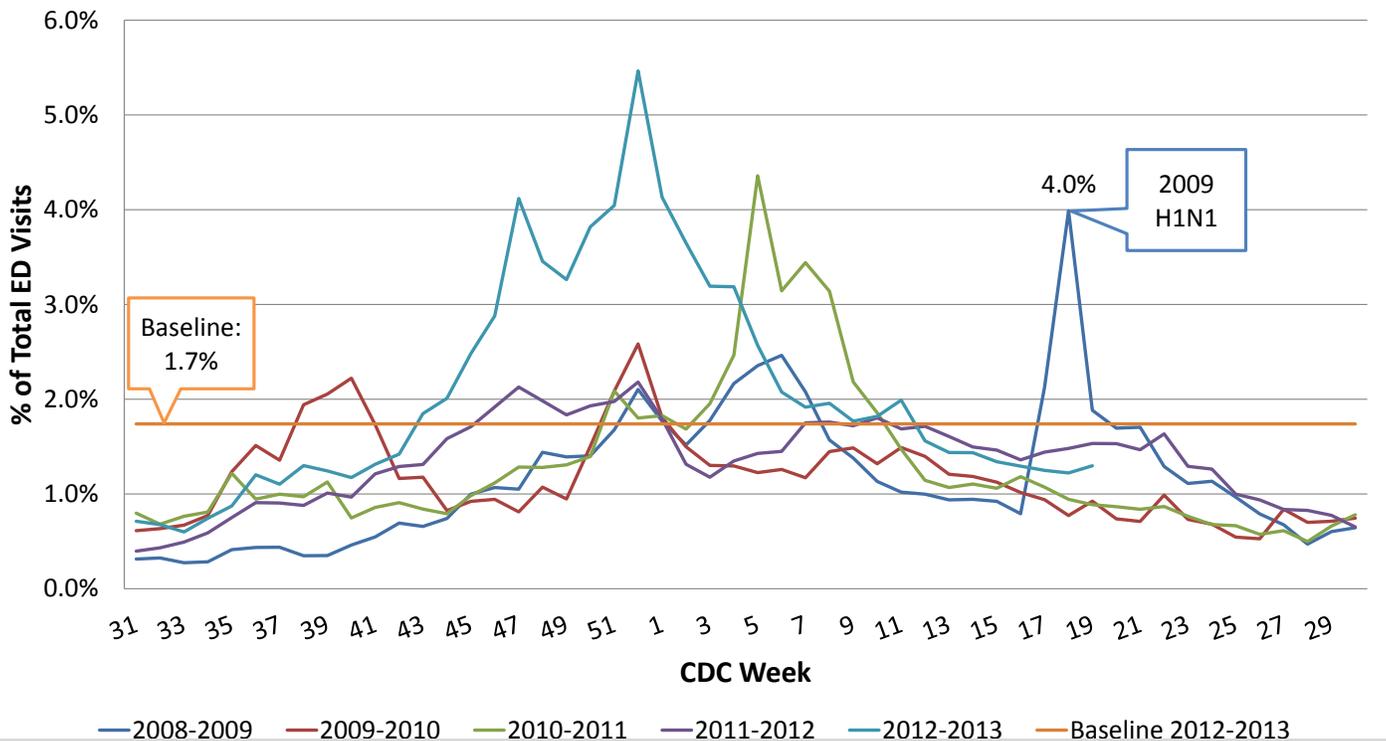
- WHO website: <http://www.who.int/csr/don/en/>
- CDC website: <http://www.cdc.gov/flu/avianflu/h7n9-virus.htm>

Syndromic Surveillance: 2012-2013 Influenza Season and Age Distribution

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



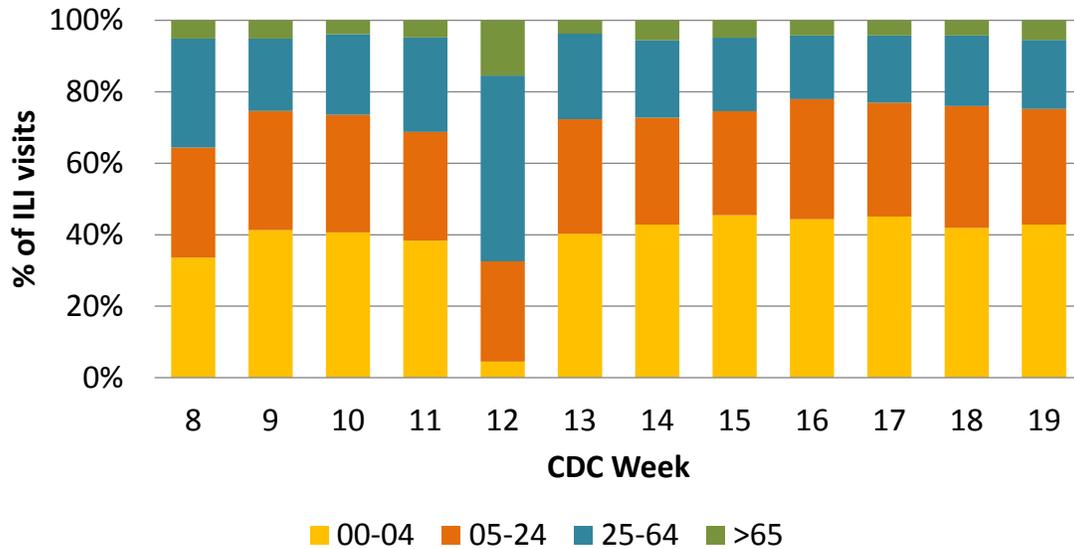
Comparison of ILI-Related ED Visits in Houston/Harris County



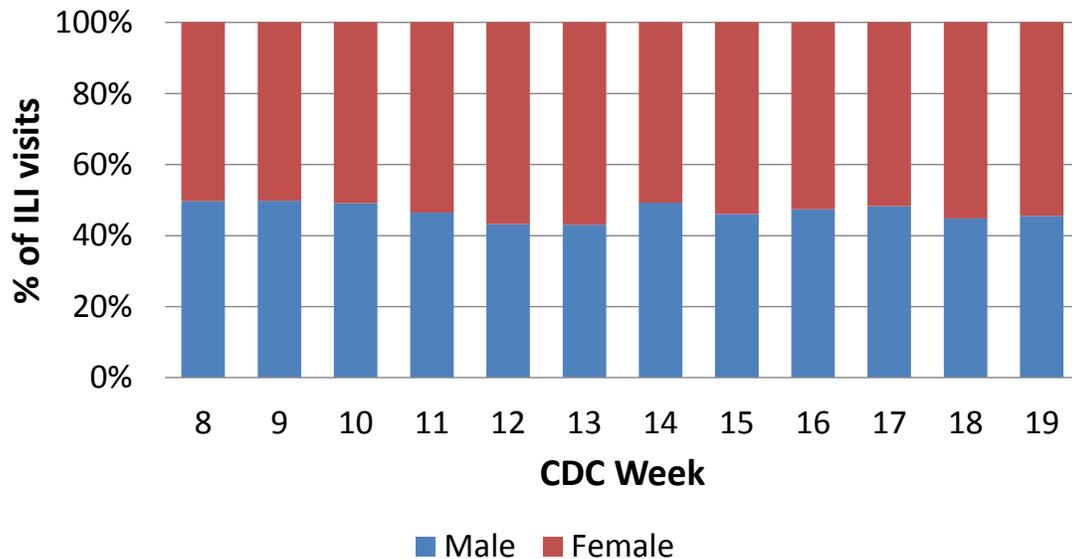
NOTE: Houston/Harris County ILI activity is assessed using information provided by surveillance participants in the Real-time Outbreak Disease Surveillance System (RODS). For week 19, 36 surveillance participants reported ILI information to Houston Department of Health and Human Services. Influenza-like 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: 2012-2013 Influenza Season and Age Distribution

ILI % by Age Groups, Houston/Harris County, 2012-2013



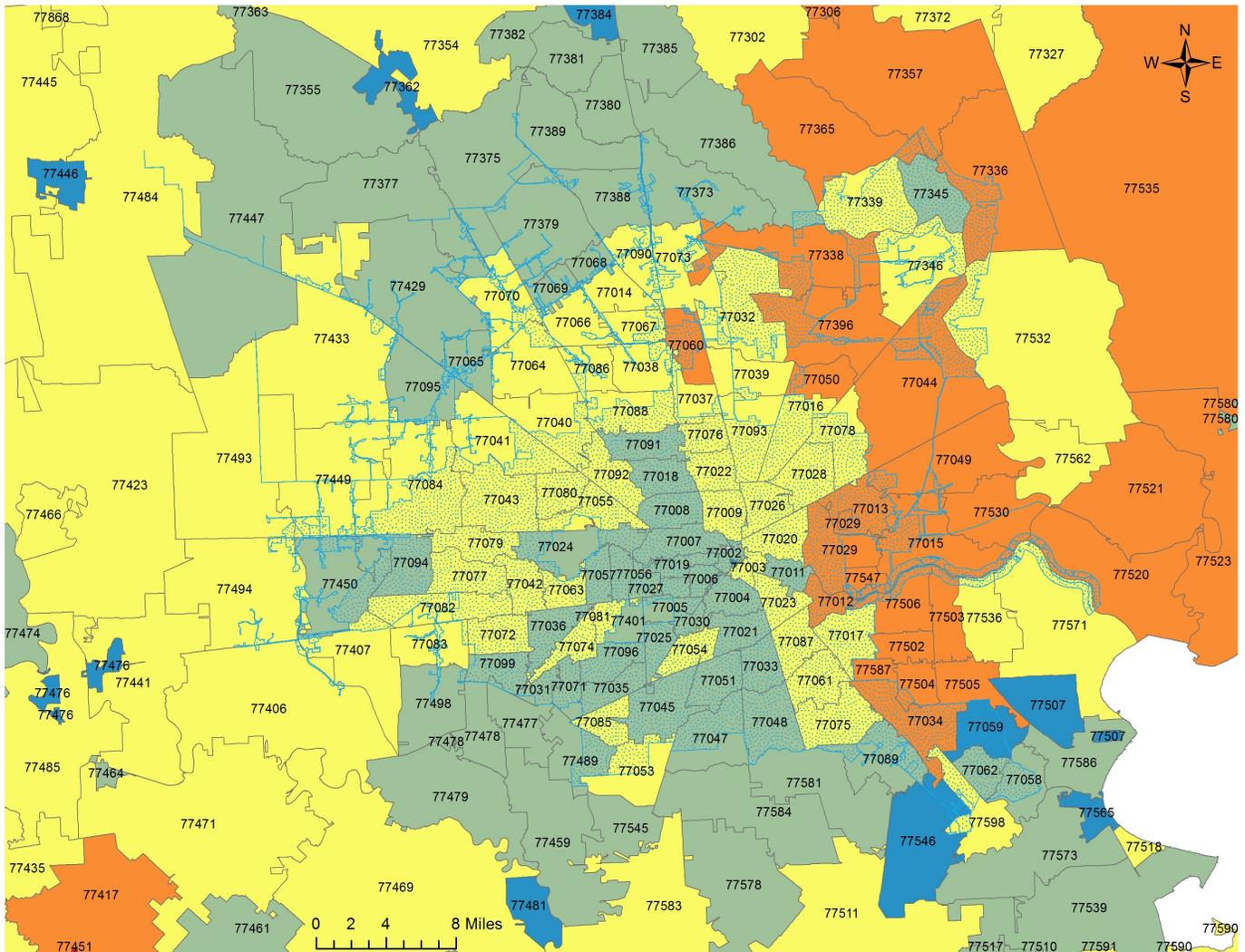
ILI % by Gender, Houston/Harris County, 2012-2013



In week 19, 1.3% of emergency department (ED) visits were due to influenza-like illness (ILI) complaints. Of the 460 patients presenting with ILI in Houston, the age group that recorded the most ED visits were the 0-4 year olds (42.8%).

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Syndromic Surveillance: Geographic Distribution Map



Legend

 City of Houston City Limit

2012-2013 % ILI of ED Visits by Zip Code

-  0.0% - 1.1%
-  1.2% - 2.5%
-  2.6% - 4.0%
-  4.1% - 6.0%
-  6.1% - 12.5%

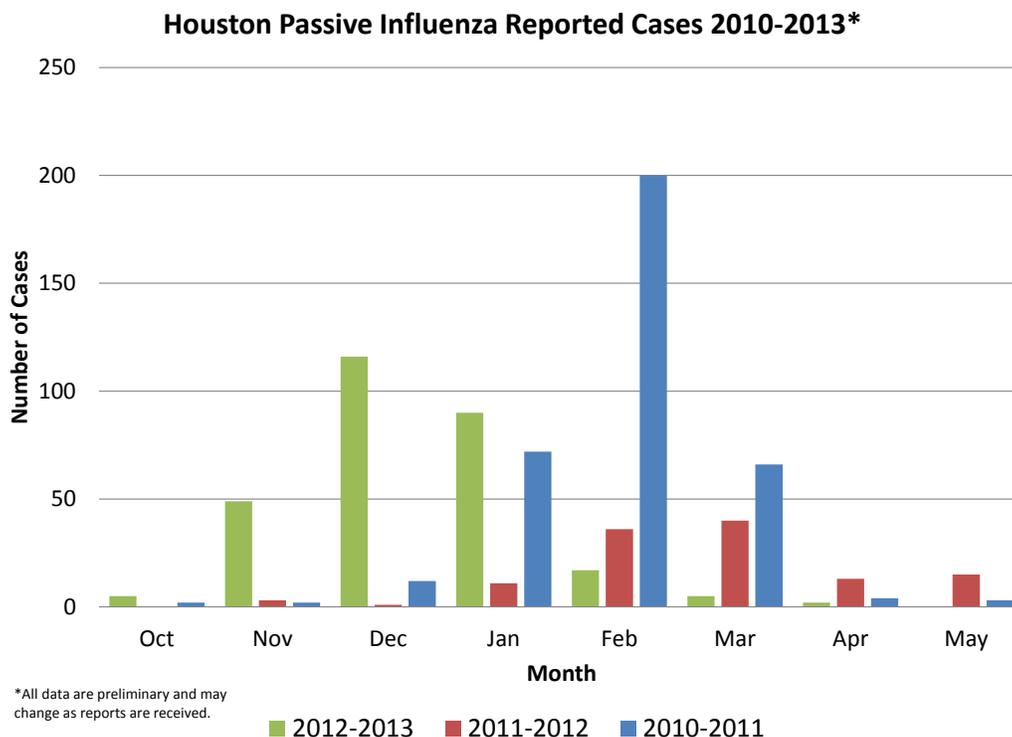
As of week 19, the zip codes that have the greatest percentage of ED visits related to ILI (6.1% or greater) are: 77301*, 77451*, 77453*, 77454*, 77460*, 77533*.

*Zip codes not displayed on 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 up to 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 19, there were (0) additional influenza cases from the prior week. The largest proportion of patients reported with influenza in April 2013 was among those in the age group of 25 to 64 years (2 cases).

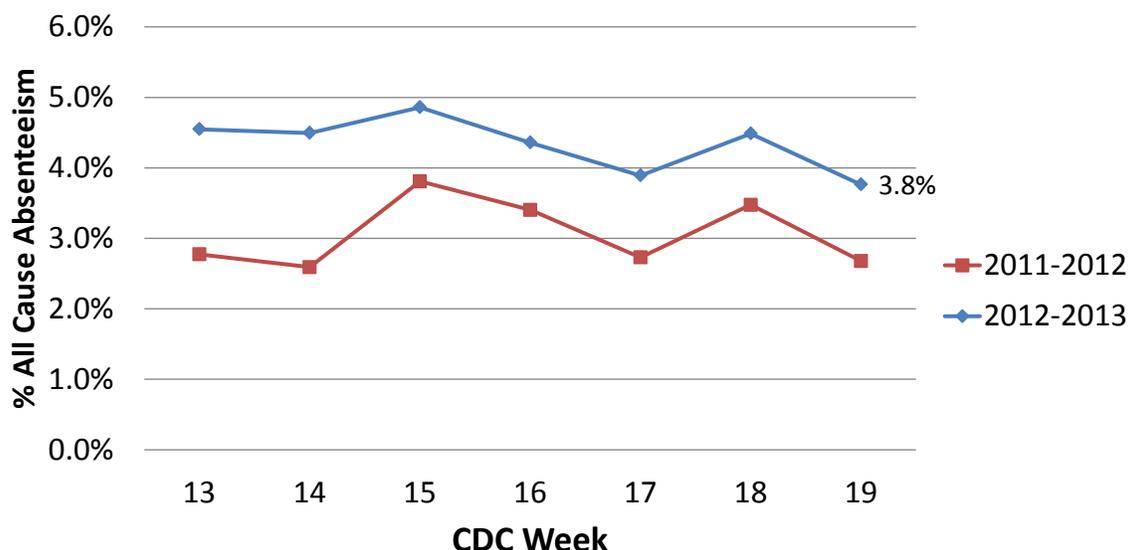


Laboratory Surveillance: Influenza Rapid Test Results, Houston

CDC Week Number	17 (Apr 21-27)	18 (Apr 28-May 4)	19 (May 4-11)
# of Influenza Tests Performed	10	4	8
% Influenza Positive	10.0%	0.0%	0.0%
# Influenza A Positive	0	0	0
% Influenza A Positive	0%	0%	0%
# Influenza B Positive	2	0	0
% Influenza B Positive	20.0%	0.0%	0.0%
# Non-differentiated Positive	0	0	0
% Non-differentiated Positive	0.0%	0.0%	0.0%

School Surveillance

Average Weekly % Absenteeism in HISD, 2012-2013



The average daily % absenteeism for HISD schools was at 3.8% in week 19, which is higher than the rate (2.7%) for the same week in 2012.

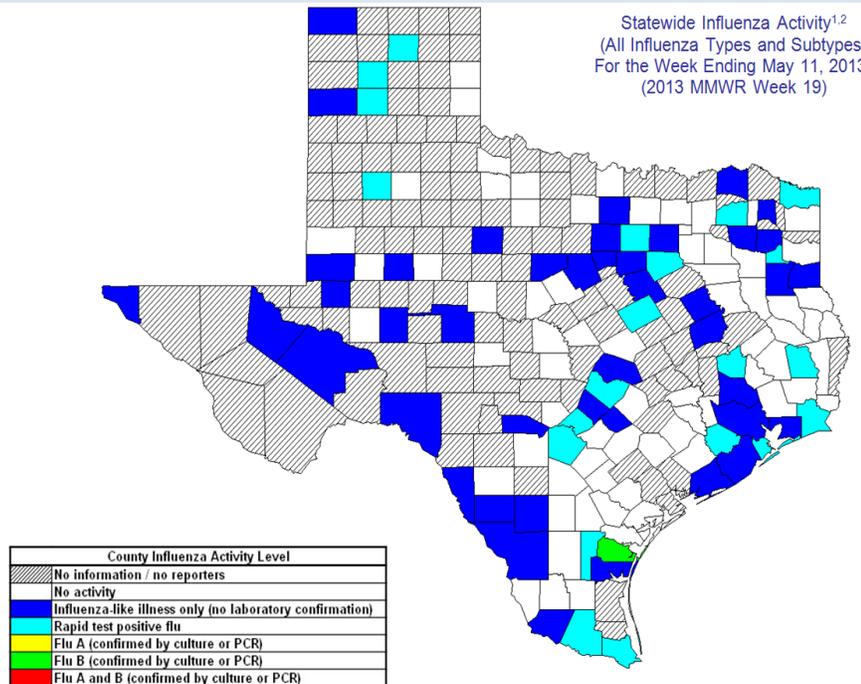
Table 1: ILI and Influenza Cases by Type and School Type¹ per Month

	Total Cases	Lab Confirmed	Flu A	Flu B	A+ B	Unclassified	Elementary Schools	Middle Schools	High Schools	Multi-Level Schools
Aug	1	0	0	0	0	0	0	0	0	1
Sep	31	0	0	0	0	0	17	0	0	14
Oct	47	5 (10.6%)	0	0	1	4	30	1	1	15
Nov	80	13 (16.3%)	3	0	0	10	40	8	3	29
Dec	168	14 (8.3%)	4	1	0	9	118	24	13	13
Jan	314	25 (8.0%)	5	4	0	16	214	19	27	54
Feb	140	9 (6.4%)	0	3	0	6	103	4	7	26
Mar	73	4 (5.5%)	0	2	0	2	59	4	2	8
Apr	90	1 (1.1%)	0	0	0	1	59	5	2	24
Total	944	71 (7.5%)	12	10	1	48	640	65	55	184

ILI cases in HISD students slightly increased in April compared to March. The majority of flu cases in this season is unclassified (48/71=67.6%), followed by type A (12/71=16.9%) and type B (10/71=14.1%). There is one flu A+B case.

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 report month.

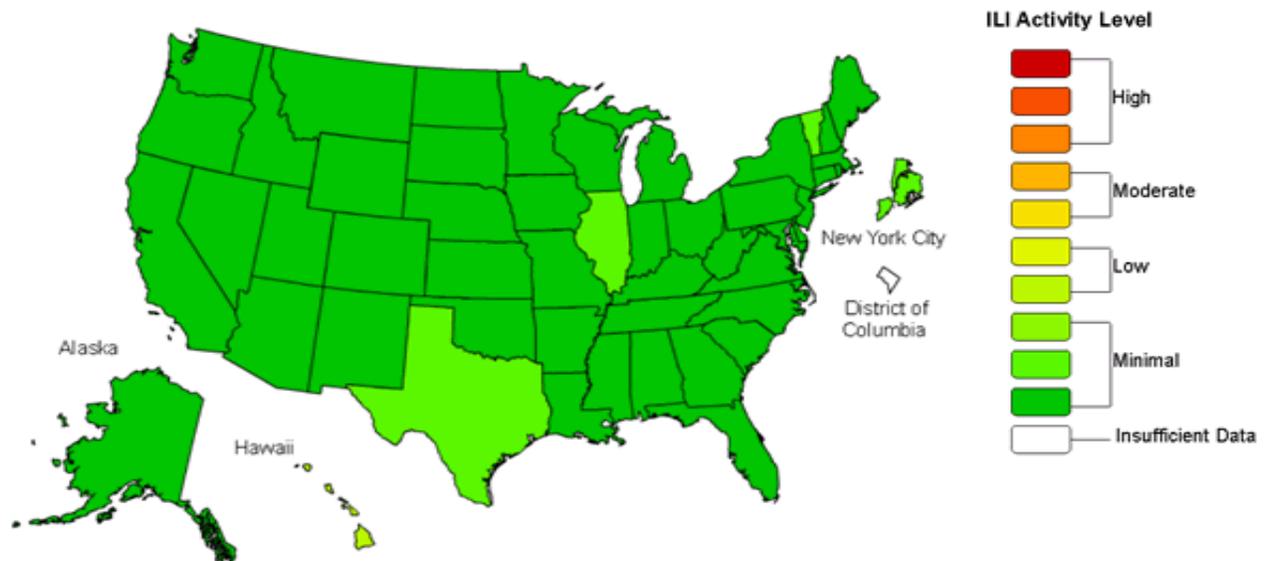
Texas and National Influenza and ILI Activity



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/2013/>

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet 2012-13 Influenza Season Week 19 ending May 11, 2013



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:
www.houstontx.gov/health/

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/2013/>

<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