HOUSTON HEALTH
DEPARTMENT

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

Influenza Surveillance Weekly Report
CDC MMWR Week 42: October 18—24, 2015

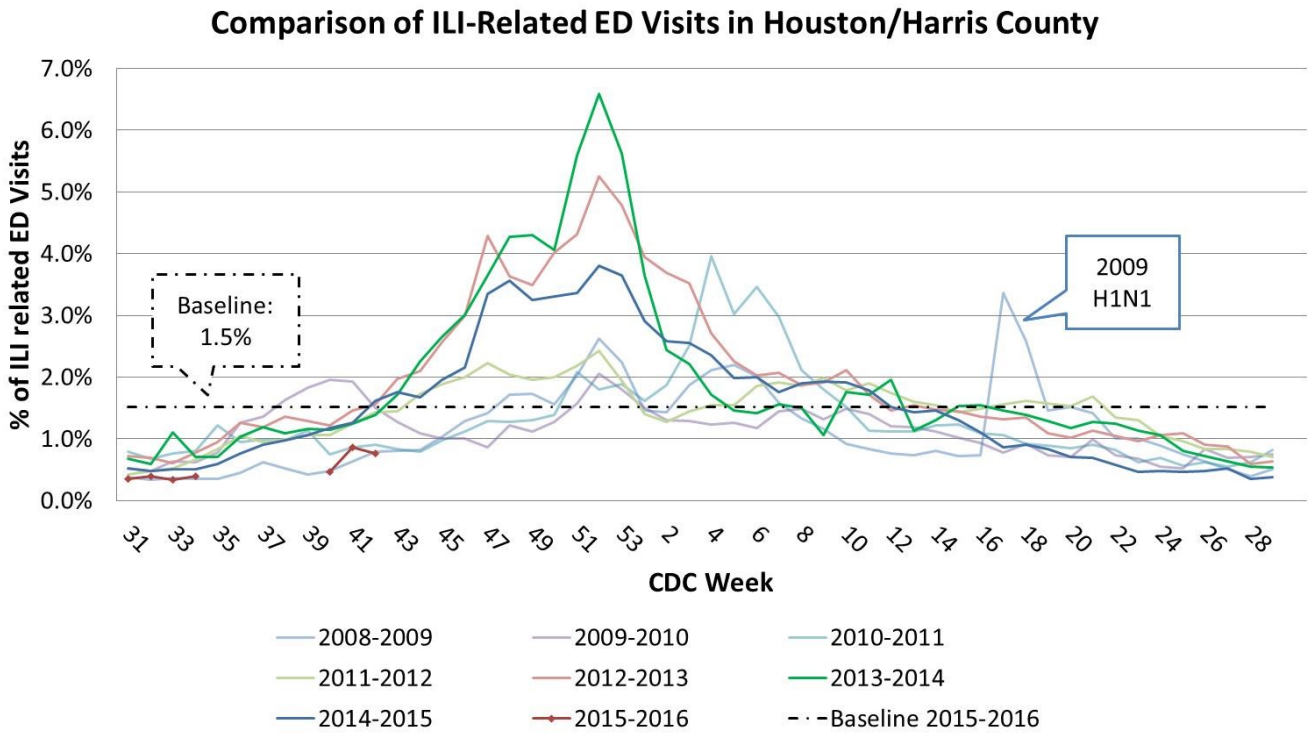
Influenza Activity by County, State, and National Levels

Houston/ Harris County: Week 42	Texas: Week 42	CDC: Week 42
Low	Low	Low

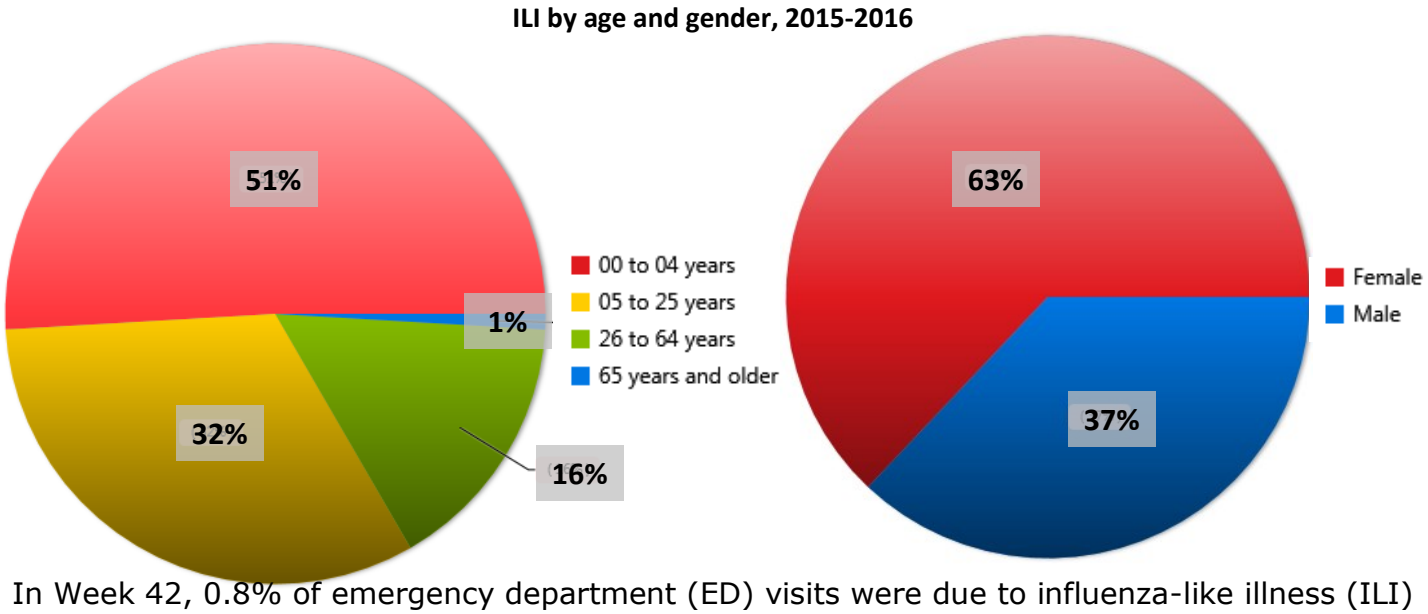
Highlights

- The Houston Health Department (HHD) conducts seasonal influenza surveillance from October (Week 40) 2015 to May (Week 22) 2016
- The percentage of reported influenza-like illness (ILI) detected from emergency departments in Houston/Harris County ***decreased*** from 0.9% in week 41 to 0.8% in week 42. The proportion of ILI was ***below*** the baseline of 1.5%.
- The percentage of flu test positives from sentinel providers in Houston ***remained the same*** from 0% in week 41 to 0% in week 42. HHD receives electronic lab reports from clinical labs. In Week 42, the percent of flu positives labs from clinical laboratories could not be compared to the previous week because there was insufficient data.
- During the 2015-2016 influenza season, zero (0) Houston influenza-associated pediatric deaths have been reported.
- In Week 42, 22 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 54 surveillance specimens. There have been zero positive lab results and no predominant strain detected.
- At the national level during Week 42, 5.3% of specimens tested and reported by public health laboratories and 1.2% of specimens tested and reported by clinical laboratories to the CDC were positive for influenza. The proportion of outpatient visits for ILI (1.3%) was ***below*** the national baseline (2.1%) and the proportion of deaths attributed to pneumonia and influenza (5.8%) was ***below*** the epidemic threshold of 6.1%.

Syndromic Surveillance: 2015-2016 Influenza Season



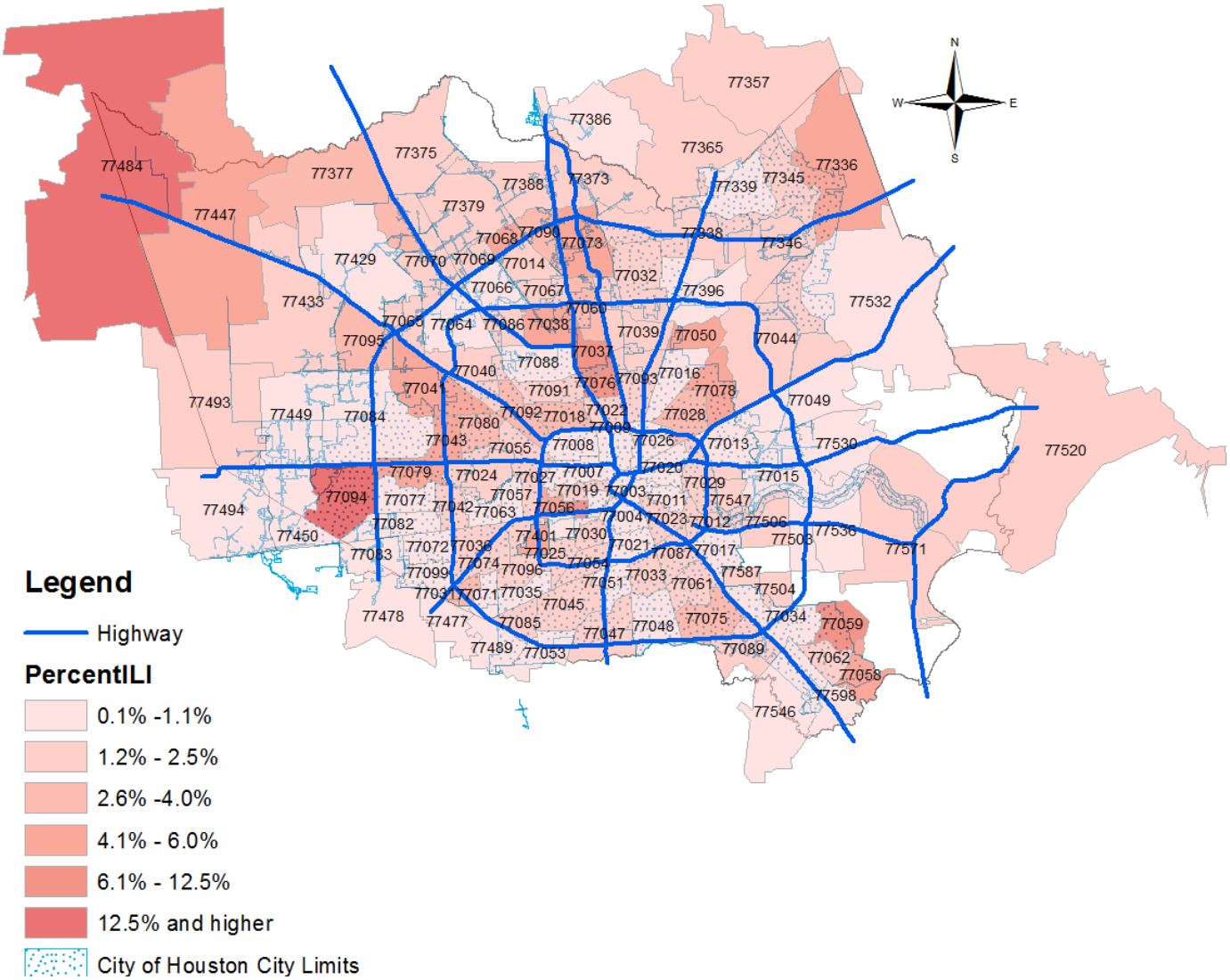
Syndromic Surveillance: 2015-2016 Influenza Season, Age and Gender Distribution



In Week 42, 0.8% of emergency department (ED) visits were due to influenza-like illness (ILI) complaints. Of the 108 patients presenting with ILI, the age group that recorded the most ED visits was the 00 to 04 year olds (51%). Females accounted for 63% of patients presenting with ILI.

NOTE: Houston/Harris County ILI activity is assessed using information provided by hospitals in the Real-time Outbreak Disease Surveillance System (RODS). For Week 42, 36 hospitals 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 fever AND cough AND sore throat 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

- Highway

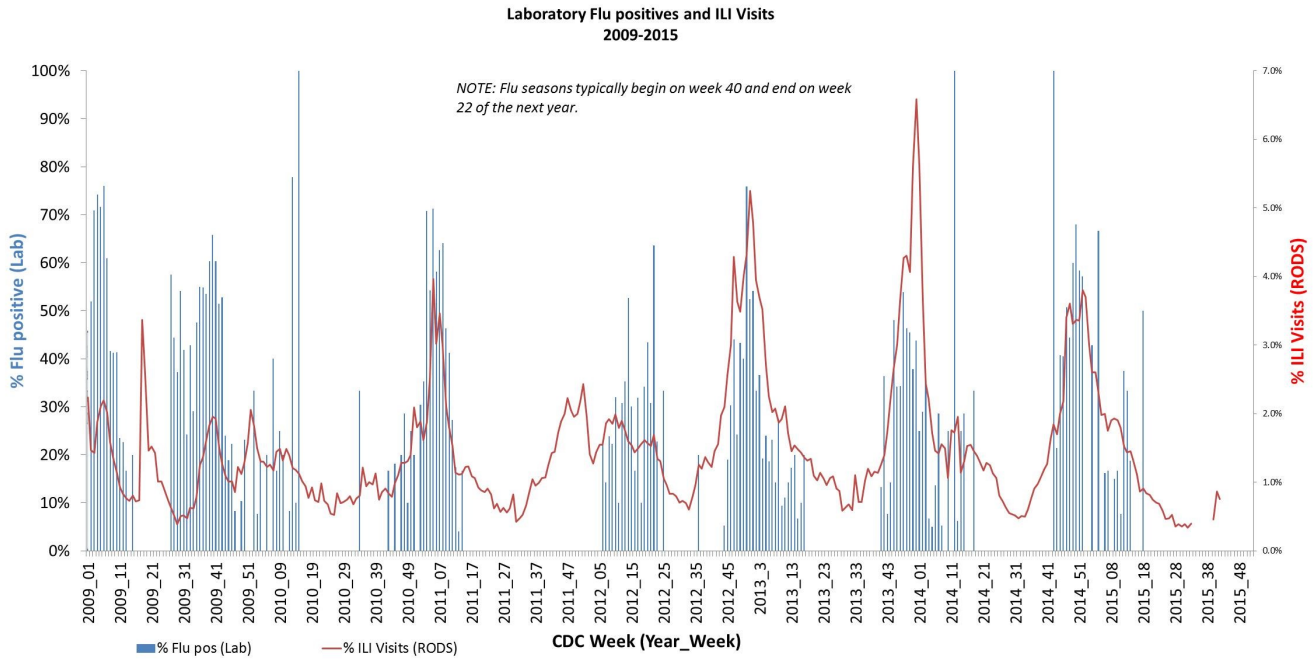
PercentILI

- 0.1% -1.1%
- 1.2% - 2.5%
- 2.6% -4.0%
- 4.1% - 6.0%
- 6.1% - 12.5%
- 12.5% and higher
- City of Houston City Limits

During Week 42, the ZIP codes that have the greatest percentage of ED visits related to ILI (6.0% or greater) are: 77037, 77046, 77059, 77076, 77094, 77098, 77401, 77484

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 fever AND cough AND sore throat 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

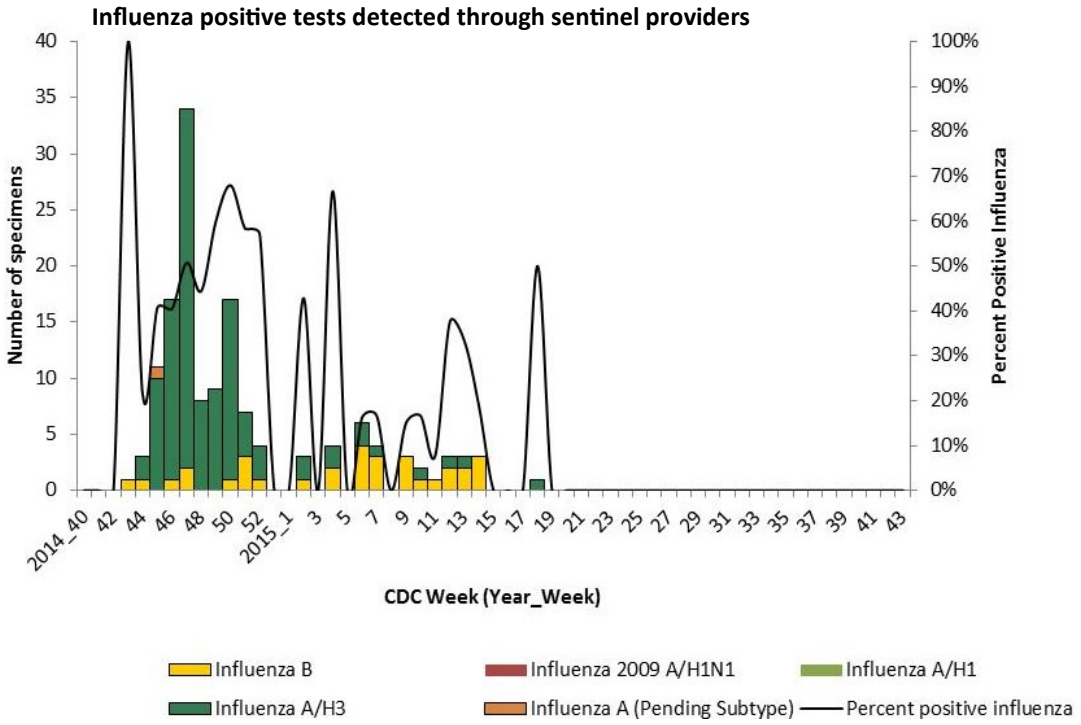


CDC Week Number	40 (Oct 04–10)	41 (Oct 11–17)	42 (Oct 18-24)
# of Influenza Tests Performed	22	10	22
% Influenza Positive	0%	0%	0%
# Influenza A Positive	0	0	0
% Influenza A Positive	0%	0%	0%
# Influenza B Positive	0	0	0
% Influenza B Positive	0%	0%	0%
# Non-differentiated Positive	0	0	0
% Non-differentiated Positive	0%	0%	0%

Laboratory Based Respiratory Viruses Surveillance: 2014-2015, 2015-2016

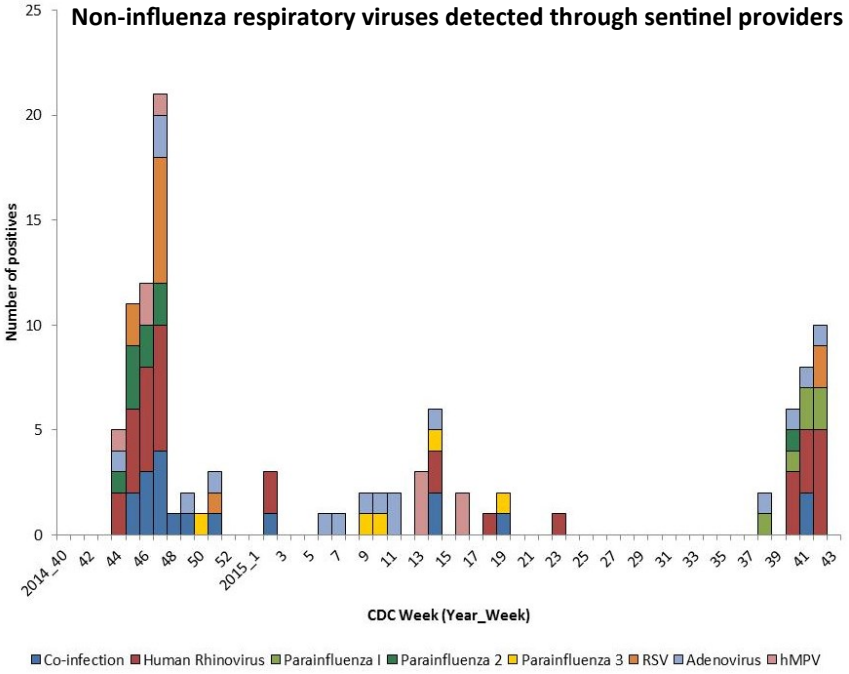
Influenza Viral Surveillance Summary

- During the 2015-2016 flu season the HHD Office of Surveillance and Public Health Preparedness (OSPHP) tested 54 specimens from sentinel providers and detected zero influenza virus activity.



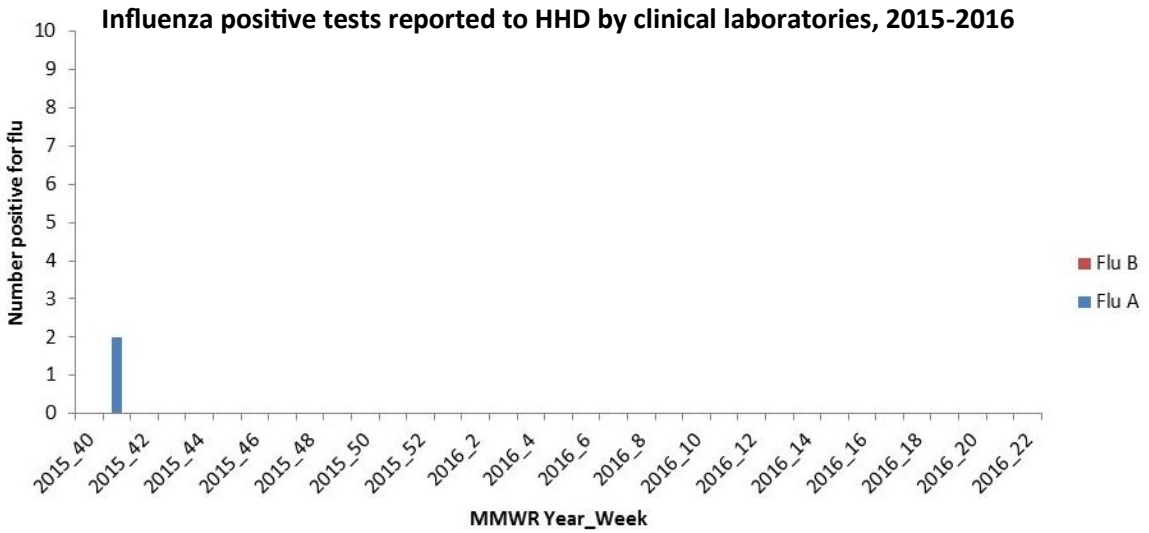
Non-influenza respiratory virus surveillance

- OSPHP tests for seven non-influenza viruses. The virus types are listed with counts in parenthesis. During week 42, the 54 specimens tested resulted in the following: human rhinovirus (5), para influenza 1 (2), para influenza 2 (0), para influenza 3 (0), respiratory syncytial virus (2), adenovirus (1), and co-infections with more than one respiratory virus (0).



Passive Viral Surveillance

HHD receives electronic lab reports (ELR) from clinical laboratories. In week 42, there were zero (0) additional laboratory confirmed influenza cases compared to the prior week. In Week 42 the percent of flu positives was 0.0%. There is insufficient data to determine the cumulative percent of influenza positives.



School Surveillance

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

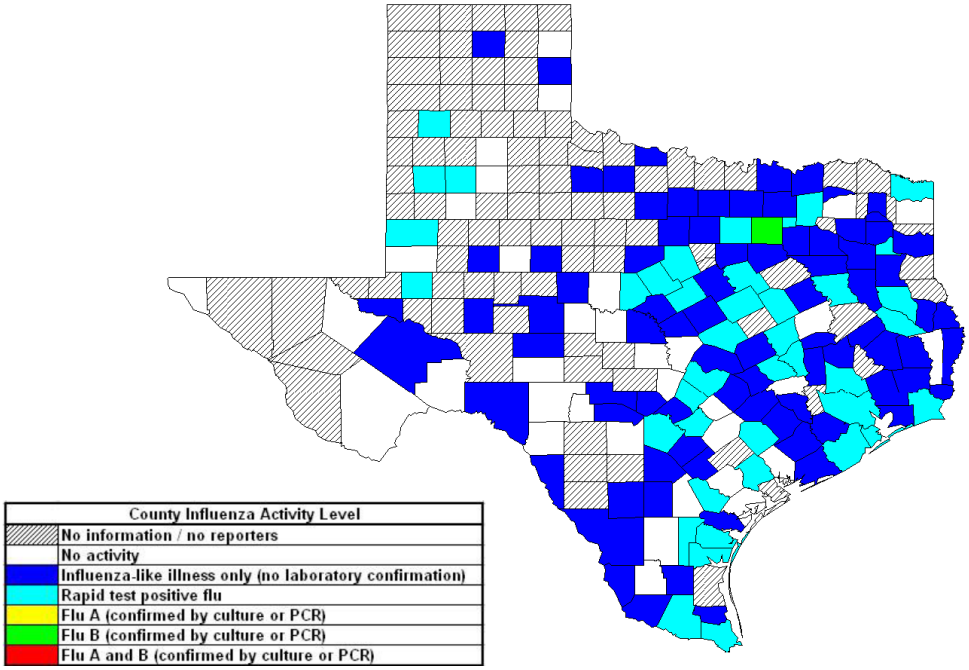
	Total Cases	Lab Confirmed		Flu A	Flu B	A+B	Unclassi-fied		Elem Schools	Middle Schools	High Schools	Multi-Level Schools
		#	%									
Aug	-	-	-	-	-	-	-		-	-	-	-
Sep	03	01	33%				01		01	01	01	00
Oct												
Nov												
Dec												
Jan												
Feb												
Mar												
Apr												
Total	03	01	33%	00	00	00	01		01	01	01	00

September was the first full month of the 2015-2016 school year. In September there were three (3) ILI cases in HISD students. There was one (1) laboratory confirmed flu case seen in September. Subtype information was not available for the lab confirmed case.

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

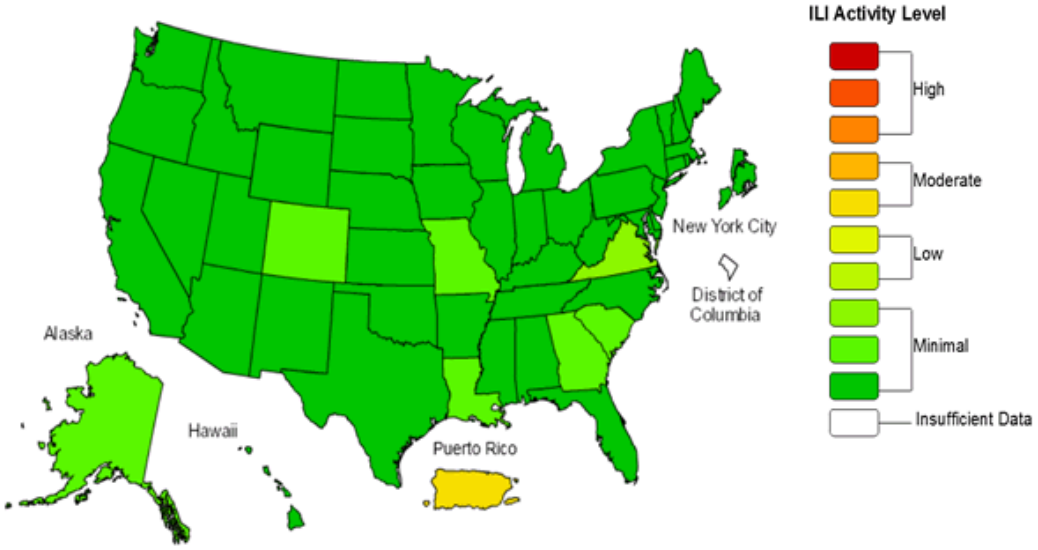
Texas and National Influenza and ILI Activity

Texas Map Displaying the Highest Level of Influenza or ILI Activity Reported by County for the Week Ending Oct 24, 2015



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 42 ending Oct 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/