

Tarrant County Public Health Division of Epidemiology and Health Information

Tarrant County Influenza Surveillance Weekly Report CDC Week 39: September 27-October 3, 2015

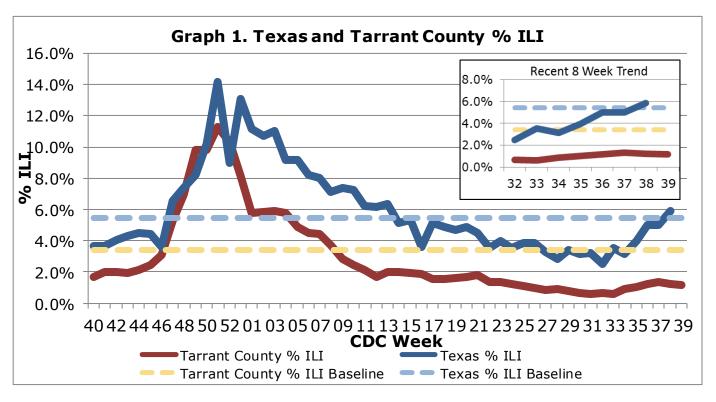
Influenza Activity Code, County and State Levels

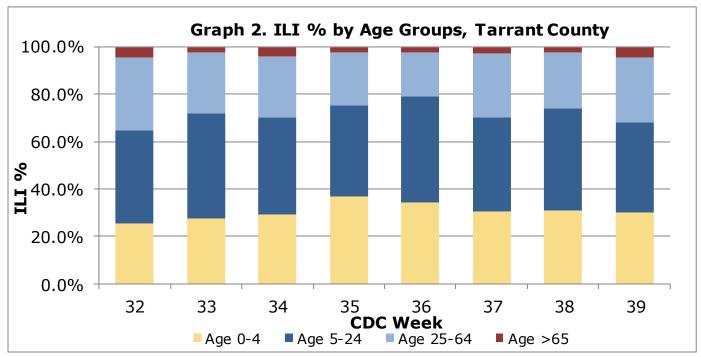
Tarrant County:	Tarrant County:	Texas:
Week 39	Week 38	Week 38
Sporadic	No Activity	Not Determined

Respiratory Virus Activity Summary

- The percentage of reported influenza-like illness (ILI) in Tarrant County **stayed the same** from 1.2% in week 38 to 1.2% in week 39 and is currently below the 2014-2015 Tarrant County baseline (3.4%).
- The percentage of all cause absenteeism was **3.9%** during week 39 in Tarrant County. Absenteeism due to ILI and school nurse office visits due to ILI were **1.8%** and **1.4%** respectively during week 39 in Tarrant County.
- The percentage of rapid flu test positives in Tarrant County **decreased** from 3.3% in week 38 to 1.5% in week 39.
- During the 2014-2015 influenza season, **1** Tarrant County influenza-associated pediatric death has been reported. As of week 38, 17 influenza-associated pediatric deaths have been reported in Texas, with a total of 146 reported nationwide for the 2014-2015 season.
- During the 2014-2015 influenza season, **0** influenza outbreaks have been reported in Tarrant County schools and **1** localized influenza outbreak has been reported within institutions in Tarrant County.
- Since last report, **10** surveillance specimens were tested by The North Texas Regional Laboratory. The following types and number of viruses were detected in these specimens: **Respiratory Syncytial Virus (1)**, **Parainfluenza-1 (2)**, **Rhinovirus (3)**.
- Cumulatively this season, the North Texas Regional Laboratory at Tarrant County Public Health has tested **333** surveillance specimens.
- At the state level during week 38, the proportion of outpatient visits for ILI (5.9%) was **above** the Texas baseline (5.4%).
- At the national level during week 38, 1.7% of specimens tested and reported to the CDC were positive for influenza. The proportion of outpatient visits for ILI (1.2%) was **below** the national baseline (2.0%), and the proportion of deaths attributed to pneumonia and influenza (5.5%) was **below** the epidemic threshold (5.9%).

Eight-Week Influenza Like Illness (ILI): Local and State Levels

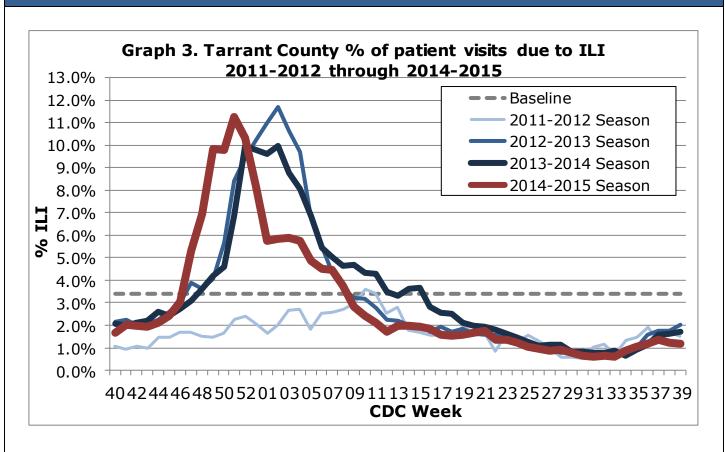




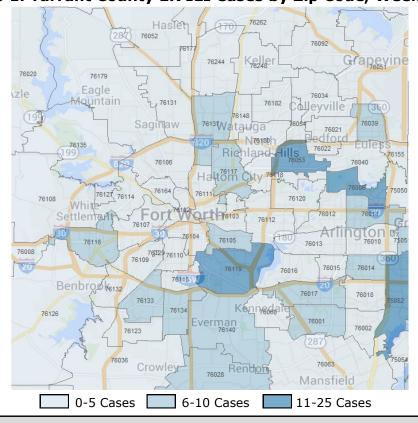
In week 39, 1.2% of visits to health care providers were due to ILI. ILI levels are currently below the county established baseline of 3.4% and are lower than the state of Texas levels. In Tarrant County, of 333 reported patients presenting with ILI the majority (38.1%) were in the 5-24 years of age group; 65 years and older accounted for the lowest percentage of health care visits due to ILI (4.2%).

NOTE: Tarrant County ILI activity is assessed using information provided by surveillance participants and the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE). Texas ILI activity is assessed using information provided by a network of physicians. For week 39, 41 surveillance participants reported ILI information to Tarrant County Public Health. For week 38, 90 physicians reported information to the Texas Department of State Health Services.

Tarrant County Historical ILI and ESSENCE Geographical Distribution Map

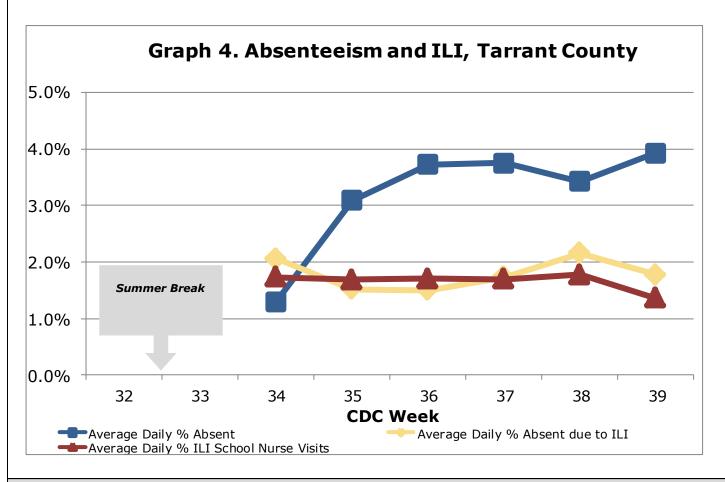


Map 1. Tarrant County ER ILI Cases by Zip Code, Week 39



NOTE Tarrant County ILI distribution map is from ESSENCE and includes data from 46 hospitals that voluntarily provide data based on chief complaints of Tarrant County residents admitted to Emergency Departments in North Central Texas. This map represents the number of cases from each zip code, not the percent. Zip codes with larger populations are expected to have more cases.

Rapid Influenza Test Results and School Absenteeism



NOTE: Tarrant County absenteeism and student ILI is collected from 17 school districts located within Tarrant County. For week 39, 10 school districts provided general absenteeism data, 8 school districts provided data regarding absenteeism due to ILI, and 8 school districts provided data regarding nurses' office visits due to ILI.

Table 1. Influenza Rapid Test Results, Tarrant County

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CDC Week Number	37 (Sept 13-19)	38 (Sept 20-26)	39 (Sept 27-Oct 3)	
# Influenza Tests Performed	264	337	330	
% Influenza Positive	2.7%	3.3%	1.5%	
# Influenza A Positive	6	5	1	
% Influenza A Positive	85.7%	45.5%	20.0%	
# Influenza B Positive	1	6	4	
% Influenza B Positive	14.3%	54.5%	80.0%	
# Non-differentiated Positive	0	0	0	
% Non-differentiated Positive	0.0%	0.0%	0.0%	

NOTE: Tarrant County rapid influenza test results are reported weekly by influenza surveillance participants. For CDC week 39, rapid influenza test results were reported by 13 hospitals, 17 healthcare clinics, 1 university and 1 long-term care facility.

Influenza Confirmatory Test Results: Tarrant County

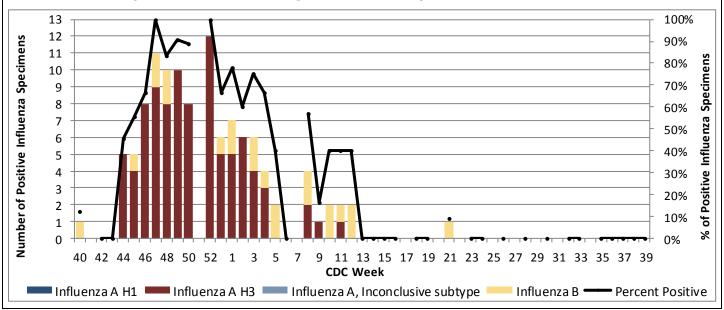
Table 2. North Texas Regional Laboratory: Respiratory Virus Results¹

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	Current Week	2014-2015 Season		
Number of Specimens Tested	10	333		
Positive Specimens	6 (60.0%)	205 (61.6%)		
Influenza A	0 (0.0%)	91 (44.4%)		
Influenza A H1	0 (0.0%)	0 (0.0%)		
Influenza A H3	0 (0.0%)	91 (100.0%)		
Influenza A, Inconclusive subtype	0 (0.0%)	0 (0.0%)		
Influenza A, Unsubtypeable ²	0 (0.0%)	0 (0.0%)		
Influenza B	0 (0.0%)	22 (10.7%)		
Respiratory Syncytial Virus	1 (16.7%)	6 (2.9%)		
Adenovirus	0 (0.0%)	16 (7.8%)		
Human Metapneumovirus	0 (0.0%)	13 (6.3%)		
Parainfluenza-1	2 (33.3%)	4 (2.0%)		
Parainfluenza-2	0 (0.0%)	5 (2.4%)		
Parainfluenza-3	0 (0.0%)	6 (2.9%)		
Rhinovirus	3 (50.0%)	52 (25.4%)		
Inconclusive ³	0 (0.0%)	1 (0.3%)		

 $^{^{1}}$ Laboratory results based on real-time PCR analysis; information is for the 2014-2015 season.

NOTE: Percentages do not add up to 100% due to co-infections, 10 specimens have tested positive with a co-infection: 1 parainfluenza-2 and adenovirus, 3 rhinovirus and adenovirus, 2 influenza A H3 and rhinovirus, 2 influenza B and adenovirus, 1 parainfluenza-3 and rhinovirus, 1 influenza A H3 and respiratory syncytial virus.

Graph 5. North Texas Regional Laboratory: Influenza Virus Results¹

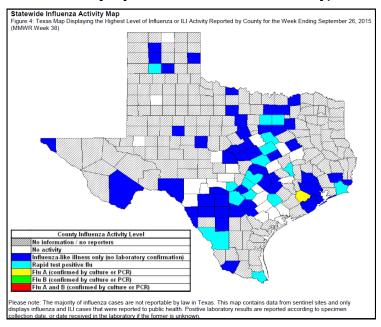


² Influenza A subtype not determined; further analysis pending.

³ Inconclusive for influenza A and influenza B; not included in positive specimens count.

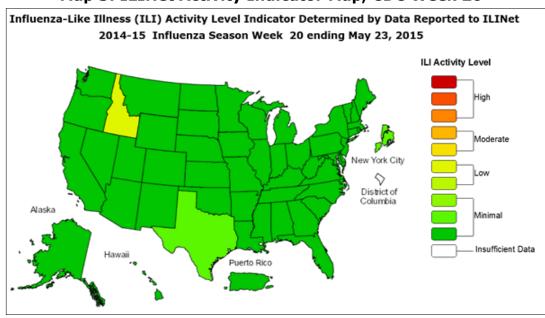
Texas and National Influenza and ILI Activity

Map 2: Texas County Specific Influenza Activity, CDC Week 38



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/

Map 3: ILINet Activity Indicator Map, CDC Week 20*



*Note: The most recent ILINet Activity Indicatory Map released by the CDC was at the end of the flu season, Week 20 (ending May 23, 2015).

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 Tarrant County Influenza Surveillance Weekly Report is available on the Tarrant County Public Health web site at:

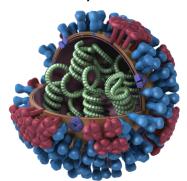
www.tarrantcounty.com/flu

If you have questions or comments regarding influenza surveillance, please contact:

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NOTE:

Influenza-like Illness (ILI) is defined as fever (temperature $\geq 100^{\circ}$ F) plus a cough OR a sore throat, in the absence of a known cause other than influenza.

Tarrant County reporting quadrants consist of Northwest, Northeast, Southwest and Southeast regions within the boundaries of Interstate 35 and Interstate 30.

Tarrant County ILI baselines were determined using a similar method as the Centers for Disease Control Prevention Regional ILI baselines and Texas Department of State Health Services Texas baseline. Regional ILI baselines are determined by the Centers for Disease Control and Prevention and can be accessed at http://www.cdc.gov/flu/weekly/overview.htm

Additional information regarding Tarrant County, Texas and national ILI activity can be accessed at

www.tarrantcounty.com/flu

http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/2015/

http://www.cdc.gov/flu/weekly/

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