

Tarrant County Public Health Division of Epidemiology and Health Information

Tarrant County Influenza Surveillance Weekly Report CDC Week 39, September 24-30, 2017

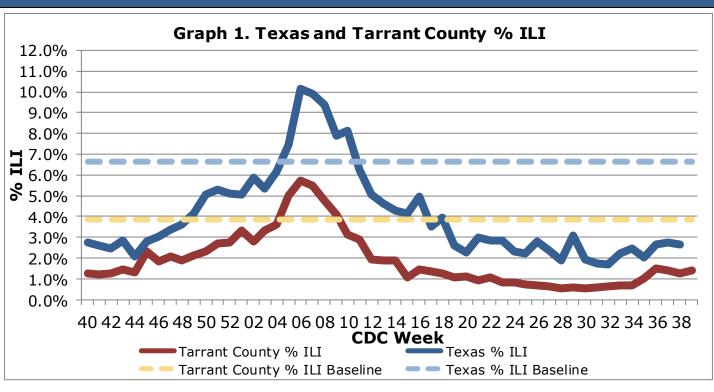
Influenza Activity Code, County and State Levels

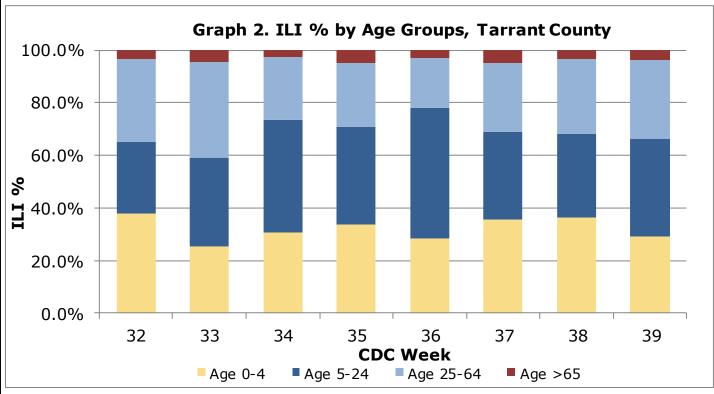
Tarrant County:	Tarrant County:	Texas:
Week 39	Week 38	Week 38
No activity	Sporadic	Not determined

Respiratory Virus Activity Summary

- The percentage of reported influenza-like illness (ILI) in Tarrant County increased from 1.3% in week 38 to 1.4% in week 39 and is below the 2016-2017 Tarrant County baseline of 3.8%.
- Due to the closing of the traditional school year, data on student absenteeism, absenteeism due to ILI, and nurses' office visits due to ILI will not be reported until the commencement of the 2017-2018 flu season in October.
- The percentage of rapid flu test positives in Tarrant County decreased from 3.5% in week 38 to 2.3% in week 39.
- During the 2016-2017 influenza season, 0 Tarrant County influenza-associated pediatric deaths have been reported. As of week 38, 8 influenza-associated pediatric deaths have been reported in Texas, with a total of 106 reported nationwide for the 2016-2017 season.
- During the 2016-2017 influenza season, 2 influenza outbreaks have been reported in Tarrant County schools and 7 localized influenza outbreaks have been reported within institutions in Tarrant County.
- Since last report, 6 surveillance specimens were tested by The North Texas Regional Laboratory.
 The following types and number of viruses were detected in these specimens: Rhinovirus(1).
 Cumulatively this season, the North Texas Regional Laboratory at Tarrant County Public Health has tested 381 surveillance specimens and of these, 118 have been positive for influenza.
- In Texas during week 38, the proportion of outpatient visits for ILI, 2.6%, was below the state baseline of 6.6%.
- Nationally during week 38, 1.6% of specimens tested and reported to the CDC were positive for influenza. The proportion of outpatient visits for ILI (1.1%) was below the national baseline (2.2%). The proportion of deaths in week 36 attributed to pneumonia and influenza from the National Center for Health Statistics (5.3%) was below the epidemic threshold (6.0%).

Influenza Like Illness (ILI): Local and State Levels

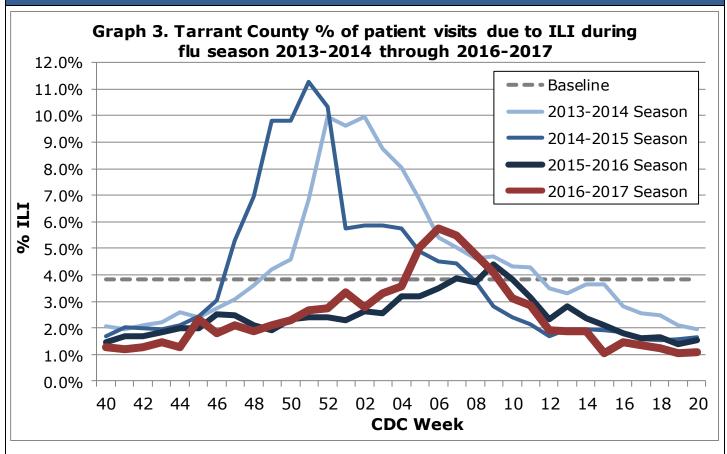




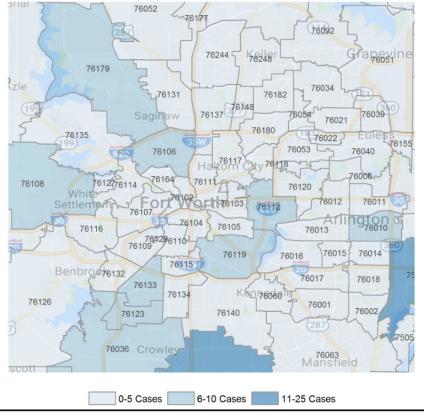
In week 39, 1.4% of visits to health care providers were due to ILI. Levels are currently below the county established baseline of 3.8% and are lower than the state of Texas levels. In Tarrant County, of 325 reported patients presenting with ILI the largest percentage, 37.2%, was in the 5-24 age group.

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). For week 39, 33 surveillance participants - 19 Hospitals, 11 Clinics, 1 Business, and 2 Colleges/Universities—reported ILI information to Tarrant County Public Health. Texas ILI activity is assessed using information provided by a network of providers . For week 38, 91 providers reported information to the Texas Department of State Health Services.

Tarrant County Historical ILI and ESSENCE Geographical Distribution Map

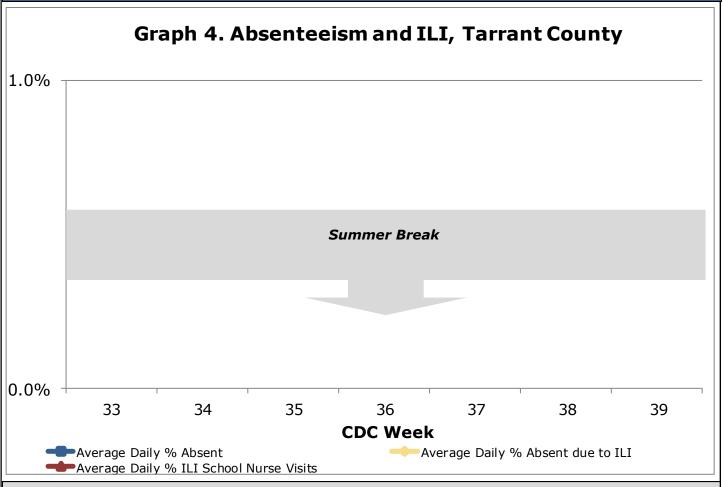


Map 1. Tarrant County ER ILI Cases by Zip Code, Week 39



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.





For week 33-39, no data are reported due to the end of the traditional school year. Reporting will recommence at the beginning of the 2017-2018 flu season in October 2017.

Table 1. Influenza Rapid Test Results, Tarrant County

CDC Week Number	37 (Sept 10-16)	38 (Sept 17-23)	39 (Sept 24-30)
# Influenza Tests Performed	460	490	534
% Influenza Positive	1.7%	3.5%	2.3%
# Influenza A Positive	2	7	7
% Influenza A Positive	25.0%	41.2%	58.3%
# Influenza B Positive	6	10	5
% Influenza B Positive	75.0%	58.8%	41.7%
# Non-differentiated Positive	0	0	0
% Non-differentiated Positive	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 15 hospitals, 11 Clinics, and 1 College/University.

Influenza Confirmatory Test Results: Tarrant County

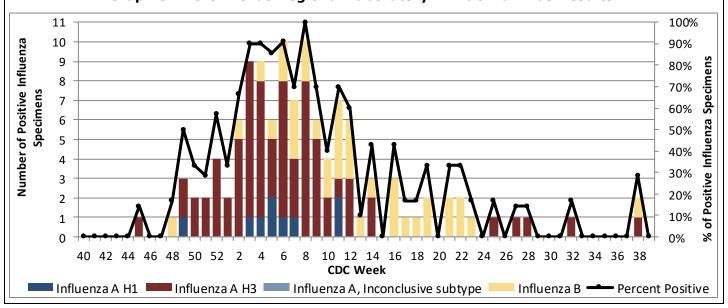
Table 2. North Texas Regional Laboratory: Respiratory Virus Results¹

Table 2. North Texas Re	Current Week	2016-2017 Season
Number of Specimens Tested	6	381
Positive Specimens	1 (16.7%)	202 (53.0%)
Influenza A	0 (0%)	82 (40.6%)
Influenza A H1	0 (0%)	9 (11.0%)
Influenza A H3	0 (0%)	72 (87.8%)
Influenza A, Inconclusive subtype	0 (0%)	0 (0%)
Influenza A, Unsubtypeable ²	0 (0%)	0 (0%)
Influenza B	0 (0%)	36 (17.8%)
Influenza B Yamagata ³	0 (0%)	25 (83.3%)
Influenza B Victoria ³	0 (0%)	5 (16.7%)
Respiratory Syncytial Virus	0 (0%)	13 (6.4%)
Adenovirus	0 (0%)	11 (5.4%)
Human Metapneumovirus	0 (0%)	8 (4.0%)
Parainfluenza-1	0 (0%)	2 (1.0%)
Parainfluenza-2	0 (0%)	4 (2.0%)
Parainfluenza-3	0 (0%)	9 (4.5%)
Rhinovirus	1 (100%)	44 (21.8%)
Inconclusive ⁴	0 (0%)	1 (0.3%)

¹ Laboratory results based on real-time PCR analysis; information is for the 2016-2017 season.

NOTE: Percentages may not add up to 100% due to co-infections, 5 specimens have tested positive with a co-infection: 5 rhinovirus and adenovirus, 1 RSV and flu H3.

Graph 5. North Texas Regional Laboratory: Influenza Virus Results¹



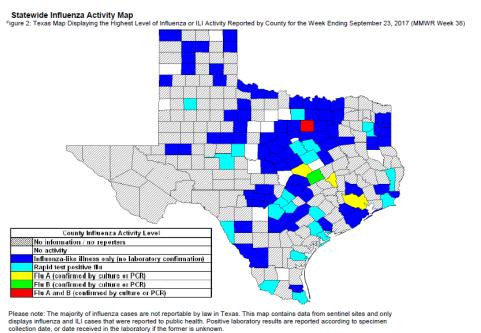
² Influenza A subtype not determined; further analysis pending.

³ Influenza B genotyping is only included in current week column if genotyping occurred in the same week as original PCR testing. Reported percentages for B genotyping is based on previous typing by the lab and may not reflect the total number of cases.

⁴ 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

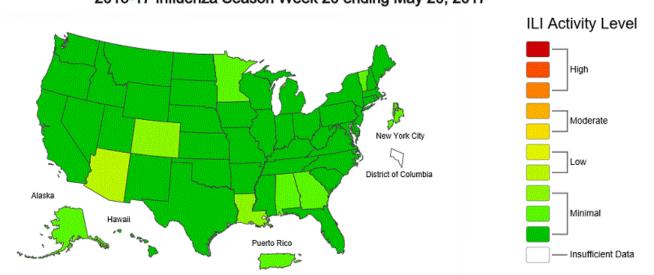


Influenza activity level corresponds to current MMWR week only and does not reflect previous weeks' activity. The majority of influenza cases are not reportable by law to the Texas Department of State Health Services. This map contains data from sentinel sites and does not represent all influenza cases 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/

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

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet 2016-17 Influenza Season Week 20 ending May 20, 2017

surveillance/2017/



*Note: The most recent ILINet Activity Indicator Map was released by the CDC at the end of the flu season, Week 20 (ending May 20, 2017).

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:

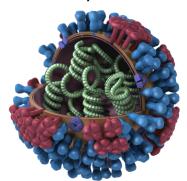
health.tarrantcounty.com/flu

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 and 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

http://health.tarrantcounty.com/flu

http://dshs.texas.gov/idcu/disease/influenza/surveillance/2017/

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

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