

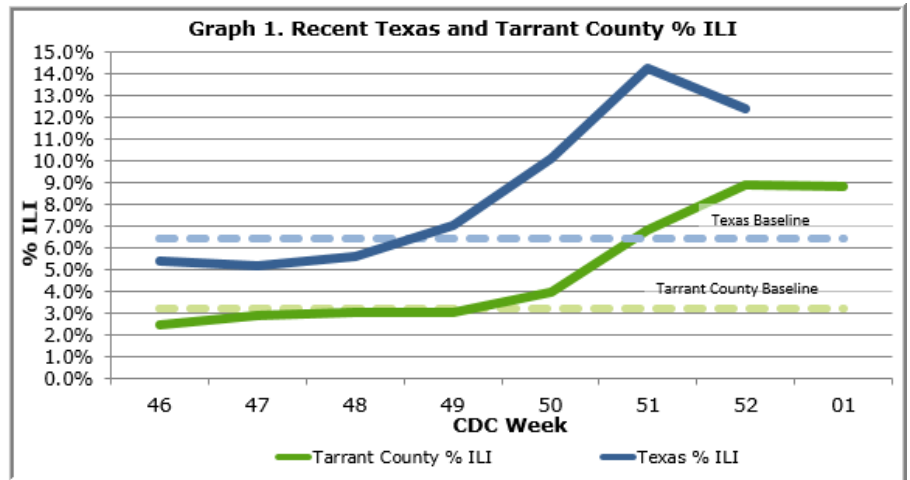
Tarrant County Public Health
Division of Epidemiology and Health Information



Tarrant County Influenza Surveillance Weekly Report
CDC Week 1: Dec 31-Jan 6, 2018

**Influenza Activity Code:
County and State Levels**

Tarrant County: Week 1
Widespread
Tarrant County: Week 52
Widespread
Texas: Week 52
Widespread

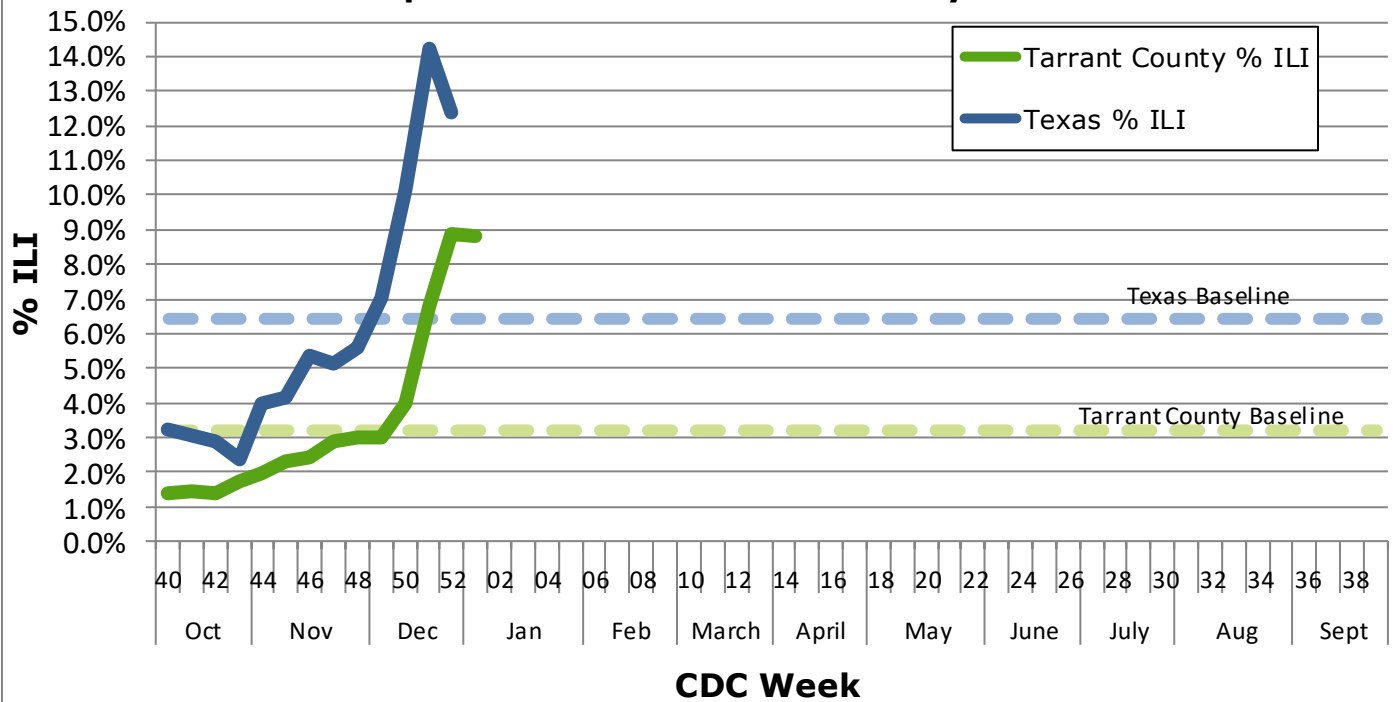


Respiratory Virus Activity Summary

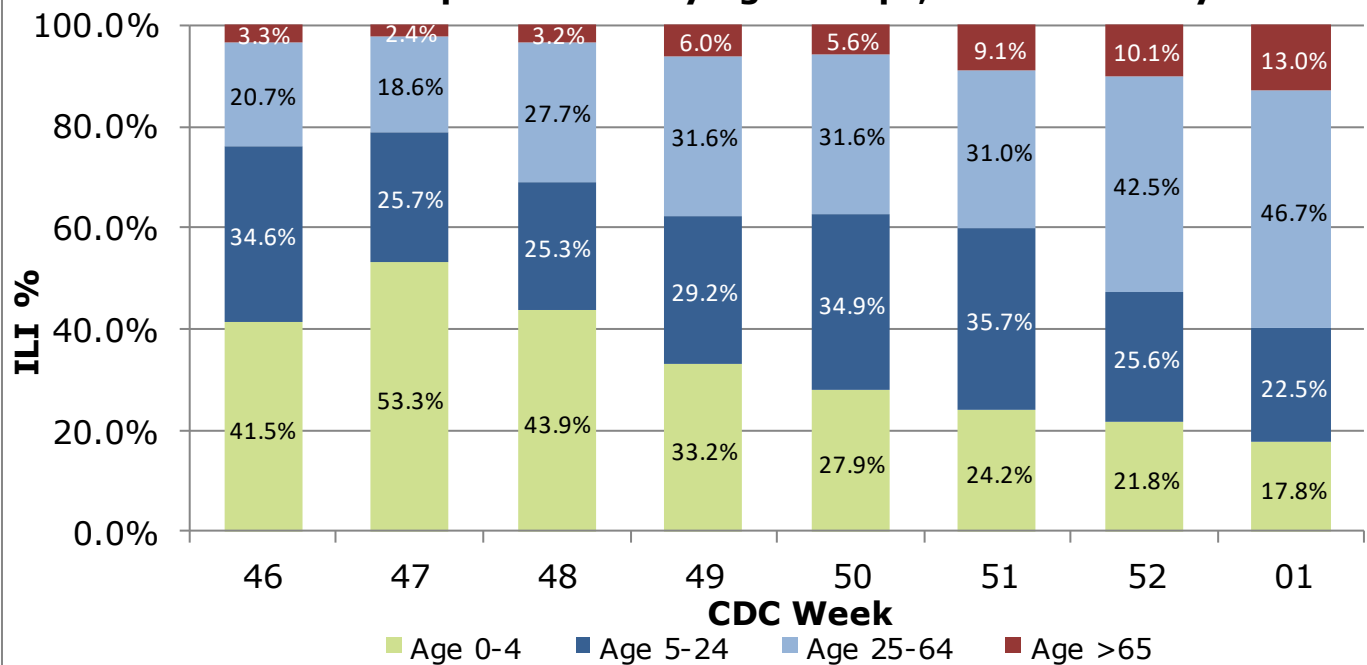
- The percentage of reported influenza-like illness (ILI) in Tarrant County decreased from 8.9% in week 52 to 8.8% in week 1 and is currently above the 2017-2018 Tarrant County baseline (3.2%).
- Due to school closures for the holidays, no absenteeism information is presented for week 1.
- The percentage of rapid flu test positives in Tarrant County increased from 26.9% in week 52 to 32.5% in week 1.
- Based on data from 12 voluntarily reporting hospitals, the percentage of reported ICU admissions due to influenza in Tarrant County was 10.4% in week 1.
- During the 2017-2018 influenza season, 0 Tarrant County influenza-associated pediatric deaths have been reported. As of week 52, 1 influenza-associated pediatric death has been reported in Texas, with a total of 13 reported nationwide for the 2017-2018 season.
- During the 2017-2018 influenza season, 1 influenza outbreak has been reported in a Tarrant County school and 14 localized influenza outbreaks 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: Influenza A/H3 (5), Influenza B (2), RSV (1), and inconclusive (1). Cumulatively this season, the North Texas Regional Laboratory at Tarrant County Public Health has tested 92 surveillance specimens and of these, 42 have been positive for influenza.
- In Texas during week 52, the proportion of outpatient visits for ILI, 12.4%, was above the state baseline of 6.4%.
- Nationally during week 52, 25.5% of specimens tested and reported to the CDC were positive for influenza. The proportion of outpatient visits for ILI (5.8%) was above the national baseline (2.2%). The proportion of deaths in week 50 attributed to pneumonia and influenza from the National Center for Health Statistics (6.7%) was below the epidemic threshold (6.9%).

Influenza Like Illness (ILI): Local and State Levels

Graph 2. Texas and Tarrant County % ILI



Graph 3. ILI % by Age Groups, Tarrant County

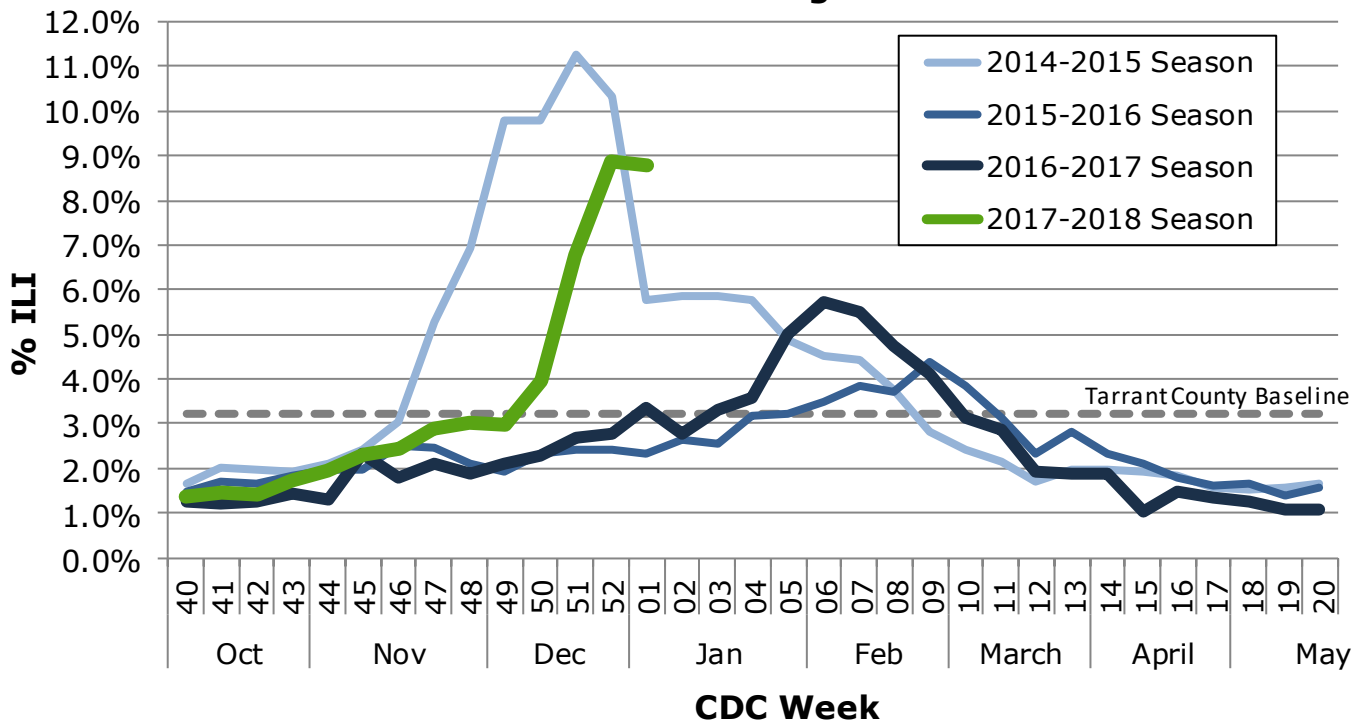


In week 1, 8.8% of visits to health care providers were due to ILI. ILI levels are currently above the county established baseline of 3.2% and are lower than the state of Texas levels. In Tarrant County, of the 2,185 reported patients presenting with ILI during week 1, the largest percentage of the reported ILI patients, 46.7%, was in the 25-64 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 1, 30 surveillance participants - 19 Hospitals, 7 Clinics, 3 Colleges/Universities, and 1 Business —reported ILI information to Tarrant County Public Health. Texas ILI activity is assessed using information provided by a network of providers. For week 52, 59 providers reported information to the Texas Department of State Health Services.

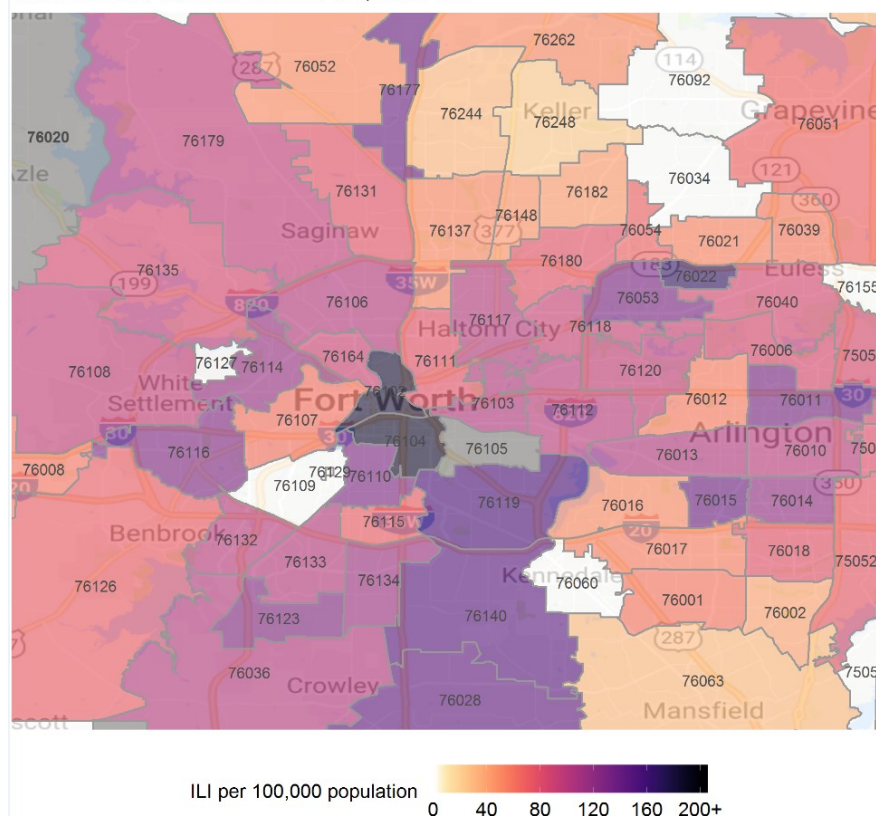
Tarrant County Historical ILI and ESSENCE Geographical Distribution Map

Graph 4. Tarrant County % of patient visits due to ILI during flu season 2014-2015 through 2017-2018



Map 1. Tarrant County ER ILI Rates per 100,000 Population by Zip Code, Week 1

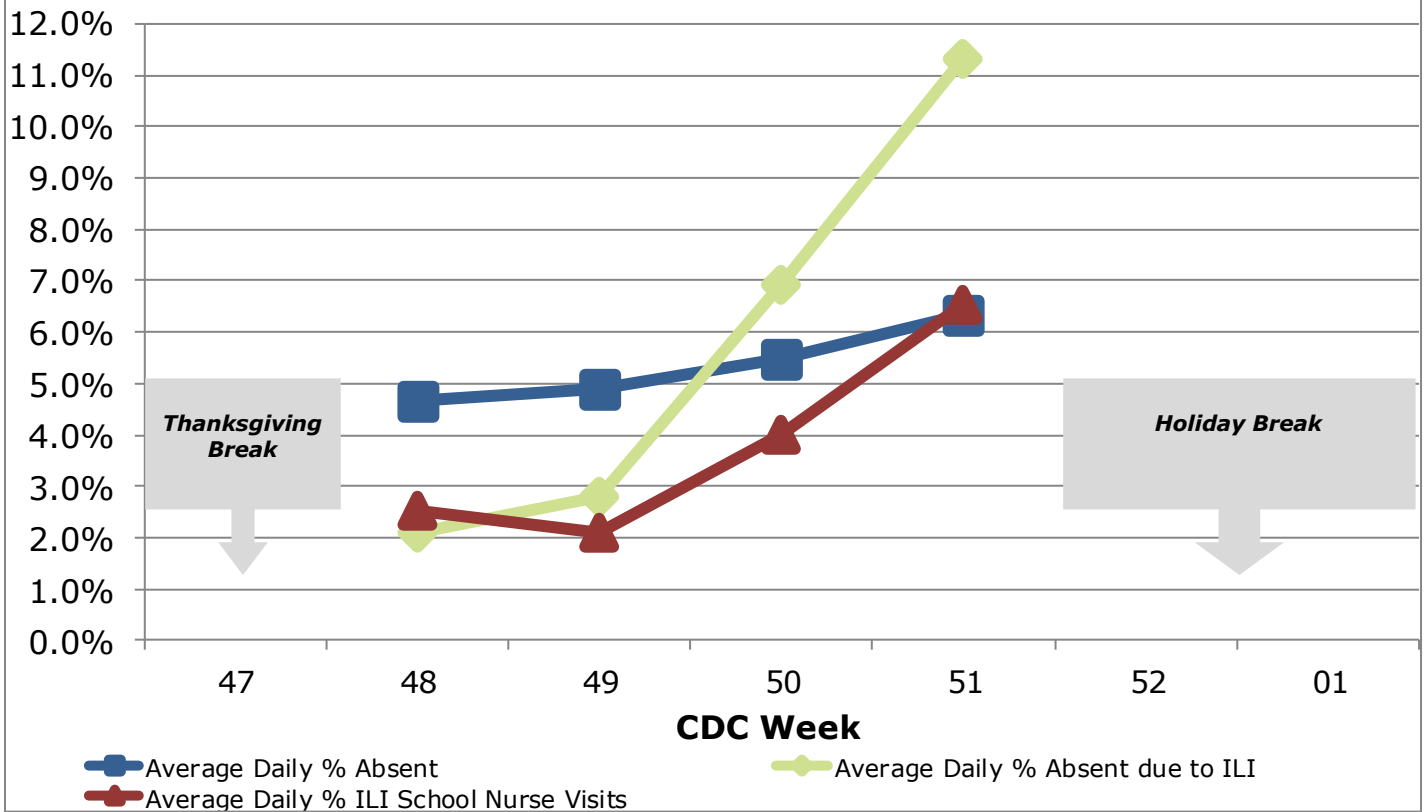
Overall rate: 84.5, Maximum rate is 210 in zip code 76020



Zip codes with ≤ 5 cases are assigned 0. Tarrant County ILI data by zip code is obtained from ESSENCE and includes ILI numbers from 46 hospitals that voluntarily provide data based on chief complaints of Tarrant County residents admitted to Emergency Departments in North Central Texas. Zip code population data is obtained from American Community Survey 2015 5 year estimate.

Rapid Influenza Test Results and School Absenteeism

Graph 5. Absenteeism and ILI, Tarrant County



For week 1, school districts were closed for all of or most of the week due to the holiday break, so data is not available including general absenteeism data, data regarding absenteeism due to ILI, or data regarding nurses' office visits due to ILI.

Table 1. Influenza Rapid Test Results, Tarrant County

CDC Week Number	51 (Dec 17-23)	52 (Dec 24-30)	1 (Dec 31-Jan 6)
# Influenza Tests Performed	3736	4313	4136
% Influenza Positive	30.3%	26.9%	32.5%
# Influenza A Positive	1001	992	1083
% Influenza A Positive	88.6%	85.4%	80.7%
# Influenza B Positive	129	170	259
% Influenza B Positive	11.4%	14.6%	19.3%
# 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 1, rapid influenza test results were reported by 16 hospitals, 7 clinics, and 2 colleges/universities.

Influenza Confirmatory Test Results: Tarrant County

Table 2. North Texas Regional Laboratory: Respiratory Virus Results¹

	Current Week	2017-2018 Season
Number of Specimens Tested	10	92
Positive Specimens	8 (80.0%)	57 (62.0%)
Influenza A	5 (62.5%)	31 (54.4%)
Influenza B	2 (25.0%)	11 (19.3%)
Respiratory Syncytial Virus	1 (12.5%)	7 (12.3%)
Adenovirus	0 (0.0%)	0 (0.0%)
Human Metapneumovirus	0 (0.0%)	0 (0.0%)
Parainfluenza-1	0 (0.0%)	2 (3.5%)
Parainfluenza-2	0 (0.0%)	0 (0.0%)
Parainfluenza-3	0 (0.0%)	0 (0.0%)
Rhinovirus	0 (0.0%)	7 (12.3%)
Inconclusive²	1 (10.0%)	2 (2.2%)

¹ Laboratory results based on real-time PCR analysis; information is for the 2017-2018 season.

² Inconclusive for influenza A and influenza B; not included in positive specimens count.

NOTE: Percentages do not add up to 100% due to co-infections, 1 specimens has tested positive with a co-infection: Parainfluenza-1 and Rhinovirus

Table 3. North Texas Regional Laboratory: Influenza Results¹

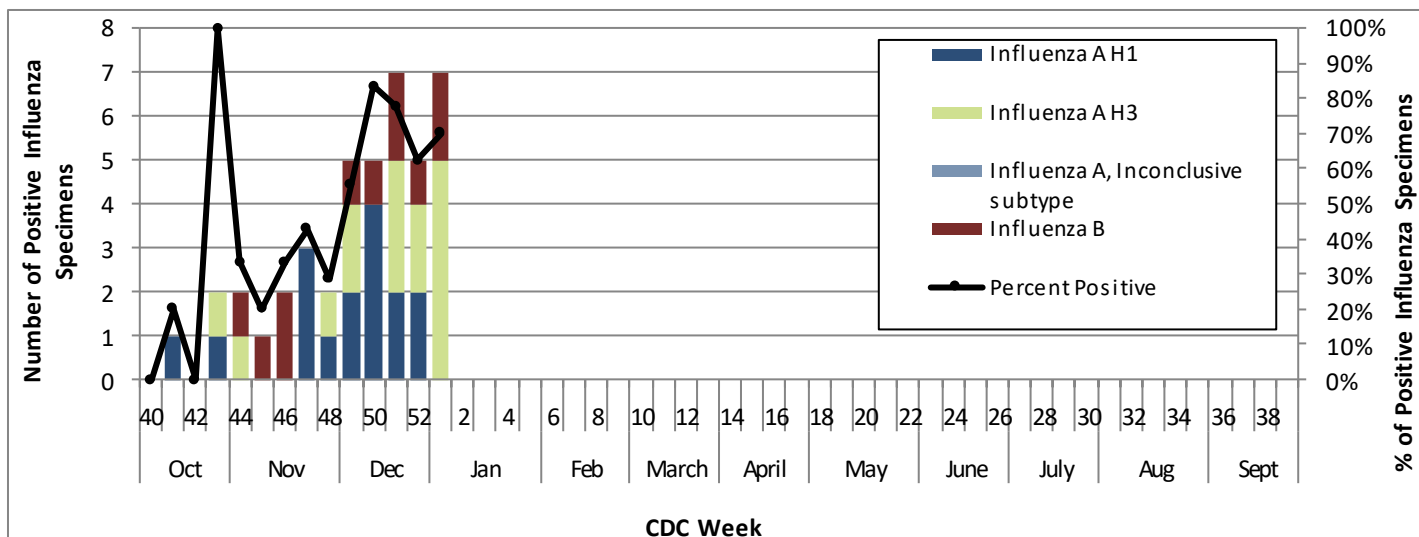
	Current Week	2017-2018 Season
Influenza A	5	31
Influenza A H1	0 (0.0%)	16 (51.6%)
Influenza A H3	5 (100%)	15 (48.4%)
Influenza A, Inconclusive subtype	0 (0.0%)	0 (0.0%)
Influenza A, Unsubtypeable ²	0 (0.0%)	0 (0.0%)
Influenza B	1	11
Influenza B Yamagata ³	2 (100%)	10 (90.9%)
Influenza B Victoria ³	0 (0.0%)	1 (9.1%)

¹ Laboratory results based on real-time PCR analysis; information is for the 2017-2018 season.

² Influenza A subtype not determined; further analysis pending

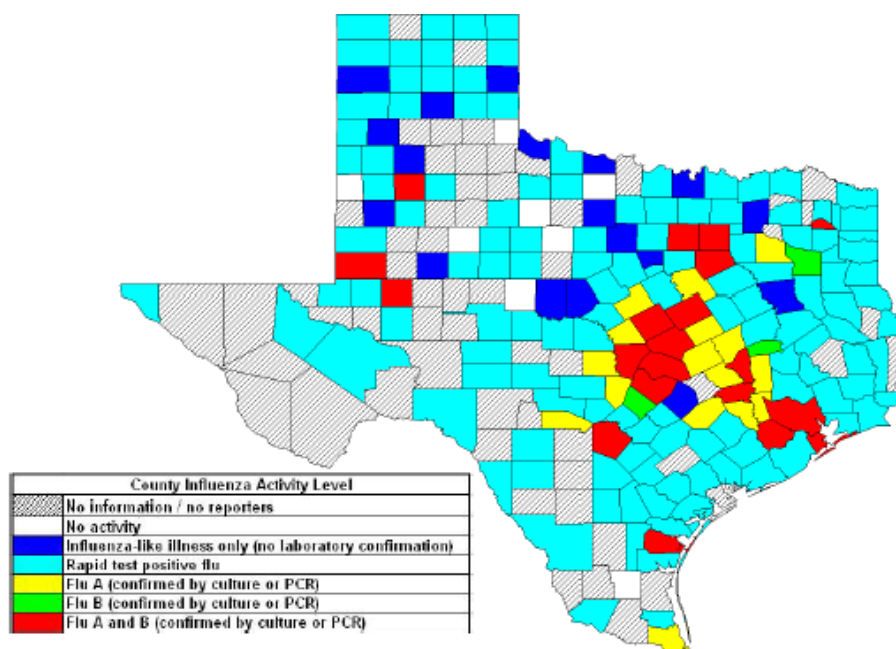
³ Influenza B genotyping is only included in current week column if genotyping occurred in the same week as original PCR testing.

Graph 6. North Texas Regional Laboratory: Influenza Virus Results¹



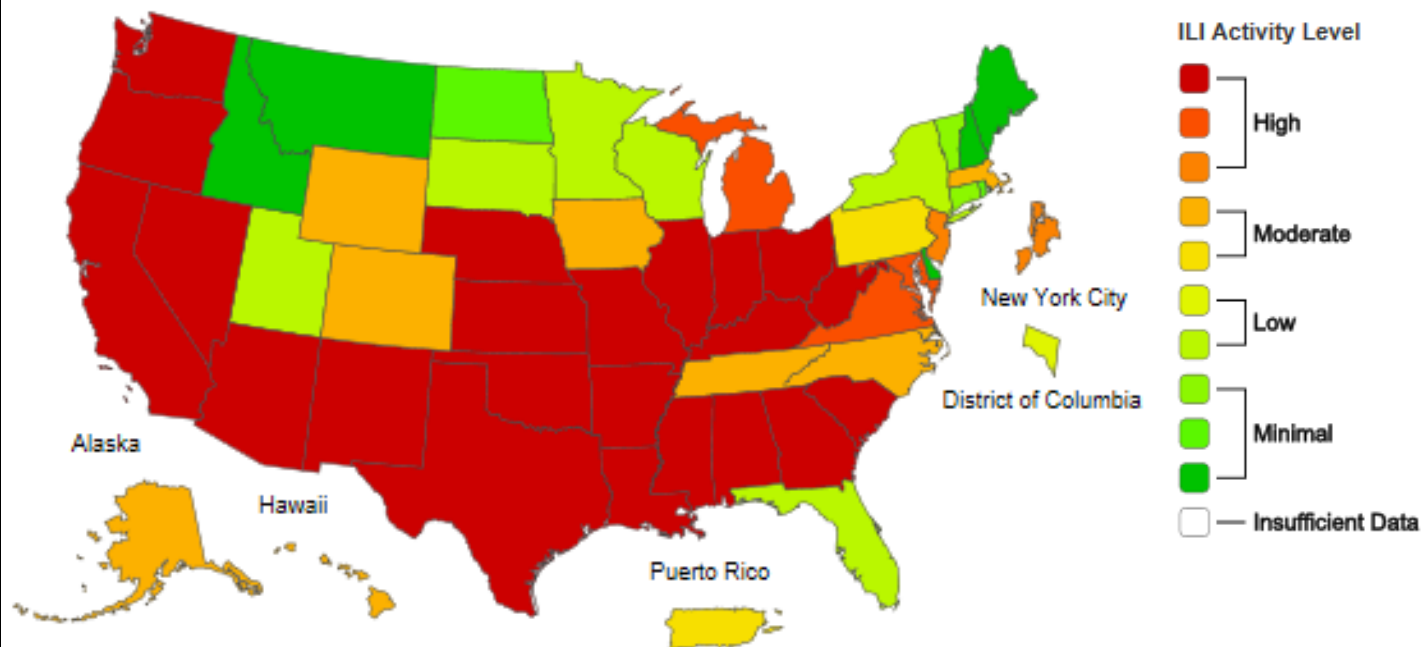
Texas and National Influenza and ILI Activity

Map 2: Texas County Specific Influenza Activity, CDC Week 52



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.texas.gov/IDCU/disease/influenza/surveillance/2017---2018-Texas-Influenza-Surveillance-Activity-Report.xls>

Map 3: ILINet Activity Indicator Map, CDC Week 52



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:

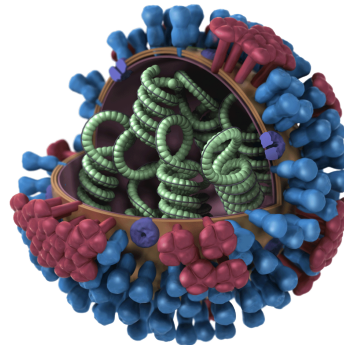
flu.tarrantcounty.com

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 $\geq 100^{\circ}\text{F}$) 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 method similar to 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 flu.tarrantcounty.com

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

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

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