Tarrant County Public Health Division of Epidemiology and Health Information

Tarrant County Influenza Surveillance Weekly Report CDC Week 2: Jan 5-11, 2020

Influenza Activity Code: County and State Levels

Tarrant County: Week 2

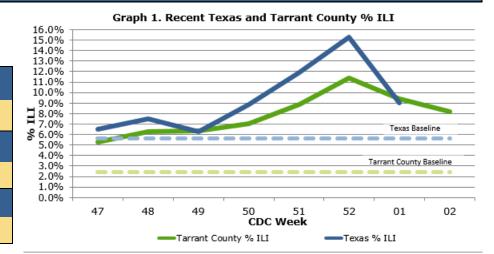
Widespread

Tarrant County: Week 1

Widespread

Texas: Week 1

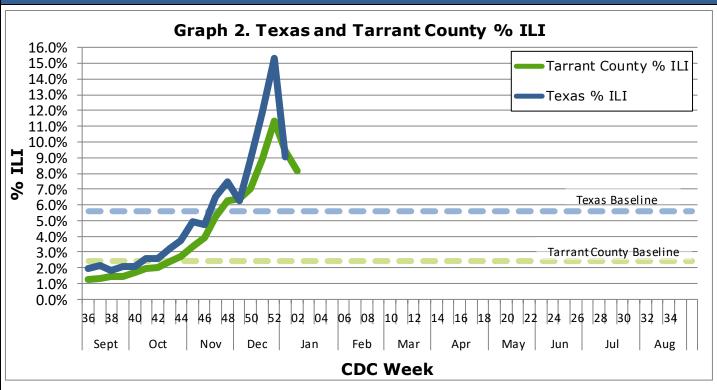
Widespread

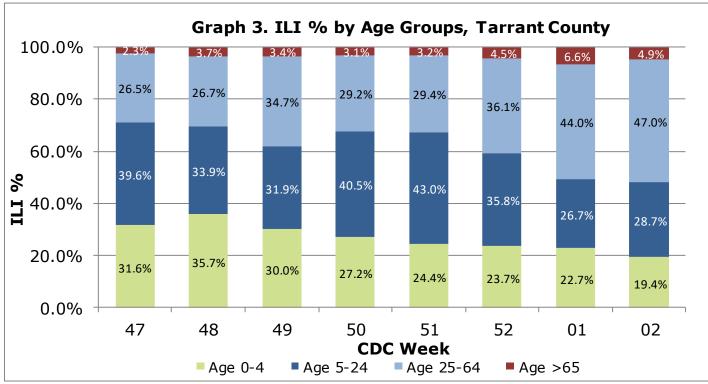


Respiratory Virus Activity Summary

- The percentage of reported influenza-like illness (ILI) in Tarrant County decreased from 9.4% in week 1 to 8.2% in week 2 and is currently above the 2019-2020 Tarrant County baseline (2.4%).
- The percentage of all cause school absenteeism was 4.9% during week 2 in Tarrant County. Absenteeism due to ILI and school nurse office visits due to ILI were 5.2% and 2.9% respectively during week 2 in Tarrant County.
- The percentage of rapid flu test positives in Tarrant County increased from 23.4% in week 1 to 23.9% in week 2.
- Based on data from the Electronic Surveillance System for the Early Notification of Community -based Epidemics, the percentage of patients hospitalized following ER visits who were diagnosed with influenza decreased from 3.7% in week 1 to 3.2% in week 2.
- During the 2019-2020 influenza season, as of week 2, 3 Tarrant County influenza-associated pediatric deaths have been reported. As of week 1, 8 influenza-associated pediatric deaths have been reported in Texas, with a total of 32 reported nationwide for the 2019-2020 season.
- During the 2019-2020 influenza season, 0 influenza outbreaks have been reported in Tarrant County schools and 1 localized influenza outbreak has been reported within an institution 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 B (5) and Influenza A/H1 (4). Cumulatively this season, the North Texas Regional Laboratory at Tarrant County Public Health has tested 135 surveillance specimens and of these, 72 have been positive for influenza.
- In Texas during week 1, the proportion of outpatient visits for ILI, 9.1%, was above the state baseline of 4.8%.
- Nationally during week 1, 23.3% 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 (2.4%). The proportion of deaths in week 52 attributed to pneumonia and influenza from the National Center for Health Statistics (5.8%) was below the epidemic threshold (6.9%).

Influenza Like Illness (ILI): Local and State Levels





In week 2, 8.2% of visits to health care providers were due to ILI. ILI levels are currently above the county established baseline of 2.4% and are lower than the state of Texas levels from the week prior. In Tarrant County, of the 1,873 reported patients presenting with ILI during week 2, the age group with the largest percentage of the reported ILI patients, 47.0%, was 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 2, 26 surveillance participants - 18 Hospitals, 2 Clinics, 2 Emergency/ Urgent Care Centers, 1 College/University, 1 Long-Term Care Facility, 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 1, 62 providers reported information to the Texas Department of State Health Services.

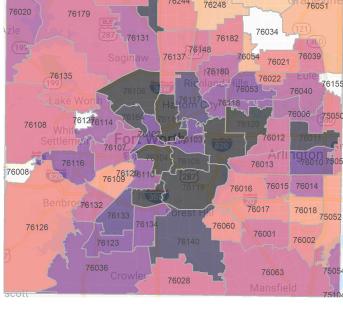
Tarrant County Historical ILI and ESSENCE Geographical Distribution Map

Graph 4. Tarrant County % of patient visits due to ILI during flu season 2016-2017 through 2019-2020 14.0% 13.0% 2016-2017 Season 12.0% 2017-2018 Season 11.0% ■2018-2019 Season 10.0% 9.0% 2019-2020 Season 8.0% 7.0% 6.0% **\$** 5.0% 4.0% 3.0% <u> [arrant County_Baseline</u> 2.0% 1.0% 0.0% Oct Nov Dec Jan Feb Mar Apr May **CDC Week**

Map 1. Tarrant County ER ILI Cases by Zip Code, Week 2

Overall rate: 105, maximum rate was 291 in zip code 76104

75022 76092 76248 76051 76034 76131 76182 76137 76148 76039 76021 76180 761276114



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 2017 5 year estimate.

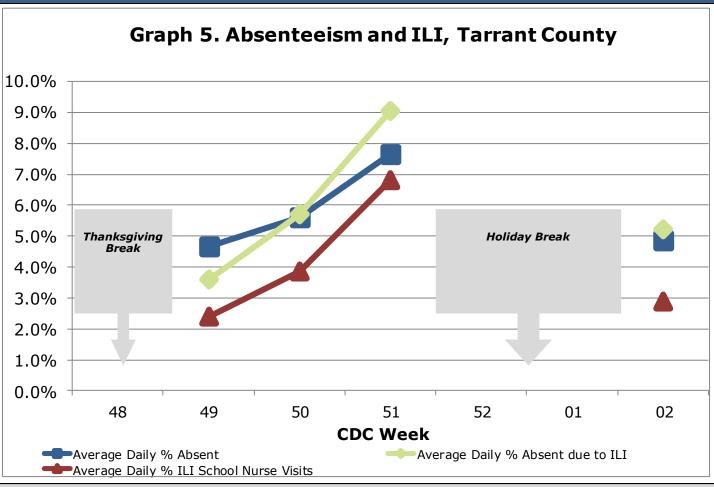
40

80

120 160 200+

ILI per 100,000 population





For week 2, 12 school districts provided general absenteeism data, 11 school districts provided data regarding absenteeism due to ILI, and 11 school districts provided data regarding nurses' office visits due to ILI.

Table 1. Influenza Test Results, Tarrant County

CDC Week Number	52 (Dec 22-28)	1 (Dec 29-Jan 4)	2 (Jan 5-11)
# Influenza Tests Performed	5556	4580	3789
% Influenza Positive	28.8%	23.4%	23.8%
# Influenza A Positive	457	369	422
% Influenza A Positive	28.6%	34.4%	46.6%
# Influenza B Positive	1142	703	483
% Influenza B Positive	71.4%	65.6%	53.4%
# 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 2, influenza test results were reported by 17 Hospitals, 1 College/University, 2 Emergency/Urgent Care Centers, 1 Long-Term Care Facility, and 2 Clinics.

Influenza Confirmatory Test Results: Tarrant County

Table 2. North Texas Regional Laboratory: Respiratory Virus Results¹

	Current Week	2019-2020 Season
Number of Specimens Tested	10	125
Positive Specimens	9 (90.0%)	82 (65.6%)
Influenza A	4 (44.4%)	17 (20.7%)
Influenza B	5 (55.6%)	46 (56.1%)
Respiratory Syncytial Virus	0 (0.0%)	4 (4.9%)
Adenovirus	0 (0.0%)	1 (1.2%)
Human Metapneumovirus	0 (0.0%)	0 (0.0%)
Parainfluenza-1	0 (0.0%)	5 (6.1%)
Parainfluenza-2	0 (0.0%)	0 (0.0%)
Parainfluenza-3	0 (0.0%)	0 (0.0%)
Rhinovirus	0 (0.0%)	9 (11.0%)
Inconclusive ²	0 (0.0%)	0 (0.0%)

¹ Laboratory results based on real-time PCR analysis; information is for the 2019-2020 season.

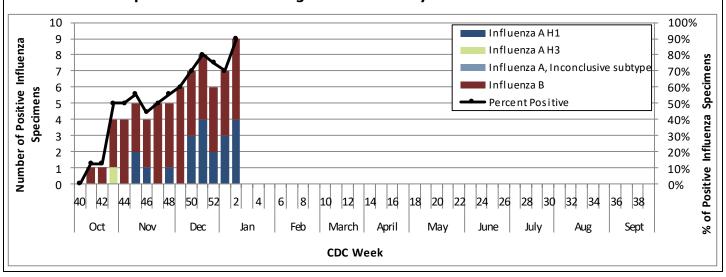
NOTE: Percentages do not add up to 100% due to co-infections

Table 3. North Texas Regional Laboratory: Influenza Results¹

	Current Week	2019-2020 Season
Influenza A	4	21
Influenza A H1	4 (100.0%)	20 (95.2%)
Influenza A H3	0 (0.0%)	1 (4.8%)
Influenza A, Inconclusive subtype	0 (0.0%)	0 (0.0%)
Influenza A, Unsubtypeable ²	0 (0.0%)	0 (0.0%)
Influenza B	5	51
Influenza B Yamagata ³	0 (0.0%)	0 (0.0%)
Influenza B Victoria ³	5 (100.0%)	51 (100.0%)
Influenza B, Inconclusive	0 (0.0%)	0 (0.0%)

¹ Laboratory results based on real-time PCR analysis; information is for the 2019-2020 season.

Graph 6. North Texas Regional Laboratory: Influenza Virus Results1



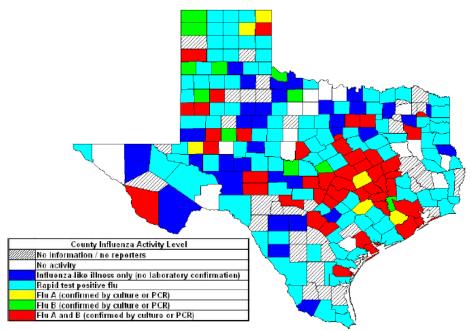
² Inconclusive for influenza A and influenza B; not included in positive specimens count.

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.

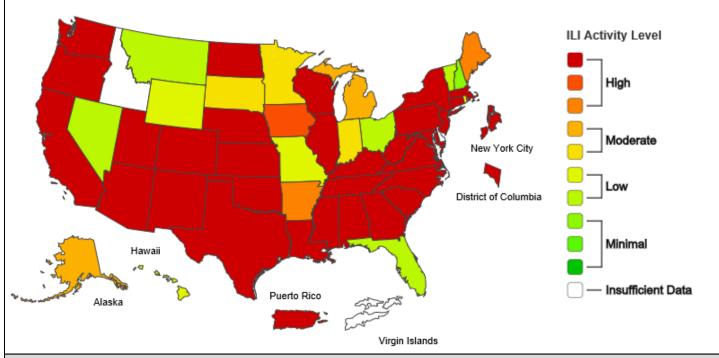
Texas and National Influenza and ILI Activity

Map 2: Texas County Specific Influenza Activity, CDC Week 1



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/2017/

Map 3: ILINet Activity Indicator Map, CDC Week 1



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:

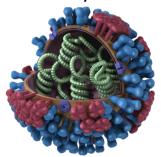
flu.tarrantcounty.com

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

Laura Lockwood, MPH, CPH Influenza Surveillance Specialist Iblockwood@tarrantcounty.com

Tarrant County Public Health Influenza Surveillance Epidemiology and Health Information

1101 South Main Street, Suite 2200 Fort Worth, TX 76104



Veerinder (Vinny) Taneja, MBBS; MPH *Director, Tarrant County Public Health*

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

flu.tarrantounty.com

https://www.dshs.texas.gov/IDCU/disease/influenza/surveillance/2019-2020.aspx

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

Russ Jones, MPH
Division Manager & Chief Epidemiologist
Epidemiology and Health Information
Tarrant County Public Health

Main Epidemiology Division Number: (817) 321-5350 Disease Reporting Fax Number: (817) 850-2366