

Week 52 ending December 29, 2018

Epidemiologic Summary

- Influenza activity is increasing in Dallas County, with 14.5% of tests returning positive during week 52.
- Daily numbers of emergency department visits for influenza-like illness in Dallas County are increasing as expected; and 67 influenza-associated hospitalizations were reported during week 52.
- No influenza-associated deaths of an adult were reported in week 52. No influenza-associated pediatric deaths have been reported during the 2018-2019 season in Dallas County.
- RSV activity remains high with 13.9% of tests from area surveillance sites testing positive.

Table 1. Summary of Influenza Surveillance from Dallas County Hospitals and Hospital Laboratories

Week Ending	11/24	12/01	12/08	12/15	12/22	12/29	9/09/18 -
CDC Week	47	48	49	50	51*	52*	Present
Total Influenza PCR Tests	996	1,108	1,058	1,003	1,101	1,251	13,837
Number of positive PCR tests	8	9	11	29	59	116	266
Percent of positive PCR tests	0.8	0.8	1.0	2.9	5.4	9.3	
Total Rapid Influenza Diagnostic Tests	1,127	1,179	1,187	1,315	1,647	2,028	14,196
Number of positive RIDTs	36	27	54	96	209	359	919
Percent of positive RIDTs	3.2	2.3	4.6	7.3	12.7	17.7	
Total Influenza Tests Performed	2,123	2,287	2,245	2,318	2,748	3,279	28,033
Total positive influenza tests ¹	44	36	65	125	268	475	1,185
Percent positive influenza tests	2.1	1.6	2.9	5.4	9.8	14.5	
Positive influenza A tests ²	30	28	48	103	244	450	977
Positive influenza B tests	14	8	17	22	24	25	208
Non-differentiated influenza tests ³	0	0	0	0	0	0	0

¹ Includes positive rapid antigen, PCR, DFA, or culture results

² Further subtyping is performed only by select hospital laboratories for specimens referred to DCHHS by institutions for PCR-testing

³ Non-differentiated refers to rapid test results which did not differentiate between influenza A and B

Table 2. Summary of Influenza Hospitalizations and Deaths from Dallas County Hospitals, Vital Statistics and Medical

 Examiner's Office

Week Ending	11/24	12/01	12/08	12/15	12/22	12/29	01/05	9/09/18 –
CDC Week	47	48	49	50	51*	52*	01*	Present
Influenza hospitalizations ⁴	10	7	11	10	34	67	N/A	173
Influenza ICU admissions ⁴	1	3	3	2	8	14	N/A	35
Confirmed pediatric deaths ⁵	0	0	0	0	0	0	0	0
Confirmed adult deaths ⁶	0	0	0	0	0	0	0	0
Possible influenza-associated deaths ⁷	0	0	0	0	0	0	0	0

⁴ Reflects all influenza-associated hospitalizations reported from hospitals located within Dallas County by week of any positive influenza tests; Data source:14 Hospitals in Dallas County

⁵ Confirmed influenza-associated deaths of Dallas County residents <18 years of age

⁶ Confirmed influenza-associated deaths as defined by a positive laboratory test and any of the following: (1) death certificate denotation, (2) medical record documentation of compatible symptoms and clear progression from illness to death, or (3) determination by the County Medical Examiner's office (ME) of no alternate cause of death

⁷ Possible influenza-associated deaths are defined as cases with laboratory-confirmed influenza, but pending final autopsy results for determination of primary cause of death

Table 3. Confirmed Influenza-associated Pediatric and Adult Deaths, Dallas County: 2013–2019 Seasons

	2013–2014	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019
Pediatric	3	0	1	1	4	0
Adult	55	19	14	16	79	0

Data source(s): Reports of confirmed influenza-associated deaths, as defined in Table 2.

*Indicates preliminary results which are subject to change with late-arriving data from surveillance sites designated for DCHHS' seasonal influenza program

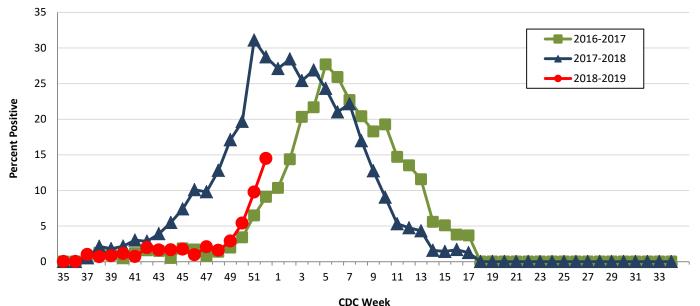


Figure 1. Influenza Positive Tests Reported to DCHHS by Hospital Laboratories: 2016-2019 Seasons

Table 4. Influenza Typing and Subtyping from Cumulative Dallas County, Texas, and U.S. Laboratory Surveillance Data:2018—2019 Season

	Dallas ¹ (n=78)	Texas ² (n=470)	U.S. ³ (n=16,255)	
Influenza A	20 (100.0%)	129 (97.0%)	3,902 (95.4%)	
H1N1 2009 subtype	9 (47.4%)	62 (48.4%)	3,019 (81.4%)	
H3N2 subtype	10 (52.6%)	66 (51.6%)	689 (18.6%)	
Not subtyped	1	1	194	
Influenza B	0 (0.0%)	4 (3.0%)	189 (4.6%)	
Yamagata strain	0 (0.0%)	2 (*66.7%)	95 (*63.3%)	

¹ DCHHS LRN laboratory PCR testing of designated Dallas County surveillance site isolates; counts may not sum to total as samples can test positive for multiple subtypes ² DSHS 2018–2019 Texas Influenza Surveillance Information Activity Report available at <u>https://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/</u>

³ CDC FluView Weekly Influenza Surveillance Report available at <u>http://www.cdc.gov/flu/weekly/</u>*Only a subset of influenza B had lineage testing performed.

320 300 280 260 Number of ILI Reports 240 220 200 180 160 140 120 100 80 60 40 20 0 - WSenne TRUAT NOCTIO OAJamB 02AUG18 107NOUNG Data warning Data alert Data normal

Figure 2. Syndromic Surveillance of Emergency Department Visits for Influenza-like Illness (ILI), Dallas County: September 1, 2016 – December 29, 2018.

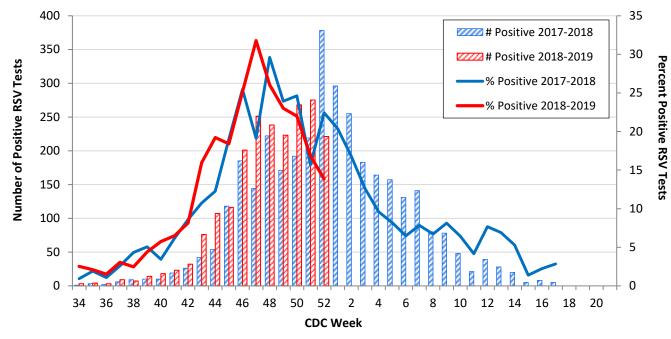
Data source: 18 emergency departments in Dallas County hospitals participating in the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) voluntarily reporting the numbers of persons presenting with self-reported chief complaints of ILI.

Table 5. Non-Influenza Respiratory Virus Testing by North Texas Laboratories Reported to NREVSS, Week 52

Virus	Number of Laboratories Reporting	Tests Performed	Total Positive Tests	Percentage of Tests Positive	
Adenovirus (respiratory)	4	494	13	2.6	
HMPV	4	483	12	2.5	
Parainfluenza virus	4	494	9	1.8	
Rhinovirus/Enterovirus	4	483	89	18.4	
RSV	4	1,595	221	13.9	

Data source: National Respiratory and Enteric Virus Surveillance System (NREVSS) and hospitals reporting directly to DCHHS

Figure 3. Number and Percent Positive RSV Rapid Antigen and PCR Tests by Week, NREVSS Surveillance Data, North Texas: August 25, 2017 – December 29, 2018



Data source: National Respiratory and Enteric Virus Surveillance System (NREVSS) and hospitals reporting directly to DCHHS

Table 6. Number and Percent Positive RSV Rapid Antigen and PCR Tests by Week, NREVSS Surveillance Data, North Texas:August 25, 2018 – December 29, 2018

Week Ending	11/17	11/24	12/01	12/08	12/15	12/22	12/29	8/25/18-
CDC Week	46	47	48	49	50	51*	52*	Present
RSV tests performed weekly	800	790	914	969	1,219	1,631	1,595	12,051
Total positive RSV tests	201	251	238	223	268	275	221	2,089
Percent positive RSV tests	25.1	31.8	26.0	23.0	22.0	16.9	13.9	

*Indicates preliminary results which are subject to change as adjustments are made for late-arriving data Data source: National Respiratory and Enteric Virus Surveillance System (NREVSS)

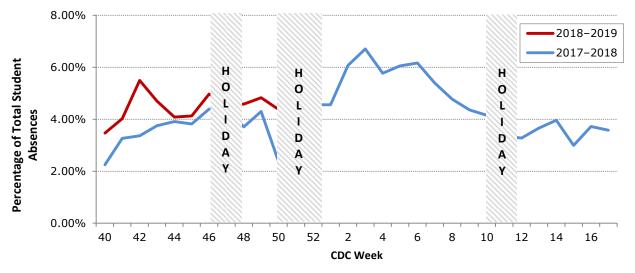
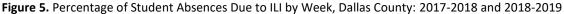
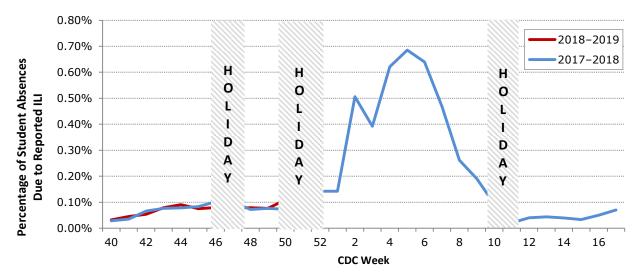


Figure 4. Percentage of Student Absences by Week, Dallas County: 2017-2018 and 2018-2019





Data source: Voluntary reporting from Independent School Districts representing over 510 elementary, middle, and secondary schools and over 420,000 students in Dallas County

Please report any of the following patients to DCHHS within 1 working day:

- Hospitalized patients with influenza (any subtype). Confirmation can be by any laboratory test, rapid antigen, culture, PCR, DFA/IFA, or performed in an outpatient or inpatient laboratory.
- **Deaths of persons with confirmed influenza** (any subtype). We are requesting all pediatric influenza-associated deaths to be reported *immediately* to facilitate specimen procurement and testing.
- Suspected influenza infections involving institutional outbreaks or a resident of any Long Term Care facility (please report *immediately*).

Phone: (214) 819-2004 Email: influenza@dallascounty.org