Dallas County Health and Human Services 2019–2020 Influenza Surveillance Report

Week 46 ending November 16, 2019

Epidemiologic Summary

- Influenza activity is increasing in Dallas County, with 13.0% of tests returning positive during week 46.
- Over the past week (Week 47), daily number of emergency department visits for chief complaints of influenza-like illness in Dallas County have been increasing above the average past baseline for this time of the year. Only seven (7) new influenza-associated hospitalizations were reported during week 46.
- No influenza-associated adult deaths were reported in week 46. No influenza-associated pediatric deaths have been reported during the 2019-2020 season in Dallas County.
- RSV activity is increasing, with 28.2% of tests from the surveillance sites reported as positive.

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

Week Ending	10/12	10/19	10/26	11/02	11/09	11/16	9/08/19 –
CDC Week	41	42	43	44	45*	46*	Present
Total Influenza PCR Tests	689	771	832	934	1,383	1,089	7,573
Number of positive PCR tests	10	14	27	47	84	99	295
Percent of positive PCR tests	1.5	1.8	3.2	5.0	6.1	9.1	
Total Rapid Influenza Diagnostic Tests	865	1,140	1,231	1,525	1,308	2,059	10,076
Number of positive RIDTs	39	58	66	130	233	310	918
Percent of positive RIDTs	4.5	5.1	5.4	8.5	17.8	15.1	
Total Influenza Tests Performed	1554	1,911	2,063	2,459	2,691	3,148	17,655
Total positive influenza tests ¹	49	72	93	177	317	409	1,213
Percent positive influenza tests	3.2	3.8	4.5	7.2	11.8	13.0	
Positive influenza A tests ²	4	8	16	12	23	23	99
Positive influenza B tests	45	64	77	165	294	386	1,114
Non-differentiated influenza tests ³	0	0	0	0	0	0	0

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

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

Week Ending	10/05	10/12	10/19	10/26	11/02	11/09	11/16	9/08/19-
CDC Week	40	41	42	43	44	45*	46*	Present
Influenza hospitalizations ⁴	3	1	4	4	5	6	7	36
Influenza ICU admissions ⁴	1	0	1	1	1	2	0	7
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 14 hospitals located within Dallas County by week of any positive influenza tests.

Table 3. Confirmed Influenza-associated Pediatric and Adult Deaths, Dallas County: 2014–2020 Seasons

	2014–2015	2015–2016	2016–2017	2017–2018	2018–2019	2019–2020
Pediatric	0	1	1	4	1	0
Adult	19	14	16	79	21	0

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

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

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. Deaths occurring outside of influenza season require a positive PCR result in order to meet laboratory criteria. Positive RIDT will meet laboratory criteria after the start of flu season.

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

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

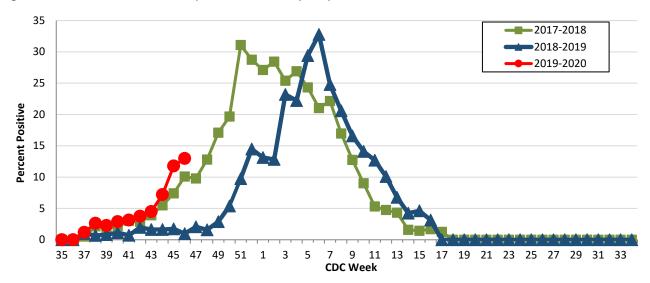


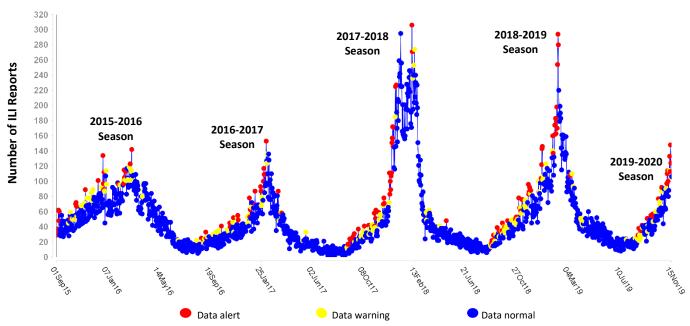
Figure 1. Influenza Positive Tests Reported to DCHHS by Hospital Laboratories: 2017—2020 Seasons

Table 4. Influenza Typing and Subtyping from Cumulative Dallas County, Texas, and U.S. Laboratory Surveillance Data: 2019—2020 Season

	Dallas¹ (n=71)	Texas² (n=233)	U.S.³ (n=8,105)		
Influenza A	3 (100%)	20 (28.2%)	811 (48.4%)		
H1N1 2009 subtype	1 (33.3%)	15 (78.9%)	337 (45.7%)		
H3N2 subtype	0 (0.0%)	4 (21.1%)	401 (54.3%)		
Not subtyped	0	1	73		
Influenza B	34 (91.9%)	51 (71.8%)	865 (51.6%)		
Yamagata strain	0 (0.0%)	0 (0.0%)	26 (*4.0%)		

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

Figure 2. Syndromic Surveillance of Emergency Department Visits for Influenza-like Illness (ILI), Dallas County: September 01, 2015 – November 16, 2019



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.

² DSHS 2019–2020 Texas Influenza Surveillance Information Activity Report available at https://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/

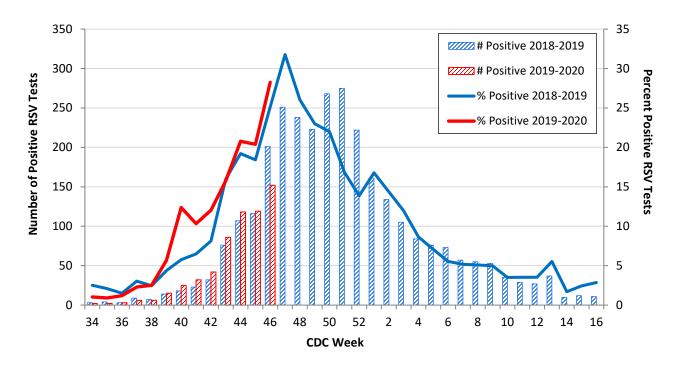
³ CDC FluView Weekly Influenza Surveillance Report available at http://www.cdc.gov/flu/weekly/ *Only a subset of influenza B had lineage testing performed.

Table 5. Non-Influenza Respiratory Virus Testing by North Texas Laboratories Reported to NREVSS, Week 46

Virus	Number of Laboratories Reporting*	Tests Performed	Total Positive Tests	Percentage of Tests Positive	
Adenovirus (respiratory)	1	75	1	1.3	
HMPV	1	75	1	1.3	
Parainfluenza virus	1	75	4	5.3	
Rhinovirus/Enterovirus	1	75	27	36.0	
RSV	1	538	152	28.2	

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 18, 2017 – November 16, 2019



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 18, 2019 – November 16, 2019

Week Ending	10/05	10/12	10/19	10/26	11/02	11/09	11/16	8/18/18-
CDC Week	40	41	42	43	44	45*	46*	Present
RSV tests performed weekly	202	310	349	546	568	487	538	4,645
Total positive RSV tests	25	32	42	86	118	119	152	632
Percent positive RSV tests	12.4	10.3	12.0	15.8	20.8	24.4	28.2	

^{*}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)

^{*}Data from 3 reporting laboratories are unavailable as of November 22, 2019

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*).

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