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

Week 06 ending February 08, 2020

## **Epidemiologic Summary**

- Influenza activity remains high in Dallas County, with 23.1% of tests returning positive during week 6.
- Over the past week (Week 6), daily number of emergency department visits for chief complaints of influenzalike illness in Dallas County remains high. One-hundred and fifty-four (154) new influenza-associated hospitalizations were reported during week 6.
- RSV activity is low with 5.2% of tests from the surveillance sites reported as positive.

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

Week Ending	01/04	01/11	01/18	01/25	02/01	02/08	9/08/19 –
CDC Week	1	2	3	4	5*	6*	Present
Total Influenza PCR Tests	1,786	1,633	1,635	1,691	1,877	1,749	27,271
Number of positive PCR tests	467	407	426	457	451	404	4,774
Percent of positive PCR tests	26.1	24.9	26.1	27.0	24.0	23.1	
Total Rapid Influenza Diagnostic Tests	3,596	2,828	3,033	3,212	3,563	2,778	48,803
Number of positive RIDTs	827	765	996	939	951	642	11,085
Percent of positive RIDTs	23.0	27.1	32.8	29.2	26.7	23.1	
Total Influenza Tests Performed	5,382	4,461	4,668	4,903	5,440	4,527	76,080
Total positive influenza tests <sup>1</sup>	1,294	1,172	1,422	1,396	1,402	1,046	15,859
Percent positive influenza tests	24.0	26.3	30.5	28.5	25.8	23.1	
Positive influenza A tests <sup>2</sup>	573	706	1,015	1,163	1,229	949	7,066
Positive influenza B tests	721	466	407	233	173	97	8,793
Non-differentiated influenza tests <sup>3</sup>	0	0	1	1	1	0	8

 $<sup>^{\</sup>rm 1}$  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	12/28	01/04	01/11	01/18	01/25	02/01	02/08	02/15	9/08/19-
CDC Week	52	1	2	3	4	5*	6*	7*	Present
Influenza hospitalizations <sup>4</sup>	167	135	115	125	190	208	154	6	1,481
Influenza ICU admissions <sup>4</sup>	13	26	18	25	25	26	21	6	208
Confirmed pediatric deaths <sup>5</sup>	0	0	0	1	0	0	0	0	1
Confirmed adult deaths <sup>6</sup>	1	1	4	2	1	0	0	0	16
Possible influenza-associated deaths <sup>7</sup>	1	0	1	1	4	2	0	0	12

<sup>4</sup> 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	1
Adult	19	14	16	79	21	16

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

<sup>&</sup>lt;sup>2</sup> Further subtyping is performed only by select hospital laboratories for specimens referred to DCHHS by institutions for PCR-testing

<sup>&</sup>lt;sup>3</sup> Non-differentiated refers to rapid test results which did not differentiate between influenza A and B

 $<sup>^{\</sup>rm 5}$  Confirmed influenza-associated deaths of Dallas County residents <18 years of age

<sup>&</sup>lt;sup>6</sup> 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.

<sup>&</sup>lt;sup>7</sup> Possible influenza-associated deaths are defined as cases with laboratory-confirmed influenza, but pending final autopsy results for determination of primary cause of death

<sup>\*</sup>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: 2019—2020 Season

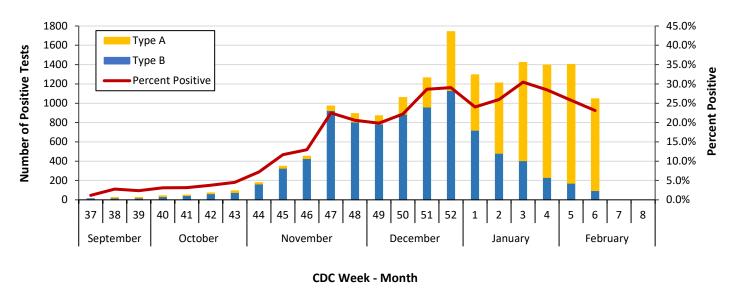
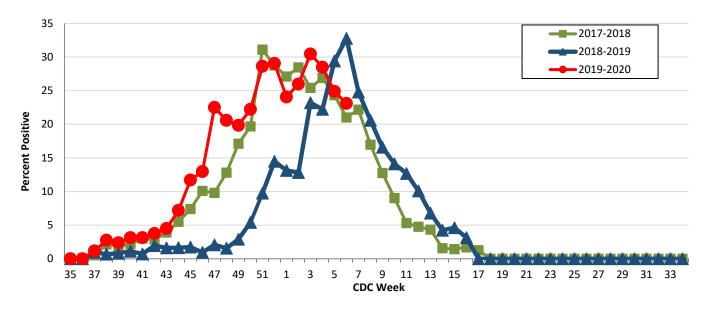


Figure 2. Influenza Positive Tests Reported to DCHHS by Hospital Laboratories: 2017—2020 Seasons



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

	Dallas¹ (n=332)	Texas² (n=1,779)	U.S.³ (n=51,930)
Influenza A	129 (58.6%)	59 (66.3%)	12,822 (49.3%)
H1N1 2009 subtype	129 (100.0%)	58 (98.3%)	12,088 (90.0%)
H3N2 subtype	0 (0.0%)	1 (1.7%)	1,349 (10.0%)
Not subtyped	0	0	385
Influenza B	91 (41.4%)	30 (33.7%)	14,218 (50.7%)
Yamagata strain	4 (4.4%)	0 (0.0%)	178 (1.6%)

<sup>&</sup>lt;sup>1</sup> 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

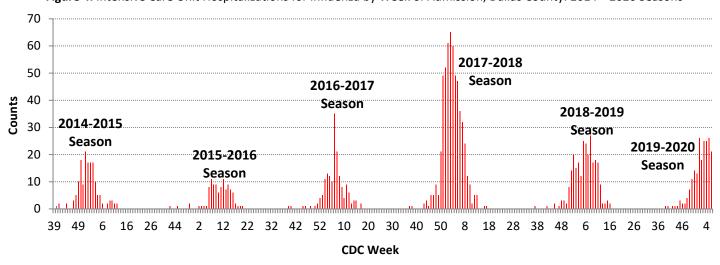
<sup>&</sup>lt;sup>2</sup> DSHS 2019–2020 Texas Influenza Surveillance Information Activity Report available at <a href="https://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/">https://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/</a>

<sup>&</sup>lt;sup>3</sup> CDC FluView Weekly Influenza Surveillance Report available at <a href="http://www.cdc.gov/flu/weekly/">http://www.cdc.gov/flu/weekly/</a> \*Only a subset of influenza B had lineage testing performed.

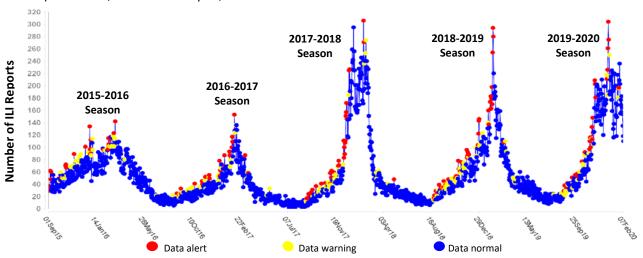
400 350 2017-2018 300 Season 2016-2017 2018-2019 250 Counts Season Season 200 2014-2015 2019-2020 150 Season Season 2015-2016 100 Season 50 0 2 12 22 32 42 52 10 20 30 40 50 8 18 28 38 48 16 26 36 46 16 26 44 **CDC** Week

Figure 3. Influenza Hospitalizations by Week of Admission, Dallas County: 2014—2020 Seasons

Figure 4. Intensive Care Unit Hospitalizations for influenza by Week of Admission, Dallas County: 2014—2020 Seasons



**Figure 5.** Syndromic Surveillance of Emergency Department Visits for Influenza-like Illness (ILI), Dallas County: September 01, 2015 – February 08, 2020



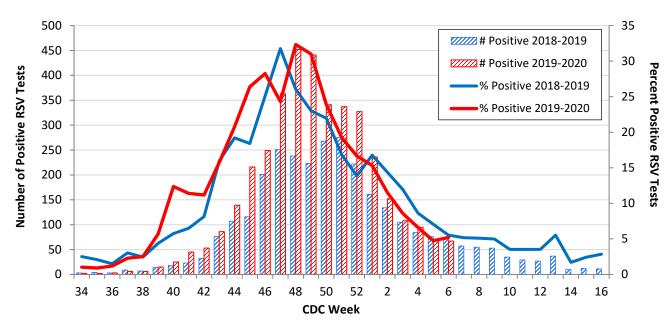
Data source: 18 emergency departments in Dallas County hospitals participating in the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) voluntarily reporting the numbers of persons presenting with self-reported chief complaints of ILI.

Table 5. Non-Influenza Respiratory Virus Testing by North Texas Laboratories Reported to NREVSS, Week 06

Virus	Number of Laboratories Reporting*	Tests Performed	Total Positive Tests	Percentage of Tests Positive	
Adenovirus (respiratory)	2	315	10	3.2	
HMPV	2	315	13	4.1	
Parainfluenza virus	2	315	8	2.5	
Rhinovirus/Enterovirus	2	315	92	29.2	
RSV	2	1,284	67	5.2	

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

**Figure 6.** Number and Percent Positive RSV Rapid Antigen and PCR Tests by Week, NREVSS Surveillance Data, North Texas: August 18, 2017 – February 08, 2020



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 – February 08, 2020

Week Ending	12/28	01/04	01/11	01/18	01/25	02/01	02/08	8/18/18-
CDC Week	52	1	2	3	4	5*	6*	Present
RSV tests performed weekly	1,962	1,541	1,319	1,400	1,437	1,435	1,284	23,165
Total positive RSV tests	327	236	152	113	95	68	67	3,839
Percent positive RSV tests	16.7	15.3	11.5	8.1	6.6	4.7	5.2	

\*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)

<sup>\*</sup>Data from 1 reporting laboratory was unavailable as of February 14, 2020

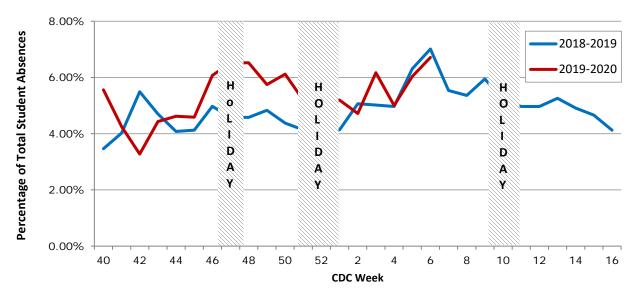
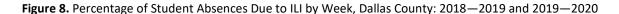
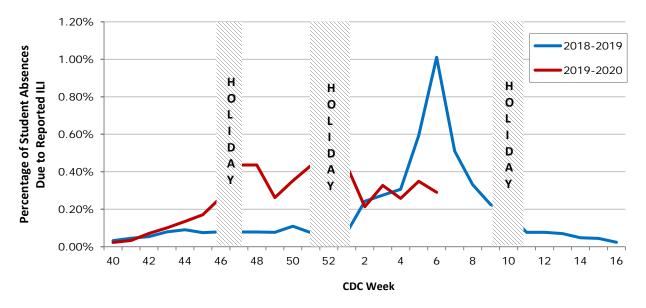


Figure 7. Percentage of Student Absences by Week, Dallas County: 2018—2019 and 2019—2020





## 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