



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

Week 11 ending March 14, 2020

Epidemiologic Summary

- Healthcare seeking behavior may be affected by the ongoing COVID-19 outbreak, causing more people to seek care for symptoms of respiratory illness.
- Influenza activity decreased in Dallas County, with 9.9% of tests returning positive during week 11.
- Over the past week (Week 11), daily number of emergency department visits for chief complaints of influenza-like illness in Dallas County slightly increased. Influenza-associated hospitalizations are continuing to decrease.
- RSV activity is low with 2.9% of tests from the surveillance sites reported as positive.

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

Week Ending	02/08	02/15	02/22	02/29	03/07	03/14	9/08/19 – Present
CDC Week	6	7	8	9	10*	11*	
Total Influenza PCR Tests	1,749	1,432	1,614	1,454	1,417	1,727	34,915
Number of positive PCR tests	404	323	294	198	175	146	6,075
Percent of positive PCR tests	23.1	22.6	18.2	13.6	12.4	8.5	
Total Rapid Influenza Diagnostic Tests	2,778	1,824	2,199	1,773	1,531	1,865	57,835
Number of positive RIDTs	642	334	458	309	236	210	12,618
Percent of positive RIDTs	23.1	18.3	20.8	17.4	15.4	11.3	
Total Influenza Tests Performed	4,527	3,256	3,813	3,227	2,948	3,592	92,756
Total positive influenza tests ¹	1,046	657	752	507	411	356	18,693
Percent positive influenza tests	23.1	20.2	19.7	15.7	13.9	9.9	
Positive influenza A tests ²	949	597	705	52	370	298	9,482
Positive influenza B tests	97	60	47	88	41	58	9,211
Non-differentiated influenza tests ³	0	0	0	0	2	0	10

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	02/01	02/08	02/15	02/22	02/29	03/07	03/14	03/21	9/08/19– Present
CDC Week	5	6	7	8	9	10*	11*	12*	
Influenza hospitalizations ⁴	208	154	120	129	88	81	67	0	1,960
Influenza ICU admissions ⁴	27	25	23	20	8	9	7	0	274
Confirmed pediatric deaths ⁵	0	0	0	0	0	0	0	0	3
Confirmed adult deaths ⁶	0	0	0	0	0	2	0	0	22
Possible influenza-associated deaths ⁷	1	0	2	1	1	1	0	0	9

⁴ Reflects all influenza-associated hospitalizations reported from 14 hospitals located within Dallas County by week of any positive influenza tests.

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. Data updated as of April 9, 2020.

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	3
Adult	19	14	16	79	21	22

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: 2019–2020 Season

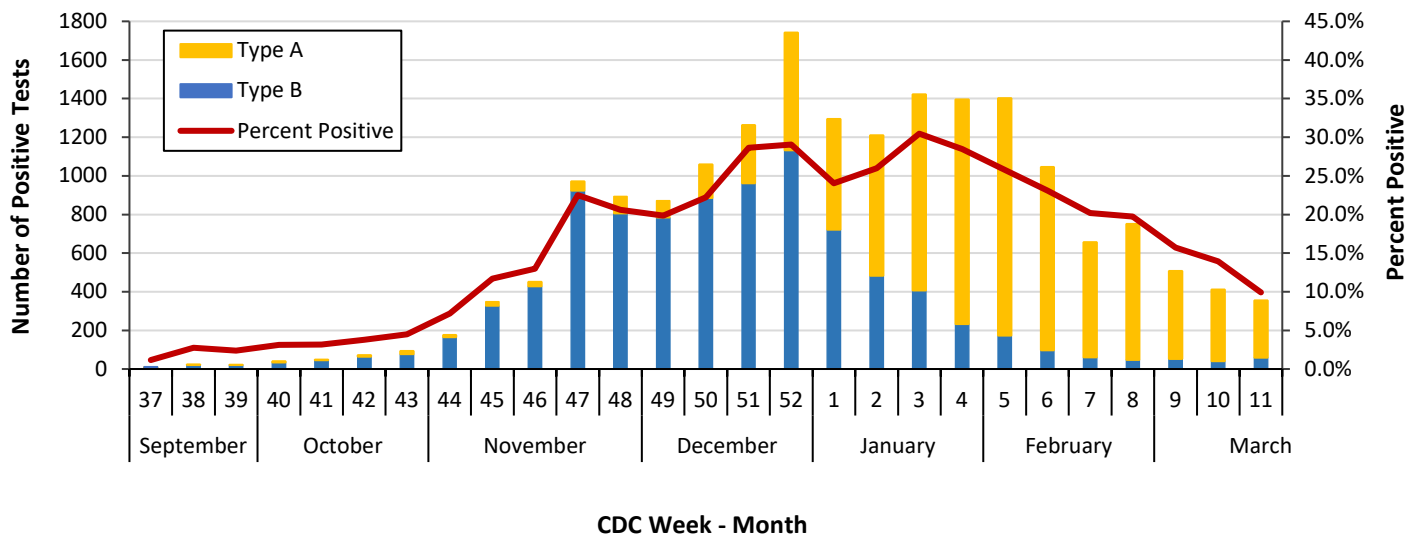


Figure 2. Influenza Positive Tests Reported to DCHHS by Hospital Laboratories: 2017–2020 Seasons

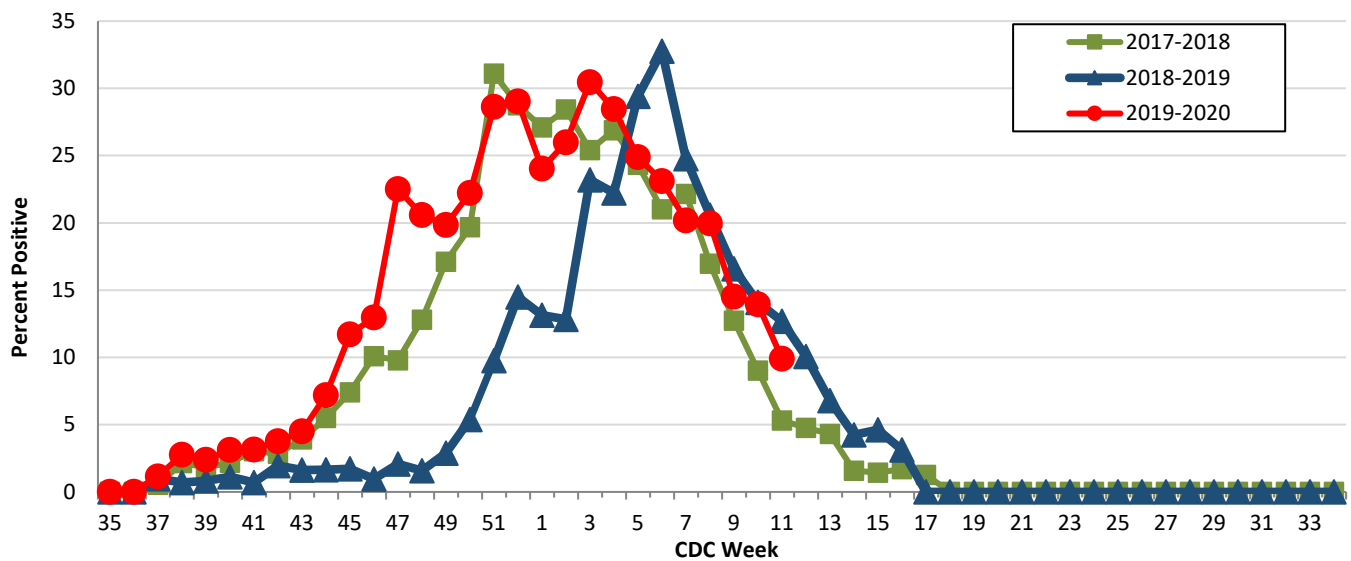


Table 4. Influenza Typing and Subtyping from Cumulative Dallas County, Texas, and U.S. Laboratory Surveillance Data: 2019–2020 Season

	Dallas ¹ (n=420)	Texas ² (n=2,106)	U.S. ³ (n=72,958)
Influenza A	191 (67.3%)	697 (54.3%)	22,899 (55.9%)
H1N1 2009 subtype	191 (100.0%)	654 (94.8%)	120,427 (92.4%)
H3N2 subtype	0 (0.0%)	36 (5.2%)	1,691 (7.6%)
Not subtyped	0	7	781
Influenza B	93 (32.7%)	585 (45.6%)	18,040 (44.1%)
Yamagata strain	4 (4.3%)	5 (0.9%)	220 (1.6%)

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 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.

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

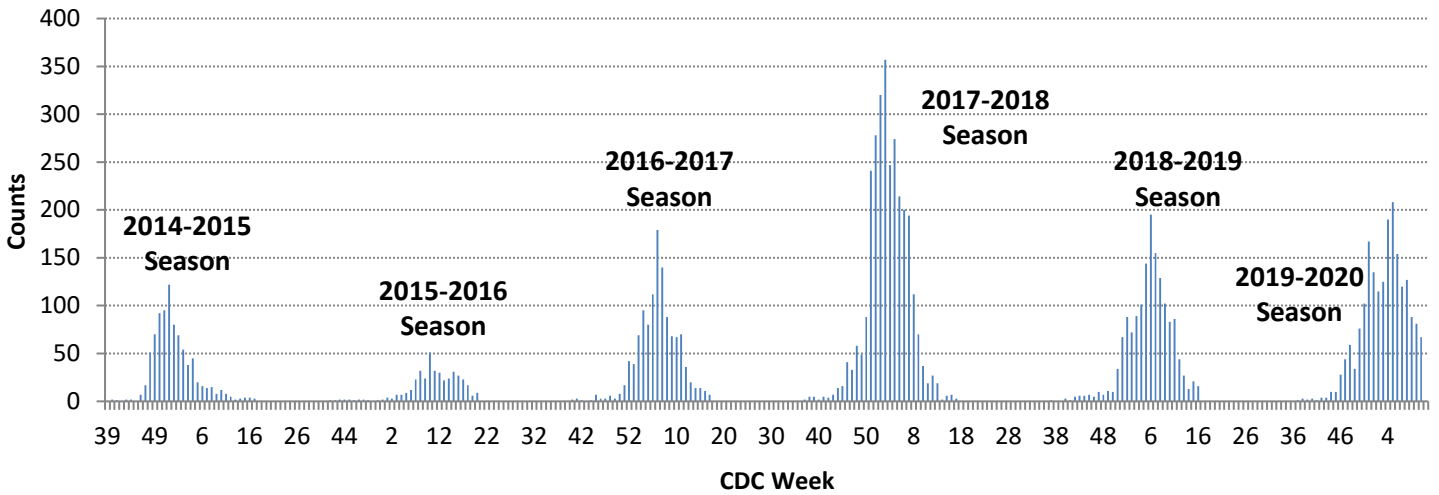


Figure 4. Intensive Care Unit Hospitalizations for influenza by Week of Admission, Dallas County: 2014–2020 Seasons

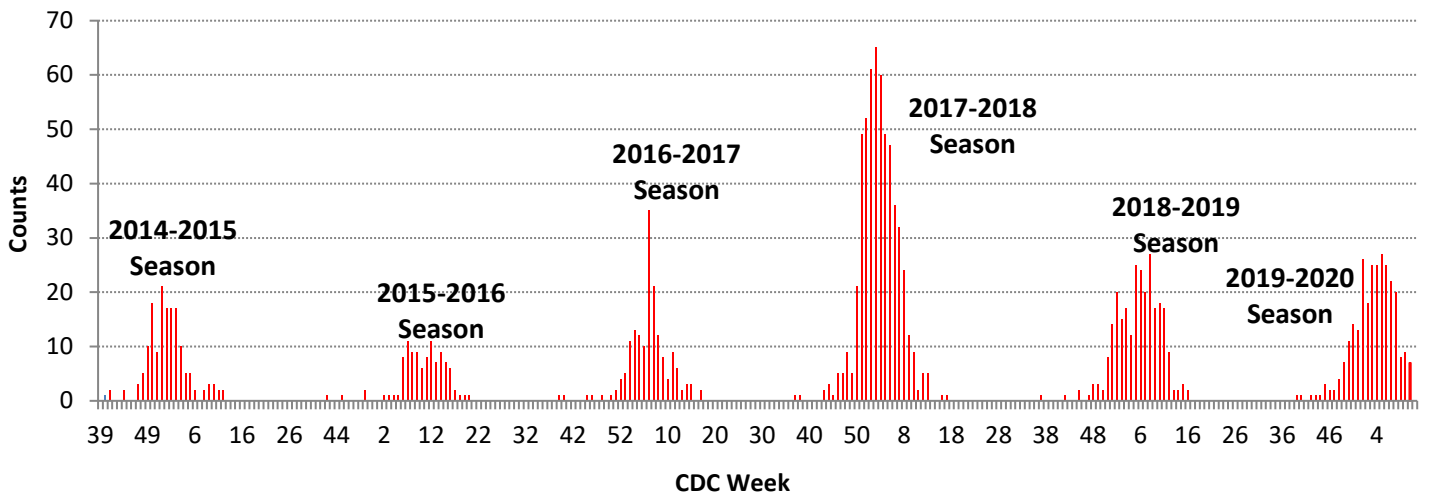
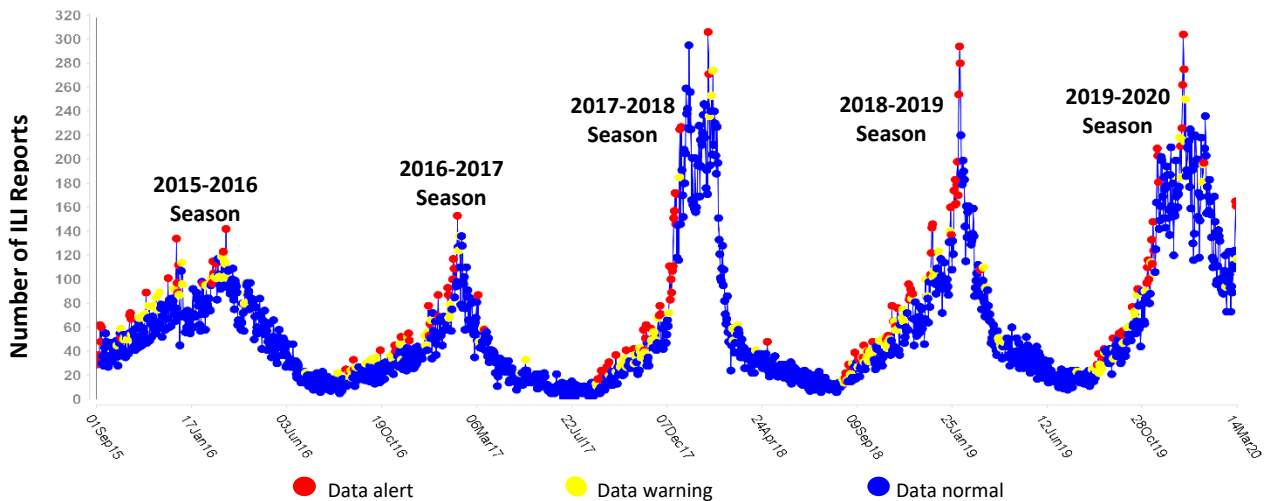


Figure 5. Syndromic Surveillance of Emergency Department Visits for Influenza-like Illness (ILI), Dallas County: September 01, 2015 – March 14, 2020



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.

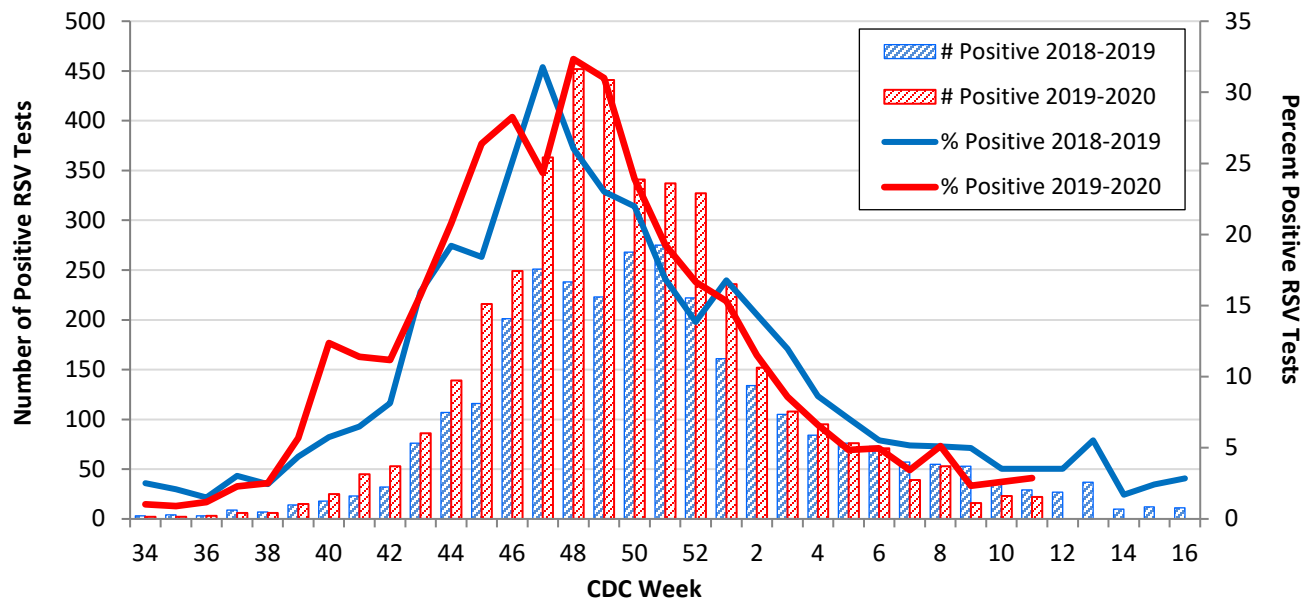
Table 5. Non-Influenza Respiratory Virus Testing by North Texas Laboratories Reported to NREVSS, Week 11

Virus	Number of Laboratories Reporting*	Tests Performed	Total Positive Tests	Percentage of Tests Positive
Adenovirus (respiratory)	2	282	10	3.6
HMPV	2	282	36	12.8
Parainfluenza virus	2	282	5	1.8
Rhinovirus/Enterovirus	2	282	81	28.7
RSV	2	766	22	2.9

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

*Data from 2 reporting laboratory were unavailable as of March 20, 2020

Figure 6. Number and Percent Positive RSV Rapid Antigen and PCR Tests by Week, NREVSS Surveillance Data, North Texas: August 18, 2017 – March 14, 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 – March 14, 2020

Week Ending	01/18	01/25	02/01	02/15	02/29	03/07	03/14	8/18/18–Present
CDC Week	5	6	7	8	9	10*	11*	
RSV tests performed weekly	1,568	1,429	1,138	1,033	683	884	766	27,947
Total positive RSV tests	76	71	39	53	16	23	22	4,004
Percent positive RSV tests	4.9	5.0	3.4	5.1	2.3	2.6	2.9	

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

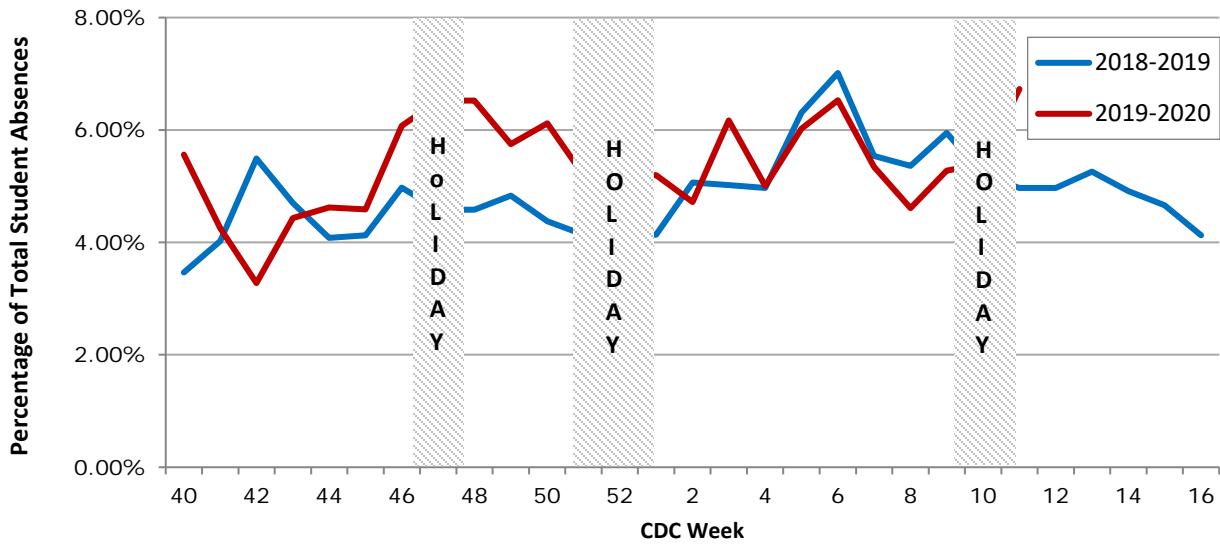
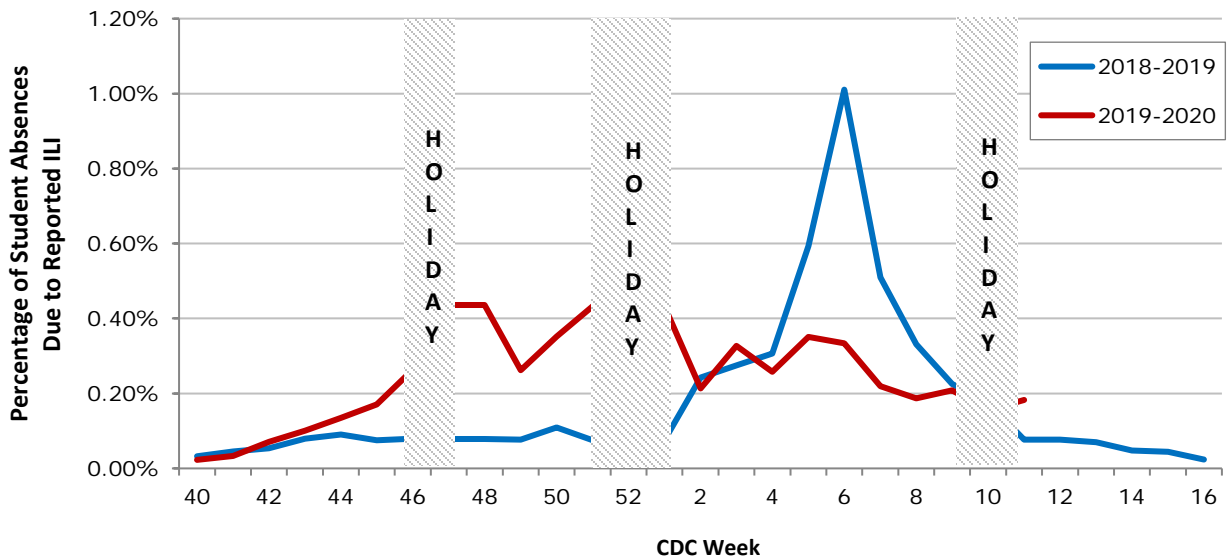


Figure 8. Percentage of Student Absences Due to ILI by Week, Dallas County: 2018–2019 and 2019–2020



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*).

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