



Dallas County Health and Human Services 2018–2019 Influenza Surveillance Report

Week 7 ending February 16, 2019

Epidemiologic Summary

- Influenza activity remains high in Dallas County, with 24.8% of tests returning positive during week 7.
- Daily number of emergency department visits for influenza-like illness in Dallas County is decreasing, and 155 Influenza-associated hospitalizations were reported during week 7.
- Two influenza-associated deaths of adults were reported in week 7. One influenza-associated pediatric death has been reported during the 2018-2019 season in Dallas County.
- RSV activity decreased with 5.2% of tests from area surveillance sites testing positive.

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

Week Ending	01/12	01/19	01/26	02/02	02/09	02/16	9/09/18 – Present
CDC Week	2	3	4	5	6*	7*	
Total Influenza PCR Tests	1,293	1,143	1,287	1,338	1,617	1,452	23,652
Number of positive PCR tests	114	123	188	248	330	253	1,653
Percent of positive PCR tests	8.8	10.8	14.6	17.9	20.4	17.4	
Total Rapid Influenza Diagnostic Tests	1,840	1,946	2,763	3,532	4,477	3,309	33,724
Number of positive RIDTs	289	597	714	1,203	1,671	930	6,624
Percent of positive RIDTs	15.7	30.7	25.8	34.1	37.3	28.1	
Total Influenza Tests Performed	3,143	3,107	4,057	4,934	6,106	4,773	57,456
Total positive influenza tests ¹	403	721	902	1,451	2,001	1,183	8,280
Percent positive influenza tests	12.8	23.2	22.2	29.4	32.8	24.8	
Positive influenza A tests ²	363	603	810	1,401	1,949	1,153	7,652
Positive influenza B tests	40	117	92	50	52	30	627
Non-differentiated influenza tests ³	0	1	0	0	0	0	1

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	01/12	01/19	01/26	02/02	02/09	02/16	02/23	9/09/18 – Present
CDC Week	2	3	4	5	6*	7*	8*	
Influenza hospitalizations ⁴	72	89	101	144	195	155	N/A	1,017
Influenza ICU admissions ⁴	15	17	12	25	24	20	N/A	168
Confirmed pediatric deaths ⁵	0	0	0	1	0	0	0	1
Confirmed adult deaths ⁶	1	1	1	0	1	2	0	9
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	1
Adult	55	19	14	16	79	9

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: 2018—2019 Season

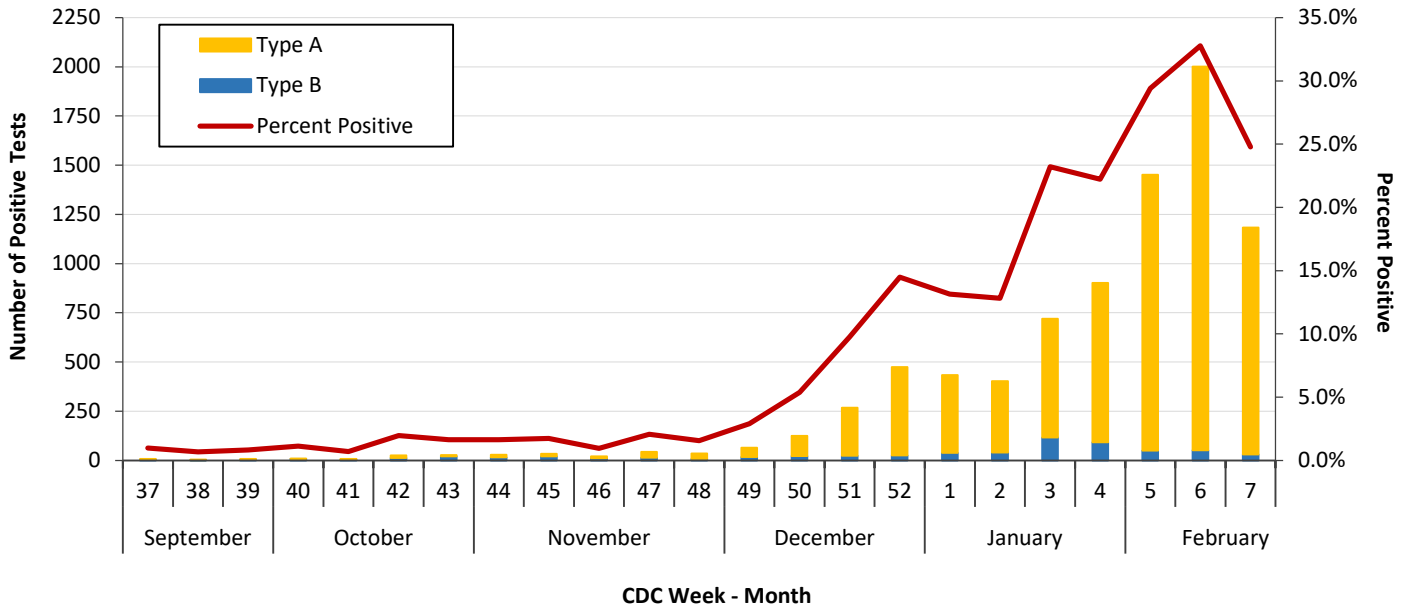


Figure 2. Influenza Positive Tests Reported to DCHHS by Hospital Laboratories: 2016—2019 Seasons

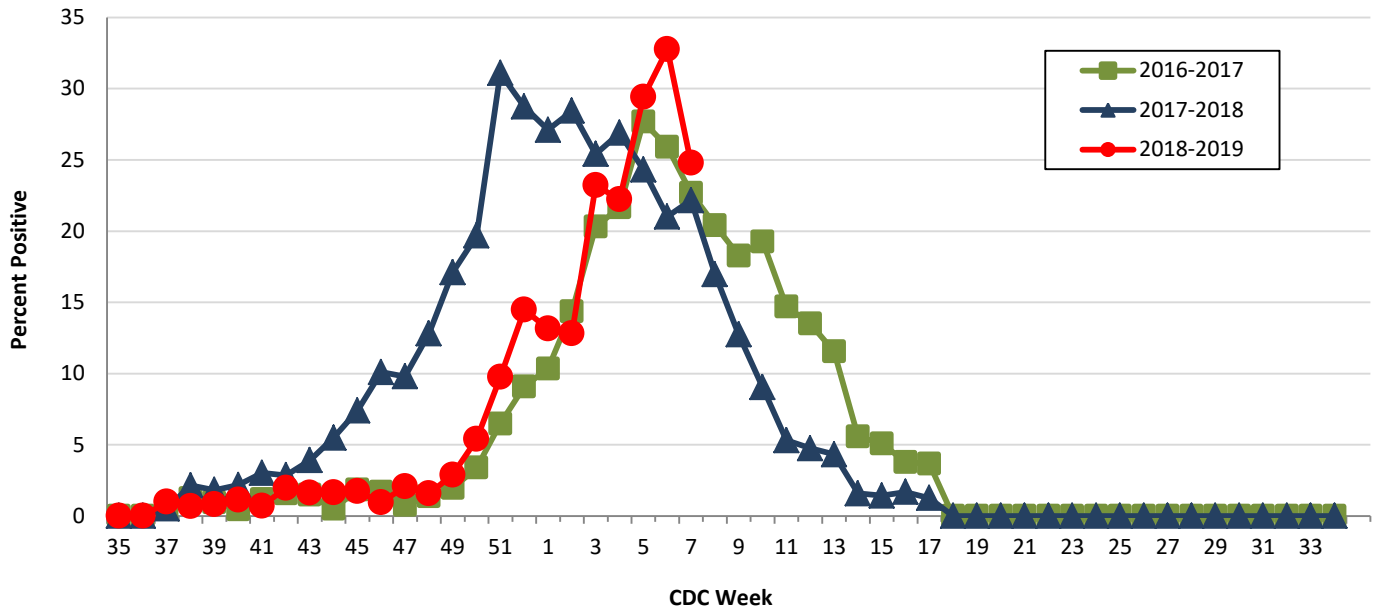


Table 4. Influenza Typing and Subtyping from Cumulative Dallas County, Texas, and U.S. Laboratory Surveillance Data: 2018—2019 Season

	Dallas ¹ (n=252)	Texas ² (n=1,508)	U.S. ³ (n=40,074)
Influenza A	175 (99.4%)	768 (95.6%)	17,636 (97.6%)
H1N1 2009 subtype	47 (26.9%)	276 (36.0%)	12,720 (75.4%)
H3N2 subtype	128 (73.1%)	490 (64.0%)	4,142 (24.6%)
Not subtyped	1	2	774
Influenza B	1 (0.6%)	35 (4.4%)	440 (2.4%)
Yamagata strain	1 (100.0%)	17 (*60.7%)	178 (*55.3%)

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 <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: 2014–2019 Seasons

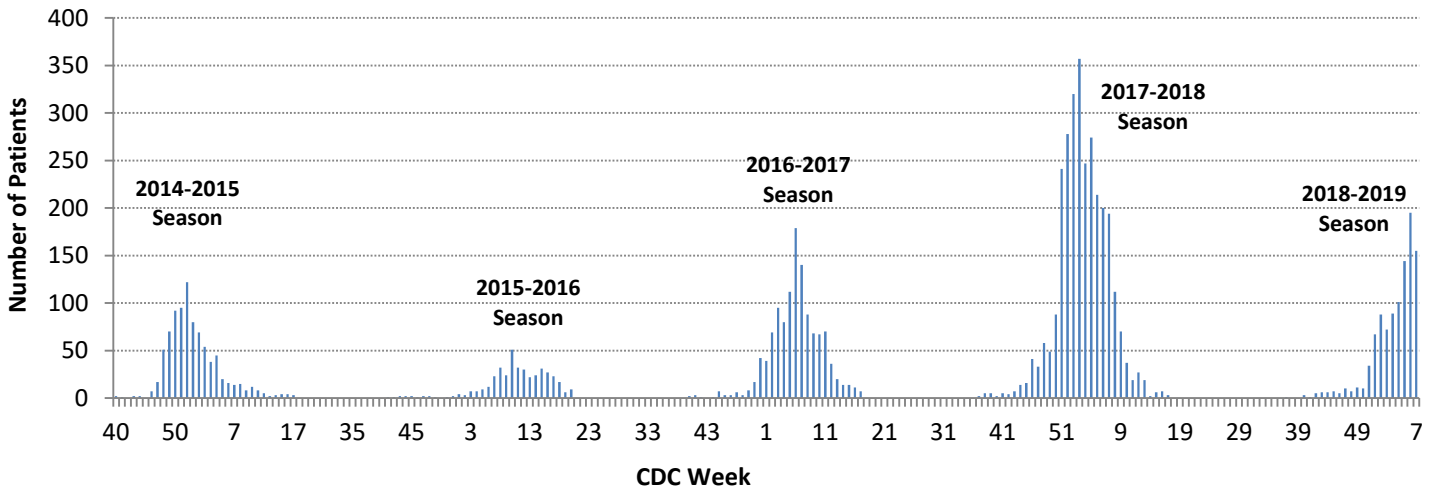


Figure 4. Intensive Care Unit Hospitalizations for influenza by Week of Admission, Dallas County: 2014–2019 Seasons

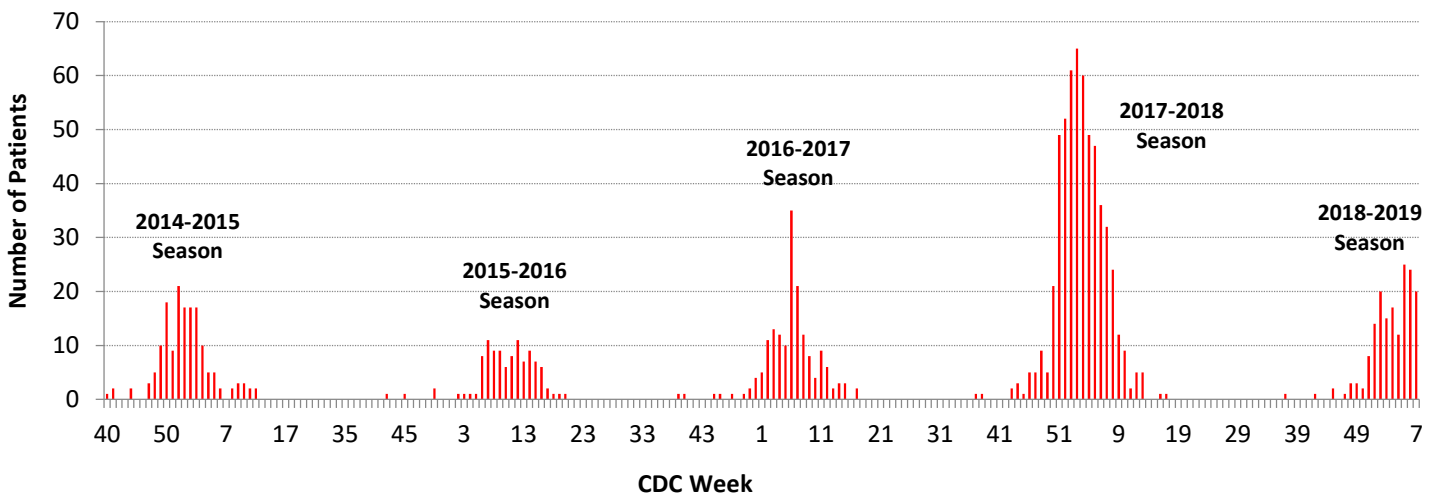
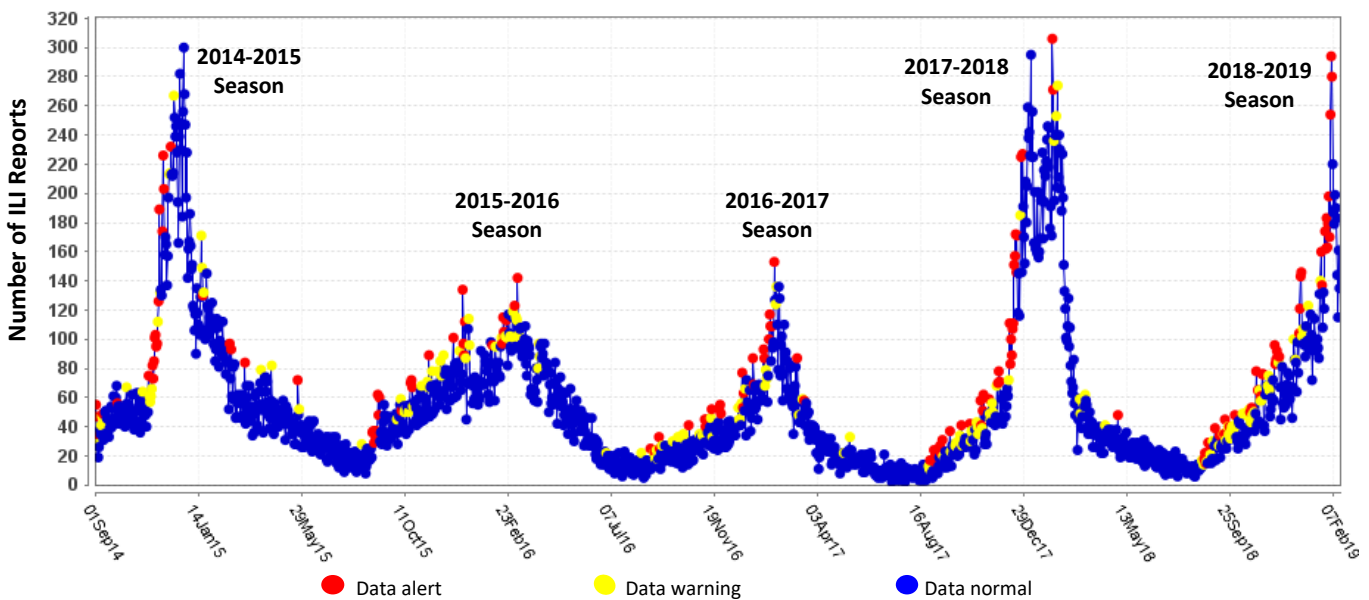


Figure 5. Syndromic Surveillance of Emergency Department Visits for Influenza-like Illness (ILI), Dallas County: September 1, 2014 – February 16, 2019



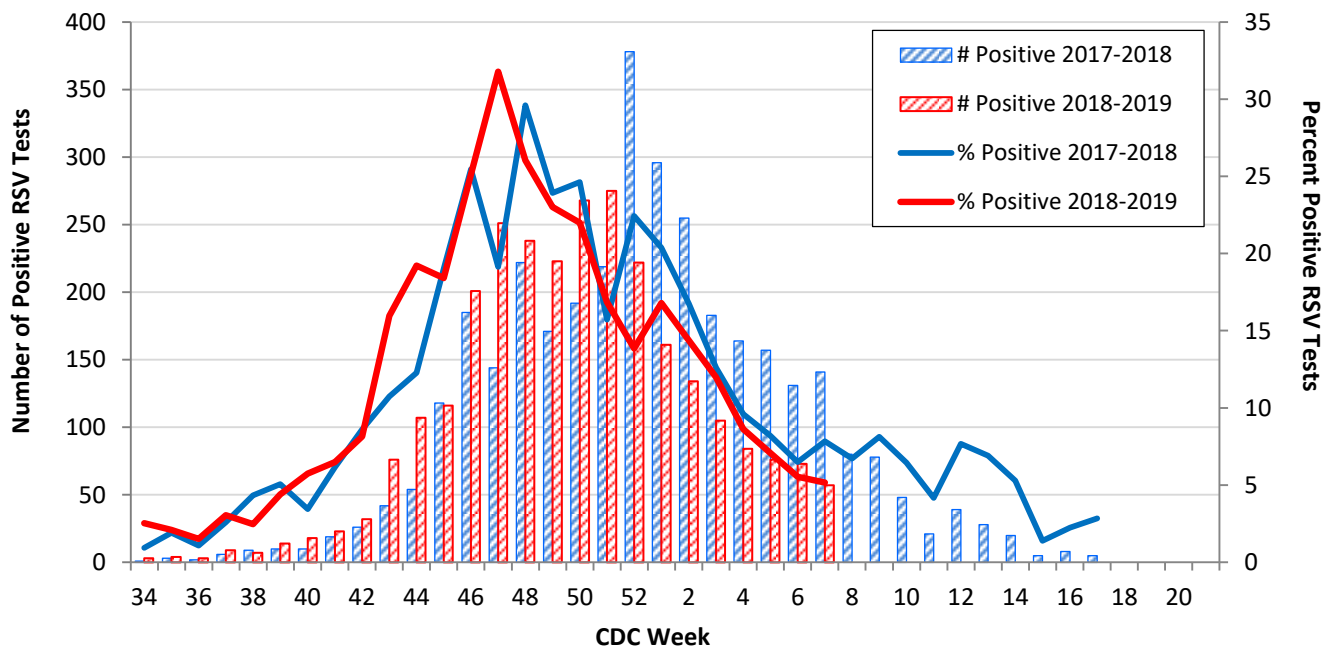
Data source: 18 emergency departments in Dallas County hospitals participating in the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) voluntarily reporting the numbers of persons presenting with self-reported chief complaints of ILI.

Table 5. Non-Influenza Respiratory Virus Testing by North Texas Laboratories Reported to NREVSS, Week 7

Virus	Number of Laboratories Reporting	Tests Performed	Total Positive Tests	Percentage of Tests Positive
Adenovirus (respiratory)	4	389	16	4.1
HMPV	4	377	28	7.4
Parainfluenza virus	4	389	6	1.5
Rhinovirus/Enterovirus	4	377	91	24.1
RSV	4	1,104	57	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 25, 2017 – February 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 25, 2018 – February 16, 2019

Week Ending	01/05	01/12	01/19	01/26	02/02	02/09	02/16	8/25/18–Present
CDC Week	1	2	3	4	5	6*	7*	
RSV tests performed weekly	959	933	877	973	1,076	1,318	1,104	19,299
Total positive RSV tests	161	134	105	84	76	73	57	2,780
Percent positive RSV tests	16.8	14.4	12.0	8.6	7.1	5.5	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)

Figure 7. Percentage of Student Absences by Week, Dallas County: 2017-2018 and 2018-2019

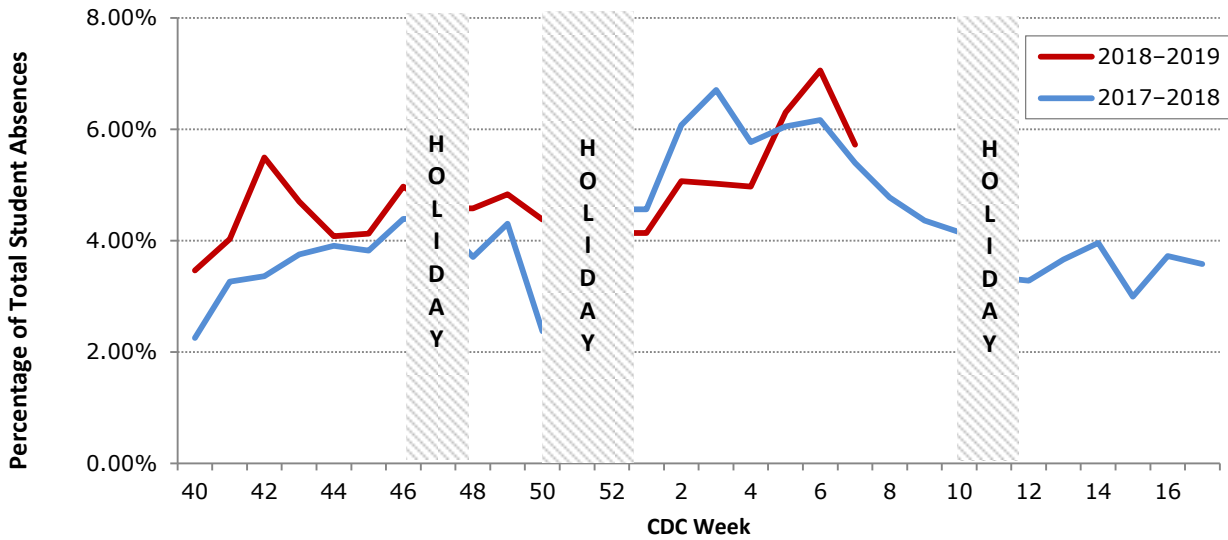
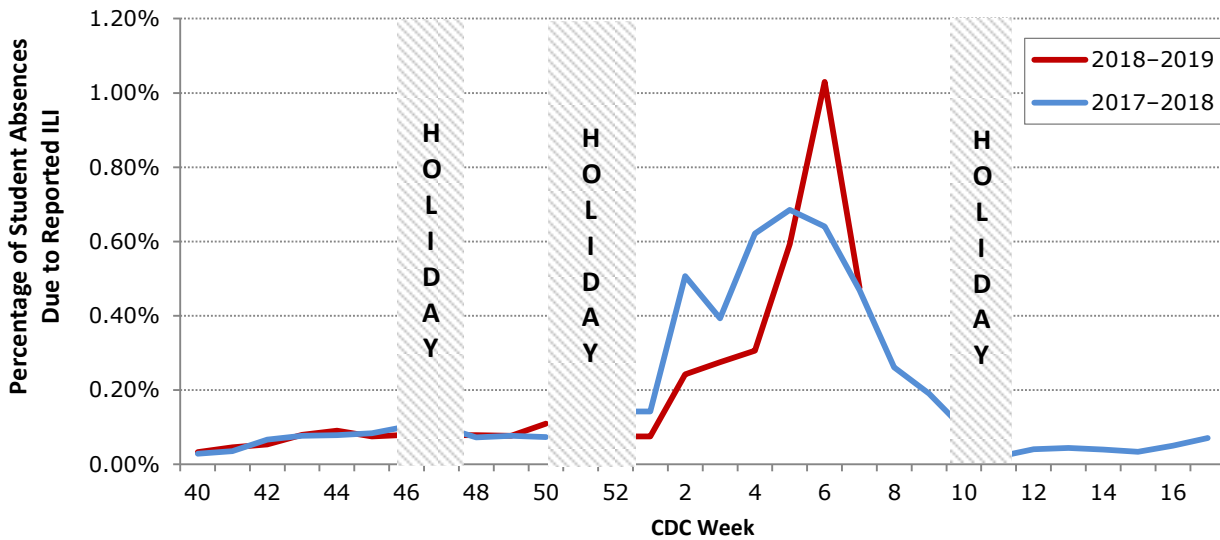


Figure 8. Percentage of Student Absences Due to ILI by Week, Dallas County: 2017-2018 and 2018-2019



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