



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

Week 8 ending February 23, 2019

Epidemiologic Summary

- Influenza activity remains high in Dallas County, with 20.6% of tests returning positive during week 8.
- Daily number of emergency department visits for influenza-like illness in Dallas County is decreasing, and 129 Influenza-associated hospitalizations were reported during week 8.
- No influenza-associated deaths of an adult were reported in in week 8. One influenza-associated pediatric death has been reported during the 2018-2019 season in Dallas County.
- RSV activity decreased with 5.1% of tests from area surveillance sites testing positive.

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

Week Ending CDC Week	01/19 3	01/26 4	02/02 5	02/09 6	02/16 7*	02/23 8*	9/09/18 – Present
Total Influenza PCR Tests	1,143	1,287	1,338	1,617	1,452	1,368	25,020
Number of positive PCR tests	123	188	248	330	253	192	1,847
Percent of positive PCR tests	10.8	14.6	17.9	20.4	17.4	14.0	
Total Rapid Influenza Diagnostic Tests	1,946	2,763	3,532	4,477	3,309	2,791	36,515
Number of positive RIDTs	597	714	1,203	1,671	930	667	7,291
Percent of positive RIDTs	30.7	25.8	34.1	37.3	28.1	23.9	
Total Influenza Tests Performed	3,107	4,057	4,934	6,106	4,773	4,172	61,628
Total positive influenza tests ¹	721	902	1,451	2,001	1,183	859	9,139
Percent positive influenza tests	23.2	22.2	29.4	32.8	24.8	20.6	
Positive influenza A tests ²	603	810	1,401	1,949	1,153	826	8,478
Positive influenza B tests	117	92	50	52	30	33	660
Non-differentiated influenza tests ³	1	0	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 CDC Week	01/19 3	01/26 4	02/02 5	02/09 6	02/16 7*	02/23 8*	03/02 9*	9/09/18 – Present
Influenza hospitalizations ⁴	89	101	144	195	155	129	N/A	1,146
Influenza ICU admissions ⁴	17	12	25	24	20	27	N/A	195
Confirmed pediatric deaths ⁵	0	0	1	0	0	0	0	1
Confirmed adult deaths ⁶	1	1	0	1	2	0	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

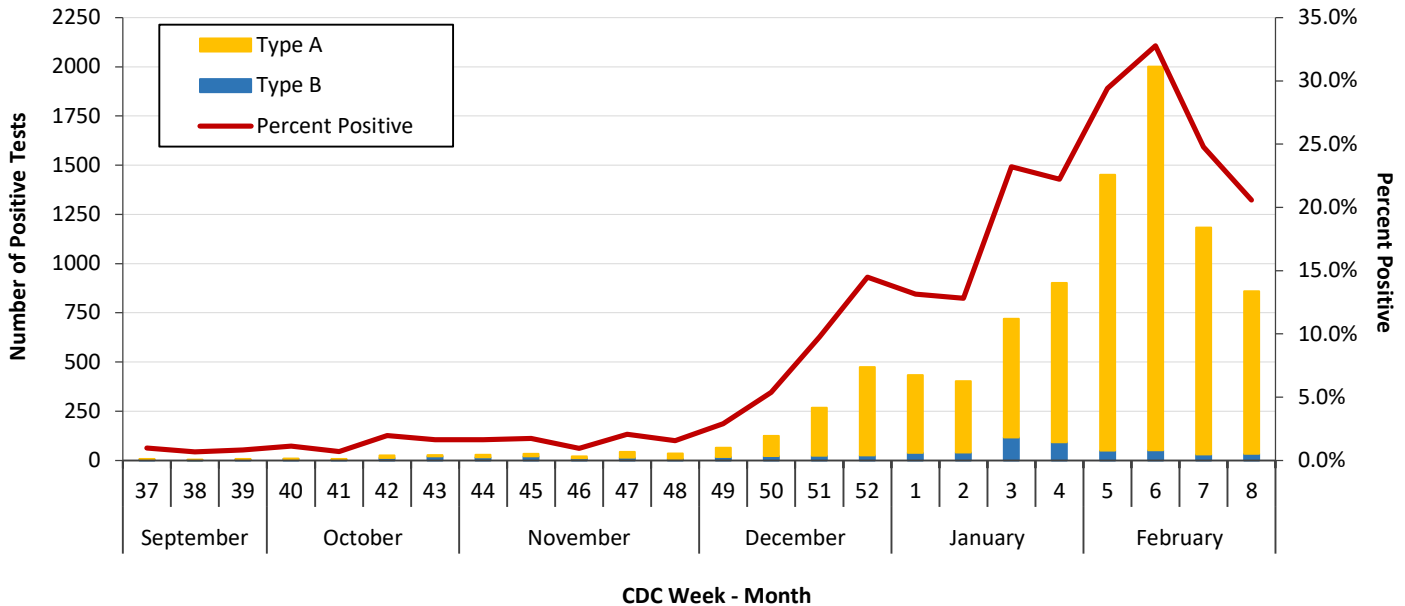


Figure 2. Influenza Positive Tests Reported to DCHHS by Hospital Laboratories: 2016—2019 Seasons

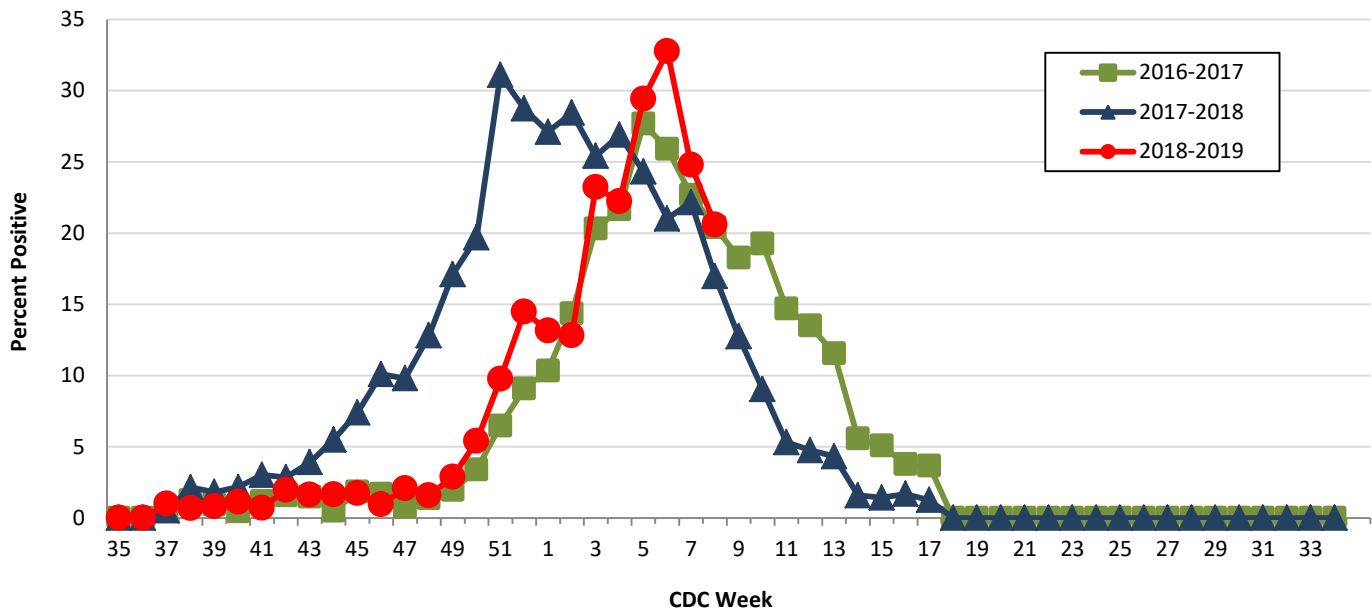


Table 4. Influenza Typing and Subtyping from Cumulative Dallas County, Texas, and U.S. Laboratory Surveillance Data: 2018—2019 Season

	Dallas ¹ (n=287)	Texas ² (n=1,689)	U.S. ³ (n=44,359)
Influenza A	199 (99.5%)	898 (95.4%)	20,371 (97.6%)
H1N1 2009 subtype	53 (26.8%)	308 (34.4%)	14,101 (72.8%)
H3N2 subtype	145 (73.2%)	588 (65.6%)	5,272 (27.2%)
Not subtyped	1	2	998
Influenza B	1 (0.5%)	43 (4.6%)	495 (2.4%)
Yamagata strain	1 (100.0%)	18 (*52.9%)	192 (*54.5%)

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

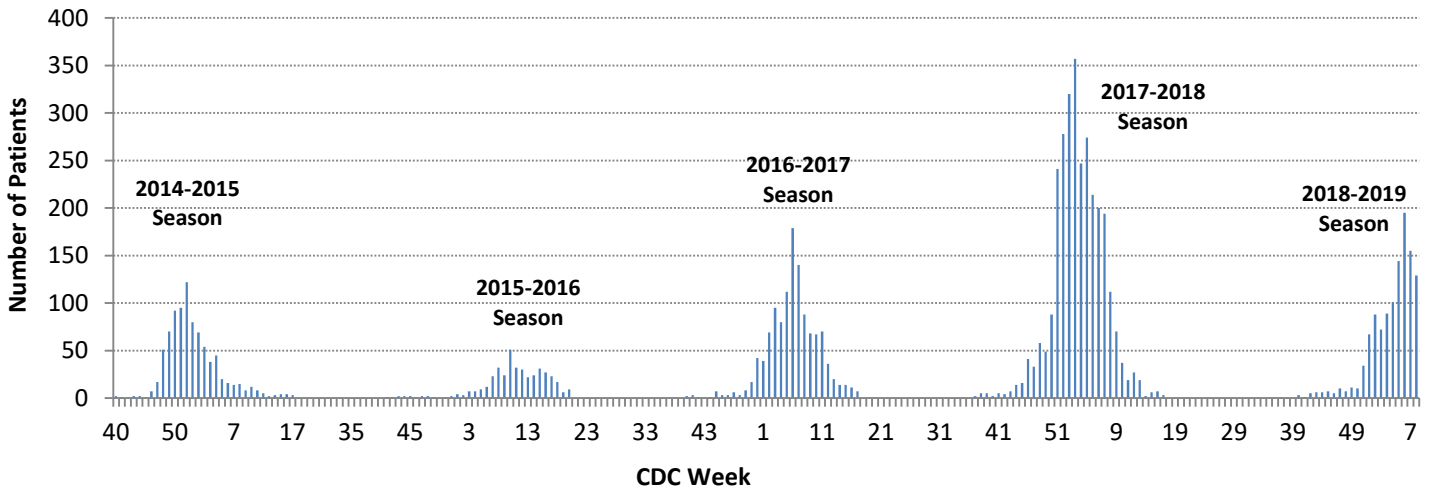


Figure 4. Intensive Care Unit Hospitalizations for influenza by Week of Admission, Dallas County: 2014–2019 Seasons

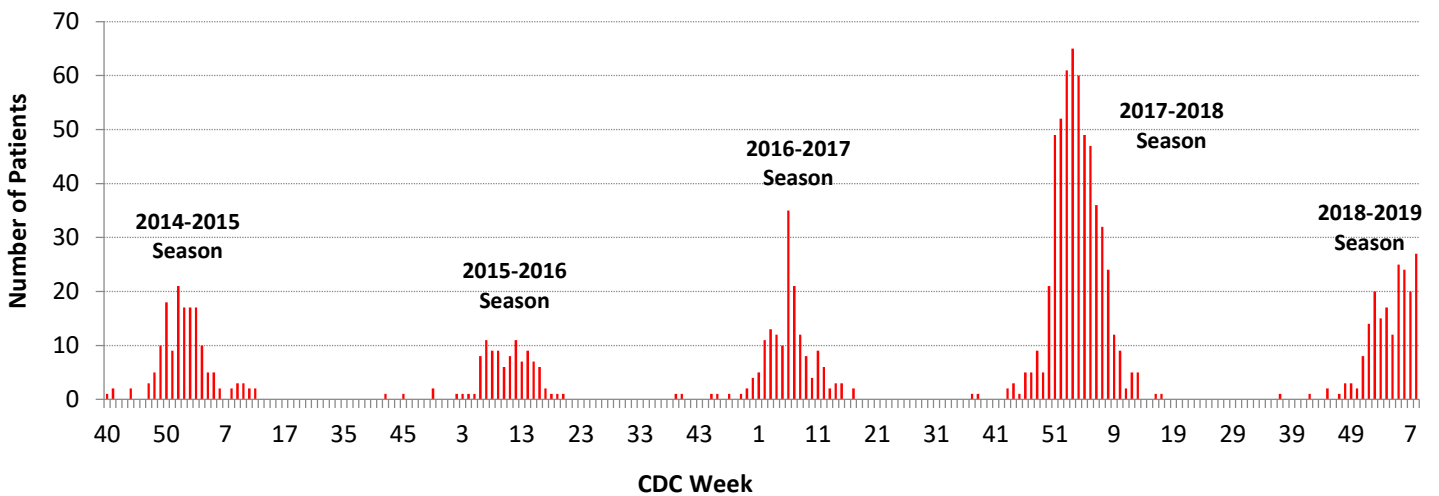
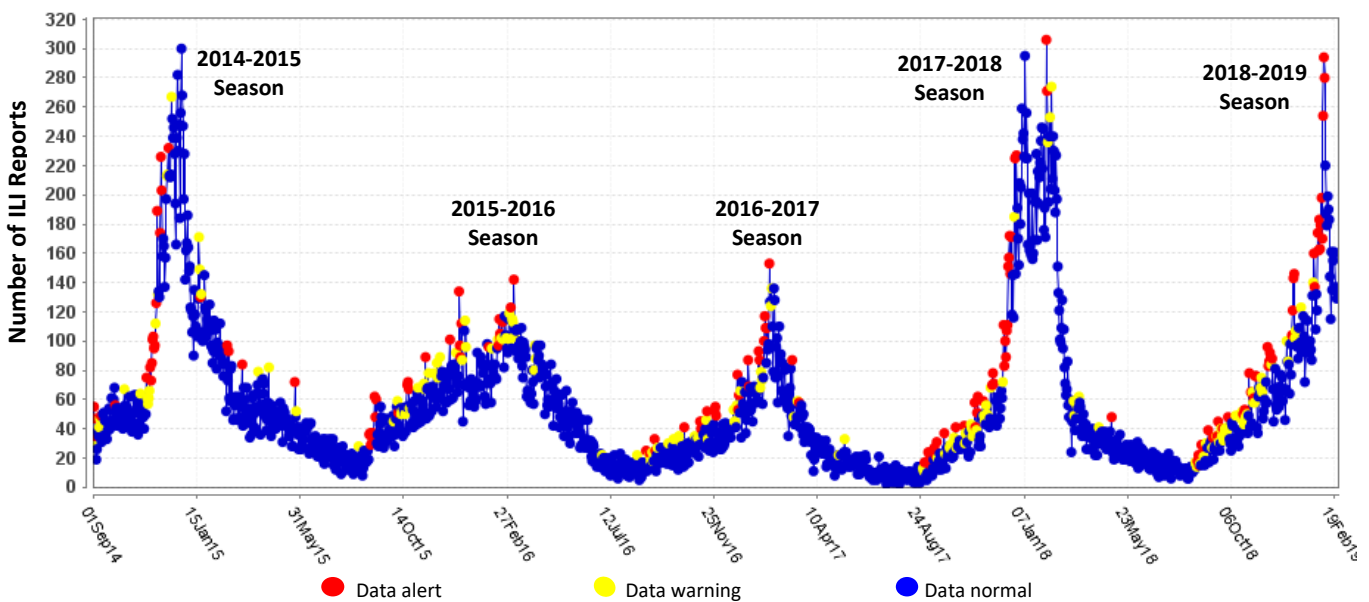


Figure 5. Syndromic Surveillance of Emergency Department Visits for Influenza-like Illness (ILI), Dallas County: September 1, 2014 – February 23, 2019



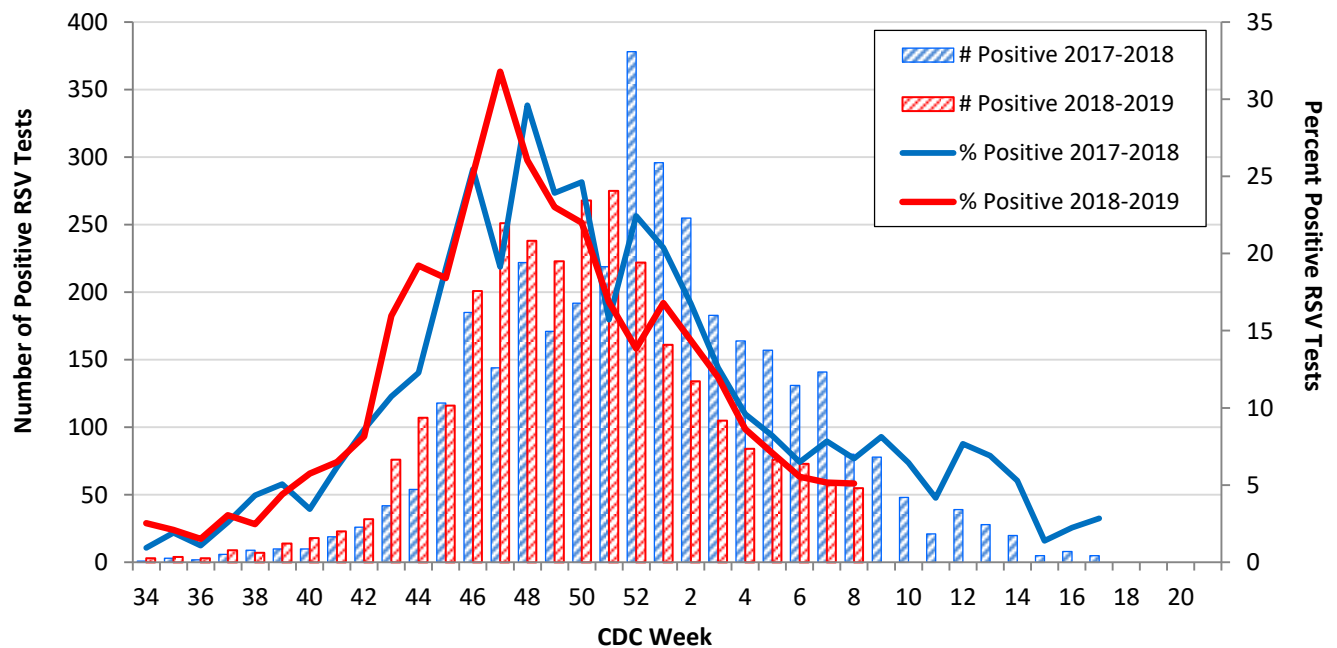
Data source: 18 emergency departments in Dallas County hospitals participating in the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) voluntarily reporting the numbers of persons presenting with self-reported chief complaints of ILI.

Table 5. Non-Influenza Respiratory Virus Testing by North Texas Laboratories Reported to NREVSS, Week 8

Virus	Number of Laboratories Reporting	Tests Performed	Total Positive Tests	Percentage of Tests Positive
Adenovirus (respiratory)	4	333	15	4.5
HMPV	4	385	23	6.0
Parainfluenza virus	4	398	15	3.8
Rhinovirus/Enterovirus	4	385	72	18.7
RSV	4	1,080	55	5.1

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 23, 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 23, 2019

Week Ending	01/12	01/19	01/26	02/02	02/09	02/16	02/23	8/25/18–Present
CDC Week	2	3	4	5	6	7*	8*	
RSV tests performed weekly	933	877	973	1,076	1,318	1,104	1,080	20,379
Total positive RSV tests	134	105	84	76	73	57	55	2,835
Percent positive RSV tests	14.4	12.0	8.6	7.1	5.5	5.2	5.1	

*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

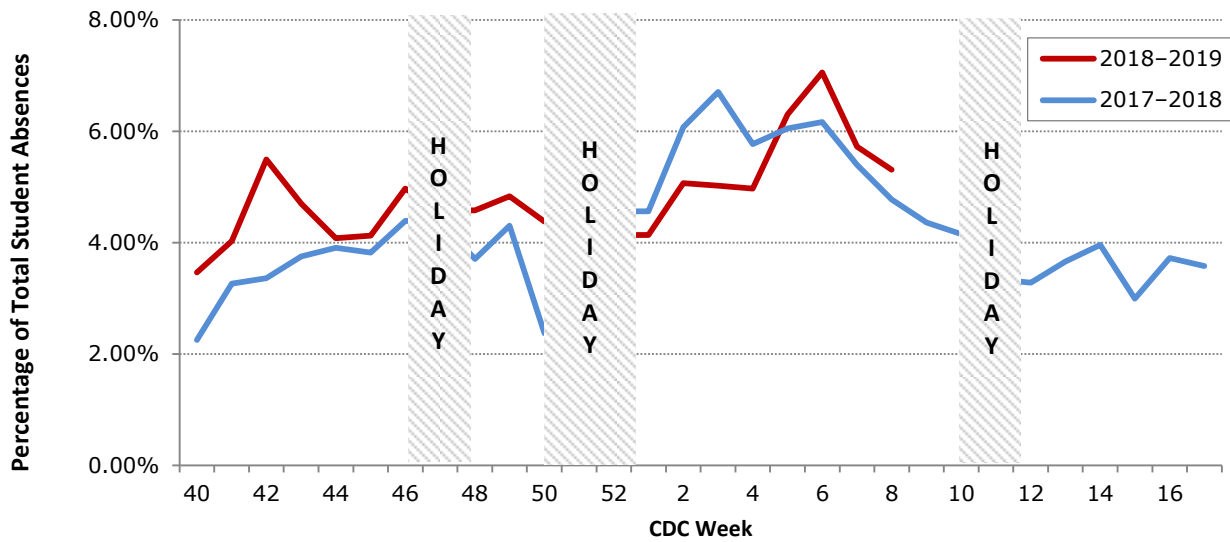
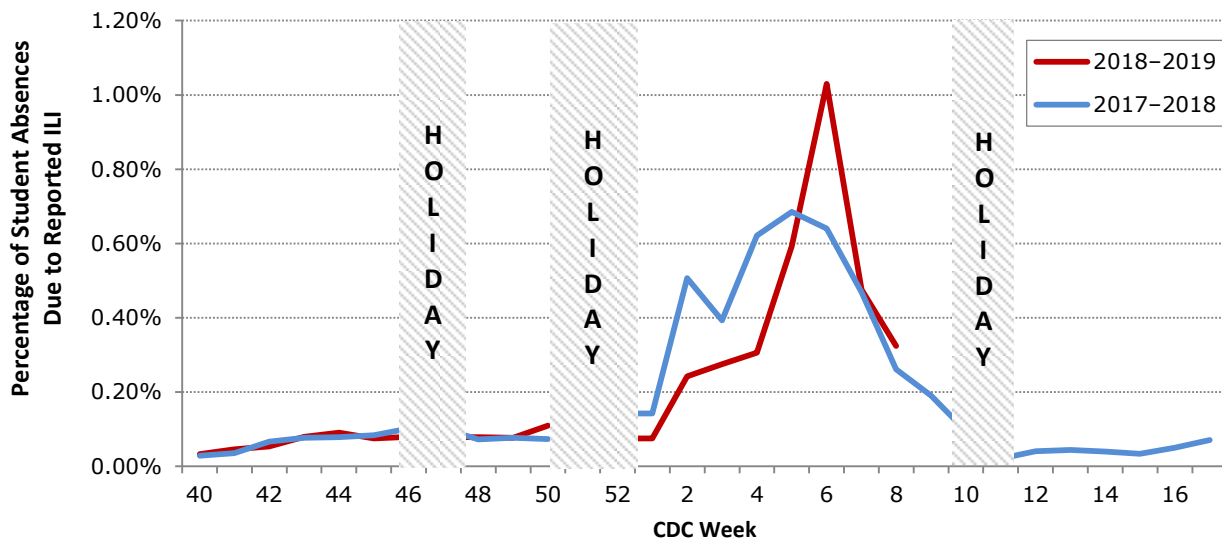


Figure 8. Percentage of Student Absences Due to ILI by Week, Dallas County: 2017-2018 and 2018-2019



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*).

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