



Dallas County Health and Human Services 2016–2017 Influenza Surveillance Report

Week 5 ending February 4, 2017

Epidemiologic Summary

- Influenza activity is increasing in Dallas County with 27.8% of tests returning positive during week 5. Nationally, 20.9% of specimens reported to CDC were positive for influenza.
- Daily numbers of emergency department visits for influenza-like illness in Dallas County were above baseline levels and 112 influenza-associated hospitalizations were reported during week 5.
- One influenza-associated death was reported in week 4. No influenza-associated pediatric deaths have been reported during the 2016-2017 season in Dallas County.
- RSV activity is decreasing with 14.3% of tests from area surveillance sites testing positive.

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

Week Ending	12/31	1/7	1/14	1/21	1/28	2/4	9/11/16 – Present
CDC Week	52	1	2	3	4*	5*	
Total Influenza PCR Tests	841	853	952	933	863	1,009	11,150
Number of positive PCR tests	80	77	152	179	162	251	965
Percent of positive PCR tests	9.5	9.0	16.0	19.2	18.8	24.9	
Total Rapid Influenza Diagnostic Tests	747	706	847	990	1,278	2,092	12,086
Number of positive RIDTs	68	90	110	222	313	626	1,619
Percent of positive RIDTs	9.1	12.8	13.0	22.4	24.5	29.9	
Total Influenza Tests Performed	1,629	1,623	1,824	1,974	2,192	3,164	25,142
Total positive influenza tests ¹	148	168	262	401	475	878	2,592
Percent positive influenza tests	9.1	10.4	14.7	20.3	21.7	27.8	
Positive influenza A tests ²	134	151	247	384	443	813	2,360
Positive influenza B tests	14	17	15	17	32	65	232
Non-differentiated influenza tests ³	0	0	0	0	2	0	2

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	12/31	1/7	1/14	1/21	1/28	2/4	9/11/16– Present
CDC Week	52	1	2	3	4*	5*	
Influenza hospitalizations ⁴	42	39	69	95	80	112	491
Confirmed pediatric deaths ⁵	0	0	0	0	0	0	0
Confirmed adult deaths ⁶	0	0	2	1	1	0	4
Possible influenza-associated deaths ⁷	0	0	1	0	0	0	1

⁴ Reflects all influenza-associated hospitalizations reported from 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, compatible symptoms, and clear progression from illness to death, or 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

Data source(s): 15 Hospitals in Dallas County

Table 3. Confirmed Influenza-associated Pediatric and Adult Deaths, Dallas County: 2011–2017 Seasons

	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017
Pediatric	1	3	3	0	1	0
Adult	0	6	55	19	14	4

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: 2016 - 2017 Seasons

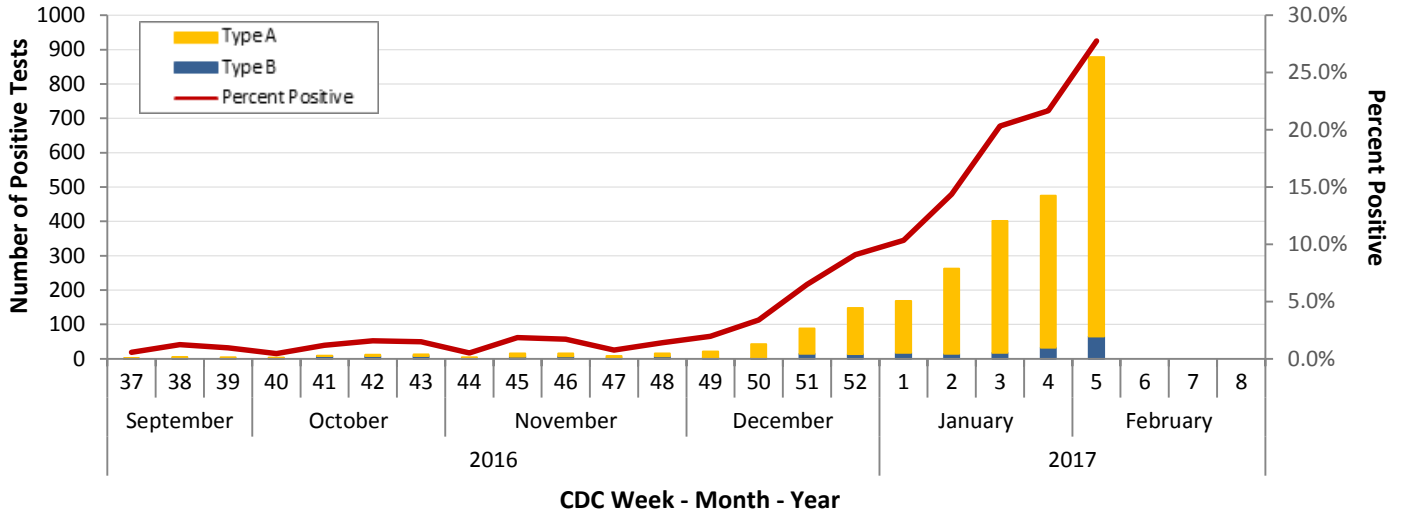


Figure 2. Influenza Positive Tests Reported to DCHHS by Hospital Laboratories: 2014–2017 Seasons

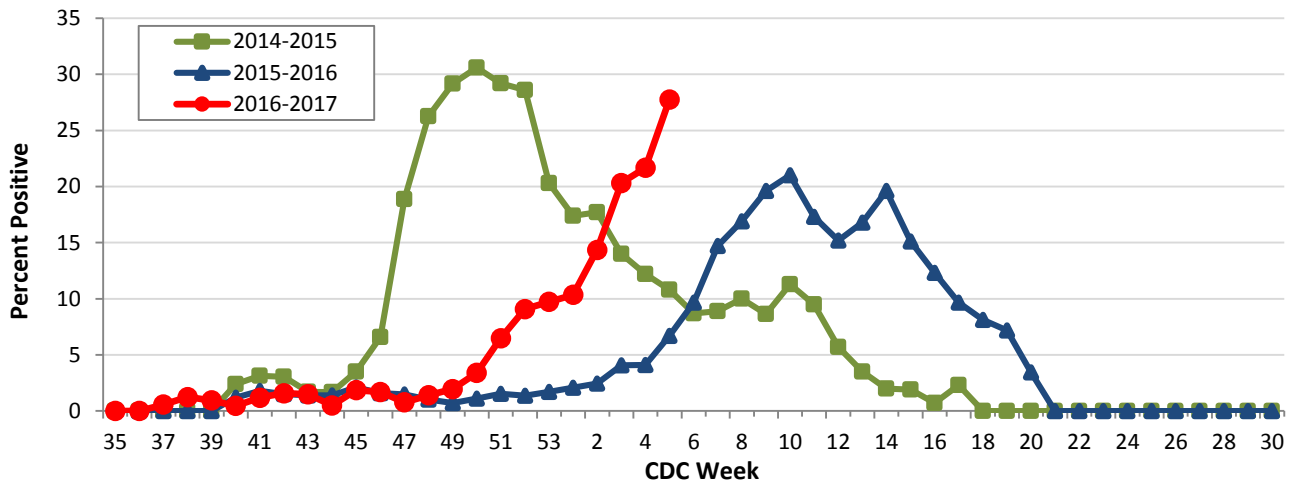
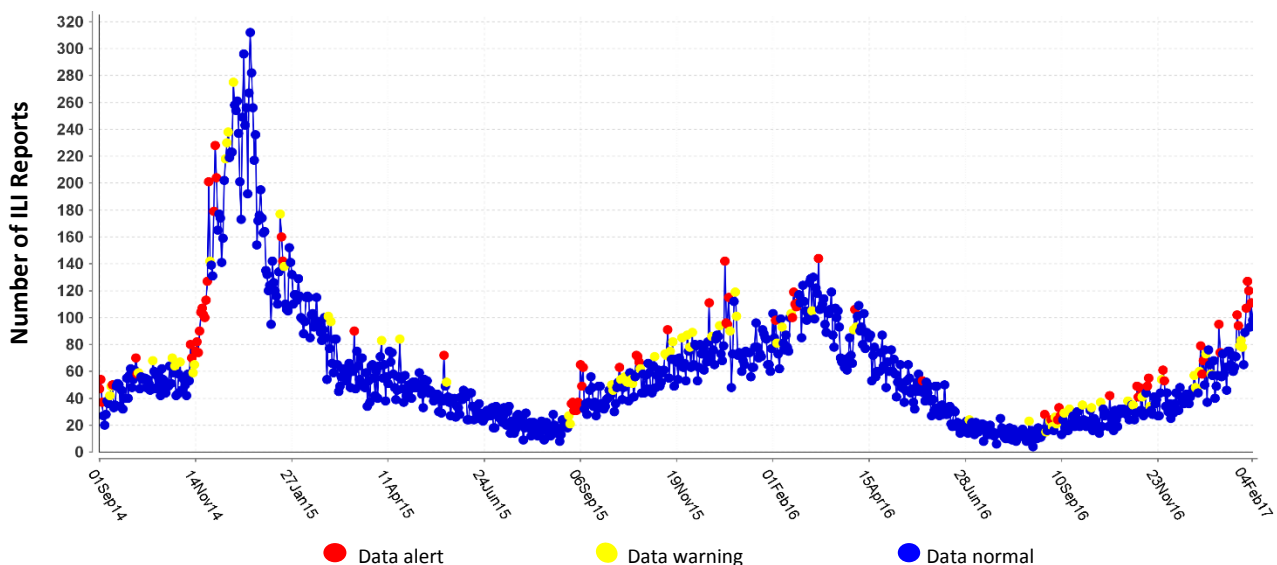


Figure 3. Syndromic Surveillance of Emergency Department Visits for Influenza-like Illness (ILI), Dallas County: September 1, 2014 – February 4, 2017



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 4. Percentage of Student Absences by Week, Dallas County: 2015–2016 and 2016–2017

	Dallas ¹ (n=403)	Texas ² (n=859)	U.S. ³ (n=15,781)
Influenza A	377 (78.0%)	758 (88.2%)	14,606 (92.6%)
H1N1 2009 subtype	54 (14.5%)	125 (16.6%)	362 (2.5%)
H3N2 subtype	318 (85.5%)	627 (83.4%)	13,973 (97.5%)
Not subtyped	5	6	271
Influenza B	26(22.0%)	101 (11.8%)	1,174 (7.4%)

¹ DCHHS LRN laboratory PCR testing of designated Dallas County surveillance site isolates

² DSHS 2015–2016 Texas Influenza Surveillance Information Activity Report available at <https://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/2017/>

³ CDC FluView Weekly Influenza Surveillance Report available at <http://www.cdc.gov/flu/weekly/>

Figure 4. Percentage of Student Absences by Week, Dallas County: 2015–2016 and 2016–2017

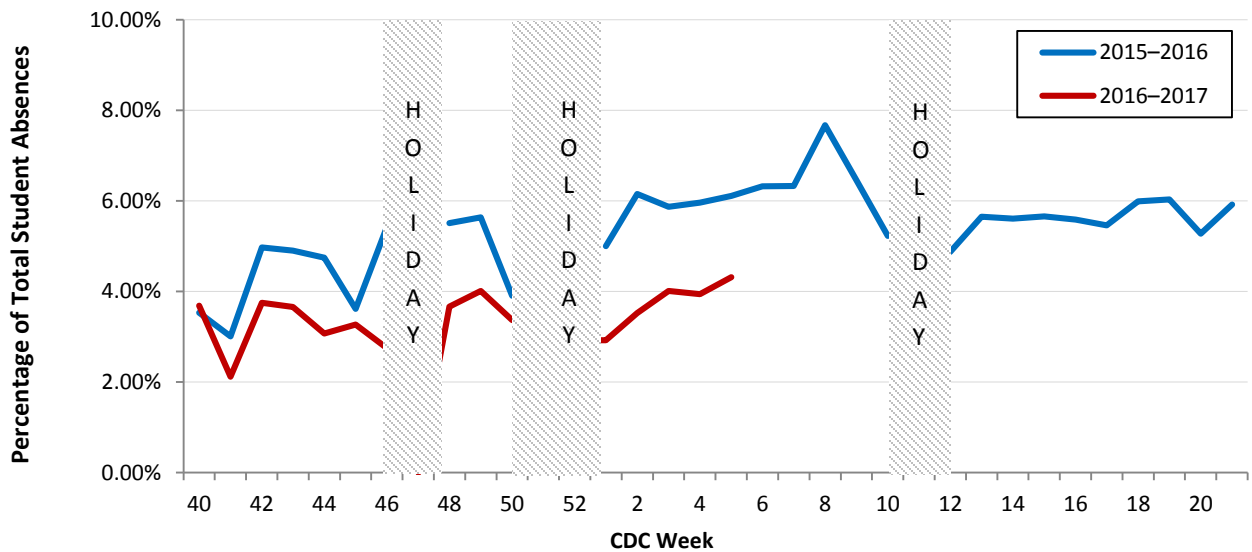
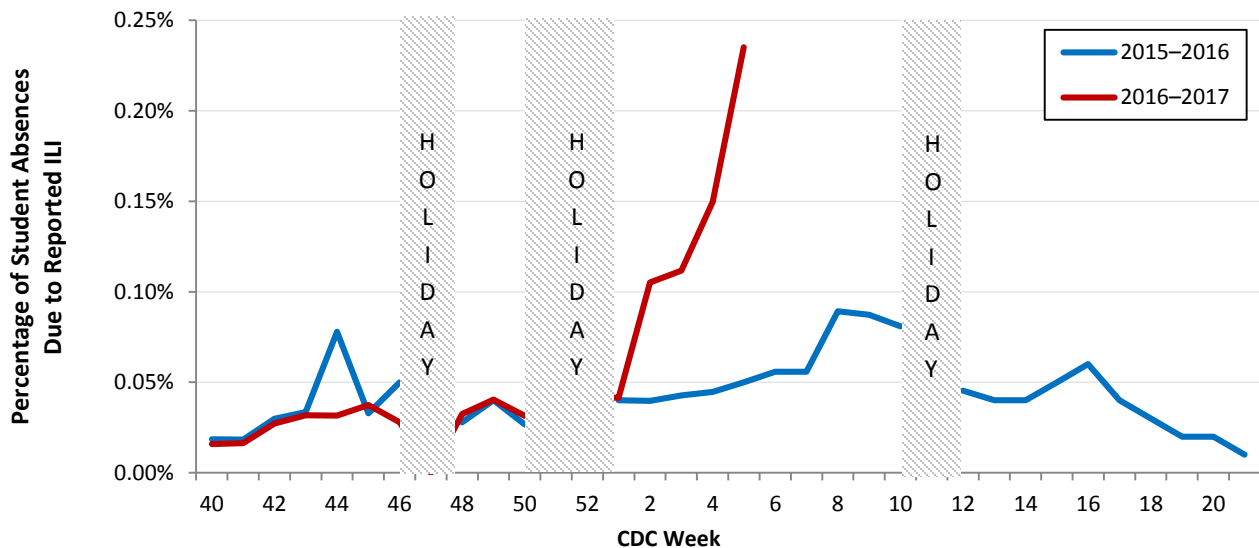


Figure 5. Percentage of Student Absences Due to ILI by Week, Dallas County: 2015–2016 and 2016–2017



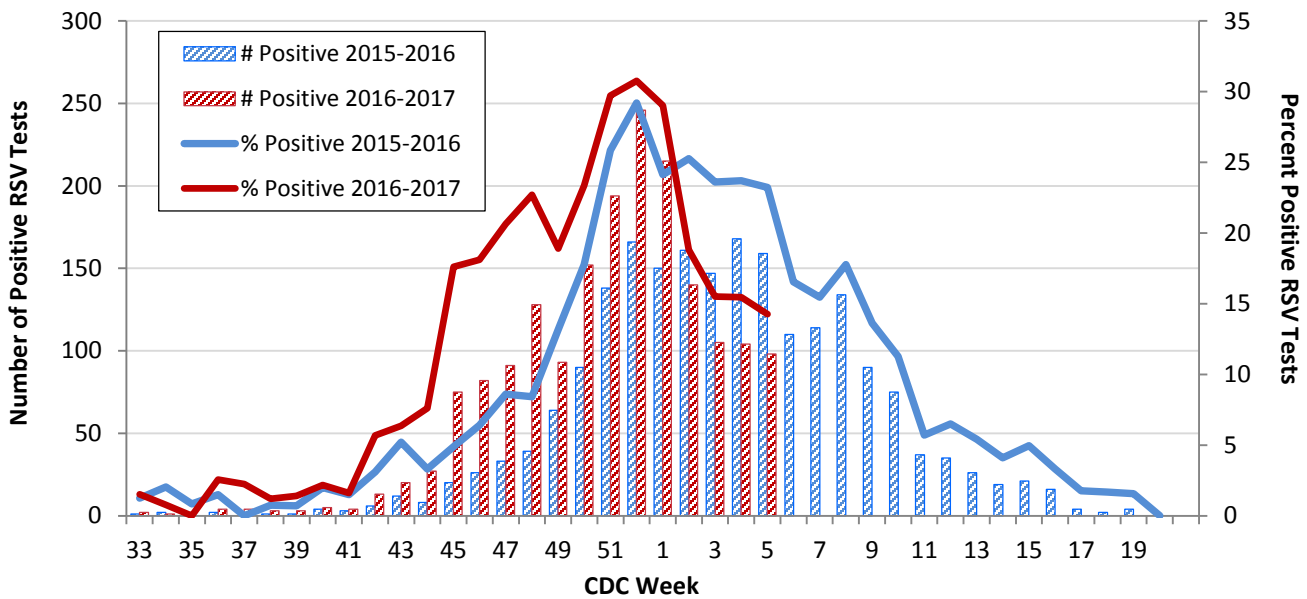
Data source: Voluntary reporting from Independent School Districts representing over 510 elementary, middle, and secondary schools and over 420,000 students in Dallas County

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

Virus	Number of Laboratories Reporting	Tests Performed	Total Positive Tests	Percentage of Tests Positive
Adenovirus (respiratory)	4	286	6	2.1%
HMPV	4	400	12	3.0%
Parainfluenza virus	4	416	10	2.4%
Rhinovirus/enterovirus	4	400	60	15.0%
RSV	4	687	98	14.3%

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 22, 2015 – February 4, 2017



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 20, 2016 – February 4, 2017

Week Ending	12/24	12/31	1/7	1/14	1/21	1/28	2/4	8/20/16–Present
CDC Week	51	52	1	2	3	4*	5*	
RSV tests performed weekly	653	800	741	745	677	673	687	8,902
Total positive RSV tests	194	246	215	140	105	104	98	1,783
Percent positive RSV tests	29.7	30.8	29.0	18.8	15.5	15.5	14.3	

*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)

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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