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

Week 1 ending January 7, 2017

Epidemiologic Summary

- Influenza activity is increasing in Dallas County with 10.4% of tests returning positive during week 1. Nationally, 13.9% of specimens reported to CDC were positive for influenza.
- Daily numbers of emergency department visits for influenza-like illness in Dallas County were at baseline levels and 37 influenza-associated hospitalizations were reported during week 1.
- RSV activity remains high with 29.0% of tests from area surveillance sites testing positive.

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

Week Ending	12/3	12/10	12/17	12/24	12/31	1/7	9/11/16 –
CDC Week	48	49	50	51	52*	1*	Present
Total Influenza PCR Tests	618	537	667	686	808	841	7,348
Number of positive PCR tests	3	6	11	31	79	76	219
Percent of positive PCR tests	0.5	1.1	1.7	4.5	9.8	8.7	
Total Rapid Influenza Diagnostic Tests	484	483	558	613	646	610	6,682
Number of positive RIDTs	13	14	31	56	61	80	331
Percent of positive RIDTs	2.7	2.9	5.6	9.1	9.4	13.1	
Total Influenza Tests Performed	1,151	1,075	1,265	1,357	1,498	1,515	15,749
Total positive influenza tests ¹	16	21	43	88	140	157	557
Percent positive influenza tests	1.4	2.0	3.4	6.5	9.4	10.4	
Positive influenza A tests ²	9	18	41	73	127	140	455
Positive influenza B tests	7	3	2	15	13	17	102
Non-differentiated influenza tests ³	0	0	0	0	0	0	0

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 CDC Week	12/3 48	12/10 49	12/17 50	12/24 51*	12/31 52*	1/7 1*	9/11/16– Present
Influenza hospitalizations ⁴	6	3	8	17	42	37	133
Confirmed pediatric deaths ⁵	0	0	0	0	0	0	0
Confirmed adult deaths ⁶	0	0	0	0	0	0	0
Possible influenza-associated deaths ⁷	0	0	0	0	0	0 (1 in week 2)	1

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

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	0

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

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

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

^{*}Indicates preliminary results which are subject to change with late-arriving data from surveillance sites designated for DCHHS' seasonal influenza program

Percent Positive

Figure 1. Influenza Positive Tests Reported to DCHHS by Hospital Laboratories: 2016 - 2017 Seasons

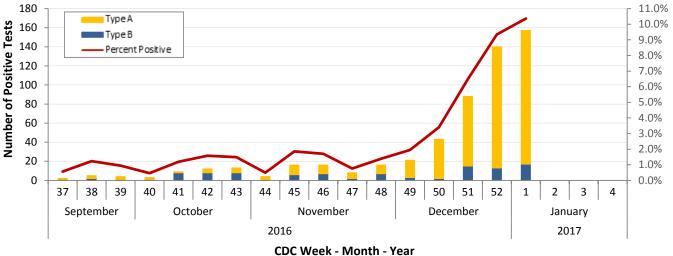


Figure 2. Influenza Positive Tests Reported to DCHHS by Hospital Laboratories: 2014–2016 Seasons

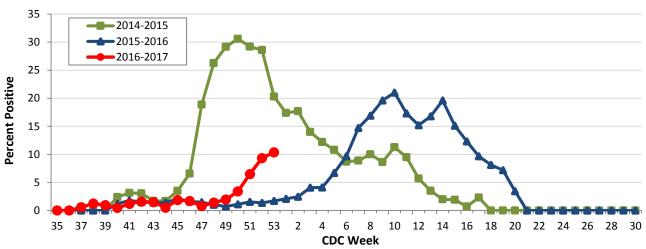
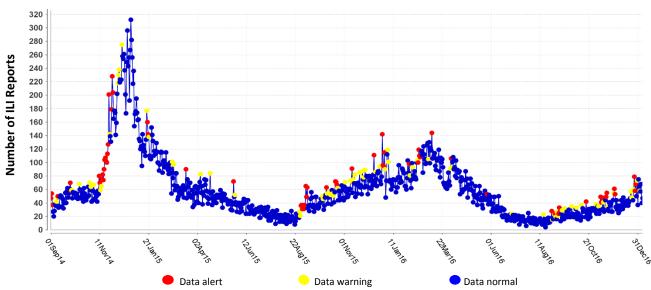


Figure 3. Syndromic Surveillance of Emergency Department Visits for Influenza-like Illness (ILI), Dallas County: September 1, 2014 – January 7, 2017



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.

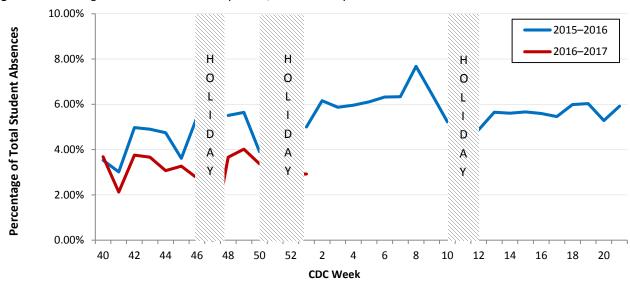
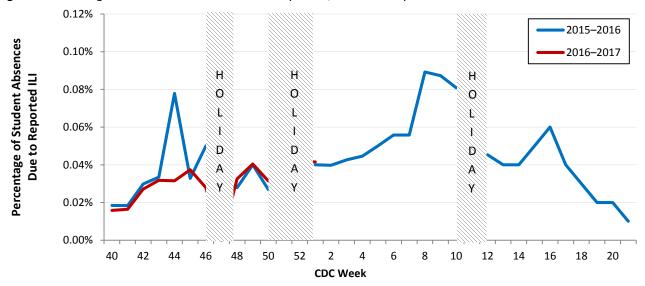


Figure 4. Percentage of Student Absences by Week, Dallas County: 2015-2016 and 2016-2017

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



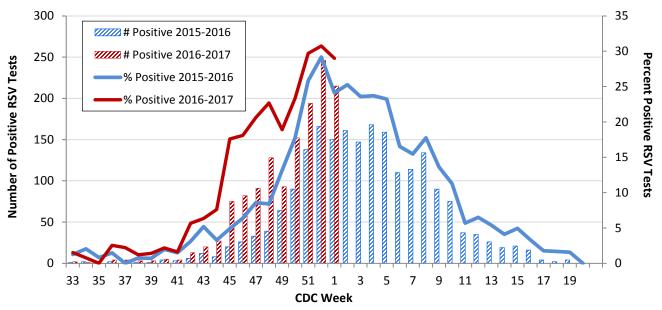
Data source: Voluntary reporting from Independent School Districts representing over 510 elementary, middle, and secondary schools and over 420,000 students in Dallas County

Table 4. Non-Influenza Respiratory Virus Testing by North Texas Laboratories Reported to NREVSS, Week 1

Virus	Number of Laboratories Reporting	Tests Performed	Total Positive Tests	Percentage of Tests Positive	
Adenovirus (respiratory)	4	468	9	1.9%	
HMPV	4	437	8	1.8%	
Parainfluenza virus	4	468	16	3.4%	
Rhinovirus/enterovirus	4	437	60	13.7%	
RSV	4	741	215	29.0%	

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 – January 7, 2017



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

Table 5. Number and Percent Positive RSV Rapid Antigen and PCR Tests by Week, NREVSS Surveillance Data, North Texas: August 20, 2016 – January 7, 2017

Week Ending	11/26	12/3	12/10	12/17	12/24	12/31	1/7	8/20/16-
CDC Week	47	48*	49	50	51	52*	1*	Present
RSV tests performed weekly	441	564	492	651	653	800	741	7,802
Total positive RSV tests	91	128	93	152	194	246	215	1,362
Percent positive RSV tests	20.6	22.7	18.9	23.4	29.7	30.8	29.0	

^{*}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).

Phone: (214) 819-2004 Email: influenza@dallascounty.org