



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

Week 14 ending April 8, 2017

## Epidemiologic Summary

- Influenza activity decreased in Dallas County with 5.4% of tests returning positive during week 14. Nationally, 15.2% 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 14 influenza-associated hospitalizations were reported during week 14.
- No influenza-associated deaths were reported in week 14. One influenza-associated pediatric death has been reported during the 2016-2017 season in Dallas County.
- RSV activity decreased with 2.3% of tests from area surveillance sites testing positive.

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

Week Ending	3/4	3/11	3/18	3/25	4/1	4/8	9/11/16 – Present
CDC Week	9	10	11	12	13*	14*	
<b>Total Influenza PCR Tests</b>	903	840	723	726	666	555	18,948
Number of positive PCR tests	156	138	101	84	57	19	2,363
Percent of positive PCR tests	17.3	16.4	14.0	11.6	8.6	3.4	
<b>Total Rapid Influenza Diagnostic Tests</b>	1,460	1,025	887	638	485	494	23,318
Number of positive RIDTs	293	241	151	104	79	39	3,988
Percent of positive RIDTs	20.1	23.5	17.0	16.3	16.3	7.9	
<b>Total Influenza Tests Performed</b>	2,478	1,972	1,714	1,415	1,195	1,103	44,973
Total positive influenza tests <sup>1</sup>	453	380	252	191	138	60	6,379
Percent positive influenza tests	18.3	19.3	14.7	13.5	11.6	5.4	
Positive influenza A tests <sup>2</sup>	339	237	133	77	44	21	5,254
Positive influenza B tests	114	143	119	114	94	39	1,125
Non-differentiated influenza tests <sup>3</sup>	0	0	0	0	0	0	2

<sup>1</sup> Includes positive rapid antigen, PCR, DFA, or culture results

<sup>2</sup> Further subtyping is performed only by select hospital laboratories for specimens referred to DCHHS by institutions for PCR-testing

<sup>3</sup> 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	3/4	3/11	3/18	3/25	4/1	4/8	9/11/16– Present
CDC Week	9	10	11	12	13*	14*	
Influenza hospitalizations <sup>4</sup>	68	67	70	36	20	14	1,173
Confirmed pediatric deaths <sup>5</sup>	0	1	0	0	0	0	1
Confirmed adult deaths <sup>6</sup>	1	0	0	0	0	0	15
Possible influenza-associated deaths <sup>7</sup>	0	0	0	0	0	0	0

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

<sup>5</sup> Confirmed influenza-associated deaths of Dallas County residents <18 years of age

<sup>6</sup> 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

<sup>7</sup> 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

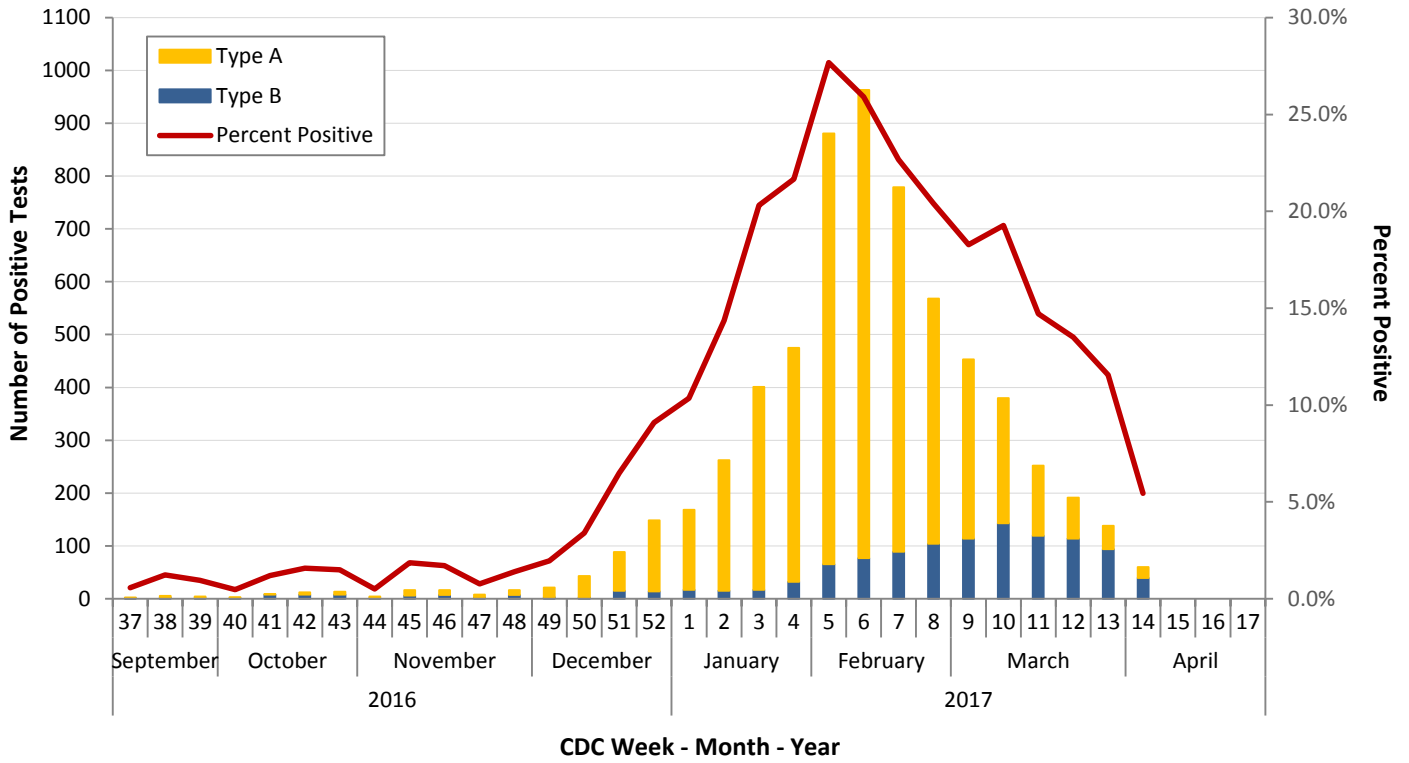
**Table 3.** Confirmed Influenza-associated Pediatric and Adult Deaths, Dallas County: 2011–2017 Seasons

	2011–2012	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017
Pediatric	1	3	3	0	1	1
Adult	0	6	55	19	14	15

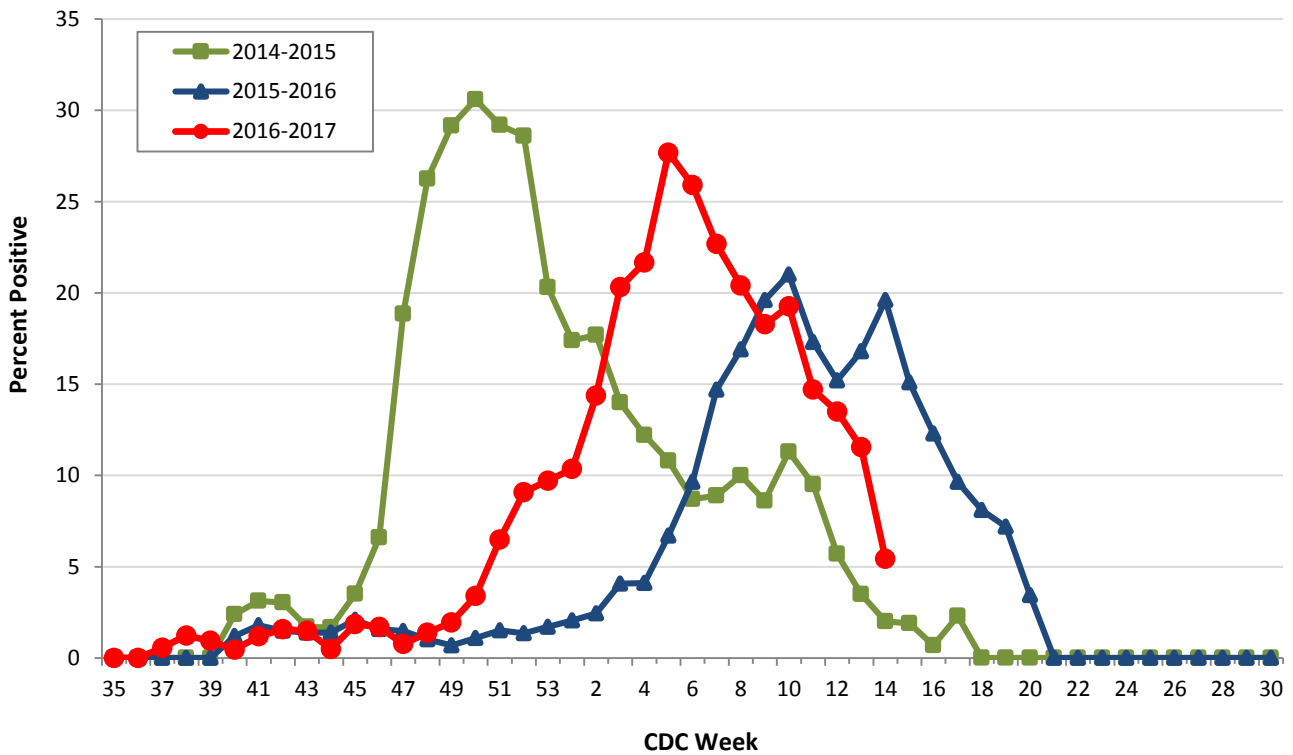
Data source(s): Reports of confirmed influenza-associated deaths, as defined in Table 2.

\*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

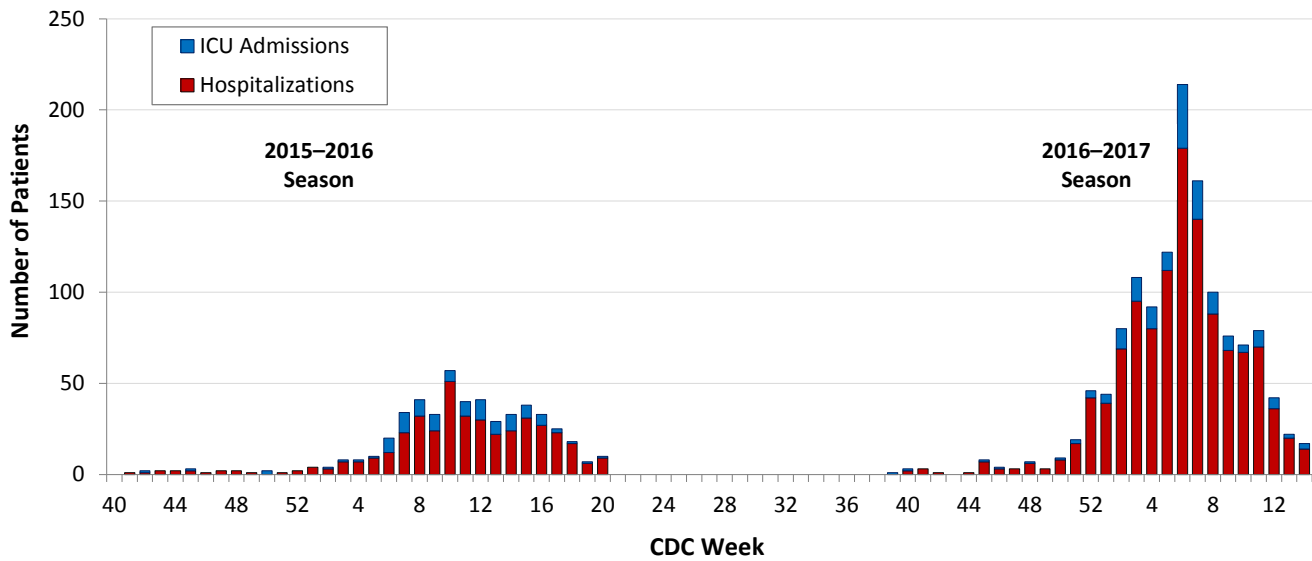


**Figure 2.** Influenza Positive Tests Reported to DCHHS by Hospital Laboratories: 2014–2017 Seasons

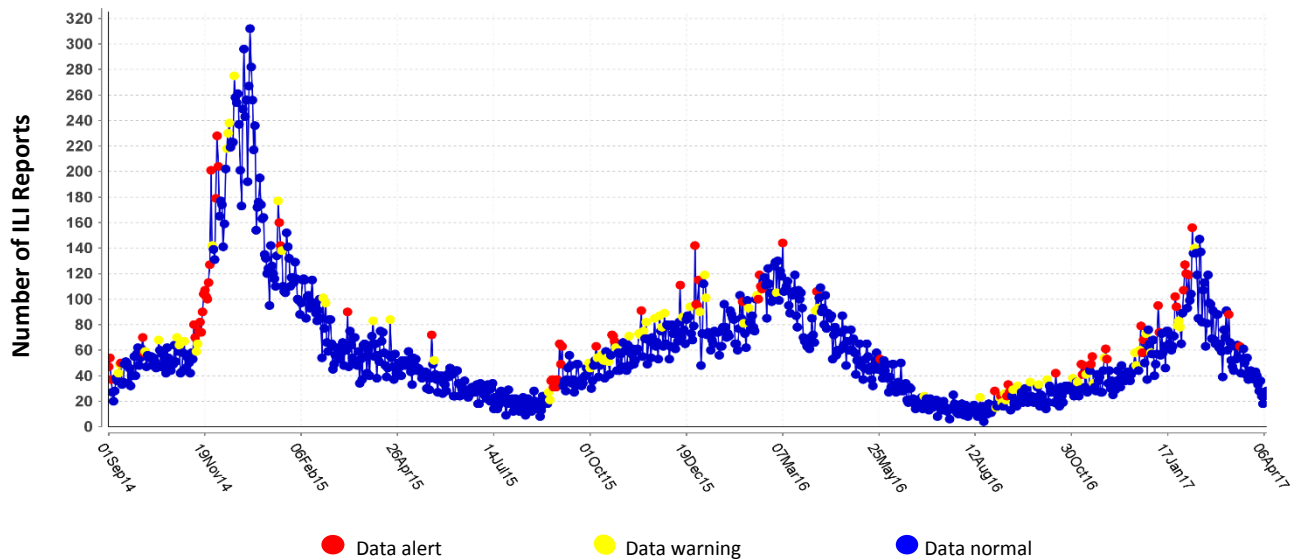


Note: For Figure 2 and all subsequent trend overlays there is no week 53 for the 2015-2016 or 2016-17 influenza seasons, therefore week 53 data point for those seasons is an average of week 52 and week 1.

**Figure 3.** Hospitalized Influenza Patients by Week of Admission, Dallas County: 2015-2017 Seasons



**Figure 4.** Syndromic Surveillance of Emergency Department Visits for Influenza-like Illness (ILI), Dallas County: September 1, 2014 – April 8, 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.** Influenza Typing and Subtyping from Cumulative Dallas County, Texas, and U.S. Laboratory Surveillance Data: 2016-2017 Season

	Dallas <sup>1</sup> (n=687)	Texas <sup>2</sup> (n=1,729)	U.S. <sup>3</sup> (n=36,649)
Influenza A	614 (89.6%)	1,440 (83.3%)	30,211 (82.4%)
H1N1 2009 subtype	75 (12.3%)	206 (14.4%)	826 (2.8%)
H3N2 subtype	534 (87.7%)	1,227 (85.6%)	29,033 (97.2%)
Not subtyped	5	7	352
Influenza B	73 (10.4%)	289 (16.7%)	6,438 (17.6%)

<sup>1</sup> DCHHS LRN laboratory PCR testing of designated Dallas County surveillance site isolates

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

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

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

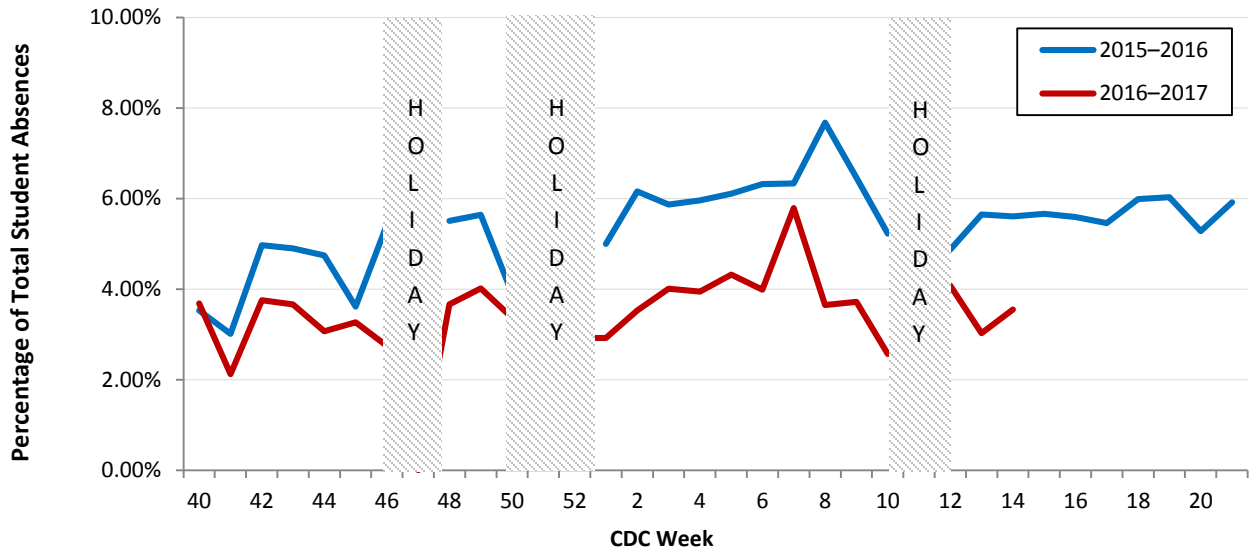
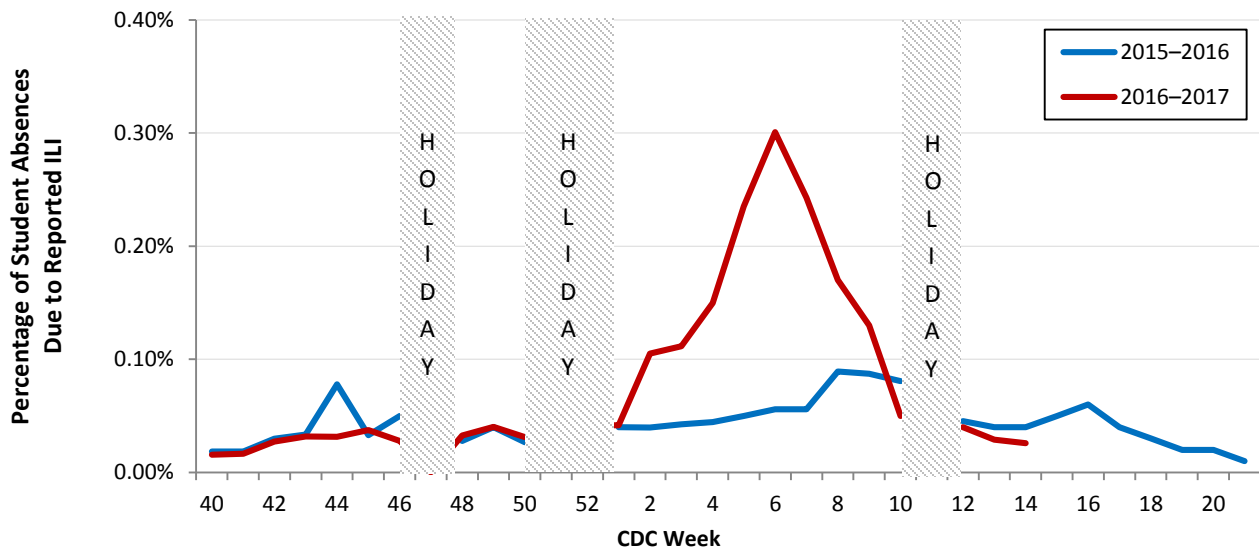


Figure 6. Percentage of Student Absences Due to ILI by Week, Dallas County: 2015–2016 and 2016–2017



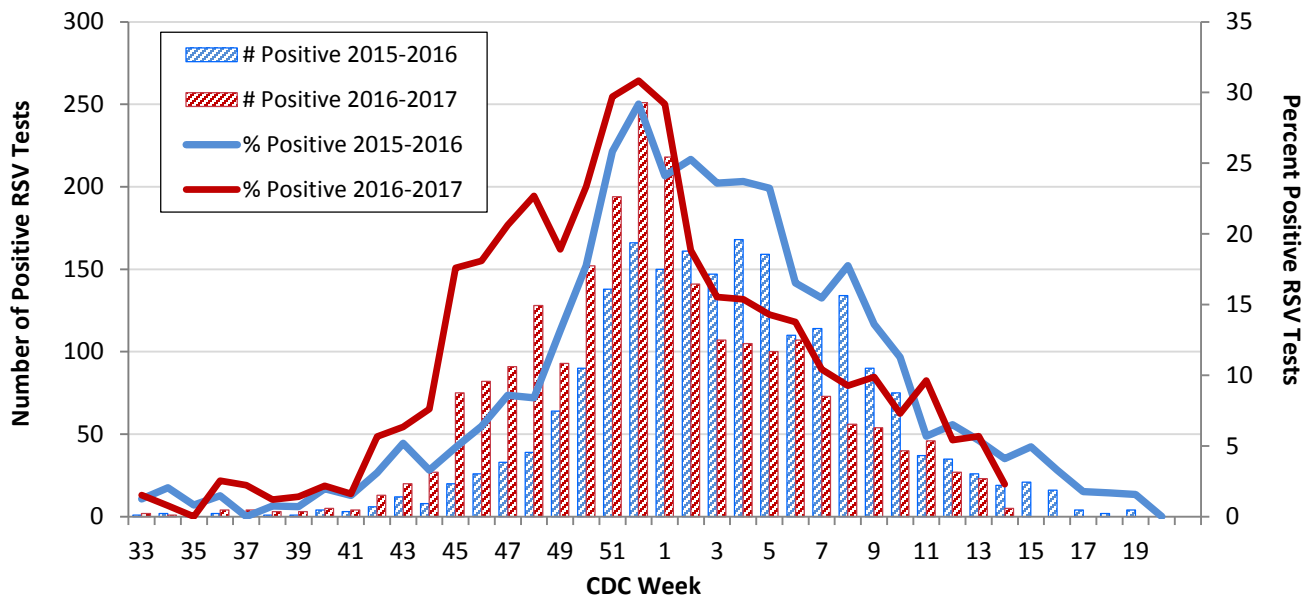
Data source: Voluntary reporting from Independent School Districts representing over 510 elementary, middle, and secondary schools and over 420,000 students in Dallas County

Table 5. Non-Influenza Respiratory Virus Testing by North Texas Laboratories Reported to NREVSS, Week 14

Virus	Number of Laboratories Reporting	Tests Performed	Total Positive Tests	Percentage of Tests Positive
Adenovirus (respiratory)	3	167	1	0.6%
HMPV	3	151	4	2.7%
Parainfluenza virus	3	167	15	9.0%
Rhinovirus/enterovirus	3	151	35	23.2%
RSV	3	221	5	2.3%

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

**Figure 7.** Number and Percent Positive RSV Rapid Antigen and PCR Tests by Week, NREVSS Surveillance Data, North Texas: August 22, 2015 – April 8, 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 – April 8, 2017

Week Ending	2/25	3/4	3/11	3/18	3/25	4/1	4/8	8/20/16– Present
CDC Week	8	9	10	11	12	13*	14*	
RSV tests performed weekly	604	547	549	478	499	404	221	15,422
Total positive RSV tests	56	54	40	46	27	23	5	2,254
Percent positive RSV tests	9.3	9.9	7.3	9.6	5.4	5.7	2.3	

\*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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