



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

Week 12 ending March 25, 2017

## Epidemiologic Summary

- Influenza activity decreased but remained elevated in Dallas County with 13.5% of tests returning positive during week 12. Nationally, 20.1% 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 36 influenza-associated hospitalizations were reported during week 12.
- No influenza-associated deaths were reported in week 12. No influenza-associated pediatric deaths have been reported during the 2016-2017 season in Dallas County.
- RSV activity decreased with 5.4% of tests from area surveillance sites testing positive.

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

Week Ending	2/18	2/25	3/4	3/11	3/18	3/25	9/11/16 – Present
CDC Week	7	8	9	10	11*	12*	
<b>Total Influenza PCR Tests</b>	1,163	993	903	840	723	726	<b>17,727</b>
Number of positive PCR tests	274	212	156	138	101	84	<b>2,287</b>
Percent of positive PCR tests	23.6	21.4	17.3	16.4	14.0	11.6	
<b>Total Rapid Influenza Diagnostic Tests</b>	2,133	1,689	1,460	1,025	887	638	<b>22,339</b>
Number of positive RIDTs	500	353	293	241	151	104	<b>3,870</b>
Percent of positive RIDTs	23.4	20.9	20.1	23.5	17.0	16.3	
<b>Total Influenza Tests Performed</b>	3,435	2,783	2,478	1,972	1,714	1,415	<b>42,675</b>
Total positive influenza tests <sup>1</sup>	779	568	453	380	252	191	<b>6,181</b>
Percent positive influenza tests	22.7	20.4	18.3	19.3	14.7	13.5	
Positive influenza A tests <sup>2</sup>	690	464	339	237	133	77	<b>5,189</b>
Positive influenza B tests	89	104	114	143	119	114	<b>992</b>
Non-differentiated influenza tests <sup>3</sup>	0	0	0	0	0	0	<b>2</b>

<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	2/18	2/25	3/4	3/11	3/18	3/25	9/11/16– Present
CDC Week	7	8	9	10	11*	12*	
Influenza hospitalizations <sup>4</sup>	140	88	68	67	70	36	<b>1,139</b>
Confirmed pediatric deaths <sup>5</sup>	0	0	0	0	0	0	<b>0</b>
Confirmed adult deaths <sup>6</sup>	2	4	1	0	0	0	<b>14</b>
Possible influenza-associated deaths <sup>7</sup>	0	0	0	0	0	0	<b>1</b>

<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

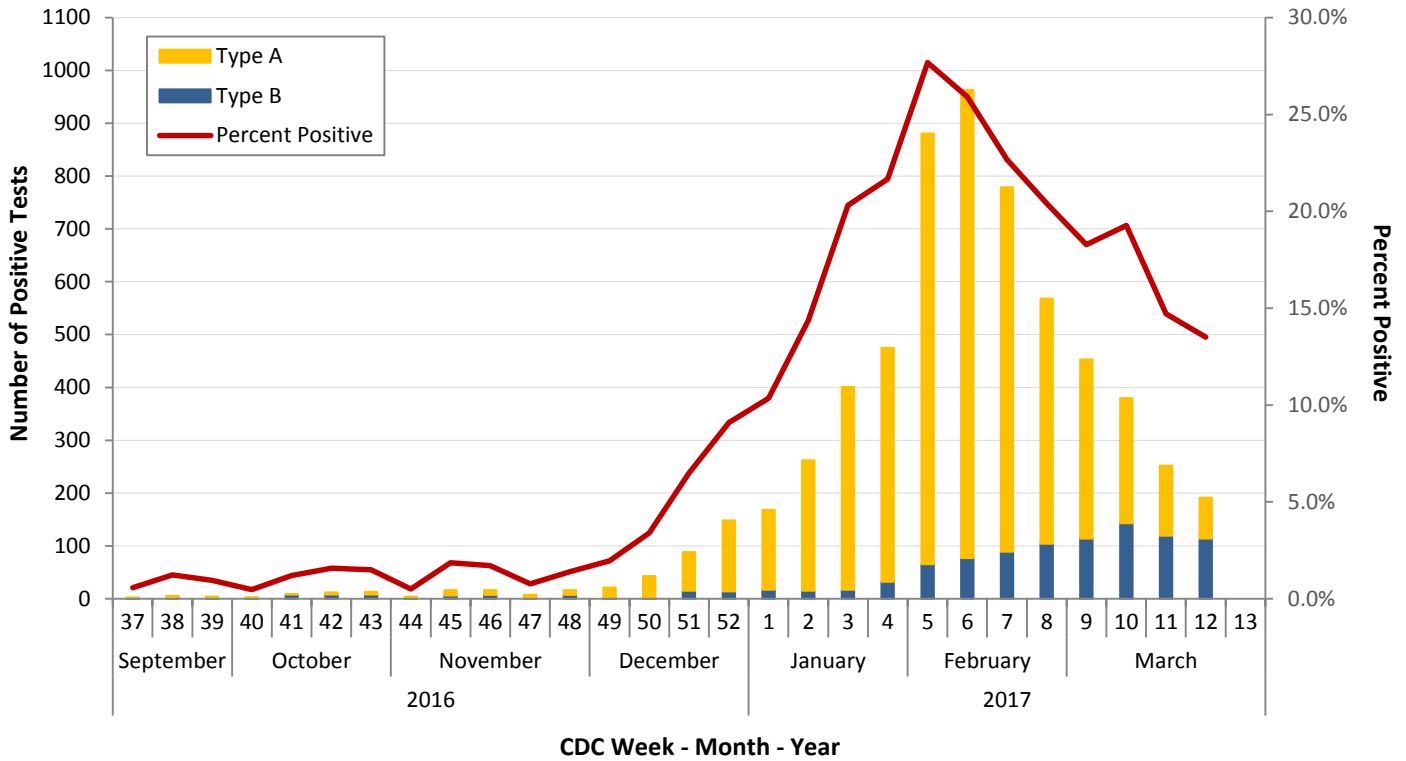
**Table 3.** Confirmed Influenza-associated Pediatric and Adult Deaths, Dallas County: 2011–2017 Seasons

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

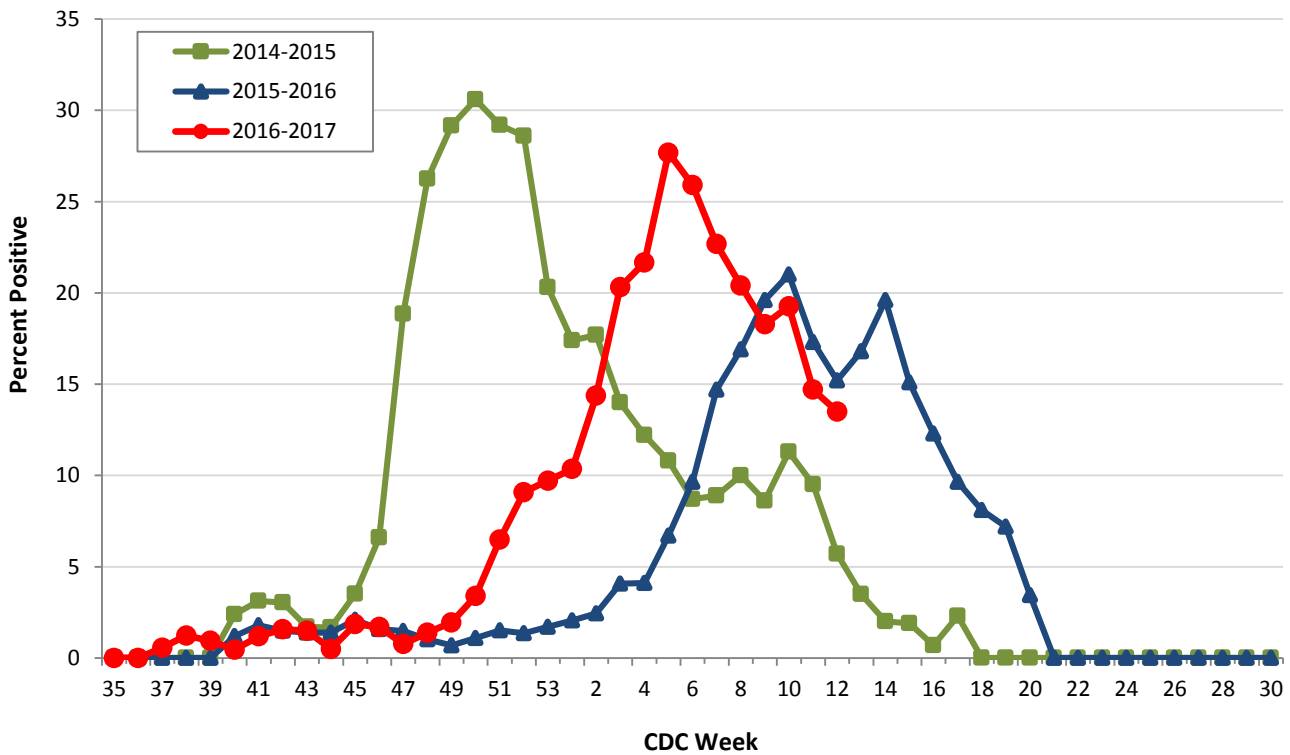
Data source(s): Reports of confirmed influenza-associated deaths, as defined in Table 2.

\*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

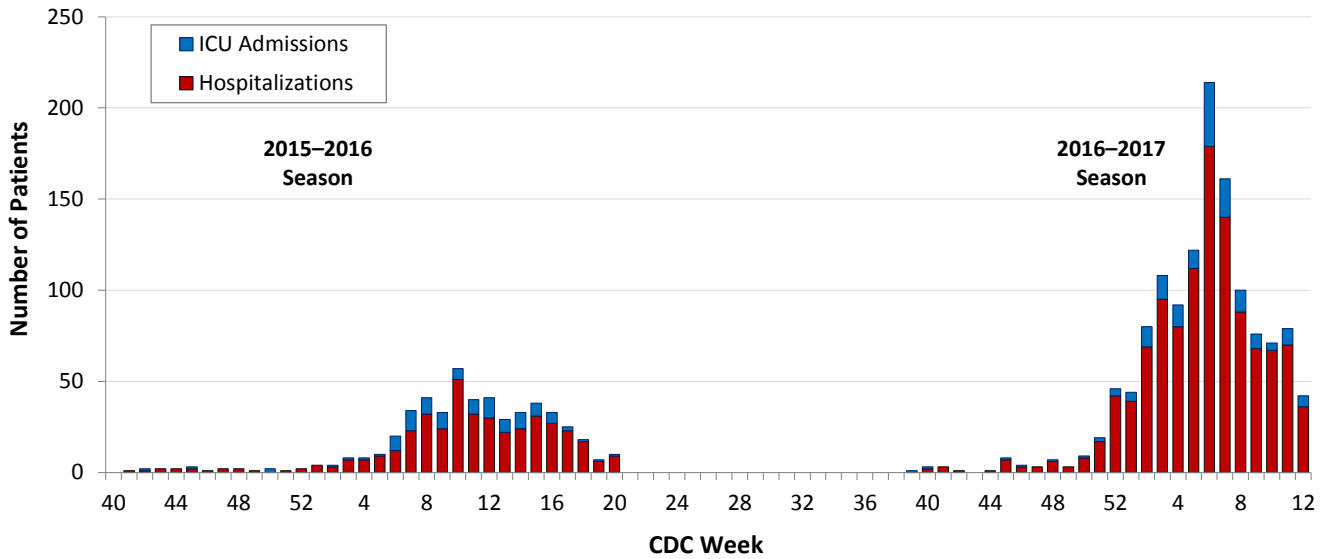


**Figure 2.** Influenza Positive Tests Reported to DCHHS by Hospital Laboratories: 2014–2017 Seasons

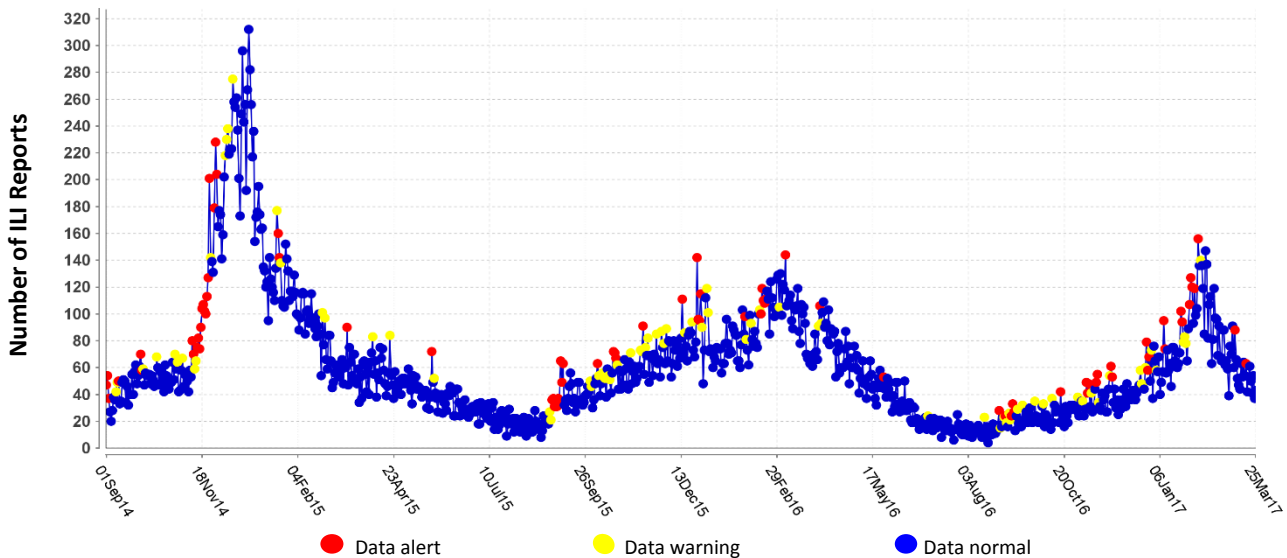


Note: For Figure 2 and all subsequent trend overlays there is no week 53 for the 2015-2016 or 2016-17 influenza seasons, therefore week 53 data point for those seasons is an average of week 52 and week 1.

**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 – March 25, 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=684)	Texas <sup>2</sup> (n=1,706)	U.S. <sup>3</sup> (n=33,498)
Influenza A	613 (89.6%)	1,433 (84.0%)	28,647 (85.5%)
H1N1 2009 subtype	75 (12.3%)	205 (14.4%)	747 (2.6%)
H3N2 subtype	533 (87.7%)	1,221 (85.6%)	27,552 (97.4%)
Not subtyped	5	7	348
Influenza B	71 (10.4%)	262 (16.0%)	4,851 (14.5%)

<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

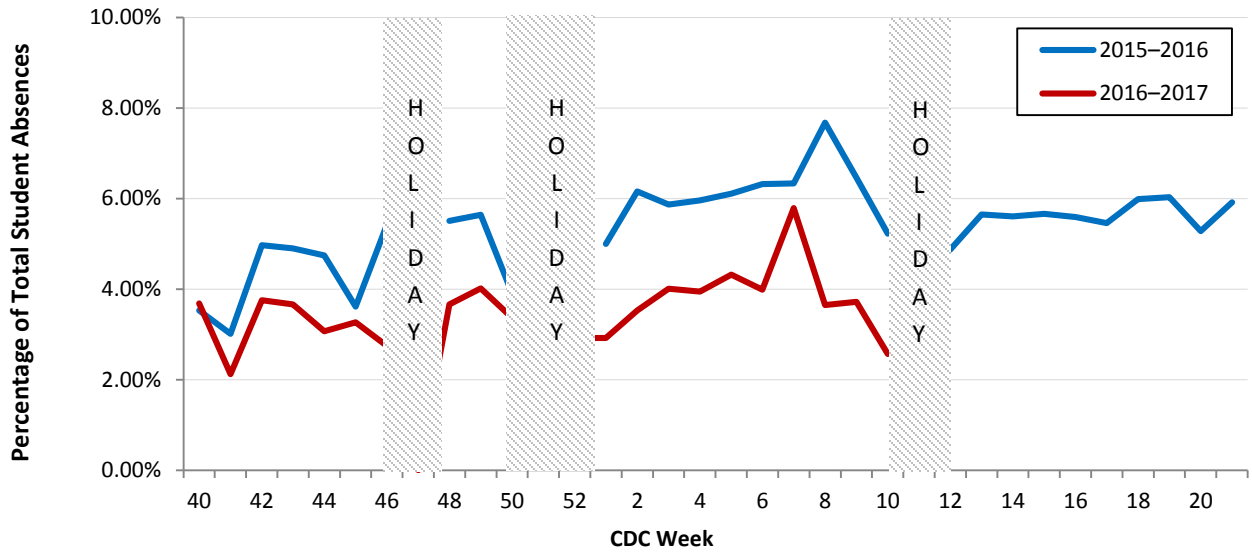
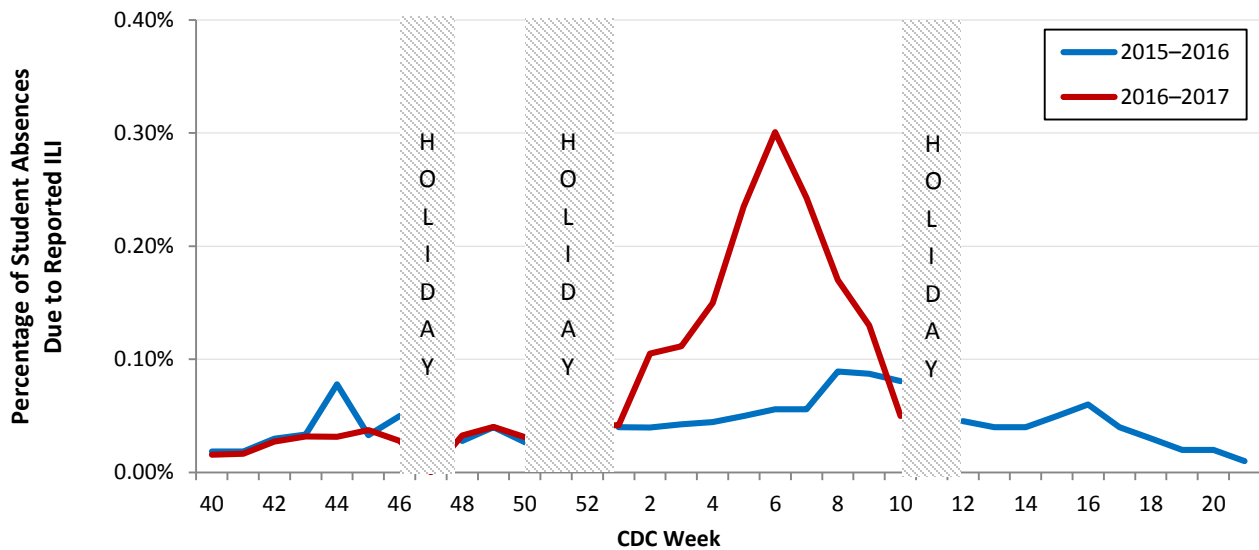


Figure 6. Percentage of Student Absences Due to ILI by Week, Dallas County: 2015–2016 and 2016–2017



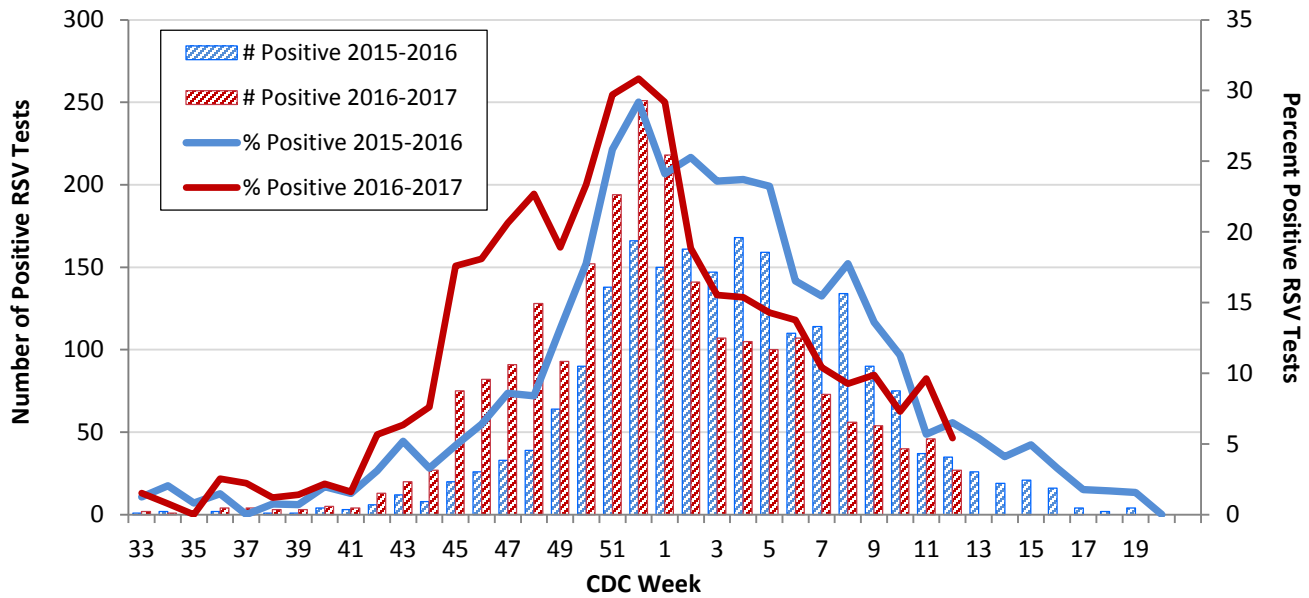
Data source: Voluntary reporting from Independent School Districts representing over 510 elementary, middle, and secondary schools and over 420,000 students in Dallas County

Table 5. Non-Influenza Respiratory Virus Testing by North Texas Laboratories Reported to NREVSS, Week 12

Virus	Number of Laboratories Reporting	Tests Performed	Total Positive Tests	Percentage of Tests Positive
Adenovirus (respiratory)	4	363	12	3.3%
HMPV	4	363	25	6.9%
Parainfluenza virus	4	363	28	7.7%
Rhinovirus/enterovirus	4	363	94	25.9%
RSV	4	499	27	5.4%

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 – March 25, 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 – March 25, 2017

Week Ending	2/11	2/18	2/25	3/4	3/11	3/18	3/25	8/20/16–Present
CDC Week	6	7	8	9	10	11*	12*	
RSV tests performed weekly	777	701	604	547	549	478	499	14,797
Total positive RSV tests	107	73	56	54	40	46	27	2,226
Percent positive RSV tests	13.8	10.4	9.3	9.9	7.3	9.6	5.4	

\*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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