



# Dallas County Health and Human Services 2017–2018 Influenza Surveillance Report

Week 50 ending December 16, 2017

## Epidemiologic Summary

- Influenza activity is increasing in Dallas County with 19.5% of tests returning positive during week 50. Nationally, 14.0% of specimens reported to CDC were positive for influenza.
- Daily numbers of emergency department visits for influenza-like illness in Dallas County were slightly above baseline levels and 215 influenza-associated hospitalizations were reported during week 50.
- One influenza-associated death of an adult was reported in week 50. No influenza-associated pediatric deaths have been reported during the 2017-2018 season in Dallas County.
- RSV activity increased with 24.8% of tests from area surveillance sites testing positive.

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

Week Ending	11/11	11/18	11/25	12/02	12/09	12/16	9/10/17 – Present
<b>CDC Week</b>	<b>45</b>	<b>46</b>	<b>47</b>	<b>48</b>	<b>49*</b>	<b>50*</b>	
<b>Total Influenza PCR Tests</b>	706	746	696	787	807	1,042	8,295
Number of positive PCR tests	41	60	41	78	83	177	553
Percent of positive PCR tests	5.8	8.0	5.9	9.9	10.3	17.0	
<b>Total Rapid Influenza Diagnostic Tests</b>	778	877	1,130	1,242	1,387	1,957	10,488
Number of positive RIDTs	72	109	141	189	303	416	1,381
Percent of positive RIDTs	9.3	12.4	12.5	15.2	21.9	21.3	
<b>Total Influenza Tests Performed</b>	1,527	1,674	1,858	2,085	2,257	3,048	19,361
Total positive influenza tests <sup>1</sup>	113	169	182	267	386	593	1,934
Percent positive influenza tests	7.4	10.1	9.8	12.8	17.1	19.5	
Positive influenza A tests <sup>2</sup>	86	139	145	223	323	522	1,600
Positive influenza B tests	27	30	37	44	63	71	334
Non-differentiated influenza tests <sup>3</sup>	0	0	0	0	0	0	0

<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	11/11	11/18	11/25	12/02	12/09	12/16	9/10/17 – Present
<b>CDC Week</b>	<b>45</b>	<b>46</b>	<b>47</b>	<b>48</b>	<b>49*</b>	<b>50*</b>	
Influenza hospitalizations <sup>4</sup>	26	64	49	82	96	215	379
Confirmed pediatric deaths <sup>5</sup>	0	0	0	0	0	0	0
Confirmed adult deaths <sup>6</sup>	0	0	0	1	1	1	3
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; Data source:14 Hospitals in Dallas County

<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

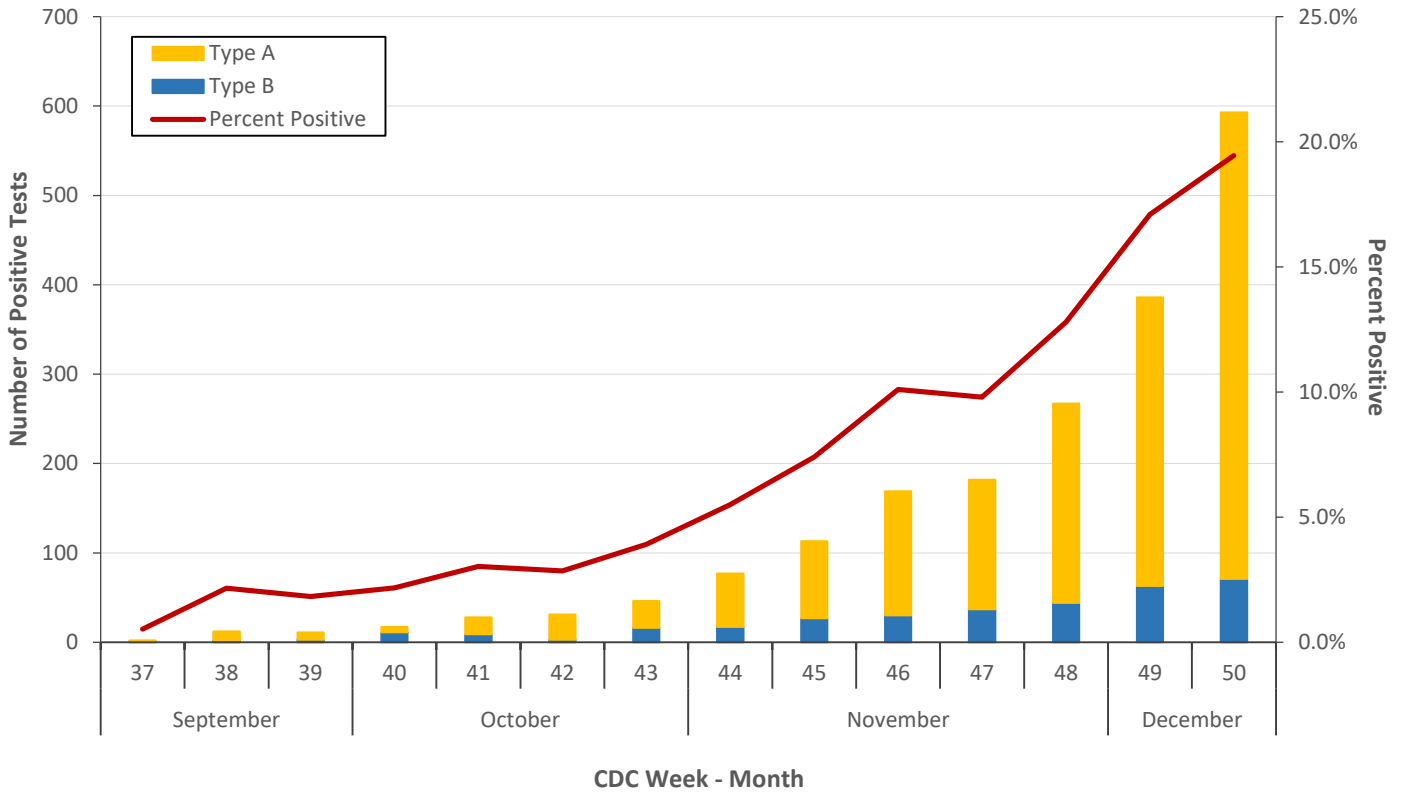
**Table 3.** Confirmed Influenza-associated Pediatric and Adult Deaths, Dallas County: 2011–2018 Seasons

	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017	2017–2018
Pediatric	3	3	0	1	1	0
Adult	6	55	19	14	16	3

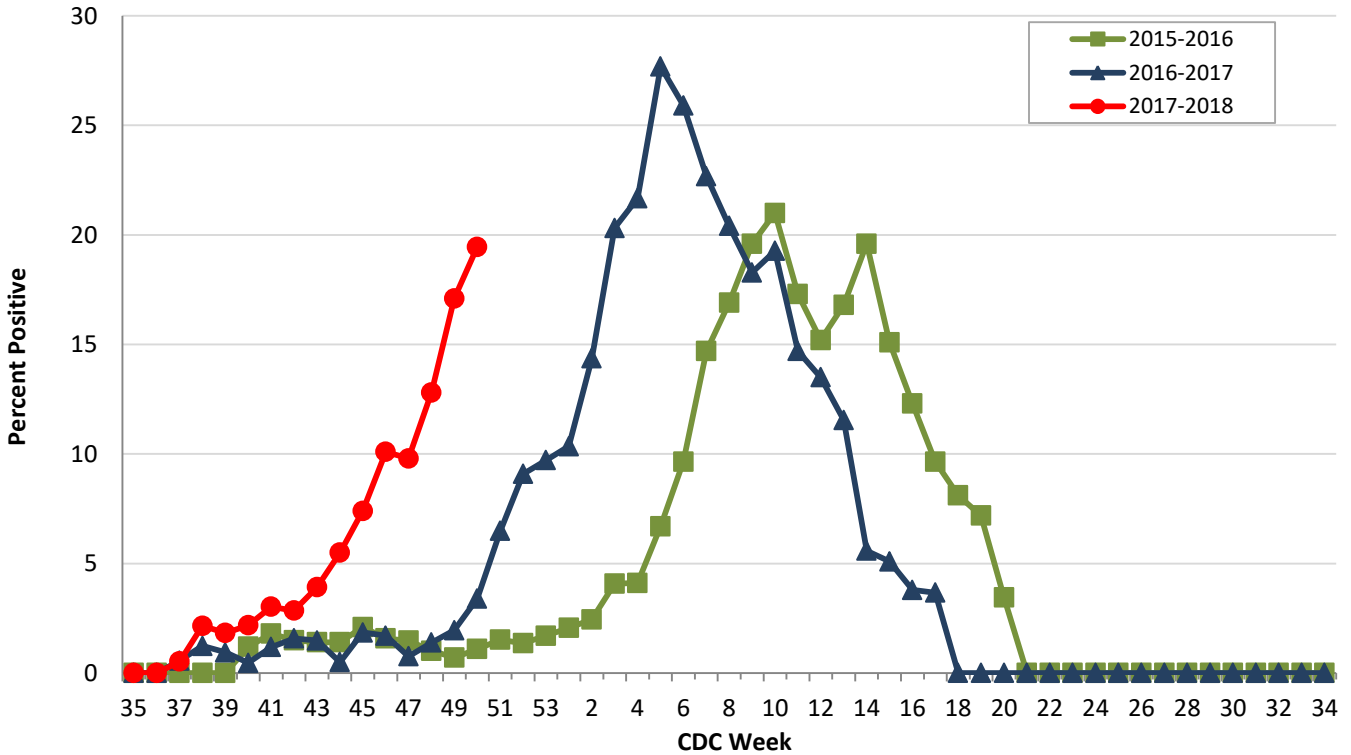
Data source: Reports of confirmed influenza-associated deaths, as defined in Table 2.

\*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: 2017 - 2018 Seasons

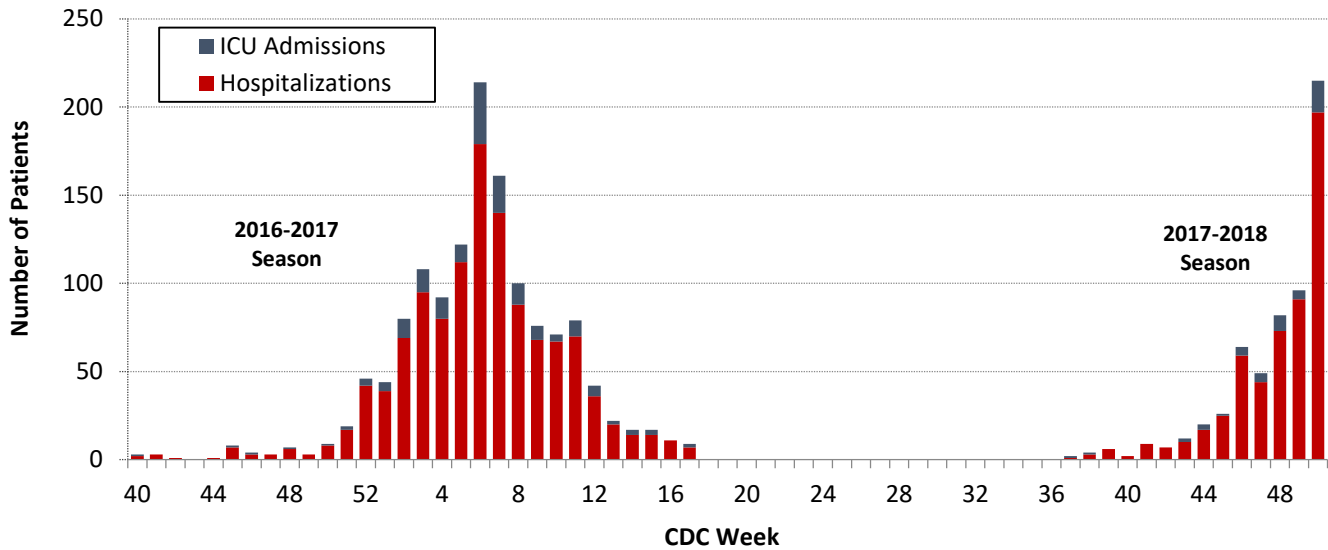


**Figure 2.** Influenza Positive Tests Reported to DCHHS by Hospital Laboratories: 2015–2018 Seasons

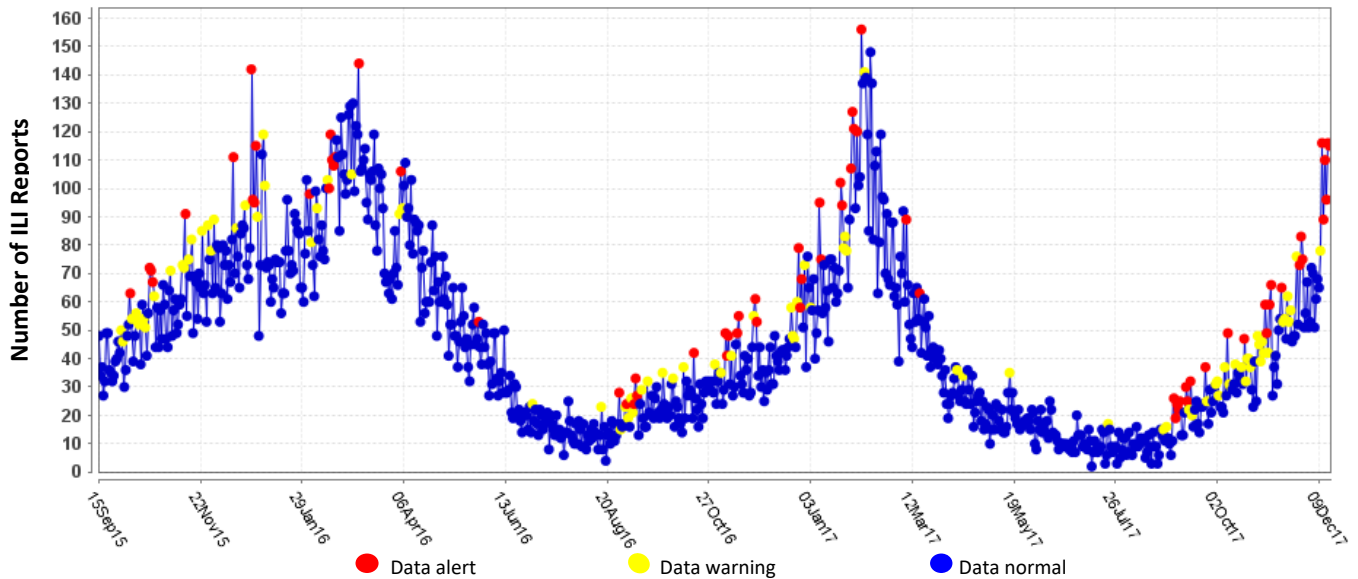


Note: For Figure 2 and all subsequent trend overlays there is no week 53 for the 2015-2016 or 2016-17 influenza seasons, therefore week 53 data point for those seasons is an average of week 52 and week 1.

**Figure 3.** Hospitalized Influenza Patients by Week of Admission, Dallas County: 2016-2018 Seasons



**Figure 4.** Syndromic Surveillance of Emergency Department Visits for Influenza-like Illness (ILI), Dallas County: September 1, 2015 – December 16, 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: 2017-2018 Season

	Dallas <sup>1</sup> (n=115)	Texas <sup>2</sup> (n= 2,808)	U.S. <sup>3</sup> (n=5,046)
Influenza A	104 (90.4%)	2219 (79.0%)	4,387 (86.9%)
H1N1 2009 subtype	44 (42.3%)	120 (25.8%)	366 (8.5%)
H3N2 subtype	60 (57.7%)	345 (74.2%)	3,965 (91.5%)
Not subtyped	0	1,754	56
Influenza B	11 (9.6%)	589 (21.0%)	659 (13.1%)

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

<sup>2</sup> DSHS 2017–2018 Texas Influenza Surveillance Information Activity Report available at <https://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/>

<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: 2016-2017 and 2017-2018

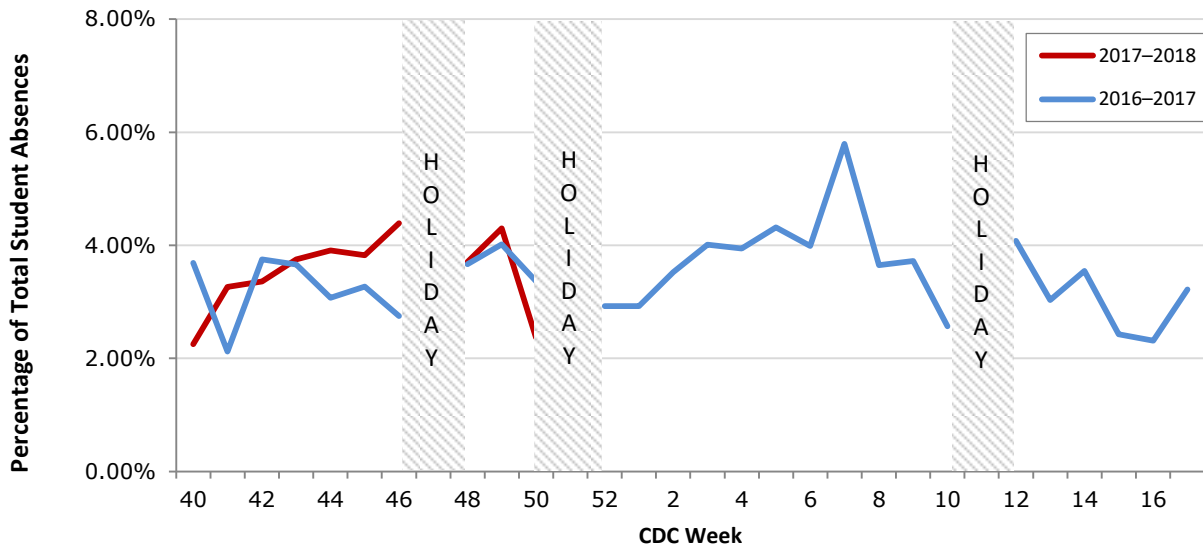
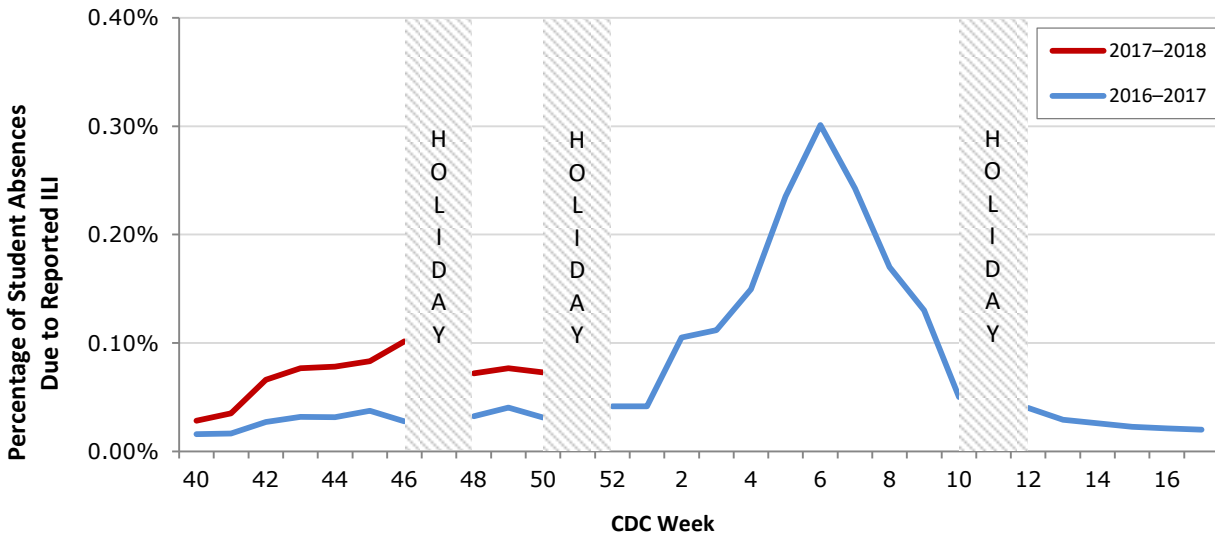


Figure 6. Percentage of Student Absences Due to ILI by Week, Dallas County: 2016-2017 and 2017-2018



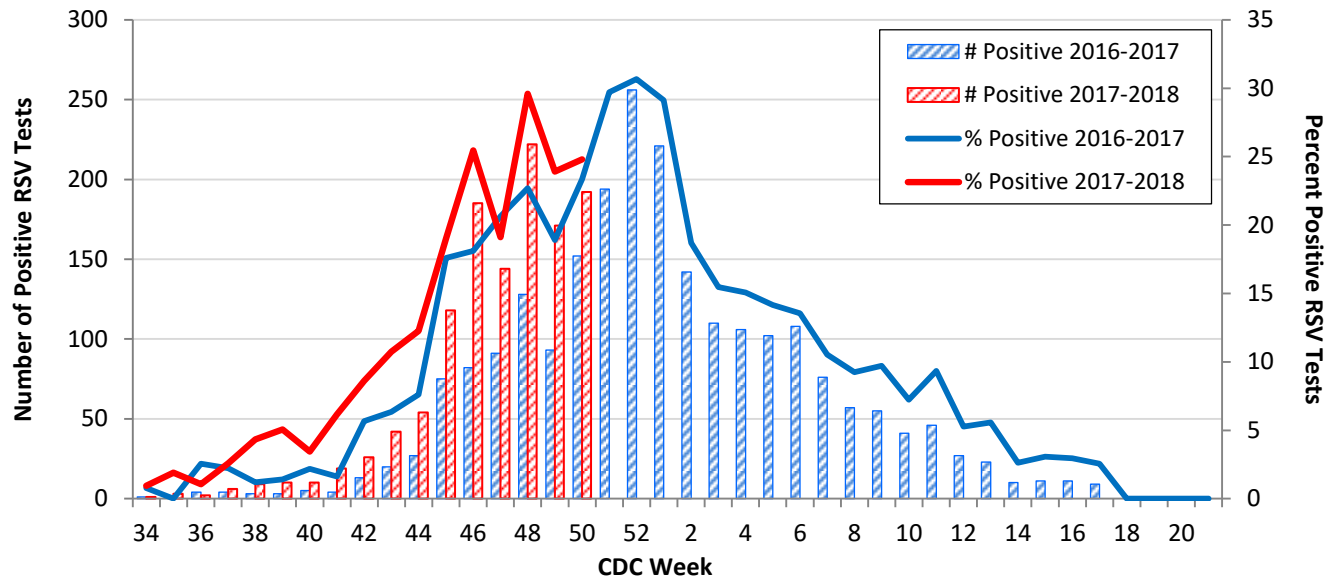
Data source: Voluntary reporting from Independent School Districts representing over 510 elementary, middle, and secondary schools and over 420,000 students in Dallas County

Table 5. Non-Influenza Respiratory Virus Testing by North Texas Laboratories Reported to NREVSS, Week 50

Virus	Number of Laboratories Reporting	Tests Performed	Total Positive Tests	Percentage of Tests Positive
Adenovirus (respiratory)	4	474	9	1.9%
HMPV	4	465	6	1.3%
Parainfluenza virus	4	476	14	2.9%
Rhinovirus/Enterovirus	4	465	80	17.2%
RSV	4	774	192	24.8%

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 27, 2016 – December 16, 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 26, 2017 – December 16, 2017

Week Ending	11/04	11/11	11/18	11/25	12/02	12/09	12/16	8/26/17– Present
CDC Week	44	45	46	47	48	49	50*	
RSV tests performed weekly	440	620	733	753	750	715	774	7,166
Total positive RSV tests	54	118	185	144	222	171	192	1,214
Percent positive RSV tests	12.3	19.0	25.2	19.1	29.6	23.9	24.8	

\*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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