



**DENTON COUNTY HEALTH DEPARTMENT**  
**2015 – 2016 INFLUENZA SURVEILLANCE PROGRAM**  
**CDC WEEK 45, WEEK ENDING NOVEMBER 14, 2015**

**Epidemiologic Overview**

**Denton County**

- Low influenza activity has been reported in Denton County for week 45.
- 9 positive influenza tests (4 Flu A and 5 Flu B) and 1 hospitalization were reported by Denton County sentinel providers for week 45.
- Zero influenza-associated deaths have been reported during the 2015-2016 season.
- Syndromic surveillance for influenza-like illness (ILI) in Denton County increased during week 45 compared to the previous week.

**Texas**

- Influenza activity continues to be sporadic in Texas.
- The percentage of visits for ILI as reported by ILINet providers in Texas was 4.25%, a 0.36% decrease from the 4.61% reported the previous week.
- The percentage of specimens testing positive for influenza was 1.57%, a 0.08% decrease from the 1.65% reported the previous week.

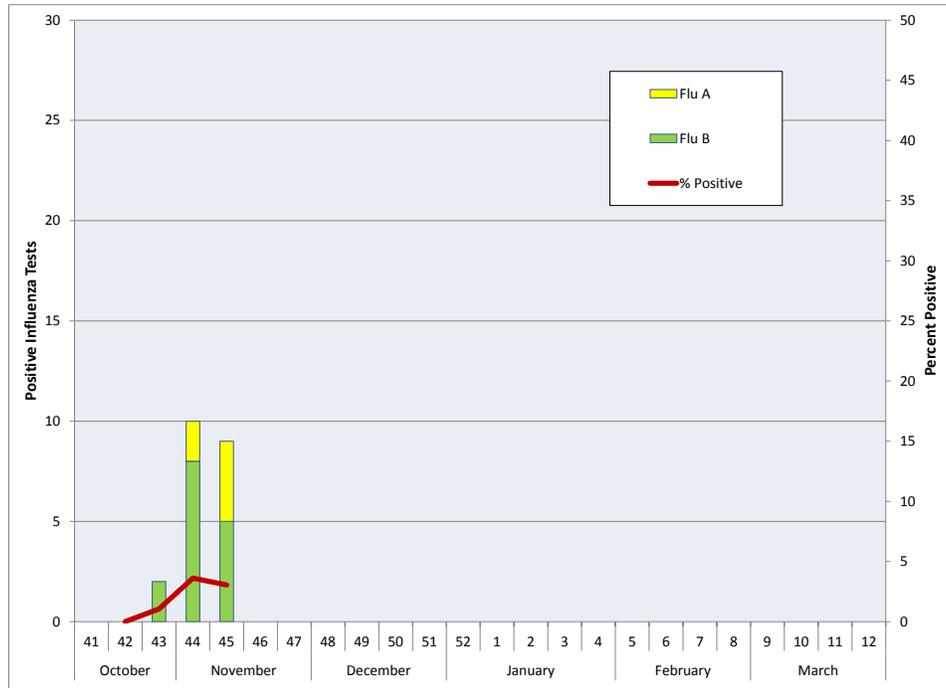
**US**

- The proportion of outpatient visits for ILI was 1.6%, 0.5% below the national baseline of 2.1%. Two of 10 regions reported ILI at or above region-specific baseline levels. One state experienced moderate ILI activity, two states experienced low ILI activity, and 47 states experienced minimal ILI activity.
- Four states reported local geographic spread of influenza. Forty states reported sporadic activity, and six states reported no influenza activity.
- The percentage of specimens testing positive for influenza in the US increased slightly from 1.2% to 1.6% compared to the previous week.
- The proportion of deaths attributed to pneumonia and influenza (P&I) during week 45 was 5.3%. This percentage is below the epidemic threshold of 6.3% for week 45.

**Figure 1. Influenza Surveillance Summary: Denton County Hospitals and Providers**

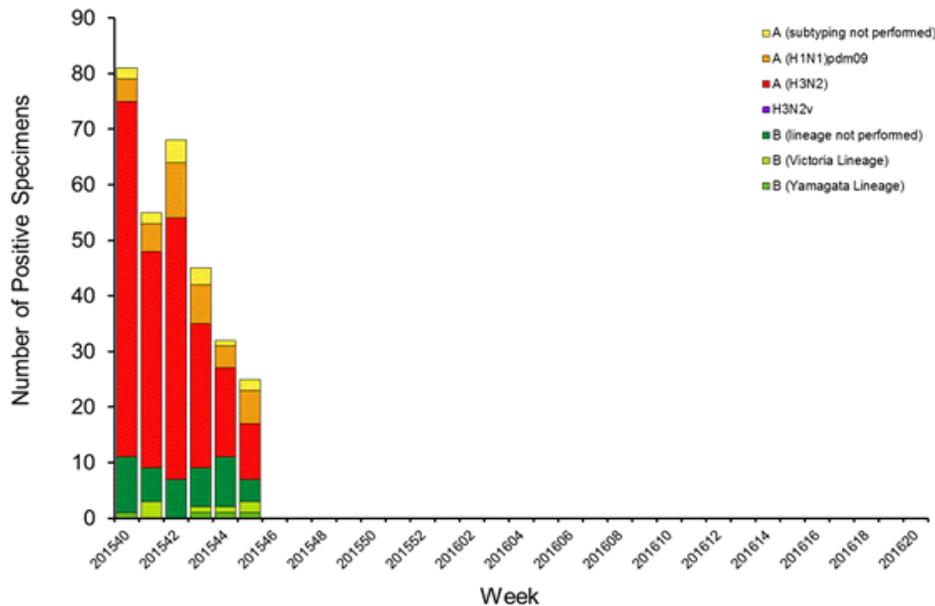
Week Ending	10/24/15	10/31/15	11/7/15	11/14/15	10/24/15 - Present
CDC Week	42	43	44	45	
Influenza Tests Performed Weekly	198	190	276	295	959
Total Positive Influenza Tests	0	2	10	9	21
Percent Positive Influenza Tests*	0	1.05%	3.62%	3.05%	
Positive A Influenza	0	0	2	4	6
Positive B Influenza	0	2	8	5	15
Non-differentiated Influenza	0	0	0	0	0
Influenza Hospitalizations	0	1	1	1	3
Influenza-associated Pediatric Deaths	0	0	0	0	0
Influenza-associated Adult Deaths	0	0	0	0	0

**Figure 2. Influenza Positive Tests and Percent Positive, Denton County Hospitals and Providers**



\* Percent positive tests only includes positive tests from providers reporting number of tests performed weekly

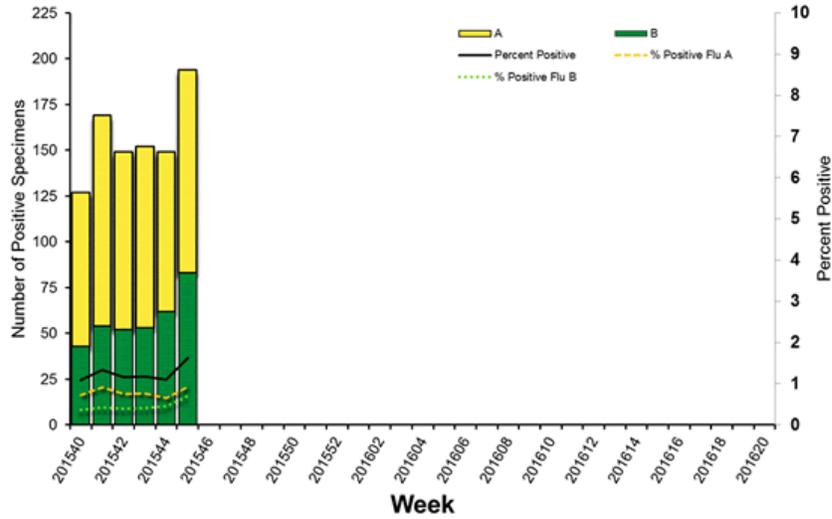
**Figure 3. Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, 2015-16 Season**



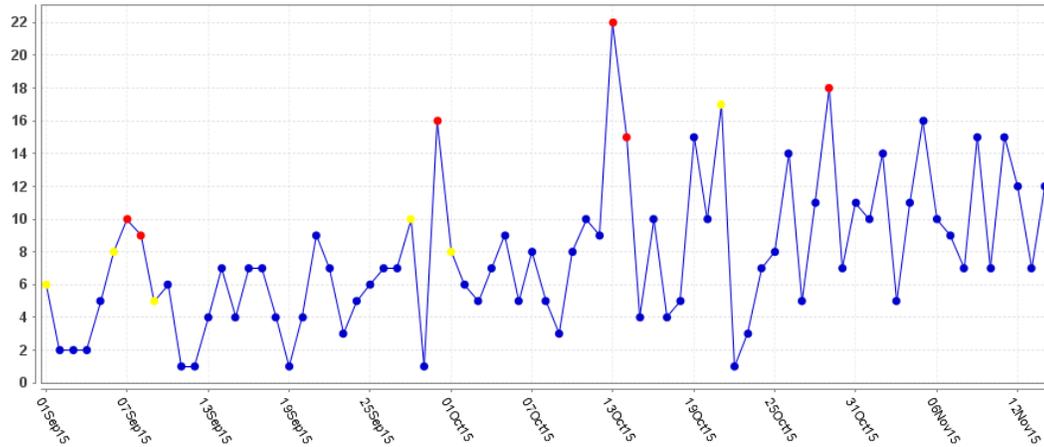
**Figure 4. U.S. Virologic Surveillance, Week 45 and Cumulative Data since October 4, 2015**

	Week 45	Data Cumulative since October 4, 2015 (Week 40)
No. of specimens tested	11,899	75,518
No. of positive specimens (%)	194 (1.6%)	940 (1.2%)
<i>Positive specimens by type</i>		
Influenza A	111 (57.2%)	593 (63.1%)
Influenza B	83 (42.8%)	347 (36.9%)

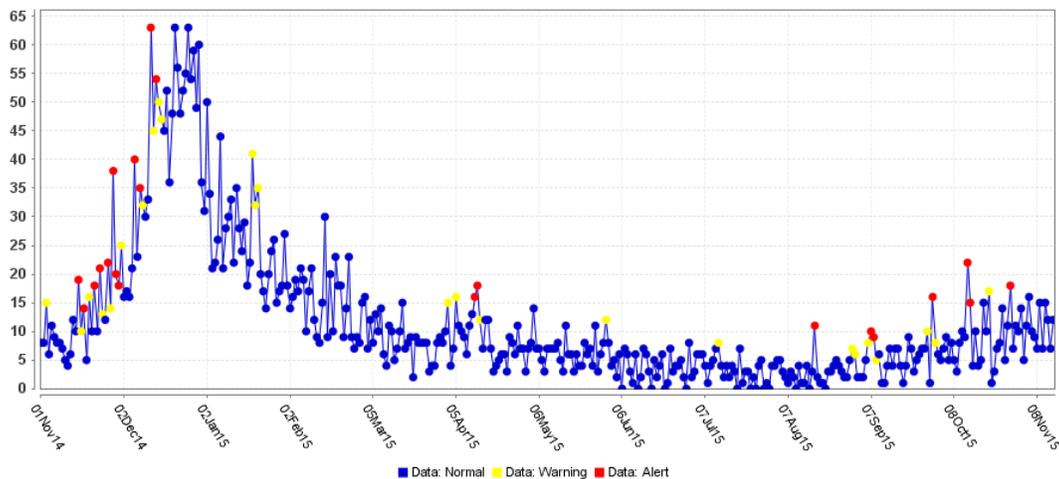
**Figure 5. Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, 2015-16 Season**



**Figure 6. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County September 1, 2015 – November 14, 2015**



**Figure 7. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County November 1, 2014 – November 14, 2015**



Data obtained from hospitals participating in the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) from November 2014 through the present. Depicted are the numbers of persons presenting to Emergency Departments according to patient location (Denton region) with self-reported chief complaints of influenza-like illness.

**Figure 8. Antigenic Characterization of Influenza Isolates**

2009 Influenza A (H1N1)	14 of 14 (100%) – A/California/7/2009-like
Influenza A (H3N2)	252 of 252 (100%) – A/Switzerland/9715293/2013 similar
Influenza B (Yamagata Lineage)	44 of 44 (100%) – B/Phuket/3073/2013-like
Influenza B (Victoria Lineage)	27 of 27 (100%) – B/Brisbane/60/2008-like

www.cdc.gov/flu/weekly

**2015-16 Influenza Vaccine Composition, Northern Hemisphere:**

- A/California/7/2009 (H1N1)-like virus
- A/Switzerland/9715293/2013 (H3N2)-similar virus
- B/Phuket/3073/2013-like virus
- B/Brisbane/60/2008-like virus\*

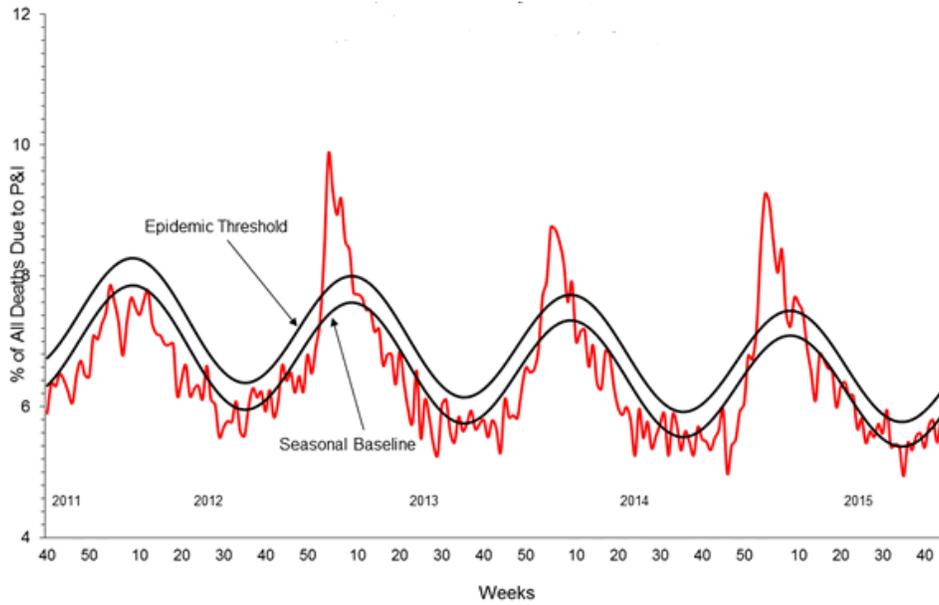
\* 2015-2016 Northern Hemisphere quadrivalent influenza vaccine influenza B component

**Figure 9. Neuraminidase Inhibitor Resistance Testing Results on Samples Collected Since October 1, 2015**

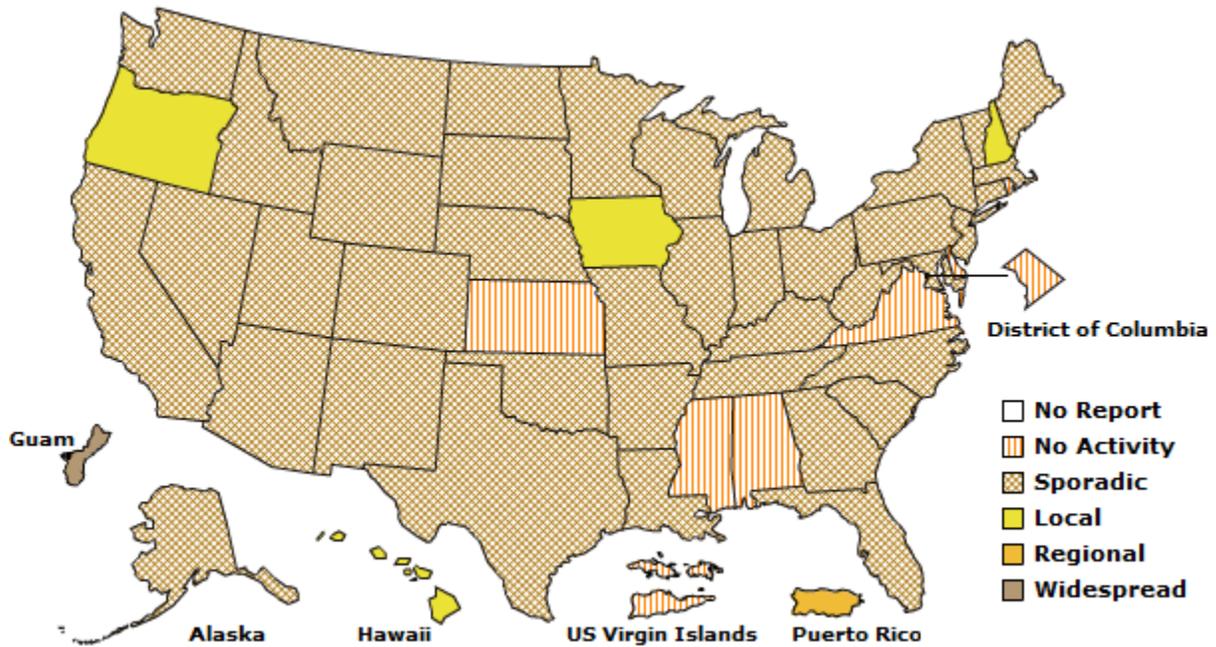
	Oseltamivir		Zanamivir		Peramivir	
	Virus Samples tested (n)	Resistant Viruses, Number (%)	Virus Samples tested (n)	Resistant Viruses, Number (%)	Virus Samples tested (n)	Resistant Viruses, Number (%)
<b>Influenza A (H1N1)pdm09</b>	0	0 (0.0)	0	0 (0.0)	0	0 (0.0)
<b>Influenza A (H3N2)</b>	13	0 (0.0)	13	0 (0.0)	13	0 (0.0)
<b>Influenza B</b>	0	0 (0.0)	0	0 (0.0)	0	0 (0.0)

\*\* Antiviral treatment with oseltamivir, zanamivir, or peramivir is recommended as early as possible for patients with confirmed or suspected influenza who have severe, complicated, or progressive illness; who require hospitalization; or who are at high risk for serious influenza-related complications. www.cdc.gov/flu/weekly

**Figure 10. Pneumonia and Influenza Mortality for 122 U.S. Cities:  
Week ending November 14, 2015**

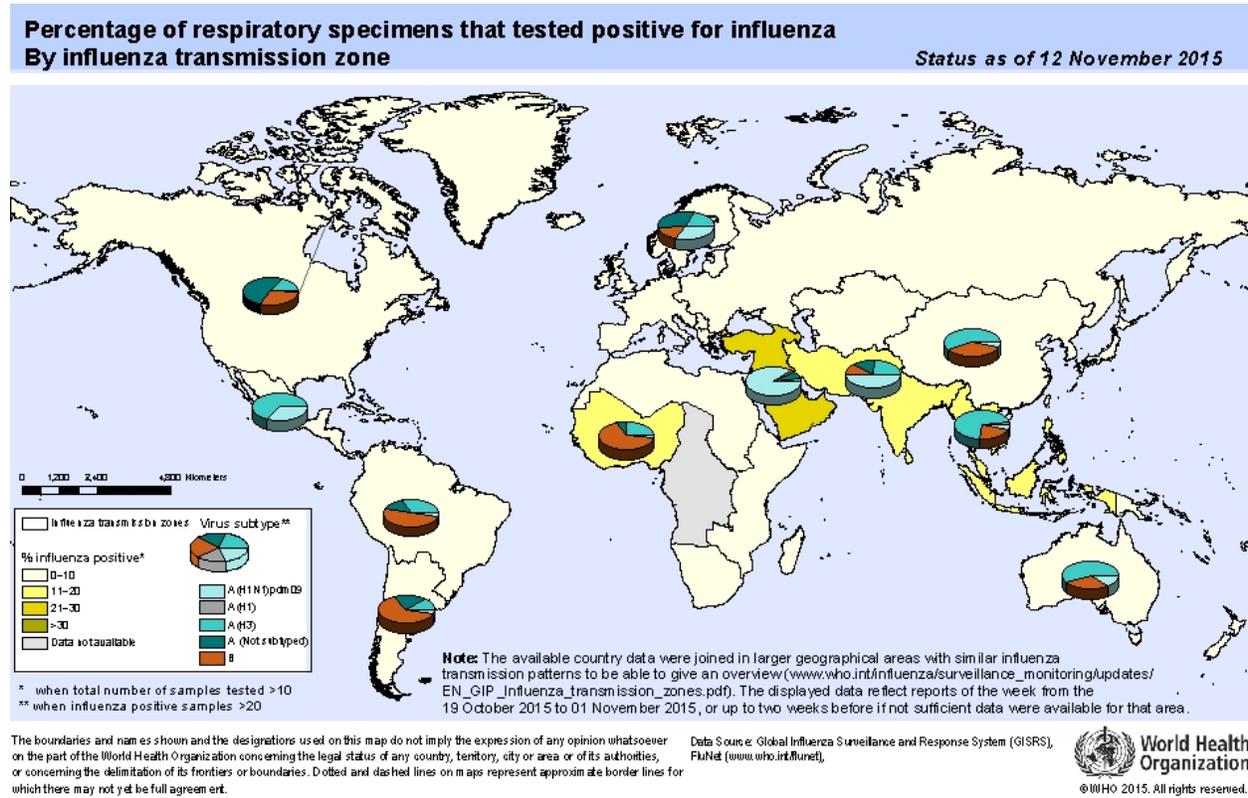


**Figure 11. Weekly Influenza Activity Estimates Reported by State and Territorial  
Epidemiologists\* Week Ending November 14, 2015 – Week 45**



\*This graph indicates geographic spread and does not measure the severity of influenza activity.

**Figure 12. Percentage of Respiratory Specimens that Tested Positive for Influenza: WHO, as of November 16, 2015\***



\*Based on data up to November 1, 2015