



DENTON COUNTY HEALTH DEPARTMENT
2015 – 2016 INFLUENZA SURVEILLANCE PROGRAM
CDC WEEK 46, WEEK ENDING NOVEMBER 21, 2015

Epidemiologic Overview

Denton County

- Low influenza activity has been reported in Denton County for week 46.
- 2 positive influenza tests (1 Flu A and 1 Flu B) and 0 hospitalizations were reported by Denton County sentinel providers for week 46.
- Zero influenza-associated deaths have been reported during the 2015-2016 season.
- Syndromic surveillance for influenza-like illness (ILI) in Denton County increased slightly during week 46 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 5.45%, a 1.2% increase from the 4.25% reported the previous week.
- The percentage of specimens testing positive for influenza was 2.19%, a 0.62% increase from the 1.57% reported the previous week.

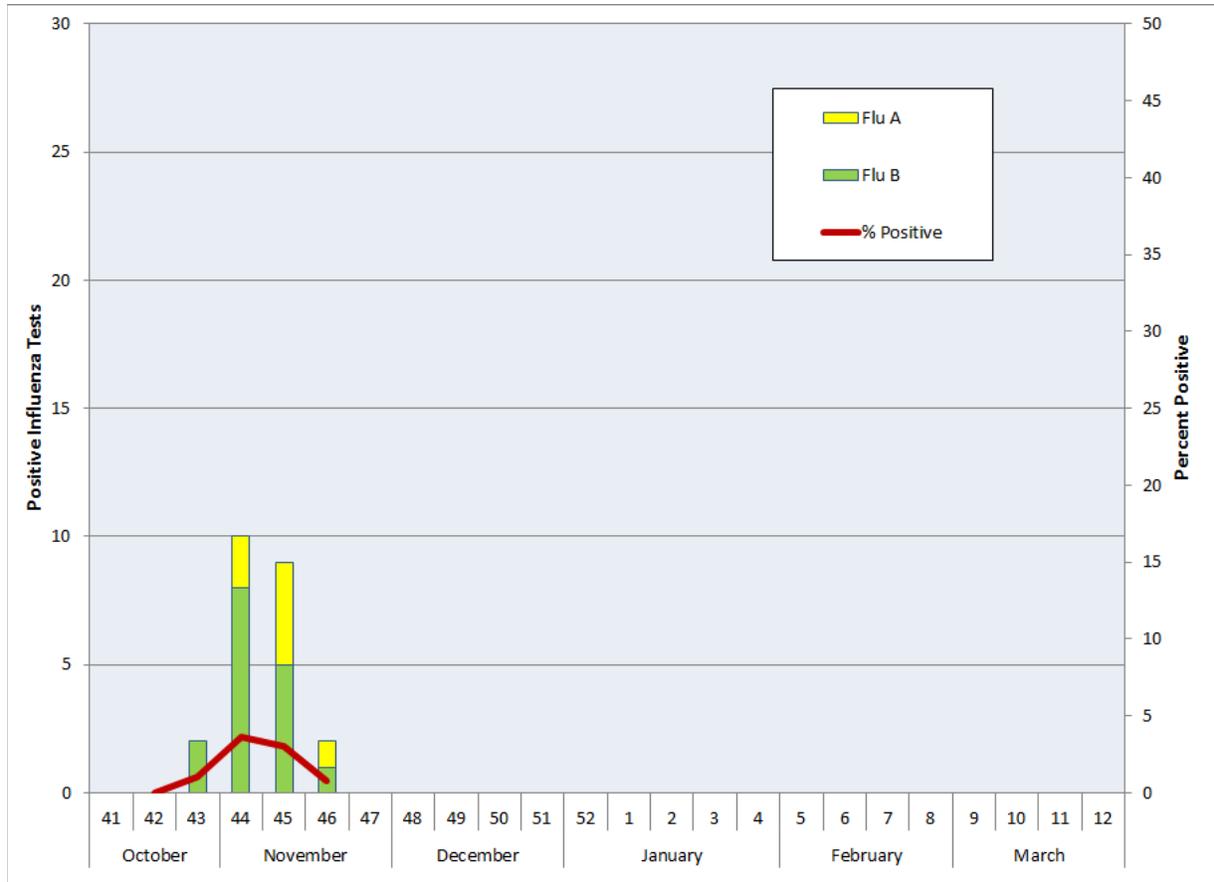
US

- 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, and 49 states experienced minimal ILI activity.
- Five states reported local geographic spread of influenza. Thirty-nine states reported sporadic activity, and six states reported no influenza activity.
- The percentage of specimens testing positive for influenza in the US decreased slightly from 1.6% to 1.1% compared to the previous week.
- The proportion of deaths attributed to pneumonia and influenza (P&I) during week 46 was 6.0%. This percentage is below the epidemic threshold of 6.4% for week 46.

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

Week Ending	10/24/15	10/31/15	11/7/15	11/14/15	11/21/15	10/24/15 - Present
CDC Week	42	43	44	45	46	
Influenza Tests Performed Weekly	198	190	276	295	257	1,216
Total Positive Influenza Tests	0	2	10	9	2	23
Percent Positive Influenza Tests*	0%	1.05%	3.62%	3.05%	0.78%	
Positive A Influenza	0	0	2	4	1	7
Positive B Influenza	0	2	8	5	1	16
Non-differentiated Influenza	0	0	0	0	0	0
Influenza Hospitalizations	0	1	1	1	0	3
Influenza-associated Pediatric Deaths	0	0	0	0	0	0
Influenza-associated Adult Deaths	0	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

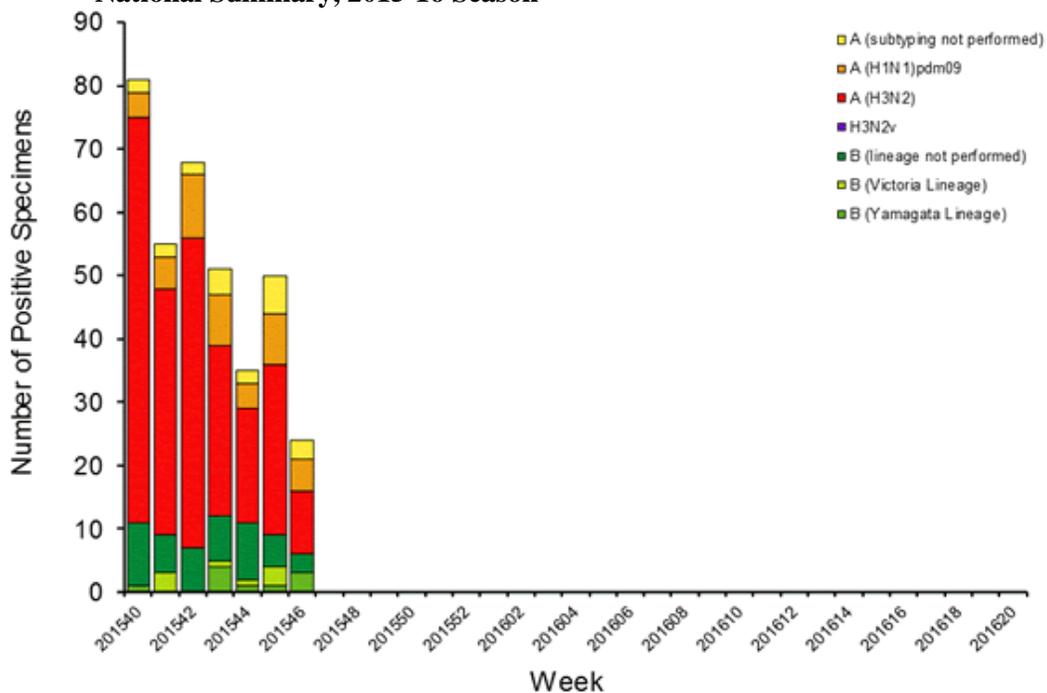


Figure 4. Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, 2015-16 Season

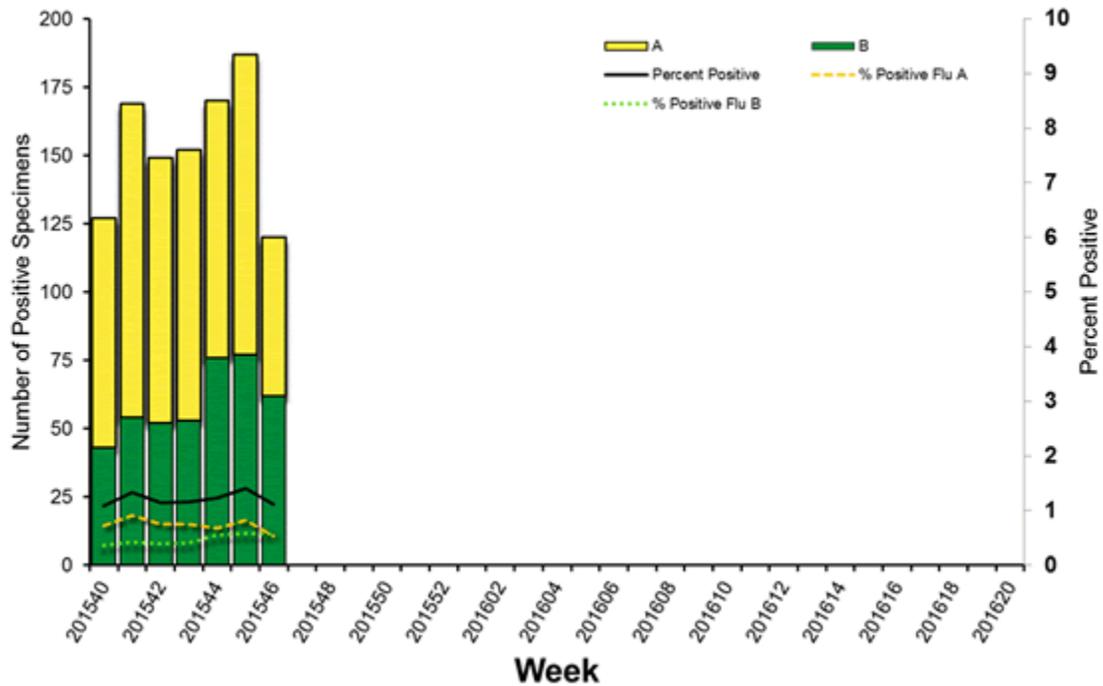
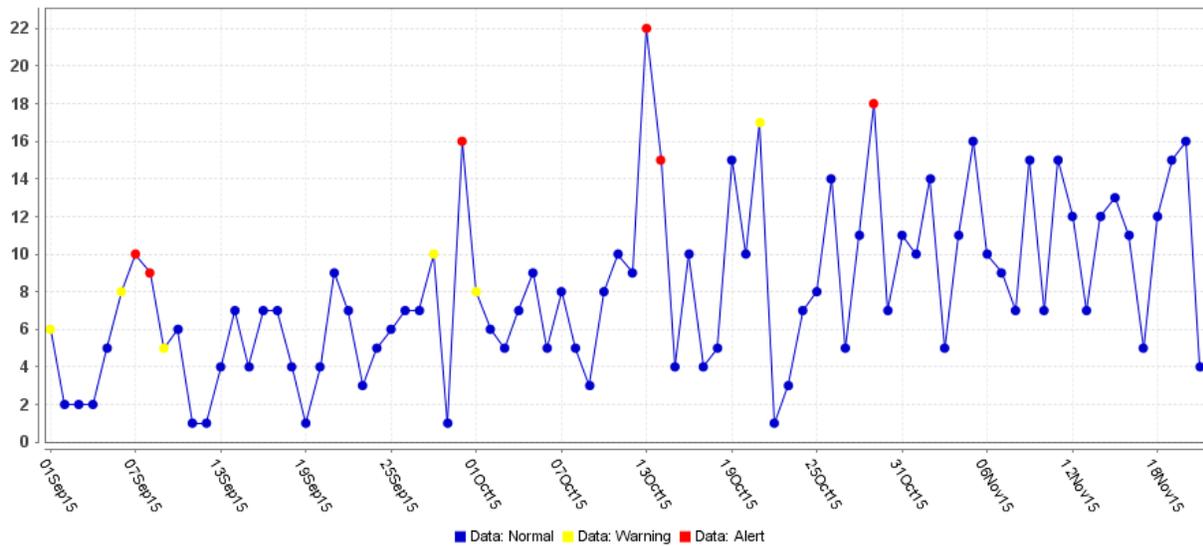


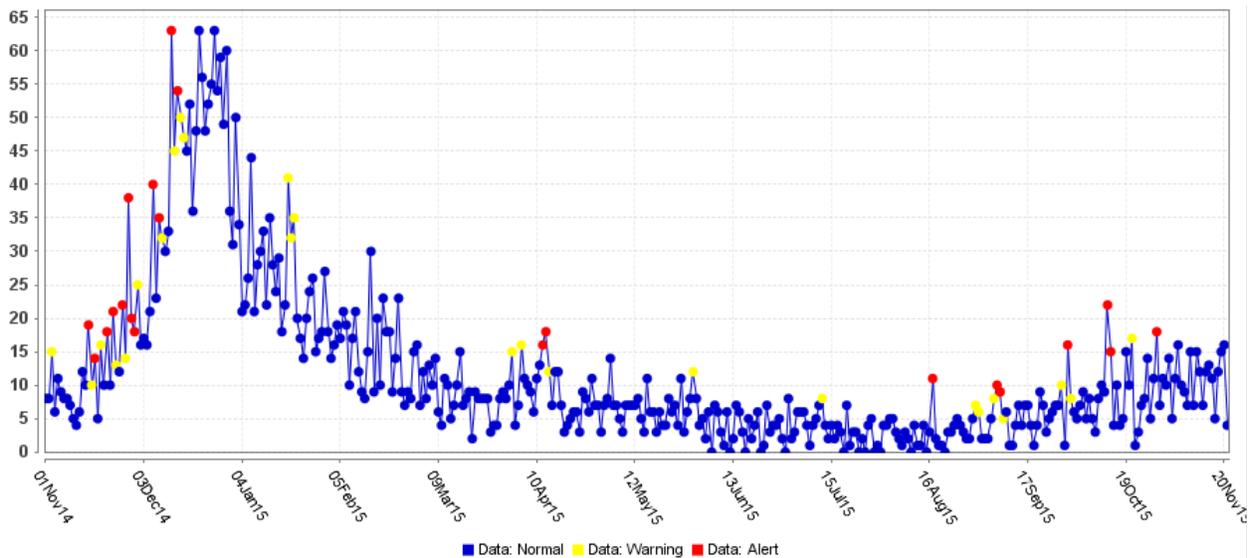
Figure 5. U.S. Virologic Surveillance, Week 46 and Cumulative Data since October 4, 2015

	Week 46	Data Cumulative since October 4, 2015 (Week 40)
No. of specimens tested	10,793	88,825
No. of positive specimens (%)	120 (1.1%)	1,074 (1.2%)
<i>Positive specimens by type</i>		
Influenza A	58 (48.3%)	657 (61.2%)
Influenza B	62 (51.7%)	417 (38.8%)

**Figure 6. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County
September 1, 2015 – November 21, 2015**



**Figure 7. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County
November 1, 2014 – November 21, 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)	260 of 260 (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 (%)
Influenza A (H1N1)pdm09	5	0 (0.0)	5	0 (0.0)	5	0 (0.0)
Influenza A (H3N2)	14	0 (0.0)	14	0 (0.0)	14	0 (0.0)
Influenza B	9	0 (0.0)	9	0 (0.0)	9	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 21, 2015

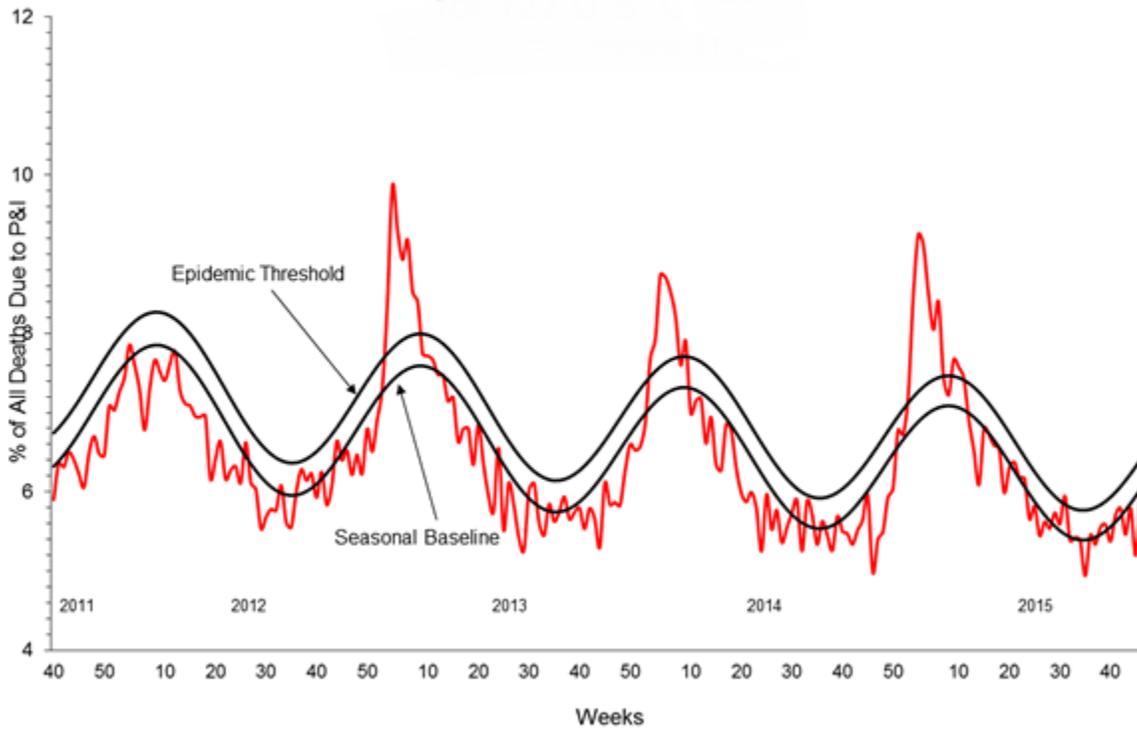
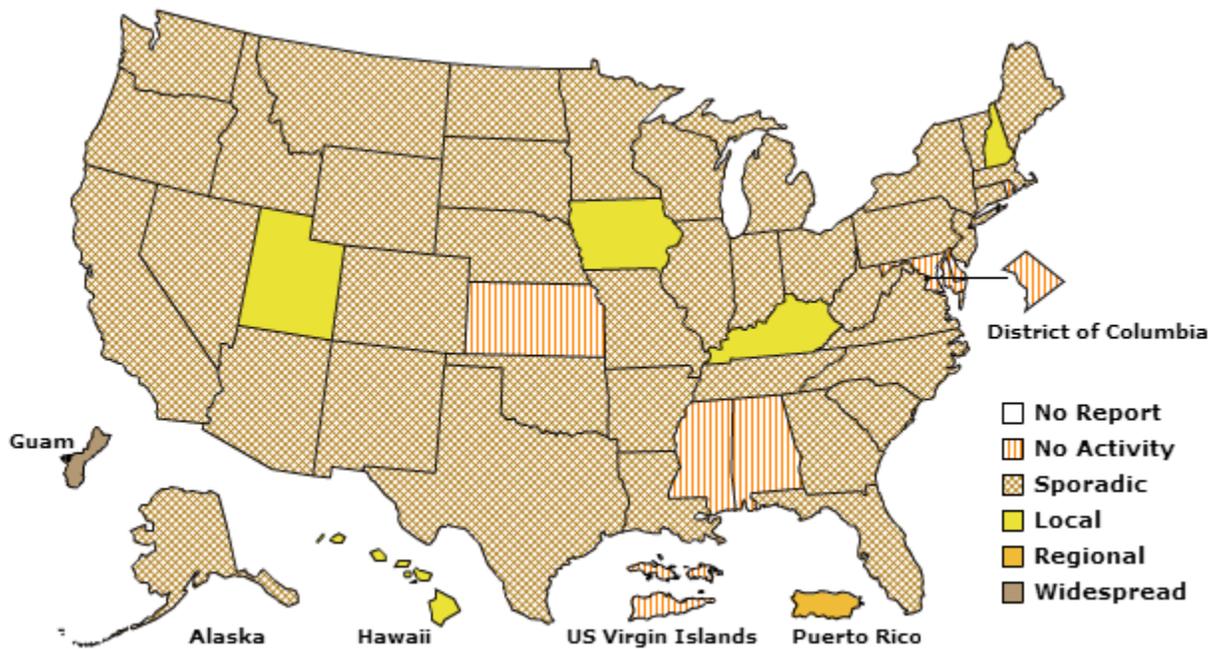
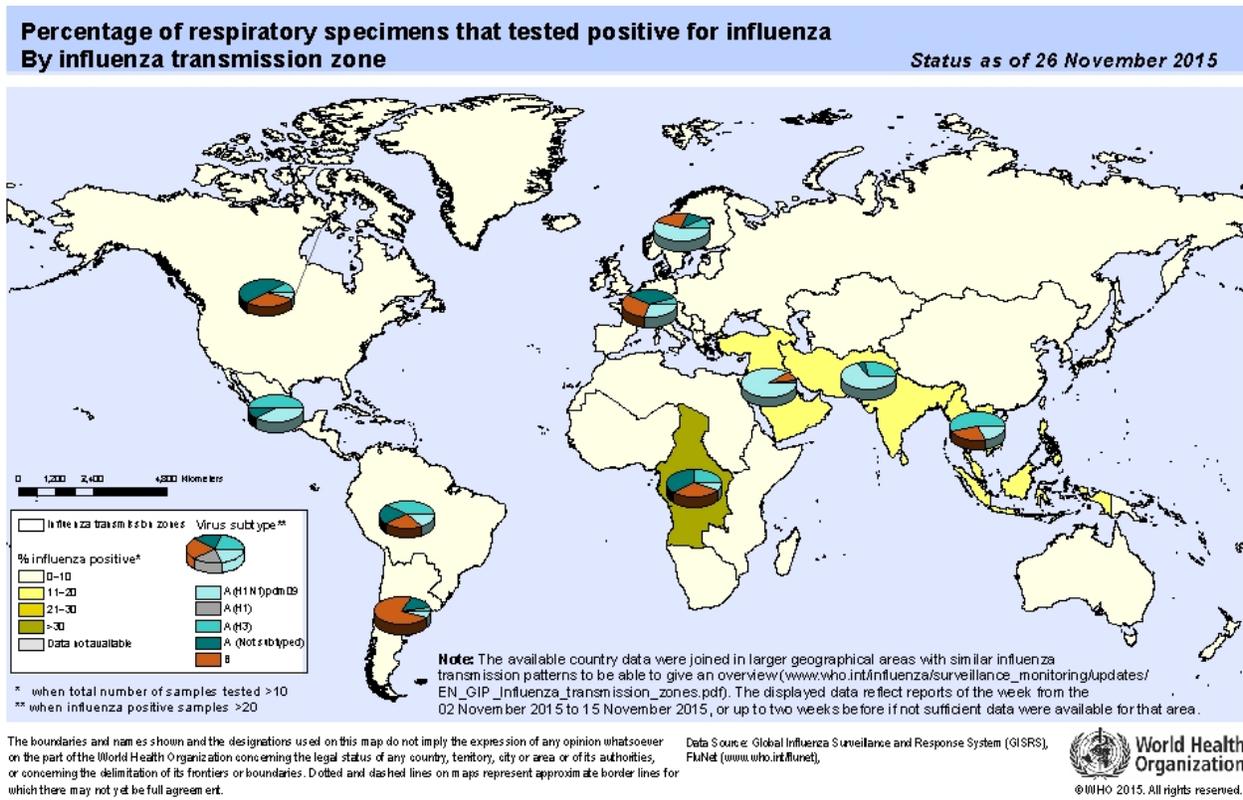


Figure 11. Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists* Week Ending November 21, 2015 – Week 46



*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 26, 2015*



*Based on data up to November 15, 2015