

Denton County Public Health

2018 – 2019 Influenza Surveillance Program

CDC Week 49, Week Ending December 8, 2018



Epidemiologic Overview

Denton County

- Low influenza activity was reported in Denton County for week 49.
- 14 positive influenza tests (8 Flu A and 6 Flu B) and 1 hospitalization were reported by Denton County sentinel providers for week 49.
- Syndromic surveillance for influenza-like illness (ILI) in Denton County increased for week 49 when compared to the previous week.
- 0.6% of the total reported school population was absent due to ILI in week 49.

Texas

- Influenza activity in the state of Texas was reported as regional in week 49.
- The percentage of visits for ILI as reported by ILINet providers increased to 4.1% in week 49 compared to the previous week.
- The percentage of specimens testing positive for influenza in Texas increased to 6.7% in week 49 compared to the previous week.

US

- The proportion of outpatient visits for influenza-like illness (ILI) was 2.2%, which is at the national baseline of 2.2%. 5 of 10 regions reported ILI at or above their region-specific baseline level.
- The geographic spread of influenza in 3 state was reported as widespread; 10 states was reported as regional; 21 states was reported as local; and 16 states reported sporadic activity.
- The percentage of specimens testing positive for influenza in the US was 3.6%.
- The proportion of deaths attributed to pneumonia and influenza (P&I) from the National Center for Health Statistics Mortality Surveillance System for week 48 was 6.0%. This percentage is below the epidemic threshold of 6.6% for week 48.

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

Week Ending	11/3/18	11/10/18	11/17/18	11/24/18	12/1/18	12/8/18	9/22/18 - Present
CDC Week	44	45	46	47	48	49	
Influenza Tests Performed Weekly	271	379	425	406	488	383	3723
Total Positive Influenza Tests	9	10	12	15	15	14	102
Percent Positive Influenza Tests*	3.3%	2.6%	2.8%	3.7%	3.1%	3.7%	
Positive A Influenza	2	4	3	7	5	8	41
Positive B Influenza	7	6	9	8	10	6	61
Non-differentiated Influenza	0	0	0	0	0	0	0
Influenza Hospitalizations	4	1	3	3	5	1	25
Influenza-associated Pediatric Deaths	0	0	0	0	0	0	0
Influenza-associated Adult Deaths	0	0	0	0	0	0	0

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

Figure 2. Influenza Positive Tests and Percent Positive, Denton County Hospitals and Providers, 2018-2019 Season

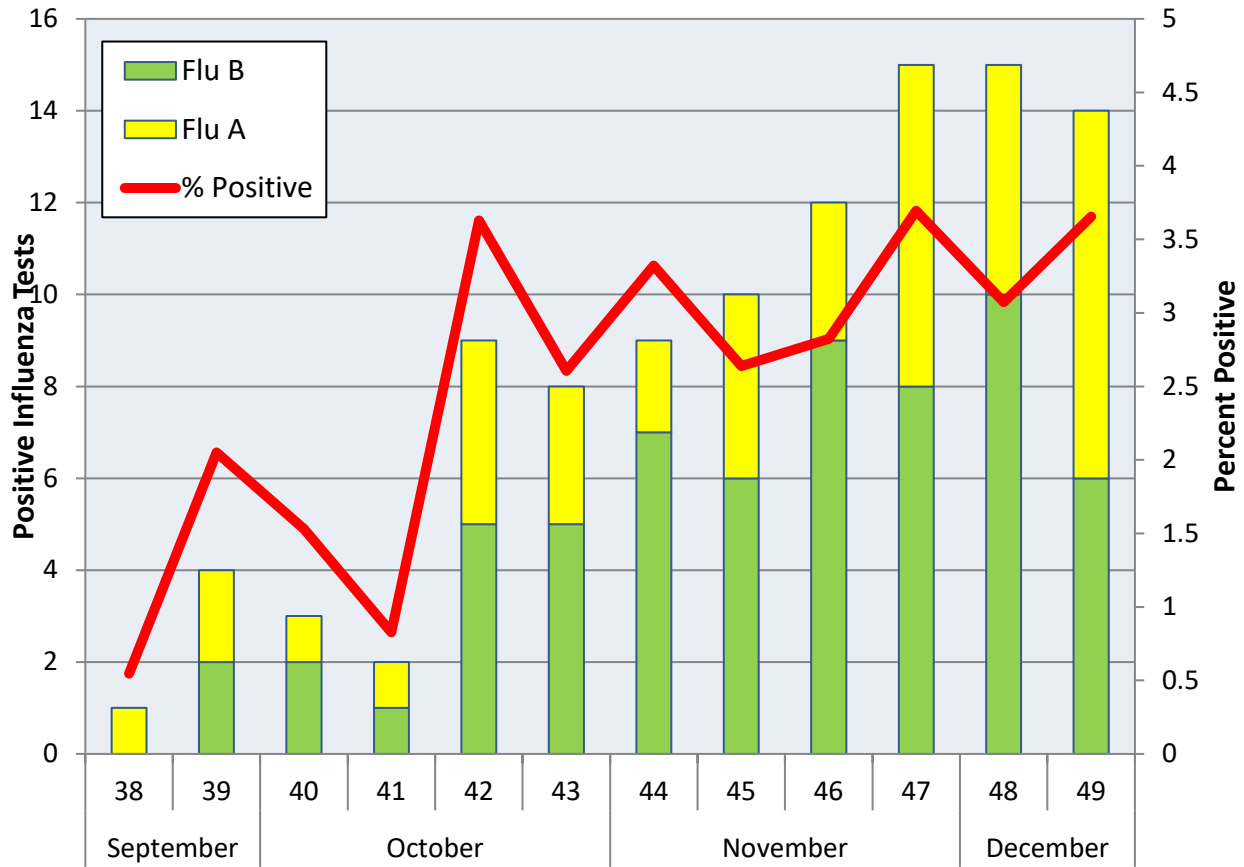
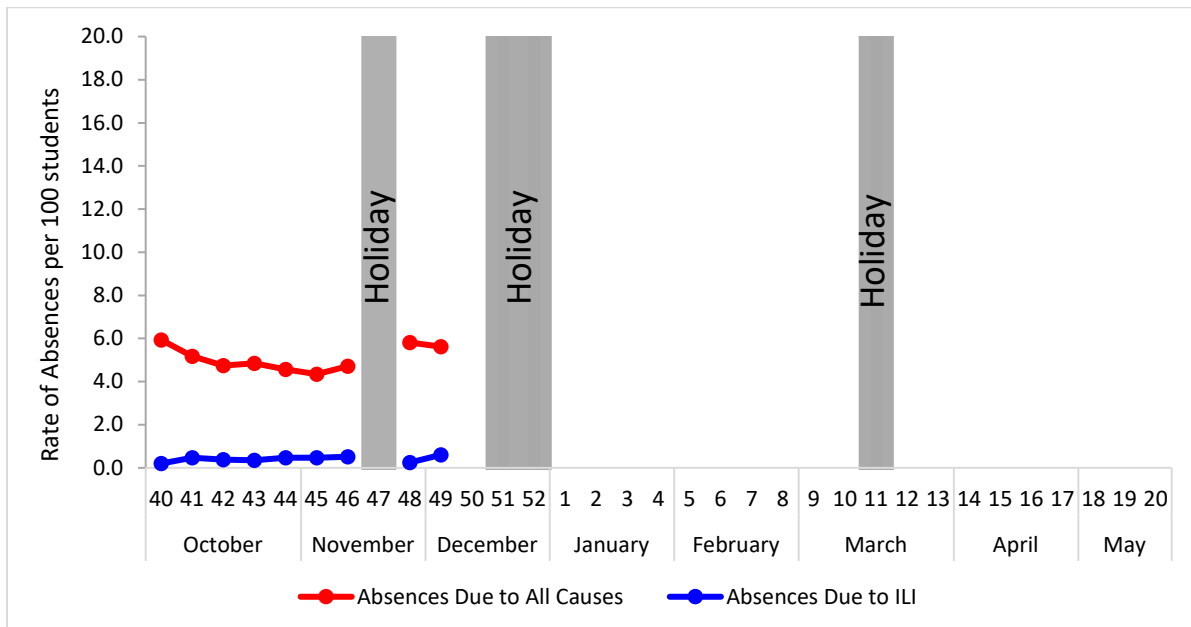


Figure 3. Percent of Absenteeism Due to All Causes and ILI, Denton County Schools*, 2018-2019 Season



*During week 49, a total of 3 Denton County Independent School Districts reported data to Denton County Public Health which included a total of 11,792 students.

Figure 4. Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, October 1, 2017 – December 8, 2018

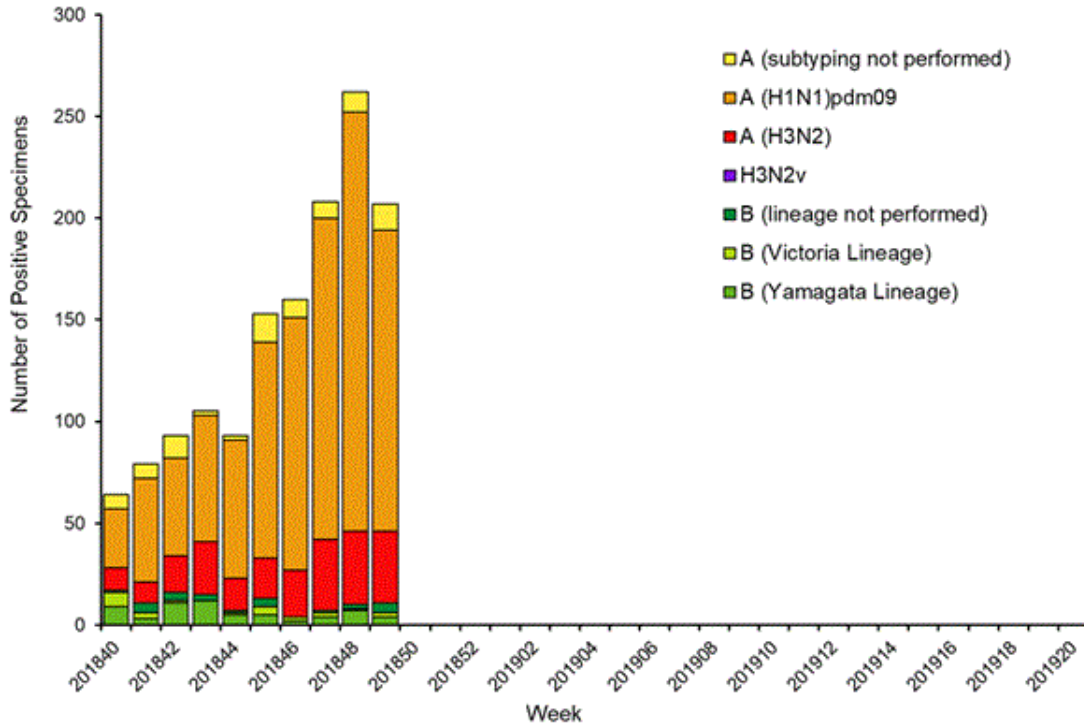


Figure 5. Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, October 1, 2017 – December 8, 2018

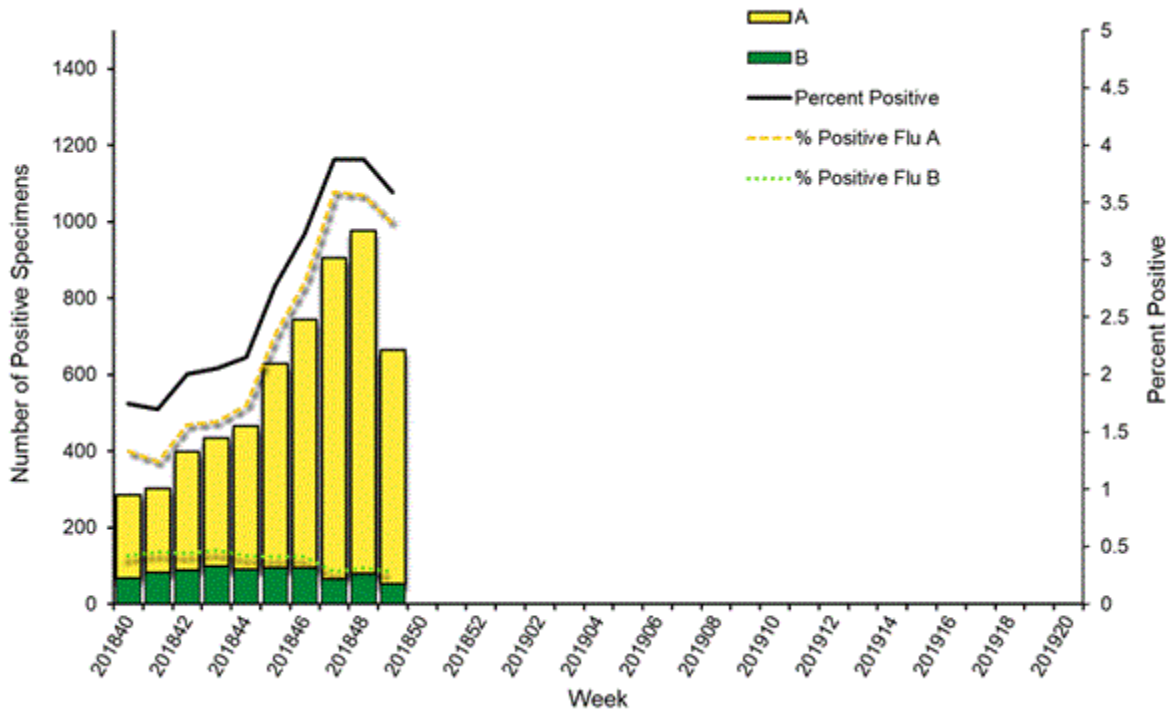


Figure 6. Antigenic Characterization of Influenza Isolates, Since December 8, 2018

Influenza A (H1N1)	68 of 68 (100%) – A/Michigan/45/2015 pdm09-like
Influenza A (H3N2)	6 of 6 (100%) – A/Singapore/INFIMH-16-0019/2016-like
Influenza B (Victoria Lineage)	3 of 3 (100%) – B/Colorado/06/2017-like
Influenza B (Yamagata Lineage)	16 of 16 (100%) – B/Phuket/3073/2013-like*

2018-2019 Influenza Vaccine Composition, Northern Hemisphere:

- A/Michigan/45/2015 pdm09-like
- A/Singapore/INFIMH-16-0019/2016-like
- B/Colorado/06/2017-like
- B/Phuket/3073/2013-like*

*2018-2019 Northern Hemisphere quadrivalent influenza vaccine influenza B component

Figure 7. U.S. Virologic Surveillance, Week 49

	Week 49	Data Cumulative since September 30, 2018 (Week 40)
No. of specimens tested	18,516	209,570
No. of positive specimens (%)	665 (3.6%)	5,801 (2.8%)
<i>Positive specimens by type</i>		
Influenza A	613 (92.2%)	4,989 (86.0%)
Influenza B	52 (7.8%)	812 (14.0%)

Figure 8. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, August 1, 2018- December 8, 2018

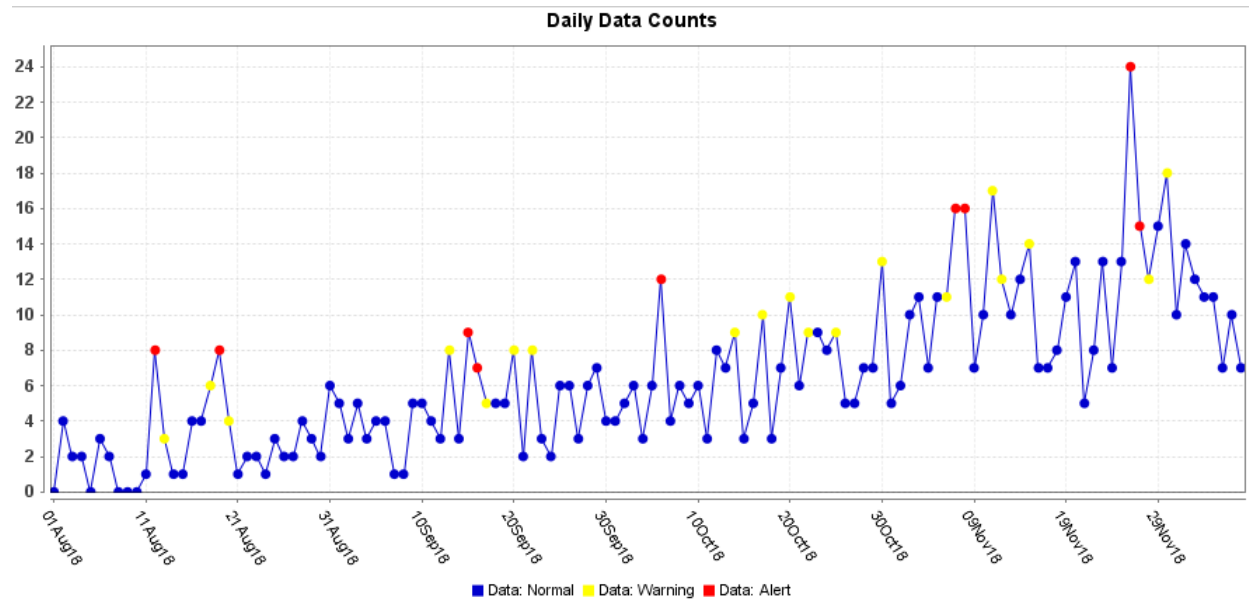
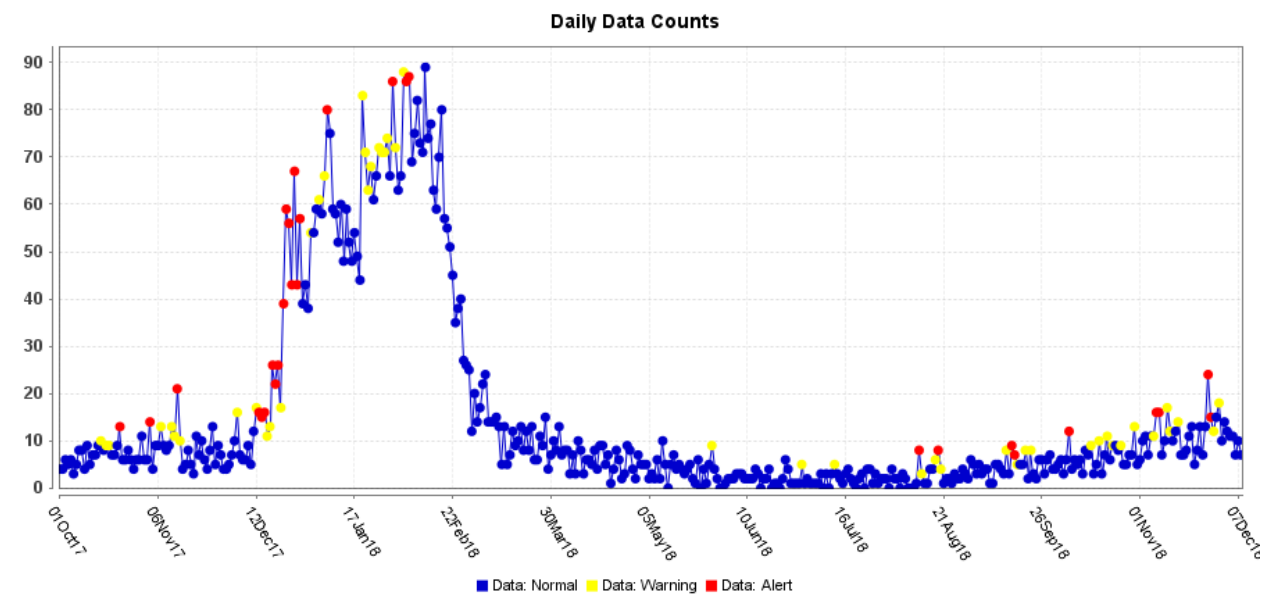


Figure 9. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, October 1, 2017 – December 8, 2018



Data obtained from hospitals participating in the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) from October 2017 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 10. Pneumonia and Influenza Mortality from the National Center for Health Statistics Mortality Surveillance System: Week ending December 1, 2018

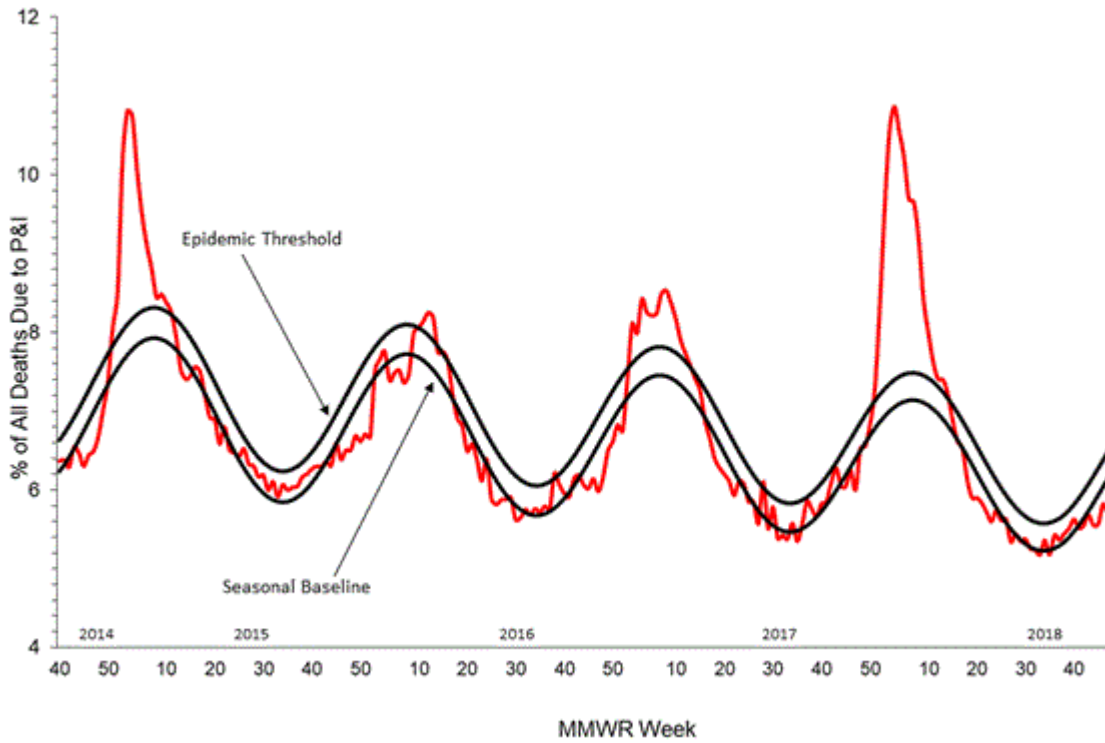


Figure 11. Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists: Week 49 – Week Ending December 8, 2018

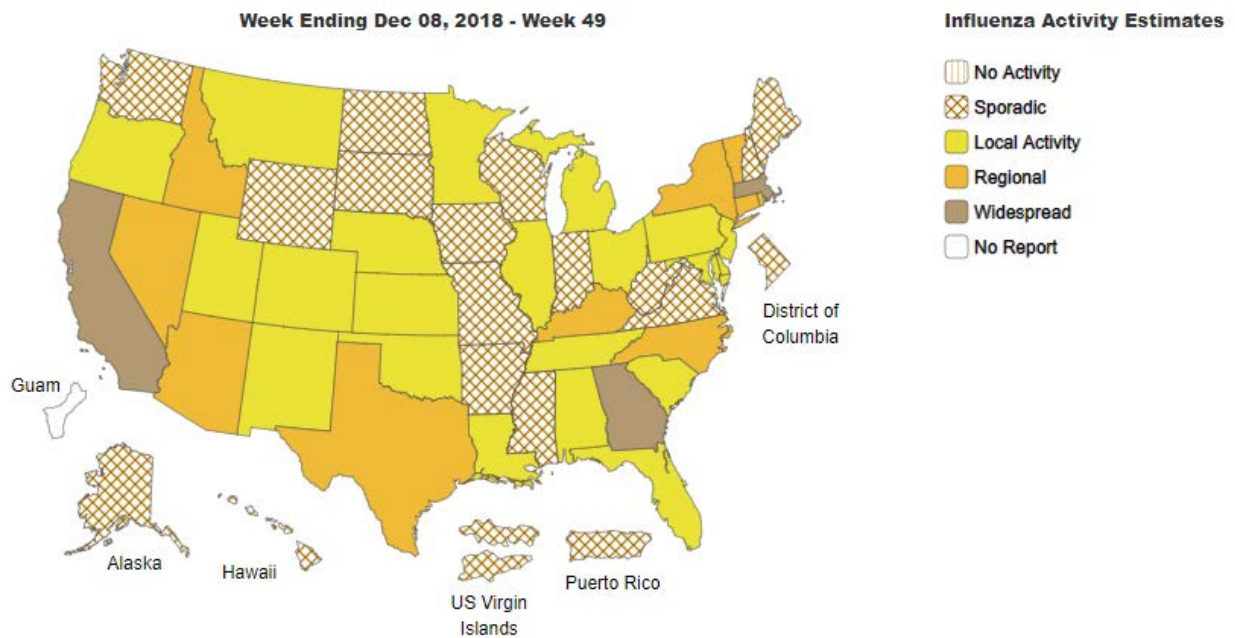
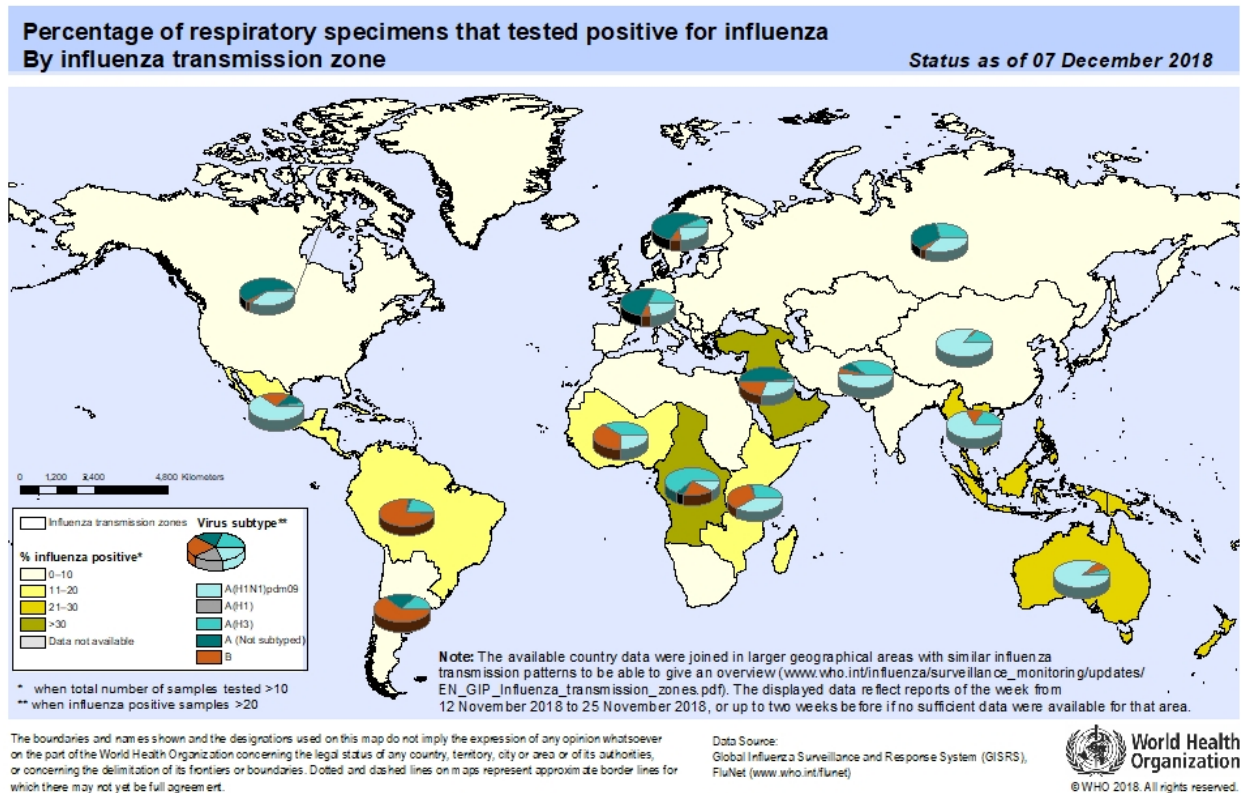


Figure 12. Percentage of Respiratory Specimens that Tested Positive for Influenza: WHO, based on data up to December 7, 2018



Please send inquiries to Lily Metzler, MPH – Epidemiologist
Denton County Public Health at Lily.Metzler@dentoncounty.com