

# Denton County Public Health

## 2018 – 2019 Influenza Surveillance Program

### CDC Week 48, Week Ending December 1, 2018



## Epidemiologic Overview

### Denton County

- Low influenza activity was reported in Denton County for week 48.
- 15 positive influenza tests (5 Flu A and 10 Flu B) and 5 hospitalizations were reported by Denton County sentinel providers for week 48.
- Syndromic surveillance for influenza-like illness (ILI) in Denton County increased for week 48 when compared to the previous week.

### Texas

- Influenza activity in the state of Texas was reported as local in week 48.
- The percentage of visits for ILI as reported by ILINet providers decreased to 3.9% in week 48 compared to the previous week.
- The percentage of specimens testing positive for influenza in Texas decreased to 3.3% in week 48 compared to the previous week.

### US

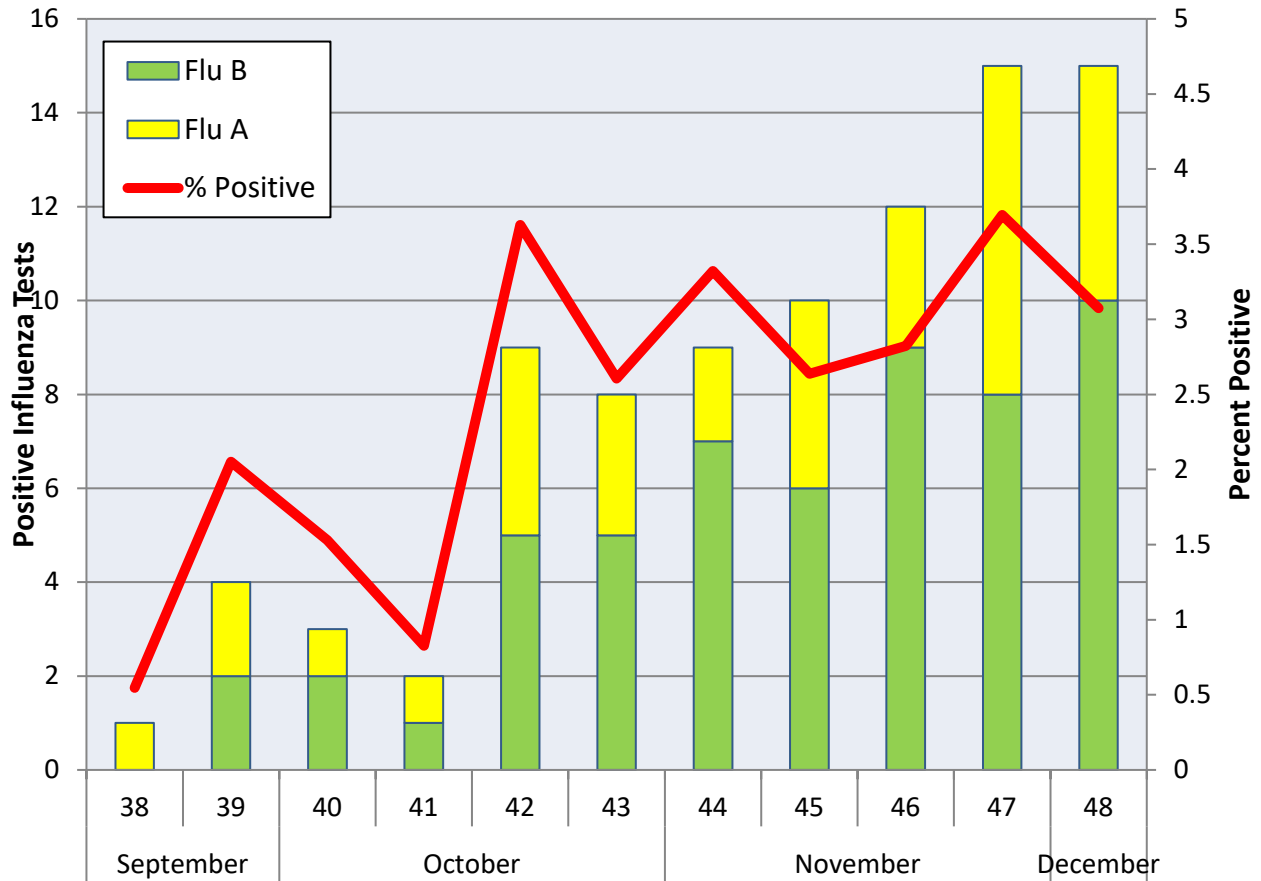
- The proportion of outpatient visits for influenza-like illness (ILI) was 2.2%, which is at the national baseline of 2.2%. 4 of 10 regions reported ILI at or above their region-specific baseline level.
- The geographic spread of influenza in 1 state was reported as widespread; 9 states was reported as regional; 18 states was reported as local; and 22 states reported sporadic activity.
- The percentage of specimens testing positive for influenza in the US was 4.2%.
- The proportion of deaths attributed to pneumonia and influenza (P&I) from the National Center for Health Statistics Mortality Surveillance System for week 47 was 5.7%. This percentage is below the epidemic threshold of 6.5% for week 47.

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

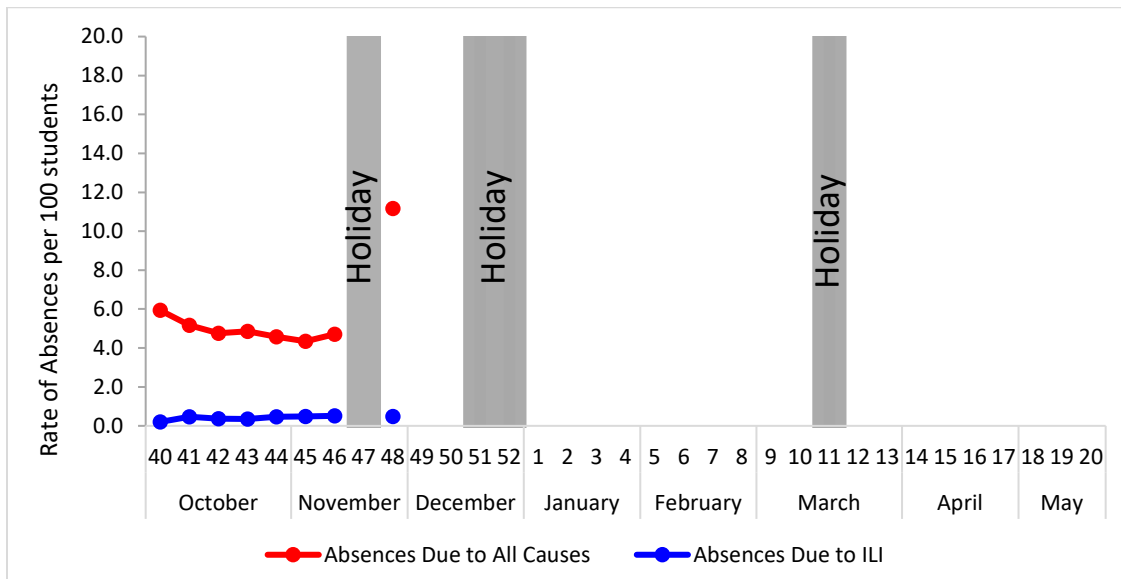
Week Ending	10/27/18	11/3/18	11/10/18	11/17/18	11/24/18	12/1/18	9/22/18 - Present
<b>CDC Week</b>	43	44	45	46	47	48	
<b>Influenza Tests Performed Weekly</b>	307	271	379	425	406	488	3340
<b>Total Positive Influenza Tests</b>	8	9	10	12	15	15	88
<b>Percent Positive Influenza Tests*</b>	2.6%	3.3%	2.6%	2.8%	3.7%	3.1%	
<b>Positive A Influenza</b>	3	2	4	3	7	5	33
<b>Positive B Influenza</b>	5	7	6	9	8	10	55
<b>Non-differentiated Influenza</b>	0	0	0	0	0	0	0
<b>Influenza Hospitalizations</b>	2	4	1	3	3	5	24
<b>Influenza-associated Pediatric Deaths</b>	0	0	0	0	0	0	0
<b>Influenza-associated Adult Deaths</b>	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**

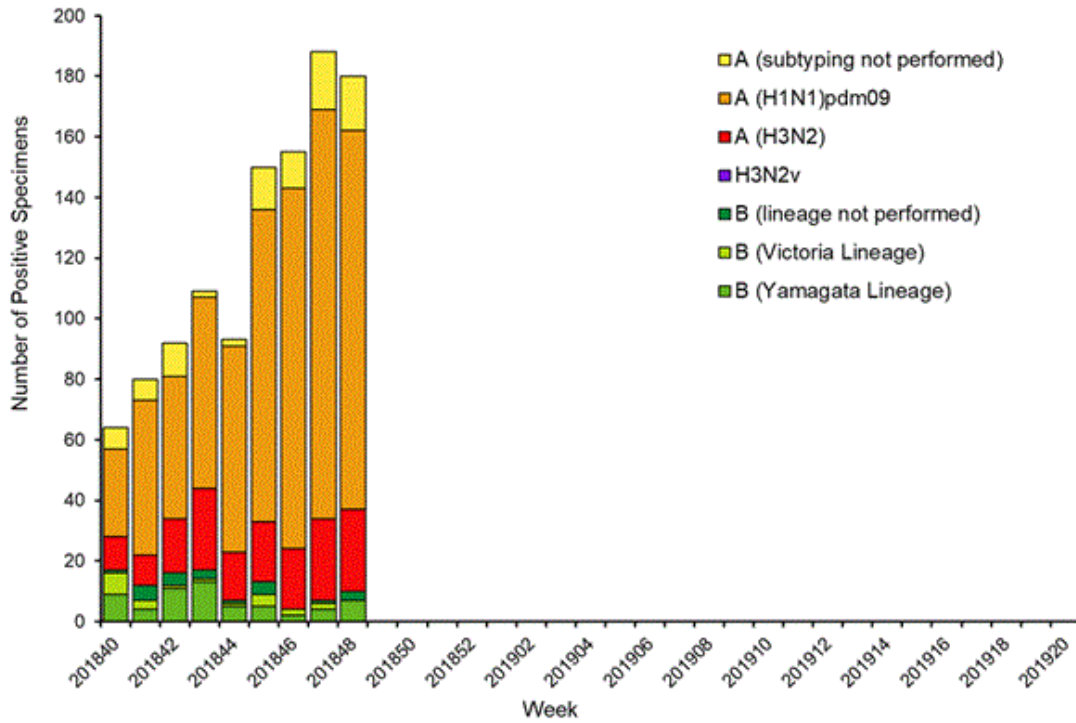


**Figure 3. Percent of Absenteeism Due to All Causes and ILI, Denton County Schools\*, 2018-2019 Season**

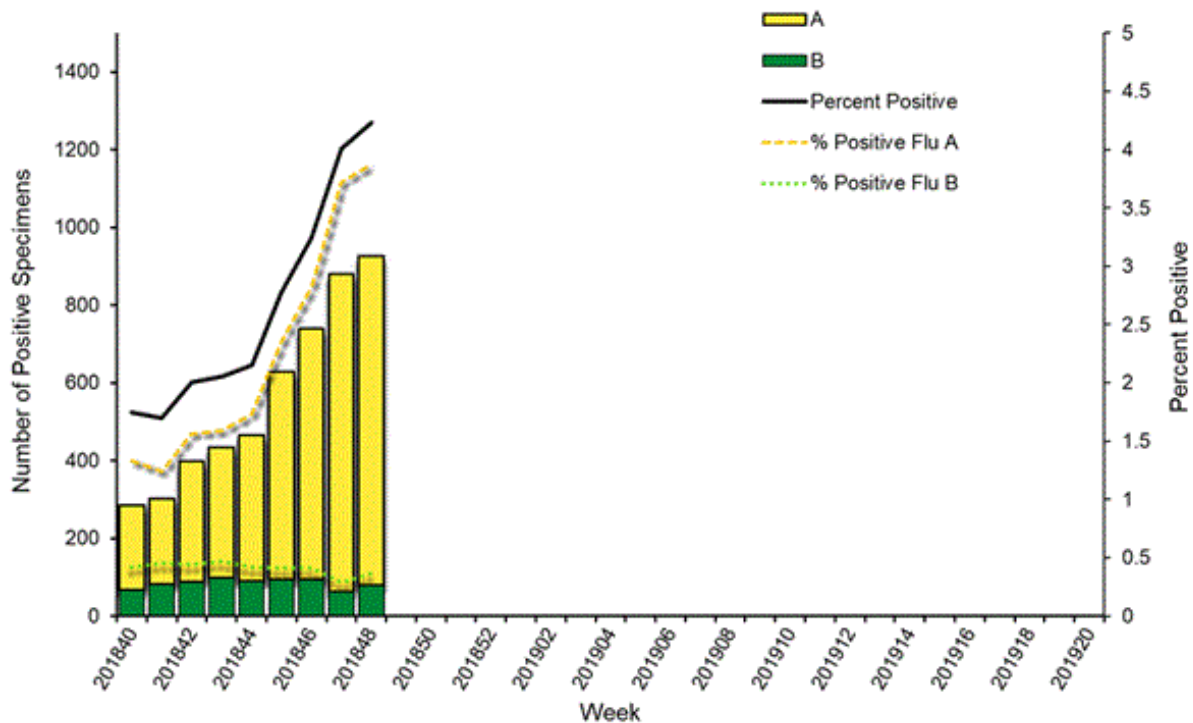


\*During week 48, a total of 2 Denton County Independent School Districts reported data to Denton County Public Health which included a total of 7,459 students.

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



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



**Figure 6. Antigenic Characterization of Influenza Isolates, Since December 1, 2018**

Influenza A (H1N1)	67 of 67 (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)	8 of 8 (100%) – B/Phuket/3073/2013-like*

**2018-2019 Influenza Vaccine Composition, Northern Hemisphere:**

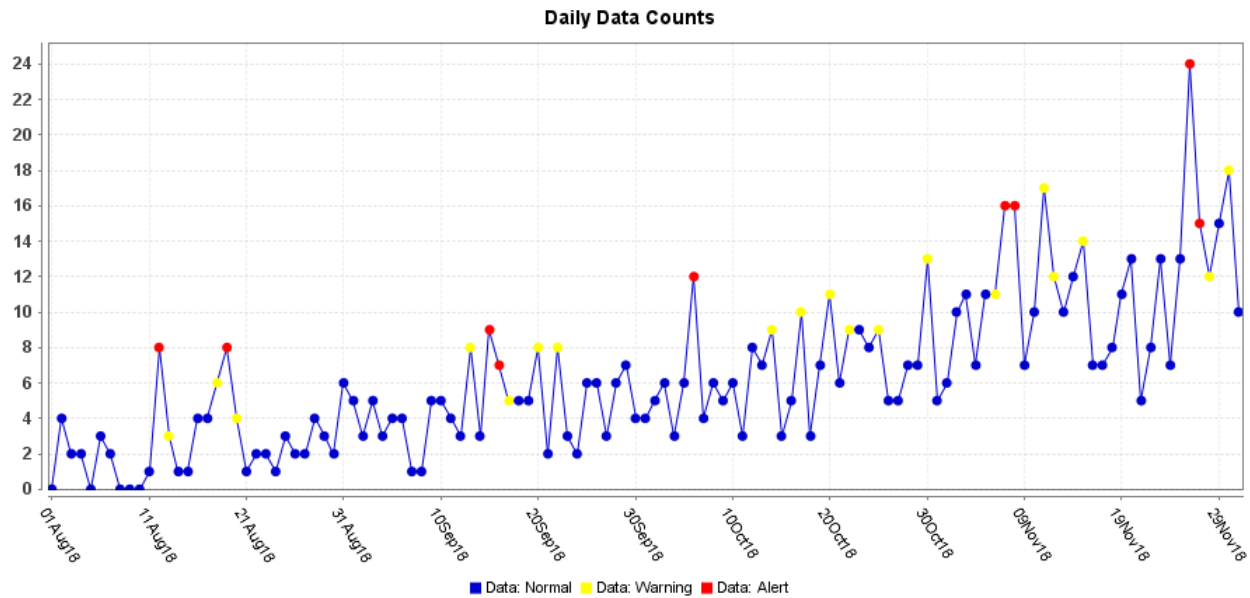
- A/Michigan/45/2015 pdm09-like
- A/Singapore/INFIMH-16-0019/2016-like
- B/Colorado/06/2017-like
- B/Phuket/3073/2013-like\*

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

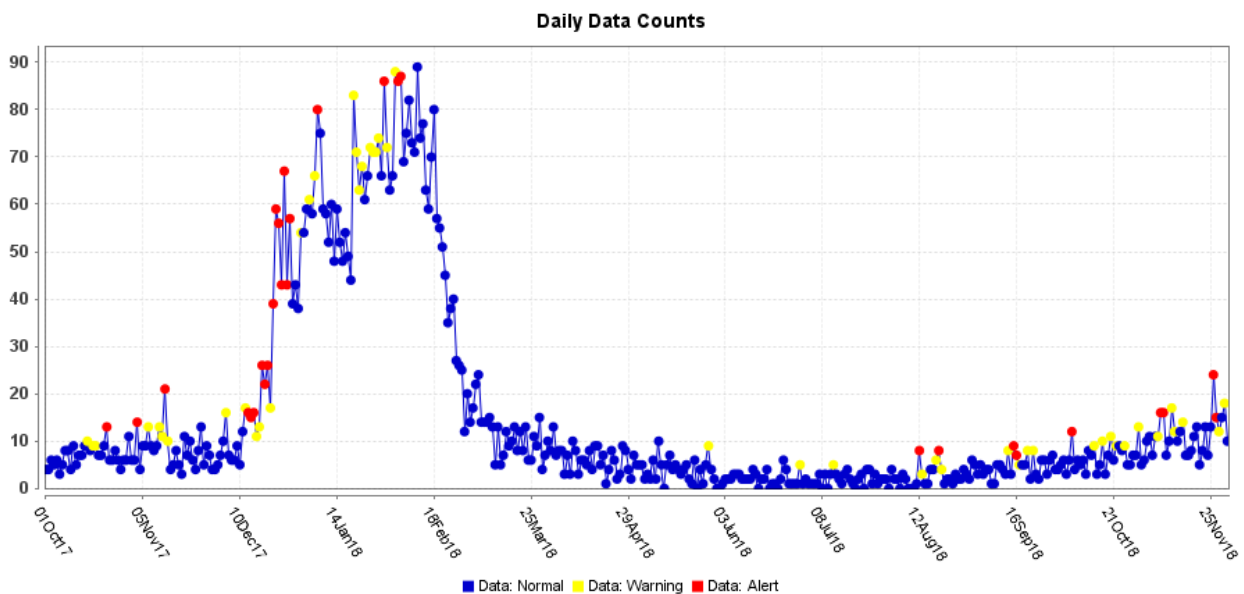
**Figure 7. U.S. Virologic Surveillance, Week 48**

	Week 48	Data Cumulative since September 30, 2018 (Week 40)
No. of specimens tested	21,851	186,197
No. of positive specimens (%)	925 (4.2%)	5,059 (2.7%)
<i>Positive specimens by type</i>		
Influenza A	846 (91.5%)	4,303 (85.1%)
Influenza B	79 (8.5%)	756 (14.9%)

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

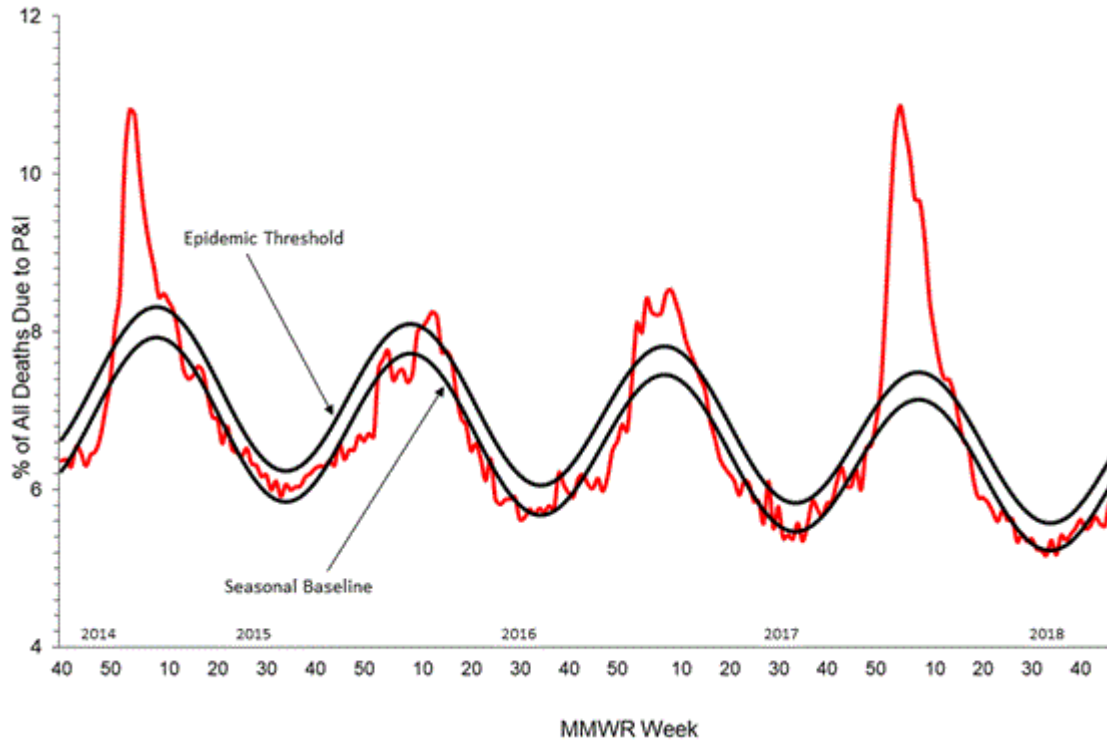


**Figure 9. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, October 1, 2017 – December 1, 2018**

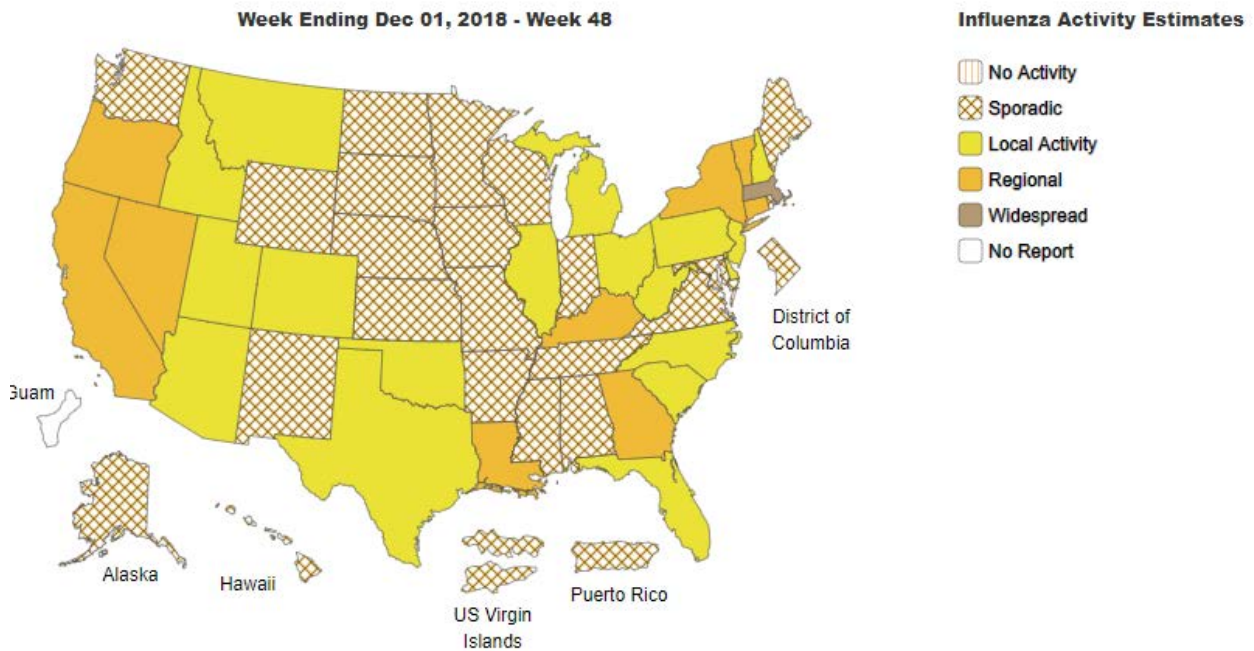


Data obtained from hospitals participating in the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) from October 2017 through the present. Depicted are the numbers of persons presenting to Emergency Departments according to patient location (Denton region) with self-reported chief complaints of influenza-like illness.

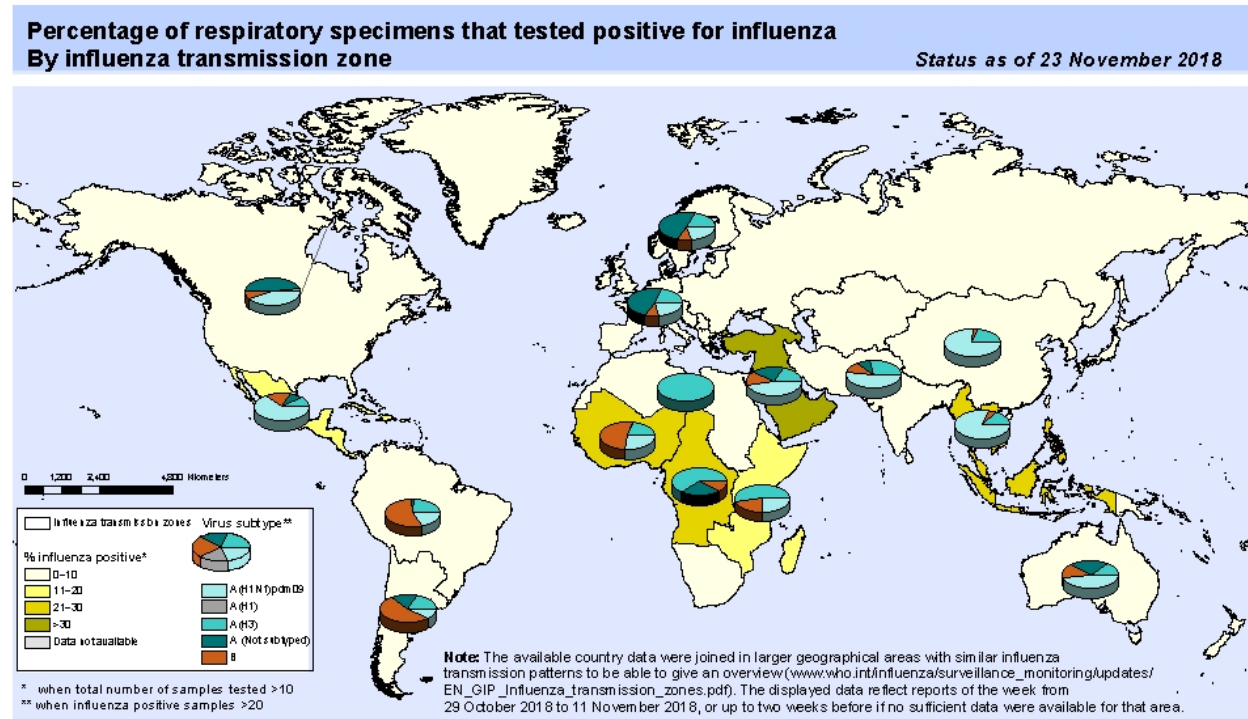
**Figure 10. Pneumonia and Influenza Mortality from the National Center for Health Statistics Mortality Surveillance System: Week ending November 24, 2018**



**Figure 11. Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists: Week 48 – Week Ending December 1, 2018**



**Figure 12. Percentage of Respiratory Specimens that Tested Positive for Influenza: WHO, based on data up to November 23, 2018**



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source:  
 Global Influenza Surveillance and Response System (GISRS),  
 FluNet ([www.who.int/fluNet](http://www.who.int/fluNet))



Please send inquiries to Lily Metzler, MPH – Epidemiologist  
 Denton County Public Health at [Lily.Metzler@dentoncounty.com](mailto:Lily.Metzler@dentoncounty.com)