

# Denton County Public Health

## 2018 – 2019 Influenza Surveillance Program

### CDC Week 2, Week Ending January 12, 2019



## Epidemiologic Overview

### Denton County

- Moderate influenza activity was reported in Denton County for week 2.
- 54 positive influenza tests (45 Flu A and 9 Flu B) and 11 hospitalizations were reported by Denton County sentinel providers for week 2.
- Syndromic surveillance for influenza-like illness (ILI) in Denton County decreased for week 2 when compared to the previous week.

### Texas

- Influenza activity in the state of Texas was reported as regional in week 2.
- The percentage of visits for ILI as reported by ILINet providers decreased to 5.0% in week 2 compared to the previous week.
- The percentage of specimens testing positive for influenza in Texas increased to 15.3% in week 2 compared to the previous week.

### US

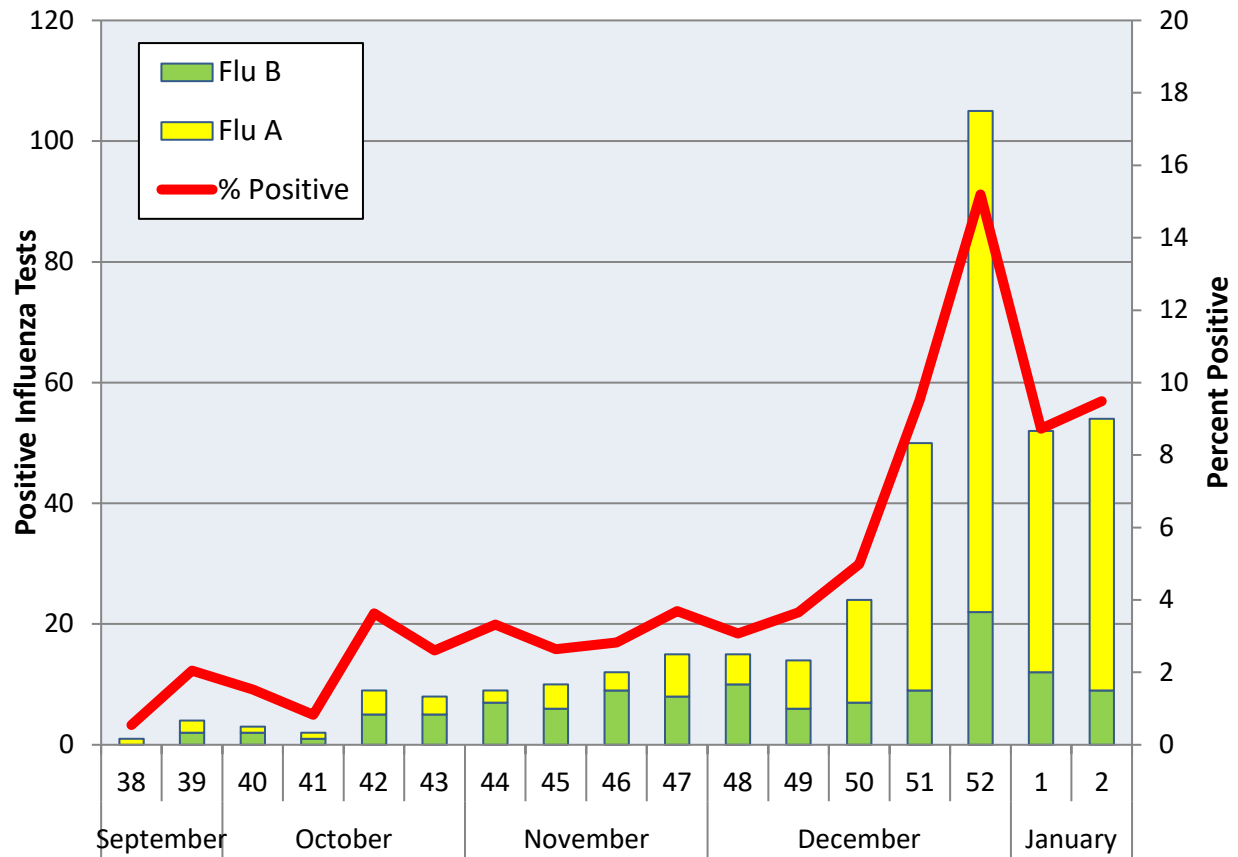
- The proportion of outpatient visits for influenza-like illness (ILI) was 3.1%, which is above the national baseline of 2.2%. 10 of 10 regions reported ILI at or above their region-specific baseline level.
- The geographic spread of influenza in 30 states was reported as widespread; 16 states was reported as regional; 3 states was reported as local; and 1 state reported sporadic activity.
- The percentage of specimens testing positive for influenza in the US was 12.4%.
- The proportion of deaths attributed to pneumonia and influenza (P&I) from the National Center for Health Statistics Mortality Surveillance System for week 1 was 6.9%. This percentage is below the epidemic threshold of 7.0% for week 1.

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

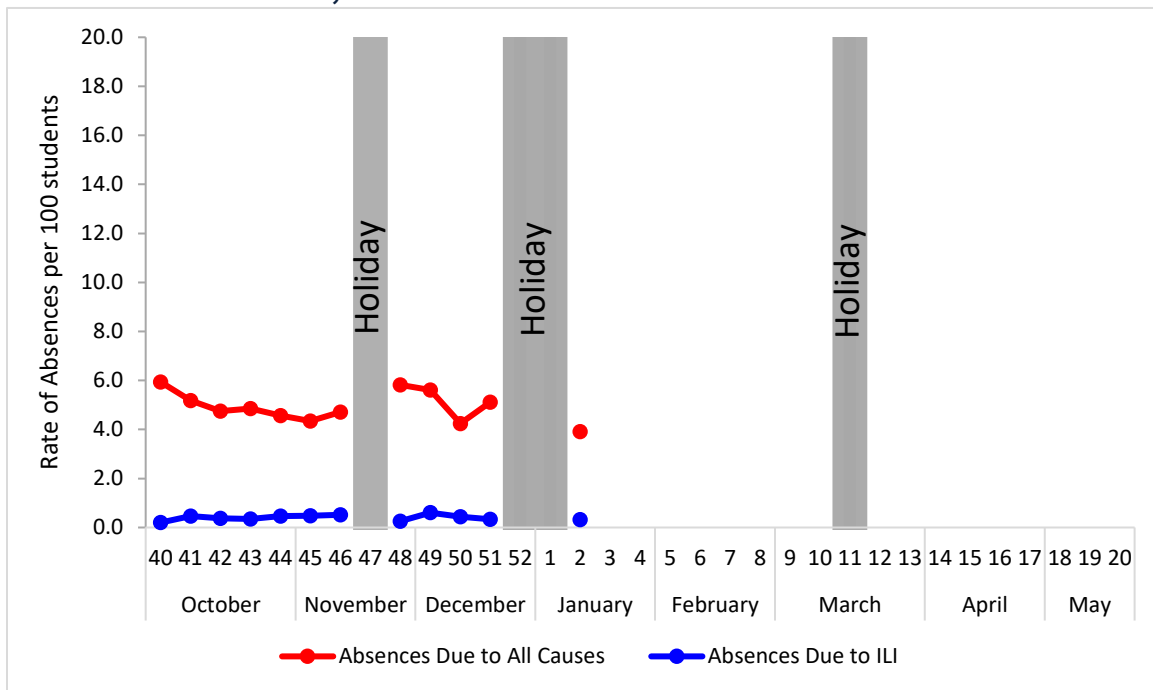
Week Ending	12/8/18	12/15/18	12/22/18	12/29/18	1/05/19	1/12/19	9/22/18 - Present
<b>CDC Week</b>	49	50	51	52	1	2	
<b>Influenza Tests Performed Weekly</b>	383	481	525	691	596	569	6585
<b>Total Positive Influenza Tests</b>	14	24	50	105	52	54	387
<b>Percent Positive Influenza Tests*</b>	3.7%	5.0%	9.5%	15.2%	8.7%	9.5%	
<b>Positive A Influenza</b>	8	17	41	83	40	45	267
<b>Positive B Influenza</b>	6	7	9	22	12	9	120
<b>Non-differentiated Influenza</b>	0	0	0	0	0	0	0
<b>Influenza Hospitalizations</b>	1	5	3	16	15	11	75
<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**

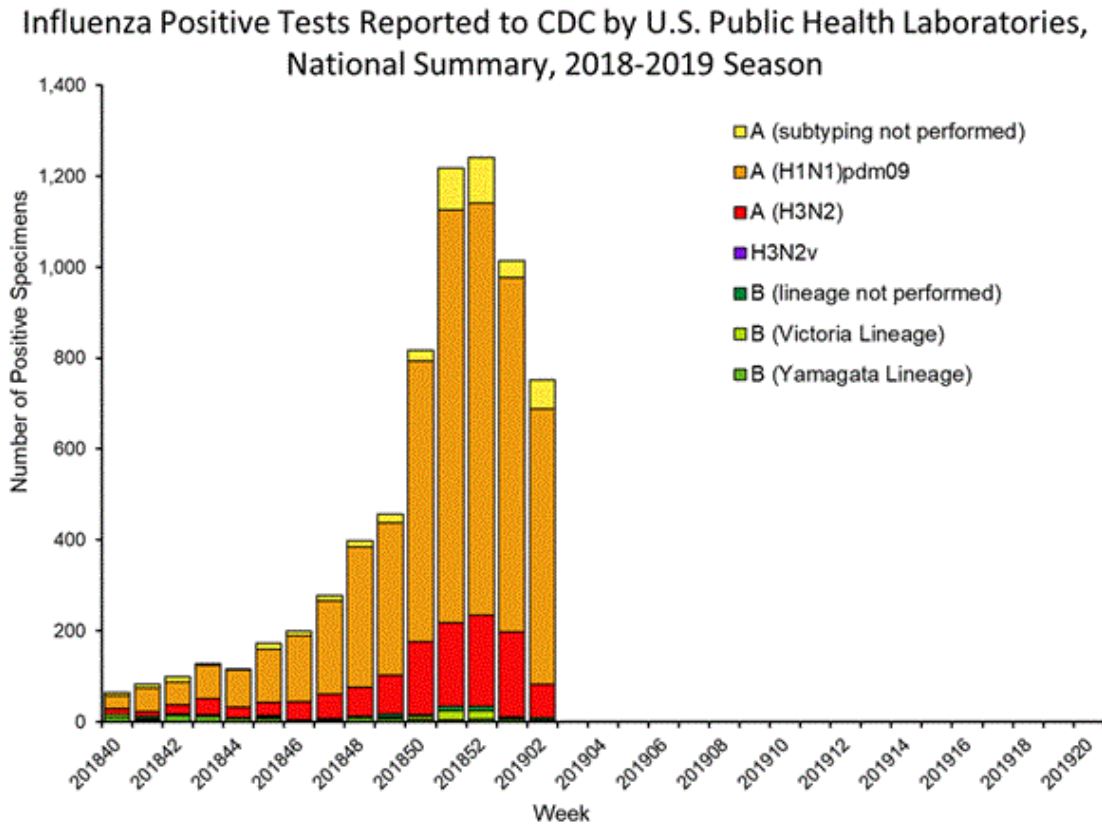


**Figure 3. Percent of Absenteeism Due to All Causes and ILI, Denton County Schools\*, 2018-2019 Season**

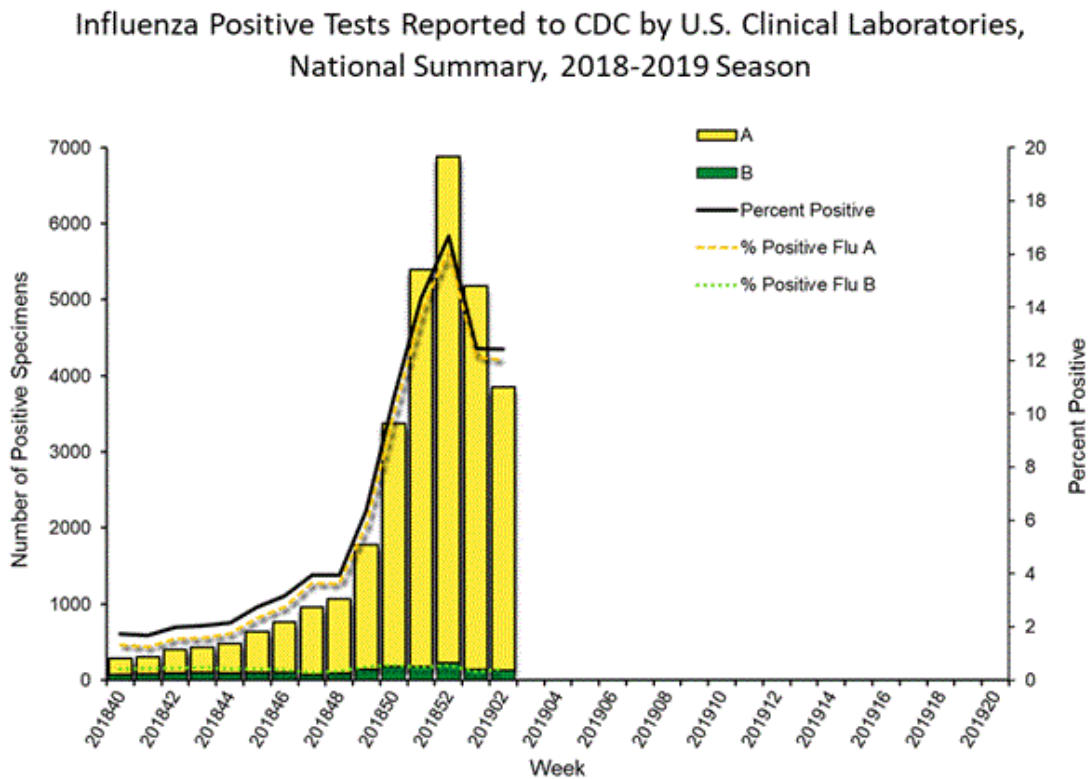


\*During week 2, a total of 4 Denton County Independent School Districts reported data to Denton County Public Health which included a total of 26,077 students.

**Figure 4. Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, September 30, 2018 – January 12, 2019**



**Figure 5. Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, September 30, 2018 – January 12, 2019**



**Figure 6. Antigenic Characterization of Influenza Isolates, Since September 30, 2018**

Influenza A (H1N1)	134 of 136 (98.5%) – A/Michigan/45/2015 pdm09-like
Influenza A (H3N2)	6 of 6 (100%) – A/Singapore/INFIMH-16-0019/2016-like
Influenza B (Victoria Lineage)	4 of 8 (50%) – B/Colorado/06/2017-like
Influenza B (Yamagata Lineage)	33 of 33 (100%) – B/Phuket/3073/2013-like*

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

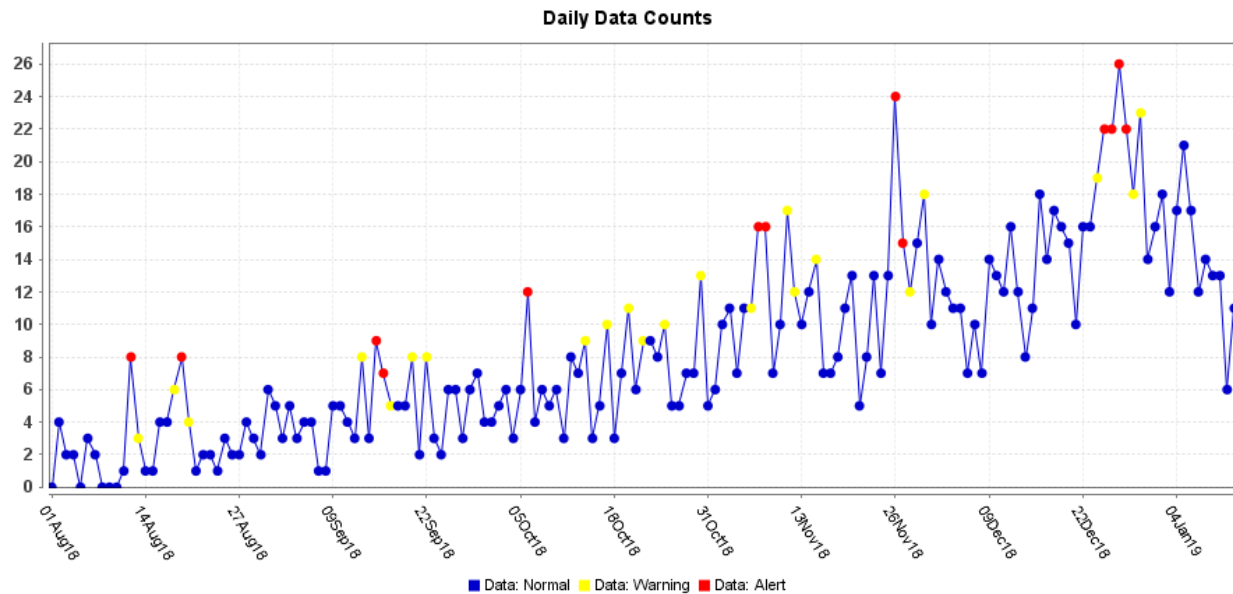
- A/Michigan/45/2015 pdm09-like
- A/Singapore/INFIMH-16-0019/2016-like
- B/Colorado/06/2017-like
- B/Phuket/3073/2013-like\*

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

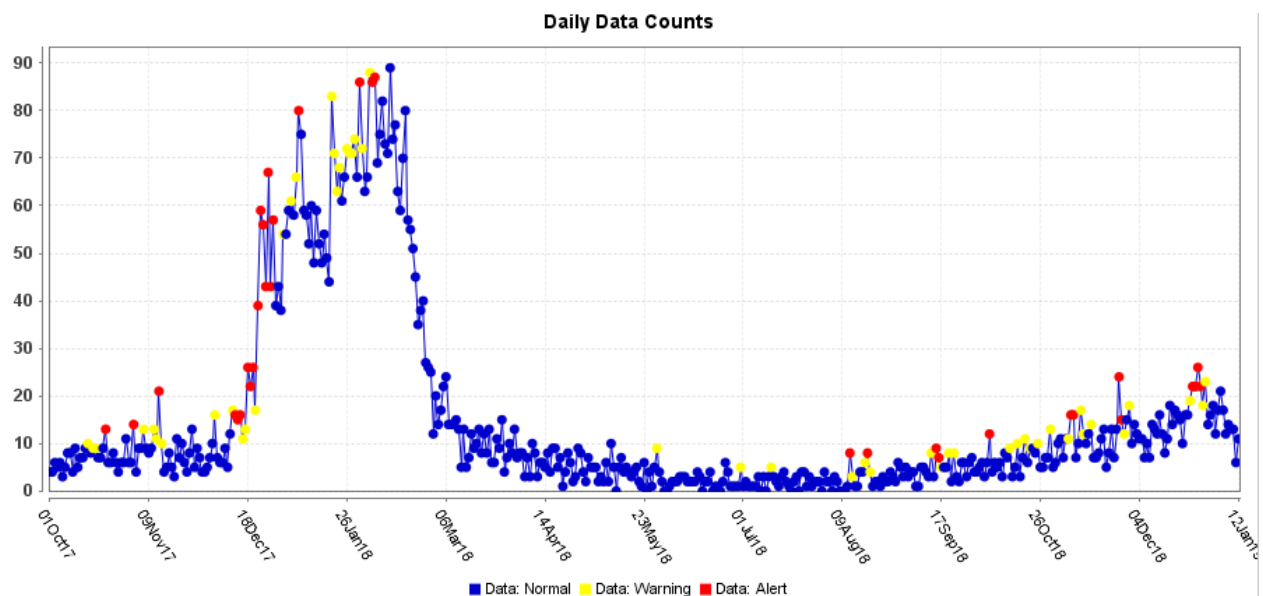
**Figure 7. U.S. Virologic Surveillance, Week 2**

	Week 2	Data Cumulative since September 30, 2018 (Week 40)
No. of specimens tested	31,051	407,503
No. of positive specimens (%)	3,856 (12.4%)	26,430 (7.3%)
<i>Positive specimens by type</i>		
Influenza A	3,730 (96.7%)	30,028 (94.5%)
Influenza B	126 (3.3%)	1,752 (5.5%)

**Figure 8. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, August 1, 2018- January 12, 2019**

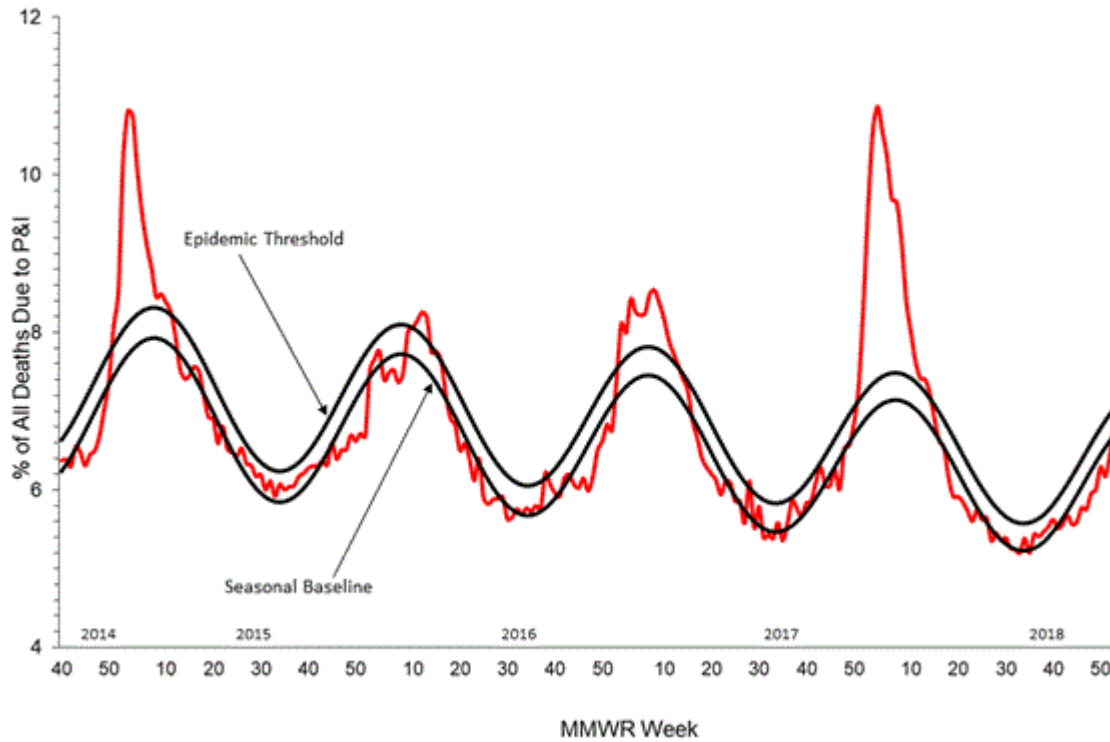


**Figure 9. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, October 1, 2017 – January 12, 2019**

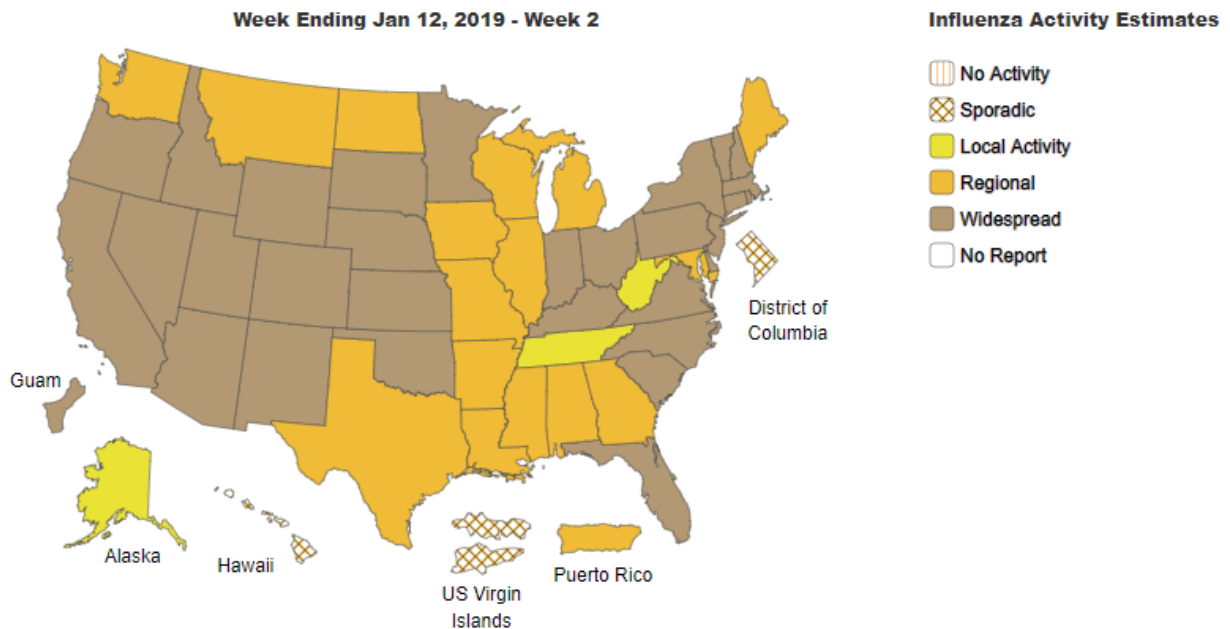


Data obtained from hospitals participating in the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) from October 2017 through the present. Depicted are the numbers of persons presenting to Emergency Departments according to patient location (Denton region)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

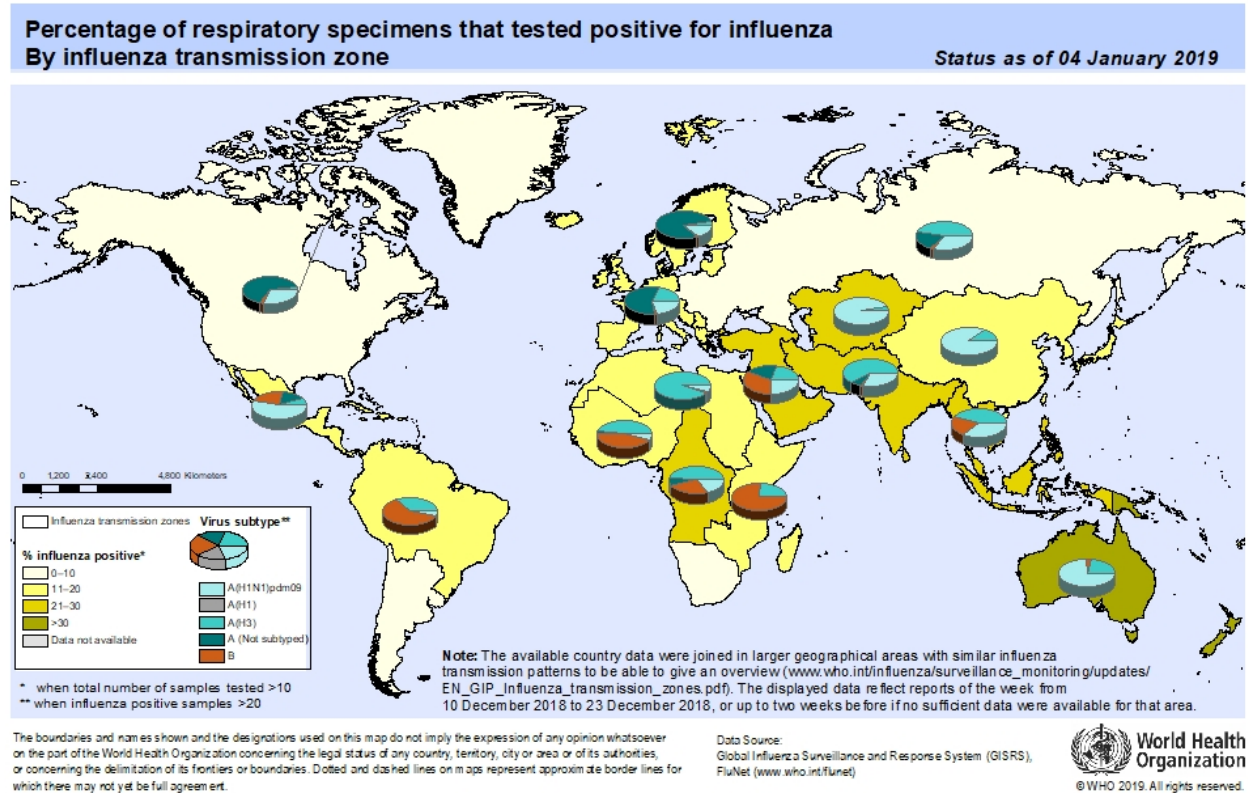
**Figure 10. Pneumonia and Influenza Mortality from the National Center for Health Statistics Mortality Surveillance System: Week ending January 5, 2018**



**Figure 11. Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists: Week 2 - Week Ending January 12, 2019**



**Figure 12. Percentage of Respiratory Specimens that Tested Positive for Influenza: WHO, based on data up to January 4, 2019**



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