

# Denton County Public Health

## 2018 – 2019 Influenza Surveillance Program

### CDC Week 17, Week Ending April 27, 2019



## Epidemiologic Overview

### Denton County

- Low influenza activity was reported in Denton County for week 17.
- 3 positive influenza tests (1 Flu A and 2 Flu B) and 1 hospitalization were reported by Denton County sentinel providers for week 17.
- Syndromic surveillance for influenza-like illness (ILI) in Denton County increased for week 17 when compared to the previous week.
- 0.3% of the total reported school population was absent due to ILI in week 16.

### Texas

- Influenza activity in the state of Texas was reported as sporadic in week 17.
- The percentage of visits for ILI as reported by ILINet providers decreased to 2.7% in week 17 compared to the previous week.
- The percentage of specimens testing positive for influenza in Texas was 7.0% in week 17.

### US

- The proportion of outpatient visits for influenza-like illness (ILI) was 1.8%, which is below the national baseline of 2.2%. 10 of 10 regions reported ILI below their region-specific baseline level.
- The geographic spread of influenza in 3 states was reported as widespread; 7 states was reported as regional; 18 states was reported as local; and 22 states was reported as sporadic.
- The percentage of specimens testing positive for influenza in the US was 5.4%.
- The proportion of deaths attributed to pneumonia and influenza (P&I) from the National Center for Health Statistics Mortality Surveillance System for week 16 was 6.3%. This percentage is below the epidemic threshold of 6.9% for week 16.

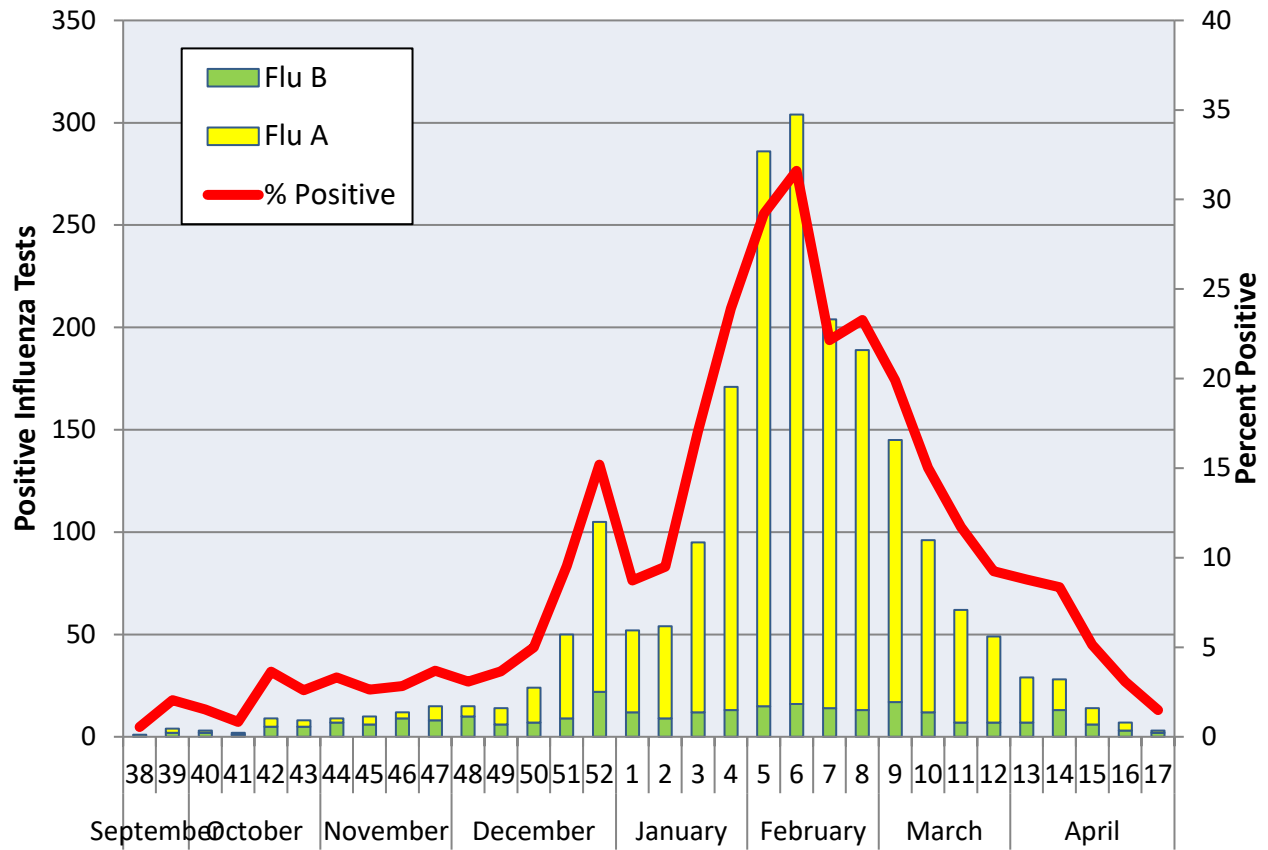
**Figure 1. Influenza Surveillance Summary: Denton County Hospitals and Providers<sup>‡</sup>**

Week Ending	3/23/19	3/30/19	4/6/19	4/13/19	4/20/19	4/27/19	9/22/18 - Present
<b>CDC Week</b>	12	13	14	15	16	17	
<b>Influenza Tests Performed Weekly</b>	530	330	335	273	227	202	15324
<b>Total Positive Influenza Tests</b>	49	29	28	14	7	3	2066
<b>Percent Positive Influenza Tests*</b>	9.3%	8.8%	8.4%	5.1%	3.1%	1.5%	
<b>Positive A Influenza</b>	42	22	15	8	4	1	1792
<b>Positive B Influenza</b>	7	7	13	6	3	2	277
<b>Non-differentiated Influenza</b>	0	0	0	0	0	0	0
<b>Influenza Hospitalizations</b>	6	7	4	2	0	1	261
<b>Influenza-associated Pediatric Deaths</b>	0	0	0	0	0	0	1
<b>Influenza-associated Adult Deaths</b>	0	0	0	0	0	0	1

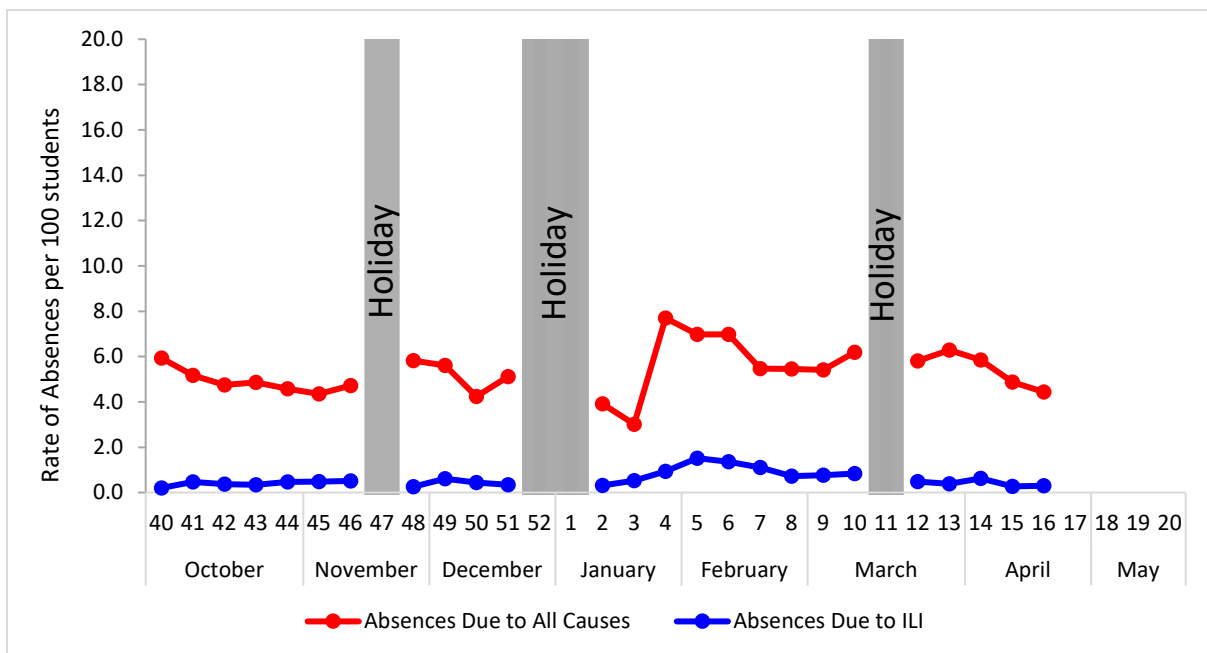
\* Percent positive tests only includes positive tests from providers reporting number of tests performed weekly

‡ Table includes preliminary voluntary results which are subject to change

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

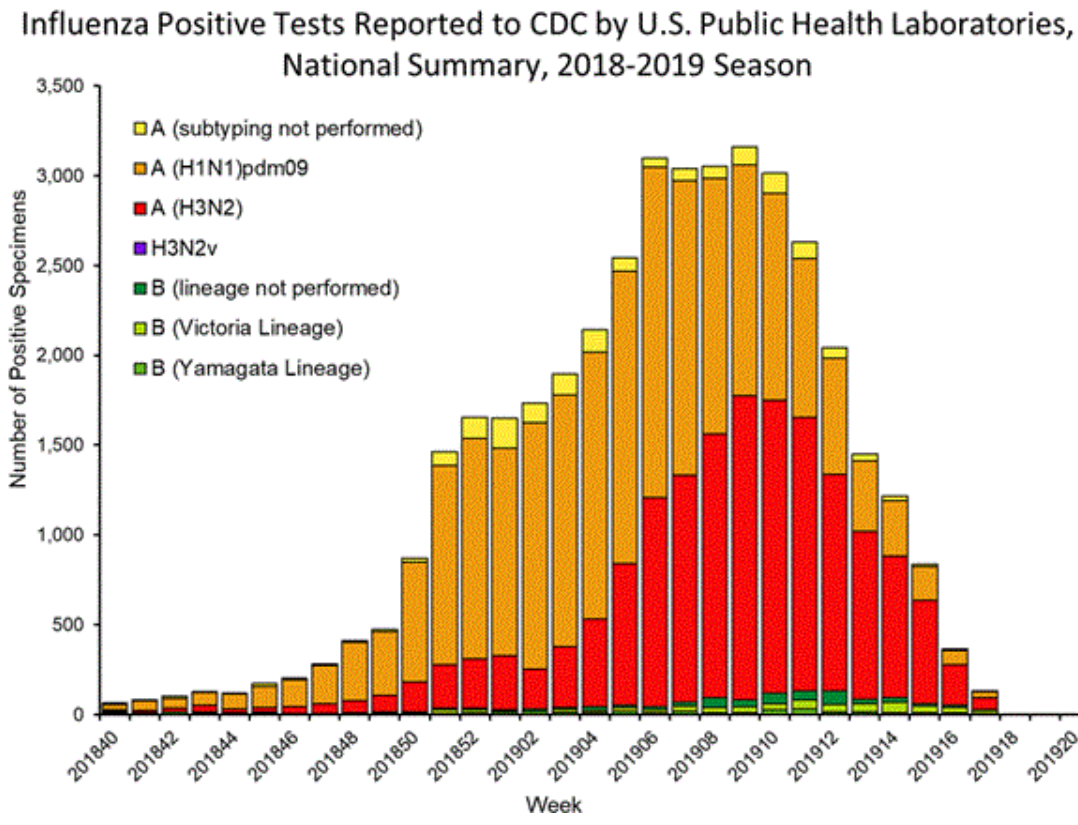


**Figure 3. Percent of Absenteeism Due to All Causes and ILI, Denton County Schools\*, 2018-2019 Season**

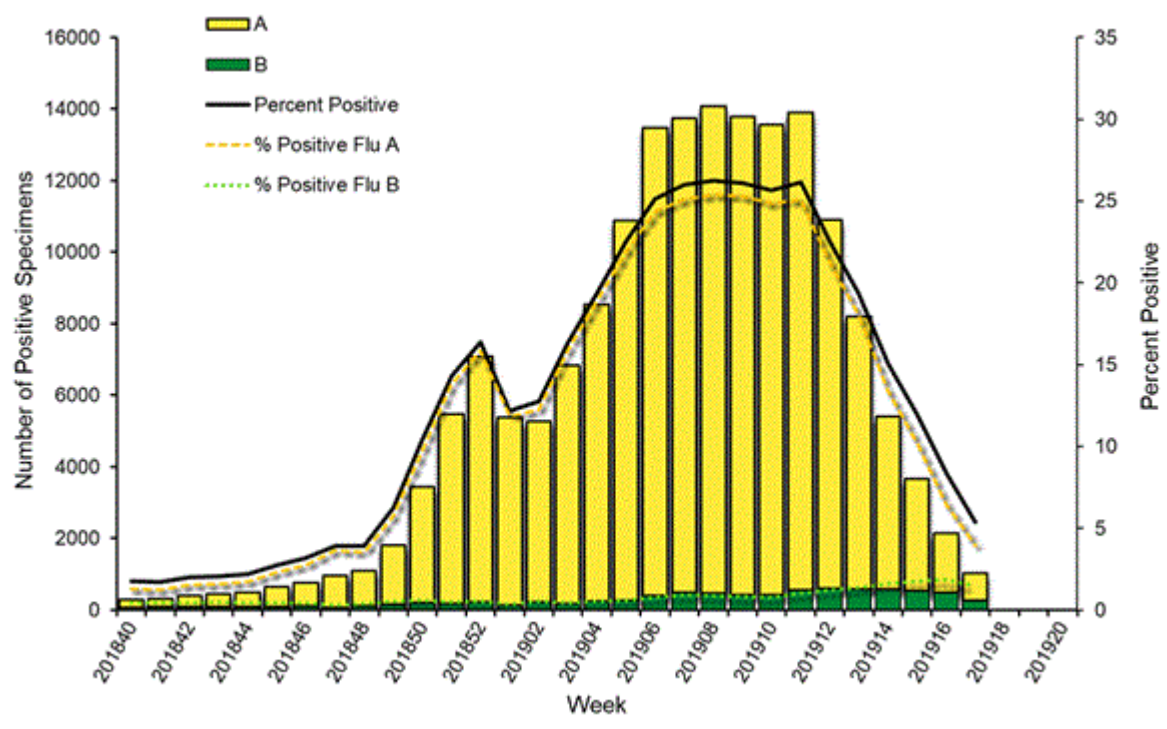


\*During week 16, a total of 3 Denton County Independent School Districts reported data to Denton County Public Health which included a total of 12,935 students.

**Figure 4. Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, September 30, 2018 – April 27, 2019**



**Figure 5. Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, September 30, 2018 – April 27, 2019**



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

Influenza A (H1N1)	296 of 305 (97%) – A/Michigan/45/2015 pdm09-like
Influenza A (H3N2)	168 of 382 (44%) – A/Singapore/INFIMH-16-0019/2016-like
Influenza B (Victoria Lineage)	82 of 108 (75.9%) – B/Colorado/06/2017-like
Influenza B (Yamagata Lineage)	137 of 137 (100%) – B/Phuket/3073/2013-like*

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

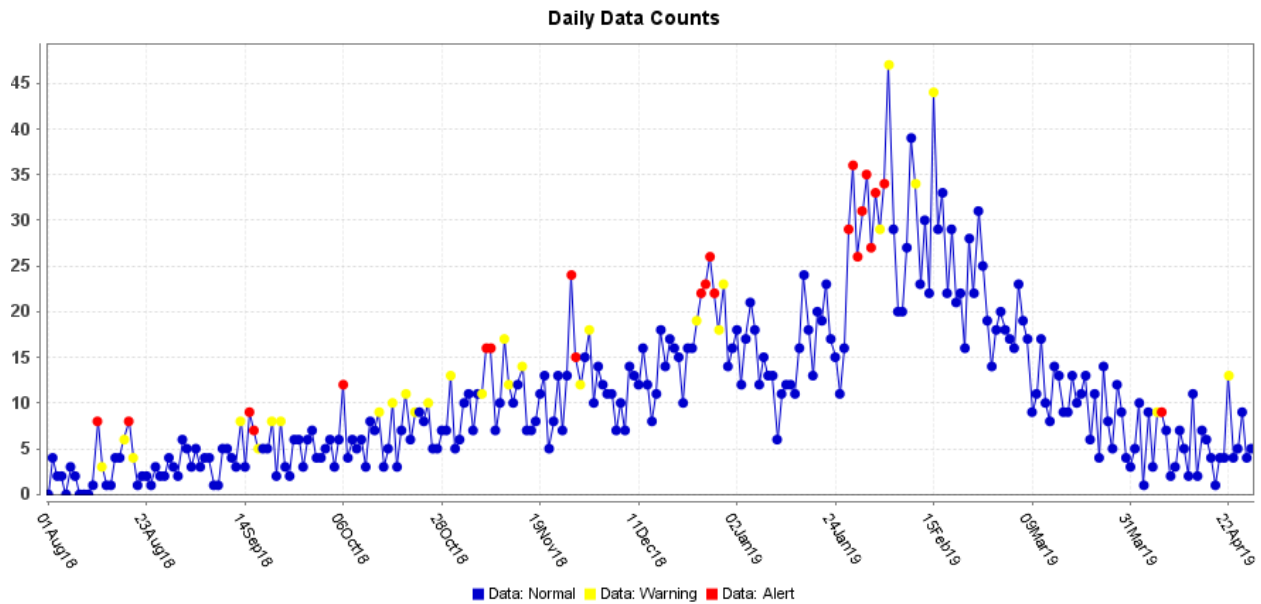
- A/Michigan/45/2015 pdm09-like
- A/Singapore/INFIMH-16-0019/2016-like
- B/Colorado/06/2017-like
- B/Phuket/3073/2013-like\*

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

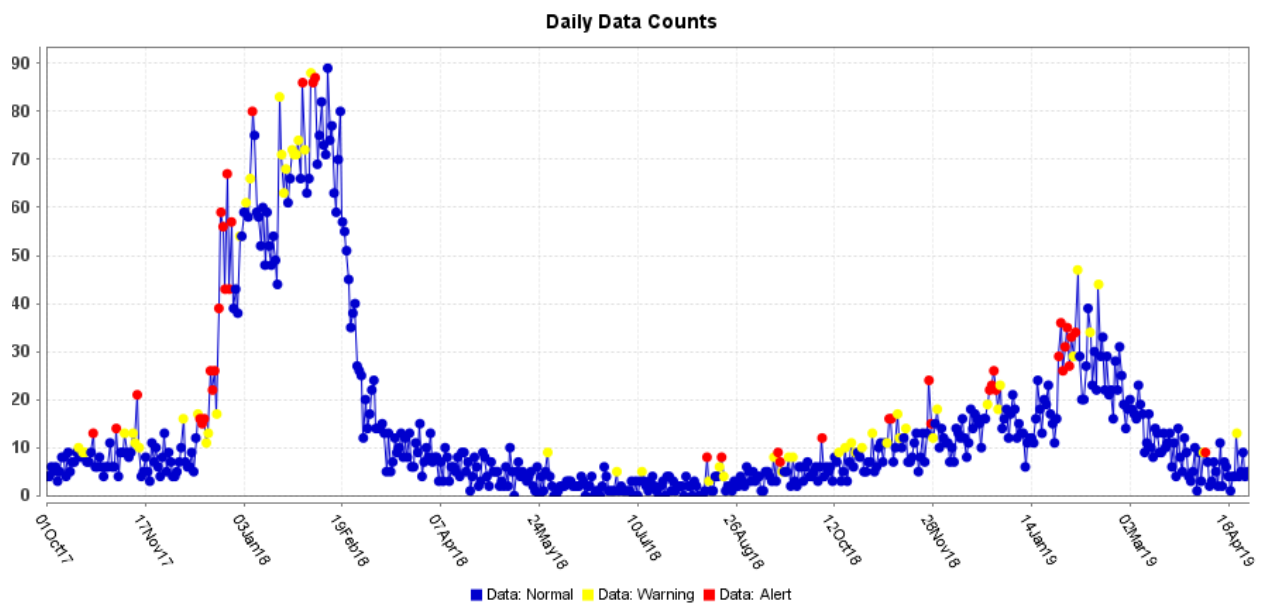
**Figure 7. U.S. Virologic Surveillance, Week 17**

	Week 17	Data Cumulative since September 30, 2018 (Week 40)
No. of specimens tested	19,080	1,082,778
No. of positive specimens (%)	1,026 (5.4%)	173,963 (16.1%)
<i>Positive specimens by type</i>		
Influenza A	750 (73.1%)	165,485 (95.1%)
Influenza B	276 (26.9%)	8,478 (4.9%)

**Figure 8. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, August 1, 2018- April 27, 2019**

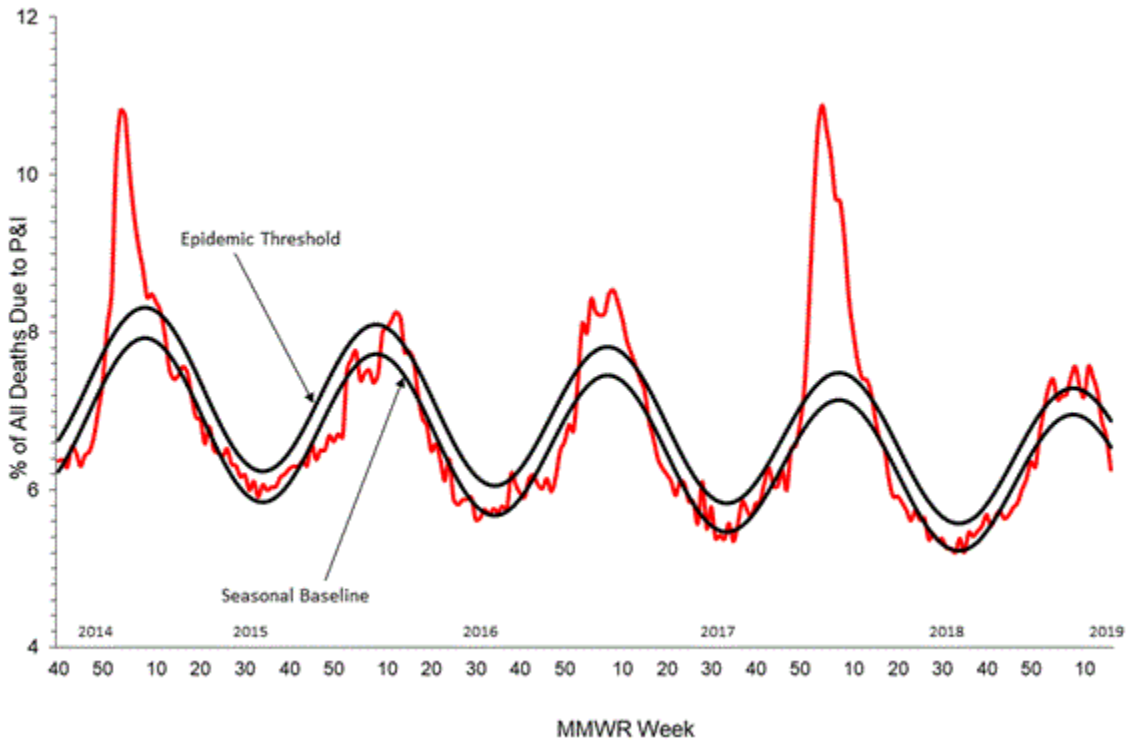


**Figure 9. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, October 1, 2017 – April 27, 2019**

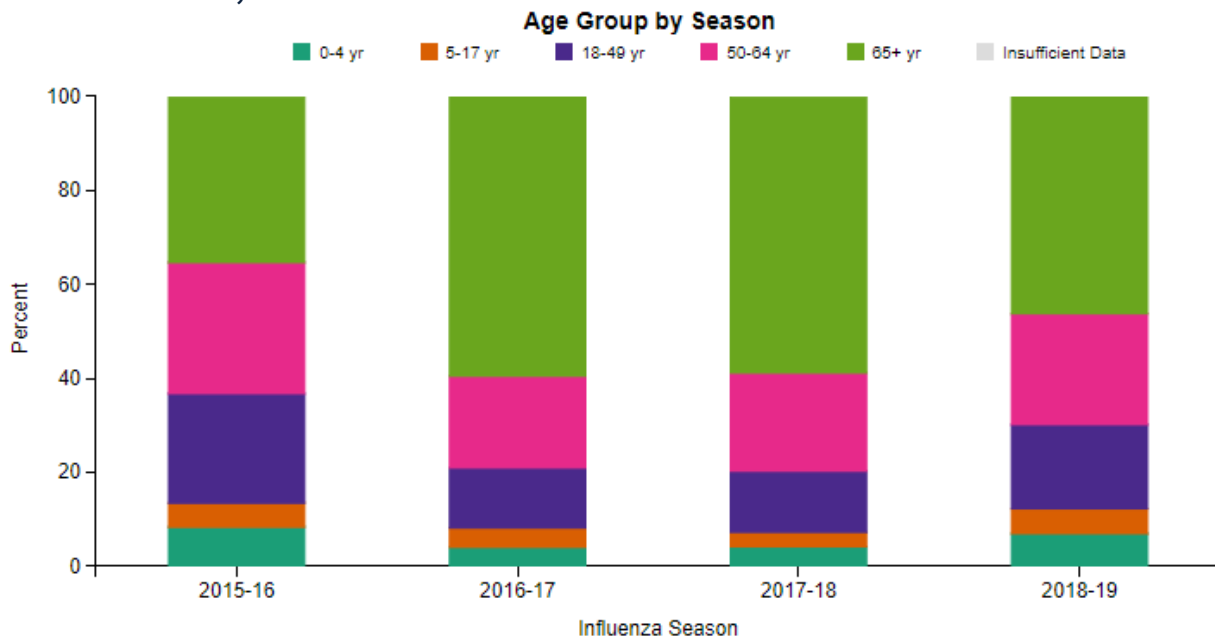


Data obtained from hospitals participating in the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) from October 2017 through the present. Depicted are the numbers of persons presenting to Emergency Departments according to patient location (Denton region) 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 April 20, 2019**

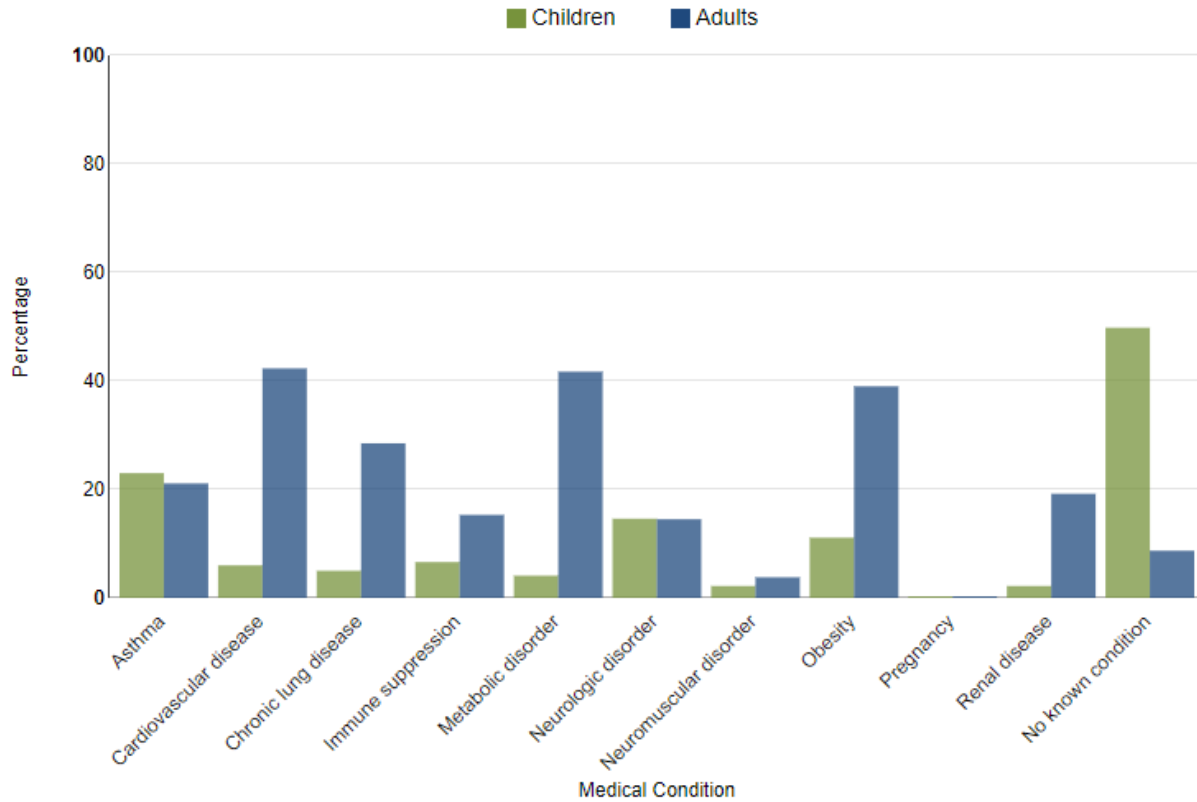


**Figure 11. FluSurv-NET Laboratory Confirmed Influenza-Associated Hospitalizations by Age Group, National Summary, data as of April 27, 2019**



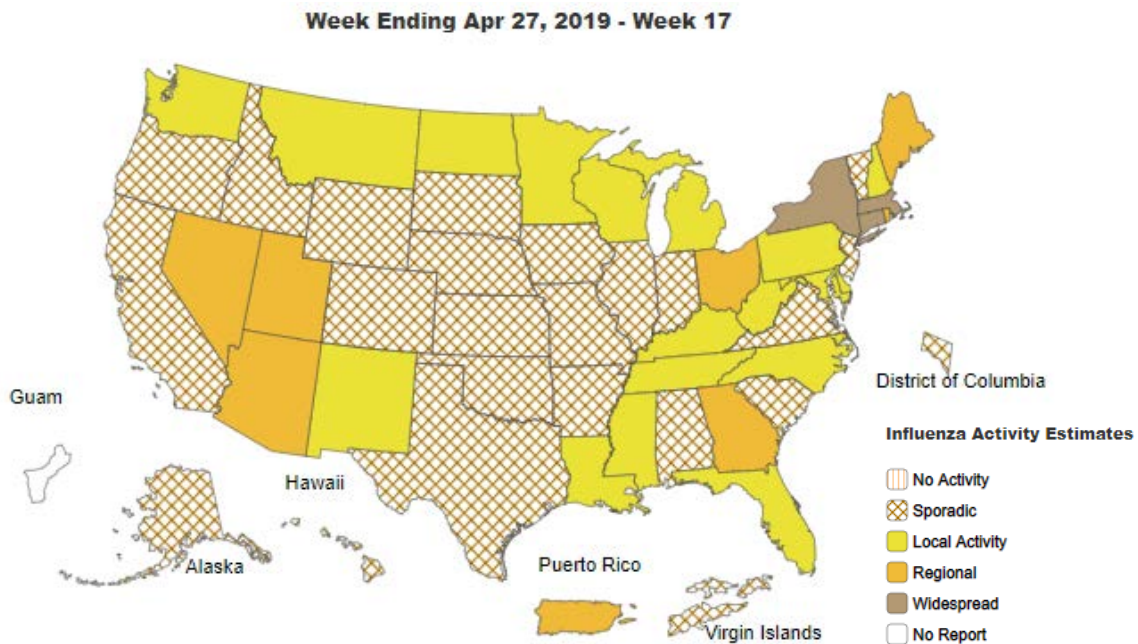
FluView: Influenza Hospitalization Surveillance Network, Centers for Disease Control and Prevention. <http://www.cdc.gov/flu/weekly/>. Accessed on 5/3/2019.

**Figure 12. FluSurv-NET Laboratory Confirmed Influenza-Associated Hospitalizations: Selected Underlying Conditions, 2018-2019 Season, data as of April 27, 2019**

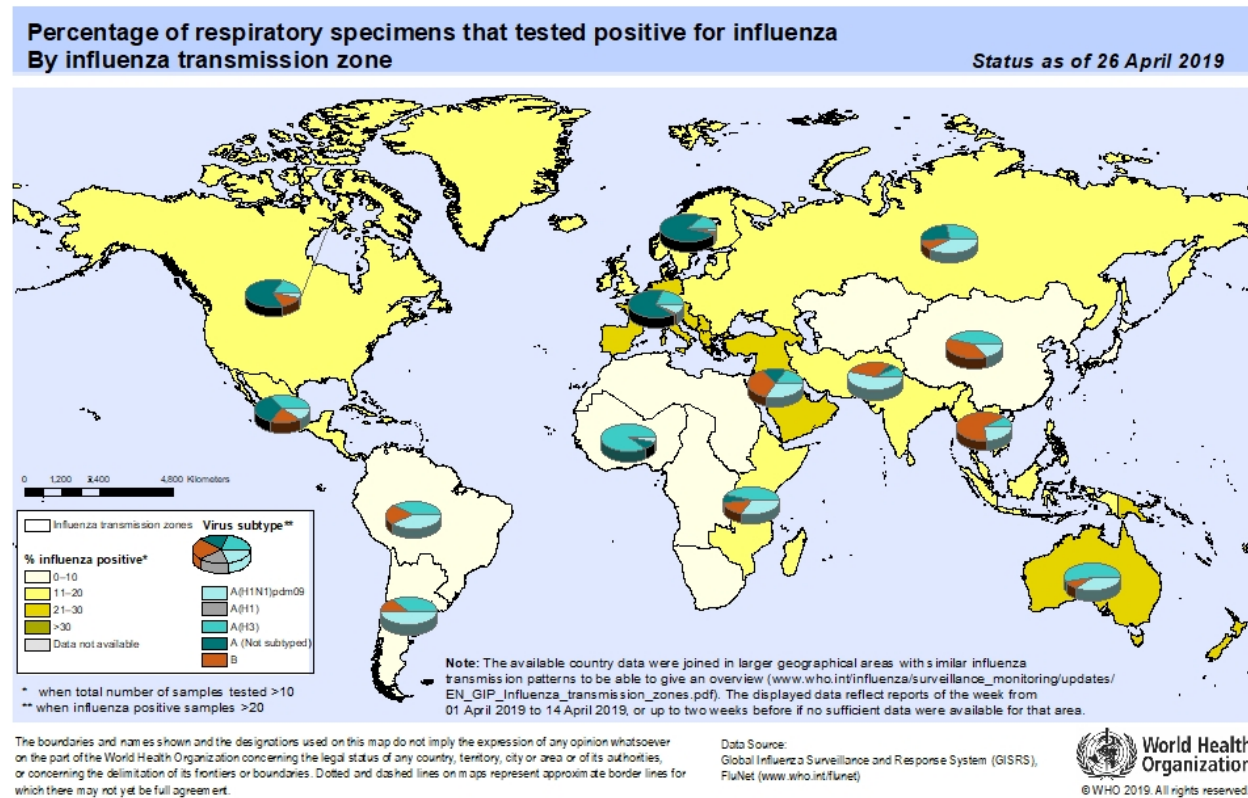


FluView: Influenza Hospitalization Surveillance Network, Centers for Disease Control and Prevention. <http://www.cdc.gov/flu/weekly/>. Accessed on 5/3/2019.

**Figure 13. Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists: Week 17 – Week Ending April 27, 2019**



**Figure 14. Percentage of Respiratory Specimens that Tested Positive for Influenza: WHO, based on data up to April 26, 2019**



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