

# Denton County Public Health

## 2018 – 2019 Influenza Surveillance Program

### CDC Week 10, Week Ending March 9, 2019



## Epidemiologic Overview

### Denton County

- Moderate influenza activity was reported in Denton County for week 10.
- 96 positive influenza tests (84 Flu A and 12 Flu B) and 17 hospitalizations were reported by Denton County sentinel providers for week 10.
- Syndromic surveillance for influenza-like illness (ILI) in Denton County decreased for week 10 when compared to the previous week.
- 0.8% of the total reported school population was absent due to ILI in week 10.

### Texas

- Influenza activity in the state of Texas was reported as regional in week 10.
- The percentage of visits for ILI as reported by ILINet providers decreased to 8.9% in week 10 compared to the previous week.
- The percentage of specimens testing positive for influenza in Texas decreased to 20.3% in week 10 compared to the previous week.

### US

- The proportion of outpatient visits for influenza-like illness (ILI) was 4.5%, 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 46 states was reported as widespread; and 4 states was reported as regional.
- The percentage of specimens testing positive for influenza in the US was 25.8%.
- The proportion of deaths attributed to pneumonia and influenza (P&I) from the National Center for Health Statistics Mortality Surveillance System for week 9 was 7.2%. This percentage is below the epidemic threshold of 7.3% for week 9.

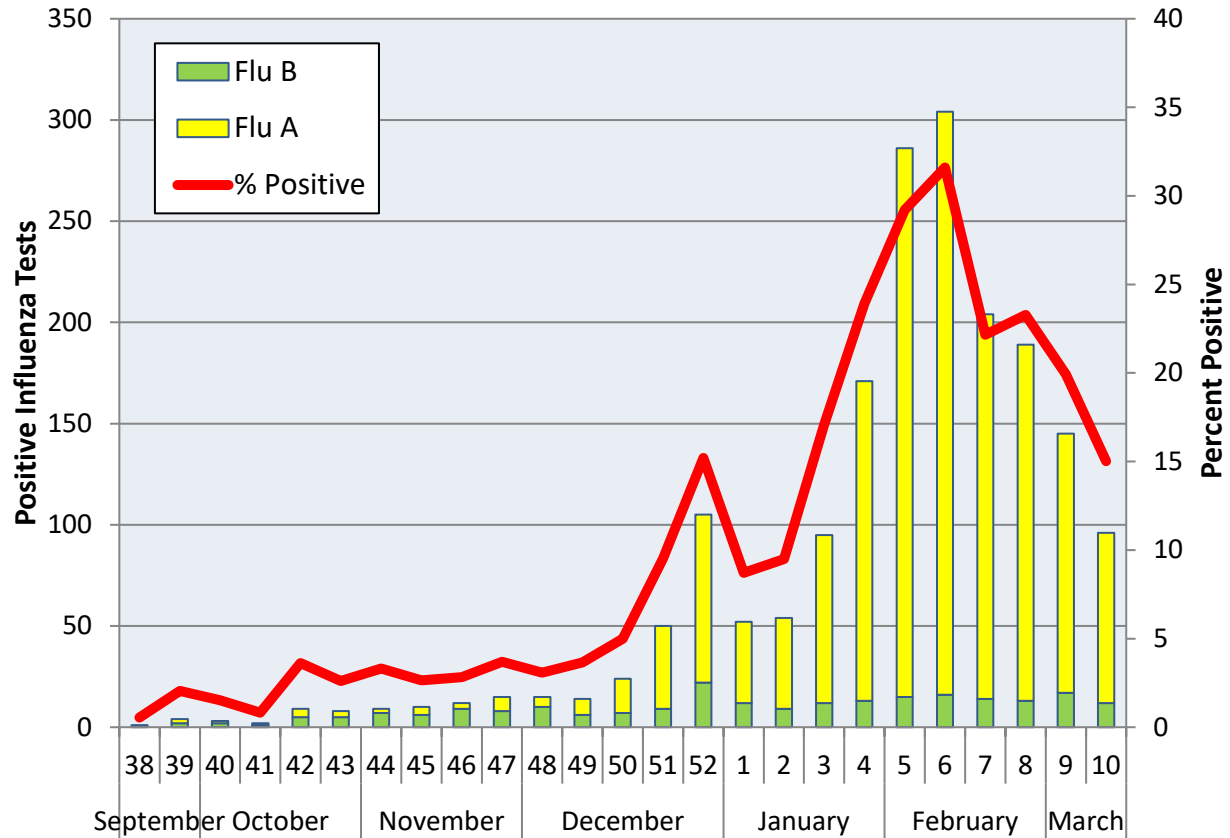
**Figure 1. Influenza Surveillance Summary: Denton County Hospitals and Providers<sup>‡</sup>**

Week Ending	2/2/19	2/9/19	2/16/19	2/23/19	3/2/19	3/9/19	9/22/18 - Present
<b>CDC Week</b>	5	6	7	8	9	10	
<b>Influenza Tests Performed Weekly</b>	979	962	921	812	728	639	12898
<b>Total Positive Influenza Tests</b>	286	304	204	189	145	96	1877
<b>Percent Positive Influenza Tests*</b>	29.2%	31.6%	22.1%	23.3%	19.9%	15.0%	
<b>Positive A Influenza</b>	271	288	190	176	128	84	1645
<b>Positive B Influenza</b>	15	16	14	13	17	12	232
<b>Non-differentiated Influenza</b>	0	0	0	0	0	0	0
<b>Influenza Hospitalizations</b>	24	33	21	20	22	17	235
<b>Influenza-associated Pediatric Deaths</b>	0	0	0	0	0	0	0
<b>Influenza-associated Adult Deaths</b>	0	0	1	0	0	0	1

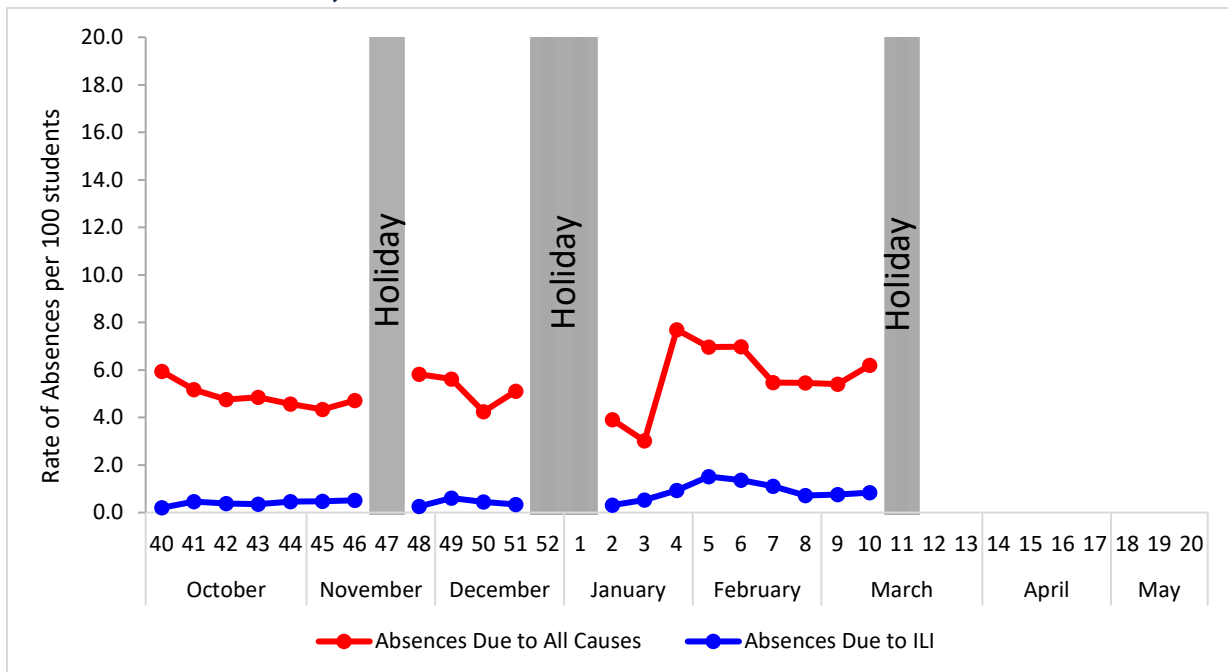
\* Percent positive tests only includes positive tests from providers reporting number of tests performed weekly

‡ 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**

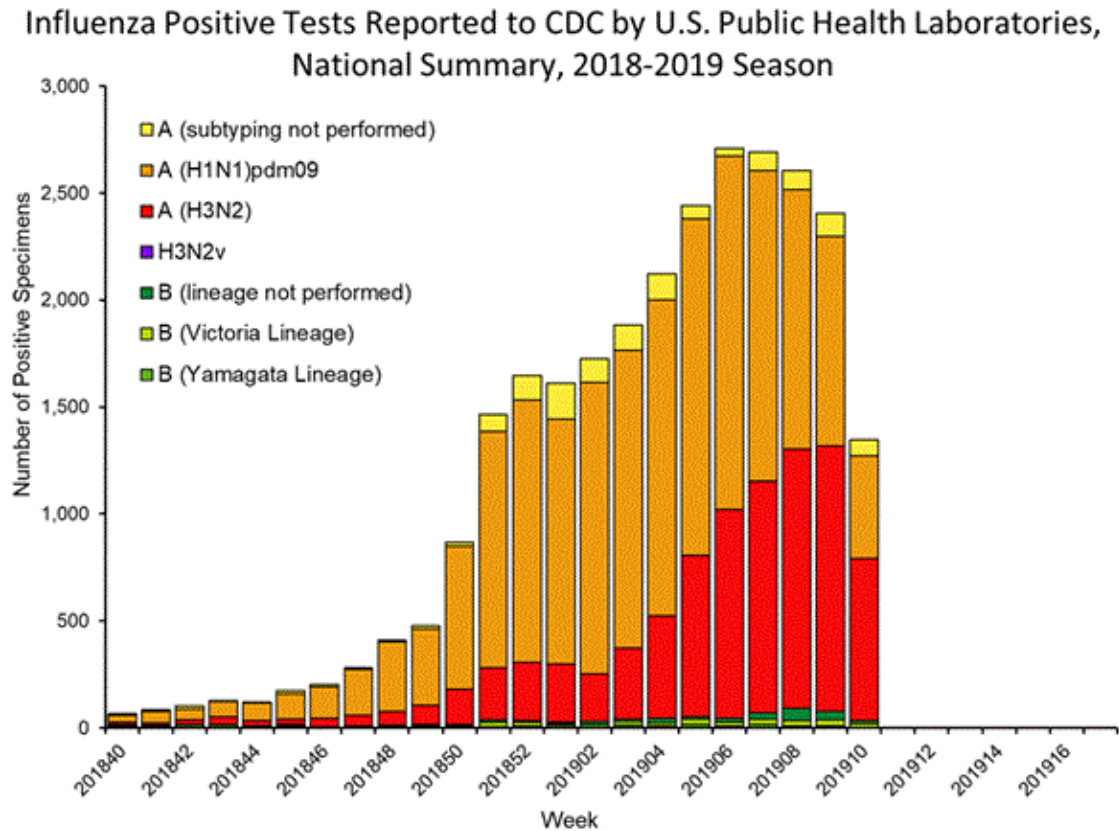


**Figure 3. Percent of Absenteeism Due to All Causes and ILI, Denton County Schools\*, 2018-2019 Season**

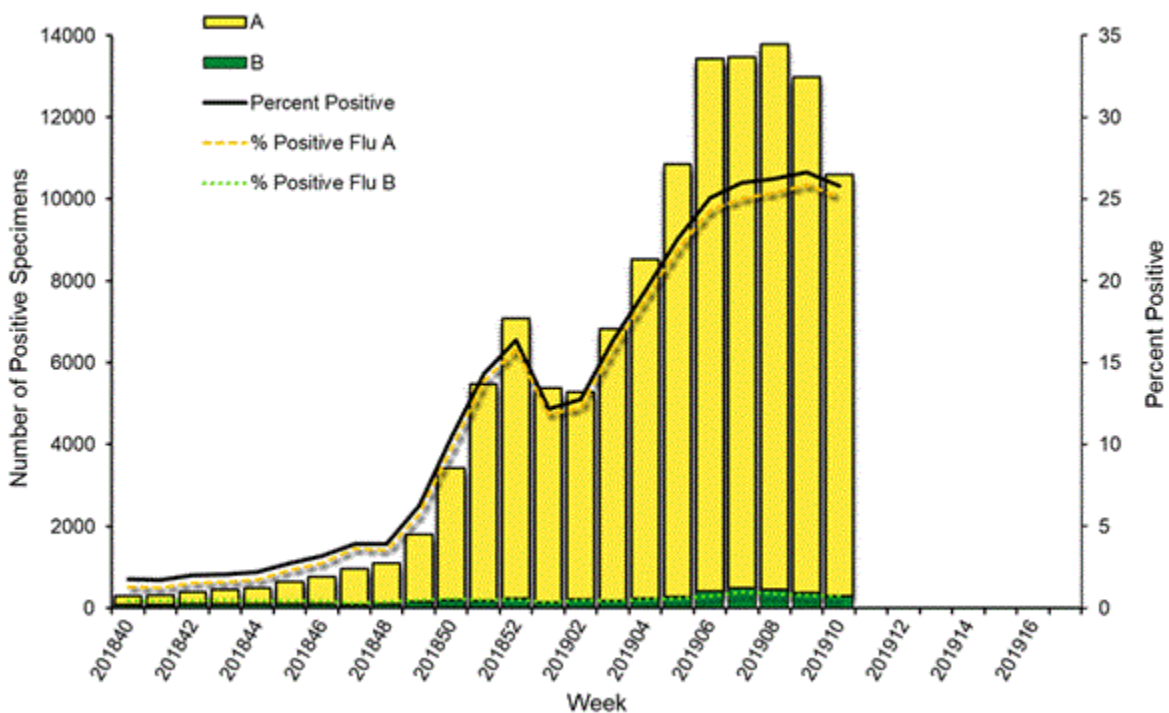


\*During week 10, a total of 3 Denton County Independent School Districts reported data to Denton County Public Health which included a total of 14,203 students.

**Figure 4. Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, September 30, 2018 – March 9, 2019**



**Figure 5. Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, September 30, 2018 – March 9, 2019**



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

Influenza A (H1N1)	270 of 276 (97.8%) – A/Michigan/45/2015 pdm09-like
Influenza A (H3N2)	138 of 224 (61.6%) – A/Singapore/INFIMH-16-0019/2016-like
Influenza B (Victoria Lineage)	44 of 54 (81.5%) – B/Colorado/06/2017-like
Influenza B (Yamagata Lineage)	75 of 75 (100%) – B/Phuket/3073/2013-like*

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

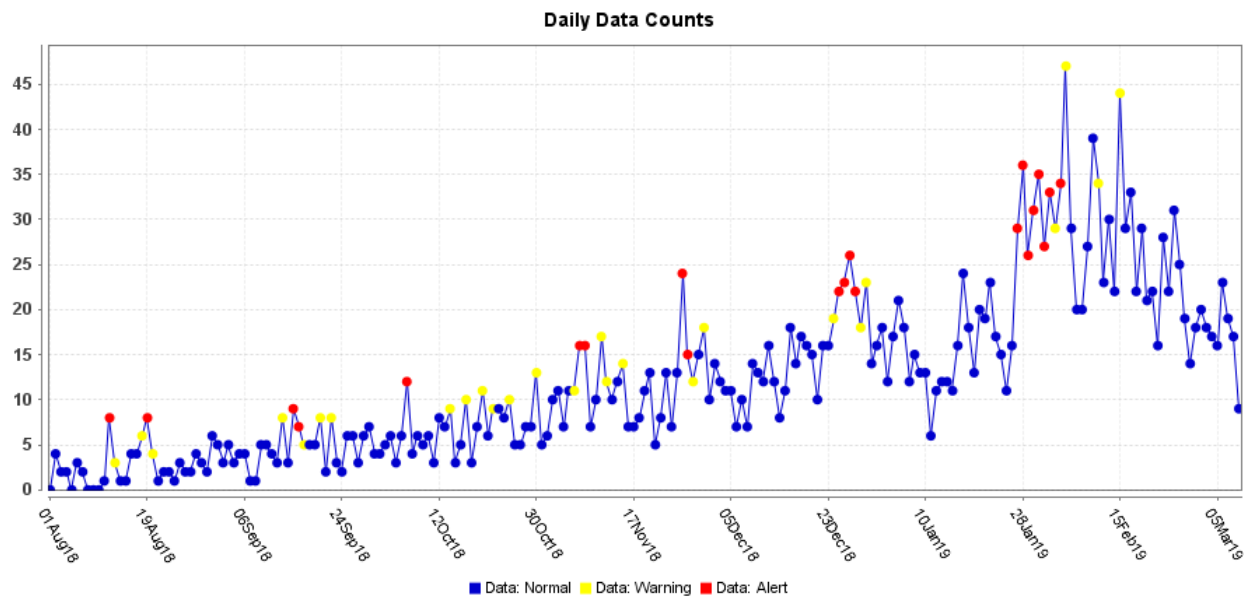
- A/Michigan/45/2015 pdm09-like
- A/Singapore/INFIMH-16-0019/2016-like
- B/Colorado/06/2017-like
- B/Phuket/3073/2013-like\*

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

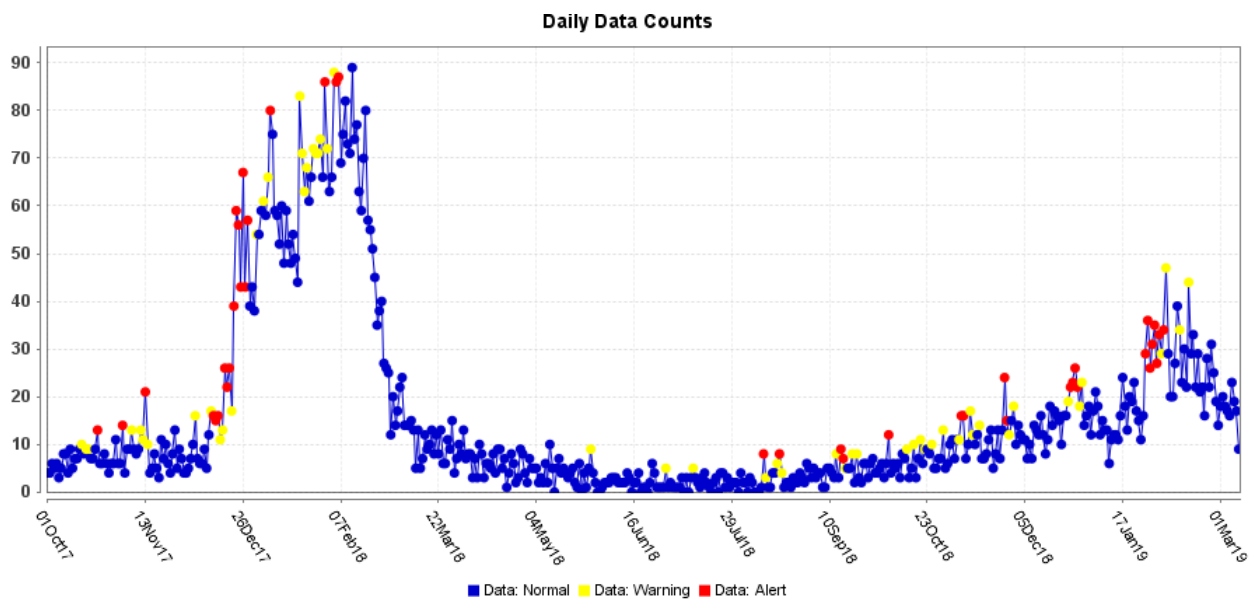
**Figure 7. U.S. Virologic Surveillance, Week 10**

	Week 10	Data Cumulative since September 30, 2018 (Week 40)
No. of specimens tested	41,054	809,094
No. of positive specimens (%)	10,591 (25.8%)	124,283 (15.4%)
<i>Positive specimens by type</i>		
Influenza A	10,296 (97.2%)	119,654 (96.3%)
Influenza B	295 (2.8%)	4,629 (3.7%)

**Figure 8. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, August 1, 2018- March 9, 2019**

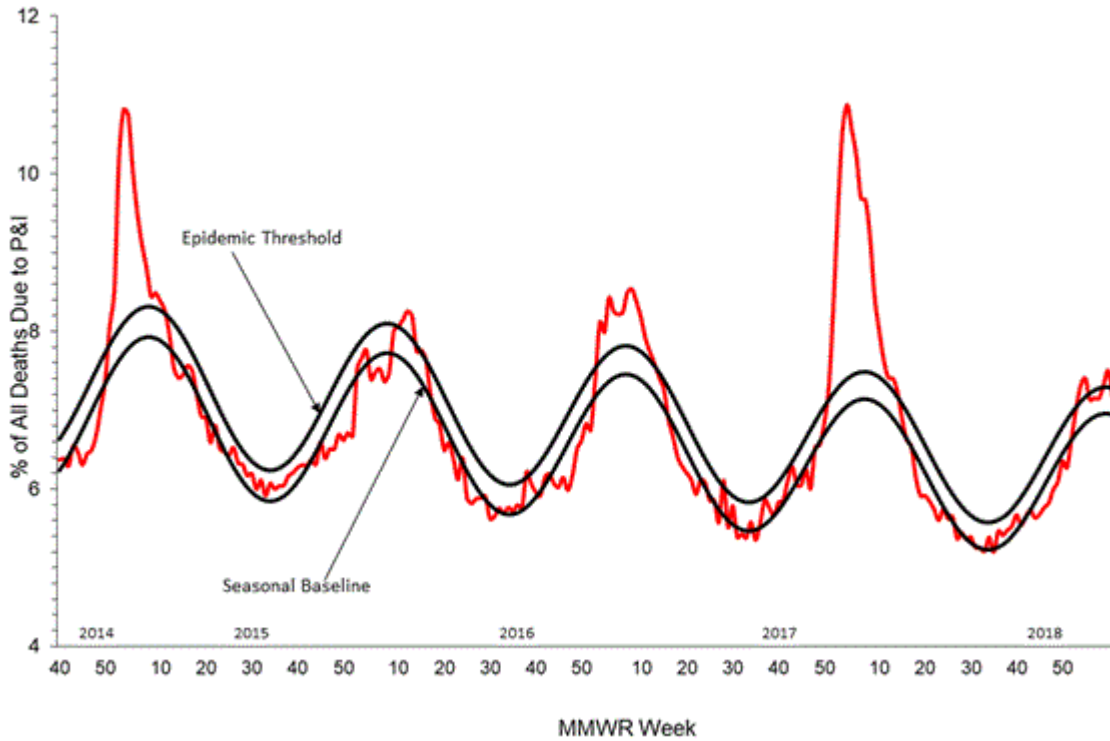


**Figure 9. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, October 1, 2017 – March 9, 2019**

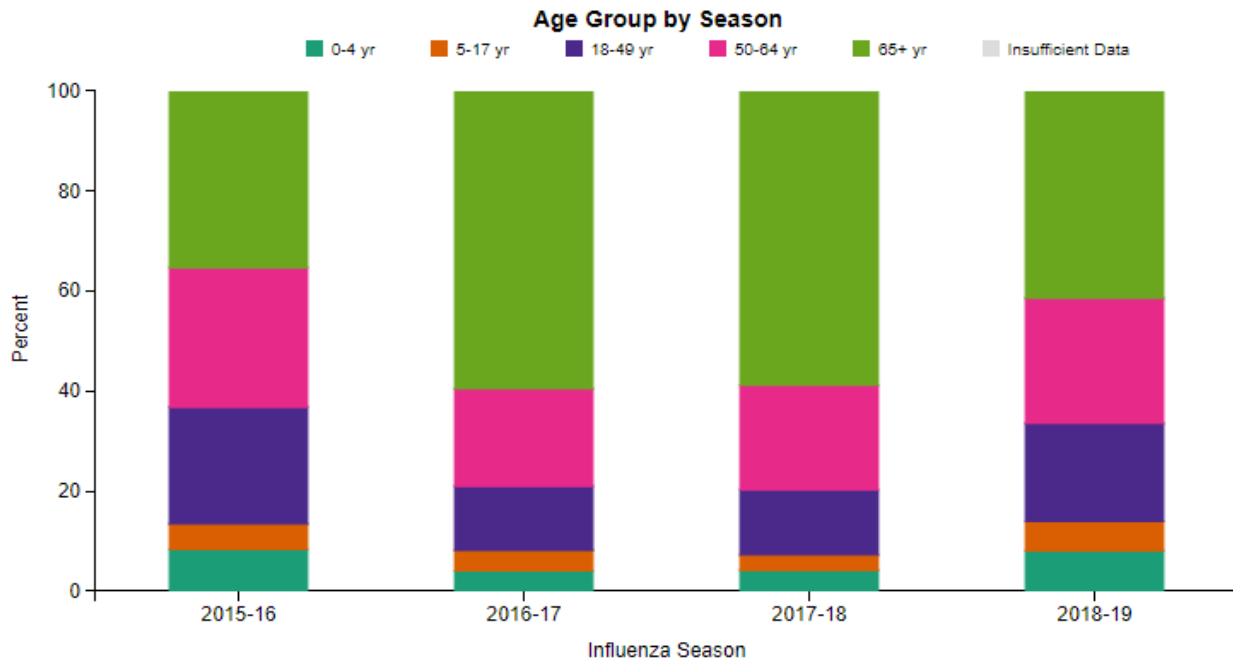


Data obtained from hospitals participating in the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) from October 2017 through the present. Depicted are the numbers of persons presenting to Emergency Departments according to patient location (Denton region)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

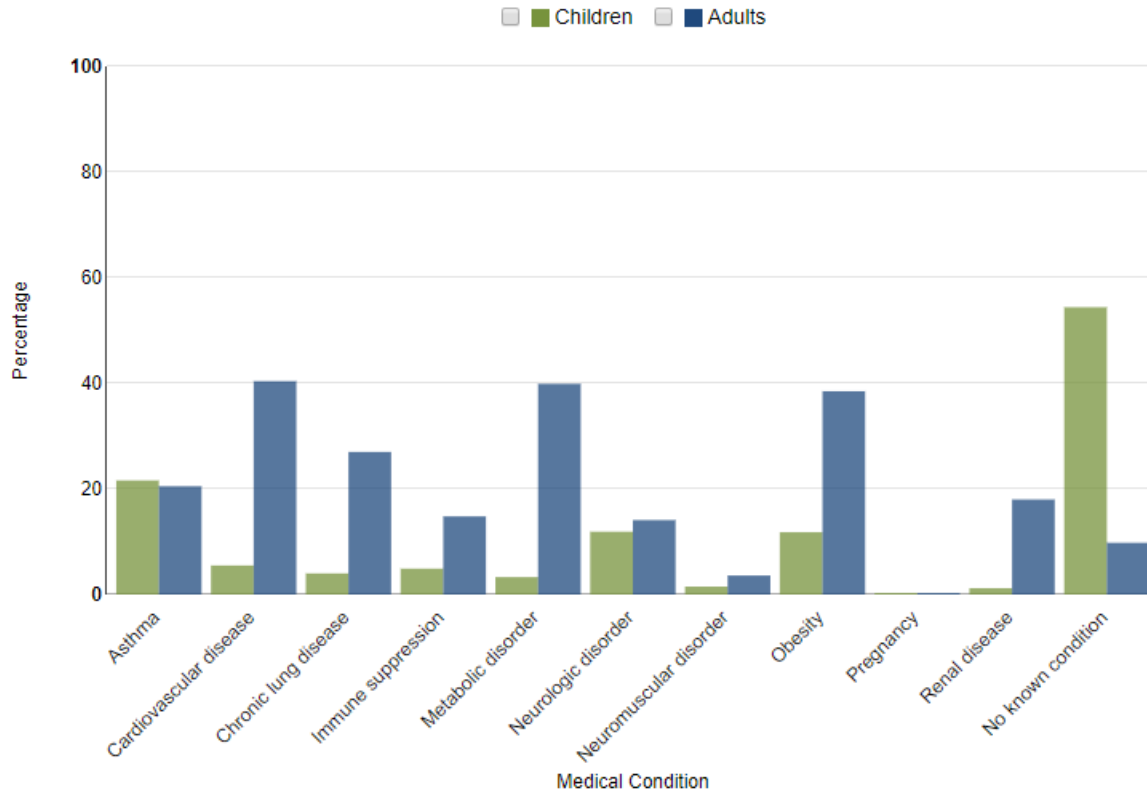
**Figure 10. Pneumonia and Influenza Mortality from the National Center for Health Statistics Mortality Surveillance System: Week ending March 2, 2019**



**Figure 11. FluSurv-NET Laboratory Confirmed Influenza-Associated Hospitalizations by Age Group, National Summary, data as of March 9, 2019**

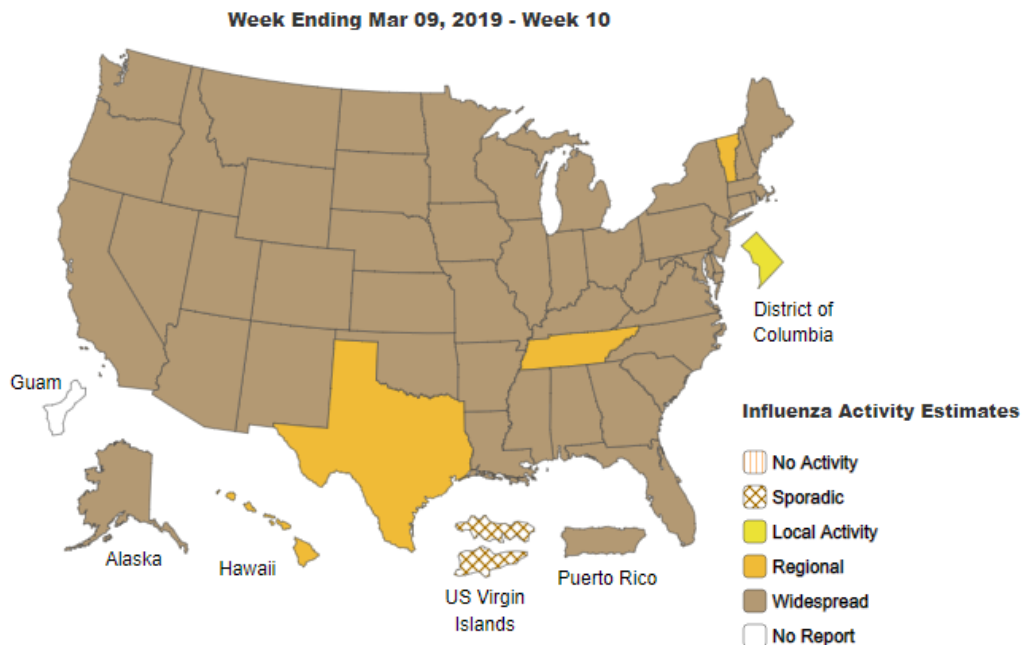


**Figure 12. FluSurv-NET Laboratory Confirmed Influenza-Associated Hospitalizations: Selected Underlying Conditions, 2018-2019 Season, data as of March 9, 2019**



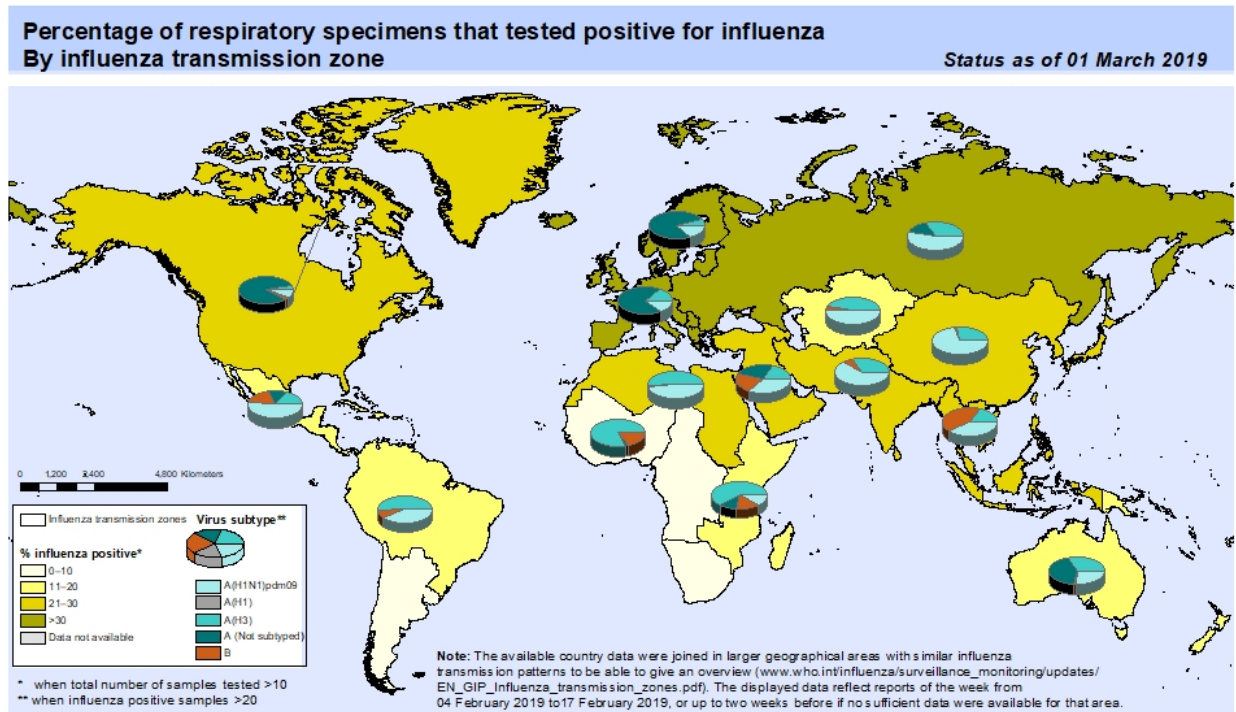
FluView: Influenza Hospitalization Surveillance Network, Centers for Disease Control and Prevention. <http://www.cdc.gov/flu/weekly/>. Accessed on 3/15/2019.

**Figure 13. Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists: Week 10 – Week Ending March 9, 2019**





**Figure 14. Percentage of Respiratory Specimens that Tested Positive for Influenza: WHO, based on data up to March 1, 2019**



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/flu-net)



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