

Denton County Public Health

2018 – 2019 Influenza Surveillance Program

CDC Week 40, Week Ending October 6, 2018



Epidemiologic Overview

Denton County

- Minimal influenza activity was reported in Denton County for week 40.
- 3 positive influenza tests (1 Flu A and 2 Flu B) and 1 hospitalization was reported by Denton County sentinel providers for week 40.
- Syndromic surveillance for influenza-like illness (ILI) in Denton County increased for week 40 when compared to the previous week.

Texas

- Influenza activity in the state of Texas remained low for week 39.
- The percentage of visits for ILI as reported by ILINet providers increased to 2.7% in week 39 compared to the previous week.
- The percentage of specimens testing positive for influenza in Texas decreased to 1.1% in week 39 compared to the previous week.

US

- The proportion of outpatient visits for influenza-like illness (ILI) was 1.4%, which is below the national baseline of 2.2%. All 10 regions reported ILI below their region-specific baseline levels.
- The geographic spread of influenza in 2 states was reported as local; 35 states reported sporadic activity; 12 states reported no activity; 1 state did not report.
- The percentage of specimens testing positive for influenza in the US was 0.9%.
- The proportion of deaths attributed to pneumonia and influenza (P&I) from the National Center for Health Statistics Mortality Surveillance System for weeks 38 and 39 was 5.4%. This percentage is below the epidemic threshold of 5.7% for both weeks.

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

Week Ending	9/22/18	9/29/18	10/6/18
CDC Week	38	39	40
Influenza Tests Performed Weekly	183	195	196
Total Positive Influenza Tests	1	4	3
Percent Positive Influenza Tests*	0.5%	2.1%	1.5%
Positive A Influenza	1	2	1
Positive B Influenza	0	2	2
Non-differentiated Influenza	0	0	0
Influenza Hospitalizations	0	1	1
Influenza-associated Pediatric Deaths	0	0	0
Influenza-associated Adult Deaths	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

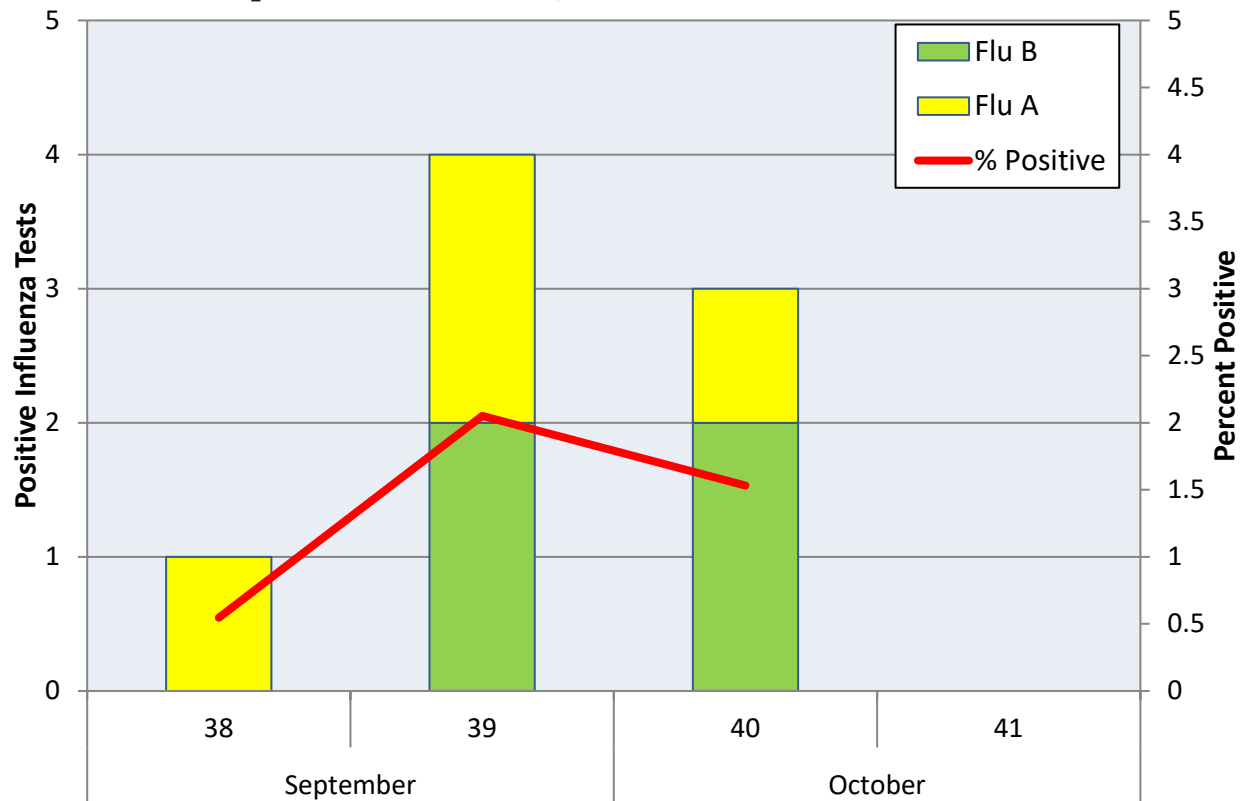


Figure 3. Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, October 1, 2017 – October 6, 2018

Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, October 1, 2017 – October 6, 2018

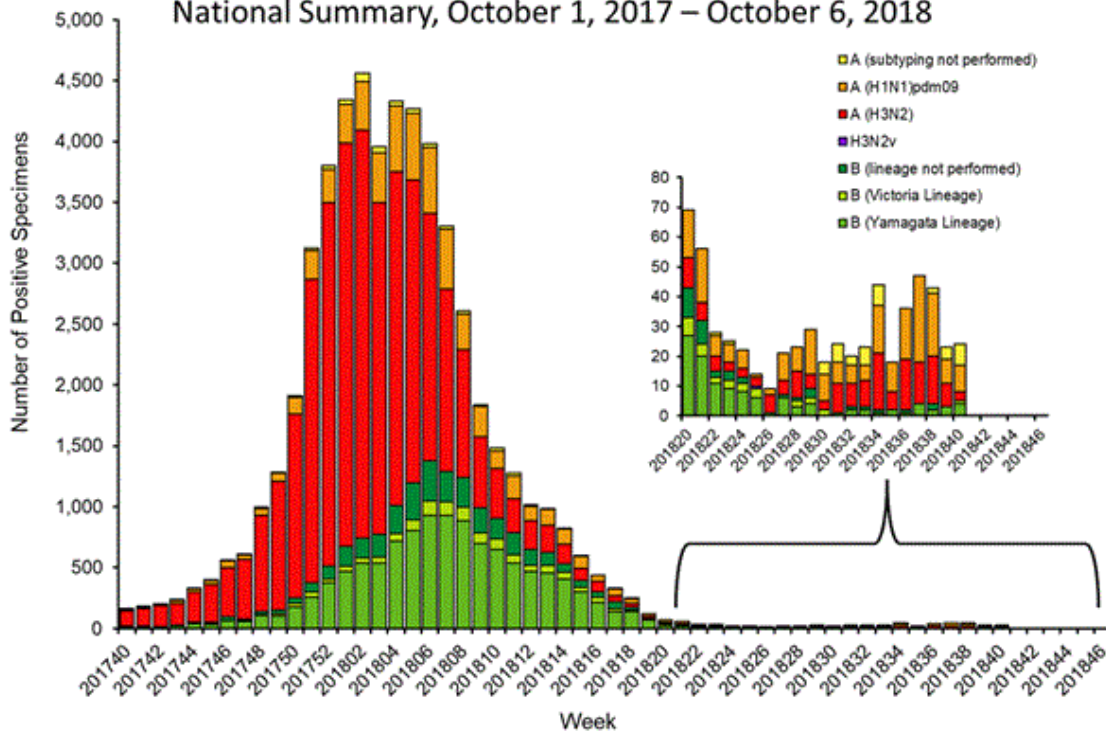


Figure 4. Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, October 1, 2017 – October 6, 2018

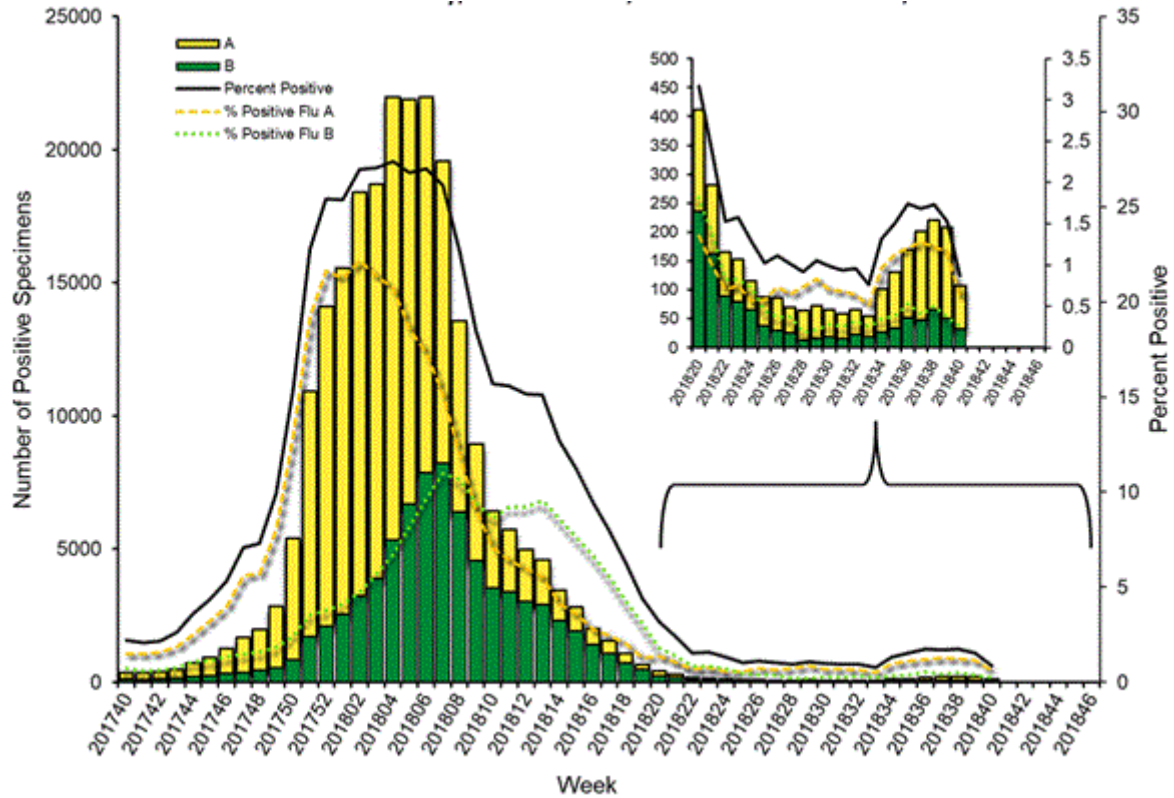


Figure 5. Antigenic Characterization of Influenza Isolates, Since October 6, 2018

Influenza A (H1N1)	57 of 57 (100%) – A/Michigan/45/2015 pdm09-like
Influenza A (H3N2)	28 of 30 (93.3%) – A/Singapore/INFIMH-16-0019/2016-like
Influenza B (Victoria Lineage)	9 of 10 (90%) – B/Colorado/06/2017-like
Influenza B (Yamagata Lineage)	32 of 32 (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 6. U.S. Virologic Surveillance, Week 40

	Week 40
No. of specimens tested	340
No. of positive specimens	24
<i>Positive specimens by type/subtype</i>	
Influenza A	19 (79.2%)
A(H1N1)pdm09	9 (75.0%)
H3	3(25.0%)
Subtyping not performed	7
Influenza B	5 (20.8%)
Yamagata lineage	4 (80.0%)
Victoria lineage	1 (20.0%)
Lineage not performed	0

Figure 7. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, August 1, 2018- October 6, 2018

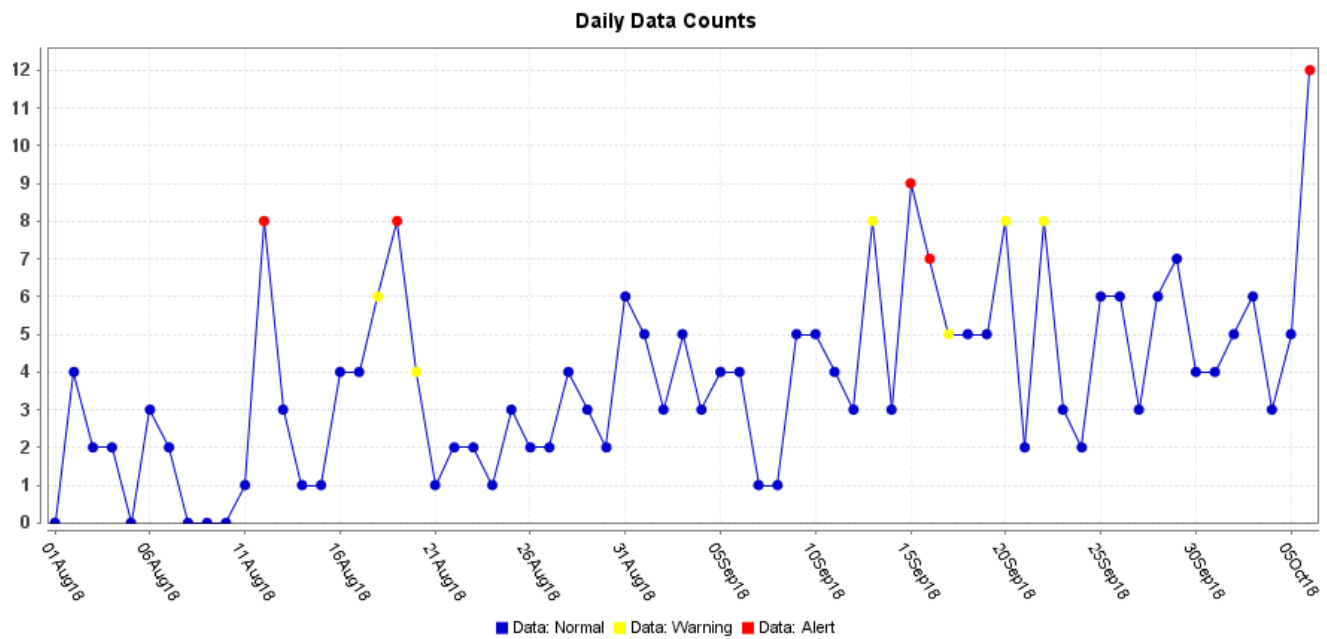
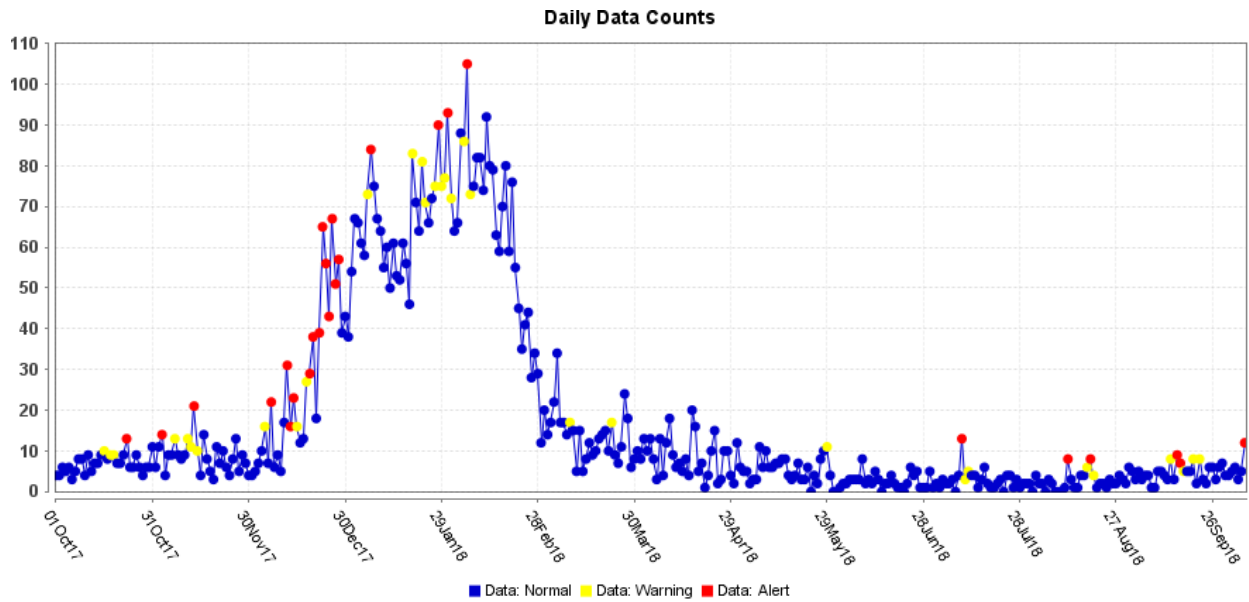


Figure 8. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, October 1, 2017 – October 6, 2018



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 9. Pneumonia and Influenza Mortality from the National Center for Health Statistics Mortality Surveillance System: Week ending September 29, 2018

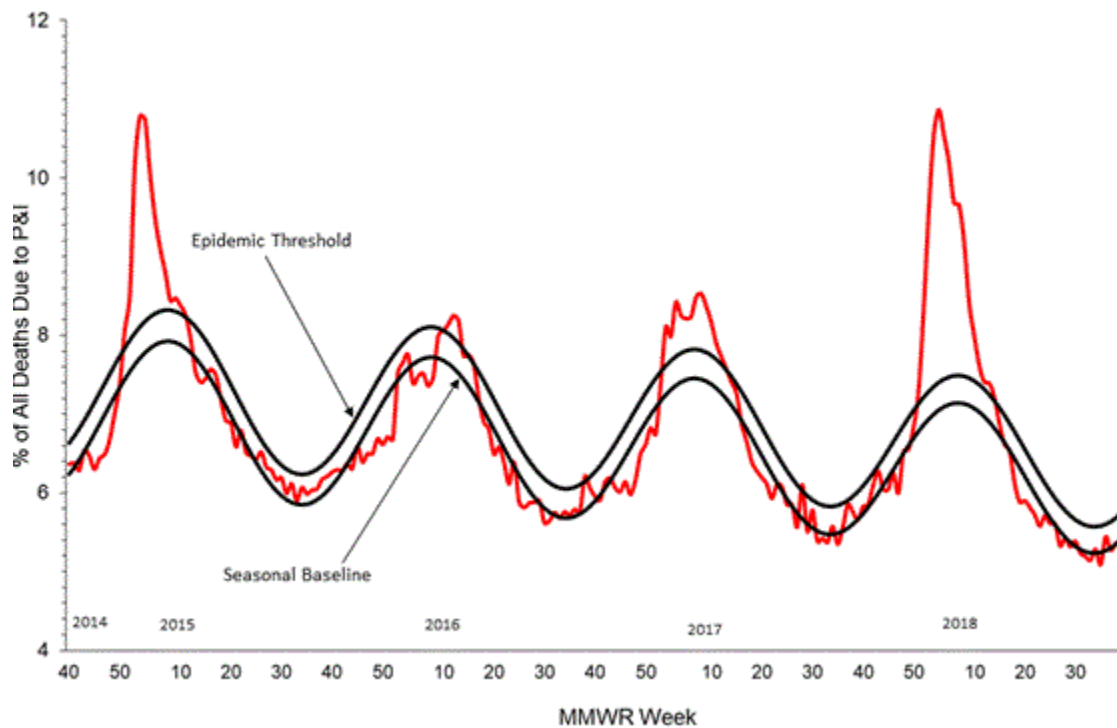


Figure 10. Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists: Week 40 – Week Ending October 6, 2018

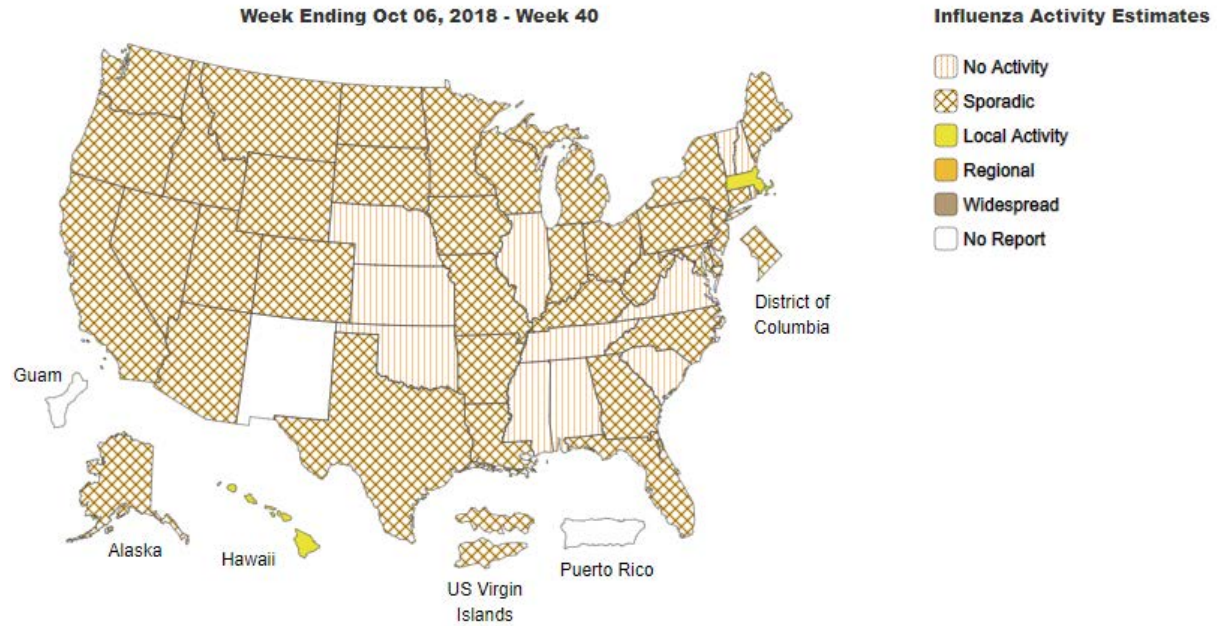
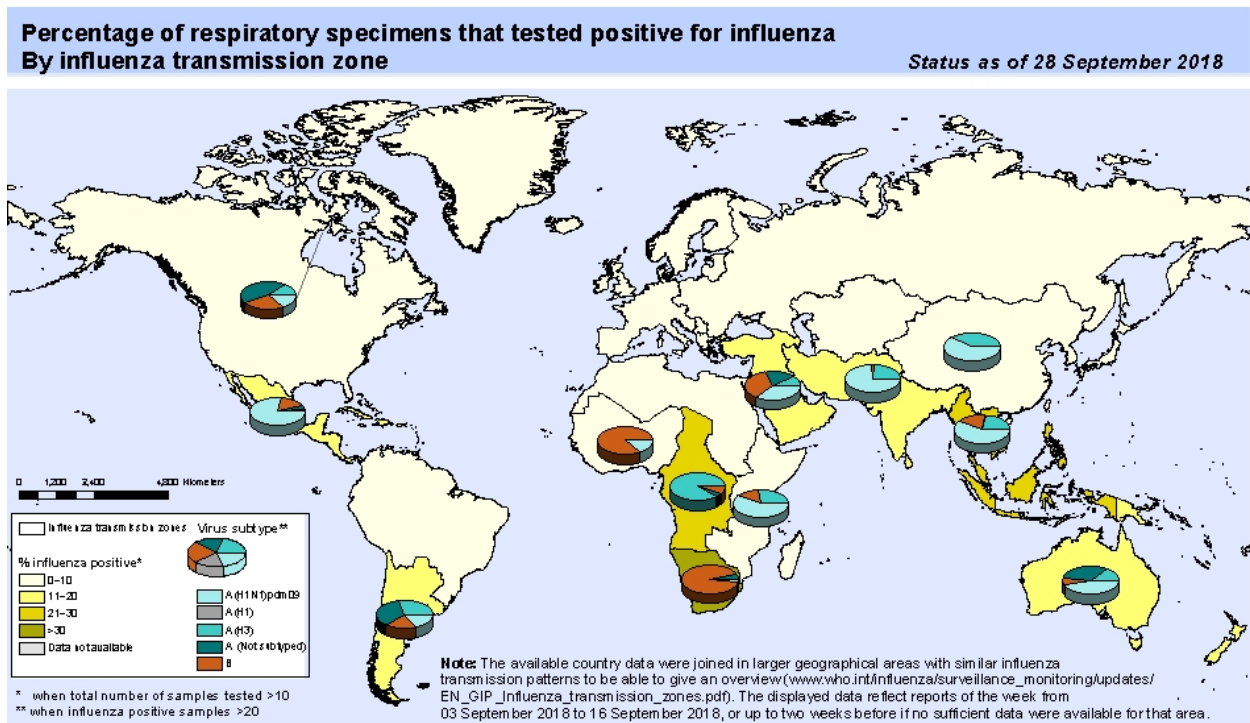


Figure 11. Percentage of Respiratory Specimens that Tested Positive for Influenza: WHO, based on data up to September 28, 2018



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/flu-net)



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