

Denton County Public Health

2018 – 2019 Influenza Surveillance Program

CDC Week 41, Week Ending October 13, 2018



Epidemiologic Overview

Denton County

- Minimal influenza activity was reported in Denton County for week 41.
- 2 positive influenza tests (1 Flu A and 1 Flu B) and 0 hospitalizations was reported by Denton County sentinel providers for week 41.
- Syndromic surveillance for influenza-like illness (ILI) in Denton County decreased for week 41 when compared to the previous week.

Texas

- Influenza activity in the state of Texas remained low for week 41.
- The percentage of visits for ILI as reported by ILINet providers decreased to 2.6% in week 41 compared to the previous week.
- The percentage of specimens testing positive for influenza in Texas decreased to 0.5% in week 41 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; 40 states reported sporadic activity; and 8 states reported no activity.
- The percentage of specimens testing positive for influenza in the US was 0.8%.
- The proportion of deaths attributed to pneumonia and influenza (P&I) from the National Center for Health Statistics Mortality Surveillance System for week 40 was 5.6%. This percentage is below the epidemic threshold of 5.8% for week 40

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

Week Ending	9/22/18	9/29/18	10/6/18	10/13/18
CDC Week	38	39	40	41
Influenza Tests Performed Weekly	183	195	196	242
Total Positive Influenza Tests	1	4	3	2
Percent Positive Influenza Tests*	0.5%	2.1%	1.5%	0.8%
Positive A Influenza	1	2	1	1
Positive B Influenza	0	2	2	1
Non-differentiated Influenza	0	0	0	0
Influenza Hospitalizations	0	1	1	0
Influenza-associated Pediatric Deaths	0	0	0	0
Influenza-associated Adult Deaths	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

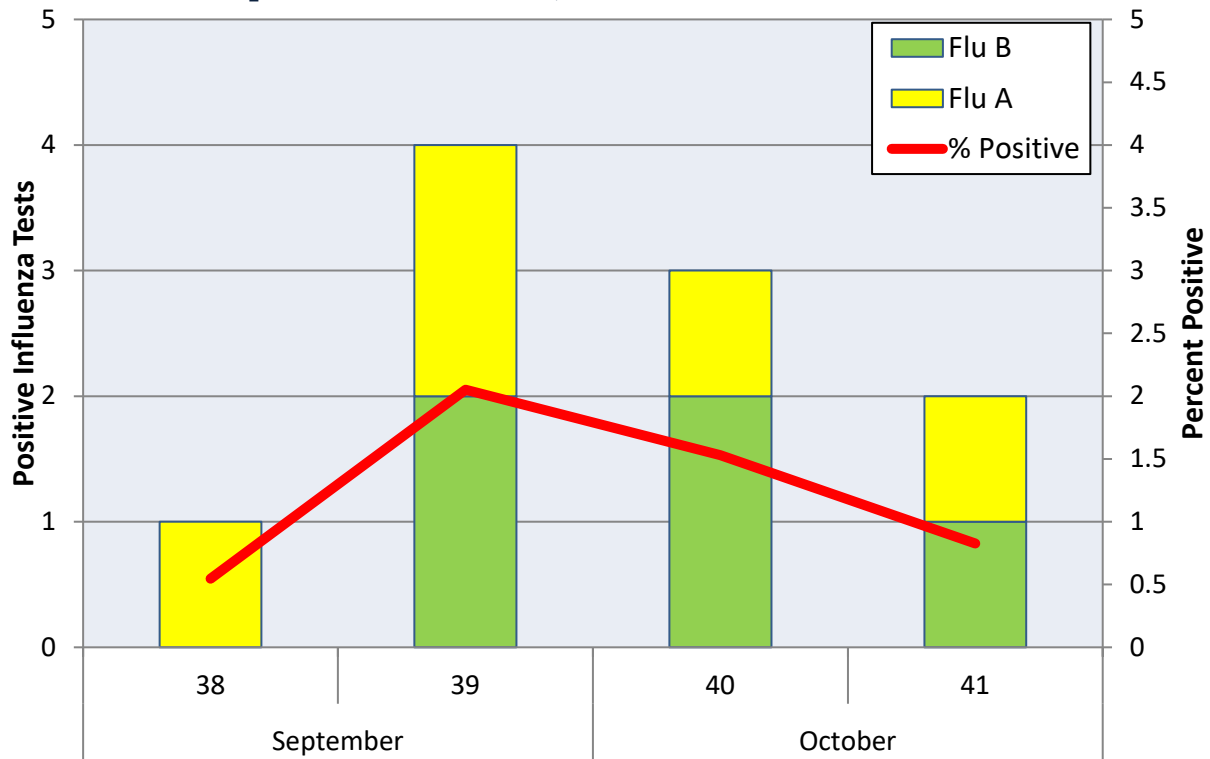


Figure 3. Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, October 1, 2017 – October 13, 2018

Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, October 1, 2017 – October 13, 2018

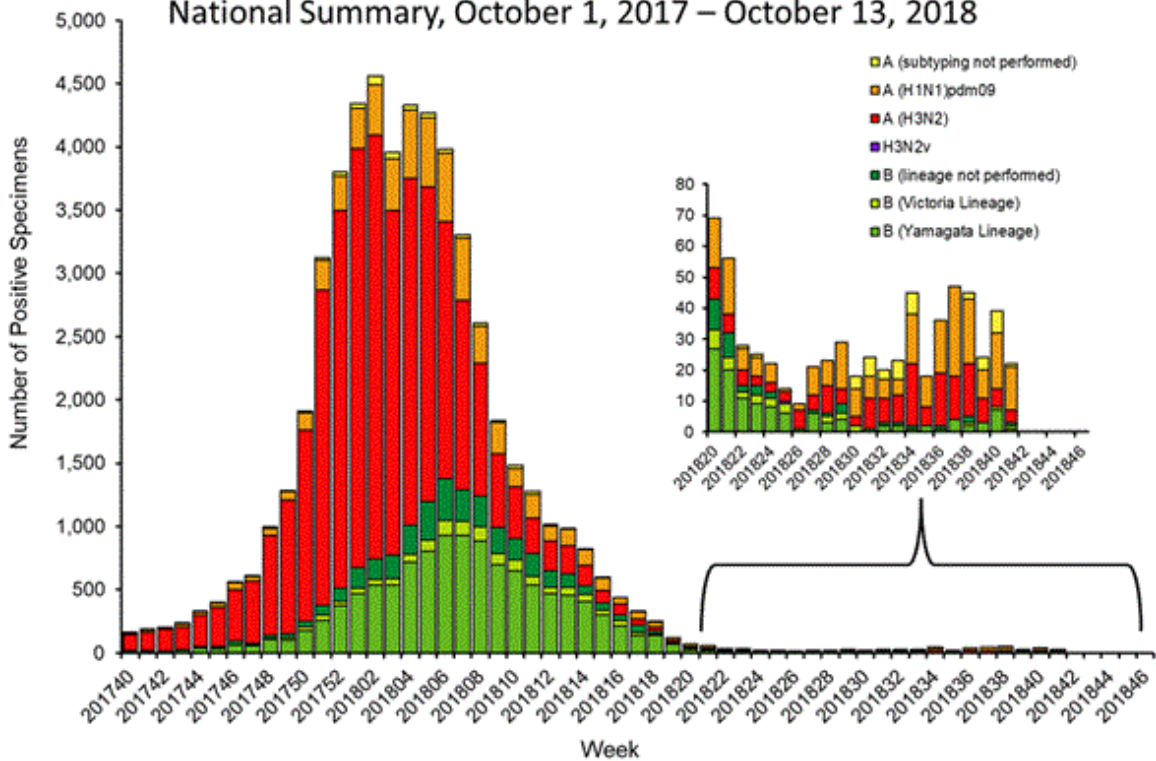


Figure 4. Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, October 1, 2017 – October 13, 2018

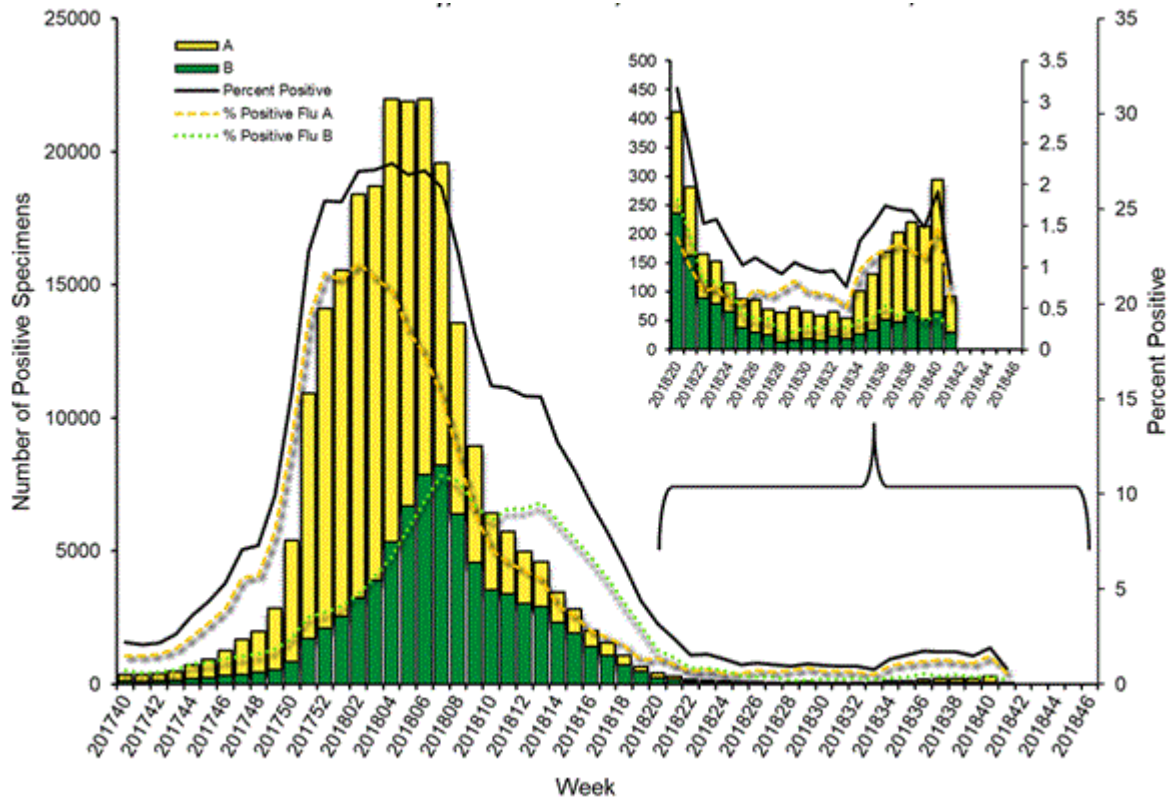


Figure 5. Antigenic Characterization of Influenza Isolates, Since October 13, 2018

Influenza A (H1N1)	57 of 57 (100%) – A/Michigan/45/2015 pdm09-like
Influenza A (H3N2)	40 of 43 (93%) – 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 33 (97%) – 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 41

	Week 41	Data Cumulative since September 30, 2018 (Week 40)
No. of specimens tested	369	880
No. of positive specimens*	22	61
<i>Positive specimens by type/subtype</i>		
Influenza A	19 (86.4%)	50 (82.0%)
(H1N1)pdm09	14 (77.8%)	32 (76.2%)
H3N2	4 (22.2%)	10 (23.8%)
Subtyping not performed	1	8
Influenza B	3 (13.6%)	11 (18.0%)
Yamagata lineage	1 (50.0%)	8 (80.0%)
Victoria lineage	1 (50.0%)	2 (20.0%)
Lineage not performed	1	1

Figure 7. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, August 1, 2018- October 13, 2018

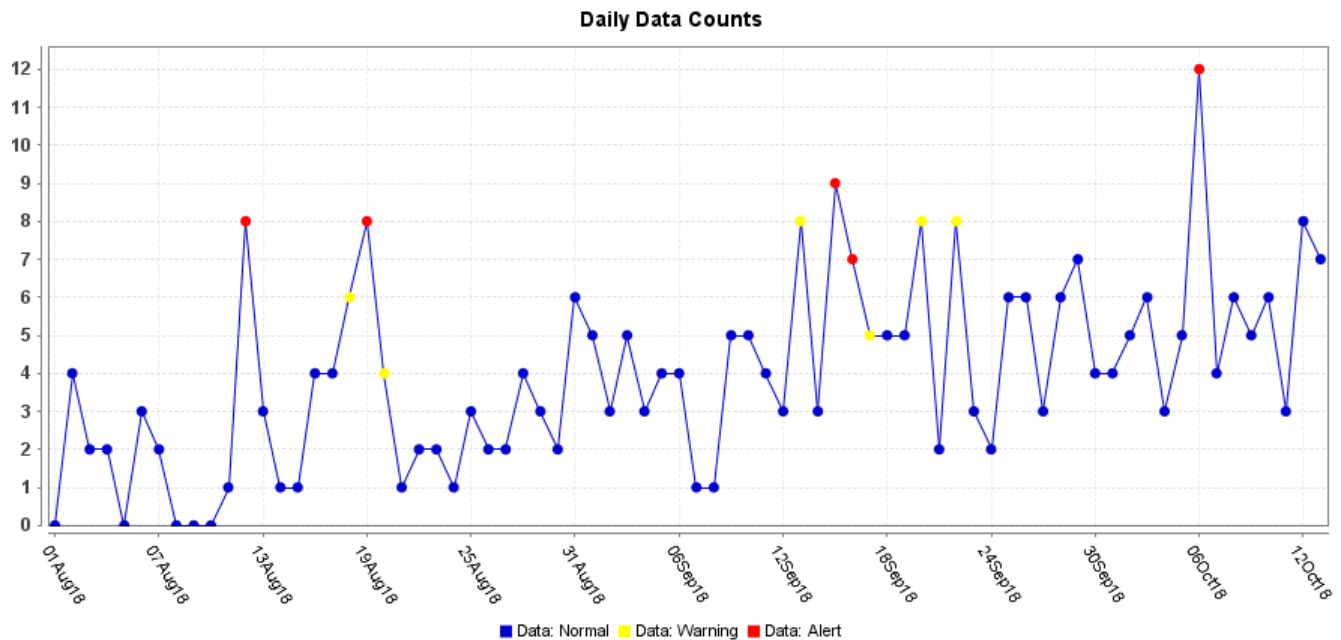
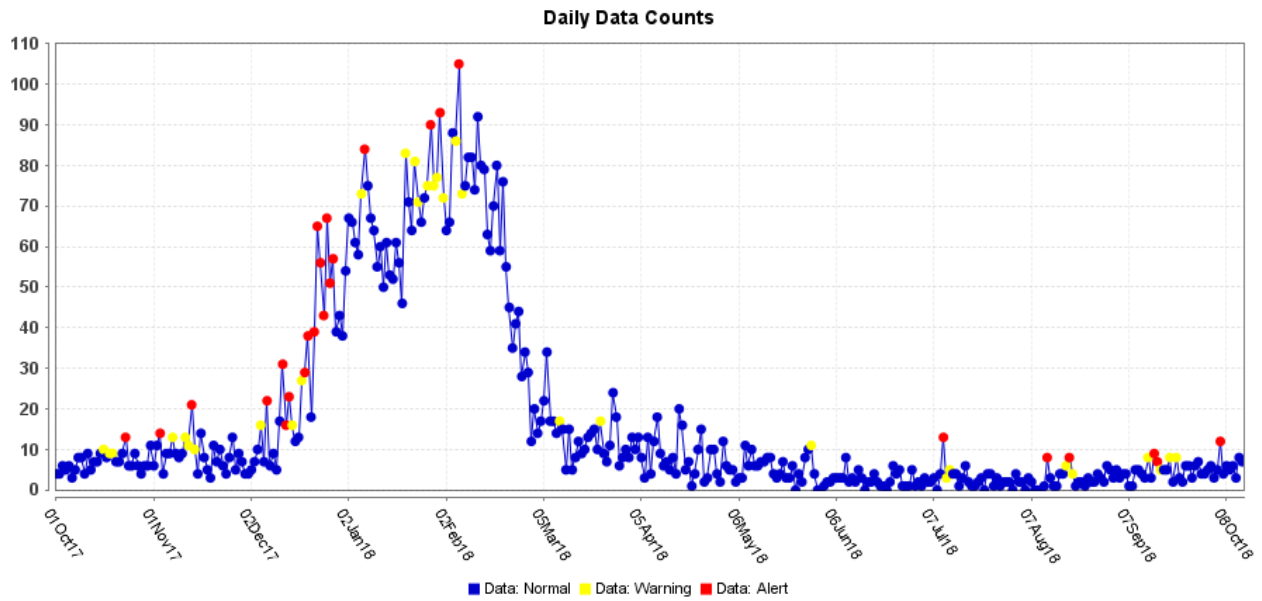


Figure 8. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, October 1, 2017 – October 13, 2018



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 October 6, 2018

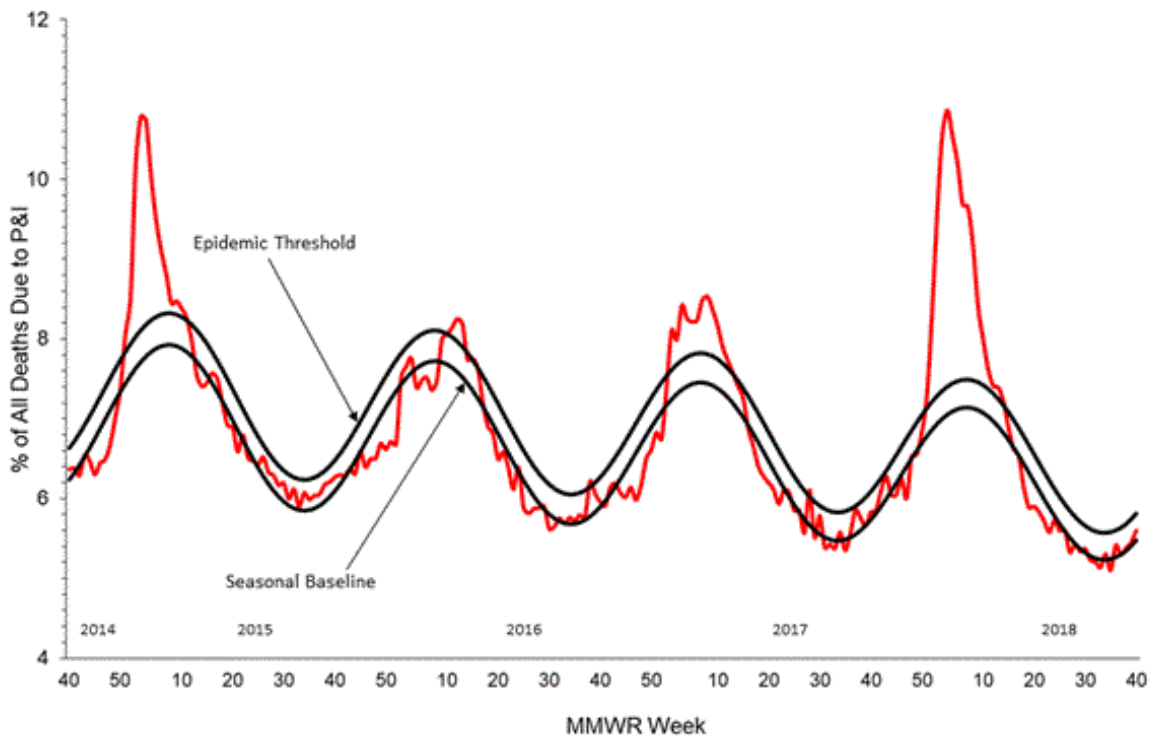


Figure 10. Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists: Week 41 – Week Ending October 13, 2018

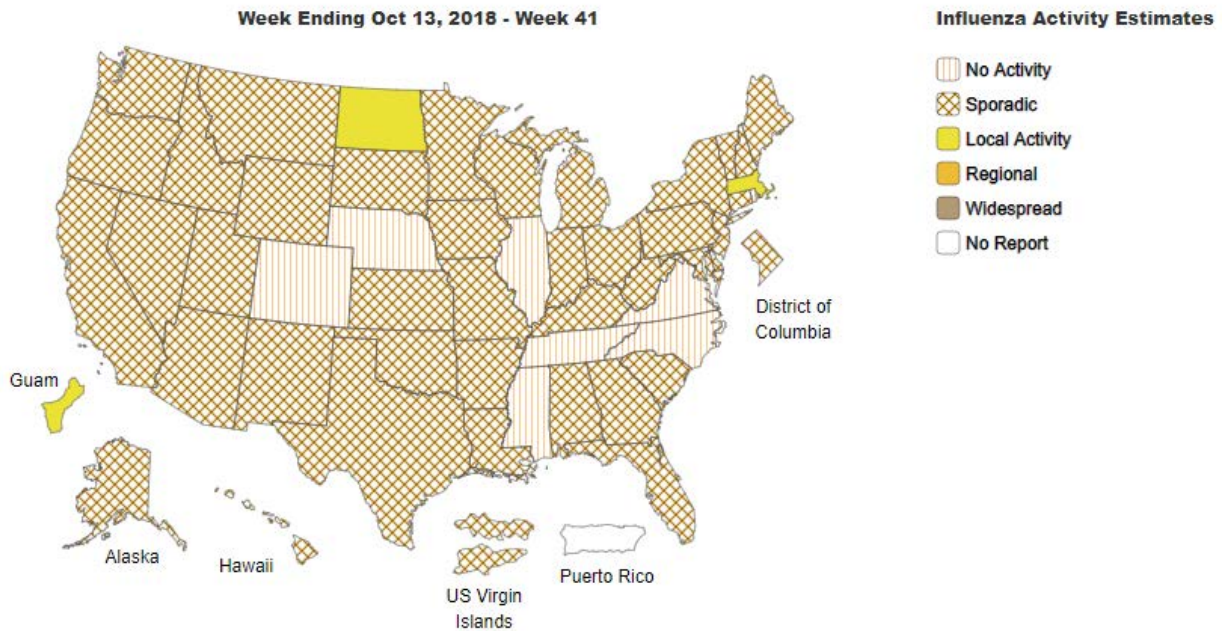
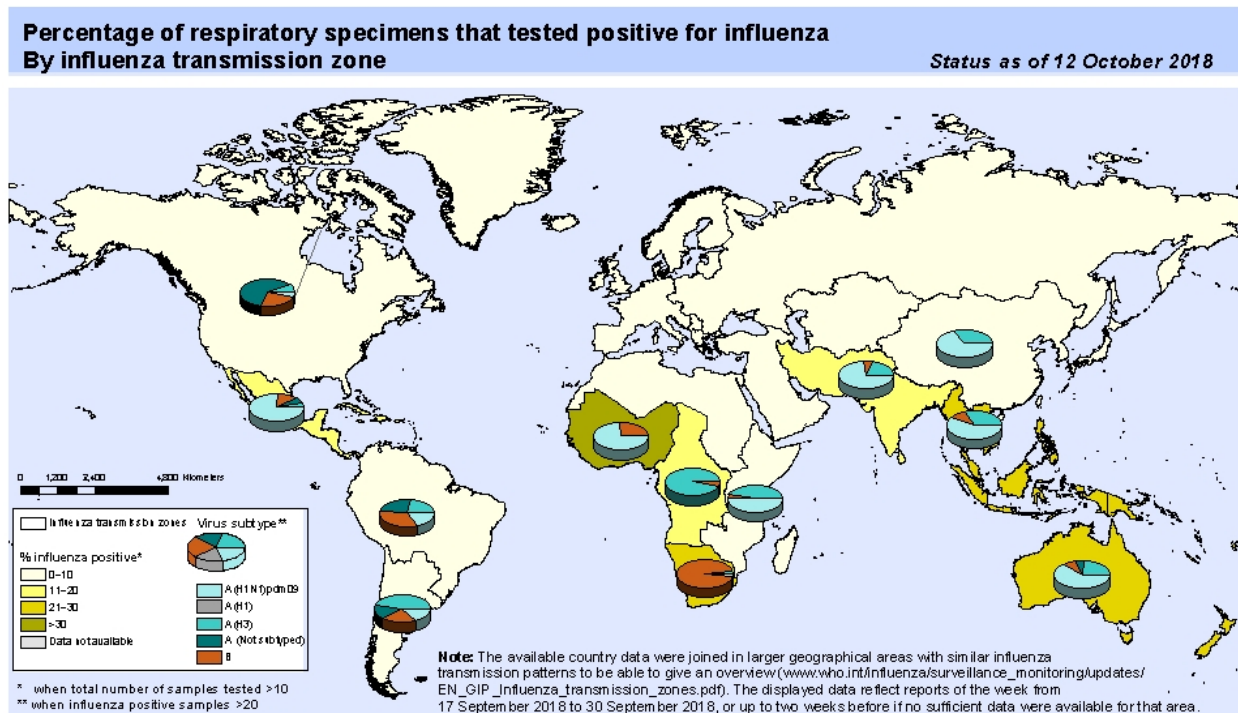


Figure 11. Percentage of Respiratory Specimens that Tested Positive for Influenza: WHO, based on data up to October 12, 2018



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)



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