

Denton County Public Health

2018 – 2019 Influenza Surveillance Program

CDC Week 9, Week Ending March 2, 2019



Epidemiologic Overview

Denton County

- High influenza activity was reported in Denton County for week 9.
- 145 positive influenza tests (128 Flu A and 17 Flu B) and 22 hospitalizations were reported by Denton County sentinel providers for week 9.
- Syndromic surveillance for influenza-like illness (ILI) in Denton County decreased for week 9 when compared to the previous week.
- 0.8% of the total reported school population was absent due to ILI in week 9.

Texas

- Influenza activity in the state of Texas was reported as widespread in week 9.
- The percentage of visits for ILI as reported by ILINet providers increased to 9.7% in week 9 compared to the previous week.
- The percentage of specimens testing positive for influenza in Texas decreased to 25.5% in week 9 compared to the previous week.

US

- The proportion of outpatient visits for influenza-like illness (ILI) was 4.7%, 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 48 states was reported as widespread; and 2 states was reported as local.
- The percentage of specimens testing positive for influenza in the US was 26.1%.
- The proportion of deaths attributed to pneumonia and influenza (P&I) from the National Center for Health Statistics Mortality Surveillance System for week 8 was 7.5%. This percentage is above the epidemic threshold of 7.3% for week 8.

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

Week Ending	1/26/19	2/2/19	2/9/19	2/16/19	2/23/19	3/2/19	9/22/18 - Present
CDC Week	4	5	6	7	8	9	
Influenza Tests Performed Weekly	715	979	962	921	812	728	12259
Total Positive Influenza Tests	171	286	304	204	189	145	1781
Percent Positive Influenza Tests*	23.9%	29.2%	31.6%	22.1%	23.3%	19.9%	
Positive A Influenza	158	271	288	190	176	128	1561
Positive B Influenza	13	15	16	14	13	17	220
Non-differentiated Influenza	0	0	0	0	0	0	0
Influenza Hospitalizations	19	24	33	21	20	22	218
Influenza-associated Pediatric Deaths	0	0	0	0	0	0	0
Influenza-associated Adult Deaths	0	0	0	1	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

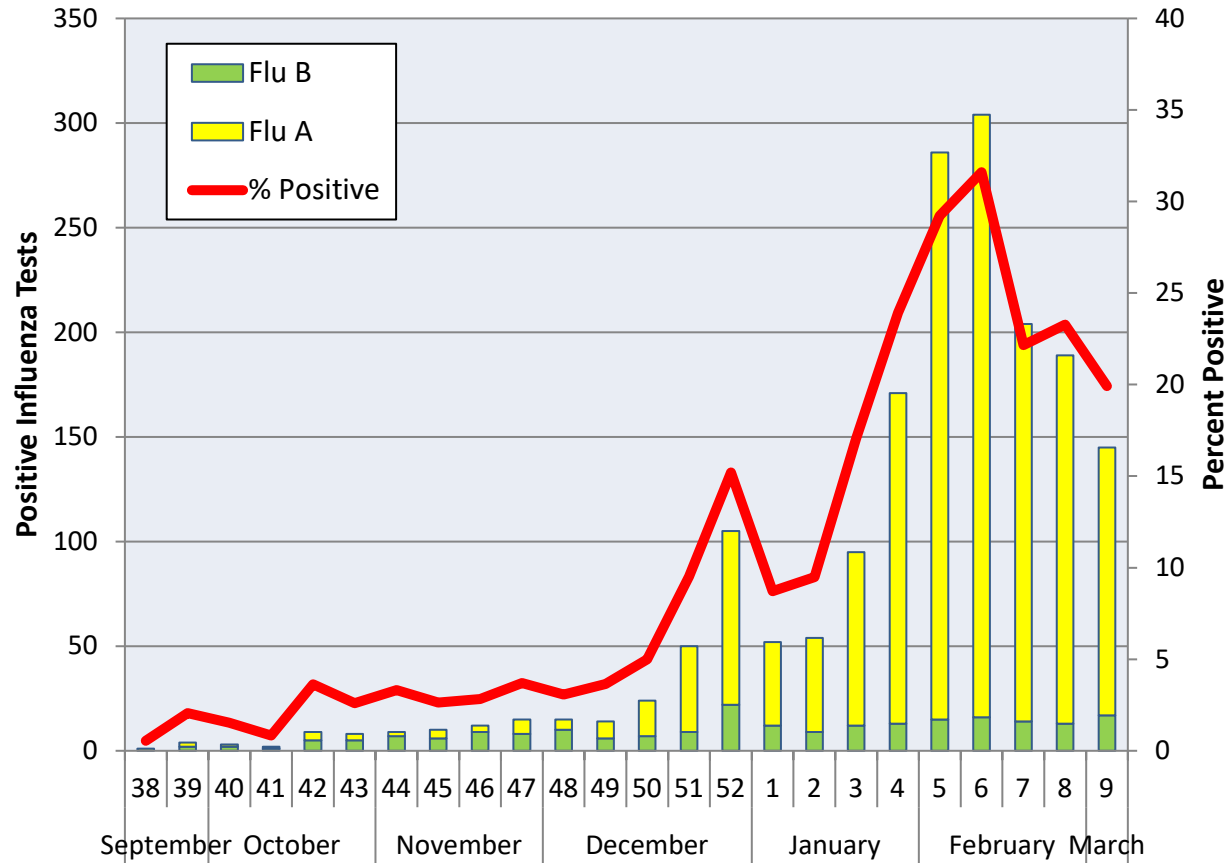
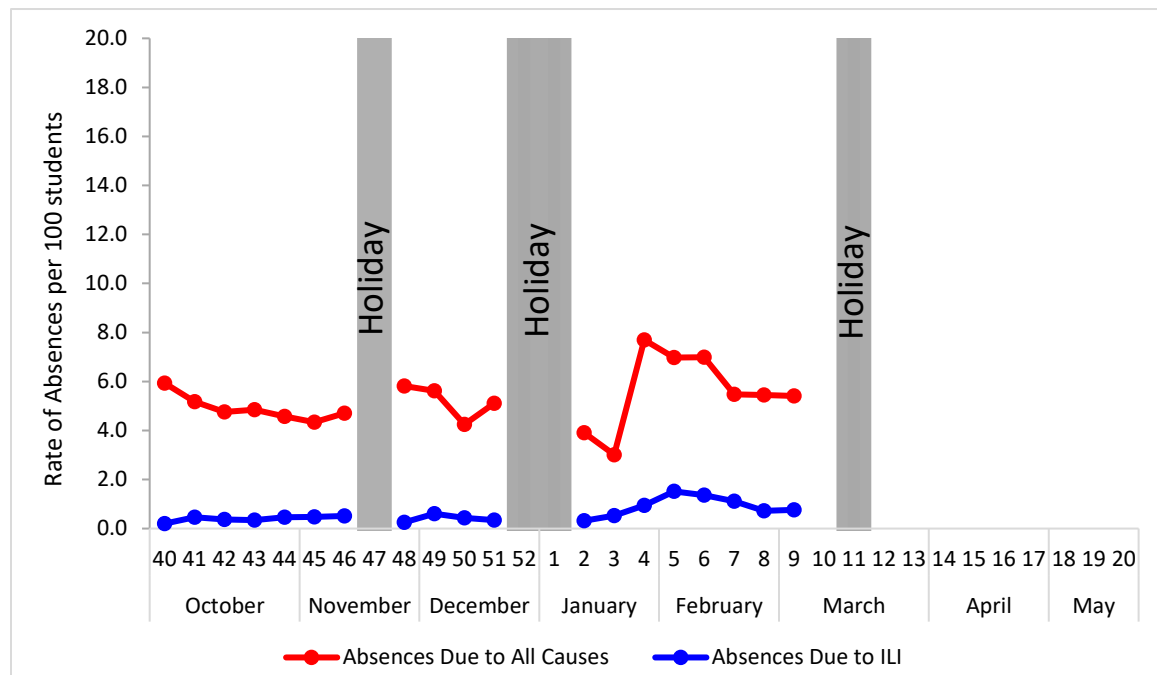


Figure 3. Percent of Absenteeism Due to All Causes and ILI, Denton County Schools*, 2018-2019 Season



*During week 9, a total of 3 Denton County Independent School Districts reported data to Denton County Public Health which included a total of 19,707 students.

Figure 4. Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, September 30, 2018 – March 2, 2019

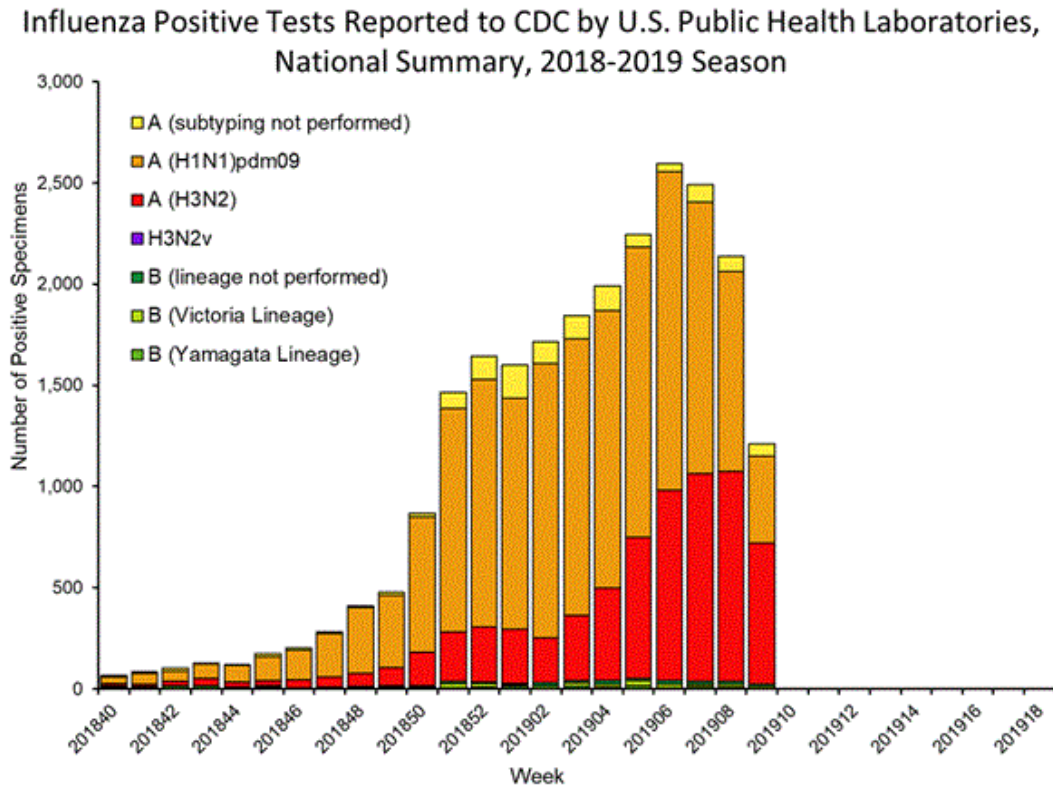


Figure 5. Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, September 30, 2018 – March 2, 2019

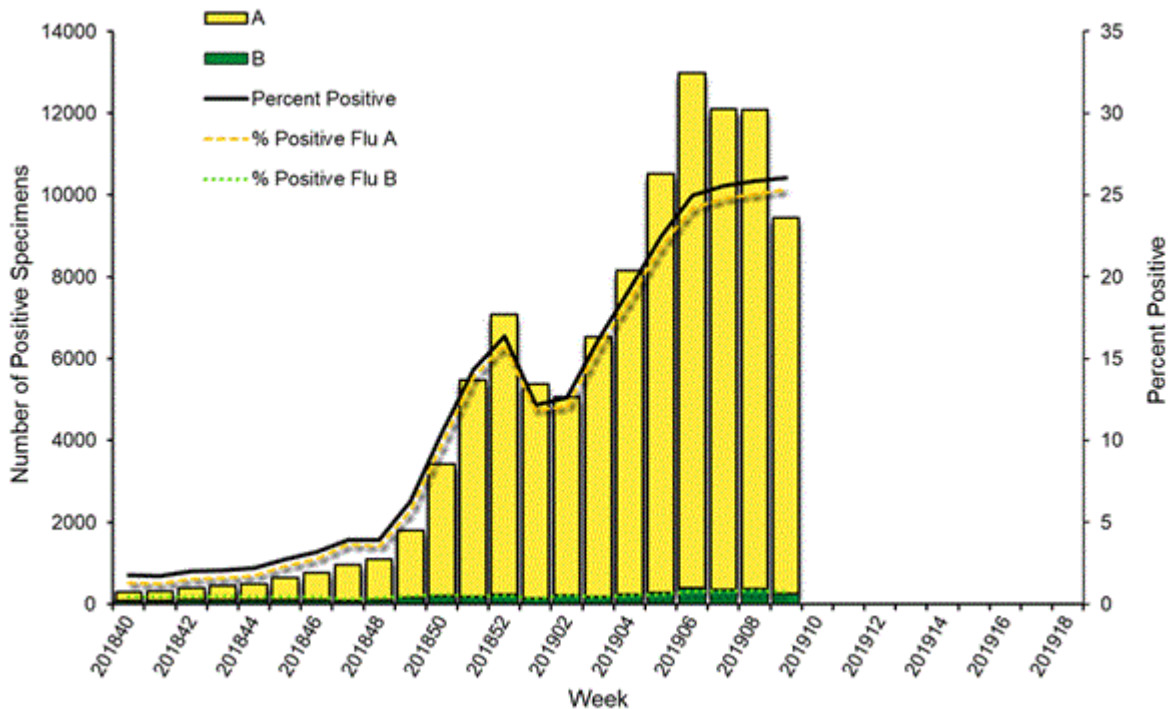


Figure 6. Antigenic Characterization of Influenza Isolates, Since September 30, 2018

Influenza A (H1N1)	260 of 264 (98.5%) – 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 9

	Week 9	Data Cumulative since September 30, 2018 (Week 40)
No. of specimens tested	36,193	738,333
No. of positive specimens (%)	9,434 (26.1%)	105,413 (14.3%)
<i>Positive specimens by type</i>		
Influenza A	9,171 (97.2%)	101,414 (96.2%)
Influenza B	263 (2.8%)	3,999 (3.8%)

Figure 8. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, August 1, 2018- March 2 2019

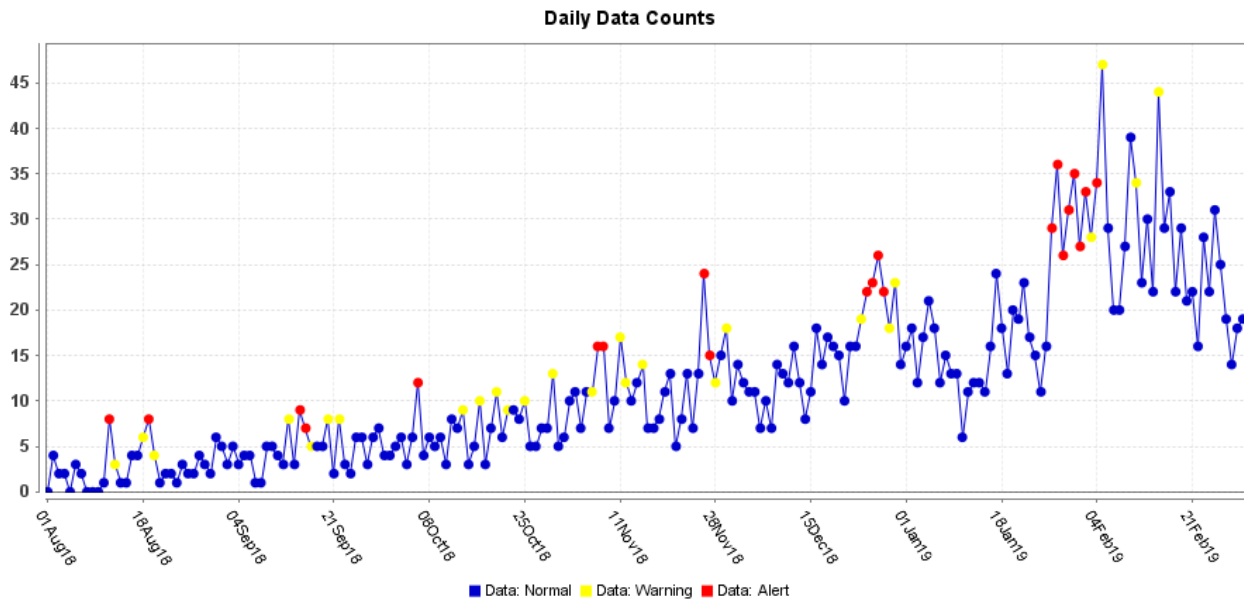
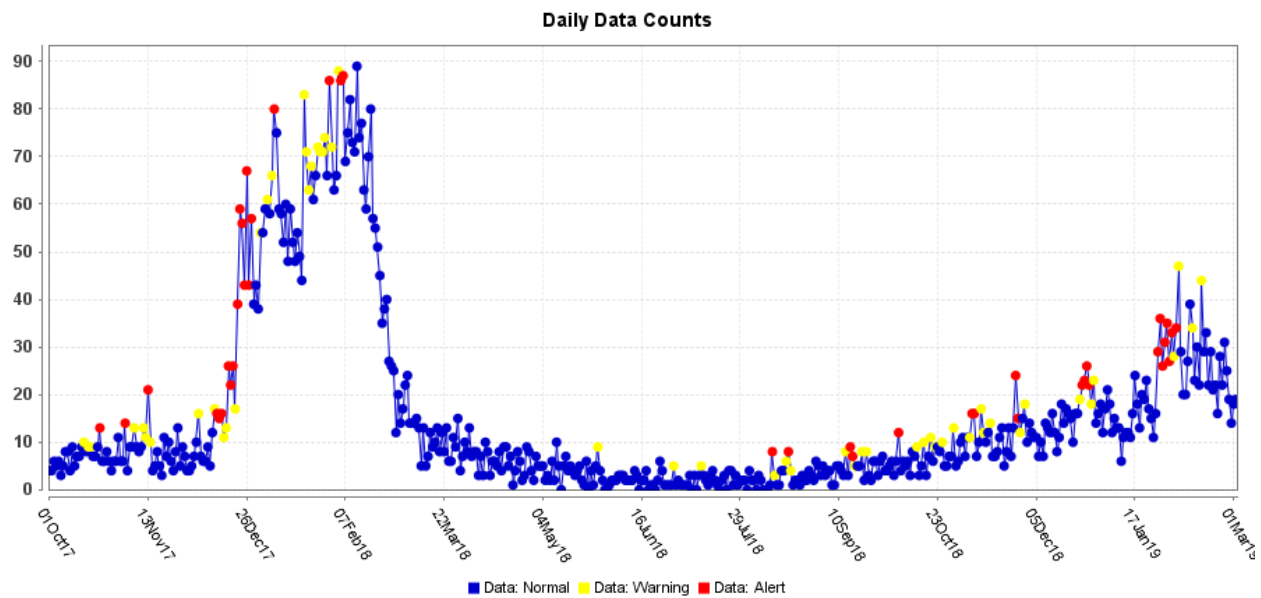


Figure 9. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, October 1, 2017 – March 2, 2019



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 February 23, 2019

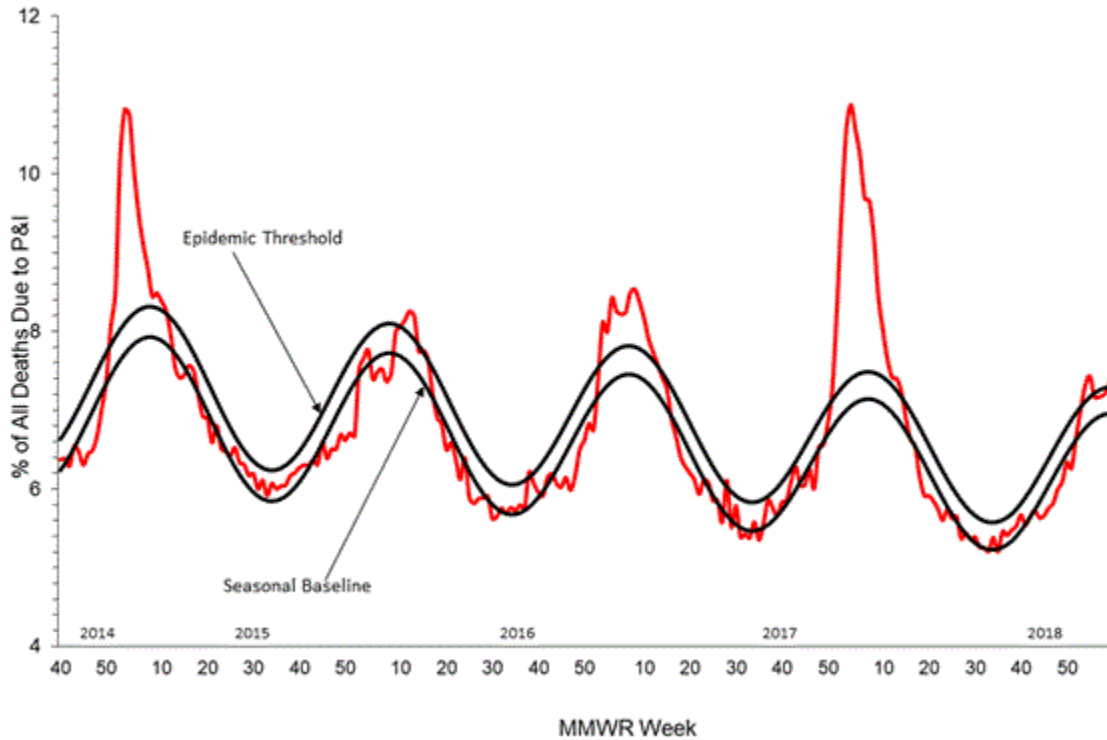
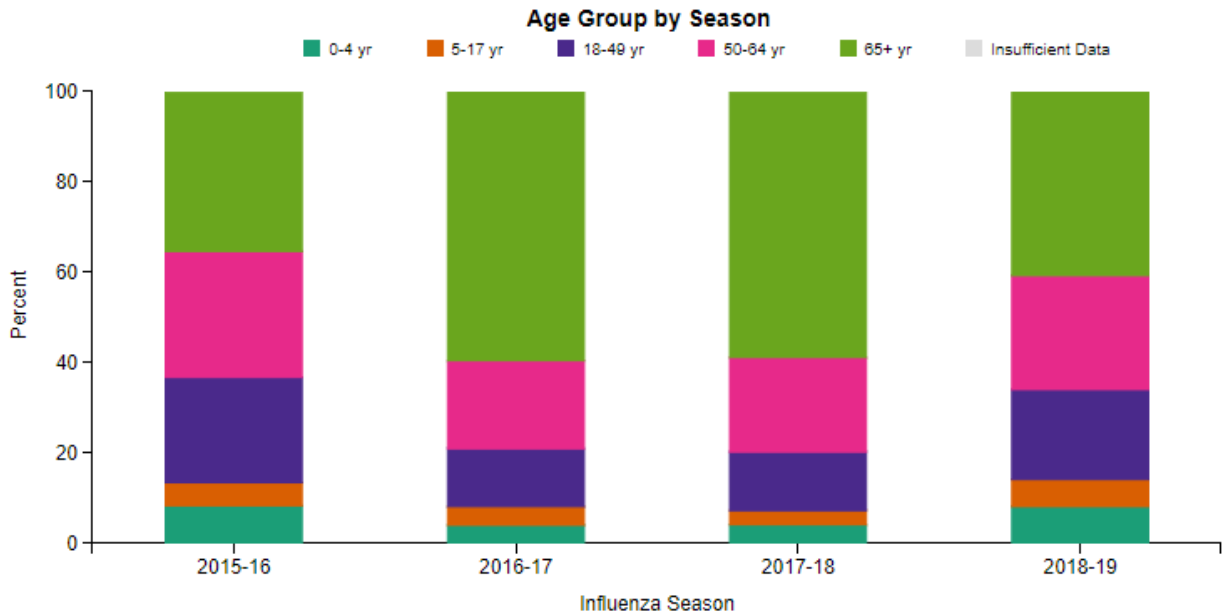
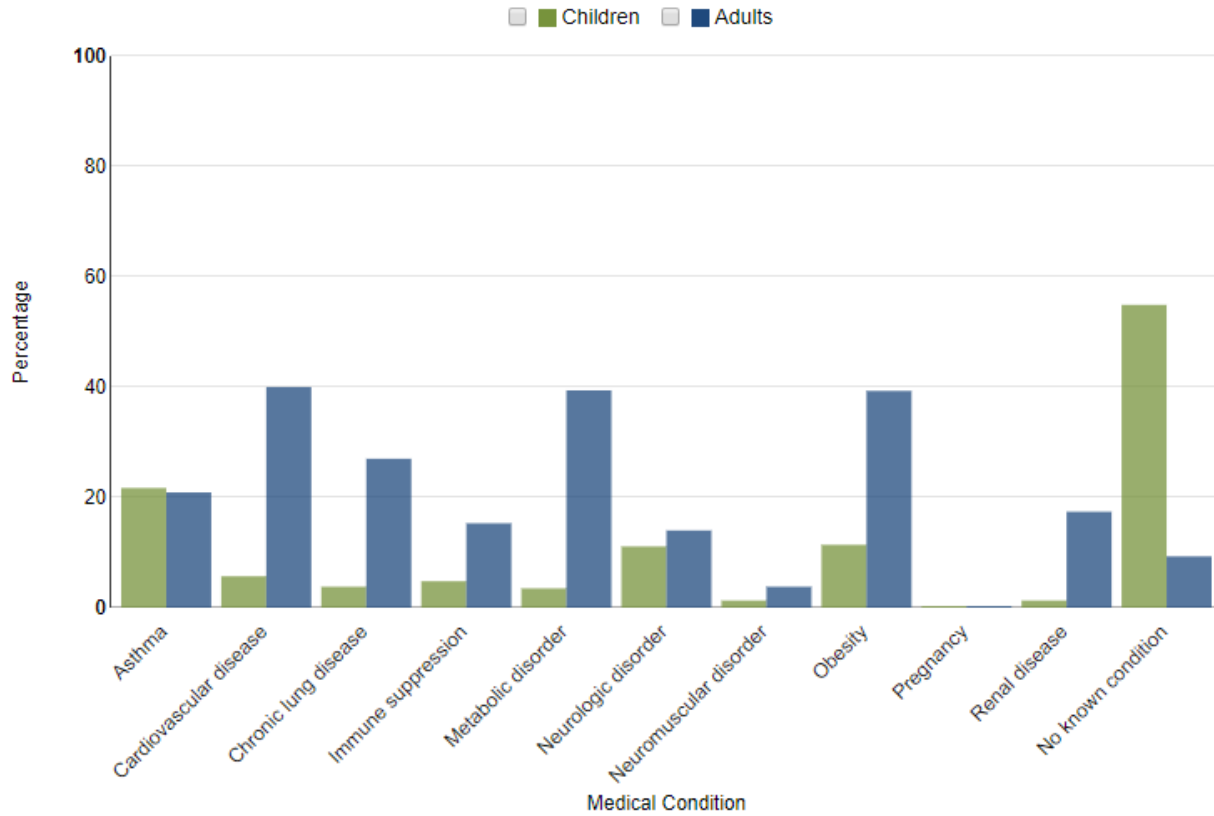


Figure 11. FluSurv-NET Laboratory Confirmed Influenza-Associated Hospitalizations by Age Group, National Summary, data as of March 2, 2019



FluView: Influenza Hospitalization Surveillance Network, Centers for Disease Control and Prevention. <http://www.cdc.gov/flu/weekly/>. Accessed on 3/8/2019.

Figure 12. FluSurv-NET Laboratory Confirmed Influenza-Associated Hospitalizations: Selected Underlying Conditions, 2018-2019 Season, data as of March 2, 2019



FluView: Influenza Hospitalization Surveillance Network, Centers for Disease Control and Prevention. <http://www.cdc.gov/flu/weekly/>. Accessed on 3/8/2019.

Figure 13. Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists: Week 9 – Week Ending March 2, 2019

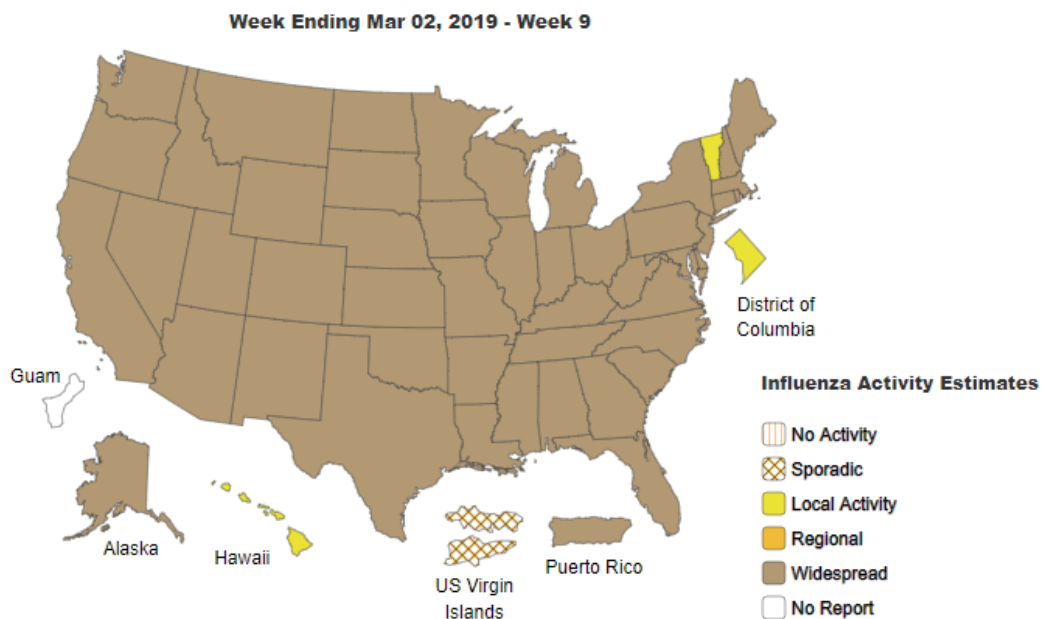
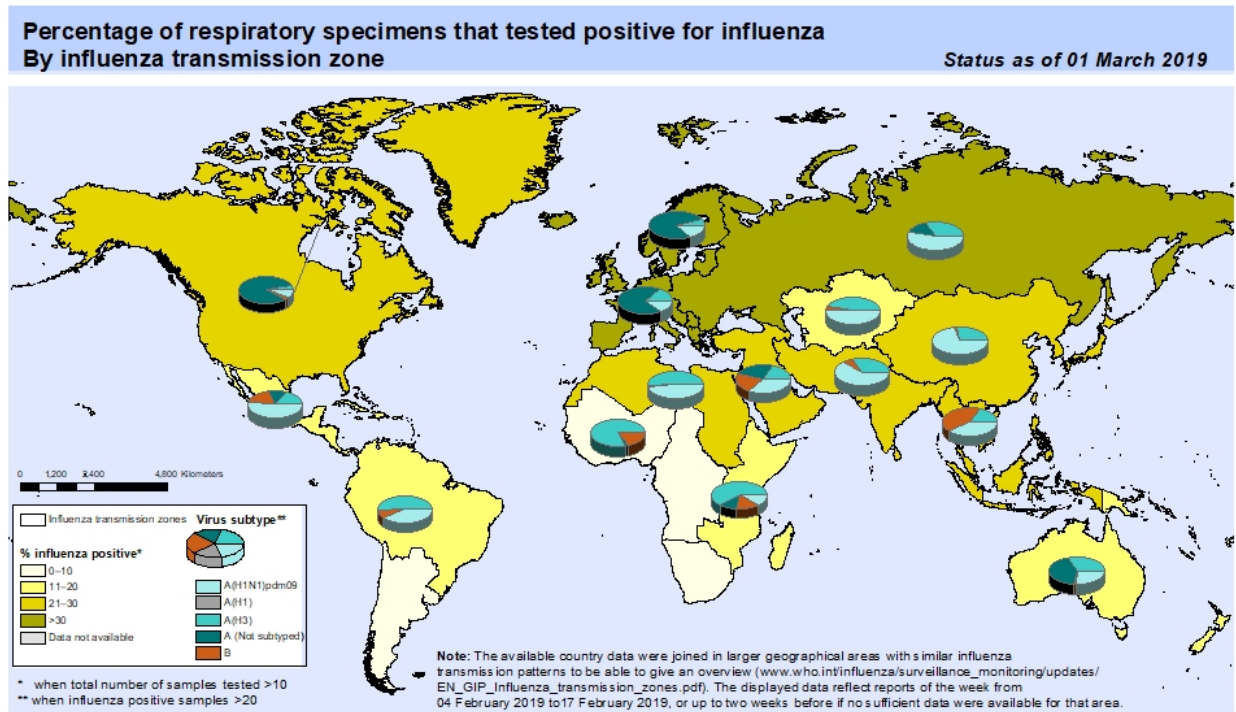


Figure 14. Percentage of Respiratory Specimens that Tested Positive for Influenza: WHO, based on data up to March 1, 2019



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)



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