

Denton County Public Health

2019 – 2020 Influenza Surveillance Program

CDC Week 48, Week Ending November 30, 2019



Epidemiologic Overview

Denton County

- High influenza activity was reported in Denton County for week 48.
- 198 positive influenza tests (8 Flu A and 190 Flu B) and 7 hospitalizations were reported by Denton County sentinel providers for week 48.
- Syndromic surveillance for influenza-like illness (ILI) in Denton County increased for week 48 when compared to the previous week.

Texas

- Influenza activity in the state of Texas was reported as high for week 48.
- The percentage of visits for ILI as reported by ILINet providers increased to 7.27% in week 48 compared to the previous week.
- The percentage of specimens testing positive for influenza in Texas increased to 20.94% in week 48 compared to the previous week.

US

- The proportion of outpatient visits for influenza-like illness (ILI) was 3.5%, which is above the national baseline of 2.4%.
- The geographic spread of influenza in 16 states was reported as widespread; 14 states was reported as regional; 17 states was reported as local; and 3 states was reported as sporadic.
- The percentage of specimens testing positive for influenza in the US was 10.2%.
- The proportion of deaths attributed to pneumonia and influenza (P&I) from the National Center for Health Statistics Mortality Surveillance System for week 47 was 4.8%. This percentage is below the epidemic threshold of 6.4% for week 47.

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

Week Ending	10/26/19	11/2/19	11/9/19	11/16/19	11/23/19	11/30/19	9/28/19 - Present
CDC Week	43	44	45	46	47	48	
Influenza Tests Performed Weekly	328	331	424	573	739	764	4344
Total Positive Influenza Tests	18	15	36	74	173	198	560
Percent Positive Influenza Tests*	5.49%	4.53%	8.49%	12.91%	23.41%	25.92%	
Positive A Influenza	0	1	3	5	11	8	39
Positive B Influenza	18	14	33	69	162	190	521
Non-differentiated Influenza	0	0	0	0	0	0	0
Influenza Hospitalizations	4	0	3	1	1	7	26
Influenza-associated Pediatric Deaths	0	0	0	0	0	0	0
Influenza-associated Adult Deaths	0	0	0	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, 2019-2020 Season

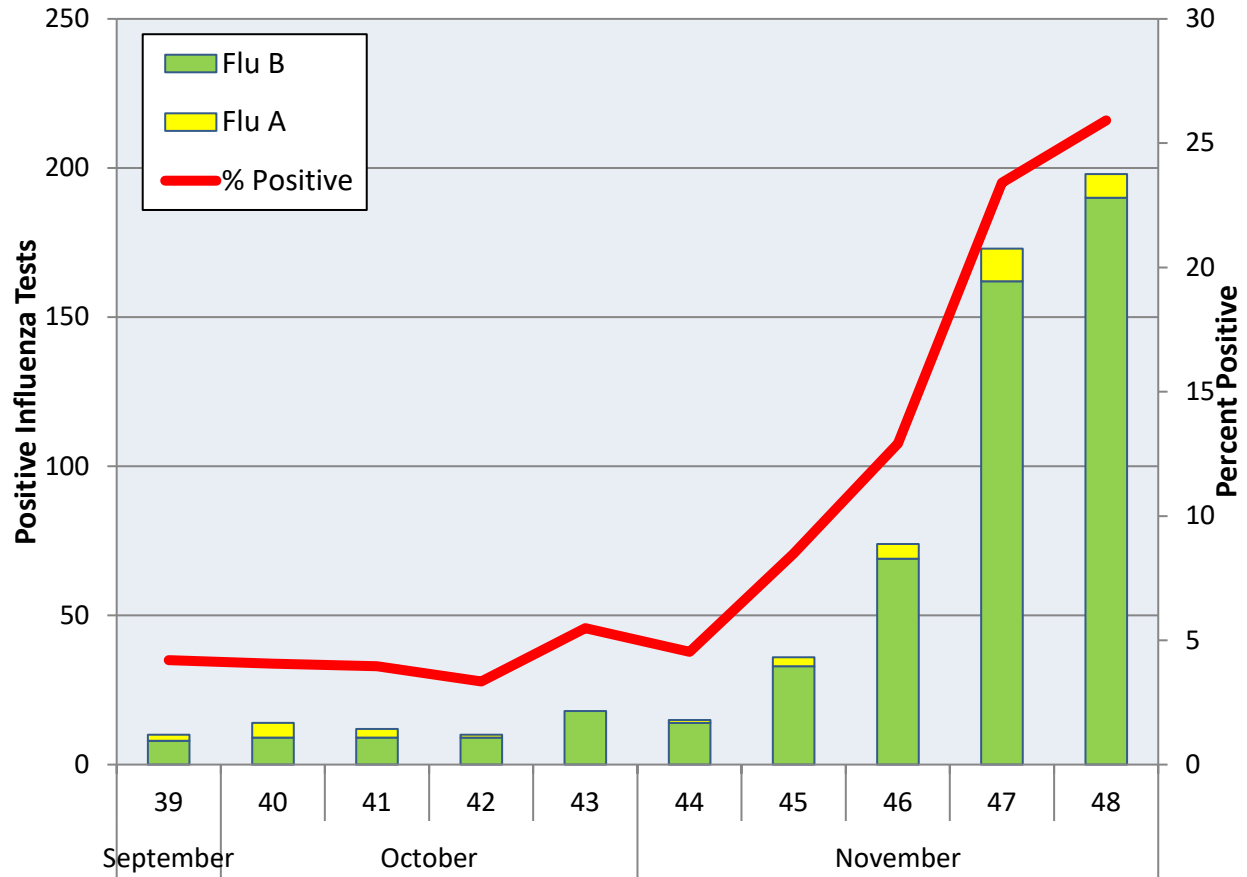
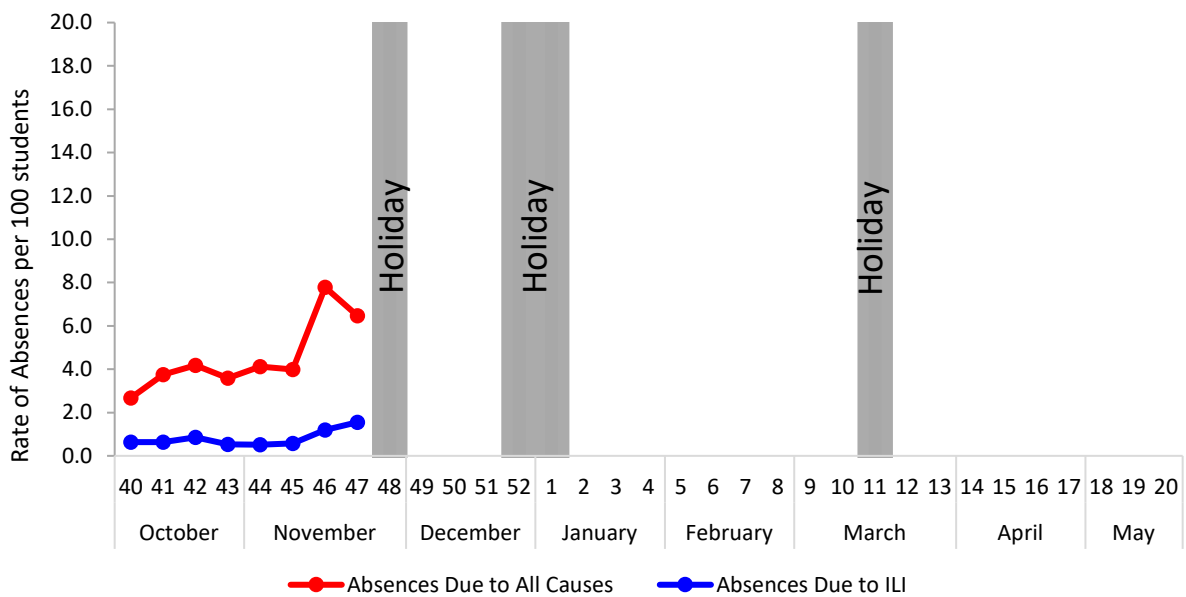


Figure 3. Percent of Absenteeism Due to All Causes and ILI, Denton County Schools*, 2019- 2020 Season



*There was no school absentee data reported for week 48 due to holiday breaks.

Figure 4. Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, September 29, 2019 – November 30, 2019

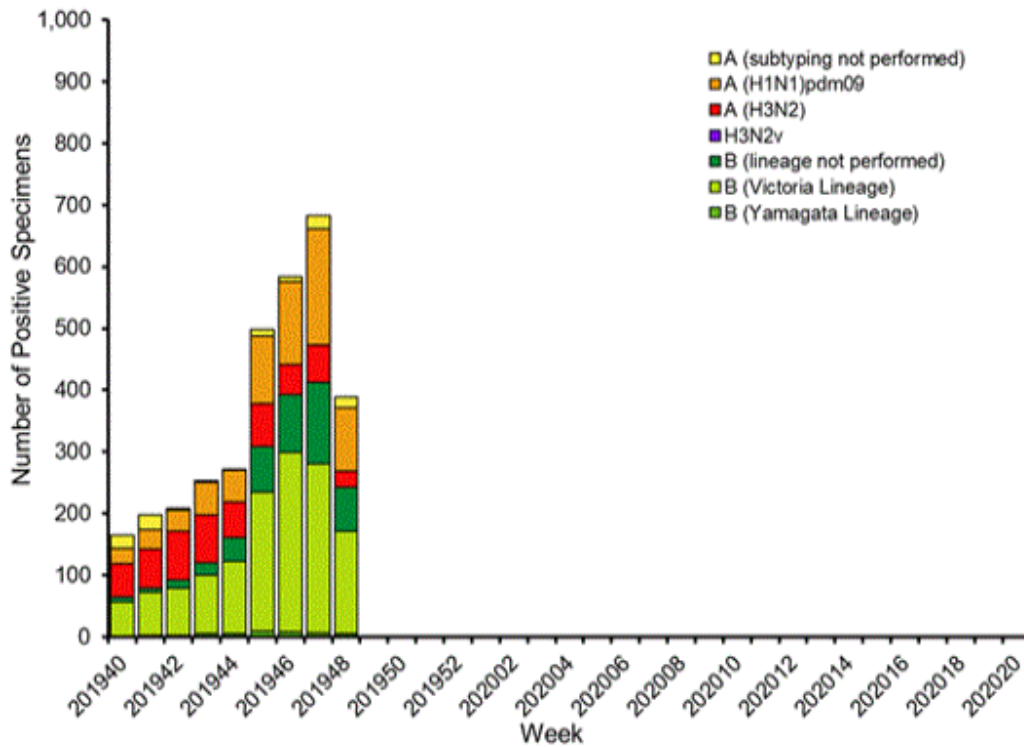


Figure 5. Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, September 29, 2019 – November 30, 2019

Influenza Positive Tests Reported to CDC by U.S. Clinical Laboratories, National Summary, 2019-2020 Season

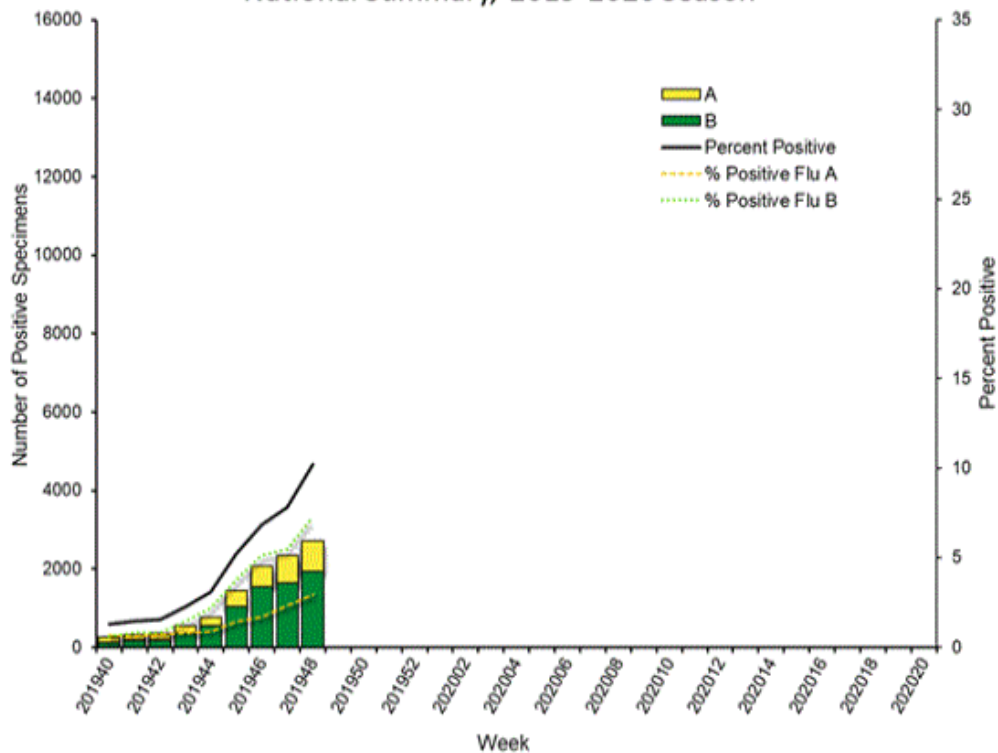


Figure 6. Antigenic Characterization of Influenza Isolates, Since September 29, 2019

Influenza A (H1N1)	5 of 5 (100%) – A/Brisbane/02/2018 (H1N1)pdm09 -like
Influenza A (H3N2)	7 of 8 (87.5%) – A/Kansas/14/2017 (H3N2)-like
Influenza B (Victoria Lineage)	10 of 16 (62.5%) – B/Colorado/06/2017-like
Influenza B (Yamagata Lineage)	Antigenic Characterization is pending

2019-2020 Influenza Vaccine Composition, Northern Hemisphere:

- A/Brisbane/02/2018 (H1N1)pdm09-like
- A/Kansas/14/2017(H3N2)-like
- B/Colorado/06/2017-like
- B/Phuket/3073/2013-like

Figure 7. U.S. Virologic Surveillance, Week 48

	Week 48	Data Cumulative since September 29, 2019 (week 40)
No. of specimens tested	26,576	227,629
No. of positive specimens (%)	2,713 (10.2%)	10,826 (4.8%)
<i>Positive specimens by type</i>		
Influenza A	784 (28.9%)	3,271 (30.2%)
Influenza B	1,929 (71.1%)	7,555 (69.8%)

Figure 8. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, August 1, 2019- November 30, 2019

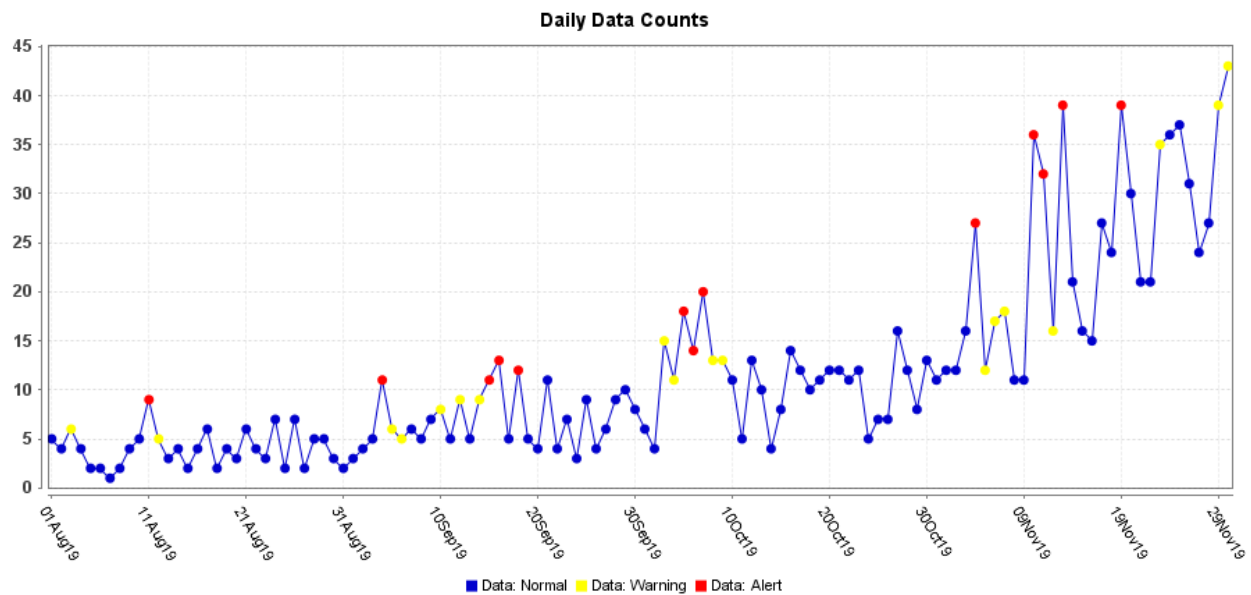
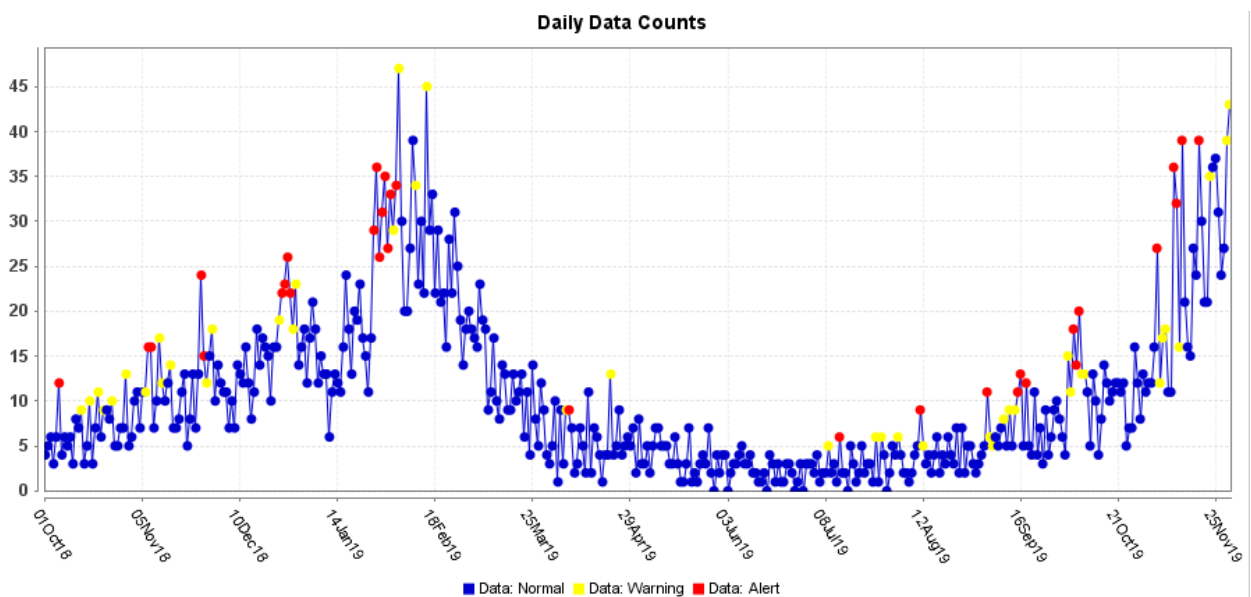


Figure 9. ESSENCE Syndromic Surveillance for Influenza-like Illness: Denton County, October 1, 2018 – November 30, 2019



Data obtained from hospitals participating in the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) from October 2018 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 November 23, 2019

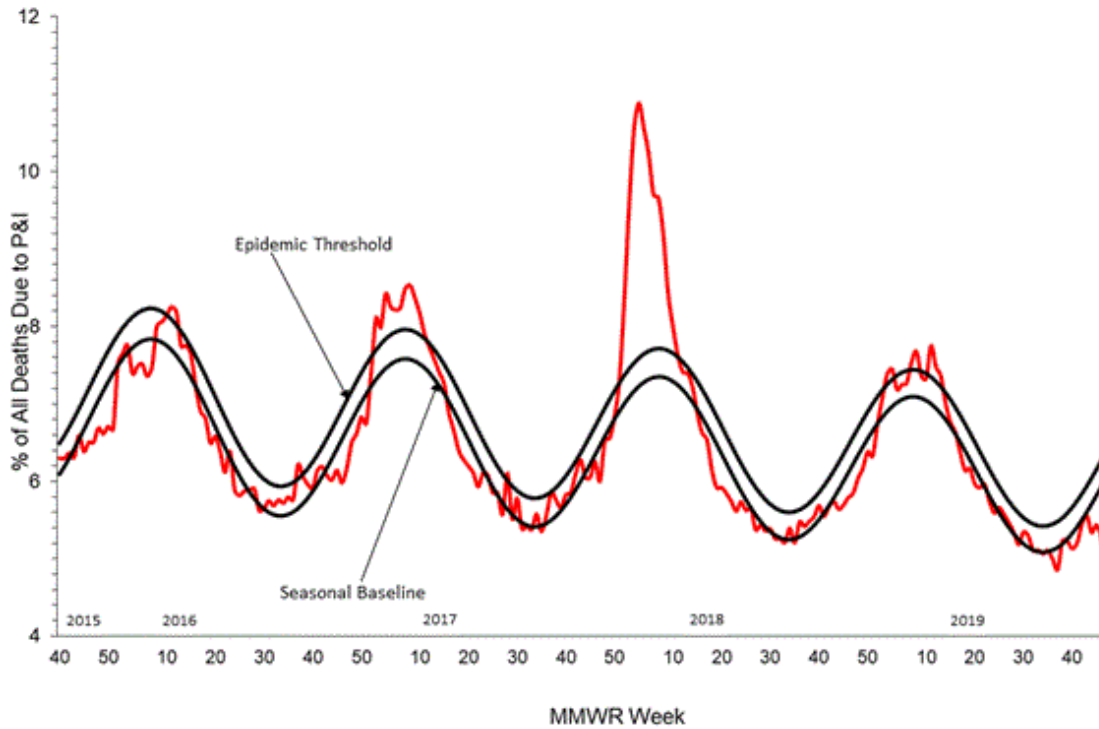


Figure 11. FluSurv-NET Laboratory Confirmed Influenza-Associated Hospitalizations by Age Group, National Summary, data as of November 30, 2019

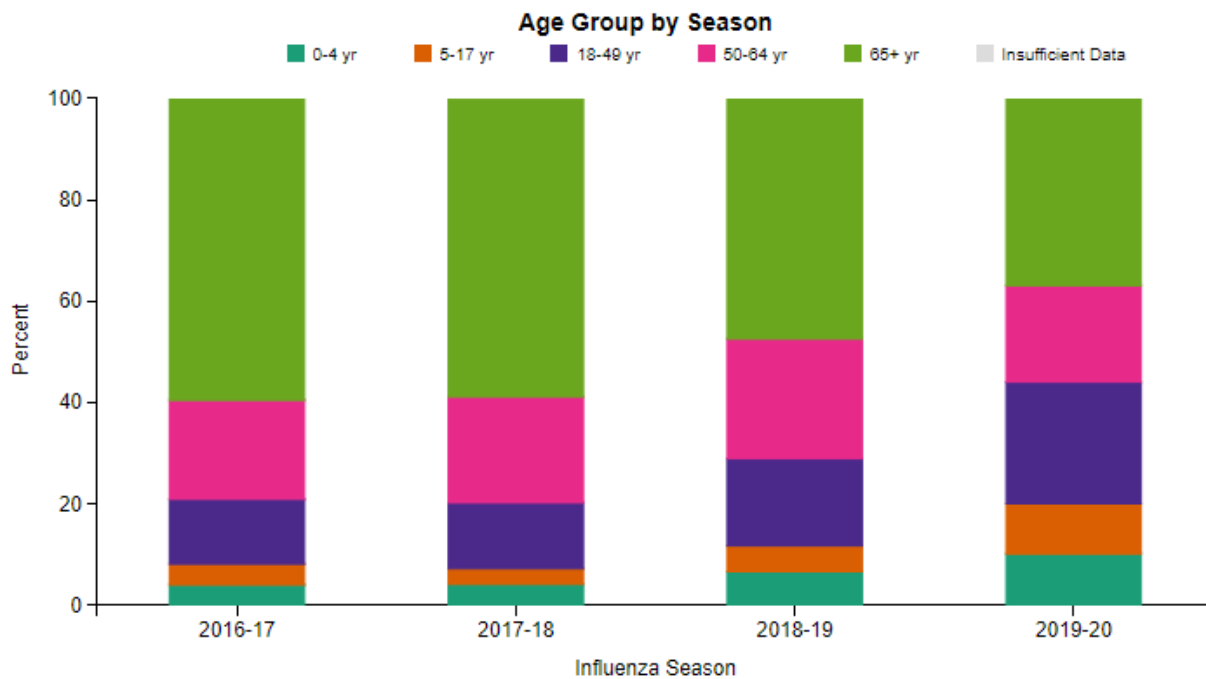
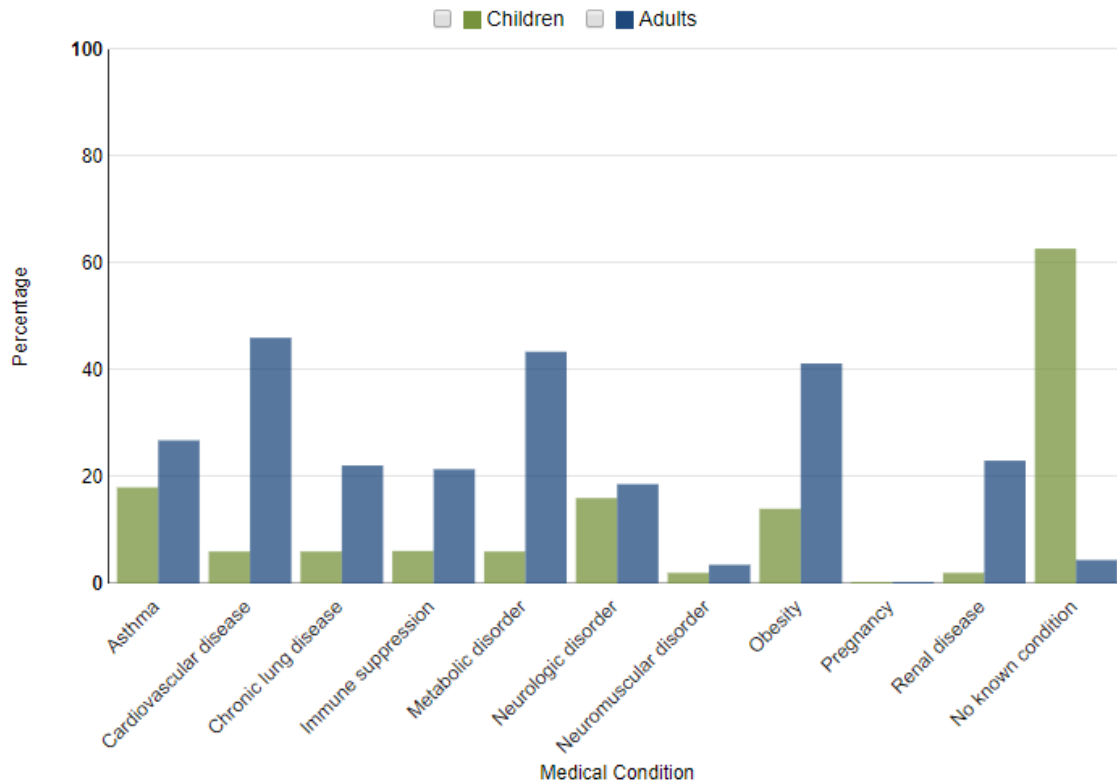


Figure 12. FluSurv-NET Laboratory Confirmed Influenza-Associated Hospitalizations: Selected Underlying Conditions, 2019-2020 Season, data as of November 30, 2019



FluView: Influenza Hospitalization Surveillance Network, Centers for Disease Control and Prevention. <http://www.cdc.gov/flu/weekly/>. Accessed on 12/9/2019.

Figure 13. Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists: Week 48 – Week Ending November 30, 2019

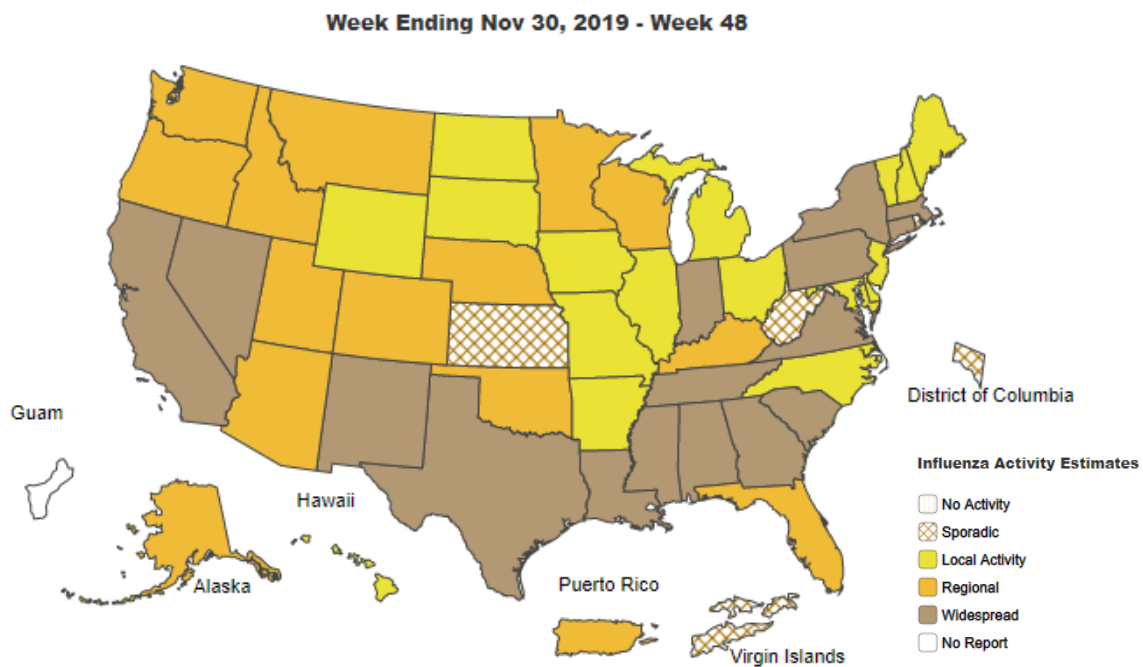
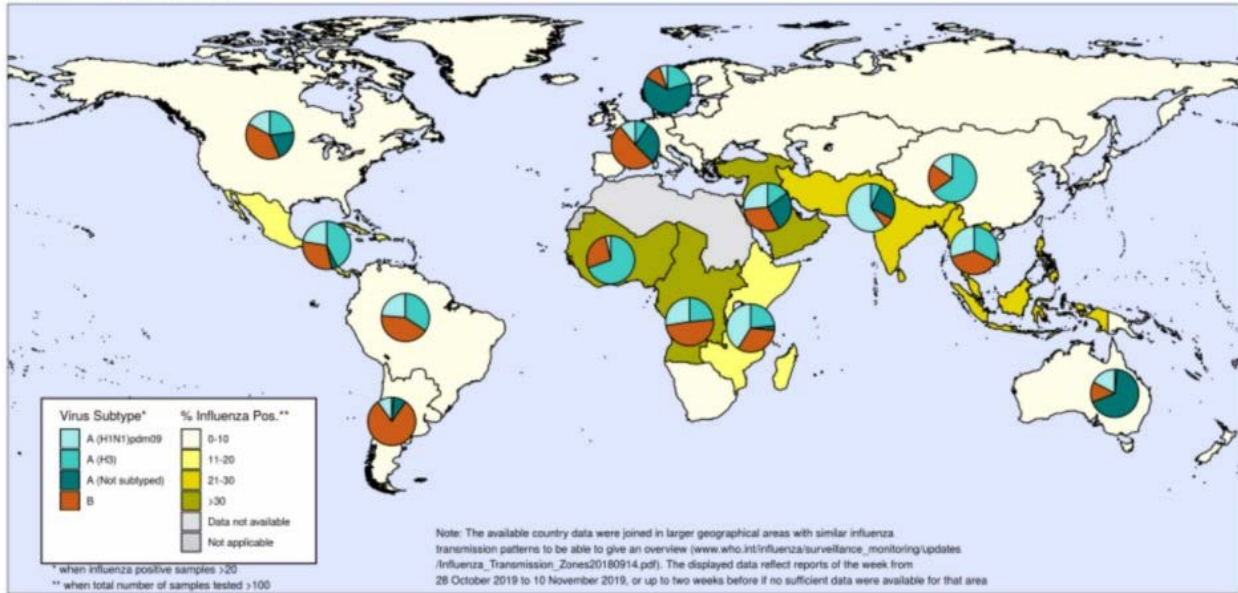


Figure 14. Percentage of Respiratory Specimens that tested Positive for Influenza: WHO, based on data through November 22, 2019

Percentage of respiratory specimens that tested positive for influenza
By influenza transmission zone
Map generated on 22 November 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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