



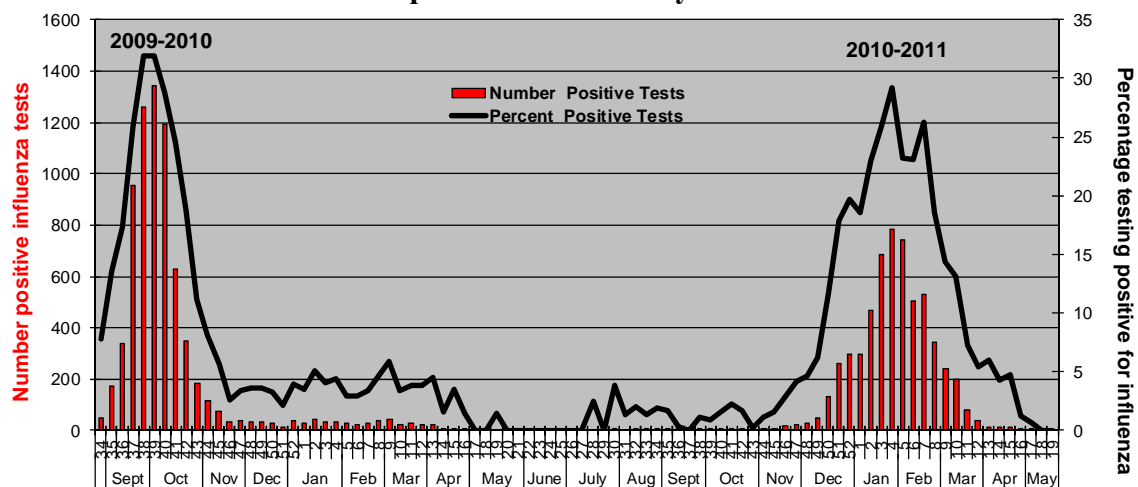
Dallas County Health and Human Services 2010-2011 Influenza Surveillance Program

2010 -2011 Season Summary

Season Overview

- During the 2010-2011 influenza season, influenza activity began to increase in November, and peaked in late January.
- The percentage of positive influenza tests exceeded 10% for 15 consecutive weeks, from the week ending December 18, 2010 through the week ending March 12, 2011. The proportion of positive tests peaked at 29% during the week ending January 29, 2011.
- In Dallas County, influenza A (H3N2) virus was the predominant virus (62%) throughout the season; smaller proportions of influenza A (H1N1) (11%), and influenza B (27%) also circulated.
- This season, 516 influenza-associated hospitalizations of Dallas County residents were reported. Of the admissions, 10% were to Intensive Care Units, and 74% had known high-risk underlying medical conditions.
- Five influenza-associated deaths were confirmed, of which two were under the age of 18 years.
- Total absences and absences from influenza-like-illnesses (ILI) in Dallas County public schools peaked at 8.4% and 6.0 % respectively during the week ending January 29, 2011.
- The proportion of specimens testing positive for respiratory syncytial virus (RSV) exceeded 10% for 16 consecutive weeks, from the week ending December 11, 2010 through the week ending March 19, 2011.

Figure 1. Number and Percentage Positive Influenza Tests by Week, Dallas County: September 2010 – May 2011



Data were obtained from the same surveillance sites as designated for DCHHS' seasonal influenza program, with over 20 participating Dallas area hospitals, urgent care centers, and sentinel providers.

Figure 2. Influenza Laboratory Surveillance: Dallas County Providers, Hospitals, & Viral Labs

Week Ending	Dec 4	Dec 11	Dec 18	Dec 25	Jan 1	Jan 8	Jan 15	Jan 22	Jan 29	Feb 5	Feb 12	Feb 19	Feb 26	Mar 5	Mar 12	Mar 19	Mar 26
CDC Week	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12
# Influenza Tests Performed Weekly	712	863	1166	1445	1792	2077	1950	2601	2875	3203	2188	2019	1857	1664	1521	1102	752
# Total Positive Influenza Tests	33	51	136	259	352	373	458	681	838	743	505	531	344	239	200	80	41
% Positive Influenza Tests	4.6	5.9	11.7	17.9	19.6	18.0	23.5	26.2	29.1	23.2	23.1	26.3	19.0	14.3	13.1	7.3	5.5
# Positive A Influenza ¹	23	43	109	226	249	305	380	544	582	500	356	346	199	117	124	42	17
# Positive B Influenza	6	4	22	33	50	62	78	126	201	243	149	184	145	121	76	38	22
# Non-differentiate Influenza ²	4	4	5	0	53	6	0	11	55	0	0	1	0	1	0	0	2
# Influenza Hospitalizations ³	4	1	11	12	34	39	35	48	68	42	47	38	25	17	21	24	4
# Influenza-associate deaths ⁴	0	0	1	0	0	0	0	0	0	1	2	0	0	0	1	1	0
# Influenza-associated Deaths of non-Dallas County Residents ⁵	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0

- ¹ Further subtyping results are performed only for specimens referred by institutions for PCR-testing (see figure 4).
- ² Non-differentiated refers to institutional rapid test results which did not differentiate between influenza A and B.
- ³ Reflects all influenza-associated hospitalizations reported from hospitals located within Dallas County. Approximately one-third of these hospitalizations involve patients who reside outside of Dallas County.
- ⁴ Deaths reported of residents of Dallas County with laboratory-confirmation of influenza by rRT- PC
- ⁵ Reflects deaths of non-Dallas County residents occurring in Dallas County hospitals.

Figure 3. Weekly Reported Positive Influenza Tests by Type, Dallas County: 2010-2011

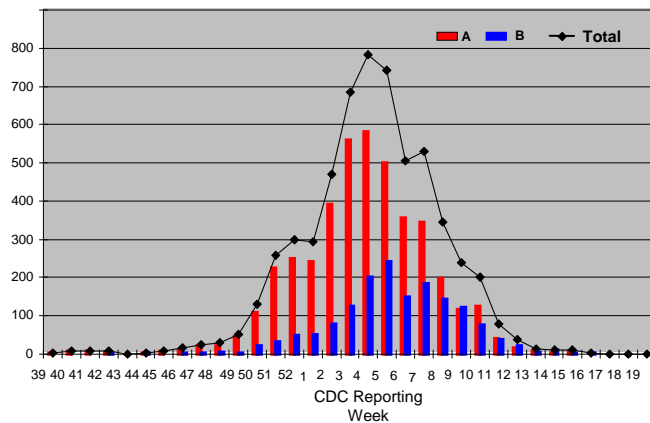
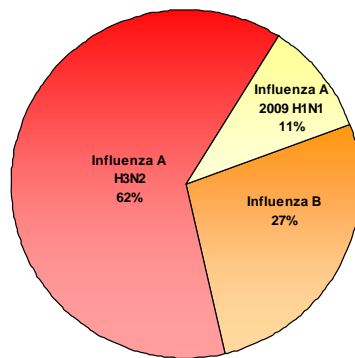


Figure 4. Dallas County LRN Influenza PCR Cumulative Test Results: October 1, 2010 – April 30, 2011



N =785

Figure 5. Number and Percent Positive RSV Tests: NRVES Surveillance Data, North Texas 2009-2010 and 2010-2011 Seasons

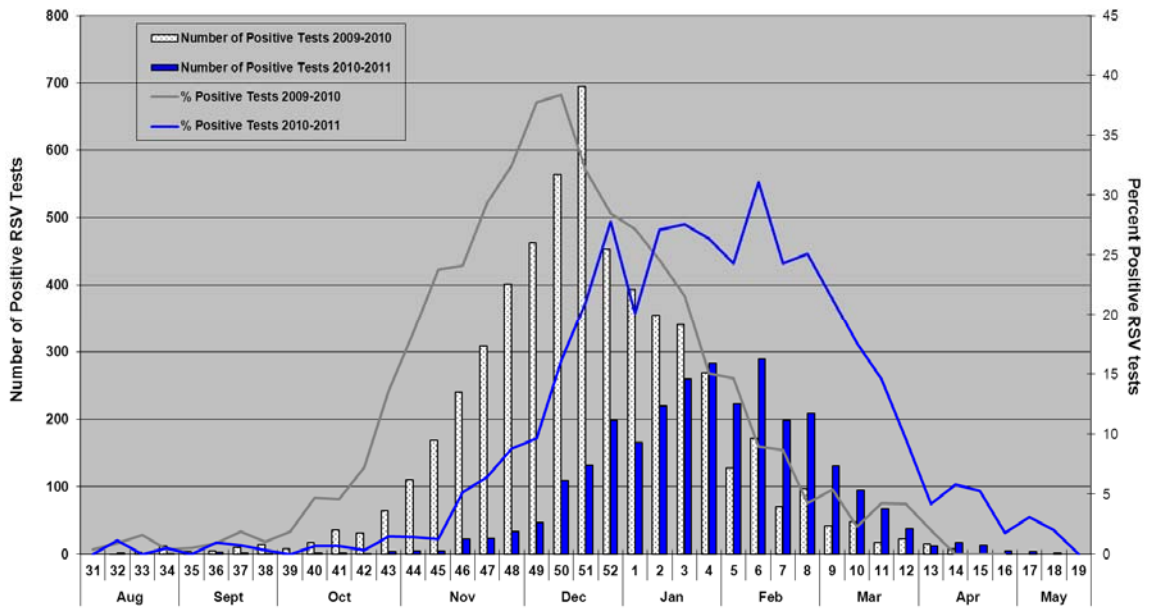
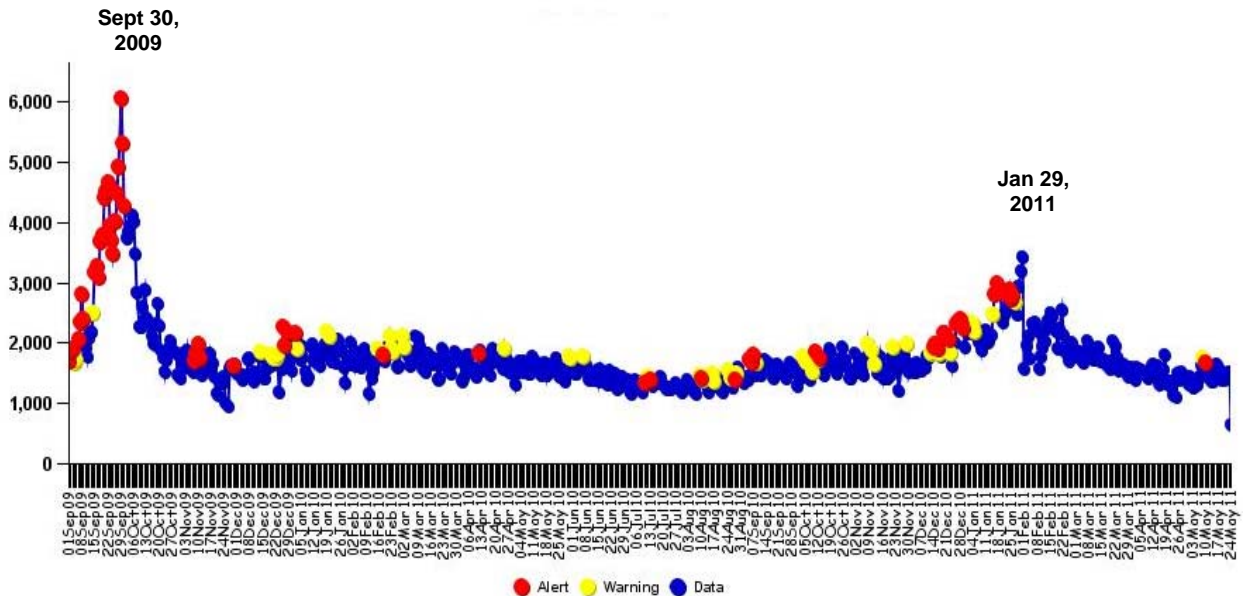


Figure 6. ESSENCE Syndromic Surveillance for Influenza-like Illness: Dallas County September 1, 2009 – May 14, 2011



Data obtained from hospitals participating in the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) from January 2008 through the present. Depicted are the numbers of persons presenting to Emergency Departments in 22 Dallas County hospitals with self-reported chief complaints of influenza-like illness.

Figure 7. Hospitalized Influenza Patients by Date of Admission, Dallas County: October 1, 2010 –May 14, 2011 (N = 516)

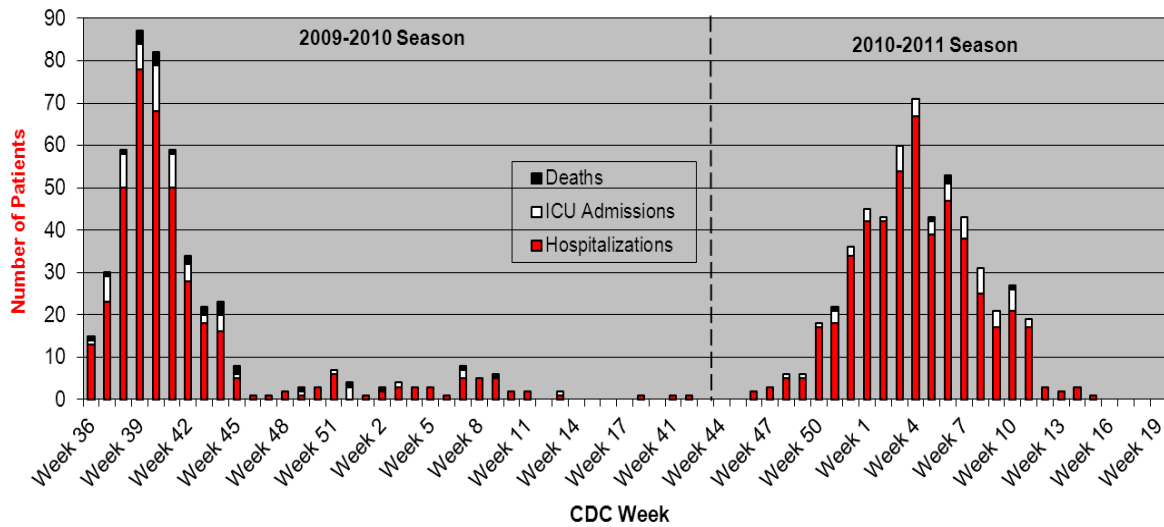


Figure 8. 2010-2011 Influenza-associated Deaths

- Dallas County residents: 5
- Median age: 63 years
- Age Range: 5 months – 90 years
- Percentage with underlying medical conditions: 5 (100%)
- Pediatric deaths (≤ 18 years): 2 (40%)

Figure 9. Characteristics of Influenza-Associated Hospitalizations, Dallas County Residents: October 1, 2010 – May 14, 2011

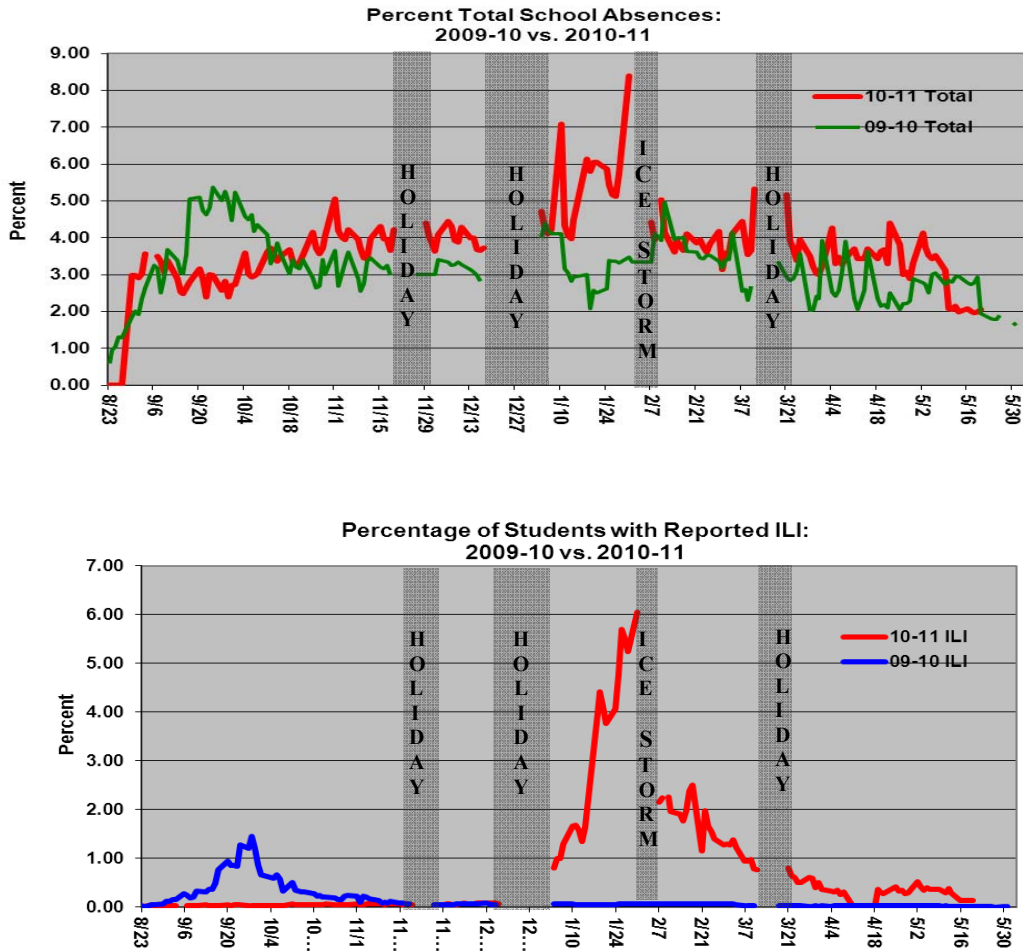
	N=516 ¹
Influenza Subtype (n²=287)	H3N2 (47%); 2009 H1N1 (22%); Influenza B (32%)
Gender	Female (54%)
Race/Ethnicity	White (36%); Hispanic (39%); Black (22%); Asian (1%); Other (2%)
Median Age	20 years (Range: 2 days – 98 years)
Presence of ≥ 1 Underlying Medical Condition³ or age < 2 years old	74%
Primary Reason for Admission	Respiratory distress/shortness of breath (209) pneumonia (51); seizure (24); rhabdomyolysis (5)
ICU Admissions	52
Deaths	5

¹ Data reflect all influenza related hospitalizations reported to DCHHS with a positive influenza test

² Data are related to PCR-Confirmed influenza hospitalizations

³ Underlying medical conditions, which confer high-risk development of flu-related complications: chronic pulmonary (including asthma), cardiovascular, renal, hepatic, neurologic, hematologic, or metabolic disorders, immunosuppression, pregnancy, and morbid obesity.

Figure 10. Percentage of Total Student Absences and Percentage of Absences due to Influenza-like Illness: Reported from 14 Independent School Districts in Dallas County:



- School absences and influenza-like illnesses are reported voluntarily from 14 Independent School Districts, representing over 510 elementary, middle, and secondary schools and over 420,000 students in Dallas County.
- Data are submitted from additional charter and private schools on a voluntary basis.
- Data trends are also followed on an individual basis by school and an aggregate basis by

Please send inquiries to DCHHS: Influenza@dallascounty.org

Elizabeth Hull Smith, RN MHA, Epidemiologist Surveillance Coordinator
 Public Health Preparedness and Communicable Disease Division Staff
 Joey Stringer, Ed Bannister PhD, LRN Laboratory
 Wendy Chung, MD MSPH, Chief Epidemiologist
 Steven Wilson MD, Health Authority, Acting Medical Director
 Zachary Thompson, MA, Director