



**Austin/Travis County Health and Human Services Department
Epidemiology and Health Statistics Unit**



Travis County Influenza Surveillance

This report contains data for the 2013-2014 Influenza Season through July 26, 2014 (MMWR¹ week 30).

Situation Update:

- Nationally, influenza situational updates have been suspended, although influenza surveillance in the U.S. will continue through the summer months.
- In Texas, the percentage of visits for influenza-like illness as reported by ILINet providers was 4.01%. Locally, the percentage of visits was 1.13%.
- Locally, pneumonia and influenza deaths have trended near or below seasonal levels and 22 deaths have been attributed to influenza this influenza season.
- Nationally, there have been 105 pediatric influenza-associated influenza deaths, 19 reported in Texas. There have been three pediatric influenza-associated deaths in Travis County.
- The percentage of specimens testing positive for influenza statewide for the week is 0.57%. Locally, no specimens were tested via PCR for influenza.
- The 2009 H1N1 viruses have predominated this influenza season. Influenza A continues to circulate at low levels throughout the summer.
- In Texas, characterization has been performed on 85 influenza A (H1N1) viruses and 25 influenza A (H3N2) viruses both matching components of the trivalent and quadravalent influenza vaccines. Additionally, 15 influenza B viruses match the B component of the trivalent vaccine while 27 have been characterized as the additional B component found in the quadravalent vaccine but not in the trivalent vaccine.
- Texas has had 374 specimens tested for antiviral resistance to oseltamivir (Tamiflu); three have been resistant to oseltamivir (Tamiflu).



Austin/Travis County Health and Human Services Department Epidemiology and Health Statistics Unit



H5N1:

- Canada reported the first case of influenza A H5N1 in a human ever detected in the Americas. No cases of H5N1 have been reported in the United States. The CDC reports the risk to people in the United States is considered to be low at this time.
- H5N1 infections are rare and these viruses do not spread easily from person to person. The CDC is not recommending that the public take any special actions regarding H5N1 in response to this case.
- For more information, visit [H5N1 Influenza](#).

H7N9:

- No cases of H7N9 have been reported in the United States. The CDC reports the risk to people in the United States is considered to be low at this time.
- For more information, visit [H7N9 Influenza](#).

Preventive Actions:

- The CDC recommends that anyone six months of age and older should be vaccinated for the flu every flu season. Individuals who are at high risk are especially advised to be vaccinated. High risk individuals are as follows:
 - Persons 65 years of age and older
 - Pregnant women
 - Individuals with certain chronic medical conditions, including diabetes, asthma, heart and lung disease
 - Health care workers
 - Individuals who live with and/or care for high risk individuals
- In addition to the vaccine, there are certain preventive measures an individual can take to prevent the flu:
 - Wash your hands often with soap and water, or use an alcohol-based hand sanitizer if soap is not available.
 - Practice proper sneezing and coughing measures.
 - Avoid touching your nose, mouth and eyes.
 - Avoid coming into contact with an individual who is sick.
 - If you are sick, stay home until you are fever free for 24 hours without the use of fever-reducing medications.

Although these preventive actions are highly recommended they do not take the place of the flu vaccine.



**Austin/Travis County Health and Human Services Department
Epidemiology and Health Statistics Unit**



*For additional information about Influenza surveillance, contact:
The Austin/Travis County Health and Human Services Epidemiology and Health Statistics Unit at (512) 972-5555*

Other Helpful Resources:

[Texas Department of State Health Services \(DSHS\)](#)

[Centers for Disease Control and Prevention \(CDC\)](#)

[World Health Organization \(WHO\)](#)

Figure 1. Influenza Surveillance, Travis County Providers^{4,5,6}

Week Ending	6/14/2014	6/21/2014	6/28/2014	7/5/2014	7/12/2014	7/19/2014	7/26/2014	8/2/2014
MMWR Week	24	25	26	27	28	29	30	31
# Influenza Rapid Tests Performed	53	51	36	37	19	17	12	18
# Total Positive Influenza Tests	4	1	1	1	4	2	1	1
% Positive Influenza Tests	7.5%	2.0%	2.8%	2.7%	21.1%	11.8%	8.3%	5.6%
# Positive A Influenza	2	1	1	0	3	0	1	1
# Positive B Influenza	2	0	0	0	1	2	0	0
# Non-Differentiated Influenza ³	0	0	0	1	0	0	0	0

Data source: Austin/Travis County Influenza surveillance reporters

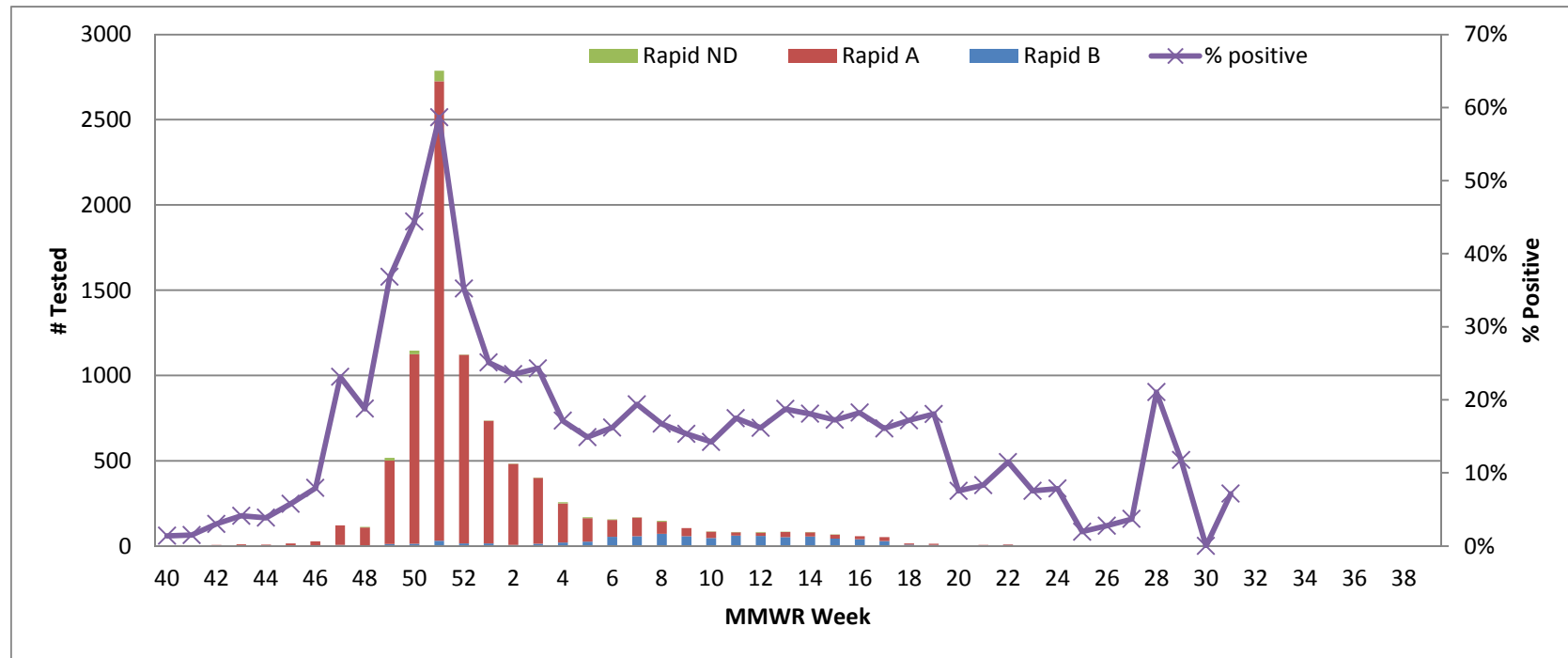
Austin/Travis County influenza surveillance does not attempt to capture all cases of influenza or influenza-like illness. These data should be used for trending purposes over time and for identifying types/strains of influenza that are occurring in the Austin area rather than for estimating the total number of cases.



Austin/Travis County Health and Human Services Department
Epidemiology and Health Statistics Unit



Figure 2. Number Tested and Percent Positive Rapid Influenza Tests by Week,
Travis County: 2012-2013 Influenza Season^{4,5,6,8}



Data source: Austin/Travis County Influenza surveillance reporters

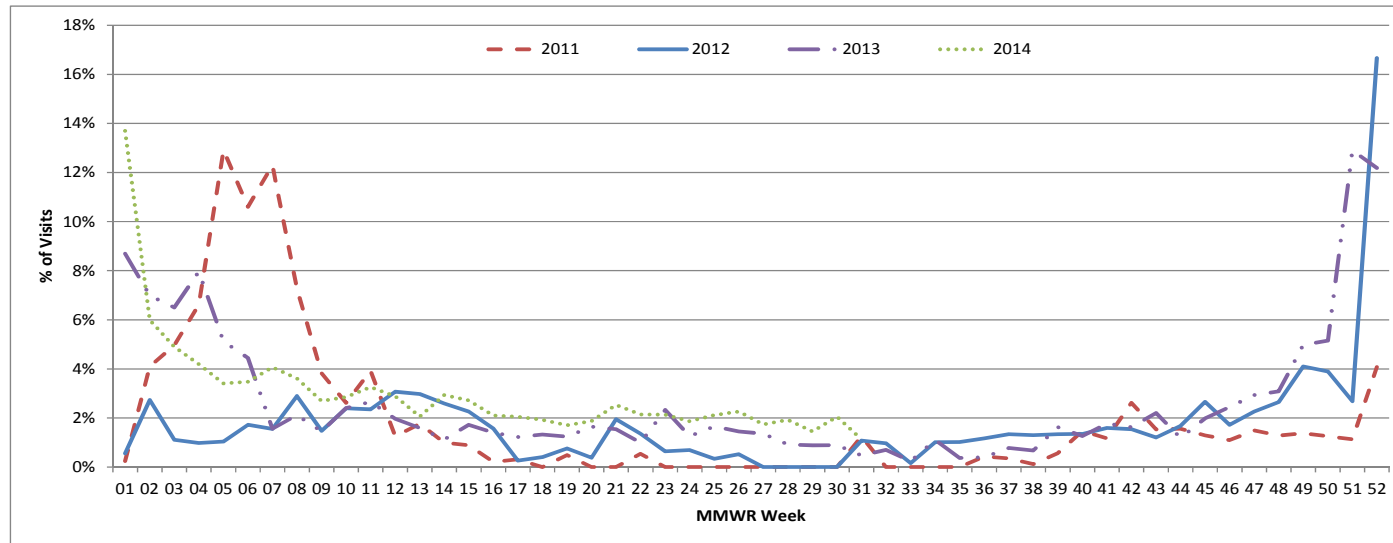
Austin/Travis County influenza surveillance does not attempt to capture all cases of influenza or influenza-like illness. These data should be used for trending purposes over time and for identifying types/strains of influenza that are occurring in the Austin area rather than for estimating the total number of cases.



Austin/Travis County Health and Human Services Department Epidemiology and Health Statistics Unit



**Figure 3. Percentage of Visits Due to Influenza-like-Illness Reported by
Travis County Participants in ILINet: 2009-2013⁸**



Data source: CDC ILI.net system

Figure 4. Travis County Confirmed Influenza Test Results:^{2,9,10}

		7/28/2013 - 9/28/2013	09/29/2013 - 11/30/2013	12/1/2013 - 2/1/2014	2/2/2014 - 4/5/2014	4/6/2014 - 6/7/2014	6/8/2014 - 8/9/2014
MMWR Week		31-39	40-48	49-5	6-14	15-23	24-32
Influenza A (Total Positive PCR Tests)		1	6	91	5	1	0
Subtype	Seasonal H1N1	1	6	83	2	0	0
	Season H3N2	0	0	2	3	1	0
	Not Subtyped	0	0	13	0	0	0
Influenza B (Total Positive PCR Tests)		0	0	1	6	0	0
PCR Negative Specimens		9	13	123	17	4	5

* Incomplete data.

Data source: Austin/Travis County Influenza surveillance reporters and the Department of State Health Services lab

Austin/Travis County influenza surveillance does not attempt to capture all cases of influenza or influenza-like illness. These data should be used for trending purposes over time and for identifying types/strains of influenza that are occurring in the Austin area rather than for estimating the total number of cases.



Austin/Travis County Health and Human Services Department
Epidemiology and Health Statistics Unit



Figure 5. Influenza Testing by Texas Laboratories^{11, 14}

Week 30	
Number of labs reporting flu tests	11
Number of specimens tested	348
Number of positive specimens (%) [†]	2 (0.57%)
Percentage of total tests that were antigen detection tests	16.95%
Positive specimens by type/subtype [n (%)]	
Influenza A	1 (50.00%)
Subtyping performed	1 (100.0%)
A (H1N1)	0 (0.0%)
A (H3N2)	1 (100.0%)
Subtyping not performed	0 (0.0%)
Influenza B	1 (50.00%)

[†]Laboratory data in 2013-2014 season reports may not be comparable to reports from previous seasons because of the inclusion of DSHS and LRN laboratory data for the current season.

Figure 6. Texas Antiviral Resistance¹¹

	Oseltamivir		Zanamivir	
	Virus samples tested (n)	Resistant viruses, number (%)	Virus samples tested (n)	Resistant viruses, number (%)
Influenza A (H1N1)	354	3 (0.85%)	75	0 (0%)
Influenza A (H3N2)	15	0 (0%)	15	0 (0%)
Influenza B	5	0 (0%)	5	0 (0%)

- Since October 1, 2013, three influenza viruses from Texas have shown resistance to Oseltamivir (Tamiflu).



Austin/Travis County Health and Human Services Department
Epidemiology and Health Statistics Unit



Texas Antigenic Characterization¹¹

Influenza A (H1N1) [85]

- Eighty-five viruses were related to A/California/07/2009. This virus strain was included in the 2013-2014 influenza vaccine for the Northern Hemisphere.

Influenza A (H3N2) [25]

- Twenty-five viruses were related to A/Texas/50/2012, an A (H3N2) virus antigenically like the cell-propagated prototype virus A/Victoria/361/2011. This virus strain was included in the 2013-2014 influenza vaccine for the Northern Hemisphere.

Influenza B [48]

- Yamagata lineage [16]: Sixteen (33%) influenza B/Yamagata-lineage virus has been characterized from Texas. B/Massachusetts/2/2012-like is included as an influenza B component of the 2013-2014 Northern Hemisphere trivalent and quadrivalent influenza vaccines.
- Victoria lineage [32]: Thirty-two (67%) influenza B/Victoria-lineage viruses were characterized as B/Brisbane/60/2008-like, which is included as an influenza B component of the 2013-2014 Northern Hemisphere quadrivalent influenza vaccine.

Figure 7. Texas Respiratory Laboratory Results⁵

Virus	Number of Laboratories Testing	Tests Performed	Positive Tests	Percentage of Tests Positive
Adenovirus (respiratory)	4	319	8	2.51%
HMPV	4	185	0	0.00%
Parainfluenza virus	4	310	7	2.26%
Rhinovirus	3	233	37	15.88%
RSV [†]	6	285	6	2.11%

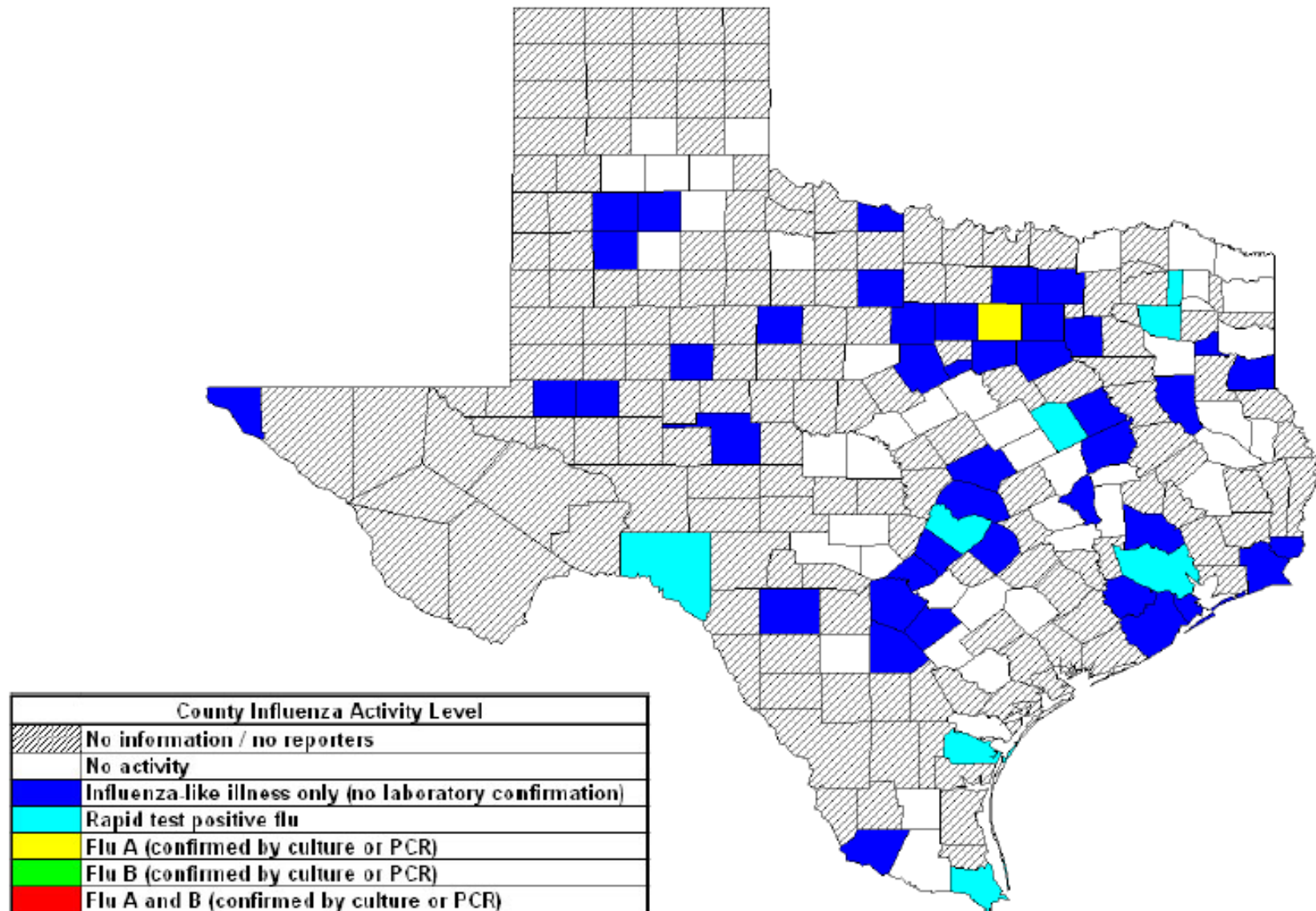
[†]RSV tests displayed in the table are antigen detection tests only. Some non-NREVSS reporters also contribute to the RSV data.



Austin/Travis County Health and Human Services Department
Epidemiology and Health Statistics Unit



Figure 8. Statewide Influenza Activity^{10,12,13}



This map was obtained from the Texas Influenza Surveillance Report <http://www.dshs.state.tx.us/idcu/disease/Influenza/surveillance/2013/>

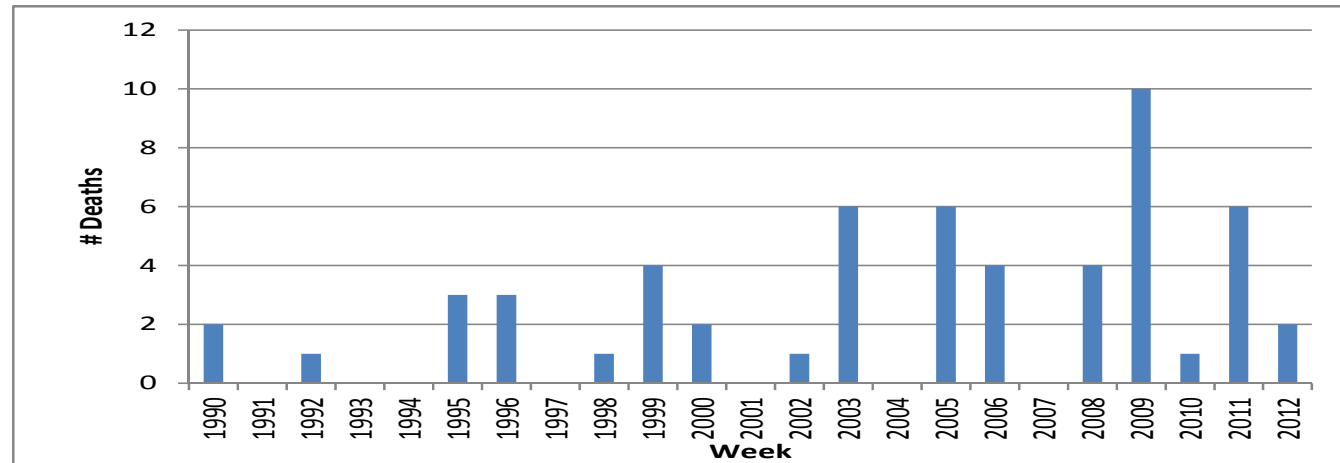
Austin/Travis County influenza surveillance does not attempt to capture all cases of influenza or influenza-like illness. These data should be used for trending purposes over time and for identifying types/strains of influenza that are occurring in the Austin area rather than for estimating the total number of cases.



**Austin/Travis County Health and Human Services Department
Epidemiology and Health Statistics Unit**

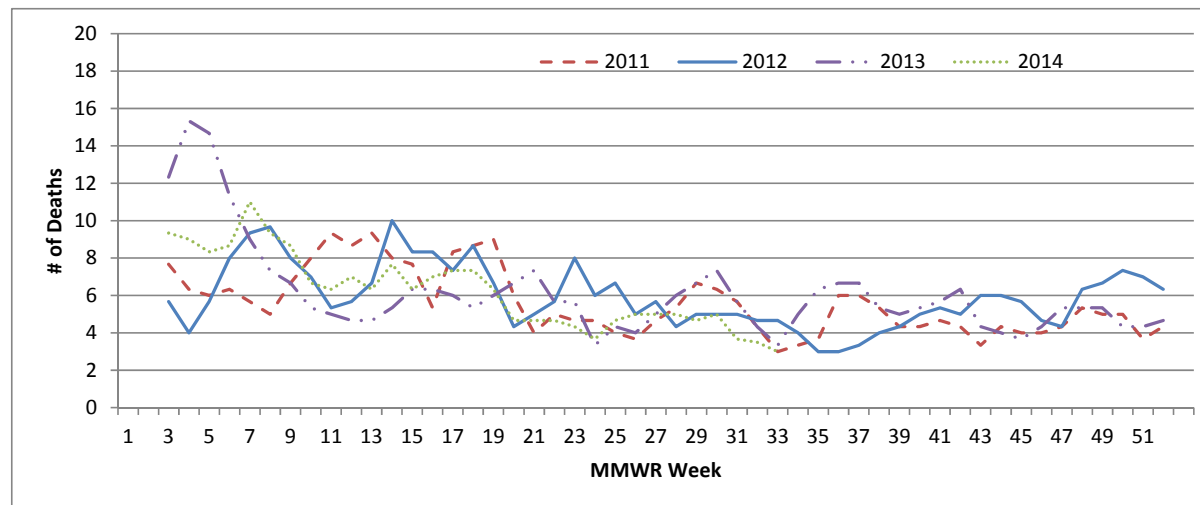


**Figure 9. Annual Influenza Related Mortality,
Travis County: 1990-2010**



Data source: Texas Department of State Health Services <http://sophin.tdh.state.tx.us/deathdoc.htm> Data as of September 12, 2012

**Figure 10. City of Austin Pneumonia and Influenza Mortality:
2010-2013**



Data source: Center for Disease Control and Prevention 122 Cities Mortality: <http://wonder.cdc.gov/mmwr/mmwmort.asp>

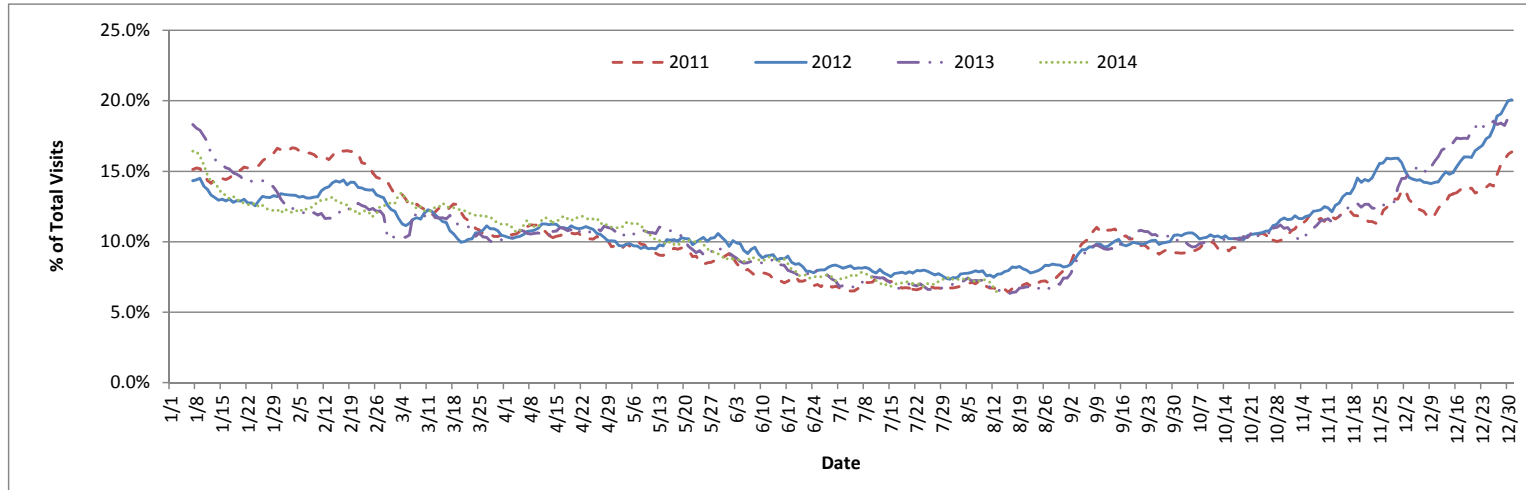
Austin/Travis County influenza surveillance does not attempt to capture all cases of influenza or influenza-like illness. These data should be used for trending purposes over time and for identifying types/strains of influenza that are occurring in the Austin area rather than for estimating the total number of cases.



Austin/Travis County Health and Human Services Department
Epidemiology and Health Statistics Unit

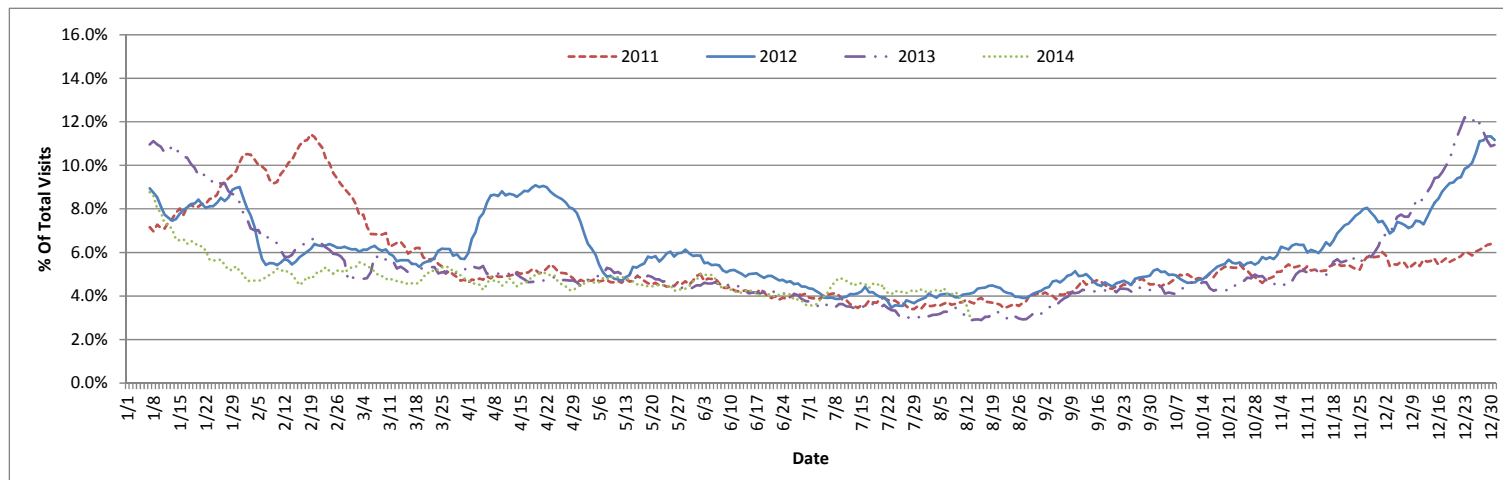


**Figure 11. RODS Syndromic Surveillance for the Respiratory Prodrôme Category,
Travis County: 2010-2013**



Data source: University of Pittsburgh Real-time Outbreak and Disease Surveillance System. Data is an aggregation of Austin area chief complaint hospital data

**Figure 12. RODS Syndromic Surveillance for Influenza-Like-Illness,
Travis County: 2010-2013**



Data source: University of Pittsburgh Real-time Outbreak and Disease Surveillance System. Data is an aggregation of Austin area chief complaint hospital data

Austin/Travis County influenza surveillance does not attempt to capture all cases of influenza or influenza-like illness. These data should be used for trending purposes over time and for identifying types/strains of influenza that are occurring in the Austin area rather than for estimating the total number of cases.



Austin/Travis County Health and Human Services Department Epidemiology and Health Statistics Unit



- 1 MMWR is the Morbidity and Mortality weekly report week published by the CDC.
- 2 PCR testing is performed for specimens referred by area sentinel Influenza surveillance reporters. Providers interested in becoming sentinel providers may call the Austin/Travis County Health and Human Services Epidemiology and Health Statistics Unit at (512) 972-5555.
- 3 Influenza A is commonly split into 2 subtypes: H1N1 and H3N2. Both strains can circulate each Influenza season.
- 4 Influenza is not a reportable condition in Texas; therefore, data is provided by sentinel surveillance reporters and is only a sample of the Influenza activity occurring in the Austin/Travis County area.
- 5 Data represent rapid Influenza testing; these tests provide quick results reporting only Influenza A or B (no subtyping). Early in the flu season, results should be used with caution due to false positive results which can occur, especially during times when Influenza activity is low.
- 6 Influenza data is collected from a variety of reporters; the number of reporters can vary from week to week.
- 7 Non-Differentiated refers to rapid test results that do not differentiate between Influenza A and B.
- 8 Data for Austin/Travis County ILI reporters only; the number of reporters can vary from week to week.
- 9 Influenza is confirmed via PCR testing and a further subtyping may be performed. PCR testing is performed for specimens referred by area Influenza surveillance reporters.
- 10 Positive laboratory results are reported according to specimen collection date or date received in the lab if the former is unknown.
- 11 Antigenic characterization and antiviral resistance is obtained from the Texas Influenza Surveillance Report <http://www.dshs.state.tx.us/idcu/disease/Influenza/surveillance/2013/>.
- 12 Influenza activity level corresponds to the current MMWR week only and does not reflect the previous weeks' activity.
- 13 The majority of Influenza cases are not reportable by law to the Texas Department of State Health Services. This map contains data from sentinel sites and does not represent all Influenza cases in the state.
- 14 Laboratory data in 2013-2014 season reports may not be comparable to reports from previous seasons because of the inclusion of DSHS and LRN laboratory data for the current season.
- 15 Some non-NREVSS reporters also contribute to the RSV data.
- 16 Percentages based on the total number of specimens B positive and subtyped A specimens.

Austin/Travis County influenza surveillance does not attempt to capture all cases of influenza or influenza-like illness. These data should be used for trending purposes over time and for identifying types/strains of influenza that are occurring in the Austin area rather than for estimating the total number of cases.