



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



Travis County Influenza Surveillance

Situation Update:

- Key influenza activity indicators in Travis County show that influenza activity started trending above previous seasons in Morbidity and Weekly Report (MMWR) week 49 (four to five weeks earlier). This is similar to trends experienced throughout Texas and the United States.
- Some key influenza activity indicators, such as ILINet have started to fall, while others continue to rise; as a result, it is too early to determine if the influenza activity in our area has peaked.
- This report contains data for the 2012-2013 influenza season through January 19, 2013 (MMWR week 3).

Epidemiologic Overview:

- The number of rapid tests² performed by Travis County sentinel providers has increased along with the percentage of positive test results. This increase in testing can indicate an increase in Influenza-Like-Illness (ILI) and is supported with the corresponding increase in positive tests.
- Travis County saw a high amount of Influenza B early in the season through both rapid testing and Polymerase Chain Reaction (PCR)¹ confirmatory testing. As the season has progressed, seasonal Influenza A (predominantly the H3¹³ strain) has increased with reporting numbers equivalent or higher than that of Influenza B.
- Reports of influenza deaths¹² in the adult population started in January. No pediatric Influenza deaths have been reported this year.
- Adult deaths related to influenza Rhinovirus, Adenovirus, and Parainfluenza have been identified for laboratory specimens in the Travis County area this season.

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 \(WHO\)](#)

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.



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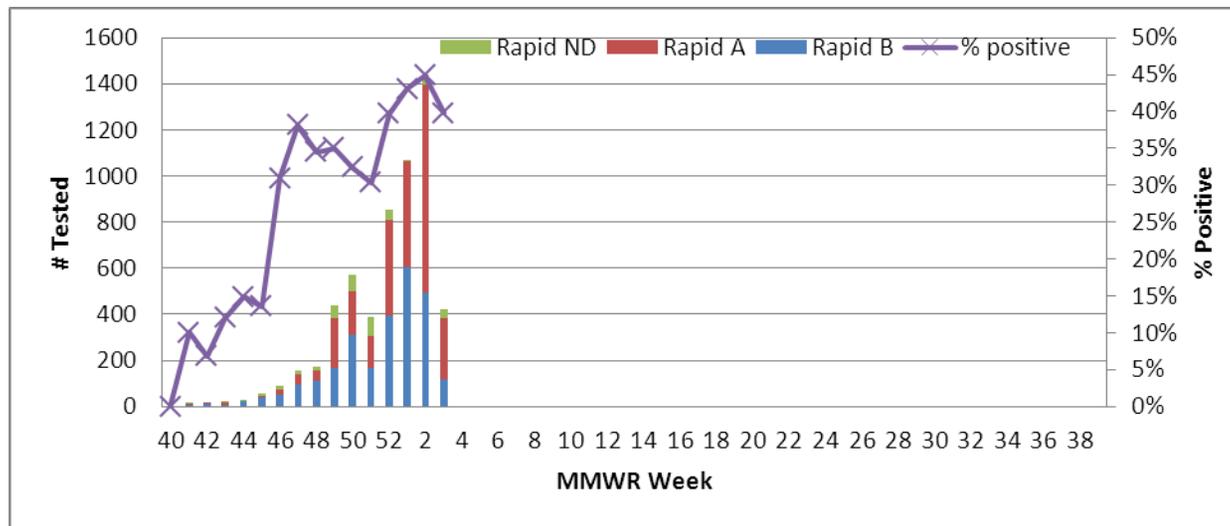


Figure 1. Influenza Surveillance, Travis County Providers^{1,2,4}

Week Ending	12/1/2012	12/8/2012	12/15/2012	12/22/2012	12/29/2012	1/5/2013	1/12/2013	1/19/2013
MMWR Week	48	49	50	51	52	1	2	3
# Influenza Rapid Tests Performed	504	1250	1773	1271	2155	2477	3548	2584
# Total Positive Influenza Tests	174	437	573	386	855	1066	1442	1632
% Positive Influenza Tests	34.5%	35.0%	32.3%	30.4%	39.7%	43.0%	40.6%	63.2%
# Positive A Influenza	48	216	184	142	414	605	902	1106
# Positive B Influenza	109	165	313	165	396	459	494	488
# Non-Differentiated Influenza ³	17	56	76	79	45	2	46	38

Data source: Austin/Travis County Influenza surveillance reporters

Figure 2. Number Tested and Percent Positive Rapid Influenza Tests by Week, Travis County: 2012-2013 Influenza Season^{1,2,3,4}



Data source: Austin/Travis County Influenza surveillance reporters

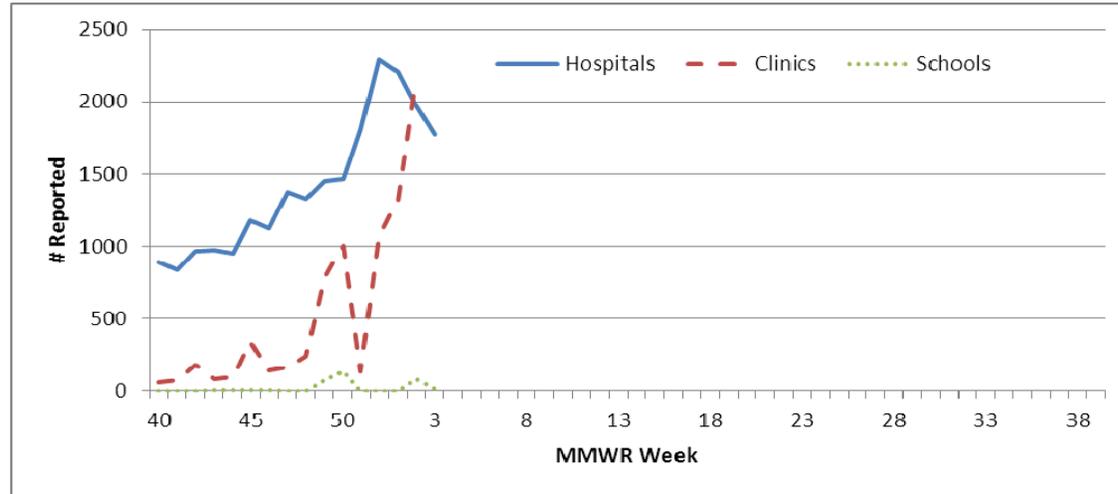
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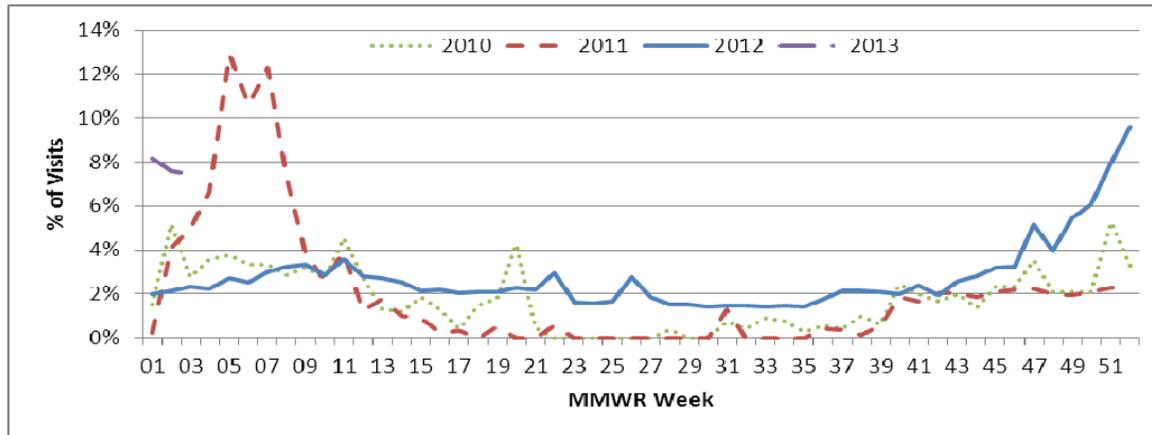


Figure 3. Percent Positive Rapid Influenza Tests by Week and Provider Type, Travis County: 2012-2013 Influenza Season^{1,2,3,4}



Data source: Austin/Travis County Influenza surveillance reporters

Figure 4. Percentage of Visits Due to Influenza-like-Illness Reported by Travis County Participants in ILINet: 2009-2013⁵



Data source: CDC ILI.net system

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Figure 5. Travis County Confirmed Influenza Test Results:^{6,7,11}

	1/14/2012 - 3/17/2012	3/18/2012 - 5/19/2012	05/20/2012 - 7/21/2012	07/22/2012 - 9/22/2012	09/23/2012 - 11/24/2012	11/25/2012 - 1/26/2013
MMWR Week	2-10	11-19	20-28	29-37	38-46	47-3
Influenza A (Total Positive PCR Tests)	13	13	1	0	3	20
Subtype	Seasonal H1N1	7	13	0	0	0
	Season H3N2	6	0	1	0	3
	Not Subtyped	4	0	0	0	0
Influenza B (Total Positive PCR Tests)	5	4	1	0	4	27**
PCR Negative Specimens	10	2	0	1	2	22

** 1 test was culture confirmed rather than PCR confirmed

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

Texas Antigenic Characterization Reported by MMWR Week 3:⁸

Since September 1, 2012, CDC has reported antigenic characterization results from one Influenza A (H1N1) virus, nine Influenza A (H3N2) viruses, and 13 Influenza B viruses received from the Texas Department of State Health Services (DSHS) Laboratory.

Influenza A (H1N1) [1]

- One virus was related to A/California/07/2009. This virus strain was included in the 2012-2013 Influenza vaccine for the Northern Hemisphere.

Influenza A (H3N2) [9]

- Nine viruses were related to A/Victoria/361/2011. This virus strain was included in the 2012-2013 Influenza vaccine for the Northern Hemisphere.

Influenza B [13]

- Thirteen viruses were related to B/Wisconsin/01/2010 (B/Yamagata lineage). This Influenza B lineage was included in the 2012-2013 Influenza vaccine for the Northern Hemisphere.

The national antigenic characterization and antiviral resistance testing results may be found in the CDC weekly flu report at <http://www.cdc.gov/flu/weekly/>. The DSHS Laboratory sends a representative sample of influenza viruses to the CDC throughout the flu season.

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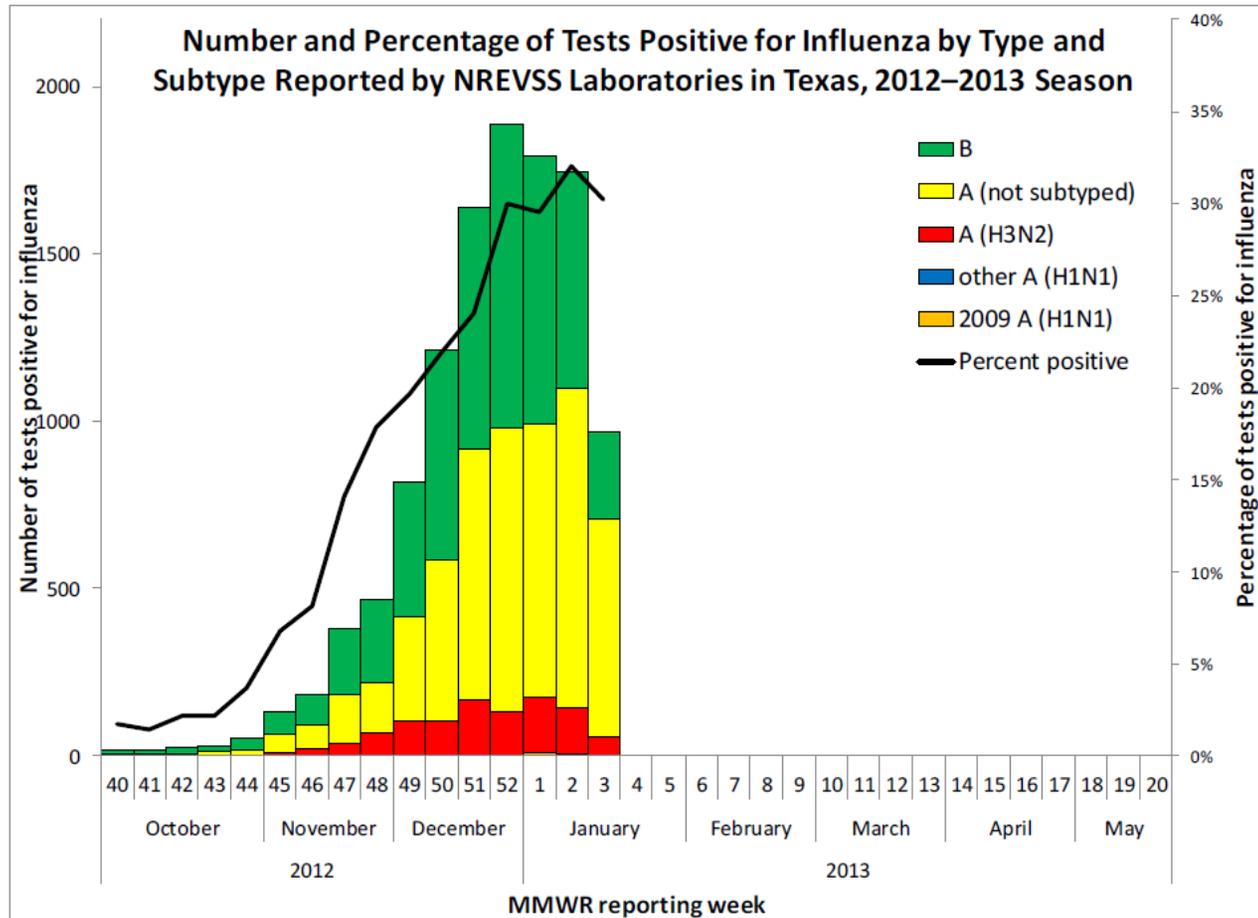


Texas Antiviral Resistance Reported by MMWR Week 3:⁸

No antiviral resistance results for Texas for the 2012-2013 season are available at this time.

For more information on antiviral medications please see <http://www.cdc.gov/flu/professionals/antivirals/index.htm>.

Figure 6. DSHS NREVSS Laboratory Data



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

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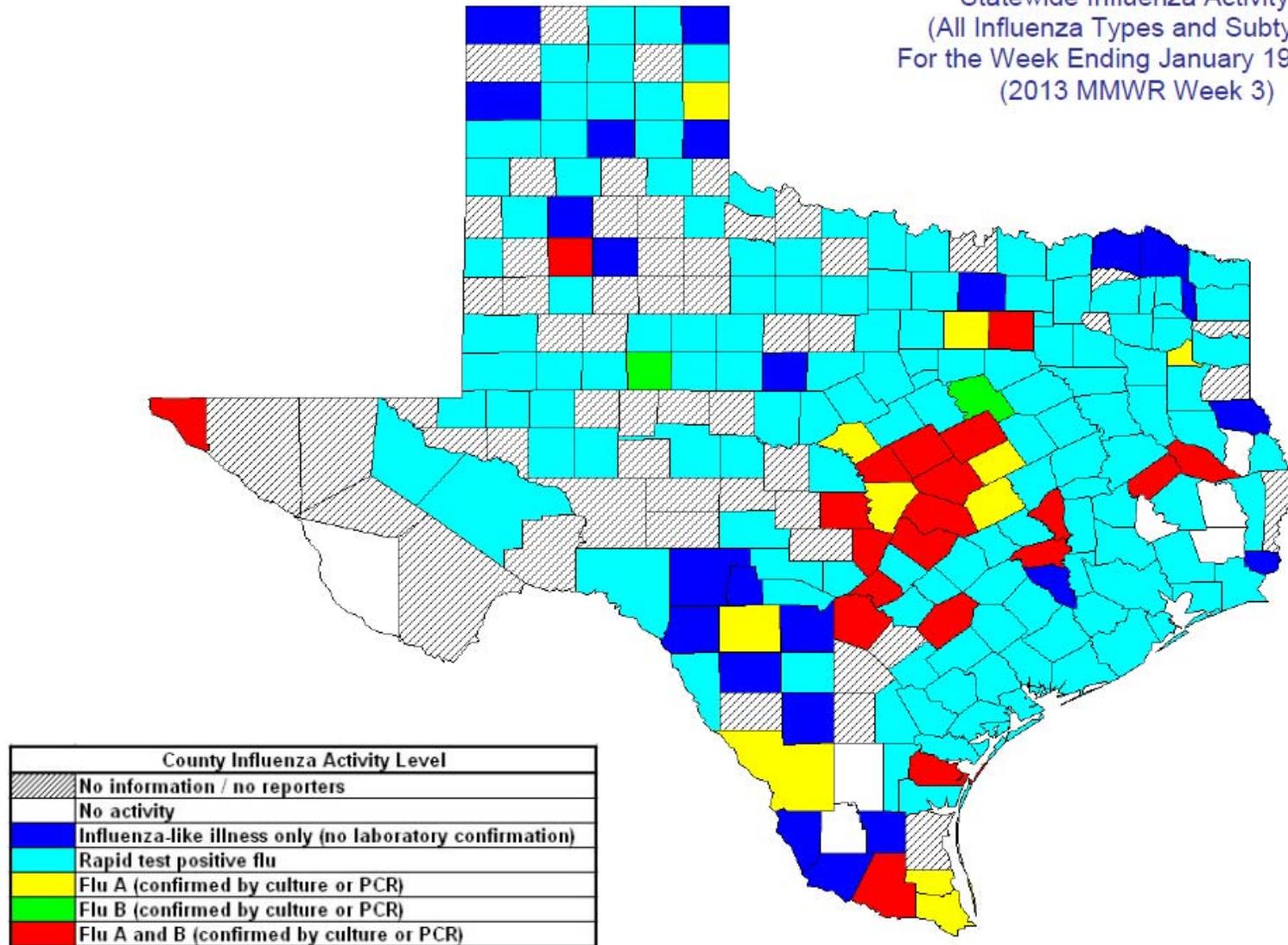


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Figure 7. Statewide Influenza Activity^{9,10,11}

Statewide Influenza Activity
(All Influenza Types and Subtypes)
For the Week Ending January 19, 2013
(2013 MMWR Week 3)



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

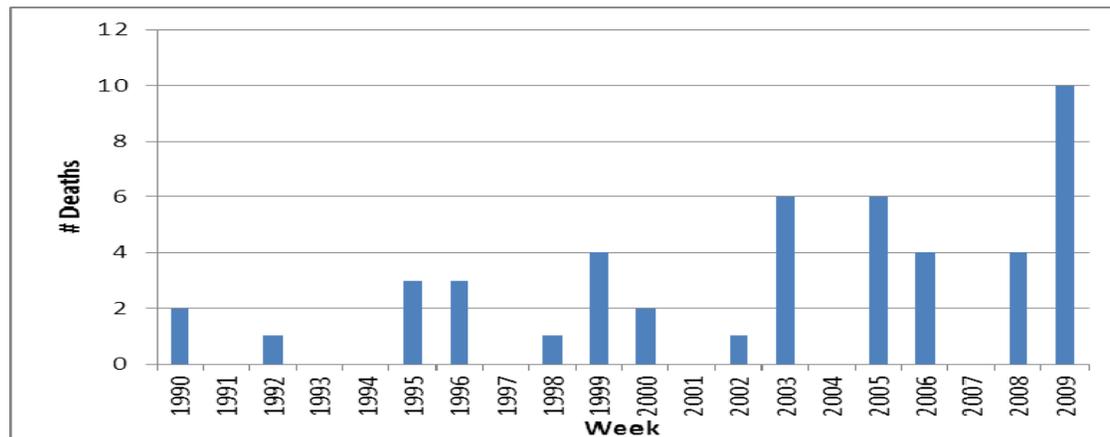
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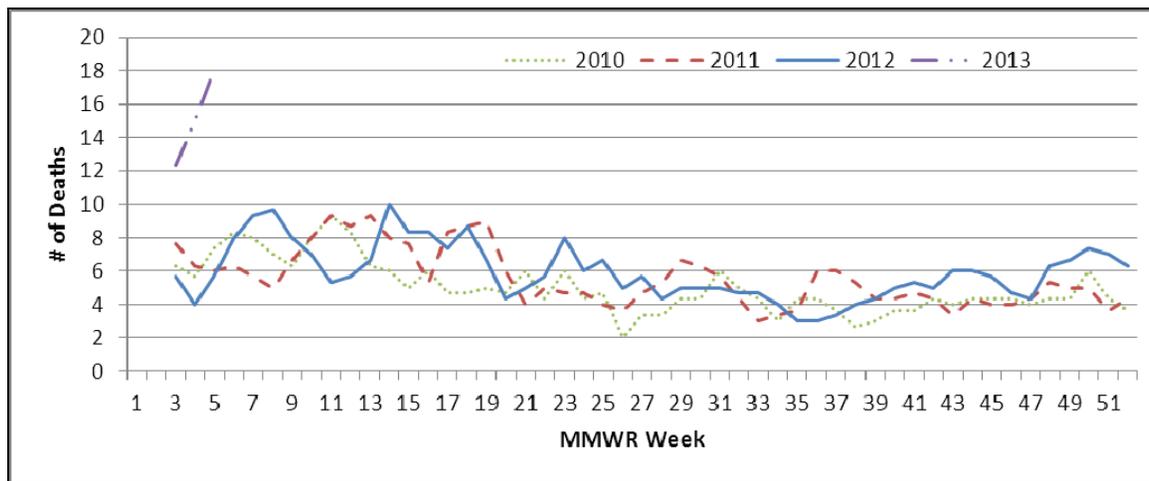


**Figure 8. Annual Influenza Related Mortality,
Travis County: 1990-2009**



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

**Figure 9. City of Austin Pneumonia and Influenza Mortality:
2010-2012**



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

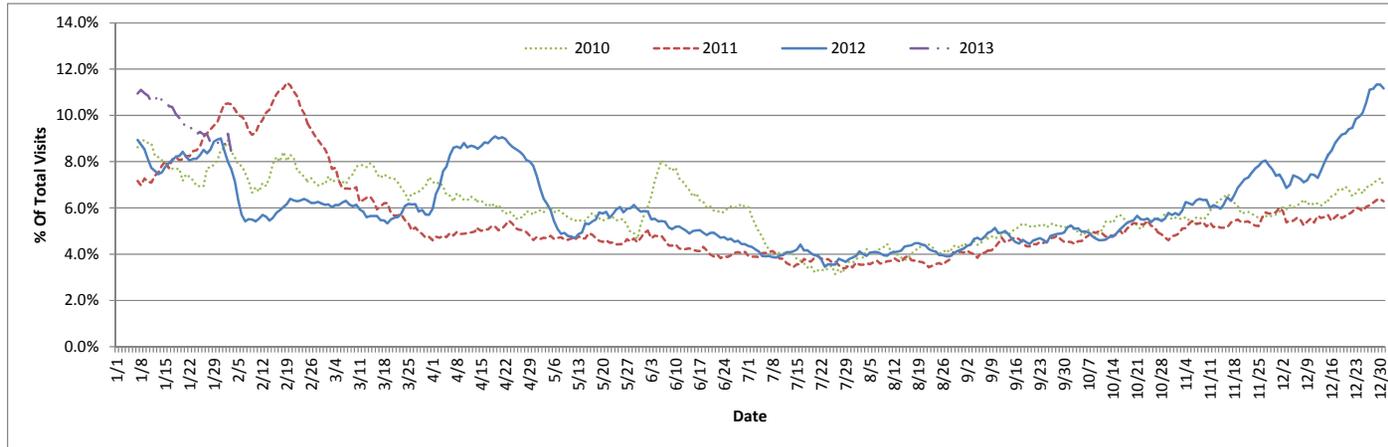
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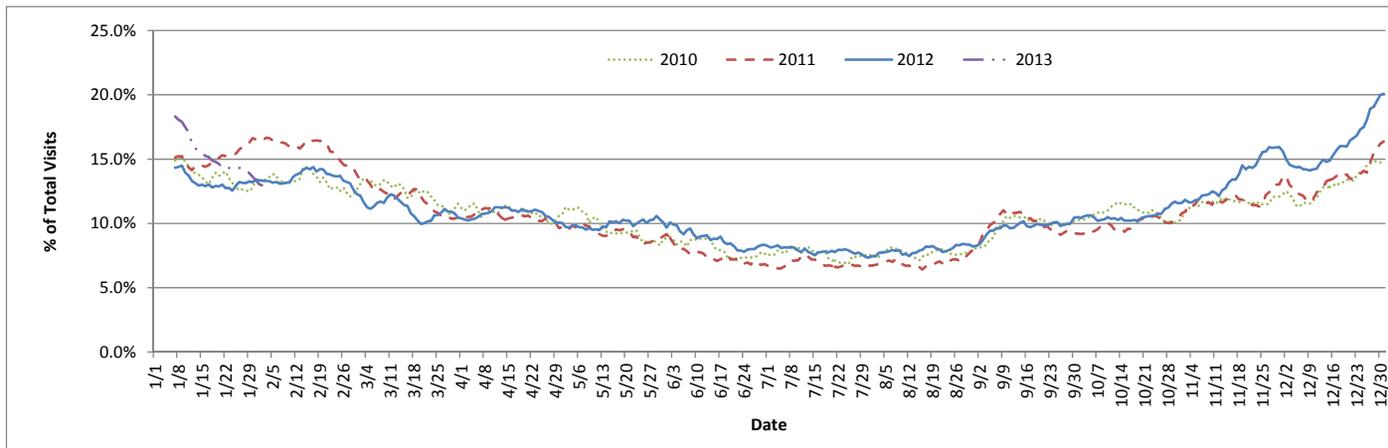


**Figure 10. RODS Syndromic Surveillance for the Respiratory Prodrome Category,
Travis County: 2010-2013**



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

**Figure 11. 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

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Figure 12. Other Respiratory Viruses Reported for Texas: MMWR Week 3

Virus	Number of Laboratories Testing	Tests Performed	Positive Tests	Percentage of Tests Positive
Adenovirus (respiratory)	5	686	7	1.02%
HMPV	5	502	10	1.99%
Parainfluenza virus	6	824	22	2.67%
Rhinovirus	4	476	79	16.60%
RSV	19	248	95	38.31%

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

- 1 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.
- 2 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.
- 3 Non-Differentiated refers to rapid test results that do not differentiate between Influenza A and B.
- 4 Influenza data is collected from a variety of reporters; the number of reporters can vary from week to week.
- 5 Data for Austin/Travis County ILI reporters only; the number of reporters can vary from week to week.
- 6 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.
- 7 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.
- 8 Antigenic characterization and antiviral resistance is obtained from the Texas Influenza Surveillance Report <http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/2013/>.
- 9 Influenza activity level corresponds to the current MMWR week only and does not reflect the previous weeks' activity.
- 10 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.
- 11 Positive laboratory results are reported according to specimen collection date or date received in the lab if the former is unknown.
- 12 Influenza deaths, other than pediatric deaths, are not reportable in Texas. Current season mortality data is obtained from the City of Austin Office of Vital Records and only reflect deaths that occur within the city limits and list influenza as a cause of death on the death certificate.
- 13 Influenza A is commonly split into 2 subtypes: H1N1 and H3N2. Both strains can circulate each influenza season.

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