



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



Travis County Influenza Surveillance

This report contains data for the 2015-2016 Influenza Season through February 20, 2016 (MMWR¹ week 07).

Situation Update:

- The Centers for Disease Control and Prevention (CDC) report flu activity continues to increase; all regions are experiencing elevated influenza like illness (ILI).
- H1N1 viruses are most common at this time. CDC recommends an annual flu vaccine for everyone 6 months of age and older.
- Nationwide, 3.2% of patient visits reported through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) were due to influenza-like illness (ILI). This percentage is above the national baseline of 2.1%.
- In Texas, the percentage of visits for influenza-like illness as reported by ILINet providers was 7.55%. Locally, the percentage of visits was 2.56%.
- Nationally, the percentage of specimens testing positive for influenza viruses in the United States was 13.8%. Of the specimens characterized at the CDC, 77.8% were influenza A viruses and 22.2% were influenza B viruses. Of the influenza A viruses that were subtyped, 13% were H3 viruses and 87% were H1N1.
- Flu activity in Texas is considered widespread. Statewide, 20.9% specimens tested in influenza surveillance labs were positive for influenza; 237 (52.01%) of the 571 influenza-positive tests were influenza A viruses and 274 (47.99%) were influenza B viruses.
- Antiviral resistance was tested on 1,028 specimens; all but two viruses showed susceptibility to oseltamivir (Tamiflu), zanamir (Relenza), and [peramir \(Rapivab\)](#).
- Nationwide, the proportion of deaths attributed to pneumonia and influenza is below the epidemic threshold of 7.2%. Locally, the number of deaths attributed to pneumonia and influenza are consistent historical trends.
- Fourteen pediatric influenza related deaths has been reported nationally. No pediatric influenza related deaths have been reported in Texas.



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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.

Other Helpful Resources: [Texas Department of State Health Services \(DSHS\)](#)
[World Health Organization \(WHO\)](#)
[Centers for Disease Control and Prevention \(CDC\)](#)



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

Week Ending	1/2/2016	1/9/2016	1/16/2016	1/23/2016	1/30/2016	2/6/2016	2/13/2016	2/20/2016
MMWR Week	52	1	2	3	4	5	6	7
# Influenza Rapid Tests Performed	592	704	745	809	1275	1005	1208	1519
# Total Positive Influenza Tests	25	61	96	71	129	114	226	360
% Positive Influenza Tests	4.2%	8.7%	12.9%	8.8%	10.1%	11.3%	18.7%	23.7%
# Positive A Influenza	6	30	27	36	55	58	147	199
# Positive B Influenza	19	24	35	35	72	55	77	160
# Non-Differentiated Influenza ³	0	7	34	0	2	1	2	1

Data source: Austin/Travis County Influenza surveillance reporters

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

	1/30/2015- 4/4/2015	4/10/2015- 6/13/2015	6/19/2015- 8/22/2015	8/28/2015- 10/31/2015	11/01/2015- 01/09/2016	11/01/2015- 01/09/2016
MMWR Week	4-13	14-23	24-33	34-43	44-01	02-11*
Influenza A (Total Positive PCR Tests)	6	0	0	0	1	10
Subtype	Seasonal H1N1	0	0	0	0	0
	Season H3N2	6	0	0	0	1
	Not Subtyped	0	0	0	0	6
Influenza B (Total Positive PCR Tests)	7	0	0	0	2	3
PCR Negative Specimens	10	6	2	20	20	12

* Incomplete data.

** 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

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

	Week 07	Season to Date
Number of labs reporting flu tests	20	
Number of specimens tested	2730	37681
Number of positive specimens (%) [†]	571 (20.92%)	1728 (4.59%)
Percentage of total tests that were antigen detection tests	46.78%	
Positive specimens by type/subtype/lineage [n (%)]		
Influenza A	297 (52.01%)	989 (57.23%)
Subtyping performed	144 (48.48%)	399 (40.34%)
A (H1N1)	93 (64.58%)	235 (58.90%)
A (H3N2)	51 (35.42%)	164 (41.10%)
Subtyping not performed	153 (51.52%)	590 (59.66%)
Influenza B	274 (47.99%)	739 (42.77%)
Lineage testing performed	32 (11.68%)	62 (8.39%)
B/Victoria	18 (56.25%)	30 (48.39%)
B/Yamagata	14 (43.75%)	32 (51.61%)
Lineage testing not performed	242 (88.32%)	677 (91.61%)

Figure 4. Texas Non-Influenza Respiratory Laboratory Results:

Virus	Number of Laboratories Testing	Tests Performed	Positive Tests	Percentage of Tests Positive
Adenovirus (respiratory)	7	1150	53	4.61%
HMPV	7	1133	71	6.27%
Parainfluenza virus	7	1147	18	1.57%
Rhinovirus	6	937	202	21.56%
RSV ^{†A}	11	1623	277	17.07%
Seasonal coronavirus (does not include MERS-CoV)	5	922	55	5.97%

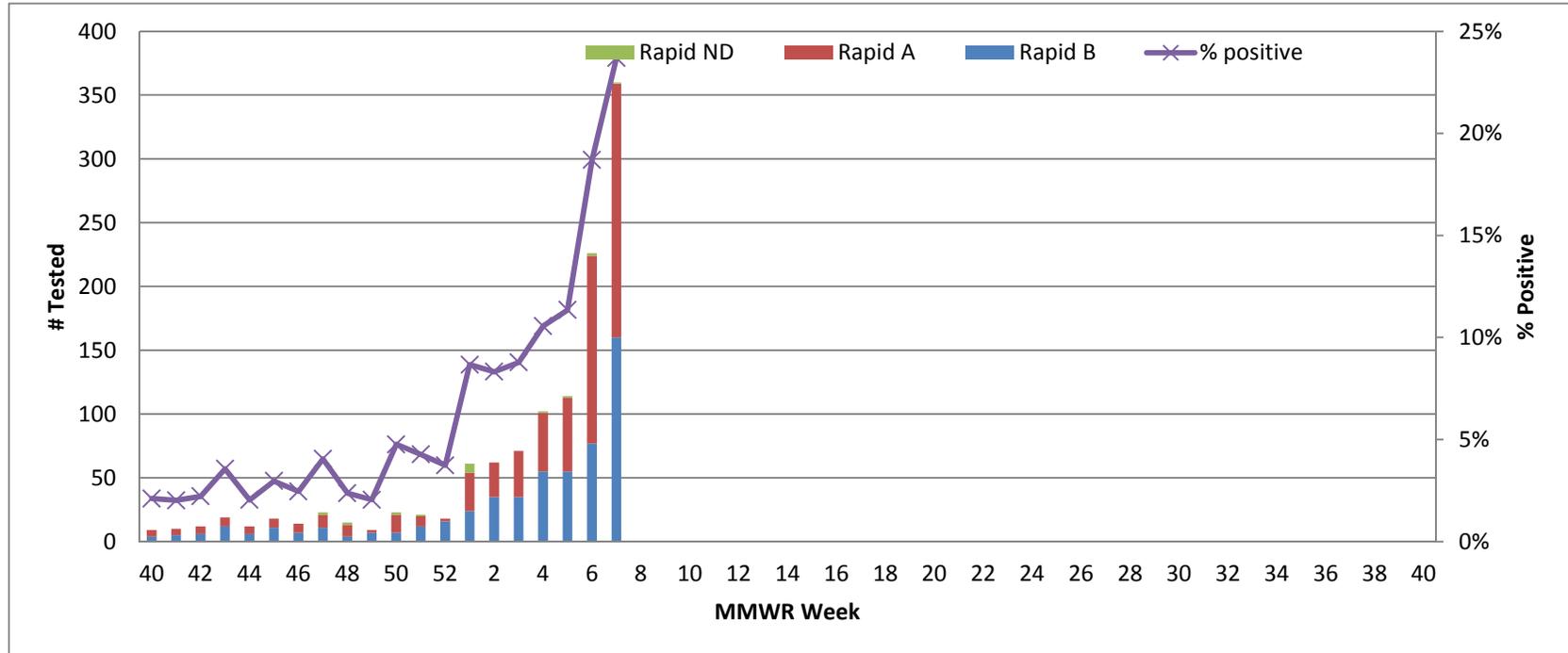
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Figure 5. Number Tested and Percent Positive Rapid Influenza Tests by Week,
Travis County: 2012-2015 Influenza Season^{4,5,6,8}



Data source: Austin/Travis County Influenza surveillance reporters

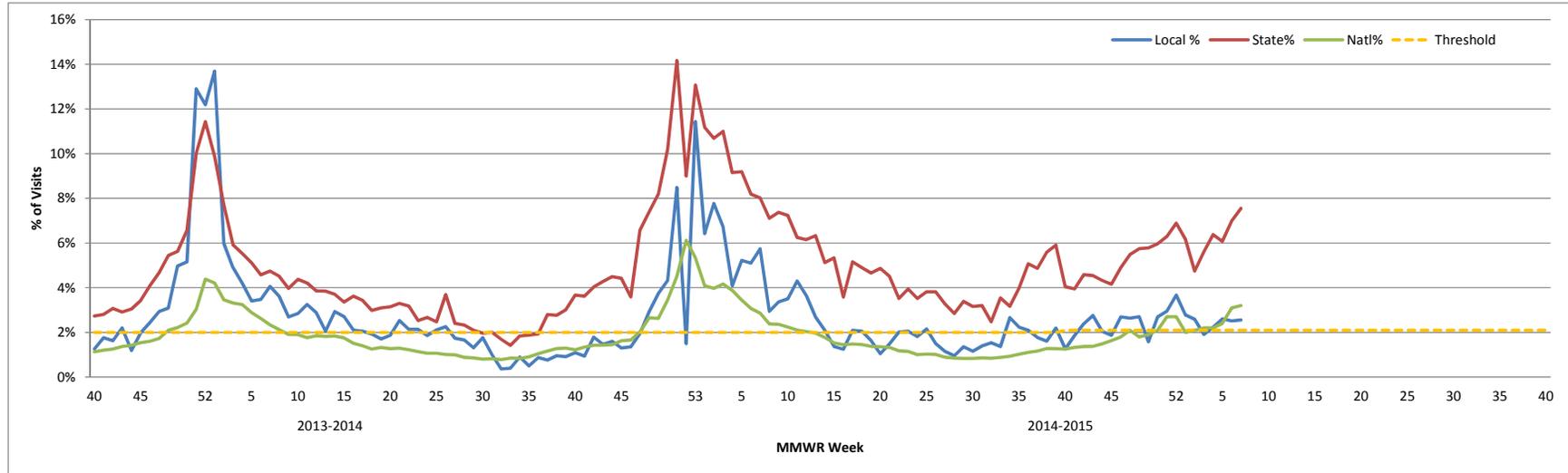
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Figure 6. Percentage of Visits Due to Influenza-like-Illness Reported by Travis County Participants in ILINet: 2009-2015⁸



Data source: CDC ILI.net system

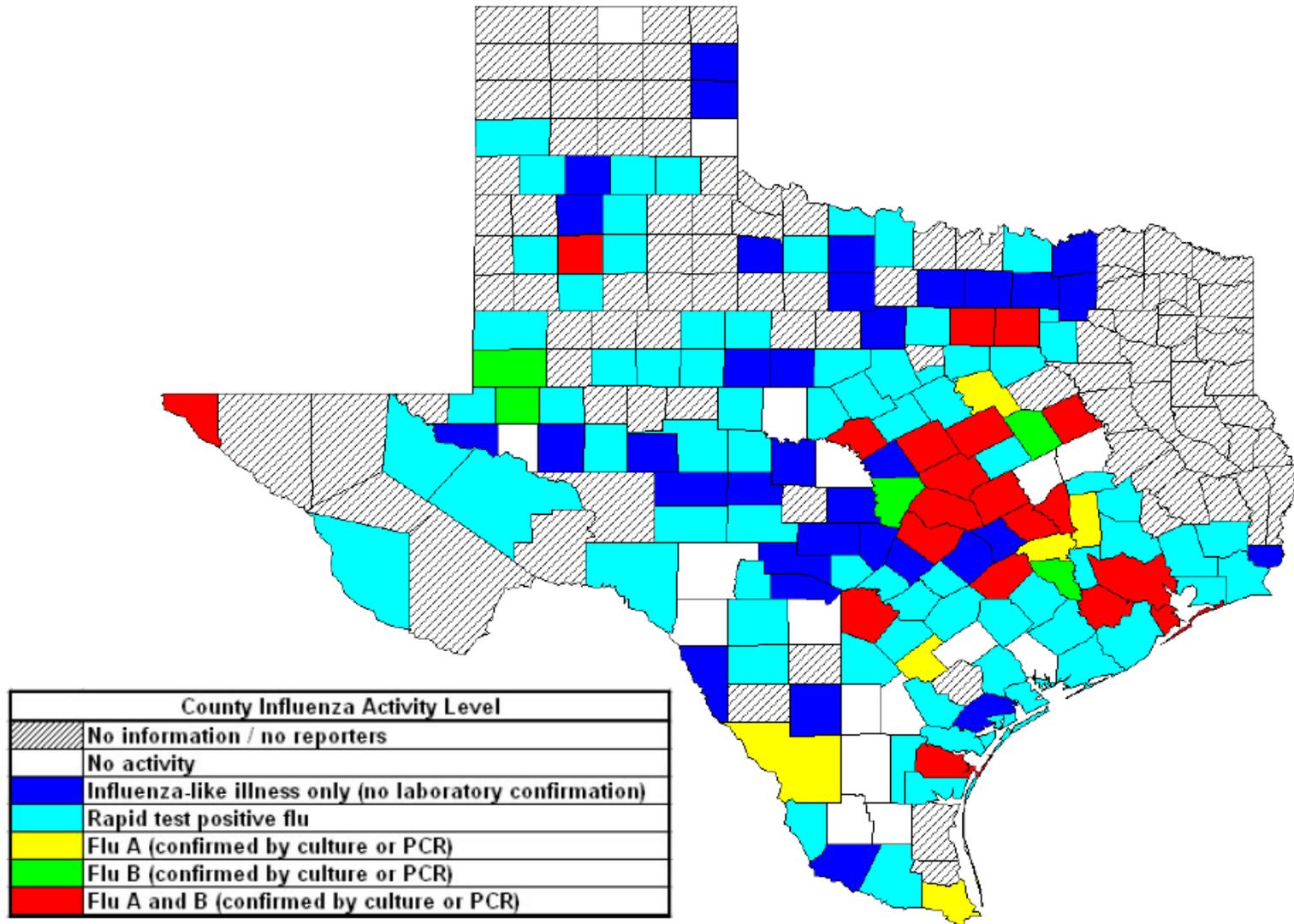
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Figure 7. Statewide Influenza Activity^{10,12,13}



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

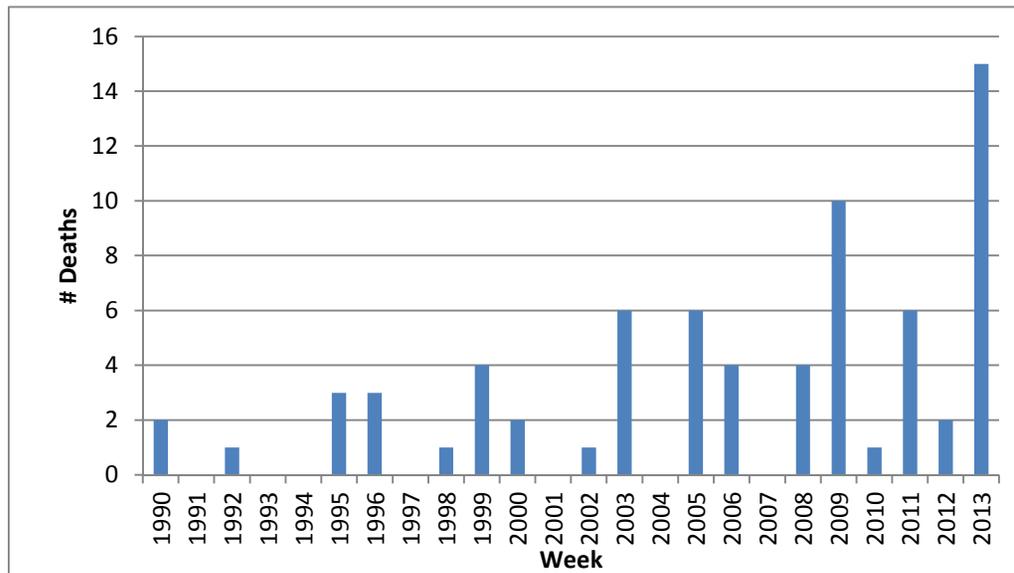
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**Figure 8. Annual Influenza Related Mortality,
Travis County: 1990-2013**



Data source: Texas Department of State Health Services <http://soupon.tdh.state.tx.us/deathdoc.htm>

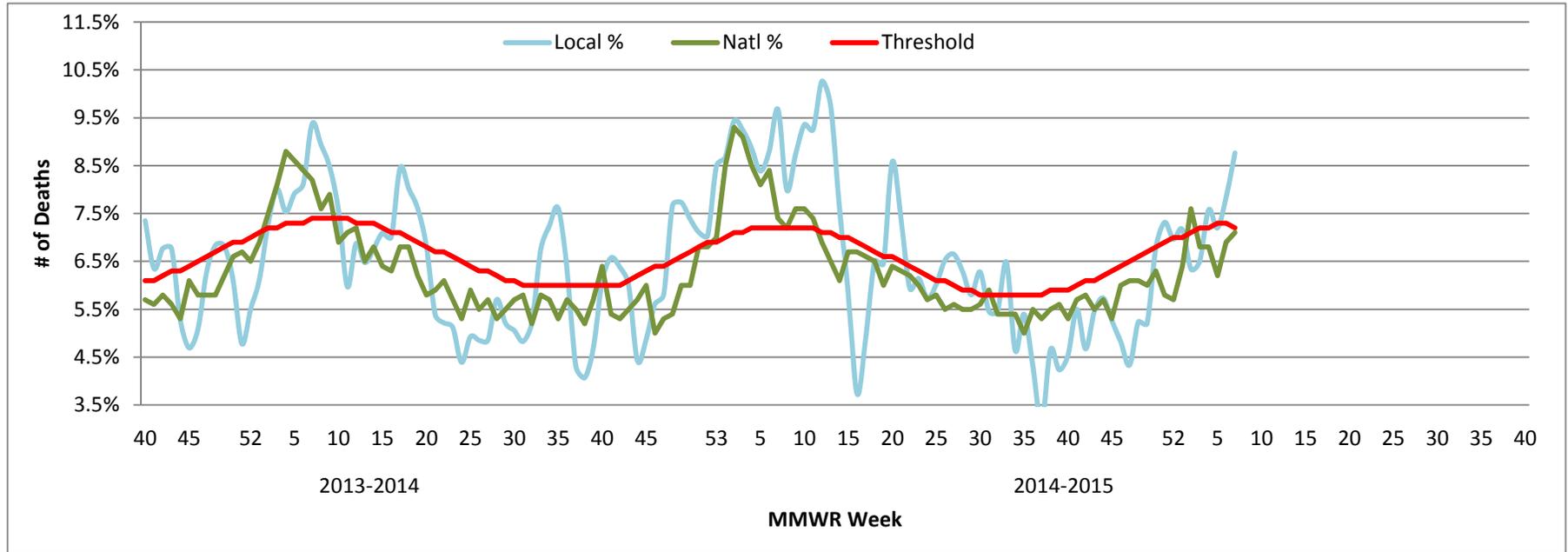
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Figure 9. City of Austin Pneumonia and Influenza Mortality:
2010-2015



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

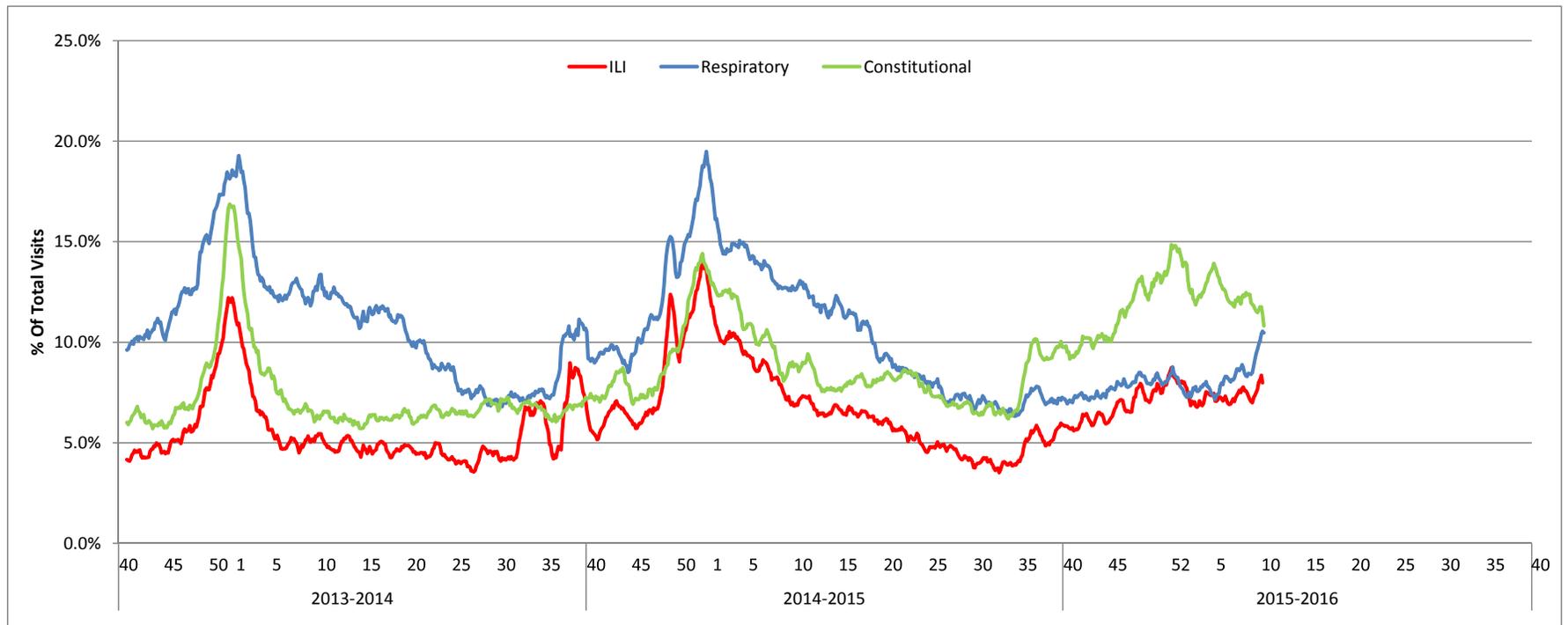
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Figure 10. RODS Syndromic Surveillance Data,
Travis County: 2010-2015



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

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

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- 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 CDC: Flu Activity Expands; Severity Similar to Past H3N2 Seasons <http://www.cdc.gov/flu/news/flu-activity-expands.htm>