

Texas Influenza Surveillance Report 2015–2016 Season/2015 MMWR Week 45

(Nov. 08, 2015 – Nov. 14, 2015)
Report produced on 11/20/2015

Summary

Influenza activity continues to be low in Texas. Compared to the previous week, the percentage of specimens positive for influenza marginally increased and the percentage of patient visits due to influenza-like illness (ILI) slightly decreased. No outbreaks or influenza-associated pediatric deaths were reported. In addition to flu, other respiratory viruses were detected in Texas during week 45.

Table 1: Summary of Texas Influenza (Flu) and Influenza-like Illness (ILI) Activity for the Current Week

Texas Surveillance Component	Change from Previous Week	Current Week	Previous Week [†]	Page of Report
Statewide influenza activity level reported to CDC (geographic spread of influenza)	No change	Sporadic	Sporadic	--
Statewide ILINet Activity Indicator assigned by CDC (intensity of influenza-like illness)	No change	Minimal	Minimal	--
Percentage of specimens positive for influenza	▲0.32%	1.57%	1.25% [†]	1
Percentage of visits due to ILI (ILINet)	▼0.14%	4.25%	4.39% [†]	3
Number of regions reporting increased flu/ILI activity	▼1	1	2	5
Number of regions reporting decreased flu/ILI activity	▲1	1	0	5
Number of variant/novel influenza infections	No change	0	0	5
Number of ILI/influenza outbreaks	No change	0	0	5
Number of Pneumonia and Influenza Deaths	No New Deaths Reported	0	4	5
Number of pediatric influenza deaths	No New Cases Reported	0	0	5

[†]Data displayed have been updated since last week's flu report with any new reports received.

Laboratory Results

Influenza

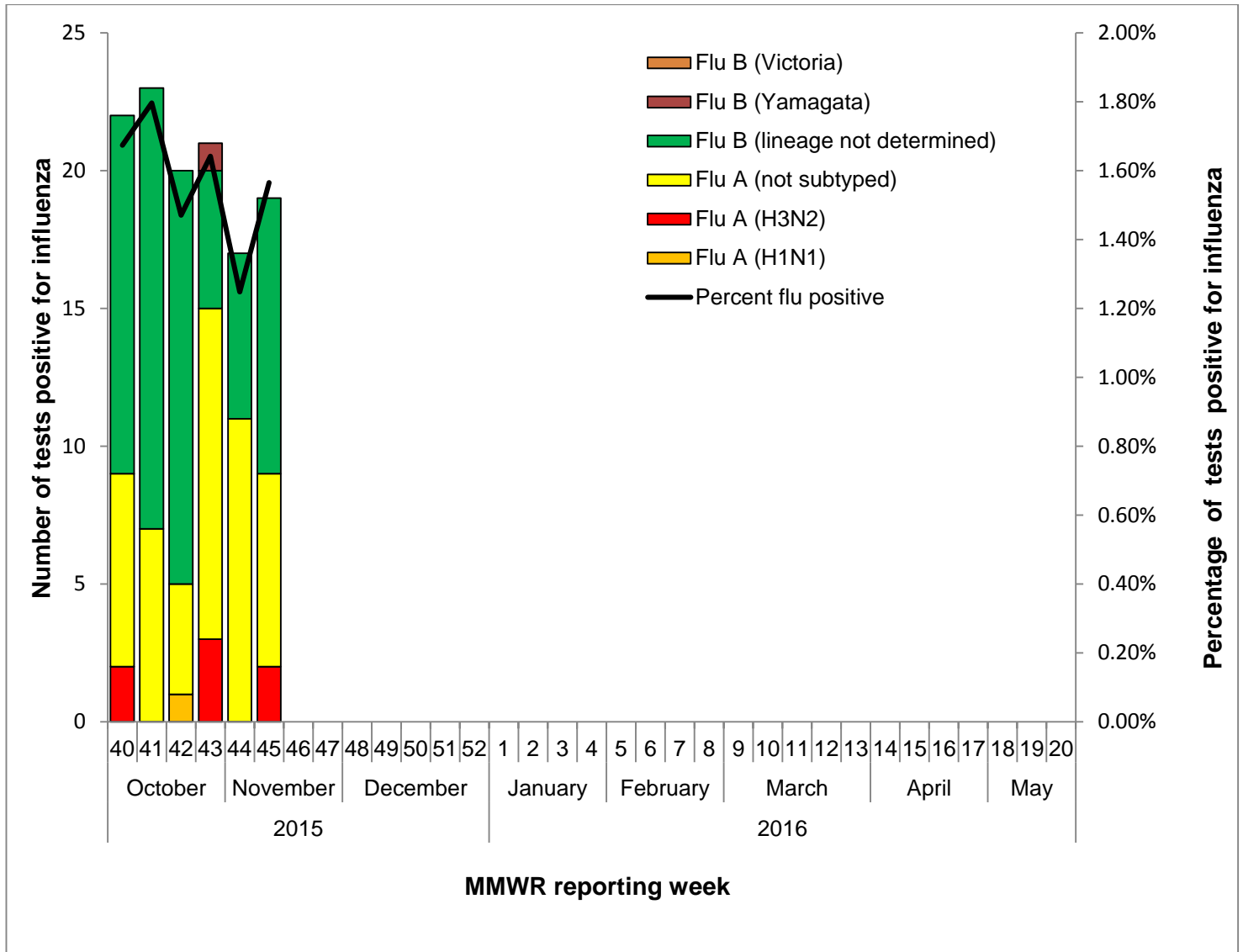
Hospital laboratories across Texas voluntarily report influenza tests (antigen, culture, and PCR) to the National Respiratory and Enteric Virus Surveillance System (NREVSS). Providers throughout Texas also submit specimens for influenza testing (PCR) to Texas public health laboratories, including the Texas Department of State Health Services (DSHS) laboratory in Austin and the nine Texas Laboratory Response Network (LRN) laboratories. The results reported by these labs are summarized below. Additional influenza test results (rapid tests, culture, PCR) were reported from providers and public health departments throughout the state (see county map at the end of this report).

Table 2: Influenza Testing Performed by Texas Laboratories for the Current Week

	Week 45	Season to Date
Number of labs reporting flu tests	14	
Number of specimens tested	1214	7809
Number of positive specimens (%) [†]	19 (1.57%)	122 (1.56%)
Percentage of total tests that were antigen detection tests	37.31%	
Positive specimens by type/subtype/lineage [n (%)]		
Influenza A	9 (47.37%)	56 (45.90%)
Subtyping performed	2 (22.22%)	8 (14.29%)
A (H1N1)	0 (0.00%)	1 (12.50%)
A (H3N2)	2 (100.00%)	7 (87.50%)
Subtyping not performed	7 (77.78%)	48 (85.71%)
Influenza B	10 (52.63%)	66 (54.10%)
Lineage testing performed	0 (0.00%)	1 (1.52%)
B/Victoria	0 (0.00%)	0 (0.00%)
B/Yamagata	0 (0.00%)	1 (100.00%)
Lineage testing not performed	10 (100.00%)	65 (98.48%)

[†]Laboratory data in 2015-2016 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 1: Number and Percentage of Tests (Antigen, Culture, PCR) Positive for Influenza by Type, Subtype, and Lineage Reported by Texas Laboratories, 2015–2016 Season



Other Respiratory Viruses

The NREVSS system collects information on a variety of respiratory viruses in addition to influenza including parainfluenza virus, respiratory syncytial virus (RSV), rhinovirus, human metapneumovirus (HMPV), seasonal coronavirus, and respiratory adenovirus. The results for the current week are summarized below.

Table 3: Non-Influenza Respiratory Virus Testing Performed by Texas NREVSS Laboratories for the Current Week

Virus	Number of Laboratories Testing	Tests Performed	Positive Tests	Percentage of Tests Positive
Adenovirus (respiratory)	7	629	28	4.45%
HMPV	7	624	2	0.32%
Parainfluenza virus	7	624	74	11.86%
Rhinovirus	6	509	142	27.90%
RSV ^{†^}	12	860	91	10.58%
Seasonal coronavirus (does not include MERS-CoV)	3	313	20	6.39%

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

[^]Numbers and percentage may differ from the weekly RSV report. The weekly RSV report may be accessed at <https://www.dshs.state.tx.us/RSV/disease/rsv-Data.aspx>.

Antigenic Characterization

Since October 04, 2015, CDC has reported an antigenic characterization result from one influenza A (H3N2) virus received from the Texas Department of State Health Services (DSHS) Laboratory. The DSHS Laboratory sends a representative sample of influenza viruses to the CDC throughout the flu season.

Influenza A (H3N2) [1]

- One (100.0%) virus was related to A/Switzerland/9715293/2013, the influenza A (H3N2) component of the 2015-2016 Northern Hemisphere influenza vaccine.

Antiviral Resistance

No antiviral resistance testing data for Texas specimens are available at this time.

U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)

Table 4: Texas ILINet Reporting and Patient Visit Summary for the Current Week

Week 45	
Number of providers reporting†	108
Number of providers reporting patient visits	108
Number (%) of providers with at least one ILI case	83 (76.85%)
Percentage of all visits due to ILI	4.25%
Texas ILINet baseline‡, 2015–2016	6.32%

†Reporting providers include both ILINet and RVSP providers.

‡The baseline is the mean percentage of patient visits for ILI during non-influenza weeks for the previous three seasons plus two standard deviations. A "non-influenza week" is defined as a week that accounted for less than 2% of the season's total number of specimens that tested positive for influenza.

Table 5: Percentage of Visits for Influenza-like Illness Reported by Texas ILINet Providers (as of 11/19/2015 11:45 AM)

Week	Providers Reporting	Number of ILI Cases by Age Group (Years)					Total ILI (all ages)	Total Patients	% ILI
		0-4	5-24	25-49	50-64	65+			
201540	125	195	388	339	191	123	1236	30756	4.02%
201541	121	202	412	294	136	92	1136	29059	3.91%
201542	122	236	458	382	181	137	1394	30591	4.56%
201543	122	235	486	338	190	149	1398	31022	4.51%
201544	120	211	397	307	207	159	1281	29150	4.39%
201545	108	179	430	275	115	38	1037	24379	4.25%

Figure 2: Percentage of Visits Due to Influenza-like Illness Reported by Texas ILINet Participants, 2015–2016 Season

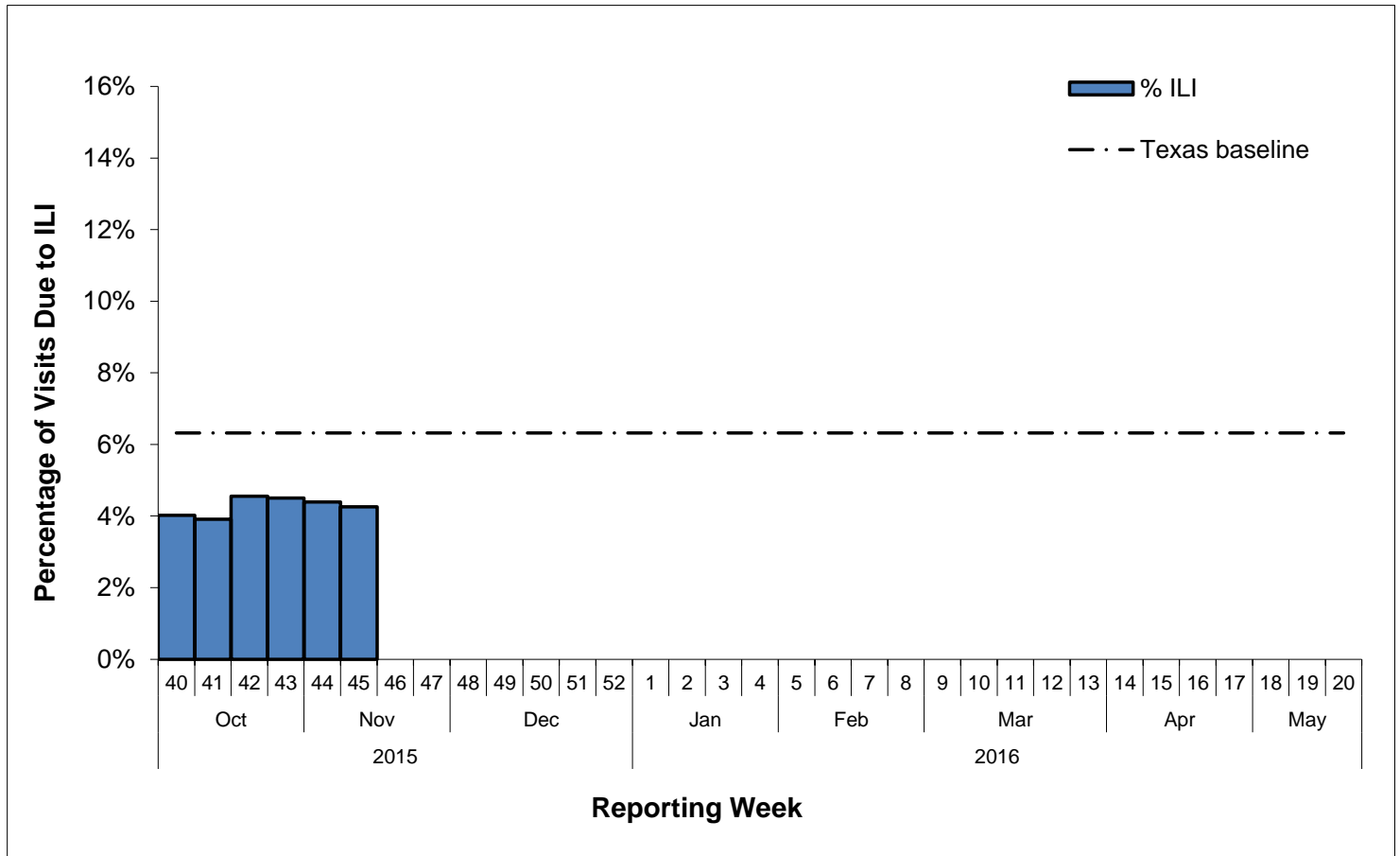
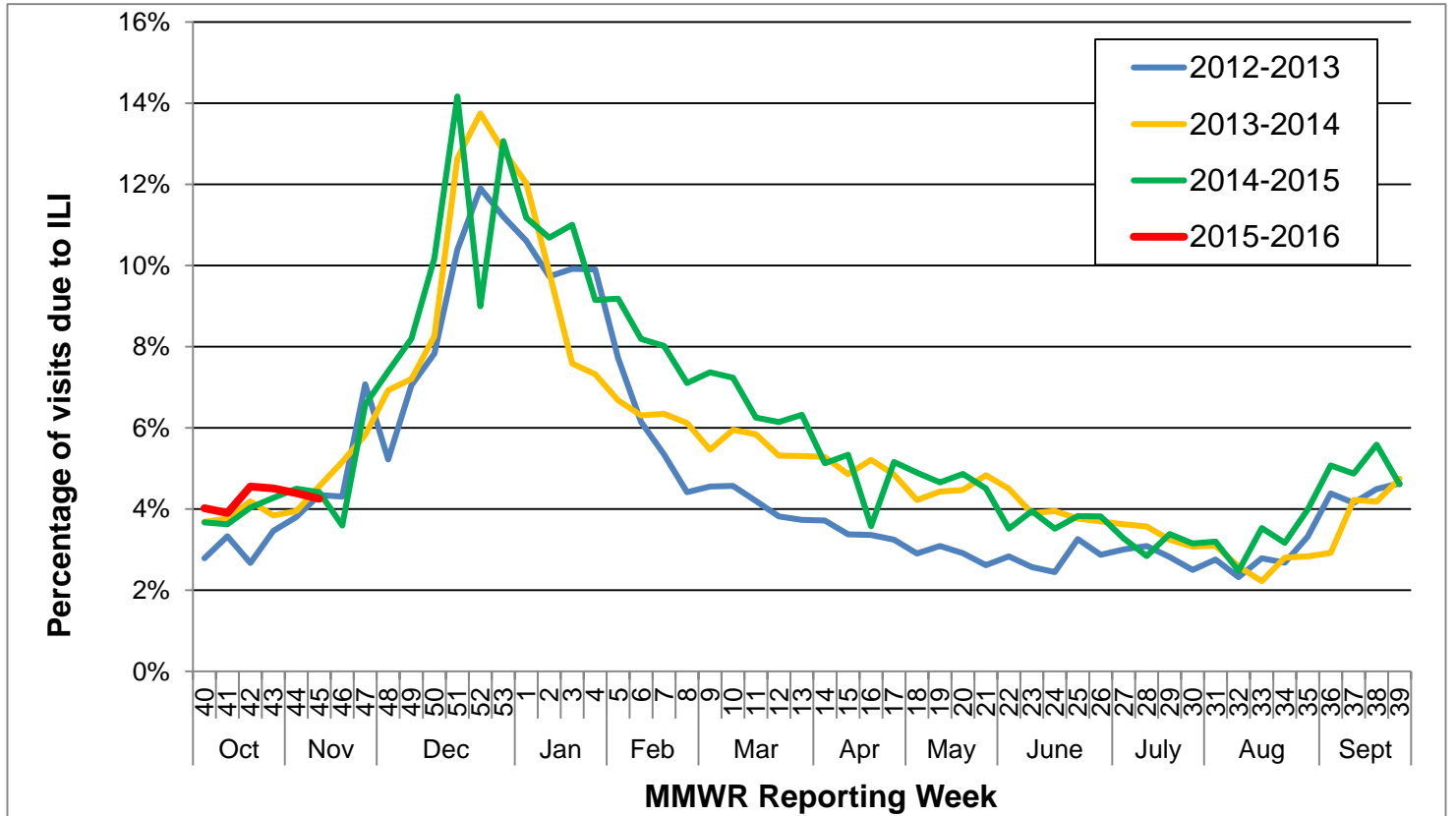


Figure 3: Percentage of Visits Due to Influenza-like Illness Reported by Texas ILINet Participants, 2012–2016 Seasons



Reports from Health Service Regions

Reports were received from all Health Service Regions (HSRs) during week 45.

Table 6: Influenza Activity Compared to Week 44 by Health Service Region (HSR)

Influenza Activity Comparison	Health Service Region (HSR)
Increased	1
Same	2/3, 6/5S, 7, 8, 9/10, and 11
Decreased	4/5N
Unsure	

Variant Influenza Viruses

No variant or novel influenza viruses have been detected in Texas in 2015.

Institutional Outbreaks and School Closures

No ILI or influenza-associated outbreaks were reported during week 45.

No school closures were reported during week 45.

TX P&I Mortality Surveillance Data

P&I deaths are attained from death certificates of Texas residents whose underlying or contributing cause(s) of death on the death certificate is reported as pneumonia or influenza. P&I deaths are identified based on ICD-10 multiple cause of death codes. In particular, P&I deaths are based on ICD-10 pneumonia and influenza mortality codes.

Four P&I deaths have been reported in Texas during the 2015-2016 influenza season.

Influenza-Associated Pediatric Mortality

No influenza-associated pediatric deaths were reported during week 45.

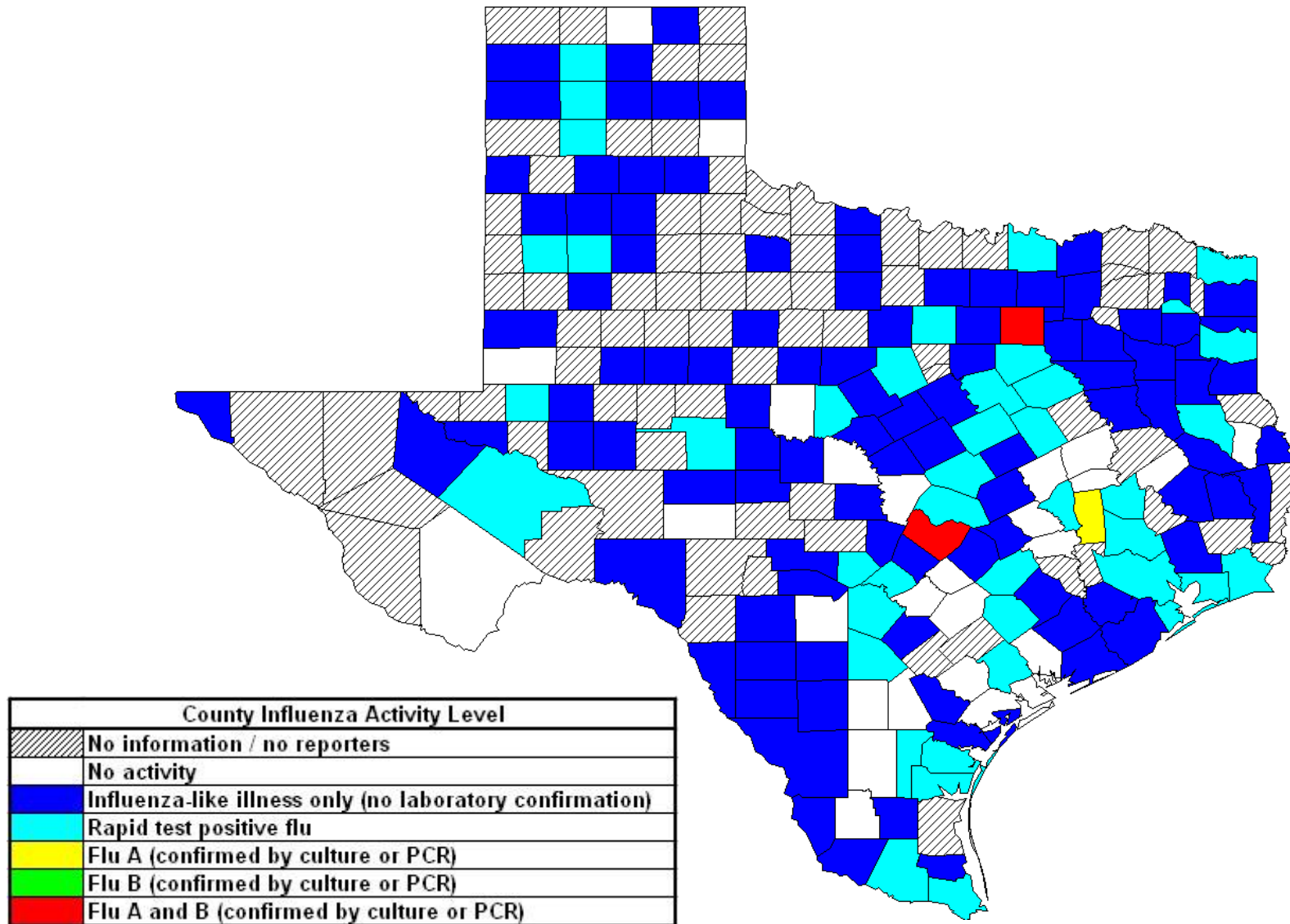
No influenza-associated pediatric deaths have been reported in Texas during the 2015-2016 influenza season. Cases of influenza-associated pediatric mortality (children <18 years of age) are reportable year-round and by law in Texas.

Table 7: Influenza-Associated Pediatric Deaths Reported in Texas during the 2015–2016 Season

Month of Pediatric Death	Influenza A (H1N1)	Influenza A (H3N2)	Influenza A (Not Subtyped)	Influenza B	Influenza, Not Typed / Not Differentiated	Influenza virus co-infection: A (not subtyped) and B	Total, All Influenza Types / Subtypes
2015							
October	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0

Statewide Influenza Activity Map

Figure 4: Texas Map Displaying the Highest Level of Influenza or ILI Activity Reported by County for the Week Ending Nov. 14, 2015 (MMWR Week 45)



Please note: The majority of influenza cases are not reportable by law in Texas. This map contains data from sentinel sites and only displays influenza and ILI cases that were reported to public health. Positive laboratory results are reported according to specimen collection date, or date received in the laboratory if the former is unknown.

Texas Influenza Surveillance Components and Measures

Activity codes (see <http://www.cdc.gov/flu/weekly/overview.htm>)

Statewide influenza activity level

A code reported weekly by states and territories to CDC indicating the geographic spread of influenza in the state. Levels are no activity, sporadic, local, regional, and widespread.

ILINet Activity Indicator

A statewide level of influenza-like illness intensity (on a scale of 1-10, with 1 being the lowest level) assigned to each state weekly by CDC based on data reported through ILINet.

Morbidity

Novel/variant influenza

Thorough investigations are performed on all cases of novel/variant influenza. *This condition is reportable by law in Texas.*

Texas ILINet

Providers voluntarily report weekly to CDC's ILINet system on the number of outpatient visits for ILI and total outpatient visits. Providers may submit up to 5 specimens per month for influenza testing. **See <http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/ILINet/> for information on how to become an ILINet provider.**

Respiratory Virus Surveillance Project (RVSP)

Providers report weekly to ILINet and submit specimens on the first 10 patients seen with ILI each week. Specimens are tested for a variety of respiratory viruses.

ILI activity

Non-ILINet providers report ILI or influenza data weekly to local or regional health departments.

Outbreaks

Healthcare, schools, and childcare facilities report ILI and influenza outbreaks to health departments in Texas. *This condition is reportable by law in Texas.*

Mortality

Pneumonia and Influenza (P&I) Mortality Surveillance

The DSHS Vital Statistics Unit collects death certificate information for all deaths on Texas residents from various partners such as funeral homes and local registrars around the state. The death certificates are then sent to the National Center for Health Statistics (NCHS) where the cause of death and underlying causes of death on the death certificates are coded with ICD-10 mortality codes. Once death certificates are coded, the information is sent back to DSHS Center for Health Statistics (CHS). CHS produces a Weekly Pneumonia and Influenza (P&I) Death Report and sends it to the State Influenza Surveillance Coordinator for inclusion in the Texas Weekly Flu Report. P&I deaths are identified based on ICD-10 multiple cause of death codes, and in particular, pneumonia and influenza mortality codes.

Influenza-associated pediatric deaths

Deaths that are associated with influenza in children < 18 years of age are reported to health departments in Texas. *This condition is reportable by law in Texas.* <http://www.dshs.state.tx.us/idcu/disease/IAPM/>

Laboratory

DSHS Austin laboratory

Providers voluntarily submit specimens to the DSHS Austin laboratory for influenza PCR testing throughout the season. Providers sign up for this program through their local health departments.

Laboratory Response Network (LRN) laboratories

Providers voluntarily submit specimens to one of the 9 Texas LRNs for influenza PCR testing throughout the season. Providers sign up for this program through their local health departments.

NREVSS

Laboratories voluntarily report influenza and other respiratory virus data weekly through the CDC's online NREVSS reporting system. **Laboratories sign up for this program by contacting DSHS.** <http://www.cdc.gov/surveillance/nrevss/>

Recommended Resources

Texas Department of State Health Services

DSHS influenza page: <http://www.texasflu.org/>

Influenza surveillance data and reports: <http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/>

Map of Texas Health Service Regions: <http://www.dshs.state.tx.us/regions/state.shtm>

Centers for Disease Control and Prevention

National FluView weekly flu report: <http://www.cdc.gov/flu/weekly/>

Variant and novel influenza viruses: <http://www.cdc.gov/flu/avianflu/index.htm>; <http://www.cdc.gov/flu/swineflu/index.htm>

Infection Control in Healthcare Facilities: <http://www.cdc.gov/flu/professionals/infectioncontrol/>

Seasonal Flu Information for Schools and Childcare Providers: <http://www.cdc.gov/flu/school/index.htm>

World Health Organization

Influenza page: <http://www.who.int/topics/influenza/en/>

Disease Outbreak News: <http://www.who.int/csr/don/en/>