



Surveillance

En Español



Influenza (Flu)

ICD-9 487; ICD-10 J10,11

Related Topics: Protecting Yourself During the Cold and Flu Season, Avian Flu, Vaccine Preventable Diseases and SARS

2008 - 2009 Texas Influenza Surveillance Information

Influenza Surveillance Report for MMWR Week 6

The influenza (flu) activity level for Texas for the week ending February 14, 2009 was "widespread." Widespread activity indicates that at least half of the regions in the state are experiencing an increase in influenza-like illness (ILI) and have recent culture-confirmed influenza. During week 6, 584 (33.8%) specimens tested by NREVSS laboratories in Texas were positive for influenza. The percentage of visits for influenza-like illness as reported by ILINet providers in Texas exceeded the regional baseline.

Reports from Health Service Regions

Reports were received from all Health Service Regions (HSRs) for week 6. HSRs 1, 8, and 9/10 reported the same level of flu activity compared to week 5. All other HSRs reported an increase in flu activity compared to week 5. For a map of Health Service Regions, please visit the following website:

<http://www.dshs.state.tx.us/regions/state.shtm>

Laboratory Results

During week 6, six hospital laboratories and public health agencies across Texas reported conducting a total of 1,728 influenza tests (antigen, culture, and PCR) to the National Respiratory and Enteric Virus Surveillance System (NREVSS) sponsored by the Centers for Disease Control and Prevention (CDC). Of the 1,561 antigen detection tests that were performed, 302 were positive for influenza A/not subtyped and 206 were positive for influenza B. The positive results were reported from Bell, Collin, Harris, Lubbock, Nueces, and Tarrant counties. Twenty-eight PCR tests positive for influenza A/H1, seven PCR tests positive for influenza A/not subtyped, and thirty-three PCR tests positive for influenza B were reported for Anderson, Harris, McLennan, Tarrant, Travis, Van Zandt, and Williamson counties. [There may be some overlap in the PCR and culture positive results described in this report (i.e., some of the PCR results may be from some of the same patients as the culture results).] A total of 387 reports of culture-confirmed influenza were received from public health laboratories in Austin, Dallas, and Houston; Scott & White Memorial Hospital in Temple; Texas Children's Hospital in Houston; the United States Air Force School of Aerospace Medicine (USAFSAM) and other sources for the following counties:

Influenza A/H1	Influenza A/H3	Influenza A/not subtyped	Influenza B
Bexar County (8)	(none)	Bell County (20)	Bell County (6)
Val Verde County		Bexar County (131)	Bexar County (30)
		Brazos County (7)	Brazos County (13)
		Dallas County (34)	Dallas County (32)
		El Paso County	Harris County (38)
		Harris County (25)	McLennan County (11)
		Hill County	Tarrant County (2)
		McLennan County (20)	Travis County (2)
		Travis County	Wichita County
		Wichita County	Williamson County (2)

Additional positive results from point-of-care rapid flu tests were reported by providers throughout the state (see Texas map below).

Antigenic Characterization

CDC has reported antigenic characterization results from 33 influenza isolates [14 influenza A/H1, 1 influenza A/H3, and 18 influenza B viruses] received from the DSHS Laboratory since the beginning of the 2008-09 flu season.

Influenza A/H1 [14]

- All 14 viruses were characterized as A/Brisbane/59/2007, the influenza A/H1 component of the 2008-09 influenza vaccine for the Northern Hemisphere.

Influenza A/H3 [1]

- One virus was characterized as A/Brisbane/10/2007, the influenza A/H3 component of the 2008-09 influenza vaccine for the Northern Hemisphere.

Influenza B (B/Victoria/02/87 and B/Yamagata/16/88 lineages) [18]

Victoria lineage [12]

- Two (17%) of the twelve viruses were characterized as B/Ohio/01/2005-like viruses.
- Ten (83%) of the twelve viruses showed somewhat reduced titers with antisera produced against B/Malaysia/2506/2004 and B/Ohio/01/2005.

Yamagata lineage [6]

- Six viruses were characterized as B/Florida/4/2006, the influenza B component for the 2008-09 influenza vaccine for the Northern Hemisphere.

Antiviral Resistance

Since September 28, 2008, 15 influenza A/H1 isolates, 1 influenza A/H3 isolate, and 17 influenza B isolates from the DSHS laboratory have been tested by CDC for antiviral resistance.

	Isolates Tested (n)	Resistant Viruses, Number (%)		Isolates Tested (n)	Resistant Viruses, Number (%)
		Oseltamivir	Zanamivir		Adamantanes
Influenza A/H1	15	14 (93%)	0 (0)	15	0 (0)

Influenza A/H3	1	0 (0)	0 (0)	1	1 (100%)
Influenza B	17	0 (0)	0 (0)	N/A*	N/A*

*Adamantanes are not effective against influenza B viruses.

CDC has issued interim recommendations for use of antiviral medications in the 2008-09 influenza season. Those recommendations are available at: <http://www.cdc.gov/flu/professionals/antivirals/index.htm>.

Influenza-Associated Pediatric Mortality

Two influenza-associated pediatric fatalities occurred during MMWR week 6. The first death occurred in a 7-year-old resident of Health Service Region 3 with no significant underlying medical conditions. A specimen from the child was positive by viral culture and PCR for influenza A/H1. The child was not vaccinated for influenza for the current season. The second death occurred in a 7-month-old resident of Health Service Region 9 with no significant underlying medical conditions. A specimen from the child was positive for influenza A/H1 by PCR test. The child had received one dose of influenza vaccine and was not eligible to receive the second of two doses recommended for this age group. Texas has reported four influenza-associated pediatric fatalities during the 2008-09 influenza season.

School Closures and Institutional Outbreaks

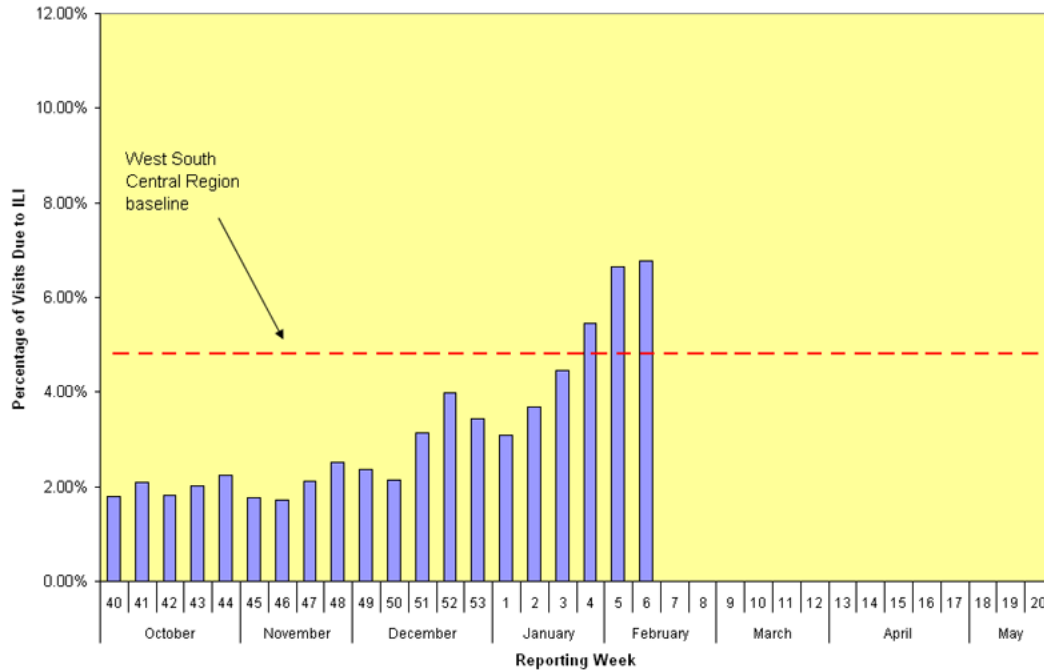
One school in Freestone County closed due to influenza and other illnesses during week 6. One school in Anderson County and four schools in Van Zandt County reported increased absenteeism due to ILI.

U.S. Outpatient Influenza-like Illness Surveillance Network

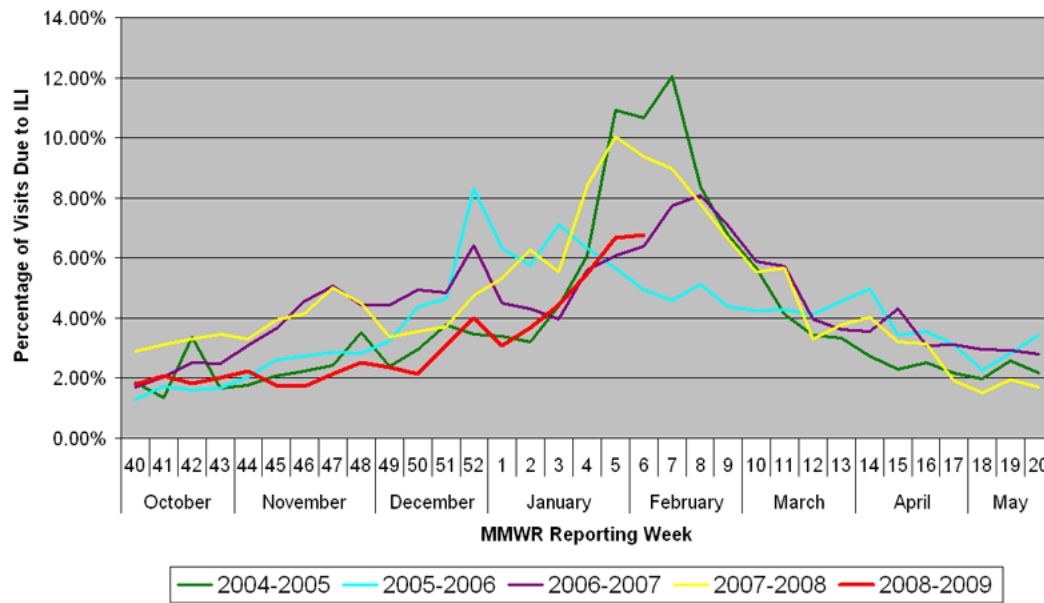
Fifty-six providers in Texas reported data to the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) (formerly known as the U.S. Influenza Sentinel Provider Surveillance System) on patients with influenza-like illness (ILI) and total patients seen for any reason during week 6. Of the 55 providers who saw patients, 44 (80%) of these providers saw at least one patient with ILI. Of all patient visits during this week, 6.78% were due to ILI. The ILI baseline for the West South Central Region (Arkansas, Louisiana, Oklahoma, and Texas) of the United States is 4.8% for the 2008-2009 season. The baseline is the mean percentage of patient visits for ILI during non-influenza weeks for the previous three seasons plus two standard deviations.

Percentage of Visits for Influenza-Like Illness Reported by the US Outpatient Influenza-Like Illness Surveillance Network (ILINet) in Texas as of 2/19/2009 5:51:41 PM								
Week	# Reporting	Age 0-4	Age 5-24	Age 25-64	Age over 64	Total ILI	Total Patients	% ILI
2008-40	78	84	133	127	22	366	20333	1.80
2008-41	78	114	163	124	19	420	20105	2.09
2008-42	79	107	156	90	7	360	19746	1.82
2008-43	79	120	152	106	20	398	19740	2.02
2008-44	80	136	199	103	26	464	20737	2.24
2008-45	78	110	111	122	27	370	20835	1.78
2008-46	73	110	106	103	23	342	19771	1.73
2008-47	75	137	143	122	19	421	19806	2.13
2008-48	79	131	132	125	37	425	16905	2.51
2008-49	77	143	159	153	24	479	20343	2.35
2008-50	75	133	146	108	28	415	19330	2.15
2008-51	69	172	177	175	24	548	17531	3.13
2008-52	76	194	153	154	34	535	13431	3.98
2008-53	76	167	137	165	46	515	15037	3.42
2009-01	78	162	182	188	38	570	18518	3.08
2009-02	76	178	287	233	41	739	19995	3.70
2009-03	76	172	462	337	40	1011	22728	4.45
2009-04	74	256	673	327	45	1301	23832	5.46
2009-05	67	239	864	452	37	1592	23918	6.66
2009-06	56	219	786	330	52	1387	20458	6.78

**Percentage of Visits Due to Influenza-Like Illness (ILI),
Texas Providers in the U.S. Outpatient Influenza-like Illness Surveillance Network,
2008–2009**

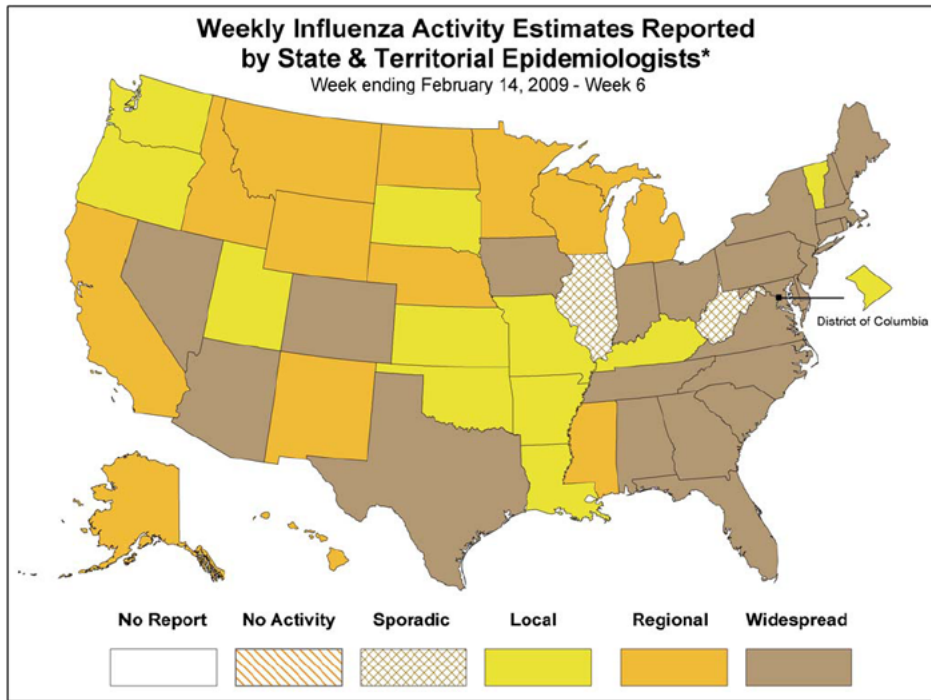


**Influenza-Like Illness (ILI) Data
Texas Providers in the U.S. Outpatient Influenza-like Illness Surveillance Network
Flu Seasons 2004–2009**



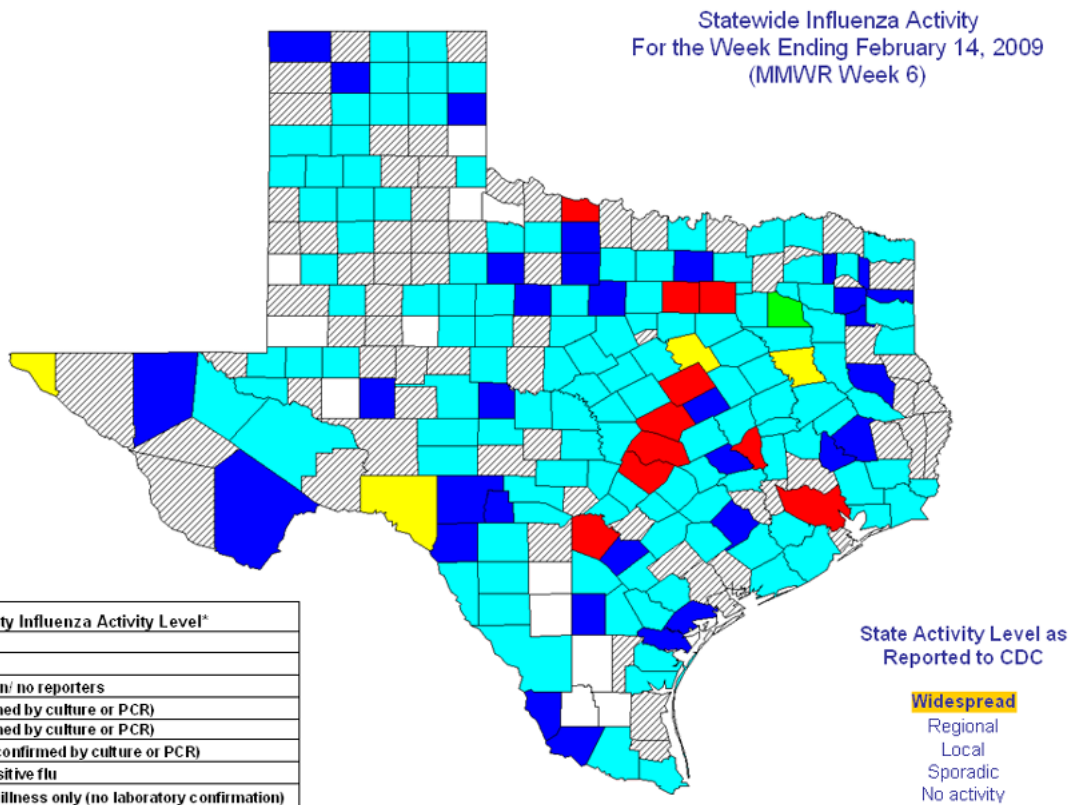
National Influenza Activity Map

The map showing influenza activity in the United States for MMWR week 6 is displayed below. The current U.S. flu weekly report may be found at: [here](#).



*This map indicates geographic spread and does not measure the severity of influenza activity.

For more information on flu surveillance activities in the State of Texas, please visit our main surveillance page.



*Influenza activity level corresponds to current MMWR week only and does not reflect previous weeks' activity.

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