

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 5**

The influenza (flu) activity level for Texas for the week ending February 7, 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 5, 991 (30.2%) 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 5. HSRs 7 and 11 reported a decrease in flu activity compared to week 4. HSRs 6/5S and 8 reported the same level of flu activity compared to week 4. All other HSRs reported an increase in flu activity compared to week 4. 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 5, twelve hospital laboratories and public health agencies across Texas reported conducting a total of 3,281 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 3,052 antigen detection tests that were performed, 628 were positive for influenza A/not subtyped and 250 were positive for influenza B. The positive results were reported from Bell, Bexar, Collin, Harris, Lubbock, Nueces, and Tarrant counties. Seventeen PCR tests positive for influenza A/H1, twenty PCR tests positive for influenza A/not subtyped, and twenty-six PCR tests positive for influenza B were reported for Bell, Harris, Henderson, and Tarrant 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 410 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
Anderson County (2)	Bexar County	Bell County (27)	Anderson County (2)
Angelina County	Dallas County	Bexar County (116)	Angelina County (2)
Bastrop County	Fort Bend County	Brazos County (4)	Bell County (4)
Bexar County (5)	Shelby County	Coryell County	Bexar County (19)
Collin County (3)		Dallas County (24)	Brazos County (13)
Dallas County (7)		Falls County (2)	Cameron County
Deaf Smith County (3)		Grimes County	Collin County
Denton County		Harris County (20)	Dallas County (26)
El Paso County		Lampasas County	Fort Bend County
Fort Bend County (2)		McLennan County (26)	Harris County (54)
Harris County (7)		Williamson County (2)	McLennan County (8)
Hidalgo County			Travis County (3)
Kleberg County (2)			
Nueces County			
Smith County			
Taylor County			
Travis County (6)			
Wichita County (2)			
Wood County			

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

One influenza-associated pediatric fatality occurred during MMWR week 5. The 15-year-old resident of Health Service Region 6 did not have any significant underlying medical conditions. A rapid influenza test from the patient was positive for influenza B; additionally, a specimen obtained from the child was positive for methicillin-sensitive *Staphylococcus aureus*. It is unknown whether the child was vaccinated for influenza for the current season. Texas has reported two influenza-associated pediatric fatalities during the 2008-09 influenza season.

School Closures and Institutional Outbreaks

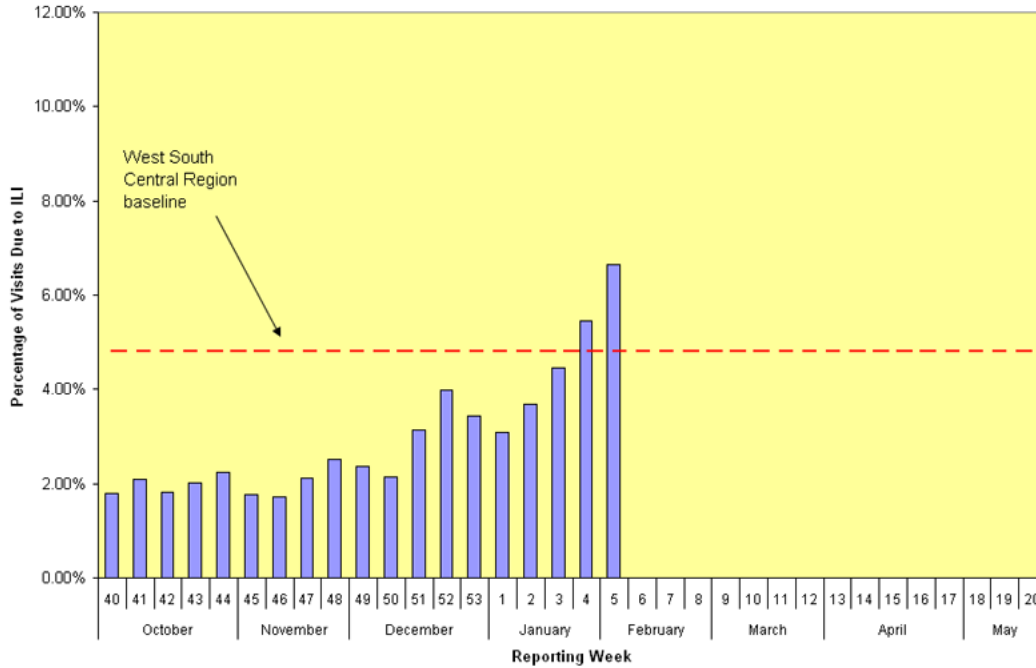
Multiple school closures and institutional outbreaks due to influenza and influenza-like illnesses were reported in week 5. One institution in Taylor County reported a resident and some staff members positive for influenza A. One elementary school in Dallas County closed for two days during week 5 due to influenza and ILI. One school in Anderson County reported large numbers of students absent due to ILI. One school in McLennan County closed due to influenza and other illnesses.

U.S. Outpatient Influenza-like Illness Surveillance Network

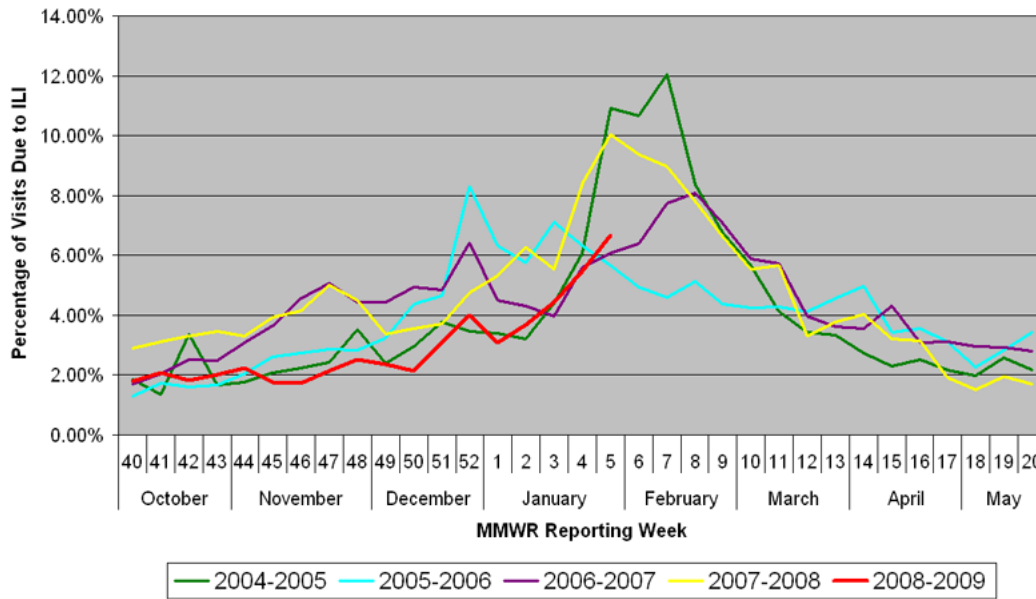
Sixty-seven sentinel providers in Texas reported data to the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) (formerly known as the U.S. Influenza Sentinel Provider Surveillance System) on patients with influenza-like illness (ILI) and total patients seen for any reason during week 5. Fifty-two (78%) of these providers saw at least one patient with ILI. Of all patient visits during this week, 6.66% 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.

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

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

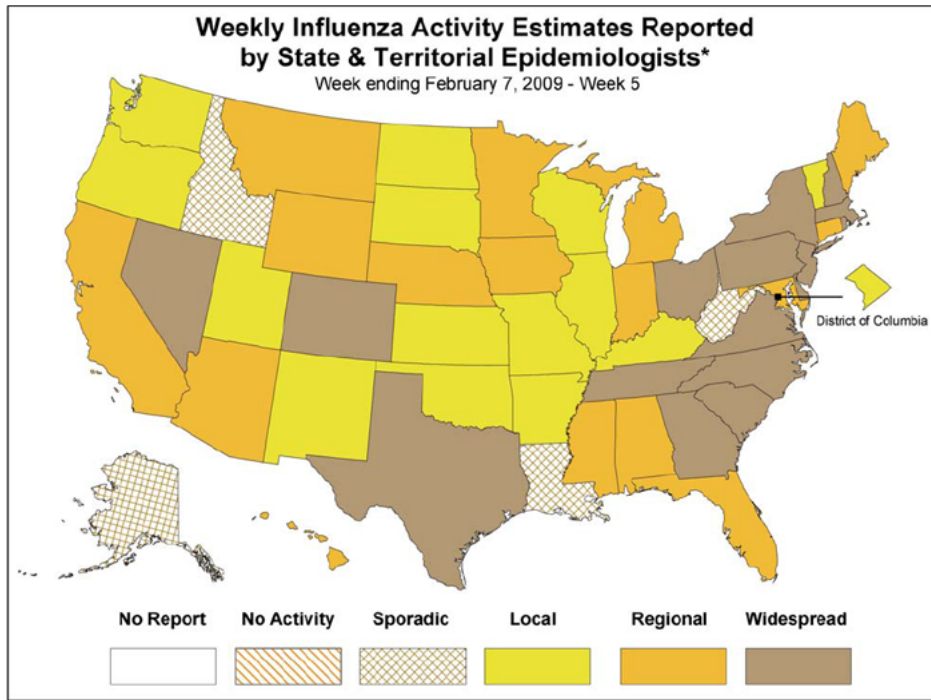


**Influenza-Like Illness (ILI) Data
Texas Providers in the U.S. Outpatient Influenza-like Illness Surveillance Network
Flu Seasons 2004–2009**



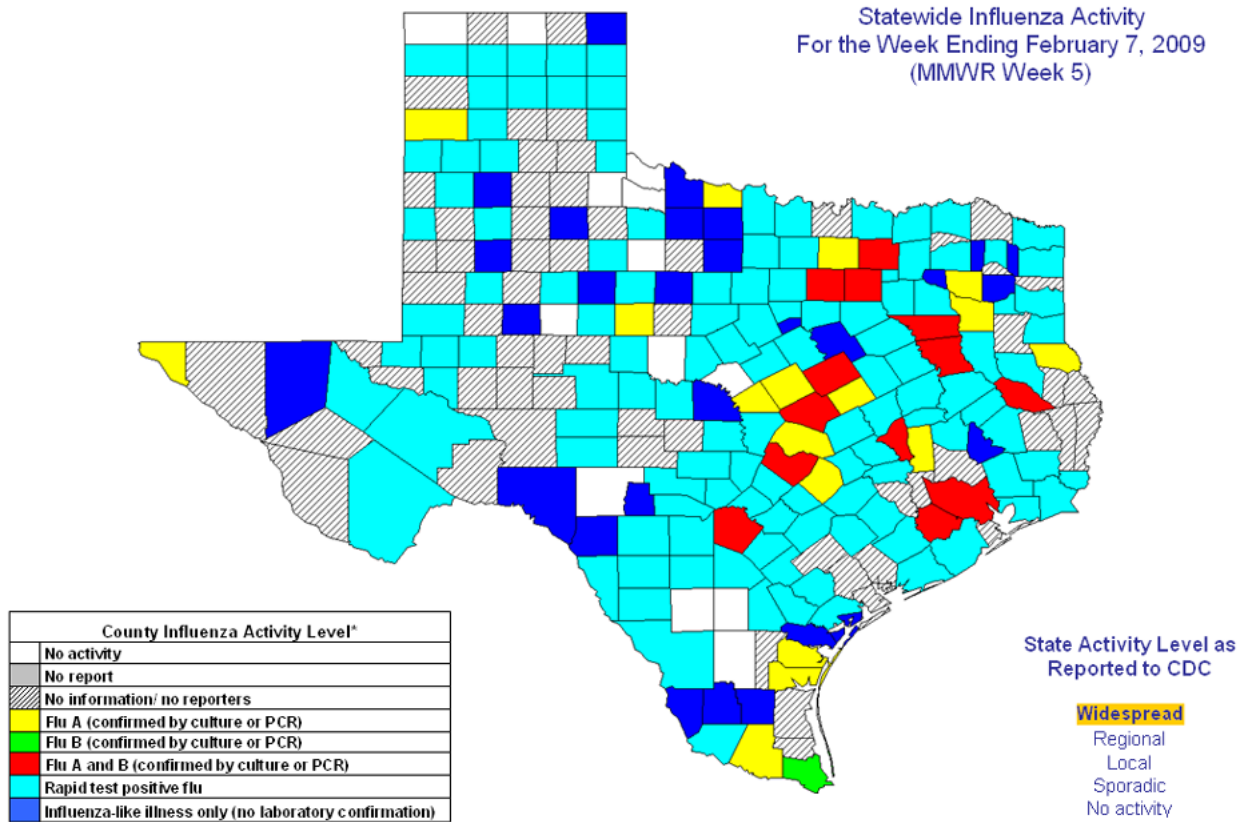
National Influenza Activity Map

The map showing influenza activity in the United States for MMWR week 5 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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Texas Department of State Health Services - Infectious Disease Control Unit
1100 West 49th Street, Suite T801, Mail Code: 1960 PO BOX 149347 - Austin, TX 78714-9347
(512) 458-7676 - Fax: (512) 458-7616 - E-Mail

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