



» Influenza » Surveillance » 2009 » Week\_04: Surveillance

## 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 4**

The influenza (flu) activity level for Texas for the week ending January 31, 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 4, 474 (31.3%) 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 4. HSRs 8, 9/10, and 11 reported the same level of flu activity compared to week 3. All other HSRs reported an increase in flu activity compared to week 3. 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 4, seven hospital laboratories and public health agencies across Texas reported conducting a total of 1,514 influenza tests (antigen, culture, and PCR) to the National Respiratory and Enteric Virus Surveillance System (NREVSS 1) sponsored by the Centers for Disease Control and Prevention (CDC). Of the 1,345 antigen detection tests that were performed, 328 were positive for influenza A/not subtyped and 77 were positive for influenza B. The positive results were reported from Bell, Bexar, Collin, Lubbock, and Tarrant counties. Twenty-nine PCR tests positive for influenza A/H1, twenty-six PCR tests positive for influenza A/not subtyped, and forty-one PCR tests positive for influenza B were reported for Bell, Harris, Lee, Tarrant, 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 364 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; and other sources for the following counties:

Influenza A/H1	Influenza A/H3	Influenza A/not subtyped	Influenza B
Anderson County	Dallas County (2)	Bell County (9)	Angelina County
Angelina County (3)	Tarrant County	Bexar County (46)	Bell County (9)
Dallas County		Brazos County (12)	Bexar County (2)
Kleberg County (2)		Burleson County	Brazos County (12)
Travis County (13)		Dallas County (105)	Brooks County
		Falls County	Dallas County (24)
		Harris County (37)	Harris County (52)
		Hill County	Leon County
		McLennan County (11)	McLennan County (5)
		Williamson County (8)	Travis County (3)

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 26 influenza isolates [14 influenza A/H1, 1 influenza A/H3, and 11 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) [11]

Victoria lineage [10]

- Two (20%) of the ten viruses were characterized as B/Ohio/01/2005-like viruses.
- Eight (80%) of the ten viruses showed somewhat reduced titers with antisera produced against B/Malaysia/2506/2004 and B/Ohio/01/2005.

Yamagata lineage [1]

• One virus was characterized as B/Florida/4/2006, the influenza B component for the 2008-09 influenza vaccine.

# **Antiviral Resistance**

Since September 28, 2008, 12 influenza A/H1 isolates and 11 influenza B isolates from the DSHS laboratory have been tested by CDC for antiviral resistance.

	Isolates Tested (n)	Resistant Numbe	t Viruses, er (%)	Isolates Tested (n)	Resistant Viruses, Number (%)
		Oseltamivir	Zanamivir		Adamantanes
Influenza A/H1	12	11 (92%)	0 (0)	12	0 (0)
Influenza A/H3	0	N/A	N/A	0	N/A

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Influenza B	11	0 (0)	0 (0)	N/A*	N/A*
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<sup>\*</sup>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**

No influenza-associated pediatric fatalities occurred during week 4. Texas has reported one influenza-associated pediatric fatality during the 2008-09 influenza season.

## **School Closures and Institutional Outbreaks**

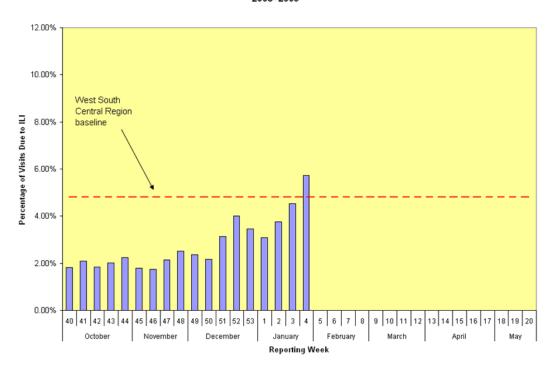
School closures and institutional outbreaks due to influenza and influenza-like illnesses were reported in multiple schools during week 4. The same school in Henderson County that reported several rapid tests positive for influenza B during week 3 continued to report a large number of influenza cases during week 4. Two schools in Angelina County reported large numbers of influenza cases. One school in Wood County closed during week 4 due to influenza-like illnesses. One boarding school in Bexar County closed due to influenza.

# U.S. Outpatient Influenza-like Illness Surveillance Network

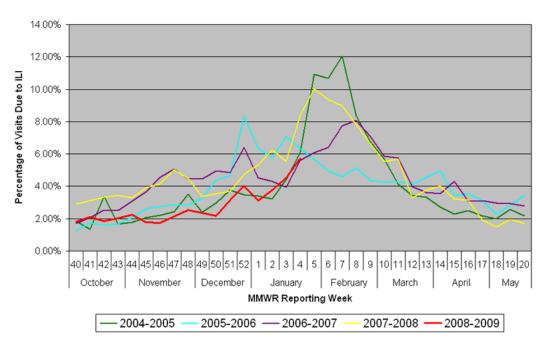
Fifty-nine sentinel providers in Texas reported data to the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) (formerly known as the U.S. Influenza Sentinel Provider Surveillance System) on patients with influenza-like illness (ILI) and total patients seen for any reason during week 4. Forty-five (76%) of these providers saw at least one patient with ILI. Of all patient visits during this week, 5.73% 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.

Percenta	Percentage of Visits for Influenza-Like Illness Reported by the US Outpatient Influenza-Like Illness Surveillance Network (ILINet) in Texas as of 2/6/2009 10:52:27 AM								
Week	# Reporting	Age 0-4	Age 5-24	Age 25-64	Age over 64	Total ILI	Total Patients	% ILI	
2008-40	77	84	133	127	22	366	20231	1.81	
2008-41	77	114	163	124	19	420	20000	2.10	
2008-42	78	107	156	90	7	360	19658	1.83	
2008-43	78	120	152	106	20	398	19654	2.03	
2008-44	79	136	199	103	26	464	20653	2.25	
2008-45	77	110	111	122	27	370	20737	1.78	
2008-46	72	110	106	103	23	342	19684	1.74	
2008-47	74	137	143	122	19	421	19722	2.13	
2008-48	78	131	132	125	37	425	16835	2.52	
2008-49	76	143	159	153	24	479	20226	2.37	
2008-50	74	133	146	108	28	415	19221	2.16	
2008-51	68	172	177	175	24	548	17438	3.14	
2008-52	75	194	153	154	34	535	13360	4.00	
2008-53	75	167	137	165	46	515	14933	3.45	
2009-01	77	162	182	188	38	570	18423	3.09	
2009-02	74	177	287	230	41	735	19587	3.75	
2009-03	73	167	446	336	40	989	21876	4.52	
2009-04	59	240	620	305	35	1200	20944	5.73	

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

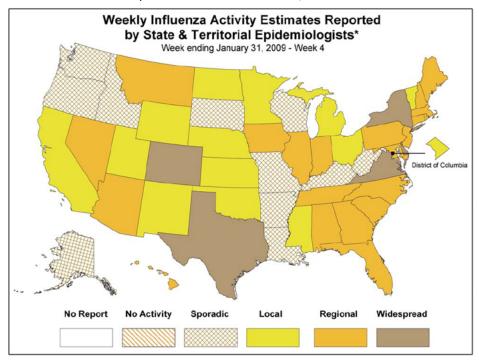


Influenza-Like Illness (ILI) Data Texas Providers in the U.S. Outpatient Influenza-like Illness Surveillance Network Flu Seasons 2004–2009



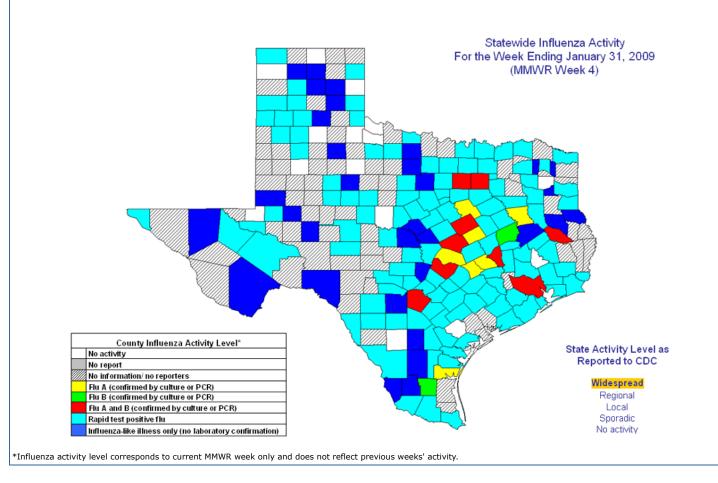
# **National Influenza Activity Map**

The map showing influenza activity in the United States for MMWR week 4 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.



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