

» Influenza » Surveillance » 2009 » Week\_08: Surveillance

# Surveillance

Influenza

En Español

(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 8**

The influenza (flu) activity level for Texas for the week ending February 28, 2009 was "widespread." During week 8, 415 (25.4%) 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 8. HSR 11 reported an increase in flu activity compared to week 7. HSRs 2/3 and 7 reported a decrease in flu activity compared to week 7. All other HSRs reported the same level of flu activity compared to week 7. 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 8, nine hospital laboratories and public health agencies across Texas reported conducting a total of 1,631 influenza tests (antigen, culture, and PCR) to the National Respiratory and Enteric Virus Surveillance System (NREVSS<sup>®</sup>) sponsored by the Centers for Disease Control and Prevention (CDC). Of the 1,464 antigen detection tests that were performed, 155 were positive for influenza A/not subtyped and 191 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, four PCR tests positive for influenza A/not subtyped, and thirty-three PCR tests positive for influenza B were reported for Bell, Henderson, Harris, Milam, Smith, and Williamson counties. [There may be some overlap in the PCR and culture positive received 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 203 reports of culture-confirmed influenza were received from public health laboratories, Scott & White Memorial Hospital in Temple, Texas Children's Hospital in Houston, NREVSS, and other sources for the following counties:

Influenza A/H1	Influenza A/H3	Influenza A/not subtyped	Influenza B
Deaf Smith County (2)	(none)	Bell County (8)	Atascosa County
El Paso County (2)		Bexar County (54)	Bell County (7)
Galveston County		Brazos County (2)	Bexar County (26)
Guadalupe County		Caldwell County	Brazos County (3)
Hansford County		Harris County (19)	Coryell County
Hutchinson County		McLennan County (7)	Dallas County (5)
Travis County			Grayson County
			Hardin County
			Harris County (43)
			McLennan County (10)
			Tarrant County
			Travis County (3)
			Williamson 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

Two influenza-associated pediatric fatalities occurred during week 8. The first death occurred in an 11-month-old resident of Health Service Region 6 with significant underlying medical conditions. A specimen obtained from the child was positive for influenza B by viral culture. The child was fully vaccinated for influenza for the current season. The second death occurred in a 9-month-old resident of Health Service Region 6 with an unknown vaccination history for influenza. The medical history on this child is incomplete at this time. A specimen obtained from the child was positive for influenza A/not subtyped by indirect fluorescent antibody test; viral culture results are pending. Texas has reported seven influenza-associated pediatric fatalities during the 2008-09 influenza season.

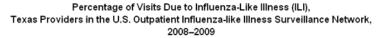
## School Closures and Institutional Outbreaks

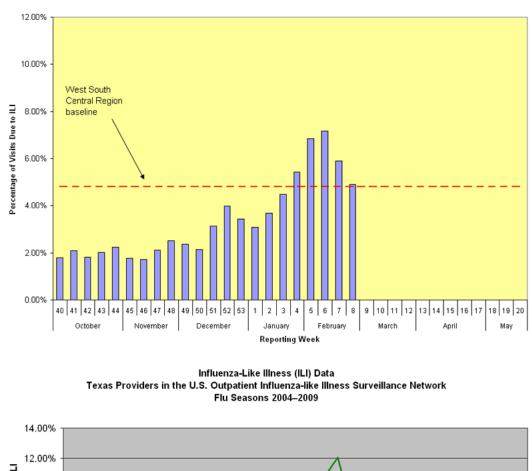
No school closures or institutional outbreaks were reported in week 8.

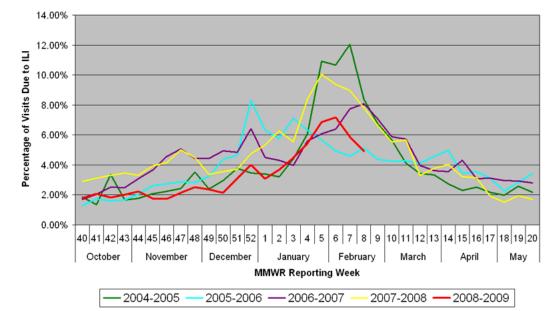
## U.S. Outpatient Influenza-like Illness Surveillance Network

Fifty-seven 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 8. Of the 56 providers who saw patients, 37 (66%) saw at least one patient with ILI. Of all patient visits during this week, 4.90% 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 3/5/2009 3:22:20 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	77	178	287	235	41	741	20094	3.69
2009-03	78	174	468	341	43	1026	22951	4.47
2009-04	78	260	679	332	47	1318	24244	5.44
2009-05	73	282	898	470	40	1690	24642	6.86
2009-06	75	294	945	387	58	1684	23513	7.16
2009-07	70	305	780	299	54	1438	24399	5.89
2009-08	57	176	499	255	53	983	20050	4.90



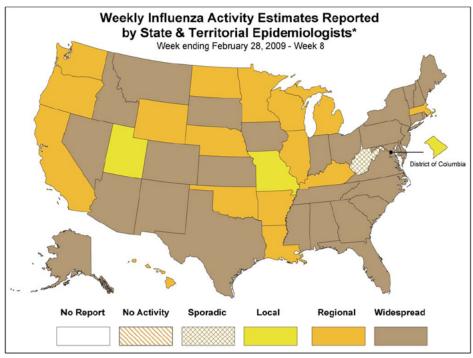




## National Influenza Activity Map

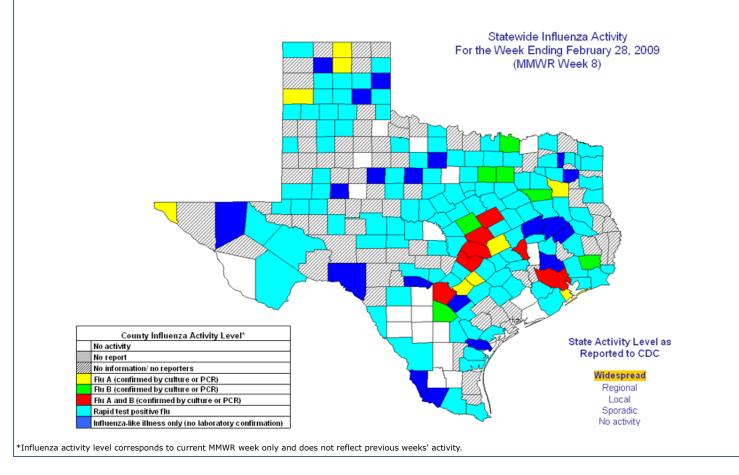
The map showing influenza activity in the United States for MMWR week 8 is displayed below. The current U.S. flu weekly report may be found at: here.

Texas Department of State Health Services, Infectious Disease Control Unit > Surveillance



\*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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