

Texas Influenza Surveillance Report 2022-2023 Season/ 2023 MMWR Week 39

(September 24, 2023 – September 30, 2023)

Report produced on 10/06/2023

Summary

*This report excludes COVID-19 data. For information about COVID-19 in Texas visit <https://www.dshs.texas.gov/covid-19-home>.

Compared to the previous week, the percentage of specimens testing positive for influenza reported by hospital laboratories has increased. The percentage of patient visits due to influenza-like illness (ILI) has increased. No influenza-associated pediatric deaths were reported. Two respiratory disease outbreaks were reported in school facilities.

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 ILINet Activity Indicator assigned by CDC (intensity of influenza-like illness)	Increased	Low	Minimal	-
Percentage of specimens positive for influenza by hospital laboratories	▲0.58%	1.89%	1.31%	1
Percentage of visits due to ILI (ILINet)	▲0.41%	2.69%	2.28%	2
Number of regions reporting increased flu/ILI activity	▲1	5	4	4
Number of regions reporting decreased flu/ILI activity	▼2	2	4	4
Number of variant/novel influenza infections	No Change	0	0	4
Number of ILI/influenza outbreaks	▲2	2	0	4
Number of pediatric influenza-associated deaths	No Change	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) state laboratory in Austin and the nine Texas Laboratory Response Network (LRN) laboratories. The results reported by Texas NREVSS participants and public health laboratories for the current week are summarized in the two tables below. Additional influenza test results (rapid tests, culture, PCR) and ILI activity 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 Hospital Laboratories for the Current Week[†]

	Week 39	Season to Date Week Ending: September 30, 2023
Number of labs reporting flu tests	19	
Number of specimens tested	3866	359884
Number of positive specimens (%)	73 (1.89%)	39741 (11.04%)
Percentage of total tests that were antigen detection tests	17.18%	
Positive specimens by type/subtype [n (%)]		
Influenza A	33 (45.21%)	37538 (94.46%)
Subtyping performed	8 (24.24%)	6210 (16.54%)
A (H1N1)	6 (75.00%)	1819 (29.29%)
A (H3N2)	2 (25.00%)	4391 (70.71%)
Subtyping not performed	25 (75.76%)	31328 (83.46%)
Influenza B	40 (54.79%)	2203 (5.54%)

[†]Laboratory data in 2022-2023 season reports may not be comparable to reports from previous seasons because the data only includes hospital laboratories data for the current season.

Table 3: Influenza Testing Performed by Texas Public Health Laboratories for the Current Week†

	Week 39	Season to Date Week Ending: September 30, 2023
Number of labs reporting flu tests	1	
Number of specimens tested	112	3971
Number of positive specimens (%)	0 (0.00%)	527 (13.27%)
Positive specimens by type/subtype/lineage [n (%)]		
Influenza A	0 (0.00%)	485 (92.03%)
Subtyping performed	0 (0.00%)	428 (88.25%)
A (H1N1)	0 (0.00%)	187 (43.69%)
A (H3N2)	0 (0.00%)	241 (56.31%)
Subtyping not performed	0 (0.00%)	57 (11.75%)
Influenza B	0 (0.00%)	42 (7.97%)
Lineage testing performed	0 (0.00%)	37 (88.10%)
B/Victoria	0 (0.00%)	37 (100.00%)
B/Yamagata	0 (0.00%)	0 (0.00%)
Lineage testing not performed	0 (0.00%)	5 (11.90%)
Other*	0 (0.00%)	0 (0.00%)

*Other denotes specimens with coinfections (i.e. one specimen was positive for both influenza A (H1N1) and influenza A (H3N2))

†Laboratory data in 2022-2023 season reports may not be comparable to reports from previous seasons because the data only includes hospital laboratories data for the current 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 4: 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)	15	1521	90	5.92%
HMPV	14	1505	2	0.13%
Parainfluenza virus	14	1505	43	2.86%
Rhino/enterovirus	15	1519	553	36.41%
RSV†^	16	2933	185	6.31%
Seasonal coronavirus (does not include MERS-CoV or COVID-19)	15	1517	12	0.79%

†RSV tests displayed in the table are a combination of antigen detection, PCR, and culture tests. 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>.

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

Table 5: Texas ILINet Reporting and Patient Visit Summary for the Current Week

	Week 39
Number of providers reporting	45
Number of providers reporting patient visits	45
Number (%) of providers with at least one ILI case	37 (82.2%)
Percentage of all visits due to ILI	2.69%
Texas ILINet baseline‡, 2022-2023	4.85%

‡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

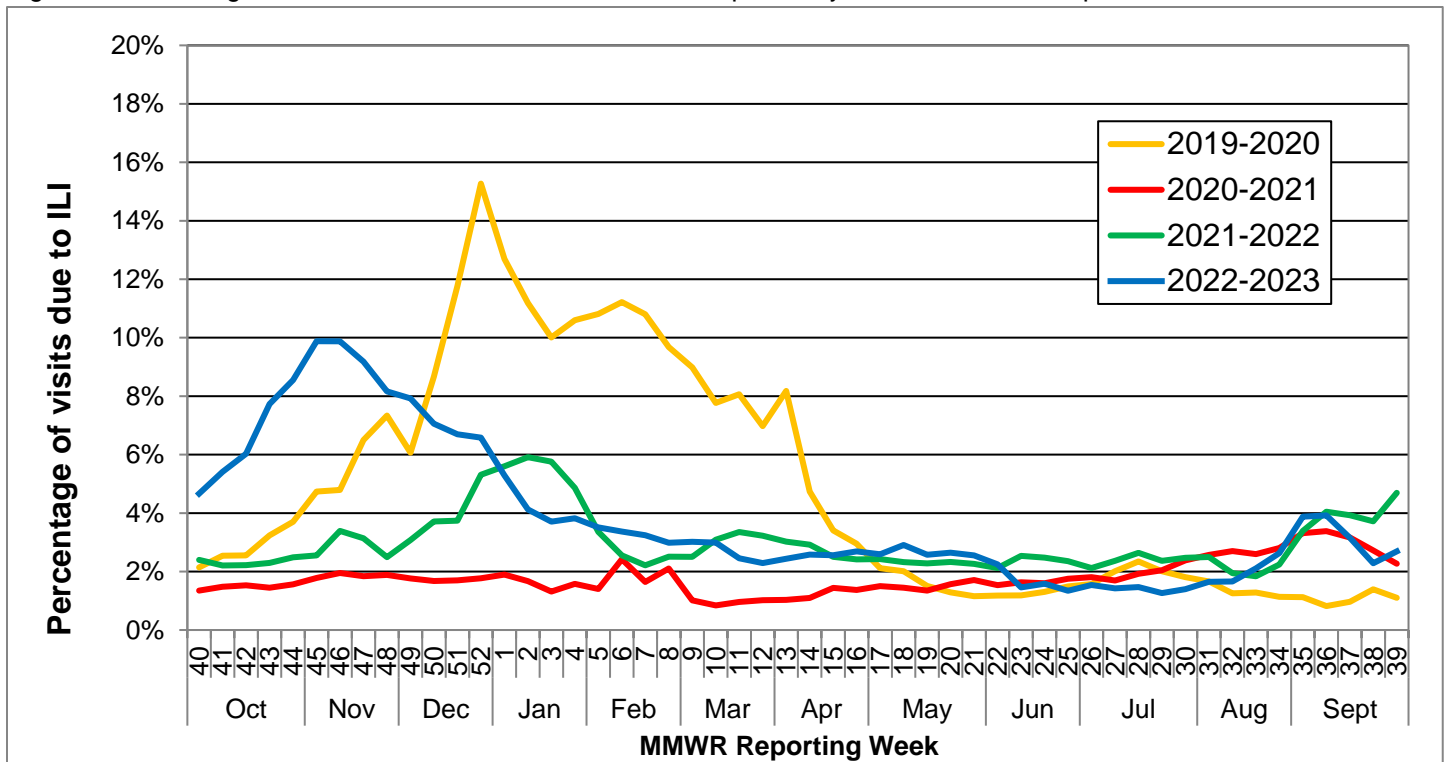
Special Note: The case definition was changed to capture respiratory pathogens causing illness, including CoVID-19, through the ILINet. The Influenza-like Illness (ILI) case definition for the 2022-2023 season is a patient with fever ($\geq 100^{\circ}\text{F}$, 37.8°C) AND cough and/or sore throat. There is no longer a restriction on the cause.

Table 6: Percentage of Visits for Influenza-like Illness Reported by Texas ILINet Providers (as of 10/05/2023 12:39PM)

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+			
202240	59	894	1298	272	104	62	2630	56384	4.66%
202241	62	1101	1590	401	164	72	3328	61532	5.41%
202242	60	1113	1874	448	201	84	3720	61711	6.03%
202243	61	1460	2704	573	226	106	5069	65582	7.73%
202244	62	1569	3068	692	269	128	5726	66979	8.55%
202245	61	1405	2524	573	431	130	5063	51247	9.88%
202246	50	1106	1833	437	159	142	3677	37234	9.88%
202247	61	1431	1874	1058	377	208	4948	53884	9.18%
202248	59	1347	1928	1141	438	285	5139	62945	8.16%
202249	57	1176	1941	895	379	251	4642	58605	7.92%
202250	58	1080	1583	800	324	226	4013	56856	7.06%
202251	57	788	1021	745	304	217	3075	45932	6.69%
202252	53	966	934	1093	485	393	3871	58798	6.58%
202301	56	617	743	753	390	248	2751	52031	5.29%
202302	59	601	779	558	312	193	2443	59270	4.12%
202303	45	504	802	448	206	147	2107	56853	3.71%
202304	43	472	815	460	167	134	2048	53582	3.82%
202305	42	444	600	357	138	94	1633	46500	3.51%
202306	45	450	785	359	170	114	1878	55767	3.37%
202307	43	471	663	315	133	84	1666	51396	3.24%
202308	45	402	717	317	168	107	1711	57279	2.99%
202309	59	498	801	299	150	95	1843	61043	3.02%
202310	60	481	760	327	123	87	1778	59486	2.99%
202311	59	428	456	279	97	76	1336	54467	2.45%
202312	42	368	480	249	80	78	1255	54876	2.29%
202313	45	362	595	298	90	79	1424	58438	2.44%
202314	44	392	567	276	103	68	1406	54501	2.58%
202315	43	442	611	294	105	68	1520	59400	2.56%
202316	58	446	763	297	89	76	1671	62146	2.69%
202317	59	476	658	288	101	70	1593	61546	2.59%
202318	59	455	764	289	89	77	1674	57536	2.91%
202319	57	425	665	264	88	69	1511	58664	2.58%
202320	57	320	488	222	79	56	1165	44009	2.65%
202321	41	228	308	112	33	27	708	27751	2.55%
202322	51	312	414	252	75	33	1086	48304	2.25%
202323	50	245	232	149	42	28	696	47802	1.46%
202324	50	232	225	187	68	40	752	47560	1.58%
202325	49	190	211	140	67	45	653	48594	1.34%
202326	51	252	257	183	57	41	790	51216	1.54%
202327	51	199	203	164	61	43	670	47077	1.42%
202328	50	212	201	183	52	55	703	47924	1.47%
202329	50	208	178	145	66	42	639	50567	1.26%
202330	46	219	178	156	68	39	660	47182	1.40%
202331	48	231	202	194	77	53	757	45846	1.65%
202332	33	120	261	224	84	46	735	44202	1.66%
202333	32	147	393	232	76	45	893	42392	2.11%
202334	33	226	708	238	92	64	1328	50509	2.63%
202335	47	308	1174	408	130	78	2098	54144	3.87%
202336	47	279	777	288	106	77	1527	38972	3.92%
202337	47	308	788	327	132	55	1610	51067	3.15%
202338	44	231	542	199	66	48	1086	47575	2.28%

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+			
202339	45	273	692	291	91	50	1397	51997	2.69%

Figure 4: Percentage of Visits Due to Influenza-like Illness Reported by Texas ILINet Participants, 2019–2023 Seasons



Note: The 2020-2021 Flu Season contains MMWR week 202053. For graphical display compatibility with seasons containing 52 weeks, average values were generated using MMWR week 52 and 1 for Seasons: 2019-2020, 2021-2022, and 2022-23.

Reports from Health Service Regions

Reports were received from eight Health Service Regions (HSRs) during week 39.

Table 7: Influenza Activity compared to week 38 by Health Service Region (HSR)

Influenza Activity Comparison	
Increased	4/5N, 5/6S, 7, 8, 11
Same	2/3
Decreased	1, 9/10
Unsure	

Variant Influenza Viruses

No variant or novel influenza viruses have been detected in Texas during the 2022-2023 season.

Institutional Outbreaks and School Closures

Two newly identified respiratory disease outbreaks were reported for week 39. The first outbreak occurred in a school facility located in Public Health Region (PHR) 11, currently identified as an influenza-like illness outbreak. Confirmatory testing is pending to identify the causative agent of the illnesses. Nine students and 2 staff members were reported as ill in relation to the outbreak. The second outbreak has been associated with RSV and was reported in a daycare facility located in PHR 7. 13 cases have tested positive for RSV another 29 have influenza like illness symptoms with no confirmatory testing. 2 of the RSV cases have been hospitalized. Control measures have been implemented by health jurisdictions and guidance provided.

P&I Mortality Surveillance Data

*Deaths due to COVID-19 may be classified as pneumonia deaths or influenza deaths (deaths due to “flu” or “flu-like illness”) in the absence of positive SARS-CoV-2 test results. Pneumonia and influenza (P&I) death data are obtained from death certificates of Texas residents whose underlying or contributing cause(s) of death is reported as pneumonia or influenza. P&I deaths are identified based on ICD-10 multiple cause of death codes. P&I deaths are based on ICD-10 pneumonia and influenza mortality codes

Ten thousand four hundred and twelve (10412) P&I deaths have been reported in Texas during the 2022-2023 influenza season.

Table 8: Texas P&I Deaths Occurring October 2, 2022– September 30, 2023, by Age

Age Category (years)	Number of P&I Deaths ⁺	Mortality Rate (per 100,000)
0 - 4	58	2.63
5 - 17	37	0.67
18 - 49	745	5.42
50 - 64	1838	34.93
65 +	7734	175.35
Overall	10412	33.4

*NOTE: Data are provisional and subject to change, errors, and duplicates

** If the cell count is less than 10, the number of P&I deaths is suppressed and <10 is written in the cell.

Table 9: Texas P&I Deaths Occurring October 2, 2022– September 30, 2023, by Health Service Region (HSR)

HSR	Number of P&I Deaths ⁺	Mortality Rate (per 100,000)
1	378	39.35
2/3	2834	32.14
4/5N	844	54.28
6/5S	2573	29.71
7	1174	33.21
8	1119	26.5
9/10	536	51.3
11	948	39.9
Unknown	6	-
Overall	10412	33.4

*NOTE: Data are provisional and subject to change, errors, and duplicates

** If the cell count is less than 10, the number of P&I deaths is suppressed and <10 is written in the cell.

Influenza-Associated Pediatric Mortality

No influenza-associated pediatric mortalities were reported in week 39.

Twelve influenza-associated pediatric mortalities have been reported in Texas during the 2022-2023 influenza season. Cases of influenza-associated pediatric mortality (children <18 years of age) are reportable year-round by law in Texas.

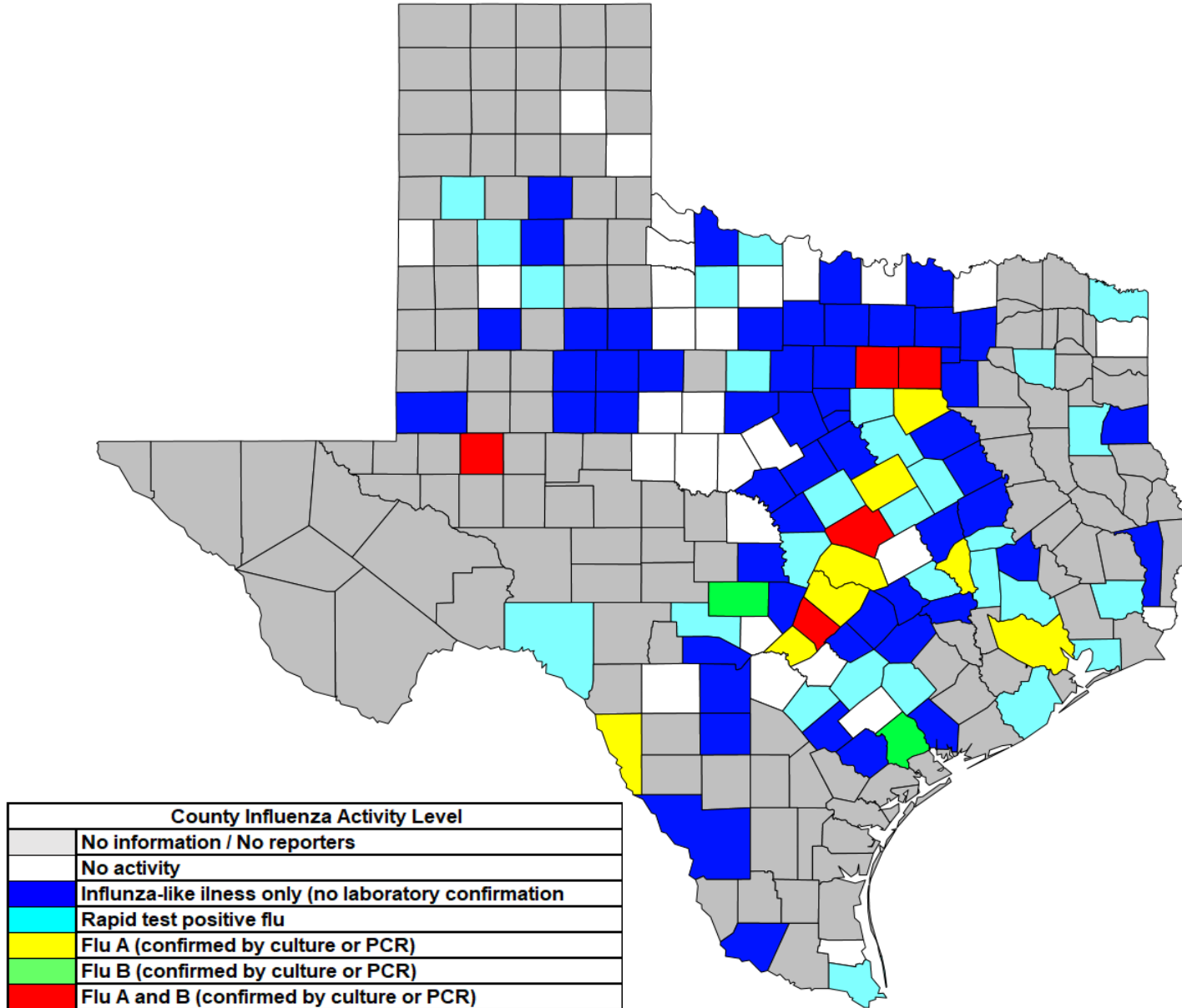
Table 10: Influenza-Associated Pediatric Deaths Reported in Texas during the 2022-2023 Season

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
2022							
October	0	2	0	1	0	0	3
November	0	2	1	0	0	0	3
December	0	2	2	0	0	0	4
2023							
January	0	0	0	0	0	0	0
February	0	0	0	1	0	0	1
March	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0
May	1	0	0	0	0	0	1
June	0	0	0	0	0	0	0
July	0	0	0	0	0	0	0
August	0	0	0	0	0	0	0
September	0	0	0	0	0	0	0
Total*	1	6	3	2	0	0	12

*Total count of typed cases may be adjusted as lab testing and case investigations are completed.

Statewide Influenza Activity Map

Figure 5: Texas Map Displaying the Highest Level of Influenza or ILI Activity Reported by County for the Week Ending September 30, 2023 (MMWR Week 39)



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.

ILI activity

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

Outbreaks

Healthcare, schools, childcare, and correctional 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. Delays inherent in death reporting and coding practices may cause the number of reported P&I deaths to vary considerably each week.

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 influenza viruses: <http://www.cdc.gov/flu/swineflu/variant.htm>

Avian influenza viruses: <http://www.cdc.gov/flu/avianflu/index.htm>

Swine influenza viruses: <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/>