

Texas Influenza Surveillance Report 2021-2022 Season/ 2022 MMWR Week 21

(May 22, 2022 – May 28, 2022)
Report produced on 6/3/2022

Summary

*Please note, some aspects of influenza surveillance may be affected by current COVID-19 response activities. For information about COVID-19 in Texas, please visit www.dshs.texas.gov/coronavirus.

Due to ongoing flu activity, the flu report in its entirety, will be continued into the summer season in place of the scaled down summer flu reports usually provided. Compared to the previous week, the percentage of specimens testing positive for influenza reported by hospital laboratories has decreased. The percentage of patient visits due to influenza-like illness (ILI) has increased. No influenza-associated pediatric deaths were reported. No influenza-associated institutional outbreaks or school closures were reported.

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)	No change	Minimal	Minimal	-
Percentage of specimens positive for influenza by hospital laboratories	▼ 1.94%	3.67%	5.61%	1
Percentage of visits due to ILI (ILINet)	▲ 0.14%	2.10%	2.24%	4
Number of regions reporting increased flu/ILI activity	▼ 3	0	3	6
Number of regions reporting decreased flu/ILI activity	▲ 3	5	2	6
Number of variant/novel influenza infections	No cases reported	0	0	6
Number of ILI/influenza outbreaks	No change	0	0	6
Number of pediatric influenza deaths	No change	0	0	7

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 21	Season to Date Week Ending: May 28, 2022
Number of labs reporting flu tests	20	
Number of specimens tested	3683	261328
Number of positive specimens (%) [†]	135 (3.67%)	20802 (7.96%)
Percentage of total tests that were antigen detection tests	20.42%	
Positive specimens by type/subtype [n (%)]		
Influenza A	125 (92.59%)	20237 (97.28%)
Subtyping performed	22 (17.60%)	2421 (11.96%)
A (H1N1)	0 (0.00%)	24 (0.99%)
A (H3N2)	22 (100.00%)	2397 (99.01%)
Subtyping not performed	103 (82.40%)	17816 (88.04%)
Influenza B	10 (7.41%)	565 (2.72%)

Figure 1: Number and Percentage of Tests (Antigen, Culture, PCR) Positive for Influenza by Type and Subtype Reported by Texas Hospital Laboratories, 2021-2022 Season

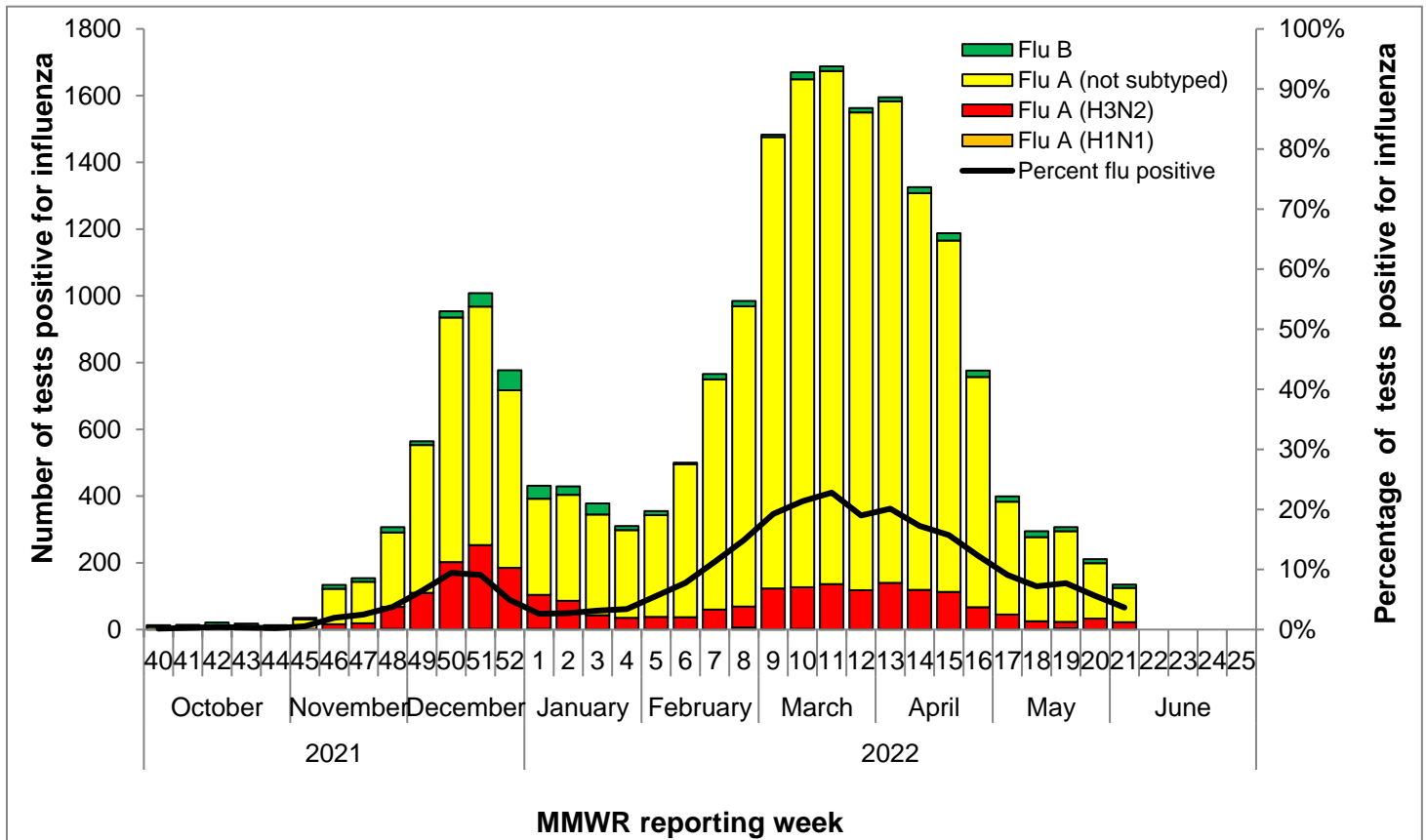
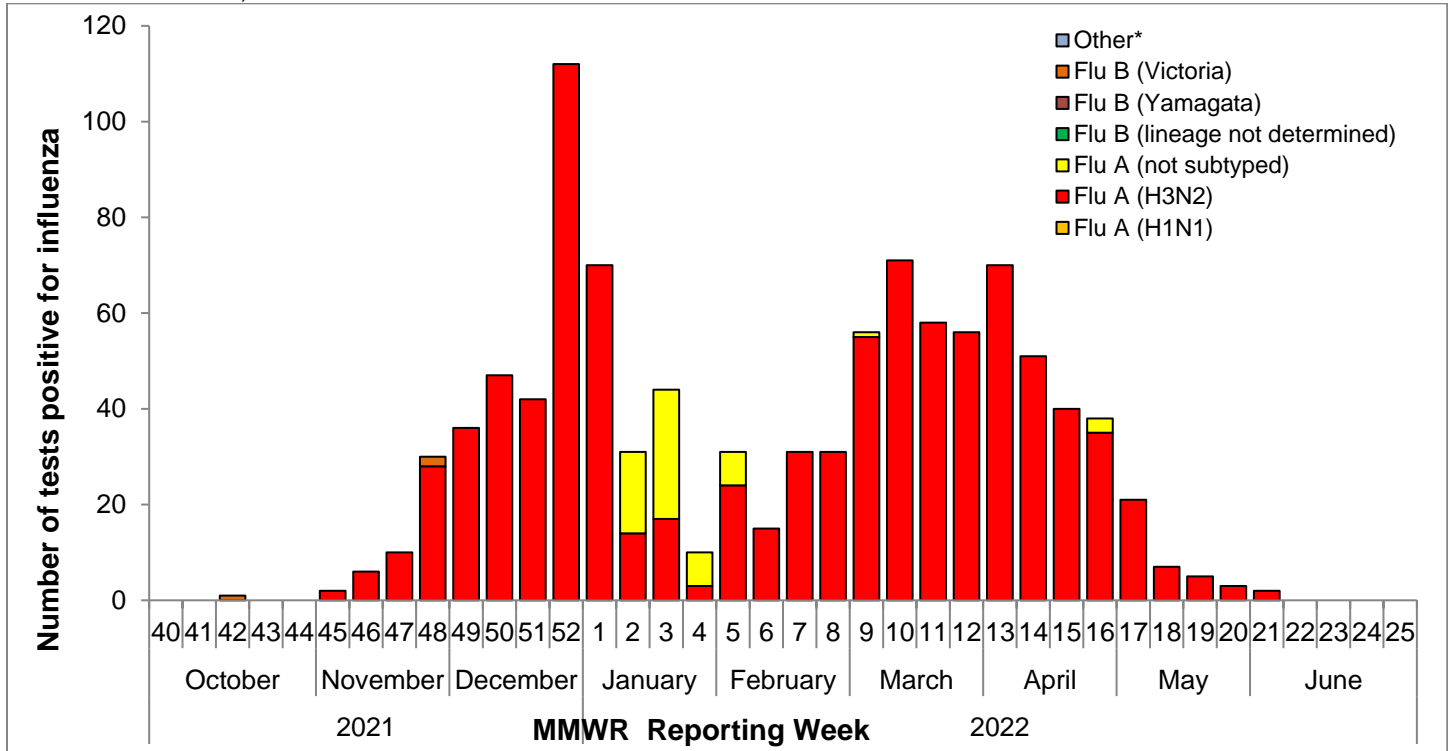


Table 3: Influenza Testing Performed by Texas Public Health Laboratories for the Current Week

	Week 21	Season to Date Week Ending: May 28, 2022
Number of labs reporting flu tests	1	
Number of specimens tested	20	15476
Number of positive specimens (%) [†]	2 (10.00%)	1027 (6.64%)
Positive specimens by type/subtype/lineage [n (%)]		
Influenza A	2 (100.00%)	1024 (99.71%)
Subtyping performed	2 (100.00%)	962 (93.95%)
A (H1N1)	0 (0.00%)	0 (0.00%)
A (H3N2)	2 (100.00%)	962 (100.00%)
Subtyping not performed	0 (0.00%)	62 (6.05%)
Influenza B	0 (0.00%)	3 (0.29%)
Lineage testing performed	0 (0.00%)	3 (100.00%)
B/Victoria	0 (0.00%)	3 (100.00%)
B/Yamagata	0 (0.00%)	0 (0.00%)
Lineage testing not performed	0 (0.00%)	0 (0.00%)
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))

Figure 2: Number of Tests (PCR) Positive for Influenza by Type, Subtype, and Lineage Reported by Texas Public Health Laboratories, 2021-2022 Season



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

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)	14	1810	73	4.03%
HMPV	13	1792	31	1.73%
Parainfluenza virus	14	1810	128	7.07%
Rhino/enterovirus	13	1802	404	22.42%
RSV ^{†^}	20	2916	176	6.04%
Seasonal coronavirus (does not include MERS-CoV or COVID-19)	13	1795	44	2.45%

[†]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>.

Antigenic Characterization

No antigenic characterization data for Texas specimens are currently available. The DSHS Laboratory sends a representative sample of influenza viruses to the CDC throughout the flu season.

Antiviral Resistance

No antiviral resistance testing data for Texas specimens are available presently.

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

Table 6: Texas ILINet Reporting and Patient Visit Summary for the Current Week

Week 21	
Number of providers reporting	69
Number of providers reporting patient visits	67
Number (%) of providers with at least one ILI case	58 (86.57%)
Percentage of all visits due to ILI	2.10%
Texas ILINet baseline [‡] , 2021-2022	4.57%

[‡]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 2021-2022 Season has changed to 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 7: Percentage of Visits for Influenza-like Illness Reported by Texas ILINet Providers (as of 6/2/2022 9:30 AM)

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+			
202140	76	452	490	223	77	41	1283	53474	2.40%
202141	72	392	429	206	80	50	1157	52473	2.20%
202142	77	417	442	179	76	36	1150	51810	2.22%
202143	60	446	421	140	41	41	1089	47456	2.29%
202144	72	452	549	188	61	40	1290	51930	2.48%
202145	74	486	633	198	66	60	1443	56512	2.55%
202146	73	563	874	231	88	55	1811	53435	3.39%
202147	71	559	470	234	90	51	1404	44711	3.14%
202148	73	426	536	228	84	57	1331	53354	2.49%
202149	74	544	673	243	105	98	1663	54075	3.08%
202150	71	538	746	347	119	83	1833	49403	3.71%
202151	75	611	603	374	114	99	1801	48133	3.74%
202152	67	1001	873	919	389	196	3378	63588	5.31%
202201	69	745	1247	1032	353	152	3529	59690	5.91%
202202	74	594	1364	906	336	213	3413	59275	5.76%
202203	73	491	891	689	249	171	2491	51241	4.86%
202204	72	377	622	390	166	111	1666	49631	3.36%
202205	69	249	426	195	79	74	1023	40096	2.55%
202206	74	242	403	216	68	72	1001	45228	2.21%
202207	72	329	549	207	64	50	1199	47969	2.50%
202208	74	300	594	199	64	49	1206	48068	2.51%
202209	69	310	755	246	69	45	1425	46118	3.09%
202210	68	384	820	267	84	55	1610	48820	3.30%
202211	69	439	609	374	91	62	1575	48785	3.23%
202212	69	379	724	294	81	56	1534	50888	3.01%
202213	70	370	794	281	88	54	1587	54598	2.91%
202214	77	379	709	283	70	41	1482	59668	2.48%
202215	76	367	674	210	84	48	1383	57606	2.40%
202216	75	388	641	232	70	50	1381	57503	2.40%
202217	73	678	890	361	123	91	2143	92500	2.32%
202218	74	378	592	237	65	52	1324	58277	2.27%
202219	74	676	841	360	85	86	2048	88011	2.33%
202220	73	477	551	224	75	50	1377	61457	2.24%

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+			
202221	69	806	703	335	92	67	2003	95547	2.10%

Figure 3: Percentage of Visits Due to Influenza-like Illness Reported by Texas ILINet Participants, 2021-2022 Season

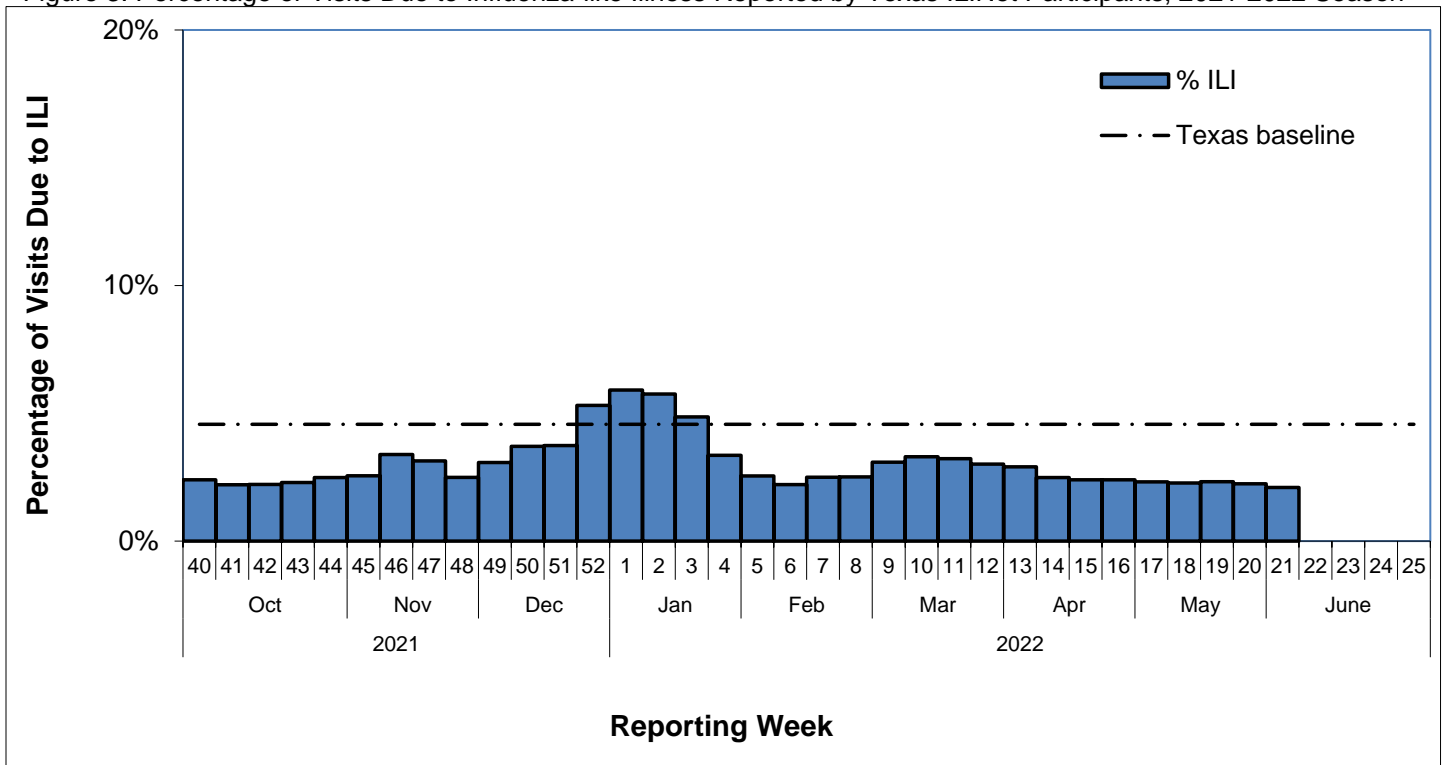
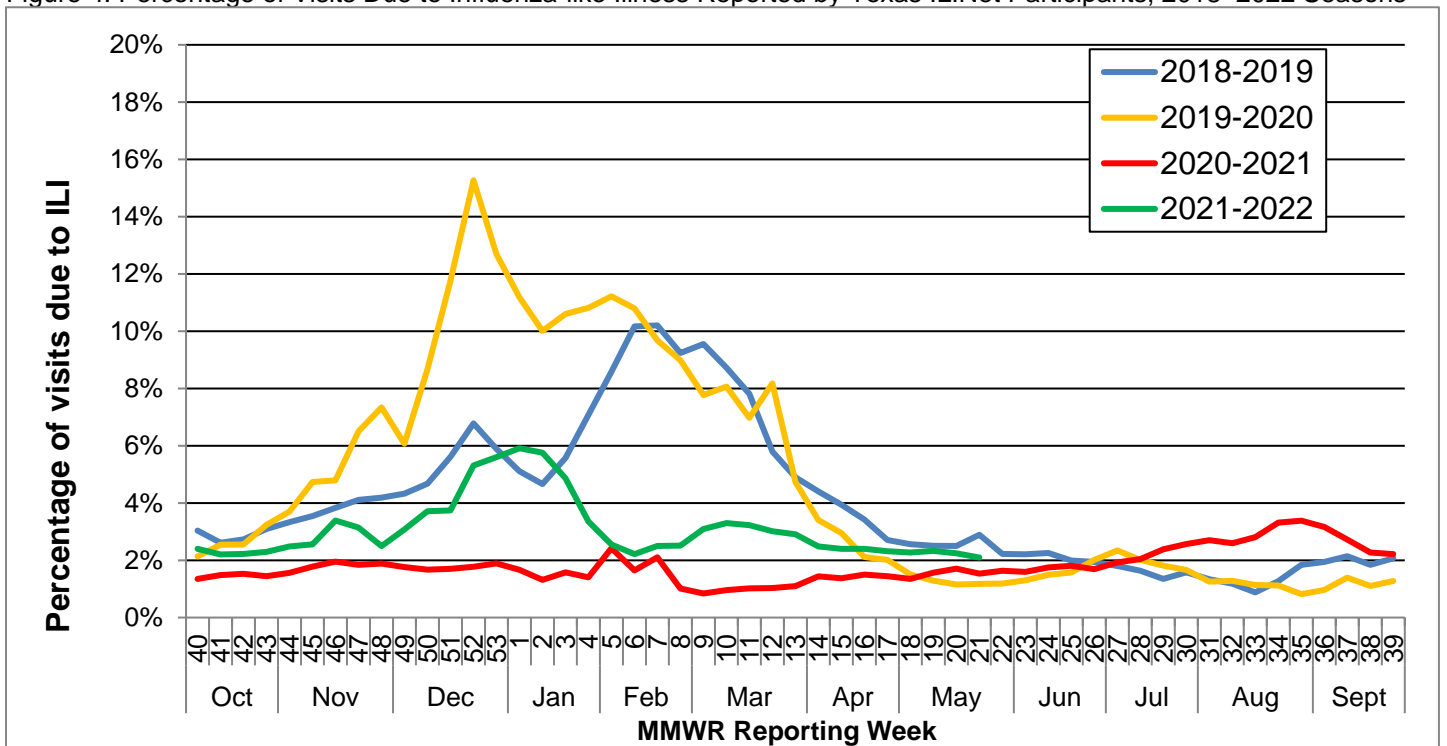


Figure 4: Percentage of Visits Due to Influenza-like Illness Reported by Texas ILINet Participants, 2018–2022 Seasons



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: 2018-2019, 2019-2020, and 2021-2022.

Reports from Health Service Regions

Reports were received from six Health Service Regions (HSRs) during week 21.

Table 8: Influenza Activity compared to week 20 by Health Service Region (HSR)

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

Variant Influenza Viruses

No variant or novel influenza viruses have been detected in Texas during the 2021-2022 season.

Institutional Outbreaks and School Closures

No outbreak was reported in week 21.

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.

Six thousand two hundred and twenty (6,220) P&I deaths have been reported in Texas during the 2021-2022 influenza season.

Table 8: Texas P&I Deaths Occurring October 3, 2021 – May 28, 2022* by Age

Age Category (years)	Number of P&I Deaths ⁺	Mortality Rate (per 100,000)
0 - 4	26	1.19
5 - 17	15	0.27
18 - 49	423	3.13
50 - 64	1093	20.92
65 +	4663	109.99
Overall	6220	20.28

*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 3, 2021 – May 28, 2022* by Health Service Region (HSR)

HSR	Number of P&I Deaths	Mortality Rate (per 100,000)
1	265	27.94
2/3	1777	19.89
4/5N	590	38.00
6/5S	1379	16.67
7	723	19.37
8	642	19.76
9/10	331	21.36
11	511	21.73
Unknown	2	-
Overall	6220	20.28

*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 deaths were reported during week 21.

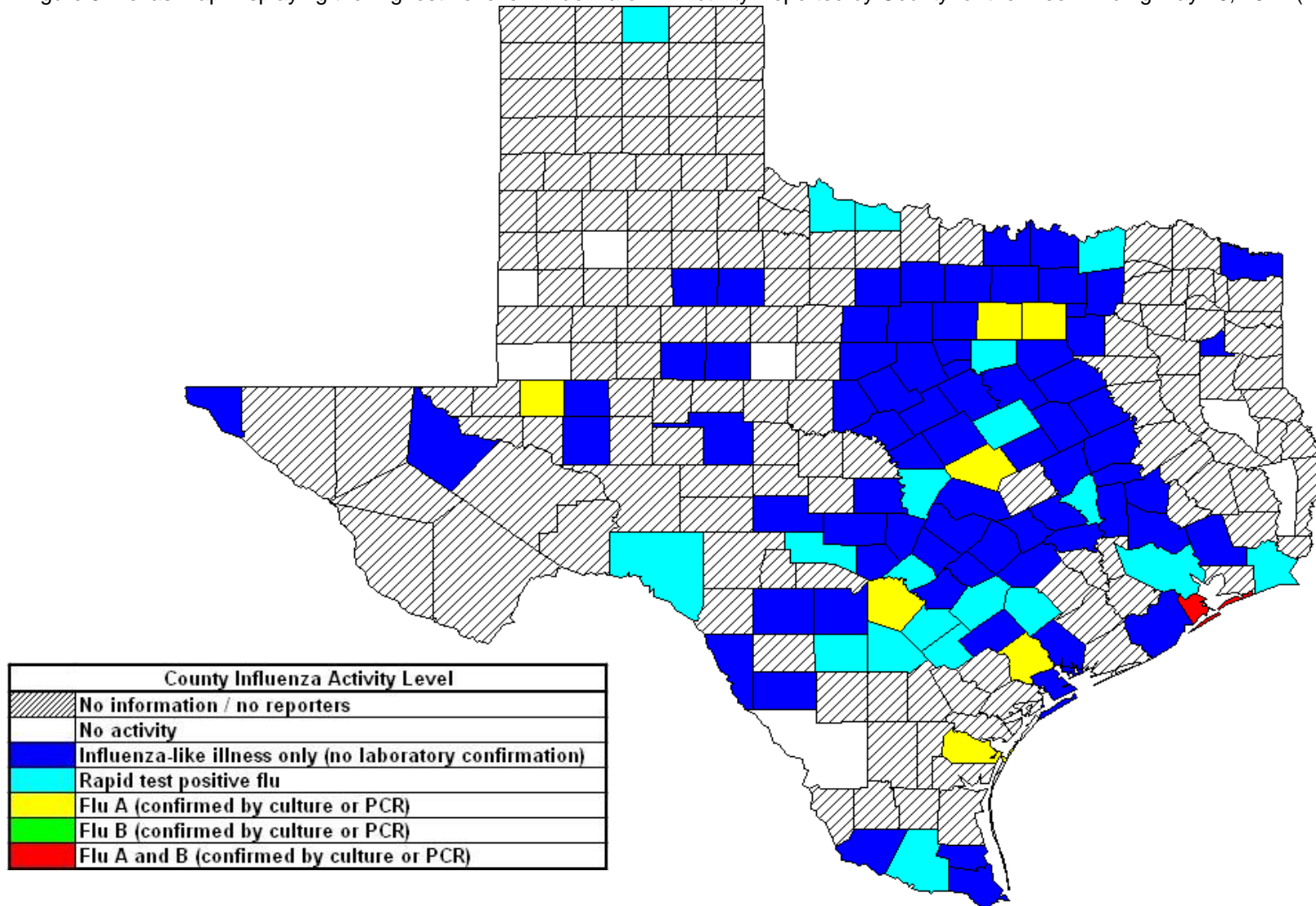
No influenza-associated pediatric mortalities have been reported in Texas during the 2021-2022 influenza season. Cases of influenza-associated pediatric mortality (children <18 years of age) are reportable year-round by law in Texas.

Table 10: Influenza-Associated Pediatric Deaths Reported in Texas during the 2021-2022 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
2021							
October	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0
2022							
January	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0
March	0	0	0	0	0	0	0
April	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0

Statewide Influenza Activity Map

Figure 5: Texas Map Displaying the Highest Level of Influenza or ILI Activity Reported by County for the Week Ending May 28, 2022 (MMWR Week 21)



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/>