

Texas Influenza Surveillance Report 2020-2021 Season/2021 MMWR Week 09

(February 28, 2021 – March 6, 2021)
Report produced on 3/12/2021

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.

Influenza activity is low across the state of Texas. 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 decreased. 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	▼0.04%	0.07%	0.11%	1
Percentage of visits due to ILI (ILINet)	▼0.16%	0.84%	1.00%	4
Number of regions reporting increased flu/ILI activity	▼4	0	4	7
Number of regions reporting decreased flu/ILI activity	▲3	4	1	7
Number of variant/novel influenza infections	No cases reported	0	0	7
Number of ILI/influenza outbreaks	No change	0	0	7
Number of pediatric influenza deaths	No change	0	0	7

Laboratory Results

Influenza

*In response to the COVID-19, influenza testing at Texas Public Health Laboratories has significantly decreased to increase capacity for SARS-CoV-2 testing. Please note, this will affect data in Table 3 and Figure 2.

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 09	Season to Date Week Ending: March 6, 2021
Number of labs reporting flu tests	14	
Number of specimens tested	1515	54063
Number of positive specimens (%)†	1 (0.07%)	784 (1.45%)
Percentage of total tests that were antigen detection tests	13.99%	
Positive specimens by type/subtype [n (%)]		
Influenza A	0 (0.00%)	171 (21.81%)
Subtyping performed	0 (0.00%)	4 (2.34%)
A (H1N1)	0 (0.00%)	1 (25.00%)
A (H3N2)	0 (0.00%)	3 (75.00%)
Subtyping not performed	0 (0.00%)	167 (97.66%)
Influenza B	1 (100.00%)	613 (78.19%)

Figure 1: Number and Percentage of Tests (Antigen, Culture, PCR) Positive for Influenza by Type and Subtype Reported by Texas Hospital Laboratories, 2020-2021 Season

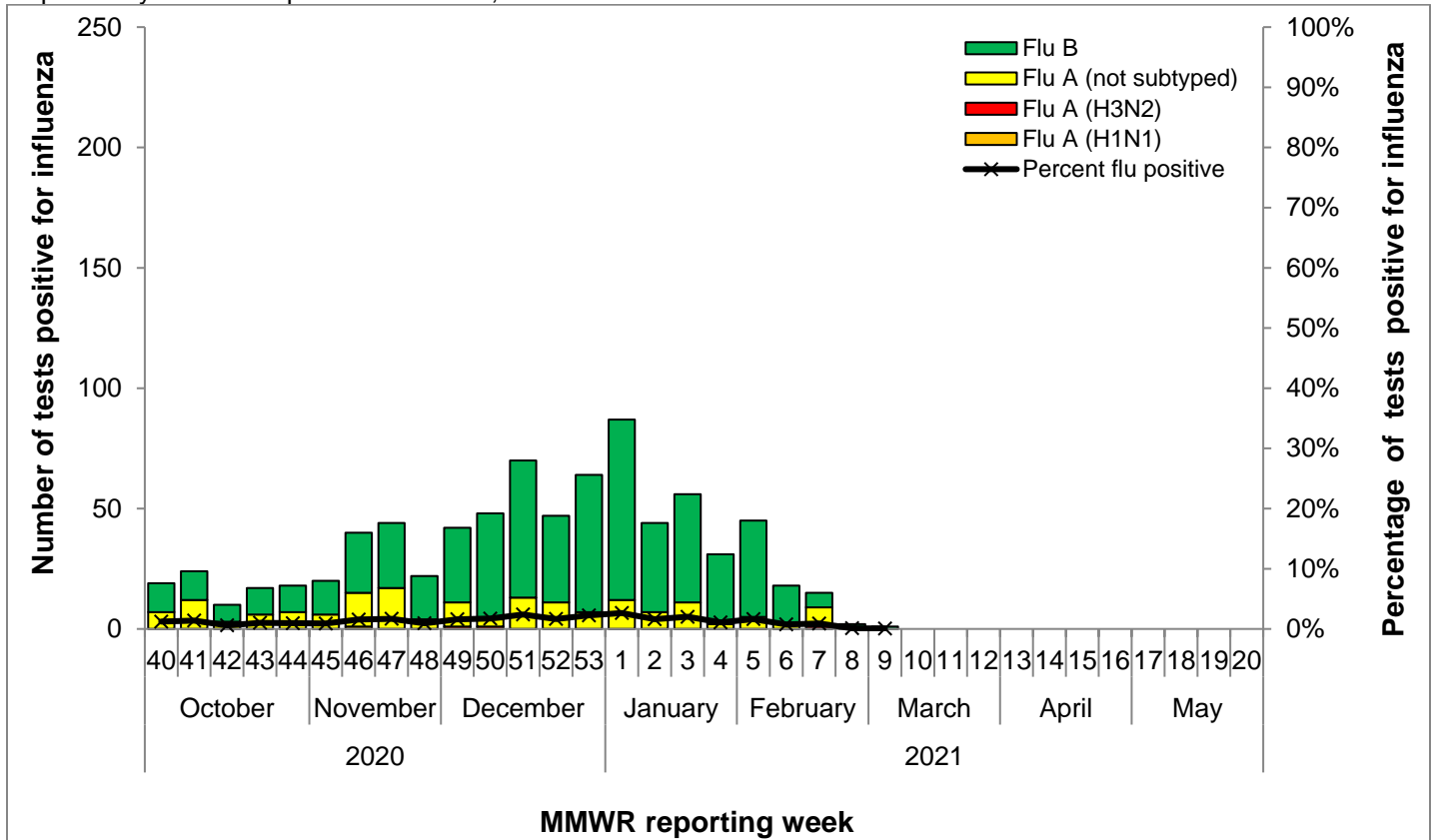
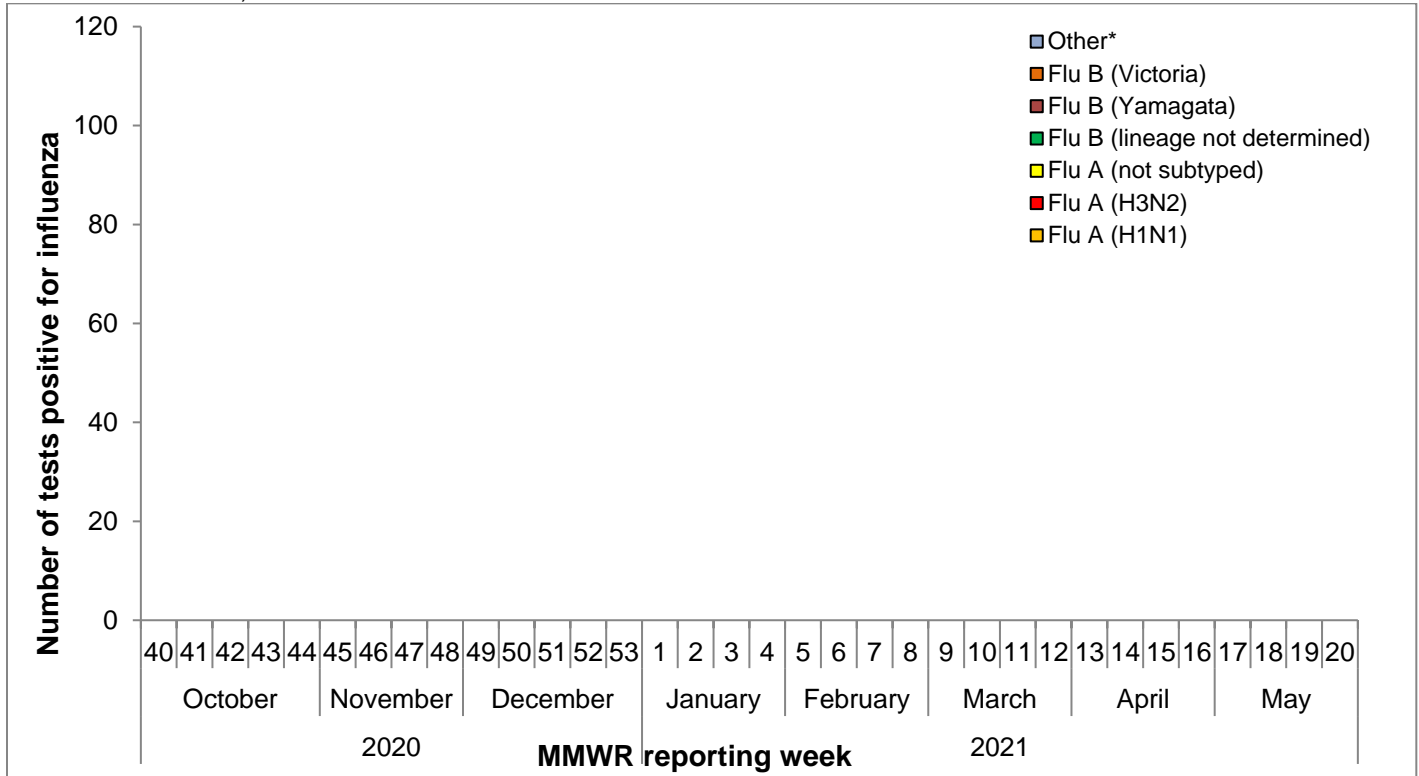


Table 3: Influenza Testing Performed by Texas Public Health Laboratories for the Current Week

	Week 09	Season to Date Week Ending: March 6, 2021
Number of labs reporting flu tests	6	
Number of specimens tested	531	6868
Number of positive specimens (%) [†]	0 (0.00%)	0 (0.00%)
Positive specimens by type/subtype/lineage [n (%)]		
Influenza A	0 (0.00%)	0 (0.00%)
Subtyping performed	0 (0.00%)	0 (0.00%)
A (H1N1)	0 (0.00%)	0 (0.00%)
A (H3N2)	0 (0.00%)	0 (0.00%)
Subtyping not performed	0 (0.00%)	0 (0.00%)
Influenza B	0 (0.00%)	0 (0.00%)
Lineage testing performed	0 (0.00%)	0 (0.00%)
B/Victoria	0 (0.00%)	0 (0.00%)
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, 2020-2021 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)	10	910	28	3.08%
HMPV	10	910	2	0.22%
Parainfluenza virus	10	907	10	1.10%
Rhino/enterovirus	9	883	191	21.63%
RSV [†]	12	1312	2	0.15%
Seasonal coronavirus (does not include MERS-CoV or COVID-19)	7	673	7	1.04%

[†]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 available at this time. 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)

* Please note, the COVID-19 pandemic is affecting healthcare seeking behavior. The number of persons and their reasons for seeking care in the outpatient and ED settings is changing. These changes impact data from ILINet in ways that are difficult to differentiate from changes in illness levels, therefore ILINet data should be interpreted with caution.

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

Week 09	
Number of providers reporting	54
Number of providers reporting patient visits	53
Number (%) of providers with at least one ILI case	42 (79.25%)
Percentage of all visits due to ILI	0.84%
Texas ILINet baseline [‡] , 2020-2021	5.26%

[‡]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

Table 7: Percentage of Visits for Influenza-like Illness Reported by Texas ILINet Providers (as of 3/11/2021 9:15 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+			
202040	62	97	203	158	69	38	565	41631	1.36%
202041	76	108	219	230	116	68	741	49803	1.49%
202042	74	138	218	227	104	58	745	48710	1.53%
202043	61	107	201	176	74	46	604	42181	1.43%
202044	74	120	204	244	99	53	720	45952	1.57%
202045	79	141	269	320	109	65	904	50472	1.79%
202046	76	154	286	352	146	99	1037	52881	1.96%
202047	75	140	256	328	130	82	936	50598	1.85%
202048	78	96	206	281	145	73	801	42406	1.89%
202049	69	127	208	284	108	67	794	44938	1.77%
202050	78	123	201	290	122	98	834	49588	1.68%
202051	63	122	166	202	87	59	636	37340	1.70%
202052	75	114	143	256	122	87	722	40748	1.77%
202053	64	116	146	258	115	104	739	38974	1.90%
202101	77	125	194	303	178	72	872	52068	1.67%
202102	64	111	124	159	82	63	539	40669	1.33%
202103	75	112	203	258	126	67	766	48355	1.58%
202104	73	87	175	199	86	47	594	42130	1.41%
202105	78	146	357	433	166	50	1152	45900	2.51%
202106	37	37	62	31	18	2	150	8046	1.86%
202107	37	11	6	14	6	7	44	2042	2.15%
202108	56	113	128	96	38	25	400	40152	1.00%
202109	54	71	110	89	34	24	328	39269	0.84%

Figure 3: Percentage of Visits Due to Influenza-like Illness Reported by Texas ILINet Participants, 2020-2021 Season

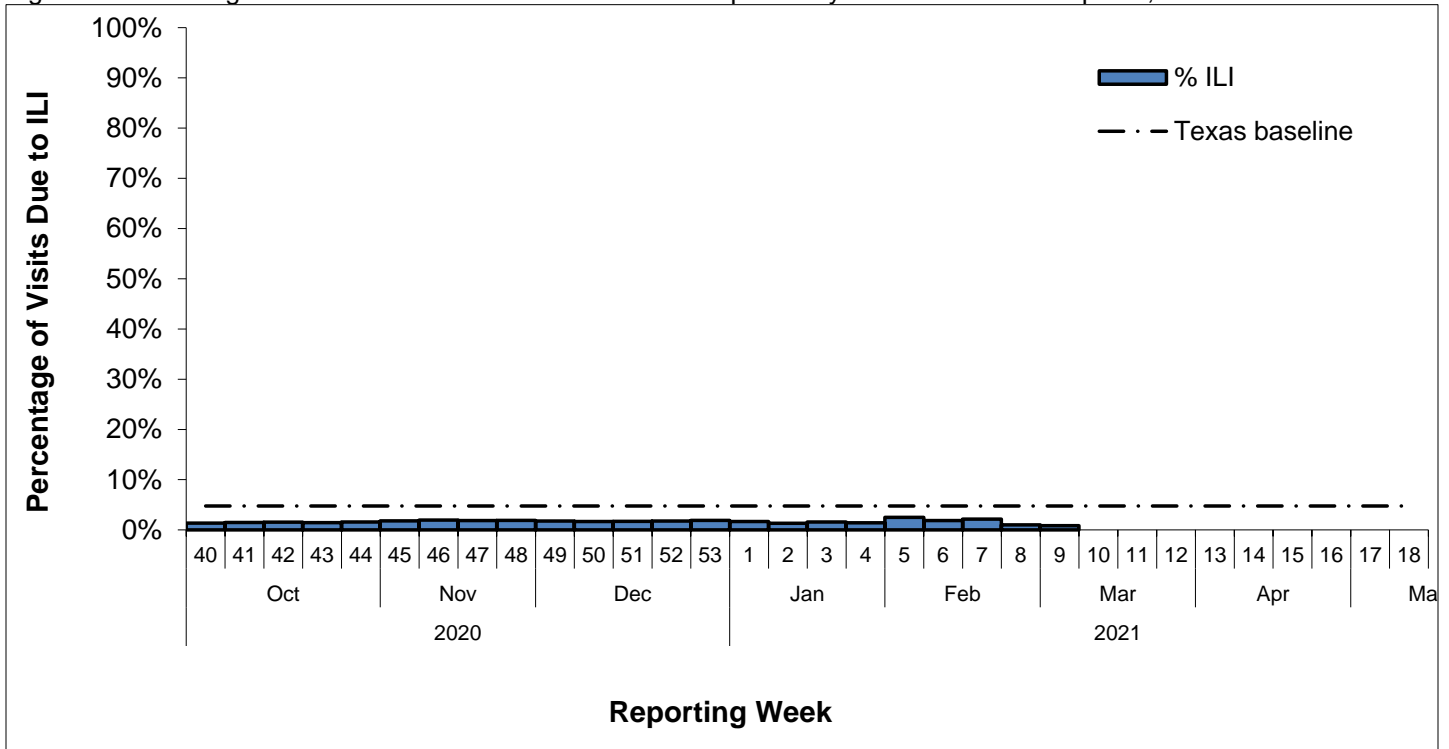
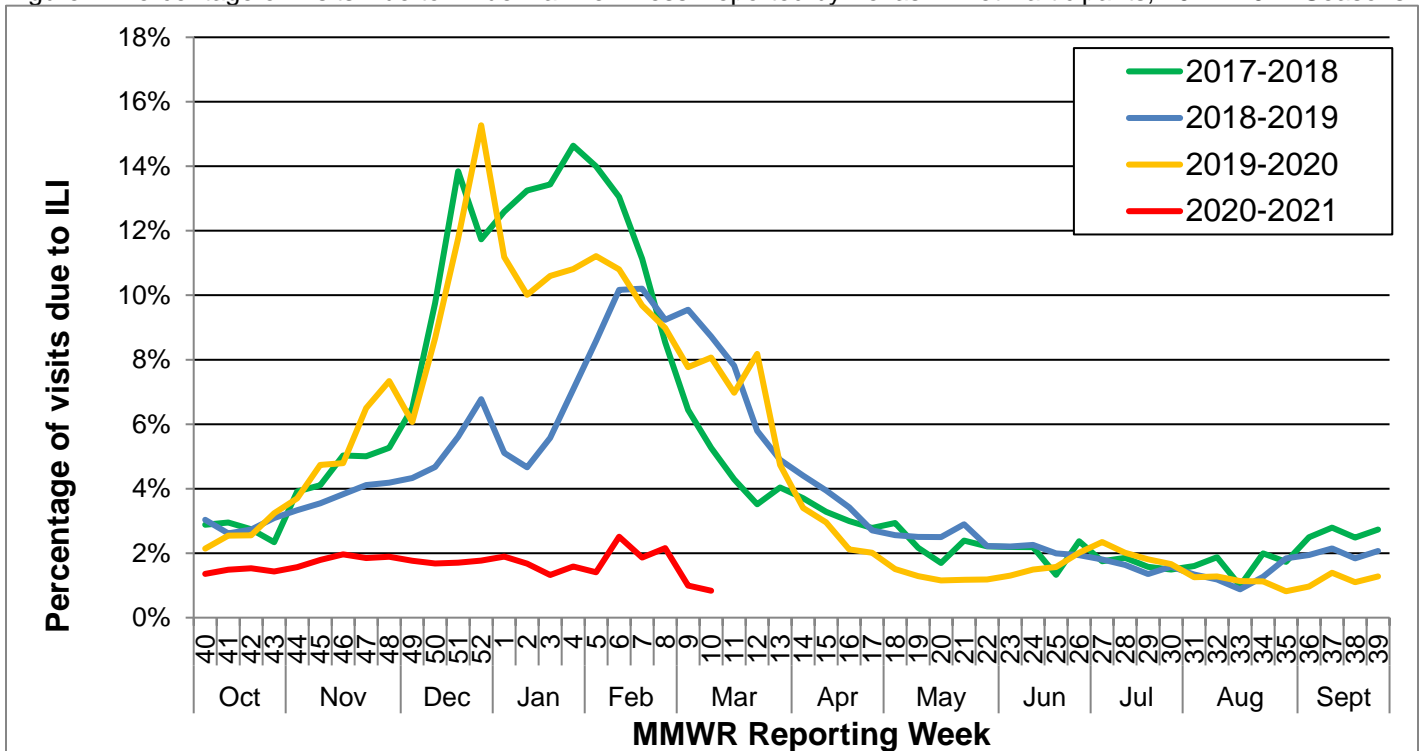


Figure 4: Percentage of Visits Due to Influenza-like Illness Reported by Texas ILINet Participants, 2017–2021 Seasons



Note: The 2020-2021 Flu Season contains a plot for week 202053 even though week202053 is not shown in the Horizontal Axis for graphical display compatibility with seasons containing 52 weeks.

Reports from Health Service Regions

Reports were received from seven Health Service Regions (HSRs) during week 09.

Table 8: Influenza Activity Compared to week 08 by Health Service Region (HSR)

Influenza Activity Comparison	Health Service Region (HSR)
Increased	
Same	2/3 and 11
Decreased	4/5N, 6/5S, 7, 8, and 9/10
Unsure	

Variant Influenza Viruses

No variant or novel influenza viruses have been detected in Texas during the 2020-2021 season.

Institutional Outbreaks and School Closures

No institutional outbreaks or school closures were reported in week 09 during the 2020-2021 season.

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.

Four thousand one hundred and two (4,102) P&I deaths have been reported in Texas during the 2020-2021 influenza season.

Table 8: Texas P&I Deaths Occurring September 27, 2020 – March 06, 2021* by Age

Age Category (years)	Number of P&I Deaths ⁺	Mortality Rate (per 100,000)
0 - 4	<10	0.28
5 - 17	<10	5.38
18 - 49	250	1.85
50 - 64	703	13.34
65 +	3140	78.22
Overall	4,102	13.43

*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 September 27, 2020 – March 06, 2021* by Health Service Region (HSR)

HSR	Number of P&I Deaths	Mortality Rate (per 100,000)
1	152	16.13
2/3	1201	13.58
4/5N	372	22.46
6/5S	940	11.74
7	425	11.31
8	405	12.86
9/10	229	14.11
11	378	14.76
Unknown	0	0
Overall	4102	13.43

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

Influenza-Associated Pediatric Mortality

No influenza-associated pediatric deaths were reported during week 08.

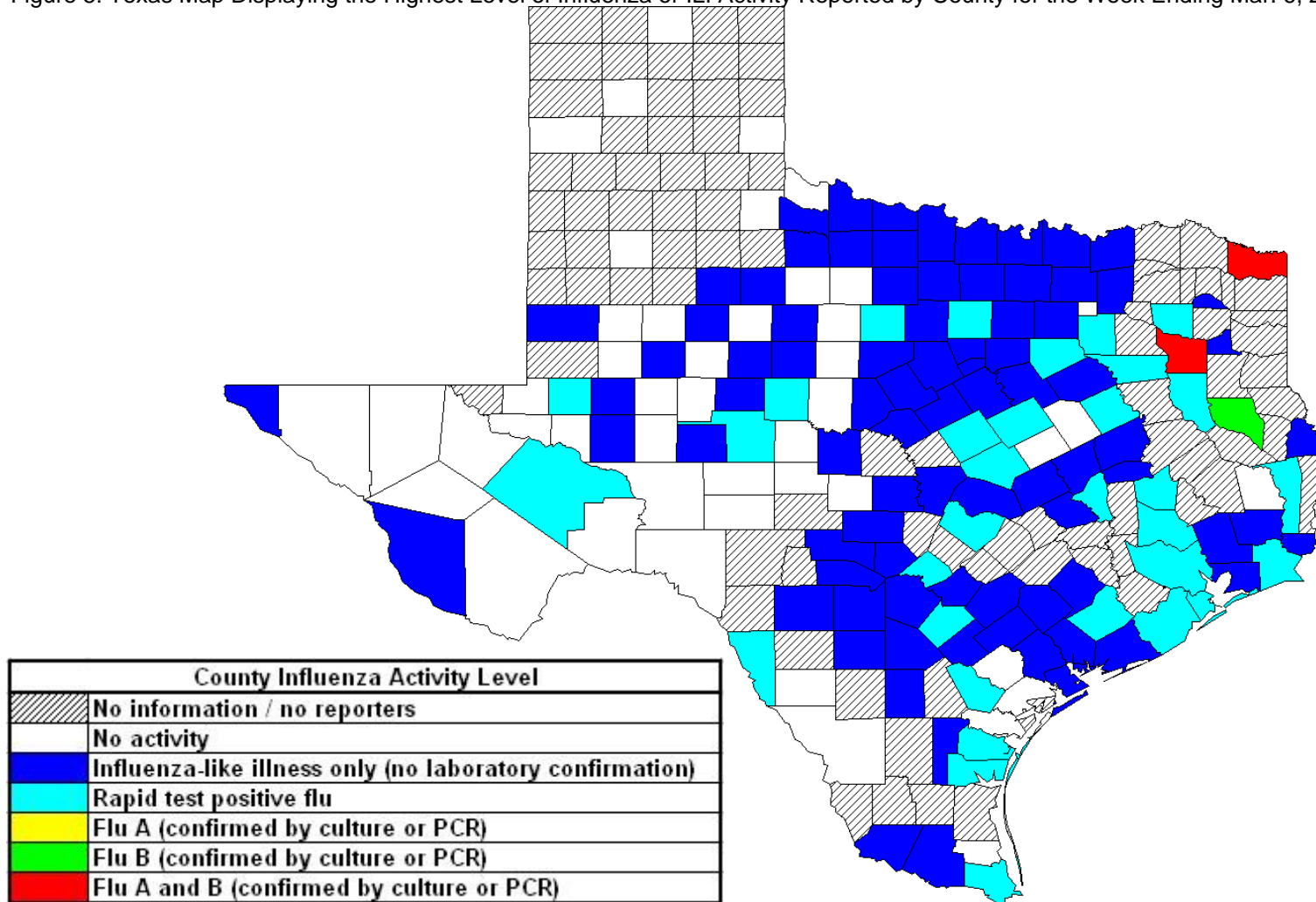
No influenza-associated pediatric mortalities have been reported in Texas during the 2020-2021 influenza season. Cases of influenza-associated pediatric mortality (children <18 years of age) are reportable year-round by law in Texas.

Table 10: Influenza-Associated Pediatric Deaths Reported in Texas during the 2020-2021 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
2020							
October	0	0	0	0	0	0	0
November	0	0	0	0	0	0	0
December	0	0	0	0	0	0	0
January	0	0	0	0	0	0	0
February	0	0	0	0	0	0	0
March	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 Mar. 6, 2021 (MMWR Week 09)



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/>