

Bexar County Influenza Surveillance Report, 2019-2020 Season; 2020 MMWR Week 1
(December 29, 2019 – January 4, 2020)

Summary

Influenza activity is widespread in San Antonio and Bexar County. Compared to the previous week, the percentage of patient visits due to influenza-like illness (ILI) decreased and there was a decrease in reports of specimens testing positive for influenza by the public health and hospital laboratories. There were zero pediatric deaths reported this week; one pediatric death has been reported this season. No outbreaks associated with flu were reported this week; four flu-associated outbreaks have been reported for the season.

Table 1: Summary of Recent Bexar County Influenza and Influenza-like Illness (ILI) Activity

	Percent Change from Previous Week	Current Week 1	Previous Week 52	Data Cumulative since September 29, 2019 (Week 40)
Percentage of specimens positive for influenza by hospitals and public health laboratory	↓36.1%	29.2%	45.7%	19.8%
Percentage of visits due to ILI ⁺	↓50.7%	10.6%	21.5%	4.0%
Number of variant/novel influenza infections	No Change	0	0	0
Number of pediatric influenza deaths	No Change	0	0	1
Influenza activity code ⁺⁺	No Change	Widespread	Widespread	N/A

Note: Data included in this table have been updated since last week's flu report with any new reports received.

⁺Based on ILINet data

⁺⁺Based on ESSENCE data

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

Information on patient visits to health care providers for influenza-like illness (ILI) is collected throughout Bexar County. Health care providers voluntarily report this information to ILINet.

Figure 1: Percentage of Visits Due to ILI Reported by Bexar County ILINet Participants 2016-2020 Seasons

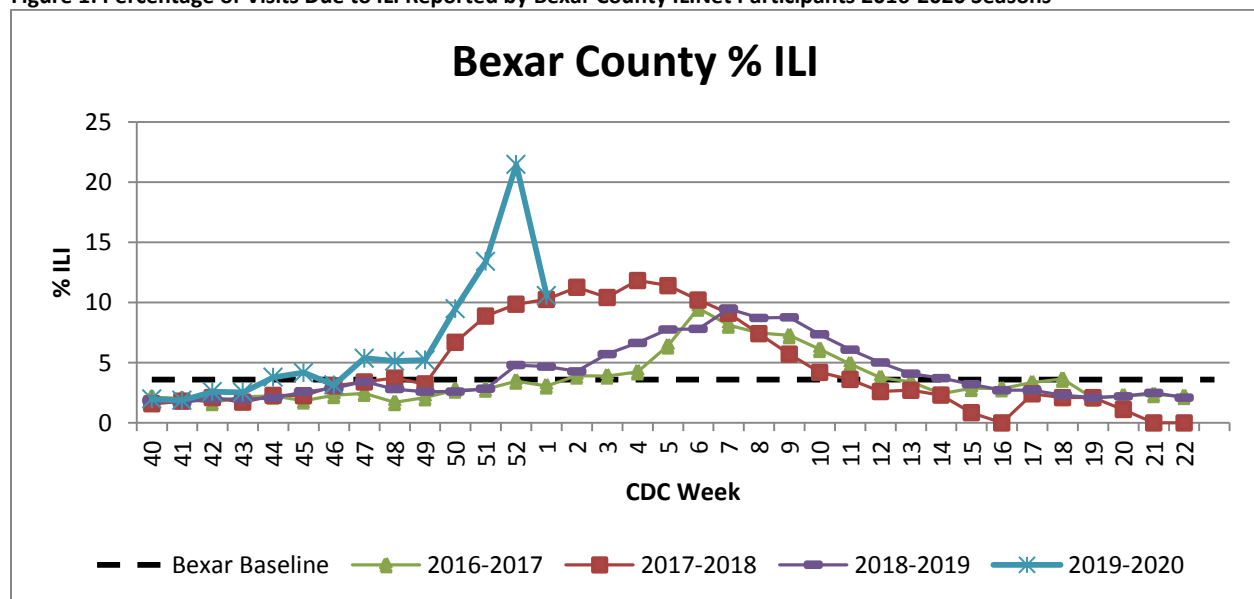
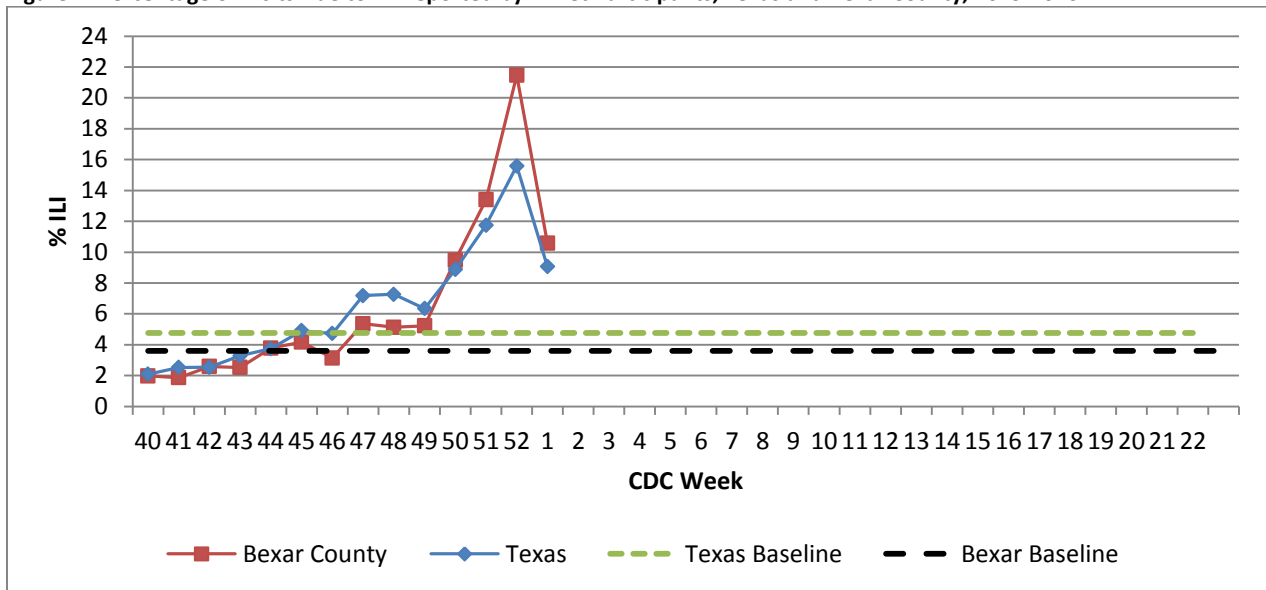


Figure 2: Percentage of Visits Due to ILI Reported by ILINet Participants, Texas and Bexar County, 2019-2020



Laboratory Results

Hospital and Public Health Laboratory Testing

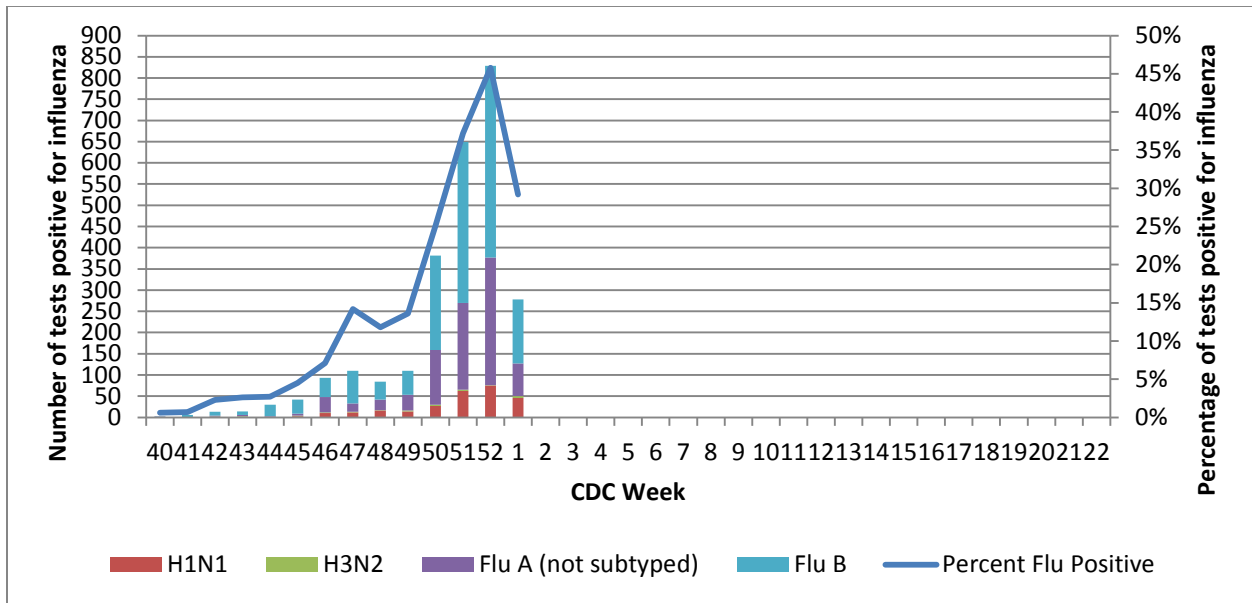
Hospital laboratories voluntarily report influenza tests (antigen, culture, and PCR) to the National Respiratory and Enteric Virus Surveillance System (NREVSS). Providers throughout Bexar County also submit specimens for influenza testing (PCR) to the San Antonio Metropolitan Health District’s (Metro Health) public health laboratory. The results reported by Texas NREVSS participants and Metro Health for the current week are summarized in the table below.

Table 2: Influenza testing performed in Bexar County for the Current and Previous Week

	Current Week 1	Previous Week 52	Cumulative since September 29, 2019 (Week 40)
Number of specimens tested	953	1809	15513
Number of positive specimens (n, %)	278 (29.2%)	829 (45.8%)	3075 (19.8%)
Positive specimens by type/subtype (n, %)			
Influenza Type A	127 (45.7%)	377 (45.5%)	1312 (42.7%)
Subtyping performed	50 (39.4%)	76 (20.2%)	309 (23.6%)
H1N1	46 (92.0%)	75 (98.7%)	283 (91.6%)
H3N2	4 (8.0%)	1 (1.3%)	26 (8.4%)
Subtyping not performed	77 (60.6%)	301 (79.8%)	1003 (76.4%)
Influenza Type B	151 (54.3%)	452 (54.5%)	1763 (57.3%)

Note: Data included in this table is voluntarily submitted weekly via NREVSS and Metro Health laboratory and reporting may vary from week to week.

Figure 3: Number and Percentage of PCR Tests Positive for Influenza by Type and Subtype, Bexar County, 2019-2020



Sentinel Provider Laboratory Testing

Providers throughout Bexar County also submit influenza test results (antigen, PCR) to Metro Health on a voluntary basis. These sites are recruited to send this information on a weekly basis. The results from the participating providers are summarized in the table below (Table 3).

Table 3: Influenza testing performed by Bexar County Sentinel Providers

	Current Week 1	Previous Week 52	Cumulative since September 29, 2019 (Week 40)
Number of providers reporting flu tests	20	20	-
Number of positive specimens	936	1096	4857
Positive specimens by type/subtype (n, %)			
Influenza Type A, total	432 (46.2%)	517 (47.2%)	2174 (44.8%)
PCR	140 (32.4%)	161 (31.1%)	675 (31.0%)
Subtyping performed	65 (46.4%)	76 (47.2%)	311 (46.1%)
H1N1	61 (93.8%)	75 (98.7%)	291 (93.6%)
H3N2	4 (6.2%)	1 (1.3%)	20 (6.4%)
Subtyping not performed	75 (53.6%)	85 (52.8%)	364 (53.9%)
Antigen (rapid) test	292 (53.9%)	356 (68.9%)	1499 (69.0%)
Influenza Type B, total	504 (48.2%)	579 (62.8%)	2683 (55.2%)
PCR	154 (30.6%)	165 (28.5%)	1926 (71.8%)
Antigen (rapid) test	350 (69.4%)	414 (71.5%)	757 (28.2%)

Note: Data included in this table is voluntarily submitted weekly by our sentinel flu providers. This data may not be comparable to previous flu seasons because providers vary by year.

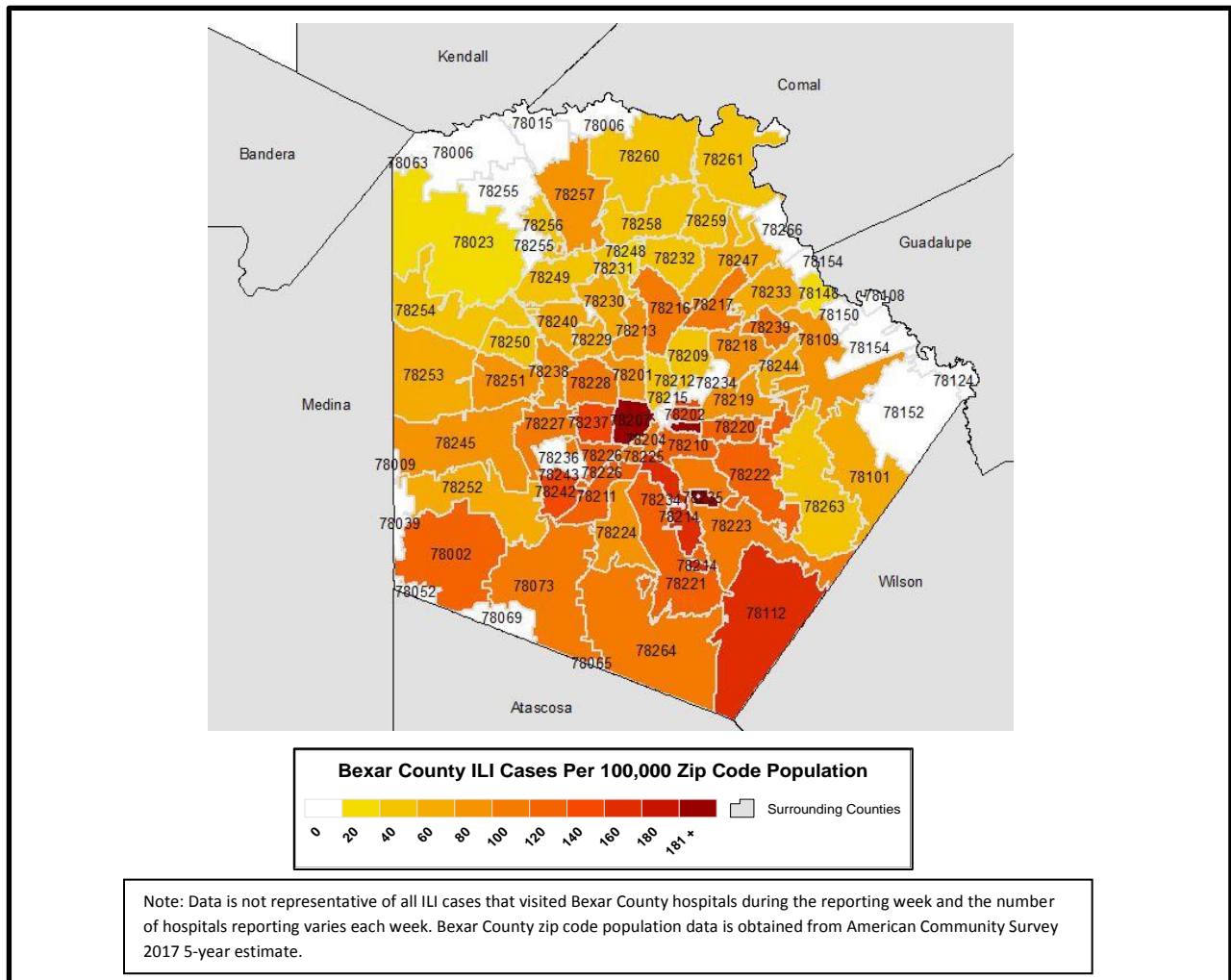
Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE)

Hospital providers throughout Bexar County voluntarily report data based on chief complaints of Influenza-like Illness (ILI) defined by influenza or fever plus cough and sore throat. Participating providers are required to report data every 24 hours.

Table 4: ILI Cases Reported by CDC ILI Age Group in ESSENCE during MMWR Week 1

CDC ILI Age Group	ILI Cases Per Age Group	ILI Percentage Per Age Group
0 – 4 Years	452	33.78%
5 – 24 Years	402	30.04%
25 – 49 Years	332	24.81%
50 – 64 Years	98	7.32%
65 +	54	4.04%

Figure 4: MMWR Week 1 ESSENCE Reported ILI Cases by Zip Code



P&I Mortality Surveillance Data

Pneumonia and influenza (P&I) death data are obtained from death certificates of Bexar County residents whose underlying or contributing cause(s) of death is reported as pneumonia or influenza.

Table 5: Bexar County P&I Deaths Occurring September 29, 2019 – January 4, 2019 by Age Group

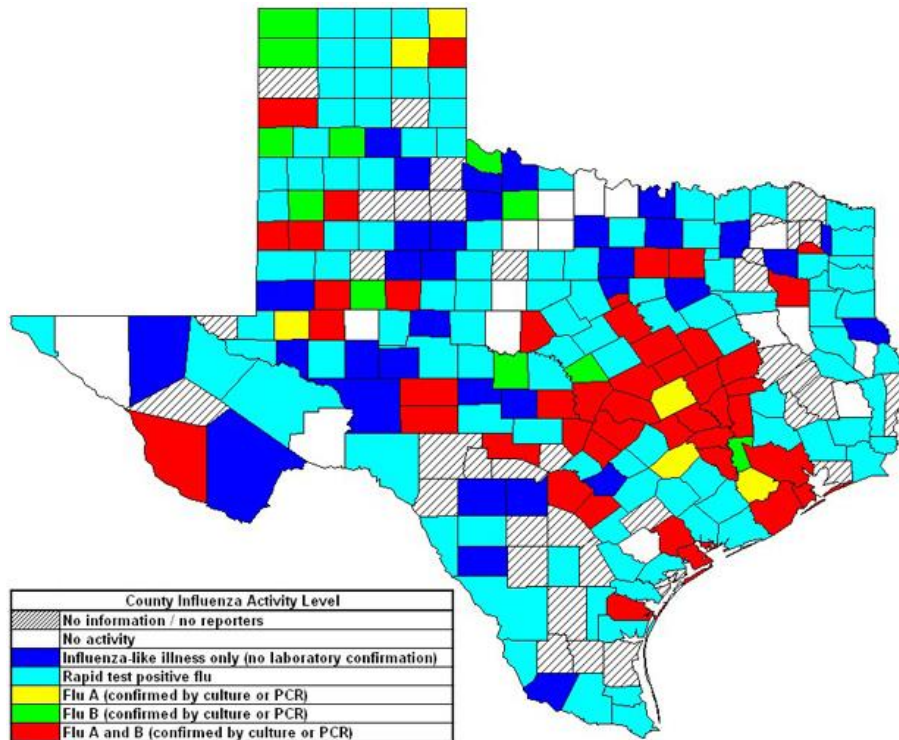
Age Category (years)	Number of P&I Deaths [†]
0-4	<10
5-17	<10
18-49	15
50-64	41
65+	156

Note: Data are provisional and subject to change, errors, and duplicates

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

Statewide Influenza Activity Map

Figure 5: Texas Map Displaying the Highest Level of Influenza or ILI Activity Reported by County for the Week Ending January 4, 2019 (MMWR Week 1)



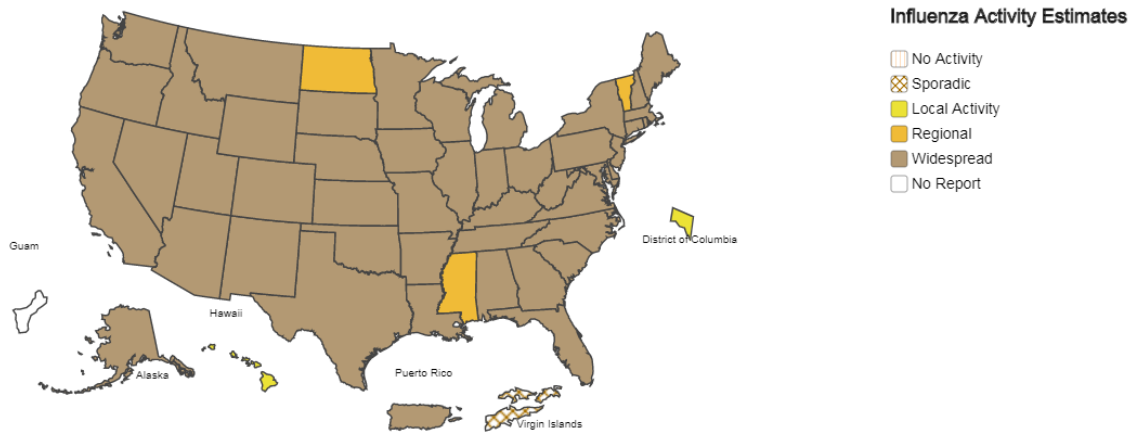
Note: The majority of influenza cases are not reportable by law in Texas. This map contains data from sentinel sites and only displays influenza and ILI cases that were reported to public health. Positive laboratory results are reported according to specimen collection date, or date received in the laboratory if the former is unknown.

Source: <http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/>

Nationwide Influenza Activity Map

Figure 6: US Influenza Activity Estimates

Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*
 Week Ending Jan 04, 2020 - Week 1



*This map indicates geographic spread and does not measure the severity of influenza activity.

Source: <https://www.cdc.gov/flu/weekly/usmap.htm>

- **View More Bexar County Weekly Influenza Reports on San Antonio Metropolitan Health District’s Website:**
<https://www.sanantonio.gov/Health/News/HealthDataReports>
- Note: Bexar County seasonal baseline was calculated using a method similar to CDC’s National/Regional baseline calculation. For further information on this method, please visit: <https://www.cdc.gov/flu/weekly/overview.htm>
- Influenza-like illness (ILI): patients with a fever of $\geq 100^{\circ}\text{F}$ and a cough/sore throat
- Influenza activity codes are determined using GIS and are based on influenza activity per zip code tabulation area (ZCTA) within a quadrant-based system for Bexar county.
 - **No activity** = No or low ILI activity (all four quadrants have <20 per ZCTA population) and no lab confirmed cases
 - **Sporadic** = Isolated cases of lab confirmed influenza and increased ILI activity in at least one of the four defined Bexar quadrants, but activity does not exceed 100 cases per ZCTA population.
 - **Localized** =ILI activity within one Bexar quadrant increases above 100 cases per ZCTA population, but all other quadrants remain below 100 cases AND lab confirmed cases have increased since the previous week
 - **Widespread** = ILI activity has increased above 100 cases per ZCTA population in 2 or more quadrants and lab confirmed cases of influenza have had an increased activity level at least one of the three prior reporting weeks
- **For questions about influenza surveillance and reporting for Bexar County**, email SA Metro Health’s Influenza Surveillance Coordinator Christina Carmona at Christina.Carmona@sanantonio.gov.