COVID-19 Monthly Epidemiological Report
February 2021

Unless otherwise indicated, data for analyses in this report were extracted from Texas Health Trace on 03/07/2021 and include cases with event dates through 02/28/2021. Results are subject to change.

Key Takeaways

Decrease in New Cases
- The number of new COVID-19 cases during February declined substantially compared to the previous few months, signaling an end to the winter surge. About 6% of cases to date occurred during February.
- 198,359 individuals are known to have had COVID-19. The age-adjusted case rate is 10,132 (per 100,000 population).

Other Trends
- Test positivity has been decreasing since January 2, and averaged about 8% during February.
- By the end of February, about 18% of all Bexar County residents age 16 years or older, including 44% of residents 65 years or older, had received at least one dose of vaccine.
- Numbers and rates of infection continue to be highest among young adults, particularly females.

Hospitalizations and Deaths
- New COVID-19 hospital admissions declined throughout February, to 447 per day, a level last seen in late November.
- The February daily average number of COVID-19 patients in the hospital was 761, less than half of that in January.
- ICU patients and those on ventilators peaked also declined by approximately 50%.
- 2,843 residents are known to have died from COVID-19. The overall case fatality rate is 1.4%, higher for males (1.7%) than females (1.2%). Highest risk of death is among the most elderly; 18% for those cases who are 80+ years of age.

I. Current Status and Overview of COVID-19 in Bexar County

Summary: During February, Bexar County reported 18,011 new cases (plus a 5,363 case backlog), as well as 2,228 new COVID-19 associated hospitalizations, and 139 deaths.

Weekly new cases declined 74% between the last week of January and last week of February. The lowest point, during the third week of February, likely reflects challenges in getting tested during Winter Storm Uri.

Weekly new hospital admissions declined steadily throughout February, with a 59% decline between the last week of January, and last week of February.

Reported deaths also declined by 74% between the last week of January and last week of February. (Note that deaths reported may have occurred anytime during the previous 14 days.)

Weekly test positivity declined throughout the month to a low of 4.7%, not seen since last fall. The highest reported rate for the month was 12.1%. Winter Storm Uri closed most testing sites during the week of 2/15–2/21.
II. Testing & Positivity Rate

Bexar county's COVID-19 weekly positivity rate steadily decreased through the month and reached a low of 2.5% in the last week, continuing the decline since early January. In February, almost 200,000 COVID-19 tests were processed, with an average positivity rate of about 8%. This was about a 70,000 decrease in number of tests from January. This difference is partly attributable to the winter storm when most testing locations were closed.

Source: Aggregate Labs Report of labs conducting COVID-19 testing

### Number of Tests and Percent Positive by Week
(May 31st - March 5th)

[Graph showing the number of tests and percent positive by week from May 31st to March 5th]

III. Trends & Demographic Characteristics among COVID-19 Cases

February saw a consistent decrease in COVID-19 cases. Preliminary data indicates that this trend will continue into early March.

**Bexar County COVID-19 Cases by 7 Day Average of Event Date* and Positivity Rate**

[Graph showing daily new cases, 7 day new case average, and positivity rate]

*Event date refers to either illness onset date (for symptomatics) or test collection date (for asymptomatics or when symptom onset date is unavailable). This differs from Reported Date.*
To date, a total of 198,359 cases of COVID-19 have been recorded among Bexar county residents. Over 25% of all cases had their onset in January, with over 51% having occurred in December 2020 and January 2021.

By comparison, February's case numbers demonstrate a substantial decrease, comprising only 6% of cases.

The numbers provided in this chart are based on event date – the date of first symptoms or test collection date if the person was asymptomatic or if the date of first symptom is unavailable.

III. A. Race/Ethnicity Distribution of Cases

Among cases for whom race/ethnicity data are available (61.3%), Hispanic individuals make up a larger proportion of cases than they do of the general population of Bexar County. This pattern is observed across every age-group, and may suggest that the pandemic has disproportionately affected Hispanic individuals.

Notes:
1. Due to limitations inherent in our database, data collection procedures, and/or our sources, data on race and/or ethnicity are currently unavailable for about 39% of cases. For this reason, meaningfully accurate determination of racial and ethnic disparities in COVID-19 diagnoses is currently not possible.
2. The number of Bexar County residents above is the ACS (5-yr) 2019 population estimate.
3. NH = Non-Hispanic
The winter surge ended in February, with the month contributing 11,907 new cases, 6% of the total to date. The cumulative age-adjusted rate is now 10,121 per 100,000 population.

Compared to January, the proportion of new cases declined similarly in every age group, by 72% to 79%. The smallest declines were among children, and the greatest declines among older adults.

Overall, 10.1% of the Bexar County population (about 1 per 10 people) is known to have had the epidemiological criteria for COVID-19. By age group, this varies from a low of 4.4% (children ages 0-9 years) to a peak of 12.4% (adults 40-49 years), with an intermediate of 8.6% among residents age 80 years and older.

*Age-specific rates use the ACS (5-yr) 2019 population estimates for Bexar County. Age-adjusted rates are weighted using the US Standard Population 2000.
IV. The Extent of COVID-19 in the Bexar County Population

Comparing the Bexar County population pyramid (top) with the case pyramid (middle) demonstrates that COVID-19 has occurred less among children when compared to adults. This is further illustrated by the age-specific curves (cases per 100,000 persons of the same age group) superimposed on the case pyramid; if all age groups were equally affected, the curve would be a straight vertical line.

The peak rate is seen among persons 20-29 years of age, who account for 16% of the population but 21% of all cases, and have an age-specific case rate of 13,321 per 100,000. Among adults age 60+ years, the case rate varies across the age groups shown, from 9,823 to 8,642 per 100,000.

Age-specific rates† demonstrate how the pandemic has focused particularly on younger adults, particularly women, and especially the 20-29 year age group. This pattern was established in June 2020, and has generally persisted since then.

Age-adjusted case rates‡ (per 100,000) are 10,222 for females and 9,445 for males (female rate is 8% higher). The overall rate is 10,121 cases per 100,000 population.

Through the end of February, 101,203 females and 91,020 males have met the epidemiologic criteria for COVID-19.
The geographic distribution of COVID-19 cases by zip code continues to show the highest rates of infections overall are in the southern portion of Bexar County.

For the month of February 2021, the highest rate of new infections occurred in those zip codes closest to downtown, and in the southern and western portions of Bexar County. This pattern has remained consistent over time.
This map shows the geographic distribution by zip code of COVID-19 case rates per 100,000 population and the percent of the population living in poverty. These variables are broken into low, medium, and high rates of COVID-19 and percentages of the population in poverty by zip code. Zip codes with the dark green indicate they are in the highest 3rd of COVID-19 case rates and poverty when compared to other zip codes within Bexar County. Conversely, those zip codes in solid grey indicate they are in the lowest 3rd of COVID-19 case rates and poverty when compared to other zip codes within Bexar County. This map shows that those zip codes near downtown and to the south of downtown are experiencing both the highest rates of COVID-19 and highest percentages of the population living in poverty.

Data Source: SAMHD COVID-19 Database, as of 02/07/2021; U.S. Census Bureau, ACS 2019 5-Year Estimates, Table S1701
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V. Congregate Setting & School-Related Cases

Cases occurring in all congregate settings decreased throughout the month of February, similar to what has occurred for the general population. Deaths associated with congregate settings are now at 482. Case fatality in congregate settings is 15.2%.

COVID-19 Cases in Bexar County Congregate Settings

(n=3,161)

Based on these data, cases among children who were infectious while physically at school also show a decline in the month of February. It is important to note that the majority of these cases were not associated with in-school exposure.

To date, there have been 12 outbreaks in Bexar County schools during which in-school transmission was recorded. These outbreaks contributed to only 69 (2%) of the 3,252 cases denoted below.

COVID-19 Cases in Bexar County Schools by Event Date

(n=4,041)

Note: The lighter teal indicates new data not previously reported in the weekly congregate settings report.
VI. Hospitalizations and Deaths among COVID-19 Cases

VI. A. Hospitalizations

When examining the second peak of the pandemic, case average continues to peak approximately 14 days before average hospitalizations, consistent with the summer surge. However, during the winter surge, average deaths have peaked approximately 8 days after case average and 5 days before average hospitalizations.

Note: Reporting of death data during February was impacted by Winter Storm Uri. Dotted line denotes the preliminary data that is available.

In February, COVID+ occupancy (coral) came down to an average of 761 beds per day, less than half that of January. Available (unoccupied) staffed beds (teal) continue to make up about a tenth of total staffed beds, while COVID+ occupancy made up 17%. Non-COVID+ occupancy (navy) increased 21% from January to an average of 3,180 beds per day in February.

Data Source: COVID-19 Daily Surveillance Data Public–STRAC Data, pulled on 2/7/2021

*General and specialty hospitals in Bexar county designated by the Southwest Texas Regional Advisory Council as part of the local trauma/emergency healthcare system. Includes hospitals in the Baptist, Christus, Methodist, SW General, University, BAMC and VAMC systems treating COVID+ patients.
As hospitalizations continue to decline through February, COVID-19 patients in the ICU made up almost 40% of hospitalizations on average, an increase from 30% in January. The increase in ICU proportion typically occurs as overall COVID-19 hospitalizations decline. Note: Patients typically stay several days in the hospital, especially in the ICU.

To date, 8,059 individuals have been hospitalized due to COVID-19.

Hospitalization trends by age have remained consistent with previous reports. Cases with ages 50-79 account for the majority of hospitalizations (56%)*.

Approximately 69% of hospitalized cases have reported underlying conditions.

Among hospitalized COVID-19 cases with a reported underlying condition, the most prevalent is cardiovascular disease, followed by diabetes. Hypertension is included in the category "cardiovascular disease", and also shown separately to highlight conditions of special interest. Similarly, asthma is included in "lung condition", and is also shown separately.

*Two cases are missing age data
VI. B. Deaths

43 deaths due to COVID-19 are known to have occurred during February, bringing the total to 2,843. Overall, the case fatality rate is 1.4 per 100 cases.

Males account for 55% of COVID-19 deaths (1,574). The case fatality is currently 1.2% for females, and 1.7% for males. The crude male mortality rate† (163 deaths per 100,000 population) is 29% higher than the female rate (127 deaths per 100,000 population), continuing a slight decline in the gender difference since December.

Starting with age-group 30-39, males have a higher age-specific mortality rate† than females. This pattern has persisted throughout the pandemic.

Overall, the total age-adjusted mortality rate‡ since the pandemic began is now 156 per 100,000 persons (122 for females, and 198 for males).

†Age-specific rates use ACS 5-yr 2019 gender-specific population estimates for Bexar County. Crude rates do not adjust for age.
‡Age-adjusted rates use the ACS 5-yr 2019 gender-specific population estimates for Bexar County and the US Standard Population 2000 weights.

Hispanic individuals account for 67% of COVID-19 related deaths with reported race/ethnicity.

Starting with age group 45-54 years, mortality rates† (per 100,000 population) are higher for Hispanic individuals than non-Hispanic individuals, even accounting for deaths where race/ethnicity is not available (not shown). Thus, within the limitations of the available data, it appears that Hispanic individuals have a disproportionate burden of death due to COVID-19.

NOTE: Race/ethnicity is not available for 309 (11%) deceased cases and age for one

Of all deceased cases, approximately 69% of cases had comorbid conditions.

Among deaths due to COVID-19, approximately half were reported as having cardiovascular disease (49.9%), 36.7% had diabetes, and 17.6% had kidney disease.

Note: For the purposes of this report, hypertension is included in the category “cardiovascular disease”, and also shown separately to highlight conditions of special interest. Similarly, asthma is included in “lung condition”, and shown separately.
This pyramid graph of deaths with superimposed age-specific mortality rates highlights the disparate burden of deaths among older individuals. Almost 60% of all COVID-19 deaths have occurred among cases 70 years of age and older.

26% more deaths have occurred among males than females. The pyramid graph shows that more deaths among males occur at younger ages compared to females.

Among people with COVID-19 who are 80 years of age or older, the risk of death is 23% for males, and 16% for females.

This map shows COVID-19 case fatality rates per 100 reported cases, excluding those in congregate settings (defined here as nursing homes, assisted living facilities, jails, homeless shelters, rehabilitation facilities, and military barracks). In general, those zip codes near downtown, to the southwest, and to the far east side of Bexar County have higher case fatality rates compared to those zip codes in the northwest and west. This spatial distribution has remained consistent over time.
During the month of February 2021, all zip codes in Bexar County saw fewer COVID-19 cases reported compared to January 2021. Those zip codes in dark blue saw the largest decrease in case numbers in February 2021, compared to January 2021. Zip codes to the far north and far south of Bexar County tend to see the largest decreases in case counts from January to February.

Using Council Districts shows the pattern restricted to within the City of San Antonio limits. Compared to January 2021, during February every Council District saw a substantial decrease in new COVID-19 cases, ranging from 74% to 78%. The greatest declines tended to be in the west and southwest Districts.
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VIII. Bexar County COVID-19 Cases by Event Date: The Pandemic in Review

(N=198,359)

*Event Date is the date of symptom onset. For asymptomatic cases, the test collection date is used.

IX. Bexar County Resident Vaccination Data

Overall, about 8% of the Bexar County population aged 16+ has been vaccinated with one dose only, while 10.4% have been fully vaccinated. A higher proportion of residents within the northern and western zip codes of the county have been vaccinated. This is mostly consistent across vaccination status.
### IX. Bexar County Resident Vaccination Data

#### Race/Ethnicity of Vaccinated Bexar County Residents
(N= 214,931, excluding unknowns)

- Hispanic: 7.3%
- NH White: 44.8%
- NH Asian: 3.6%
- NH Black: 3.2%
- NH Multiracial: 3.1%
- NH Other: 37.9%

Among residents receiving vaccinations, and for whom we have race/ethnicity, the greater portion who **have received at least one dose are Hispanic** (45%) followed by Non-Hispanic White individuals (38%).

Note: Race/ethnicity data are not available for 22% of vaccinated persons.

#### Gender Breakdown of Vaccinated Bexar County Residents
(N= 275,575)

- Male: 40.5%
- Female: 59.5%

Through March 3rd, more female Bexar county residents have been vaccinated than males: **60% of vaccinations have been given to females.**

Approximately **37% of all individuals** receiving at least one vaccination are **aged 65 or older** — a vaccination priority group. That is, 44% of the Bexar county senior population have received at least one dose.

A majority (63%) of those vaccinated living in Bexar county are 64 or under.

#### Vaccinations of Bexar County Residents by Age Group

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<th>First Dose Only</th>
<th>Fully Vaccinated</th>
<th>Total Vaccinated</th>
<th>Total General Population</th>
<th>% of General Population Vaccinated</th>
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<td>Count</td>
<td>%</td>
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Note: This table only includes data for which age data is available.

Report completed by the City of San Antonio COVID-19 Response Data Team