

COVID-19 Monthly Epidemiological Report May 2021

Unless otherwise indicated, data for analyses in this report were extracted from Texas Health Trace on **06/10/2021** and include cases with event dates† through **05/31/2021**. Results are subject to change.

Key Takeaways

Continued Decrease in New Cases

- May saw the smallest number of monthly new cases (by event date[†]) so far this year: 4,365, comprising 1.9% of all cases to date. The decline has been greatest among older age groups: ages 50+ years contributed only 18% (compared to 29% in Jan '21), while 50% of new cases occurred in people younger than 30 years of age compared to 40% in Jan '21.
- 224,349 Bexar County residents are known to have had COVID-19, which is 11.5% of the total population.

Hospitalizations and Deaths

- Hospitalizations declined through May, with an average daily COVID-19 occupancy of 179 beds.
- ICU percentage of COVID-19 occupied beds continued to decline, from 36% in April to 32% in May.
- Total deaths to date are 3,525. Case fatality remains at 1.6%. The risk of death increases with age at COVID-19 onset, and is greater for males than females.

Other Trends

 Test positivity remained at the lowest levels seen since the beginning of the pandemic, averaging 1.8% for the month of May.

† Event date is the date of symptom onset or first positive COVID-19 test, whichever is known to occur first.

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

Summary: During the five weeks of May, Bexar County reported* 6,140 new cases (plus a 847 case backlog), 751 new COVID-19 associated hospitalizations, and 31 deaths. Overall, May continued with encouraging declines observed since February.

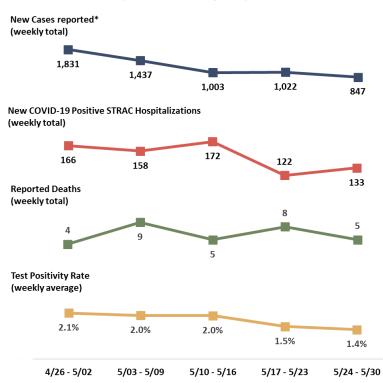
Weekly newly reported cases were 18% fewer than in April, and 66% fewer than February. (Reported cases include new cases with a specimen date within 14 days of the reported date.)

Weekly new hospital admissions were fairly steady during the first three weeks of May, and then declined. May saw 24% fewer new weekly hospitalizations than April, and as with new cases 66% fewer than during February.

Weekly reported deaths remained below 10 per week throughout May. May's weekly deaths were 30% fewer than April, and 78% fewer than February.

Weekly test positivity remained at the lowest levels seen since the beginning of the pandemic, averaging 1.8% for the month of May.

Weekly Trends during May (Mon-Sun)



All data reflect dates they were reported. Reported cases and deaths may have occurred anytime during the previous 14 days, which includes the last days of April. *Delayed reports of backlogged cases and deaths are not included in weekly totals.

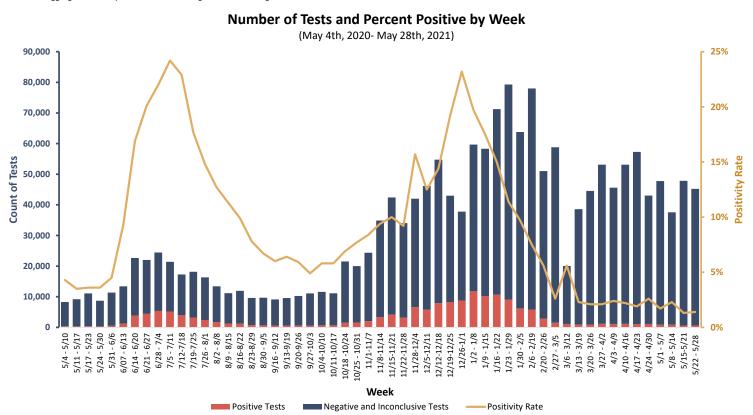


II. Testing & Positivity Rate

May 2021

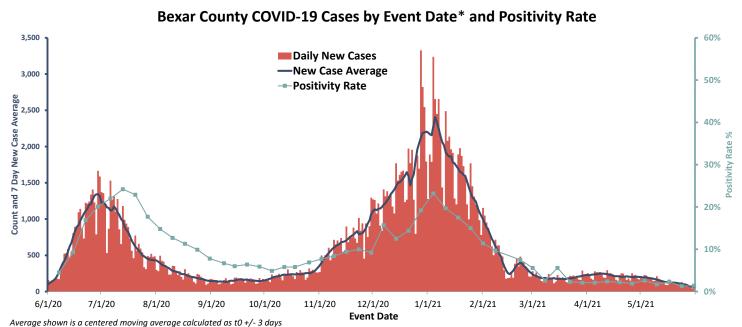
Bexar County's COVID-19 weekly positivity rate remained low through May, with a **high of 2.3%** in the second week and a **low of 1.2%** in the third week. About 175,000 tests were processed over the month. The week of May 8th to May 14th had the lowest number of tests for the month, at about 37,000.

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



III. Trends & Demographic Characteristics among COVID-19 Cases

May 2021 demonstrated a **significant decrease** in new COVID-19 cases compared to April 2021. The median number of daily cases **decreased from 226 in April to 132 in May.** Preliminary data indicate that this trend will continue into early June.



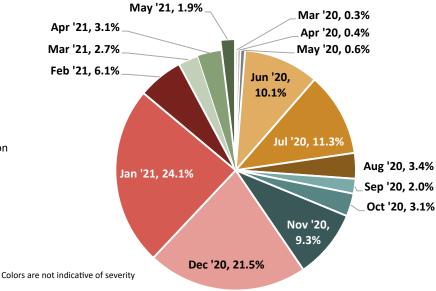
*Event date refers to either illness onset date (for symptomatic cases) or test collection date (for asymptomatic cases or when onset date not available). This differs from Reported Date.

III. A. Distribution of Cases over Time

Percentage of Total COVID-19 Cases in Bexar County by Event Month* (N = 224,349)

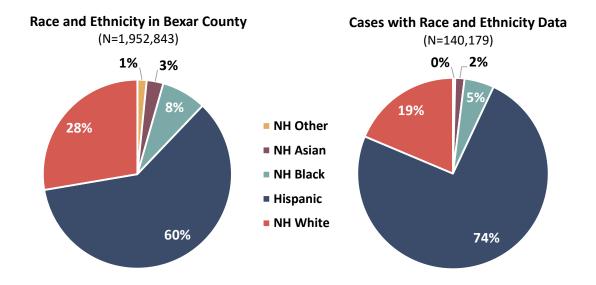
Numbers for May 2021 indicate a continued decline in new COVID-19 cases, as monthly reported new cases have dropped steadily since February 2021.

*The data in this chart are based on event date: the date of first symptom, or date of test collection if the person was asymptomatic or if symptom date is not available.



III. B. Race/Ethnicity Distribution of Cases

Race/ethnicity data are currently available for 62% of all cases. Among these cases, **Hispanic individuals comprise 74%**. This is greater than the Hispanic proportion of the general population of Bexar County (60%), a pattern observed across all age groups.



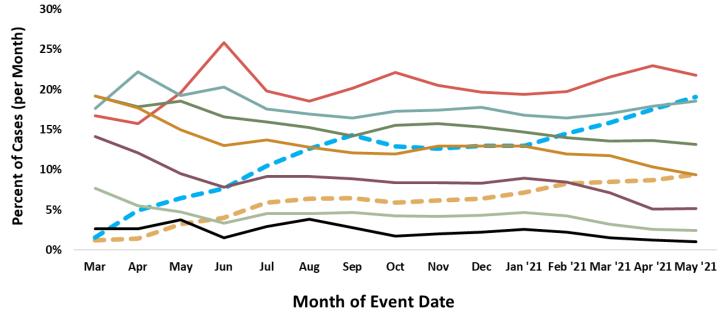
Notes:

- 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 38% 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

III. C. Age and Gender Distribution of Cases

Distribution of Cases by Age Group, over Time





-0-9 -10-19 -20-29 -30-39 -40-49 -50-59 -60-69 -70-79 -80+
*Excludes 149 cases (0.1%) with age not available plus 6 cases diagnosed in Feb '20 (0.1%).

The case distribution by age group have generally remained consistent over the pandemic: group 20-29 years (red line) has generally comprised the greatest percent of new cases, 30-39 years (solid teal line) the next largest group, and so on through each subsequent 10-year group, with age 80+ years (black line) comprising the smallest percent of all cases.

However, the proportion of new cases among persons 10-19 years of age (turquoise dashes) has tripled since May '20, from 6% to 19% of newly reported cases in May '21, to a level similar to adults ages 30-39 (solid teal line). Most of this increase has occurred among older teenagers.

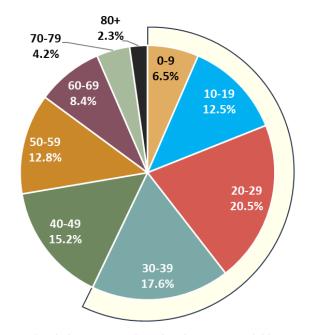
Cases among **young children** (ages 0-9; dashed beige line) have followed a similar trend, tripling in the number of newly reported cases from 3% of all cases in May '20 to 9% in May '21.

These increases have been accompanied by proportional declines in case percentages among older adults, from a 30% decrease in age group 40-49 (dark green line) to a 74% decline among people age 80+ (black line).

Overall, cases 0 to 39 years of age account for over half (57%) of all cases. The average age of all COVID-19 cases since March 2020 is 37 years, median age is 35 years.

Cases by Age Group (%)

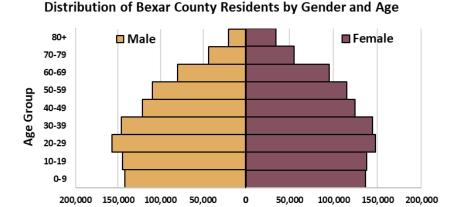
(N=224,195*)

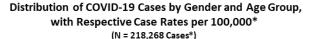


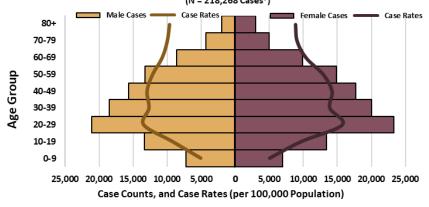
*Excludes 149 cases (0.1%) with age not available

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IV. The Extent of COVID-19 in the Bexar County Population







^{*}Excludes 6,081 cases (3.0%) for whom age and/or gender was not available.

This more traditional representation of age-specific rates† also demonstrates how the younger adults and women have higher rates of COVID-19. This pattern has persisted since June '20. Any observed disparities in case rates may be influenced by behavior differences in regard to COVID-19 testing.

Age-adjusted case rates‡ adjust for different population age structures (for example, the differences between males and females in the upper pyramid) and allow comparisons between groups. Through May 31, 2021, COVID-19 ageadjusted case rates are 11,544 per 100,000 females and 10,777 per 100,000 males (females 7% higher than males). The overall age-adjusted case rate for the County is now 11,446 per 100,000 population.

‡Age-adjusted rates are weighted using the US Standard Population 2000.

The upper pyramid shows the distribution of Bexar County residents by age and gender.

The case pyramid (middle graph) shows the age distribution of all COVID-19 cases to date. The greatest numbers of cases have occurred among age group 20-29 years: 23,277 females and 21,117 males. The smallest numbers have occurred among oldest age group 80+ years: 3,029 females and 1,937 males. This general pattern has persisted throughout the pandemic.

Age-specific case rates[†] (curved lines in middle graph) show the number of cases per 100,000 persons of the same gender and age group. The lowest case rates have been among young children (ages 0-9 years): about 5,100 cases per 100,000 population in each gender.

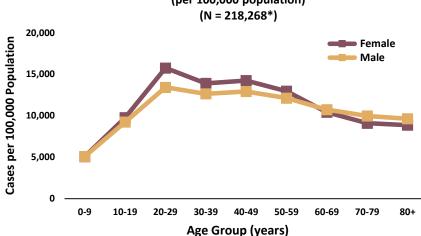
Conversely, young adults ages 20-29 have had the highest case rates, about 15,760 cases per 100,000 females and 13,430 cases per 100,000 males. For this age group the female case rate is 17% greater than the male rate.

A total of 224,349 residents of Bexar County are known to have had COVID-19, as reported with a positive COVID-19 test. Overall, 11.5% (1 in 9) Bexar County residents is known to have had COVID-19, as reported with a positive COVID-19 test, with a gender breakdown of 11.6 % of females, and 10.8% of males.

†Age-specific rates use the ACS (5-yr) 2019 population estimates for Bexar

Gender data are not available for 5,927 cases (2.7%). and age for another 154 cases (0.1%)

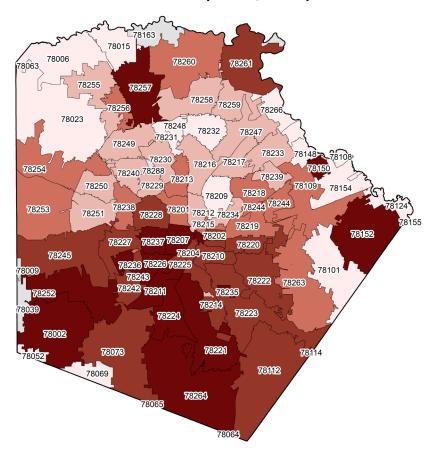
Age-Specific COVID-19 Case Rates, by Gender (per 100,000 population) (N = 218, 268*)



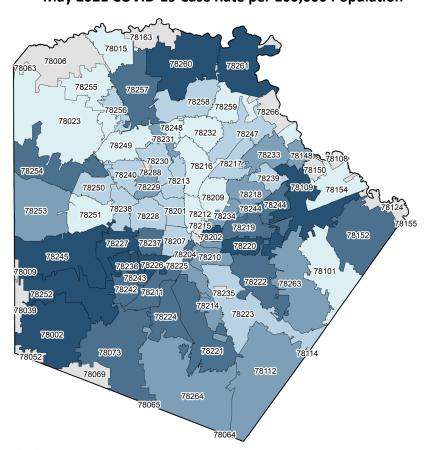
*Excludes 6,081 cases (3.0%) for whom age and/or gender was not available at time of this analysis.



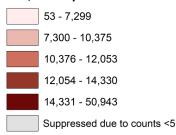
COVID-19 Case Rate per 100,000 Population



May 2021 COVID-19 Case Rate per 100,000 Population



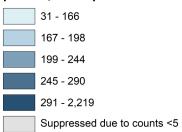
COVID-19 Case Rate per 100,000 Population



The geographic distribution of total COVID-19 case rates by zip code continues to show the highest rates of infection have generally been in the southern portion of Bexar County. The overall COVID-19 case rates range from 53 cases per 100,000 population to 50,943 cases per 100,000 population.

For the month of May 2021, the highest rates of new COVID-19 infections occurred to the southwestern, eastern, and far northern/northeastern portions of Bexar County.

May 2021 COVID-19 Case Rate per 100,000 Population

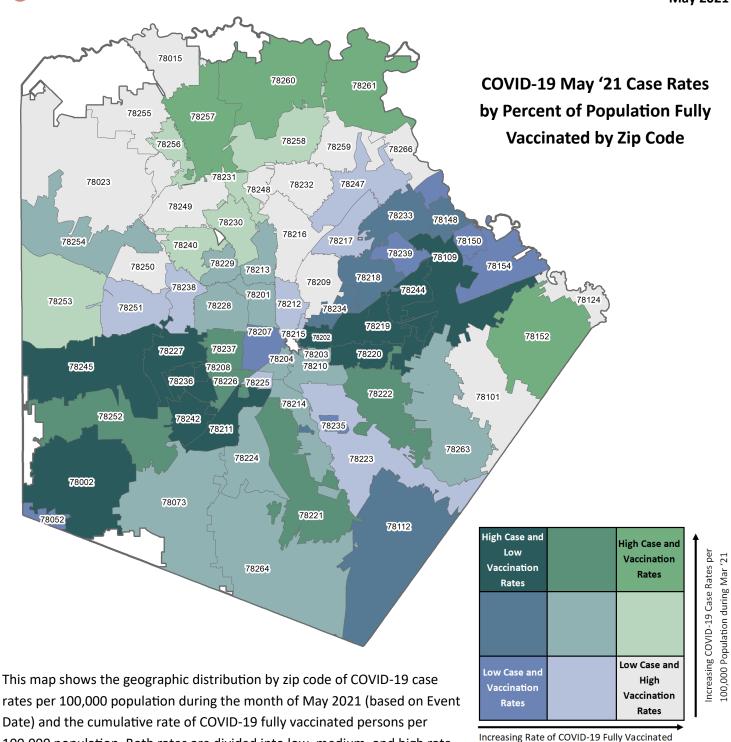


Data Source: SAMHD COVID-19 case data through 06/14/2021, event dates through 05/31/2021; U.S. Census, ACS 2019 5-year Population Estimates, Table S0101.

Persons per 100,000 Population

categories.

May 2021



Zip codes shaded <u>dark teal</u> indicate they are in the highest third of new COVID-19 case rates, as well as are in the lowest third of rates of fully vaccinated persons. Conversely, those zip codes shaded <u>solid grey</u> indicate they are in the lowest third of new COVID-19 case rates for the month and are in the highest third for rates of fully vaccinated persons. In general, zip codes to the east and west of downtown have higher COVID-19 case rates and lower vaccination rates. Conversely, zip codes in the northern portion of Bexar County have lower COVID-19 case rates and higher vaccination rates.

Data Source: SAMHD COVID-19 Database, as of 06/10/2021; U.S. Census Bureau, ACS 2019 5-Year Estimates, Table S1701

100,000 population. Both rates are divided into low, medium, and high rate

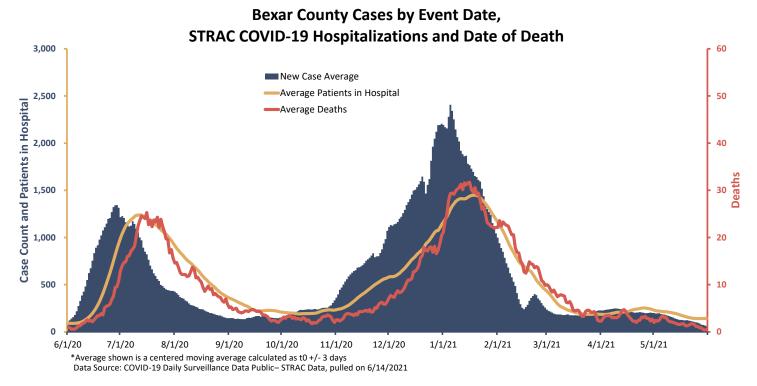
V. Hospitalizations and Deaths among COVID-19 Cases

May 2021

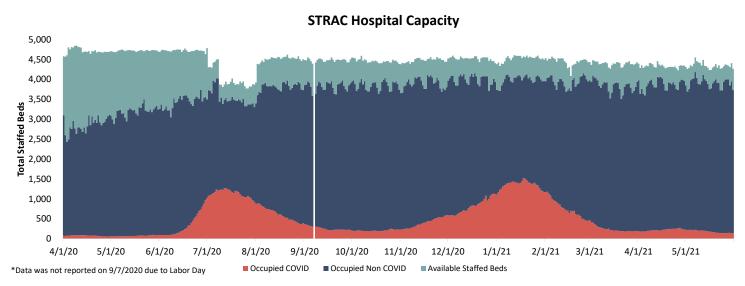
V. A. Hospitalizations

COVID-19 cases, hospitalizations, and deaths all decreased in May 2021. The new case average on 5/26/2021 dropped below 100 cases per day for the first time since May 2020. The average patients in area hospitals are also at the lowest since early June 2020.

Note: In regards to deaths, the last two weeks of May 2021 are considered preliminary as death certificates make their way to Metro Health for confirmation.



In May, COVID+ occupancy (coral) declined to an average of 179 beds per day, a 18% decrease from April. Available (unoccupied) staffed beds (teal) made up about 10% of total staffed beds. COVID+ occupancy made up only 4%, while non-COVID+ occupancy (navy) slightly increased from April to an average of 3,733 beds per day in May.



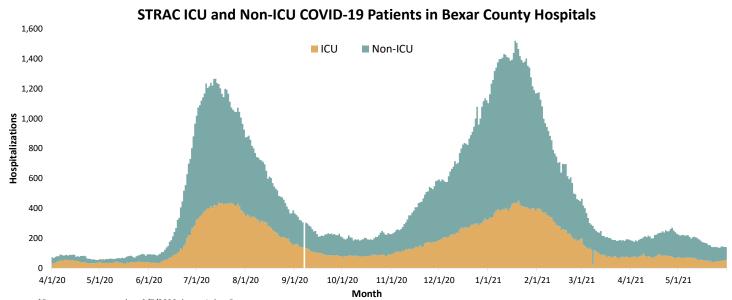
Data Source: COVID-19 Daily Surveillance Data Public – STRAC Data, pulled on 6/14/2021

^{*}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.



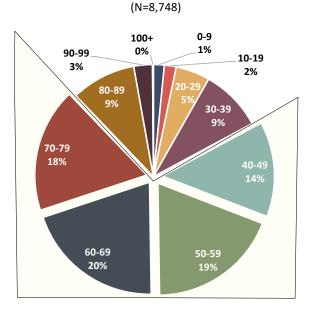
While a noticeable decrease is seen in non-ICU COVID-19 hospitalizations through May 2021, ICU COVID-19 hospitalizations decreased very slightly. The average percentage of COVID+ hospitalized patients admitted to the ICU was 32%, down from 36% in April. This is the first instance since the winter surge where both ICU and non-ICU COVID -19 hospitalizations decreased for the month.

Note: Patients typically stay several days in the hospital, especially in the ICU.

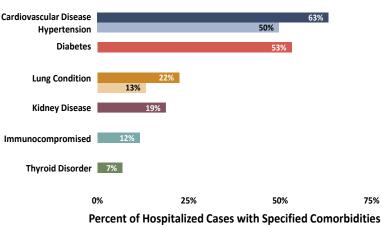


*Data was not reported on 9/7/2020 due to Labor Day Data Source: COVID-19 Daily Surveillance Data Public-STRAC Data, pulled on 6/14/2021

Hospitalized Cases by 10-Year Age Groups (%)



Hospitalized Cases with Specified* Comorbidities (N=6,217*)



*Excludes 2,531 (29%) hospitalized cases for whom data pertaining to comorbid conditions are not available, or who were not reported to have at least one of these specific comorbidities associated with poor COVID-19 outcome.

To date, 8,748 individuals have been hospitalized due to COVID-19. Hospitalization trends by age have remained consistent with previous reports. Cases with ages 40-79 account for the majority of hospitalizations (71%).

Data including the presence of at least one of the specified comorbidities associated with poor COVID-19 outcomes were available for 71% of hospitalized cases (N=6,217). Among these cases with at least one comorbidity, cardiovascular disease (63%) was the most prevalent, followed by diabetes (53%).

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.



V. B. Deaths

The total number of deceased COVID-19 cases through May '21 is 3,525. As the pyramid graph shows, deaths due to COVID-19 occur most often among older persons. Whereas the average age at COVID-19 onset is 37 years, the average age of deceased cases is 70 years (age 68 for males, and 73 for females).

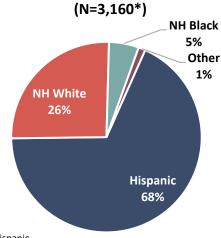
To date, 55% of all deaths have occurred among cases 70 years of age and older. Among persons 80+ years of age who have had COVID-19, the risk of death is 25% for males, and 17% for females.

Age-specific mortality rates† (curved lines on both graphs) show that males also have higher rates of death due to COVID-19 at every age from age group 30-39 years and older, a pattern that has persisted throughout the pandemic. Age-adjusted rates‡ are now 204 per 100,000 males, and 155 per 100,000 females. The overall rate, including persons for whom gender is not available (N=30), is 193 deaths per 100,000 population.

Although more COVID-19 cases have been reported among women than men, males continue to account for more than half (56%) of all deceased cases of known gender. The risk of death among cases (case fatality rate) continues at 1.9 deaths per 100 male cases and 1.3 per 100 female cases; the overall rate is 1.6 per 100 cases.

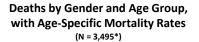
Over the course of the pandemic, average case ages have declined, particularly since vaccination began in mid-December. Average age at disease onset was 45 years when the pandemic began (March - April '20), remained at about 37 years from June '20 through January '21, and is now about 31 years. Over this time average ages of deceased cases have remained more constant, at about 71 years through January '21, declining to about 65-66 years currently.

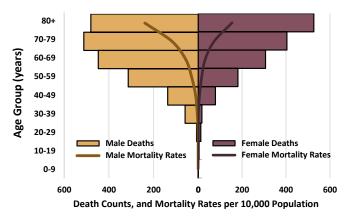
Deceased Cases by Race and Ethnicity



NH = Non-Hispanic *Excludes 365 deceased cases (10.4%) with no race/ethnicity data.

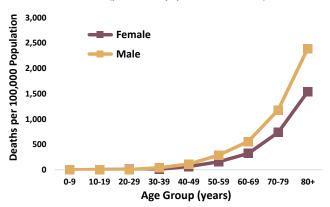
May 2021





*Excludes 30 deceased cases (0.8%) for whom gender and/or age are unavailable.

Age-Specific Mortality Rates, by Gender (per 100,000 population; N = 3,495*)



 st Excludes 30 deceased cases (0.8%) for whom gender and/or age are unavailable.

It continues to appear that **Hispanics may have a disproportionate burden of death due to COVID-19**. Of the 90%* of deaths for whom race/ethnicity data are available, Hispanic individuals account for 68% of deceased cases, compared to 60% of the Bexar County population being Hispanic†.

Age-adjusted mortality rates are 236 for Hispanic cases and 108 for Non-Hispanic cases (NH). This disparity is consistent with the higher percent of cases of known race/ethnicity who are Hispanic, compared to the general Bexar County population. However, because race/ethnicity data are unavailable for 38% of COVID-19 cases, it is not possible to calculate the risk of death among cases by race/ethnicity.

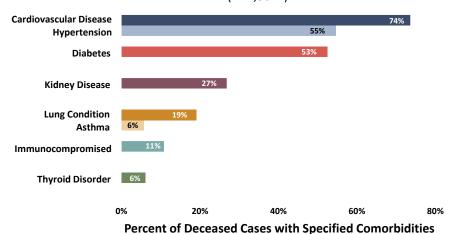
Clear disparities in mortality rates between non-Hispanic White individuals and Non-Hispanic Black individuals have not been observed to date.

[†]Age-specific rates use ACS 5-yr 2019 gender-specific population estimates for Bexar County.

[‡]Age-adjusted rates use the ACS 5-yr 2019 gender-specific population estimates for Bexar County and the US Standard Population 2000 weights.

Deceased Cases with Specified* Comorbidities

(N=2,567*)



ated with poor COVID-19 outcome

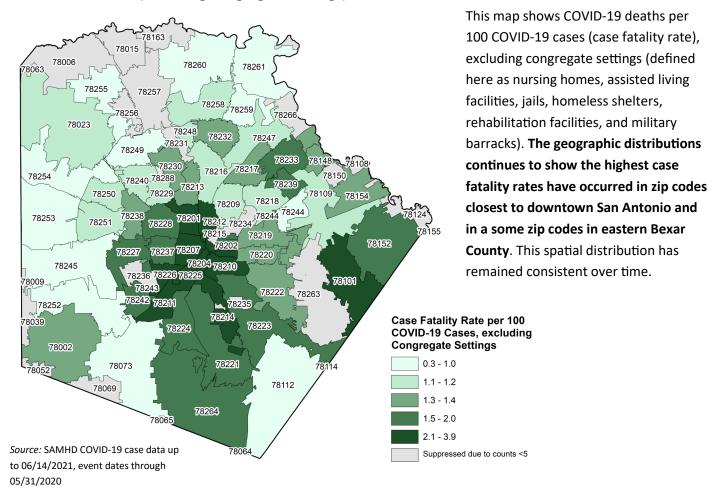
*Excludes 958 (27%) deceased cases for whom data pertaining to comorbid conditions are not available, or who were not reported to have at least one of these specific comorbidities associ-

Data including the presence of at least one of the specified comorbidities associated with poor COVID-19 outcomes were available for 73% of deceased cases (N=2,567*).

Among these cases with at least one comorbidity, cardiovascular disease (74%) was the most prevalent, followed by diabetes (53%).

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 is also shown separately.

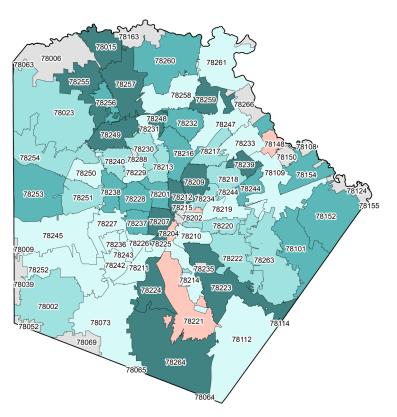
COVID-19 Case Fatality Rate by zip code (Excluding Congregate Settings)



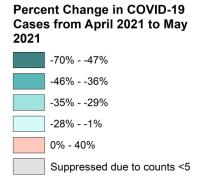


VI. Percent Change of COVID-19 Cases, January—May

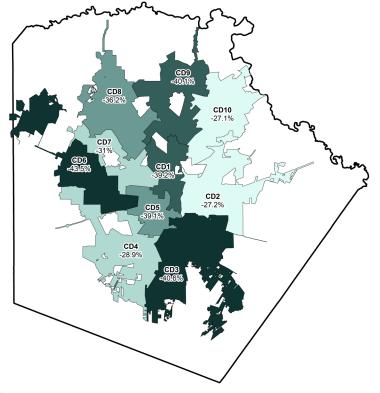
Percent Change in COVID-19 Cases from Apr '21 to May '21 by Zip



Approximately 95% of zip codes in Bexar County reported having a lower number of new COVID-19 cases in May 2021 compared to April 2021. The few zip codes that saw an increase in COVID-19 cases from April to May tended to be closer to downtown and in southern and far eastern Bexar County compared to March 2021. As shown in the map on page 7, the zip codes with percent increases in cases from last month had widely varying vaccination rates— at this time, no correlation can be observed.

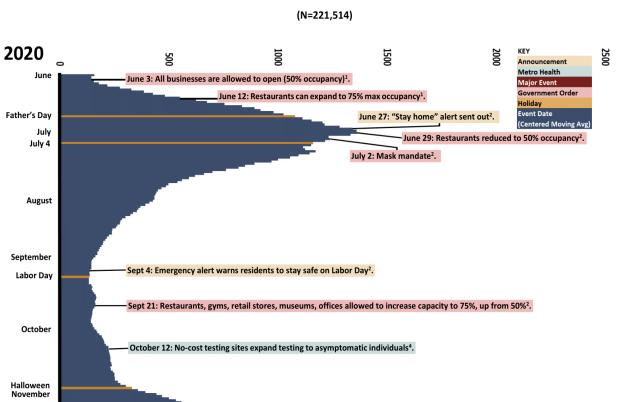


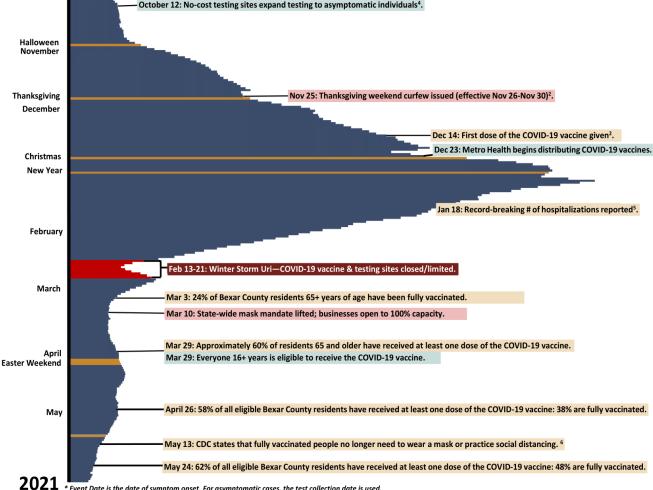
Percent Change in COVID-19 Cases from Apr '21 to May '21 by Council District



The map to the right depicts the percent change in COVID-19 cases from April 2021 to May 2021 by City of San Antonio Council District. Compared to April 2021, during May 2021, every council district saw a decrease in new monthly COVID-19 cases. The Council District with the largest percent decrease in new COVID-19 cases are Council Districts 3 and 6, with 40.6% and 43.5% fewer new COVID-19 cases respectively during May 2021.

VII. Bexar County COVID-19 Cases by Event Date: The Pandemic in Review





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