CITY OF SAN ANTONIO
METROPOLITAN HEALTH DISTRICT

COVID-19 Monthly Epidemiological Report
June 2021

*Unless otherwise indicated, data for analyses in this report were extracted from Texas Health Trace on **07/12/2021** and include cases with event dates† through **06/30/2021**. Results are subject to change.*

Key Takeaways

Continued Decrease in New Cases

- Bexar County reported 3,433 new cases (plus a 1,307 case backlog), 537 new COVID-19 associated hospitalizations, and 30 deaths.
- 228,636 Bexar County residents are known to have had COVID-19, which is 11.7% of the total population.

Hospitalizations and Deaths

- Hospitalizations declined through June, with the average daily COVID-19 occupancy 129 beds, the lowest since June '20.
- ICU percentage of COVID-19 occupied beds continued to decline, from 36% in April to 31% in June.
- Total deaths to date are 3,576. 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 (rolling 7-day average) remained below 2.7% through mid-June, slightly higher than May, and then increased rapidly through June 30th to 5.9%.

† 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 June, Bexar County reported 3,433 new cases (plus a 1,307 case backlog), 537 new COVID-19 associated hospitalizations, and 30 deaths. Overall, new cases were the lowest observed since just before the summer surge. The last half of the month showed an upward trend in new cases as well as increasing test positivity. New hospitalizations and deaths were similar to, or less than, during May.

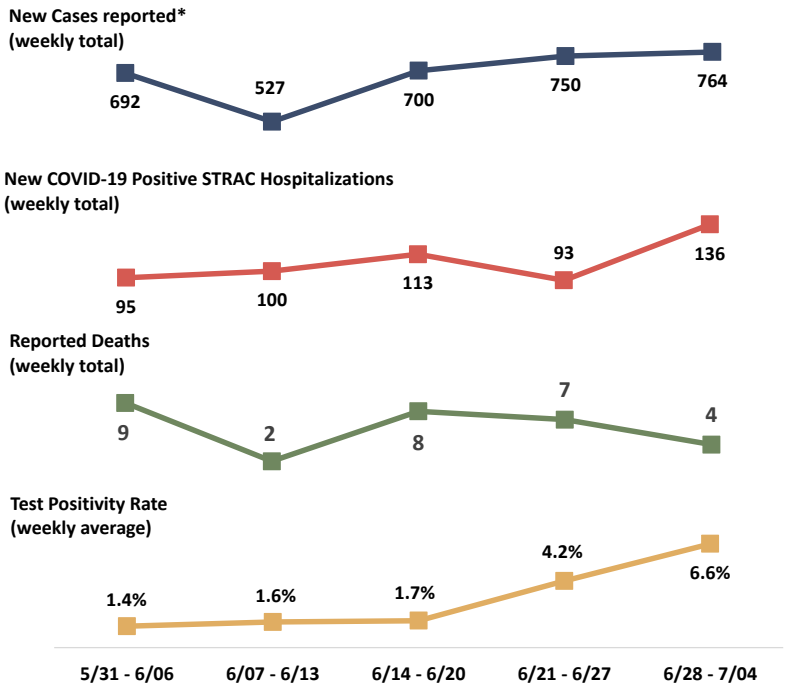
Weekly newly reported cases were 44% fewer than in May, but increased 10% from the beginning to end of the month.

Weekly new hospital admissions were 28% fewer than in May overall, but increased 43% over the course of the month of June.

Weekly reported deaths remained below 10 per week throughout June, unchanged since May.

Weekly test positivity started low, a continuation of rates seen in May. Increased positivity towards the end of June reflects both the 68% decline in total tests (from the first week to the last week), as well as the 54% increase in numbers of positive tests.

Weekly Trends (Mon-Sun)



*Reported cases and deaths may have occurred anytime during the previous 14 days. Delayed reports of backlogged cases and deaths are not included in weekly totals.

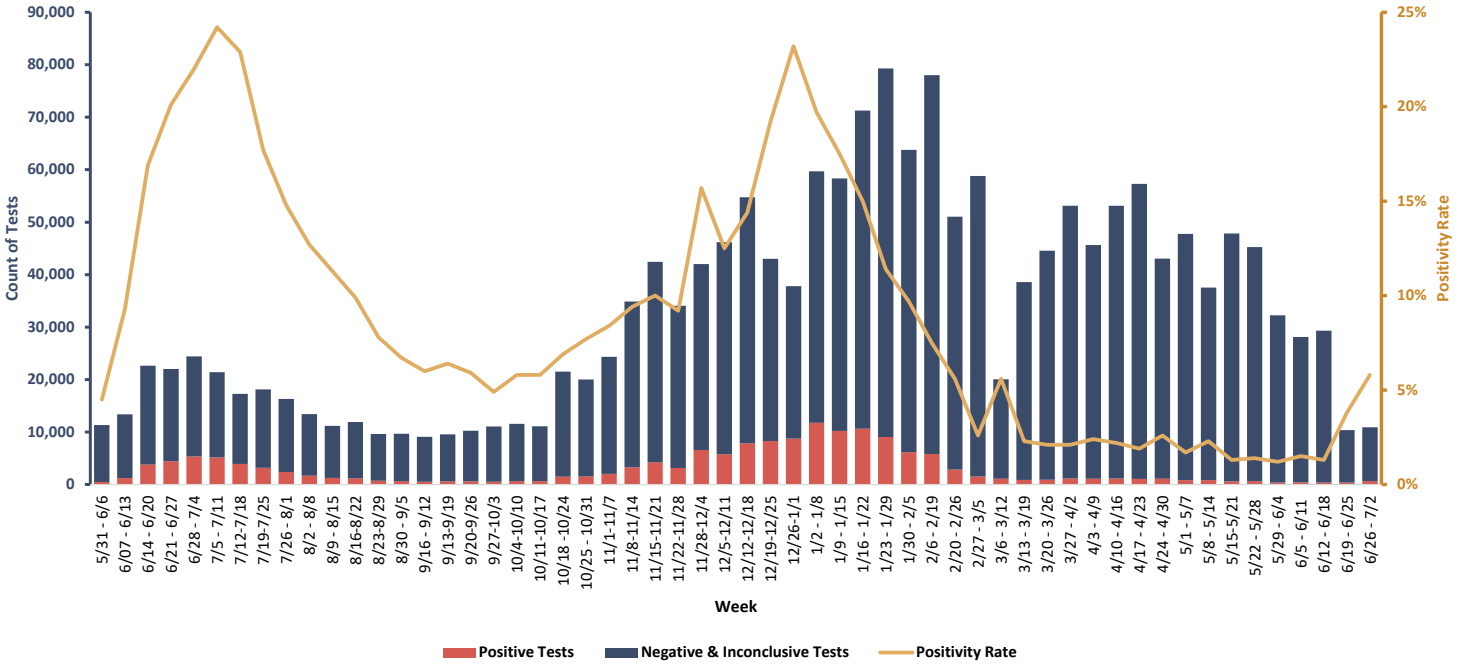
II. Testing & Positivity Rate

Bexar County's COVID-19 weekly test positivity rate increased in June, with a **high of 5.8%** in the last week-- **the highest positivity rate since February 2021.** About 108,000 tests were processed over the month. The last two weeks of the month had an over 50% decrease in tests compared to the first three weeks of June.

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

Number of Tests and Positivity Rate by Week

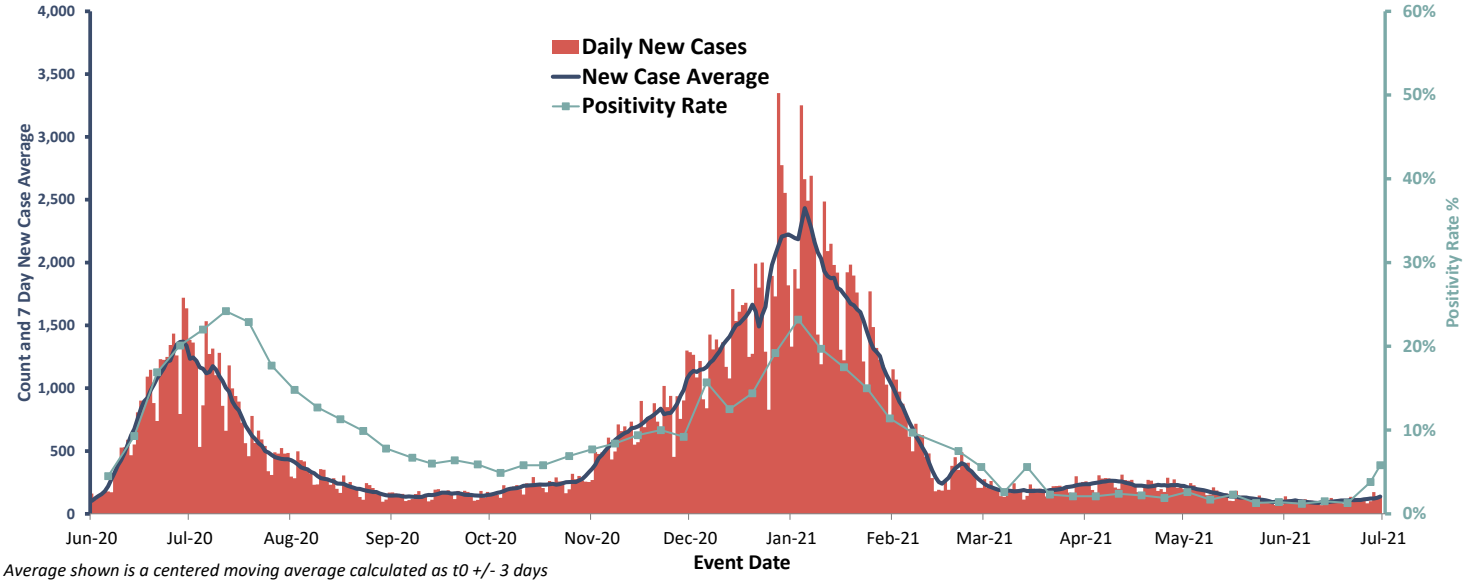
(May 31st, 2020– July 2nd, 2021)



III. Trends & Demographic Characteristics among COVID-19 Cases

June 2021 demonstrated a stabilization of COVID-19 cases compared to this time last year, averaging about 107 cases per day. **The median number of daily cases decreased from 143 in May to 106 in June.** However, the positivity rate noticeably increased by the end of the June.

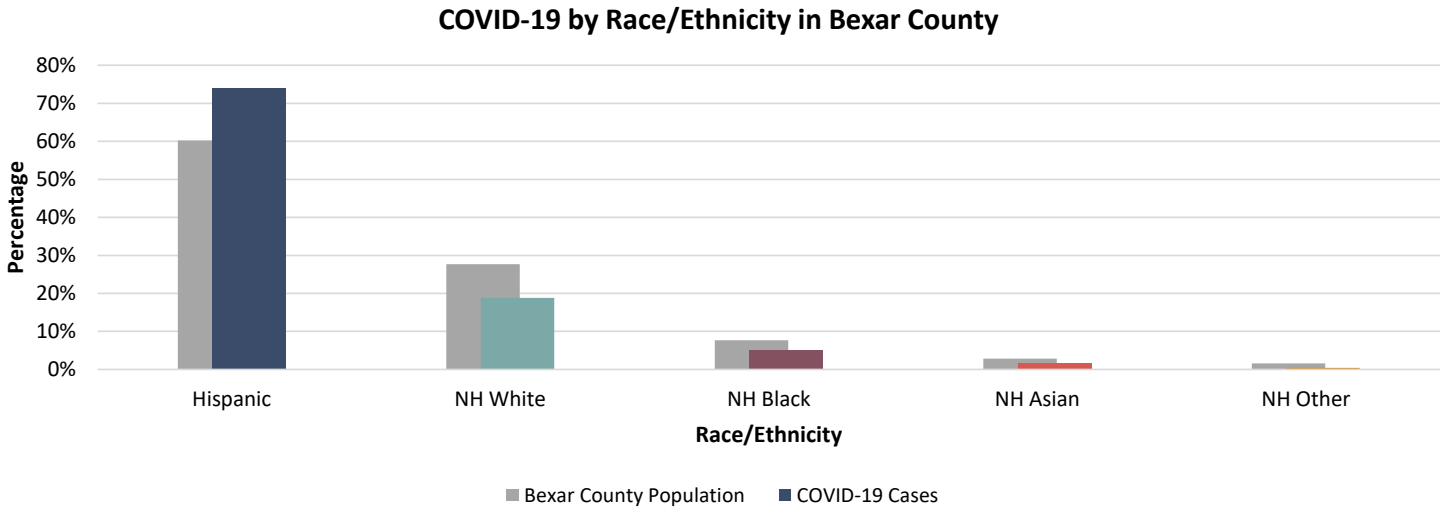
Bexar County COVID-19 Cases by Event Date* and Positivity Rate



Average shown is a centered moving average calculated as t0 +/- 3 days

**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. Race/Ethnicity Distribution of Cases



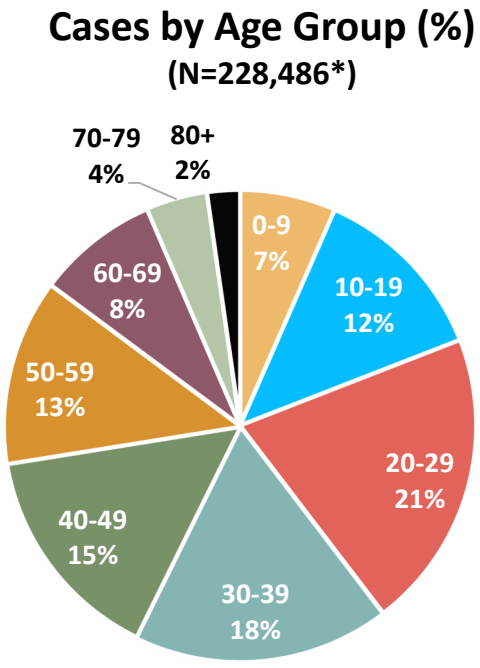
Among cases for whom race/ethnicity data are available (62%), **Hispanic individuals constitute the majority of COVID-19 cases in Bexar County, and account for a larger proportion of cases** than they do of the general population of Bexar County. This pattern is persistent across age groups.

Notes:

1. Data on race and/or ethnicity are currently unavailable for about 38% of cases.
2. The number of Bexar County residents above is the ACS (5-yr) 2019 population estimate.
3. NH = Non-Hispanic

III. B. Age and Gender Distribution of Cases

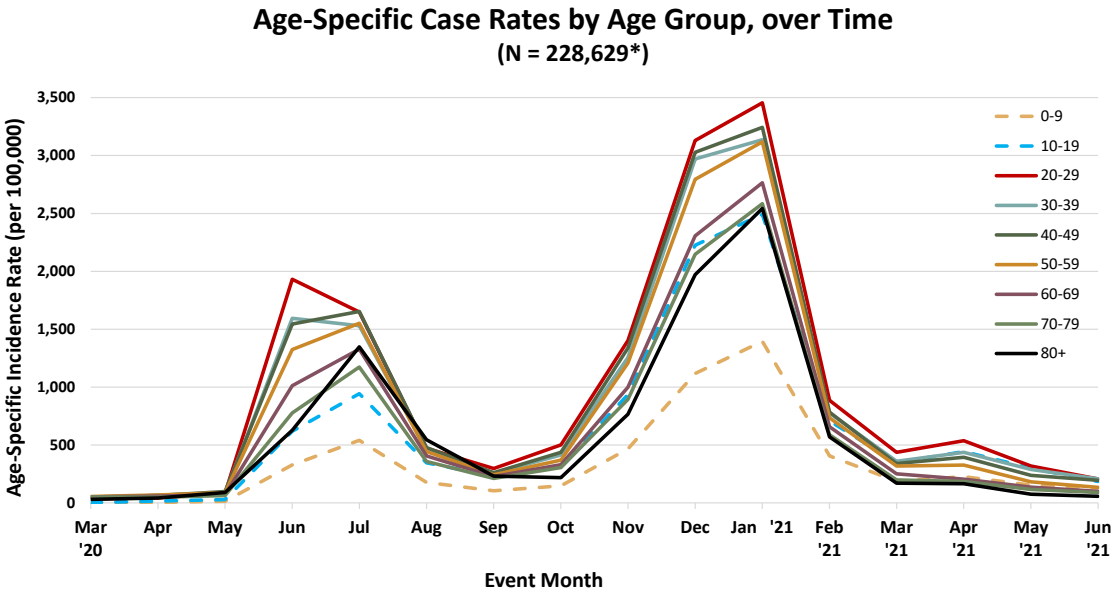
Since the pandemic began, cumulative case distributions by age group have remained generally consistent: persons ages **20-29 years** comprise the greatest percent (currently 21%), **30-39 years** the next largest group, and so on through each subsequent 10-year group to **80+ years** (currently 2%). Children/teenagers ages **10-19 years** now comprise 12%, similar to adults age **50-59**. **Young children** (**ages 0-9**) comprise 7% of cases, similar to adults **60-69** years.



*Excludes 150 cases (0.1%) with age unavailable.

III. C. Age and Gender Distribution of Cases

Age-specific case (incidence) rates† over time demonstrate some interesting changes. Until March '21, children ages **0-9 years** (**dashed beige line**) had the **lowest age-specific case rate** of any age group, but since April '21, the rate has ranged between the **50-59** (**solid beige line**) and **60-69** (**dark maroon line**) year age groups. **5% of all Bexar County young children** are known to have had COVID-19.

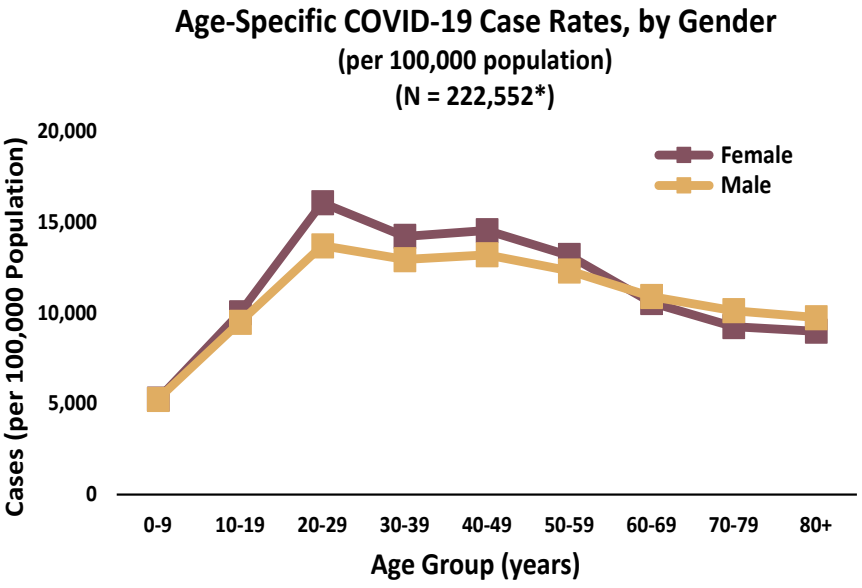


* Excludes 150 cases with age not available plus 7 cases diagnosed in February 2020 (0.1%).

Children/teenagers ages **10-19** (**turquoise dashes**) initially had **the second lowest case rates**. After the summer surge ended in August '20, they increased proportionately to lie between the ages **60-69** (**dark maroon line**) and **70-79** (**dark sage line**) case rates. Since March '21, case rates for **age group 10-19** have **ranged among those for adults 20-29 through 40-49 years**. To date, COVID-19 has been reported for **10% of all Bexar County children/teenagers 10-19**.

Young adults ages **20-29 years** (**red line**) have **consistently had the highest or second highest case rates** since June '20. To date, comprising **15% of all Bexar County residents in this age group.**

The percent of Bexar County population known to have had COVID-19 **decreases in step-wise fashion** from age groups 30 -39 and 40-49 (14%) through age group **80+ (9%**; also the **fewest** case numbers). **Overall, 12% of Bexar County population is known to have had COVID-19.**



*Excludes 6,084 cases (2.7%) for whom age and/or gender was not available at time of this analysis.

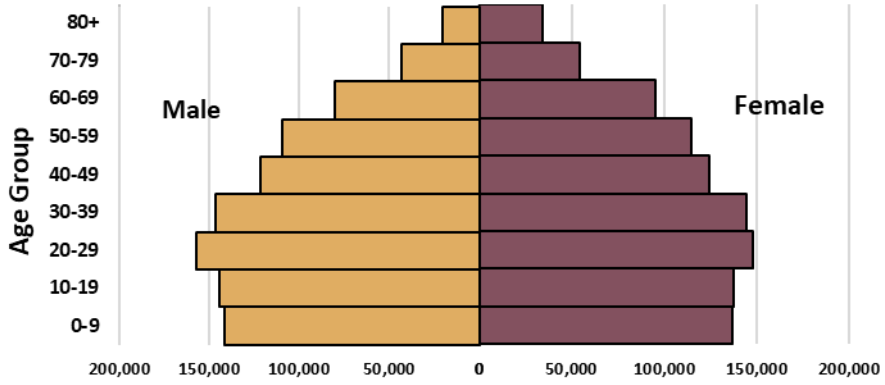
Age-specific rates‡ for all months combined indicate comparatively higher rates of COVID-19 for **younger adults, and particularly for women**. This pattern has persisted throughout the pandemic.

Through June 30, 2021, COVID-19 age-adjusted case rates are 11,770 per 100,000 females and 10,990 per 100,000 males (females 7% higher than males). The **overall age-adjusted case rate** for the County is now **11,667 cases per 100,000 population.**

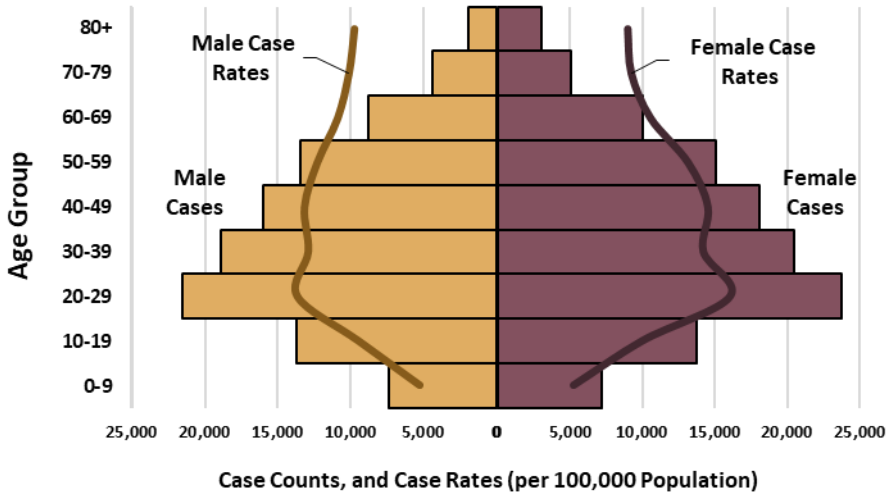
†Age-specific rates use the ACS (5-yr) 2019 population estimates for Bexar County.
‡Age-adjusted rates are weighted using the US Standard Population 2000.

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

Distribution of Bexar County Residents by Gender and Age Group



Distribution of COVID-19 Cases by Gender and Age Group, with Respective Case Rates per 100,000*
(N = 222,552 Cases*)



*Excludes 6,084 cases (2.7%) for whom age and/or gender was not available.

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

The case pyramid (lower graph) shows the age distribution of all COVID-19 cases to date for whom gender and age are known*. The **greatest numbers of cases have occurred in the 20-29 year age group:** 23,721 females and 21,530 males.

The **smallest case numbers have occurred among the oldest age group, 80+ years:** 3,067 females and 1,957 males. This general pattern has persisted throughout the pandemic.

Through the end of June '21, a total of 228,636 Bexar County residents are known to have had COVID-19. The average age of all cases to date is 37 years.

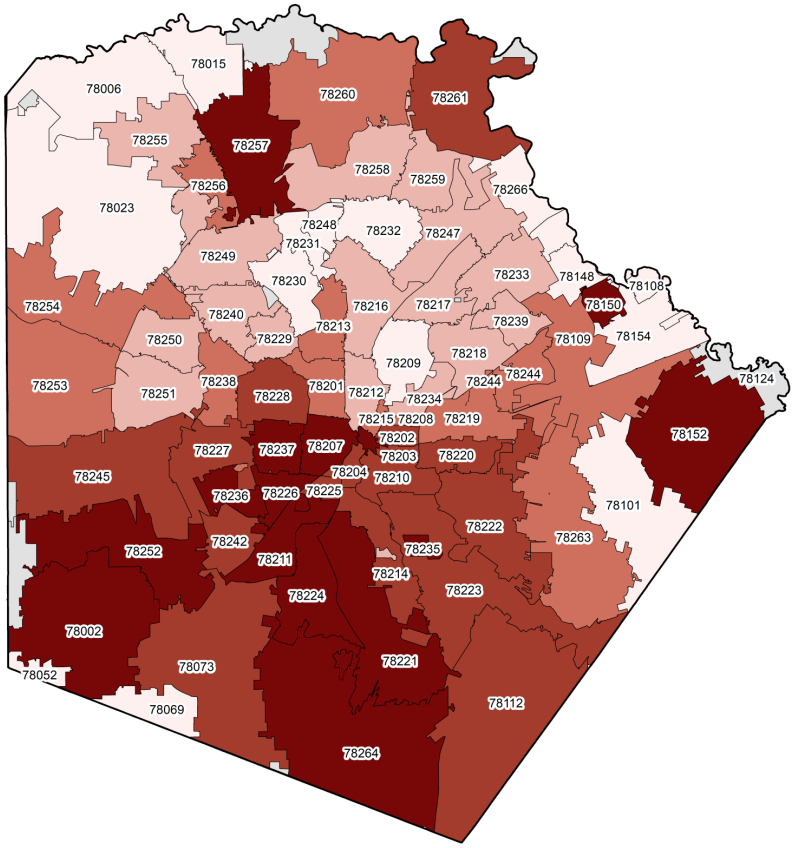
*Gender data are not available for 5,934 cases (2.6%). and age for another 150 cases (0.1%)

Age-specific case rates† (curved lines in lower graph; also shown on previous page) overlay the number of cases per 100,000 persons in Bexar County of the same gender and age group on the corresponding case number bars. The lowest case rates (incidence) have been among young children (ages 0-9 years): about 5,240 cases per 100,000 population in each gender. Conversely, young adults **ages 20-29** have had the highest case rates, with 16,062 cases per 100,000 females and 13,691 cases per 100,000 males. For this age group the **female case rate is 17% greater than the male rate**.

Overall, **11.8% (1 in 8.5) Bexar County residents are known to have had COVID-19. This includes 11.8 % of females, and 11.0% of males.**

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

COVID-19 Case Rate per 100,000 Population

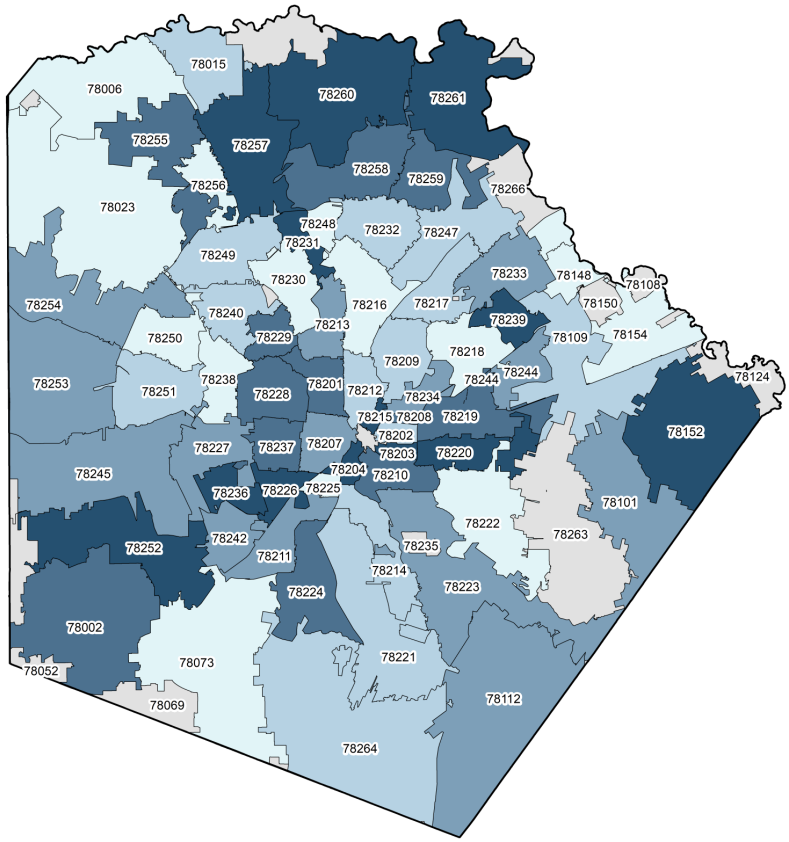


COVID-19 Case Rate per 100,000 Population

- 48 - 8,374
- 8,375 - 10,649
- 10,650 - 12,282
- 12,283 - 14,530
- 14,531 - 53,422
- Suppressed due to counts <5

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 48 cases per 100,000 population to 53,422 cases per 100,000 population.

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

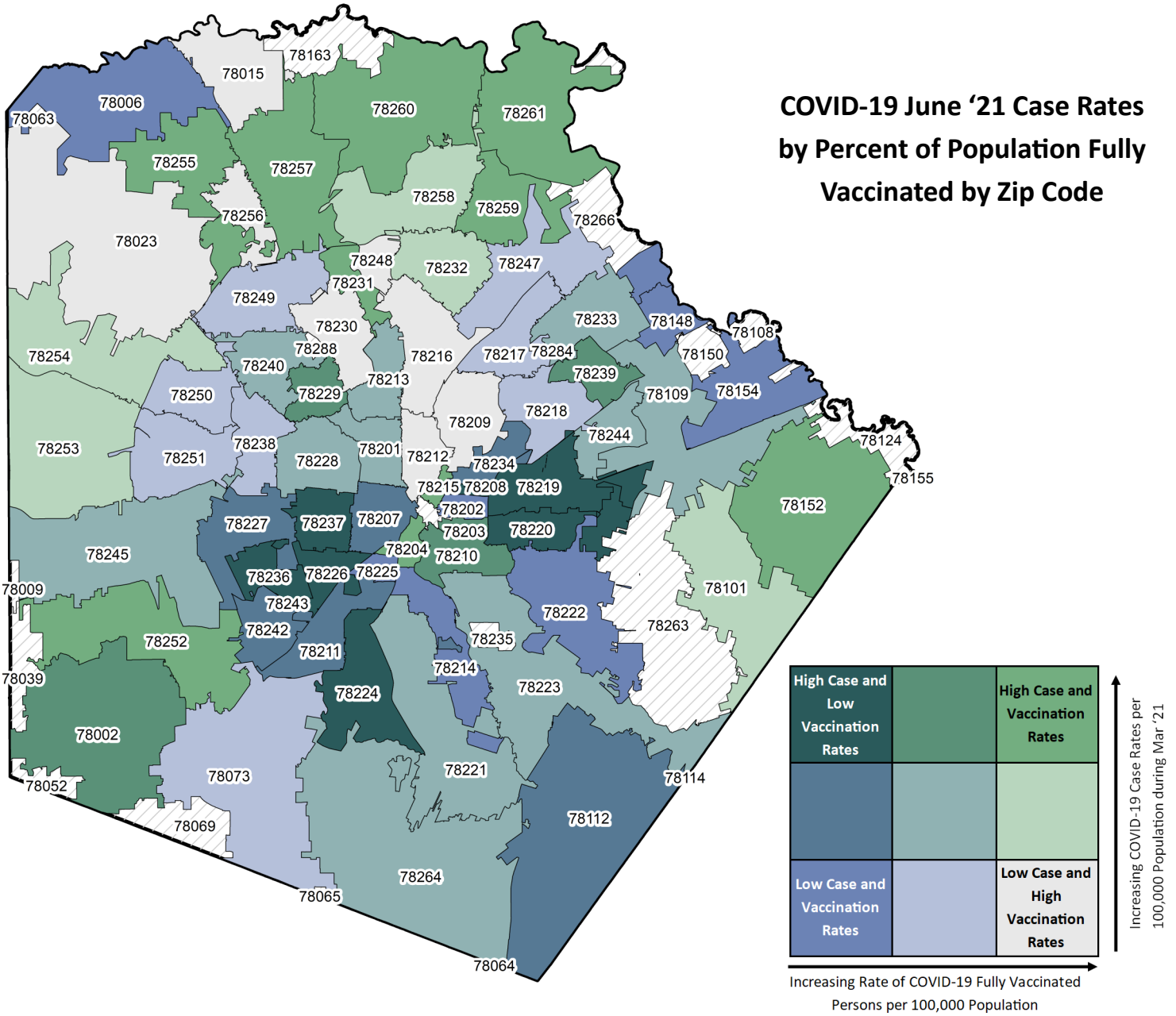


June 2021 COVID-19 Case Rate per 100,000 Population

- 14 - 108
- 109 - 156
- 157 - 184
- 185 - 216
- 217 - 870
- Suppressed due to counts <5

For the month of June 2021, the **highest rates of new COVID-19 infections occurred in central, southwestern, and far-northern portions of Bexar County.**

Data Source: SAMHD COVID-19 case data through 07/12/2021, event dates through 06/30/2021; U.S. Census, ACS 2019 5-year Population Estimates, Table S0101.



This map shows the geographic distribution by zip code of COVID-19 case rates per 100,000 population during the month of June 2021 (based on Event Date) and the cumulative rate of COVID-19 fully vaccinated persons per 100,000 population. Both rates are divided into low, medium, and high rate categories.

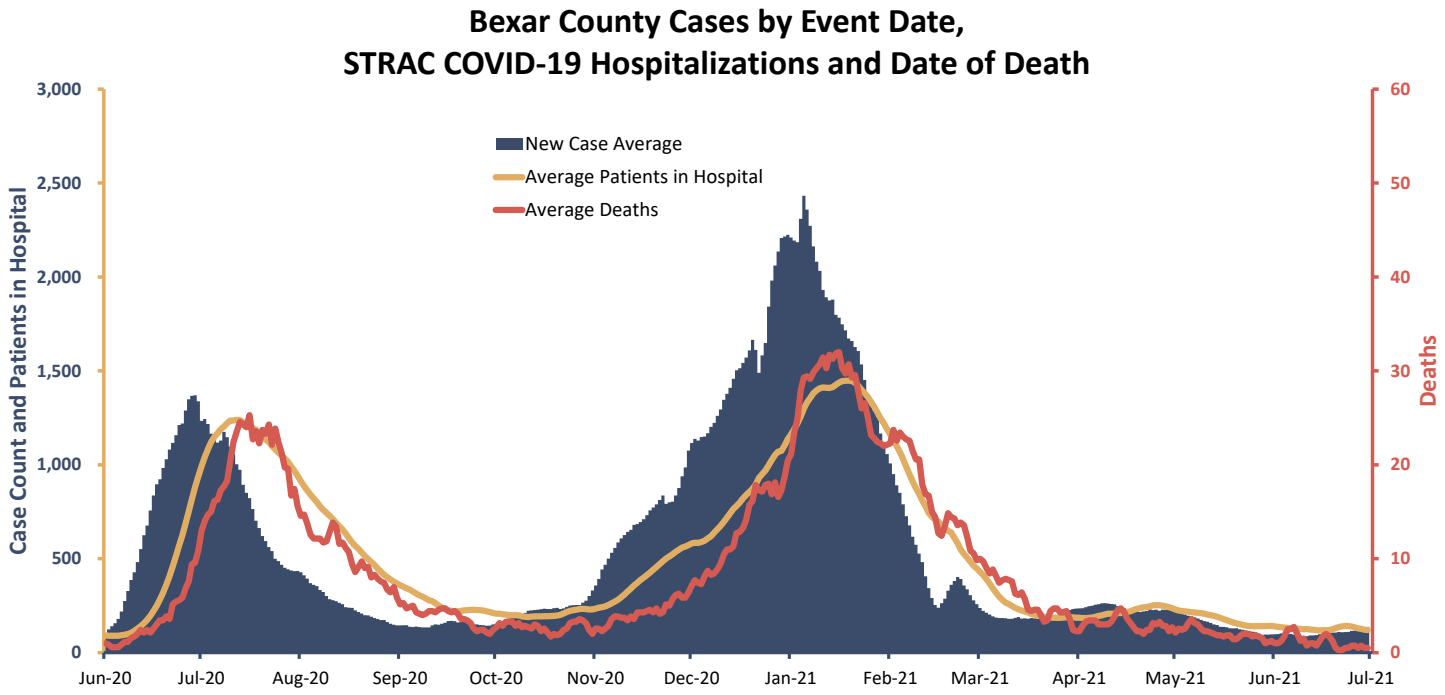
Zip codes shaded **dark teal** indicate they are in the highest third of new COVID-19 case rates, as well as the lowest third of rates of fully vaccinated persons. Conversely, those zip codes shaded solid grey indicate they are in the lowest third of new COVID-19 case rates for the month and the highest third for rates of fully vaccinated persons. **In general, zip codes near downtown and to the near east and west of downtown have higher COVID-19 case rates and lower vaccination rates. Conversely, zip codes in the near northern portion of Bexar County have higher COVID-19 case rates and higher vaccination rates in June 2021.**

Data Source: SAMHD COVID-19 Database, as of 07/12/2021; U.S. Census Bureau, ACS 2019 5-Year Estimates, Table S1701

V. Hospitalizations and Deaths among COVID-19 Cases

V. A. Hospitalizations

Numbers of cases and hospitalizations stabilized in June 2021, while deaths continued to see a slight decrease. While the new case average remained below 100 cases per day for most of June 2021, it ticked up to 137 cases by the end of the month. The average patients in area hospitals dropped to 120 patients per day on 6/30/2021, **the lowest since June 2020**.

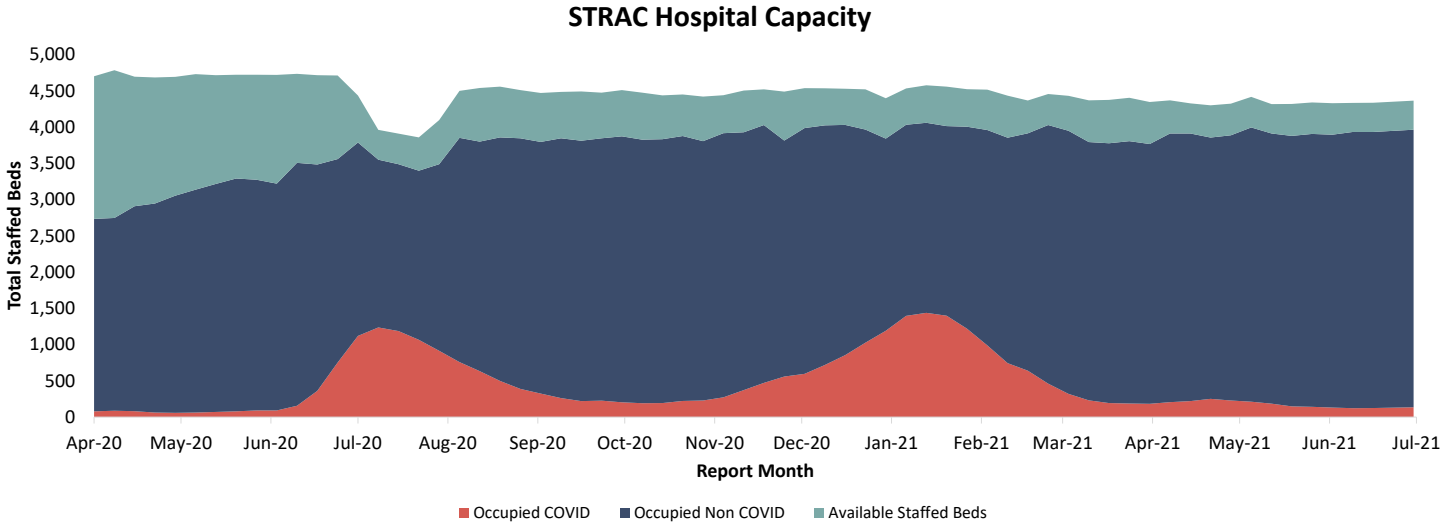


Data Source: COVID-19 Daily Surveillance Data Public– STRAC Data, pulled on 7/12/2021

*Average shown is a centered moving average calculated as t0 +/- 3 days

In June, COVID+ occupancy (coral) declined to an average of 129 beds per day, a 28% decrease from May. Available (unoccupied) staffed beds (teal) made up about 9% of total staffed beds. COVID+ occupancy made up only 3%, while non-COVID+ occupancy (**navy)** slightly increased from May to an average of 3,802 beds per day in June.

Note: STRAC has switched to reporting weekly bed averages and is reflected in this report.

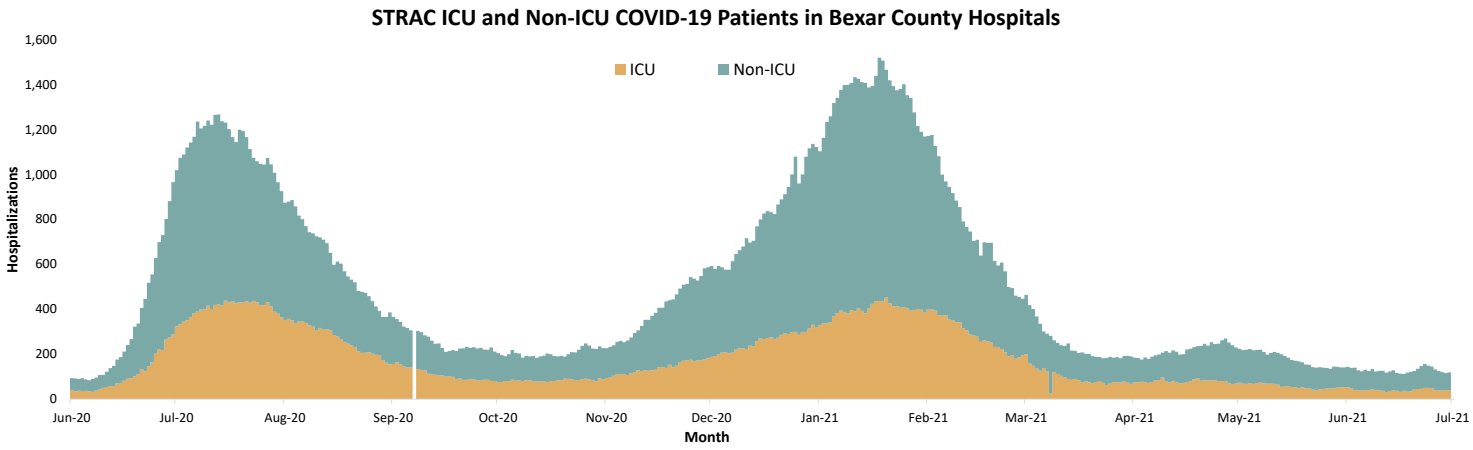


Data Source: COVID-19 Daily Surveillance Data Public– STRAC Data, pulled on 7/12/2021.

*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.

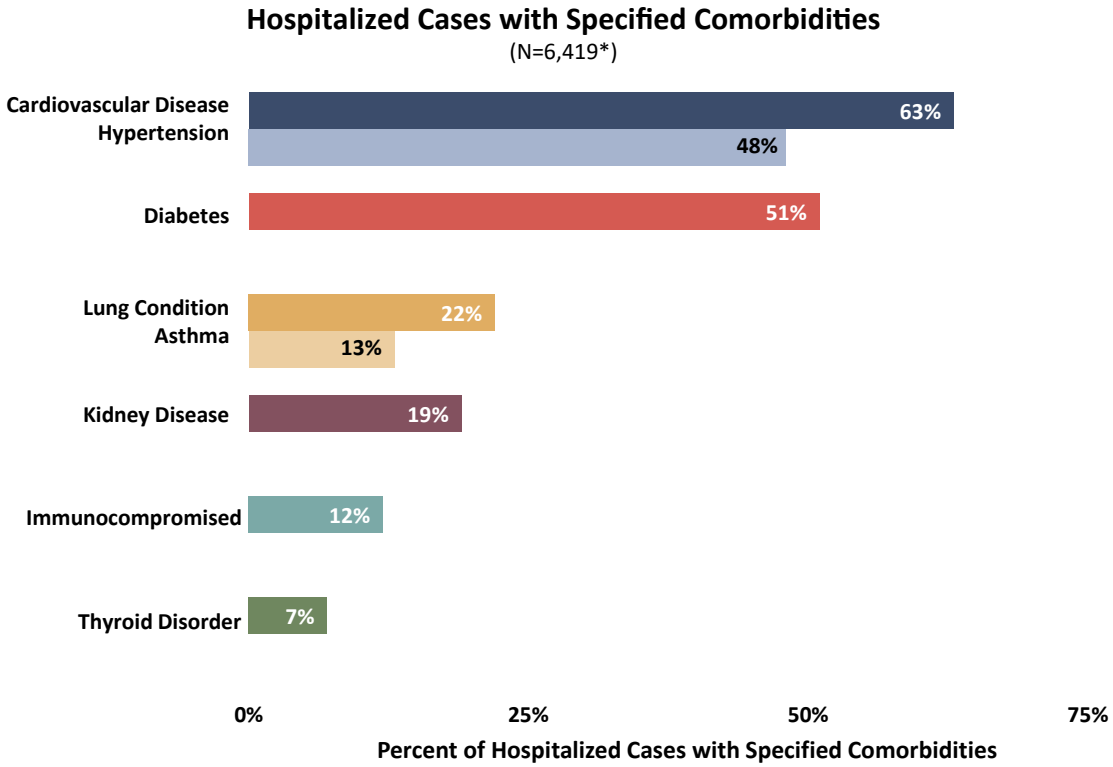
Numbers of both non-ICU and ICU hospitalizations remained stable through June. The average percentage of COVID+ patients admitted to the ICU was 31%, similar to the 32% seen in May. **Median ICU counts in June 2021 (40 patients per day) are similar to about a year ago, during May 2020 (38 patients per day).**

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 7/12/2021



To date, **9,053 i**ndividuals have been hospitalized due to COVID-19.

Data including **the presence of at least one of the specified comorbidities associated with poor COVID-19 outcomes were available for 71% of the hospitalized cases** (N=6,419). Among these cases with at least one comorbidity, **cardiovascular disease (63%)** was the most prevalent (hypertension specifically reported for 48%), followed by **diabetes (51%).**

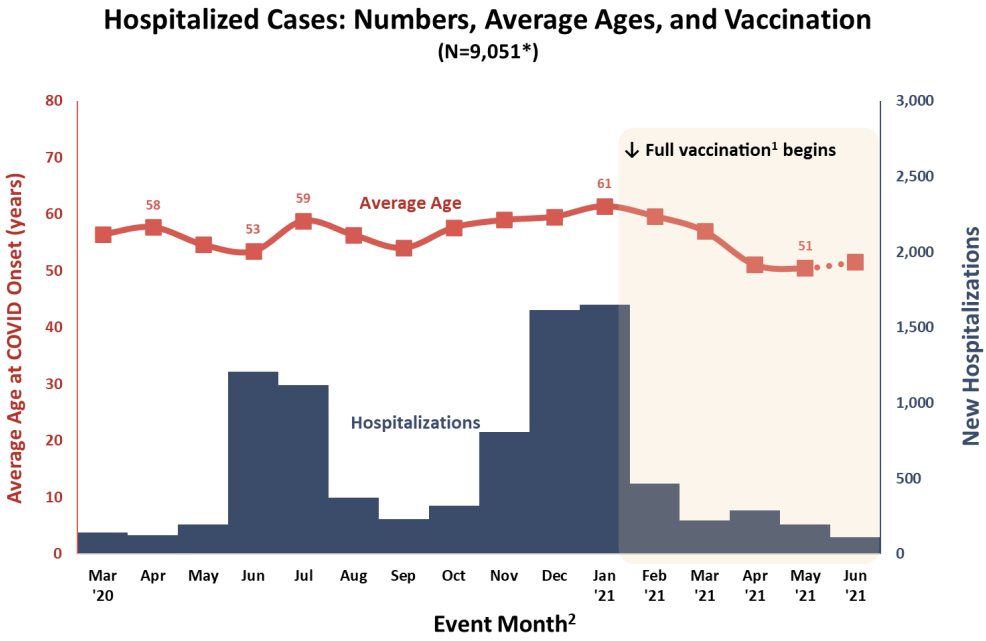
Note: For the purposes of this report, hypertension is included in the category "cardiovascular disease", and also shown separately to highlight conditions of special interest. Similarly, asthma is included in "lung condition", and shown separately.

*Excludes 2,634 (29%) hospitalized cases not reported to have at least one of these specific comorbidities associated with poor COVID-19 outcome, or for whom such comorbidity data were not available.

V. B. Hospitalization and Age

The **average age of hospitalized cases has recently declined, from 60 years** in Dec '20, **to 51 years** in April and May'21 (June data were incomplete at time of analysis). Starting April '21, **almost half (48%) of all hospitalized cases have been younger than age 50**.

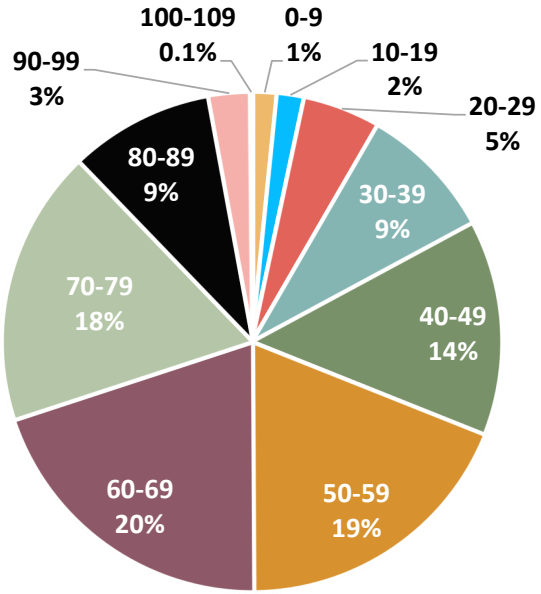
The decline in average age coincides with availability of vaccination[1]. Vaccination began among older individuals in the latter part of Dec '20, and was gradually extended to younger ages. San Antonio began vaccinating children age 12 and older on May 13th.



*Excludes 2 hospitalized cases with Event Date in February '20.

NOTES:
The dotted line indicates that June data may be incomplete at time of analysis.
[1]A person is considered fully vaccinated two weeks after the second vaccine dose of 2-dose regimen, or two weeks after receiving a single shot of a 1-dose regimen.
[2]Event date is the date of first positive test, or symptom onset (if available). This is not the date of hospitalization.

Hospitalized Cases by Age Group (%)
(N=9,053)



To date, **9,053 i**ndividuals have been hospitalized due to COVID-19.

The three age groups that contribute the greatest percentages of all hospitalized cases (18% - 20% each) are ages 50-59, 60-69 and 70-79 years. Together, they comprise 57% of all hospitalized cases.

V. C. Deaths

Through June '21, a total of 3,576 cases have died due to COVID-19. As the top pyramid graph shows, these deaths have occurred primarily among older persons. **Whereas the average age at COVID-19 onset for all cases is 37 years, the average age for deceased cases is 70 years** (age 68 for males, 72 for females).

Since December '20, the **average age of deceased cases has declined from 71 years, to 66 years** in June '21. **Full vaccination** of older individuals began in the later part of January '21.

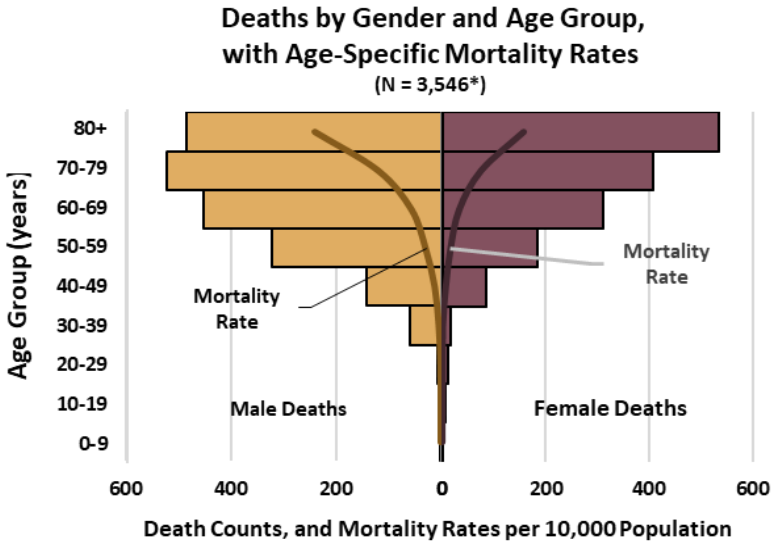
Gender and age-specific mortality rates† (curved lines in the top pyramid graph, presented here as deaths per 10,000 population) also show that **males have higher rates of death compared to females**, in every age group 30-39 years and older. This pattern has persisted throughout the pandemic.

Age-adjusted rates‡ through June '21 are 250 per 100,000 males, and 155 per 100,000 females. Including persons for whom gender is not available (N=30), the overall rates is **196 deaths per 100,000 population**.

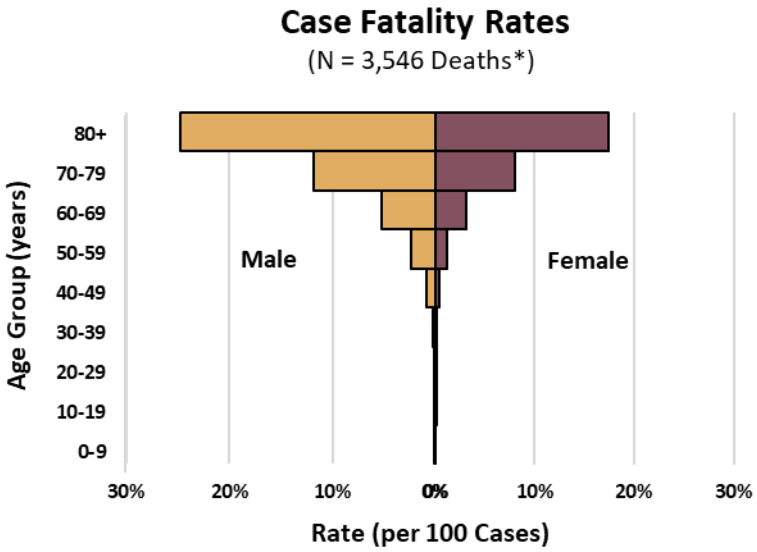
The **lower graph shows case fatality rates** (deaths per 100 cases) for each age group, by gender. Older cases have higher risks of death. Among persons **80+ years of age** who have COVID-19, the case fatality rate is 25 per 100 cases for males, and 17 for females.

The risk of death among cases remains 1.9 deaths per 100 male cases and 1.3 deaths per 100 female cases, unchanged through May '21. Overall, the **case fatality rate remains at 1.6 deaths per 100 cases**; that is, COVID-19 has caused or contributed to the deaths of 1.6% of all cases among Bexar County residents.

†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.



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



*Excludes 30 deceased cases (numerator; 0.8%) and 5,934 cases (denominator; 2.6%) for whom gender and/or age are unavailable.

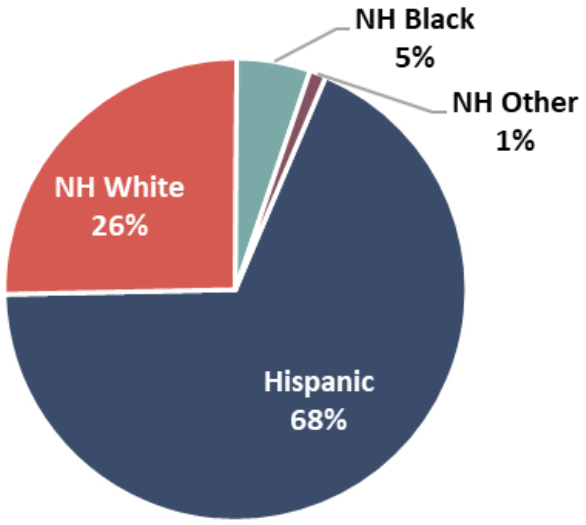
Of the 90%* of deaths due to COVID-19 for whom race/ethnicity data are available, Hispanic individuals continue to account for 68%, compared to 60% of the Bexar County population being Hispanic†.

Through June, age-adjusted mortality rates‡ per 100,000 are 240 for the Hispanic population, 110 for the Non-Hispanic (NH) population, and 195 for all persons combined.

Because race/ethnicity data are unavailable for 38% of COVID-19 cases, it is not possible to calculate the risk of death among cases (case fatality) by race/ethnicity.

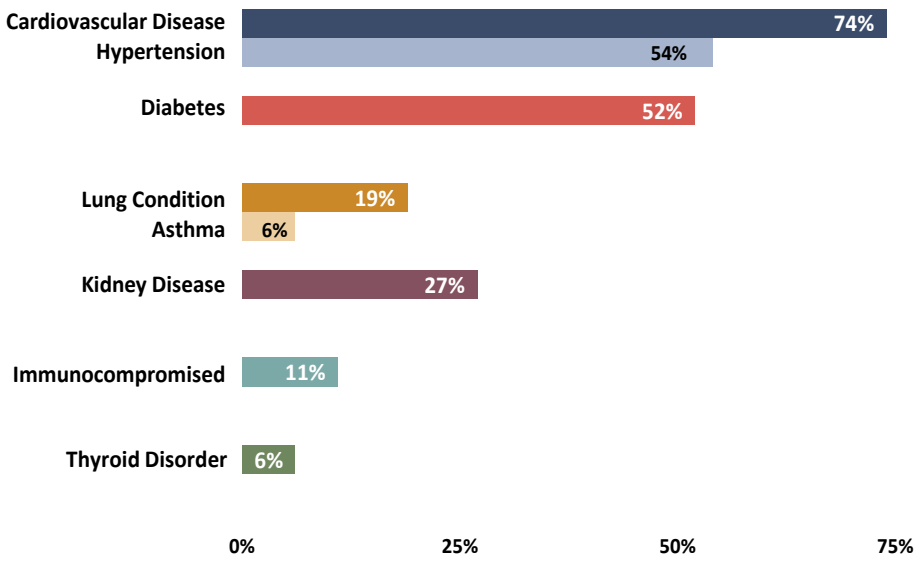
†Age-specific rates use ACS 5-yr 2019 gender-specific population estimates for Bexar County.
‡Age-adjusted rates use the ACS 5-yr 2019 gender-specific population estimates for Bexar County and the US Standard Population 2000 weights.

Deaths by Race and Ethnicity
(N = 3,208*)



*Excludes 368 deceased cases (10%) for whom race and ethnicity are not available.

Deceased Cases with Specified* Comorbidities
(N=2,617*)



Percent of Deceased Cases with Specified Comorbidities

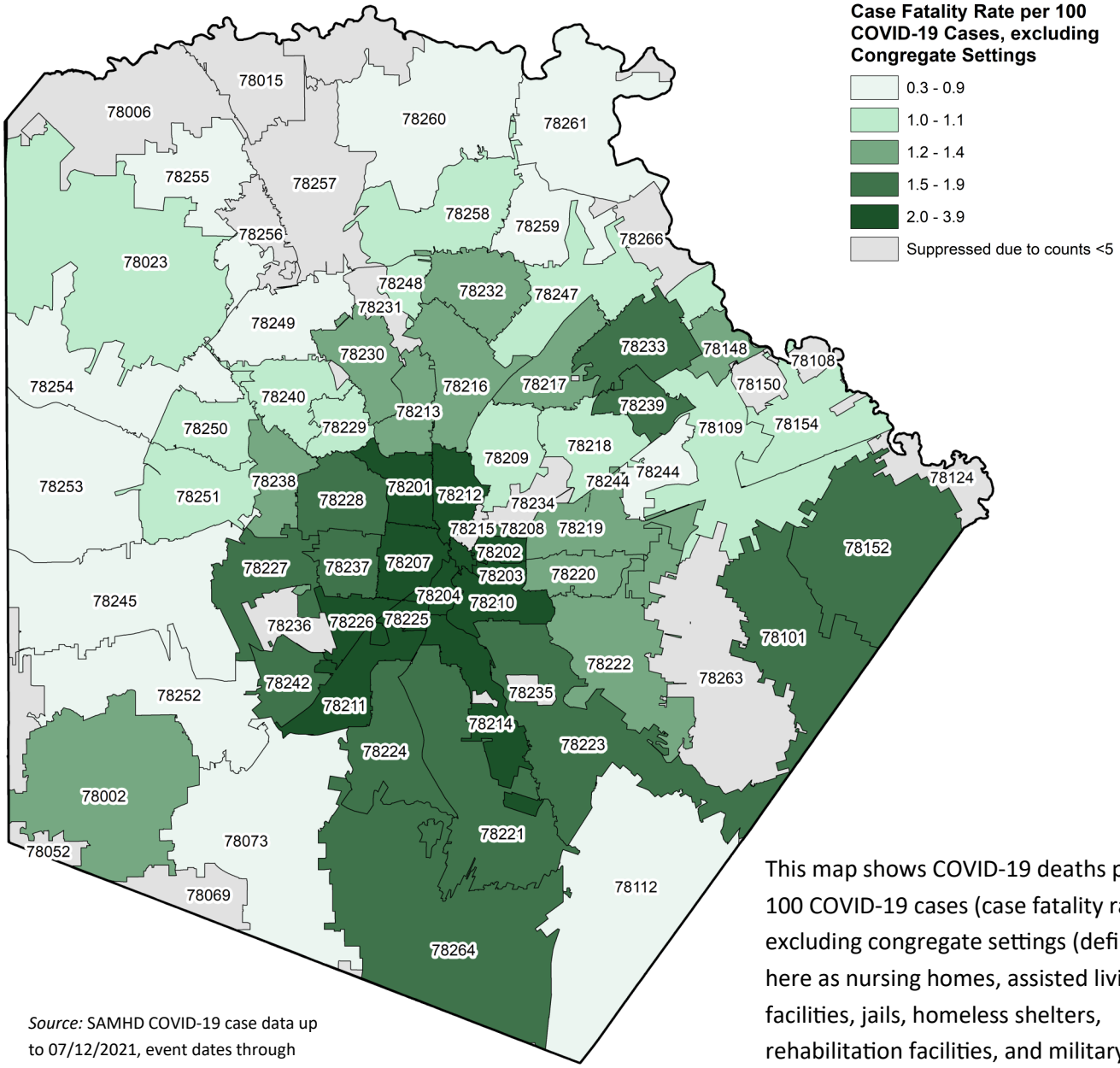
Data including **the presence of at least one of the specified comorbidities associated with poor COVID-19 outcomes were available for 73% of deceased cases** (N=2,567*).

Among deceased cases with at least one comorbidity, **cardiovascular disease (74%) was the most prevalent**, followed by **diabetes (52%).**

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.

*Excludes 959 (27%) of deceased cases not reported to have at least one of these specific comorbidities associated with poor COVID-19 outcome, or for whom such comorbidity data were not available.

COVID-19 Case Fatality Rate by Zip Code
(Excluding Congregate Settings)

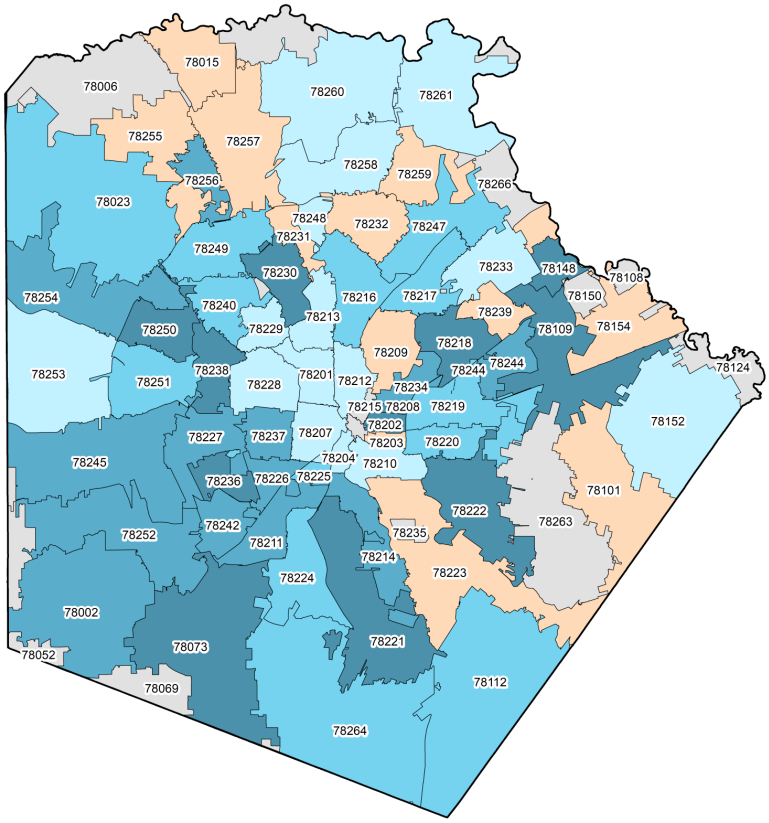


Source: SAMHD COVID-19 case data up to 07/12/2021, event dates through 06/30/2021

This map shows COVID-19 deaths per 100 COVID-19 cases (case fatality rate), excluding congregate settings (defined here as nursing homes, assisted living facilities, jails, homeless shelters, rehabilitation facilities, and military barracks). **The geographic distribution continues to show the highest case fatality rates have occurred in zip codes closest to downtown San Antonio.** This spatial distribution has remained consistent over time.

VI. Percent Change of COVID-19 Cases, May-June

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

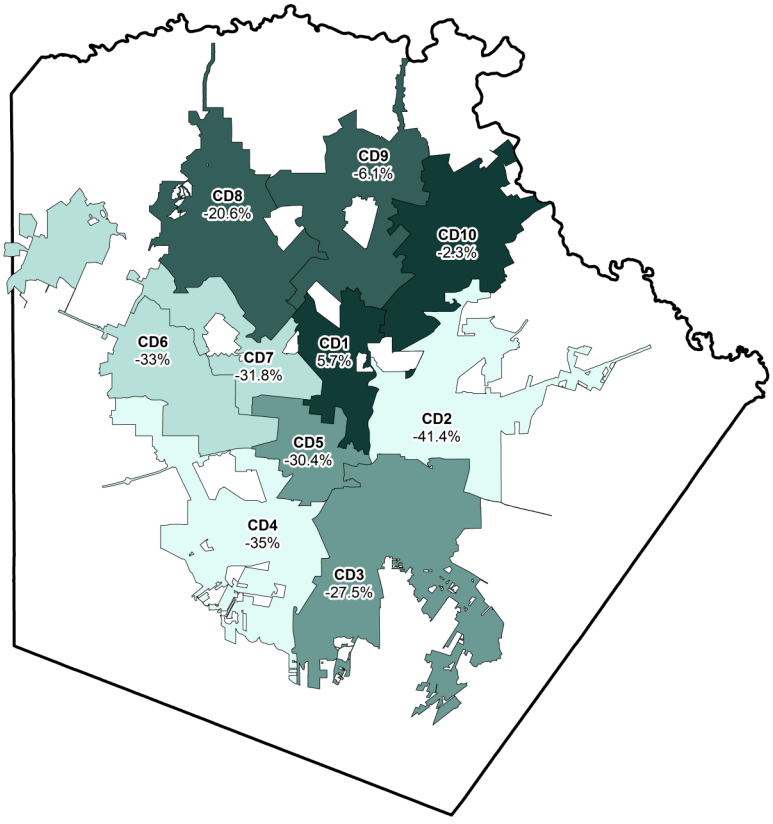


Approximately 84% of zip codes in Bexar County reported having a lower number of new COVID-19 cases in June 2021 compared to May 2021. The zip codes that saw an increase in new COVID-19 cases from May to June tended to be in the north, west and southwest of the county. As shown in the map on page 7, the zip codes with the percent increase in cases from last month had varying vaccination rates– at this time, no correlation can be observed.

Percent Change in COVID-19 Cases from May 2021 to June 2021

- -69% - -46%
- -45% - -32%
- -31% - -20%
- -19% - 0%
- 1% - 83%
- Suppressed due to counts <5

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



The map to the left depicts the percent change in COVID-19 cases from May 2021 to June 2021 by City of San Antonio Council District. In comparison from May 2021 to June 2021, 9 of the 10 council districts saw a decrease in a new COVID-19 cases reported. Council District 1 saw an approximately 6% increase in new COVID-19 cases in June 2021 compared to the month prior.