



Unless otherwise indicated, data for analyses in this report were extracted from Texas Health Trace on 01/10/2021 and include cases with event dates through 12/31/2020. Results are subject to change.

Key Takeaways

Increase in Cases

- December saw a substantial increase in the rolling 7-day average of new COVID-19 cases, with daily counts **surpassing the previous peak from the summer surge**. The 7-day average was 736 on 12/1 and 1,164 on 12/31, a 58% increase.
- Over **30% of all COVID-19 cases to date** occurred in December.

Other Trends

- December saw the **second highest positivity rate to date** (23.2%), only surpassed by early July (24.2%).
- The **highest rates of COVID-19 cases** have occurred in zip-codes **near Downtown and Southern Bexar County**, with rates as high as 3,300 **new cases** per 100,000 population (3.3% of residents) in December alone.
- Residents in their **20's** continued to account for over **20% of all cases to date**.
- Risk of death in congregate settings has decreased**— down from nearly 8% in the first quarter to just under 2% in recent months.
- Case fatality rate among those living in private residences **has remained at 1 - 2%** - the same since June.

Hospitalizations and Deaths

- Hospitals experienced an **increase in the number of COVID-positive occupied beds** in the month of December. ICU cases **account for approximately one-third** of those hospitalized individuals.
- Cases **among those 50 and older** comprise **90% of COVID-19 deaths** seen to date in Bexar County.

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

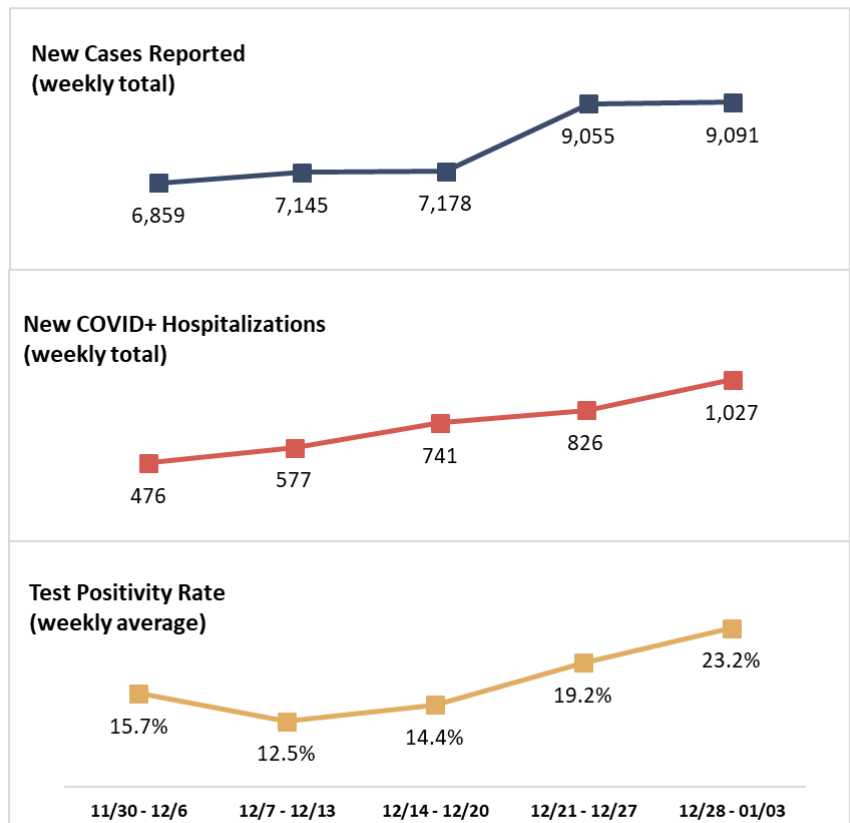
Bexar County reported 36,392 new cases during December, for a total of 127,083 cases in 2020. December also reported 101 COVID-19 related deaths, bringing the total COVID-19 related deaths for the year to 1,635.

After a major surge during June and July, transmission declined through August and September. A slight increase during October was followed by a second and more extensive surge throughout November and December.

Weekly case totals saw a continued increase throughout the end of the year, with **32% more** new cases reported in the last week of December than in the last week of November.

Hospitalizations and the testing positivity rate saw similar upward trends, with a **215% increase** in hospitalizations, and a **7.5% point increase** (of all tests) in positivity rate.

Weekly Trends through December (Mon-Sun)



Case and hospital admissions data reflect dates they were reported.

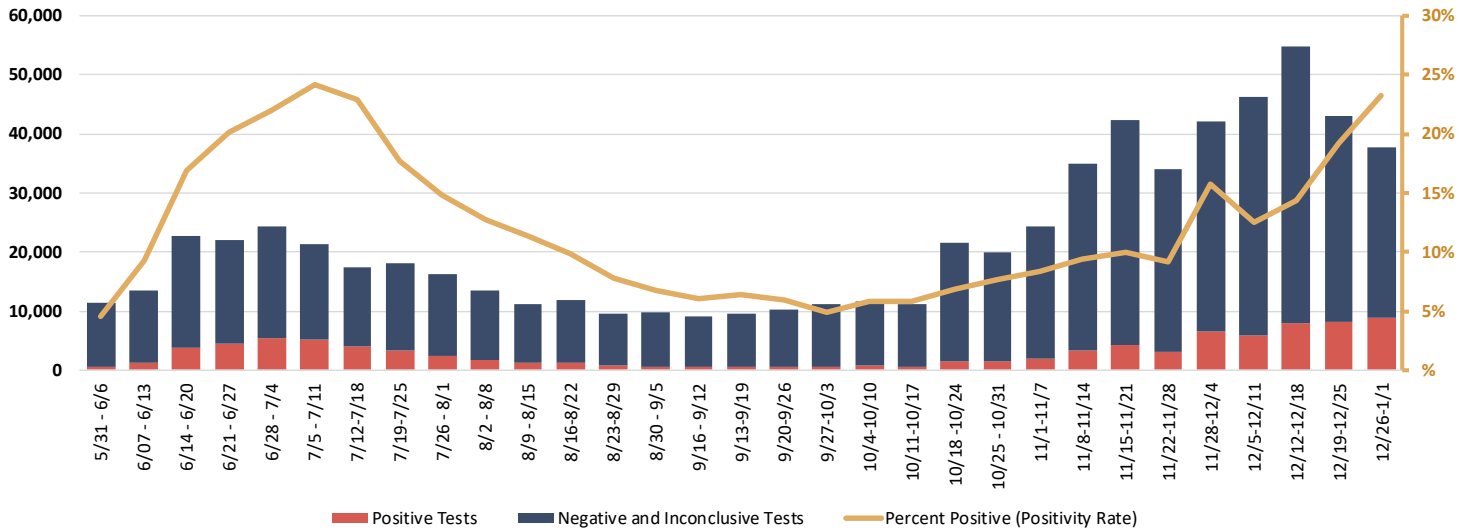


II. Testing & Positivity Rate

Bexar County's COVID-19 weekly positivity rate began climbing in early June and reached a record high in early July (24.2%), indicating the height of the 2-month surge that we experienced across early summer. Since then the weekly positivity rate declined, but has seen an increase since October. **The increase to the 2nd highest weekly positivity rate ever reported in Bexar county occurred during the final week of 2020 reaching 23.2%.**

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

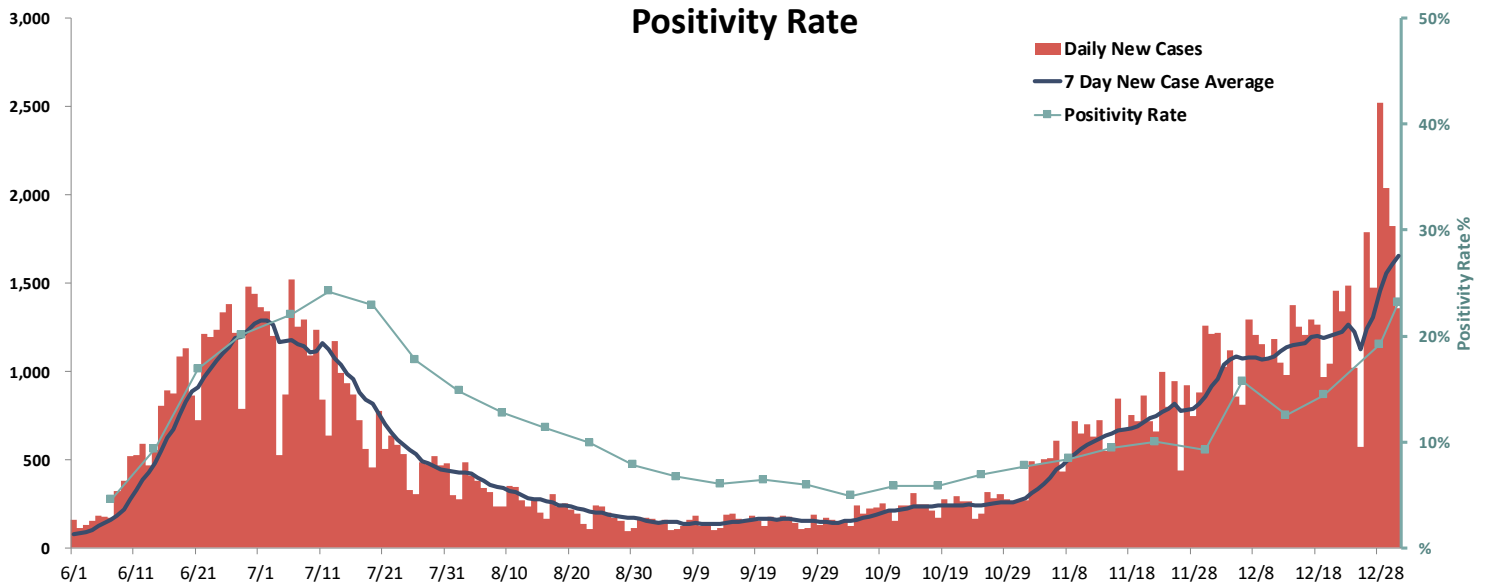
Number of Tests and Percent Positive by Week
(May 31st- January 1st)



III. Trends & Demographic Characteristics among COVID-19 Cases

December continued to see a substantial increase in new COVID-19 cases, **introducing the highest peak in case count ever recorded in the county.** Preliminary data suggest that the increase in new cases will continue into 2021.

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

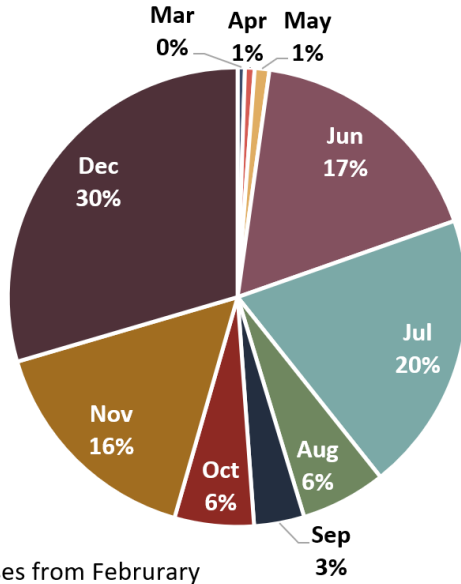


*: Event Date is the date of symptom onset. For asymptomatic cases, the test collection date is used. This differs from reported date, which is the date when related results are received by Metro Health.

** : Data for days not shown or lightened in color have yet to be fully completed.



Percentage of Total COVID-19 Cases In Bexar County by Event Month*



Per current data, **30% of all COVID-19 cases ever recorded in Bexar county** had their onset occur during the month of December.

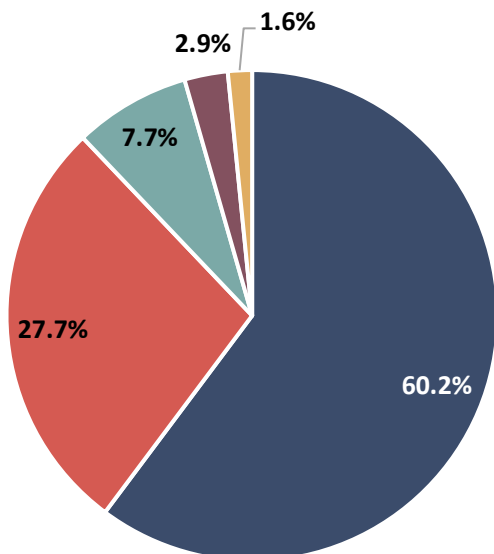
Additionally, 52% of all reported cases occurred some time between October and the end of the year, compared to 48% across March through September.

These numbers are based on Event Date: the date of first symptoms or test collection date if the person was asymptomatic.

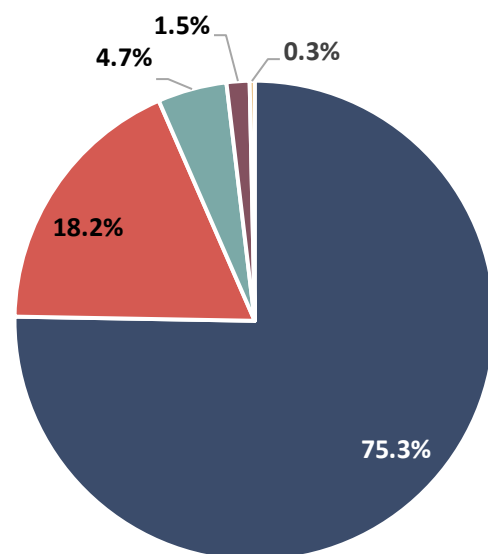
III. A. Race/Ethnicity Distribution of Cases

Among cases for whom race/ethnicity data are available (58%), **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 particularly affected Hispanic individuals.

Race and Ethnicity in Bexar County
(N=1,952,843)



Cases with Race and Ethnicity Data
(N=74,372)



- HISPANIC
- NH WHITE
- NH BLACK
- NH ASIAN
- NH OTHER

Notes regarding Race and Ethnicity data:

Due to limitations inherent in our database, data collection procedures, and/or our sources, data on race and/or ethnicity are currently unavailable for over 42% of cases. For this reason, meaningfully accurate determination of racial and ethnic disparities in COVID-19 diagnoses is currently not possible.

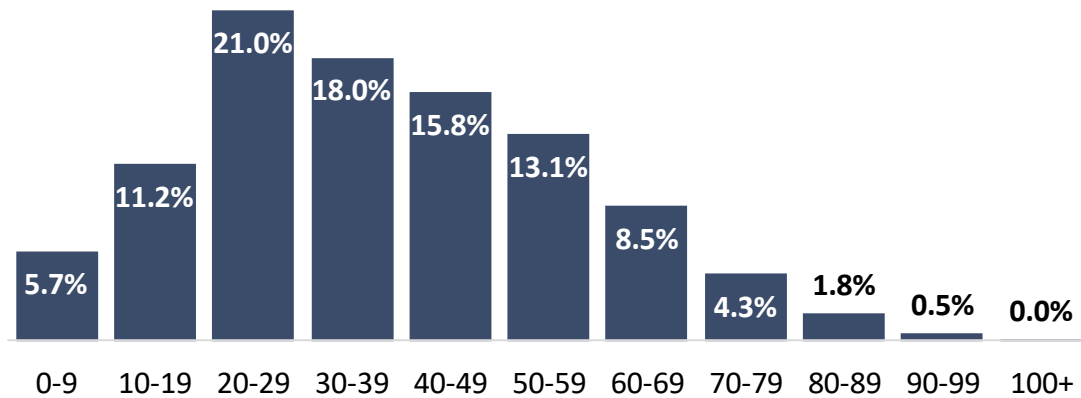


III. B. Age and Gender Distribution of Cases

20 to 29 year-olds continue to make up about **one-fifth** of COVID-19 cases, a rate consistent throughout the pandemic. The 20-29, 30-39, and 40-49 age groups continue to **comprise over half** of all reported cases.

Even with schools returning to some in-person learning, the proportion of pediatric cases **remained relatively unchanged**.

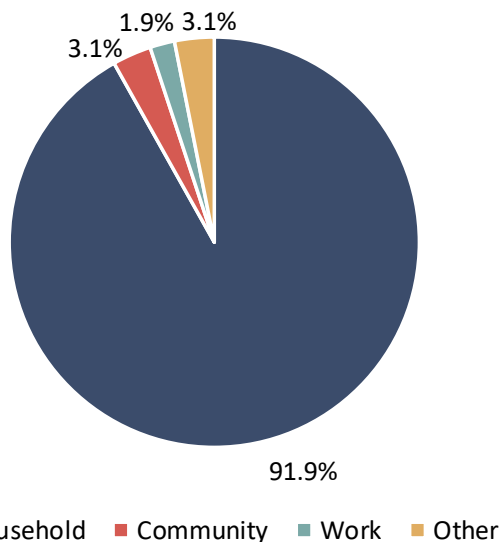
Total Cases by Age Group (N = 126,979)



III. C. Characteristics of Close Contacts among Cases

Location of Exposure to Confirmed Case

Total N= 6,891
December Cases



Since COVID-19 is transmitted through close contact between persons, identifying the location of exposure is critical in preventing the spread of this disease. The **vast majority** (92%) of close contacts, who were interviewed and knew where they had become infected, reported being a **household member** of a case.

Approximately 3% of reported close contacts were exposed in a community setting -- meaning a grocery store, public or shared transit, etc. Another 3% of contacts reported "Other" locations such as schools, day cares, healthcare settings, and hotels. A smaller proportion of about 2% reported work as their location of exposure—a small decrease from the previous month.

For December cases, each had an **average of two contacts** while they were infectious.

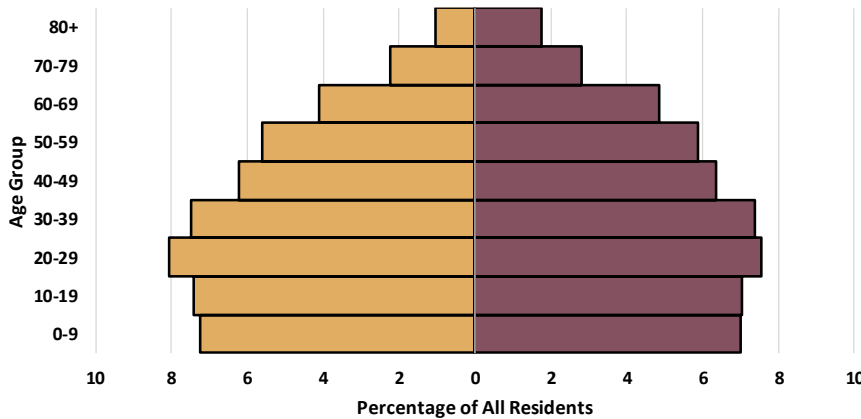
NOTE: These data are based on only 18% of all December cases. The data may be skewed due to reporting and selection biases.



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

Distribution of Bexar County Residents by Gender and Age

(n=1,952,843) Source: US Census, 2019 ACS 5-Year Estimate



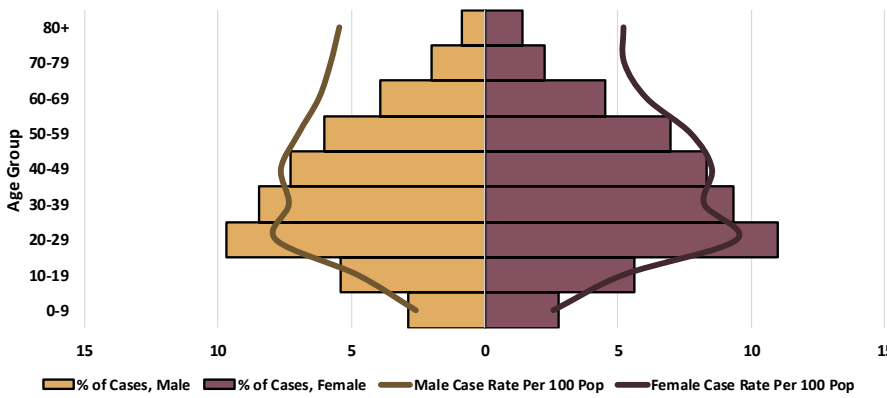
The distribution of COVID-19 cases stratified by age and gender shows a relative overrepresentation of the **20-29 year old age-group among both males and females**. This age-group comprises approximately 16% of the Bexar County general population, but 21% of COVID-19 cases.

Conversely, we see a relative **underrepresentation of children** aged 0-9 and 10-19 among **COVID-19 cases**, compared to the general population.

Overall, adult case rates, when standardized to the general population, show a somewhat similar pattern to the age distribution of COVID-19 cases. The 20-29 age-group has the highest case rate at 9.5 per 100 population.

Distribution of COVID-19 Cases by Gender and Age with Respective Case Rate Per 100*

(n=127,083)



*Excludes cases with no known gender or age

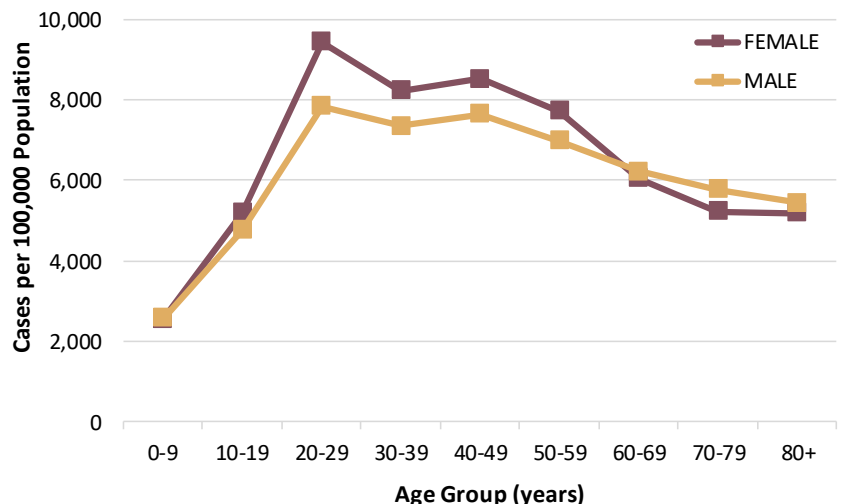
COVID-19 incidence rates through December 31 were 6,704 per 100,000 for females and 6,133 per 100,000 for males. All together, 6.4% of the Bexar County population has been diagnosed with COVID-19 by a positive test.

Among young children and seniors (ages 60+), incidence rates do not differ by gender, except in age group **70-79** where the **male rate** is higher than female.

NOTE: For 1.3% of cases (N=1,669) gender or age is not available. These cases are not included in these rates.

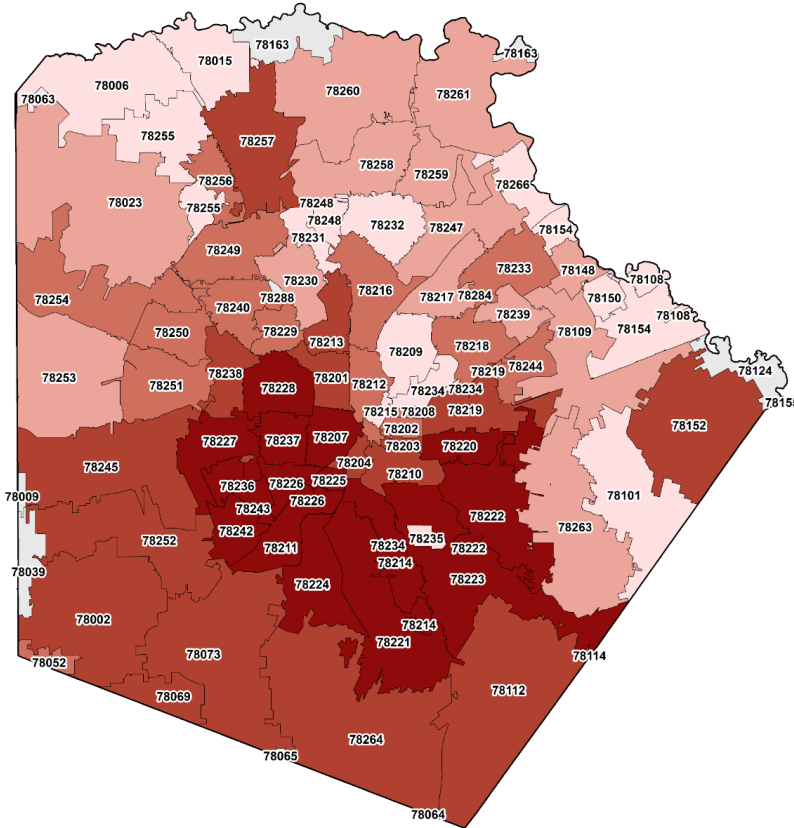
Age-Specific COVID-19 Incidence Rates by Gender (per 100,000 population)

(N available = 125,414)

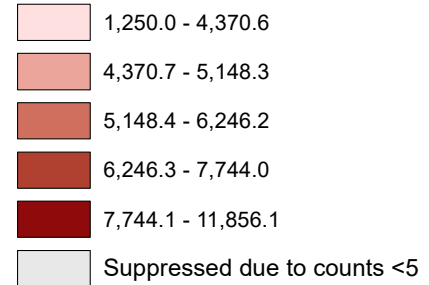




COVID-19 Case Rate per 100,000 Population

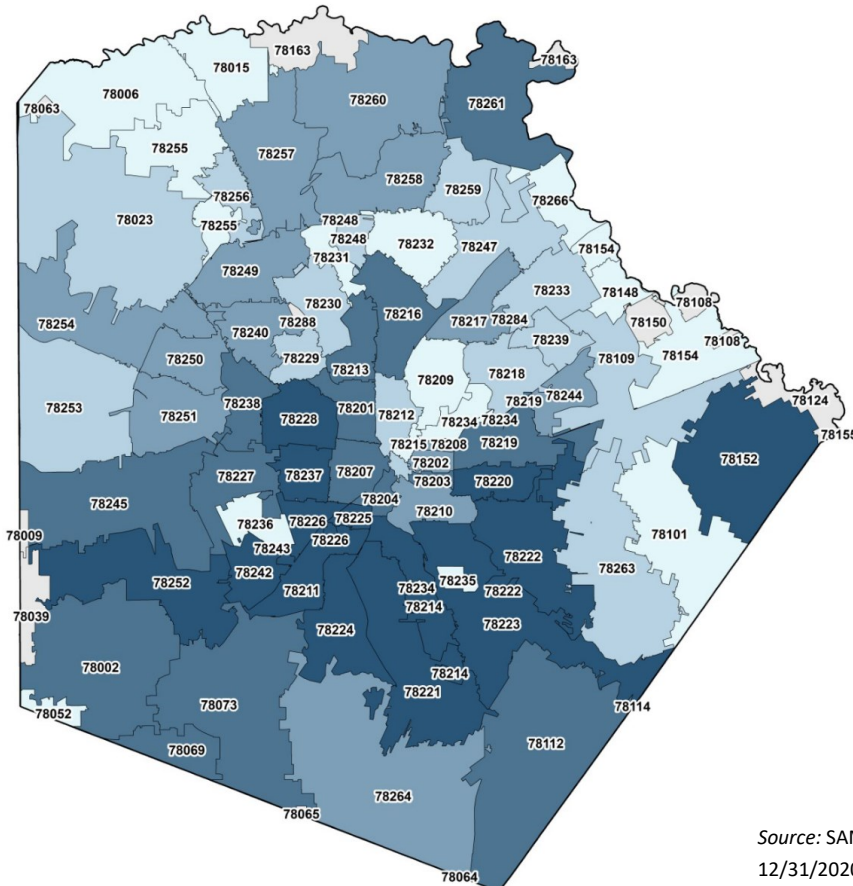


COVID-19 Case Rate per 100,000 Population

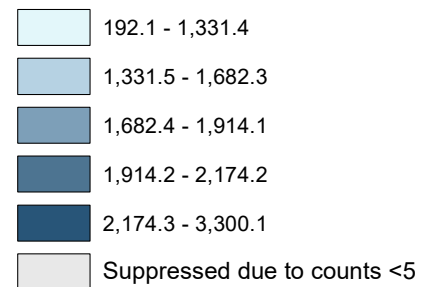


The geographic distribution of COVID-19 cases geographically by zip code, there is a similar pattern between overall case rates and December 2020 case rates. Both data show that zip codes near downtown and in southern Bexar County have the highest rates of COVID-19 cases per 100,000 population. Zip codes in the northern and northwestern portion of the county continue to see lower case rates over time and monthly, compared to zip codes in the southern portion of Bexar County.

December 2020 COVID-19 Case Rate per 100,000 Population



December 2020 COVID-19 Case Rate per 100,000 Population



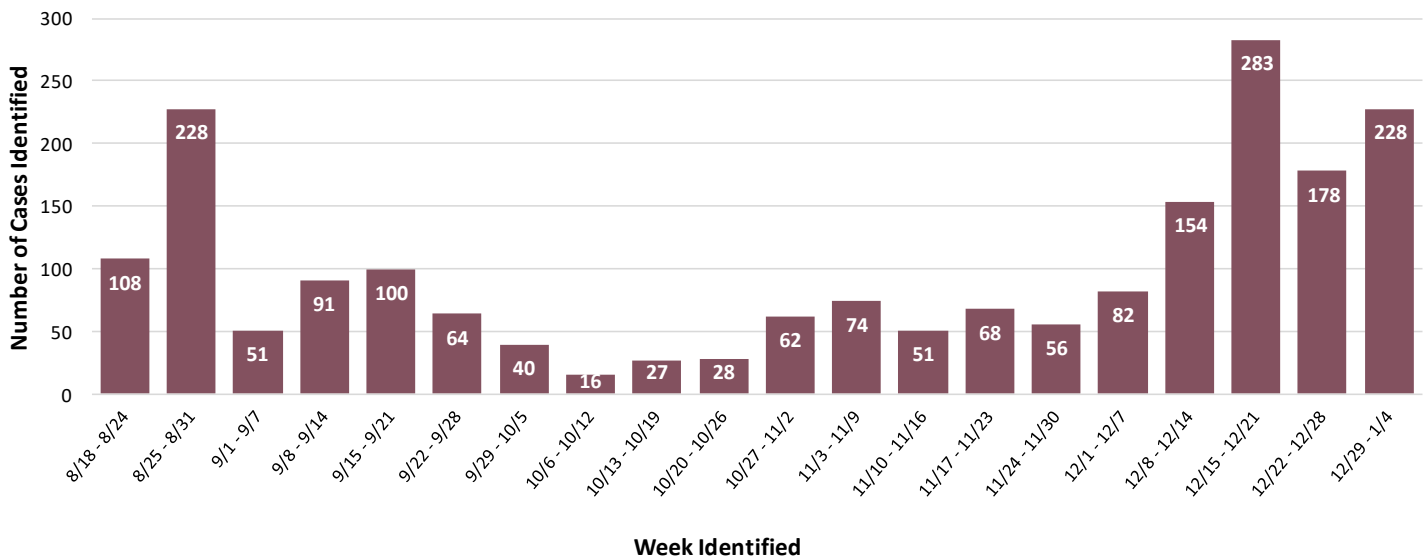
Source: SAMHD COVID-19 case data up to 01/10/2021, event dates through 12/31/2020; U.S. Census, ACS 2019 5-year Population Estimates, Table S0101.



V. Congregate Setting & School-Related Cases

Cases occurring in congregate settings **substantially increased during the month of December**, much like cases seen within the local community. During late December, case counts appeared more irregular due to outbreaks across varying congregate setting facilities. The total number of deaths associated with a congregate setting has **increased to 318** as of January 3rd.

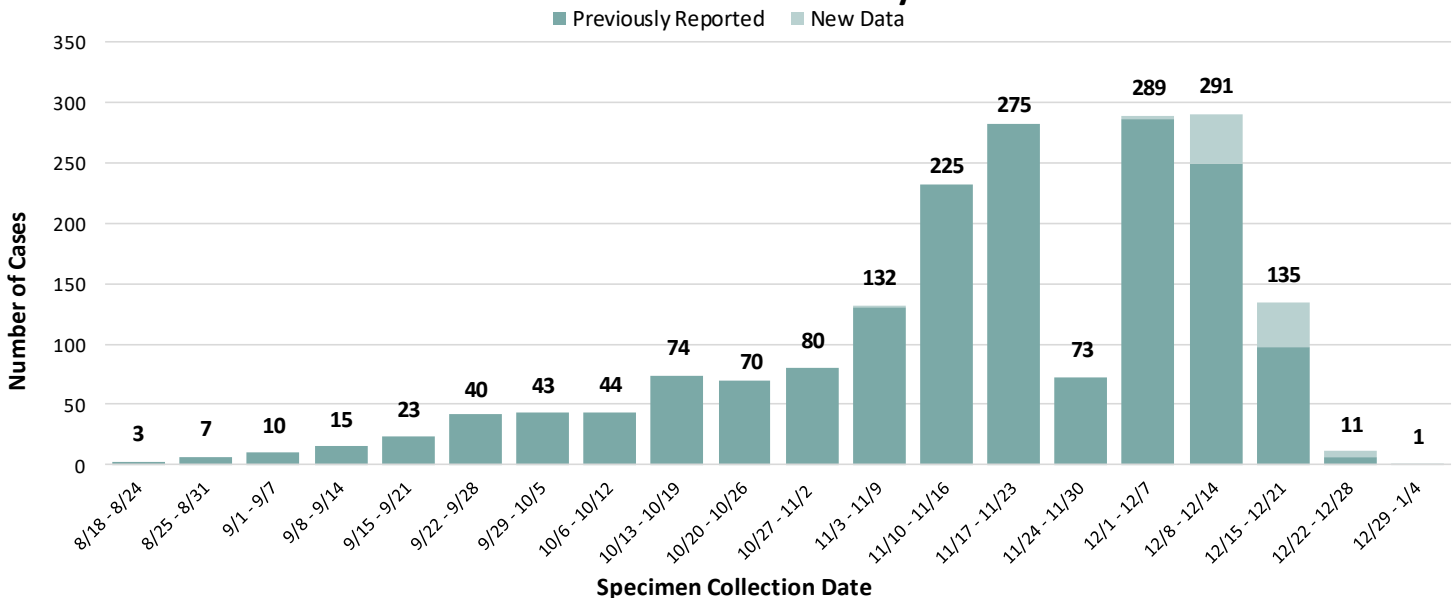
COVID-19 Cases Identified Weekly in a Congregate Setting



Excluding the holiday break in November, **cases within schools have shown a slight increase. However, these data also show a substantial drop towards the end of December.** This shift in numbers may be partially attributed to the extracurricular activities and school closures during the holiday break.

It is important to note that the majority of these cases were not associated with in-school exposure. To date, there have been 10 outbreaks in Bexar County schools during which in-school transmission was recorded. These outbreaks account for only 56 of the 1,841 cases denoted below.

COVID-19 Cases in Bexar County Schools



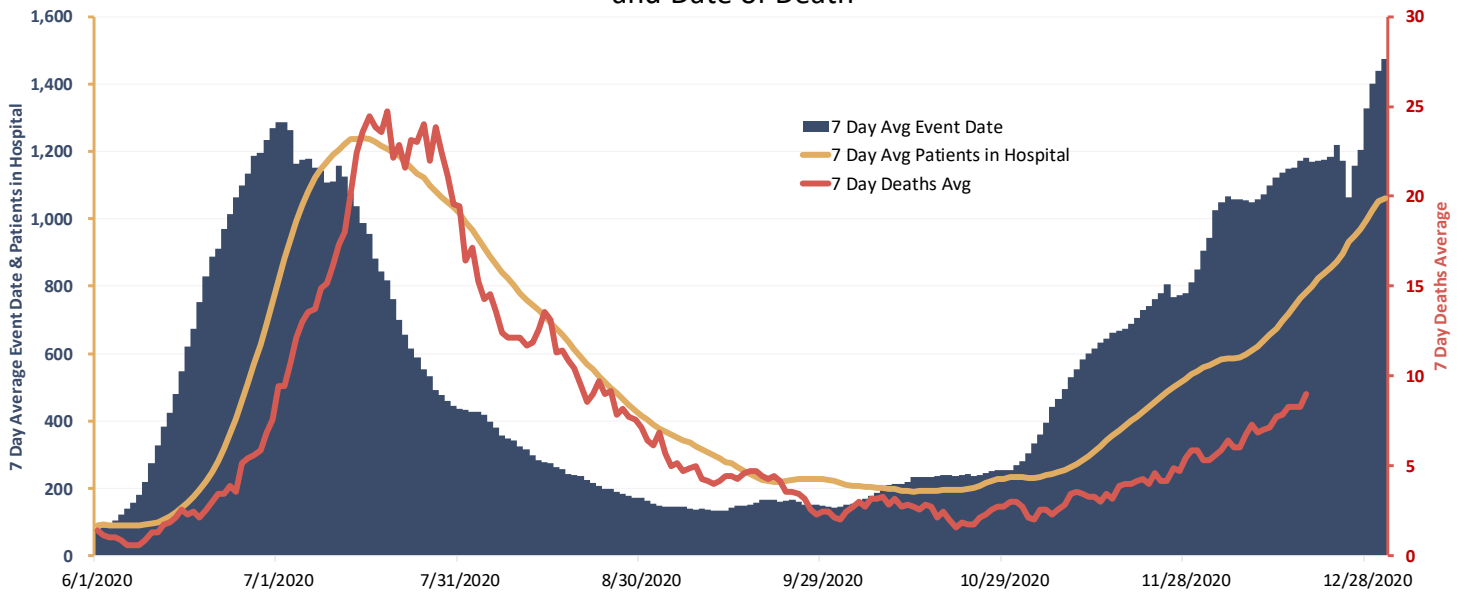


VI. Hospitalizations and Deaths among COVID-19 Cases

VI. A. Hospitalizations

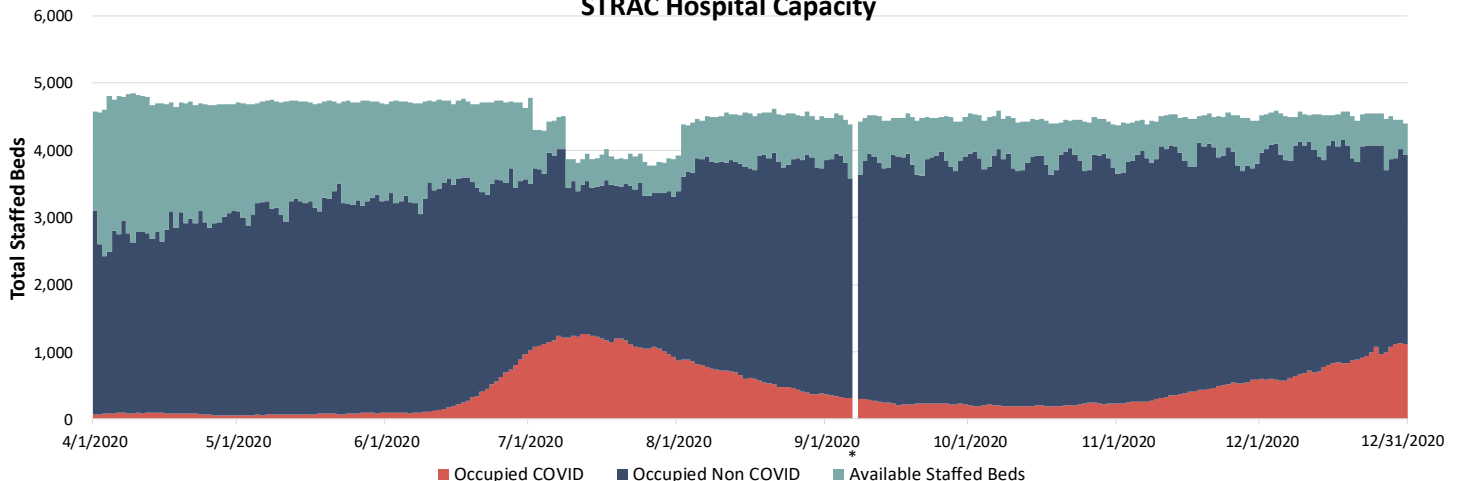
When examining the 7 day average of event date, overlaid with 7-day averages for current hospitalizations and deaths, a lag time of about 14 days between peak case average and peak hospitalizations can be observed. There is also about a 20 day lag time between peak case average and average deaths. This pattern continues during the second surge, with hospitalizations rising after an increase in cases then a subsequent increase in deaths. Note: We are seeing a substantial increase of hospitalizations in January 2021 that will be reflected in the January Report, to be published on February 16th.

Bexar County Cases by 7 Day Average of Event Date, STRAC COVID-19 Hospitalizations and Date of Death



Since the beginning of April, Bexar County has kept an average of about 4,511 total staffed beds and 911 available staffed beds per day. Prior to July 8th, available staffed beds averaged 1,482 per day and non-COVID-19 patients occupied an average of 2,977 beds per day. From July 9th to August 1st, as the surge of COVID-19 patients began to peak, total staffed beds and available staffed beds considerably dropped to an average of 3,878 and 441 beds per day, respectively. From November 5th to December 31st, beds occupied by COVID-19 patients increased to an average of 633 beds per day and non-COVID-19 patients decreased to an average of 3,330 beds per day. However, from August 8th to December 31st available staffed beds saw a stabilization at an average of 611 beds per day.

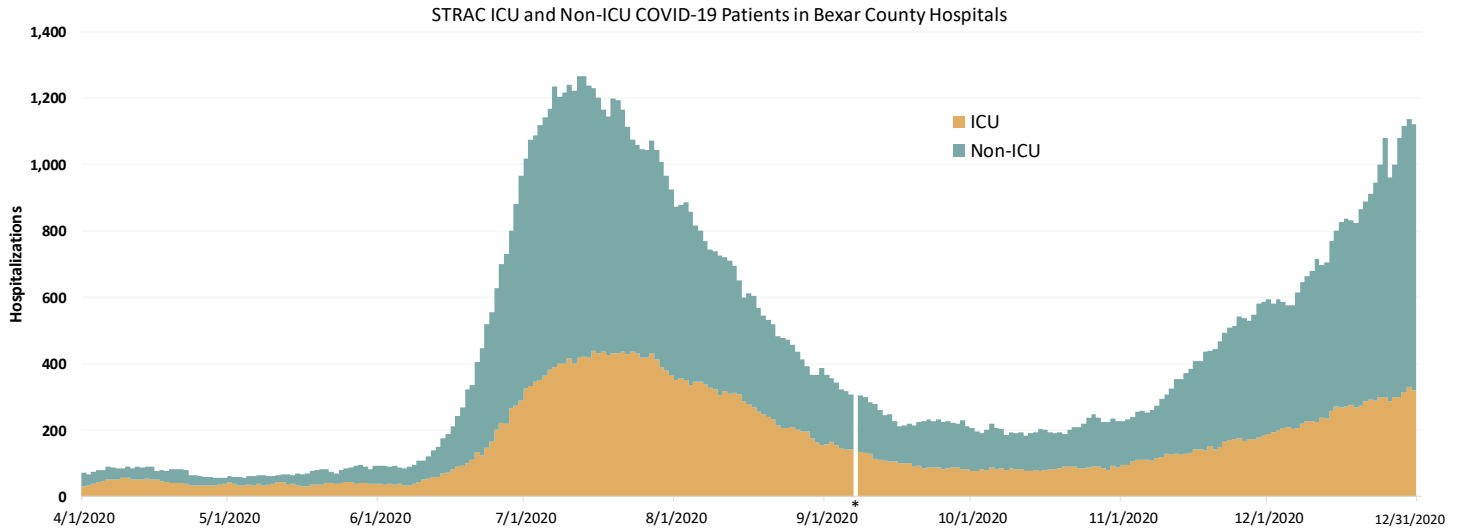
STRAC Hospital Capacity



*: Data was not reported on 9/7/2020 due to Labor Day.

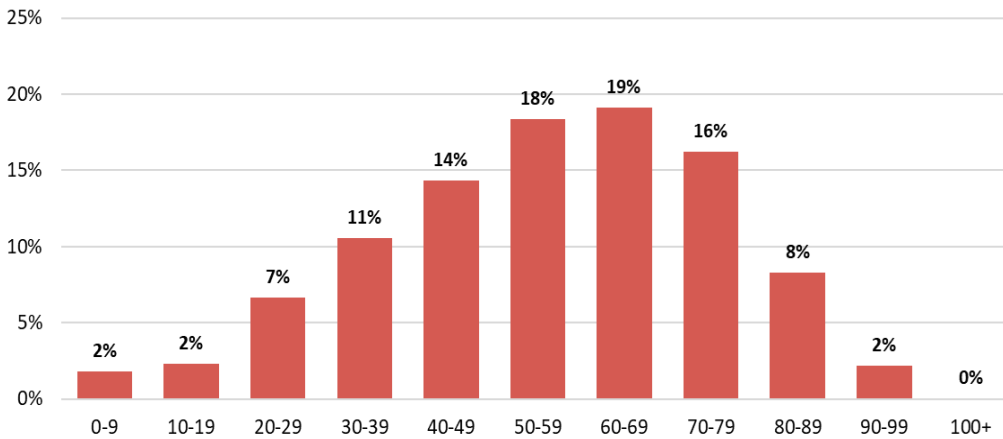


Over the course of the COVID-19 pandemic, COVID-19 cases in the ICU have consistently made up approximately one-third of all hospitalized cases. Similar to other patterns we see with the COVID-19 pandemic, the number of individuals in the ICU is highest during the July-August spike, and appear to be on the rise since November.



*: Data was not reported on 9/7/2020 due to Labor Day.

Distribution of Total Hospitalized Cases by 10-Year Age-Groups (N=5,580)

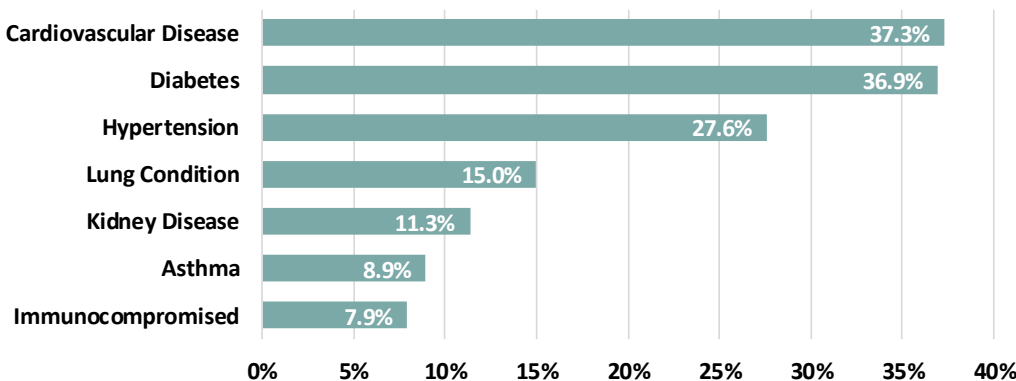


Through the end of December a total of 5,580 individuals have been hospitalized with COVID-19.

Trends by age remain consistent with previous reports: **age-groups 50-59, 60-69, and 70-79 account for the majority of hospitalizations with COVID-19.**

74% of cases have one or more comorbid conditions.

Hospitalized Cases with Underlying Conditions (N=5,581)



The most common are cardiovascular disease and diabetes.

In this report, cardiovascular disease includes heart conditions, hypertension, stroke, aneurysm, hypotension, and history of pulmonary embolism. The category immunocompromised includes cancer.



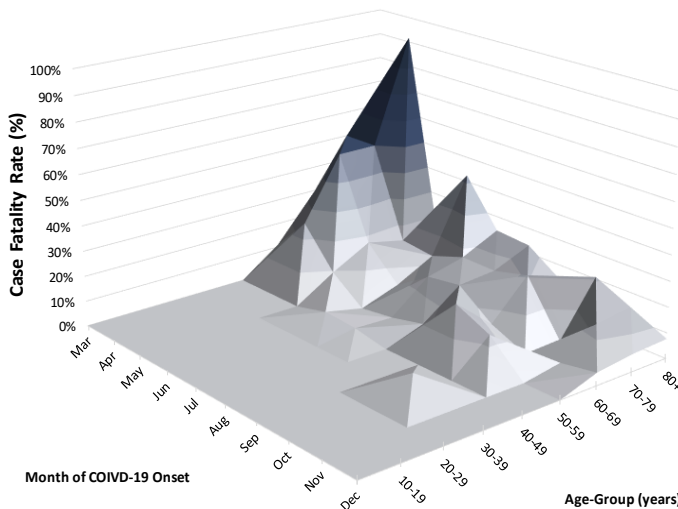
VI. B. Deaths

People living or working in congregate settings* were at particularly high risk of COVID-19 during the first months of the pandemic. The highest case fatality rates occurred during these early months, particularly among the most elderly residents. Deaths associated with congregate settings accounted for 30% of COVID-19 related deaths among cases with disease onset during March-May.

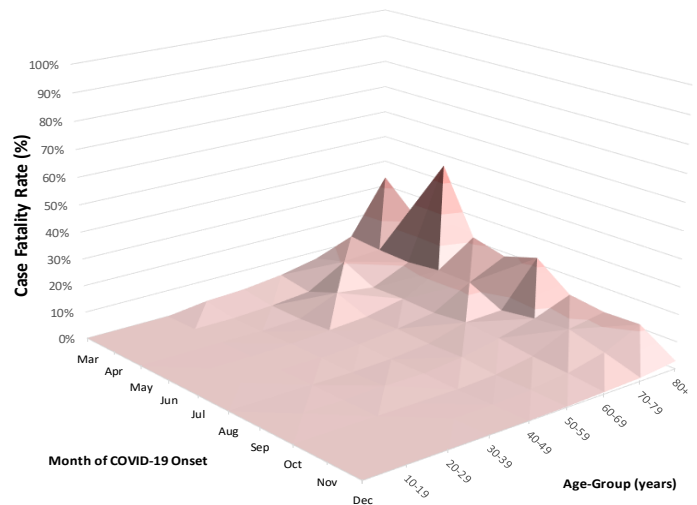
Risk of death in congregate settings has decreased—down from nearly 8% in the first quarter to just under 2% in recent months. Subsequent reductions in new infections and deaths may reflect improved infection prevention strategies, testing regimens and medical management; and possibly the previous deaths of the most at-risk residents.

*In this analysis: Long-term acute care, Long-term living, Assisted living, Rehabilitation, State supported living facilities.

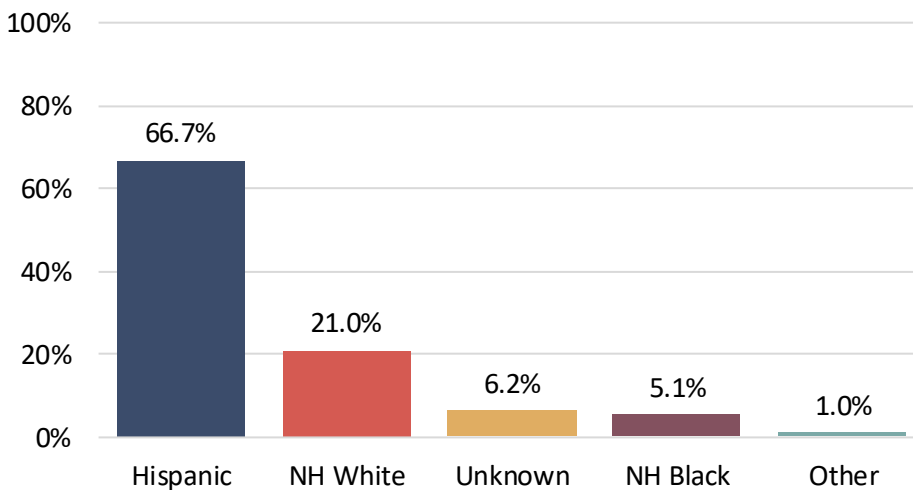
Age-Specific Case Fatality Rates over Time, among Cases in Selected Congregate Living Settings*
(N's available = 337 Deaths among 2,850 Cases with Onset March - December)



Age-Specific Case Fatality Rates over Time, among Cases Living in Private Residences
(N's available = 1,279 Deaths among 119,534 Cases with Onset March - December)



Distribution of Total Deceased Cases by Race/Ethnicity (N=1,635)



Among deceased cases, **Hispanic individuals** account for **67%** of COVID-19 related deaths to date.

Adjusted to the Bexar County population, the highest COVID-19 mortality rate was among Hispanic individuals, particularly males age 50 and older (not shown).

NOTE: Race/ethnicity was not available for 101 deceased cases (6%).

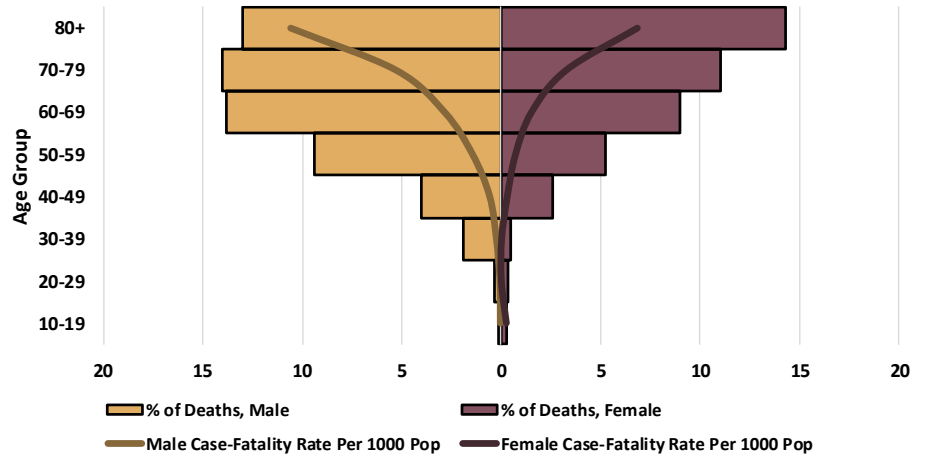


This graph, when compared with the Bexar County population pyramid (page 5), highlights the disparate burden of death due to COVID-19 among **older individuals** in both genders. Males accounted for a higher proportion of death overall.

Males and females over the age of 50 make up 90% of COVID-19 deaths seen to date in Bexar County, with males 50+ comprising 50% and females 50+ at 40%.

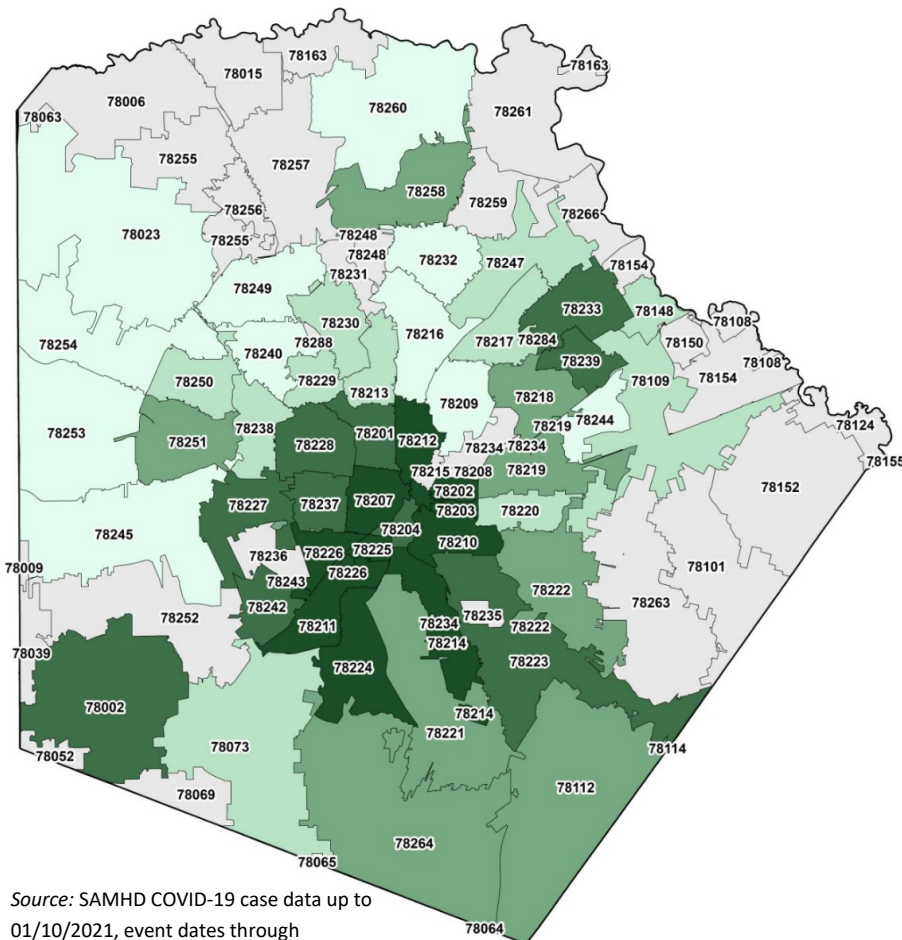
This finding, alongside the higher case rates among women, and the elevated gender, age, and population controlled case-fatality rate suggest that males carry a higher burden of COVID-19 related deaths.

Distribution of COVID-19 Deaths by Gender and Age with Respective Case-Fatality Rate Per 1,000* (n=1,635)



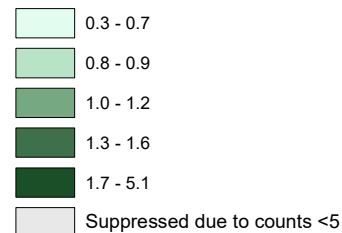
*Excludes cases with no known gender or age

COVID-19 Case Fatality Rate per 100 Cases (Excluding Congregate Settings)



This map shows COVID-19 case fatality rates per 100 COVID-19 cases, excluding those in congregate settings (defined here as nursing homes, assisted living facilities, jails, and rehabilitation facilities). Geographically, the **highest rates** of COVID-19 deaths (and cases) have occurred in zip codes **near and to the south of downtown San Antonio**.

Case Fatality Rate, per 100 Cases, excluding Congregate Settings

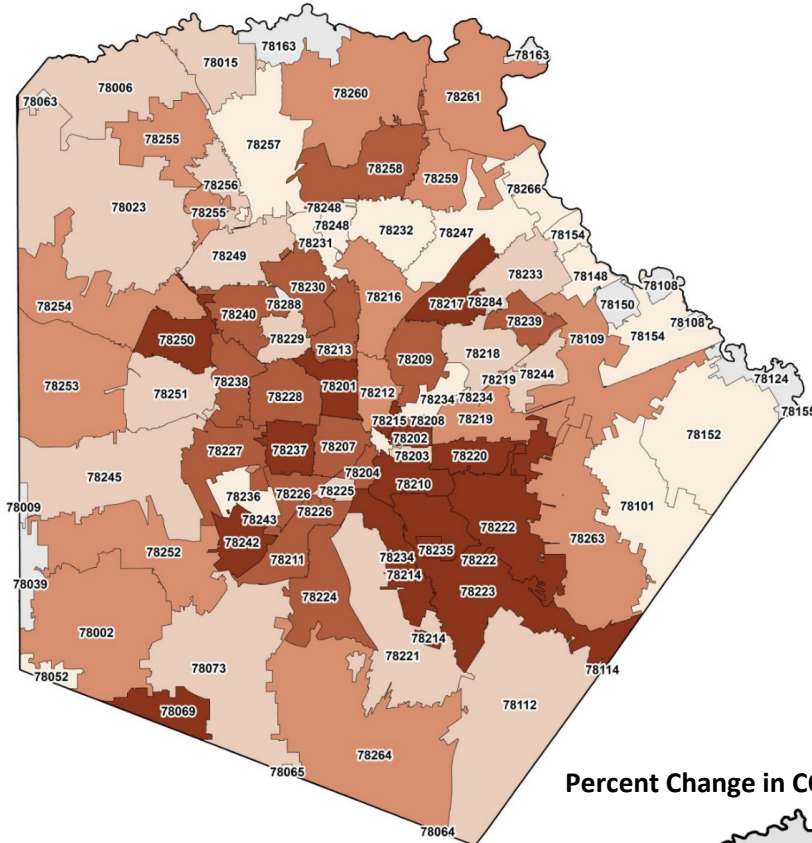


Source: SAMHD COVID-19 case data up to 01/10/2021, event dates through 12/31/2020; U.S. Census, ACS 2019 5-year Population Estimates, Table S0101.



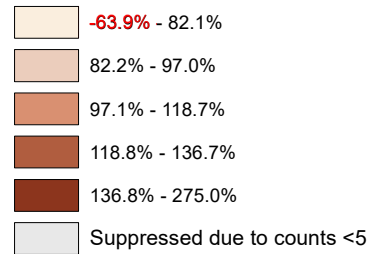
VII. Percent Change of COVID-19 Case Rates, November—December

Percent Change in COVID-19 Cases from Nov to Dec 2020 by Zip Code

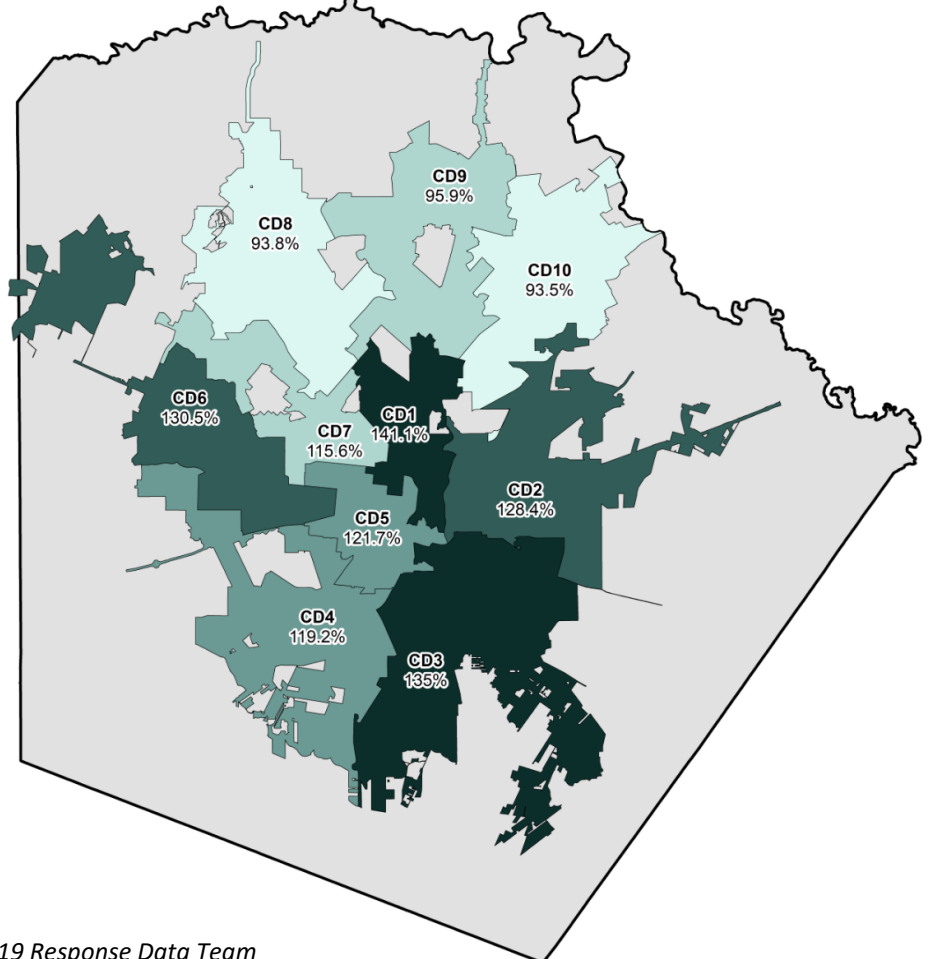


Darker shades of red correspond to zip codes with the largest increase in number of cases, compared to November. The majority of these zip codes are south-east of the city center. Across the entire county, only three zip codes - 78154, 78234, and 78236 - had fewer cases in December than in November.

Percent Change in COVID-19 Cases from November 2020 to December 2020



Percent Change in COVID-19 Cases from Nov to Dec 2020 by Council District



During the month of December 2020, Council District 1 and Council District 3 had the highest percent increase in case rates compared with November 2020, with 141.1% and 135% increases, respectively. During this month, Council Districts to the north, particularly Council District 8 and 10, had the lowest increase in new cases compared to November 2020.