

Santa Barbara County
PUBLIC Health
DEPARTMENT



COVID-19 Quarterly Report
January 2021 – March 2021

April 20, 2021

SUMMARY

- COVID-19 cases reached the pandemic peak in early January, soon followed by highs in hospitalization and deaths
- All metrics then decreased through February and March
- Working-aged adults (18-49 years) had the highest proportion of cases
- By ten-year age groups, cases were most common among 20 year-olds
- Hispanic/Latinos were disproportionately represented in COVID-19 cases, hospitalizations, and deaths
- Santa Maria has the highest case count and second highest case rate
- Most cases were symptomatic and 36% had close contact with a known case
- Vaccination began in December 2020 and 30% of SBC residents have now received at least one dose. Of the county population, 16% are fully vaccinated.
- In the [Healthy Places Index](#) target areas, 20% of the population has received at least one dose of vaccine and 9.8% are fully vaccinated.

Background

2020-2021 COVID-19 Season, March 2020 – March 2021

This report provides a high-level summary, to date, thirteen months into the COVID-19 pandemic. It uses data collected by the Santa Barbara County Public Health Department (SBCPHD) to help explain *who* is contracting COVID-19, *how* they are contracting the disease, and *where* transmission is occurring.¹ In the first quarter of 2021, immunization has taken priority in the county's COVID-19 response, with the dual aim of reaching county residents quickly and equitably. This report presents the vaccination data for the period, including the demographics of vaccine recipients and the progress to date in reaching the county's most vulnerable populations.

In late 2019, Coronavirus disease 2019 (COVID-19) emerged as an isolated disease in a region of China, which then spread quickly across the globe. On March 11, 2020, the World Health Organization (WHO) declared COVID-19 to be a global pandemic, an outbreak occurring worldwide and affecting a large number of people.² The Centers for Disease Control and Prevention (CDC) confirmed the first US coronavirus case on January 21, 2020 in Washington State when a resident tested positive after returning from a trip to Wuhan, China.³ The first case in California, also a resident returning from Wuhan, was detected on January 25, 2020 in Orange County.⁴ In Santa Barbara County (SBC), the Public Health Department began actively monitoring COVID-19 in March 2020. The first positive COVID-19 case in SBC was confirmed on March 15. The individual had no history of travel within or outside the United States during the preceding six weeks.⁵

Initially, in March and April of 2020, transmission appears to have been kept limited in SBC by stringent California State and local Public Health Orders that required residents to stay at home and/or physically distance. By May 4, 2020, a California State Executive Order allowed for the gradual reopening of some industry

¹ This report focuses on community cases. Inmate data has been excluded. For further information, please see the Santa Barbara County Public Health Department "COVID-19 Racial, Ethnical & Socioeconomic Data & Strategies Report" from May 28, 2020.

² World Health Organization. WHO Director-General's opening remarks at the media briefing on COVID-19 – 11 March 2020. Retrieved on October 6, 2020. <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>.

³ Centers for Disease Control and Prevention. First travel-related case of 2019 novel coronavirus detected in the United States. Retrieved on October 6, 2020. <https://www.cdc.gov/media/releases/2020/p0121-novel-coronavirus-travel-case.html>

⁴ Orange County Health Care Agency. OC Health Care Agency confirms first case of novel coronavirus in Orange County, California. Retrieved on October 6, 2020. <https://mailchi.mp/ochca/novelcoronavirus>.

⁵ Santa Barbara County Public Health Department. First positive case of COVID-19 confirmed in Santa Barbara County. Retrieved on October 6, 2020. <https://www.countyofsb.org/asset.c/5250>

sectors under new modifications and guidance continuing through June 2020. On June 16, 2020, CA State Health Department (CDPH) flagged SBC for its increased hospitalization rates of individuals with COVID-19. Soon thereafter, on June 28, 2020, in response to surging COVID-19 cases and hospitalizations across California, CDPH released its state-wide County Monitoring List, a system for utilizing data to determine which businesses, institutions, and activities could be open based on transmission, testing, and hospital capacity criteria defined for each county. SBC was placed on the “watchlist” for not meeting these standards and soon thereafter, on July 2, 2020, restrictions were again imposed statewide and with back-to-back local Health Orders many sectors closed down once again.⁶ On August 28, 2020, Governor Newsom unveiled the “Blueprint for a Safer Economy” - a new, tiered plan intending to slow the spread of coronavirus with revised criteria for loosening and tightening restrictions on activities. Initially, SBC was categorized into Tier 1 (purple), the tier with the most restrictions. By September 29, 2020, SBC met the State’s Tier 2 criteria (red) as COVID-19 spread in SBC was downgraded from “widespread” to “substantial”. The SBC Public Health Department issued a Health Officer Order allowing more businesses to reopen indoors with modifications and capacity limits in accordance with the State’s Blueprint for a Safer Economy.⁷

As case volume began to increase across California following Halloween and the national election, CDPH began to modify metrics previously being used to gauge counties from a 7-day lag to a 4-day lag in hopes to be able to respond quicker to the surge of cases that began to emerge. By the beginning of December an ICU capacity metric was shared with the local health jurisdictions as a new metric to determine a potential Stay at Home Order (SAHO), but instead of based on individual county data, the metric was based on Health Officer Regions within the State. Santa Barbara county fell within the Southern California region along with nine other counties. Once ICU capacity fell below 15%, the region would go into a SAHO for at least three weeks and remain until the ICU capacity increased to at least 15%. This order further restricts retail capacity, ends outdoor dining, closes bars, nail salons, and hair salons. The SAHO went into effect in the Southern California Region on December 6, 2020,⁸ and the SAHO was rescinded on January 25, 2021, and SBC entered the Purple Tier on January 26th.

The month of January 2021 saw the highest cases, hospitalizations and deaths of the pandemic in the county, as well as across the state. However, by February and March, these values decreased with Santa Barbara county entering the red tier on March 17th. The transition to red was due to a reduction in cases and test positivity, as well as to changes in the state tier metrics. Upon reaching the state goal of 2 million vaccines administered to residents in areas in the lowest quartile of the Healthy Place Index (HPI), the upper limit for the red tier increased from 6 to 10 cases per 100,000.

While surveillance continues to be of utmost importance, immunization has become central to the county’s COVID-19 response. Vaccinations began in December, and have reached 139,223 SBC residents (as of March 31st), of which 73,666 residents are fully vaccinated or 16% of the county population).

The following sections provide information on COVID-19 cases and testing over time, followed by demographic data based upon age, gender, race, occupation and geography for reported confirmatory cases residing in Santa Barbara County. New for this Quarterly Report is information on COVID-19 vaccinations, including distribution over time, demographics and results relating to priority Healthy Places Index areas.

⁶ Santa Barbara County Public Health Department. Press Releases 2020. Retrieved October 6, 2020. <https://www.countyofsb.org/phd/pr/2020/>

⁷ Santa Barbara County Public Health Department. Santa Barbara County moves to the red tier allowing for more businesses to open indoors with modifications. Retrieved on October 6, 2020. <https://www.countyofsb.org/asset.c/5740>

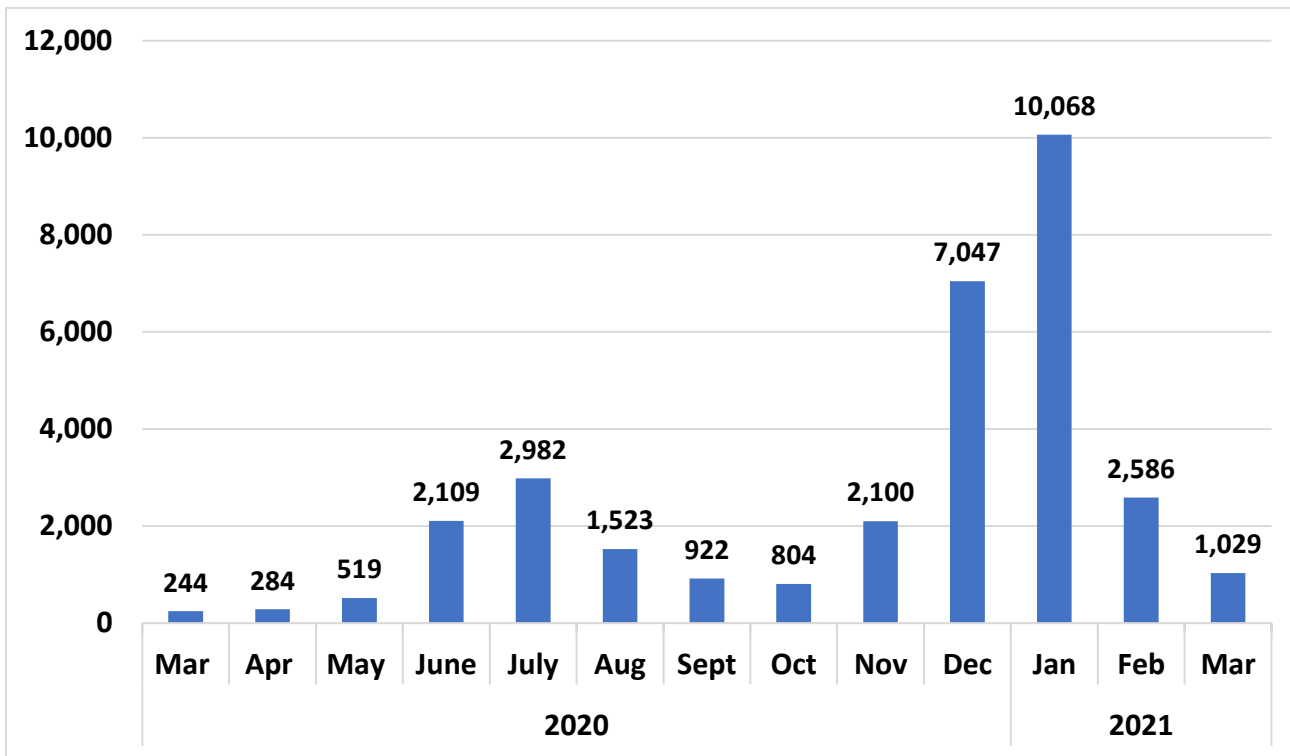
⁸ Santa Barbara County Public Health Department. REGIONAL STAY-AT-HOME ORDER FOR SANTA BARBARA COUNTY BEGINS AT 11:59 P.M. ON SUNDAY, DECEMBER 6, 2020. Retrieved on January 17, 2021. <https://www.countyofsb.org/asset.c/5740>

COVID-19 Cases and Testing

Figure 1 presents the number of new COVID-19 cases by month in Santa Barbara from March 1, 2020 through March 31, 2021. During this time, SBC reported 32,217 cases of COVID-19 infection among community members. From May to June 2020, there was a four-fold increase in the number of cases, from 519 to 2,109 (Figure 1). Summer cases peaked in July with 2,982 cases. In August, cases decreased substantially and continued to do so through October, when SBC reported 804 new cases of COVID-19. The last two months of 2020 showed a sharp increase in cases, with almost half of total cases reported in November and December, which may have been associated with holiday gatherings, travel, and pandemic fatigue.

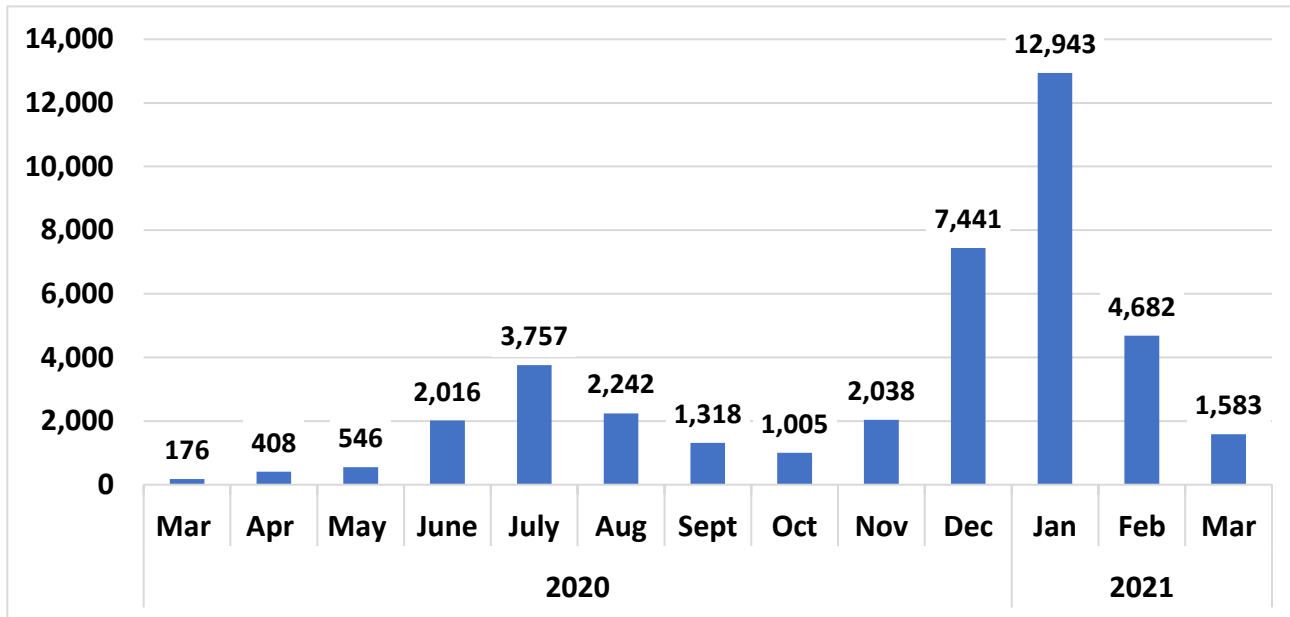
As the first quarter of 2021 began, cases reached an all-time pandemic high, with over 3,100 cases in the first week of January alone. This unprecedented volume of cases was more than 3.5 times higher than the summer peak. From that point, cases began to fall and the downward trend continued through March. From January to March there was a sharp decrease of 90% in the number of cases, from 10,068 to 1,029 per month.

Figure 1. Monthly Number of New COVID-19 Cases by Episode Date, as of 3/31/21 (N=32,217)



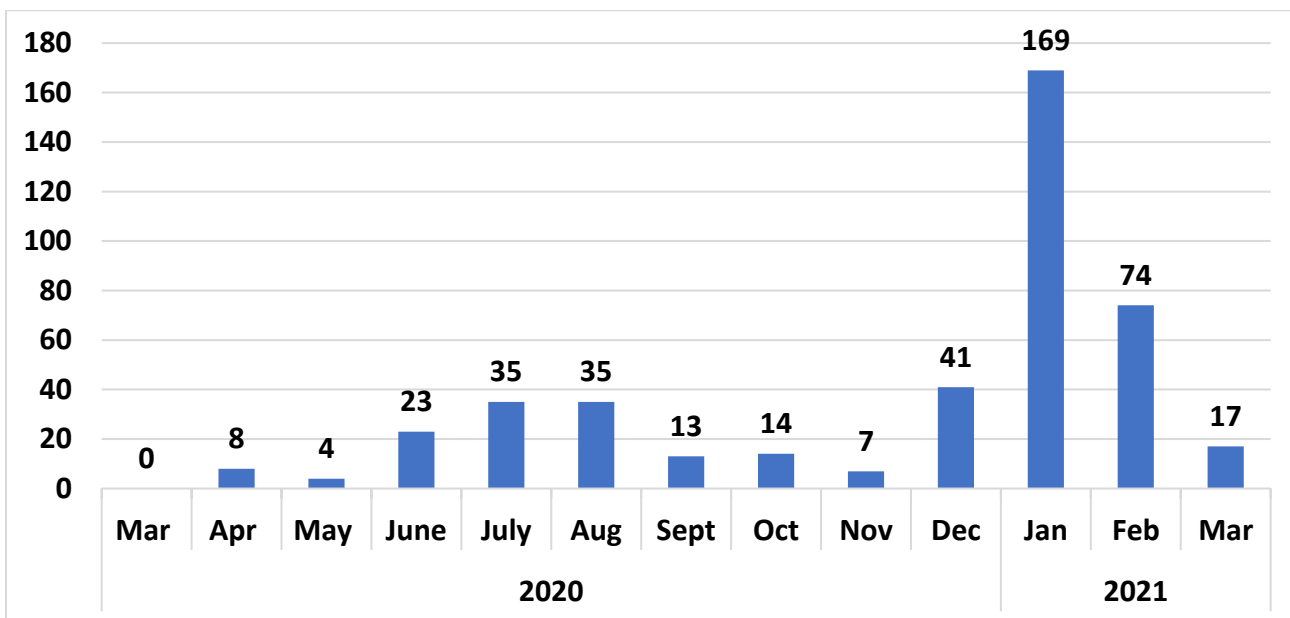
Similar to the previous chart, active cases, those that are still infectious, followed a similar time trajectory. The number of active cases per month peaked in mid-January and then fell steadily through the end of March.

Figure 2: Monthly Number of Active COVID-19 Cases by Episode Date, as of 3/31/21



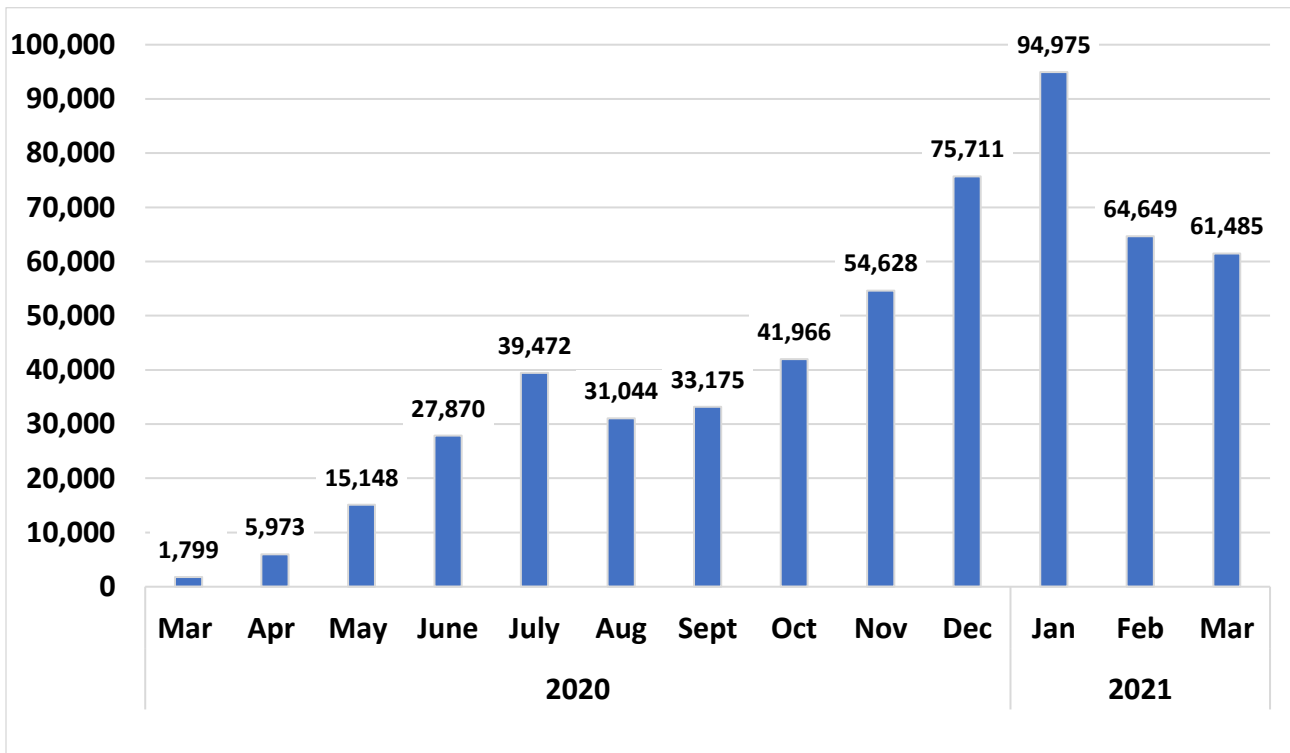
COVID-19 deaths have been seen to increase about three weeks following case increases. The summer wave of infections resulted in a peak of 35 deaths each month in July and August, as seen in **Figure 3**. As the number of cases declined in August, the number of deaths continued to remain high. In December, cases began to rise again and this second wave of infections reached over three times the summer peak, resulting in an unprecedented number of deaths over the subsequent months. The number of deaths per month peaked in January with 169 COVID-19 related deaths, decreasing to 74 in February and 17 in March.

Figure 3. Monthly Number of COVID-19 Deaths by Date of Death, as of 3/31/21 (N=440)



The number of SARS-CoV-2 tests in Santa Barbara County by month from March 1, 2020 to March 31, 2021 is presented in **Figure 4**. At the beginning of the pandemic, the availability of COVID testing was very limited. With an increase in supply, testing steadily increased from 1,791 total county-wide tests conducted in March 2020 to a peak of 75,640 tests conducted in December. In the fourth quarter of 2020, the monthly number of tests administered substantially grew due to the increase of routine testing at facilities with active outbreaks, more testing made available to the public, and an influx of testing utilization prior to holiday gatherings. The highest volume of testing was in January 2021, with over 94,000 tests administered. Of note, Figure 4 displays the volume of tests conducted and does not depict the unique number of individual people tested, in other words, a patient can be represented more than one time in the below chart if they obtained more than one test in this reporting period.

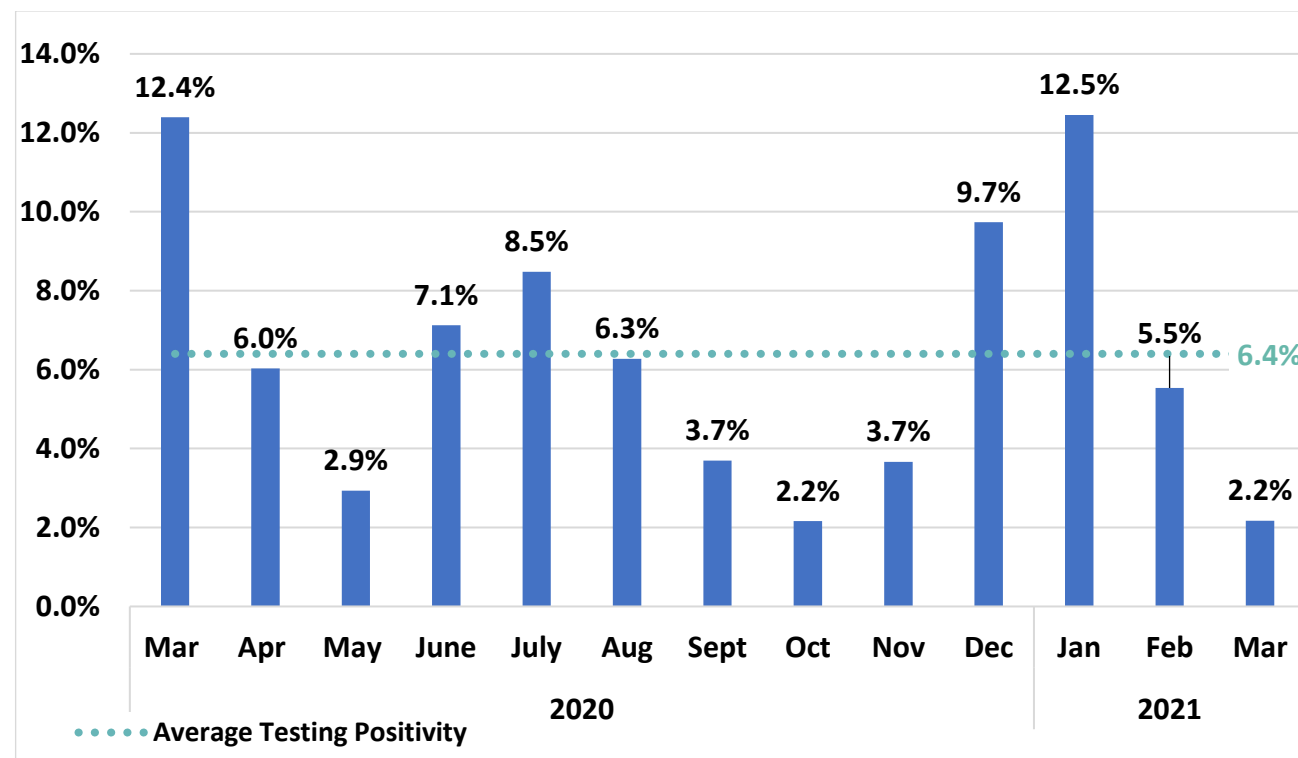
Figure 4. Number of SARS-CoV-2 Tests Conducted, as of 3/31/2021 (N=547,895)*



*Total testing numbers may be under-represented given that point of care (POC) testing is being used widely, but not currently counted in the confirmatory COVID-19 case count per CDPH direction.

Average test positivity rate was 6.4% between March 2020 to March 2021 (**Figure 5**). The positivity rate was 12.4% in the first month of the pandemic, decreasing to 2.9% in May due to more widely-available testing and a continued low case count. However, with the wave of cases in the summer, test positivity rose to 8.5% in July. From this point, the rate dropped each month to a pandemic low in October (2.2%). As cases began to rise again in the late fall, so too did the test positivity. January had the highest monthly test positivity rate (12.5%), surpassing the summer peak. Positivity decreased in the following two months, returning to 2.2% in March 2021.

Figure 5. Percent of Positive SARS-CoV-2 Test Results, as of 3/31/2021 (N = 36,555)



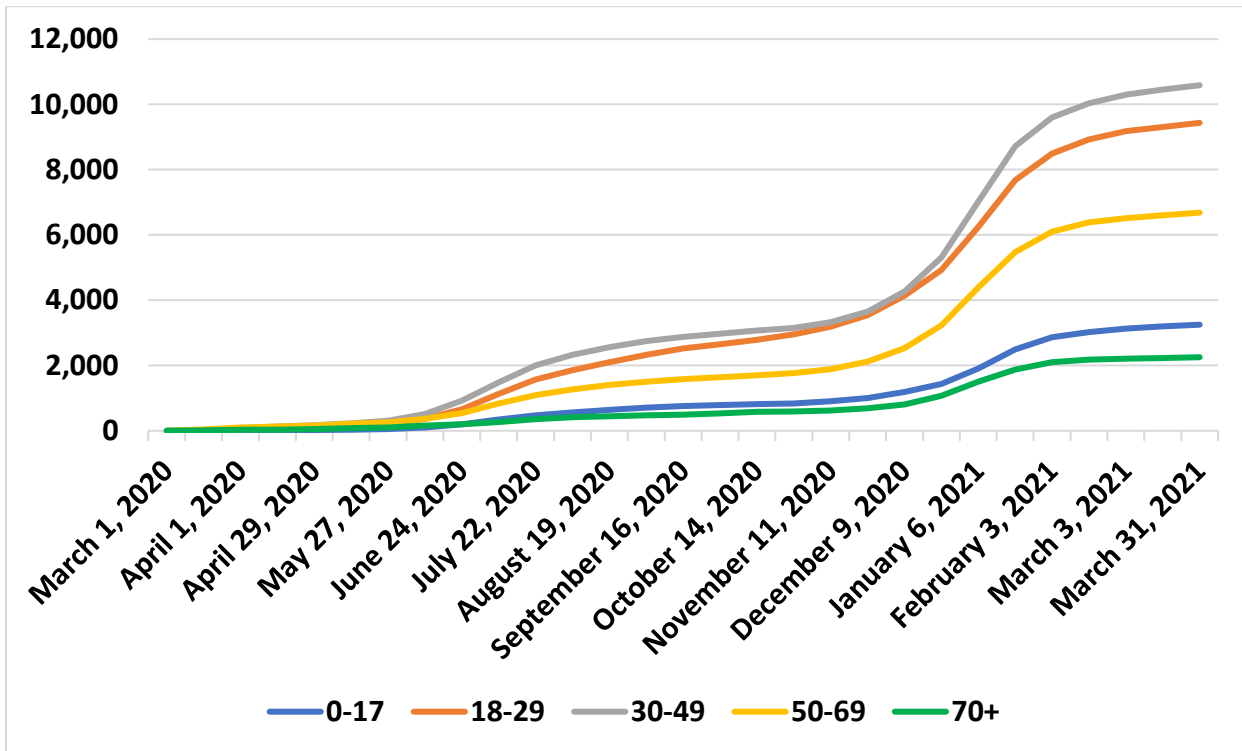
Key Demographics

Age

The cumulative number of COVID-19 cases by age in Santa Barbara County is presented in **Figure 6**. Each bi-weekly value represents the sum total of all the previously confirmed cases. As of March 31, 2021, the 30-49 year-old age group had the highest number of COVID-19 cases (10,586), followed by 18-29 year-olds (9,434) . Many of these younger adults likely make up a large proportion of workers in frontline occupations and highly exposed industries, putting them at greater risk of contracting COVID-19.⁹ The next age group with the highest number of cases was the 50-69 year-olds (6,683), followed by 0-17 year-olds (3,250) and lastly 70+ year-olds (2,254). It is important to note that though the absolute number of 70+ year-olds is the lowest, 70+ year-olds also make up a very small relative proportion of the population. While the elderly had lower numbers of cases, this is likely because they are retired and are carefully following stay-at home orders.

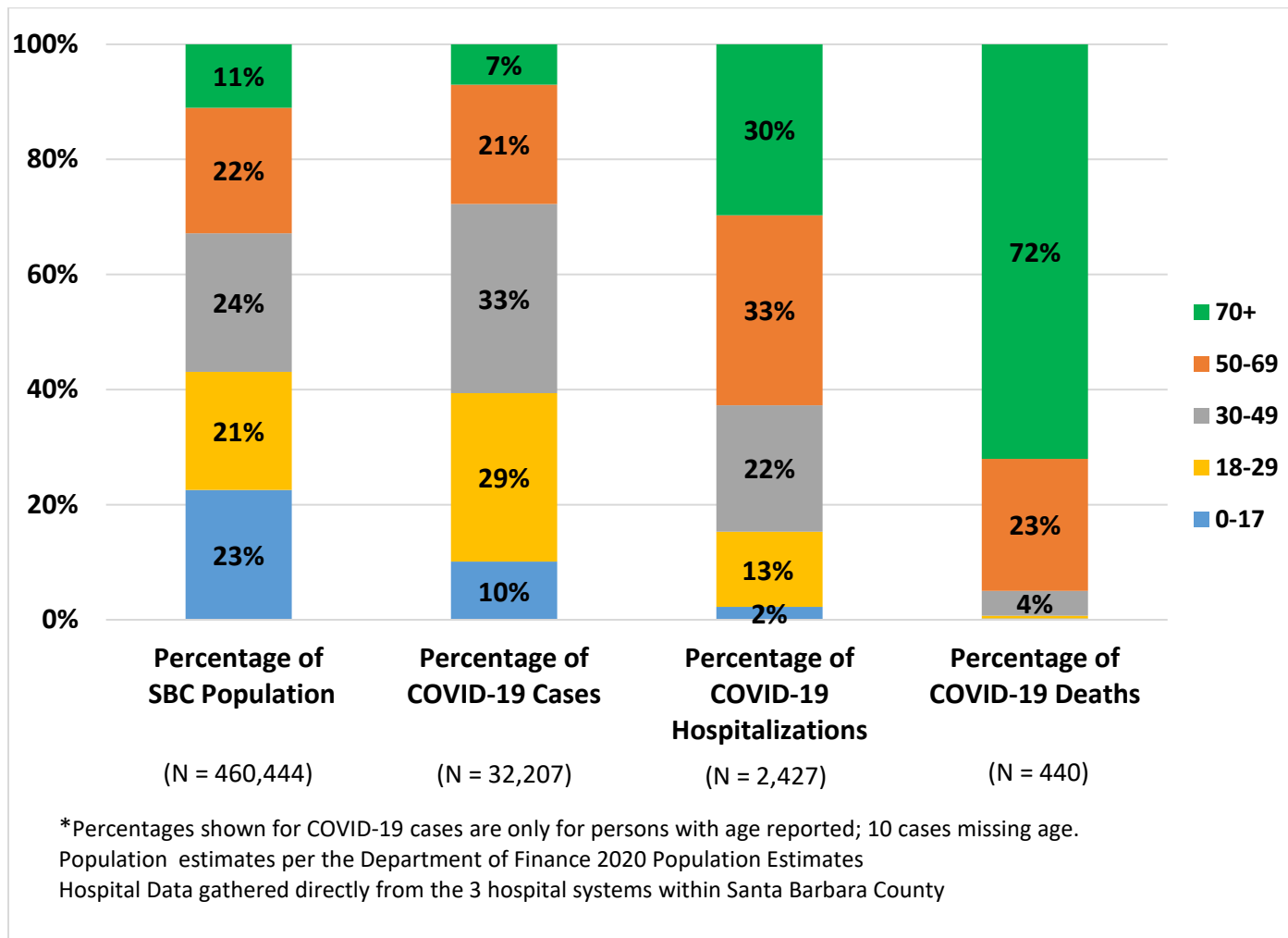
⁹ Centers for Disease Control and Prevention. Changing age distribution of the COVID-19 pandemic – United States, May – August 2020. Retrieved on October 6, 2020. <https://www.cdc.gov/mmwr/volumes/69/wr/mm6939e1.htm>.

Figure 6. Cumulative Community COVID-19 Case Count by Age Category and Episode Date, as 3/31/2021
 (N=32,217)



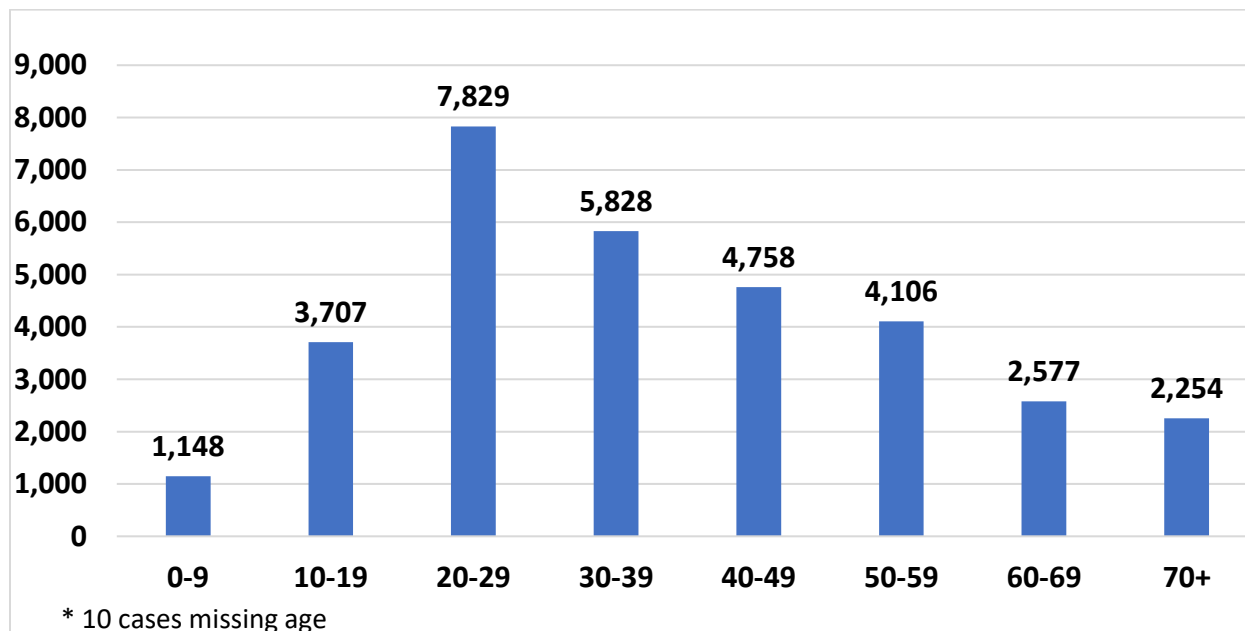
The age groups of Santa Barbara County’s population are compared to the age groups of cases, hospitalizations, and deaths and reveals several important trends (**Figure 7**). First, a greater proportion of cases versus the population was observed in working aged adults ages 18-29 years (29% of cases versus 21% of the population) and 30-49 years (33% of cases versus 24% of the population). Second, a greater proportion of hospitalizations was attributed to 50-69 and 70+ year-olds (33% and 30%, respectively) compared to their populations (22% and 11%, respectively). Third, most deaths occurred among older adults and this percent was disproportionately higher than the population. Of COVID-19 deaths, 23% were among 50-69 year-olds (N=101) and 72% were among 70+ year-olds (N=317). However, 50-69 year-olds made up 22% of the population and 70+ year-olds only accounted for 11% of the population. Lastly, children accounted for fewer cases (10%) and deaths (0.2%) than their relative population (23%). As most schools were reopening for in-person learning by the end of the first quarter of 2021, there may be more cases among children in the next reporting cycle.

Figure 7. Comparison of COVID-19 Cases, Hospitalizations, Deaths to SBC Population by Age, as of 3/31/2021



The distribution of age by ten-year groupings was analyzed (Figure 8). The age group with the highest number of cases was 20-29 year olds (N=7,829), followed by 30-39 year olds (N=5,828), and 40-49 year olds (N=4,758). As mentioned previously, these age groups represent working-aged adults. In addition, 20-29 year olds may include students.

Figure 8. COVID-19 Cases by 10 Year Age Group, as of 3/31/21 (N=32,217)*



Gender

Figures 9-12 shows the relative gender proportions of Santa Barbara County’s population, COVID-19 cases, hospitalizations, and deaths. The gender of Santa Barbara County’s population was approximately equal with 51% male and 49% female (Figure 9). During the reporting period, the gender of COVID-19 cases (Figure 10) and hospitalizations (Figure 11) was similar to that of the population (51% female, 48% male, and 1% other/unknown/transgender of COVID-19 cases; 52% female, 48% male of COVID-19 hospitalizations). However, the gender of deaths (Figure 12) was higher among males (57%).

Figure 9. Gender of Santa Barbara County Population (N=460,444)

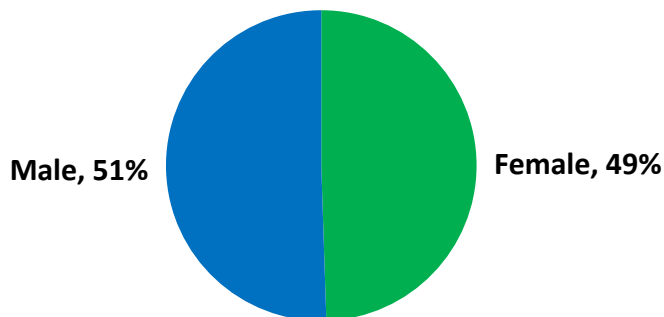


Figure 10. Gender of COVID-19 Cases, as of 3/31/21 (N=32,217)

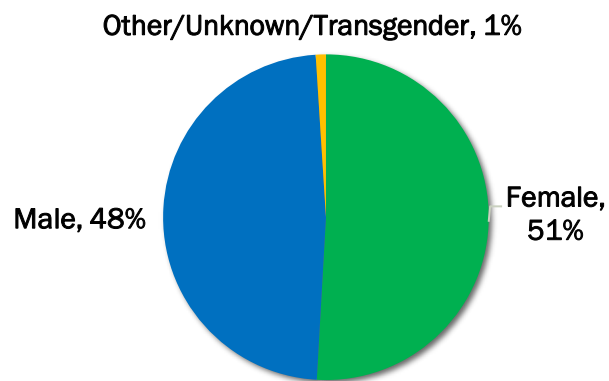


Figure 11. Gender of COVID-19 Hospitalizations, as of 3/31/21 (N=2,427)

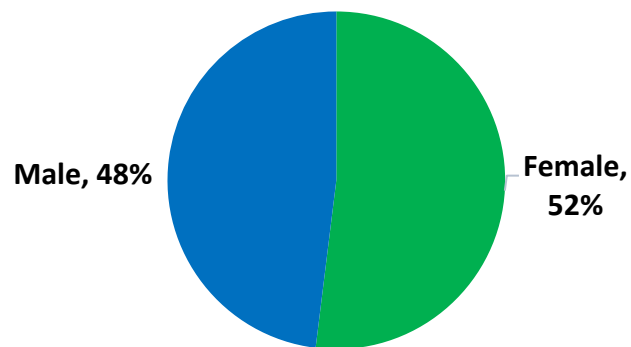
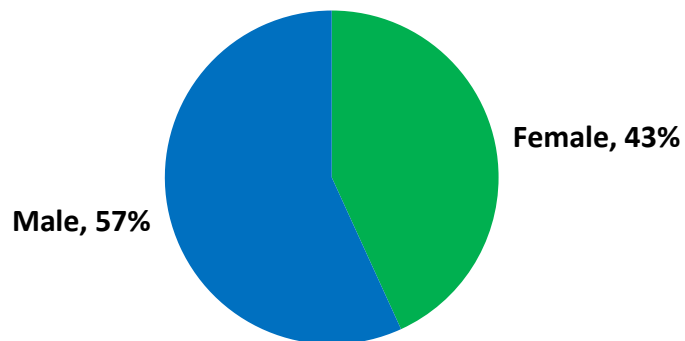


Figure 12. Gender of COVID-19 Deaths, as of 3/31/21 (N=440)



Race

COVID-19 has disproportionately impacted communities of color, highlighting racial disparities. While Hispanics/Latinos accounted for 48% of Santa Barbara County’s population (**Figure 13**), they represented 59% of COVID-19 cases (**Figure 14**) and 63% of COVID-19 hospitalizations (**Figure 15**). The percentage of COVID-19 deaths among Hispanic/Latinos was equal to the population percentage, 48% (**Figure 16**). In contrast, Whites represented fewer cases (17%) compared to their population (43%). While Whites made up 43% of deaths, many of these deaths occurred at skilled nursing homes and other congregate care settings, which have been highly impacted by the pandemic. While the SARS-CoV-2 is novel, the disparate impact of the COVID-19 pandemic on Santa Barbara County’s communities of color is deeply rooted in the historic and ongoing social and economic inequalities that lead to persistent racial disparities in health status.

Figure 13. Santa Barbara County Population by Race/Ethnicity (N=460,444)

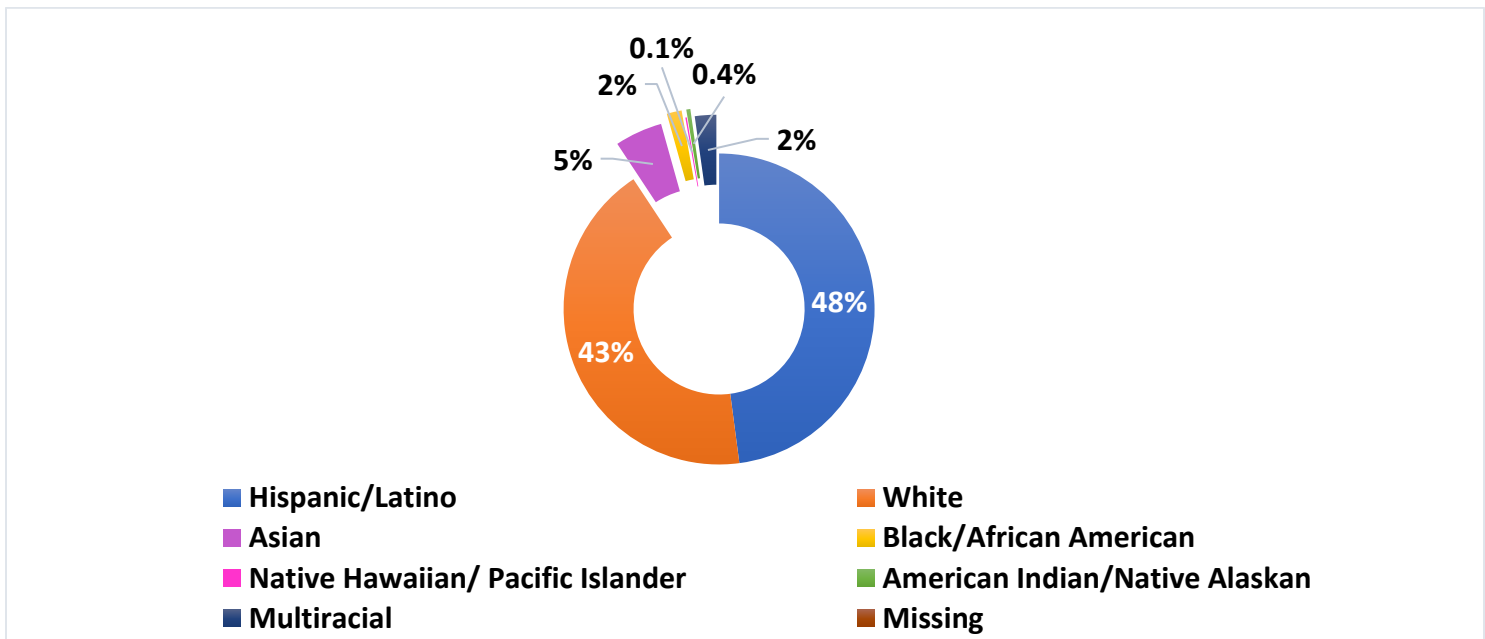
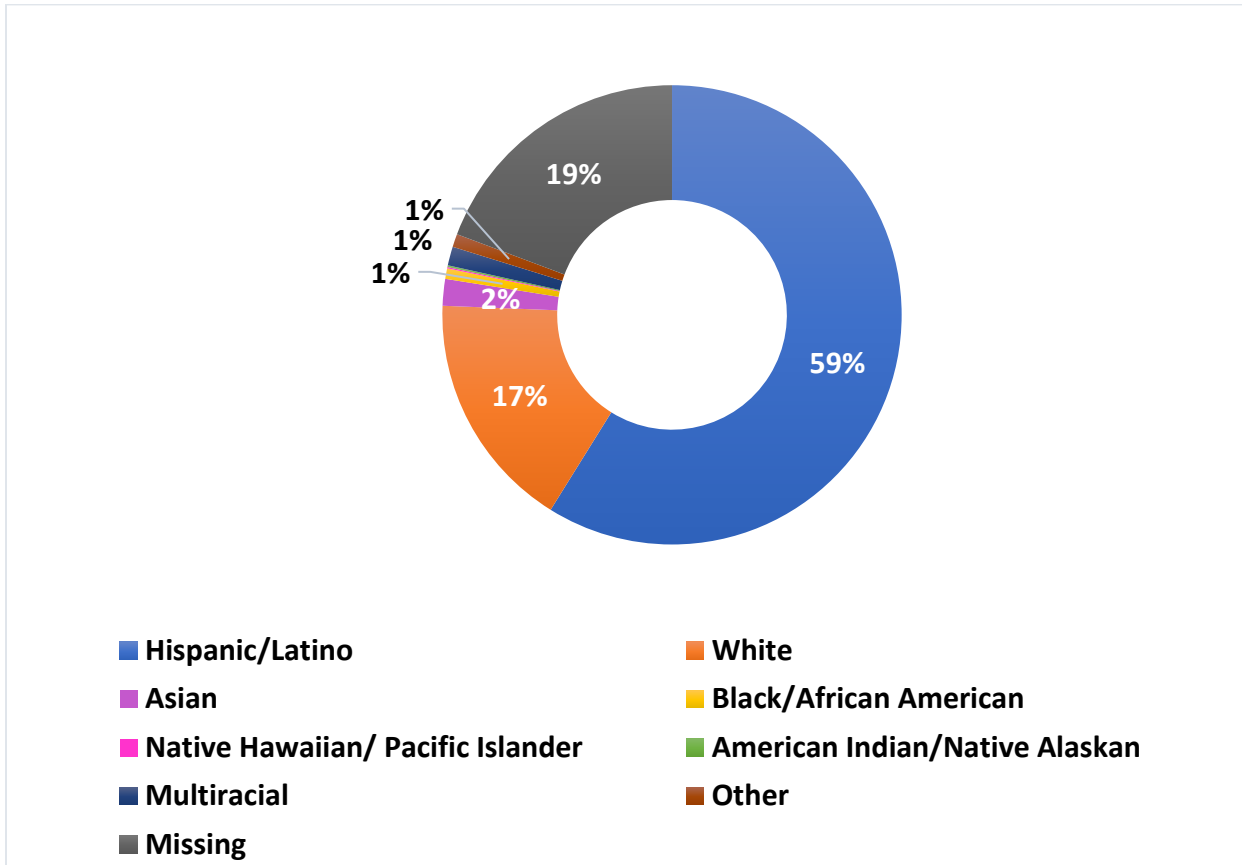


Figure 14. COVID-19 Cases by Race/Ethnicity, as of 3/31/21 (N=32,217)*



* The large percent of missing race/ethnicity was due to cases declining or unable to be interviewed or refusing to answer their race/ethnicity when contacted.

Figure 15. COVID-19 Hospitalizations by Race/ethnicity as of 3/31/21 (N=2,427)

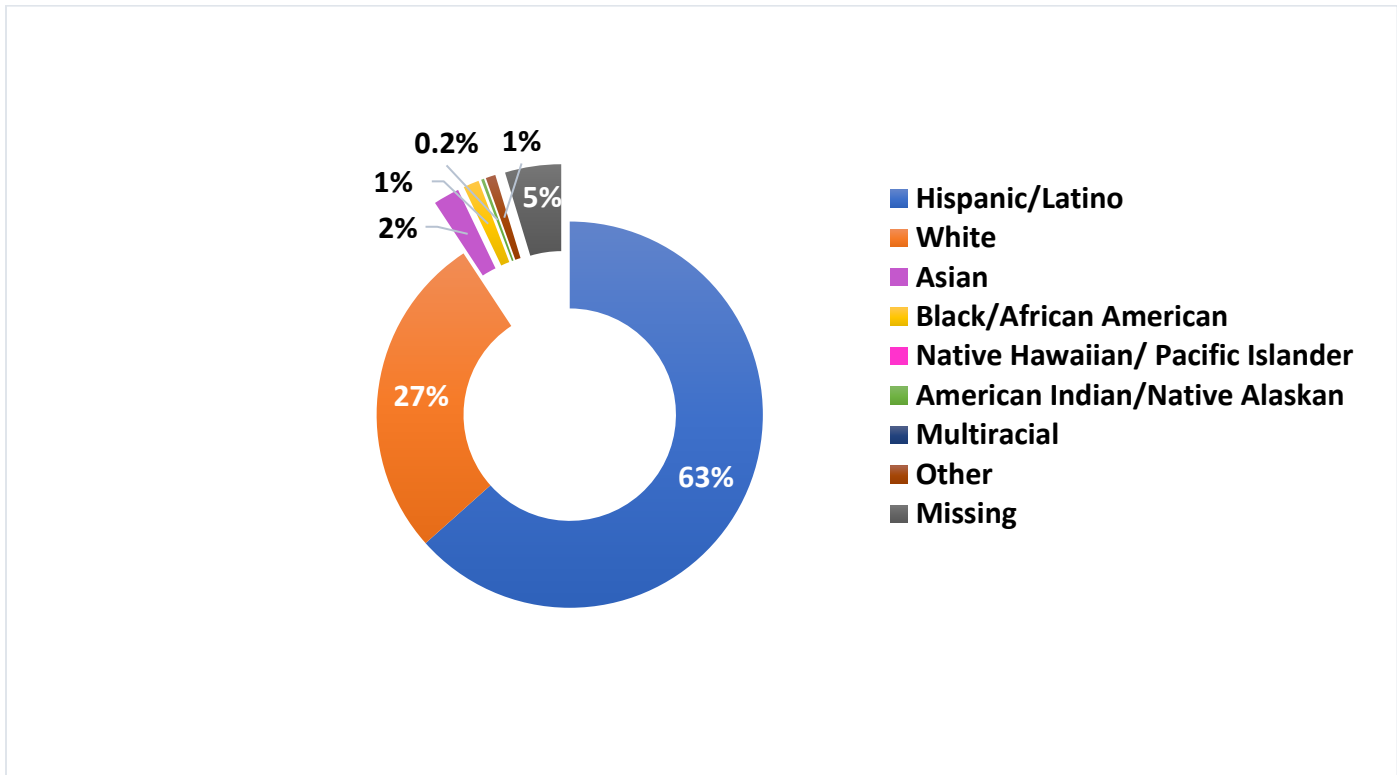
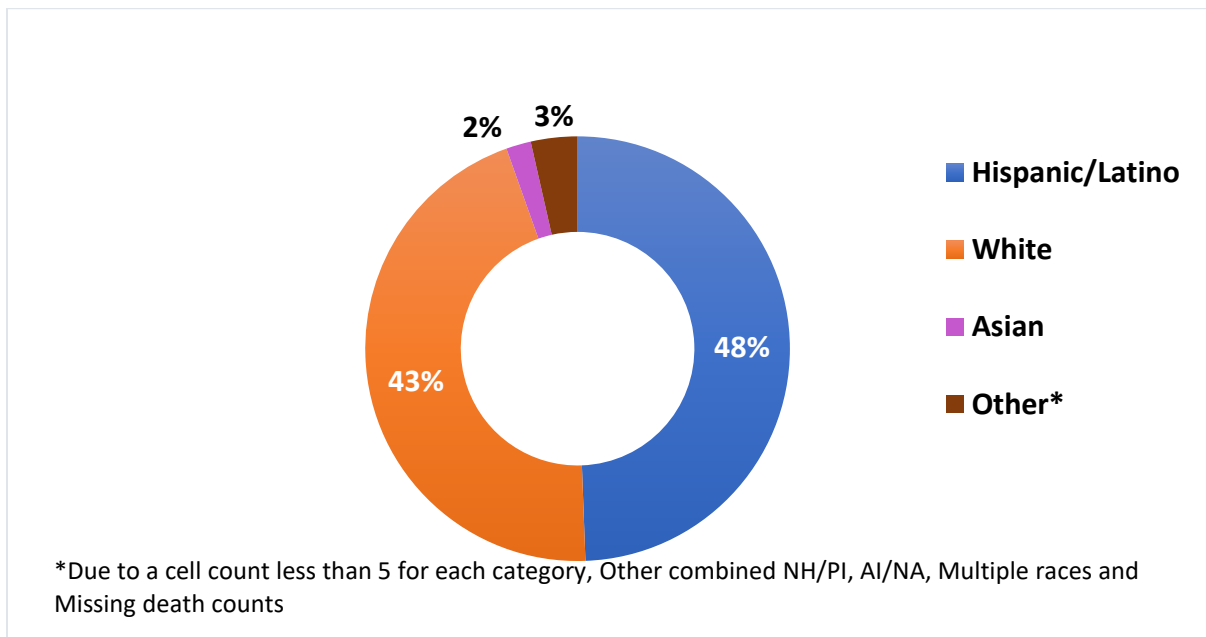


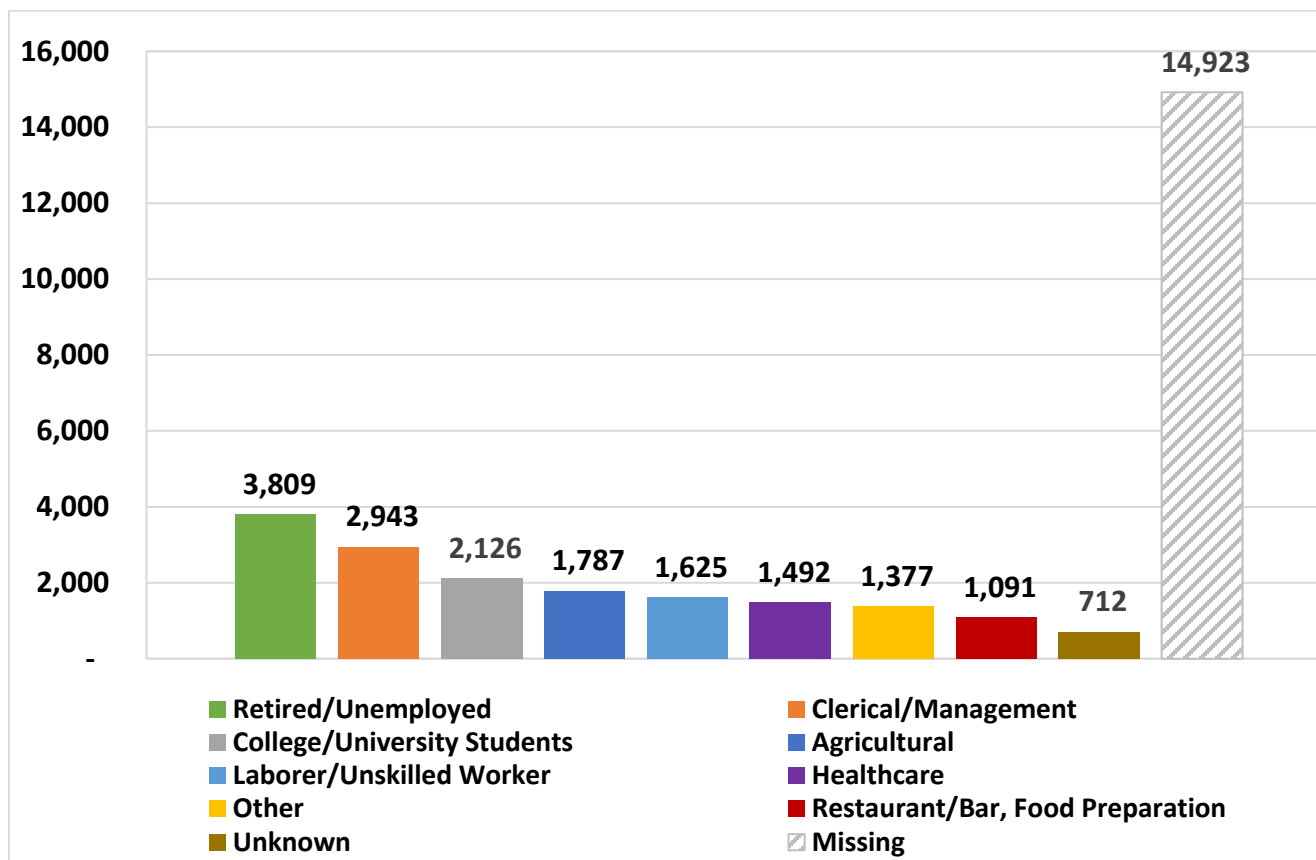
Figure 16. COVID-19 Deaths by Race/ethnicity as of 3/31/21 (N=440)



Occupation

Figure 17 presents laboratory-confirmed SARS-CoV-2 cases in Santa Barbara County through March 31, 2021 disaggregated by occupation. Of all cases, only 56% were interviewed and answered the occupation question, while the occupation of the remaining 44% is not available. Of those who responded, the occupation with the most number of cases was retired/unemployed workers (N=3,809), followed by clerical/management employees. Over the course of the pandemic, 219 outbreaks were associated with congregate care facilities in which many retired/unemployed reside. The Santa Barbara County Public Health Department has worked closely with congregate care facilities throughout the County to contain the spread of COVID-19. As stay at home orders were lifted following the summer peaks, previously closed businesses began to bring their employees back to the office which may explain the influx of cases in the clerical/management sector. Other occupations with high frequencies included: agricultural, healthcare worker, and laborer/unskilled worker. These frontline occupations are less likely to be able to implement social distancing measures that prevent transmission, thus increasing their risk of contracting COVID-19.¹⁰

Figure 17. Occupation of COVID-19 Cases, as of 3/31/21 (N=32,217)*



¹⁰ Centers for Disease Control and Prevention. Changing age distribution of the COVID-19 pandemic – United States, May – August 2020. Retrieved on October 6, 2020. <https://www.cdc.gov/mmwr/volumes/69/wr/mm6939e1.htm>.

Geographic Region

Figures 18 and 19 divide Santa Barbara County into ten geographic regions. Communities with smaller populations were aggregated in order to comply with Privacy and HIPAA regulations. Figure 18 depicts the number of cases each month for each geographic region. The City of Santa Maria consistently had the highest number of monthly cases, followed by the City of Santa Barbara; all regions had pandemic peaks of monthly case counts in the month of January.

Cumulatively, the city of Santa Maria had the highest overall case count with 11,217 confirmed cases, and has been disproportionately impacted by the COVID-19 pandemic. The City of Santa Barbara followed in rank with 6,240 cases, and then Lompoc with 3,538 cases. The data for remaining geographic areas are presented in the figures below.

Figure 18. COVID-19 Monthly Cases by GIS Region, as of 3/31/21 (N=32,217)*

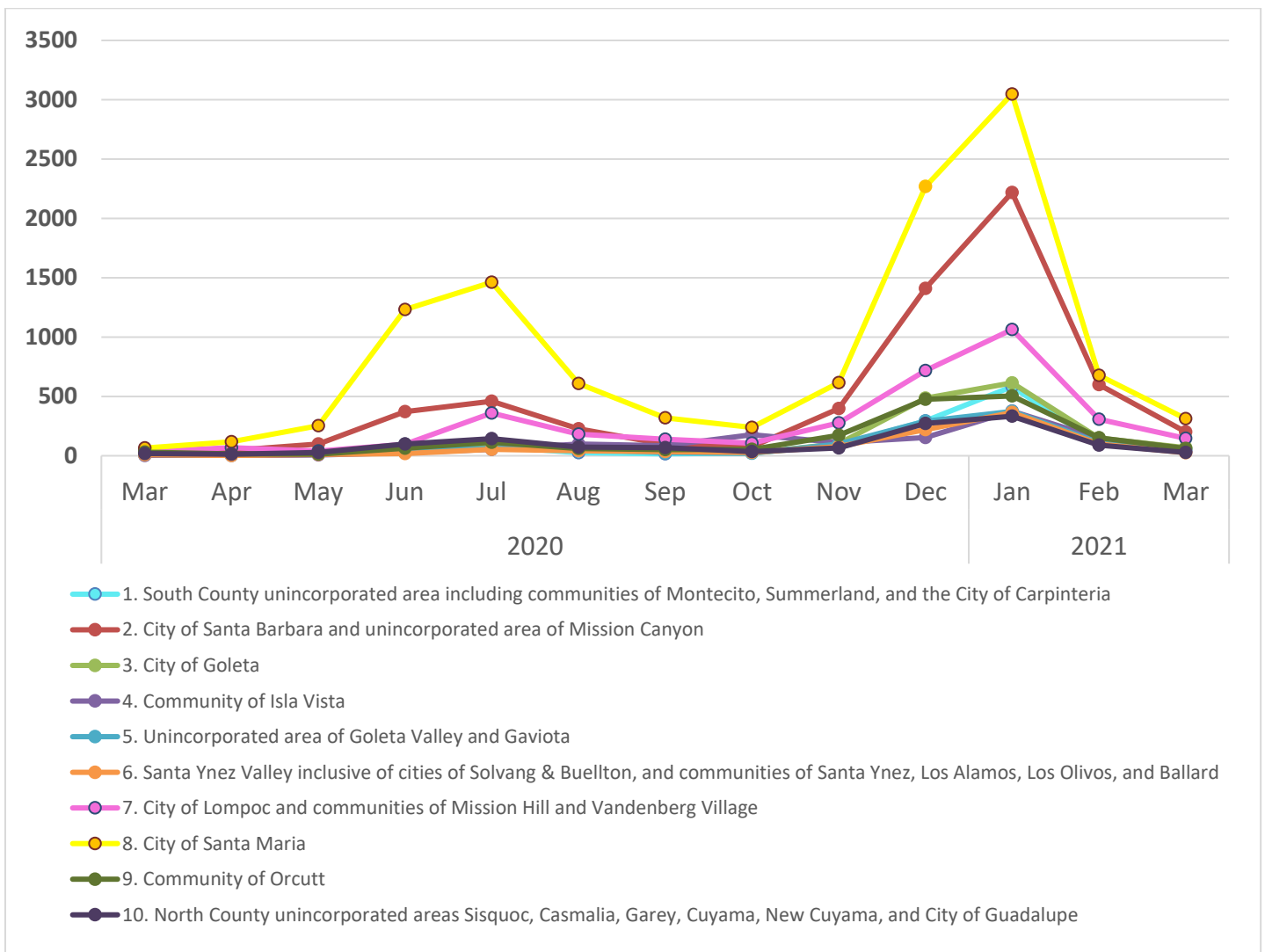
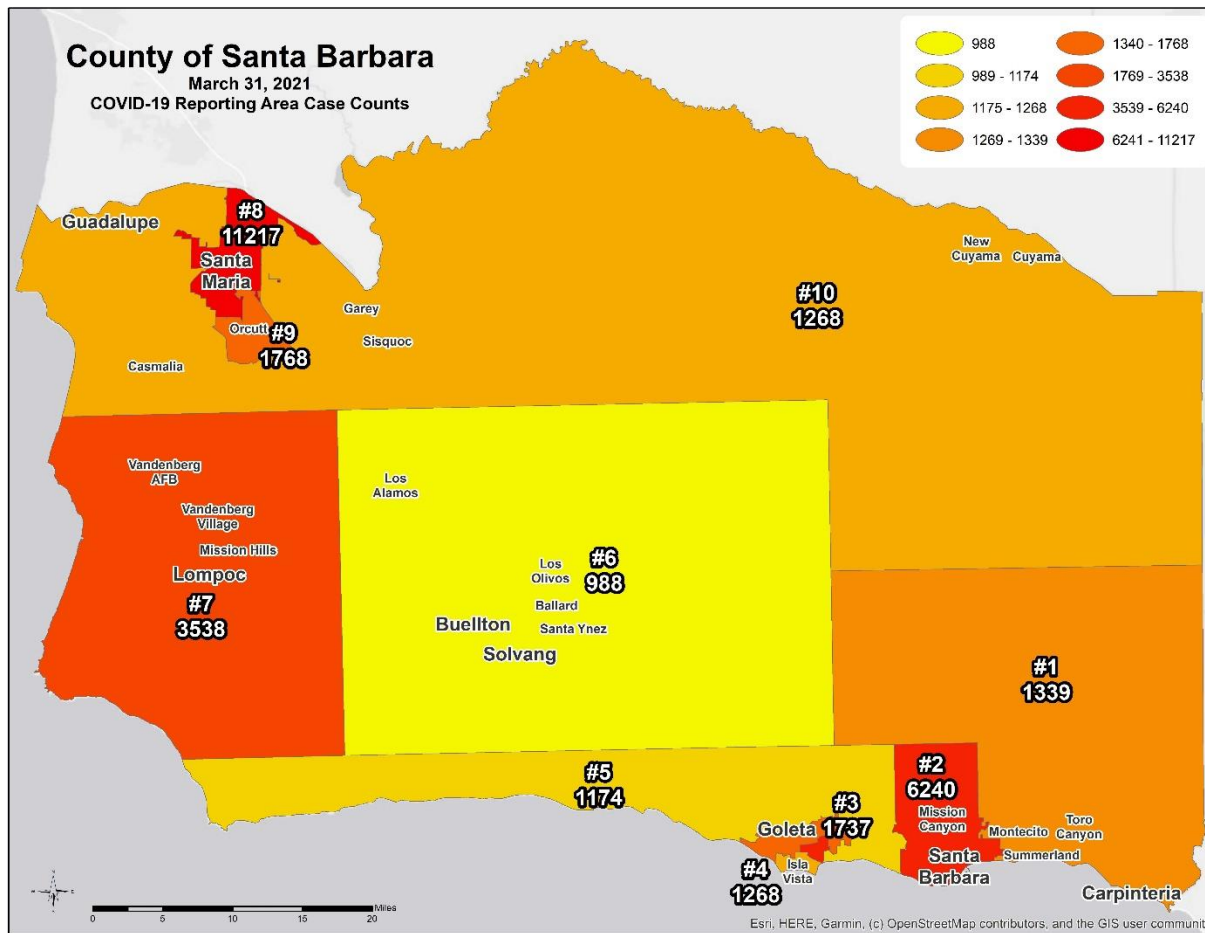


Figure 19. Map of COVID-19 Case Count by Region, as of 3/31/21 (N=32,217)*

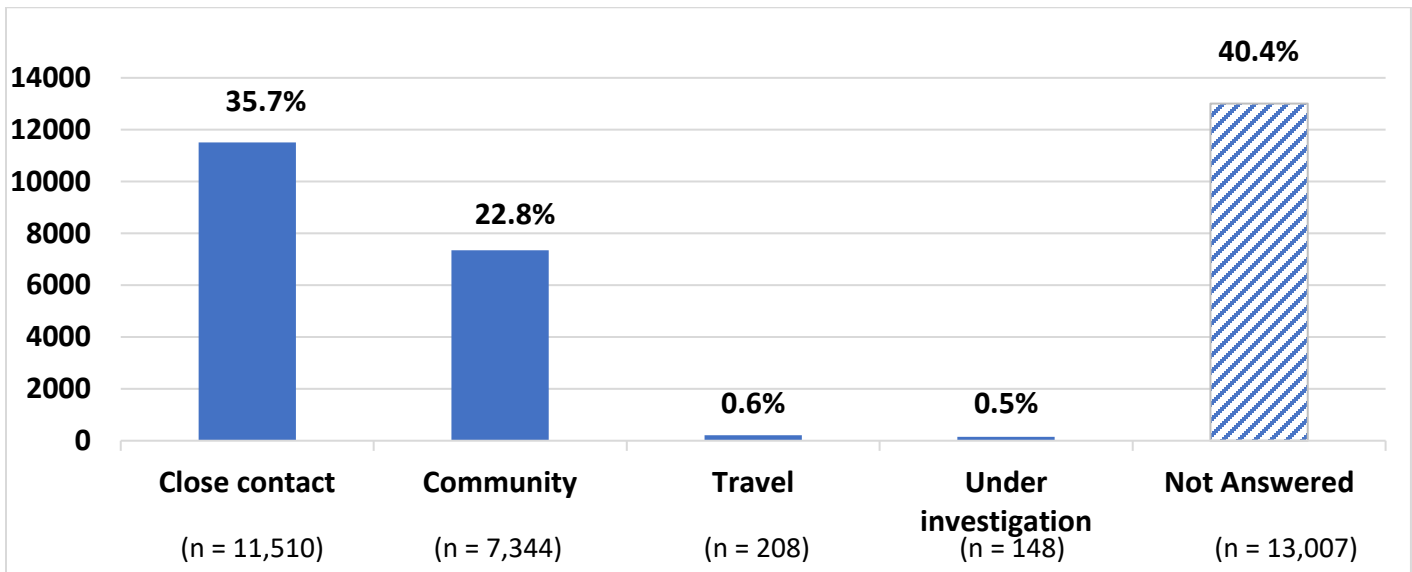


* 1,680 cases had pending addresses and are not displayed in the GIS charts

Transmission

Transmission type is presented in **Figure 20**. The majority of COVID-19 cases with a known transmission status can be attributed to close contact (35.7%) and community spread (22.8%). *Close contact* is defined as being within 6 feet of an infected person for at least 15 minutes from 2 days before illness onset or specimen collection date. Cases labeled as *community spread* are those in which the individual has had no known close contact with an identified case. While the first cases in the country were linked to international travel, less than 1% of cases in Santa Barbara County were due to *travel*. The transmission status of 0.5% of cases was yet to be determined at the date of this report’s publication. It should be noted that a large percent of cases (over 40%) did not or were not able to provide information related to the transmission status interview questions.

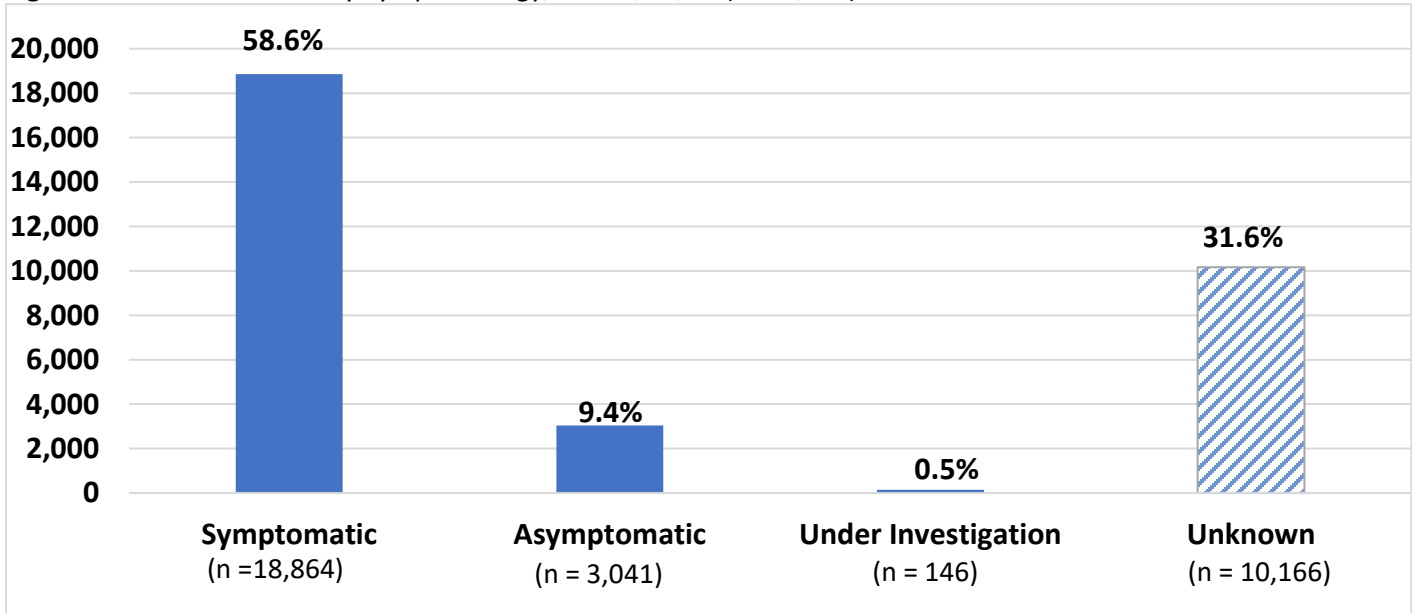
Figure 20. COVID-19 Cases by Transmission Type, as of 3/31/21 (N=32,217)



Symptomology

Figure 21 depicts cases that reported having any symptom of COVID-19 (62%) compared to those that were asymptomatic (9.4%), under investigation (0.5%), and unknown (31.6%). Early in the pandemic, testing was limited to those with symptoms. Since then, testing criteria has broadened. However, asymptomatic residents may be less likely to seek testing; therefore the number of cases and percentage of asymptomatic cases is difficult to determine.

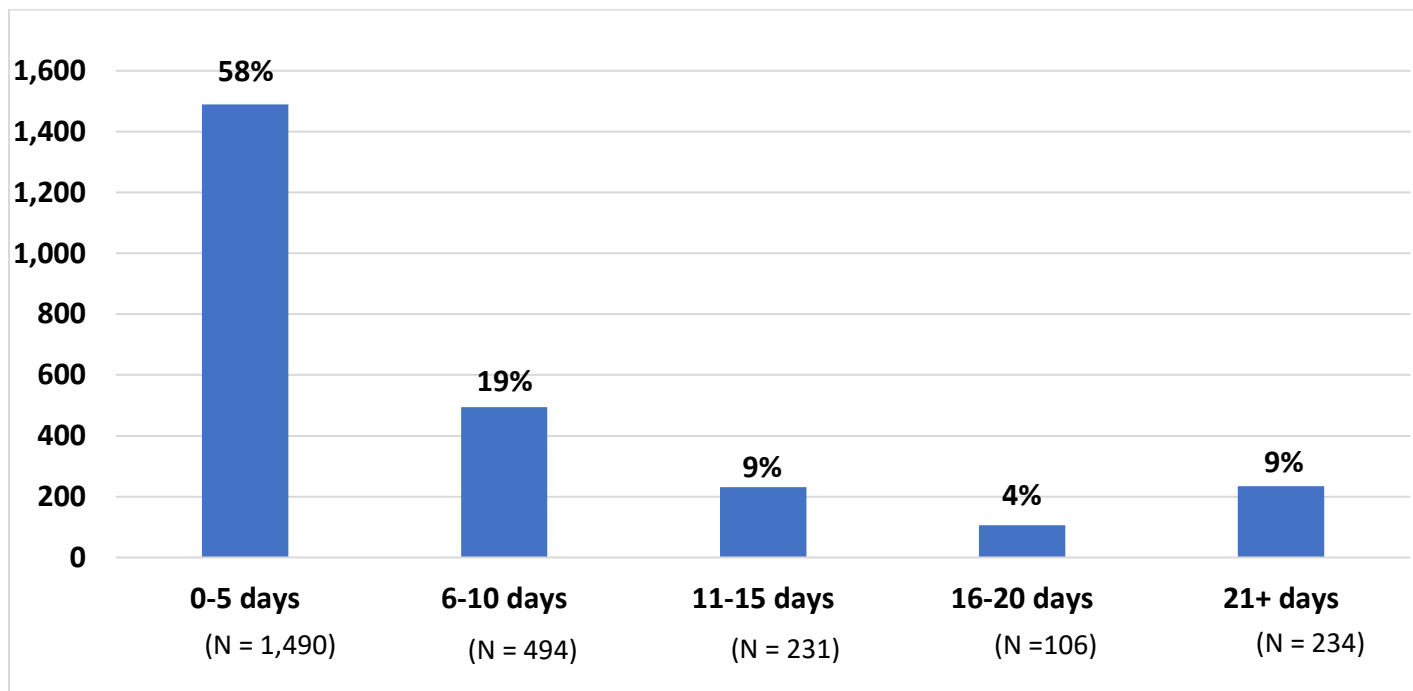
Figure 21. COVID-19 Cases by Symptomology, as of 3/31/21 (N=32,217)



Additional Hospitalization Data

Length of stay among those hospitalized is presented in **Figure 22**. While the majority (60%) of hospitalizations had a relatively short length of stay (0-5 days), 9% had a length of stay greater than 20 days. Length of stay may indicate severity of disease and need for supportive care.

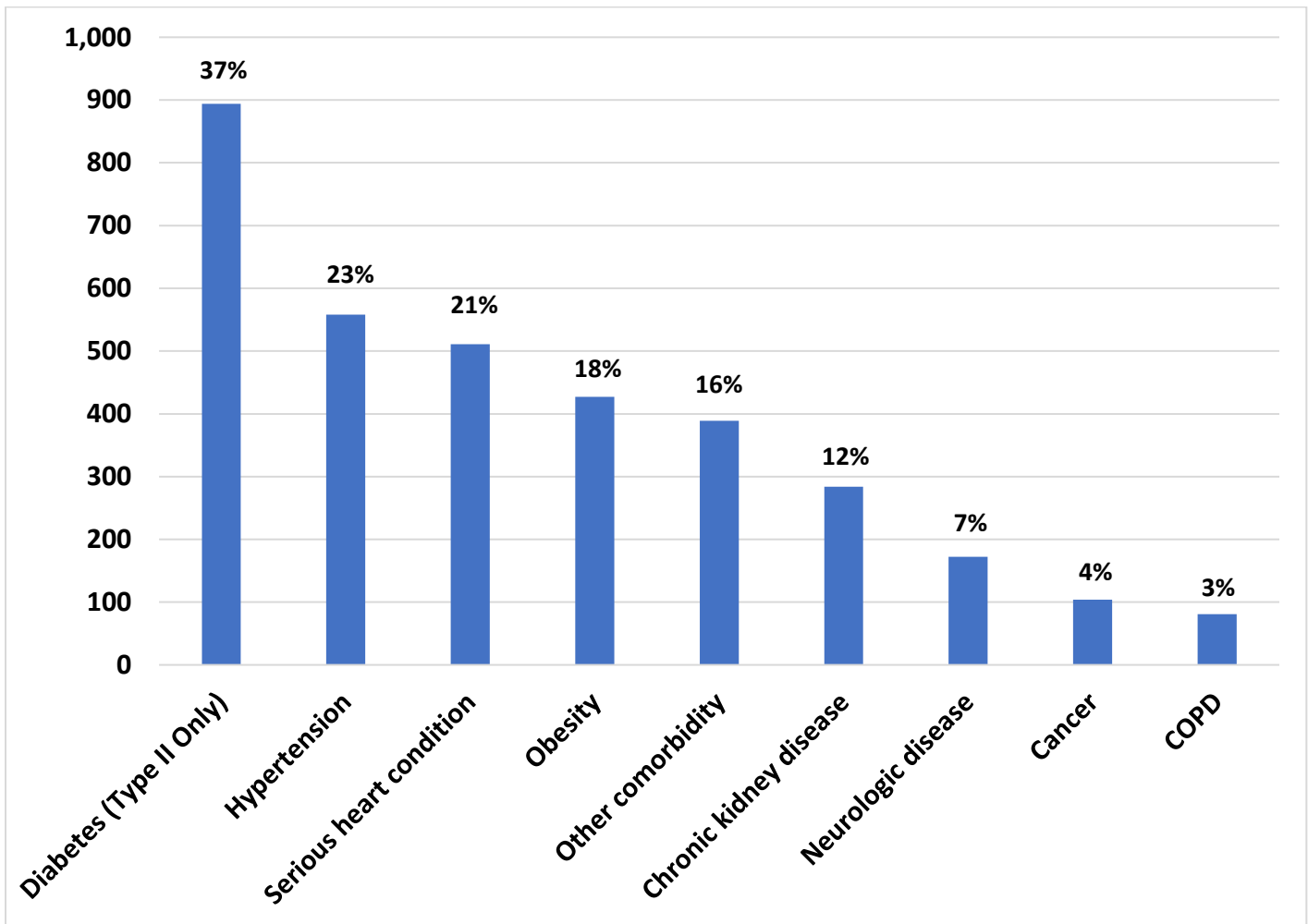
Figure 22. Hospitalization Length of Stay per Visit, as of 3/31/21 (N=2,427 patients)*



* 2,427 individuals were hospitalized in this reporting period for a total of 2,555 admissions; some patients were readmitted and counted more than once in this chart

Many hospitalized patients were diagnosed with more than one comorbidity. The percentages presented in **Figure 23** are based on how many patients were diagnosed with each comorbidity out of the total individuals hospitalized (N=1,341) and explains why the percentages add up to more than 100. In order of ranking, diabetes was identified in 32% of those hospitalized, followed by obesity and serious heart condition at 17% and 16%. The main diagnoses identified in order in the following chart.

Figure 23: Comorbidities Among those Hospitalized as of 3/31/21 (N=2,427)*

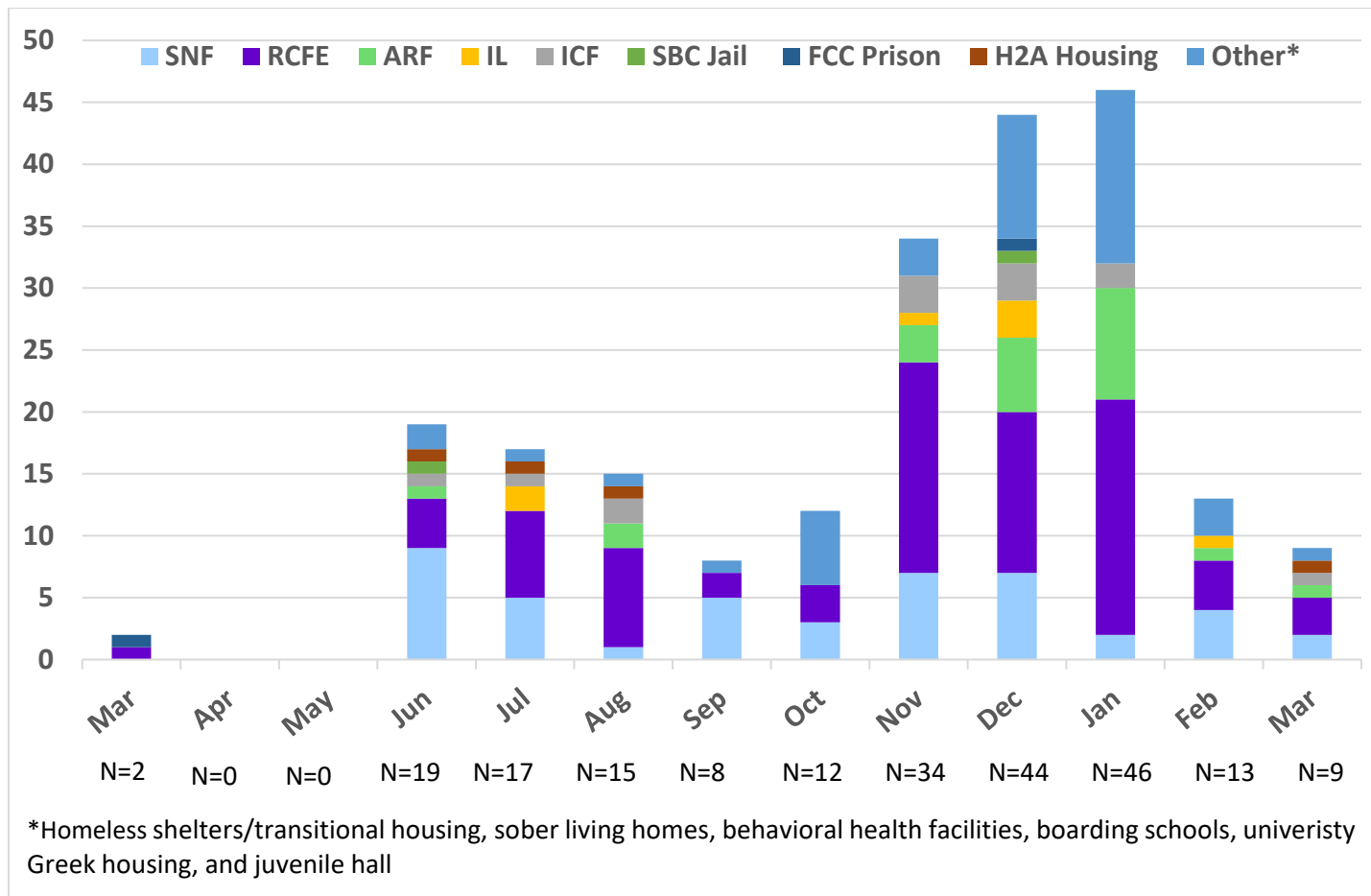


* Patients can have multiple co-morbidities

Outbreaks

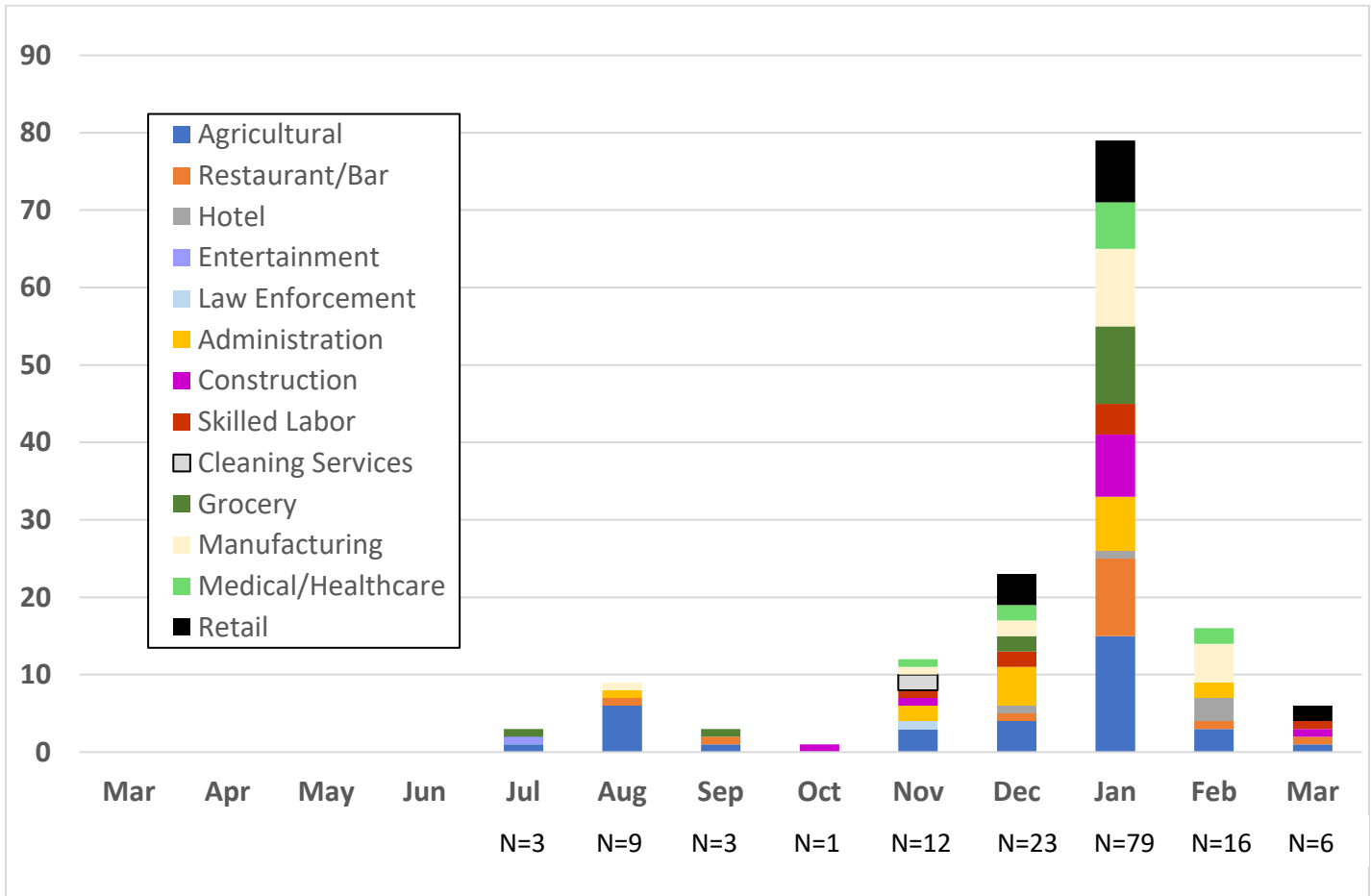
There have been 219 outbreaks at congregate care settings in Santa Barbara County between March 2020 through March 2021 (**Figure 24**). These congregate care settings included skilled nursing facilities (SNF), residential care facilities for the elderly (RCFE), adult residential facilities (ARF), independent living facilities (IL), intermediate care facilities (ICF), Santa Barbara County Jail (SBC Jail), Lompoc Federal Correctional Complex (FCC Prison), H2A housing, and other congregate settings. Following temporal trends of cases, congregate care setting outbreaks increased during the summer months and then again from November 2020 through January 2021. January had the highest number of congregate care setting outbreaks. RCFEs accounted for the majority of active outbreaks by month.

Figure 24. Opened Outbreaks in Congregate Settings by Month, Santa Barbara County (N=219)



Between July 2020 and March 2021 there were 152 outbreaks identified in business settings (Figure 25). The business sectors identified with the most outbreaks were Agriculture (34) followed by Manufacturing (19). Business outbreak reporting was sparse the first few months of the pandemic while there was minimal community spread of COVID-19 seen in Santa Barbara County, however as community transmission increased, so did business outbreaks. January had more outbreaks than the sum of all the previous months of the pandemic (N=46). Outbreaks have been identified in every business sector except for personal care/hair salons.

Figure 25. Opened Outbreaks in Business Settings by Month, Santa Barbara County (N=152)



Vaccinations

On December 10th, 2020, Santa Barbara County ordered the first shipment of the two-dose Pfizer and Moderna vaccines with an estimated delivery time of 2-days. On December 15, 2020, the Santa Barbara County Public Health Department administered first doses to eligible individuals. The Department followed the guidelines from the California Department of Public Health (CDPH) and the Advisory Committee on Immunization Practices (ACIP) to prioritize vaccine distribution. The tiered approach was used to ensure high-risk community members were prioritized as vaccine distribution continued. Vaccination data was captured and compiled using the CAIR2 database. Beginning in March, the single-dose vaccine produced by Johnson & Johnson arrived in Santa Barbara County.¹¹

The number of first, second, and single doses administered to County residents regardless of place of administration is displayed in **Figure 26**. As time has progressed and vaccine supplies have also increased more vaccine became available and more doses have been administered.

¹¹ As of 04/13/2021, in alignment with State and CDC, SBC will halt the administration of J&J vaccine.

Figure 26. Monthly Vaccines Administered to Santa Barbara County residents as of 3/31/21 (Total 1st Dose = 131,815, Total 2nd Dose = 30,723, Total Single Dose = 7,408)

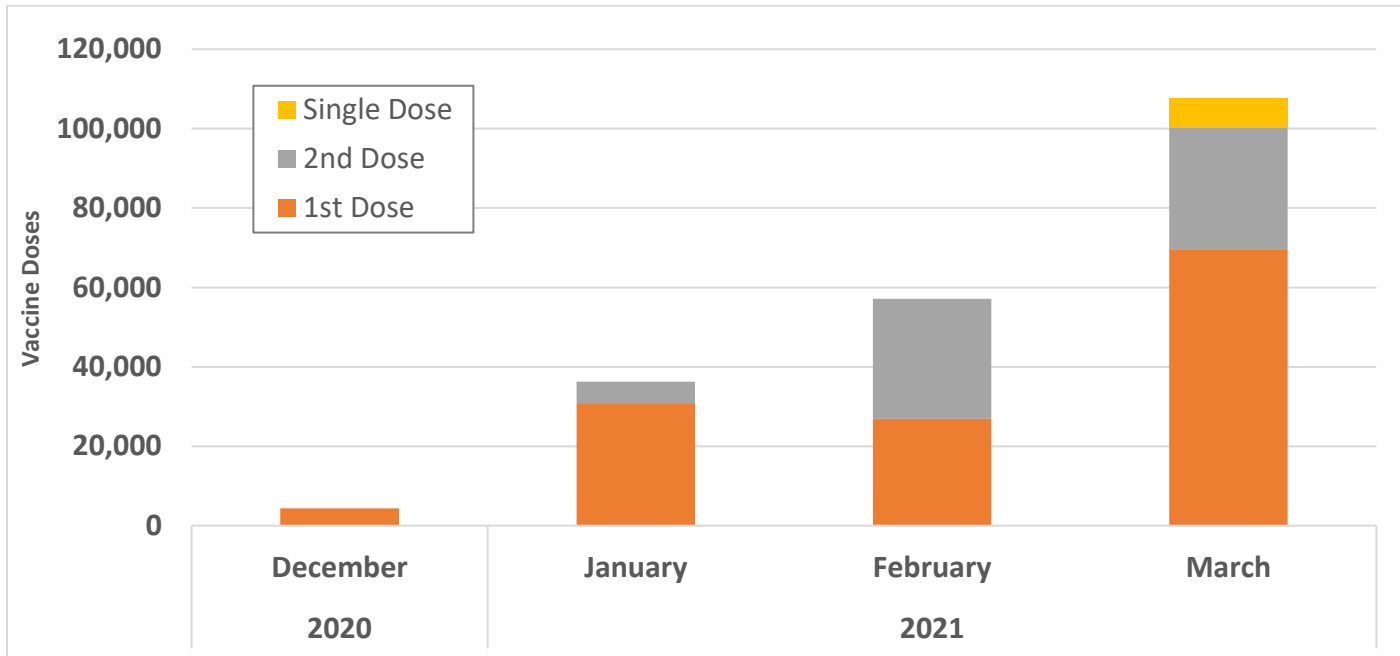


Figure 27. Age of Santa Barbara County Residents Vaccinated, as of 3/31/21 (N= 139,222)

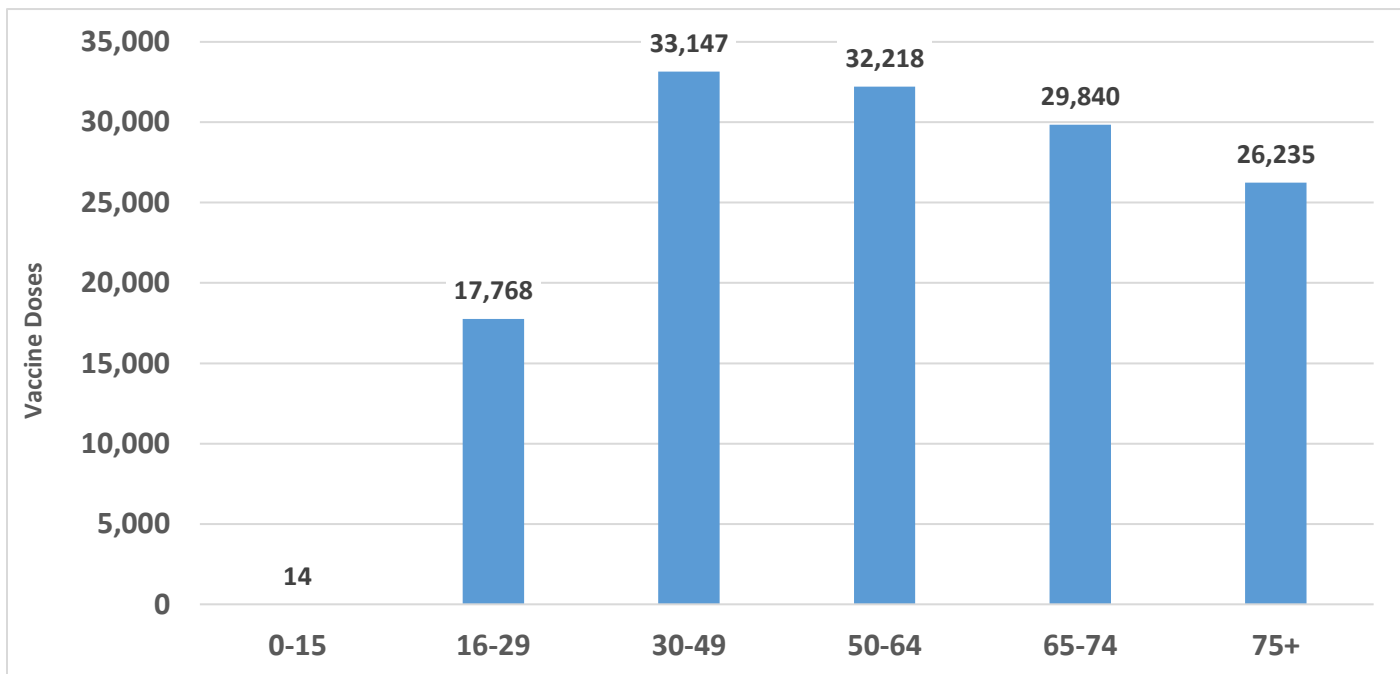


Figure 28. Gender of Santa Barbara County Residents Vaccinated, as of 3/31/21 (N=139,223)

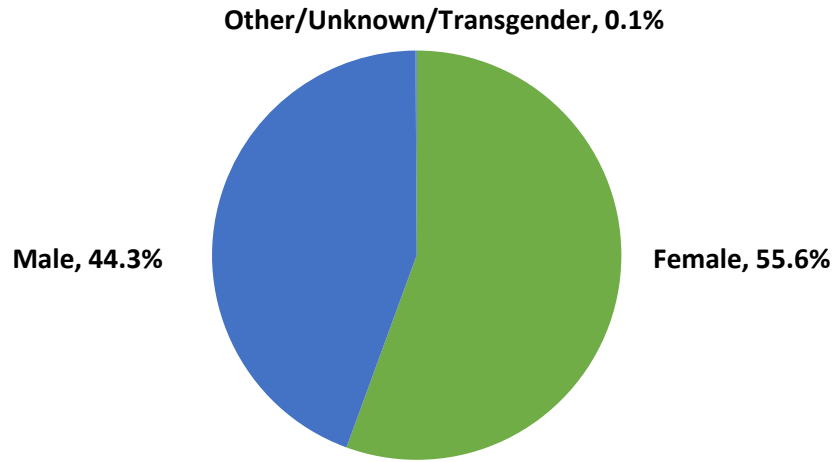


Figure 29 Race/Ethnicity of Santa Barbara County Residents Vaccinated, as of 3/31/21 (N= 139,223)

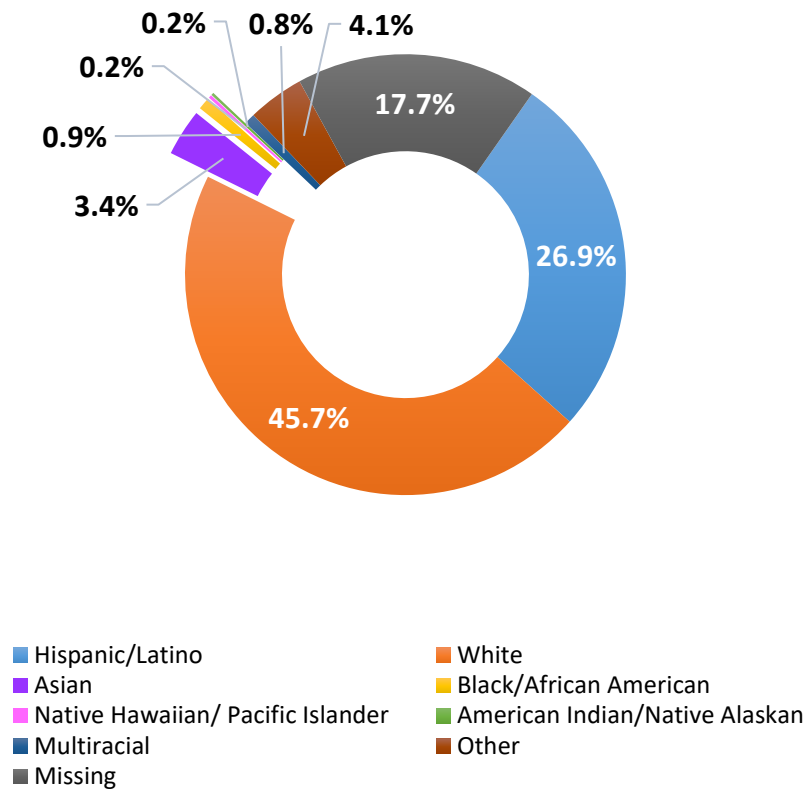


Table 1 presents the overall number and percentage of residents of the Santa Barbara County population who have been partially or fully vaccinated.

Table 1. Santa Barbara County Residents Vaccinated, as of 3/31/2021

SBC Residents Vaccinated	At least 1 Dose	Fully Vaccinated
Total	139,223	73,666
% of Total Population	30%	16%

While aiming to vaccinate residents as quickly as possible, equitable distribution remains a concern. California state identifies target populations by means of the Healthy Places Index (HPI). The HPI is a state-wide scoring tool that classifies geographic areas according to a variety of community conditions that affect health and well-being. Zip codes are divided by quartile, with the first quartile being areas with the least healthful conditions and the fourth quartile with the most healthful conditions. Monitoring immunization across HPI Q1 can help direct efforts to reach the most vulnerable populations.

Santa Barbara County is home to three zip codes included in HPI Q1. **Figure 30** presents the vaccines administered to these three areas through the first quarter of 2021. Figure 31 compares the quantity and percentage of vaccines administered for each of the four quartiles.

Figure 30. Doses of Vaccine Administered in Healthy Places Index Quartile 1 Zip Codes of SBC (Total 1st dose: 11,902 Total 2nd dose: 4,988 Total single dose: 1,434)

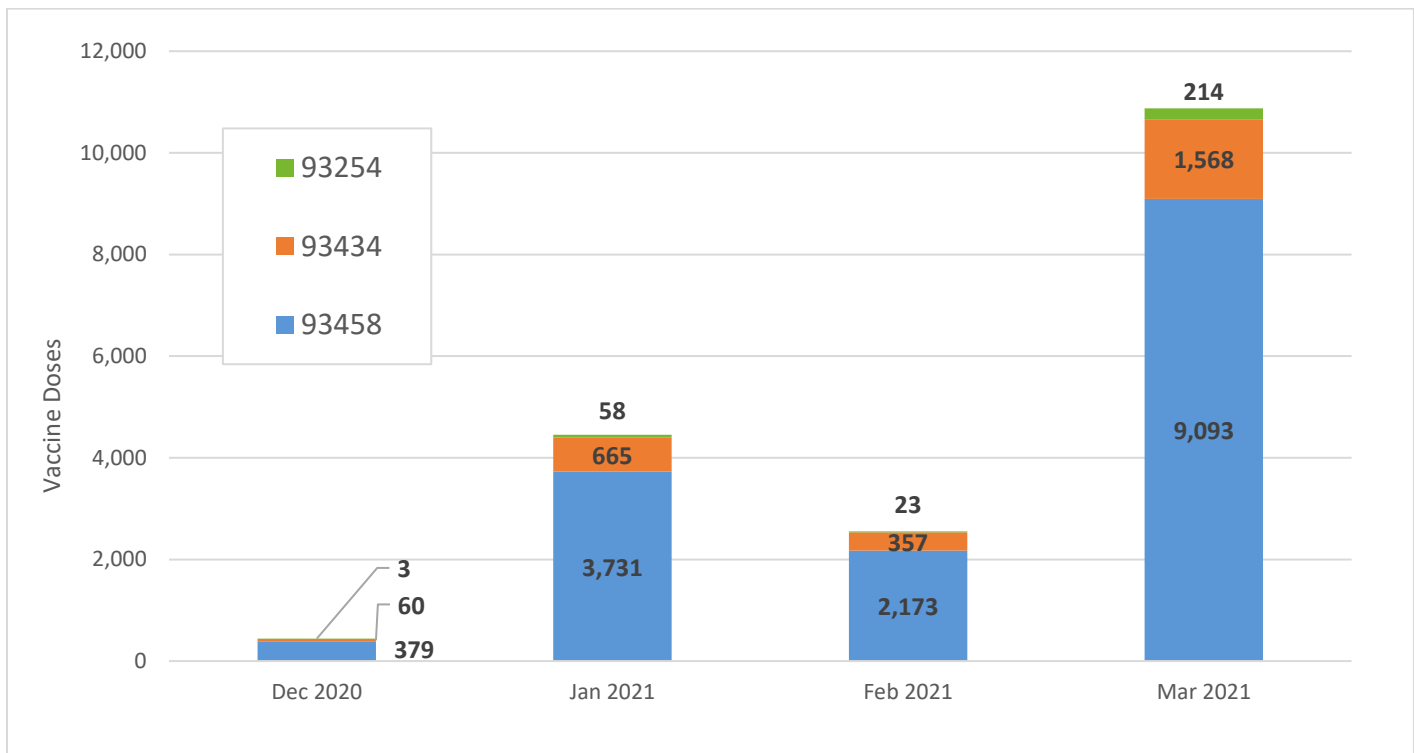
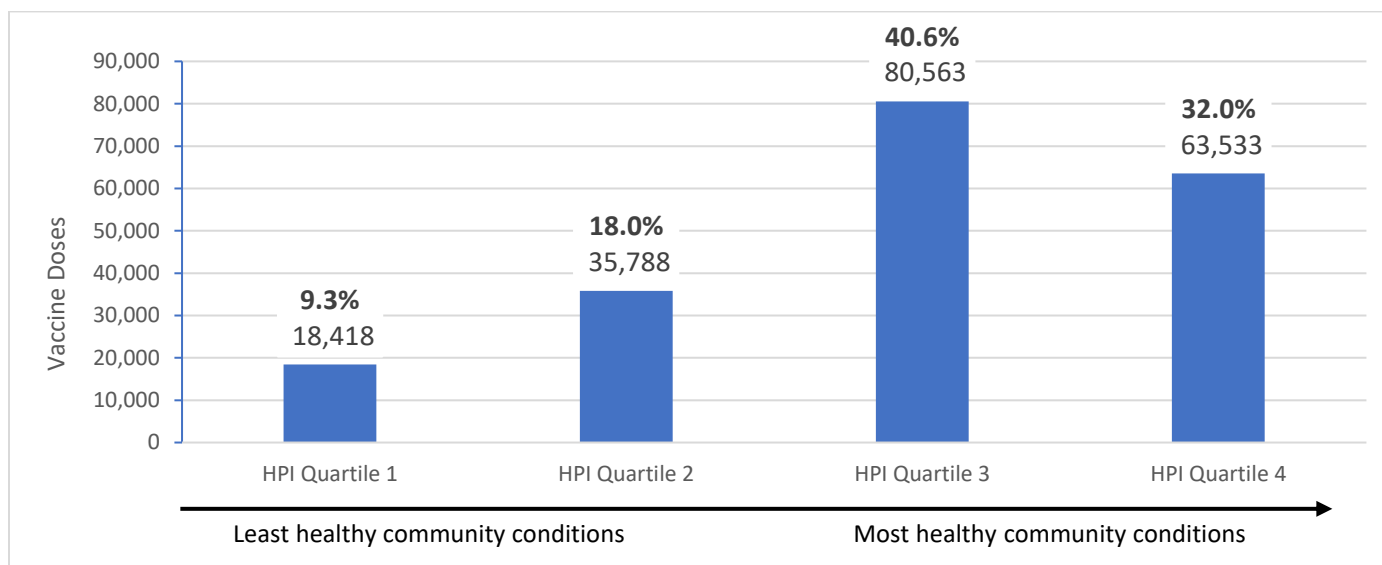


Figure 31. Vaccines Administered by Healthy Places Index quartiles*



*7,188 vaccines doses are excluded from the chart due to CA state quartile classification not including all zip codes located in Santa Barbara County.

As of March 31, 2021, 20.4% of the HPI Q1 population has received at least one dose of vaccine and 9.8% are fully vaccinated. Considering the eligible population of those 16 years or older, 14.2% of this priority population has been immunized.

Conclusion:

This report summarized COVID-19 cases in Santa Barbara County from March 2020 through March 2021. During this time, there have been 32,217 cases of COVID-19 reported to Public Health with 440 COVID-19-related deaths. The overall testing positivity was 6.4%. Santa Barbara County saw a wave of cases in the summer followed by an even higher wave in the winter that peaked in January 2021. The first wave of cases and testing positivity could be associated with the reopening of sectors and summer holidays, while the second wave could be associated with fall and winter holiday gatherings and increased travel.

At the end of 2020, a major transition occurred for Santa Barbara County. On December 6th, per Governor Newsom’s Regional Stay at Home Order (SAHO), SBC was grouped with nine other counties to be assessed as the Southern California Region. Once regional ICU capacity dropped below 15%, the region went into a SAHO for at minimum 3 weeks, and until regional ICU capacity surpassed 15%. The increase of gatherings that coincided with the start of the school semester and several holidays only weeks apart clearly led to a major surge in cases in SBC. For this reason, Santa Barbara County Public Health Department reinforced messaging on the danger of gathering with those outside of one’s household.

The first quarter of 2021 saw pandemic highs at the start of the period progressing to pandemic lows at the end. Although decreasing trends continued throughout March 2021, the rate of decrease slowed, with case counts and testing positivity plateauing towards the end of the month. With the move to the less restrictive red tier in March, certain business activities resumed and/or expanded. Transmission continued to occur in the community

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and the proven measures of masking, social distancing, handwashing and testing remain crucial to minimizing the spread of COVID-19, even as immunization efforts ramp up.

The age groups with the majority of cases were working adults (18-29 and 30-49 years old), which made-up for a larger percentage of cases than their respective population proportions. Efforts should focus on working with employers and post-secondary schools to mitigate the spread of disease. In addition, as schools reopen it will be a priority to monitor the situation with the youth.

Residents age 70+ make up 11% of the county population, yet this group made up 30% of the hospitalizations and 72% of the deaths due to COVID-19. Fortunately, with increased immunization among this group, cases, hospitalizations and deaths all decreased significantly by the end of the quarter, as have outbreaks in congregate living settings.

While Whites had fewer cases than predicted by their relative population size, Hispanic/Latinos have been disproportionately impacted by COVID-19 in Santa Barbara County when compared to population estimates in the County. This highlights the issue of health equity; which Santa Barbara County Public Health Department is committed to advancing.

Although nearly half of cases were missing information regarding occupation, of the available information, retired and clerical/management sectors superseded cases in any other business sector. Agriculture workers and frontline staff (healthcare, laborers/unskilled, and restaurant/bar or food preparation workers) also represent a large number of cases. These groups have been prioritized in the county immunization efforts.

The geography of cases has consistently shown that North County unincorporated areas and City of Santa Maria have the highest rates of disease. These communities' rates far surpass the County average case rate. However, during the second wave of infections, which peaked in January 2021, case counts rose in all GIS regions. Together, Santa Maria and Santa Barbara cities have consistently accounted for over half the cases in the County.

Immunization of SBC residents began at the end of December 2020 and steadily increased through the first quarter of 2021. By the end of the quarter, 30% of Santa Barbara County residents had received at least one dose of vaccine, and 16% are fully vaccinated. By age, 30-49 year olds received the largest portion of vaccines (24%), followed by 50-64 year olds (23%) and 65-74 year olds (21%). Note that although the age-group 75+ received only 19% of vaccines administered, relative to their proportion of the SBC population, this group has the highest immunization coverage of all ages.

Immunization by race/ethnicity show Hispanic/Latinos received 26.9% of vaccines and Whites, 45.7%. Compared to the population make-up (48% Hispanic/Latino and 43% White) , improvements must be made to increase the equitable distribution of vaccines. Of further concern, the immunization rate of minorities such as Black/African American, who make up 2% of SBC residents, have only received 0.9% of vaccines administered. Additionally, Asians, composing 5% of the County population, received only 3.4% of vaccines administered.

Equitable distribution of vaccines can also be analyzed through the lens of the Healthy Places Index. Three zip codes that are included in the statewide first quartile of the HPI are located in SBC. In these priority areas, 20% of residents received at least one dose, and 9.8% are fully vaccinated, as of March 31st, 2021.

Next Steps:

- This report will be updated on a quarterly basis.
- Data from this report will inform vaccination efforts.
- A weekly report has been added to the Epidemiology Unit workflow and is shared with the Public Health Department leadership each Friday afternoon to monitor the situation in real-time.
- Trends identified in this report will continue to be monitored for any changes.
- Young adults and youth will be closely monitored during reopening of sectors and schools.
- The Public Health Department will continue to work with partners to contain disease during outbreaks.
- For the most up-to-date information, please visit <https://publichealthsb.org/>.

APPENDIX

Technical Notes:

- All cases are laboratory confirmed for SARS-CoV-2 via molecular assay.
- Unless otherwise noted, population numbers are 2020 projections from California Department of Finance.
- Federal inmates are excluded from the analysis.
- Doses Received (approximate): The number of vaccine doses received is estimated based on a the number of doses ordered with a 2-day delay, which is the average delivery time from when orders are placed.
- Doses Administered are the number of COVID-19 vaccines injected into an eligible recipient. The number of doses administered in the county are reported to the state from a variety of sources.
- CVS, Walgreens and Rite Aid receive allocations directly from the Federal government so their administrations are not counted in our % Administered of ordered.

Terminology:

- **Active Cases** are cases that the Public Health Department has identified as still infectious based on the time elapsed between their known or estimated onset of symptoms and the date the case is reported. This number represents known cases confirmed by diagnostic tests.
- **Case Rate** is a metric (or measure) for the number of new cases per day for every 100,000 residents of the county, not including inmates from the Lompoc Federal Correctional Complex, averaged over a week.
- **Episode date** is the earliest date the infected person can be confirmed to have had COVID-19.
- **Test Positivity (TPR)** is one of the best ways to measure how much infection there is in a community. To calculate the TPR, the number of positive COVID-19 PCR tests conducted in a period of time is divided by the COVID-19 PCR tests that have been done in that same time frame.