

COVID-19 Watch

Weekly Coronavirus Disease 2019 (COVID-19) Surveillance Report

Prepared by Epidemiology and Immunization Services
Branch

www.sdepi.org

December 22, 2021

Cases
399,213

Deaths
4,406

Outbreaks
3,147

Data through 12/18/2021

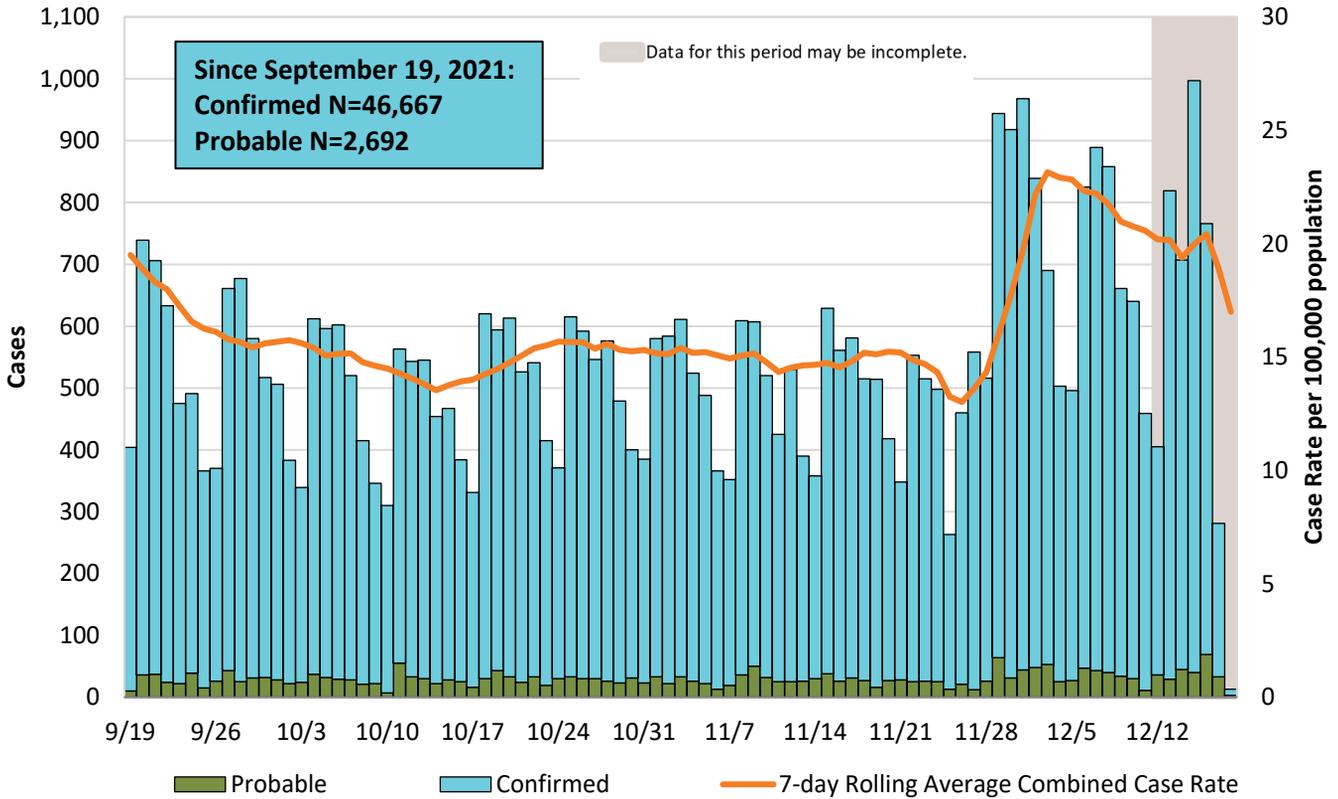
Report Content Links

- Page 2: [Summary](#)
- Page 3: [COVID-19 Infections by Vaccination Status](#)
- Page 4: [COVID-19 Hospitalizations by Vaccination Status](#)
- Page 5: [COVID-19 Deaths by Vaccination Status](#)
- Page 6: [COVID-19 Spread in San Diego County: R-effective Trend](#)
- Page 7: [Daily COVID-19 Counts by Vaccination Status – Previous 3 Months](#)
- Page 8: [Weekly COVID-19 Counts by Age – Previous 3 Months](#)
- Page 9: [Selected Characteristics of COVID-19 Cases, Hospitalizations, and Deaths](#)
- Page 10: [Age-Adjusted COVID-19 Case Rates by Race/Ethnicity](#)
- Page 11: [Age-Adjusted COVID-19 Hospitalization Rates by Race/Ethnicity](#)
- Page 12: [Case Rates by Zip Code of Residence](#)
- Page 13: [COVID-19 Potential Exposure Settings](#)
[Community Setting Outbreaks](#)
- Page 14: [Number of Vaccinations Administered and Cumulative Number of Persons Fully Vaccinated](#)
[Percent Fully Vaccinated by Zip Code of Residence](#)
- Page 15: [COVID-19 Vaccinations by Race/Ethnicity and Health Equity](#)
- Page 16: [COVID-19 Cases in Children and Outbreaks in School Settings](#)
- Page 17: [COVID-19 Cases in Schools](#)
- Page 18: [COVID-19 Laboratory Test Positivity Rate – Previous 12 Months](#)
[Emergency Department Data – Previous 12 Months](#)
- Page 19: [COVID-19 Pandemic at a Glance](#)
- Page 20: [Pandemic at a Glance: Summary of COVID-19-associated Deaths](#)

Epidemiology and Immunization Services Branch

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Figure 1. COVID-19 Confirmed and Probable Cases and 7-Day Rolling Average Case Rate by Date of Illness Onset*, San Diego County Residents, N=49,359



*When onset date is unavailable, specimen collection date, date of death, or date reported is used instead.
 **Probable cases are antigen positive tests received since August 1, 2020.

Table 1. Summary of Cases, Deaths, and Outbreaks by Date Reported

	12/12 – 12/18/2021	12/5 – 12/11/2021	Cumulative
Cases	5,222	4,988	399,213
Avg Daily Cases	746	713	613
Deaths	28	27	4,406
Outbreaks	56	29	3,147

COVID-19 Infections by Vaccination Status

Case rate for not fully vaccinated residents is **3 times higher** than fully vaccinated residents

Dates: 11/28-12/4/2021

Not Fully Vaccinated*
Case Rate
(per 100,000)

37.7

Fully Vaccinated**
Case Rate
(per 100,000)

12.9

County Overall
Case Rate
(per 100,000)

21.7

Figure 2. 7-Day Rolling Average COVID-19 Case Rate by Vaccination Status in San Diego County Residents since March 1, 2021

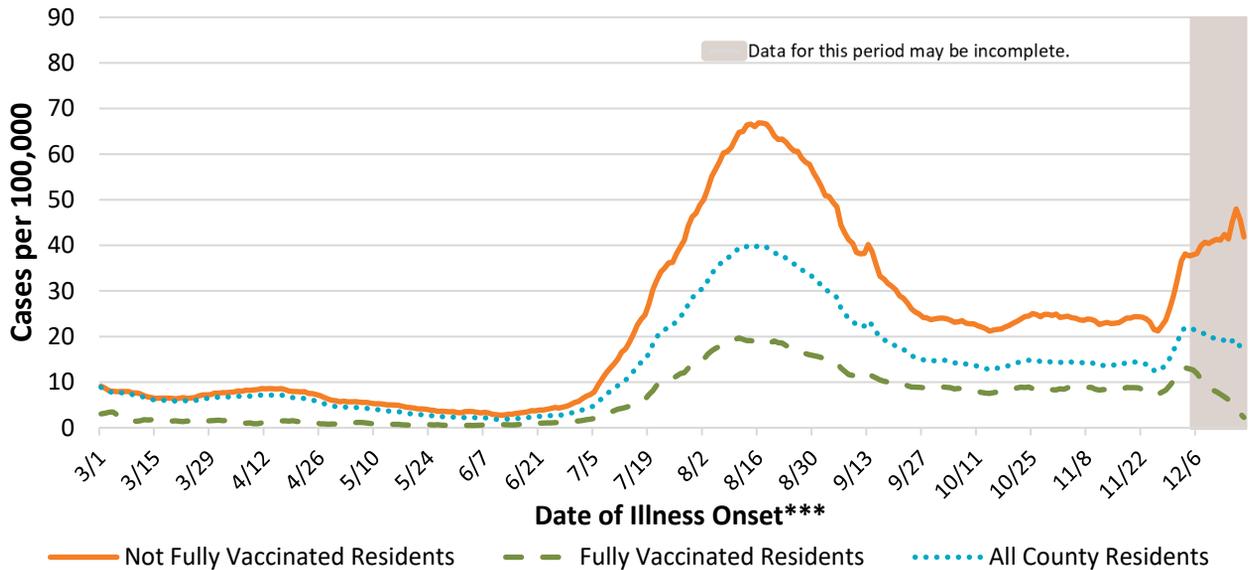


Table 2. COVID-19 Cases Among San Diego County Residents by Vaccination Status from Illness Onset Dates*** of March 1, 2021 to December 4, 2021

	Not Fully Vaccinated*	Fully Vaccinated**	Total
Cases	91,962 (72.7%)	34,594 (27.3%)	126,556
Hospitalizations	3,192 (82.3%)	686 (17.7%)	3,878
Deaths	532 (82.9%)	110 (17.1%)	642

*Not fully vaccinated includes individuals with one dose of the two-dose series, no doses, or unknown vaccination status. Individuals who are not yet eligible for the vaccine are also included.

**Cases who first tested positive (based on specimen collection date) greater than or equal to 14 days after receiving the final dose of COVID-19 vaccine.

Percentages are among total cases, hospitalizations, and deaths for the time period. Cases with recent infection or onset dates may not yet be reported and vaccination data for recently reported cases may be incomplete. Hospitalizations and deaths from the last 14 days may not yet be reported. To account for this, data for the most recent two weeks are not included.

***If case did not have symptoms or illness onset date is unavailable, the earliest of specimen collection date, date of death, or date reported is used instead.

San Diego County Population from SANDAG 2019 Population Estimates (Prepared June 2020) = 3,351,784. The fully vaccinated population for each day is the cumulative number of county residents documented to have received the final dose of COVID-19 vaccine more than 14 days prior to that day. The not fully vaccinated population is the estimated total county population minus the fully vaccinated population.

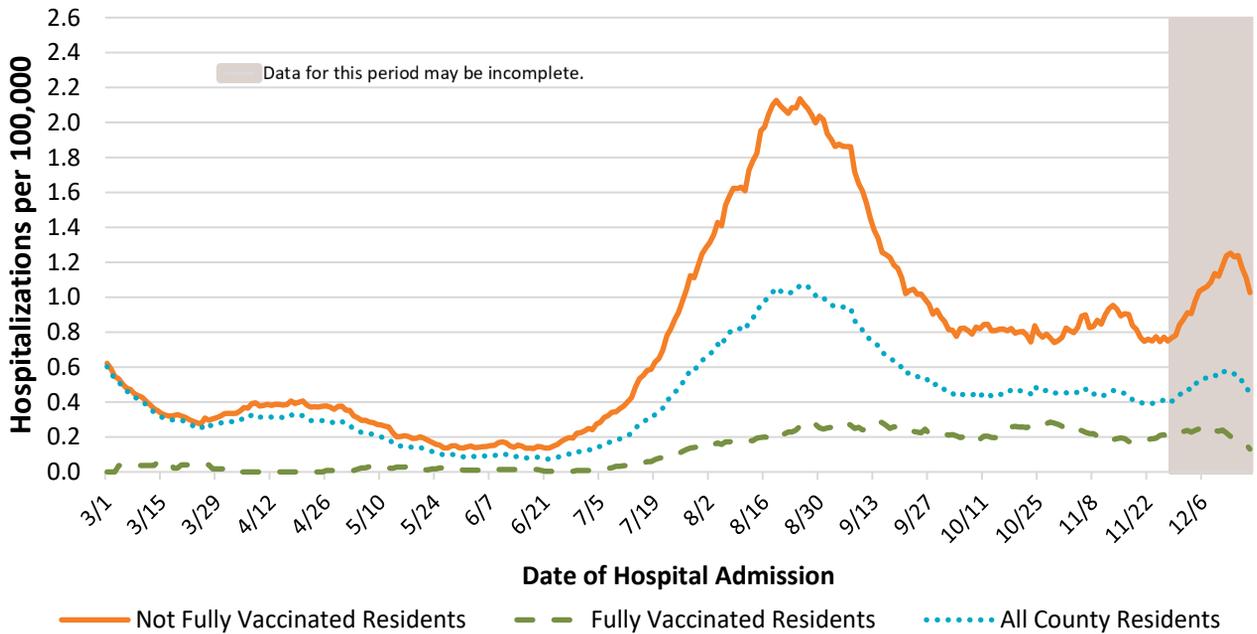
COVID-19 Hospitalizations by Vaccination Status

Hospitalization rate for not fully vaccinated residents is **4 times higher** than fully vaccinated residents

Dates: 11/14-11/27/2021

Not Fully Vaccinated* Hospitalization Rate (per 100,000)	Fully Vaccinated** Hospitalization Rate (per 100,000)	County Overall Hospitalization Rate (per 100,000)
0.75	0.20	0.40

Figure 3. 14-Day Rolling Average COVID-19 Hospitalization Rate by Vaccination Status in San Diego County Residents since March 1, 2021



*Not fully vaccinated includes individuals with one dose of the two-dose series, no doses, or unknown vaccination status. Individuals who are not yet eligible for the vaccine are also included.

**Cases who first tested positive (based on specimen collection date) greater than or equal to 14 days after receiving the final dose of COVID-19 vaccine.

San Diego County Population from SANDAG 2019 Population Estimates (Prepared June 2020) = 3,351,784. The fully vaccinated population for each day is the cumulative number of county residents documented to have received the final dose of COVID-19 vaccine more than 14 days prior to that day. The not fully vaccinated population is the estimated total county population minus the fully vaccinated population.

COVID-19 Deaths by Vaccination Status

Dates: 11/14-11/27/2021

Death rate for not fully vaccinated residents is **7 times higher** than fully vaccinated residents

Not Fully Vaccinated*
Death Rate
(per million)

1.90

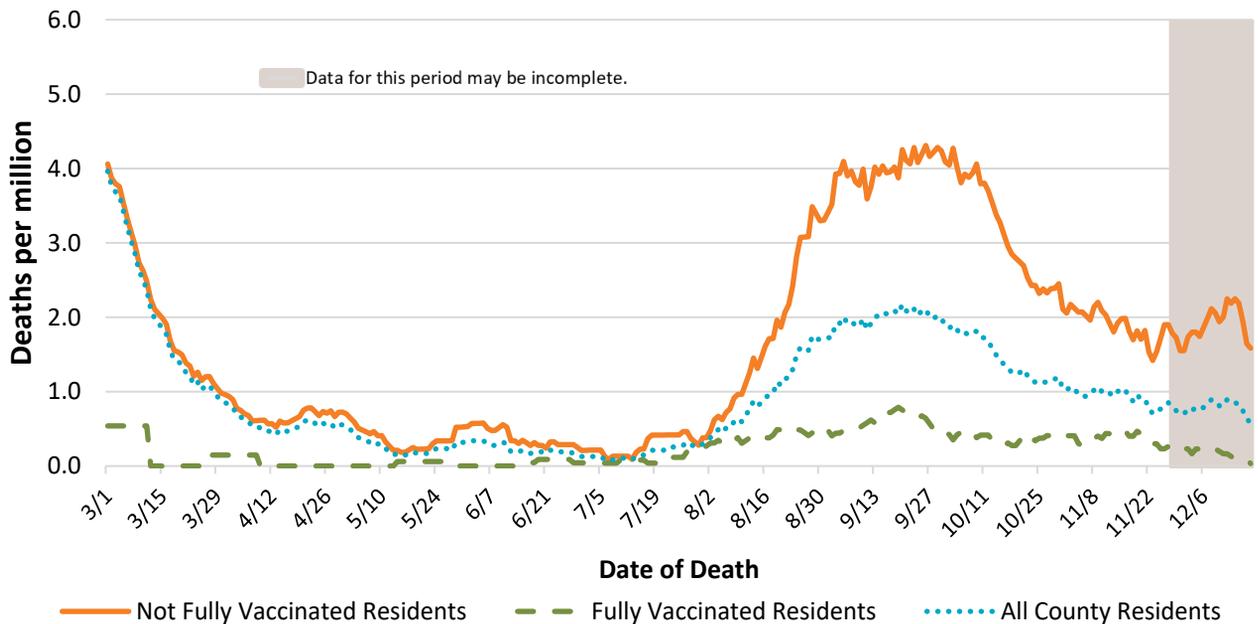
Fully Vaccinated **
Death Rate
(per million)

0.27

County Overall
Death Rate
(per million)

0.85

Figure 4. 14-Day Rolling Average COVID-19 Death Rate by Vaccination Status in San Diego County Residents since March 1, 2021



*Not fully vaccinated includes individuals with one dose of the two-dose series, no doses, or unknown vaccination status. Individuals who are not yet eligible for the vaccine are also included.

**Cases who first tested positive (based on specimen collection date) greater than or equal to 14 days after receiving the final dose of COVID-19 vaccine.

San Diego County Population from SANDAG 2019 Population Estimates (Prepared June 2020) = 3,351,784. The fully vaccinated population for each day is the cumulative number of county residents documented to have received the final dose of COVID-19 vaccine more than 14 days prior to that day. The not fully vaccinated population is the estimated total county population minus the fully vaccinated population.

COVID-19 Spread in San Diego County: R-effective Trend

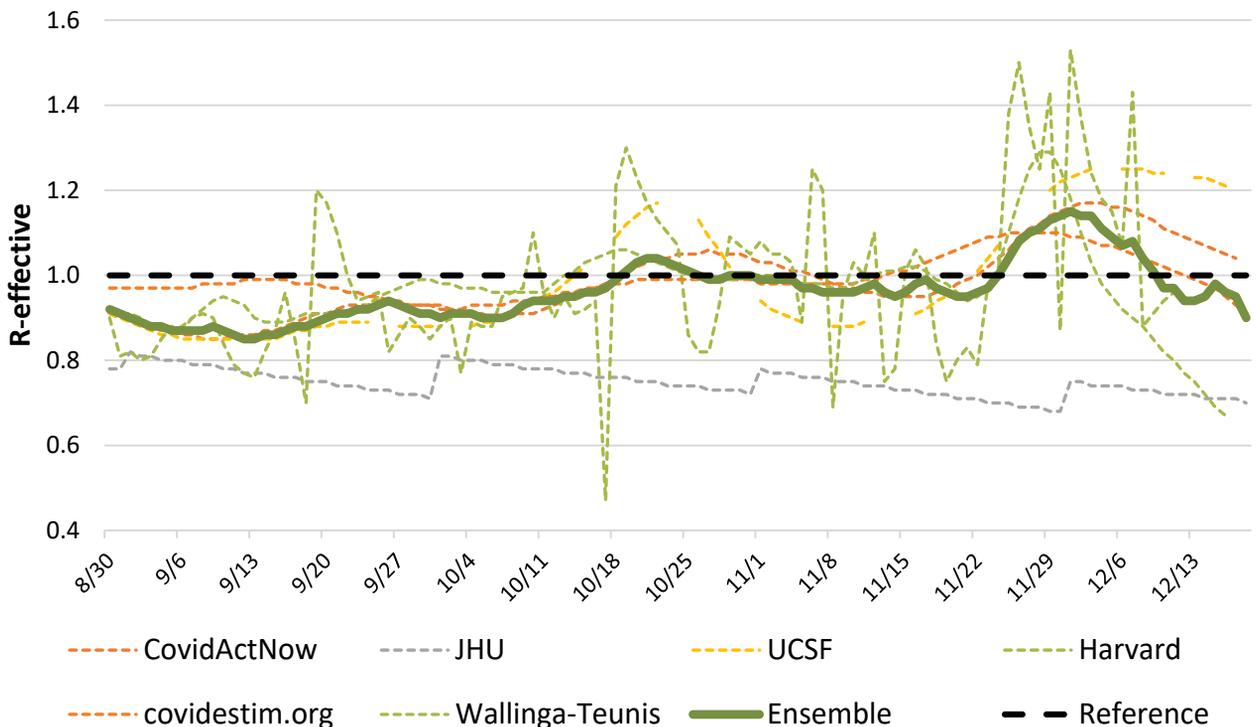
- The effective reproduction number (R effective or R-eff) is the average number of people each infected person will pass the virus onto and represents the rate at which a virus is spreading. If R-eff >1, the number of infected persons will increase. If R-eff <1, the number of infected persons will decrease. If R-eff =1, the number of infected persons is constant.
- R effective should be interpreted with caution. It is based on a theoretical set of assumptions to derive an average number across San Diego County. It does not take into account factors such as local population density or social behavior.
- These R effective estimates come from the California COVID Assessment Tool Nowcasts (<https://calcat.covid19.ca.gov/cacovidmodels/>). Each estimate on the graph comes from a different group with different modeling methods. The ensemble takes the median of all the nowcasts available on a given date and smooths it with a three-day moving average.

Figure 5. R-effective Trend in San Diego County Over the Past Three Months

Latest estimate of R-effective is:

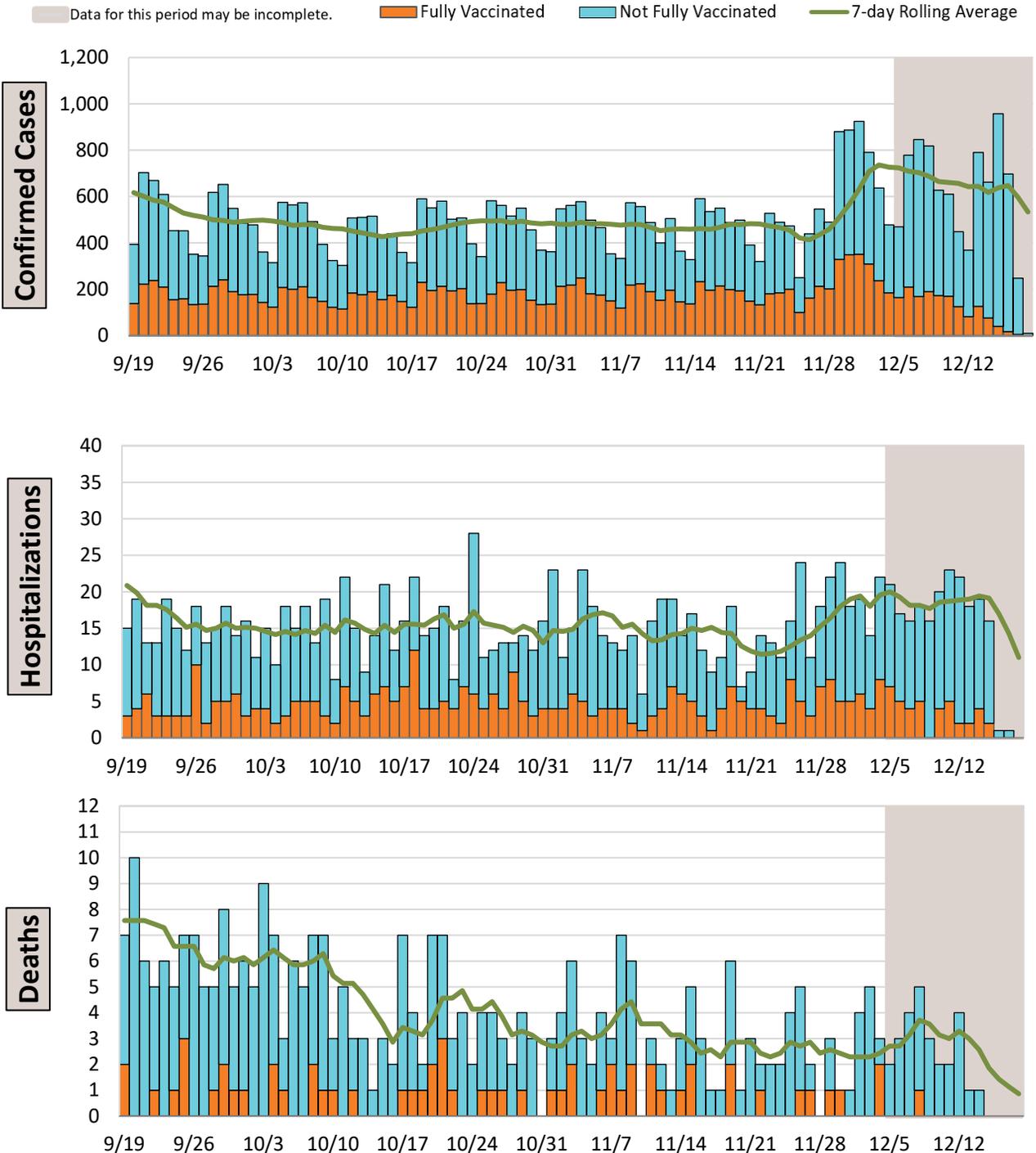
0.9

Spread of COVID-19 is likely stable

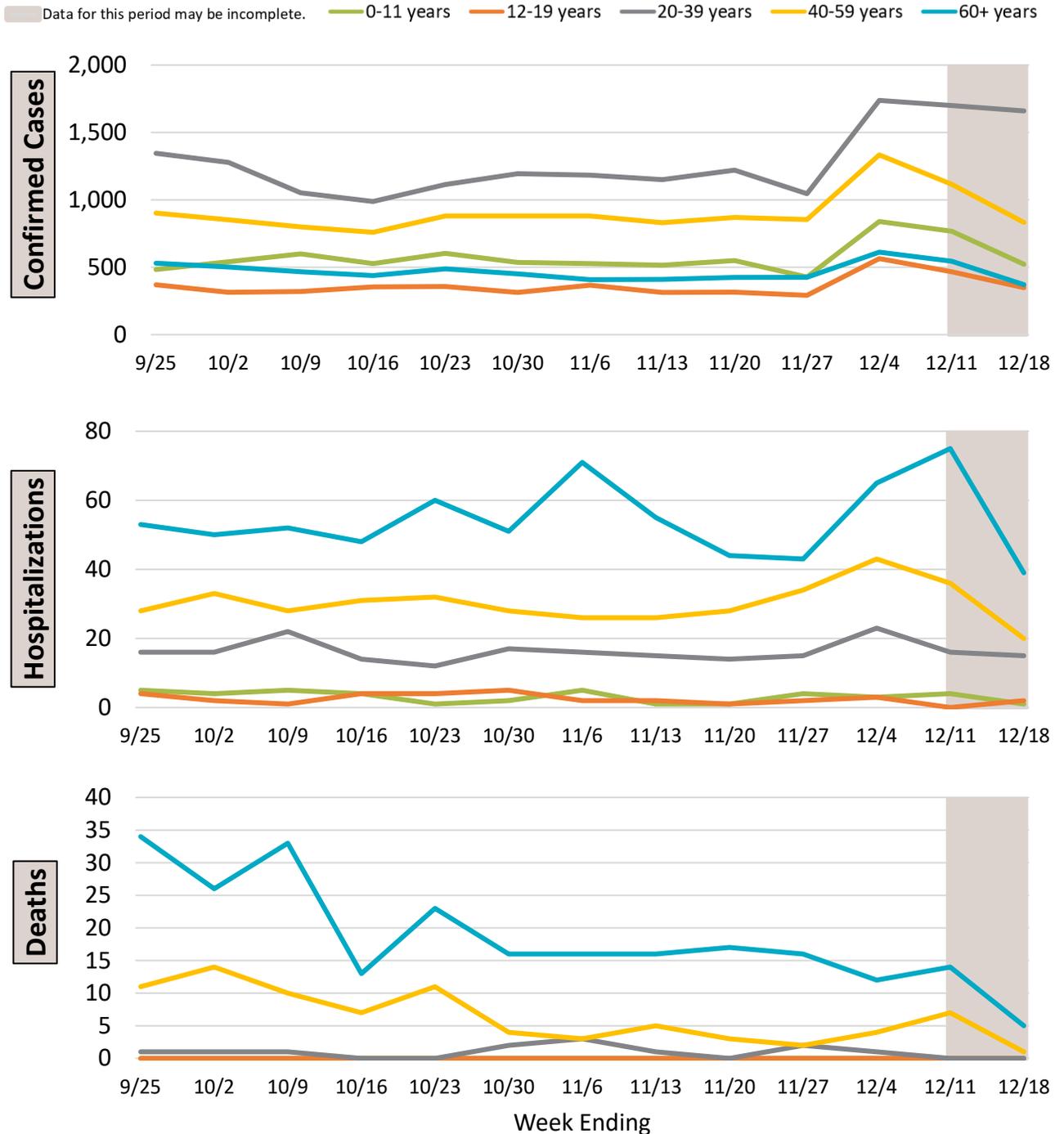


Source: <https://calcat.covid19.ca.gov/cacovidmodels/>

Figures 6-8. Daily COVID-19 Counts by Vaccination Status – Previous 3 Months



Figures 9-11. Weekly COVID-19 Counts by Age – Previous 3 Months



Selected Characteristics of COVID-19 Cases, Hospitalizations, and Deaths

Table 3. Confirmed Cases by Date Reported, Last Two Weeks vs. Cumulative

Confirmed Cases		December 5, 2021 – December 18, 2021	February 14, 2020 – December 18, 2021
	Confirmed cases		10,210
Median age		32 years	34 years
Age range		0-100+ years	0-100+ years
Male		4,954 (49%)	193,953 (49%)
Female		5,178 (51%)	202,411 (51%)

Table 4. Confirmed Hospitalizations by Date of Admission, Last Two Weeks vs. Cumulative

Hospitalizations		December 5, 2021 – December 18, 2021	February 14, 2020 – December 18, 2021
	Hospitalizations		208 (2%)
Median age		62 years	62 years
Age range		0-98 years	0-100+ years
Male		111 (53%)	10,177 (54%)
Female		96 (46%)	8,734 (46%)

Sex is unknown for 1 hospitalizations for the last two weeks and for 30 hospitalizations cumulatively.

Note: Percentage hospitalized is calculated based on the total number of cases; information may be unknown in some cases. Hospitalization counts are likely underreported and may increase as additional information is obtained.

Table 5. Confirmed Deaths by Date of Death, Last Two Weeks vs. Cumulative

Deaths		December 5, 2021 – December 18, 2021	February 14, 2020 – December 18, 2021
	Deaths		27
Case Fatality Ratio		N/A*	1.1%
Underlying Conditions**		26 (94%)	4,218 (96%)
Median age		65 years	76 years
Age range		44-98 years	10-100+ years
Male		14 (52%)	2,648 (60%)
Female		13 (48%)	1,758 (40%)

*Data are incomplete for this time period.

**Refer to the graph on page 18 for more details.

Age-Adjusted COVID-19 Case Rates by Race/Ethnicity

Figure 12. Age-Adjusted Rates of Confirmed Cases by Race/Ethnicity, San Diego County Residents

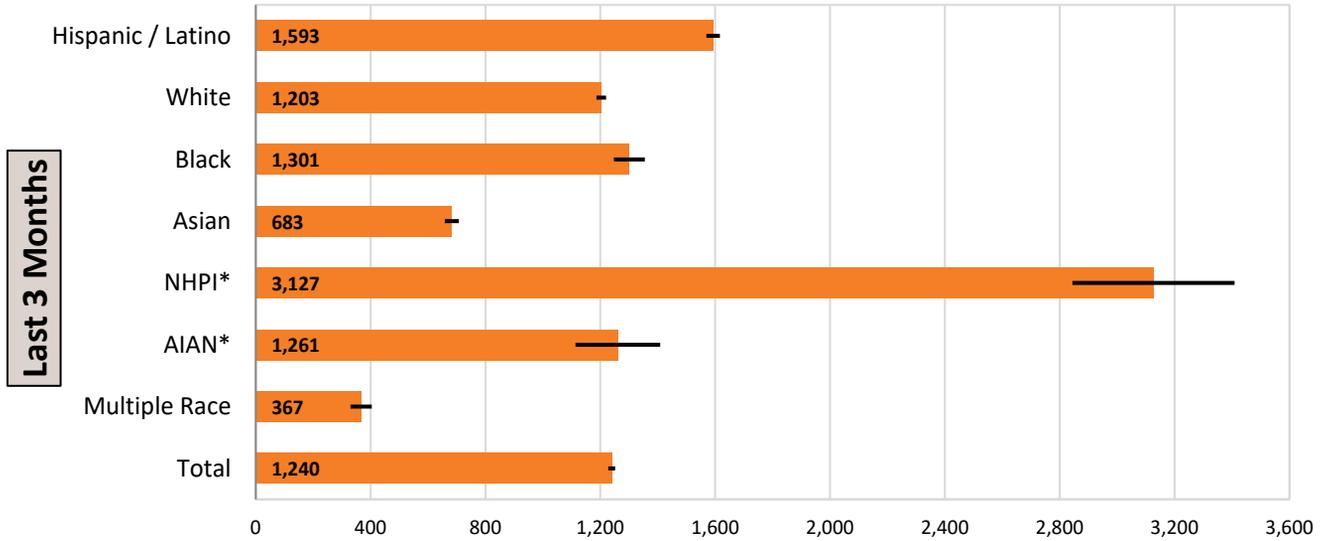
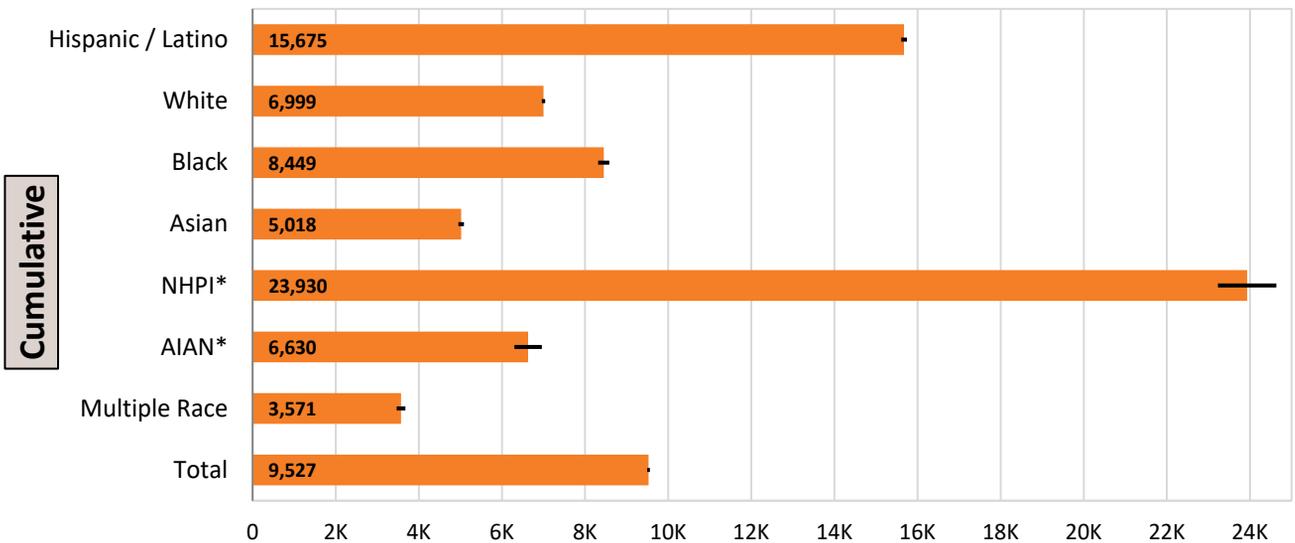


Figure 13. Age-Adjusted Rates of Confirmed Cases by Race/Ethnicity, San Diego County Residents



The black lines represent the 95% confidence intervals (error bars). Rates are not calculated for fewer than 20 events.

*NHPI=Native Hawaiian/Pacific Islander, AIAN=American Indian/Alaska Native.

Age-Adjusted COVID-19 Hospitalization Rates by Race/Ethnicity

Figure 14. Age-Adjusted Rates of Hospitalizations by Race/Ethnicity, San Diego County Residents

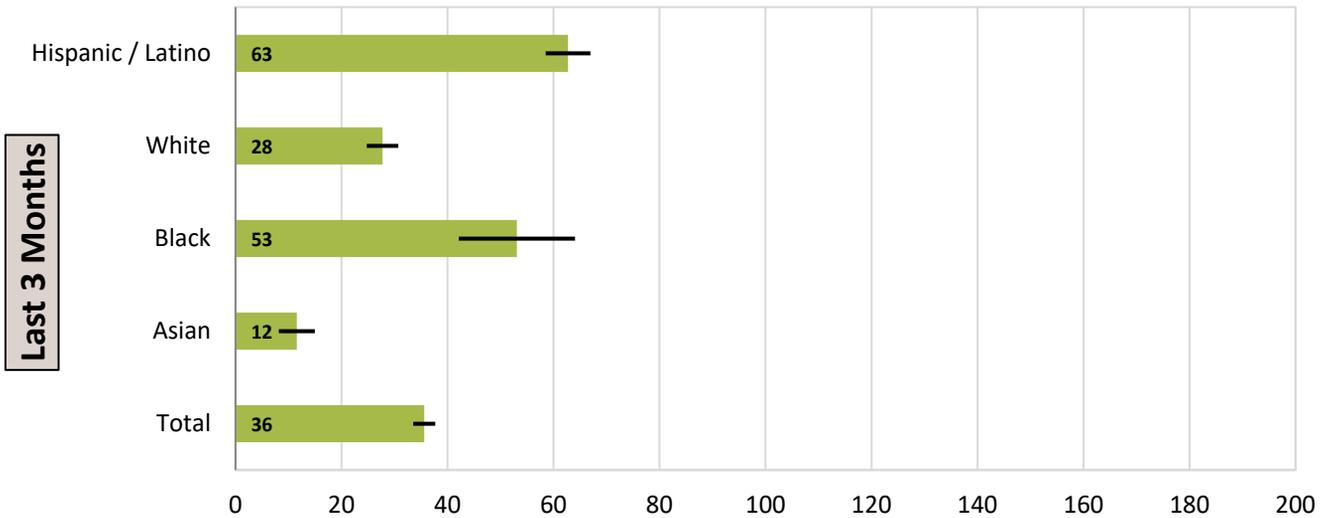
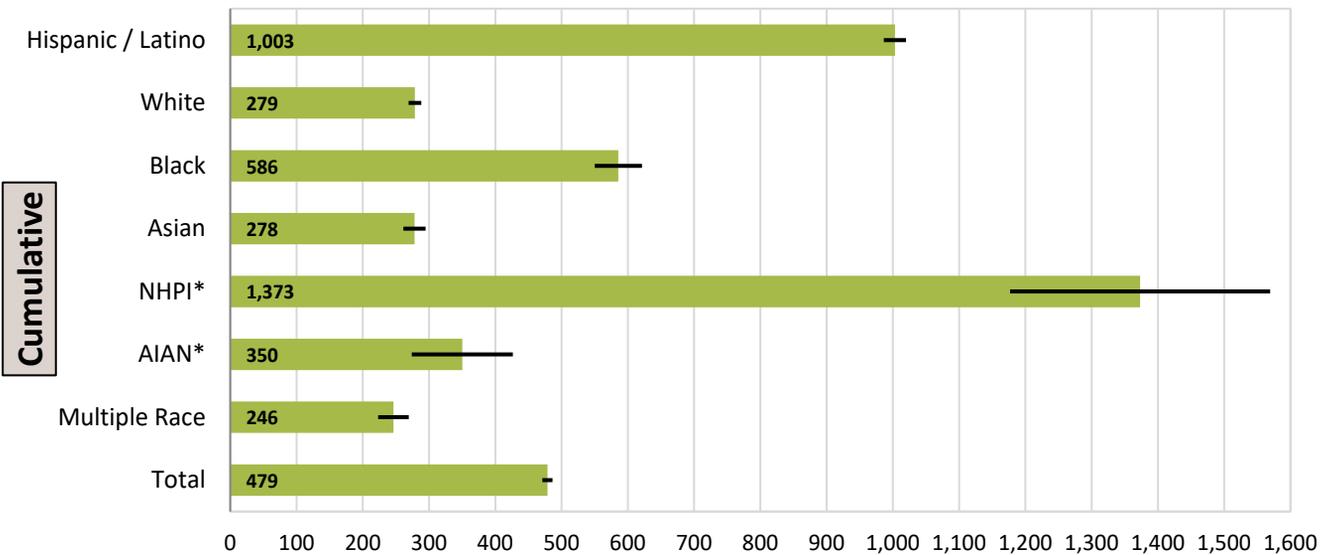


Figure 15. Age-Adjusted Rates of Hospitalizations by Race/Ethnicity, San Diego County Residents



The black lines represent the 95% confidence intervals (error bars).

Rates are not calculated for fewer than 20 events. Hospitalization rates were not calculated for the last three months for Multiple Race, AIAN, and NHPI because these categories have fewer than 20 events.

*NHPI=Native Hawaiian/Pacific Islander, AIAN=American Indian/Alaska Native.

COVID-19 WATCH

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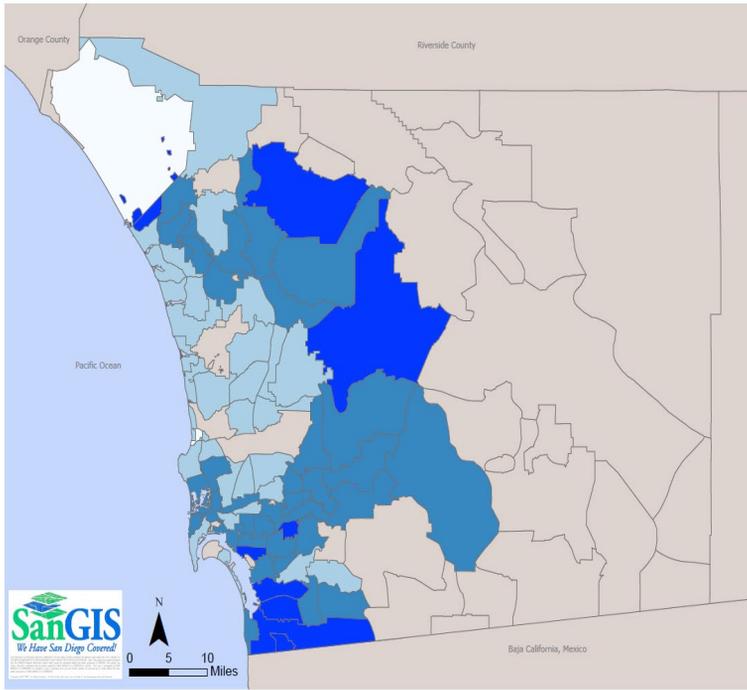


Figure 16. Confirmed Case Rate by Zip Code of Residence, 12/5/2021-12/18/2021, San Diego County
(Countywide Rate = 305 per 100,000 Population)

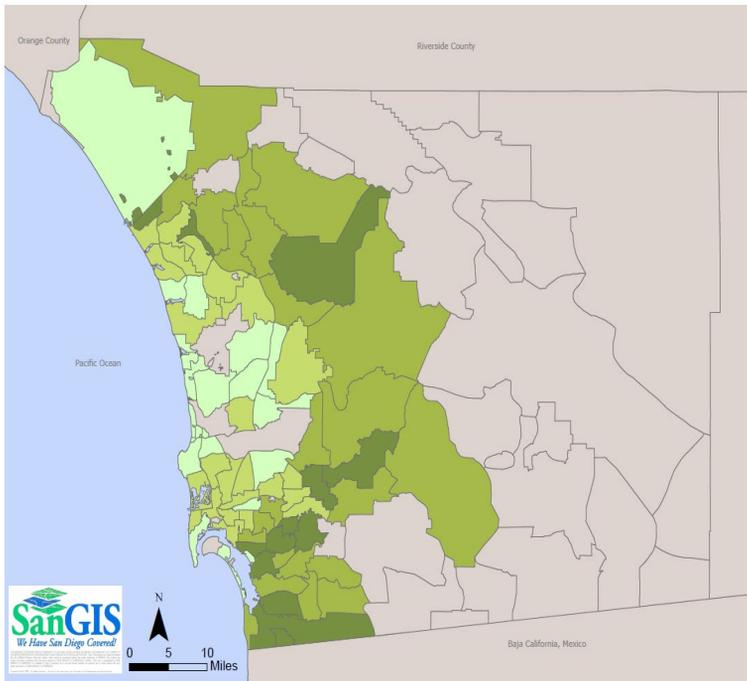
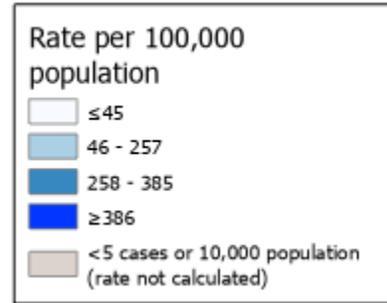
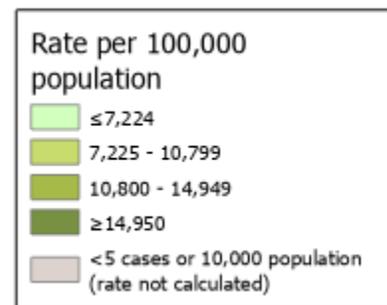


Figure 17. Cumulative Confirmed Case Rate by Zip Code of Residence, San Diego County
(Countywide Rate = 11,911 per 100,000 Population)

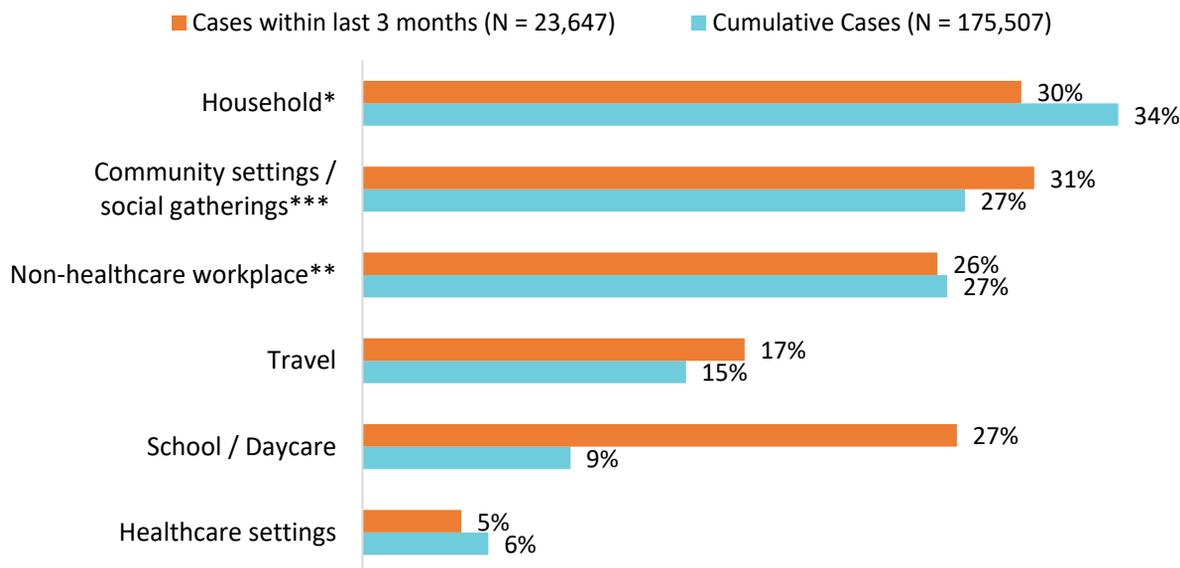


Confirmed COVID-19 Cases by Zip Code

Rates calculated using 2019 population estimates from the San Diego Association of Governments. Rates not calculated for counts under 5 cases or populations less than 10,000. Zip code is zip code of residence, which may not be location of exposure. Case [counts and rates](#) for each zip code are updated routinely on the County of San Diego COVID-19 website.

COVID-19 Potential Exposure Settings

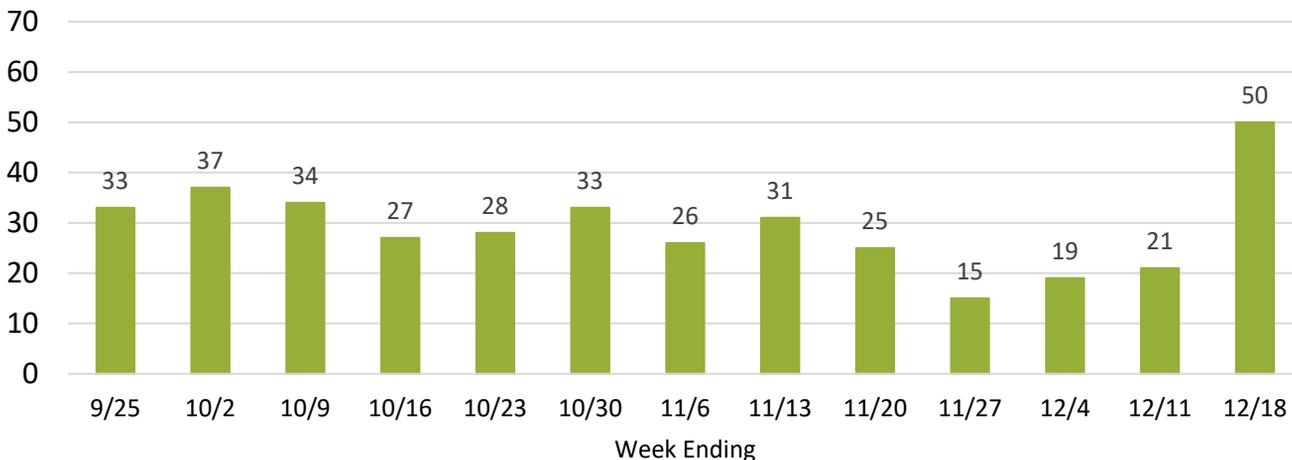
Figure 18. All Potential Exposure Settings Identified Among Confirmed Cases, San Diego County Residents



Potential exposure settings are places case-patients visited during their exposure period, not confirmed sources of infection. Persons may be exposed in multiple locations and types of settings, including the household, the workplace, educational settings, other community settings, and during travel. Community settings are defined as indoor or outdoor locations in which cases came within 6 feet of anyone who was not a household member for at least 15 minutes during the 2-14 days prior to symptom onset, even if the case wore a mask or facial covering.

COVID-19 Community Setting Outbreaks

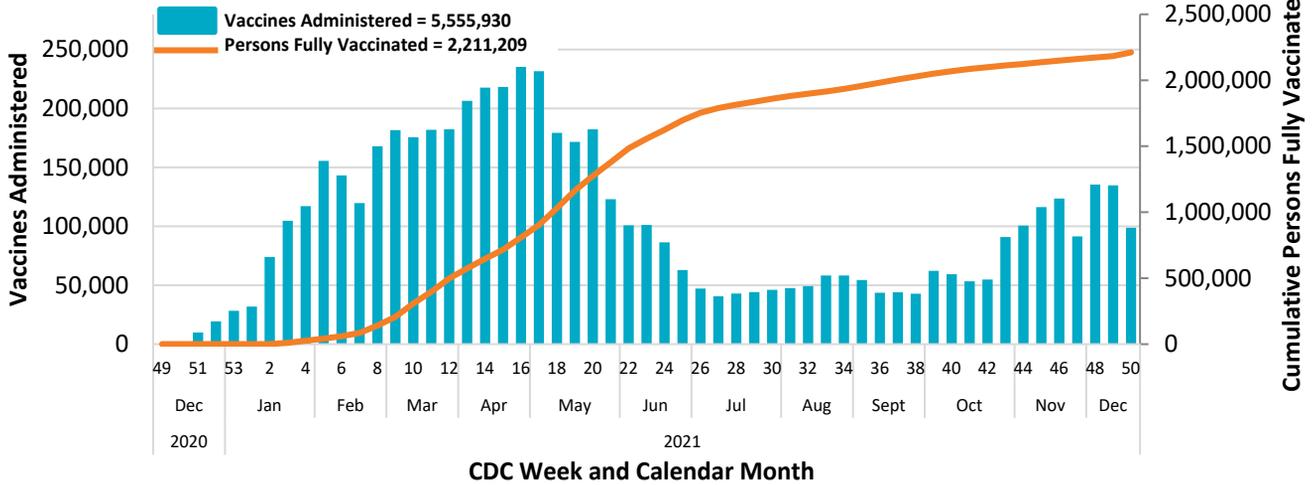
Figure 19. Community Setting Outbreaks* by Date Outbreak Confirmed
Total Number of Community Outbreaks=379



*Community setting outbreaks are defined as at least three probable or confirmed COVID-19 cases within a 14-day period in people who are epidemiologically-linked in the setting, are from different households, and are not identified as close contacts of each other in any other case investigation. Examples include workplaces, adult and child daycare facilities, K-12 schools and colleges/universities, and day camps.

COVID-19 Vaccinations

Figure 20. Number of COVID-19 Vaccinations Administered and Cumulative Number of Persons Fully Vaccinated by Week Among San Diego County Residents



The bars show vaccines administered, not individuals vaccinated. The line shows the cumulative number of persons fully vaccinated per the dose and schedule regimen for the vaccine received.

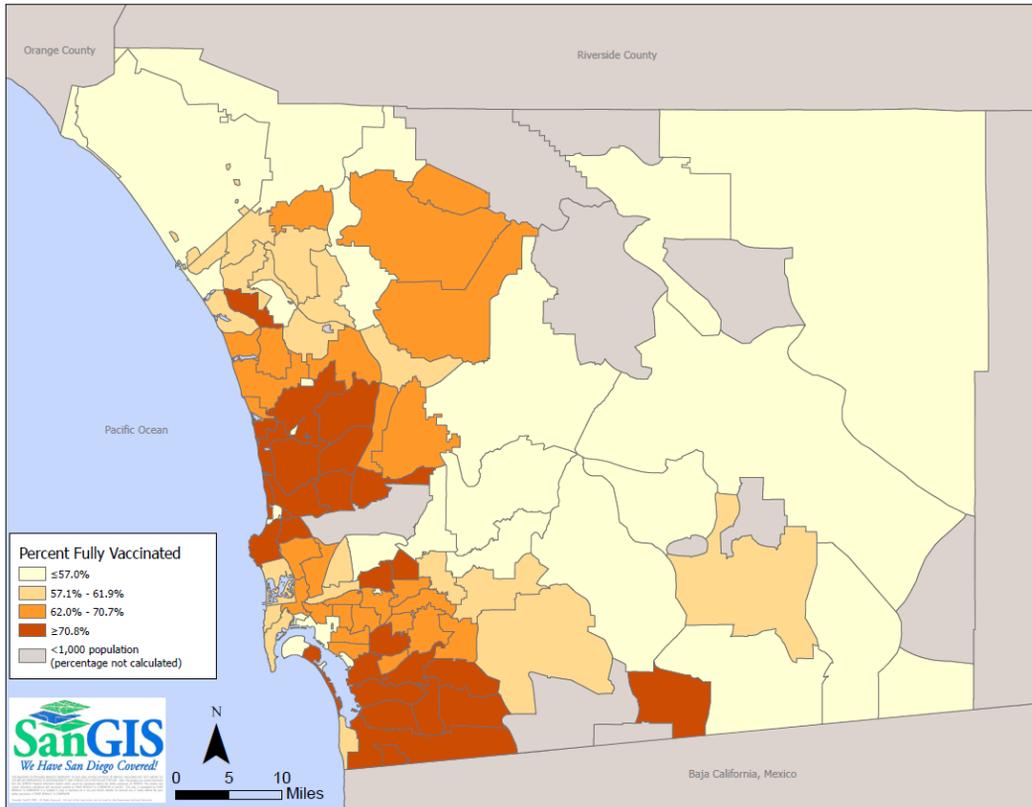


Figure 21. Percentage of the Total Population of San Diego County Residents Who are Fully Vaccinated, by Zip Code of Residence

Only includes vaccines that have been recorded in the San Diego Immunization Registry (SDIR). Some healthcare providers, including Veteran's Affairs, the Department of Defense, some tribal entities, and prisons do not report to SDIR. See this [dashboard](#), updated daily, for more detailed vaccine status information for San Diego County. Data source: San Diego Immunization Registry, SANDAG 2019 Population Estimates (Prepared June 2020).

COVID-19 Vaccinations by Race/Ethnicity and Health Equity

■ Fully Vaccinated ■ Partially Vaccinated ■ Not Vaccinated

Figure 22. Vaccination Status by Race/Ethnicity, San Diego County Residents Age Five Years and Older

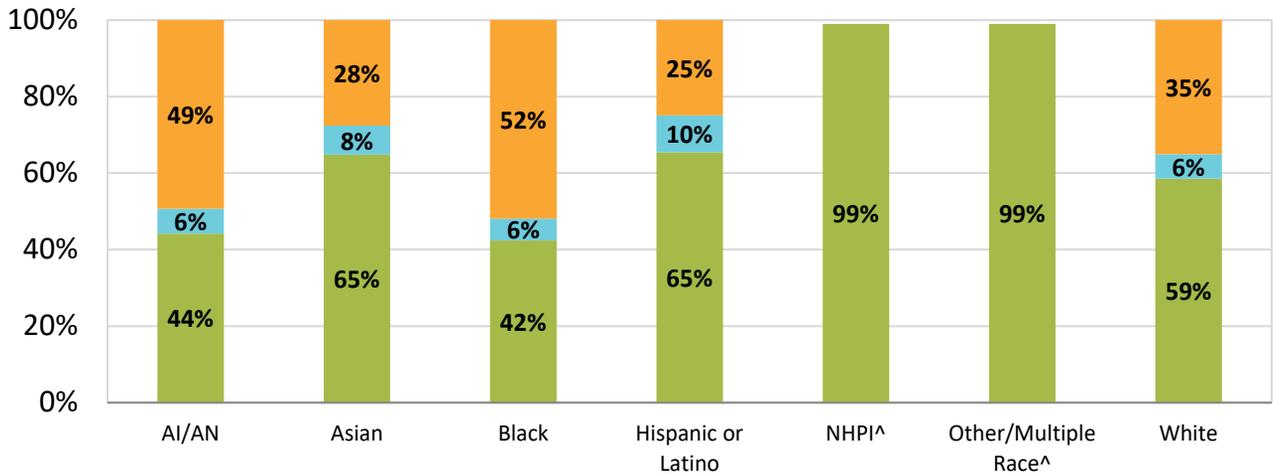
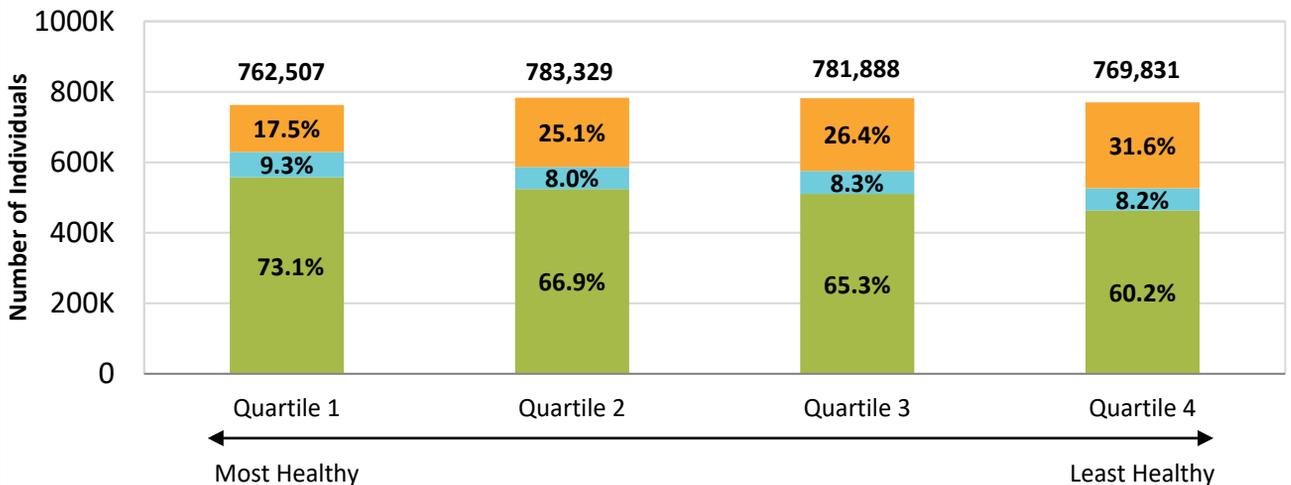


Figure 23. Vaccination Progress by Healthy Places Index Quartile,* San Diego County Residents Age Five Years and Older



*The California [Healthy Places Index](#)

[^]The percentage and rate of the population vaccinated with at least one dose of COVID-19 vaccine may approach, or exceed, 99% or 999 per 1,000 San Diego residents aged five years and older. The most recent race/ethnicity populations are 2019 estimates, which may underestimate the current population. When these demographics are analyzed, the population estimates may not reflect social and environmental changes of a community, possibly leading to an under- or overestimate of a population.

Individuals vaccinated by Veterans Affairs or Department of Defense are not included.

COVID-19 vaccine is not approved for those under age five at this time.

Data source: San Diego Immunization Registry, SANDAG 2019 Population Estimates (Prepared June 2020). Total population five years of age and older=3,144,061. Population estimate of 45,505 individuals do not reside in a census tract with a Healthy Places Index score.

Data through
12/18/2021

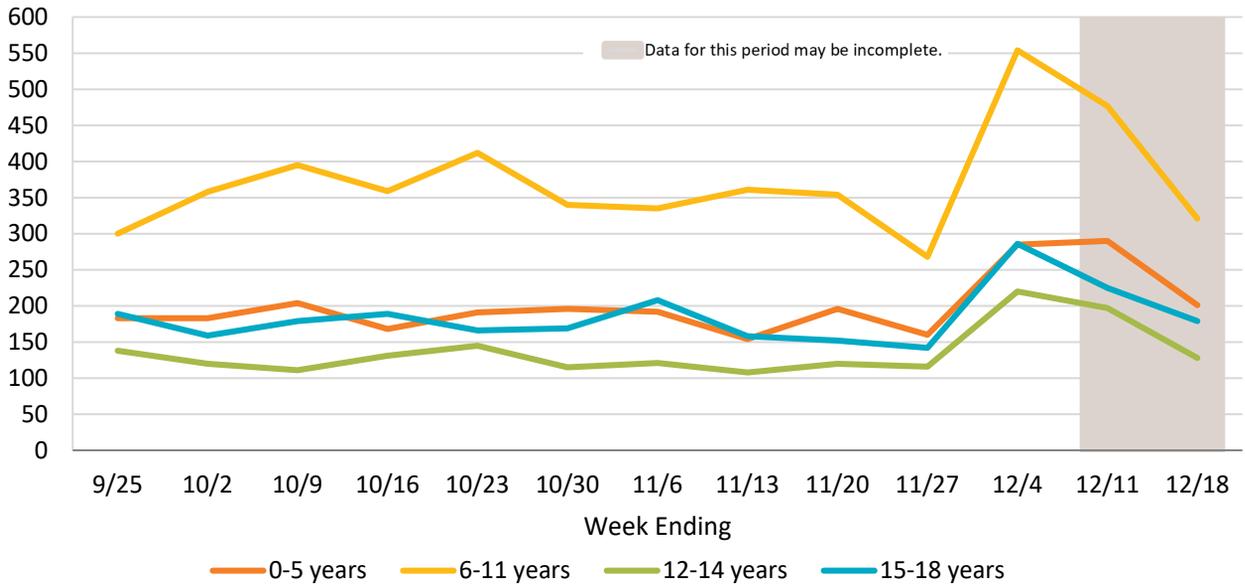
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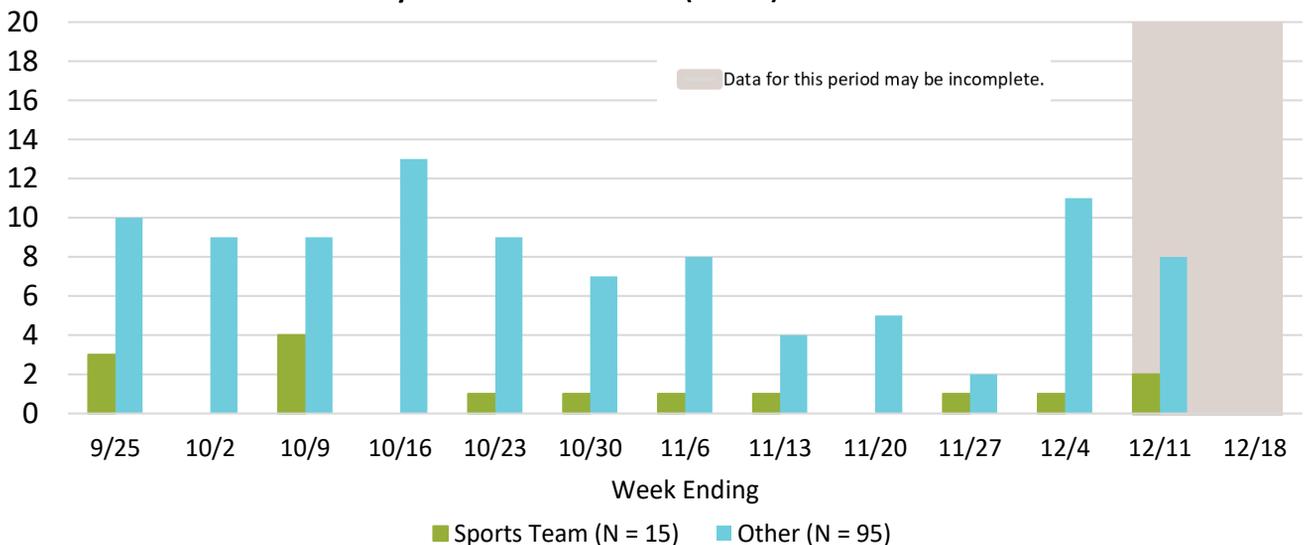
COVID-19 Cases in Children and Outbreaks in School Settings

Figure 24. COVID-19 Confirmed Cases for Ages 0-18 Years by Week of Illness Onset,* San Diego County Residents, N=11,481



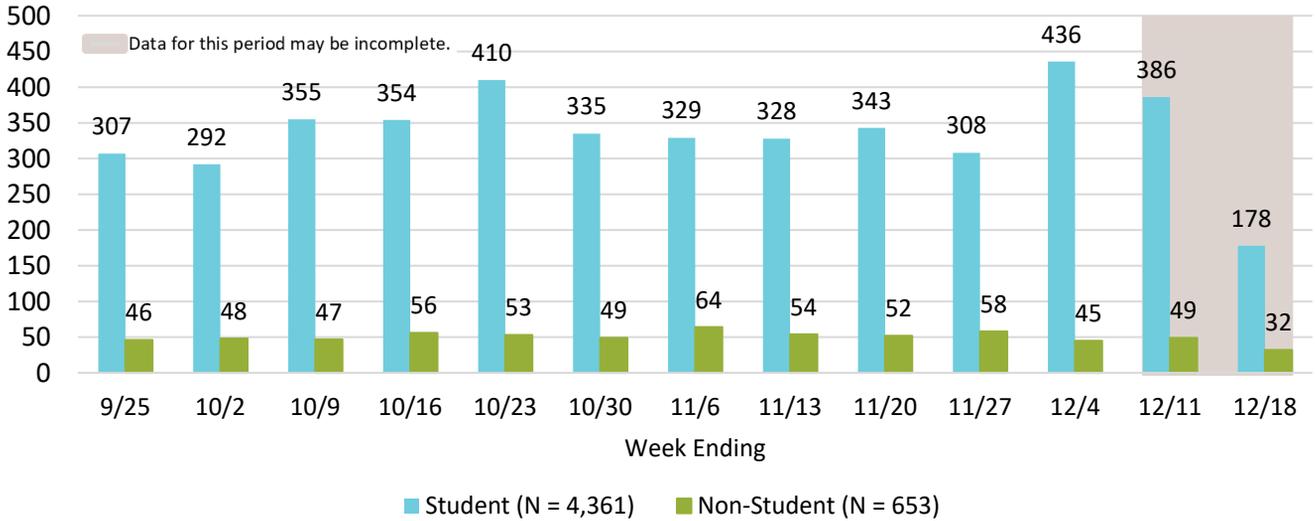
*When onset date is unavailable, specimen collection date, date of death, or date reported is used instead.

Figure 25. COVID-19 Outbreaks in School Settings (Tk-12th Grade) by Week of Illness Onset (N=110)



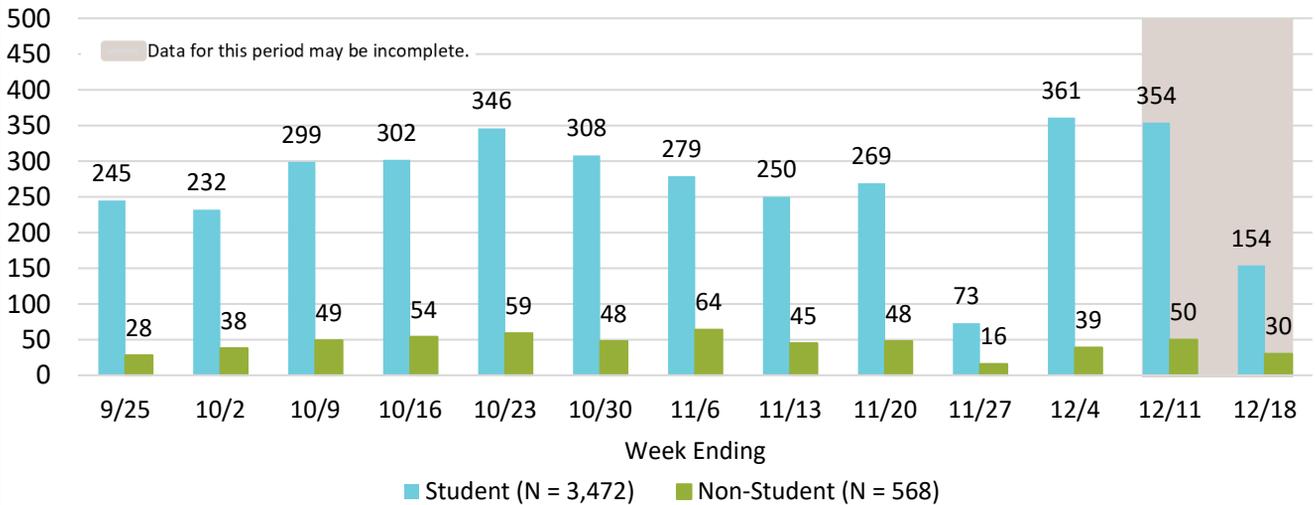
COVID-19 Cases in Schools

Figure 26. Confirmed Cases Physically Present at K-12 Schools During Exposure Period* by Week of Illness Onset, San Diego County Residents, N=5,014**



*Cases are among students and non-students physically present at a K-12 school 2-14 days prior to symptom onset (or lab collection date if asymptomatic) with COVID-19.
 **If case did not have symptoms or illness onset date is unavailable, the earliest of specimen collection date, date of death, or date reported is used instead.

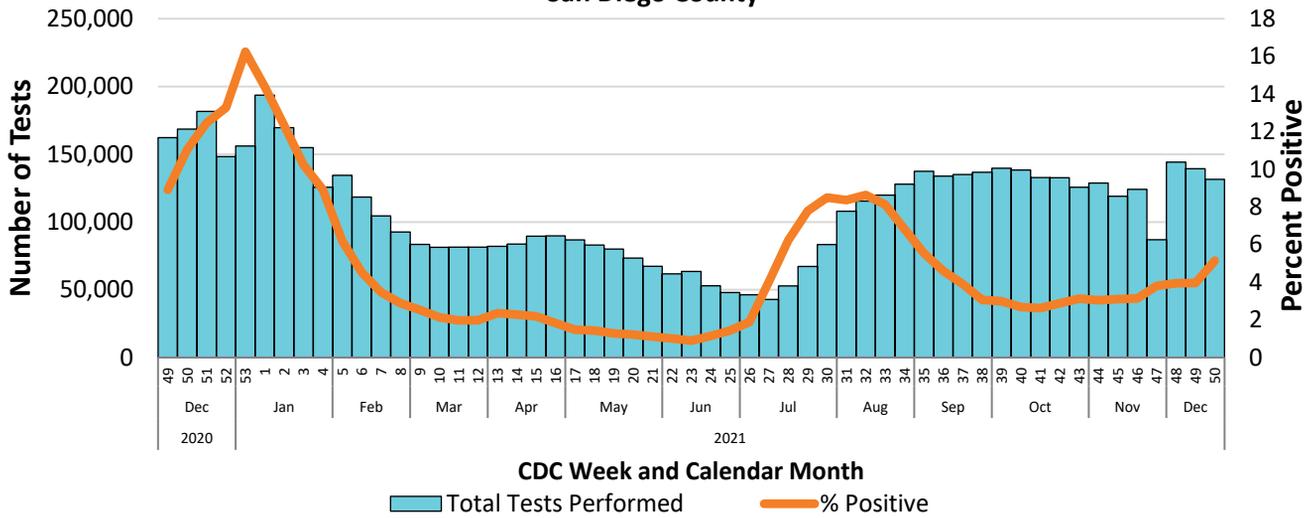
Figure 27. Confirmed Cases Physically Present at K-12 Schools During Communicable Period* by Week of Illness Onset, San Diego County Residents, N=4,040**



*Cases are among students and non-students physically present at a K-12 school 48 hours prior to symptom onset (or lab collection date if asymptomatic) with COVID-19.
 **If case did not have symptoms or illness onset date is unavailable, the earliest of specimen collection date, date of death, or date reported is used instead.

COVID-19 Laboratory Test Positivity Rate – Previous 12 Months

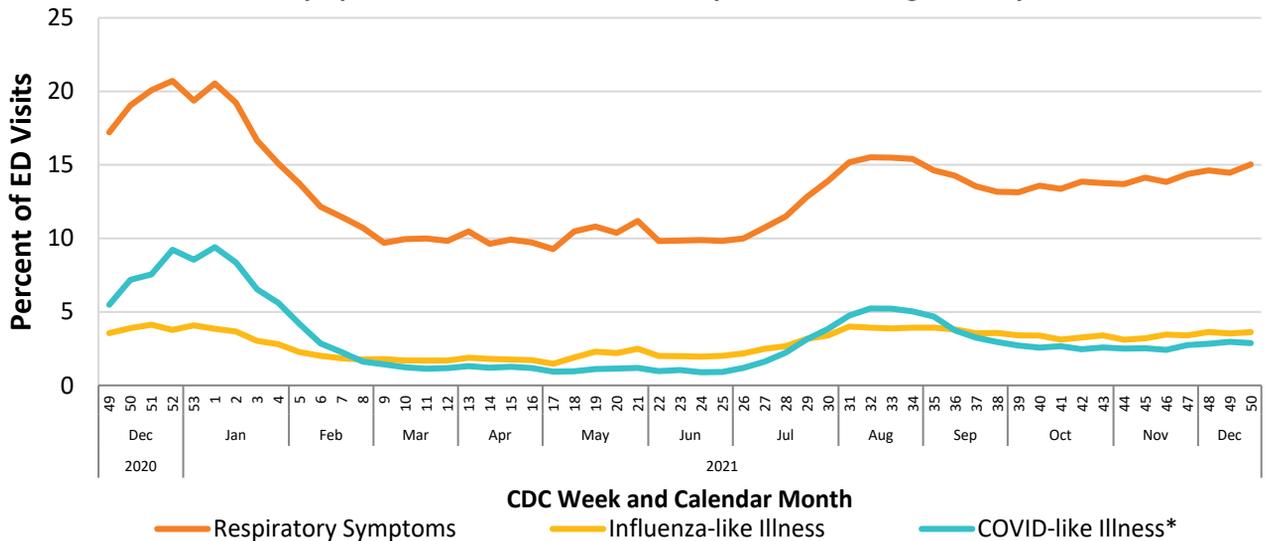
Figure 28. COVID-19 Testing Volume and Positivity by Week of Specimen Collection, San Diego County



Includes PCR tests performed by COSD Public Health, hospital, and reference laboratories and reported via Electronic Laboratory Reporting (ELR) and line lists. Excludes invalid, indeterminate, and unsatisfactory results.

Emergency Department Data – Previous 12 Months

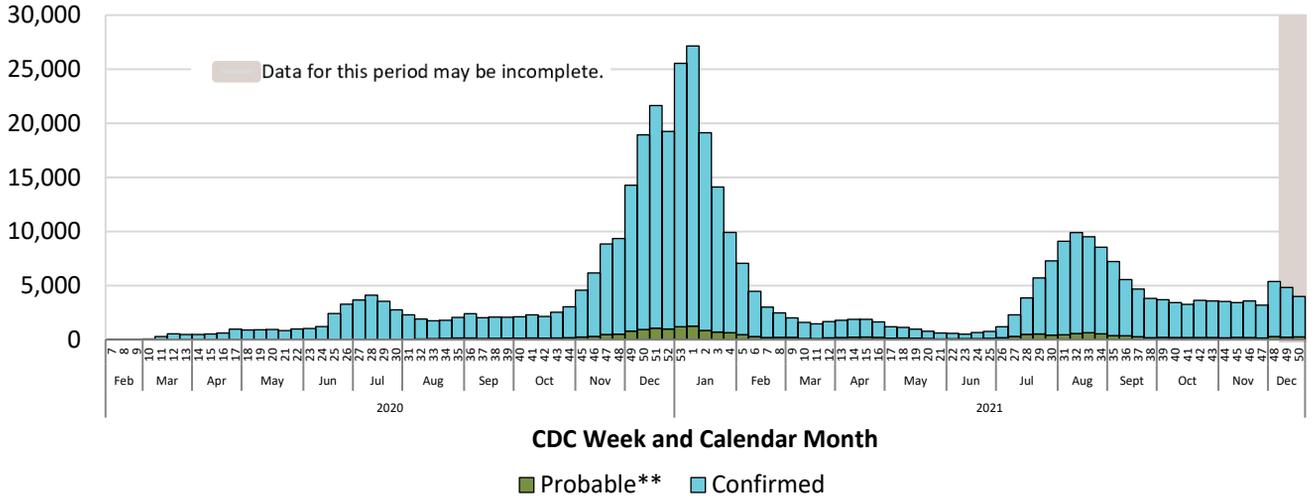
Figure 29. Percent of Emergency Department Visit Chief Complaints for ILI, Respiratory Symptoms, or COVID-like Illness* by Week, San Diego County



Categories are not mutually exclusive. *COVID-like Illness includes fever and cough, shortness of breath, or difficulty breathing OR coronavirus diagnostic codes.

COVID-19 Pandemic at a Glance

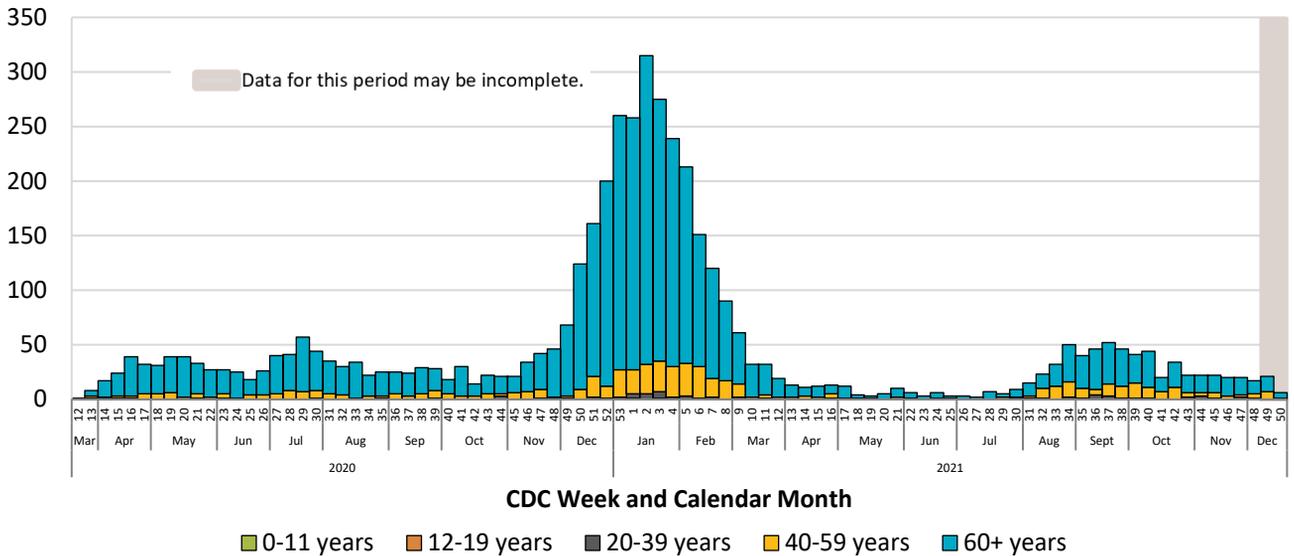
Figure 30. COVID-19 Confirmed and Probable Cases by Week of Illness Onset*, San Diego County Residents, N=422,383



*When onset date is unavailable, specimen collection date, date of death, or date reported is used instead.

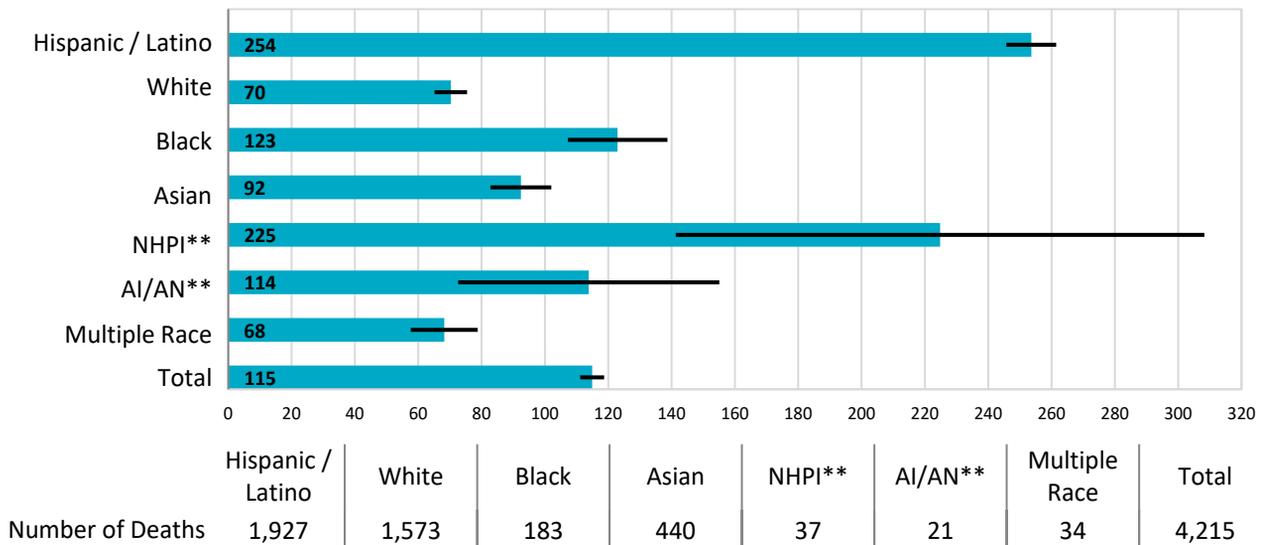
**Probable cases are antigen positive tests received since August 1, 2020.

Figure 31. COVID-19 Deaths by Week of Death San Diego County Residents, N=4,406



Pandemic at a Glance: Summary of COVID-19-associated Deaths

Figure 32. Age-Adjusted Rates of COVID-19-associated Deaths by Race/Ethnicity, San Diego County Residents, N=4,215*

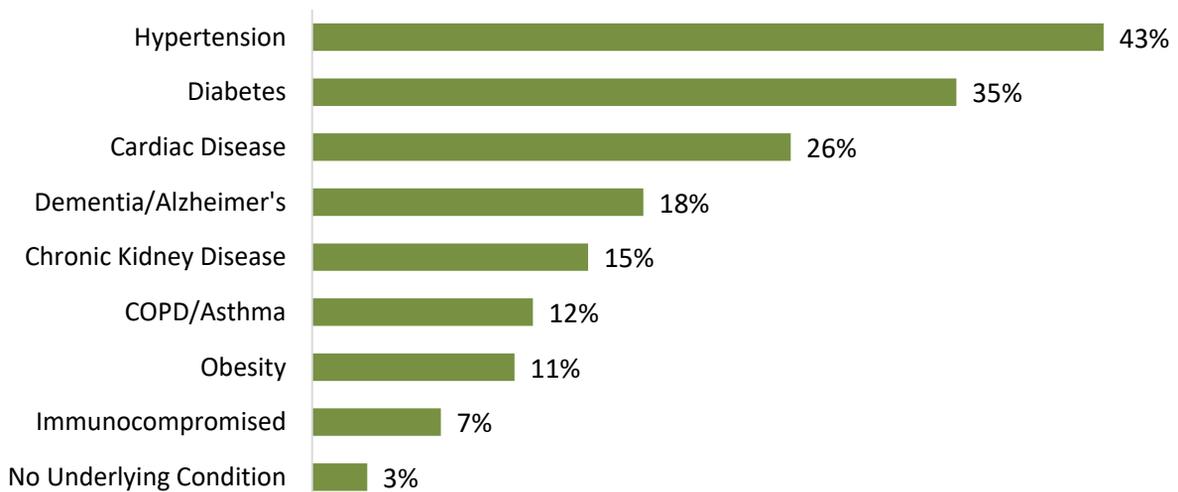


The black lines represent the 95% confidence intervals (error bars). Rates are not calculated for fewer than 20 events.

*Race/ethnicity are unknown for 191 deaths.

**NHPI=Native Hawaiian/Pacific Islander, AI/AN=American Indian/Alaska Native.

Figure 33. Common Underlying Conditions, COVID-19-associated Deaths



Persons may have more than one underlying condition. These data are abstracted from death certificates and available medical records and may not reflect a complete list of underlying conditions for each person.

COVID-19 Watch Data Sources

The following sources of data are used to produce this report:

- **COVID-19 case reports:** Medical providers and laboratories report individual cases of PCR-confirmed and antigen-positive probable COVID-19 via fax or electronic laboratory reporting (ELR) to the County of San Diego Epidemiology Unit.
- **COVID-19 deaths:** The County of San Diego requests that all deaths related to COVID-19 be reported for surveillance purposes. Medical facilities may report these deaths directly to the Epidemiology Unit or they may be identified by the Office of Vital Records through death certificate registration. The Epidemiology Unit compiles the data, and only reports deaths that can be verified by a death certificate.
- **Emergency Department Chief Complaint Data:** Electronic emergency department data are reported to the Epidemiology Unit daily. The number of respiratory chief complaints and the number of total emergency department visits are used to calculate percentages for all respiratory-related visits and visits specific to influenza-like illness and COVID-like illness.
- **COVID-19 outbreaks:**
 - Skilled Nursing Facilities: at least one case of laboratory-confirmed COVID-19 in a resident.
 - Non-SNF Institution/Congregate Settings: At least three probable or confirmed COVID-19 cases within a 14-day period in epidemiologically-linked residents and/or staff.
 - Community settings: At least three probable or confirmed COVID-19 cases within a 14-day period in people who are epidemiologically-linked in the setting, are from different households, and are not identified as close contacts of each other in any other case investigation.
- **COVID-19 vaccinations:** Number of vaccinations registered in the San Diego Immunization Registry (SDIR) by participating providers. Some providers, including the VA, DoD, other military, some tribal, and prisons do not report to SDIR.
- **SANDAG population estimates, vintage 2019:** Rates are calculated using 2019 population estimates from the San Diego Association of Governments. Rates are not calculated for counts under five cases.

The purpose of the weekly **COVID-19 Watch** is to summarize current COVID-19 surveillance in San Diego County.

Data are preliminary and may change due to delayed reporting and additional information obtained during investigations.

For information on influenza in San Diego County, please see the weekly [Influenza Watch](#) surveillance report. Additional influenza data and resources and a link to subscribe to the Influenza Watch are available on the Epidemiology Unit [website](#).