

COVID-19 Watch

Weekly Coronavirus Disease 2019 (COVID-19) Surveillance Report

Prepared by Epidemiology and Immunization Services
Branch

www.sdepi.org

October 13, 2022

Cases

925,994

Deaths

5,498

Outbreaks

4,828

Data through 10/8/2022

Report Content Links

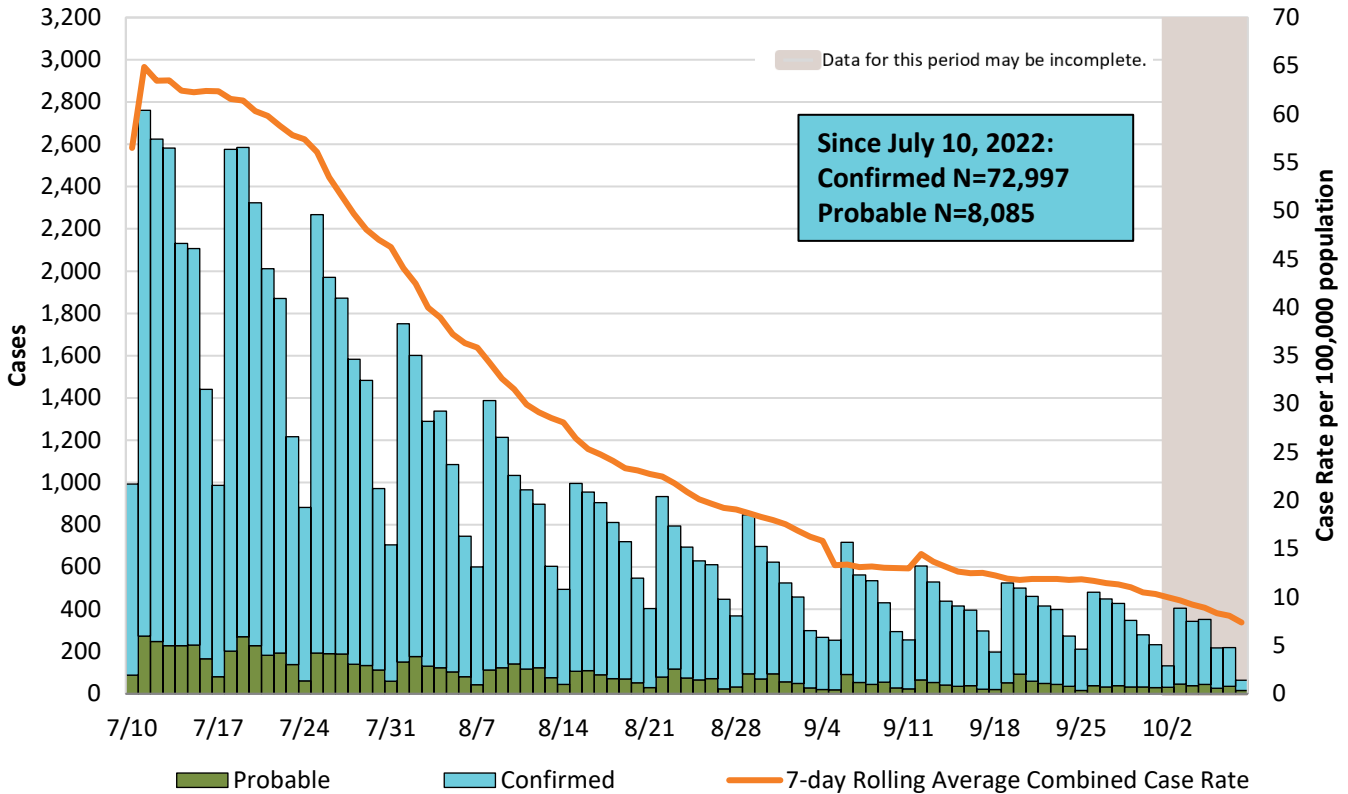
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Please visit the COVID-19 data dashboards, which debuted on the County of San Diego COVID-19 [website](#) on March 16, 2022. They include much of the same data as the COVID-19 Watch, but in a more interactive format.

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Figure 1. COVID-19 Confirmed and Probable Cases and 7-Day Rolling Average Case Rate by Episode Date*, San Diego County Residents, N=81,082



*Episode date is the earliest of the following available dates: symptom onset date, specimen collection date, date of death, date reported.

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

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

	10/2– 10/8/2022	9/25– 10/1/2022	Cumulative
Cases	1,908	2,454	925,994
Avg Daily Cases	273	351	980
Deaths	7	4	5,498
Outbreaks*	25	21	4,828

*A number of outbreaks with onset dates prior to 9/1/2022 have been added to the cumulative total but are excluded from the outbreak counts from the past two weeks.

COVID-19 Infections by Vaccination Status

Dates: 9/18-9/24/2022

Case rate for not fully vaccinated residents is **2 times higher** than those fully vaccinated + booster residents

Not Fully Vaccinated*
Case Rate
(per 100K - 12+ yrs)

22.65

Fully Vaccinated†
Case Rate
(per 100K - 12+ yrs)

6.08

**Fully Vaccinated +
Booster‡** Case Rate
(per 100K - 12+ yrs)

11.01

Figure 2. 7-Day Rolling Average COVID-19 Case Rate by Vaccination Status in San Diego County Residents Age 12 Years and Older in the Previous Three Months

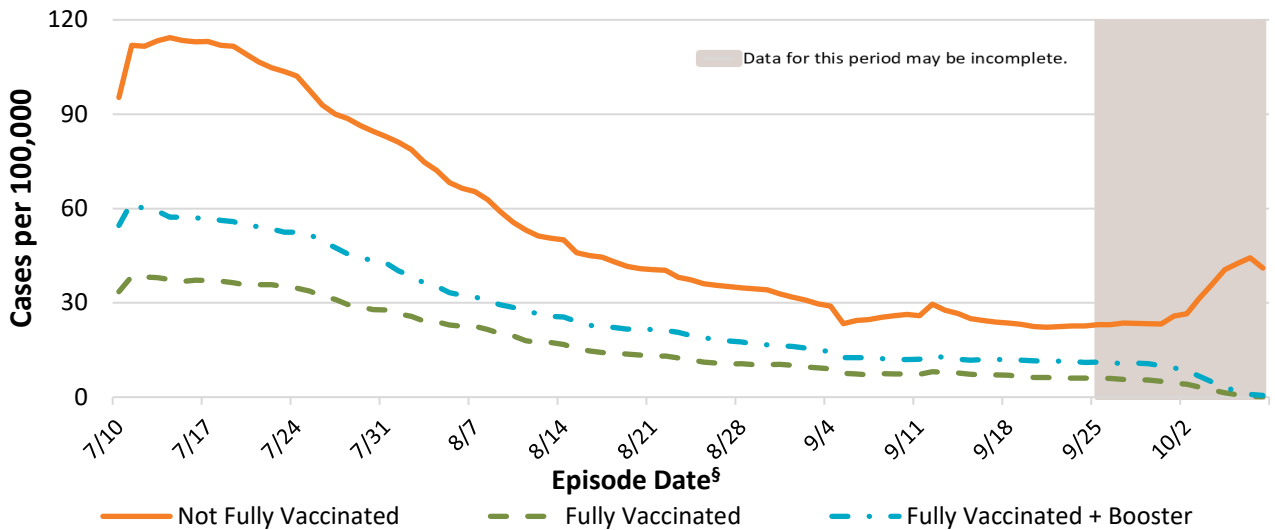


Table 2. COVID-19 Cases by Vaccination Status Among All San Diego County Residents with Episode Dates[§] during Previous Three Months[¶]

	Not Fully Vaccinated*	Fully Vaccinated†	Fully Vaccinated + Booster‡	Total
Cases	25,138 (36.3%)	14,369 (20.7%)	29,787 (43.0%)	69,294
Hospitalizations	909 (32.8%)	677 (24.4%)	1,188 (42.8%)	2,774
Deaths	25 (32.1%)	25 (32.1%)	28 (35.9%)	78

According to CDC, several factors likely affect crude case rates by vaccination and booster dose status, making interpretation of recent trends difficult.

* 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.

‡ Cases who first tested positive (based on specimen collection date) greater than or equal to 14 days after receiving a booster dose of COVID-19 vaccine at least 2 months after a J&J vaccine or 5 months after a Pfizer or Moderna vaccine series.

§ Episode date is the earliest of the following available dates: symptom onset date, specimen collection date, date of death, date reported.

¶ 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.

San Diego County Population from SANDAG 2019 Population Estimates (Prepared June 2020). The fully vaccinated population and the boosted population for each day is the cumulative number of county residents documented to have received the final or booster dose of COVID-19 vaccine at least 14 days prior to that day. The not fully vaccinated population is the estimated total county population minus the fully vaccinated and boosted populations.

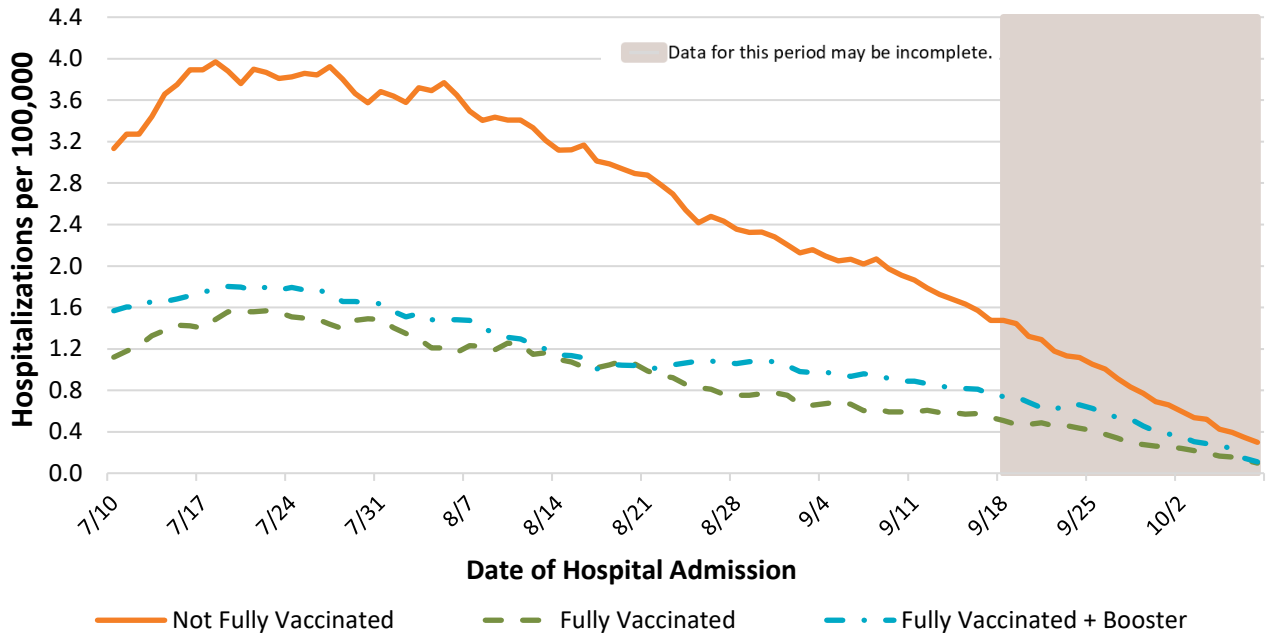
COVID-19 Hospitalizations by Vaccination Status

Dates: 9/4-9/17/2022

Not Fully Vaccinated* Hospitalization Rate (per 100K - 12+ yrs)	Fully Vaccinated [†] Hospitalization Rate (per 100K - 12+ yrs)	Fully Vaccinated + Booster [‡] Hospitalization Rate (per 100K - 12+ yrs)
1.48	0.54	0.76

Hospitalization rate for not fully vaccinated residents is **2 times higher** than fully vaccinated + booster residents

Figure 3. 14-Day Rolling Average COVID-19 Hospitalization Rate by Vaccination Status in San Diego County Residents Age 12 Years and Older in the Previous Three Months



According to [CDC](https://www.cdc.gov), several factors likely affect crude case rates by vaccination and booster dose status, making interpretation of recent trends difficult. Limitations include higher prevalence of previous infection among the unvaccinated and un-boostered groups; difficulty in accounting for time since vaccination and waning protection; and possible differences in testing practices (such as at-home tests) and prevention behaviors by age and vaccination status.

*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.

‡Cases who first tested positive (based on specimen collection date) greater than or equal to 14 days after receiving a booster dose of COVID-19 vaccine at least 2 months after a J&J vaccine or 5 months after a Pfizer or Moderna vaccine series.

San Diego County Population from SANDAG 2019 Population Estimates (Prepared June 2020). 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 at least 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: 8/21-9/17/2022

Not Fully Vaccinated*
Death Rate
(per million – 12+ yrs)

0.78

Fully Vaccinated[†]
Death Rate
(per million – 12+ yrs)

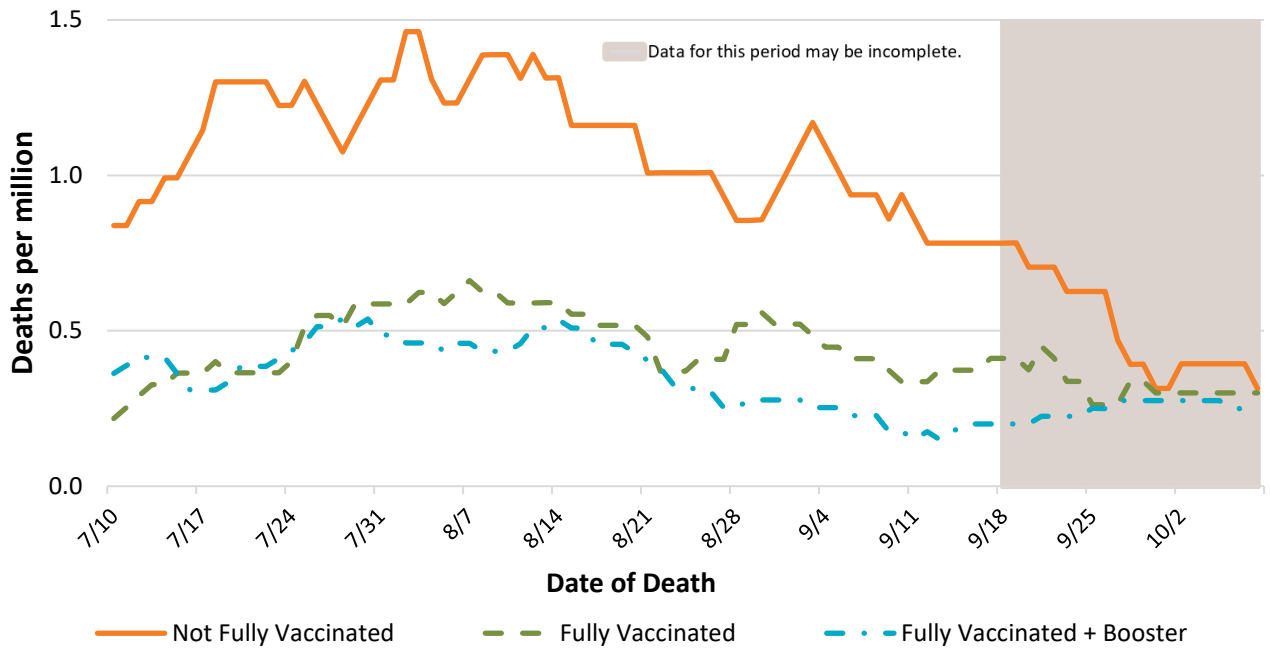
0.41

**Fully Vaccinated +
Booster[‡]**
Death Rate
(per million – 12+ yrs)

0.20

Death rate for not fully vaccinated residents is **4 times higher** than fully vaccinated + booster residents

Figure 4. 28-Day Rolling Average COVID-19 Death Rate by Vaccination Status in San Diego County Residents Age 12 Years and Older in the Previous Three Months



*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.

[‡]Cases who first tested positive (based on specimen collection date) greater than or equal to 14 days after receiving a booster dose of COVID-19 vaccine at least 2 months after a J&J vaccine or 5 months after a Pfizer or Moderna vaccine series.

San Diego County Population from SANDAG 2019 Population Estimates (Prepared June 2020). 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 at least 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

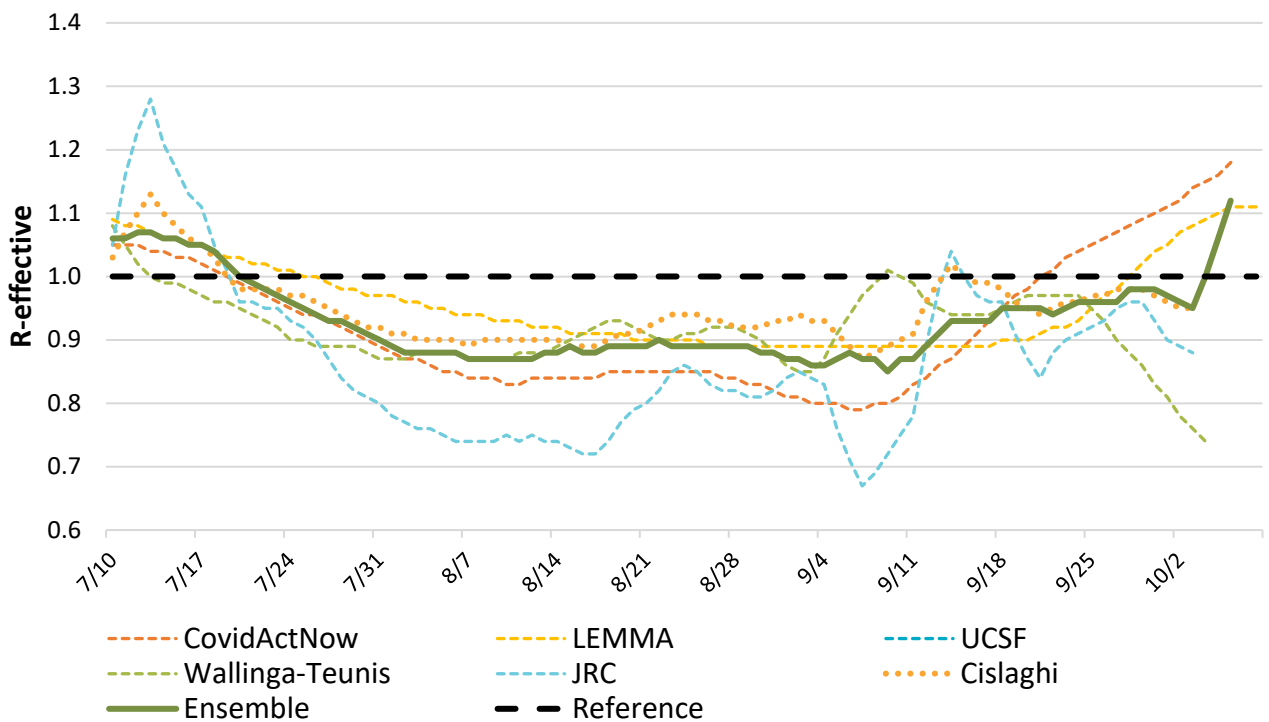
- The effective reproduction number (R effective or R-eff) is the average number of people each infected person will pass the virus onto and represents the rate at which a virus is spreading. If R-eff >1, the number of infected persons will increase. If R-eff <1, the number of infected persons will decrease. 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:

1.12

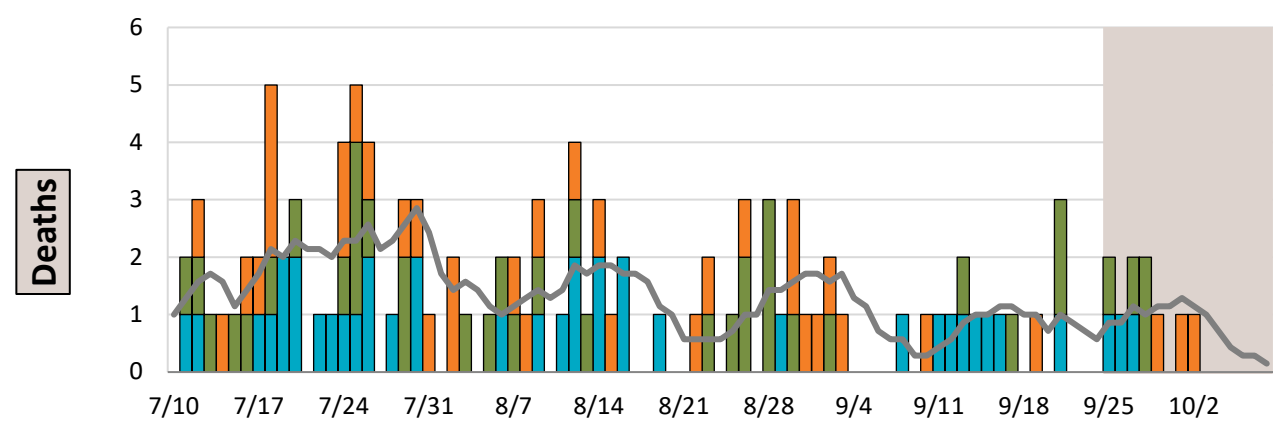
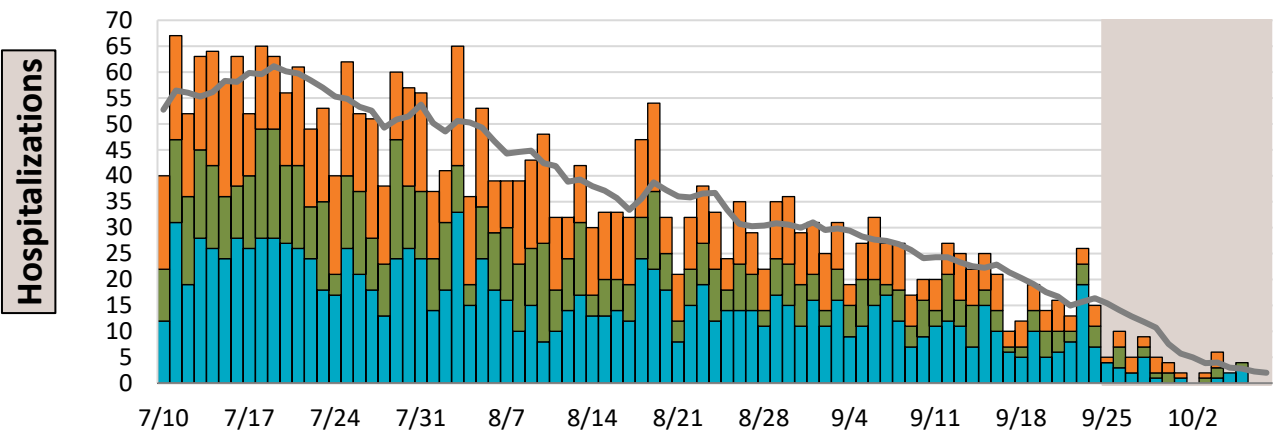
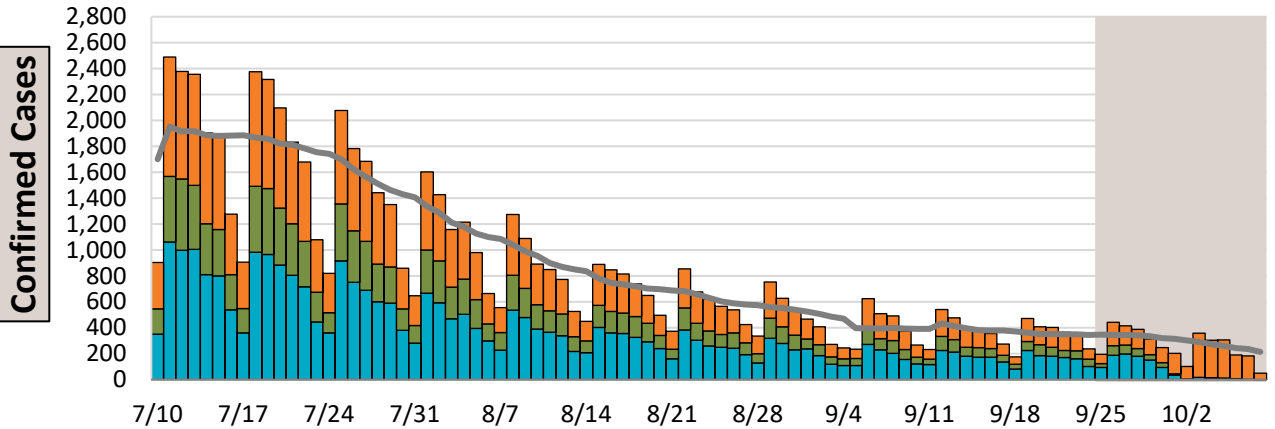
Spread of COVID-19 is likely increasing



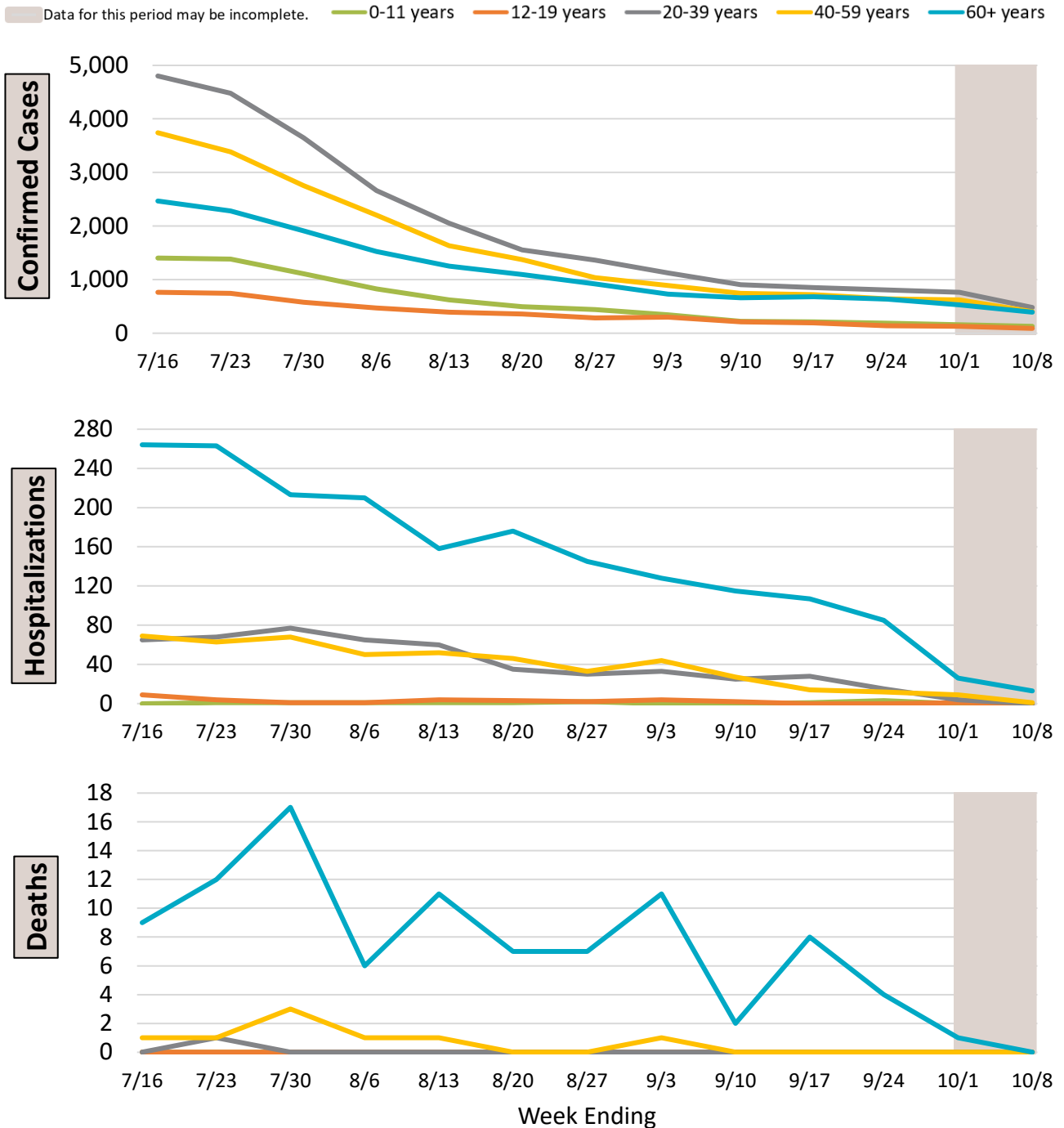
Source: <https://calcat.covid19.ca.gov/cacovidmodels/>

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

Data for this period may be incomplete. ■ Fully Vaccinated + Booster ■ Fully Vaccinated ■ Not Fully Vaccinated — 7-day Rolling Average



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		Sept. 25, 2022 – Oct. 8, 2022	February 14, 2020 – Oct. 8, 2022
	Confirmed cases		4,362
Median age		42 years	34 years
Age range		0-100+ years	0-100+ years
Male		1,978 (46%)	436,298 (48%)
Female		2,282 (54%)	480,872 (52%)
PEH*		12 (0.3%)	2,819 (0.3%)

Note: Includes persons known to be experiencing homelessness (PEH) based on available information but does not present a comprehensive picture of PEH diagnosed with COVID-19. Data are not complete due to a move away from universal case investigation and contact tracing.

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

Hospitalizations		Sept. 25, 2022 – Oct. 8, 2022	February 14, 2020 – Oct. 8, 2022
	Hospitalizations		54 (1.0%)
Median age		74 years	62 years
Age range		19-96 years	0-100+ years
Male		26 (48%)	18,260 (52%)
Female		28 (52%)	16,916 (48%)
PEH*		0 (0%)	672 (2%)

Sex is unknown for 0 hospitalization for the last two weeks and for 54 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		Sept. 25, 2022 – Oct. 8, 2022	February 14, 2020 – Oct. 8, 2022
	Deaths		1
Case Fatality Ratio		N/A†	0.6%
Underlying Conditions‡		1 (100%)	5,256 (96%)
Median age		68 years	76 years
Age range		68 years	10-100+ years
Male		1 (100%)	3,283 (60%)
Female		0 (0%)	2,215 (40%)
PEH*		0 (0%)	42 (0.8%)

*PEH = Persons Experiencing Homelessness.

†Data are incomplete for this time period.

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

Data through
10/8/2022

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

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

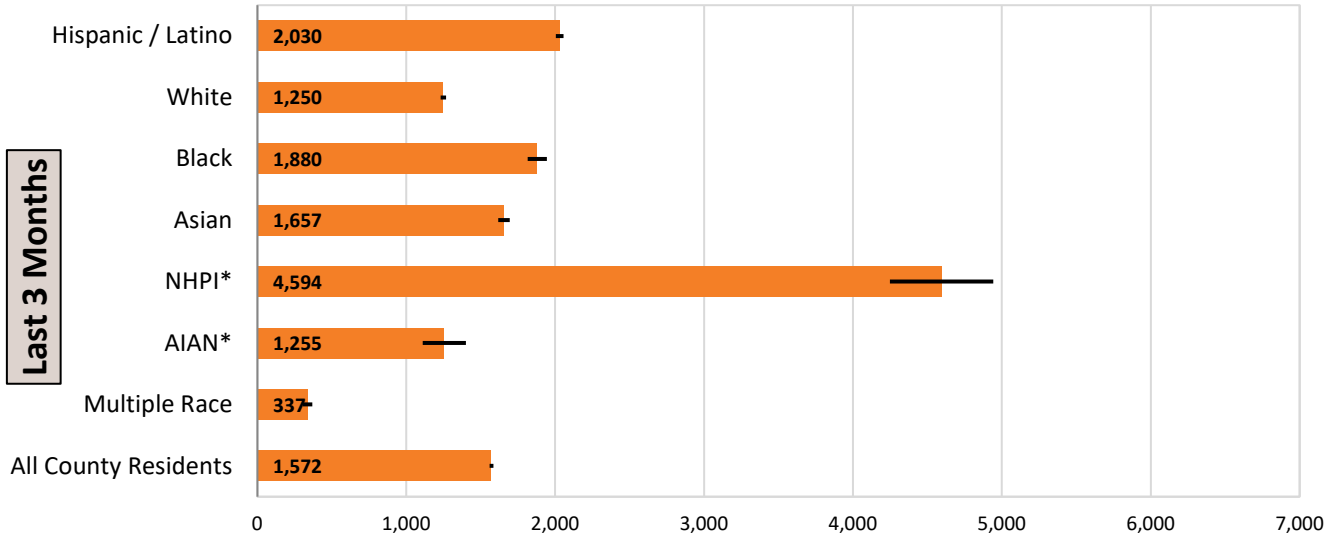
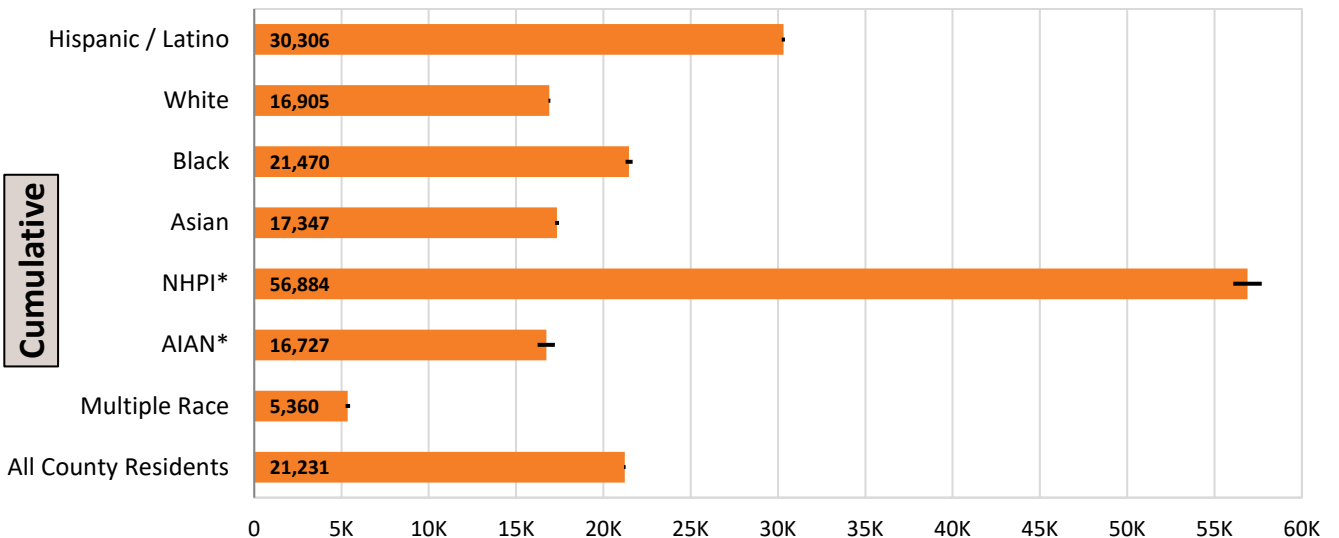


Figure 13. Age-Adjusted Rates of Confirmed Cases by Race/Ethnicity, San Diego County Residents



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

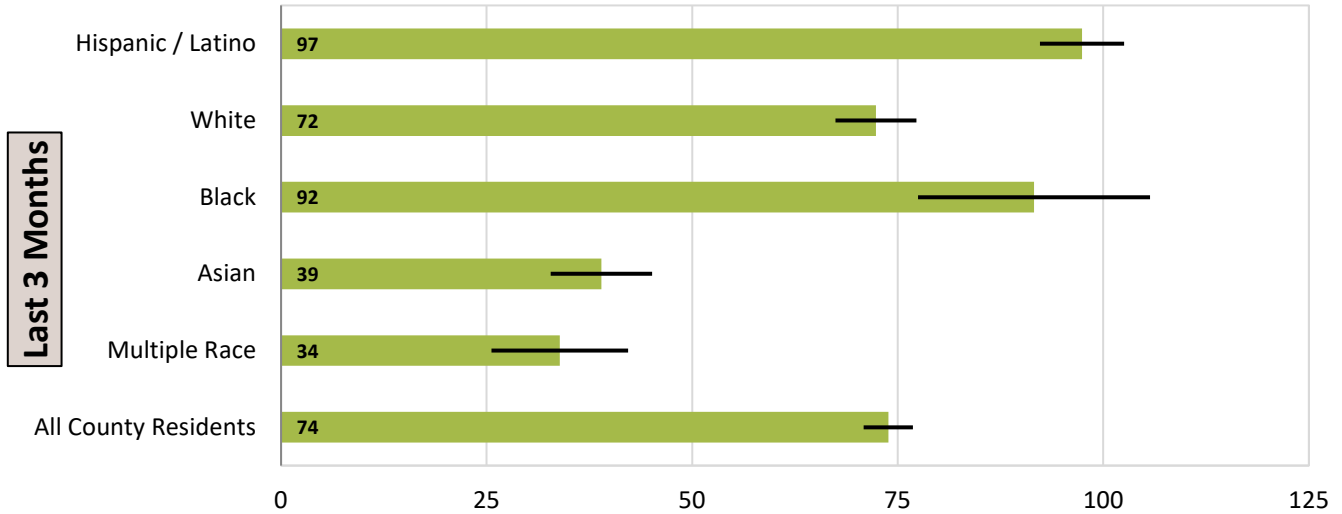
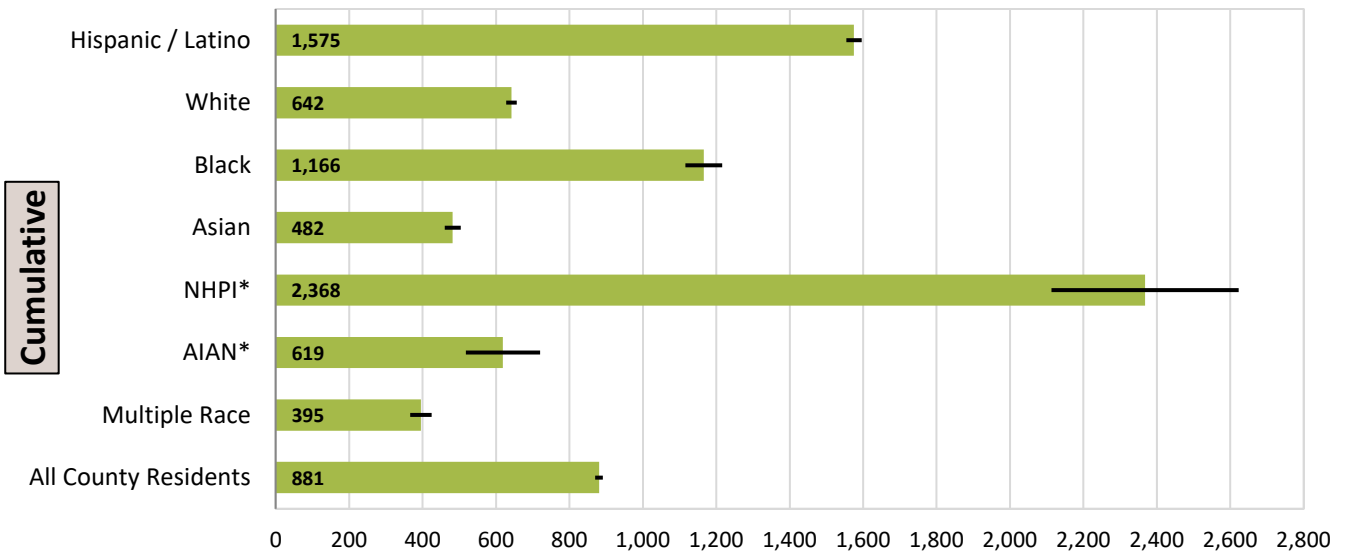


Figure 15. Age-Adjusted Rates of Hospitalizations by Race/Ethnicity, San Diego County Residents



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 AI/AN and NHPI because this category have fewer than 20 events.

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

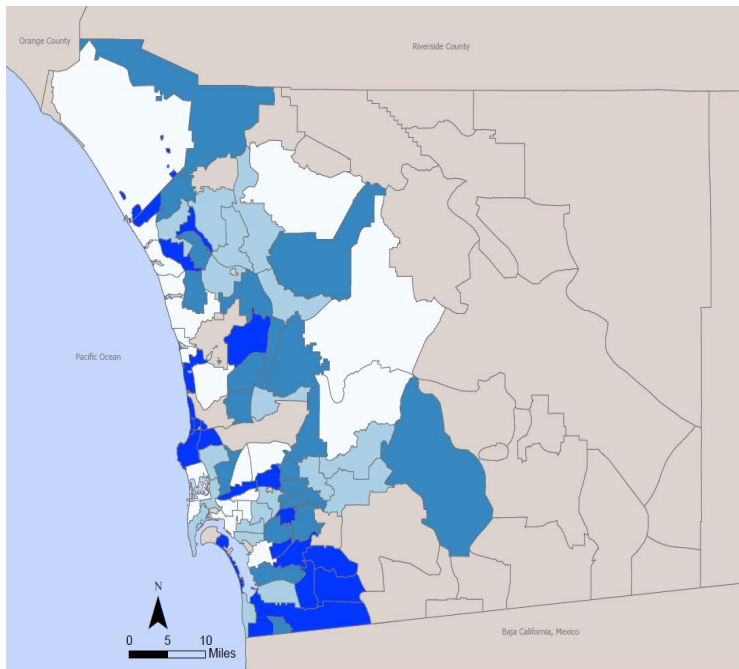


Figure 16. Confirmed Case Rate by Zip Code of Residence, 9/25/2022-10/8/2022, San Diego County
(Countywide Rate = 130 per 100,000 Population)

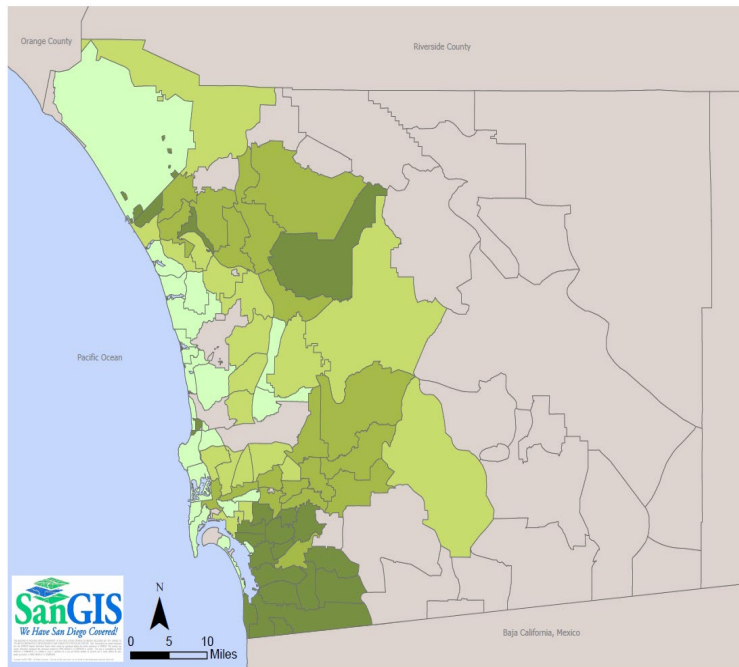
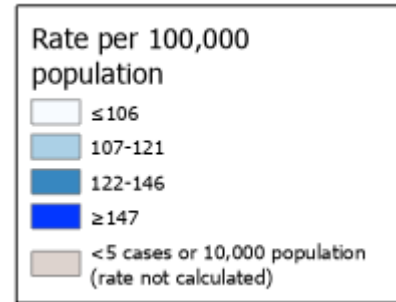
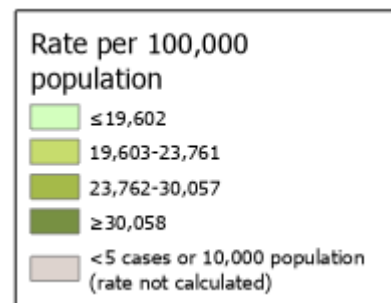


Figure 17. Cumulative Confirmed Case Rate by Zip Code of Residence, San Diego County
(Countywide Rate = 27,627 per 100,000 Population)



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.

Beginning 3/16/22, the maps use quartiles to categorize the data rather than natural breaks.

Data through
10/8/2022

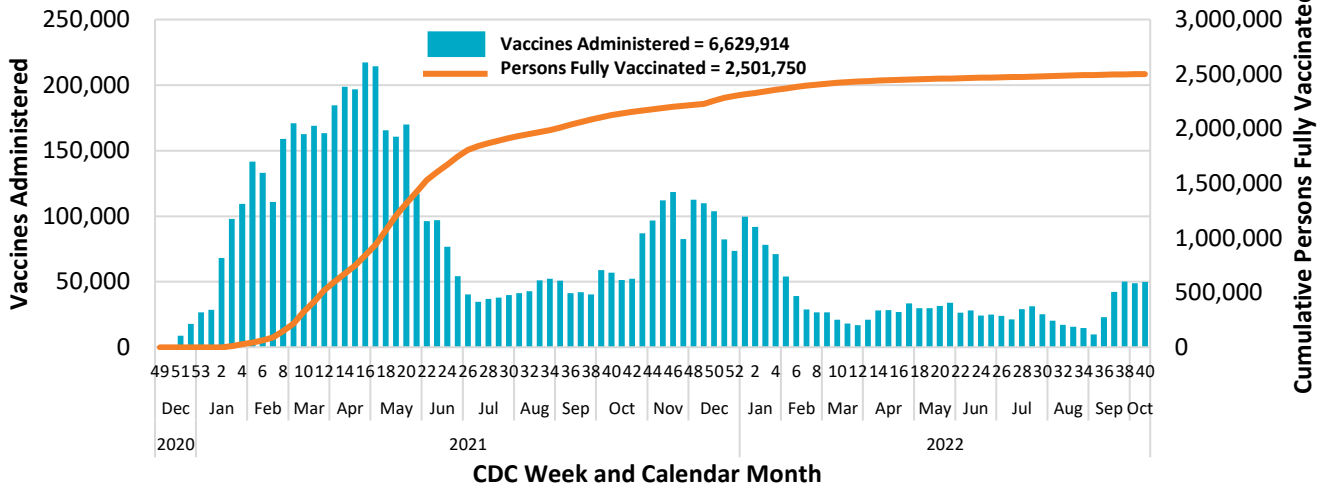
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COVID-19 Vaccinations

Figure 18. 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. The San Diego Immunization Registry (SDIR) transitioned to the California Immunization Registry (CAIR2) on Monday, April 25, 2022. All vaccination data is now being pulled from CAIR2. Due to differences in the programming of each system, the overall count of vaccinations, count of vaccinated individuals, and demographic data may differ slightly from previously-reported data.

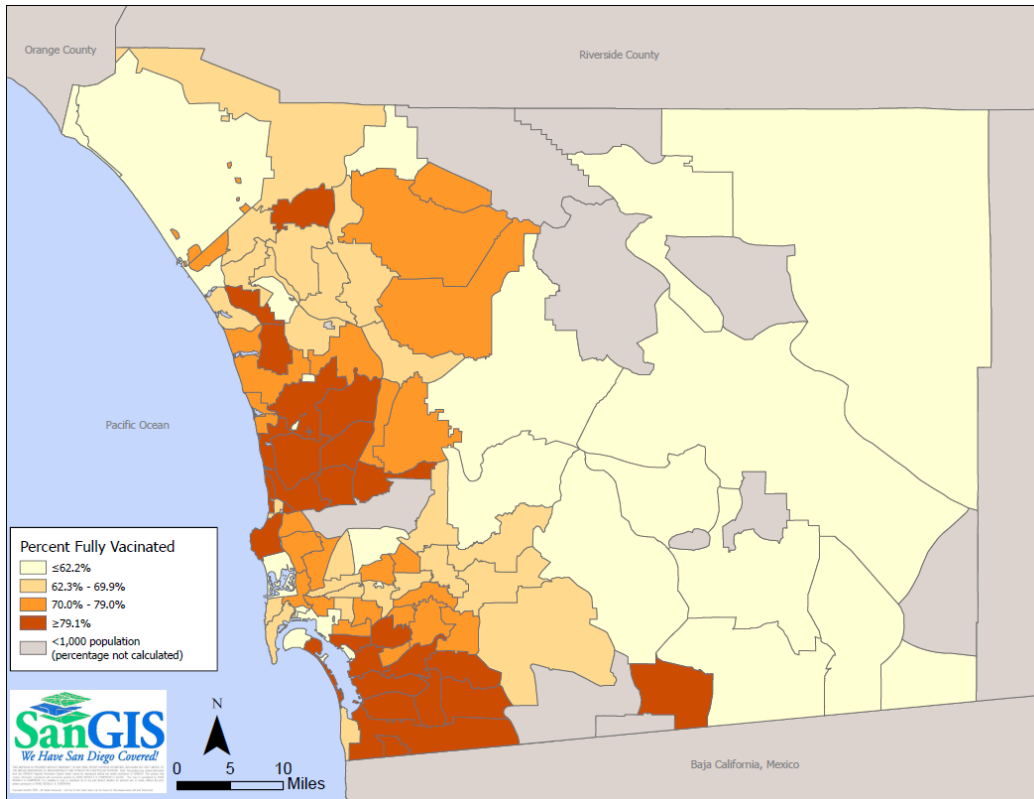


Figure 19. Percentage of the Total Population of San Diego County Residents Who are Fully Vaccinated, by Zip Code of Residence

Only includes vaccines that have been recorded in the California Immunization Registry (CAIR2). Some healthcare providers, including Veteran's Affairs, the Department of Defense, some tribal entities, and prisons do not report to CAIR2. 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 + Booster
 ■ Fully Vaccinated
 ■ Partially Vaccinated
 ■ Not Vaccinated

Figure 20. Vaccination Status by Race/Ethnicity, San Diego County Residents

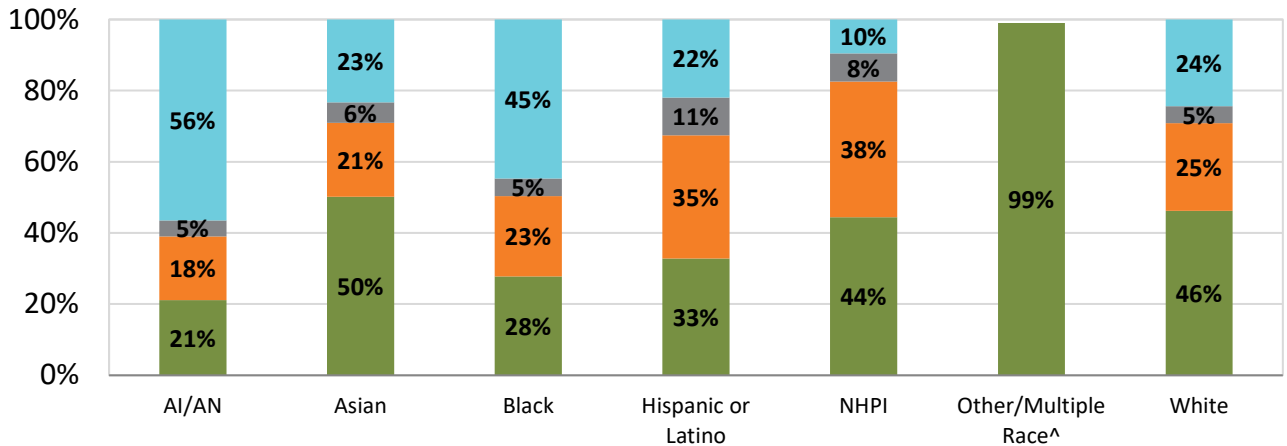
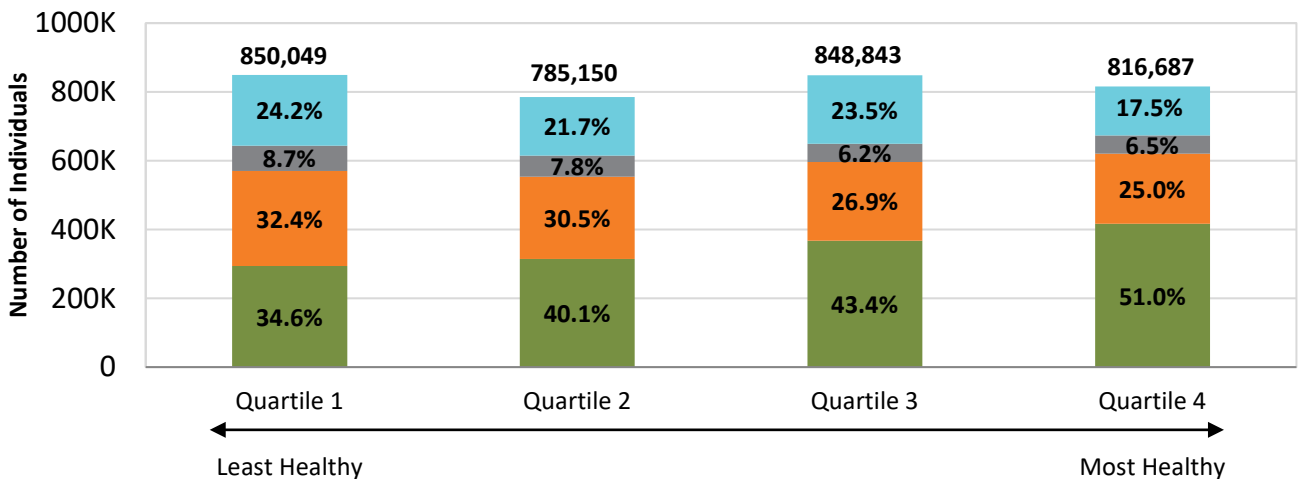


Figure 21. Vaccination Progress by Healthy Places Index Quartile,* San Diego County Residents



*The California [Healthy Places Index](#). Beginning 6/9/2022, HPI 3.0 is used instead of HPI 2.0. The change in methodology may affect the percentages. In addition, note that the order of the quartiles, reflecting least to most healthy, has been reversed.

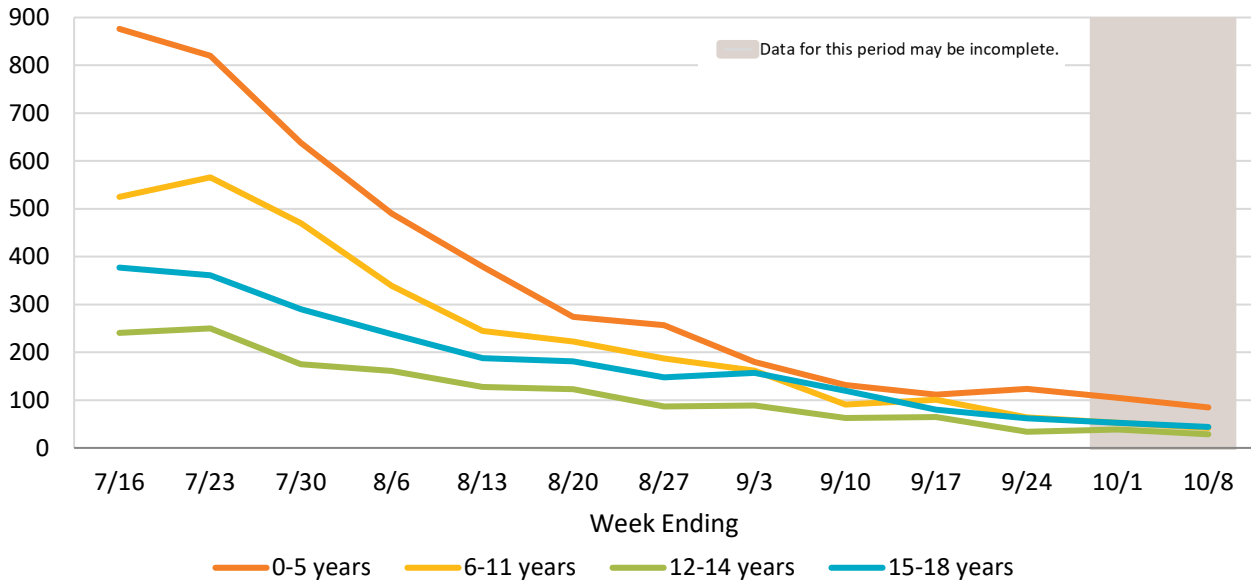
^The percentage and rate of the population vaccinated with at least one dose of COVID-19 vaccine may approach, or exceed, 99% or 999 per 1,000 San Diego residents. The most recent race/ethnicity populations are 2019 estimates, which may underestimate the current population. When these demographics are 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.

Data source: California Immunization Registry, SANDAG 2019 Population Estimates (Prepared June 2020). Total population=3,351,784. Population estimate of 51,055 individuals do not reside in a census tract with a Healthy Places Index score.

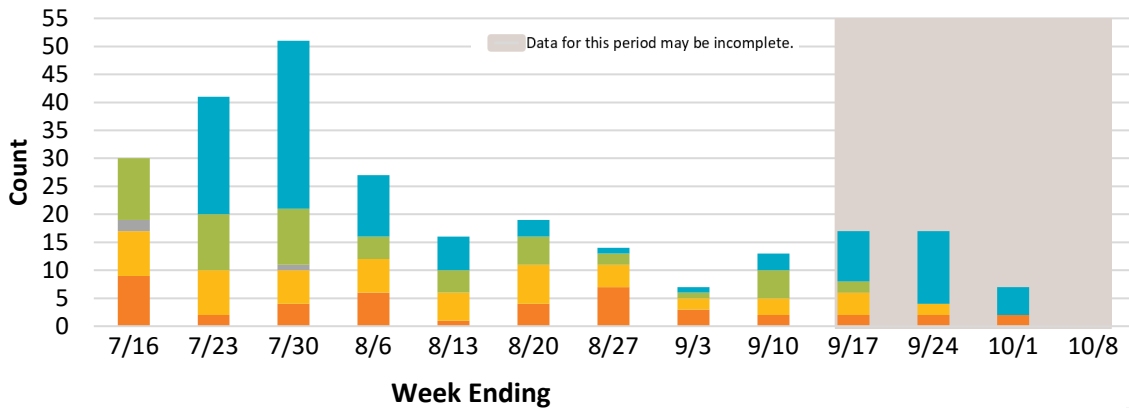
COVID-19 Cases in Children and Outbreaks by Setting

Figure 22. COVID-19 Confirmed Cases for Ages 0-18 Years by Week of Episode Date,* San Diego County Residents, N=11,323



*Episode date is the earliest of the following available dates: symptom onset date, specimen collection date, date of death, date reported.

Figure 23. COVID-19 Outbreaks by Date of Onset, N=259



	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8
TK-12th Grade*	0	21	30	11	6	3	1	1	3	9	13	5	0
Community	11	10	10	4	4	5	2	1	5	2	0	0	0
Acute Care Hospital	2	0	1	0	0	0	0	0	0	0	0	0	0
Non-SNF+ Congregate	8	8	6	6	5	7	4	2	3	4	2	0	0
SNF†	9	2	4	6	1	4	7	3	2	2	2	2	0

*Due to widespread use of self-administered antigen tests, available school outbreak data are not considered representative of current activity.

†Skilled Nursing Facility

Data through
10/8/2022

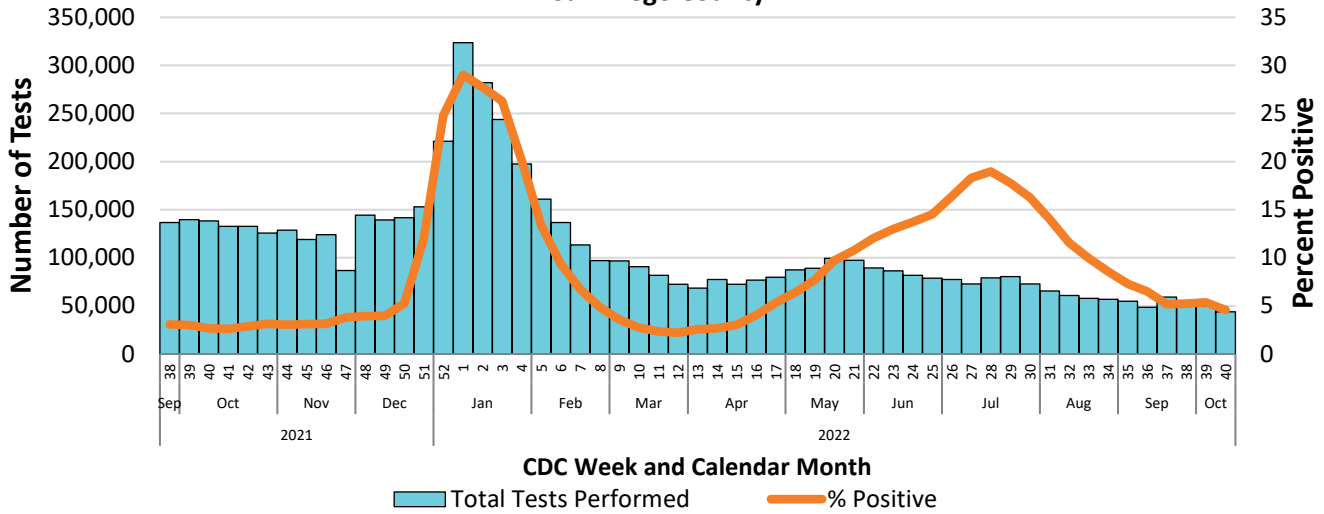
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COVID-19 Laboratory Test Positivity Rate – Previous 12 Months

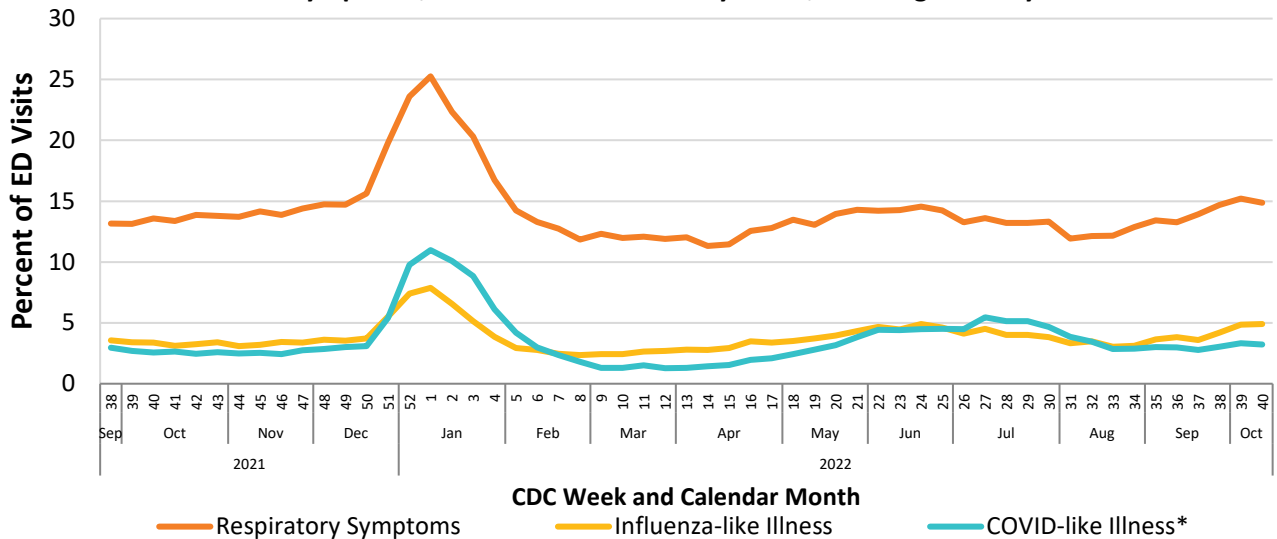
Figure 24. COVID-19 Testing Volume and Positivity by Week of Specimen Collection, San Diego County



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

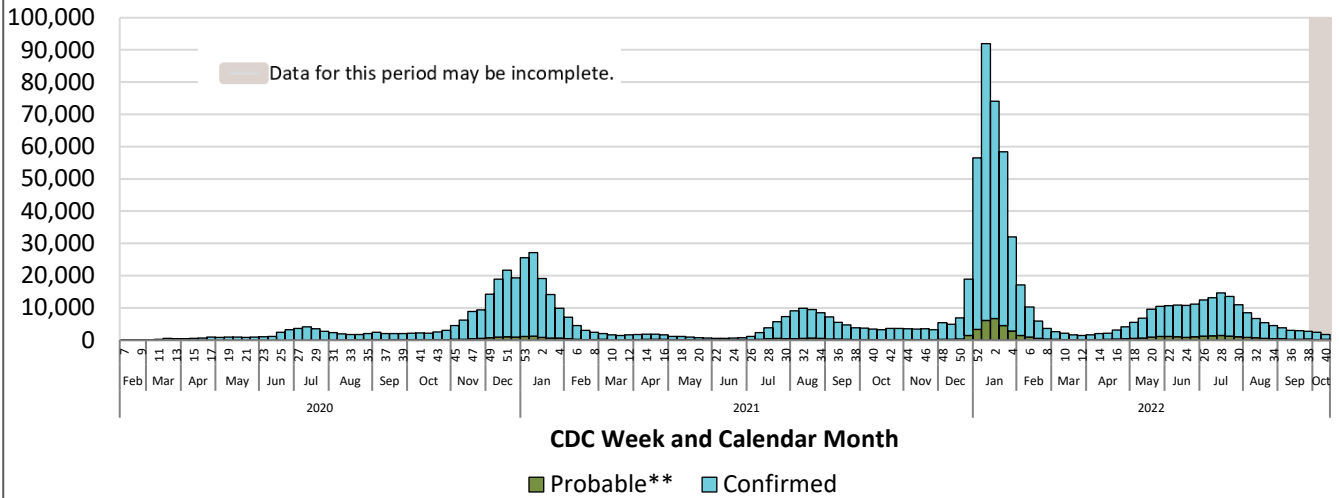
Figure 25. Percent of Emergency Department Visit Chief Complaints for ILI, Respiratory Symptoms, or COVID-like Illness* by Week, San Diego County



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

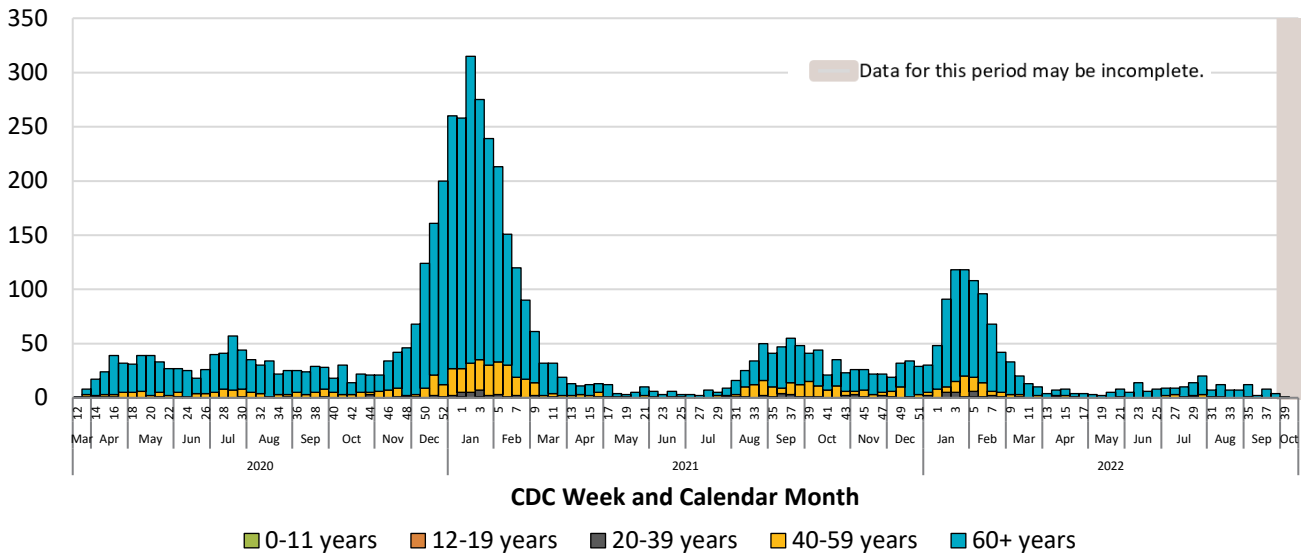
Figure 26. COVID-19 Confirmed and Probable Cases by Week of Episode Date*, San Diego County Residents, N=998,114



*Episode date is the earliest of the following available dates: symptom onset date, specimen collection date, date of death, date reported.

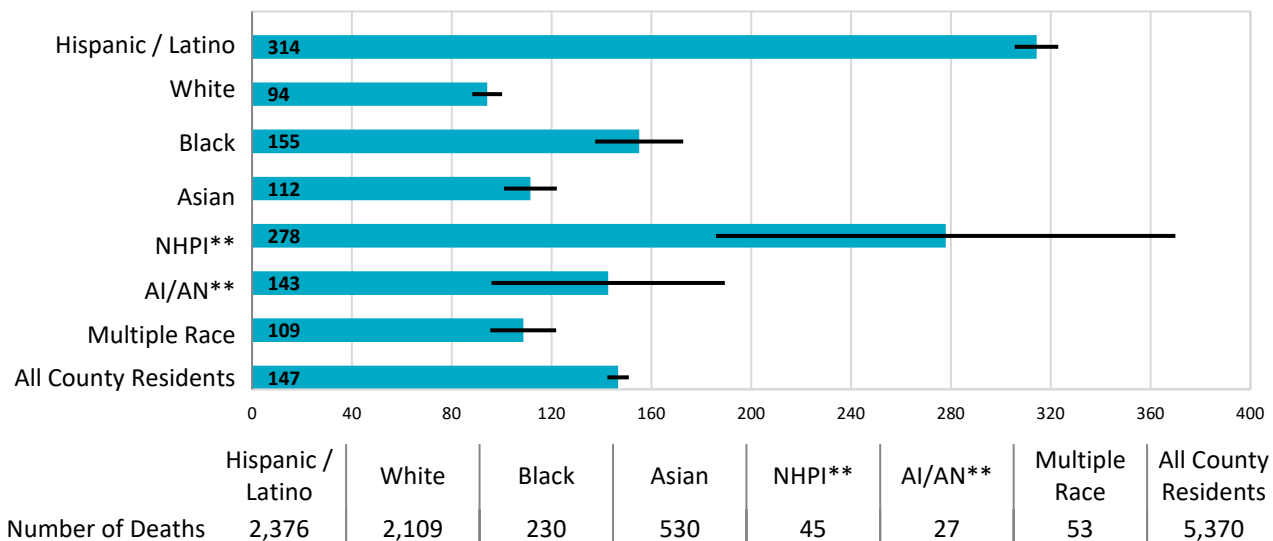
**Probable cases are antigen positive tests received since August 1, 2020.

Figure 27. COVID-19 Deaths by Week of Death San Diego County Residents, N=5,498



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

Figure 28. Age-Adjusted Rates of COVID-19-associated Deaths by Race/Ethnicity, San Diego County Residents, N=5,370*

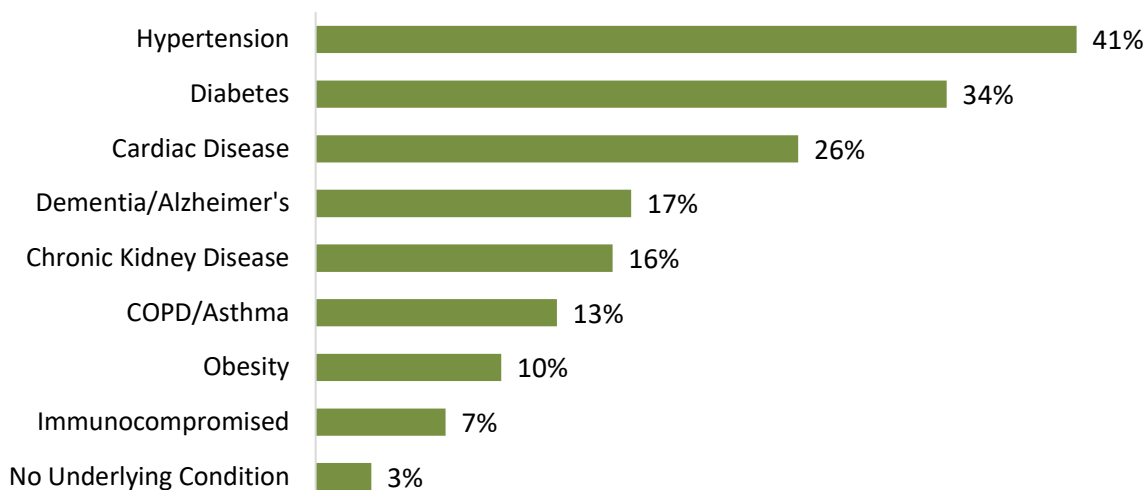


The black lines represent the 95% confidence intervals (error bars). Rates are not calculated for fewer than 20 events.

*Race/ethnicity are unknown for 128 deaths.

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

Figure 29. 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 California Immunization Registry (CAIR2) by participating providers. Some providers, including the VA, DoD, other military, some tribal, and prisons do not report to CAIR2. The San Diego Immunization Registry (SDIR) transitioned to the California Immunization Registry (CAIR2) on Monday, April 25, 2022. All vaccination data, previously pulled from SDIR, is now being pulled from CAIR2. Due to differences in the programming of each system, the overall count of vaccinations, count of vaccinated individuals, and demographic data may differ slightly from previously-reported data.
- **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](#).

Note: Starting 3/9/2022, the figures, Potential Exposure Settings and Community Setting Outbreaks, (formerly Figures 18 and 19 on page 13) are no longer included due to a move from universal case investigation and contact tracing to reprioritization of high-risk individuals and settings. The figures Cases Physically Present at K-12 Schools During Exposure Period and Cases Physically Present at K-12 Schools During Communicable Period (formerly Figures 26 and 27 on page 17) are no longer included due to increased use of home antigen test and changes to school-based case investigations and contact tracing.