

COVID-19 (Coronavirus Disease)

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COVID-19 Racial and Ethnic Health Disparities

Updated Dec. 10, 2020

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Why are some racial and ethnic minority groups disproportionately affected by COVID-19?

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Disparities in COVID-19-Associated Hospitalizations

Conditions in the places where people live, learn, work, play, and worship affect a wide range of health risks and outcomes, such as [COVID-19 infection](#), [severe illness](#), and [death](#). These conditions are known as [social determinants of health](#). Long-standing systemic health and social inequities have put many people from racial and ethnic minority groups at increased risk of severe illness from COVID-19.

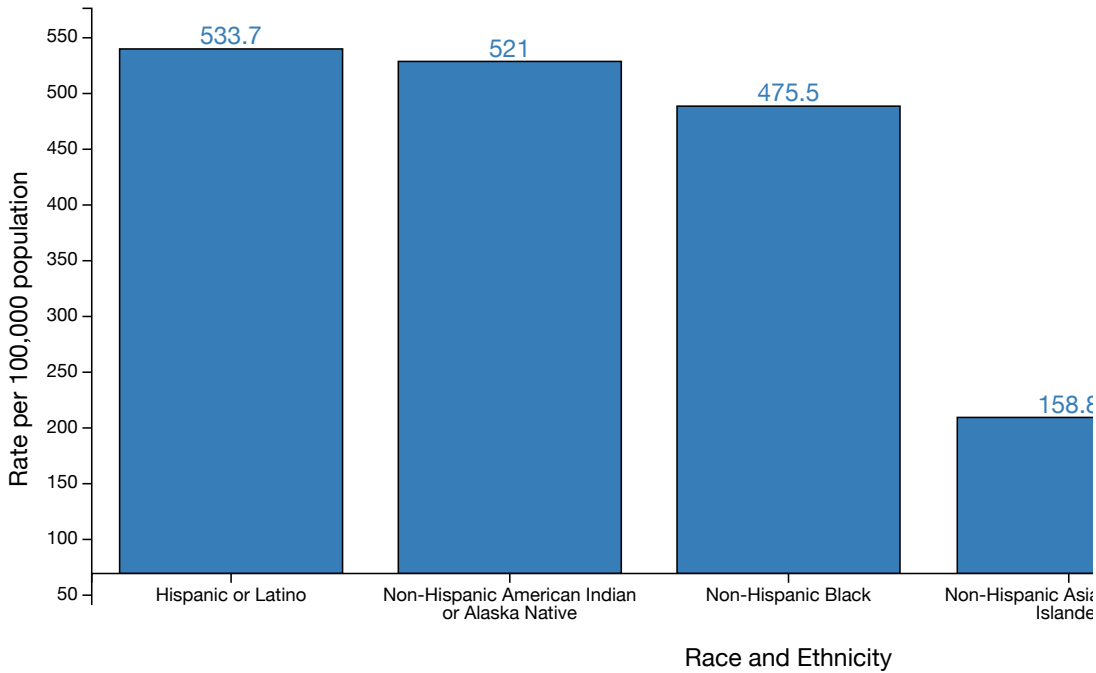
An important source of data for laboratory-confirmed COVID-19-associated hospitalizations is [CDC's COVID-19-Associated Hospitalization Surveillance Network \(COVID-NET\)](#). COVID-NET provides demographic and clinical information on COVID-19-associated hospitalizations, including age group, sex, race and ethnicity, underlying health conditions, interventions, and outcomes. COVID-NET comprises 99 counties in the 14 states participating in the Emerging Infections Program and the Influenza Hospitalization Surveillance Project; covering approximately 10% of the U.S. population. The age-adjusted

hospitalization rates and distribution of characteristics among people hospitalized, including underlying medical conditions and outcomes, by race and ethnicity can be used to identify racial and ethnic disparities and inform potential strategies to reduce disparities.

Age-adjusted hospitalization rates by race and ethnicity

Among laboratory-confirmed COVID-19-associated hospitalized cases, more than 90% have information on race and ethnicity. There are differences in age-adjusted hospitalization rates by race and ethnicity. Age-adjusted rates allow for comparisons across groups by accounting for the different age distributions within each racial and ethnic group. Non-Hispanic American Indian or Alaska Native, non-Hispanic Black, and Hispanic or Latino people have higher hospitalization rates compared with non-Hispanic Asian or Pacific Islander and non-Hispanic White people.

Age-adjusted COVID-19-associated hospitalization rates by race and ethnicity — COVID-NET, March 1–November 28, 2020



Age-adjusted rate [Reset](#)

Age-adjusted COVID-19-associated hospitalization rates by race and ethnicity				
	Hispanic or Latino	Non-Hispanic American Indian or Alaska Native	Non-Hispanic Black	Non-Hispanic Asian or Pacific Islander
Age-adjusted rate	533.7	521.0	475.5	158.8

[Scroll for additional info](#)

[Download Table Data \(csv\)](#)

Data Source: [COVIDView: A Weekly Surveillance Summary of U.S. COVID-19 Activity](#)

Hospitalization rates differ by age group and race and ethnicity group. The table below includes hospitalization rates and rate ratios for five racial or ethnic minority groups by age. Racial and ethnic minority groups have disproportionately higher hospitalization rates among every age group, including children aged younger than 18 years. The rate ratios compare the rate for each of these groups relative to the rate for non-Hispanic White people. For example, a rate ratio of 2.0 means that the group has a rate that is 2 times higher than the rate for non-Hispanic White people. In general, all racial and ethnic groups included in the table had higher hospitalization rates than non-Hispanic White people across almost every age category.

Hospitalization rates per 100,000 population

by age and race and ethnicity — COVID-NET
March 1, 2020–November 28, 2020

Age Category	Non-Hispanic American Indian or Alaska Native		Non-Hispanic Black		Hispanic or Latino		Non-Hispanic Asian or Pacific Islander	
	Rate ¹	Rate Ratio ^{2,3}	Rate ¹	Rate Ratio ^{2,3}	Rate ¹	Rate Ratio ^{2,3}	Rate ¹	Rate Ratio ^{2,3}
0–17 years	21.4	3.1	26.3	3.8	36.9	5.3	11.1	
18–49 years	399.9	6.7	259.9	4.4	381.5	6.4	84.3	
50–64 years	869.4	4.6	725.2	3.9	876.4	4.7	244.3	
65+ years	1148.2	2.2	1430.8	2.7	1279.9	2.4	492.7	
Overall rate ⁴ (age-adjusted)	521.0	3.7	475.5	3.4	533.7	3.8	158.8	

¹ COVID-19-associated hospitalization rates by race and ethnicity are calculated using COVID-NET hospitalizations with known race and ethnicity for the numerator and [NCHS bridged-race population estimates](#) for the denominator.

² For each age category, rate ratios are the ratios between crude hospitalization rates within each racial and ethnic group and the crude hospitalization rate among non-Hispanic White persons in the same age category.

³ The highest rate ratio in each age category is presented in **bold**.

⁴ Overall rates are adjusted to account for differences in age distributions within race and ethnicity strata in the COVID-NET catchment area; the age strata used for the adjustment include 0–17, 18–49, 50–64, 65–74, 75–84 and 85+ years.

Data Source: [COVIDView: A Weekly Surveillance Summary of U.S. COVID-19 Activity](#)

Characteristics of COVID-19-Associated Hospitalizations

The interactive graph below has three menu selections. The first menu includes selecting to view data on the percent of patients hospitalized with COVID-19, or the percent of patients who required mechanical ventilation, required treatment in an intensive care unit, or who died in the hospital by race and ethnicity, age, or sex). Another selection option is to view data on underlying medical conditions (such as asthma, diabetes, obesity or symptoms at admission to the hospital (such as cough, fever/chills, or sore throat) by race and ethnicity, age, or sex. The last selection option is to view data on discharge diagnosis (such as pneumonia, acute respiratory failure, or acute renal failure) are also available by race and ethnicity, age, or sex.

[Technical Notes](#)



Evidence from the literature

Findings from other published studies are consistent with COVID-NET data. Across several studies, most found a higher percent of hospitalized patients were non-Hispanic Black or Hispanic or Latino people than non-Hispanic White people.

Race or	Percent of hospitalized COVID-19	# of Studies
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Ethnicity Group	patients Median [Range]	Reporting
Black	44% [15–81%]	7 ^{1,2,3,4,5,6,7}
Hispanic or Latino	36% [3–48%]	4 ^{1,2,3,4}
White	16% [11–72%]	6 ^{1,2,4,5,6,7}

Notes: Studies reporting data on percent of hospitalized patients by race and ethnicity included people of all ages. These studies analyzed race and ethnicity differently; two studies analyzed the variables separately (racial categories could be Hispanic or Latino or non-Hispanic) and five studies analyzed the variables in a single variable (racial categories were non-Hispanic). Data were inadequate to assess potential differences in percent of hospitalized COVID-19 patients for American Indian and Alaska Native people, Native Hawaiian and other Pacific Islander people, and people who identify with more than one race. Therefore, data for these groups are not reported.

Acute kidney injury has been a common outcome among patients hospitalized with COVID-19. One study found that among patients hospitalized with COVID-19, 37% developed acute kidney injury. Among those with acute kidney injury, 35% died compared with 16% of all patients hospitalized with COVID-19. Acute kidney injury was more likely among Black patients than White patients.⁸

Severe illness from COVID-19 is disproportionately affecting children and adolescents from racial and ethnic minority groups. [Multisystem inflammatory syndrome in children \(MIS-C\)](#) is a rare but severe condition that occurs approximately 2–4 weeks after the onset of COVID-19 in children and adolescents. MIS-C disproportionately affects children and adolescents from racial and ethnic minority groups.^{9, 10} More than 70% of reported cases have occurred among children who are Hispanic or Latino or non-Hispanic Black. Data are routinely monitored and updated [here](#).

To prevent severe illness from COVID-19, we need to work together to address inequities in the social determinants of health that increase risk of severe illness from COVID-19 for racial and ethnic minority groups. Learn more about [what we can do to move towards health equity](#).

CDC Resources

[COVID-NET: A Weekly Summary of U.S. COVID-19 Hospitalization Data](#)

[COVIDView: A Weekly Surveillance Summary of U.S. COVID-19 Activity](#)

[COVID-19 Information for Pediatric Healthcare Providers](#)

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