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**For Whom the Bell Tolls:  
COVID-19 Death Patterns in California**

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**ABOUT CESLAC**

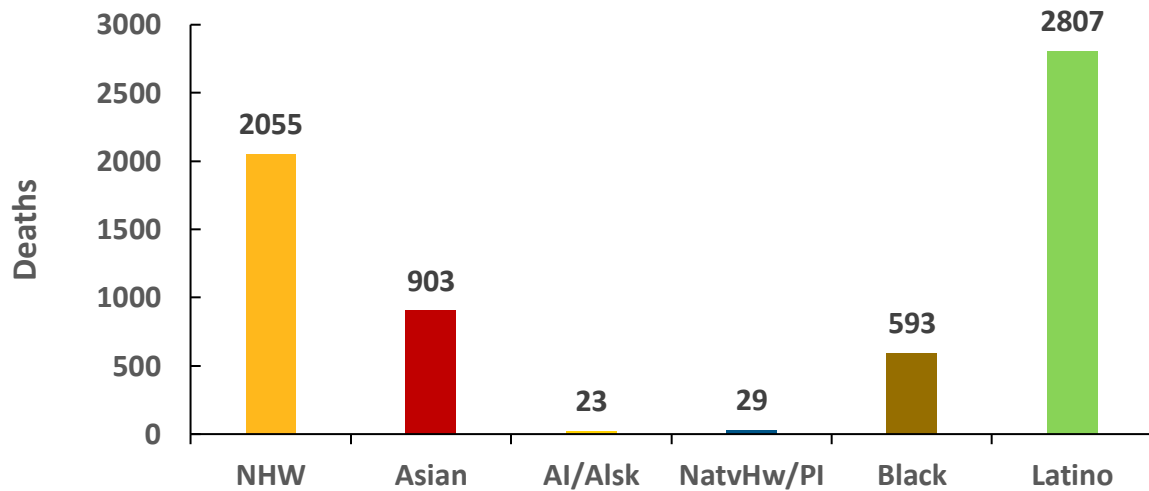
Since 1992, the UCLA Health Center for the Study of Latino Health and Culture (CESLAC) has provided cutting-edge, fact-based research, education, and public information about Latinos, their health, their history, and their roles in California society and economy.

## For Whom the Bell Tolls: COVID-19 Death Patterns in California

As of July 8, 2020, a total of 6,519 people in California had died due to COVID-19–associated conditions. These deaths did not occur randomly in the state’s population. Rather, they occurred more in some racial/ethnic (R/E) populations than in others.

Figure 1 shows the absolute number of deaths for each R/E population group. The Latino population has suffered the most deaths (2,807) and the American Indian/Alaska Native population the least (23). We would expect more Latino deaths than American Indian ones, due to the simple fact that there are more Latinos in California---a lot more, in fact: there are 15.5 million Latinos in the state, compared to 128,060 American Indians/Alaska Natives.

Figure 1.  
Total COVID-19 Deaths, Age 18+ by  
Race/Ethnicity, California, July 8, 2020

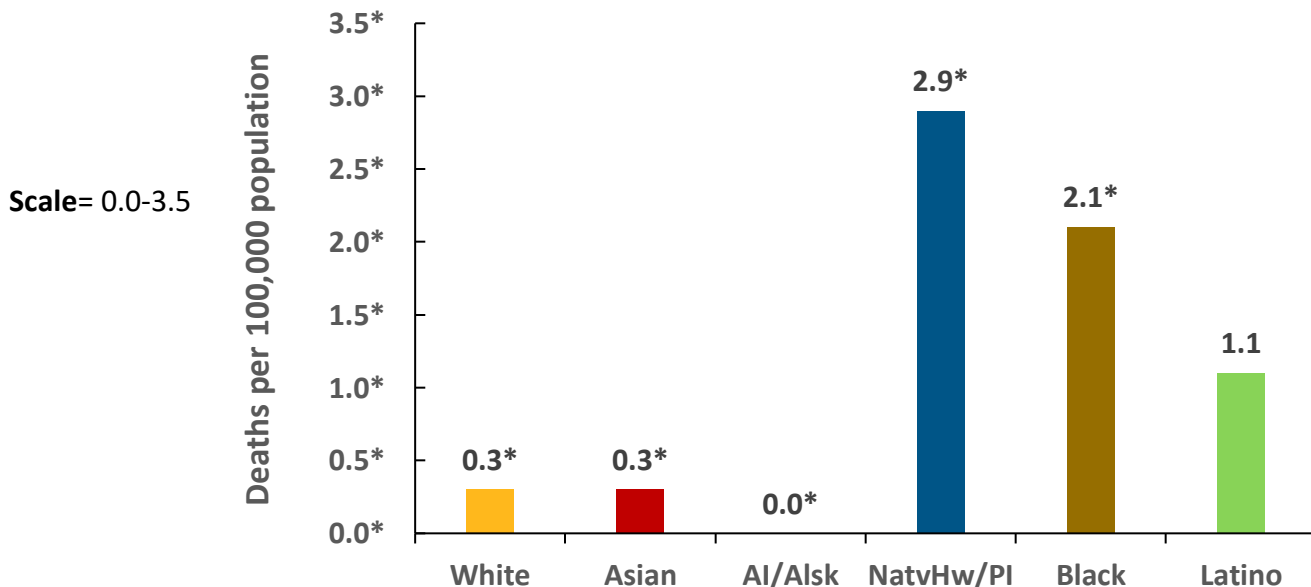


Source: UCLA CESLAC Tabulations, CDPH, 07-08-2020, Population: ACS 2018

How can we meaningfully compare Latino deaths to American Indian/Alaska Native deaths, given this wide difference in numbers? We are able to do this by converting the total number of deaths in a population into a rate of “deaths per 100,000 population”—in other words, out of each group of 100,000 individuals in a total population, how many have died of COVID-19–related illnesses. Once we make those calculations, we can then compare the death rates in each of the two populations, to see if there are disparities between their death rates. These rates can be further calculated by age groups within a given R/E group.

Figure 2 gives the death rates per 100,000 of the young adult population (18 to 34 years old) in each R/E group. The rates indicated by an asterisk (\*) are based on very small numbers (less than 30 deaths—for example, only one Native Hawai’ian/Pacific Islander death or only four Asian deaths). Because the numbers for these groups are so small, they are considered unstable and unreliable in a statistical sense. Nonetheless they do give a rough idea of possible trends. The only rate that is stable and reliable in Figure 2 is the Latino rate, based on 47 deaths (n>30). The scale (vertical axis) is from 0 to 3.5 deaths per 100,000.

Figure 2.  
18-34, Age-Specific Death Rates per 100,000  
By Race/Ethnicity, California, July 8, 2020

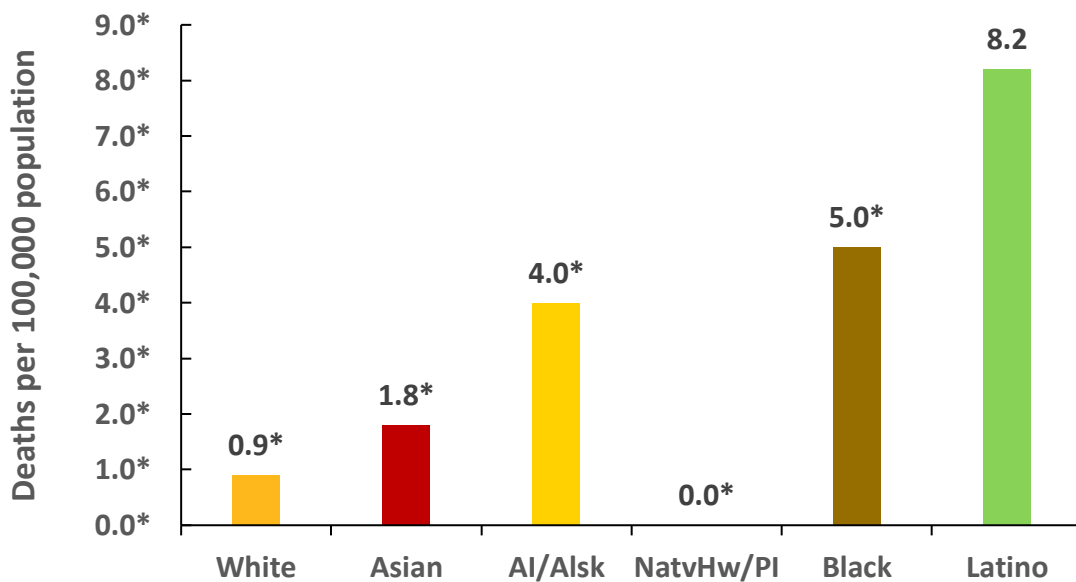


\*rate unstable and unreliable based on small number (n<30)

Source: UCLA CESLAC Tabulations, CDPH, 07-08-2020, Population: ACS 2018

Figure 3 shows the age-specific death rates for early middle-aged adults (35 to 49 years.) The Latino rate is stable and reliable, as it is based on 260 deaths (n>30); but the other groups' rates are unstable, because they are all based on less than 30 deaths per group (n<30.) Even with these caveats about small numbers, a trend emerges: non-white R/E groups have higher age-adjusted mortality rates than whites do. Note the change in scale, from 0 to 9 deaths per 100,000.

Figure 3.  
35-49, Age-Specific Death Rates per 100,000  
By Race/Ethnicity, California, July 8, 2020

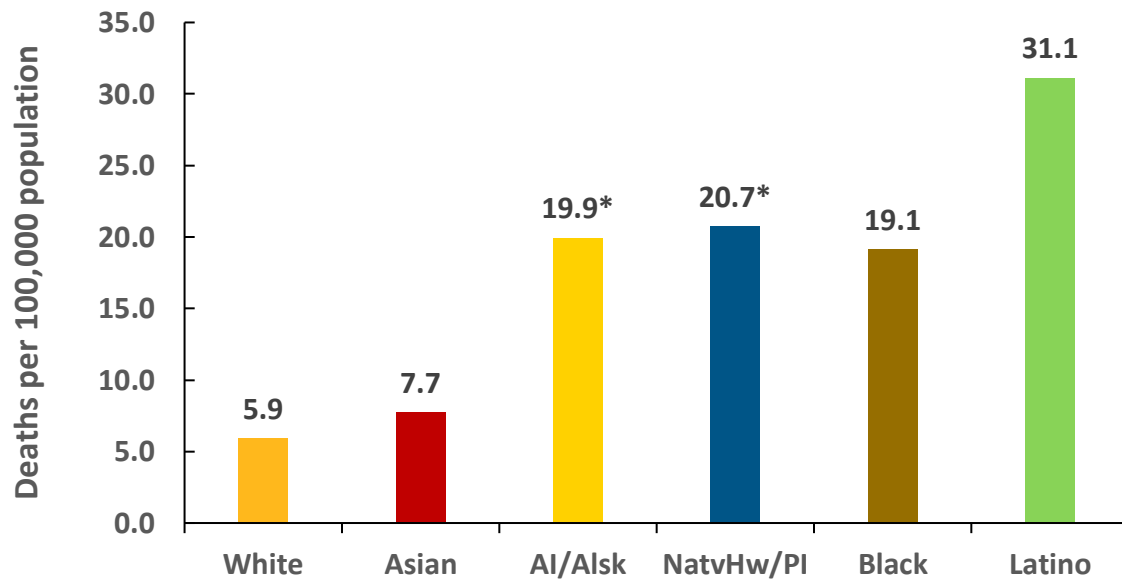


\*rate unstable and unreliable based on small number (n<30)

Source: UCLA CESLAC Tabulations, CDPH, 07-08-2020, Population: ACS 2018

Figure 4 shows the age-specific death rates for late middle-aged adults (50 to 64). The rates for whites, Asians, Blacks, and Latinos are stable and reliable, all based on more than 30 deaths per R/E group, ranging from 686 Latino deaths to 83 Black deaths. These non-white R/E groups have higher mortality rates than whites do. Because American Indian/Alaska Native rates and Native Hawai'ian/Pacific Islander rates are based on small numbers (n<30), they should be treated with caution. All the same, they still trend higher than white rates. Note the change in scale, from 0 to 35 deaths per 100,000.

Figure 4.  
50-64, Age-Specific Death Rates per 100,000 By  
Race/Ethnicity, California, July 8, 2020

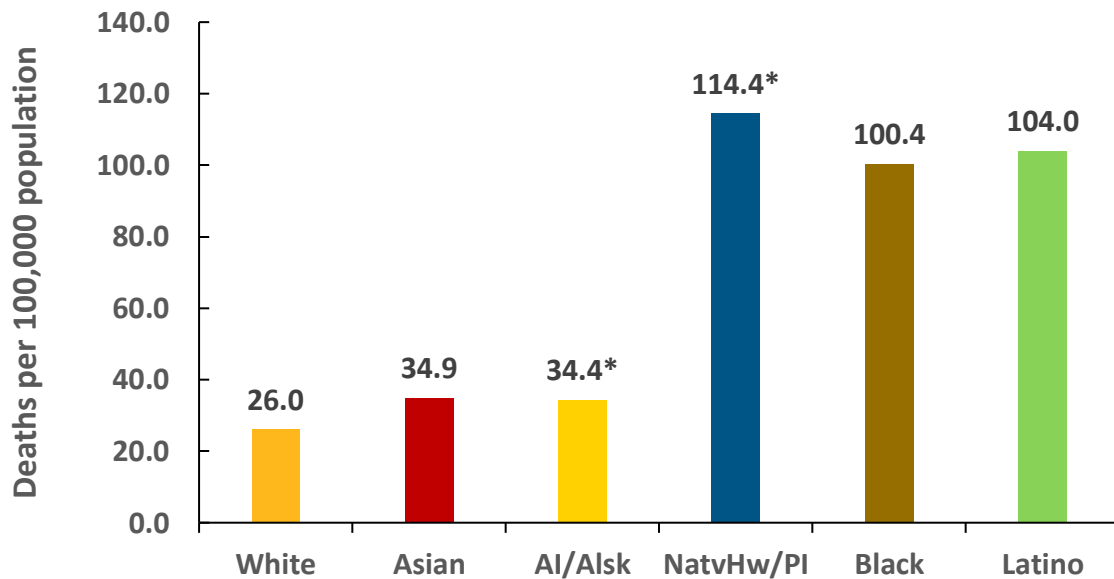


\*rate unstable and unreliable based on small number (n<30)

Source: UCLA CESLAC Tabulations, CDPH, 07-08-2020, Population: ACS 2018

Figure 5 shows the age-specific death rates for the elderly population (ages 65 to 79). The Black and Latino death rates are similar, and both are nearly four times as high as the white rate. The Asian death rate is about 50% higher than the white death rate. The death rates for American Indians/Alaska Natives and Native Hawaiians/Pacific Islanders both trend higher than the white death rate, but because they are based on fewer than 30 deaths in each population, their rates must be treated with caution. Note the change in scale from 0 to 140 deaths per 100,000.

Figure 5.  
65-79, Age-Specific Death Rates per 100,000 By Race/Ethnicity, California, July 8, 2020

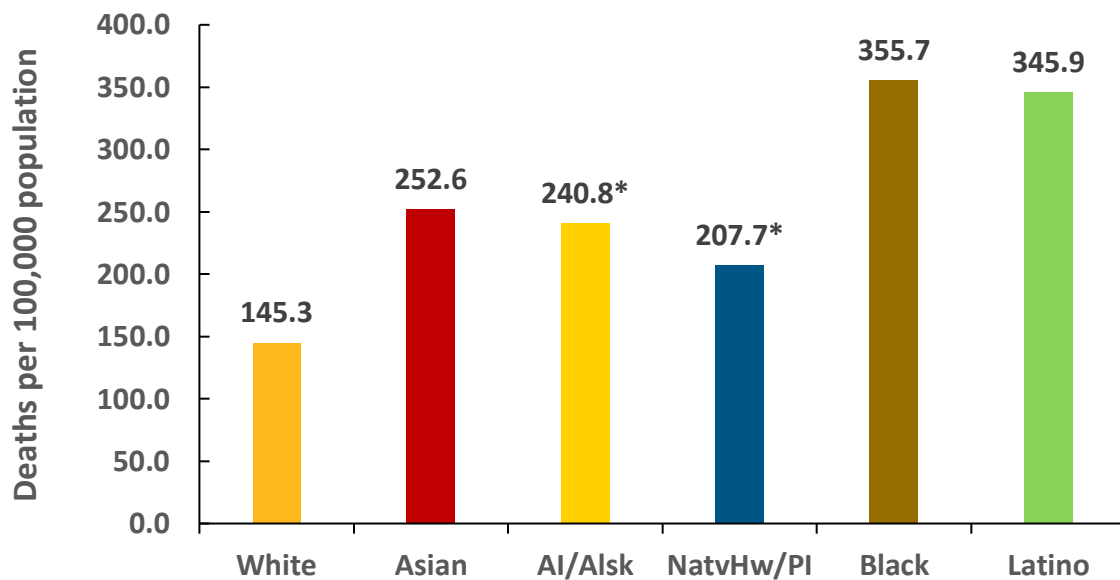


\*rate unstable and unreliable based on small number (n<30)

Source: UCLA CESLAC Tabulations, CDPH, 07-08-2020, Population: ACS 2018

Figure 6 shows the age specific rates for the old elderly (80+ years old). Again, the pattern is that non-white R/E groups have higher death rates than whites do. The Asian death rate is nearly twice as high, and the Black and Latino rates are nearly three times as high. American Indian/Alaska Native and Native Hawai'ian/Pacific Islander rates trend nearly twice as high as white death rates, but again, these are based on small numbers (n<30.) Note the change in scale, from 0 to 400 deaths per 100,000.

Figure 6.  
80+, Age-Specific Death Rates per 100,000 By  
Race/Ethnicity, California, July 8, 2020



\*rate unstable and unreliable based on small number (n<30)

Source: UCLA CESLAC Tabulations, CDPH, 07-08-2020, Population: ACS 2018

As we have pointed out in our previous reports, there are a number of conditions that may explain the consistently higher Latino, Black, Asian, American Indian/Alaska Native, and Native Hawaiian/Pacific Islander case rates and death rates. (Our previous reports are available on our website: <https://www.uclahealth.org/ceslac/research>)

- Essential workers. Early in the pandemic, physicians and nurses were considered to be essential workers, and much attention was paid to their supply of personal protective equipment (PPE) so that they could avoid contagion and remain healthy enough to take care of patients. Only later did people realize that other industries were just as essential as medical personnel: farm workers who produce food for everyone's consumption; meat and vegetable packing house workers, who process raw products; truck drivers, who carry products from manufacturer or retailer to consumer; grocery store workers; public transportation drivers; construction workers; landscapers; and nursing home attendants. These jobs are primarily filled by Latinos, Blacks, Asians, and other non-whites.
- Extended exposure to coronavirus. Farm workers often labor in crews standing shoulder to shoulder. Similarly, meat cutters and packers work right next to each other. Grocery store workers have scores, if not hundreds, of customers pass within an arm's length of them every day. Nursing home attendants have to wash and feed their patients, change their bedding, etc. Unlike the situation of those who can work from home, the daily responsibilities of these essential workers expose them much more often to the coronavirus, which is why they have higher infection case rates.
- Less access to health insurance and doctors. As we pointed out in our first report, on April 23, 2020, these essential workers, particularly Latinos, have far less access to health insurance and to medical providers than those with jobs which allow them to work from home. Therefore they are less likely to be tested for the virus, and those who do become infected receive care later in course of COVID-19 than people who have good access to these necessities.
- Less access to health care resulting in more comorbidities. While comorbidities (pre-existing health conditions) do not affect the level of someone's exposure to the coronavirus, research shows that if people with such conditions do contract COVID-19 and have to be hospitalized, they seem to be at a higher risk of dying than people who don't have comorbidities. Most non-medical essential workers, particularly Latinos, have more exposure to the coronavirus in their jobs, have less access to health insurance, and have made fewer doctor visits throughout their lives. For these reasons, they are more likely to already have comorbidities that make contracting the virus more dangerous to them.



We see the results of these and other conditions in the consistently higher death rates for non-white R/E groups in California.

### **Methods**

Data on COVID-19 cases, stratified by race/ethnicity and by age group, were furnished by the California Department of Public Health (CDPH) on July 9, 2020. Population denominators to calculate the rate of cases per 100,000 were tabulated from the 2018 American Community Survey (ACS), the latest available.

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For more information, or to arrange a telephone interview with the Center's Director, David E. Hayes-Bautista, Ph.D., Distinguished Professor of Medicine, please contact Adriana Valdez, at (310) 794-0663 or [cesla@ucla.edu](mailto:cesla@ucla.edu).