Demographic Report on Health and Mental Health Equity in California

Reporting Data through October 2021 to the Legislature and the People of California by the Office of Health Equity, California Department of Public Health

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[1] In Memoriam

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Prologue: COVID-19 & Racial Justice

As described in previous editions of this report, substantial differences in social determinants of health (SDOH) measures across race, ethnicity, income and other dimensions of disadvantage persist in California. SDOHs are defined by the Healthy People framework as the "conditions in the environments in which people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks." [1] The production of the current edition coincided with the COVID-19 pandemic, protests against racially motivated police brutality and hate crimes, and intense public recognition of economic inequities underlying the impacts of the pandemic. Data for many of the SDOH measures highlighted in this report series were still forthcoming at the time of writing and the fuller picture of the harmful health equity impacts of the pandemic is still unfolding.

Several key impacts were identified early in the pandemic, and we highlight some of these in this section. As of May 9, 2023, COVID-19 surveillance data in California indicate higher proportions of reported cases in Latino and Native Hawaiian or Pacific Islander (NHPI) communities, and greater proportions of deaths among Latino, Black or African American and NHPI people, relative to their population shares. Disaggregating case and mortality data by both age, race and ethnicity, rather than averaging proportions across all age groups, provides a clearer picture of disparities. For example, across all age groups, Latino people accounted for 38.9 percent of the population and 41.9 percent of deaths. However, when mortality data were disaggregated by age, race and ethnicity, the Latino population make up 41.5 percent of Californians aged 35 to 49 years, and, 66.5 percent of deaths. [2] Despite Latino and Black or African American communities being hardest hit, as of October 2, 2023 their proportions of up-to-date COVID-19 vaccinations were 10.7 percent and 17.2 percent, respectively — substantially lower than Asian American (30.1 percent) and White (26.6 percent) people. [3] American Indian and Alaska Native people in California also have low vaccination rates (14.0 percent) and experience case and mortality rates as high as or higher than other racial and ethnic groups. [3, 4]

Rather than focusing only on COVID-19 outcomes, evaluating all-cause deaths may provide a clearer picture of the overall impact of the pandemic. In fact, more deaths than expected occurred during the pandemic compared to historical death data. According to a California Department of Public Health (CDPH) analysis, a 15.9 percent increase in the death rate occurred in California from 2019 to 2020, with Latino people experiencing significant excess mortality (34.1 percent). [5] Chen and colleagues evaluated excess deaths between March and October 2020 and found that Californians who were older, Black or African American, Latino, or with lower educational attainment, experienced

greater excess deaths compared to prior years. [6] In a separate analysis, the authors found that excess deaths in Californians aged 18 to 65 years differed by occupation, race and ethnicity: Latino food/agriculture-, Black or African American retail-, and Asian health care workers experienced 59, 36 and 40 percent increases, respectively. [7]

During the pandemic, the field of public health advanced in naming and studying structural racism as a root cause of health inequities. [8-11] During the first wave of the pandemic, the tragic death of George Floyd on May 25, 2020 caused by a police officer in Minneapolis spurred a national and international social movement for racial justice, led by groups including Black Lives Matter (BLM). As a result, numerous city and county governments in California and nationwide made declarations that racism is a public health crisis. On April 8, 2021 the Centers for Disease Control and Prevention (CDC) declared racism a serious public health threat. [12] Unfortunately, hate crime offenses in California significantly increased (23.9 percent) during the pandemic from 1,261 in 2019 to 1,563 in 2020. [13, 14] Although Black or African American people account for only 6.0 percent of the state's population, they represented one in three hate crime events in 2020. [13] Hate crime against Asian American people in California was most pronounced with an increase of 107 percent (43 events in 2019 compared with 89 in 2020). Most hate crime events perpetrated against Asian American people across the nation occurred in March and April 2020, shortly after the pandemic began, and may be due to anti-Asian sentiment which blamed Asian American communities for the spread of COVID-19. [15] The organization Stop AAPI Hate documented 3,795 hate incidents nationally between March 2020 and February 2021, which prompted President Biden to sign the COVID-19 Hate Crimes Act into law in May 2021. [16, 17]

Both COVID-19 disparities and social movements such as BLM are attributable in part to historical, structural and institutional injustices in social, economic, political and environmental systems that disadvantage racial and ethnic minoritized groups. While a higher prevalence of chronic conditions partially contributed to higher proportions of COVID-19 hospitalizations and mortality in racial and ethnic minoritized groups compared to White people, these minoritized groups are over-represented in the frontline essential workforce, less able to practice social distancing, more likely to have multigenerational households, and have less access to health care, increasing their risk for COVID-19 infection and complications.

- Frontline essential workers —In California, 55 percent of Latino workers and 48 percent of Black or African American workers are employed in front-line essential work, whereas their population shares are 38.9 and 6.0 percent respectively. Within these sectors, occupations differ by race and ethnicity. Latino workers comprise high proportions of the workforce in agriculture (93 percent), construction (78 percent), trucking (57 percent), labor and material

moving (60 percent) and stocking (52 percent) and represent 69 percent of cooks and 64 percent of food preparation workers. Twelve percent of personal care aides, 9 percent of laborers and material movers, and 8 percent of food preparation workers are Black or African American. [18]

- Access to telework — Racial and ethnic minoritized low-wage workers had fewer opportunities to work from home when stay-at-home orders were implemented in California in March 2020, are more vulnerable to layoffs and have fewer financial resources to weather the storm of the pandemic. Although Black or African American and Latino households represent 43 percent of all families, they only make up 12 percent of incomes above the 90th percentile. [19] Based on community testing for COVID-19 infection in the Mission District in San Francisco in April 2020, 90 percent of residents who tested positive could not work from home, 95 percent were Latino, 89 percent earned less than $50,000 a year, 82 percent said that they were financially impacted by the pandemic, and most lived in households of 3 to 5 people (60 percent) or larger (29 percent). [20] In fact, according to national data, 29 percent of Asian American and 27 percent of Latino families live in multigenerational housing making self-isolation nearly impossible. [21]
- Affordability of housing and overcrowded households— Housing has become unaffordable for many racial and ethnic minoritized families, leaving them more vulnerable to eviction or foreclosure during the pandemic. In the fall of 2020, approximately 12 percent of Californian households were behind on their rent or mortgage payments, and these proportions varied by race and ethnicity: 17, 14, 13 and 8 percent for Latino, Asian, Black or African American, and White households, respectively. [22] Among all the state's renters, 58.2 percent of Black or African American persons and 54.6 percent of Latino persons were housing cost-burdened (paying more than 30 percent of their income toward rent), compared to 51.1 percent of Californians overall. [23] The lack of affordable housing in California contributes to overcrowded homes, which is a risk factor for COVID-19. [24] Approximately one in six Californians live in overcrowded houses, and two-thirds of these are essential workers. Of the 6.3 million persons living in overcrowded housing, most live in poverty (75 percent), are persons of color (92 percent) and do not have health insurance (12 percent). [25]
- Food security — COVID-19 has the potential to worsen many of the challenges Californians face related to access to healthy foods, and racial and ethnic minoritized groups are more likely to be food insecure. Based on California Health Interview Survey (CHIS) data from 2014 to 2018, 41 percent of low-income adults are food insecure in California. [26] In a report produced by the Public Policy Institute of California, survey results showed that in the fall of 2020, 14 to 15 percent of Black or African American and

Latino, 7 percent of White and 6 percent of Asian American households in California were food insecure. [22] State economic assistance programs were successful in reaching low-income households in California, as very low food security decreased to 14.5 percent after the initial COVID-19 shutdown (April 27 to September 29, 2020) compared to before 19.3 percent (November 21, 2019 to March 14, 2020). [27]

- Access to quality health care — Racial and ethnic minoritized groups are less likely to receive quality care and less likely to have health care insurance than White persons. As a result, people in racial and ethnic minoritized groups may be less likely to seek health care due to COVID-19, or in the worst-case scenario, may seek care later in the course of disease and when illness is more severe. One study conducted by a large health care system in Northern California found the Black or African American people were more likely than White people to seek care for COVID-19 in the emergency department, and were more likely to need hospitalization and care in the intensive care unit. [28]
- Mental health — The COVID-19 pandemic has elevated mental health needs of many who face social isolation or who were negatively impacted by discrimination or the economic downturn. In early 2021, young adults (age 18 to 29), people with low-income, and persons with disabilities in the United States (U.S.) were more likely to report high levels of psychological distress [29]; and one in three adults in California had symptoms of anxiety and/or a depressive disorder. [30]

Racial and ethnic minoritized groups were already experiencing poorer health and health inequities, as highlighted in previous editions of this report. It is important to also note the demographic shifts demonstrated by the 2020 Census, such as diversity increasing compared to 2010 Census data. [31] Additionally, there were improvements to the 2020 Census Hispanic origin and race questions and coding procedures that will allow for more granular analyses of race and ethnicity in the future. [32]

The COVID-19 pandemic and the public health impacts of racial injustice have cast a necessary spotlight on the wide disparities between racial and ethnic minoritized groups and their White counterparts. Now more than ever, a clear understanding of the intersectional health equity picture in California is critical in informing cross-sectoral recovery toward fulfilling the state's portrait of promise. The administration has several policies and investments to advance racial equity, including the California Truth and Healing Council, the California Task Force to Study and Develop Reparation Proposals for African Americans Final Report, and the Racial Equity Commission. [33-35] The intersection of health equity and racial justice during a pandemic offers a historic opportunity to build bridges to address root causes and promote equitable outcomes. [36]

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Executive Summary

Health and mental health disparities are differences in health status along lines of disadvantage that can occur by age, race, ethnicity, sexual orientation, gender identity, education- and income-level, disability or functional impairment, geographic location, or combinations of these factors. Health and mental health inequities are created by the underlying social, economic, geographic, political, and physical environmental factors that shape health, are systemic and avoidable—and therefore unjust and unfair.

The Office of Health Equity (OHE) was established within the CDPH in 2012, as authorized in Section 131019.5 of the California Health and Safety Code. A key duty of the OHE is creating a biannual demographic report on health and mental health inequities. This report, developed in 2020/21 in the midst of the global COVID-19 pandemic, is the latest update. The pandemic exposed harsh racial and ethnic disparities in COVID-19 morbidity and mortality driven by inequities in factors associated with the risk of infection and severe illness, including income, access to health insurance, occupation, and housing security. While some of the destructive health equity fault lines of the pandemic are already well documented, including the contributions of structural racism to the underlying SDOH (see the Prologue: COVID-19 & Racial Justice), others will become more apparent as data become available. We will explore these impacts in the next report.

Highlights of this updated[2] statistical profile of key SDOH and mental health in California include:

- The percentage of Californians in poverty has decreased in recent years (from 15.0 percent in 2013 to 2015, to 11.0 percent in 2018 to 2020) according to the official federal measure. However, high costs of living in California translate into the second highest poverty rate of all 50 states according to the Supplemental Poverty Measure (SPM).
- Income inequality remains stark, especially among families headed by single mothers: 23.1 percent of such households are below the federal poverty level (FPL), compared to 5.7 percent of married-couple households. Higher proportions of Black or African American (26.9 percent), American Indian or Alaska Native (29.2 percent), Latina (30.0 percent) female-headed households are in poverty, whereas 21.5 percent of White and 15.4 percent of Asian American female-headed households live in poverty.
- Examining income alone, two in five low-income (<200 percent FPL) adults are unable to afford enough food (2016 to 2020). Food insecurity further

[2] Estimates in the report are based on data available as of November 1, 2021.

impacts certain low-income racial and ethnic groups: Low-income Black or African American, American Indian or Alaska Native, and NHPI adults have been disproportionately impacted by food insecurity in California compared to low-income Latino, White and Asian racial and ethnic groups.

- Early childhood education disparities persist by racial and ethnic group: Higher proportions of Latino, and American Indian or Alaska Native children are not enrolled in preschool, nursery school or kindergarten compared with White, and Asian or Pacific Islander students. Further, low-income children (<200 percent FPL) are more likely to not be enrolled in an early childhood education program (59 percent) compared with higher-income children (≥200 percent FPL; 45 percent). These early educational disparities may have long-lasting implications, embodied by the lower proportions of Latino, Black or African American, American Indian or Alaska Native and NHPI adults attaining a 4-year college degree or higher compared to White and Asian people.
- Home ownership rates among Black or African American and NHPI persons remain the lowest in the state (41.3 percent and 39.5 percent, respectively), compared to White (65.3 percent) and Asian American persons (59.3 percent). These findings, based on 2019 to 2020 data, represent an improvement for Black or African American and a decline for NHPI people from 2015 to 2016, when estimated home ownership rates were 38.3 percent for Black or African American and 56.4 percent for NHPI people.
- Black or African American and Latino households are shouldering a disproportionately high burden of housing cost (i.e., spend more than 30 percent of their income on housing): 58.2 percent of Black or African American and 54.6 percent of Latino renters are cost-burdened, in comparison to 46.2 percent of White and 43.2 percent of Asian American renters.
- Many California communities suffer from poor air quality. Seven Californian cities are among the top ten most polluted cities in the nation by ozone, six of the top ten by year-round particle pollution and six by short-term particle pollution. The disproportionate exposure is further concentrated in particular neighborhoods. Black or African American, Latino, and Asian people are exposed to particulate matter (PM) 2.5 pollution that is 43, 39, and 21 percent higher, respectively, than for White people based on Census tract-level data.
- Parks and greenspace are vital to community health. Researchers followed 3,173 children in Southern California over eight years and found that the children who lived closer to parks had lower rates of obesity as adults than those who did not.

- Despite overall improvements in health insurance coverage, disparities by racial and ethnic groups persist: the uninsured rate among Latino persons dropped (from 21.9 percent in 2011 to 10.5 percent in 2020), but remained substantially higher than among White persons (3.8 percent in 2020).
- Low-income women are less likely than higher-income women to receive preventive breast and cervical cancer screening. Asian and Latino people aged 50 to 75 years are less likely to meet colorectal cancer screening recommendations than White people in the same age range.
- In the health care setting, 13.8 percent of Black or African American adults reported ever experiencing unfair treatment due to their race and ethnicity when receiving medical care, compared to 2.3 percent of White and 4.7 percent of Asian adults.
- The number of reported hate crime offenses has increased 23.9 percent, from 1,261 reported in 2019 to 1,563 in 2020. In 2020, anti-race, ethnicity, or national origin biases were the most common motivations for hate crimes, accounting for 1,053 offenses. Of these, over half were directed at Black or African American people, and the largest percentage increase – 84.5 percent – impacted Asian Americans. Anti-transgender bias motivation also saw a major increase in the number of hate crime offenses from 2019 to 2020, from 36 to 62.
- In California in 2020, at least 745 civilians experienced the use of force by police: 42.6 percent were Latino and 17.4 percent were Black or African American civilians. This represents proportions greater than the Latino and Black or African American population shares of 38.9 and 6.0 percent, respectively.
- Violent crime in California decreased 2.9 percent from 2018 to 2019: 430 per 100,000 residents. In 2019, 60 percent of violent crimes reported were aggravated assault, 30 percent were robberies, 9 percent were rapes and 1 percent were homicides. Preliminary data in 2020 show modest increases in assaults and significant increases in homicides, while robberies and rapes have decreased.
- Compared to adults who speak English very well, limited-English proficient adults are more likely to have fair or poor health, delay health care due to cost or lack of insurance, and lack current health insurance.
- Latino people constitute 38 percent of the state's population but make up only 6 percent of the active physician workforce. Black or African American people, approximately 6 percent of the state's population, account for just 3 percent of physicians. Applying a gender lens, women are underrepresented in the physician workforce. Although the proportion of female medical school graduates is equal to that of male graduates, there are more male than female active physicians in the workforce.

- Access to health insurance or a usual source of care is lowest among non-citizens with serious psychological distress in the past year, compared to naturalized- and U.S. born citizens with the same condition. When comparing between race and ethnicity, access to health insurance or a usual source of care is lower among Latino and Asian people with serious psychological distress in the past year, compared to Black or African American and White people with the same condition.

By providing data-driven understanding of the magnitude and distribution of health inequities, this report aims to help mobilize the understanding of and sustain the commitment to improvements in health equity in California. There are notable improvements, setbacks, and trends all part of narrating the complex California health equity story. Each statistic is a pixel in an emerging picture that will improve in resolution as we pursue better disaggregated and hyper-local data. Working with the Advisory Committee and other cross-sector partners, OHE will continue to strive for its vision of everyone in California having full and equal access to opportunities for optimal health, and its mission of promoting equitable social, economic, and environmental conditions to achieve optimal health and mental health for all.

Sincerely,

Rohan Radhakrishna, MD, MPH, MS (he/him)

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California Department of Public Health

Income Security: The High Cost of Low Incomes

The relationship between socioeconomic status (SES)—usually measured by income, education, and occupation—and health, including mental health, is well documented. As individuals move up the SES ladder, their health improves, they live longer lives and have fewer health problems. SES is important because it provides access to needed resources such as knowledge, money, power, prestige, and social connections that help people avoid risk factors for disease, promote healthy behaviors, and protect health. [1]

Several studies have measured the economic impact of child poverty in the U.S. One of the studies referenced in the previous legislative report, *An Update on the Portrait of Promise: Demographic Report on Health and Mental Health Equity in California*, measured the economic impact of child poverty by calculating lost economic productivity, criminal activity, and increased health expenditures. [2] Estimates of the annual costs of child poverty including previously unmeasured costs (i.e., cost of child homelessness, maltreatment, and incarceration) reveal that the nation as a whole pays the equivalent of $1 trillion a year, or 5.4 percent of the gross domestic product for costs associated with child poverty. [3] In addition to the economic costs of child poverty to the nation as a whole, these studies found that children growing up in poverty are more likely to receive less and lower quality education, earn less as adults, receive public assistance, and have worse health and high health care costs over their lifetimes, compared to nonpoor children.

California Wealth and Income Disparities

In 2018, families in the 90th percentile in California have 12.3 times the income compared to those in the 10th percentile (measured before taxes and safety net programs). Although government policies and safety net programs narrow the income gap, it is still growing due to disproportionate gains for California's highest earners. Since 1980, incomes in the 90th percentile have increased by 60 percent, while those in the 10th percentile have grown by only 20 percent. [4]

Under the official federal poverty measure, the percentage of people in poverty in California has improved from 15.0 percent of the population in 2013 to 2015 to 11.0 percent in 2018 to2020. [5, 6] When poverty is calculated according to an alternative method, the SPM, California has the second highest rate (15.4 percent) in the U.S. behind the District of Columbia (16.5 percent). The SPM factors in the cost of housing, taxes noncash benefits, and day-to-day costs such as childcare, work-related expenses, utilities, clothing, and medical costs. Although the official number of Californians in poverty has decreased in recent years, the high costs of living in California have kept the poverty rate higher than most states, according to the SPM.

The Wage Gap

Although considerable progress has been made since 1979 when women made 62 cents for every dollar earned by men, the gender wage gap has persisted, with women now being paid 82 cents for every dollar earned by men. The gender-wage gap worsens for certain races and ethnicities as illustrated in 2020 where Asian American women earned 79 percent as much Asian American men and White women earned 82 percent as much as White men. [7] Furthermore, the gap is not isolated to one industry as women earn less than men in almost every occupation. [8]

Inequities in income security remain especially acute among family households in California headed by single women — nearly one in four (23.1 percent) are below the FPL compared to 5.7 percent of married couples with children (**Figure 1**). Although this overall proportion for singe-female households has remained relatively stable since 2010, [9] higher proportions of Black or African American (26.9 percent), American Indian or Alaska Native (29.2 percent), and Latina of any race (30.0 percent) female-headed households are in poverty, whereas 21.5 percent of White- and 15.4 percent of Asian American female-headed households live in poverty (**Figure 1**).

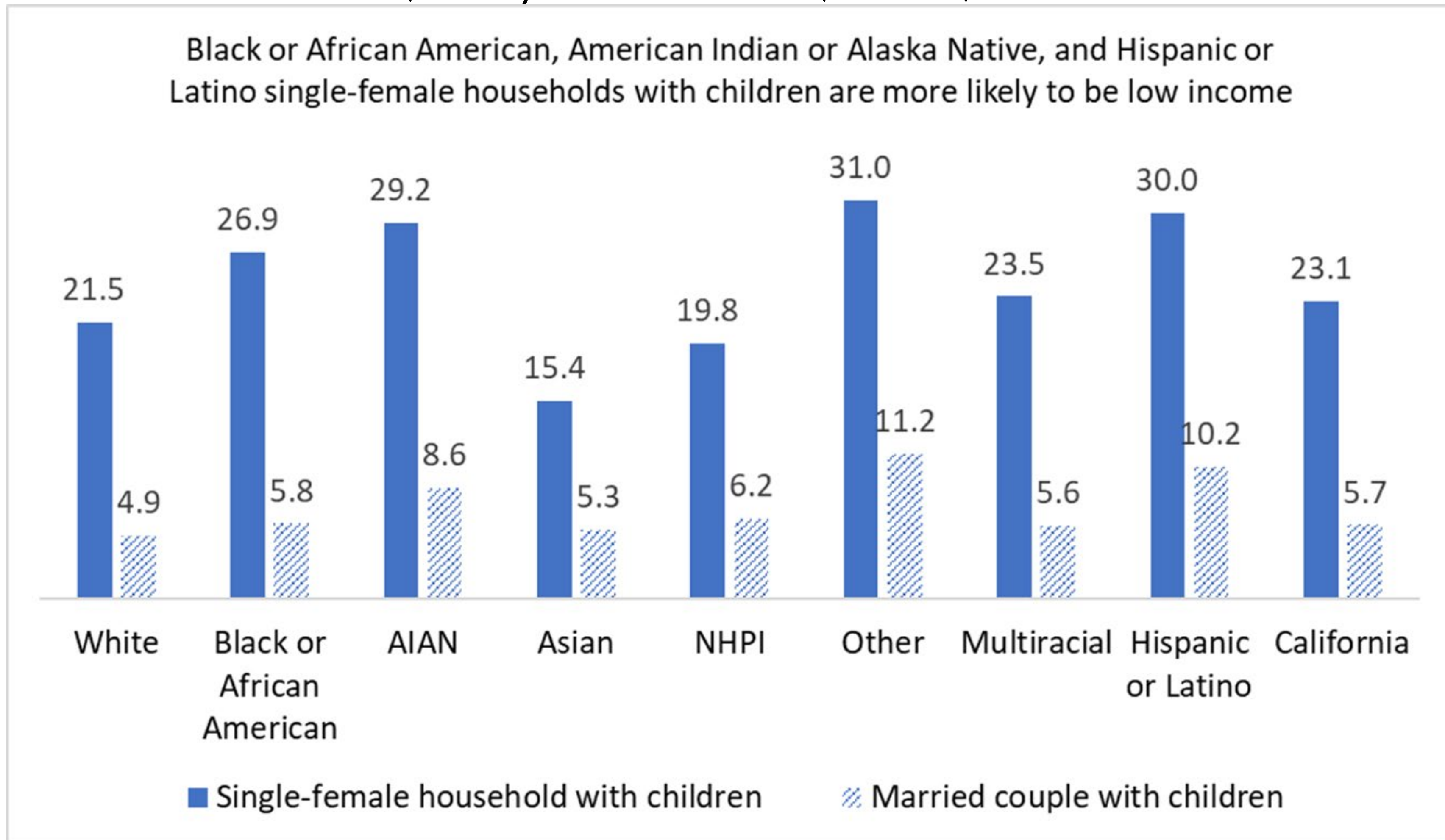
To address income inequality, the gender, race and ethnicity wage gap must close. Pay secrecy perpetuates wage gaps as it fosters discrimination and undermines an employee's ability to negotiate for higher pay. While legislation to ban pay secrecy has passed at both federal and state levels, it still exists in many companies, especially non-union, private sector organizations. Pay transparency has been shown to be a powerful tool against wage gaps as it forces organizations to develop a standardized, data-driven approach to compensation which helps to negate unconscious biases and discrimination. [10]

The Health Impact of Poverty

The consequences of poverty include high rates of poorer health and lower life expectancy among vulnerable populations. [11] Evidence has shown a strong correlation between poverty-level income and cardiovascular disease, low birth weight, hypertension, arthritis, and diabetes. [12] A 2017 review of the literature revealed that life expectancy has stagnated among poor Americans whereas middle and high income Americans have continued to experience gains. [13] In addition, income-based inequities emerge in cognitive development among infants as young as 9 months and widen as they age, leading to educational achievement gaps between higher- and lower-income peers in later years. [14] The prevalence of psychiatric disorders, including neurotic disorders, functional psychoses, and alcohol and drug dependence is consistently more common among people with lower incomes. [15]

One approach to closing the gaping disparities in health outcomes is to work towards more equitable household income distribution. In addition, income support programs, such as the federal Earned Income Tax Credit, can be effective in combatting poverty which is known to be a driver of adverse health outcomes in children. Investing in economic security is a key to improving health outcomes for working families. [16]

Figure 1: Percentage of families whose income in the past 12 months was below the federal poverty level, by race, ethnicity and household status, California, 2015-2019



Source: U.S. Census Bureau, American Community Survey, 5-year estimate (2015-2019); Note: Low income=below federal poverty level; Data are for race alone and Latino origin of any race; AIAN=American Indian or Alaska Native; NHPI=Native Hawaiian or Pacific Islander. In the American Community Survey, "Other race" is a residual category that represents the respondents who did not select any of the race categories shown in the figure above. Data were pooled 2015-2019.

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Food Security and Nutrition

Food security, defined as stable access to affordable, sufficient food for an active, healthy life, is a basic human right. [1] Yet here in California, the nation's largest producer of agricultural crops and livestock, too many people cannot afford to put enough food on the table, or have to forego other basic needs to do so. According to a survey on the social and economic effects of the coronavirus pandemic on U.S. households, 10.2 percent of adults in California either sometimes or often did not have enough to eat, as of September/October 2021. [2]

Chronic Food Insecurity Means More Than a Missed Meal

Adults who are food insecure tend to have poorer health and are at greater risk for mental health conditions as well as other health problems including heart disease, diabetes, obesity and hypertension. [3]

- Food-insecure mothers are more likely to experience long-term physical health problems [4], have complications during pregnancy [5], and are at greater risk of depression [6] and other mental health problems. [7]
- Food-insecure children have increased rates of developmental and mental health problems. They are also at higher risk of having problems with cognitive development and growth, leading to detrimental impacts on their behavioral, social, and educational development. [6, 8-14]
- Women in food-insecure households are more likely to be overweight or obese. Possible reasons for this paradoxical association include overcompensation during periods when food is available; and access to predominantly low-cost, high-calorie foods. [15, 16]
- Low food security is associated with higher levels of psychological distress among low-income adults [17] and college students. [18]

Communities of Color, Low-Income and Children Bear the Brunt

Low-income Black or African American, American Indian or Alaska Native, and NHPI adults have been disproportionately impacted by food insecurity in California compared to low-income Latino, White and Asian racial and ethnic groups (**Figure 2**). An estimated 40 percent of low-income adults in California are food insecure, and 13.6 percent of all children in California are food insecure regardless of family income (**Figure 3**). Many of the most food-insecure communities are located in the state's agriculturally fertile—and demographically increasingly Latino—San Joaquin Valley. For example, the

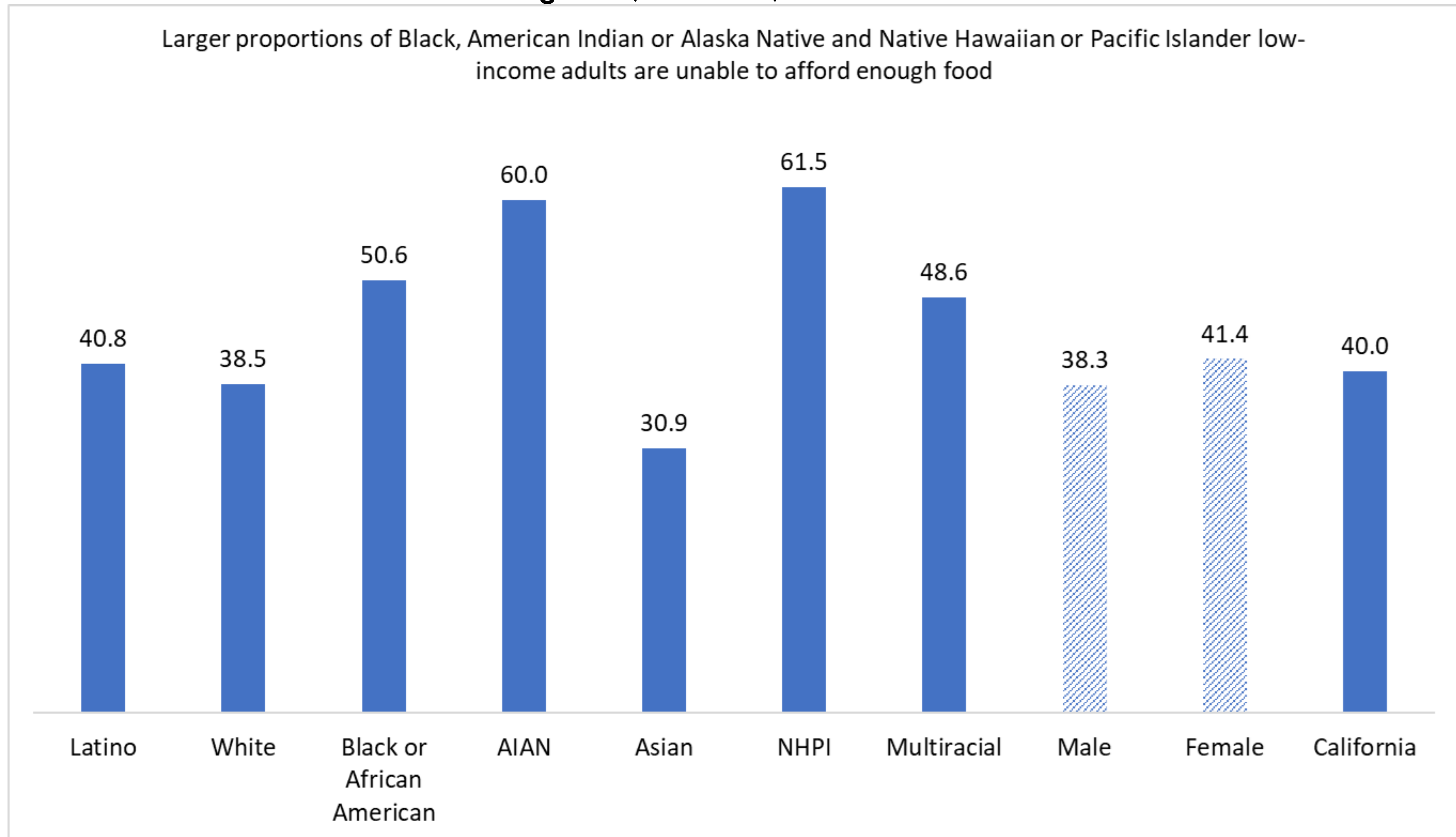
percentage of children in Fresno County with food insecurity (22.0 percent) is almost four times as high as in San Mateo County (5.9 percent).

Food Deserts and Swamps in a Fertile Landscape

Even before the COVID-19 pandemic, overall food insecurity in California was highest in the state's rural and agricultural regions (Imperial County in the south, and Trinity County in the north had the highest prevalence in 2019) but widely distributed across urban and suburban areas. [19] Of the estimated 2.7 million Californians who reside in areas marked by both low income and low access to healthy foods, 1.2 million—or 3.3 percent of the state's population— live more than one mile (in urban locales) or ten miles (in rural areas) from the nearest food store. [20] These areas are food deserts, where relatively few local food retailers offer healthier and affordable food options such as fresh fruits and vegetables, and residents may have limited means of transportation to more distant full-service grocery stores. Residents without a nearby supermarket are substantially less likely to have a healthy diet (25 to 46 percent less likely, depending on the measure). [21] Retail food environment data suggest that there are approximately four-and-a-half times as many fast-food restaurants and convenience stores as supermarkets and produce vendors in California, with the ratio ranging from about two in Del Norte and Sierra counties, to over six in Orange and Placer. [22] Communities with high densities of fast food outlets and convenience stores ("food swamps") are more likely to be impacted by high rates of obesity and hospitalizations among those with diabetes. [23-25]

One effective way to move levers in the food system in order to improve health equity is to provide nutrition assistance to people in need. [26] Not only do nutrition programs alleviate food insecurity, they also reduce poverty by freeing up more financial resources to go toward basic necessities such as housing, utilities, and medical care. [27] The CalFresh Program, federally known as the Supplemental Nutrition Assistance Program and administered by the California Department of Social Services, issues monthly benefits to low-income Californians that can be used to buy food at a wide variety of markets. [28] In 2020, 2.4 million households in the state received CalFresh benefits, up from 1.9 million in 2019. [29] However, the percentage of eligible people receiving benefits – approximately 70 percent statewide – is among the lowest in the nation, and only about 59 percent of California's working poor receive benefits. [30] Efforts at the local level to enroll eligible persons continue in the face of challenges including large county-to-county variations in administrative capacity and funding. [31]

Figure 2: Percentage of low-income adults who were unable to afford enough food, by race, ethnicity and gender, California, 2016-2020



Source: University of California Los Angeles, California Health Interview Survey; Note: Low income=less than 200% Federal Poverty Level; Adults=aged 18 and older; Office of Management and Budget (OMB)/Department of Finance race categories used; Latino category includes all race groups; AIAN=American Indian or Alaska Native; NHPI=Native Hawaiian or Pacific Islander. Data were pooled 2016-2020.

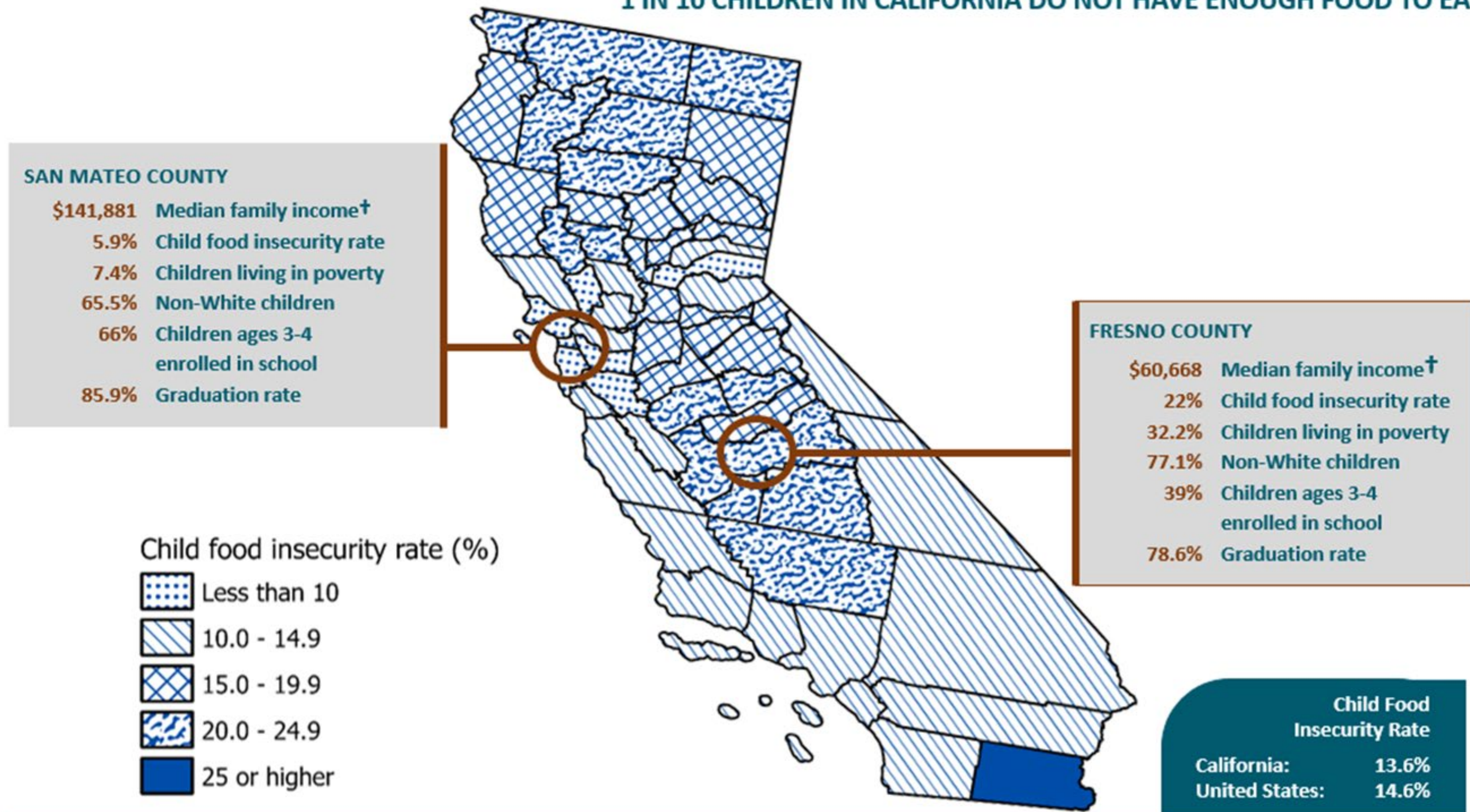


FIGURE 3: Child food insecurity rate: percentage of children under 18 years old who are food insecure, California, 2019.

Sources: Feeding America, Map the Meal Gap, 2019, https://map.feedingamerica.org/county/2019/child/California. U.S. Census Bureau, American Community Survey 2015-2019. Children Now, 2018 data in 2020-2021 California County Scorecard of Children's Well-Being. California Department of Education, Graduation Data, 2019-2020. †Median family income with own children under 18 years.

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Child Development and Education: Addressing Life Outcomes in Childhood

The basic foundations for lifelong health, prosperity, and well-being are formed in early and middle childhood, from birth to age 12. That understanding, recognized in policy, research, and clinical practice, means that educational and health disparities later in the life course can be reduced by focusing attention and resources on providing young children with the strongest possible foundations for future success. [1, 2] Early childhood development sets the stage for acquiring skills that directly affect physical and mental health – health literacy, self-discipline, the ability to make good decisions about risky situations, eating habits, and conflict negotiation. [3, 4] In fact, self-regulation in childhood has been shown to predict achievement , interpersonal behaviors, mental health and healthy living in later years. [5]

Getting a Head Start

Early investment in childhood education yields substantial rewards. The rate of return on a one-dollar investment is approximately 7 to 10 percent annually in the form of better outcomes in education, health, economic productivity, and reduced crime. Over a lifetime, the social rate of return on each dollar adds up to $60 to $300. [6] Benefit-cost ratios of a high-quality early childhood education have been estimated at 2:1 and 7:1 through early adulthood and middle adulthood, respectively, for every dollar invested. [7-9]

One of the most effective ways of supporting healthy childhood development is through high-quality infant and toddler care in the critical first years of life. Early childhood education programs and centers are a promising tool to advance health equity, by supporting the cognitive and social development of children in disadvantaged communities who are at risk of falling behind before they have even started kindergarten. [10] While parents are at work or school, young children can receive care in a variety of settings including the home, from relatives, friends or neighbors; in licensed child-care centers, preschools, and Head Start programs. [11-13] Fourteen percent of income-eligible infants and toddlers under age 3 are served by a subsidized program in California. [14] Factors behind this percentage include the lack of capacity of publicly-funded early childhood education programs to serve all eligible children, regional variation in access (e.g., families in less population-dense rural areas face particular challenges in finding care), and a lack of awareness of eligibility. About three in five low-income children ages 3-4 years are not enrolled in preschool or transitional kindergarten, including nearly three in five Latino and American Indian children regardless of income-level (**Figure 4**).

Third-Grade Reading Proficiency as a Predictor of Future Performance

When children lack early developmental and educational opportunities, the impacts are felt in educational performance measures later in childhood, such as reading proficiency. Despite overall improvement in third-grade reading standards in California, substantial gaps remain. For example, 36.3 percent of economically disadvantaged third-graders — those eligible for reduced-cost lunch programs—were reading below standard in 2018 to 2019, compared with 14.4 percent of higher-income 3rd graders. [15] Additional reading level gaps exist between boys and girls, and among racial and ethnic groups including Latino, Black or African American, American Indian or Alaska Native, and NHPI, compared with White and Asian 3rd graders (**Figure 5**). These early educational disparities may have long-lasting implications, exemplified by lower proportions of Latino, Black or African American, American Indian or Alaska Native and NHPI groups attaining a 4-year college degree compared to White and Asian American groups (**Figure 6**).

Similar disparities exist in high school graduation rates. In 2019, 85.8 percent of all California students graduated from high school within four or five years of entering ninth grade, up from 83.5 percent in the previous year. However, rates vary widely by racial, ethnic and social dimensions. African American, American Indian or Alaska Native, and Pacific Islander students; English learners, persons experiencing homelessness, students with disabilities, and foster youth each have markedly lower graduation rates. [16] Research suggests that dropouts are more likely than graduates to be unemployed, live in poverty, depend on public assistance, suffer poorer health, have higher rates of mortality, and are less likely to vote. [17]

Data on school climate – how connected students feel to the campus community, and how safe they feel in their learning environment – from the California School Climate, Health, and Learning Surveys have shown steady declines in perceived school safety and mental health (prior to the coronavirus pandemic), and increases in cyberbullying. [18] These findings indicate that more resources need to be devoted to fostering safe, supportive, and engaging schools.

Enforced losses of instruction time in the form of suspensions or expulsions are associated with greater academic problems, dropping out of school, and future involvement in the juvenile justice system. [19] In California, school suspension rates differ strongly by race and ethnicity, with Black or African American, and American Indian or Alaska Native students suspended at substantially higher rates than White students. [20] In 2018 to 2019, 92.2 Black or African American and 73.1 American Indian or Alaska Native students per 1,000 were suspended, in contrast to 29.8 White students per 1,000. [21]

Barriers and Disparities in K-12 Adult Education

The K-12 adult education-to-workforce pipeline in California served over 790,000 adult students in the 2019 to 2020 academic year. Barriers to employment experienced by this cohort include low literacy (56 percent), low income (44 percent), limited English proficiency (LEP)(35 percent), and cultural barriers (13 percent). [22] Approximately 19,000 of these adult learners were enrolled in a program designed to meet the needs of adults with disabilities. The racial and ethnic distribution of this population does not reflect that of the general population: Only 0.3 percent is American Indian or Alaskan Native, and only 0.2 percent Pacific Islander, suggesting that more can be done to connect racial and ethnic minoritized persons with disabilities to educational programs.

Roadmaps and Plans to Close Gaps in Child Development in California

Making California for All Kids

The California Health and Human Services Agency *Master Plan for Early Learning and Care* is a framework for the realization, by 2030, of the vision of all California children thriving physically, emotionally, and educationally in their early years, through access to high-quality early learning and care resources. [23] The Master Plan aims to unify a range of programs that serve children ages birth through five, and deliver equitable access to high-quality early learning and care by 1) expanding access to paid family leave; 2) consolidating child care programs, streamlining eligibility and enrollment, and strengthening workforce quality and sustainability; 3) providing three- and four-year-old children with access to high-quality preschools; and 4) eliminating bias and ensure equitable treatment for all children and families through better training and practices.

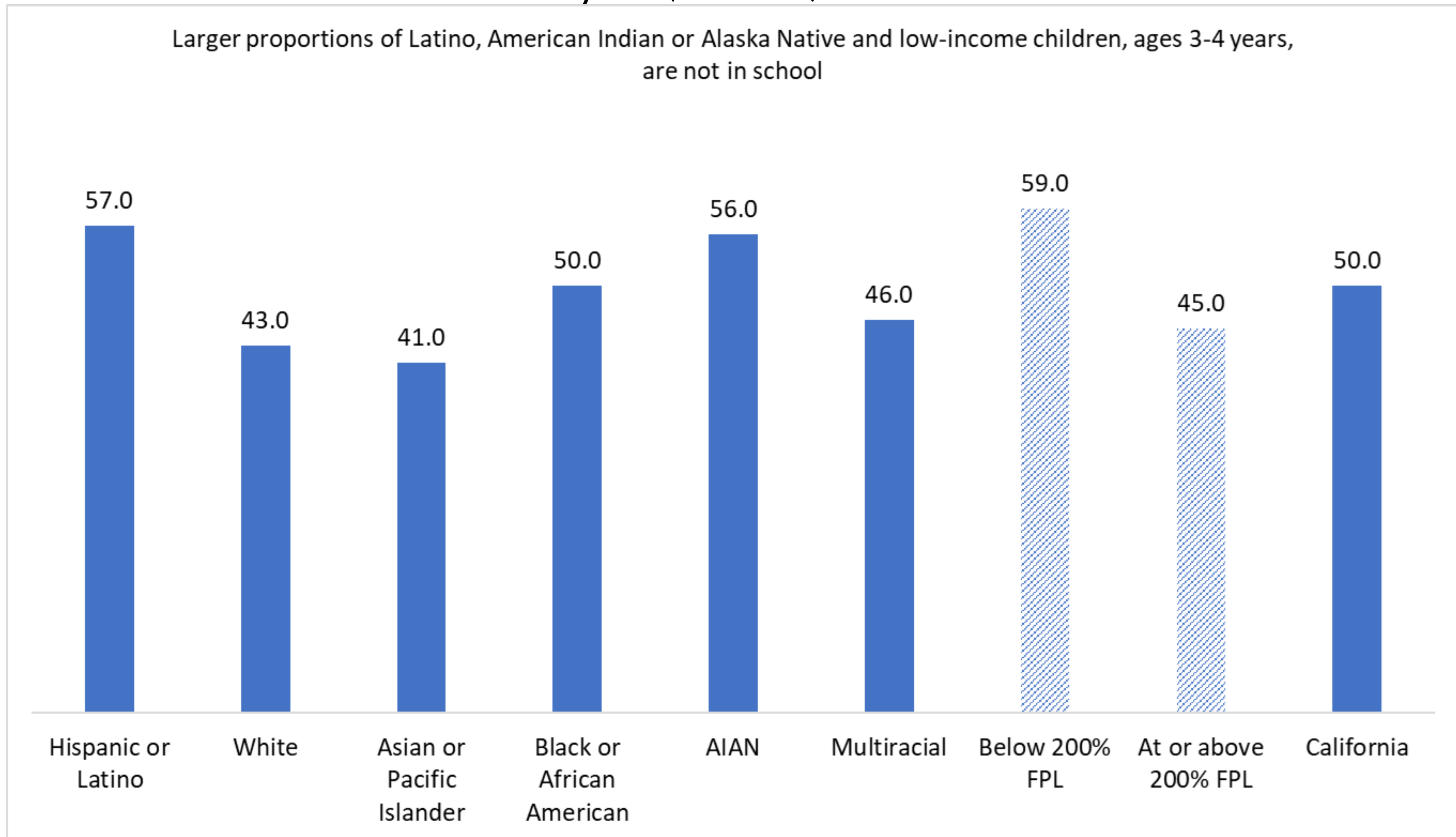
Adverse Childhood Experiences

Adverse childhood experiences (ACEs) encompass a set of categories of child abuse (physical, emotional, or sexual); neglect (physical or emotional); and household challenges (growing up with someone in the household who experienced incarceration, mental illness, substance dependence, parental separation or divorce, or intimate partner violence). [24] An accumulation of ACEs increases the likelihood of developing long-term health problems. [25] Individuals with four or more ACEs are more likely to report frequent mental distress, engage in risky behaviors like binge drinking and smoking, and suffer from chronic obstructive pulmonary disease, asthma, stroke, heart disease, and diabetes. [25] An estimate which considers eight ACE-associated health conditions suggests that ACEs cost California $112.5 billion annually, and may cost $1.2 trillion over the next 10 years. [24]

The prevalence of ACEs is strikingly disparate by race, ethnicity, educational attainment, and income level. In California, Black or African American, and Latino persons, were more likely to have four or more ACEs (20.6 and 18.0 percent, respectively) than their White and other race and ethnicity counterparts (16.4 and 10.8 percent, respectively). [25] Californians with a college or technical school degree had the lowest prevalence of ACEs and the lowest prevalence of having four or more ACEs compared to those with lower education levels. [25] Individuals in households with less income the past year had a higher prevalence of four or more ACEs (20.3 percent) compared to households with higher income. [25-27]

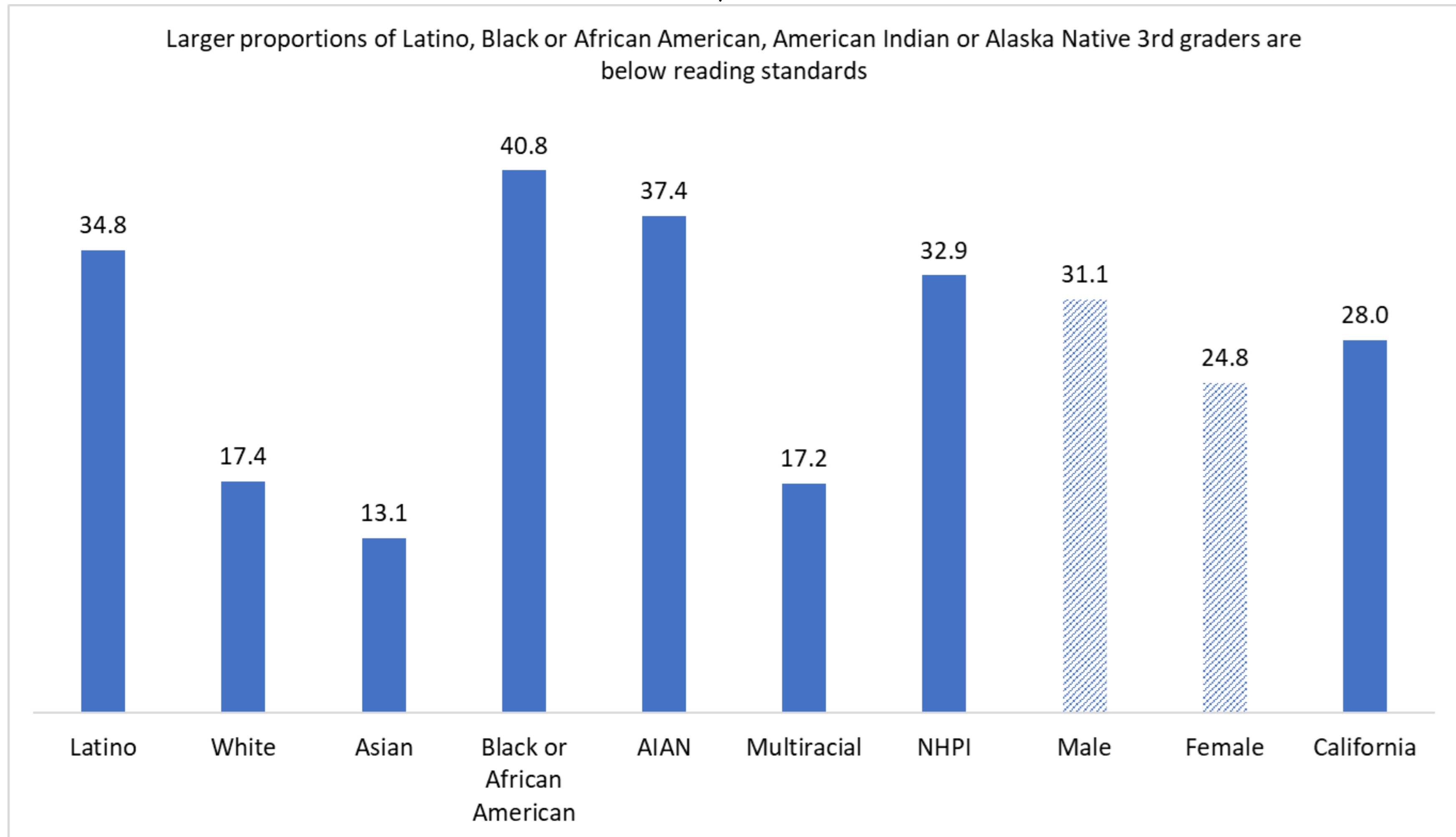
The California Office of the Surgeon General was established in 2019, with ACEs and toxic stress among its key priorities, and the goal of reducing them by half in one generation. [28] California is leading the nation in a statewide effort to screen for ACEs which includes reimbursing health care providers for screening Medi-Cal patients. [29, 30]

Figure 4: Percentage of children ages 3 to 4 years not enrolled in school, by race, ethnicity and 200% Federal Poverty Level, California, 2015-2019



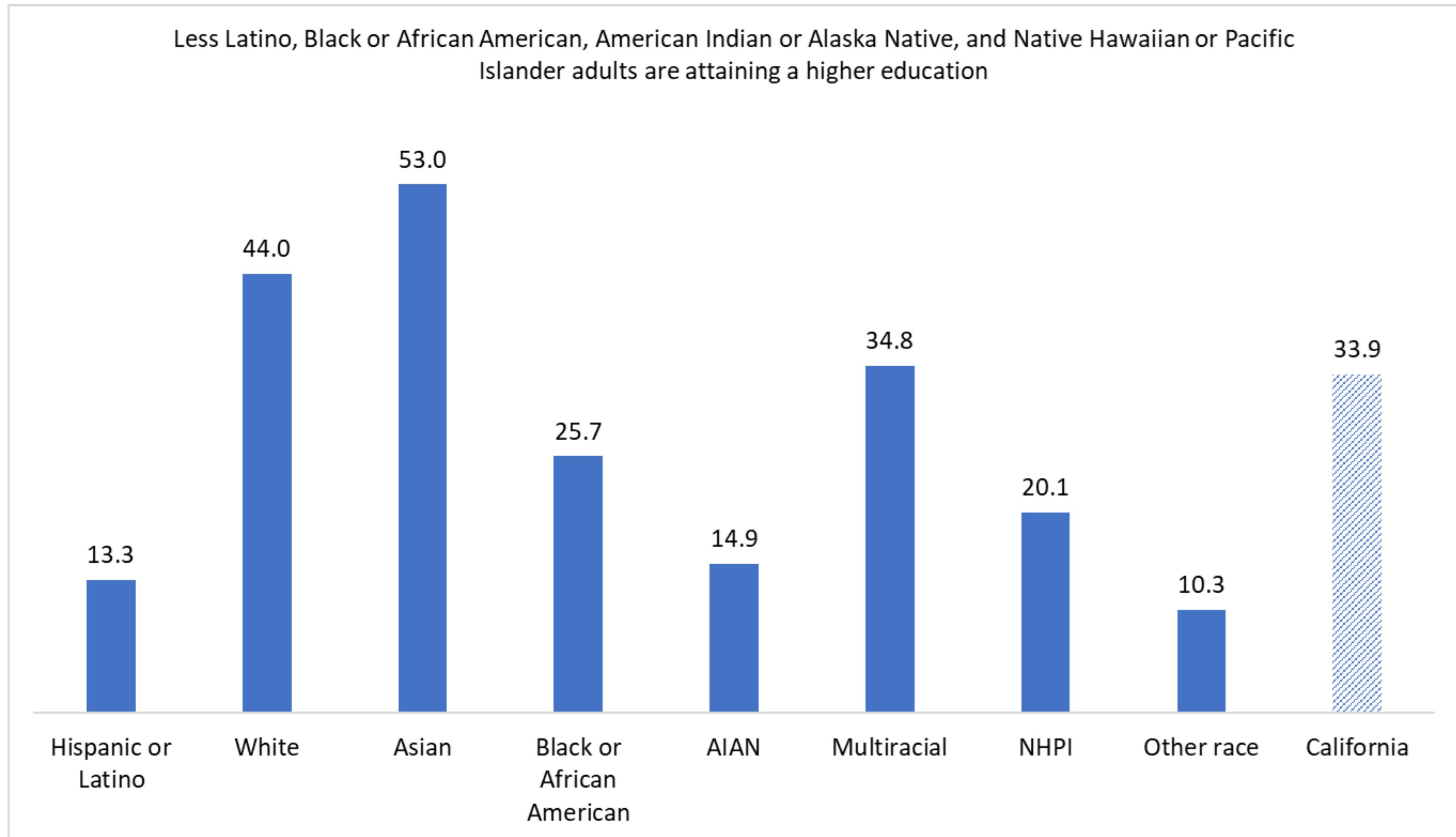
Source: U.S. Census Bureau, American Community Survey, 5-year estimate (2015-2019) analyzed by the Population Reference Bureau. Note: School=nursery, preschool or transitional kindergarten; data are for race alone and Latino origin of any race; AIAN=American Indian or Alaska Native; low-income=<200% federal poverty level (FPL). Data were pooled 2015-2019.

Figure 5: Percentage of 3rd graders who are below standard in reading by race, ethnicity and gender, California, 2018-2019



Source: California Department of Education, California Assessment of Student Performance and Progress. Reading standards portion of the English language arts/Literacy, Smarter Balanced Summative Assessments. Note: AIAN=American Indian or Alaska Native; NHPI=Native Hawaiian or Pacific Islander. Data were pooled 2018-2019.

Figure 6: Percentage of those attaining a bachelor's degree or higher by race and ethnicity, California, 2015-2019



Source: U.S. Census Bureau, American Community Survey, 5-year estimate (2015-2019). Note: Data are for race alone and Latino origin of any race; AIAN=American Indian or Alaska Native; NHPI=Native Hawaiian or Pacific Islander; In the American Community Survey, "Other race" is a residual category that represents the respondents who did not select any of the race categories shown in the figure above. Data were pooled 2015-2019.

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Housing: A Leading Social Determinant of Public Health

Housing stability, quality, and affordability play fundamental roles in impacting public health. [1] Persons who experience housing instability (e.g., move frequently, are behind on rent, live in an overcrowded home, face homelessness) are more likely to have poorer physical and mental health compared to those with stable housing. [2] Likewise, persons who reside in substandard housing (e.g., characterized by poor ventilation, pests, and exposure to lead paint or mold) are at increased risk for poorer health outcomes, compared to those with safe and higher quality housing. [3] In California, 43.8 percent of households have at least one of the following housing problems: incomplete kitchen or plumbing facilities, more than 1 person per room, and cost burden greater than 30 percent; and 25.9 percent have at least one of four severe housing problems: incomplete kitchen facilities, incomplete plumbing facilities, more than 1.5 persons per room, and cost burden greater than 50 percent. [4]

When Housing Becomes Unaffordable

For most individuals, the cost of housing is the largest single expense. When the cost becomes unmanageable, individuals may fall behind on rent or mortgage payments and have little or no disposable income. The lack of disposable income may force individuals to forego food, household utilities, or medical care. [5] For low- and middle-income Californians, the lack of affordable housing has necessitated stressful cost-related moves and unmet medical needs. [6] In California, the Housing Affordability Index – the percentage of households that can afford to purchase a median-priced home without exceeding 30 percent of their income, as recommended by lending institutions – has remained consistently low since 2013. By the second quarter of 2021, only 23 percent of Californian households could afford to purchase a median priced ($817,950) single family home, while 37 percent could afford to purchase a condominium or a town house ($585,000). Nationally, 50 percent of households could afford to purchase a home of either type. [7] Home ownership rates among Black or African American and NHPI adults remain the lowest in the state (41.3 percent and 39.5 percent, respectively), compared to White (65.3 percent) and Asian (59.3 percent) adults that have the highest home ownership rates (**Figure 7**). These findings, based on 2019 to 2020 data, [8] represent an improvement for Black or African Americans and a decline for NHPIs from 2015 to 2016 when estimated home ownership rates were 38.3 percent for Black or African Americans and 56.4 percent for NHPIs. [9]

Rents are rising rapidly while rental vacancy rates are declining. Approximately 53 percent of all renters and 80 percent of lower-income renters (earning 80 percent or less than the median income) are cost-burdened. [10] Households with high housing cost burdens are "shelter poor" in the sense that they have less to spend on other essentials, such as food, clothing, and health care, and are more likely to report that their children have only fair or poor health. [11] In California, Black or African American and Latino households are shouldering a disproportionately high burden of housing costs: 58.2 percent of Black or African American renters and 54.6 percent of Latino renters are cost-burdened, in comparison to 46.2 percent of White and 43.2 percent of Asian renters (**Figure 8**). These updated findings, based on 2015 to 2019 data, are similar to 2010 to 2014 data which found that an estimated 59.2 percent of Black or African American renters and 57.6 percent of Latino renters were cost-burdened. [9] Similar trends are observed for severely cost-burdened households. In 2015 to 2019, 33.1 percent of Black or African American renters and 27.2 percent of Latino renters were severely cost-burdened, compared to the state's average of 25.8 percent. [12] When historically disinvested communities experience gentrification, low-income renters can face displacement due to rising housing costs. According to one measurement method, over 10 percent of low-income Bay Area households (161,343) were in neighborhoods at risk of or already experiencing gentrification in 2018. [13]

Disparities in Crowded Housing

To manage rising housing costs, some residents may pack several individuals into small living quarters to save money. This is illustrated by the nearly 6.3 million Californians who live in overcrowded houses or apartments. [14] While there are various measurements of overcrowding, the most common is persons-per-room [15] and household crowding occurs when the number of residents exceeds the capacity of the household itself – at more than 1 person per room. [16][3] Household crowding is related to a number of adverse health outcomes including increased risk of infection from communicable diseases and higher rates of respiratory diseases. Additionally, household crowding among low-income individuals is linked to greater vulnerability of homelessness. [18]

There are striking disparities in household overcrowding by race, ethnicity, and income level. In California, Latino and NHPI persons have the highest rates of overcrowding (20.1 and 14.6 percent, respectively) compared to African American, multiracial, and White persons (4.7, 4.7, and 1.9 percent, respectively). Similar trends are observed for severe overcrowding, defined as

[3] In contrast to household crowding which measures the number of individuals within a single residence, household density refers to the concentration of households in a geographic area. While many of the densest neighborhoods in the United States are in New York City, nine of the top 10 most crowded neighborhoods are in Southern California. [17]

more than 1.5 persons per room. Latino and NHPI people have the highest rates of severe overcrowding (7.0 and 4.2 percent, respectively) compared to multiracial individuals and White persons (1.5 and 0.6 percent, respectively). [19] Asian and Latino persons are also more likely to live in multigenerational households (29 and 27 percent, respectively) compared to White people (16 percent) [20] which are more likely to be overcrowded. [21] As expected, income is also related to household crowding. According to 2014 to 2018 Census Bureau data, householders in the U.S. who made less than $15,000 had the highest rates of household crowding which progressively decreased as householder income increased. [17]

Homelessness

The barriers to stable and affordable housing result in the ultimate plight of the crisis: homelessness. Twenty eight percent of the nation's homeless population live in California [22] which is 2.3 times California's share of the nation's population (12 percent). [23, 24] California has one of the highest rates of homelessness in the country, at 41 persons per 10,000 as well as the highest percentage of homeless individuals residing in outdoor locations (70 percent). On a single night in January 2020, 161,548 Californians were counted as homeless. [22] This is likely a substantial underestimate of the magnitude of homelessness bearing in mind that over the course of the year, the number of people experiencing homelessness could be two or three times higher than the point-in-time count. [25]

During the 2018-19 school year, 269,269 K-12 students (4.3 percent) experienced some form of homelessness. Homelessness disproportionately affects Latino and Black or African American K-12 students (70 and 9 percent of the student population experiencing homelessness, respectively), as they are only 54 percent and 5 percent of the general student population, respectively. Homelessness takes a notable academic toll as students experiencing severe housing insecurity have higher chronic absenteeism (25 percent) as well as lower graduation rates (70 percent) and college readiness rates (29 percent) compared to their housed peers (12, 86, and 52 percent, respectively). [26]

Homelessness is associated with poor physical and mental health including higher rates of both chronic and communicable diseases. [27] A study conducted across 15 states found that unsheltered individuals were more likely to report conditions related to physical health (84 percent), mental health (78 percent), and substance abuse (75 percent) compared to their sheltered counterparts (19, 50, and 13 percent, respectively). [28] Homelessness has detrimental effects which can be particularly acute for children and adolescents, including severe trauma, developmental delays, as well as risks to health and safety. Children and adolescents experiencing homelessness are

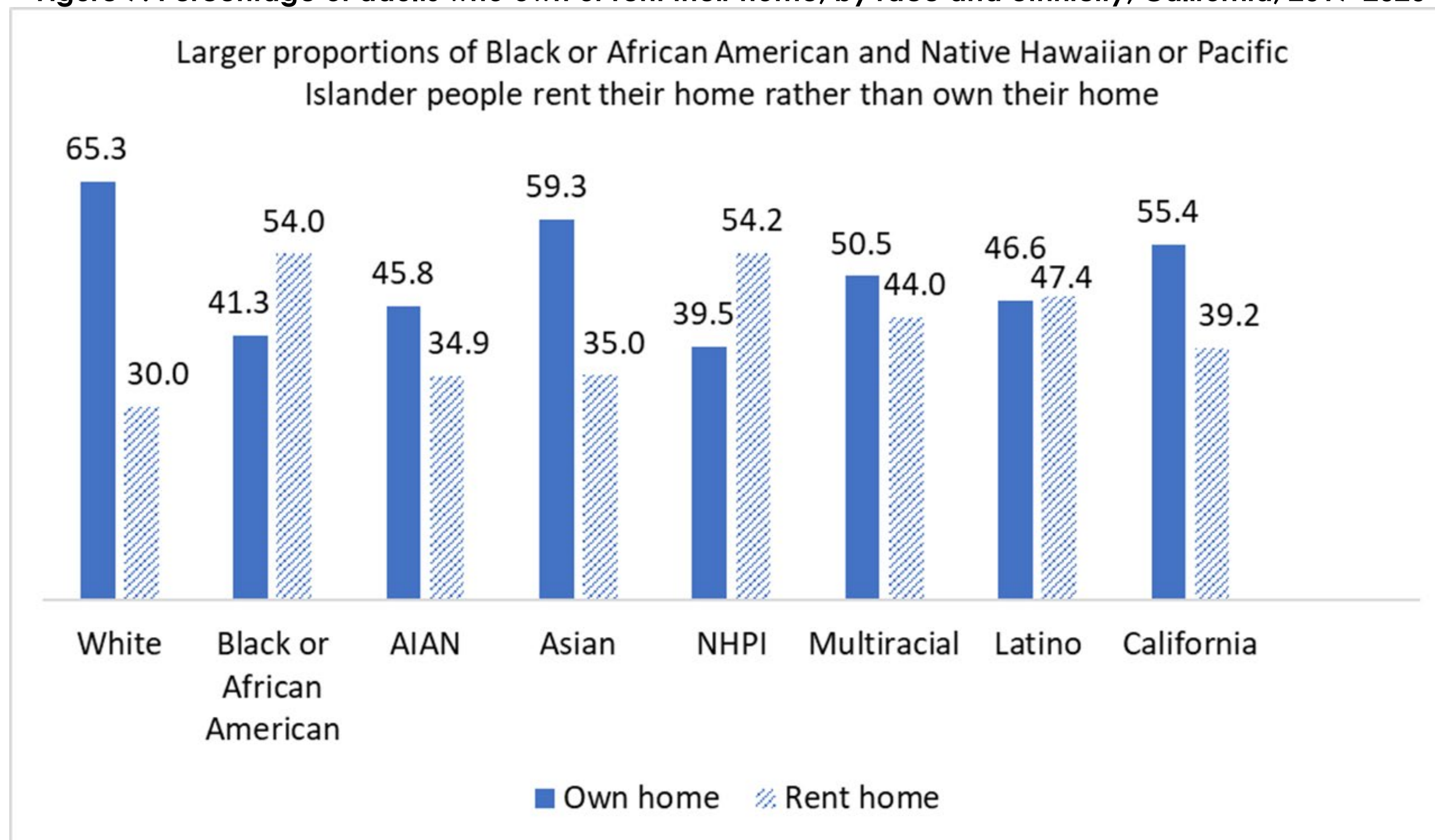
more likely to have physical and mental health problems, hunger, malnutrition, and difficulties at school. [29]

Key Drivers of the Housing Crisis and Next Steps

As previously discussed, California is in the midst of a housing crisis with unaffordable, crowded housing, and one of the highest rates of homelessness in the country. In order to resolve California's housing crisis, the drivers and consequences of housing instability, namely supply shortages and widespread homelessness, must be addressed.

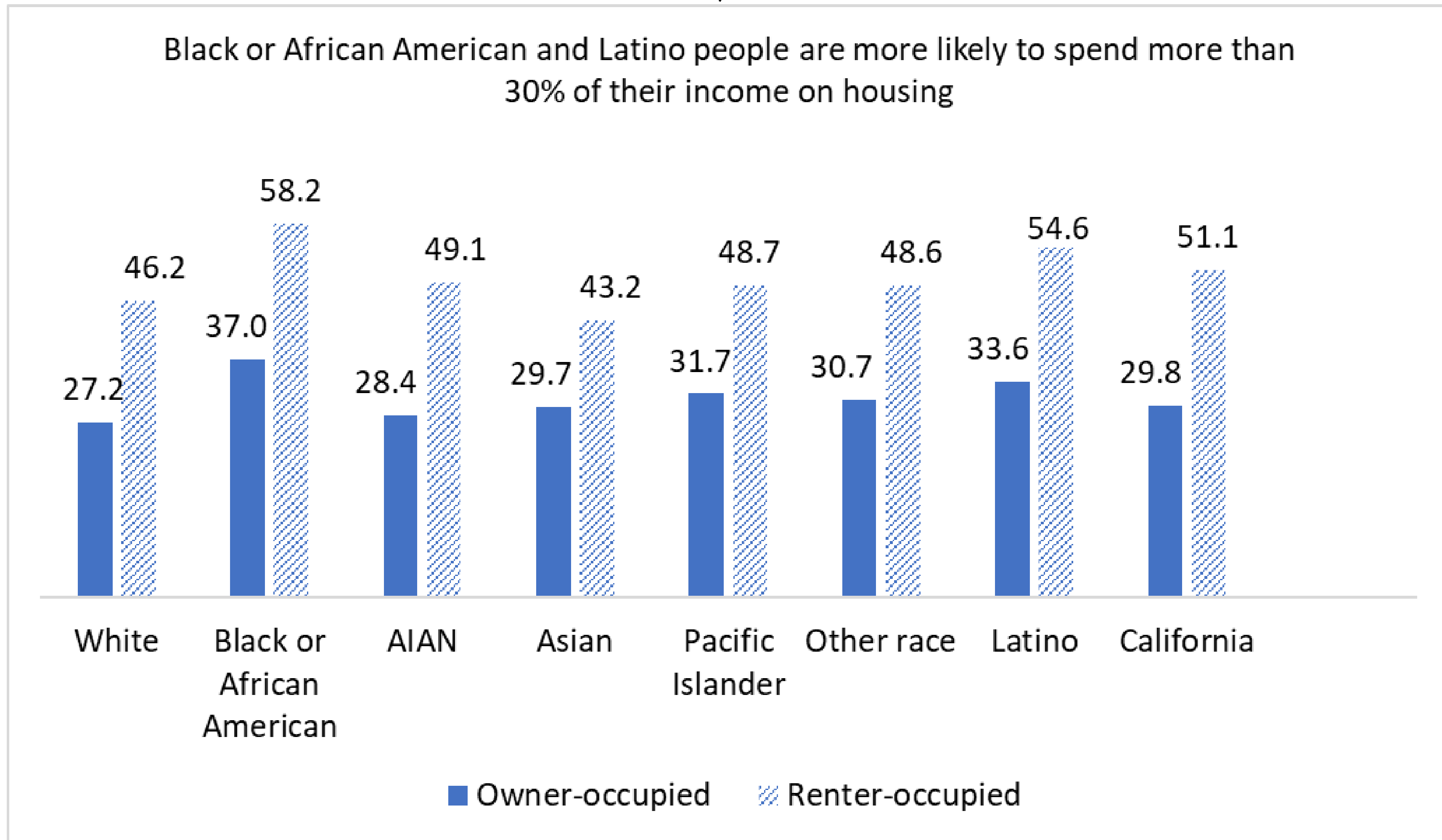
A shortage of available housing units exists throughout the entire housing supply chain, due to a high proportion of current units already occupied to labor shortages to create new housing. In 2018, California's 4.0 percent rental vacancy rate was the third lowest in the nation and notably lower than the nationwide rate (6.1 percent). California's homeowner vacancy rate (1.2 percent) was comparable to the nationwide rate (1.5 percent). Further exacerbating the housing shortage problem are multiple barriers for those who want to build new homes. Land in California is more expensive compared to the rest of the nation and the prices are still rising. Between 2012 and 2017, California accounted for 14 of the 20 counties nationwide with the largest percentage increases in land prices. Furthermore, new construction permits are meeting neither current demand, nor the backlog of 2.3 million housing units (as of 2017). In order to keep pace with the growing population, 180,000 new homes are needed each year, but only 104,000 residential permits were issued in 2018. Finally, labor shortages are a concern, with the construction industry unemployment rate falling from 14.9 percent in 2012 to 2.7 percent in 2019. [23] There is an urgent need for both state and local government to take action to address the housing and homelessness crises including earmarking funds, updating laws, and improving coordination among community members. A more securely and affordably housed California is a healthier California.

Figure 7: Percentage of adults who own or rent their home, by race and ethnicity, California, 2019-2020



Source: University of California Los Angeles, California Health Interview Survey. Note: AIAN=American Indian or Alaska Native; NHPI=Native Hawaiian or Pacific Islander; Adults=aged 18 and older; OMB/Department of Finance race categories used; Latino category includes all race groups; data for 'have other arrangement for home' not shown. Data were pooled 2019-2020.

Figure 8: Percentage of adults who are housing cost burdened, by homeowner status, race and ethnicity, California, 2015-2019



Source: U.S. Department of Housing and Urban Development, Comprehensive Housing Affordability Strategy (CHAS) data, data were pooled 2015-2019. Analysis by CDPH, Office of Health Equity. Note: AIAN=American Indian or Alaska Native; Cost burdened is defined as households spending more than 30% of monthly household income on housing costs.

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Environmental Quality: The Inequities of an Unhealthy Environment

The environment – the air we breathe; the water we consume; the soil that nourishes the food we eat; and all the natural and human-made conditions of the places we live, work, learn, and play – has a profound impact on the health of all. Yet low-income families, communities of color, and other people who are underserved, are disproportionately subjected to environmental perils that have been causally linked to epidemic rates of various respiratory problems, including bronchitis, emphysema, asthma, and other diseases, disabilities, and chronic health conditions. [1] Pollution burdens tend to be high in California's Central Valley, where Latino and other non-White persons make up a large proportion of the population (**Figures 9A, 9B**).

Many California communities suffer from poor air quality. Seven Californian cities are among the top ten most polluted cities in the nation by ozone, six by year-round particle pollution and six by short-term particle pollution. [2] Previously, seven California cities were in the top ten by year-round air pollution and also by short-term particle pollution based on 2018 data. The state's smoggiest cities are also the cities with the highest densities of people of color. [3] The disproportionate exposure is further concentrated in particular neighborhoods. Black or African American, Latino, and Asian people are exposed to PM 2.5 pollution that is 43, 39, and 21 percent higher, respectively, than for White people based on Census tract-level data. Low-income households are also at higher risk; the lowest-income households in California are in communities where PM2.5 pollution is 10 percent higher than the state average. [4] A 2019 study in eight California cities that were heavily impacted by historically discriminatory lending practices, also known as redlining, found that the risk of asthma-related emergency department visits is about 40 percent higher among residents of "hazardous" (redlined) neighborhoods as compared to residents of the "best" neighborhoods. [5]

Climate Change Threatens Widening Disparities

Climate change poses significant risks to the health and well-being of all Californians today and for generations to come, according to the Fourth National Climate Assessment, Volume 2, released in 2018. Extreme weather and climate-related events are predicted to damage infrastructure, ecosystems, and social systems, and exacerbate economic inequality. Low-income and communities that have been marginalized have less capacity to prepare for and cope with such events. [6]

Responding to climate change through public health prevention and preparedness measures can help reduce existing health disparities and create

opportunities to improve health and well-being across multiple sectors including agriculture, transportation, and energy. [7]

Children Are Disproportionately Affected

It is well established that children are more susceptible to environmental pollutants than adults, because their nervous, immune, digestive, and other bodily systems are still developing. Moreover, children eat more food, drink more fluids, and breathe more air relative to their body weights, compared to adults. [8] Exposure to air pollution is linked to infant mortality as well as childhood respiratory diseases and cancers. Furthermore, individuals exposed to air pollution prenatally and in early childhood are more likely to develop adverse health conditions later in life. [9] Studies have found that air pollution can harm children while they are still in the womb: a large study using California birth records found that increased maternal exposure to air pollution was associated with higher rates of preterm births. [10] Exposure to high levels of air pollutants, including indoor air pollutants and secondhand smoke, increases the risk of premature death, respiratory infections, heart disease, and asthma. [11]

Low-income households and communities of color are more likely to have neighborhood characteristics associated with worse air quality (e.g., residential location near busy roadways). [12] Compared to children in general who are already vulnerable to environmental pollutants, the children in these neighborhoods are at an increased risk of chronic respiratory conditions. Black or African American children are two and a half times more likely to have asthma and five times more likely to be hospitalized for asthma compared with White children. [13] Furthermore, Puerto Rican children are three times more likely to have asthma and Latino children are 40 percent more likely to die from asthma when compared to White children. [14] In 2020, 22.2 percent of California children missed one or more school days in the last 12 months due to asthma. [15]

Non-White populations are more likely to live in high-pollution burden areas

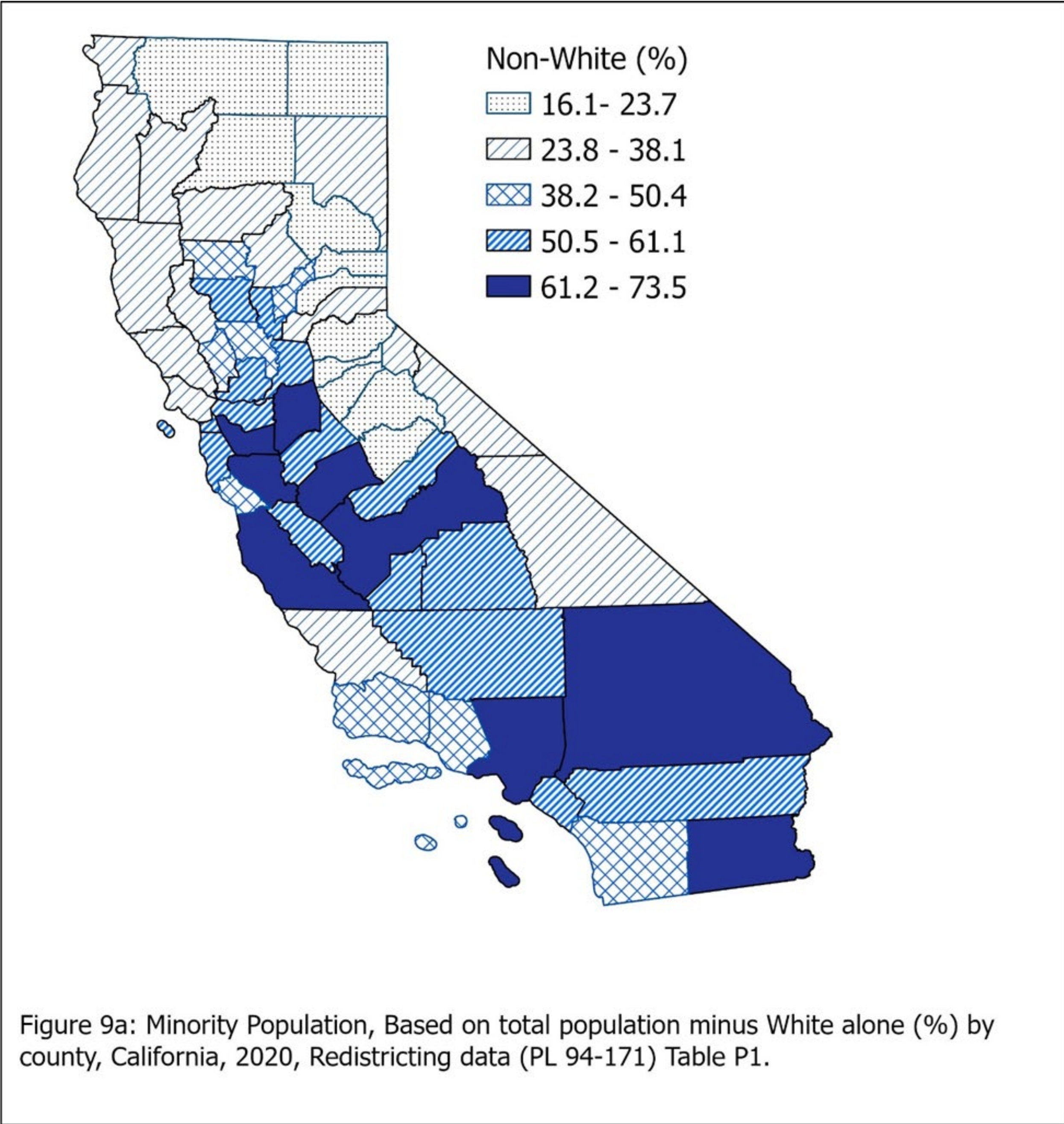

Figure 9a: Minority Population, Based on total population minus White alone (%) by county, California, 2020, Redistricting data (PL 94-171) Table P1.

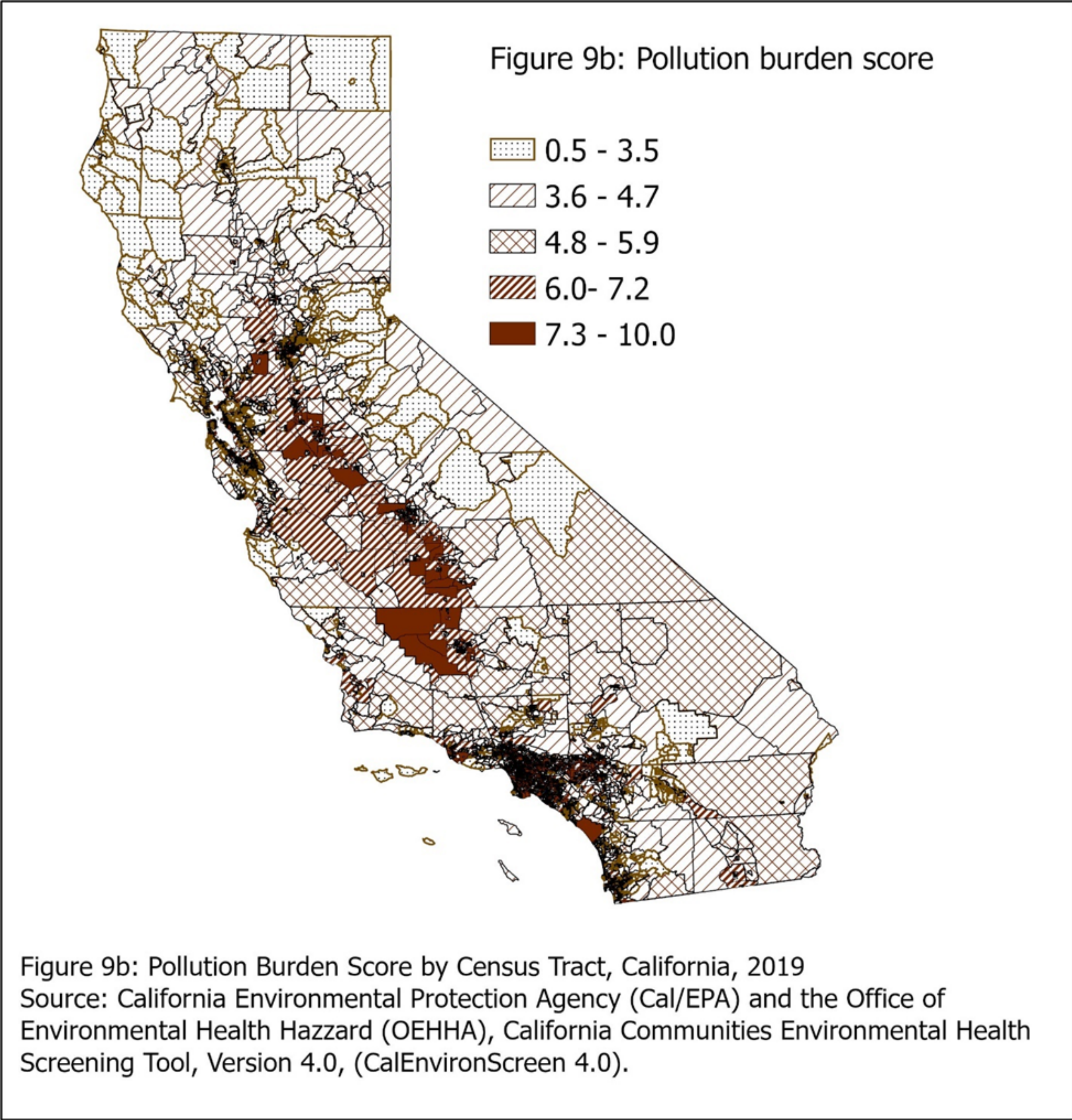

Figure 9b: Pollution Burden Score by Census Tract, California, 2019
Source: California Environmental Protection Agency (Cal/EPA) and the Office of Environmental Health Hazzard (OEHHA), California Communities Environmental Health Screening Tool, Version 4.0, (CalEnvironScreen 4.0).

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Built Environment: Healthy Neighborhoods, Healthy People

The built environment consists of human-designed and constructed surroundings, including transportation networks (e.g., streets, freeways, sidewalks), buildings (e.g., houses, schools, offices, stores, hospitals, factories), and recreational amenities (e.g., parks, playgrounds). How the built environment is prioritized and designed impacts quality of life, physical and mental health, and social cohesion. For example, the health consequences of traffic-intensive development and transport patterns include higher levels of air pollutants which impact incidence and severity of respiratory symptoms, stress-related health problems and other physical ailments associated with commuting. [1] Additionally, families living in car-based transportation regions tend to spend a higher proportion of their income on transportation (**Figure 10**), putting strain on the ability to pay for other essentials such as food, health care, and education. The built environment also influences how healthy food is accessed. Neighborhoods with greater proportions of low-income racial and ethnic minoritized residents tend to have fewer grocery stores and less access to fresh fruits and vegetables than higher-income neighborhoods. [2] Many of the neighborhoods that lack healthy food outlets also lack safe places to be active, including walkable streets, bike paths, parks, and recreational facilities. [3]

Active Transportation

California's land use and transportation systems reveal key areas of health inequity. Traffic-related injuries and deaths disproportionately impact older adults, children, communities of color, and low-income communities. [4] In contrast, people who live in highly walkable and safe communities, with easy access to green space and active transportation options tend to have higher levels of physical activity and less obesity (**Figure 11**). [5, 6] Investing in neighborhood safety improvements that support active transportation (i.e., walking, biking) may help to reduce inequities. Safety improvements include providing sidewalks, bike lanes, bike paths, marked crosswalks, and crossings at traffic lights.

In addition to advancing health, [7] there are important benefits to promoting active transportation. Replacing motorized trips reduces greenhouse gas emissions that contribute to climate change. [8-10] The Integrated Transport and Health Impacts Model developed by CDPH found that in the San Francisco Bay Area, an increase in daily walking and biking per capita from 4 to 22 minutes reduced cardiovascular disease and diabetes by 14 percent, and decreased greenhouse gas emissions by 14 percent. [10] Since 2013, the Active Transportation Program in the California Department of Transportation (Caltrans)

has worked to increase active transportation, ensuring that disadvantaged communities are included in this effort and helping to achieve greenhouse gas reduction goals. [11, 12] Caltrans and CDPH also support the Safe Routes to School Program to encourage students to commute to school through walking or bicycling by improving safety of common routes to school and promoting safe pedestrian behaviors. [11, 12] The percentage of children and teens walking, biking, or skating home from school in California increased from 34.9 percent in 2018 to 43.9 percent in 2019. [13]

Parks and Greenspace

Parks and greenspace are vital to community health. [14, 15] For example, researchers followed 3,173 children in Southern California over eight years and found that the children who lived closer to parks had lower rates of obesity as adults than those who did not. [16] A comprehensive review of the literature found that greenspace provides protective health effects for lower income neighborhoods compared to more affluent neighborhoods. The authors also found that the type of greenspace matters. Public space such as parks impacted health outcomes in lower income communities more than green land cover. [17] However despite these protective effects, parks have been shown to be underused [18], and more so in low-income communities. [18, 19] Presence of parks in low-income areas may not be enough to improve park use, as the social attributes impact whether the space is utilized. [20] In fact, Latino, Asian and NHPI people are more likely to use parks for social interactions. [18] Another possible reason that neighborhood parks are underutilized is that they are often geared toward youth. In order for all ages to benefit from neighborhood parks, more features such as sitting areas and walking loops for older adults may need to be created. [18, 21] Parks may be an avenue to promote equity in California. It is essential to incorporate community-based efforts to increase use of parks not only for recreational purposes for all ages but for socialization to improve health and wellbeing.

THE BURDEN OF TRANSPORTATION COST RELATIVE TO INCOME IS HIGHER IN RURAL COUNTIES OF CALIFORNIA

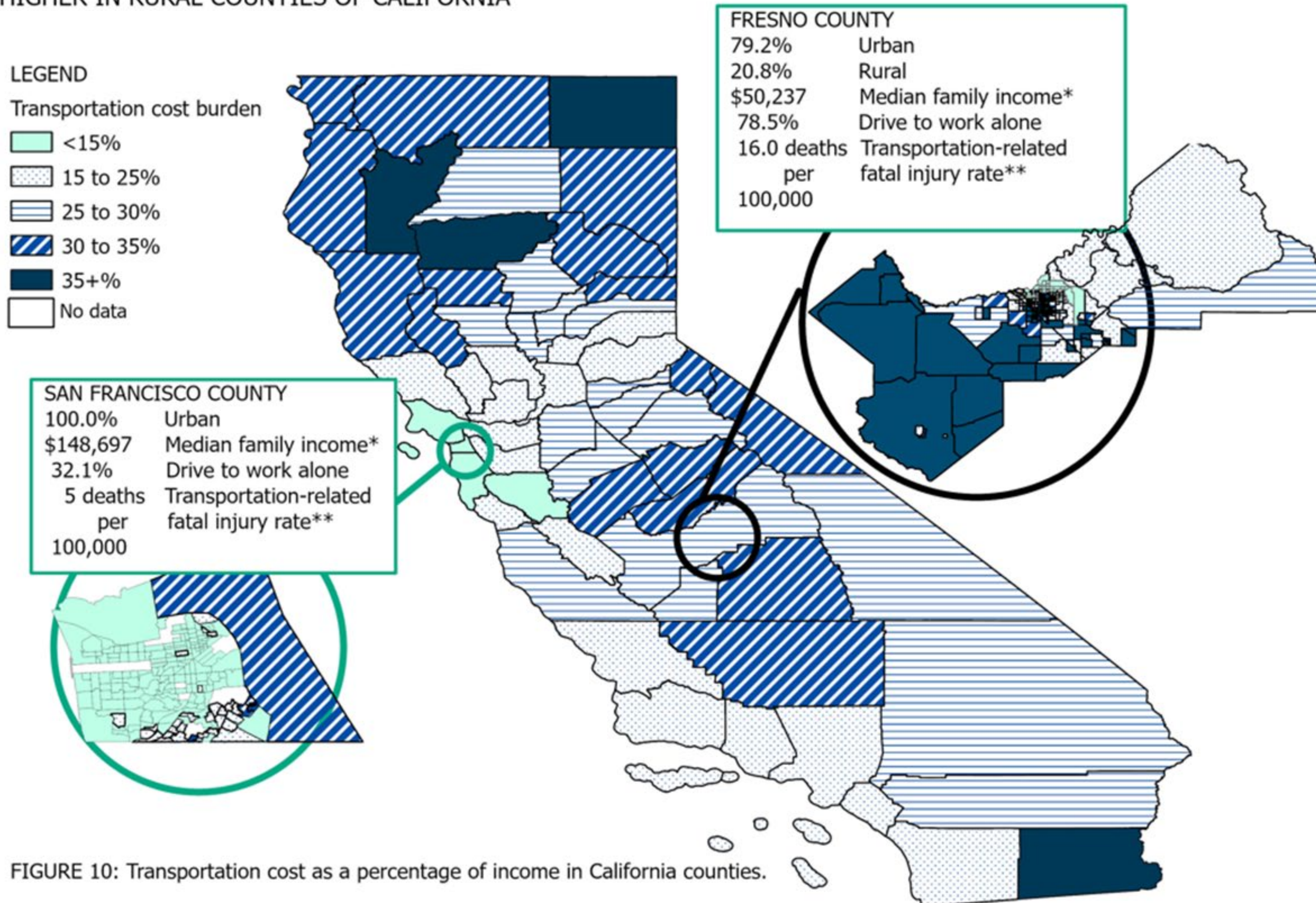
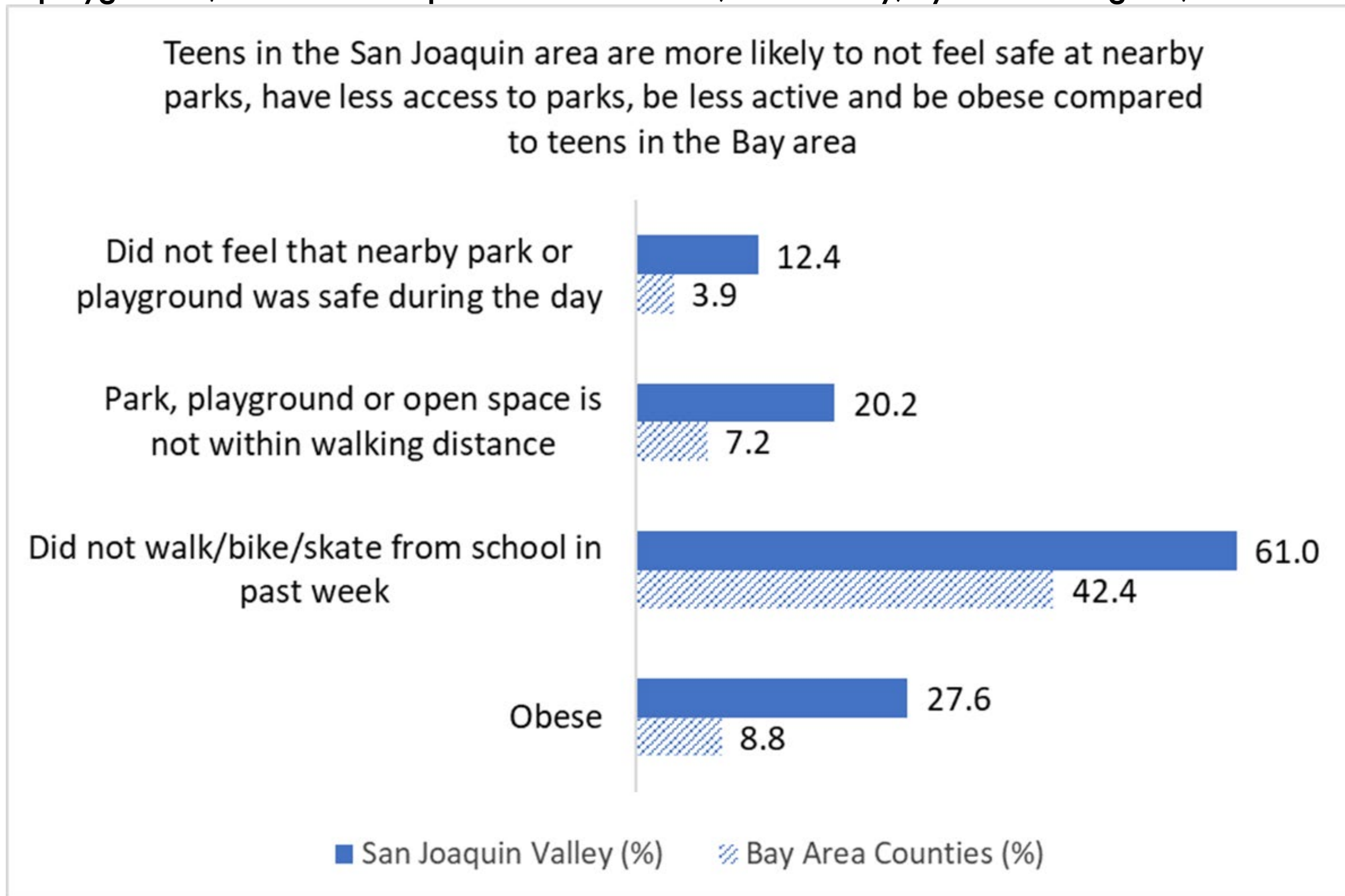


FIGURE 10: Transportation cost as a percentage of income in California counties.

Sources: Center for Neighborhood Technology, Housing and Transportation (H+T) Affordability Index, 2019, Census Bureau, American Community Survey, 5-year estimates 2015-2019 (income, drive to work); *Median family income with own Children under 18 years. **University of Wisconsin, Population Health Institute's County Health Rankings, 2015-2020 (transportation-related fatal injury rate), https://www.countyhealthrankings.org; University of California Los Angeles, California Health Interview Survey, 2020 (rural/urban).

Figure 11: Percentage of teenagers who reported not feeling safe at or not having access to nearby parks or playgrounds, no active transportation from school, and obesity, by selected regions, California



Source: University of California Los Angeles, California Health Interview Survey. Note: Teenagers aged 12-17 years; Did not feel that park or playground was safe during the day (2012-2019); Park, playground or open space is not within walking distance (2013-2018); Did not walk/bike/skate from school in past week (2018-2019); obesity (2019-2020).

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Health Care Access and Quality of Care: Narrowing the Gaps

Access to health insurance ranks as one of the leading health indicators of the federal government's Healthy People 2030 initiative. [1] Its objective is to have 92.4 percent of all Americans under 65 years have health insurance. [2] In 2019, approximately 12 percent of Americans under the age of 65 years did not have any form of health insurance. [2] Among racial and ethnic groups, the national proportions for those with health insurance were notably different. In 2019, Latino and American Indian or Alaska Native people under age 65 years had the highest uninsured rates in the U.S., 20.0 percent and 21.7 percent, respectively. [3] In California, an estimated 10.5 percent of Latino persons under age 65 were uninsured in 2020 - substantially higher than the 3.8 percent uninsured among White persons in the same age group (**Figure 12**). In fact, from 2011 to 2020, the uninsured proportion in the Latino population has been consistently higher than other racial and ethnic groups in California. [4] Significant racial and ethnic disparities in insurance coverage in California persist, due in part to cultural and linguistic barriers to expanded access to insurance, and to ineligibility under federal law. [5, 6] A projected 1.3 million undocumented California residents under 65 years, and an additional 30,000 undocumented older persons are uninsured. [5, 7]

Implementation of the Affordable Care Act (ACA) provided expanded access to health insurance for most people. Even though undocumented immigrants were excluded from the ACA's main provisions, California offered different forms of health insurance to some undocumented immigrants, through locally managed health plans such as Healthy San Francisco or My Health LA. Additionally, Medi-Cal, which offers low-cost or free health care coverage to qualified low-income persons, was expanded to include low-income undocumented children and young adults. [8] Twenty-four percent of the population in California in 2020 was covered by Medi-Cal. [9] According to Department of Health Care Services (DHCS) data reported in August 2021, 49.4 percent of Medi-Cal certified eligible persons are Latino. [10] Covered California is the state health insurance marketplace where residents can shop for health plans. Of the 1.5 million Covered California enrollees as of December 2020, 27.1 percent are Latino, [11] a percentage similar to the previous legislative report which documented 27.7 percent of Covered California enrollees as Latino people. [11] The American Rescue Plan Act of 2021, also called the COVID-19 Stimulus Package, offers additional premium subsidies for coverage purchased through the exchange and it is projected that these subsidies will benefit 1.6 million Californians. [5]

Expanded access and use of health insurance is encouraging because data at the national level have shown that insurance coverage increases people's

ability to obtain a usual source of care and thus improves access to disease management programs and urgent health care services. [12] In 2019 to 2020, 13.7 percent of Californians did not have a usual place to go when they were sick or needed preventive care or advice, and levels of coverage varied substantially by race, ethnicity and English proficiency. [13] Black or African American (90.4 percent) and White (90.1 percent) persons were more likely to have a usual source of care than Latino persons (82.1 percent). [14] Furthermore, compared to Latino persons with LEP (speak English less than very well; 75 percent), Latino people proficient in English were more likely to have had a usual source of care (80.6 percent). [15]

The ACA provided avenues to address health disparities linked to cultural and linguistic barriers. For example, the ACA expanded research on health and health care disparities and created the Patient-Centered Outcomes Research Institute (PCORI) to oversee studies that examined differences in patient outcomes among racial and ethnic minoritized groups. As of 2021, PCORI funded 316 research projects which are specific to racial and ethnic minoritized groups [16] as well as 105 comparative clinical effectiveness research studies to address disparities [17]. The ACA also expanded grant programs to attract and retain health professionals from diverse backgrounds and directed funds to encourage service in underserved areas. The ACA provided $11 billion to support and expand community health centers which are an essential safety net for low-income and other populations that have been marginalized as they provide health care regardless of an individual's ability to pay and are often located in underserved areas. [18] Furthermore, the ACA provided support for the development and dissemination of curricula to promote cultural competency and supported a variety of culturally appropriate prevention and education initiatives.

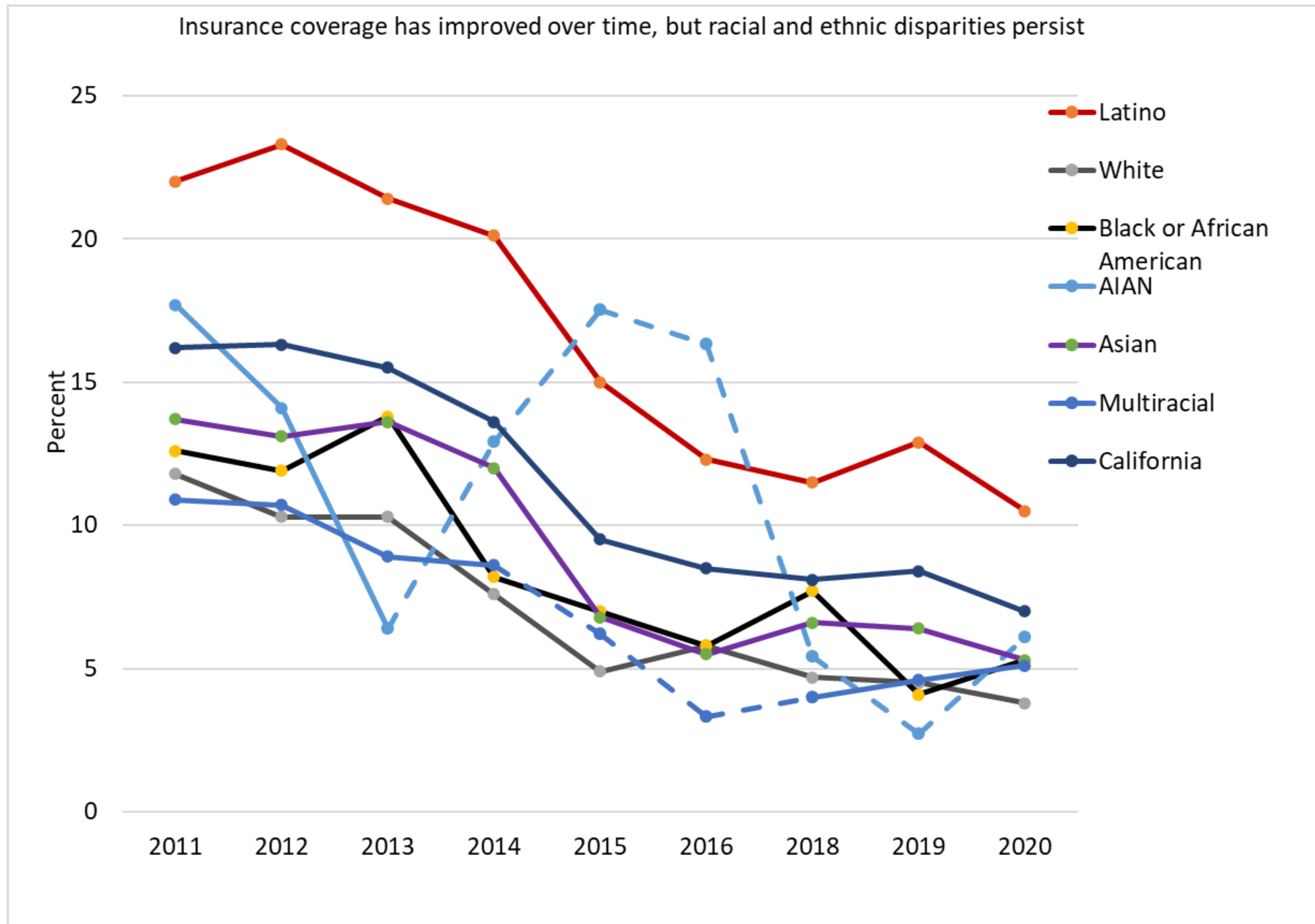
California has led the effort in developing and implementing contract requirements, laws and regulations to ensure access to culturally and linguistically appropriate care. The Health Care Language Assistance Act of 2003 (Senate Bill 853, Chapter 713, Statutes of 2003) was the first of its kind in the nation. This law extended the same protections that were offered to Medi-Cal enrollees to commercial insurance enrollees by requiring health plans to collect data on enrollee race, ethnicity and language, and implement interventions, including interpreter services and translated materials. The passage of Assembly Bill 635 (Atkins, Chapter 600, Statutes of 2016) Medical Interpretation Services, allowed for Medi-Cal reimbursement for interpreter services which increased incentives to improve language access. Despite the passage of these language access laws, access continues to be uneven. This is due to how much leeway state regulations give plans in determining how to collect data on race, ethnicity and the need for language assistance.

Equal Access Is One Piece of Health Equity

Having insurance does not address whether access to health care is affordable for those with low-incomes. [6, 19] The average cost of a family health insurance plan in California is nearly $20,000 per year which is almost one-third of the state's median family income. The average deductible for a California family exceeds $3,000, while the average co-pay for a physician office visit is $25. [20] Furthermore, access to health care does not ensure that everyone receives appropriate or high-quality care at the right time. The California Health Care Foundation published a report titled, '*Quality of Care: Providers*' in 2021 that showed that California's ambulatory surgery centers fared worse than the national average for three quality measures in 2019: 1) recommended follow-up for a normal colonoscopy; 2) improvement in visual function after cataract surgery; and 3) length of stay in emergency departments. [21]

Major disparities in the quality of care also exist across the nation. If every state achieved the high-quality levels achieved by the top-performing states, it is estimated that 91,000 premature deaths would be avoided, 10.5 million fewer adults would seek care in emergency departments for non-emergent conditions, and tens of millions of adults and children would receive timely preventive care. The Commonwealth Fund ranks all the States on quality of health care costs, health outcomes and health disparities. [19] While California's overall rank improved from 23rd at baseline, 2017 to 2018, to 19th in 2020, its prevention and treatment rank worsened, dropping from 28th to 44th.

Figure 12: Percentage of people under 65 years without health insurance, by race and ethnicity, California, 2011-2020



Source: University of California Los Angeles, California Health Interview Survey, 2011-2020. "Type of current health insurance coverage source (under age 65) by race/gender." Note: Dashed line represents statistically unreliable data. OMB/Department of Finance race categories used; Latino category includes all race groups; AIAN=American Indian or Alaska Native.

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Clinical and Community Prevention Strategies: The Power of Prevention

Prevention in health is a broad concept. It can occur in health care in a range of settings and modalities, including public health strategies to prevent the occurrence of a disease (e.g., anti-smoking campaigns), clinical strategies to detect the early stages of disease (e.g., cancer screening), or clinical interventions to prevent complications of an existing disease (e.g., care management plans for diabetes). Prevention also includes community education about risky or healthy behaviors, and changes in the environmental or social conditions that have an impact on health. In all these ways, prevention has long been recognized as an essential public health strategy for creating better health and promoting health and mental health equity throughout society.

Health and Economic Advantages of Prevention

Numerous prevention strategies have been shown to be effective and cost beneficial. Nationally, immunizations are estimated to save—for every birth cohort—33,000 lives, prevent 14 million cases of disease, and avoid more than $43 billion in direct and indirect costs. [1] The completion of recommended childhood vaccines prevents an estimated 42,000 childhood deaths each year. [2] Water fluoridation reduces tooth decay by 25 percent in both children and adults, [3] yielding economic benefits that substantially exceed intervention costs. [4] Of the 46.3 million adults age 65 or older in the U.S. in 2014, [5] it is estimated that fewer than half were up-to-date on core clinical preventive services. [6]

Unfortunately, prevention strategies are not fully utilized in California and in the U.S. The result has been the avoidable loss of thousands of lives every year across the country, unnecessarily high levels of poor mental and physical health, the persistence of health disparities among populations that are underserved, and inefficient use of health care dollars. Despite progress in immunization rates, approximately 42,000 adults and 300 children in the U.S. die each year from vaccine-preventable diseases. [7] According to the CDC, chronic disease treatment is one of the most expensive health care costs [8]; in 2016, total direct costs of chronic disease treatment was estimated to be more than $1 trillion in the U.S., including over $123 billion in California. [9] The underutilization of prevention strategies burdens Californians, especially racial and ethnic minoritized groups, negatively affecting both their health and finances.

Racial and Ethnic Disparities in Preventive Services

Race and ethnic minoritized persons tend to receive preventive care at lower levels than in the population as a whole. Latino adults have lower utilization of key preventive services than White and Black or African American adults. Of all racial and ethnic groups, Asian Americans have the lowest utilization of breast, cervical, and colorectal cancer screening. [10] Although research indicates that good oral health during pregnancy is critical for both the woman and child's health there are notable discrepancies in the rates of dental visits during pregnancy. Women who have private insurance have higher rates of dental visits during pregnancy as compared to those with Medi-Cal. According to a DHCS 2017 report, among women with private insurance, White and Asian or Pacific Islander women have the highest rates of dental visits compared to Black or African American and Latina women. [11] Another DHCS report in 2013 found that compared to White and Asian children, American Indian or Alaska Native, Pacific Islander, Latino, and Black or African American children were less likely to meet all six parts of a fitness test measuring physical activity in California. [12] Underserved populations such as low-income persons face additional barriers to accessing preventive services, including high transportation and child care costs. [13]

Disparities in Clinical Prevention: Mammograms and Colorectal Cancer Screening

Disparities exist among mammograms and Pap tests even though they are a core component of women's preventive medicine as standard screening methods to prevent breast and cervical cancer. [14] In California, low-income women continue to be less likely than higher-income women to receive mammograms and Pap tests (**Figure 13**). Regular mammograms are particularly important for Black or African American women, who in 2017 had the highest breast cancer death rates of all racial and ethnic groups, at 27.4 per 100,000, compared to 21.7 per 100,000 for White women. However, White women are more likely to be diagnosed with breast cancer. [15]

Like mammograms and Pap tests, colorectal cancer screenings are effective in detecting and treating cancer early. [16] The U.S. Preventive Services Task Force (USPSTF) recommends that all adults be screened for colorectal cancer starting at age 50 and continue for 25 years. [17] Colorectal cancer is the third most commonly diagnosed cancer in the U.S. (excluding skin cancers) [18] and the corresponding mortality rate in California was 12.1 per 100,000, in 2017. [19] The mortality rate would likely be significantly higher without clinical preventive care such as screenings and improved treatments. Despite the confirmed benefit of colorectal cancer screening, there continue to be notable racial and ethnic disparities according to 2020 data as White adults aged 50 to 75 years are more

likely to meet the USPSTF recommendations for colorectal cancer screening, compared to Asian and Latino adults (**Figure 14**). Additional targeted prevention interventions, both clinical and community-based, may help reduce existing racial and ethnic disparities.

Community Prevention: Engaging Community Health Workers

In addition to clinical preventive services, there are community-based prevention interventions which focus on improving population health. The Community Preventive Services Task Force provides evidence-based guidance on effective community-based prevention interventions. For instance, research indicates that community-based colorectal cancer screening prevention interventions that engage community health workers (CHWs) have increased colorectal cancer screening rates. CHWs are frontline workers who link communities and health care systems. The aforementioned interventions include those that increase the demand for screening services (i.e., group education, one-on-one education, and client reminders) and improve access to screening services (i.e., reduce structural barriers such as commute time, clinic hours, and out-of-pocket costs). [20] Community-based prevention interventions can assist clinical preventive services to help improve colorectal cancer screening rates and reduce existing racial and ethnic disparities. Similar to clinical and community prevention services, behavioral-level prevention can also have positive health results.

Behavior-Level Prevention: Breastfeeding

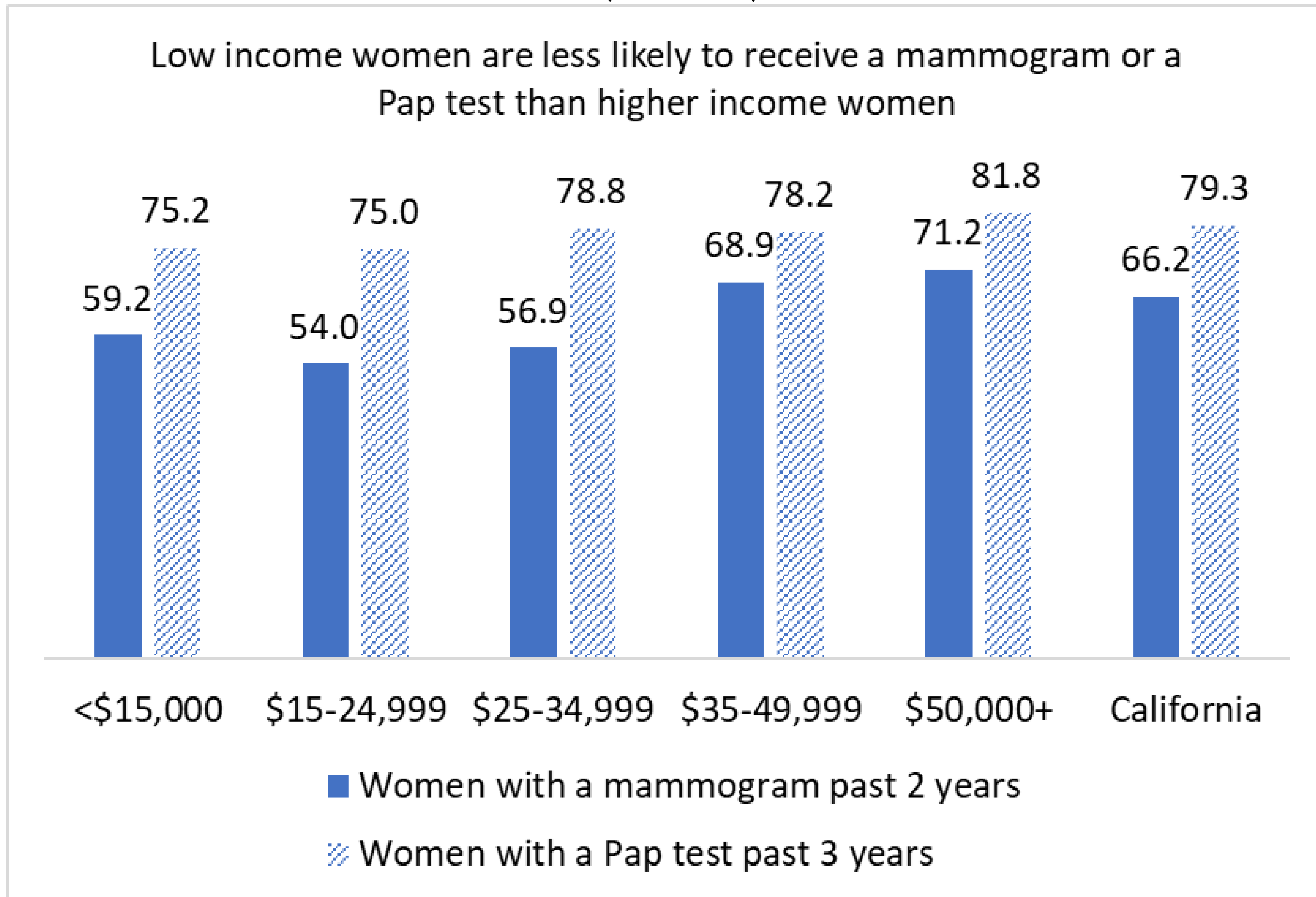
Breastfeeding has multiple, lasting health benefits for infants and children as well as mothers. It reduces the likelihood of many common infections and is associated with reduced risk of atopic dermatitis (eczema). [21, 22] Studies estimate that 27 percent of monthly pediatric hospitalizations for lower respiratory tract infections and 53 percent of monthly pediatric hospitalizations for diarrhea could be prevented by exclusive breastfeeding. [23] Yet rates of breastfeeding beyond the first month following birth fall off sharply among California women at the lowest levels of family income, [24] partly because compared to high-income women, low-income and single women are more likely to have jobs that are less accommodating of breastfeeding. White and Asian or Pacific Islander women are more likely to have workplace breastfeeding support (76 and 74 percent, respectively) than Black or African American and Latina women (59 and 53 percent, respectively). [25] Although breastfeeding rates have increased overall for Black or African American and White infants, there continue to be significant racial disparities as illustrated by "a significant difference of at least 10 percentage points in exclusive breastfeeding through 6 months in 12 states and in breastfeeding at 12 months

in 22 states." [26] There is a range of policy and health education strategies that can be taken to improve the rates of breastfeeding among new mothers which includes having dedicated breastfeeding rooms at the workplace, adjusting work schedules to accommodate breastfeeding, and educating families on the benefits of breastfeeding.

School-Based Health Centers

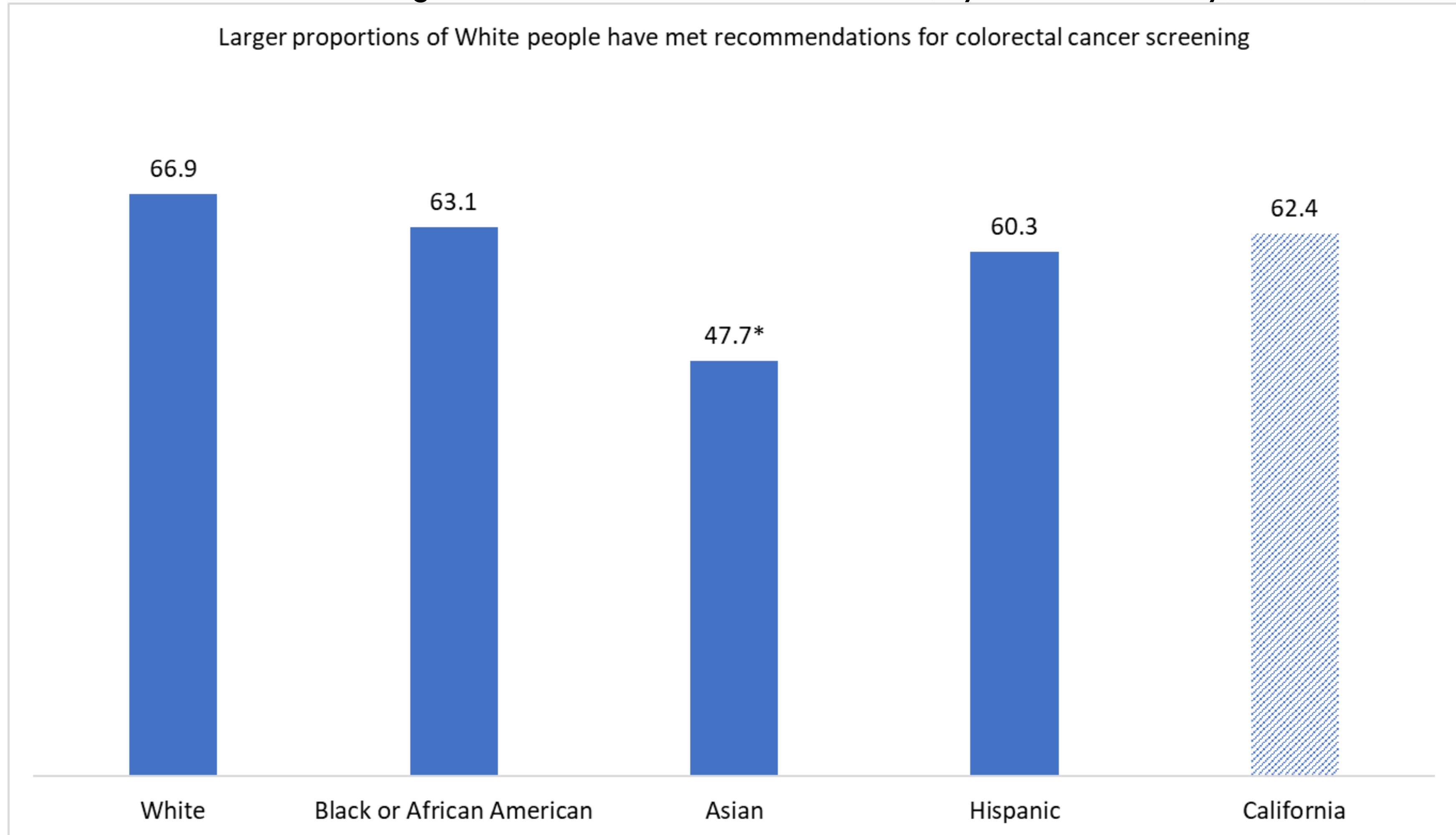
School-based health centers (SBHCs) are located on or near school campuses and help to ensure that children have access to health care. These centers offer many clinical, community, and behavioral preventative services which result in healthier students. Specifically, the centers provide medical, mental health, dental, reproductive health, and youth engagement services. In addition to the students, SBHCs often serve the broader community. [27] All services are provided at no or low cost and no one is refused services due to their inability to pay. [28] Despite the many benefits of SBHCs, as of 2020, there are only 291 of them in California. [27] This is not due to lack of need or impact as SBHCs positively influence student health and academic performance. [29] SBHCs located in low-income communities can help reduce existing health disparities as they have many beneficial educational and health outcomes. [30]

Figure 13: Percentage of women who are up to date on their mammogram or a Pap test, by household income, California, 2020



Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (BRFSS), Prevalence Data and Analysis Tools, BRFSS Prevalence & Trends Data, 2020. Note: Women without a mammogram are aged 40+ years; Women without a Pap test are ages 21-65 years.

Figure 14: Percentage of respondents aged 50-75 years who received one or more of the recommended tests for colorectal cancer screening within the recommended time interval, by race and ethnicity, California, 2020



Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (BRFSS), 2020. Note: Estimates for American Indian or Alaska Native, Native Hawaiian or other Pacific Islander, other race, and multiracial are not available; Estimates for Asian persons are statistically unreliable and should be interpreted with caution.

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Experiences of Discrimination and Health

Discrimination—the unequal treatment of individuals or groups due to conscious or unconscious prejudice—is complex, rooted in historical social policy, and directly or indirectly compounds the disproportionate burdens of poor health outcomes that marginalized groups experience. Over time, the U.S. has made progress in creating a more inclusive society. [1] The Civil Rights Act of 1964 and subsequent civil rights laws prohibit discrimination in workplaces, schools, public facilities, and state and local government. Despite these policies, many groups continue to be disproportionately affected by both subtle and overt forms of discrimination. [2] Discrimination, whether experienced as individual acts or at an institutional level, makes people sick. [1] Numerous studies have documented the harmful mental and physical health effects of discrimination, including depression, stress, anxiety, hypertension, self-reported poor health, breast cancer, obesity, and substance abuse. [3-5]

Discrimination is experienced by individuals and groups defined by race, ethnicity, age, gender, sexual orientation and gender identity (SOGI), religion, disability, and other social or personal characteristics. Discrimination can occur across institutional, structural, and interpersonal dimensions and settings. In the health care setting, for example, 13.8 percent of Black or African American adults in California reported ever experiencing unfair treatment due to their race and ethnicity when receiving medical care, compared to 2.3 percent of White and 4.7 percent of Asian adults (**Figure 15**). Furthermore, experiences of discrimination can be even more pronounced for racial and ethnic minoritized females. In California, about 40 percent of Black or African American women report experiencing racial discrimination, in any setting, compared to 8 percent of White women. [6] Individuals who are at an intersection of multiple dimensions that may be discriminated against (e.g., racial and ethnic minoritized people with a disability) are more likely to have poor mental and physical health than those who are not; this is in part due to the disproportionate exposure to discrimination. [7]

How Discrimination Gets Under Our Skin

Discrimination is not just something that we cognitively or emotionally feel. Discrimination gets under our skin and causes negative physiological changes due to the resulting stress response. Researchers are able to measure the body's stress response to discrimination by assessing changes in blood pressure, [8, 9] stress hormone (i.e., cortisol) levels, [10] and biomarkers associated with heart disease. [11-13] Over time, the resulting physiological and psychological effects of discrimination start to wear down the body and contribute to the dysregulation of various physiological systems including the cardiovascular, metabolic, and inflammatory systems. [14] This wearing, or "weathering," effect

from repeated exposure to discrimination contributes to a number of health disparities, such as the disproportionate prevalence of cardiovascular disease and low birth weight in Black or African American compared with White people. [15-18]

Black or African American mothers in the U.S. are more likely to give birth to lower-weight babies compared with African-born and White women when controlling for income level, educational level and health insurance status, which is evidence against a genetic basis for the racial disparity. [16] Research suggests that the lower weights among babies born to Black or African American mothers may in part be explained by the stress caused by the mothers' lifelong experiences of discrimination. [17, 18] This is particularly problematic because low birth weight is a strong indicator of long-term health consequences including higher risk of non-substance-related psychiatric problems, [19] hypertension, [20] less leisure-time physical conditioning activity, [21] and reduced language development [22, 23]. Furthermore, according to the Institute of Medicine report *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, non-White patients tend to experience discrimination at the patient-provider level and to receive a quality of care inferior to that received by White persons, even when controlling for access-related factors such as income and insurance status. [24] Indirect discrimination, such as witnessing discrimination, also affects biological processes and may also lead to long-term health consequences. [25]

Microaggressions are "everyday verbal, nonverbal, and environmental slights, snubs, or insults—whether intentional or unintentional—that communicate hostile, derogatory, or negative messages to individuals based solely upon their marginalized group membership". [26] Nascent research on microaggressions indicates that similar to other types of discrimination, microaggressions lead to adverse physiological changes such as cortisol output [27] and psychological distress, including anxiety, diminished self-esteem and self-efficacy. [28, 29] Other adverse impacts of microaggressions include poorer sleep quality, [30] shorter sleep duration, [30] higher levels of suicidal ideation through perceived burdensomeness, [31] and symptoms of depression. [32, 33]

Systemic Discrimination

Complex social and political sources of discrimination have serious health consequences. These discriminatory practices include pay inequality between women and men, bank redlining practices that systematically deprive lower-income neighborhoods of financial investment, and a lack of job opportunities and protections for those with physical and mental disabilities. In limiting the ability to make a fair and decent wage, buy a home, access high-quality education, and marry and support the person of their choice, society is directly

or indirectly perpetuating disadvantage to certain groups of persons' health and overall quality of life.

Reported Hate Crimes Increased in 2020

Numerous professional associations and state, county, and city governments have acknowledged the scope of the negative psychological and physical health impacts of discrimination by declaring racism and discrimination public health issues and crises. [34-38] One sobering measure of interpersonal discrimination is hate crime — criminal acts motivated by the victim's race, ethnicity, or other personal characteristics (**Figure 16**). In California, the number of reported hate crime offenses increased 23.9 percent, from 1,261 in 2019 to 1,563 in 2020. [39] In 2020, anti-race, ethnicity, or national origin biases were the most common motivation for hate crimes, accounting for 1,053 offenses. Of these, over half were directed at Black or African American people, and the largest percentage increase – 84.5 percent – impacted Asian Americans. Anti-transgender bias motivation also saw a major increase in the number of hate crime offenses from 2019 to 2020, from 36 to 62.

Police Violence

On May 25, 2020, George Floyd, a 46 year-old African American man, was killed during an arrest by Minneapolis police officers [40]; using his knee, an officer applied pressure to Mr. Floyd's neck for nearly nine minutes and the other officers at the scene failed to intervene. [41] Nearly 30 years earlier, on March 3, 1991, Rodney King, an African American man, was beaten by four White Los Angeles Police Department officers; when tried, all four officers were acquitted. [42, 43] These cases were witnessed and recorded by bystanders and are just two of many encounters that involve police violence. In 2020, there were a total of 745 civilians in California that experienced use of force by police: 42.6 percent were Latino and 17.4 percent were Black or African American people **(Figure 17).** [44] This represents proportions greater than Latino and Black or African American population shares in California, 38.9 and 6.0 percent, respectively. According to a report by the Public Policy Institute of California, Black or African American people are overrepresented in both police use of force incidents and hospital discharge data at 17 percent each for firearm injuries. [45] Further, Black or African American and Latino people are overrepresented in fatalities from police encounters: 16 to 19 percent for Black or African American and 45 percent for Latino people. In addition to adverse individual-level health effects, police brutality can have significant community-level health consequences. Evidence suggests that the high rate of unarmed Black or African American people being killed at the hands of police is associated with a higher prevalence of depression, stress and other adverse

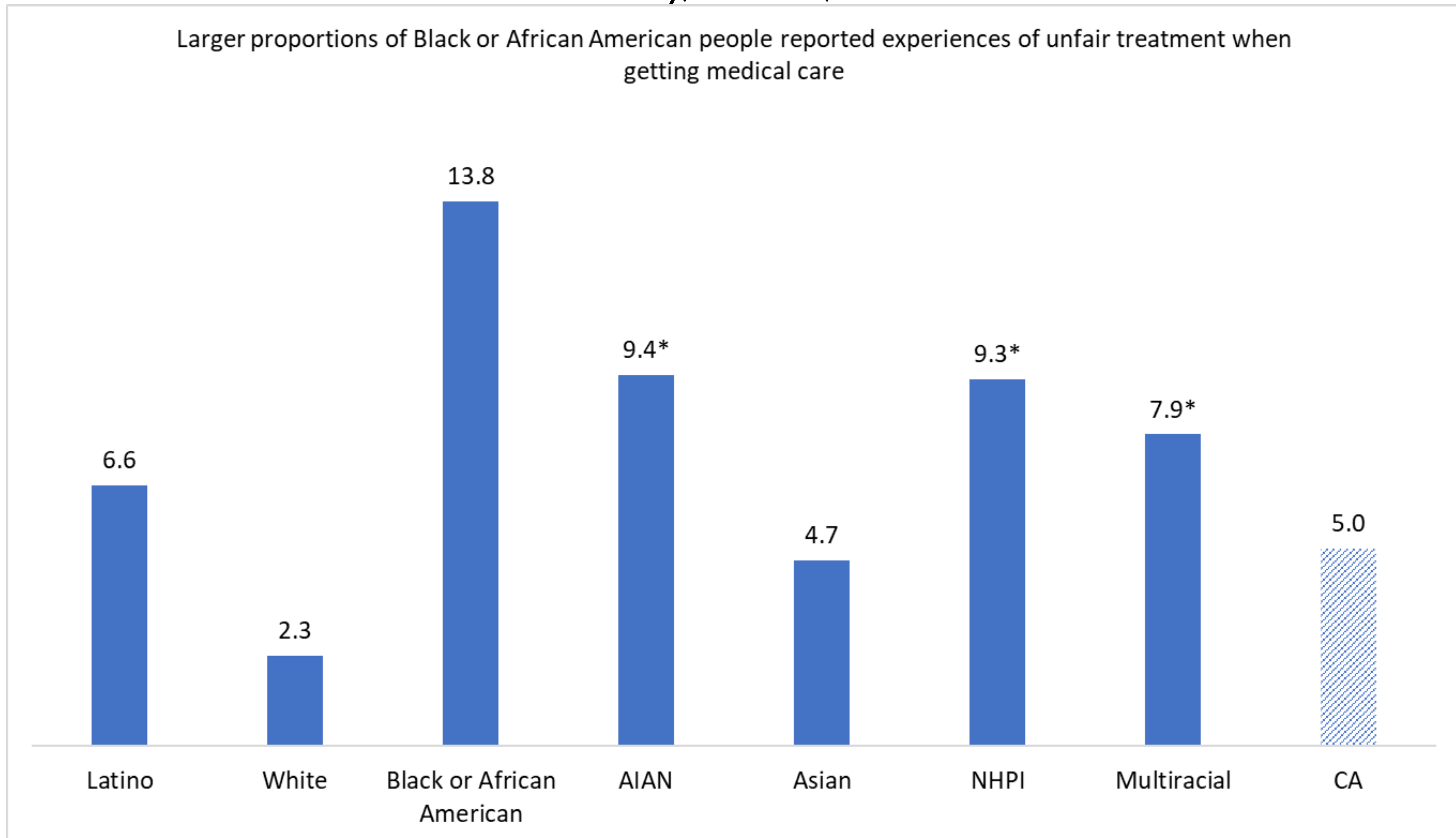
mental health issues among Black or African American adults not directly impacted by police violence. [46]

Inaction of Law Enforcement

There is a silent epidemic of violence against American Indian or Alaska Native women. American Indian or Alaska Native women experience disproportionately higher levels of violence in their lifetime compared to White women [47-49], and the majority of these violent acts across the lifespan occur at the hands of at least one non-American Indian or Alaska Native perpetrator. [49] Furthermore, there are high rates of murder and disappearance cases for American Indian or Alaska Native women, and oftentimes, little is done by law enforcement as many cases go cold, and are unreported and unrecorded in national databases. [48, 50, 51] As a result of underreporting and lack of data collection, the true magnitude of the problem is likely much higher. The Sovereign Bodies Institute (SBI), which tracks missing and murdered indigenous women, girls (MMIWG) and two-spirit[4] people in California, has documented 165 cases as of July 2020—the fifth highest number in the country. [50] Sixty-two percent of all missing cases identified by SBI were not found in official missing persons databases. Alarmingly, one in two of the known perpetrators in the SBI database, [50] and nearly one in three known perpetrators in a national and urban database were never held accountable for their actions. [51] With American Indian or Alaska Native women facing disproportionately high levels of violence, and MMIWG often not addressed by the criminal justice system, more can and should be done to strengthen crime data collection, and ensure that these crimes are adequately tracked, investigated, reported and perpetrators are held accountable.

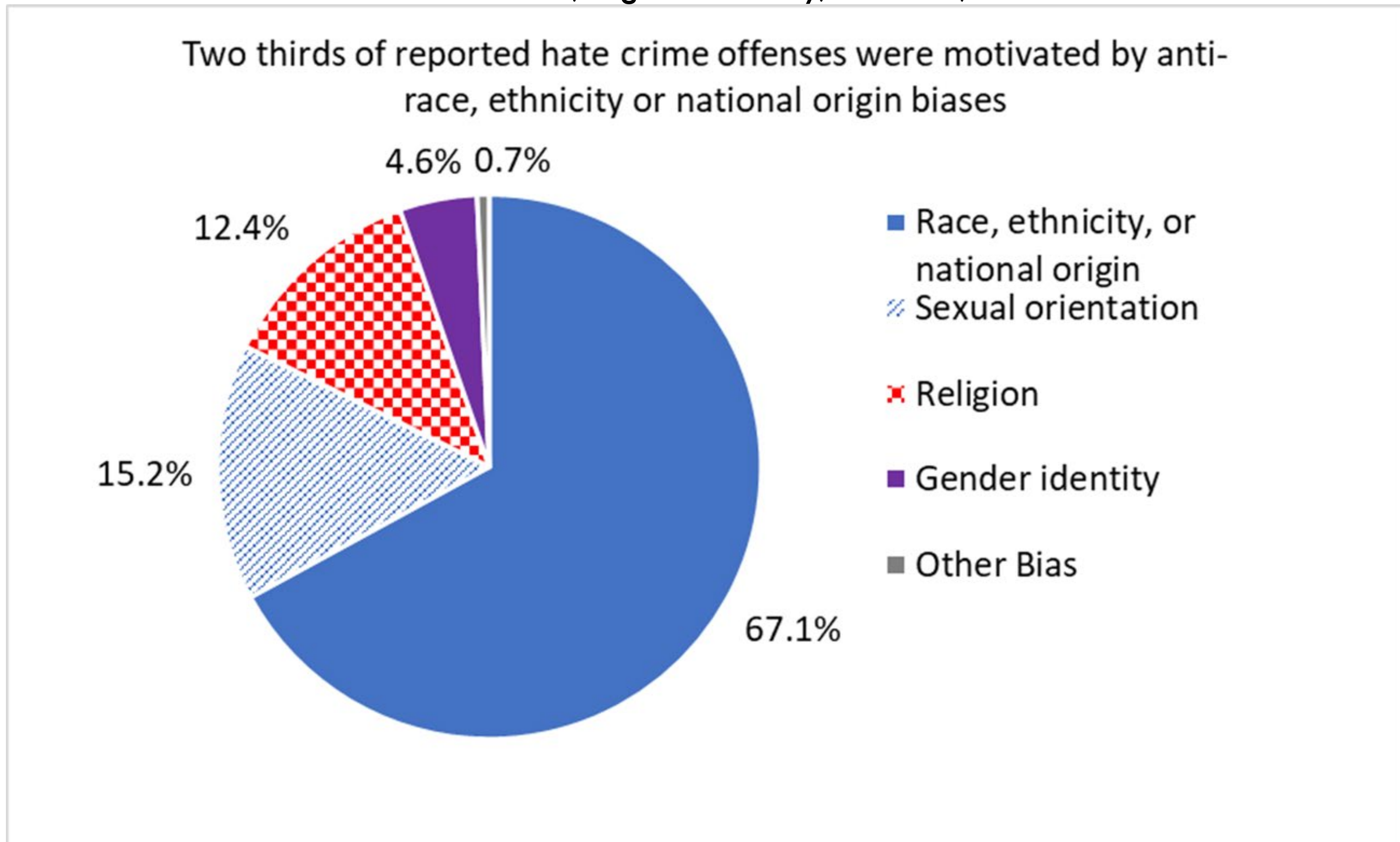
[4] Two-spirit refers to lesbian, gay, bisexual, queer and transgender people.

Figure 15: Percentage of respondents who ever experienced unfair treatment getting medical care due to race and ethnicity, California, 2015-2017



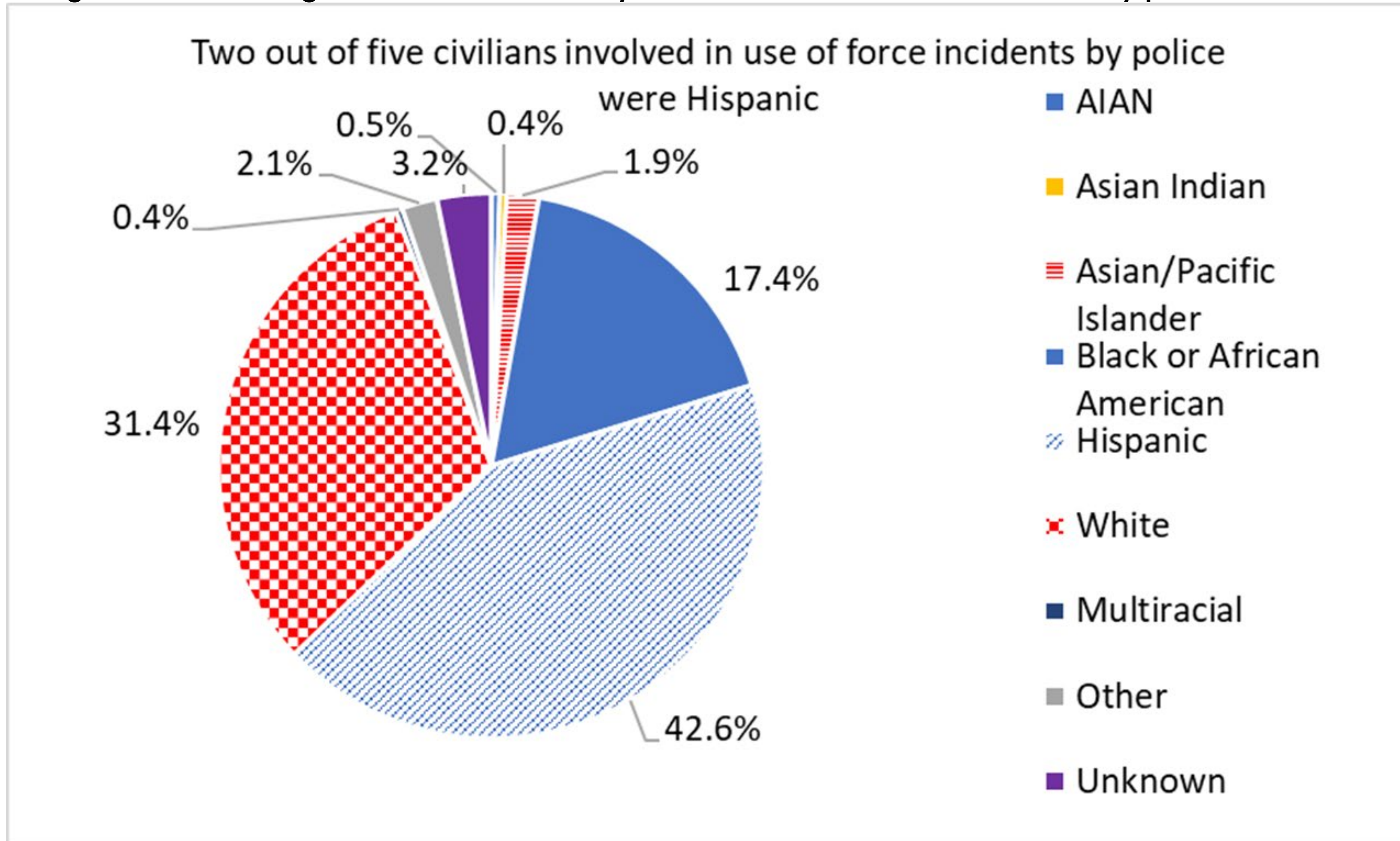
Source: University of California Los Angeles, California Health Interview Survey, 2015-2017. "Last time experienced unfair treatment getting medical care due to race/ethnicity compared by Race and Ethnicity." Note: OMB/Department of Finance race categories used; Latino category includes all race groups; AIAN=American Indian or Alaska Native; NHPI=Native Hawaiian or Pacific Islander; *=Unstable estimates due to small sample size and should be interpreted with caution.

Figure 16: Percentage of hate crime motivated by the victim's race, ethnicity, national origin, religion, sexual orientation, or gender identity, California, 2020



Source: California Department of Justice, Hate Crime in California (Table 4), 2020. Note: Other biases (0.7%) comprise physical/mental disability and multiple biases.

Figure 17: Percentages of race and ethnicity of civilians involved in use of force by police, California, 2020



Source: California Department of Justice, Use of Force Incident Reporting (Table 7), 2020. Note: Incidents involved the discharge of a firearm or use of force resulting in serious bodily injury or death; Unknown=unknown race/ethnicity because civilian fled the scene; AIAN=American Indian and Alaska Native.

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Neighborhood Safety, Social Cohesion and Collective Efficacy

Violent Crime in California

Violent crime in California decreased 2.9 percent from 2018 to 2019: 430 per 100,000 residents. [1] In 2019, 60 percent of violent crimes reported were aggravated assault, 30 percent were robberies, 9 percent were rapes and 1 percent were homicides. Preliminary data in 2020 show modest increases in assaults and significant increases in homicides, while robberies and rapes have decreased. A U.S. Department of Justice study found a high correlation between low household income levels and rates of property crime, such as burglary. [2] A similar relationship holds true for violent crime, exemplified by low-income, disadvantaged neighborhoods in the Bay Area and in South Los Angeles having some of the highest crime rates in their regions (**Figure 18**). Community-level crime interventions, such as well-lit, secure playgrounds; neighborhood watch organizations; and development of well-resourced teen centers to reduce gang activity, are important components in many community-based neighborhood improvement initiatives. [3]

Healthy Neighborhoods and Social Cohesion

Across the country, when people are asked what they want their neighborhood to be like, the answers are consistent. People want neighbors who care enough about the neighborhood to work together to create and maintain a healthy and safe environment, with convenient access to cultural and economic opportunities, and where their children can play, learn, and thrive in an atmosphere of trust and security. [4, 5] In other words, they want socially cohesive neighborhoods that ensure access to basic goods, are designed to promote good physical and psychological well-being, and are protective of the natural environment. Such characteristics are essential to community mental and physical health and health equity. [6] Social cohesion is defined as the strength of social relationships in the neighborhood and oriented toward the common good of the members of that community. [7] Social cohesion is not only conducive to public health, but is recognized as an important emergency preparedness component that can impact how well communities are able to recover from disasters and large-scale traumatic events. [8]

Healthy Neighborhoods and Collective Efficacy

Collective efficacy is an aspect of social cohesion and is defined as trusting relationships with neighbors and their perceived agency to make positive changes in their community using informal social control. [7] The collective

health of neighborhoods is associated with the social relationships among residents, including the degree of mutual trust, and sense of connectedness among neighbors. Residents of close-knit neighborhoods can work together to create and maintain clean and safe playgrounds, parks, and schools. They can exchange information on childcare, employment, and health access, and cooperate to discourage crime and other negative behaviors, such as domestic violence, child abuse, substance abuse, and gang involvement. Researchers have shown that higher neighborhood collective efficacy has been associated with better self-reported physical health, [9] lower asthma/breathing problems prevalence, [10] lower concealed firearm carrying among adolescents, [11] lower reported exposure to gun violence, [12] protection against adolescent sexual engagement [13, 14], decreased violence in neighborhoods, [15] and less depressive and anxiety symptoms in adolescents. [16]

Trends and Disparities in Neighborhood Social Cohesion and Collective Efficacy

According to national data, there was an increase in adults who reported a strong sense of membership (11 percent versus 8 percent), and a strong emotional connection (19 percent versus 15 percent) with their community in 2018 compared to 2015. A strong sense of community membership differed by urbanicity, with 13 percent of adults residing in rural areas having stronger connections compared to 11 percent of adults living in urban areas. [17] Disparities in perceptions of a neighborhood's social cohesion and collective efficacy also exist. [18] Men, homeowners, older residents, and individuals who needed income assistance had higher perceptions of neighborhood collective efficacy and social cohesion compared to their counterparts (i.e., women, renters, younger residents, and individuals who did not use income assistance resources). Those with higher perceptions of social cohesion and collective efficacy had lower perceptions of community social disorder as well as higher satisfaction with police. Furthermore, those with higher perceptions of social cohesion had less fear of crime.

Participation in Civic Engagement

One way to improve the health and wellbeing of the community is through civic engagement – voting, advocacy, involvement in community organizations, and community service. While opportunities for civic engagement benefit people across the socioeconomic spectrum, lower income adults in California are less likely to have participated in a board, council, organization, or worked informally to address a community problem, compared to higher income California adults. [19] In addition, teenagers in lower-income families are less likely to have ever volunteered to solve a community problem, compared to their higher income peers. In 2019 to 2020, 36.5 percent of higher income teens

(300 percent FPL and above) ever volunteered to solve a community problem compared to 25.6 percent of lower income teens (0-99 percent FPL) (**Figure 19)**. It is important to note that civic efficacy—the belief in the ability to make a difference— does not differ by income level, race or ethnicity, suggesting that lower rates of civic engagement among low income teens are possibly due to limited opportunities to participate rather than a lack of interest. [20]

Barriers to Voting

There are structural barriers which drive disparities in civic engagement. Between January 1 and May 14, 2021, at least 14 states have enacted 22 new laws restricting voting access including making it more difficult to cast mail ballots as well as vote in-person. [21] In contrast, California has taken steps to make it easier to vote including allowing workers to take up to two paid hours to vote if they are unable to vote during non-work hours. [22] Despite California's steps to increase voting access, there are still income and racial and ethnic disparities as Latino, Asian American, and Black or African American people are less likely to vote compared to White people. [23] In the 2016 elections, many of the common reasons for non-participation were logistic-related barriers (e.g., busyness, illness, transportation, inconvenient polling locations/hours, not knowing where to vote, and issues with registration) and Black or African American and Latino people were more likely to experience issues with long lines at polling locations and lack of identification compared to White people. [24]

THE RISK OF CRIME COULD BE HIGHLY DISPARATE FOR NEIGHBORING CALIFORNIA CITIES

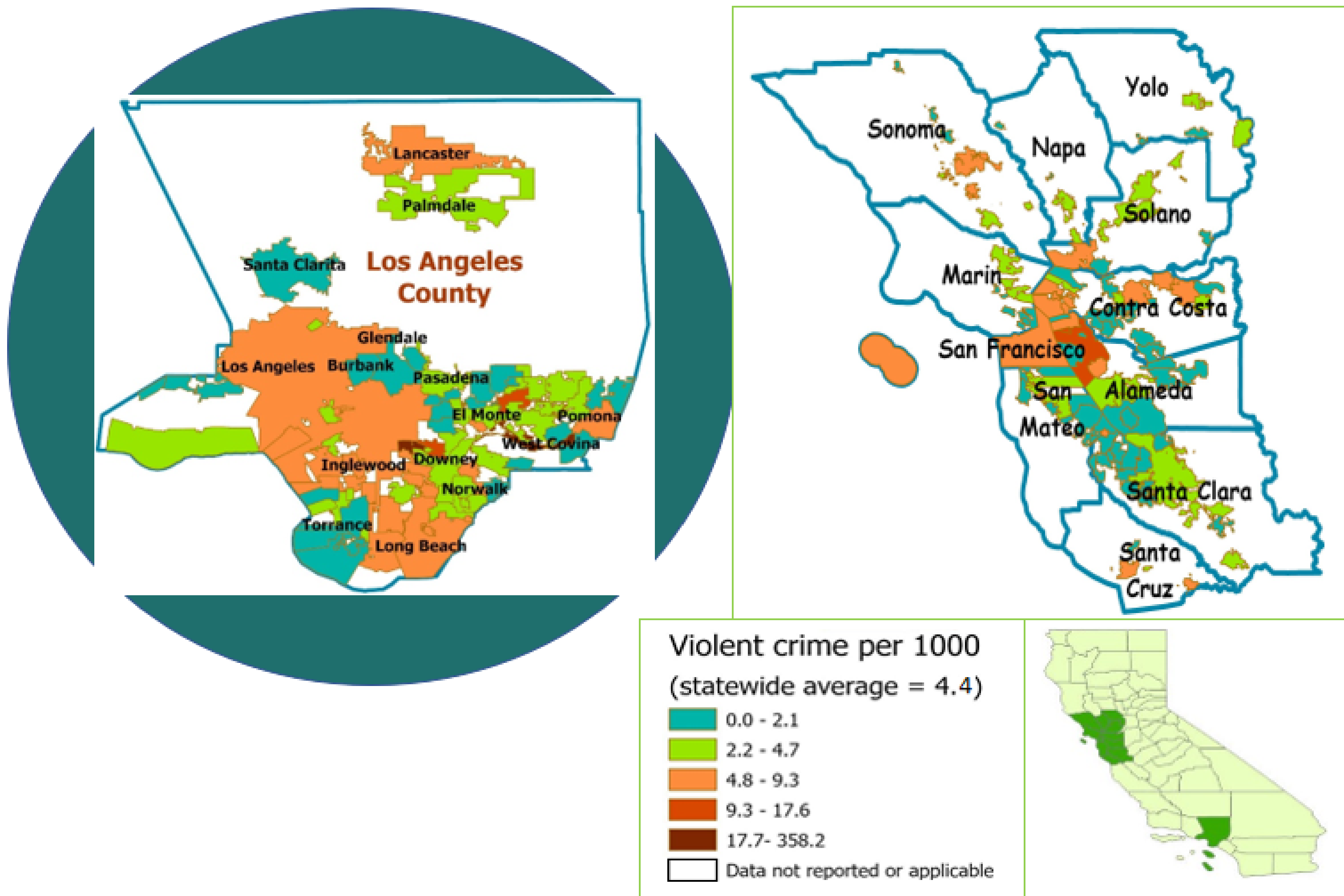
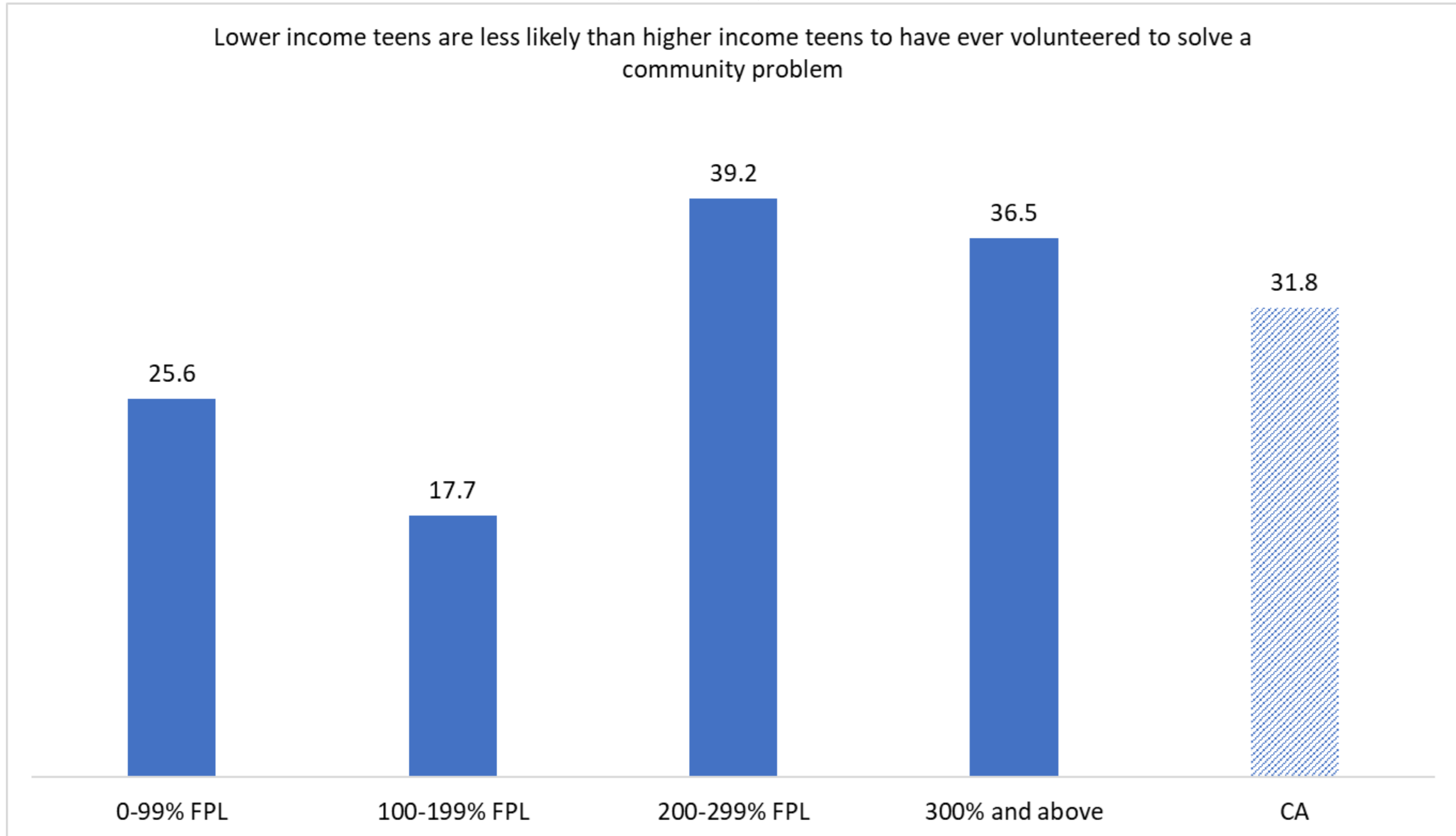


Figure 18: Number of violent crimes per 1,000 population, by cities and towns, Los Angeles County and Bay Area, California, 2019

Source: Federal Bureau of Investigation, Uniform Crime Reports, 2019, Analysis by CDPH Office of Health Equity, Healthy Communities Data Indicators Project

Figure 19: Percentage of teens who ever volunteered to solve a problem in the community, by federal poverty-level, California, 2019-2020



Source: University of California Los Angeles, California Health Interview Survey, 2019-2020. Note: Teenagers aged 12-17 years; FPL=Federal Poverty Level. Data were pooled 2019-2020.

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Cultural and Linguistic Competence: Why It Matters

The ability of health care providers and organizations to communicate with clients and communities, to understand and respond to their cultural beliefs and practices regarding health, wellness and illness, is essential for providing effective and equitable services. [1-3] California's growing population diversity represents a challenge for health care delivery systems. More than 200 languages and dialects are spoken in the state, [4] 45 percent of the population speaks languages other than English at home, and 17 percent, approximately 6.3 million Californians, are LEP (do not speak English very well). [5] A household is considered limited English-speaking when all of its members of high school age and older speak a language other than English, and none speaks English very well. [6] Nearly 9 percent of all California households are characterized by this linguistic isolation, [7] hampering access to information such as emergency-related public health messages and presenting barriers to health and social services. LEP status is associated with fewer preventive services, less treatment comprehension, lower adherence to treatment, lower satisfaction with services, and more adverse events. [8] In California, compared to adults who speak English very well, LEP adults are more likely to have fair or poor health, delay health care due to cost or lack of insurance, and lack current insurance (**Figure 20**). Nationally, Healthy People 2030 is developing an objective to increase the proportion of LEP adults who report that their health care provider explains things in a way that is easy to understand. [9] People in racial and ethnic minoritized groups and low-income households are more likely than White and higher-income groups to experience culturally insensitive care and dissatisfaction with care – factors that can lead to lower treatment adherence and health-promoting lifestyles, and worse health outcomes. [10]

Racial and Ethnic and Gender Representation in the Health Care Workforce

The National Standards for Culturally and Linguistically Appropriate Services (CLAS) in Health and Health Care recognize a diverse workforce as a key component of cultural competence. [2] Currently, the demographic composition of the health care workforce is not representative of the racial and ethnic diversity of the California population. According to a California Health Care Foundation report on California physicians, White and Asian Americans—52 percent of the population—accounted for 65 percent of active patient care physicians in 2020. Latino, Black or African American, and other racial and ethnic groups comprised 48 percent of the California population, but only 35 percent of physicians. [11-13] Latino people constitute 38 percent of the state

population (and approximately 50 percent in Los Angeles County, the Inland Empire and the San Joaquin Valley), but make up only 6 percent of the active physician workforce. Black or African American people, approximately 6 percent of the state's population, account for just 3 percent of physicians (**Figure 21**). In comparison to the physician workforce, the state's nursing workforce is more racially and ethnically diverse. In 2018, non-White individuals comprised almost 60 percent of California's registered nurses. [14] Applying a gender lens, women are underrepresented in the physician workforce (**Figure 22**). Although the proportion of female medical school graduates is equal to that of male graduates, there are more male than female active physicians in the workforce in California. [11]

Linguistic Diversity in the Health Care Workforce and Cultural Barriers

About one third of active primary care physicians in the state speak Spanish, 3 percent Cantonese, 6 percent Mandarin, 6 percent Tagalog, and 4 percent Vietnamese— the five most commonly spoken languages in California after English. Linguistic diversity, however, does not necessarily equate to the provider-client language concordance that more effectively serves LEP clients. [15] Studies suggest that educational interventions to improve the cultural competence of health professionals and systems are associated with better patient outcomes. [16, 17] Cultural barriers are associated with reduced quality of care and decreased access to primary and preventive care. [18-20] These barriers include physicians' and patients' competing views of health and disease which can lead to poor patient-clinician communication and to lower client satisfaction. Other barriers include clinician lack of awareness of patient knowledge, beliefs and communication styles, and unconscious biases. [8]

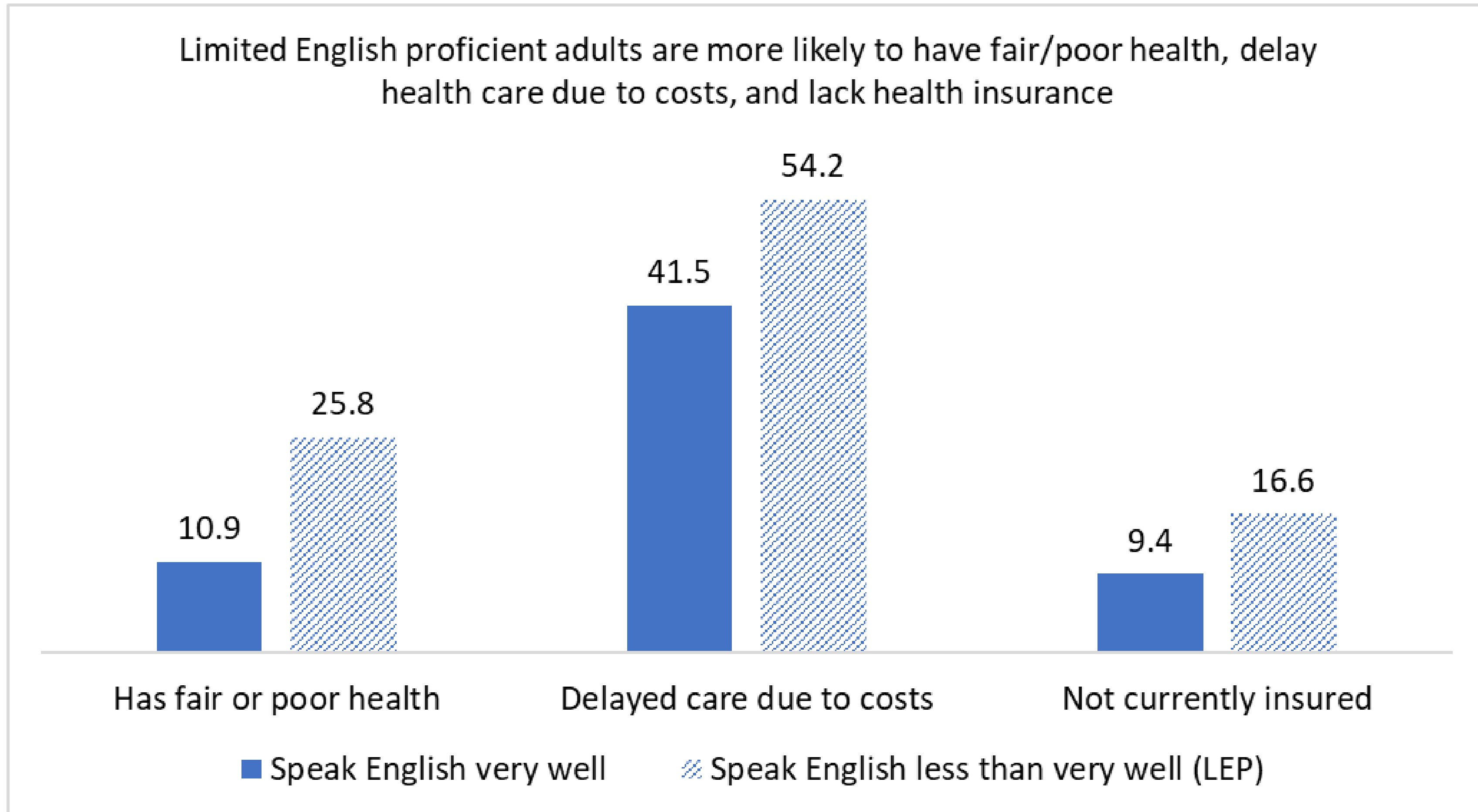
Implicit Bias

A subtle but real obstacle to cultural competence is unconscious bias. Unconscious, or implicit, bias describes automatic, unintentional social stereotypes and judgments about groups of people. [21, 22] Research suggests that implicit bias is common among health care providers, and can influence their interactions with clients. Studies have shown that Black or African American patients and White patients report different experiences during interactions with providers who carry anti-Black biases, with Black or African American patients more likely to feel less respected and to view the health care provider as less collaborative. [23] Biased clinicians have been documented to involve patients from certain racial and ethnic minoritized groups in decision-making less often as compared to White patients, as well as treat and diagnose them differently. [8]

Standards in Cultural and Linguistic Competence

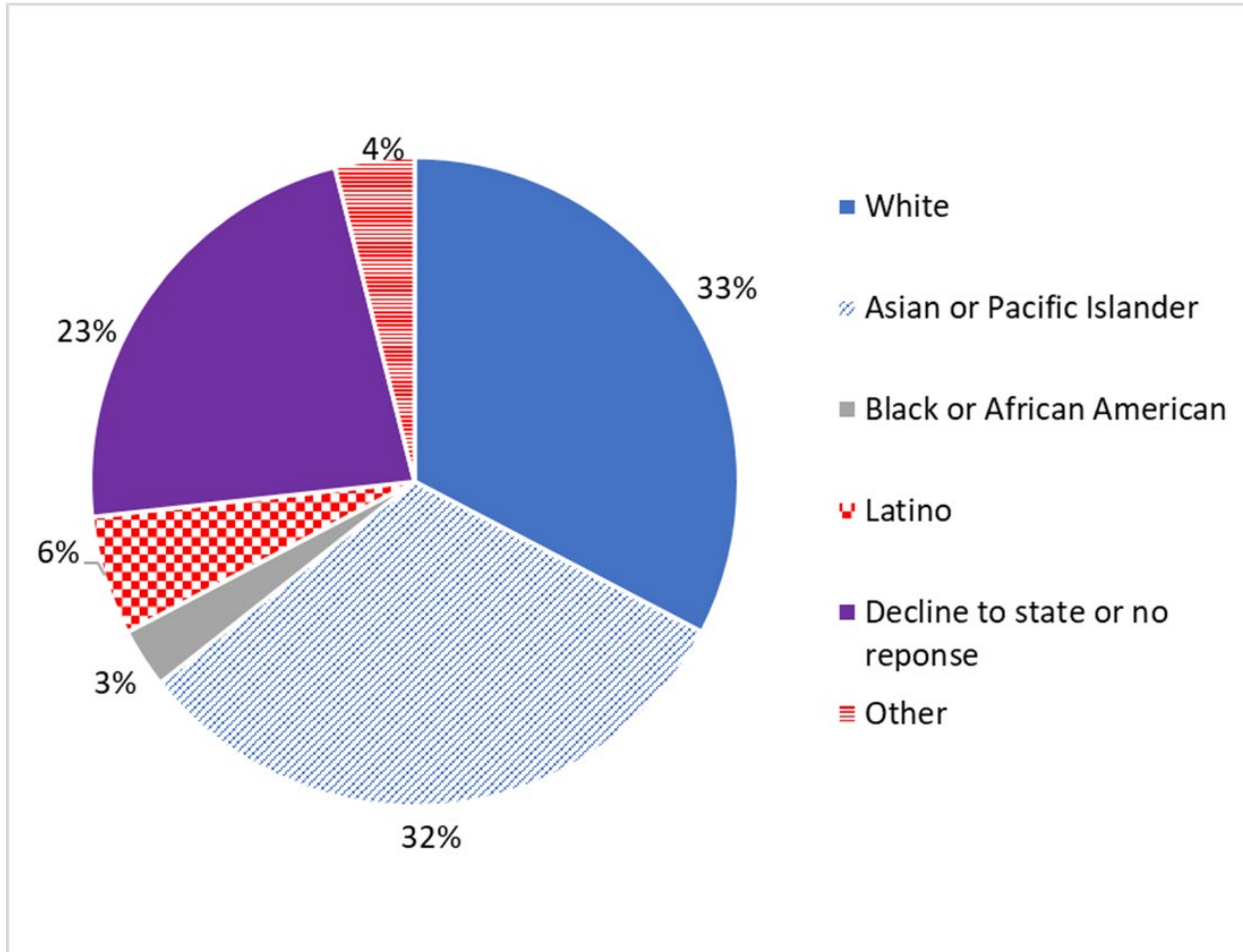
California legislation was passed in 2005 and amended in 2019 to require cultural and linguistic competency as part of the continuing medical education curriculum for courses for medical clinicians. [24, 25] In addition to the workforce and language assistance, the CLAS standards recognize "engagement, continuous improvement, and accountability" as another key component of cultural and linguistic competence. [26] In addition to California state standards, certain counties have taken the initiative to create cultural and linguistic competence resources and programs. The County of San Diego's Behavioral Health Services Department (BHS) developed a Cultural Competence Handbook to enhance the cultural competence of its workforce. One tool in this resource is the California Brief Multicultural Competence Scale (CBMCS), which measures the competency and training needs of behavioral health staff in the areas of multicultural knowledge, awareness of cultural barriers, sensitivity and responsiveness to consumers, and socio-cultural diversities. In 2015, according to the CBMCS, 28.6 percent BHS Children, Youth, and Families (CYF) program staff and 33.1 percent of the Adult/Older Adult (A/AO) program staff needed additional training in socio-cultural diversities. Similarly, 25.8 percent of the CYF program staff and 34 percent of the A/AO program staff needed additional training in awareness of cultural barriers. [27]

Figure 20: Percentage of adults with poor or fair health, who delayed health care due to costs or lack of insurance, and lack health insurance coverage, by limited English proficiency status, California, 2019-2020



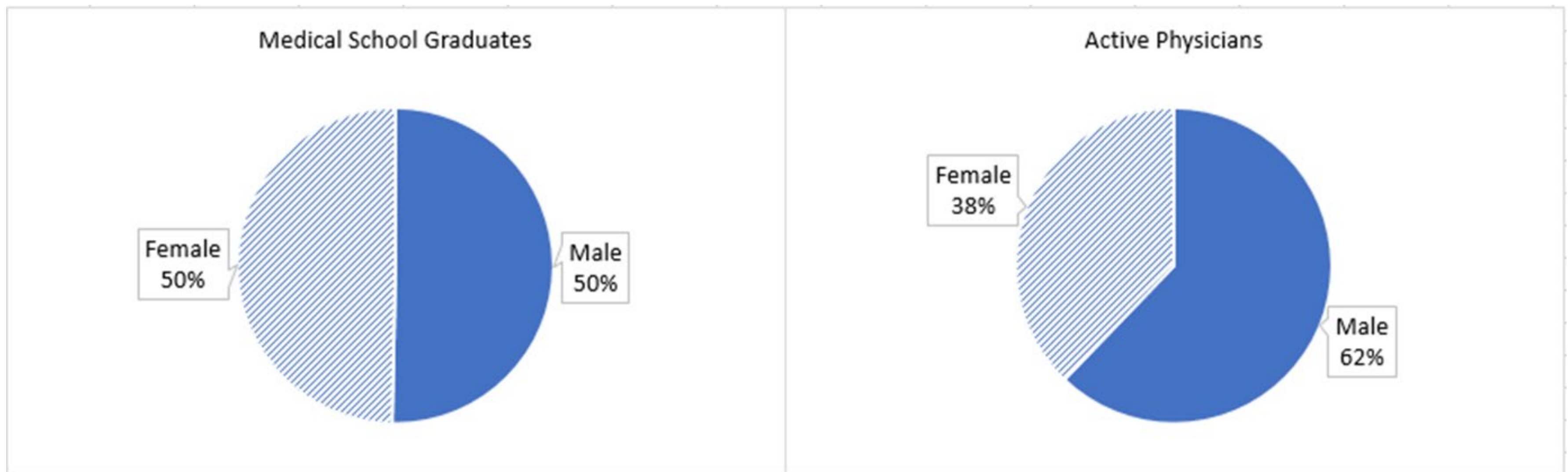
Source: University of California Los Angeles, California Health Interview Survey. Note: Adults=aged 18 and older; LEP=limited English proficiency.

Figure 21: Percentage of California active physicians by race and ethnicity, 2020



Source: California Health Care Foundation, California Physicians: California Health Care Almanac Quick Reference Guide. Note: American Indian active physicians account for < 1%.

Figure 22: Percentage of California's medical school graduates (2018-2019) and active physicians (2018) by gender, California



Sources: Table B-2.2 Total Graduates by Medical School and Gender and Table 1.7 in: (www.aamc.org) 2019 State Physician Workforce Data Report used in California Health Care Foundation report, California Physicians, 2021: A Portrait of Practice.

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Mental Health Services: 'No Health without Mental Health'

Mental health is integral and includes emotional, psychological and social wellbeing, allowing the individual to relate to others, cope with the stresses of life, and make healthy choices. [1] Mental disorders are characterized by alterations in thinking, mood, and behaviors that are associated with distress and functional impairment, contribute to increased disability, pain, or death. [2] Mental disorders are very common in the U.S., with nearly half of the population estimated to receive a diagnosis at some point in the lifespan. [3] Almost one in six adults in California have experienced any form of mental illness, and about one in 24 have had difficulty carrying out major life activities due to a serious mental illness. [4] Furthermore, one in 13 children in California suffers from a serious emotional disturbance. Without prevention and early intervention, mental illness can contribute to complications including heart disease and other medical conditions, substance abuse, poverty and homelessness. [5] In 2017, suicide, a sentinel event of mental distress, was the second-leading cause of death in California among young adults age 15–34 years. [6] In fact, three in five adults with mental illness do not receive treatment or counseling. [4]

Unequal Burdens of Mental Illness: Race and Ethnicity

The prevalence of mental illness, and barriers to accessing mental health treatment and preventive services, show striking disparities by race and ethnicity. In California, multiracial and American Indian or Alaska Native adults have higher rates of serious psychological distress during the past year (20.3 and 18.7 percent, respectively) compared to Black or African American and Asian adults (10.2 and 9.8 percent, respectively).[5] [7] According to a California Budget and Policy Center report, the prevalence of serious mental illness is higher among American Indians or Alaska Natives (7.0 percent), than other racial and ethnic groups: Black or African American (5.6 percent), multiracial (5.5 percent), Latino (4.8 percent) and White (4.0 percent). [8] People in these racial and ethnic groups, and low-income individuals, are less likely than their counterparts to access mental health care services, and when they do, it is more likely to be of lower quality. [9, 10].

A notable contrast to the pattern of disparities of mental illness and access to care by race and ethnicity is the suicide rate, which is highest among White people. [4] A study by The California Endowment on the increasing death rates among White adults in California found the leading causes of these "deaths of despair" included drug overdoses, alcoholic liver disease, and suicides. [11]

[5] Serious psychological distress is a dichotomous measure of mental illness using the Kessler 6 series.

These trends are concentrated in rural Northern California and to some extent in the Central Valley, where the residents have experienced persistent poverty and economic hardships, contributing to increased frustration, anxiety, and lower resilience. In contrast to the increased suicide rate, White people do not report suicidal ideation (15.2 percent) at higher levels than their multiracial and American Indian or Alaska Native counterparts (24.1 and 27.5 percent, respectively) (**Figure 23**).

Unequal Burdens of Mental Illness: Age, Gender, Gender Identity, Sexual Orientation and Citizenship

Based on data available from the CHIS 2020, there are unequal burdens of mental illness by age, gender, gender identity, sexual orientation and citizenship. Young adults (aged 18-24 years) in California face greater mental health burdens, compared to older adults (aged 25-64 years). Young adults reported having higher rates of serious psychological distress over the past year compared to older adults (30.3 vs. 11.8 percent), and more often reported needing help for mental health problems or use of alcohol/drugs (37.2 vs. 22.1 percent).[6] [12, 13] Finally, young adults who sought help for mental health problems or alcohol/drugs had higher rates of unmet needs (not receiving treatment despite needing help) as compared to older adults (55.7 vs. 43.5 percent).[7] [8] [14]

Women reported having higher rates of serious psychological distress in the past year compared to their male counterparts (13.6 vs. 10.7 percent). [15] Furthermore, women more often reported needing help in the past year for mental health problems or use of alcohol/drugs, compared to men (23.8 vs. 17.8 percent). [16] Conversely, men reported higher rates of unmet needs when seeking help for mental/emotional or alcohol/drug issue compared to women (47.9 vs. 44.0 percent). [17] The gender discrepancy in unmet needs may be influenced by a number of factors including bias and gender stereotypes. For example, physicians may be more likely to diagnose depression in women even when men have the same symptoms or similar scores on standardized measures. [18, 19] Furthermore, studies have found that men are less inclined to seek help for psychological issues compared to women. [20, 21] However, these data show that even when men seek help, they are not receiving treatment.

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[6] Measures used to estimate percentages of individuals who need help for mental health problems and with unmet needs include behavioral health-related issues, namely alcohol/drug usage, in addition to emotional/mental health problems.
[7] Unmet need is a self-reported measure that indicates needing help for problems with mental health emotions or nerves or use of alcohol or drugs and not receiving treatment from a primary care physician or any other professional such as a counselor, psychiatrist, or social worker.
[8] Percent estimates of unmet needs are likely underestimates as they do not capture individuals who received inadequate treatment in either quantity or quality.

Similar to other aspects of mental health problems, suicidal ideation affects various sub populations differently. According to CHIS data 2018 to 2020, transgender or gender non-conforming persons reported the highest percentage of ever having suicidal thoughts, compared to all groups (52.5 percent) (**Figure 23**). When analyzed by sexual orientation for the same years, suicidal thoughts are most common among bisexual individuals (45.6 percent), followed by those who identify as gay, lesbian, or homosexual (25.2 percent). The lowest rates of suicidal ideation were seen in naturalized- (6.5 percent) and non-citizens (5.7 percent), compared to U.S. born citizens (16.6 percent) living in California. [22]

Financial Barriers to Care

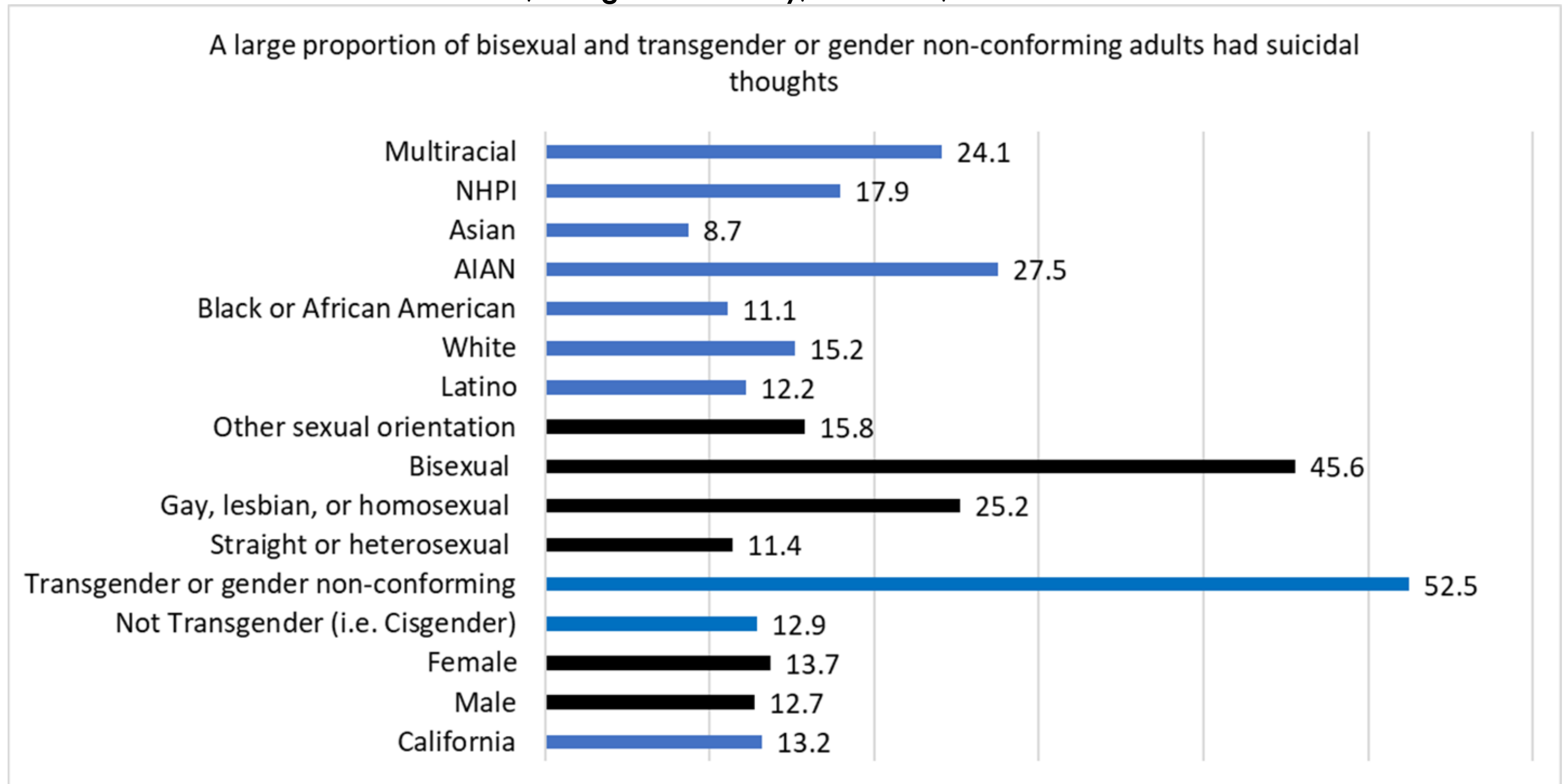
Affordability of care, and low rates of health insurance coverage in underserved populations, have been major barriers to mental health care. According to CHIS data, among those with serious psychological distress in the past year, Latino and Asian people were less likely to have health insurance and a usual source of care, compared to White people (**Figure 24**). Latino teens who need help for emotional or mental health problems are less likely to receive counseling than White teens. [23] About 44 percent of White teens who need counseling access it, compared to 31.5 percent of Latino teens. Non-citizens with serious psychological distress faced barriers to care, as they were less likely than U.S. born- and naturalized citizens to have health insurance and a usual source of care (**Figure 25**). Lastly, rates of serious mental illness are more than four times higher among low-income adults (at less than 100 percent of the FPL) than among those earning above the 300 percent FPL threshold. [4]

Cultural and Linguistic Barriers to Mental Health Care

Another key barrier to equity in mental health prevention and treatment is the cultural and linguistic gulf between underserved populations and mental health professionals. Cultural barriers may contribute to premature treatment termination among racial and ethnic minoritized groups; these barriers include the conceptualization of mental health illness, its cause, its respective “cure”, willingness to seek help, and overall cultural values (e.g., collectivistic). [24] Linguistically competent mental health services in native languages of immigrant groups are challenged by a lack of Spanish-speaking professionals serving Latino communities. [25] Spanish-speaking clients who seek care from the few Spanish-speaking providers available, can end up overburdening the system with heavy caseloads for those providers and may lower the quality of care. [26] Similar themes impact Filipino American communities, with cultural, social, and language barriers to discussing a stigmatized topic, and accessing mental health services. [27] Filipino cultural beliefs about the causes of mental illness along with resistance and stigma in addressing mental health as a

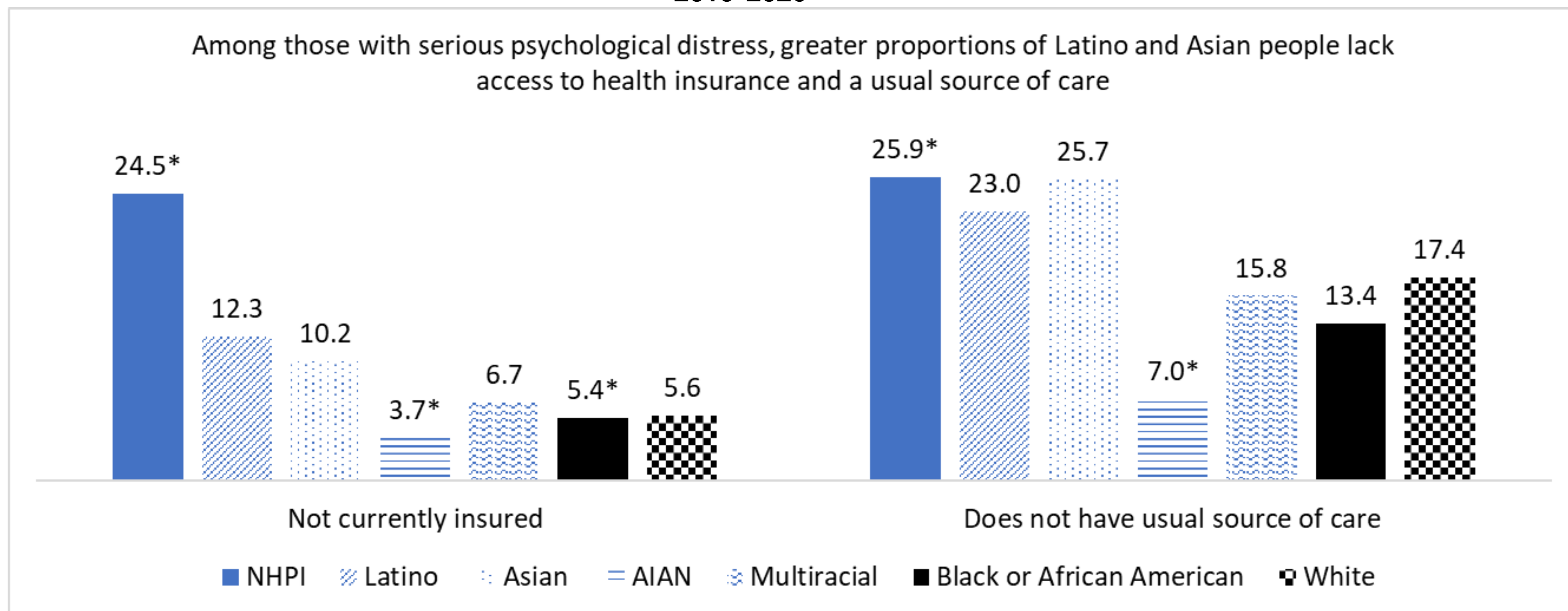
problem, prevent Filipinos from seeking care for their mental health. Moreover, the term “mental health” is not directly translatable to Filipino languages, illustrating the need for culturally competent care.

Figure 23: Percentage of adults who seriously thought about committing suicide-by race, ethnicity, sexual orientation, and gender identity, California, 2018-2020



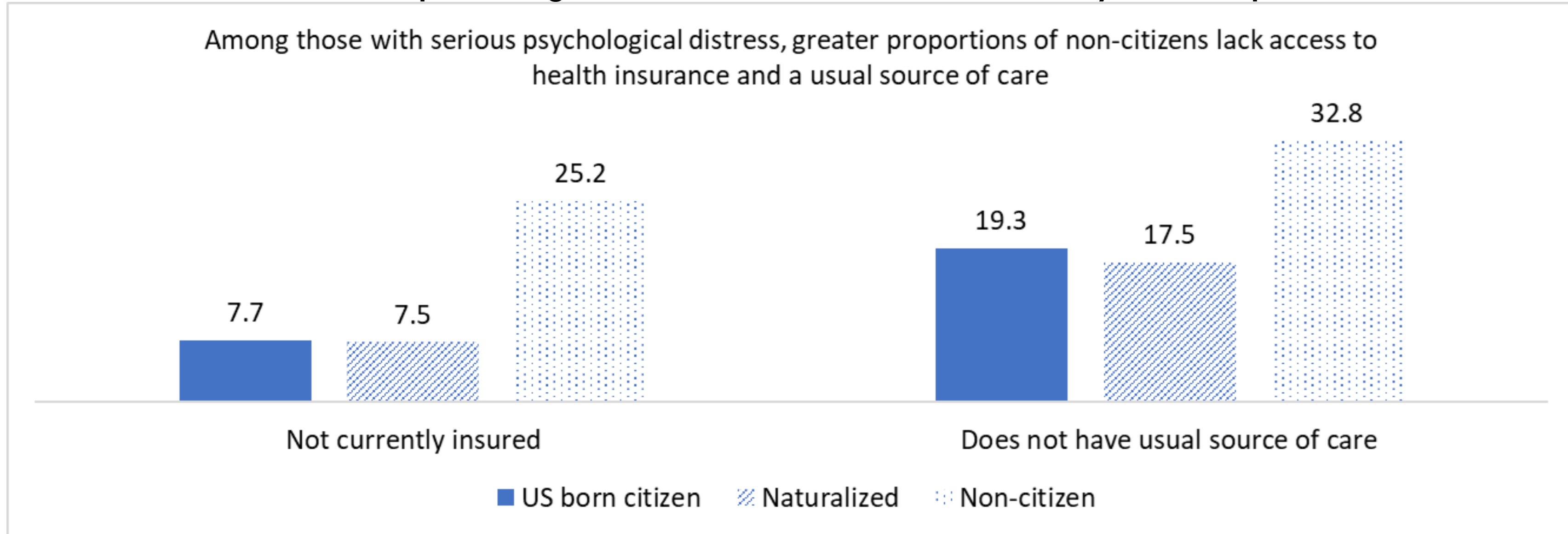
Source: University of California Los Angeles, California Health Interview Survey. Notes: NHPI=Native Hawaiian or Pacific Islander; AIAN=American Indian or Alaska Native; Other sexual orientation= not sexual/celibate/none. Data were pooled 2018-2020.

Figure 24: Percentage of people with serious psychological distress in the past year who reported not having health insurance, or a usual place to go when sick or need health advice, by race and ethnicity, California, 2015-2020



Source: University of California Los Angeles, California Health Interview Survey. "Currently insured", and "Have usual place to go when sick or need health advice", limited by "Likely had serious psychological distress during past year". Note: NHPI=Native Hawaiian or Pacific Islander; AIAN=American Indian or Alaska Native. * Unstable estimates due to small sample sizes and should be interpreted with caution. Data were pooled 2015-2020.

Figure 25: Percentage of people with serious psychological distress in the past year who reported not having health insurance, or a usual place to go when sick or need health advice, by citizenship, California, 2016-2020



Source: University of California Los Angeles, California Health Interview Survey. "Currently insured", and "Have usual place to go when sick or need health advice", limited by "Likely had serious psychological distress during past year." Data were pooled 2016-2020.

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Glossary

Active transportation – Ways of getting to workplaces, school, leisure, or service-oriented destinations that involve physical activity, such bicycling and walking. Although public transportation, such as a municipal bus system or regional mass transit, is not typically defined as active transportation, it can also contribute to higher levels of physical activity due to its multi-modal nature (e.g., walking or riding a bike to a train station). (United States Department of Transportation)

Adverse childhood experiences (ACE) encompass a set of categories of child abuse (physical, emotional, or sexual); neglect (physical or emotional); and household challenges (growing up with someone in the household who experienced incarceration, mental illness, substance dependence, parental separation or divorce, or intimate partner violence).

Civic engagement refers to individual or group actions to address issues of concern to the public, and includes activities such as volunteering, voting, and participating in school, community, or political organizations. (UCLA Center for Health Policy Research)

Climate change refers to long-term shifts in temperatures and weather patterns. Since the 1800s, human activities have been the main driver of climate change, primarily due to burning fossil fuels like coal, oil and gas. (United Nations)

Collective efficacy is the perception of a group or community that its members can successfully work together to accomplish shared goals. (Adapted from the Encyclopedia of Human Behavior) See also *social cohesion*.

Cultural and linguistic competence A set of behaviors, attitudes, and policies within a system, agency or professional group that enables effective interactions in a cross-cultural framework, including the provision of culturally appropriate oral and written language services to persons with limited English proficiency. Services include bilingual/bicultural staff, trained medical interpreters, and qualified translators. (Adapted from the Agency for Healthcare Research and Quality)

Disabilities are conditions that limit a major life activity, including physical and mental disabilities, as well as medical conditions such as cancer or HIV/AIDS. (California Department of Fair Employment and Housing)

Discrimination is the unequal treatment of individuals or groups due to conscious or unconscious prejudice based on race, ethnicity, age, gender, sexual orientation and gender identity, national origin, immigration status, religion, disability, and other social or personal characteristics. See also *implicit bias*.

Displacement A situation in which households are forced involuntarily to move out for economic or physical reasons (e.g., eviction, rent increase, demolition of existing housing) or are prevented from moving into a neighborhood (i.e., excluded) because of high rents or other conditions they are unable to control or prevent. (California Air Resources Board)

Early childhood education refers to programs for children from birth to age 5 including preschool, transitional kindergarten, and kindergarten. (California Department of Education)

Ethnicity is a term used to describe subgroups of a population that share characteristics such as language, values, behavioral patterns, history, and an ancestral geographical base. When used in data collection and reporting, 'ethnicity' is generally framed as self-identification as Hispanic/Latino or non-Hispanic/Latino. See also *race*.

Federal poverty level (FPL) A guideline set annually by the United States Department of Health and Human Services that indicates levels of income for a person or family to meet basic needs. Federal agencies use these guidelines to determine eligibility for public programs such as food assistance. In 2021, the FPL for one person is $12,880. For a four-person family/household, it is $26,500.

Food insecurity is limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways. Food security means access at all times to enough food for an active healthy life. (United States Department of Agriculture)

Gentrification is a process of neighborhood change that includes economic and demographic changes in a historically disinvested neighborhood. (Urban Displacement Project) See also *displacement*.

Health disparity A difference in physical or mental health status or outcomes between groups, that is linked with social, economic, and/or environmental disadvantage, and is preventable.

Health equity refers to efforts to ensure that all people have full and equal access to opportunities that enable them to lead healthy lives. (California Health and Safety Code Section 131019.5)

Household includes all the people who occupy a housing unit, i.e., house, apartment, mobile home. (United States Census Bureau)

Housing Affordability Index is the percentage of households that can afford to purchase a median-priced home without exceeding 30 percent of their income as recommended by lending institutions. (California Association of Realtors)

Housing crowding or **overcrowding** refers to a housing unit occupied by 1.01 persons or more per room (excluding bathrooms and kitchens). (United States Census Bureau) See also *household*, and *housing insecurity*.

Housing cost burden Housing cost-burdened families are those that spend more than 30 percent of their income on housing. Severely cost-burdened families are those that spend more than 50 percent of their income on housing. (United States Department of Housing and Urban Development) See also *housing insecurity*.

Housing insecurity, or **housing instability**, encompasses a variety of challenges such as moving frequently, being behind on rent, living in an overcrowded home, and facing homelessness. (Healthy People 2030)

Implicit bias Unconscious thoughts, attitudes, and feelings that result in preferences for, or aversions to, certain types of people; often associated with stereotypes based on characteristics such as race, gender, and appearance. See also *discrimination*.

Life expectancy or life expectancy at birth, is a summary measure of mortality experience of a population. It estimates the average number of years that a newborn could expect to live, given the sex- and age-specific death rates prevailing at the time of birth, for a specific year, in a defined area.

Limited English proficiency describes a characteristic of persons who speak English less than "very well". This definition is based on the results of the English Language Proficiency Survey conducted by the United States Census Bureau in 1982. See also *cultural and linguistic competence*.

Low income Unless specified otherwise, a level of income less than two times (< 200 percent of) the FPL. (See also *federal poverty level*).

Married-couple family is a family in which the householder and his or her spouse are listed as members of the same household. (United States Census Bureau)

Medi-Cal California's name for its Medicaid program. a public health insurance program which provides health care services for low-income individuals including families with children, older adults, persons with disabilities, foster care, pregnant women, and low-income persons with specific diseases such as tuberculosis, breast cancer, or HIV/AIDS. (DHCS)

Minoritized refers to groups of persons who have been historically marginalized. (American Medical Association Manual of Style, 11th Edition)

Net worth (wealth) is the sum of the market value of assets owned by every member of the household minus liabilities owed by household members. (United States Census Bureau)

Particulate matter 2.5 is an indicator of air pollution consisting of particles smaller than 2.5 micrometers in diameter. Such particles can travel into and deposit on the surface of the deeper parts of the lung and contribute to chronic heart and lung disease. (California Air Resources Board)

Pollution Burden scores are derived from the average percentile of six exposure indicators (ozone and PM 2.5 concentrations, diesel PM emissions, pesticide use, toxic releases from facilities, and traffic density) and five environmental effects indicators (clean-up sites, impaired water bodies, groundwater threats, hazardous waste facilities and generators, and solid waste sites and facilities). The calculated average percentile is divided by 10 for a Pollution Burden score ranging from 0.1 to 10. (California Office of Environmental Health Hazard Assessment)

Race is a social construct used to categorize humans into groups, called races or racial groups, based on ancestry or combinations of shared physical traits such as skin color, hair texture, nose shape, eye shape, or head shape. Although most scientists agree that such groupings lack biological meaning, racial groups continue to have a strong influence over contemporary social relations. When used for census, data collection, and other statistical purposes, race is framed as self-identification with one or more social groups, including American Indian or Alaska Native; Black or African American; Asian; Native Hawaiian or Pacific Islander; other race; White; and multiple races. See also *ethnicity*.

Reading proficiency is an indicator of academic and career success. In California, it is measured by the percentage of public school students in grades 3, 4, 5, 6, 7, 8, and 11 who meet or exceed their grade-level standard on the California Assessment of Student Performance and Progress Smarter Balanced Summative Assessment for English language arts/literacy. (California Department of Education)

Safety net refers to a set of programs to assist low-income individuals by helping them to meet basic needs through public health insurance, cash and food assistance, and tax credits. (Public Policy Institute of California)

School-based health centers are health clinics located on or near school campuses where children and youth can get help for acute and chronic conditions, as well as preventive care. (California School-Based Health Alliance)

Serious psychological distress is an indicator of mental illness based on responses to a screening questionnaire called the Kessler 6 series, which asks respondents how often they feel sad, nervous, worthless, hopeless, restless, or whether everything is an effort. (California Health Interview Survey)

Sexual orientation and gender identity refers to a set of characteristics that describe a person's attraction to others, and their own sense of self, respectively. The sexual orientation characteristic describes a person's attraction to others as straight/heterosexual, gay/lesbian, bisexual, or something else. The gender identity characteristic is typically determined by the sex assigned to the person at birth (e.g., 'male' or 'female' on the birth certificate), or how a person currently describes themselves, which can differ from birth (e.g., male, female, transgender, something else).

Social cohesion is the strength of relationships and the sense of solidarity among members of a community. (Healthy People 2030)

Social capital is defined as resources accessed by individuals or groups through social networks that provide a mutual benefit. (California Department of Public Health, Healthy Communities Data and Indicators Project)

Toxic stress Prolonged, severe, chronic stress triggering a cascade of physiological changes in systems throughout a person's body that have detrimental impacts on health and development. (United States Department of Health & Human Services) See also *adverse childhood experiences*.

Violent crime is a category composed of murder, nonnegligent manslaughter, rape, robbery, and aggravated assault. (Federal Bureau of Investigation)

Wage gap, or gender pay gap, is an equality measure comparing the earnings of women and men, calculated from the median pay of female employees and that of male employees, expressed as a percentage. A pay gap of 20 percent would mean that females earn 80 percent of the male median base salary. (California Department of Human Resources)