# An Update on the *Portrait of Promise:*Demographic Report on Health and Mental Health Equity in California

Report to the Legislature and the People of California by the Office of Health Equity, California Department of Public Health, February 2020

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## **Executive Summary**

In 2012, as authorized by Section 131019.5 of the California Health and Safety Code, the Office of Health Equity (OHE) was established within the California Department of Public Health. One of the key duties of the Office of Health Equity outlined in the code is the development of a report with demographic analyses on health and mental health disparities and inequities, highlighting the underlying conditions that contribute to health and well-being, accompanied by a comprehensive, cross-sectoral strategic plan to eliminate health and mental health disparities.

Section 131019.5 defines health and mental health *disparities* as the differences in health and mental health status among distinct segments of the population, including differences that occur by gender, age, race or ethnicity, sexual orientation, gender identity, education or income, disability or functional impairment, or geographic location, or the combination of any of these factors. Disparities in health or mental health, or the factors that shape health, that are systemic and avoidable and, therefore, considered unjust or unfair, are defined as health and mental health *inequities*.

In August 2015, the Office of Health Equity issued its inaugural legislative report —*Portrait of Promise: The California Statewide Plan to Promote Health and Mental Health Equity* ("Plan")— which presented background and evidence for the root causes and consequences of health inequities in California. It explored and illustrated how a broad range of socioeconomic forces, including income security, education and child development, housing, transportation, health care access, environmental quality, and other factors shape the health of entire communities — especially vulnerable and underserved communities —resulting in preventable health inequities for specific populations.

The primary objective of this update is to refresh the demographic analysis— the portion of the Plan titled *Demographic Report on Health and Mental Health Equity in California* ("Report")— with more recent data. With an up-to-date, data-driven understanding of the causes and consequences of health inequities, Californians will be better prepared to take the steps necessary for promoting health across California's diverse communities and building on the great strengths that our population diversity brings. Highlights of this updated statistical profile of the social determinants of health and mental health in California include:

The percentage of Californians in poverty has decreased in recent years (from 16.3 percent in 2009–2011, to 14.5 percent in 2014–2016) according to the official measure. However, high costs of living in California translate into the highest poverty rate of all 50 states according to the Supplemental Poverty Measure. By this measure, one in five Californians is in poverty.

- Income inequality remains stark, especially among families headed by single mothers: 38 percent of such households are below the federal poverty level, compared to 11 percent of married-couple households.
- Food insecurity in California has significantly decreased from 15.6 percent of households in 2010–2012, to 11.8 percent in 2014–2016. However, communities of color continue to be disproportionately affected, and two in five low-income adults are unable to afford enough food.
- Disparities by racial/ethnic group persist in childhood education indicators such as elementary school reading level: Higher proportions of Asian and White third-graders are reading at above or near standard compared with African American, American Indian, and Latino students.
- Higher percentages of African American and Latino households are housing costburdened (i.e., spend over 30 percent of monthly income on housing) than other race/ethnic groups.
- Pollution burdens continue to be highest in regions such as the Central Valley, where Latinos and other racial and ethnic minorities make up a large proportion of the population.
- Despite overall improvements in health insurance coverage, disparities by racial/ethnic group persist: the uninsured rate among Latinos dropped (from 28 percent in 2012 to 17 percent in 2016), but remained substantially higher than among Whites (10 percent in 2017).
- Overall quality of care for low-income patients in the state appears to be improving, with California rising from 20<sup>th</sup> to 14<sup>th</sup> among the 50 states, between 2013 and 2015.
- The number of hate crime victims increased in 2016, reversing a declining trend from 2007 to 2014.
- Access to health insurance or a usual source of care continues to be lower among minority individuals with serious psychological distress.

The Office of Health Equity staff, working with the Advisory Committee and other stakeholders, has established a vision, a mission, and a central challenge to guide the development of strategies.

VISION: Everyone in California has equal opportunities for optimal health, mental health and well-being.

MISSION: Promote equitable social, economic, and environmental conditions to achieve optimal health, mental health, and well-being for all.

CENTRAL CHALLENGE: Mobilize understanding and sustained commitment to eliminate health inequity and improve the health, mental health, and well-being of all.

The following are the Plan's continuing strategic priorities:

- Through assessment, yield knowledge of the problems and the possibilities.
- Through communication, foster shared understanding.
- Through infrastructure development, empower residents and their institutions to act effectively.

This updated Demographic Report on Health and Mental Health Equity provides a renewed context for why this work is of utmost importance.

Sincerely,

 ${\sf Mark\ Starr,\ DVM,\ MPVM,\ DACVPM}$ 

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## Demographic Report on Health and Mental Health Equity in California

#### **Definition of Terms**

- **Determinants of Equity:** The social, economic, geographic, political, and physical environmental conditions that lead to the creation of a fair and just society.
- **Health Equity:** Efforts to ensure that all people have full and equal access to opportunities that enable them to lead healthy lives.
- Health and Mental Health Disparities: Differences in health and mental health status among distinct segments of the population, including differences that occur by gender, age, race or ethnicity, sexual orientation, gender identity, education or income, disability or functional impairment, or geographic location, or the combination of any of these factors.
- **Health and Mental Health Inequities:** Disparities in health or mental health, or the factors that shape health, that are systemic and avoidable and, therefore, considered unjust or unfair.
- Vulnerable Communities: Vulnerable communities include, but are not limited to, women, racial or ethnic groups, low-income individuals and families, individuals who are incarcerated and those who have been incarcerated, individuals with disabilities, individuals with mental health conditions, children, youth and young adults, seniors, immigrants and refugees, individuals who are limited-English proficient (LEP), and Lesbian, Gay, Bisexual, Transgender, Queer, and Questioning (LGBTQQ) communities, or combinations of these populations.
- Vulnerable Places: Places or communities with inequities in the social, economic, educational, or physical environment or environmental health and that have insufficient resources or capacity to protect and promote the health and wellbeing of their residents.

Source: Health and Safety Code Section 131019.5.

## The Social Determinants Shaping the Health of California's People and Places

The physical and mental health of individuals and communities is shaped, to a great extent, by the social, economic, and environmental circumstances in which people live, work, play, and learn. According to the World Health Organization, these same circumstances—or social determinants of health—are "mostly responsible for health inequities: the unfair and avoidable differences in health status seen within and between countries."<sup>1</sup>

In preparing the California Statewide Plan to Promote Health and Mental Health Equity (published in 2015), the Office of Health Equity, working in close collaboration with other public and private agencies and advocacy organizations, collected and analyzed a wealth of primary and secondary demographic and health data concerning the major underlying social, economic, and environmental conditions that contribute to the health and health inequities of the state's residents and their communities. The following demographic report is an effort to provide updated data to inform plans for addressing health inequities and disparities, and to help measure future progress toward the goal of reducing and eliminating these inequities and disparities.

In the following pages, we present data highlights for key domains in the social determinants of health.

#### **Income Security: The High Cost of Low Incomes**

For many years, the relationship between socioeconomic status (SES)—usually measured by income, education, or occupation—and health and mental health has been known. As individuals move up the SES ladder, their health improves, they live longer lives, and they have fewer health problems. SES is important because it provides access to needed resources that help people avoid risks, promote healthy behaviors, and protect health, such as "money, knowledge, power, prestige, and beneficial social connections."

Several recent studies of the economic impact of poverty in the United States reveal that the nation as a whole pays the equivalent of \$500 billion a year, or roughly 4 percent of U.S. Gross Domestic Product (GDP), for the lost productivity and excess costs of health and other services associated with child poverty.<sup>2</sup> These studies confirm that children growing up in poverty receive less and lower quality education, earn less as adults, are more likely to receive public assistance, and have lower-quality health and high health costs over their lifetimes.

#### **California Wealth and Income Disparities**

Although the Great Recession of 2007-2009 hit the pocketbooks of families across the socioeconomic spectrum, the hardest hit included those that were already in the lower ranks of the income ladder. By 2010, California families in the lowest income level (10th percentile) saw incomes fall more than 21 percent, while those in the 90th percentile experienced only a 5 percent decline, resulting in a new record level of income inequality in the state.<sup>3</sup> Although the intervening economic recovery has raised incomes from Great Recession-era lows, the rate of recovery at the bottom of the spectrum has been much slower than in the middle and top, resulting in worse income inequality in 2014 than in 2007.<sup>4</sup>

Under the official federal poverty measure, California's ranking improved from 14<sup>th</sup> (16.3 percent of the population in 2009–2011) to 16<sup>th</sup> (14.5 percent in 2014–2016) among the 50 states. However, California has the highest poverty rate of all states—20.4 percent—when calculated according to an alternative (although unofficial) measure known as the Supplemental Poverty Measure (SPM). This measure was developed by an Interagency Technical Working Group commissioned by the federal Office of Management and Budget to better reflect contemporary social and economic realities and government policy. 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. This alternate definition adds over 2 million more people to the official poverty figures, meaning that one in five Californians would be considered poor. Although the official number of Californians in poverty has decreased in recent years, the high costs of living in the Golden State have kept the poverty rate higher than in any other state, according to the SPM.

#### Single-Mother Households and Children Bear the Brunt of Poverty

Extreme income inequity remains especially acute among California households headed by a single mother, 38 percent of which have an income below the poverty level, according to data from 2011–2015. In the inaugural *Portrait of Promise*, we reported that 33 percent of California families headed by single mothers had an income below the poverty level, based on data from 2006–2010. The disparity is even higher for families led by Latino, American Indian/Alaska Native, and African American single mothers (**Figure 1**). This suggests that the persistent (if improving) inequity in wages between men and women, with women being paid 76 percent of comparable wages paid to men,<sup>7</sup> is not simply a women's issue but also a serious family issue that contributes to additional inequities in quality of life for children. Almost half of the state's 2 million children age 3 or under live in low-income families.<sup>8</sup>

#### The Health Impact of Poverty

The consequences of poverty include high rates of poorer health and lower life expectancy among vulnerable populations. Evidence has shown a strong correlation between poverty-level income and cardiovascular disease, low birth weight, hypertension, arthritis, and diabetes. One-third of deaths in the United States can be linked to income inequality, and it is estimated that nearly 900,000 deaths could have been prevented nationally in 2007, had the level of income inequality been lower. 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. The prevalence of psychiatric disorders, including neurotic disorders, functional psychoses, and alcohol and drug dependence is consistently more common among lower-income people.

In short, one of the most beneficial prescriptions for improving people's health and closing the gaping disparities in health outcomes is to work towards more equitable household income distribution.

#### **Food Security and Nutrition**

Food security, defined as stable access to affordable, sufficient food for an active, healthy life, is a basic human right. Yet here in California, the nation's food-rich "breadbasket," many people experience periods when they cannot afford to put sufficient food on the table or have to forgo other basic needs to do so. Food insecurity among California households increased from 11.7 percent in 2000–2002 to 15.6 percent in 2010–2012, then decreased to 11.8 percent in 2014–2016.<sup>2</sup>

#### **Chronic Food Insecurity Means More Than a Missed Meal**

Adults who are food insecure have poorer health and are at risk of major depression as well as chronic diseases such as heart disease, diabetes, and hypertension.<sup>3</sup> Food-insecure expectant mothers may experience long-term physical health problems,<sup>4</sup> experience birth complications,<sup>5</sup> and be at greater risk of depression<sup>6</sup> and other mental health problems.<sup>7</sup> Food-insecure children have increased rates of developmental and mental health problems. They may also have problems with cognitive development and stunted growth, leading to detrimental impacts on their behavioral, social, and educational development.<sup>6,8-14</sup> Women living in food-insecure households are more likely to be overweight or obese. One possible explanation for this paradoxical correlation is that these women tend to overcompensate for periods when food is scarce by overeating when food is available.<sup>15</sup>

#### **Communities of Color and Children Bear the Brunt**

The pain of hunger and food insecurity impacts virtually all racial and ethnic groups and geographic regions of the state. However, low-income American Indian/Alaska Native, African American, and Latino adults have been disproportionately impacted by hunger and food insecurity (**Figure 2**). Overall, nearly 44 percent of low-income individuals experience food insecurity, as do nearly one in five California children regardless of family income. Ironically, many of California's most food-insecure communities are located in the very heart of the state's agriculturally rich—and increasingly Latino—San Joaquin Valley. For example, the percentage of children in Fresno County who are food insecure continues to be close to twice as high as in San Mateo County (**Figure 3**).

#### Food Deserts in a Fertile Landscape

Marginalized, vulnerable communities experiencing high rates of food insecurity are not limited to the state's agricultural regions; they are also common throughout California's cities and suburban areas. Nationally, in 2010, nearly 30 million Americans (9.7 percent of the population) lived in low-income areas more than a mile from a supermarket. These areas are often defined as virtual "food deserts," where fewer than 12 percent of local food retailers offer healthier food options such as fresh fruits and vegetables, and where residents have limited means of travel to more distant full-service grocery stores.

One study found that residents with no supermarkets near their homes were 25-46 percent less likely to have a healthy diet.<sup>17</sup> An analysis of the retail food landscape in California found that for the state as a whole, there were more than four times as many fast-food restaurants and convenience stores as supermarkets and produce vendors in 2005. This ratio of unhealthy to healthy food options varied substantially among counties and cities, with two counties (San Bernardino and Sacramento) and two cities (Bakersfield and Fresno) having nearly six times as many fast-food restaurants and convenience stores as supermarkets and produce vendors.<sup>18</sup> Communities with high concentrations of fast-food outlets and relatively high-priced convenience stores are characterized by disproportionately high rates of obesity and diabetes, which are precursors of other chronic diseases such as cardiovascular disease, stroke, and arthritis.

# Child Development and Education: Addressing Lifelong Disparities in Early Childhood

Many of the basic foundations for lifelong health, prosperity, and well-being are formed in early and middle childhood. That observation, increasingly recognized in policy, research, and clinical practice, means that as a society, we can ameliorate many of the health inequities featured in this report by focusing attention and resources on ensuring that our children—all our children—are provided with the strongest possible foundations for future success.

#### **Getting a Head Start**

In purely financial terms, early investment in childhood education is a winner. The rate of return on a \$1 investment is 7 to 10 percent annually "through better outcomes in education, health, sociability, [and] economic productivity and [through] reduced crime," according to University of Chicago economist and Nobel laureate James Heckman. Over a lifetime, the return on that \$1 adds up to \$60 to \$300.<sup>2</sup>

One of the most successful ways of supporting healthy early childhood development is through high-quality infant and toddler care, whether provided by parents, other family members, day care providers, Head Start, or preschool programs.<sup>3</sup> Getting ready to learn is especially important for the nearly half of all California children who live in low-income families (less than 200 percent of the federal poverty level), <sup>4</sup> a disproportionately large share of whom are non-White. Despite the evidence demonstrating the importance of early childhood care and enrichment, only 6 percent of income-eligible children under age 3 are served by any publicly supported program.<sup>5</sup> Possible reasons for this include transportation barriers, especially for rural areas; cultural, language, or literacy barriers; lack of awareness of eligibility; and staffing or facilities issues. As shown in **Figure 4**, about three in five low-income children ages 3-4 are not enrolled in school, including nearly three in five Latinos and American Indians, and more than half of African Americans.

#### **Third-Grade Reading Proficiency as a Predictor of Future Performance**

When children do not participate in early developmental and educational opportunities, the impact is seen in later educational performance. In an encouraging trend, the data available at the time of the inaugural legislative report showed that the percentage of reading-proficient California third-graders had increased between 2003 and 2013, in all subgroups. The California Department of Education implemented a new testing program in 2014, and we report results for 2017. Despite overall continuing improvement in meeting reading standards, substantial gaps remain between English learners; economically disadvantaged children (those eligible for reduced-price lunch programs); boys and girls; and racial or ethnic subgroups including African Americans, American Indian/Alaska Natives, and Latinos, compared with White, and Asian students (Figure 5). For example, only 51 percent of economically disadvantaged third-graders were reading at, above or near standard in 2017, compared with 79 percent of higher-income students. These educational inequities start early and have long-lasting implications (Figure 6).

Similar disparities exist in terms of high school dropout and graduation rates, although here, there has been notable improvement in recent years. By the academic school year 2015–16, more than 47,000 California students who started high school in 2011–2012 had dropped out —about one of every ten students. (In 2011–2012, there were more than 65,000 dropouts—about one in eight students.) However, dropout rates vary widely by school district and among racial/ethnic groups. African American, American Indian/Alaska Native, Latino, and Pacific Islander students have markedly higher dropout rates than Asian American and White students. Research has shown that young people who do not complete high school are more likely than those with higher education levels to be unemployed, live in poverty, be dependent on welfare benefits, have poor physical and mental health, and engage in criminal activity. One

national study estimated that if those who dropped out of high school in 2011 had graduated instead, the nation's economy would benefit by about \$154 billion over their lifetimes.<sup>9</sup>

#### **Implications for Lifelong Health**

More than any other developmental period, early childhood development sets the stage for acquiring skills that directly affect children's physical and mental health – health literacy, self-discipline, the ability to make good decisions about risky situations, eating habits, and conflict negotiation. These same skills influence children's health and mental health throughout adolescence, contributing to important public health and social problems, including increases in school violence, teen sexuality, eating disorders, and the onset of many psychological disorders.<sup>10</sup>

#### Housing: A leading social determinant of public health

Housing plays a fundamental role in impacting public health, from locational attributes to quality and affordability. Stable (i.e., adequate, safe, and affordable) housing is a foundation for healthy family growth and for thriving communities.

#### An Unaffordable House Is Not a Healthy Home

Healthy and stable housing is one of the most basic requirements for a sense of personal security, sustainable communities, family stability, and health of every individual. It is essential for meeting our physical needs for shelter against environmental hazards, our psychological and emotional needs for personal space and privacy, and our social needs for a gathering place for family and friends.

#### When Housing Becomes Unaffordable...

Cost of shelter is the largest, non-negotiable expense for most families. When the cost is excessive, families fall behind on rent or mortgage payments and have little or no disposable income, often going without food, utilities, or healthcare. For a growing share of lower- and even middle-income Californians, lack of availability of affordable and adequate housing has become a contributor to mental stress and physical illness rather than a source of health and well-being. The rising cost of housing over several decades (a trend temporarily reversed during the Great Recession) has put homes in the lowest price quartile out of reach for approximately half of all American families, up from 40 percent in the mid-1980s. In California, the housing "affordability index" – the percentage of households that can afford to purchase a median-priced home without exceeding 30 percent their income, as recommended by lending institutions – has fallen rapidly, as housing prices have rebounded since 2012. For example, by the end of 2018, only 28 percent of Californian households could afford to purchase a median

priced (\$564,000) single family home, while 37 percent could afford to purchase a condominium or a town house (\$460,000). Nationally, 54 percent of households could afford purchasing a home of either type.<sup>4</sup>

Rents are rising rapidly and rental vacancy rates are in decline, impacting lower-income households in particular, one-third of which are households headed by an elderly person or person with disabilities, and one-third are families with children. About 53 percent of all renters and 80 percent of lower-income renters (earning 80 percent or less than the median income) pay in excess of 30 percent of their income for rent. Households with high housing cost burdens (over 30 percent of annual income) are often referred to as "shelter poor" because 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. In California, African American and Latino households are shouldering a disproportionately high burden of housing cost: 59 percent of African Americans renters and 58 percent of Latino renters spend more than 30 percent of their monthly household income on housing, in comparison to 53 percent of Californian renters overall (Figure 7). These updated findings on housing cost burdens impacting renters are similar to those in the inaugural report, in which an estimated 58 percent of African American renters and 56 percent of Latino renters spent more than 30 percent of their monthly household income on housing, based on data through 2012.

#### The Color of the Housing Crisis

The affordability crisis is particularly acute in California, and it has disproportionately affected low-income and other vulnerable populations throughout the state. Home ownership rates among Latino and African American families are significantly below the state average and more than 36 and 42 percent lower, respectively, than the rate of Whites (Figure 8). In addition, African American and Latino families who were recent borrowers experienced foreclosure rates during the recession that were double the rate of White families.<sup>7</sup> Foreclosures and rapidly rising rents have also contributed to high rates of housing disruption for economically disadvantaged families and communities of color: African Americans and American Indians/Alaska Natives are about one-third more likely than the California average to experience a disruptive change of residence during a given year (Figure 9). Such unplanned changes are a source of harmful stress and disruption in families' access to health care services, education, social networks, and employment opportunities. These families will be more likely to also feel the delayed "spin-off" effects of recession, such as poor credit affecting employment and renting, or declining neighborhoods with increased crime and poverty.<sup>8</sup>

The barriers to healthy, stable, and affordable housing resulted in the ultimate plight of the housing crisis: homelessness. With 12 percent of the U.S. population, California was home to more than 25 percent of the nation's homeless in 2017, an increase of 16,136 people from the

previous year. On a single night in January 2017, 134,278 Californians were counted as homeless. Almost seven in 10 homeless individuals in California live unsheltered (i.e., do not use shelters and are typically found on the streets, in abandoned buildings, or in other places not meant for human habitation) on any given night – the highest rate for unsheltered homeless in the nation.<sup>9</sup>

#### **Beyond Affordable Housing: Healthy Communities**

A healthy home is more than an affordable house. Ultimately it must also meet at least minimum community safety and health standards and be part of a healthy neighborhood. That means being part of a community with parks, sidewalks, and bike paths; with clean air, soil and water; with full-service grocery stores that stock affordable, healthy, fresh fruits and produce; with high-quality childcare, preschool, and K-12 schools that graduate all children; with reliable, affordable public transit for getting to work; and with decent-paying local jobs at healthy workplaces. That is the kind of healthy home we all deserve.

#### **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 every one of us. Yet low-income families, communities of color, and certain other vulnerable populations, especially children, 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. Figures 10A and 10B illustrate that pollution burdens tend to be high in California's Central Valley, where Latinos and other non-Whites make up a large proportion of the population.

Despite having achieved impressive improvements in overall air pollution reduction in recent decades, eight Californian cities are among the top ten most polluted cities in the nation by ozone, and seven of the top ten by year-round and short-term particle pollution.<sup>2</sup> The state's smoggiest cities are also the cities with the highest densities of people of color and low-income residents who lack health insurance.<sup>3</sup>

#### **Climate Change Threatens Even Greater 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 1, released in 2017.<sup>4</sup> A 2009 report from the California Climate Change Center had warned that the impacts of climate change will likely create especially heavy burdens on low-income and

other vulnerable populations: "Without proactive policies to address these equity concerns, climate change will likely reinforce and amplify current as well as future socioeconomic disparities, leaving low-income, minority, and politically marginalized groups with fewer economic opportunities and more environmental and health burdens." The report emphasized that some of the greatest economic impacts of climate change are expected to hit the state's agricultural sector, whose half million workers are predominantly Latino, and tourism-related industries, in which people of color make up a majority of the workforce.<sup>3</sup>

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.<sup>3</sup>

#### Low-Income Children Are Uniquely Vulnerable

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.<sup>5</sup> 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.<sup>6</sup> Children living in low-income neighborhoods near heavy, energy-intensive industry; rail yards; and heavily trafficked freeways and streets in urban areas are at special risk of chronic respiratory conditions. African American children are four times more likely to be hospitalized for asthma compared with White children, and urban African American and Latino children are two to six times more likely to die from asthma than White children.<sup>7</sup> Low-income children in California with asthma miss more than twice as many days of school due to the severity of symptoms as higher-income children.<sup>8</sup>

#### **Built Environment: Healthy Neighborhoods, Healthy People**

The built environment refers to human-designed and constructed surroundings from transportation networks (e.g., streets, freeways, sidewalks), to buildings (e.g., stores, hospitals, factories, houses, schools, offices), to recreational amenities (e.g., parks, playgrounds). How we design the built environment profoundly impacts every aspect of our quality of life, especially as it relates to our physical, mental, and social health.

#### Influence on Access to Healthy Foods and Physical Activity

The built environment influences many aspects of a community, such as whether healthy food can be accessed and where children can safely play. Data have shown that Californians living in neighborhoods with a low number of full-service grocery stores tend to have higher rates of

obesity, and neighborhoods with fewer grocery stores tend to have more poor non-White residents than neighborhoods with easy access to fresh fruits and vegetables. Many of these neighborhoods that lack healthy food outlets also lack safe places to be active, including walkable streets, bike paths, parks, and other recreational facilities.

#### Land Use, Transportation, and Health

Transportation systems and land use policies can support health and equity by influencing an individual's social connections, physical activity, and level of access to jobs, medical care, healthy food, educational opportunities, parks, and other necessities. In addition, promoting safe active transportation (e.g., walking, biking, public transportation) is an important strategy for promoting health and equity, while also reducing greenhouse gas emissions. California's state leadership has identified healthy, sustainable transportation as a priority, and in 2014 the California Department of Transportation adopted a goal to "promote health through active transportation and reduced pollution in communities."<sup>2</sup>

In California and throughout the nation, the health consequences of traffic-intensive development and transport patterns include higher rates of air pollutants which are associated with higher incidence and severity of respiratory symptoms, and stress-related health problems and other physical ailments (i.e., back pain) associated with commuting.<sup>3</sup> In a car-based transportation region, people are less likely to bike, walk, or skate to school or the grocery store, thus contributing to higher rates of cardiovascular disease, diabetes, and obesity. For example, school siting and transportation planning significantly impact how children get to school. Despite the health and environmental benefits, the percentage of children walking, biking, or skating to school in California (39 percent in 2017) has not changed appreciably in recent years.<sup>4</sup> Additionally, families living in these car-based transportation regions tend to spend a higher proportion of their income on transportation costs (**Figure 11**), and the high burden of transportation costs can put a strain on other essential expenses such as health care, education, and food.

In addition to reducing transportation costs and the associated inequities, a focus on California's land use and transit systems can address important health inequities. People who live in highly walkable, safe, mixed-use communities with easy access to green space and public transit options have higher levels of physical activity and lower body mass indexes, <sup>5,6</sup> contributing to greater overall health (**Figure 12**). Evidence strongly suggests that active transportation is positively associated with better cardiovascular health, lower risk of diabetes, and lower risk of hypertension. For example, the Integrated Transport and Health Impacts Model (I-THIM), developed by the California Department of Public Health, found that in the San Francisco Bay Area an increase in daily walking and biking per capita from 4 to 22 minutes would reduce cardiovascular disease and diabetes by 14 percent, and would decrease

greenhouse gas emissions by 14 percent. <sup>7</sup> Traffic related injuries and deaths disproportionately impact vulnerable populations such as older adults, children, communities of color, and low-income communities. <sup>8</sup> Investing in a range of land use and safety improvements that support active transportation can help reduce these inequities. Well-designed, well-built, safe neighborhoods and streets are essential to people's well-being, and are important strategies for promoting health and mental health throughout California.

#### **Health Care Access and Quality of Care: Narrowing the Gaps**

Access to high-quality health care services ranks as one of the most important overall health indicators of the federal government's Healthy People 2020 initiative. However, in 2011, 23 percent of Americans did not have a regular primary care provider (a doctor or health center) who they could visit when they were sick or needed preventive care or advice. By 2014, that share (nearly 24 percent) had not changed substantially. As of 2015, about 11 percent of Americans under the age of 65 did not have any form of health insurance. For both measures, the national rates were higher for various ethnic or racial groups, especially Latinos. In the inaugural legislative report, the uninsured rate among Latinos in California was estimated at 28 percent in 2011–2012, almost double that among the White population. By 2015–2016, the uninsured rate among Latinos declined to an estimated 17 percent, but remained substantially higher than the 10 percent among Whites (Figure 13). From year to year, some of the largest disparities in access to care and quality of care nationally are for Spanish-speaking Latinos, a fact that points to the critical importance of access to health insurance and linguistically and culturally appropriate care.

Implementation of the federal Affordable Care Act (ACA) is providing expanded access to health insurance for most people. Undocumented residents are an exception to this access, aside from those who qualify for some emergency services. In California, of the 1.3 million Covered California enrollees as of September 2017, 27.7 percent were Latinos, a percentage similar to when the inaugural legislative report was published in 2015. <sup>3</sup> This continuing level of enrollment represents a positive step in the right direction, because data on the national level has shown that having insurance coverage positively affects people's ability to obtain a usual source of care and thus increases their use of preventive, urgent, or chronic health care services. <sup>4</sup> However, significant racial and ethnic disparities in insurance coverage in California are likely to persist, due in part to cultural and linguistic barriers to expanded access to insurance, and to ineligibility under federal law (an estimated 1.4–1.5 million uninsured, undocumented California residents are ineligible).<sup>5</sup>

The ACA provides a number of avenues to address health disparities linked to cultural and linguistic barriers. For example, the ACA expands research on health and health care disparities

and created the Patient-Centered Outcomes Research Institute to oversee studies that examine differences in patient outcomes among racial and ethnic minorities. The ACA also expands grant programs to attract and retain health professionals from diverse backgrounds and directs funding to encourage service in underserved areas. Furthermore, the ACA provides support for the development and dissemination of curricula to promote cultural competency and supports a variety of culturally appropriate prevention and education initiatives.

#### **Equal Access Is One Piece of Health Equity**

Although insurance provides access to care, it does not ensure that everyone receives appropriate or high-quality care at the right time; nor does it fully address the affordability of access for low-income people with insurance. An examination over an eight-year period of sixteen prevention quality indicators — conditions such as pediatric asthma, hypertension, and low birth weight, for which quality outpatient care can often prevent the need for hospitalization — concluded that African Americans consistently had the highest hospitalization rates on fourteen of the measures. In some cases, the rates were two to three times higher than for Whites. For example, the average hospitalization rate for short-term complications of diabetes was 134 per 100,000 for African Americans, compared with 44 for Latinos, 42 for Whites, and just 14 for Asian/Pacific Islanders.

Major disparities in quality of care also exist across the nation among cities, regions, and states. A 2017 study of quality of care received by low-income Americans found that if every state had achieved the high-quality levels achieved by the top-performing states, an estimated 90,000 premature deaths would have been avoided, 1 million low-income Medicare beneficiaries would not have been unnecessarily prescribed high-risk medication, and tens of millions of adults and children would have received timely preventive care. Between 2013 and 2015, California's ranking improved from 20<sup>th</sup> to 14<sup>th</sup> among states for overall quality of care for low-income patients, but remained low (moving from 37<sup>th</sup> to 35<sup>th</sup>) for prevention and treatment.

## **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., antismoking campaigns), clinical strategies or treatments to detect the early stages of a 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 public health activities, such as health education about risky or positive personal behavior, and changes to the larger 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.

Unfortunately, prevention strategies are not fully utilized in California, or in the United States. The result has been the avoidable loss of thousands of lives annually in the United States, unnecessarily high levels of poor mental and physical health, the persistence of health disparities among vulnerable populations, and inefficient use of health care dollars. For instance, a national study by the Partnership for Prevention found that a 90 percent utilization rate for just five widely-recommended and cost-effective preventive services – daily aspirin use to prevent heart attacks, anti-smoking advice by health professionals, periodic colorectal cancer screening, annual influenza immunization for adults over age 50, and biennial breast cancer screening for women over age 40 – would save more than 100,000 lives each year in the United States. Of the twelve preventive services examined in the study, seven had been implemented for half or fewer of the people for whom they were recommended. Racial and ethnic minorities are getting even less preventive care than the general U.S. population. Latinos, for instance, have lower utilization of ten preventive services than Whites and African Americans. Asian adults age 50 and older are 40 percent less likely to be up to date on colorectal screening than White adults. In a number of important areas, use of preventive mental and physical health strategies among disadvantaged populations significantly lags behind use among more advantaged population groups.<sup>2</sup>

#### Disparities in Clinical Prevention: Mammograms and Childhood Immunization

In California, very low-income women continue to be less likely than higher-income women to receive mammograms and Pap tests (**Figure 14**). However, more recent data (this updated report uses data from 2016, whereas the inaugural report used data from 2012) suggest that the difference in test prevalence between very low-income women and higher income women has decreased, in part due to declining mammogram utilization for higher-income women. This continues to be important for African American women, who in 2015 had the highest breast cancer death rates of all racial and ethnic groups, at 31.7 per 100,000, compared to 21.4 per 100,000 for White women, though White women are actually more likely to be diagnosed with breast cancer.<sup>3</sup>

Another core component of preventive medicine is the recommended childhood immunization regimen. 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. Despite progress in immunization rates, however, approximately 42,000 adults and 300 children in the United States die each year from vaccine-preventable diseases.<sup>4</sup> In California, students entering kindergarten must show proof of immunizations for diphtheria, pertussis and tetanus (DPT); polio; measles, mumps, and rubella (MMR); hepatitis B; and varicella

(chickenpox).<sup>5</sup> The dosages required for these vaccines can be taken within the first 24 months of life.<sup>6</sup> As shown in **Figure 15**, African American kindergarteners have lagged behind all other racial or ethnic groups in immunization rates, although the lack of data more recent than 2011 specific to racial/ethnic groups precludes an updated assessment of this disparity.

#### **Behavior-Level Prevention: Breastfeeding**

Like immunization, breastfeeding has multiple 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). 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. Yet rates of breastfeeding beyond the first week following birth fall off sharply among California women at the lowest levels of family income, partly because low-income women are more likely than their higher-income counterparts to return to work earlier and to be engaged in jobs that make it challenging for them to continue breastfeeding. There is a range of policy and health education strategies that can be taken to improve the rates of breastfeeding among new mothers.

#### **Preventing Upstream Health Inequities**

As this report indicates throughout, a growing body of evidence shows that many of the "downstream" health disparities that occur among vulnerable populations can be effectively reduced or eliminated by addressing the related upstream socioeconomic and environmental inequities. Clean air and safe playgrounds, for instance, may be as effective for reducing levels of childhood asthma in low-income communities as a shot in the arm is for preventing measles. As another example, transportation systems, which are generally not thought of as part of the health care system, can indirectly impact health by influencing physical activity opportunities. Active transportation (walking, biking, and wheeling to destinations) can help prevent obesity and improve both mental and physical health. 12,13

#### **Experiences of Discrimination and Health**

The United States has made progress in creating a more tolerant society, yet discrimination and inequality persist today. Discrimination, whether experienced as individual acts or at an institutional level, makes people sick. Although many of the most blatant forms of discrimination have been greatly reduced since passage of the Civil Rights Act of 1964 and subsequent civil rights laws, which prohibited discrimination in workplaces, schools, public facilities, and state and local government— many groups continue to be vulnerable to both subtle and overt forms of discrimination in other social and economic sectors. 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, high blood pressure, and substance abuse.<sup>3,4</sup>

Prejudice and acts of discrimination are experienced by members of racial and ethnic groups, and **Figure 16** details how Californian women experience discrimination across these groups. In addition, discrimination is experienced by individuals and groups defined by age, gender, gender identification, sexual orientation, religion, and other social or personal characteristics. Individuals who are members of two or more disadvantaged groups (such as a member of a racial minority who is also disabled), are the most likely to report acts of discrimination and to experience stress and poor mental or physical health as a result.<sup>5</sup>

Discrimination is complex, rooted in historical racist and sexist social policy, and compounds the disproportionate burden of poor health outcomes that marginalized groups' experience directly and indirectly. Therefore, efforts to achieve health equity must also include efforts to identify and correct the discrimination that persists.

#### **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 in the body. Researchers are able to measure the body's stress response to discrimination by assessing changes in blood pressure, <sup>6,7</sup> stress hormone levels, protein markers associated with heart disease, and more. Over time, the resulting physiological and psychological effects of discrimination start to wear down the body. 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 weight births in African Americans compared with Whites. 11-14 Studies have shown that when comparing women with the same levels of income, education, job status, and health insurance status, African American mothers in the U.S. have lower-weight babies compared with their African-born, as well as White counterparts, suggesting that genetic ancestry is not a strong determinant of birth weight. 12 Although this is a complex area of research, the lower-weight babies born to African American mothers can in part be explained by the stress caused by the mothers' lifelong experiences of discrimination. 13,14 This is particularly problematic because low birth weight is a strong indicator of long-term health consequences. 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 their White counterparts, even when controlling for access-related factors such as

income and insurance status.<sup>15</sup> Given the impact of discrimination, it is important to address it as rigorously as the other social determinants of health.

#### The Indirect Health Effects of Discrimination

Beyond the direct health effects of 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, disproportionate arrest rates for boys and men of color (**Figure 17**), and lack of job opportunities and protection for those with physical and mental disabilities, among many others. In limiting an individual's or a group of individuals' ability to make a fair and decent wage, buy a home, access high-quality education at all levels, and marry and support the person of their choice, society is directly or indirectly impacting their health and overall quality of life.

#### Hate Crimes No Longer Declining, Still Pervasive

One way of discussing different groups' experience of discrimination is the number of hate crimes inflicted on individuals that are motivated by the victim's race, ethnicity, or other personal characteristics (**Figure 18**). In California, the reported number of victims who experienced hate crimes overall has increased 21 percent, from 943 in 2014 to 1,145 in 2016. This recent increase is in contrast to a general declining trend between 2007 and 2014. In 2016, reported hate crimes involving race, ethnicity, or national origin were the most frequent in absolute (but not population-adjusted) terms, accounting for 642 victims (most commonly anti-Black, 315 victims). Sexual orientation bias victims accounted for 242 victims (mostly for anti-gay bias, 177 victims), and religious bias accounted for 223 victims (most commonly anti-Jewish bias, 130 victims; and anti-Muslim bias, 40 victims). Anti-transgender and anti-gender non-conforming hate crimes accounted for 27 victims.

## **Neighborhood Safety and Collective Efficacy**

Across the country, when people are asked what they want their neighborhood to look like, the answers are fairly 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. In other words, they want neighborhoods that ensure access to basic goods, that are socially cohesive, that are designed to promote good

physical and psychological well-being, and that are protective of the natural environment. Such characteristics are essential to community mental and physical health and health equity.<sup>2</sup>

#### Trust as a Foundation for Health

An analysis of the literature on neighborhood-level social determinants of health shows that, among other factors, the collective health of neighborhood is highly subject to the social relationships among residents, including the degree of mutual trust and feelings of connectedness among neighbors. For instance, residents of "close knit" neighborhoods work together to create and maintain clean and safe playgrounds, parks, and schools. They exchange information on childcare, employment, and health access, and they cooperate to discourage crime and other negative behaviors, such as domestic violence, child abuse, substance abuse, and gang involvement, which can directly or indirectly influence health. Conversely, less close-knit neighborhoods and greater degrees of social disorder have been related to anxiety and depression.<sup>3</sup>

Unfortunately, California has many low-income neighborhoods, both rural and urban, where the opportunities or traditions for engagement in community service are lacking. While opportunities for social engagement benefit people across the socio-economic 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, when compared to higher income California adults (**Figure 19**).

#### **Unsafe Neighborhoods Produce Sick Children**

Low levels of neighborhood trust and cohesion may also be related to higher rates of criminal activity in disadvantaged neighborhoods. A 2010 study from the U.S. Department of Justice found a high correlation between low household income levels and rates of property crime, such as burglary. A similar relationship holds true for violent crime, as seen in **Figure 20**, where low-income, disadvantaged neighborhoods in the Bay Area and in South Los Angeles have the highest crime rates. The combination of high crime rates and other social factors associated with low-income neighborhoods creates barriers to healthful behaviors, such as walking and playground use; puts children at risk for poor educational, emotional, and health outcomes; and makes children more likely to become victims or perpetrators of violent crime. And makes children more likely to become victims or perpetrators of violent crime. Community-level crime interventions, such as well-lit, secure playgrounds; neighborhood watch organizations; and development of well-resourced teen centers to reduce neighborhood gang activity, are important components in many community-based neighborhood improvement initiatives.

#### **Cultural and Linguistic Competence: Why It Matters**

The ability of health and mental health care providers to effectively communicate with service recipients and to understand and respond to their cultural beliefs and values regarding health, illness, and wellness is essential for providing high-quality care to every person and for reducing health disparities among all social groups.<sup>1,2,3</sup>

California's vast and growing population diversity represents a special challenge for the state's primary and behavioral health care providers and organizations. The state is home to more than 200 languages, with 44 percent of the population speaking languages other than English at home and 19 percent, almost 7 million Californians, having limited English proficiency (LEP)—meaning they do not speak English "very well"—in 2016.<sup>4,5</sup>

The state's physician workforce is not representative of California's racial and ethnic diversity. While White and Asian/Pacific Islander people made up 53 percent of the population in California, they accounted for at least 60 percent of active physicians in 2015. Latinos, African Americans, and other ethnicities made up 48 percent of the California population, but less than 14 percent of active physicians. While Latinos constituted 38 percent of the population (and close to 50 percent in many regions), Latino physicians made up only 5 percent of the physician workforce. African Americans, who make up about 6 percent of the state's population, account for just 3 percent of physicians (**Figure 21**). It is estimated that roughly nine out of 10 physicians, dentists, and pharmacists in California are either White or Asian. Women are also underrepresented in the physician workforce (**Figure 22**). Although the proportion of female medical school graduates is nearly equal to that of male graduates, the impact of historical gender gaps in the past means that the active physician workforce is still majority male.

#### Impacts on Quality of Care

Although as many as 20 percent of the state's non-Hispanic White physicians are relatively fluent in Spanish,<sup>7</sup> significant cultural and linguistic barriers remain for many patients, and these barriers are associated with multiple forms of reduced quality of care and decreased access to primary and preventive care.<sup>8,9,10</sup> The Institute of Medicine report *Unequal Treatment* indicates that U.S. racial and ethnic minorities are less likely to receive routine medical procedures and more likely to experience a lower quality of health services.<sup>11</sup> Racial/ethnic minorities and individuals with low household incomes are more likely than their non-Hispanic White and higher-income counterparts to experience culturally insensitive health care and dissatisfaction with health care – health care experiences that have been linked to poorer health outcomes.<sup>12</sup>

The persistent racial, cultural, and linguistic gaps in the health care workforce are reflected in significant health disparities between population groups with LEP and those who speak English very well (**Figure 23**). In order to achieve cultural and linguistic competency in California's public and private health care institutions, we must look beyond the issue of language alone and grapple with a larger challenge – that of developing a primary and behavioral health care workforce capable of providing services that are responsive to the health beliefs, health practices, and cultural and linguistic needs of California's diverse population.

#### Mental Health Services: 'No Health without Mental Health'

The World Health Organization (WHO) defines mental health as "a state of well-being in which the individual realizes his or her own abilities, can cope with normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community." WHO adds, "Mental health is an integral part of health; indeed, there is no health without mental health," since physical health impacts mental health and vice versa.

Mental disorders, characterized by alterations in thinking, mood, and/or behaviors that are associated with distress and/or impaired functioning, contribute to a host of physical and emotional problems that include disability, pain, or death. In fact, mental health disorders are the leading cause of disability in the United States, accounting for 25 percent of all years of life lost to disability and premature mortality. In 2016, suicide, which is a direct outcome of mental distress, was the second-leading cause of death in California among individuals ages 15–34.

#### **Unequal Burdens**

The prevalence of mental illness and problems of availability, affordability, and access to mental health treatment and preventive services are areas of striking disparities on the basis of race, ethnicity, gender, income, age, and sexual preference. Various racial, ethnic, and other minority groups and low-income individuals of all races experience higher rates of mental illness than do Whites and more affluent individuals. Further compounding the problem, these individuals are less likely to access mental health care services, and when they do, it is more likely to be of poor quality. In California, almost one in six adults has experienced mental illness, and about one in twenty-four (and one in 13 children) suffers from a serious mental illness (SMI), according to a recent report by the California Health Care Foundation. The study found that three in five adults with a mental illness do not receive treatment or counseling. Other findings included substantial racial and ethnic disparities for incidence of SMI, with Native Americans, multiracial individuals, African Americans, and Latinos all experiencing rates of SMI above the state average.

A notable exception to the link between race and ethnicity and mental illness is the suicide rate, which is highest among White men.<sup>5</sup> This is an area that could benefit from additional research, as White men do not report having seriously thought about committing suicide any more than their multiracial and American Indian and Alaska Native counterparts (the data on Native Hawaiians and other Pacific Islanders is statistically unreliable). When the data are examined by sexual orientation, rates of suicidal thoughts are highest among bisexual individuals, followed by those who identify as gay or lesbian. Although the estimate is statistically unstable due to small sample sizes, the transgender or gender non-conforming group reported the highest percentage of suicidal thoughts of all groups (**Figure 24**).

#### **Barriers to Care**

Affordability of care and low rates of health insurance among vulnerable populations such as adults and teenagers with serious psychological distress have posed disproportionately large barriers to care for communities of color in California (**Figure 25**). Furthermore, Latino, teenagers who need help for emotional or mental problems continue to be less likely to receive counseling than White teens. About 29 percent of Latino teens who need counseling access it, in contrast to 40 percent of White teens. Studies show that rates of SMI are more than four times as high among the lowest-income adults in California (less than 100 percent of the federal poverty level) than among those earning at least 300 percent of the poverty rate. Among children age 17 and under, serious emotional disturbance is more closely associated with family income than with race or ethnicity. S

Another key barrier to equity in mental health prevention and treatment is the wide cultural and linguistic gulf between underserved populations and health care and behavioral health professionals. For example, a University of California, Davis report found that up to 75 percent of Latinos who seek mental health services opt not to return for a second appointment, due largely to cultural, social, and language barriers. Although mental health services must be provided in native languages of major immigrant groups, the study found Spanish-speaking professionals few and far between within Latino communities.

On the positive side, changes in state and federal legislation on mental health, including mental health parity laws and the Affordable Care Act, have increased access to mental health prevention and treatment for underinsured and uninsured Californians with mental health needs. In addition, funding for California's public mental health system received a boost from the expansion of Medi-Cal and increased revenue stemming from passage of the Mental Health Services Act in 2004 and the Mental Health Wellness Act of 2013.8

#### Summary

This overview of the underlying conditions and root causes influencing health in California—updated since the publication in 2015 of the Office of Health Equity's inaugural legislative report—paints a picture of continuing disparities in many domains, and modest narrowing or widening in gaps in others. Disparities along lines of race/ethnicity, gender, and geographic region appear to be persisting in domains such as income security, education, and environmental quality. Evidence suggestive of modest gains toward lessened disparities is seen in food security, prevention services, and access to health care. Data on selected markers of housing security and discrimination suggest that disparities in these domains may be worsening. The panoramic view of this demographic report paints a state-level portrait of the magnitude, distribution and disparities in the underlying conditions driving health outcomes, but the picture can vary from community to community.

The Office of Health Equity continues its multifaceted efforts to reduce or eliminate health and mental health disparities among California's vulnerable communities. OHE was created both to build upon the existing network of public and private sector partnerships in all economic, social, and environmental sectors that influence health and mental health and to align state resources, decision making, and programs to further the following objectives:

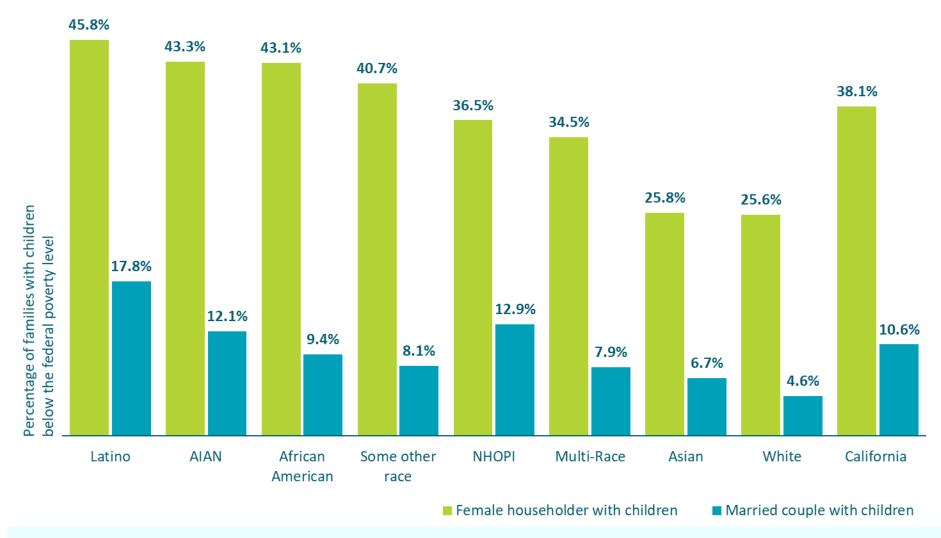
- Achieve the highest level of health and mental health for all people, with special attention focused on those who have experienced socioeconomic disadvantage and historical injustice;
- Work collaboratively with the Health in All Policies Task Force to promote work to prevent injury and illness through improved social and environmental factors that promote health and mental health;
- Advise and assist other state departments in their mission to increase access to, and the
  quality of, culturally and linguistically competent health and mental health care and
  services; and
- Improve the health status of all populations and places, with a priority on eliminating health and mental health disparities and achieving health equity.

# Acknowledgments

This report was prepared by the staff of the Office of Health Equity, Health Research and Statistics Unit: Rafael Colonna, Madhurima Gadgil, Benjamin Hicks, Peter Oh, and Mallika Rajapaksa. Tamu Nolfo provided input and guidance.

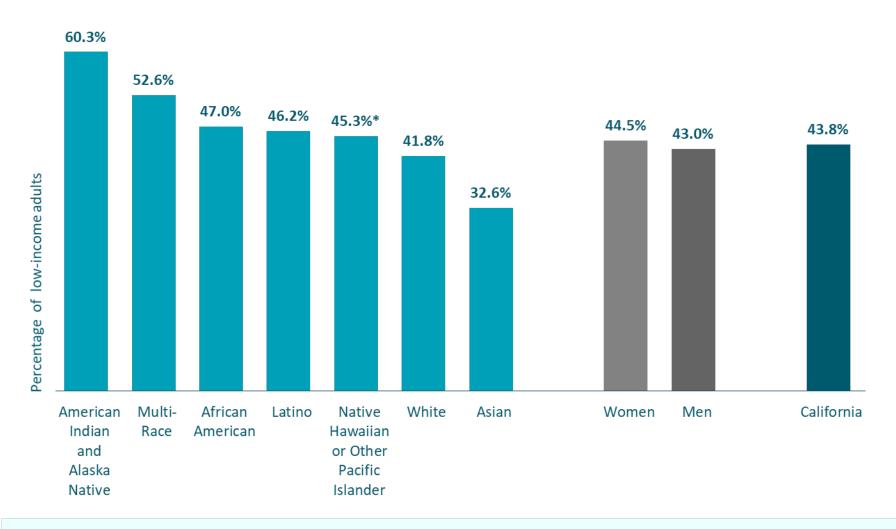
# **Figures**

# 38% OF FEMALE-HEADED HOUSEHOLDS AND 11% OF MARRIED-COUPLE HOUSEHOLDS LIVE BELOW THE FEDERAL POVERTY LEVEL



**FIGURE 1:** Percentage of families whose income in the past 12 months was below poverty level, by race/ethnicity and family type, California 2011-2015. Source: U.S. Census Bureau, American Community Survey, 5-year sample (2011–2015).

#### MORE THAN 40% OF LOW-INCOME ADULTS ARE UNABLE TO AFFORD ENOUGH FOOD



**FIGURE 2:** Percentage of adults whose income is less than 200% of the federal poverty level and who report having food insecurity, by race/ethnicity and gender, California, 2015-2016.

Source: University of California Los Angeles, California Health Interview Survey, 2015-2016. \* Statistically unreliable data.

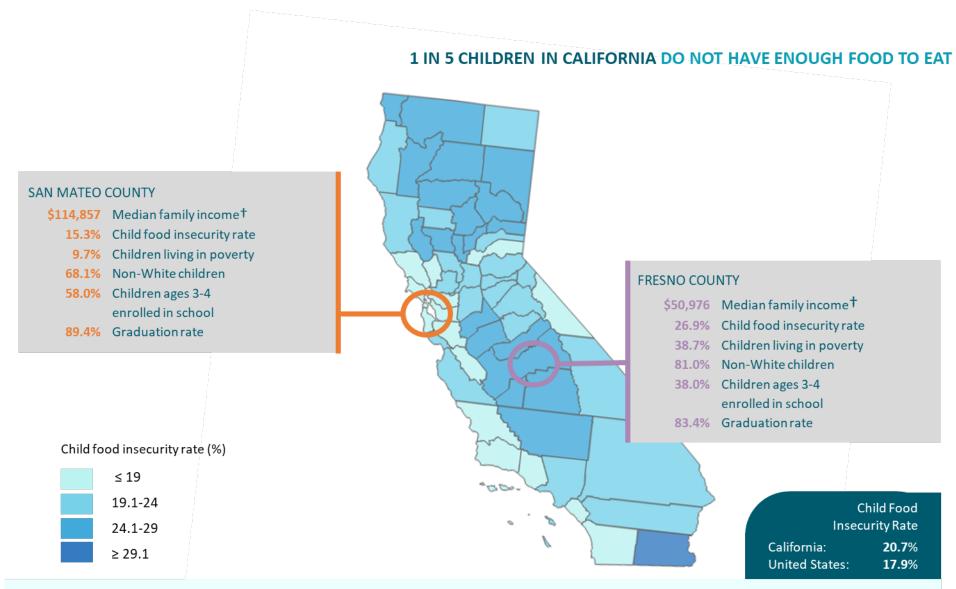
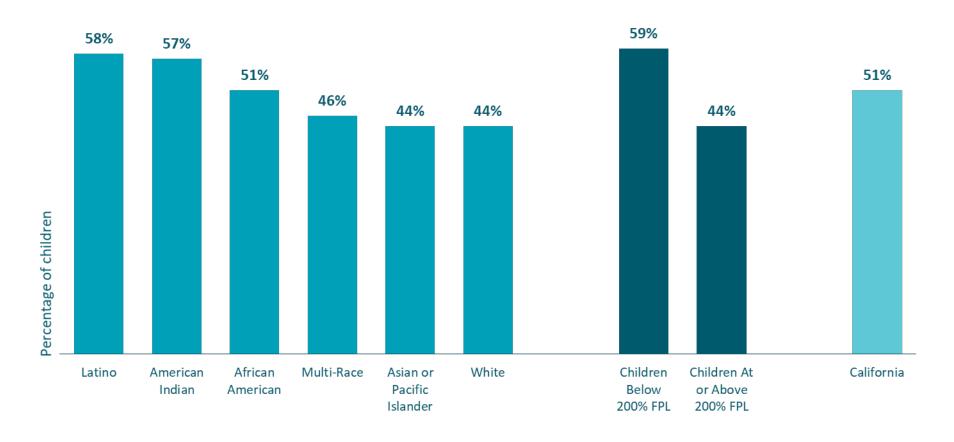


FIGURE 3: Child food insecurity rate: percentage of children under 18 years old who are food insecure, California, 2015.

Source: Feeding America, Map the Meal Gap, 2015; U.S. Census Bureau, American Community Survey 5-year sample 2012-2016; California Department of Education, Graduation Data, 2015-2016. †Median family income with own children under 18 years.

# MORE THAN HALF OF THE CHILDREN IN CALIFORNIA AGES 3 TO 4 ARE NOT IN SCHOOL



**FIGURE 4:** Percentage of Children ages 3 to 4 not enrolled in school, including nursery school, preschool, or kindergarten, by race/ethnicity, and 200% federal poverty level (FPL), 2012-2016.

Source: U.S. Census Bureau, American Community Survey, 5-year sample (2012–2016). Analysis by the Annie E. Casey Foundation, KIDS COUNT Data Center.

# A HIGHER PROPORTION OF ASIAN AND WHITE THIRD-GRADERS ARE READING AT ABOVE, OR NEAR STANDARD, COMPARED WITH AFRICAN AMERICANS AND LATINOS

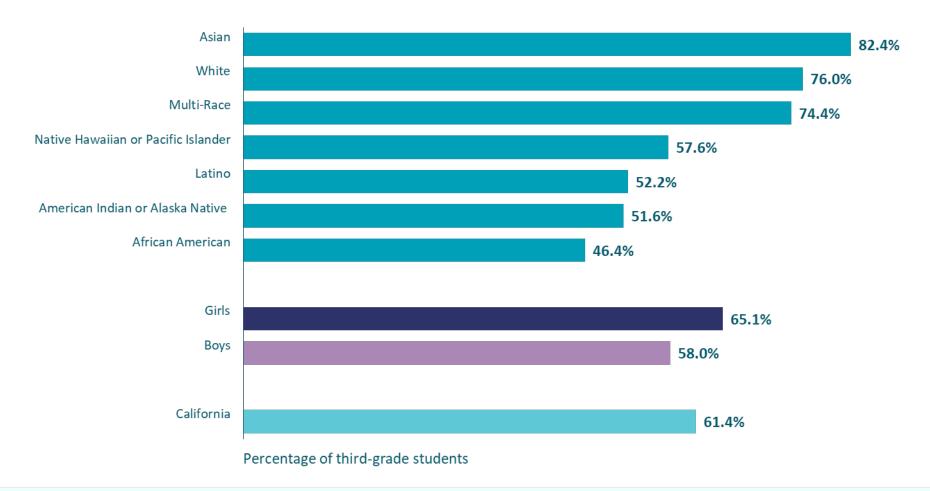


FIGURE 5: Percentage of third-grade students reading at above, or near standard, by race/ethnicity and gender, California, 2017.

Source: California Department of Education, Smarter Balanced Assessment Test Results, Reading standards section of English Language Arts/Literacy, California Assessment of Student Performance and Progress (CAASPP), 2017.

#### NON-WHITE MALE STUDENTS ARE UNDERREPRESENTED

#### IN CALIFORNIA HIGHER EDUCATION



FIGURE 6: Percentage of Bachelor's degree or Higher Educational Attainment by Race/Ethnicity and Sex, 2011-2015.

Source: U.S. Census Bureau, American Community Survey, 5-year sample (2011-2015). Note: Population age 25 years and older.

# AFRICAN AMERICANS AND LATINOS ARE MORE LIKELY TO SPEND MORE THAN 30% OF THEIR INCOME ON HOUSING THAN OTHER RACIAL/ETHNIC GROUPS



FIGURE 7: Percentage of housing cost by tenure and race/ethnicity, California, 2010-2014.

Source: U.S. Department of Housing and Urban Development, Comprehensive Housing Affordability Strategy, 2010-2014. Analysis by CDPH-Office of Health Equity, Healthy Communities and Data and Indicators Project.

Cost burdened is defined as households spending more than 30% of monthly household income on housing costs.

### DISPARITIES IN HOUSING OCCUPANCY EXIST ACROSS RACIAL/ETHNIC GROUPS IN CALIFORNIA



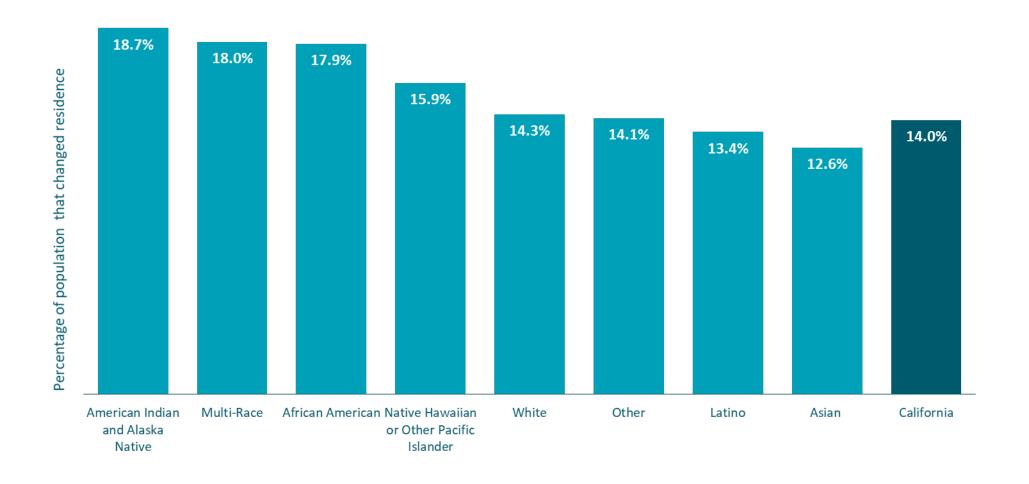


FIGURE 8: Percentage of adults who own or rent their homes, by race/ethnicity, California, 2015-2016.

 $Source: University\ of\ California\ Los\ Angeles,\ California\ Health\ Interview\ Survey,\ 2015-2016.$ 

Note: Within each race/ethnic group, variable "have other arrangement" is not included, and the percentages may not add up to 100.

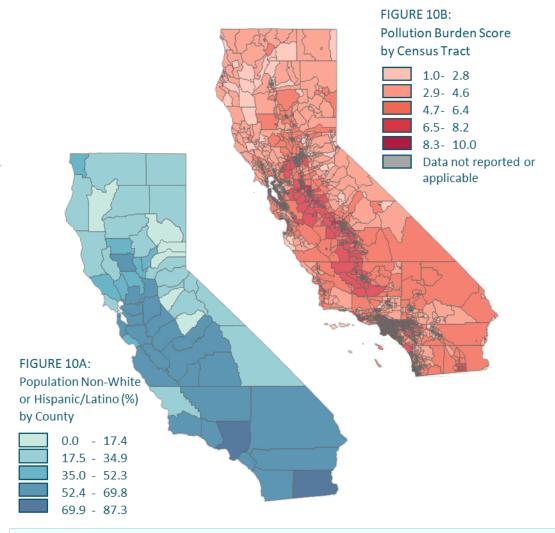
# AMERICAN INDIANS/ALASKA NATIVES AND AFRICAN AMERICANS ARE MORE LIKELY TO EXPERIENCE THE DISRUPTION OF A RESIDENTIAL MOVE THAN OTHER RACE/ETHNICITIES



**FIGURE 9:** Percentage of population ages 1 year and over who changed their residence (different house in the U.S.) from last year to current year, by race/ethnicity, California, 2011-2015.

Source: U.S. Census Bureau, American Community Survey, 5-year sample (2011-2015).

# LATINO OR NON-WHITE POPULATIONS ARE MORE LIKELY TO LIVE IN AREAS WITH A HIGH BURDEN OF POLLUTION



**FIGURE 10A.** Population Non-White or Hispanic/Latino (%) by County, California 2011-2015. *Source: U.S. Census Bureau, American Community Survey, 5-year sample (2011–2015).* 

FIGURE 10B: Pollution Burden Score by Census Tract.

Source: California Environmental Protection Agency (Cal/EPA) and the Office of Environmental Health Hazard Assessment (OEHHA), California Communities Environmental Health Screening Tool, Version 3.0 (CalEnviroScreen 3.0), 2017.

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

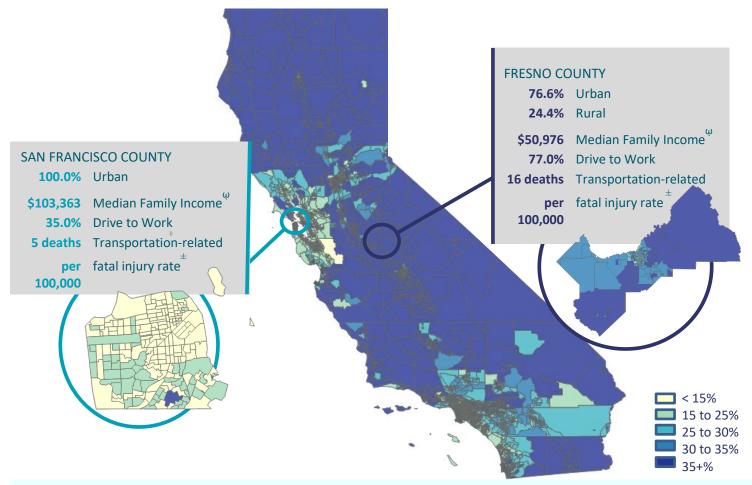


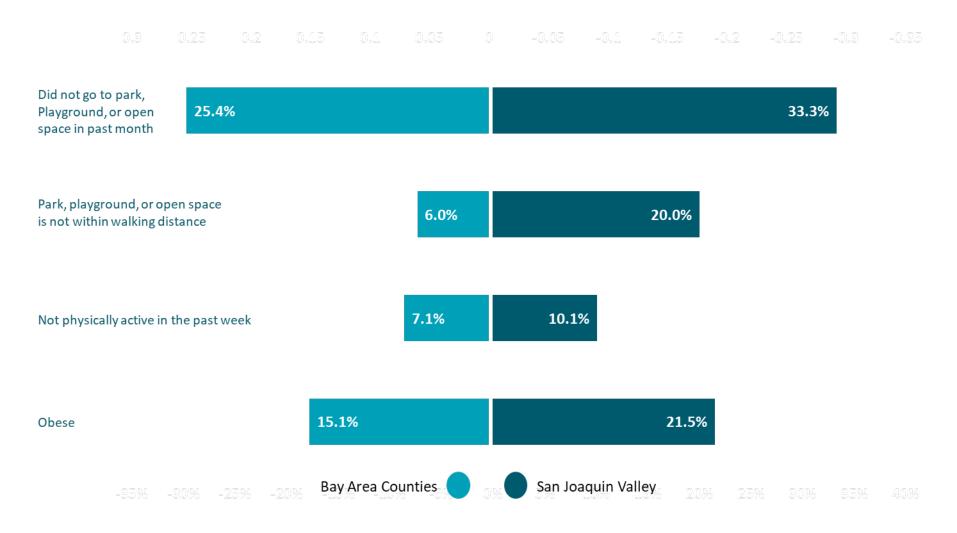
FIGURE 11: Transportation cost as a percentage of income, California, 2017.

Sources: Center for Neighborhood Technology. Housing and Transportation (H + T) Affordability Index, 2017; U.S. Census Bureau, American Community Survey, 5-Year Estimate (2012-2016), Table DP03; Centers for Disease Control and Prevention, National Centers for Injury Prevention and Control, Web-Based Injury Statistics Query and Reporting System (WISQARS), 2016; University of California Los Angeles, California Health Interview Survey, 2016.

<sup>\*</sup>Age-adjusted death rate.

 $<sup>\</sup>degree$ Median family income with own children under 18 years.

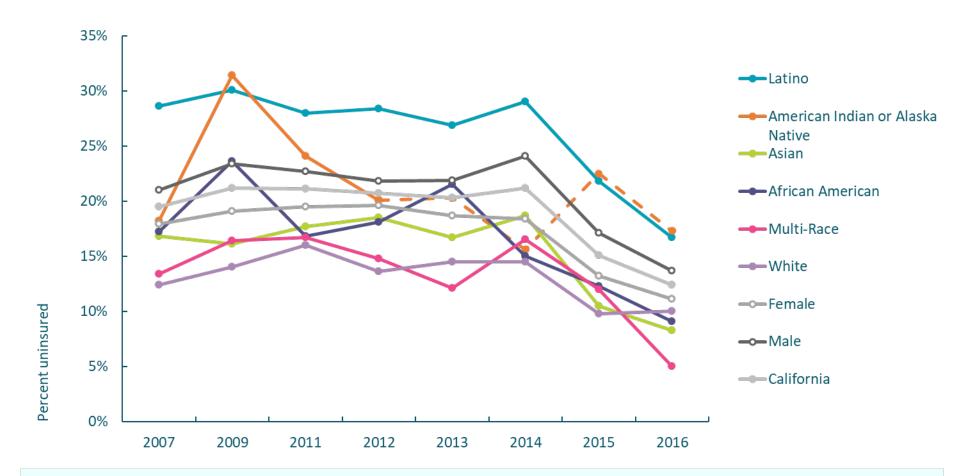
# PHYSICAL ACTIVITY AMONG TEENAGERS IS ASSOCIATED WITH ACCESS TO PARKS AND OPEN SPACES



**FIGURE 12**: Percentage of teenagers in Bay Area Counties and the San Joaquin Valley who reported not having access to parks, playgrounds or open spaces; not being physically active; and being obese, California, 2013-2016.

Source: University of California Los Angeles, California Health Interview Survey, 2013-2016.

# LATINOS HAVE THE HIGHEST RATES OF HAVING NO HEALTH INSURANCE OF ANY RACIAL/ETHNIC GROUP IN CALIFORNIA



**FIGURE 13**: Percentage of people ages 0-64 without health insurance\* during the past 12 months, by race/ethnicity, California, 2007 to 2016. Source: University of California Los Angeles, California Health Interview Survey, 2007-2016.

Note: "Asian" includes Native Hawaiian and other Pacific Islander.

<sup>\*</sup> Had no insurance the entire year or had insurance only part of the past year.

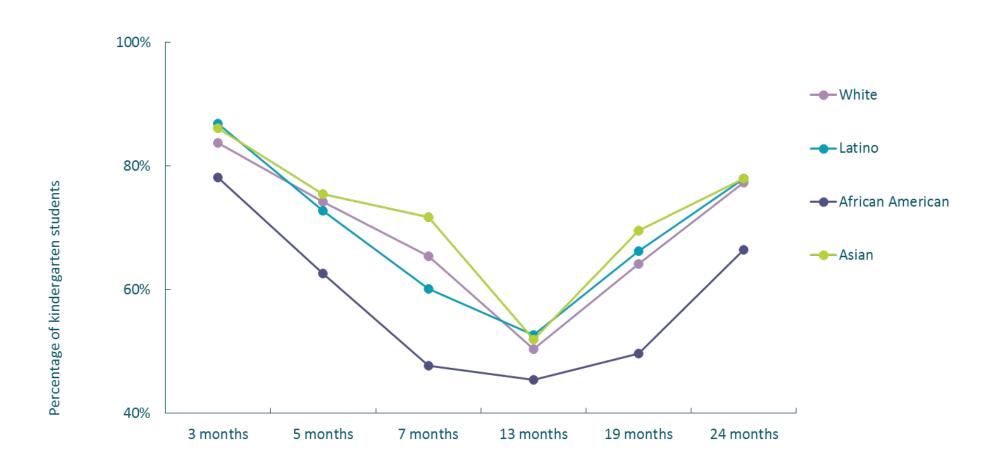
<sup>---</sup> Statistically unreliable data.

# LOW-INCOME WOMEN ARE MORE LIKELY TO NOT RECEIVE A MAMMOGRAM OR A PAP TEST THAN HIGHER-INCOME WOMEN



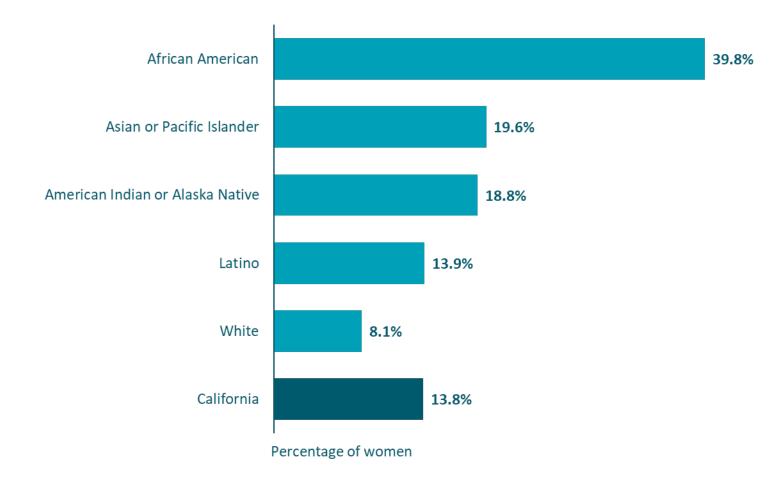
**FIGURE 14:** Percentage of women who have not had a mammogram or a Pap test, by annual income level, California, 2016. Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System (BRFSS), 2016.

Note: Mammogram screening among women age 40 years and over within the past two years, and Pap smear screening among women aged 21-65 who have not had a mammogram or pap test within the past 3 years.



**FIGURE 15:** Percentage of immunization coverage among kindergarten students, by age checkpoint and race/ethnicity, California, 2010-2011. Source: California Department of Public Health, Immunization Branch, Kindergarten Retrospective Survey Results, 2010-2011.

# ABOUT 40% OF AFRICAN AMERICAN WOMEN REPORTED EXPERIENCING RACIAL DISCRIMINATION, COMPARED WITH 8% OF WHITE WOMEN



**FIGURE 16:** Percentage of women who reported experiencing discrimination because of their race or ethnicity, California, 2013. *Source: Office of Health Equity analysis of California Behavioral Risk Factor Surveillance System 2013 data.* 

# TEENAGE ARRESTS FOR MARIJUANA POSSESSION DISPROPORTIONATELY AFFECTED BOYS, AND AFRICAN AMERICANS

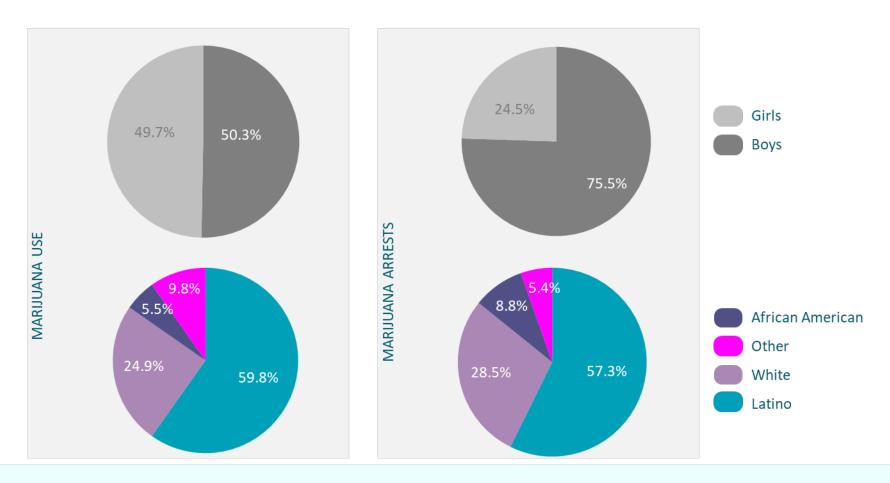
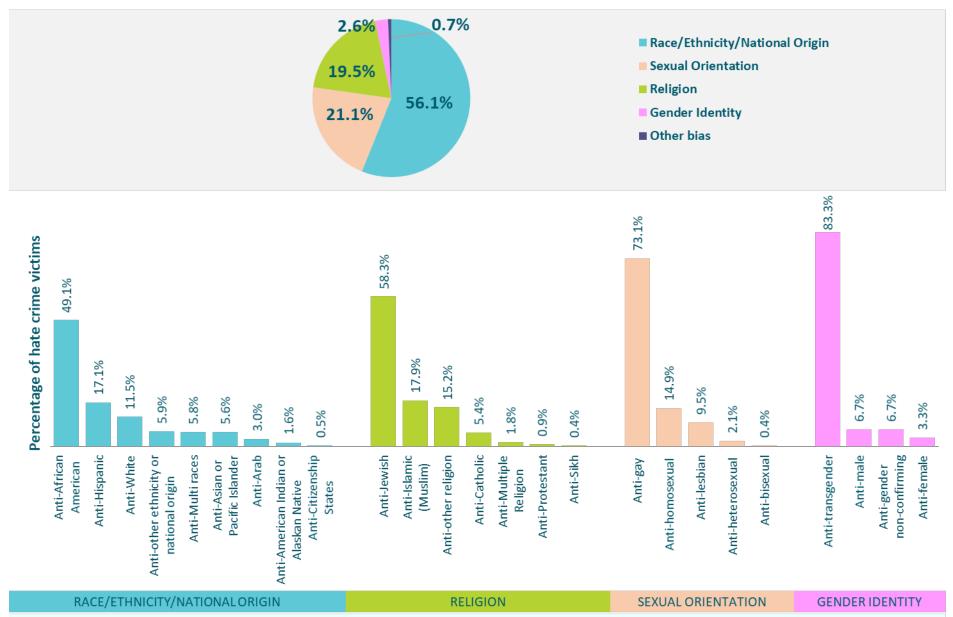


Figure 17: Percentage of marijuana use and misdemeanor arrests among teenagers ages 11-17, by race/ethnicity and gender, California.

Sources: California Department of Public Health, Tobacco Control Branch, California Student Tobacco Survey, 2015-2016; and California Department of Justice, Criminal Justice Statistics Center, Crime in California 2015.

Note: Prior to 2018, possession of one ounce or less of marijuana for personal use was a misdemeanor under California Health and Safety Code 11357.

# MORE THAN HALF OF ALL HATE CRIMES ARE MOTIVATED BY RACE/ETHNICITY, FOLLOWED BY THOSE MOTIVATED BY SEXUAL ORIENTATION AND BY RELIGION OF THE VICTIM



**Figure 18:** Percentage of hate crime victims, by bias motivation, California, 2016.

🗜 Source: California Department of Justice, Hate Crime in California Report, 2016.

# LOWER-INCOME ADULTS ARE LESS LIKELY TO ENGAGE IN VOLUNTEER WORK OR GET TOGETHER WITH OTHERS TO DEAL WITH COMMUNITY PROBLEMS



**Figure 19**: Percentage of adults who participated in community service, by federal poverty level (FPL), California, 2015-2016 *Source: University of California Los Angeles, California Health Interview Survey, 2015-2016.* 

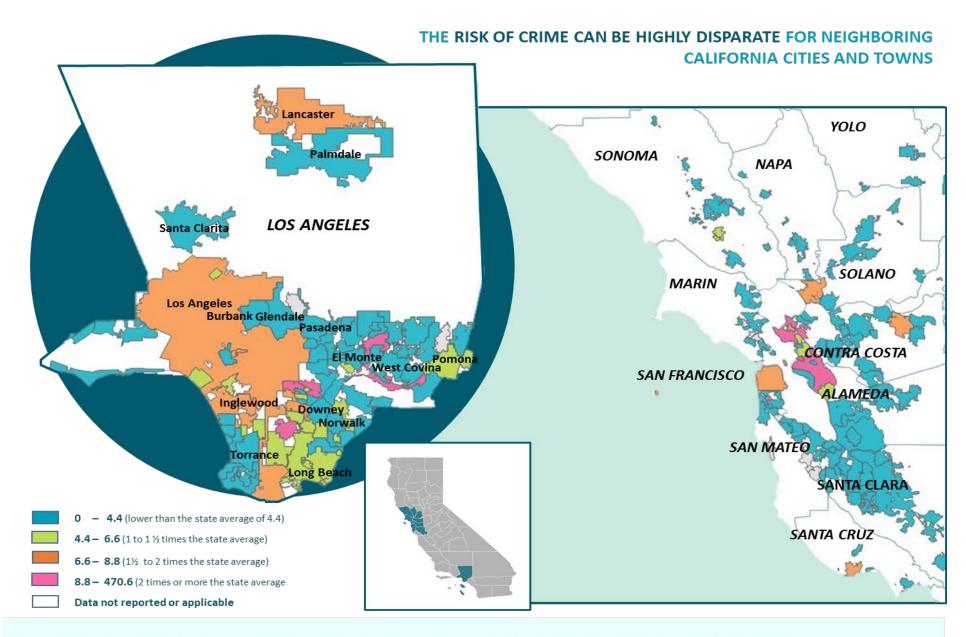


Figure 20: Number of violent crimes per 1,000 population, by cities and towns, Los Angeles County and Bay Area, California, 2016.

Source: Federal Bureau of Investigation, Uniform Crime Reports, 2016. Analysis by CDPH-Office of Health Equity, Healthy Communities Data and Indicators Project.

### AFRICAN AMERICAN AND LATINO PHYSICIANS ARE UNDERREPRESENTED IN CALIFORNIA

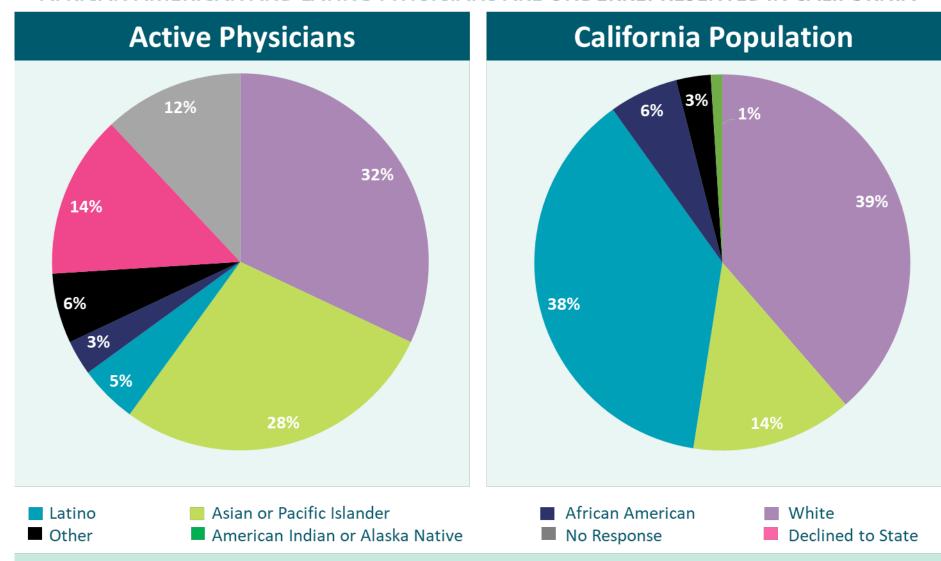
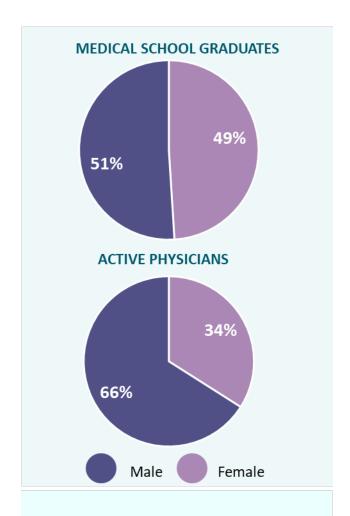


FIGURE 21: Percentage of California's population and active physicians, by race/ethnicity, California 2015.

Sources: Analysis by California HealthCare Foundation, California Health Care Almanac, California Physicians: Who They Are, How They Practice August, 2017.

Note: Data Includes active medical doctors (MDs)

# WOMEN ARE UNDERREPRESENTED IN MEDICAL PRACTICE

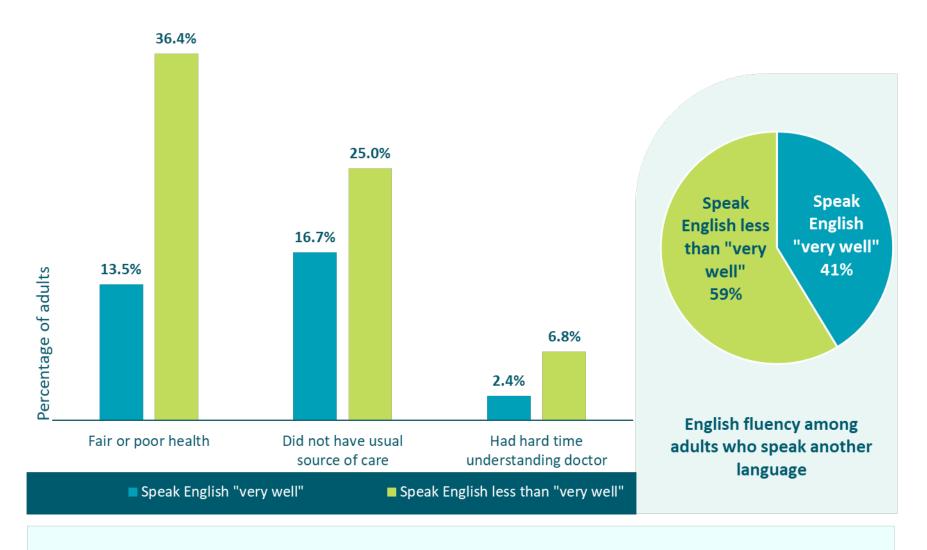


**Figure 22:** Percentage of California's medial school graduates and active physicians by gender, California, 2014

Notes: Data include active MDs and doctors of osteopathic medicine.

Source: State Physician Workforce Data Book, Association of American Medical Colleges, 2015.

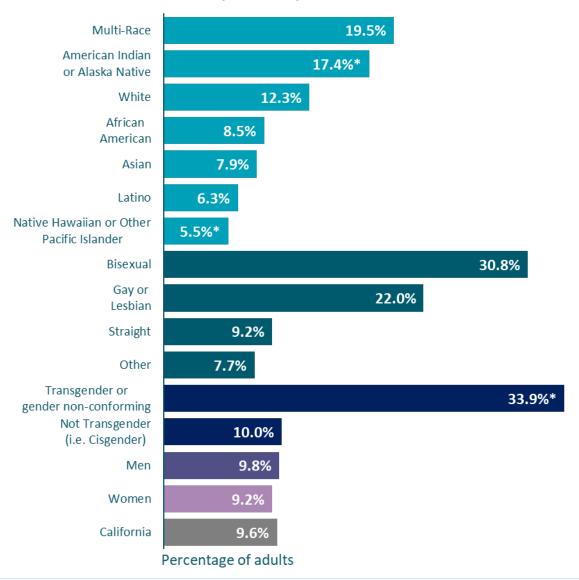
# ADULTS WITH LIMITED ENGLISH PROFICIENCY (LEP) GENERALLY HAVE POORER HEALTH COMPARED WITH THOSE WHO SPEAK FLUENT ENGLISH



**FIGURE 23**: Percentage of English fluency levels among adults ages 18 years and older who speak a language other than English at home, by selected characteristics, California, 2015-2016.

Source: University of California Los Angeles, California Health Interview Survey, 2015-2016.

## RATES OF SUICIDAL THOUGHTS ARE HIGHER AMONG BISEXUAL, GAY, LESBIAN, AND GENDER NON-CONFORMING ADULTS



**Figure 24**: Percentage of adults who reported having seriously thought about committing suicide, by race/ethnicity and sexual orientation, California 2015-2016.

Source: University of California Los Angeles, California Health Interview Survey, 2015-2016. Note: "Other" includes not sexual/celibate/none.

<sup>\*</sup> Statistically unreliable data.

# ACCESS TO HEALTH INSURANCE OR A USUAL SOURCE OF CARE IS LOWER AMONG RACIAL/ETHNIC GROUPS WITH SERIOUS PSYCHOLOGICAL DISTRESS

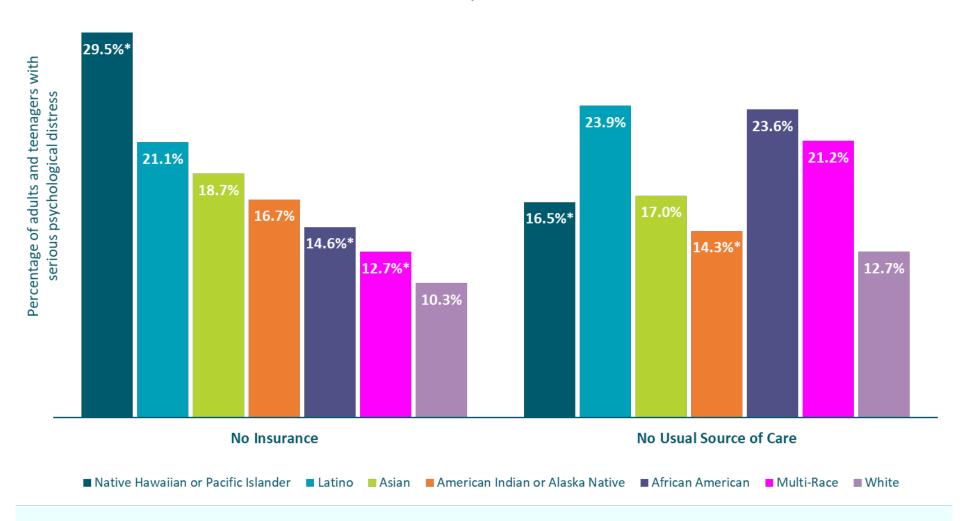


Figure 25: Percentage of adults and teenagers with serious psychological distress during the past month who reported not currently having health insurance, and no usual source of care; by race/ethnicity, California, 2011-2016. Source: University of California Los Angeles, California Health Interview Survey, 2011-2016. \* Statistically unreliable data.

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