



The Unequal Landscape  
of Diabetes:  
Place based solutions  
to end an epidemic



**CPEHN**

California Pan-Ethnic Health Network



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The California Pan-Ethnic Health Network (CPEHN) works to ensure that all Californians have access to quality health care and can live healthy lives. CPEHN gathers the strength of communities of color to build a united and powerful voice in health advocacy. Together, we work to evolve health care from a one-size-fits-all approach to a system that works for people from all cultural and ethnic backgrounds. For more information about CPEHN and our work go to [www.cpehn.org](http://www.cpehn.org).

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**AS MORE AND MORE CALIFORNIANS ARE DIAGNOSED** with diabetes we see our communities facing the debilitating effects every day. With more than 1.8 million Californian adults diagnosed with the disease, diabetes has risen to the seventh leading cause of death in California and the leading medical cause of amputations, blindness, and kidney disease.<sup>1,2</sup> However, the burden of diabetes is not equally distributed among all populations. Instead, California's racial and ethnic minorities are experiencing higher prevalence rates and increased risk of diabetic complications compared to their White counterparts. In order to stem the increasing prevalence of diabetes and eliminate these growing disparities, the health field must work not only to create parity in the medical screening and management of the disease, but also to address the nutritional and physical landscapes of disadvantaged communities. It is only by acknowledging the context in which diabetes develops and progresses that we can begin to address the root causes placing communities of color at elevated risk for diabetes.



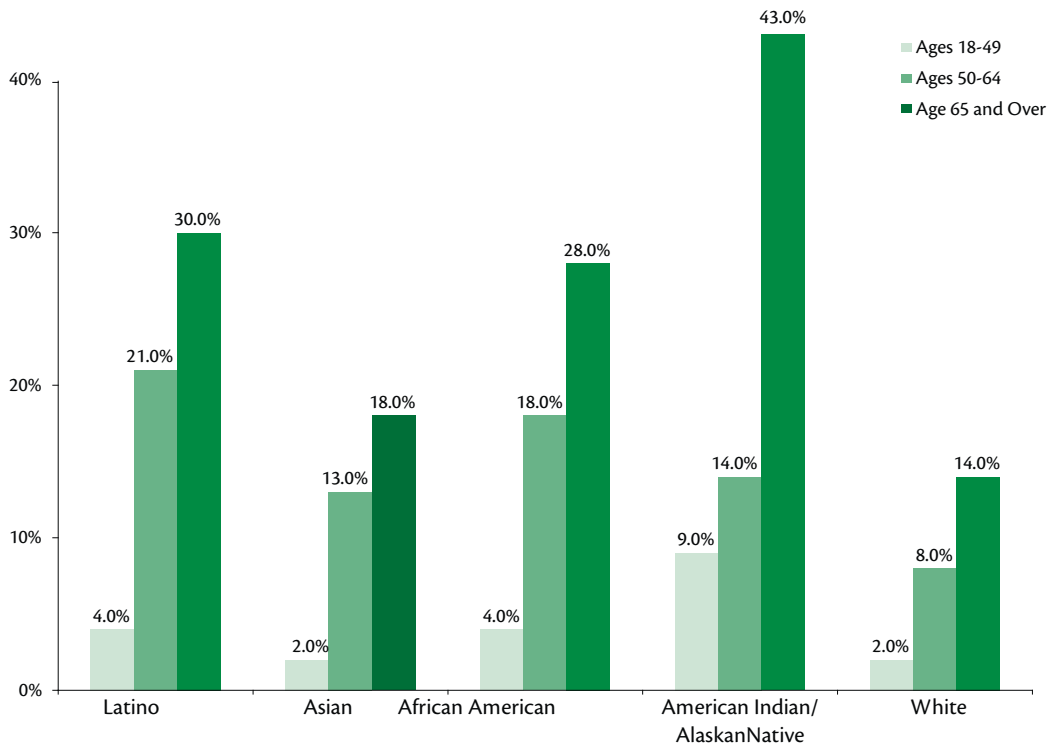
### DIABETES PREVALENCE BY RACE/ETHNICITY ADULTS AGE 18 AND OVER, CALIFORNIA, 2005

	LATINO	ASIAN	AFRICAN AMERICAN	AMERICAN INDIAN/ALASKAN NATIVE	WHITES
Diabetes Prevalence	8.0%	6.5%	10.1%	14.9%	6.0%

Source: UCLA Center for Health Policy Research<sup>3</sup>

Overall, racial and ethnic minorities in California are faced with higher rates of diabetes than Whites, with African American and American Indian/Alaska Native (AIAN) adults presenting prevalence rates up to 40% higher than their White counterparts.<sup>4</sup> These disparities in prevalence rates only increase with age, with over 25% of Latino, African American, and AIAN seniors (age 65 and over) diagnosed with diabetes compared to only half as many Whites.<sup>5</sup>

### DIABETES PREVALENCE BY AGE AND RACE/ETHNICITY ADULTS AGE 18 AND OVER, CALIFORNIA, 2005







### African Americans

The American Diabetes Association (ADA) estimates that nationwide, 2.8 million (13%) African Americans have diabetes, and only two-thirds of them have been diagnosed.<sup>7</sup> In California it is estimated that over 200,000 (10.1%) African American adults have been diagnosed with diabetes.<sup>8</sup> Once diagnosed, African Americans fare worse compared to their White counterparts in terms of some diabetic complications, including diabetes related blindness, kidney disease, and lower limb amputations.<sup>9</sup> African American diabetics have hospital admission rates for uncontrolled diabetes that are twice as high as for Whites (26.9 per 100,000 compared to 13.2) and have rates of lower-extremity amputations that are 30% higher than for Whites (39.2 per 100,000 compared to 29.6).<sup>10</sup>

### Native Americans and Alaskan Natives

Native American tribes experience the highest rates of diabetes among any ethnic group, with the Pima Indians of Arizona reaching a 50% prevalence level.<sup>11</sup> California is home to more AIANs than any other state in the U.S. with 627,600 residents.<sup>12</sup> Of these, 14.9% have been diagnosed with diabetes. AIANs over-65 population is especially afflicted with the disease with a prevalence rate of 43%, the highest for any racial or ethnic group.<sup>13</sup>



### Asians

The category of “Asian” encompasses many ethnic-specific groups but diabetes statistics for this population are usually aggregated. There is considerable cultural variance among specific Asian ethnic groups; therefore, there is a limited ability to interpret or generalize the available information for this population. The prevalence of diabetes among Asians in California is 6.5%. Among Asian sub populations the highest prevalence of diabetes is seen among Japanese (10.2%), followed by Filipinos (8.6%), Vietnamese (7.4%), Koreans (7.4%), and Chinese (4.4%).<sup>14</sup>

### Latinos

Similar to the Asian population, the category of Latino encompasses many different racial subgroups with varying rates of diabetes, ranging from 8.2% among Mexicans to 13.9% among Puerto Ricans.<sup>15</sup> The prevalence of diabetes varies by age and is particularly high among older age groups. Within California, over one in four Latino seniors (age 65 and over) reports having diabetes. This rate is over twice the rate for elderly Whites (14%) and among the highest for all racial or ethnic groups.<sup>16</sup> Type 2 diabetes is the third leading cause of death among Latinos of both sexes, ages 55-74, and the fifth leading cause of death across all ages, accounting for 5% of all deaths.<sup>17</sup>



### Recent Immigrants

Among non-U.S. born adults in California the prevalence of diabetes increases with the number of years lived in the United States. The prevalence of diabetes is more than three times as high among adults who have lived in the U.S. 15 years or more (8.9%) as among those who have lived here four years or less (2.4%). Approximately 4% of adults who have lived in the U.S. between five and 14 years have been diagnosed with diabetes.<sup>18</sup>

### Disparities in the Burden of Diabetic Complications

Diabetes can have a harmful effect on most of the organ systems in the human body. It is a frequent cause of end-stage renal disease and non-traumatic lower-extremity amputations, and a leading cause of blindness among nonelderly adults. Certain racial and ethnic minorities suffer higher rates of diabetes-related complications and death. These disparities are illustrated by diabetes-related hospital admission rates, which even after being adjusted for prevalence, are often much higher for Latinos and African Americans than for Whites.<sup>19</sup>

#### PREVALENCE ADJUSTED HOSPITAL ADMISSION RATES FOR INDIVIDUAL WITH DIABETES, BY RACE/ETHNICITY IN CALIFORNIA, 2001 (PER 100,000 POPULATION)

<i>Rate of Hospitalization for:</i>	LATINO	ASIAN	AFRICAN AMERICAN	AMERICAN INDIAN/ALASKAN NATIVE	WHITES
Uncontrolled Diabetes	20.2	10.2	26.9	7.0	13.2
Short-Term Complications	36.5	15.0	74.0	15.0	43.4
Long-Term Complications	106.4	63.9	130.1	63.8	91.0
Lower-Extremity Amputation	33.6	14.0	39.2	20.2	29.6

Source: Office of Statewide Health Planning and Development<sup>20</sup>

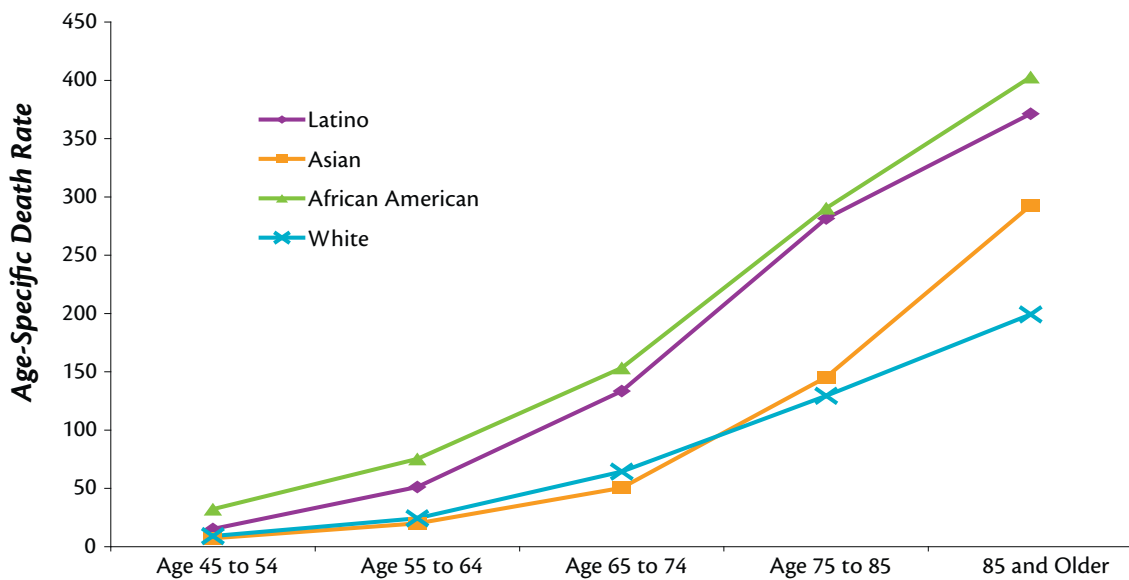




## Mortality

African Americans, Latinos, and Asians all experience higher death rates from diabetes than Whites. Throughout the different age groups, African Americans with diabetes consistently have death rates two to three times higher than their White counterparts.<sup>21</sup>

**DIABETES AGE-SPECIFIC DEATH RATES  
BY RACE/ETHNICITY AND AGE, CALIFORNIA 2003**



	45 TO 54	55 TO 64	65 TO 74	75 TO 84	85 AND OLDER
Latino	15.3	51.2	133.5	281.5	371.4
Asian	7.2	20.0	50.5	145.4	292.7
African American	32.2	75.3	153.4	290.4	402.8
Whites	9.2	24.4	64.4	129.5	199.2

Note: The diabetes age-specific death rates for American Indian, Pacific Islander, and Two or More Races were not reliable in 2004.<sup>22</sup>



## Disparities in Access to Care

Health insurance plays a critical role in whether individuals have access to preventive care as well as receive the wide range of services needed to manage diabetes. The disparities between insurance rates for communities of color and Whites are immense, with uninsured rates of Latinos and American Indian/Alaskan Natives reaching 32.1% and 18.8% respectively compared to only 8.5% of Whites.<sup>23</sup> These trends continue for the under 65-year-old diabetic population, with 36.1% of Latinos being uninsured for all or part of the year compared to only 11.6% of White diabetics.<sup>24</sup>

**PERCENTAGE OF THE POPULATION UNDER THE AGE OF 65 REPORTING BEING UNINSURED FOR ALL OR PART OF THE YEAR BY RACE/ETHNICITY, CALIFORNIA, 2005**

	LATINO	ASIAN	AFRICAN AMERICAN	AMERICAN INDIAN/ALASKAN NATIVE	WHITES
% Population (65 and under) Uninsured All or Part of the Year, California 2005	33.7%	17.7%	15.2%	22.0%	12.5%
% Diabetic population (65 and under) Uninsured All or Part of the Year, California 2005	36.1%	18.6%	11.3%	--	11.6%

Source: 2005 California Health Interview Survey<sup>25</sup>







## Discussion and Policy Recommendations

There are numerous factors that play into the development of diabetes including family history, genetics, and age; however, the most prominent and preventable is overweight and obesity. The solution, however, is not as simple as recommending a diet or providing a pass to a local gym. Food consumption reflects both preference and availability. The same limited resource communities that are home to many of California's minority populations are also often without retail grocery outlets, let alone farmers' markets or other sources of fresh food. These communities are also less likely than more affluent White neighborhoods to have access to safe parks or open spaces to promote physical activity. It is these immense inequities between the nutritional and physical activity landscapes of low-income communities of color and those of higher income Whites that must be targeted in addressing the disparate rates of Type 2 diabetes.

### *Changing the nutritional landscape*

#### **School Nutrition**

Rising childhood obesity rates have spurred communities to take action on both the state and community level to change our schools' food policies. Through coalitions and advocacy work, several communities have been successful in improving the quality of school food environments, including setting nutritional standards for foods sold outside the school meal programs, allowing adequate time for meal periods, and improving cafeteria surroundings and menu offerings to increase their appeal to students.<sup>26</sup>

- The Oakland Unified School District – serving an urban, predominantly low-income, ethnically diverse student population – was one of the first school districts to pass a ban on the sale of all soft drinks and candy in its schools. Catalyzed by a public outcry around a potential \$5 million school district contract with PepsiCo in 2000, staff, parents, and public health advocates came together to mobilize for change. Responding to the community, the school board rejected the contract and formed a nutrition policy committee that ultimately set one of the strictest school food nutrition policies in the nation.<sup>27</sup>

#### **Supermarkets, Small Stores and Farmers Markets**

Low-income communities have used many strategies to enhance their neighborhoods food environments. Through attracting and developing new grocery stores, improving existing small stores and starting and sustaining farmers' markets, communities are fighting for equal access to fresh fruits and vegetables and more healthy options for their families.<sup>28</sup>

- West Fresno Food Max – Residents of West Fresno came together in 1995 to advocate for a supermarket for their community. Through a creative campaign including news conferences, demonstrations, public hearings, and petitions,



this group of concerned citizens pushed the need for supermarkets onto the political agenda. Four years later, the West Fresno Food Max Supermarket, opened and continues to successfully serve this community.<sup>29</sup>

### *Changing the Physical Landscape*

#### **Parks, Recreation and Physical Education**

With tightening budgets causing school districts to cut their physical education programs and leaving municipal park departments financially hard pressed to maintain existing parks and recreation services, a new breed of community partnerships has evolved to provide impetus for local governments to improve urban parklands and services. Through addressing safety concerns, ensuring the walkability and bikeability of streets, and enhancing local open spaces, communities are striving to create vibrant, active neighborhoods.<sup>30</sup>

- Los Angeles State Historic Park - In the foreground of a familiar downtown skyline, 32 acres of formerly abandoned land is quickly being transformed into Los Angeles' first urban park. The original reuse plans for the site consisted of the construction of a light-industrial warehouse complex. However, with the dedication and perseverance of a public coalition of more than 25 community groups, the project was redirected to a more beneficial use for the Los Angeles community. In 2002, the State Urban Parks and Healthy Community program made funds available for the 32-acres to be converted to an urban park. With the surrounding community's full support, the park project will provide a much needed recreational use for residents living near downtown Los Angeles.<sup>31</sup>

#### **Health Impact Assessments**

With the growing body of research indicating that a wide range of sectors – business, transportation, and economic development – can impact community health, it is vital that we begin to analyze our future policies and development projects in terms of their impact on the creation of health promoting environments. Including analyses of these potential health impacts, known as Health Impact Assessments (HIA), can increase our knowledge on the interaction between the environment and health and serve to reorient the actions of both public health and planning departments.<sup>32</sup>

- East Bay Greenway Project – The Greenway Project proposes to build twelve miles of walking and biking paths under the elevated BART tracks between the northern California cities of Oakland and Hayward. Through the use of HIAs, local community based organizations partnered with community members to analyze ways to maximize the potential health impacts of the proposed project as well as investigate and mitigate some of the main barriers to its use. Through the HIA process the group generated several concrete recommendations including connecting the sidewalks from the Greenway



to the interior of local neighborhoods to increase access and use; implementing traffic calming measures around the park to ensure pedestrian/bicyclist safety; and developing trail designs that provide proper sight lines and “eyes on the street” to increase safety.<sup>33</sup>

## State Level Solutions

California’s 2008 legislative session has several key bills pushing for the creation of healthier environments. The bills listed below are a sample of the innovative approaches that have been developed to help reduce California’s rates of diabetes and promote health equity.

### *Changing the nutritional landscape:*

- SB 1420 (Padilla): Requires restaurant menu labels to include caloric information adjacent to items.
- AB 441 (Torlakson): Mandates nutritious foods in vending machines on state property.
- AB 2704 (Leno): Prevents school boards from entering into contracts with corporations selling unhealthy beverages that discourage free tap water in schools.
- AB 2708 (Solario): Bans the advertising of non-nutritious foods in schools.

### *Changing the physical landscape:*

- AB 1472 (Leno): Creates a program to provide grants and technical assistance to health departments and community organizations to conduct Health Impact Assessments to assess the impact of land use decisions on community health and health disparities.
- AB 211 (Jones): Specifies that Public Health Officers can be involved with land use decisions to increase consideration of the impact of planning decisions on community health.
- AB 2072 (Hayashi): Awards recognition to schools doing well in physical education.
- AB 2989 (Fuentes): Creates an Outdoor Environmental Education and Recreation Fund, providing access to outdoor exercise opportunities for the underserved and at-risk.

For more information on these bills visit the Take Action page on CPEHN’s website, [www.cpehn.org](http://www.cpehn.org).

## Conclusion

While medical care at the individual level is important, it is not enough to stem the growing prevalence of diabetes nor can it adequately address the inequities that lie at the root of the disparate rates experienced by California’s communities of color. Stepping away from this traditional paradigm and treating whole communities, partnerships and innovations like the ones described above are beginning to have an impact. By working to improve our communities’ nutritional and physical landscapes we can prevent diabetes and lay the foundation for our communities to thrive.

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