



**ISSUE BRIEF SERIES: EXPLORING THE SOCIAL DETERMINANTS OF HEALTH  
RACE AND SOCIOECONOMIC FACTORS—APRIL 2011**

*This is one in a series of 10 issue briefs on the social determinants of health. The series began as a product of the Robert Wood Johnson Foundation Commission to Build a Healthier America and continues as a part of the Foundation's Vulnerable Populations portfolio.*



## **Race and Socioeconomic Factors Affect Opportunities for Better Health**

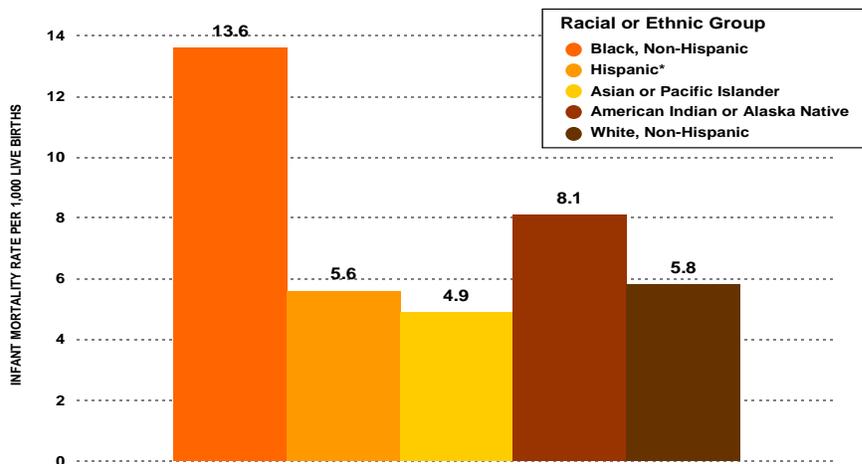
### **1. Striking Differences in Health Are Seen Among Racial or Ethnic Groups**

Dramatic differences in health among racial or ethnic groups<sup>†</sup> in the United States have been observed repeatedly across a wide range of important indicators of health from the beginning of life through old age. The largest and most consistent health disparities generally are observed for blacks and—when data are available—American Indians compared with whites, although Hispanics and some Asian groups also have significantly worse health than whites on a number of measures. For example, compared with a baby born to a white mother, a baby born to a black mother is more than twice as likely, and an infant born to an American Indian or Alaska Native mother almost 1½ times as likely, to die before reaching his or her first birthday (Figure 1). Age-adjusted overall mortality rates are higher for blacks compared with all other groups (Figure 2); these age-adjusted rates mask even larger disparities among the young.<sup>1</sup> Adult Hispanics, Asians and blacks have higher rates of diabetes than adult whites (Figure 3).

*To understand health disparities, it is not enough to consider only race or only socioeconomic factors. Both affect health.*

<sup>†</sup> We use "racial or ethnic groups" to refer to population groups identified by their ancestral origin on different continents. Black denotes African-American background, white denotes European-American background and Hispanic or Latino denotes Latin-American background. Based on scientific consensus that race is primarily a social rather than biological construct, we use *race* and *ethnic group* interchangeably; given common usage, which may distinguish between these terms, we mention both to avoid confusion.

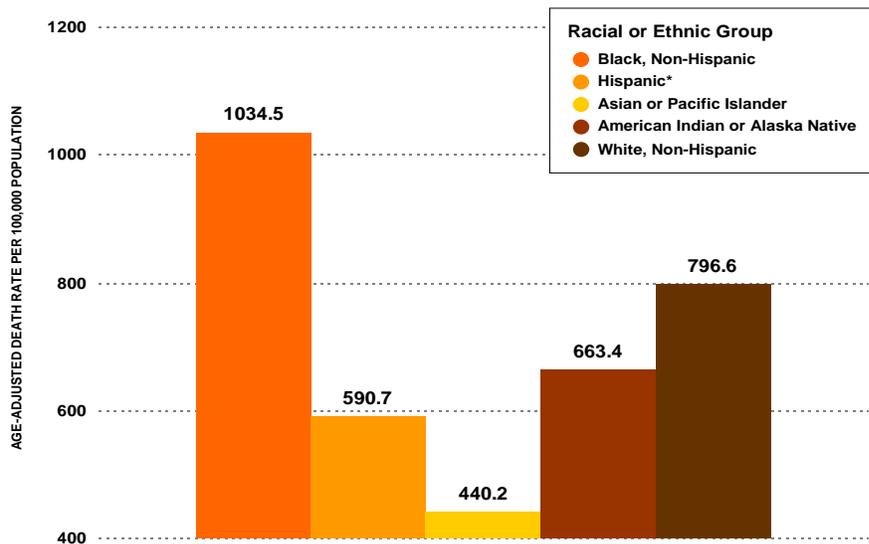




\* Persons of Hispanic origin may be of any race.  
 Source: Mathews TJ & MacDorman MF. "Infant Mortality Statistics from the 2005 Period Linked Birth/Infant Death Data Set." *National Vital Statistics Reports*, vol 57, no 2. Hyattsville, MD: National Center for Health Statistics, 2008.

*Figure 1. Black and American Indian or Alaska Native babies are much more likely than babies in other racial or ethnic groups to die in their first year of life.*

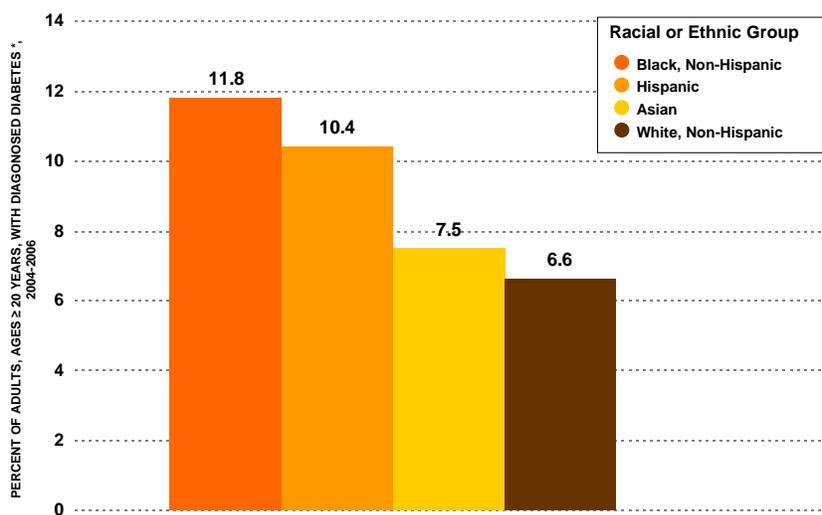
*Dramatic differences in health among racial or ethnic groups in the United States have been observed repeatedly across a wide range of important indicators of health from the beginning of life through old age.*



\* Persons of Hispanic origin may be of any race.  
 Source: Kung HC, Hoyert DL, Xu J, et al. "Deaths: Final Data for 2005." *National Vital Statistics Report*, vol 56, no 10. Hyattsville, MD: National Center for Health Statistics, 2008.

*Figure 2. Overall, blacks have the highest age-adjusted mortality rates.*





\*Age-adjusted  
 Source: Centers for Disease Control and Prevention. *National Diabetes Fact Sheet, 2007.*

*Figure 3. Adult blacks, Hispanics and Asians all have higher rates of diabetes than adult whites. Diabetes increases the risk of heart disease, stroke and premature death.*

Gaps in life expectancy by racial or ethnic group may have narrowed in recent years. However, racial and ethnic disparities in many other health measures have persisted over time. For some outcomes, such as maternal mortality, the disparities have widened.<sup>2</sup> This issue brief focuses on disparities in health itself, contrasted with health care; widespread racial or ethnic disparities in health care have been well documented<sup>3-6</sup> and undoubtedly contribute to disparities in health.

**SOCIOECONOMIC FACTORS—INCLUDING INCOME AND EDUCATION—ALSO MATTER FOR HEALTH**

Income and educational attainment are the two most commonly used markers of socioeconomic status or position in the United States.<sup>7</sup> Both are strongly related to most measures of health and health-related behaviors across the life course. A person’s income and education—along with other correlated characteristics including accumulated wealth, occupation and neighborhood socioeconomic conditions—can influence health in myriad ways. These include the direct and obvious effects of extreme poverty (such as malnutrition or exposure to extreme heat or cold) to the less obvious health effects of chronic stress that accompanies a constant struggle to meet life’s needs with inadequate resources. *Overcoming Obstacles to Health*,<sup>8</sup> published by the Robert Wood Johnson Foundation (RWJF) in February 2008, reveals striking income and education gradients at the national level for many health measures across the lifespan: As income or education levels rise, health improves incrementally. *America’s Health Starts With Healthy Children: How Do States Compare?*,<sup>9</sup> published by the RWJF Commission to Build a Healthier America in October 2008, documents similar patterns by income and education, as well as disparities by racial or ethnic group, for infant mortality and children’s overall health status at both the national and state levels.

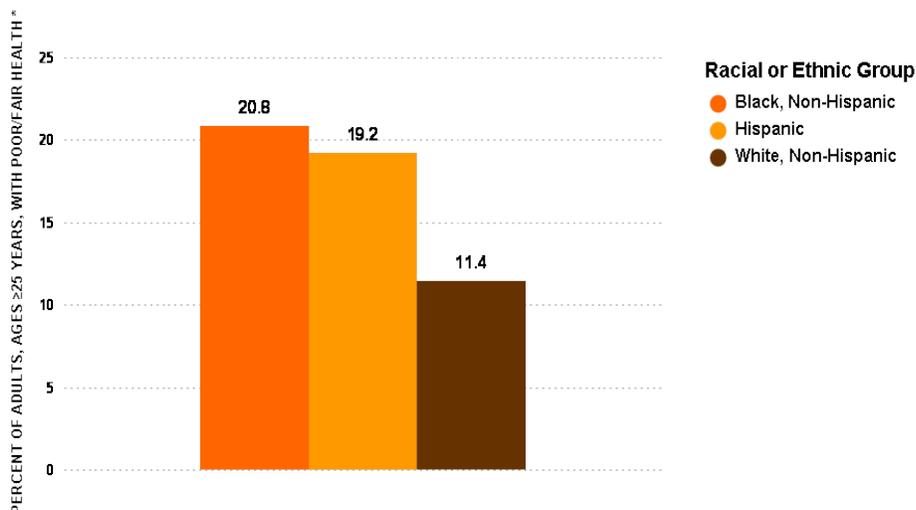
*A person’s income and education—along with other correlated characteristics including accumulated wealth, occupation and neighborhood socioeconomic conditions—can influence health in myriad ways.*





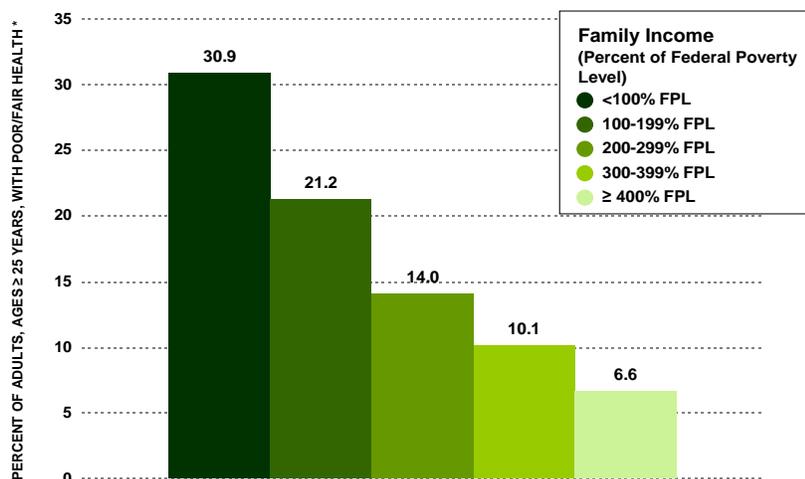
### BOTH RACIAL OR ETHNIC GROUP AND SOCIOECONOMIC FACTORS MATTER FOR HEALTH

Figures 4a–4d illustrate the importance of considering health disparities across *both* socioeconomic factors and racial or ethnic groups. For example, studies of self-reported health status—which corresponds closely with objective clinical assessments by health professionals—have found that poor or fair (as opposed to good, very good or excellent) health is more common among both black and Hispanic adults than among white adults (Figure 4a) and among adults with lower incomes compared with those who are more affluent (Figure 4b).



**Figure 4a.** On average, black and Hispanic adults have worse health than white adults.

\* Age-adjusted  
Source: National Health Interview Survey, 2001–2005.



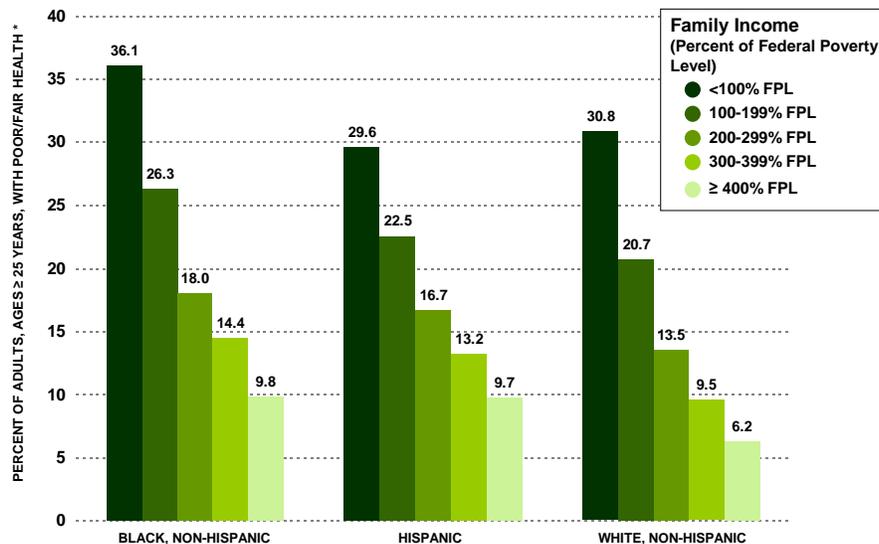
**Figure 4b.** As income goes up, health status improves. Adults who are poor (with incomes below the Federal Poverty Level<sup>†</sup> (FPL)) are most likely to report being in poor or fair health, but even adults with middle-class incomes (200–399% FPL) are less healthy than those with higher incomes. This stepwise pattern, also seen when comparing across education groups, is referred to as the socioeconomic gradient in health.

<sup>†</sup>In 2005, the Federal Poverty Level for the 48 contiguous states and the District of Columbia was \$16,090 for a family of three and \$19,350 for a family of four.  
\* Age-adjusted  
Source: National Health Interview Survey, 2001–2005.





Figure 4c examines income differences within three large racial or ethnic groups. Health varies markedly by income within every racial or ethnic group, indicating that income differences in health are not based on racial or ethnic differences.

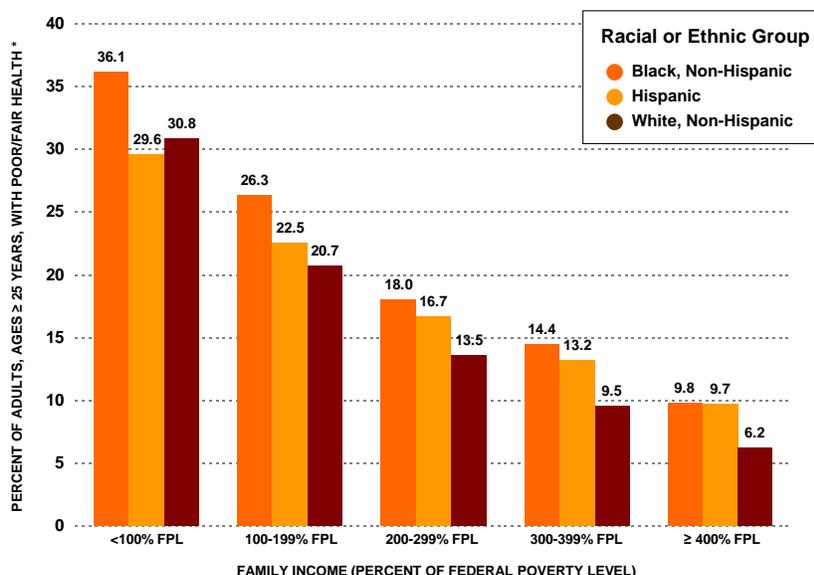


\*Age-adjusted  
Source: National Health Interview Survey, 2001-2005.

Figure 4c. In every racial or ethnic group, health status improves as income increases. Socioeconomic differences in health are related to differences in resources and opportunities that affect all racial or ethnic groups.

This does not mean, however, that differences by income (or other socioeconomic factors) should be considered without taking racial or ethnic differences into account. As seen in Figure 4d, racial or ethnic differences can be seen at each level of income. These general patterns—displayed here for adult self-reported health status but also seen across a wide range of health conditions and age groups—tell us that both race and socioeconomic factors are important for health; both must be considered.

*Health varies markedly by income within every racial group, and racial or ethnic differences can be seen at each level of income. These patterns are seen across a wide range of health conditions.*



\*Age-adjusted  
Source: National Health Interview Survey, 2001-2005.

Figure 4d. Within most income groups, blacks and Hispanics have worse health than whites. Both racial or ethnic group and socioeconomic factors, such as income or education, are important for health.





## 2. What explains these patterns?

Disparities in both access to and quality of medical care likely play an important role in racial or ethnic disparities in health.<sup>5</sup> Although medical care is important, an accumulating body of evidence suggests that racial or ethnic differences in living and working conditions that affect health may be even more important, determining who will be healthy or become sick in the first place.<sup>8</sup> Increasing evidence also suggests that chronic stress related to overt or subtle experiences of racial or ethnic bias may significantly contribute to disparities in health among racial or ethnic groups, over and above differences in living and working conditions and differences in medical care.<sup>10</sup> These complex issues are discussed below.

**Levels of income and education—both strongly related to health—vary across racial or ethnic groups.** There are striking racial and ethnic disparities in income, with blacks and Hispanics consistently experiencing higher rates of poverty than whites (Figure 5). Some Asian populations and Native Hawaiians and other Pacific Islanders also have higher rates of poverty than whites.<sup>11,12</sup> Public health statistics in the United States generally have been reported by racial or ethnic group but often not by income, education or other socioeconomic characteristics.<sup>13</sup> Without adequate socioeconomic information, racial or ethnic differences in health often are assumed to reflect either underlying genetic differences or entrenched “cultural” differences—both of which have limited potential for intervention. In fact, less frequently measured modifiable social factors—including income, education, wealth and neighborhood socioeconomic conditions, both current and earlier in life—are likely to be more important in explaining health differences by race or ethnicity.<sup>7</sup> For example, researchers at the U.S. Centers for Disease Control and Prevention (CDC) estimated that 38 percent of the excess mortality among black adults compared with white adults in the United States was related to differences in income.<sup>14</sup>

*The social patterns of many racial or ethnic disparities in health strongly suggest that modifiable social differences—such as income, wealth, education and neighborhood socioeconomic conditions—play a key role.*

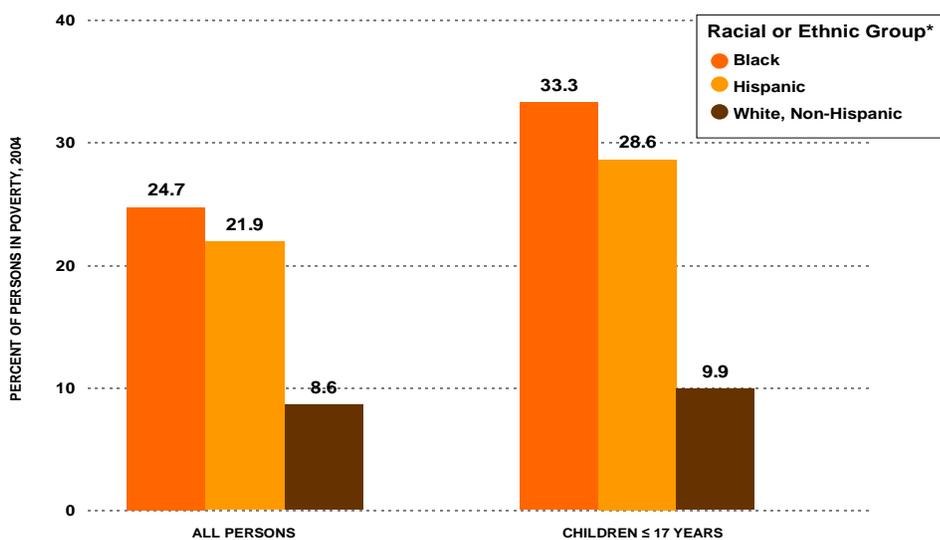


Figure 5. Blacks and Hispanics are more likely than whites to experience poverty; the disparities are largest in childhood.

*While the role of genetic differences in health disparities has been debated, authoritative scientific sources have concluded that race is primarily a social, not biological, construct.*

**Differences in income and education partly, but not entirely, account for racial or ethnic disparities in health.** Many racial or ethnic disparities in health—as distinguished from health care—may be reduced markedly or even “disappear” when income and/or education are considered.<sup>15</sup> Many differences (like those in adult health





status, shown in Figure 4d), however, remain even after taking income and education into account.<sup>16-18</sup> These patterns strongly suggest that modifiable social differences play a key role in many racial or ethnic disparities. While the role of genetic differences in health disparities has been debated, authoritative scientific sources have concluded that race is primarily a social rather than a biological construct.<sup>19-21</sup>

*Unmeasured socioeconomic differences are likely to explain a large part of many racial or ethnic disparities in health.*

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### THE HISPANIC PARADOX

The patterns and relationships between race and ethnicity and health can be complex. For example, although Hispanics as a group have lower levels of income (Figure 6), wealth (Figure 7) and education than whites, they fare as well or sometimes even better than whites on several key health outcomes, including low birth weight, premature birth and age-adjusted mortality. This relative health advantage on some health indicators, despite typically greater economic disadvantage, is referred to as the “Hispanic paradox.”<sup>22, 23</sup> The Hispanic paradox is most striking among Mexican Americans and does not appear to hold for Puerto Ricans.<sup>22</sup> (It is important to note that Hispanics, like all other large racial or ethnic groups used in typical classifications, represent a heterogeneous group of individuals from many ethnic groups that often have markedly different socioeconomic and demographic characteristics.) The Hispanic paradox appears to be concentrated among immigrants and typically is not seen among people born in the United States; in fact, birth outcomes among Mexican Americans appear to worsen with successive generations in this country.<sup>24</sup> Several hypotheses have been advanced to explain these patterns. Individuals who face the challenges of emigration may be inherently healthier (the “healthy immigrant effect”). Recent immigrants also may benefit from healthier behaviors, stronger social networks and other sources of psychological resilience that their U.S.-born counterparts may not have.

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### LIKE INCOME AND EDUCATION, RACIAL OR ETHNIC GROUP IS AN IMPORTANT MARKER FOR SOCIAL EXPERIENCES REFLECTING OPPORTUNITIES AND RESOURCES

The social patterns of many racial or ethnic disparities in health strongly suggest that modifiable social differences—such as income, wealth, education and neighborhood socioeconomic conditions—play a key role. Evidence also indicates that belonging to a particular racial or ethnic group can itself represent different social experiences beyond the effects of income or education.

For example, if the underlying explanation for two-fold disparities in birth outcomes seen for U.S.-born black women compared with white women were primarily genetic, we would also expect immigrant black women to have worse outcomes relative to white women. Instead, immigrants from Africa or the Caribbean have relatively favorable birth outcomes.<sup>25,26</sup> Evidence that differences in birth outcomes between blacks and whites are greatest among more affluent and educated women also is not easily explained by genetic differences.<sup>27</sup> Many scientists are exploring the potential role of psychosocial factors in health disparities, focusing particular attention on the chronic stress associated with belonging to a group that historically has experienced racial/ethnic bias.<sup>10,28,29</sup> This stress can affect even people who may not have experienced major incidents of overt bias themselves but are aware of their group’s unfair perception and treatment.



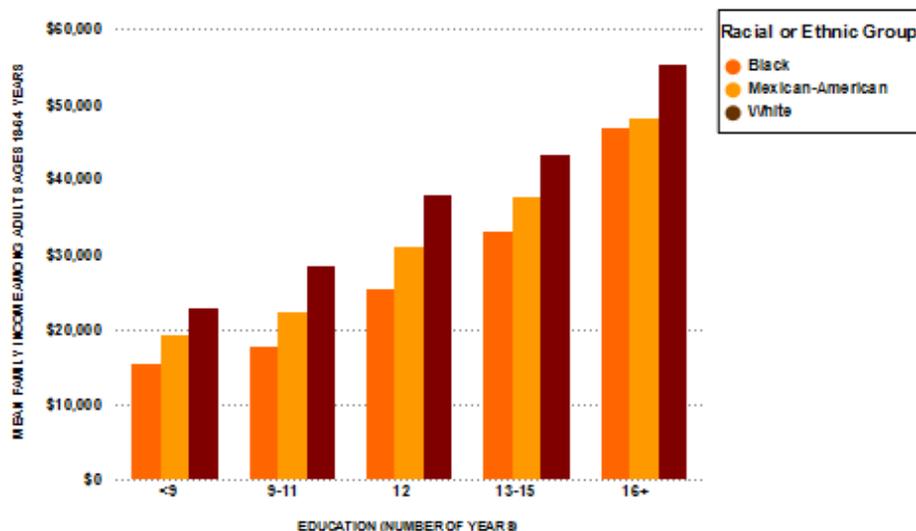


### 3. What explains racial or ethnic differences in health among people with similar levels of income or education?

**Unmeasured socioeconomic differences are likely to explain a large part of many racial or ethnic disparities in health.** Figure 4d shows racial or ethnic differences in health within groups defined by level of income. As noted earlier, blacks, Hispanics, American Indians and some Asian groups historically have been socioeconomically disadvantaged relative to whites. However, the magnitude of this relative disadvantage may not be adequately captured using the income or education information typically available in health studies. Studies rarely describe wealth or educational quality, and typically use broad income and education categories—for example, grouping income as below or above 100 percent of the Federal Poverty Level (poor vs. non-poor), or grouping education as less than high-school graduate vs. high-school graduate. Within broad categories like these, some groups (e.g., people of color) may cluster systematically near the lower cut-off, while others (e.g., whites) cluster at the top, but these differences are not reflected by the categories used. Furthermore, large racial or ethnic differences have been documented in:

*At each level of income, blacks and Hispanics have far less accumulated wealth than whites.*

- *Income at a given level of education.* At each level of educational attainment, blacks and Mexican Americans (the largest of the Hispanic ethnic subgroups, representing about 66 percent of Hispanics in the United States) consistently have lower incomes than whites (Figure 6).
- *Wealth at a given level of income.* At each level of income, blacks and Hispanics have far less accumulated wealth than whites (Figure 7). Although income is the most commonly used measure of economic resources, wealth—which typically reflects income and assets over a longer period of time, often since childhood—could be at least as important for health.<sup>7,30</sup>



**Figure 6.** At every educational level, blacks and Mexican Americans have lower mean family incomes than whites.

Source: Braveman RA et al. Socioeconomic status in health research: One size does not fit all. JAMA, 294(22), 2005. Based on National Health Interview Survey, 1989-1994.



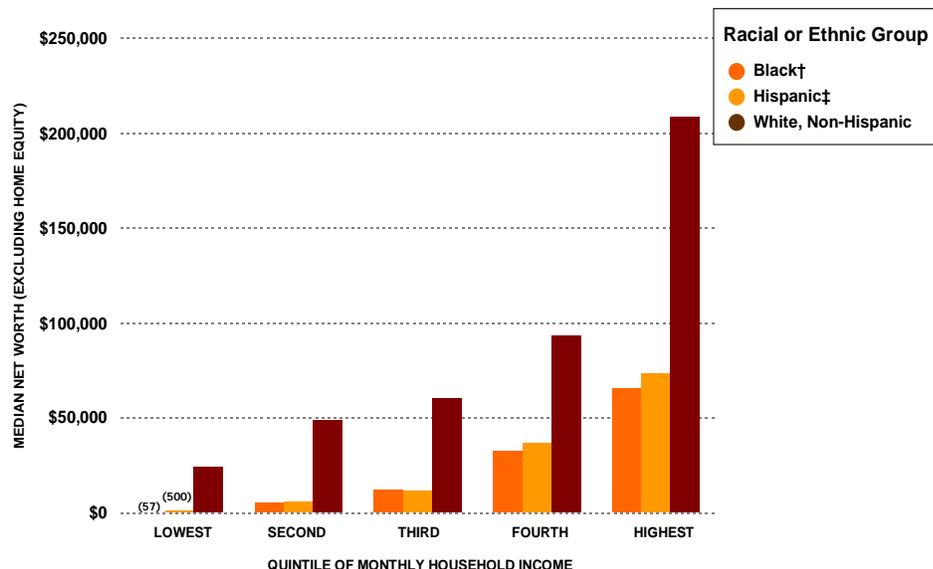


Figure 7. At every income level, blacks and Hispanics have less accumulated wealth than whites.

†Report does not indicate whether Blacks are non-Hispanic  
‡Persons of Hispanic origin may be of any race  
Source: Braveman PA et al. Socioeconomic status in health research: One size does not fit all. *JAMA*, 294(22), 2005. Based on US Census Bureau Survey of Income and Program Participation, 2000.

- *Neighborhood socioeconomic characteristics at a given level of income.* Although most studies do not consider socioeconomic characteristics of the neighborhoods where people live, neighborhood characteristics such as the percentage of residents who are poor have been shown to affect people’s health over and above the effects of individual socioeconomic characteristics. At a given level of income, blacks and Hispanics generally live in more disadvantaged neighborhoods than their white counterparts.<sup>7</sup>
- *Socioeconomic conditions experienced in childhood.* Although childhood socioeconomic conditions have been shown to have major effects on adult health, independent of how they shape socioeconomic conditions during adulthood, they are rarely measured. Black and Hispanic adults are more likely to have experienced lower socioeconomic circumstances in childhood, compared with whites of comparable current educational levels.<sup>7</sup>

**Other social factors related to race or ethnicity also may contribute to racial or ethnic disparities in health.** In particular, a number of scientists have hypothesized that chronic stress related to experiences of racial/ethnic bias—including relatively subtle experiences that arise even in the absence of conscious or intentional prejudice—may contribute significantly to unexplained racial or ethnic disparities in health, regardless of income or education. Chronic stress has been found to have major adverse health effects through multiple neuroendocrine, vascular, immune and/or inflammatory mechanisms,<sup>31-34</sup> resulting in increased risk of heart disease, stroke, diabetes, low birth weight or premature birth and other serious conditions.<sup>34</sup> Findings from studies in the United States and other countries have found that perceived racial/ethnic bias makes an additional contribution to racial or ethnic disparities in health, after income and education are considered.<sup>10,35,36</sup>

*Chronic stress related to overt or subtle experiences of racial or ethnic bias may significantly contribute to disparities in health among racial or ethnic groups, over and above differences in living and working conditions and differences in medical care.*





Blacks, American Indians, Hispanics, Pacific Islanders and some Asian groups are disproportionately represented among the more socioeconomically disadvantaged groups in the United States. This reflects a long history of racial inequality in which racial or ethnic origin was legally used to exclude individuals from employment, educational opportunities and property ownership. Although most explicit uses of race to demean or exclude people from participation in society have been outlawed, racial residential segregation persists. The legacy of segregation, together with subtle institutional forms of bias that limit economic and social opportunities, continues to shape living and working conditions, with adverse health consequences for many people of color.<sup>37</sup>

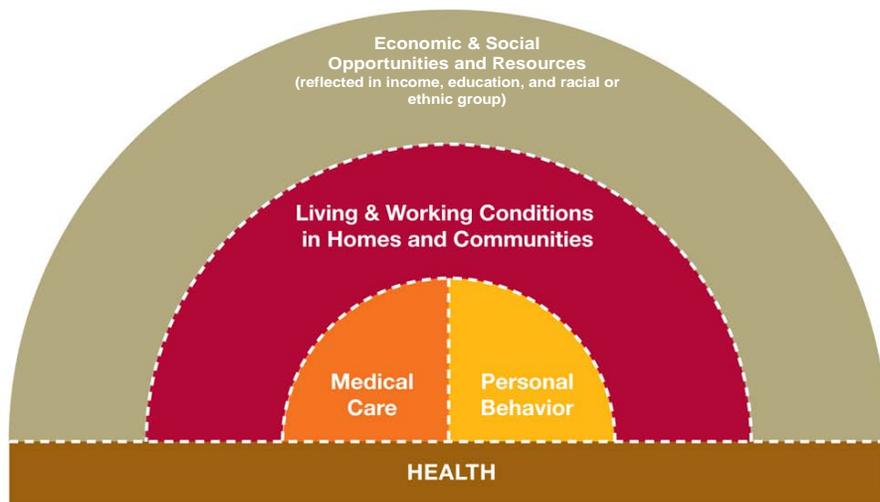
#### 4. Race, income and education matter for health because they reflect access to different resources and opportunities to be healthy

Figures 8 and 9, below, excerpted from *Overcoming Obstacles to Health*,<sup>8</sup> depict some of the influences that shape health. Good education, for example, gives people access to safe jobs providing a stable income, health insurance and other benefits. Income can determine whether people can afford to eat nutritious foods and live in healthy homes in safe neighborhoods with good schools and places to exercise and play. Racial or ethnic group, along with income and education, also shapes economic and social opportunities and resources for three major reasons:

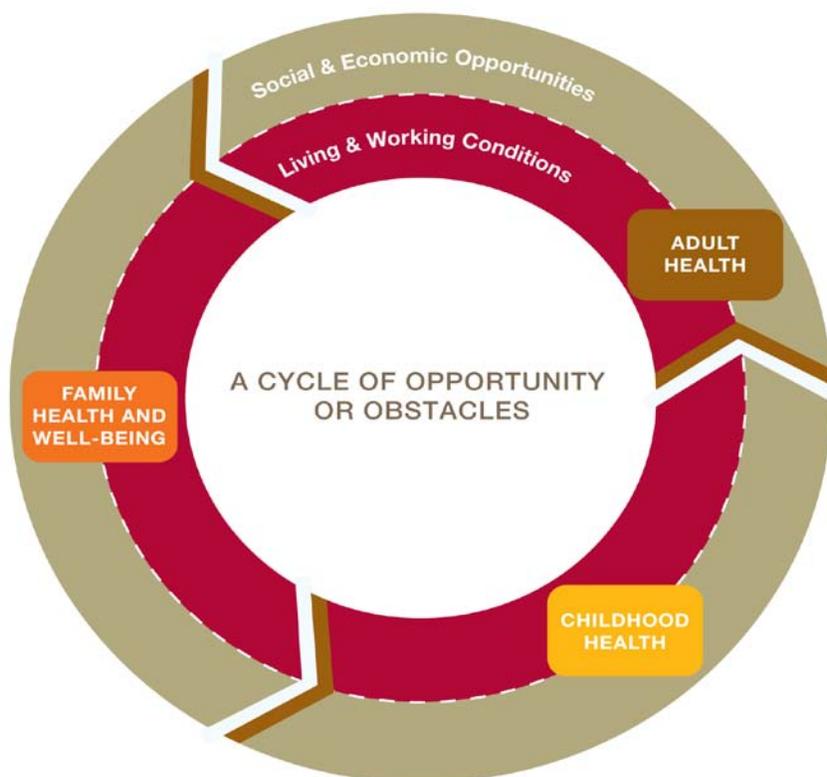
- First, in many respects, the United States remains a highly segregated society, with racial residential segregation that systematically tracks blacks and Hispanics into neighborhoods with fewer resources and opportunities to be healthy (see the “Neighborhoods and Health” issue brief in this series). Blacks and Hispanics of all incomes are more likely than whites with similar incomes to live in neighborhoods with concentrated disadvantage.<sup>38,39</sup>
- Second, although advances have been made, as reflected by the recent election of a black President, the legacy of racial discrimination persists and may have direct adverse effects on health by adding to chronic stress among blacks and Hispanics, even in the absence of conscious intent to discriminate. These effects are experienced not just among those who are at greatest socioeconomic disadvantage but among relatively affluent and highly-educated individuals as well.
- Third, along with income and education, racial or ethnic group can reflect experiences that can hurt or enhance health over lifetimes and across generations (Figure 9). Experiences in childhood are particularly crucial in shaping health across a person’s entire lifetime (see the “Early Childhood Experiences and Health” issue brief in this series). Because of the legacy of racial discrimination, blacks are more likely to have experienced social and economic disadvantage in childhood than their white counterparts, who may appear similar when only current income and years of education are considered. Social advantage and disadvantage affect opportunities for good health. They are transmitted across a person’s lifetime, with poverty and ill health in childhood increasing the likelihood of lower income, less wealth and less educational attainment in adulthood. Social advantage and disadvantage also are transmitted across generations, as children become adults, have families and raise their own children.

*The legacy of segregation, together with subtle institutional forms of bias that limit economic and social opportunities, continues to shape living and working conditions, with adverse health consequences for many people of color.*





*Figure 8.* Along with income and education, racial or ethnic group represents economic and social opportunities and resources.



*Figure 9.* Social advantage or disadvantage – which leads to health advantage or disadvantage – accumulates over time and is transmitted across generations.





## 5. Americans are not as healthy as they should or could be. This is an issue for us all—for all racial or ethnic groups and for the middle class as well as the poor

Health disparities by racial or ethnic group, income and education reflect unrealized health potential in our society. In addition to needless suffering and premature disability and death, this translates in hard economic terms to less economic productivity and greater health care expenditures for conditions that could have been prevented—issues that affect us all. The United States spends more per person on medical care than any other country,<sup>40</sup> but ranks at or near the bottom among affluent nations on key health indicators and even performs poorly on health by comparison with a number of low-income countries<sup>41,42</sup>—even when looking only at white Americans.<sup>2,40</sup> Perhaps not coincidentally, our low international ranking on health is matched by the highest rate of child poverty among affluent nations.<sup>43</sup> Within each large racial or ethnic group, however, the middle class as well as the poor have worse health than the most affluent (Figure 4c)—a finding that provides an important clue to understanding and addressing the problem.

We have much to learn about how race, income and education affect health. We do know, however, that both race and socioeconomic factors reflect social factors that contribute to large gaps in health for the vast majority of Americans, across lifetimes and generations. Realizing our full health potential will require high-quality medical care for all, but that will not be enough. Successful, sustainable strategies will need to focus on improving living and working conditions for everyone, particularly those in the most health-damaging circumstances.

*Both racial or ethnic group and socioeconomic factors reflect differential access to resources and opportunities that can hurt or enhance health, over lifetimes and across generations.*





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## EXAMPLES OF EFFORTS WITH DEMONSTRATED OR PROMISING IMPACTS ON RACIAL OR ETHNIC DISPARITIES IN HEALTH

Historically, programs and policies addressing social and/or economic conditions have led to significant reductions in health disparities between racial or ethnic groups. Examples of efforts with demonstrated or promising impacts on racial or ethnic differences in health include the following:

- The **Civil Rights Act of 1964**, banning racial segregation in schools, public places and employment, and the **Voting Rights Act of 1965**, banning discriminatory voting practices, have had significant effects on the health of blacks in the United States. Desegregating hospitals had dramatic effects on infant mortality (see below). At least as dramatic, however, is how broader opportunities for black women led to economic and social gains in the late 1960s and the 1970s, with declines in income disparities between white and black women and significant increases in life expectancy and decreases in mortality rates for working-age black women compared with white women during this period.<sup>44</sup>
- After passage of Title VI of the 1964 Civil Rights Act prohibiting discrimination and segregation in all institutions receiving federal funding, the federally-mandated **desegregation of public hospitals**, particularly in Mississippi, led to dramatically improved access to care for black mothers and infants. From 1965 to 1971, declines in the black infant mortality rate (IMR) resulted in the narrowest gap between black and white IMRs in the post-World War II era. Benefits associated with reduced infant mortality generated an estimated welfare gain of more than \$7 billion during 1965 to 1975.<sup>45</sup>
- Initiated in 1961 as part of the federal “war on poverty,” the **Food Stamp Program** was the means-tested food and nutrition program intended to improve nutrition among the low-income population. The passage of 1973 Amendments to the Food Stamp Act mandated that all counties offer the Food Stamp Program by 1975. The rollout of Food Stamp Program benefits during the 1960s and early 1970s improved birth outcomes for both whites and blacks, with larger impacts for births to black mothers.<sup>46</sup>
- The **Baltimore Regional Housing Campaign** resulted from a lawsuit by the American Civil Liberties Union on behalf of 14,000 black tenants and potential beneficiaries of public housing in Baltimore. In 2005, the District Court found the U.S. Department of Housing and Urban Development (HUD) in violation of the Fair Housing Act and liable for failing to provide poor families with access to housing outside of segregated, high-poverty communities. Funded by HUD and administered by the Housing Authority of Baltimore County, the Campaign allowed families who were eligible for housing assistance to move from public housing into “communities of opportunity” defined on the basis of school performance, employment, transportation, child care, health care and institutions facilitating civic and political activity. A public health intervention incorporated into the housing mobility strategy provided services such as nutrition assessments and health-related counseling.<sup>47</sup>
- REACH (Racial and Ethnic Approaches to Community Health) 2010 is a federal initiative funded by the U.S. Centers for Disease Control and Prevention to eliminate health disparities among racial and ethnic communities. For example, beginning in 2001, the local **Charlotte REACH 2010** program was implemented over a seven-year period to reduce health disparities in cardiovascular disease and diabetes in a North Carolina community of 20,000 blacks by creating changes in individual behaviors, community capacity and systemic policies. The program featured lay health advisors, targeted individual interventions (e.g., exercise, nutrition, smoking cessation, primary care), and environmental and systemic interventions (e.g., launching a culturally-specific mass media campaign to raise awareness and target specific health behaviors, starting and maintaining a local farmer’s market, expanding physical activity programs and promoting healthy food labeling in area schools and restaurants). Statistically-significant improvements were found in physical activity, smoking and healthy eating for those who participated in the program.<sup>48</sup>
- Rooted in the American Civil Rights Movement, the Children’s Defense Fund (CDF) created the **CDF Freedom Schools** program in 1993 to mobilize the black community to address children’s needs by emphasizing reading enrichment, youth leadership development, parent involvement and social action. The **Kansas City CDF Freedom Schools** initiative, begun in 1995, provided a summer program for mostly black children ages 5 to 15 years. By 2007, 18 CDF Freedom Schools sites, operating in churches, enrolled between 1,000 and 2,000 students each year. An external three-year evaluation found improvements in reading ability, as well as positive change in measures including community involvement, acceptance of responsibility and social adjustment. Health impacts were not directly measured, but the measured outcomes have been linked repeatedly with health in research literature.<sup>49</sup>





**CONTINUED:**

- In 2001, a group of concerned residents, community-based organizations and social service agencies formed the **West Oakland Food Collaborative (WOFC)** with the goal of increasing access to nutritious and affordable food while stimulating economic development in this low-income, primarily black community in California. With funding from the University of California, Davis, and The California Endowment, WOFC helped open the **Mandela Farmers’ Market** in April 2003. This initiative provides farmers and vendors with equipment, training, resources and technical assistance, and helps connect the community with black farmers suffering from the displacement of small family farms. WOFC also offers free shuttle bus service to the weekly market for residents with limited public transportation access. The group plans to add screening and application services at the farmers’ market to help residents apply for public benefits such as WIC, food stamps and Medi-Cal (California’s Medicaid). The market’s turnout has been increasing, with about 200 customers a week.<sup>50</sup>

**ABOUT THE ROBERT WOOD JOHNSON FOUNDATION**

The Robert Wood Johnson Foundation focuses on the pressing health and health care issues facing our country. As the nation’s largest philanthropy devoted exclusively to improving the health and health care of all Americans, the Foundation works with a diverse group of organizations and individuals to identify solutions and achieve comprehensive, meaningful and timely change. For more than 35 years, the Foundation has brought experience, commitment, and a rigorous, balanced approach to the problems that affect the health and health care of those it serves. When it comes to helping Americans lead healthier lives and get the care they need, the Foundation expects to make a difference in your lifetime.

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The Robert Wood Johnson Foundation Commission to Build a Healthier America was a national, independent, non-partisan group of leaders that released 10 recommendations to dramatically improve the health for all Americans. [www.commissiononhealth.org](http://www.commissiononhealth.org)

**ABOUT THIS ISSUE BRIEF SERIES**

This issue brief is one in a series of ten on the social determinants of health. The series began as a product of the Robert Wood Johnson Foundation Commission to Build a Healthier America and continues as a part of the Foundation’s Vulnerable Populations portfolio. [www.rwjf.org/vulnerablepopulations](http://www.rwjf.org/vulnerablepopulations)

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*Photography credit: Tyrone Turner*





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