



# Looking Upstream

A webinar presented by the Robert Wood Johnson Foundation

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ISSUE BRIEF SERIES: EXPLORING THE SOCIAL DETERMINANTS OF HEALTH  
INCOME, WEALTH AND HEALTH—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.



How Social Factors Shape Health:  
Income, Wealth and Health

1. Introduction

Few people would deny that there are many advantages of having more income or wealth. Nevertheless, apart from the well-known link between economic resources and being able to afford health insurance and medical care, their influence on health has received relatively little attention from the general public or policy-makers, despite a large body of evidence from studies documenting strong and pervasive relationships between income, wealth and health.<sup>1,2</sup> The evidence tells us that these relationships are based not just on how economic resources can affect our access to medical care, but also on how they enable us to live in safer homes and neighborhoods, buy healthier food, have more leisure time for physical activity, and experience less health-harming stress. Understanding the importance of the links between income, wealth and health can inform policies aiming to achieve better health for all Americans while reducing social disparities in health.

This brief summarizes the evidence that health varies with income and wealth, provides an overview of what is currently known about the pathways and biological mechanisms that can explain the links between economic resources and health, and briefly discusses the implications for policy.



To find out more on the integral relationship between our health and how we live, learn, work and play, visit [www.rwjf.org/en/about-us/issue-briefs](http://www.rwjf.org/en/about-us/issue-briefs).

VULNERABLE POPULATIONS PORTFOLIO



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

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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>1</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. Adult Hispanics, Asians and blacks have higher rates of diabetes than adult whites (Figure 3).

<sup>1</sup> We use "racial or ethnic groups" to refer to population groups identified by their ancestry 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 construct, we use race and ethnic group interchangeably, given common usage, which may distinguish between these terms, we mention both to avoid confusion.



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



ISSUE BRIEF SERIES: EXPLORING THE SOCIAL DETERMINANTS OF HEALTH  
EDUCATION AND HEALTH—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.



Education Matters for Health

1. Introduction

Everyone knows that without a good education, prospects for a good job with good earnings are slim. Few people think of education as a crucial path to health, however. Yet a large body of evidence strongly—and, with very rare exceptions, consistently—links education with health, even when other factors like income are taken into account.<sup>1,2</sup> By "education" we mean educational attainment, or the years or level of overall schooling a person has, rather than instruction on specific health topics like hygiene, diet or exercise; while the quality of education also is important for health outcomes, this information is more difficult to measure and thus typically unavailable. People with more education are likely to live longer, to experience better health outcomes (Figures 1 & 2), and to practice health-promoting behaviors such as exercising regularly, refraining from smoking, and obtaining timely health care check-ups and screenings.<sup>3,4</sup> Educational attainment among adults is linked with children's health as well, beginning early in life: babies of more-educated mothers are less likely to die before their first birthdays, and children of more-educated parents experience better health (Figures 3 & 4).

Education can influence health in many ways. This issue brief examines three major unexamined pathways through which educational attainment is linked with health: health knowledge and behaviors; employment and income; and social and psychological factors, including sense of control, social standing and social networks. In addition, this brief explores how educational attainment affects health across generations, examining the links between parents' education—and the social and economic advantages it represents—and their children's health and social advantages, including opportunities for educational attainment.

*A large body of evidence links education with health, even when other factors like income are taken into account.*



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## More health care spending but less health: Life expectancy

1	<b>Japan (82.3 years)</b>	16	<b>Luxembourg</b>
2	<b>Australia</b>	17	<b>Germany</b>
3	<b>Canada</b>	18	<b>Belgium</b>
4	<b>Spain</b>	19	<b>Finland</b>
5	<b>Sweden/Switzerland</b>	20	<b>Korea</b>
6	<b>Israel</b>	21	<b>Denmark</b>
7	<b>Iceland</b>	22	<b>Portugal</b>
8	<b>New Zealand</b>	23	<b>United States (78.2 years)</b>
9	<b>Italy</b>	24	<b>Chile</b>
10	<b>Norway</b>	25	<b>Slovenia</b>
11	<b>Ireland</b>	26	<b>Czech Republic</b>
12	<b>United Kingdom</b>		
13	<b>Greece</b>		
14	<b>Austria</b>		
15	<b>Netherlands</b>		

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Source: CIA: *The World Factbook* online, January 2011 (2010 estimate)



## What influences health?

- Medical care
- Genetic makeup
- Climate and natural physical environment
- Behaviors, nutrition
- What else?
- And what influences the influences?



***UPSTREAM:***  
**The source**

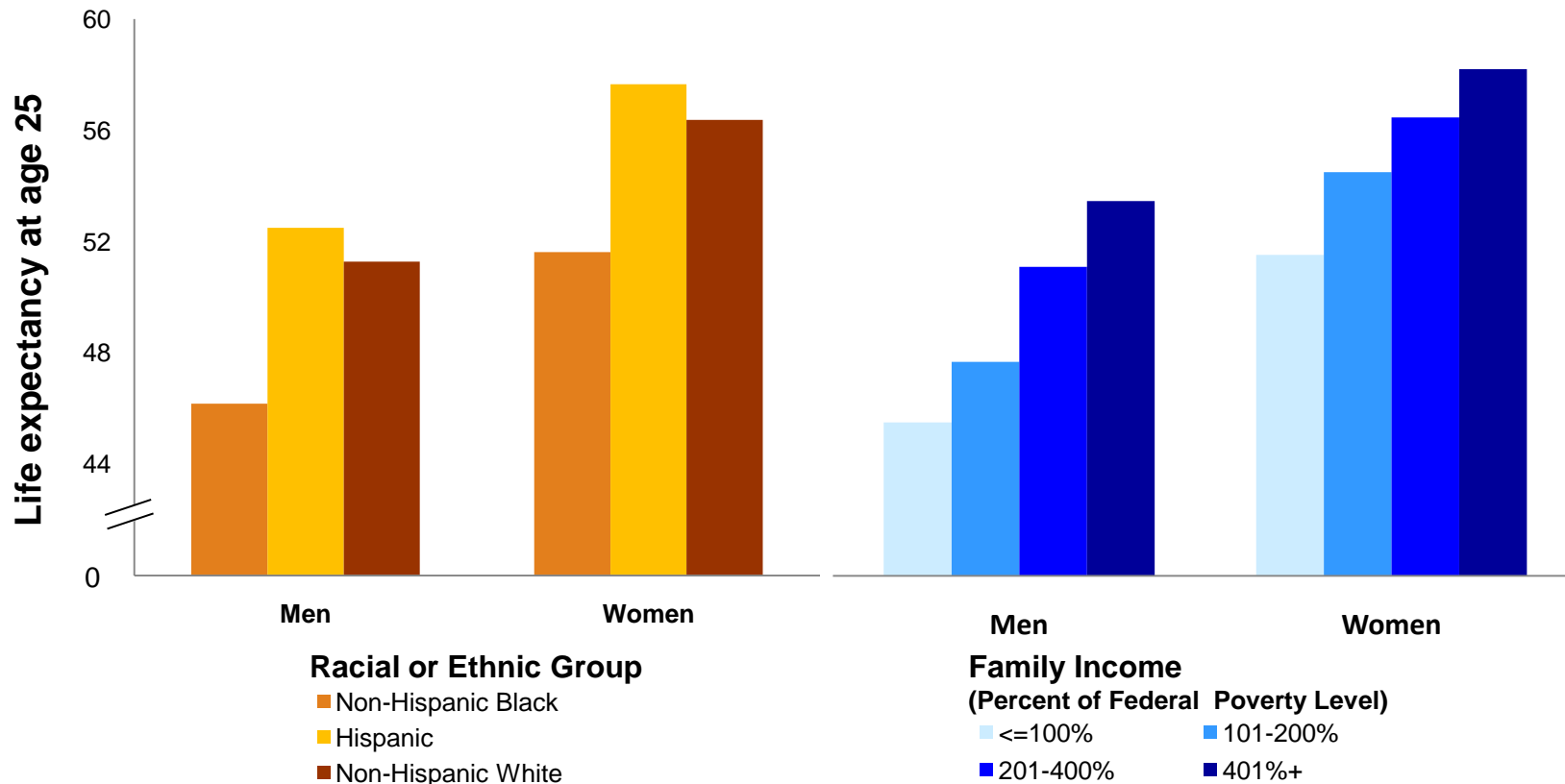


***DOWNSTREAM:***  
**The immediate exposure**





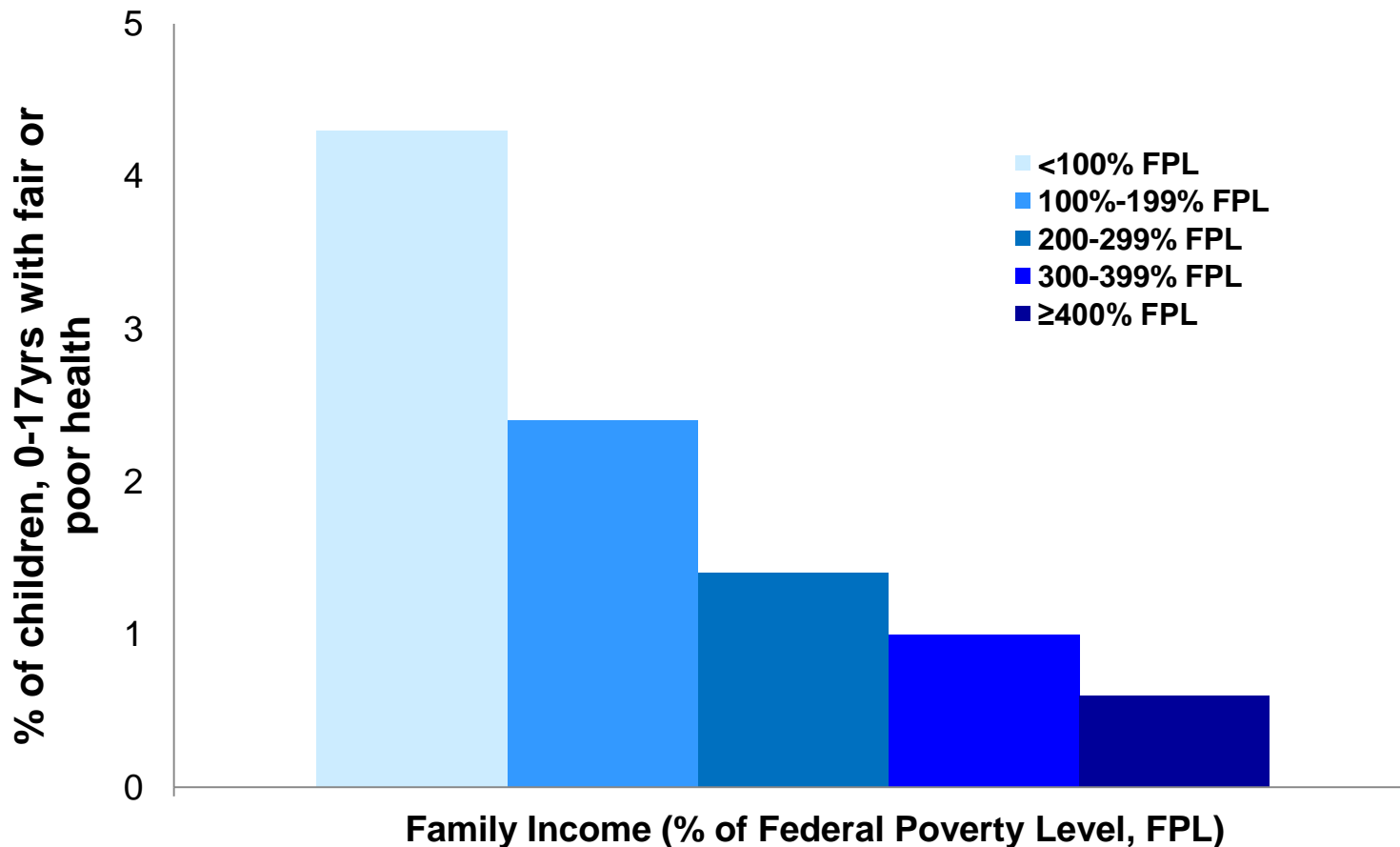
## Clues? Large disparities by race/ethnic group and income, e.g. life expectancy at age 25



Source: NLMS, 1988-1998



# Higher income, better child health

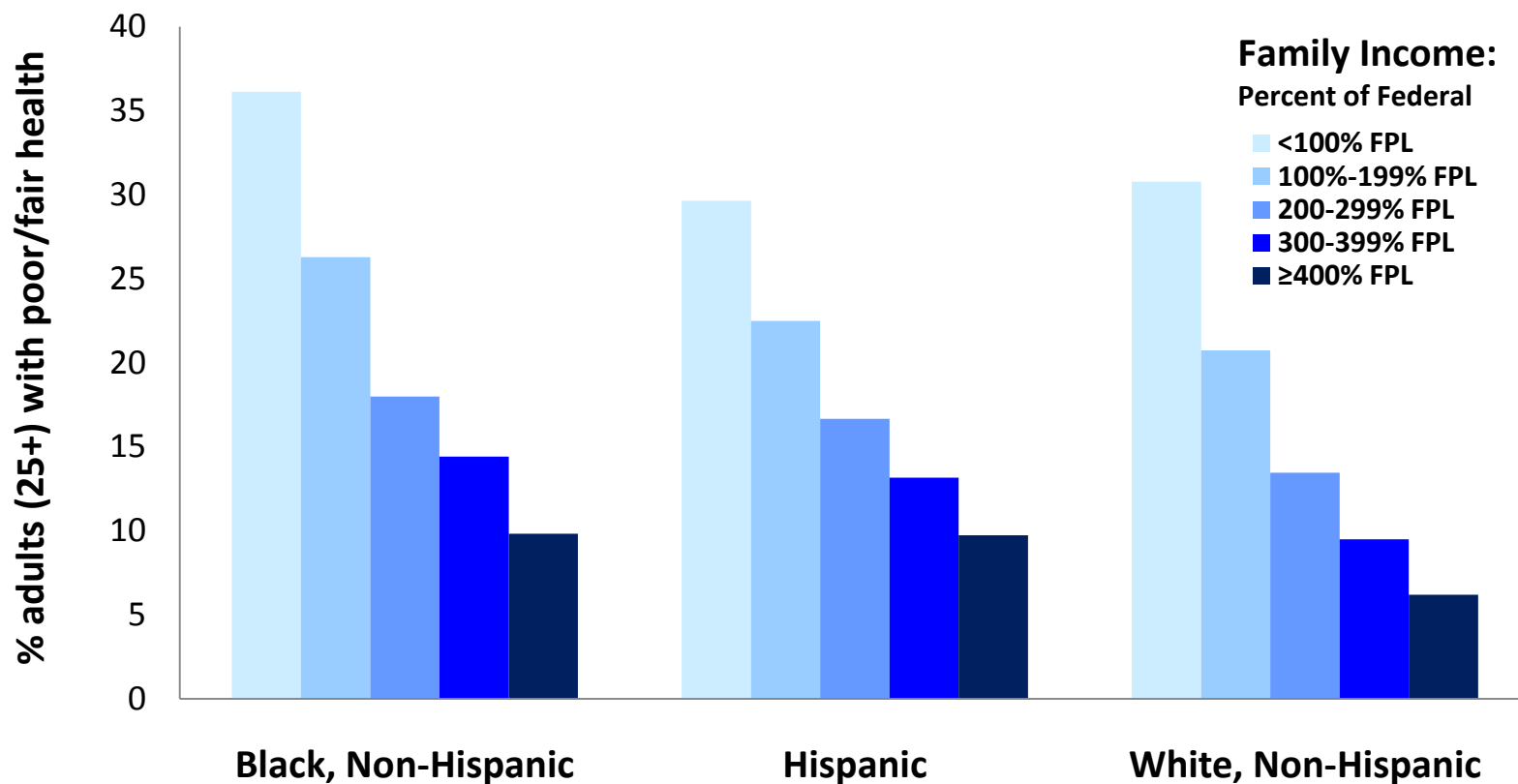


Source: National Health Interview Survey, 2001-2005. Age-adjusted





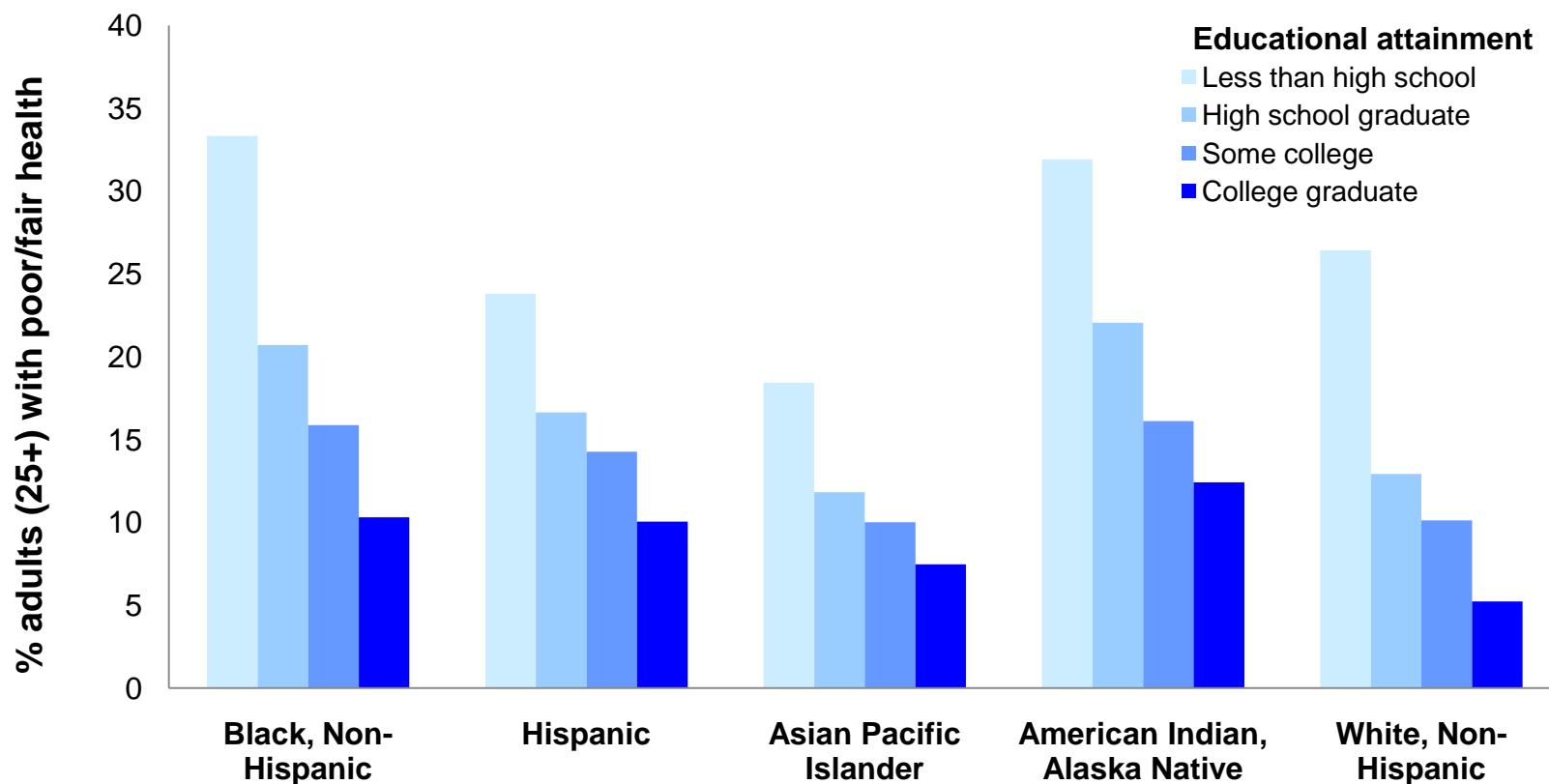
# Racial/ethnic differences do not explain the income differences in health: adult health



Source: NHIS 2001-2005. Age-adjusted



## Racial/ethnic differences do not explain education differences in health



Source: NHIS 2001-2005. Age-adjusted

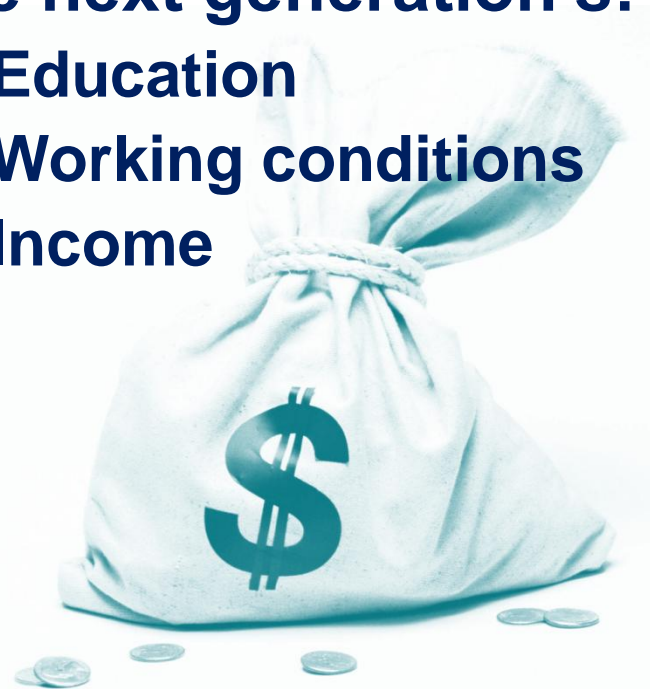
# How could income affect health?

## Income directly shapes:

- Medical care
- Housing
- Nutrition
- Physical activity
- Neighborhood conditions
- Stress

## Parents' income shapes the next generation's:

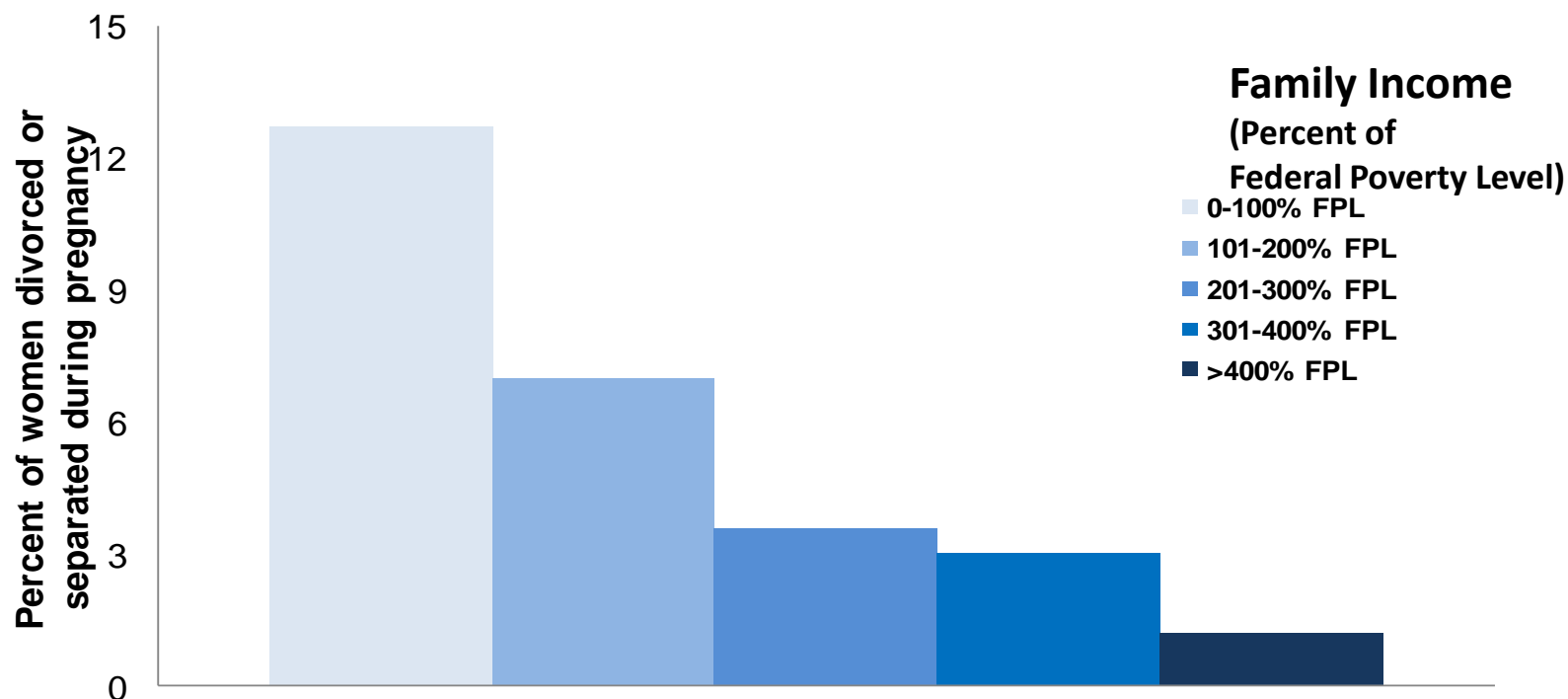
- Education
- Working conditions
- Income





# Higher income, less stress

For example, separation or divorce during pregnancy



Other stressors: domestic violence, job loss, incarceration, no social support, homeless, food insecurity, financial strain...

Source: MIHA 2003-2006 (CDPH/MCAH)



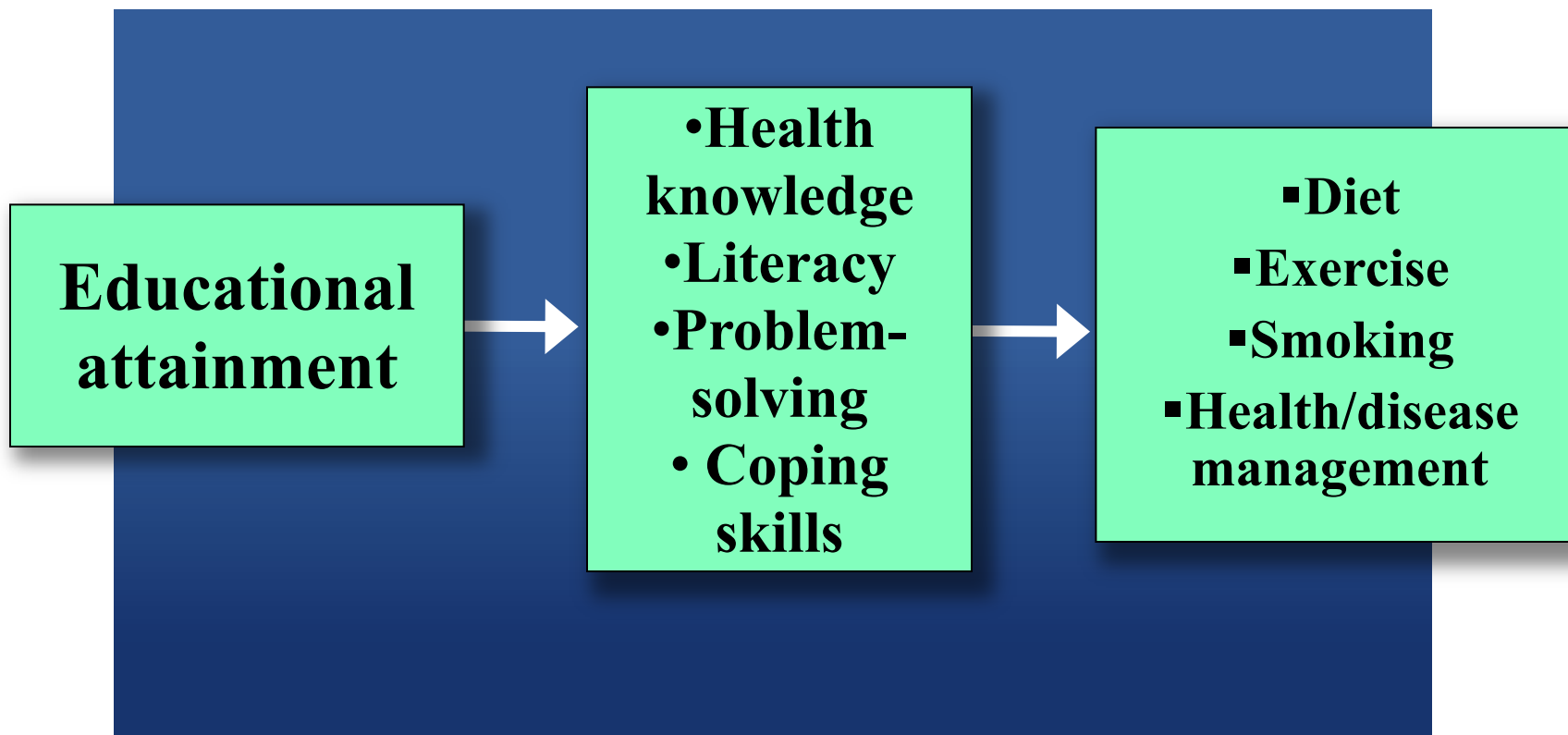
## Income affects neighborhood options

### Neighborhoods affect health

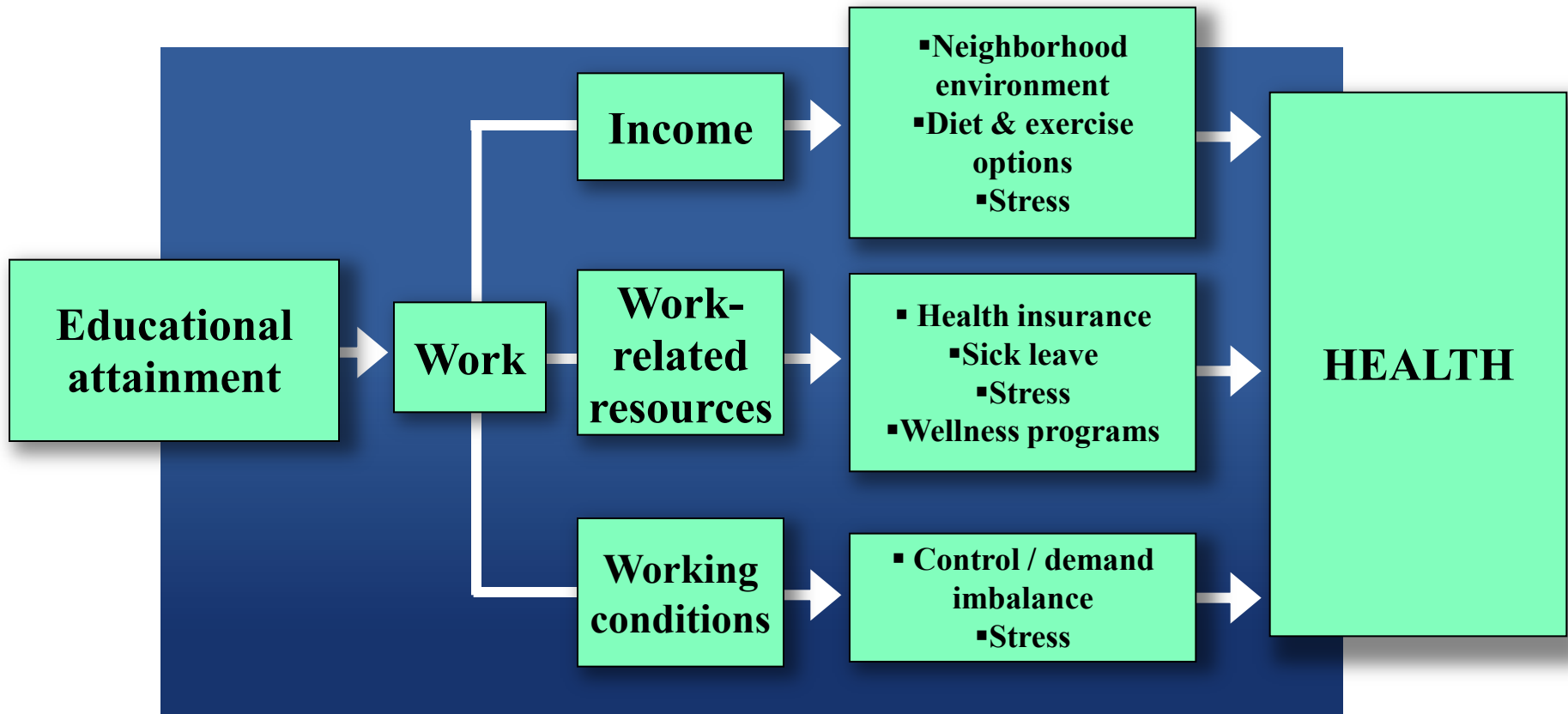
- Safe places to exercise
- Access to healthy food
- Targeted advertising of alcohol and tobacco
- Social networks and support
- Norms, role models, peer pressure
- Fear, anxiety, stress, despair
- Quality of schools
- Segregation often puts Blacks & Hispanics in unhealthier neighborhoods than similar-income Whites



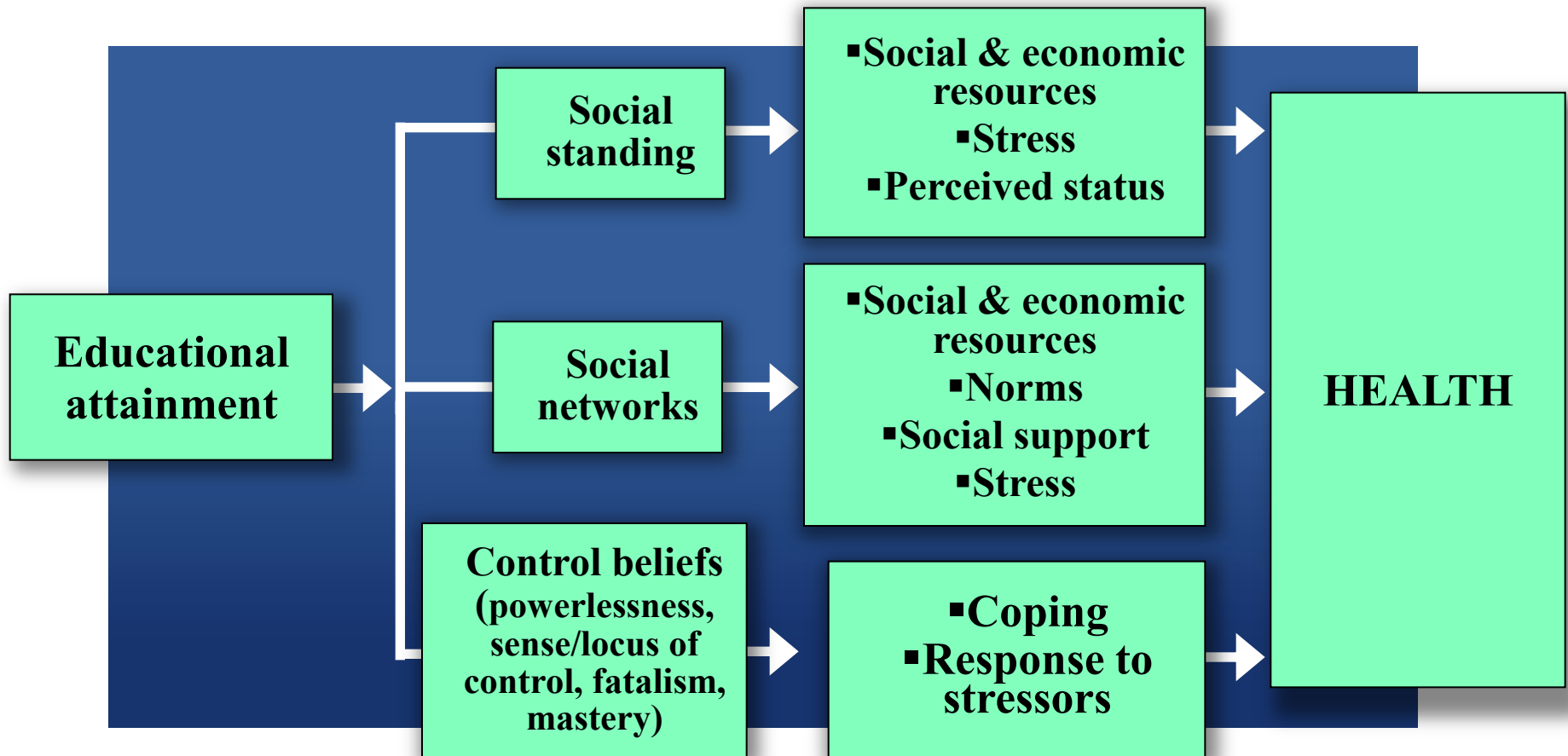
## Education can shape health behaviors by determining knowledge and skills



# Education can shape health by determining work and income



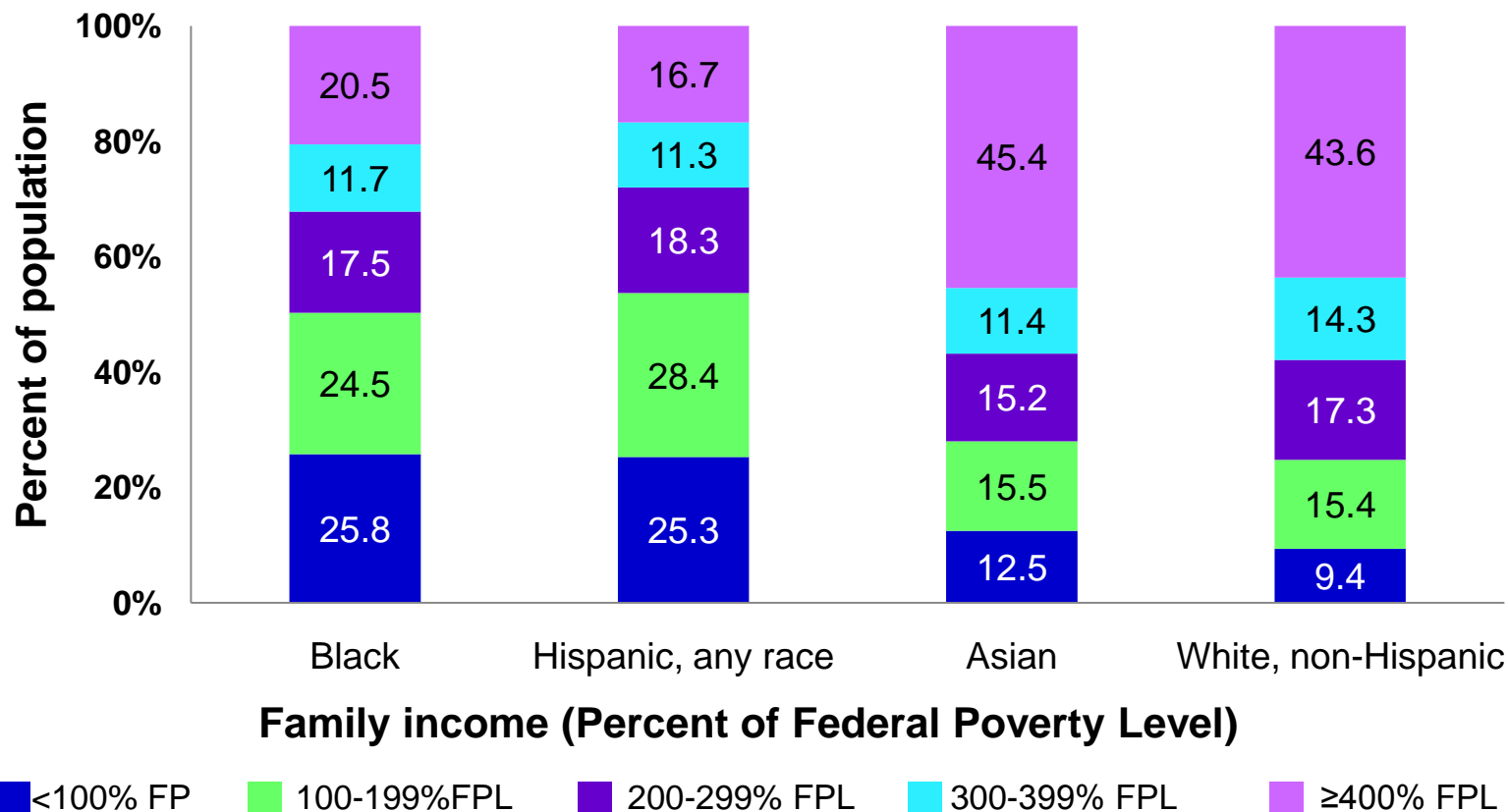
# Education can shape health through psychosocial pathways







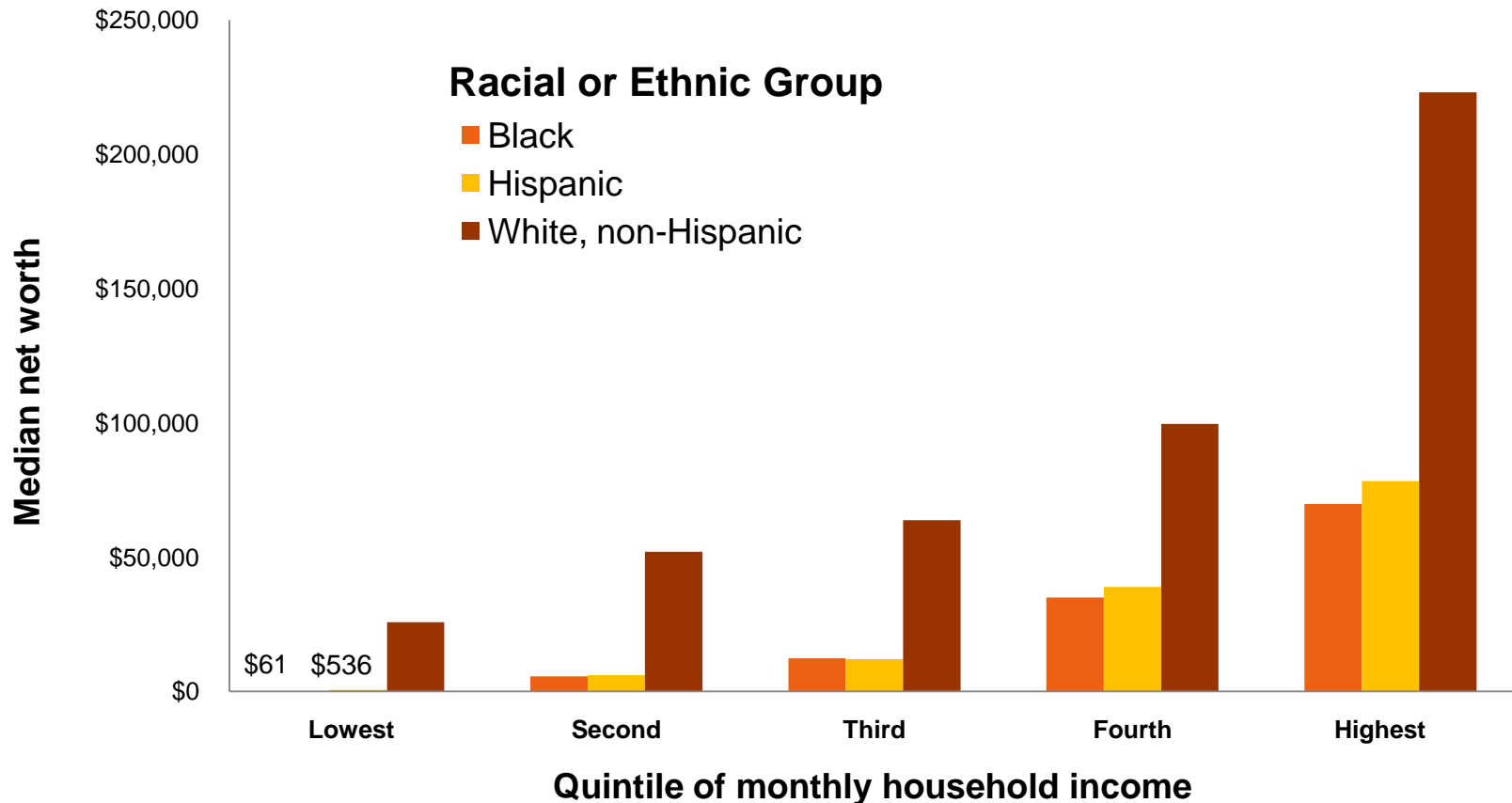
# Racial/ethnic disparities in income



Source: Current Population Survey, 2010 Annual Social and Economic (ASEC) Supplement



# At each income level, whites have far more wealth



Median net worth (assets minus debts) 2000 Census.

Gottschalck AO. Net Worth & Assets of Households: 2002. U.S. Census Current Population Reports. SIPP. April 2008.

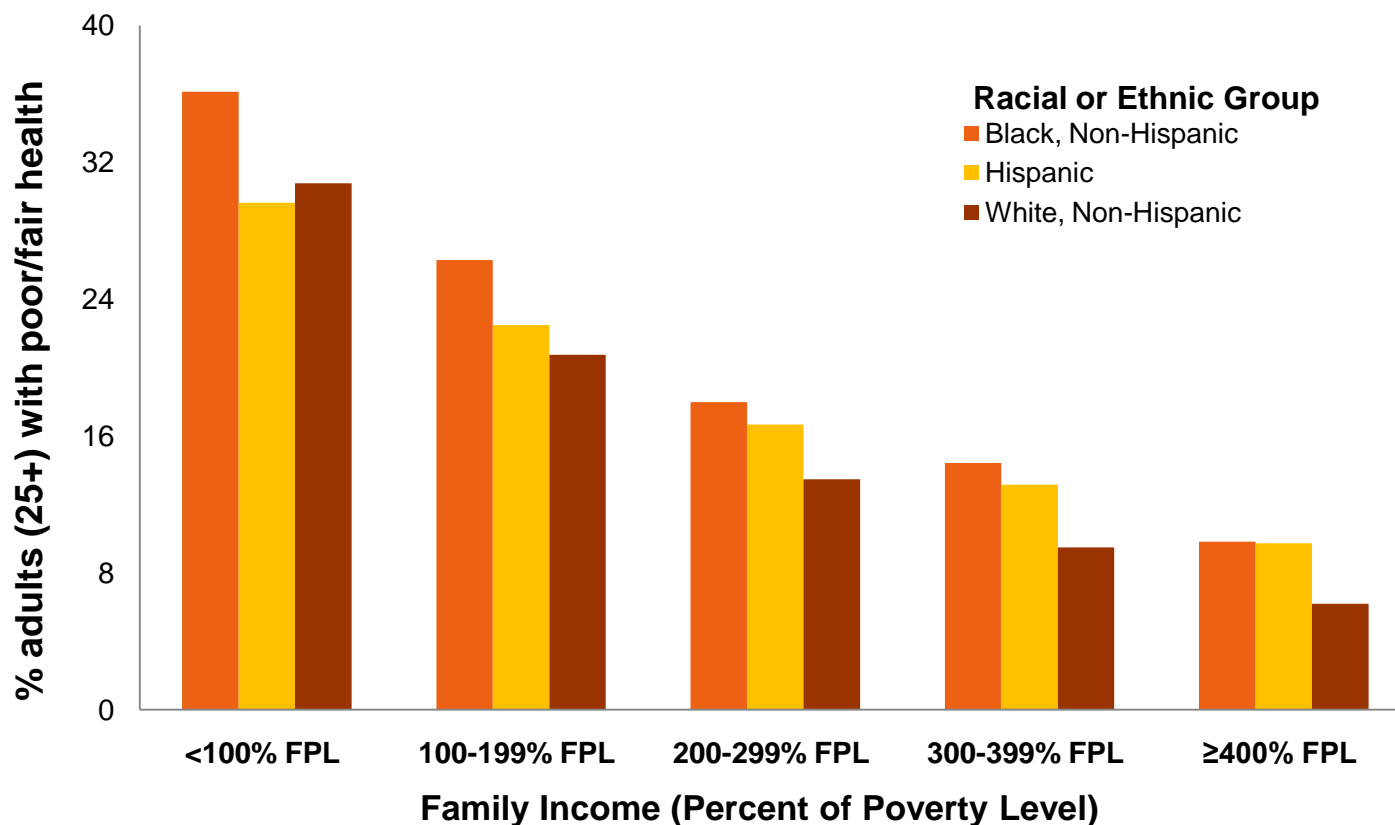


## Racial/ethnic disparities in childhood socioeconomic circumstances





## Both race/ethnic group and income matter for health. (Similar by education, not shown)



Source: NHIS 2001-2005. Age-adjusted.



# The legacy of legal discrimination: Socioeconomic disadvantage

Due to the legacy of discrimination, at a given income or educational level, African Americans on average:

- Live in unhealthier neighborhoods
- Have far less wealth and were worse off in childhood
- Experience more hardship with fewer resources to cope
- Studies rarely measure these factors, but often conclude a racial difference must be genetic because it persists after “control for SES”
- Race/ethnicity often captures unmeasured socioeconomic factors

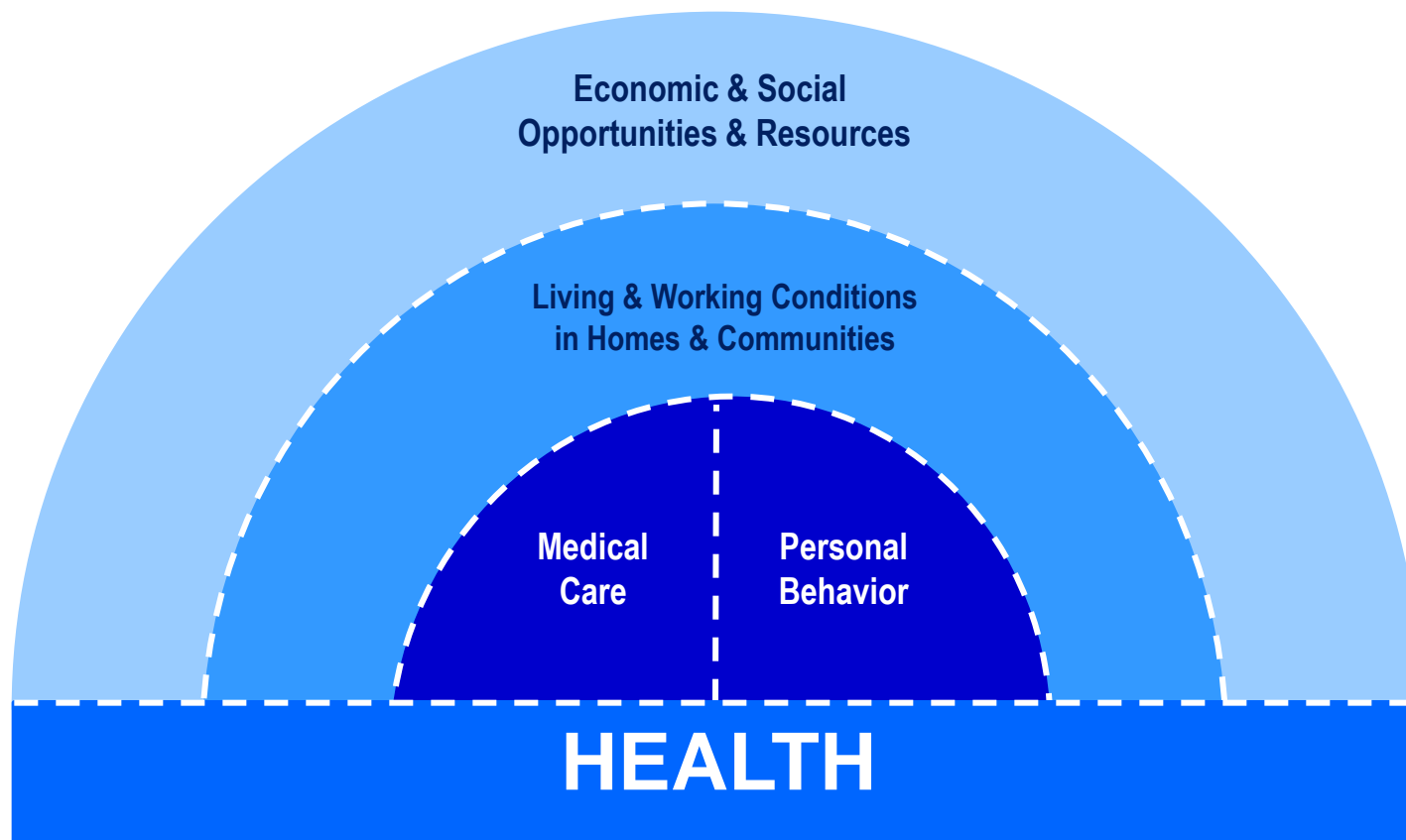


## And psychological effects of racial discrimination may harm health

- Structural racial discrimination exposes blacks and Latinos to worse living conditions and more stress related to economic hardship, even without conscious intent to discriminate.
- In addition, overt and subtle incidents are still pervasive and stressful.
- Internalized racism could harm health by undermining self-esteem and self-efficacy.
- Chronic concern about unfair perceptions or treatment based on race could be stressful, even without overt incidents.



# Looking Upstream: How income, education, and racial inequality shape health



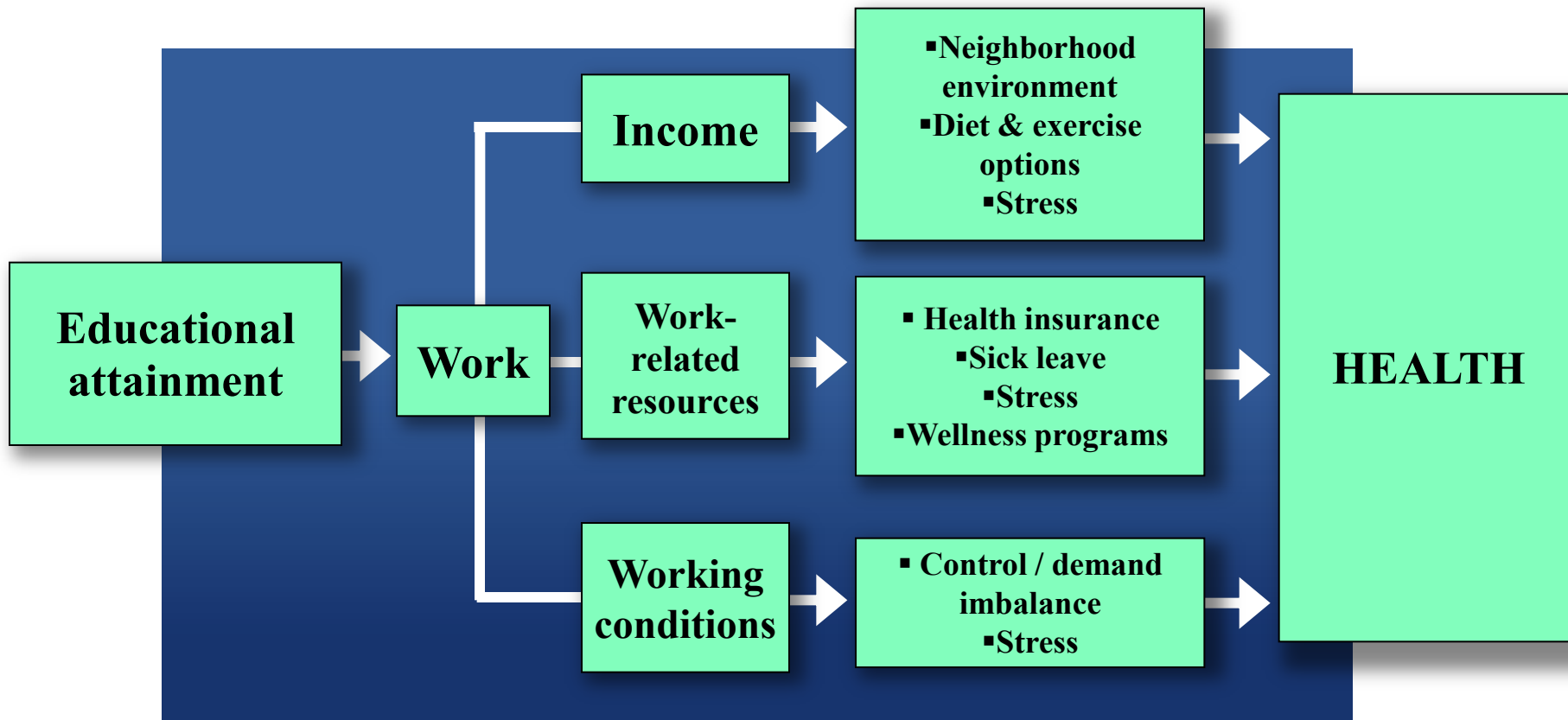


# Q&A

**Note: solutions and policies will be discussed during the second Q & A**



## Education can shape health by determining work and income





## The County Health Calculator

- Online simulation tool developed by the Virginia Commonwealth University Center on Human Needs
- Purpose: to explore how health is associated with education, income, and the living conditions to which they are linked
- Focus:
  - Education: percent of adults with some college education
  - Income: percent of individuals with a basic household income (greater than 200% of the poverty level)



**VCU Center on  
Human Needs**  
Virginia Commonwealth University



## Ohio: Delaware and Knox



## New York: Bronx, Queens and Nassau

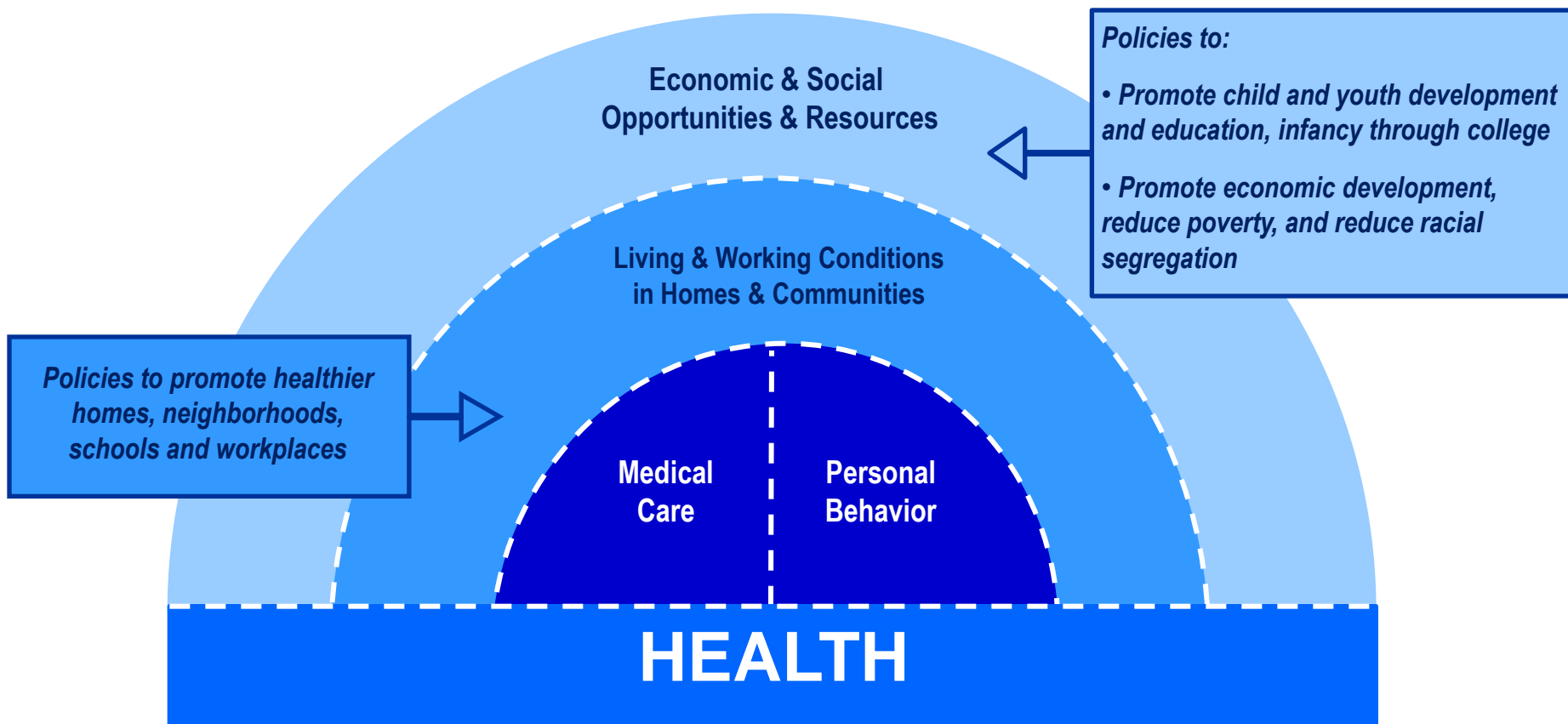


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*“I was able to get in one last lecture  
about diet and exercise.”*

## Finding solutions: Understanding the importance of social factors





# Final Questions & Answers

Upon exiting, you will be redirected to a web page where you can access the issue briefs discussed during today's webinar. A recording will also be available there soon.

## Thank you!

Join the Twitter discussion: [#HealthIsSocial](#)