



CENTER ON SOCIAL DISPARITIES IN HEALTH
University of California, San Francisco

Broadening our focus to improve health and reduce health disparities: the importance of social determinants of health

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ASAHP Annual Conference
Scottsdale, AZ
October 21, 2011



- **What does the evidence tell us about how social factors shape our health?**
- **What are the implications for providers of health services?**



Building on work related to the *RWJF Commission to Build a Healthier America*

- **Bipartisan independent group representing leadership and expertise beyond traditional 'health' sector**
 - Economics, public policy, education, business, philanthropy, media, health systems
- **14 Commissioners**
 - Co-chaired by Mark McClellan & Alice Rivlin
- **Convened 2/2008, final report 4/2009**
- **Goals:**
 - to raise awareness about social determinants of health and health disparities in the US
 - to recommend feasible strategies for reducing disparities and improving the health of all Americans



What the evidence tells us

- **How does the US compare with other nations on key indicators of health?**

Poorer health outcomes despite spending more on health care

Life Expectancy

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

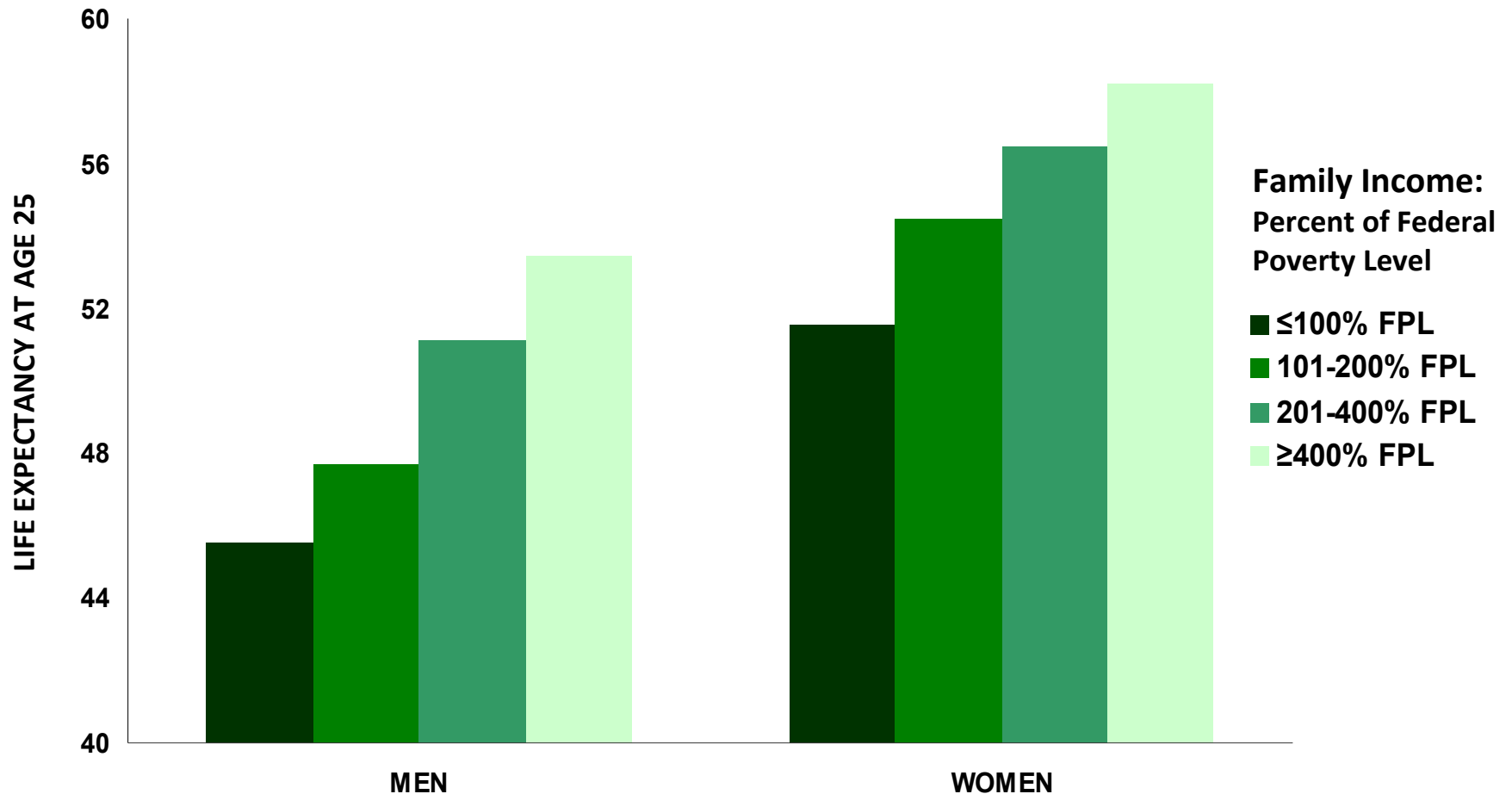
Infant Mortality

1	Iceland (2.3 deaths/1,000 live births)
2	Sweden
3	Luxembourg
4	Japan
5	Finland
6	Norway
7	Czech Republic
8	Portugal
9	Belgium
10	France
11	Greece
12	Italy
13	Spain
14	Germany
15	Ireland
16	Austria
17	Switzerland
18	Denmark
19	Korea
20	Netherlands
21	Australia
22	New Zealand
23	United Kingdom
24	Canada
25	Hungary
26	Poland
27	United States (6.9 deaths/1,000 live births)
28	Mexico

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

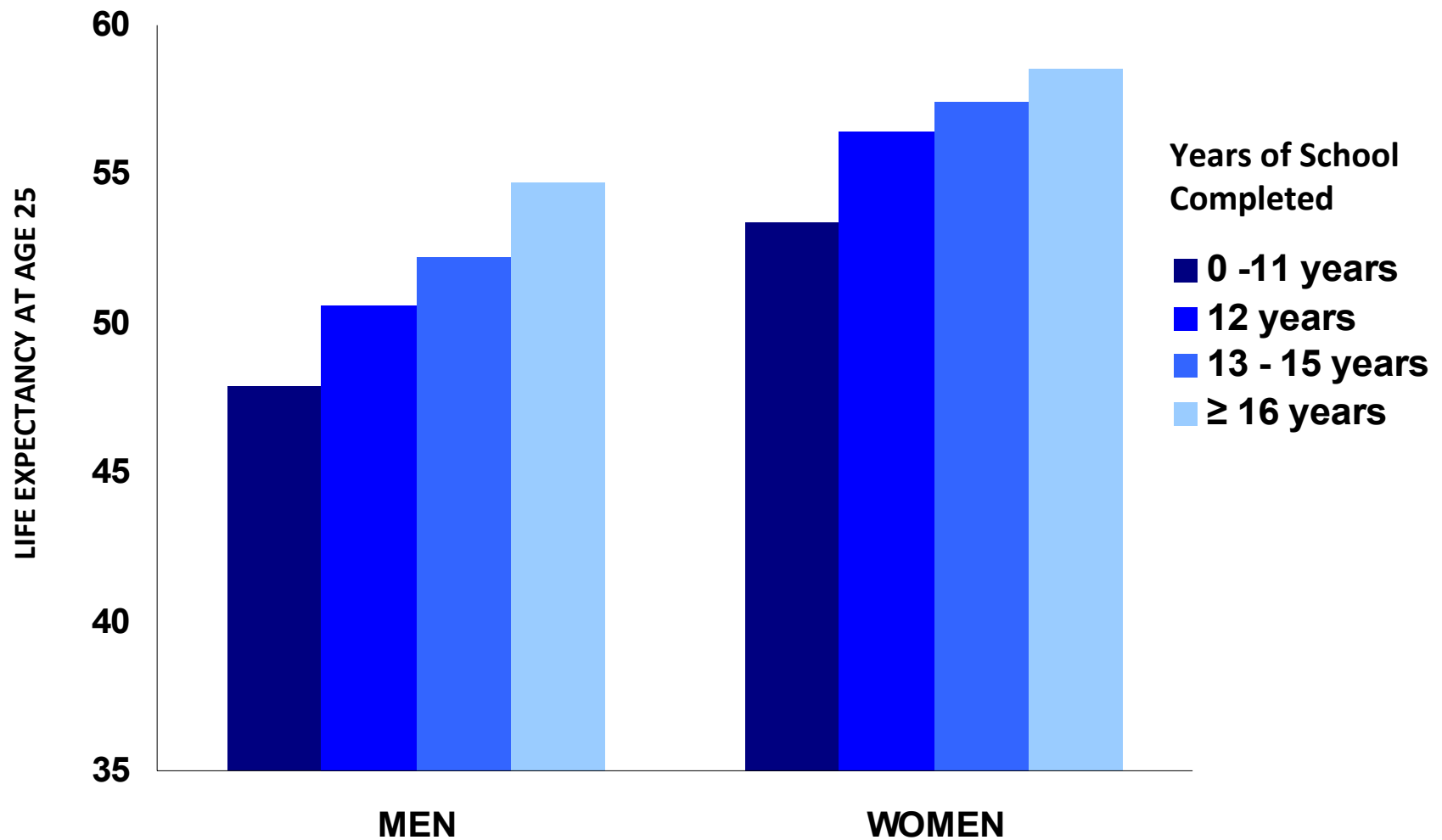
IM source: OECD Data 2009-2005 rankings)

Americans are not living as long as they could. Within the US, life expectancy varies with income...



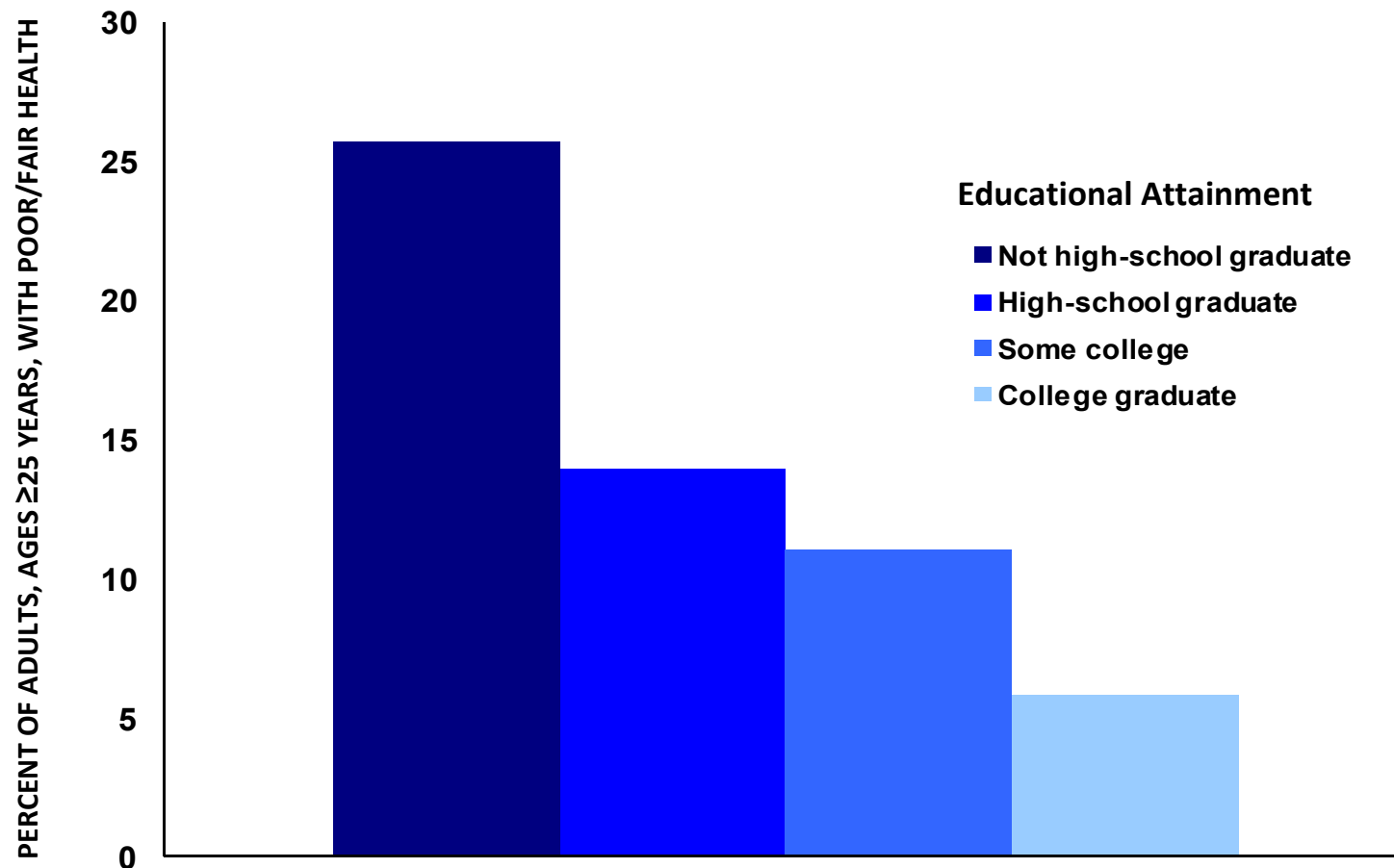
Source: NLMS, 1988-1998

Within the US, life expectancy varies with education.



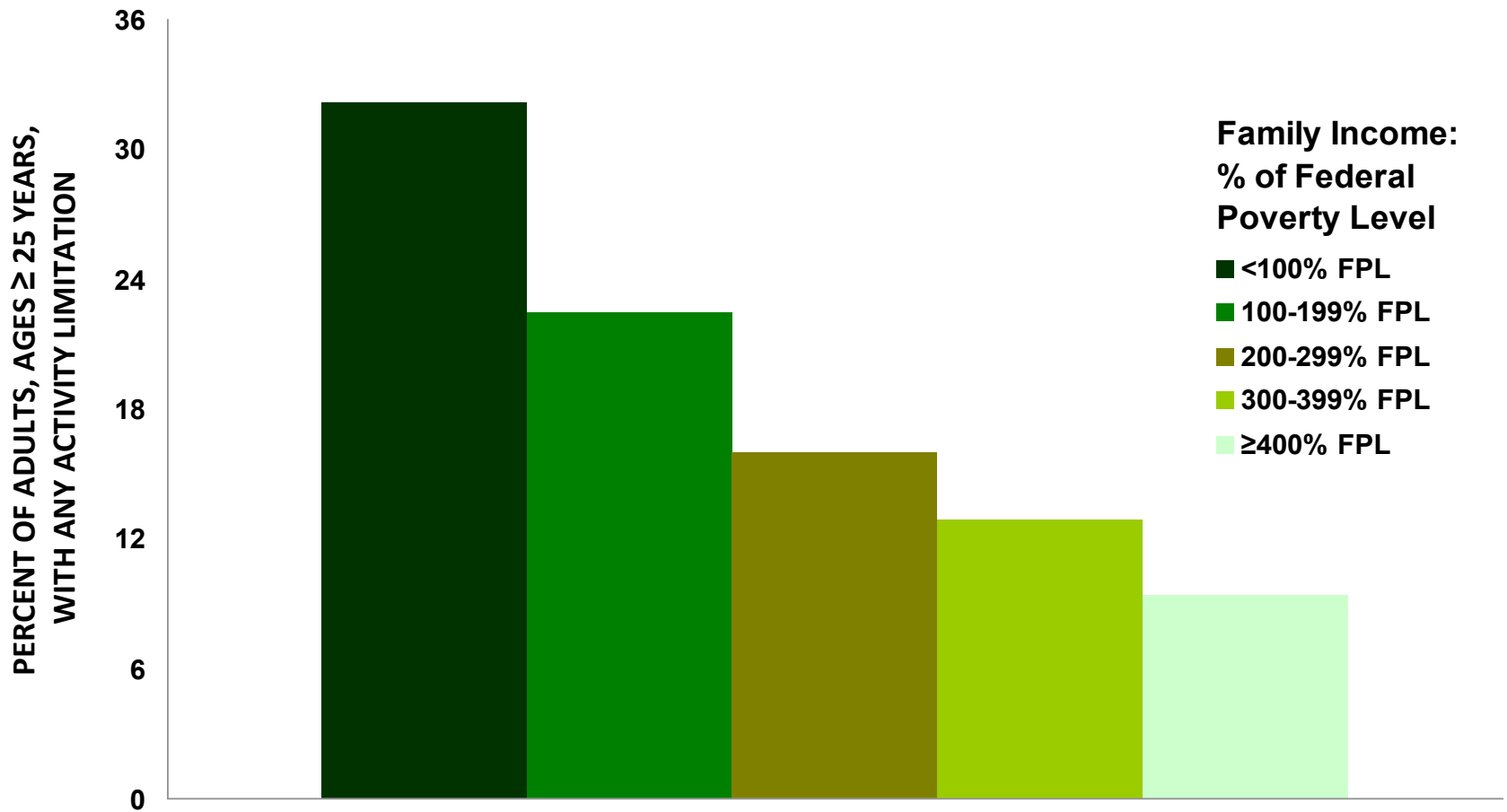
Source: NLMS, 1988-1998

Americans are less healthy than they could be. Health among adults improves with increasing education...



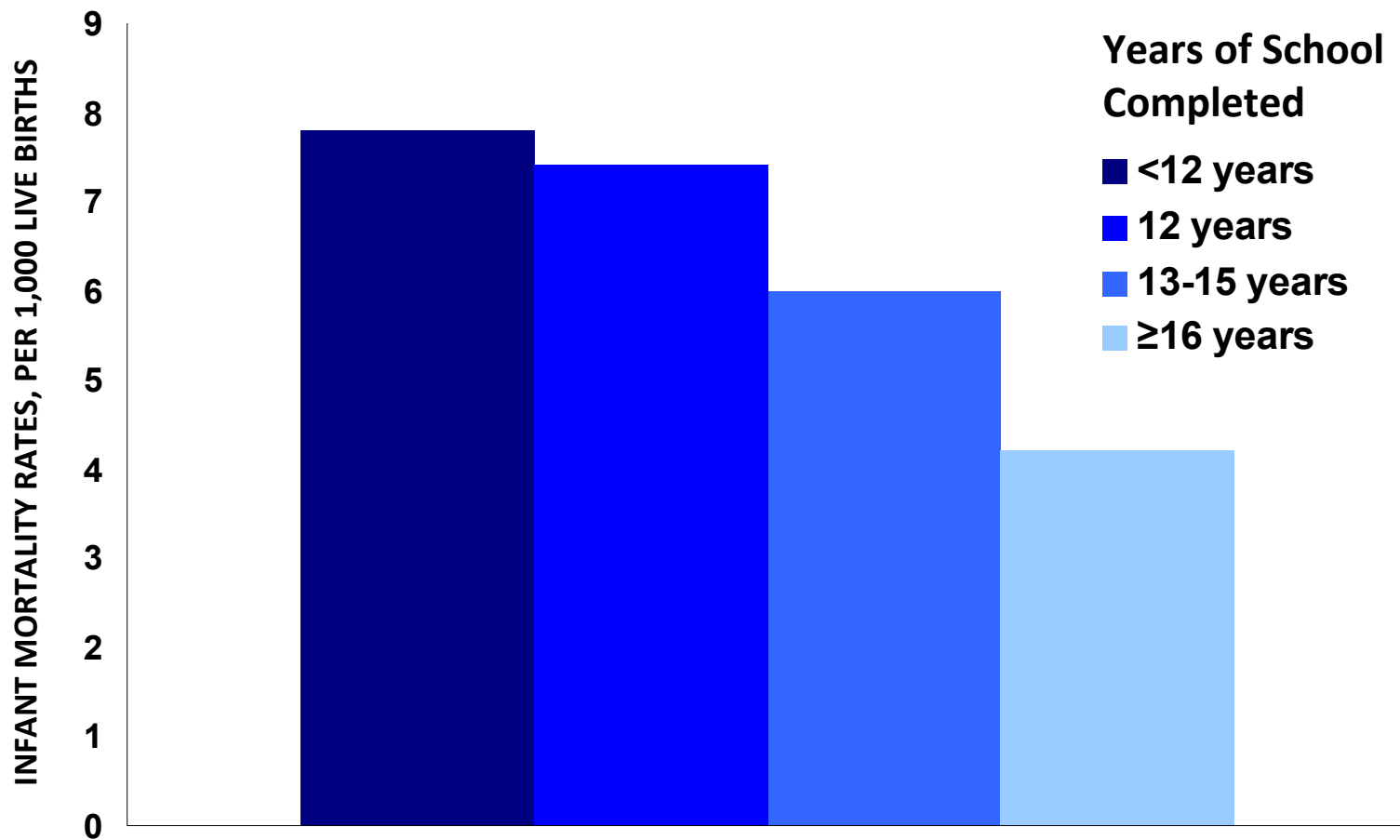
Source: NHIS 2001-2005

...and with income. Individuals with lower family incomes are more likely to have chronic disease that limits their activity.



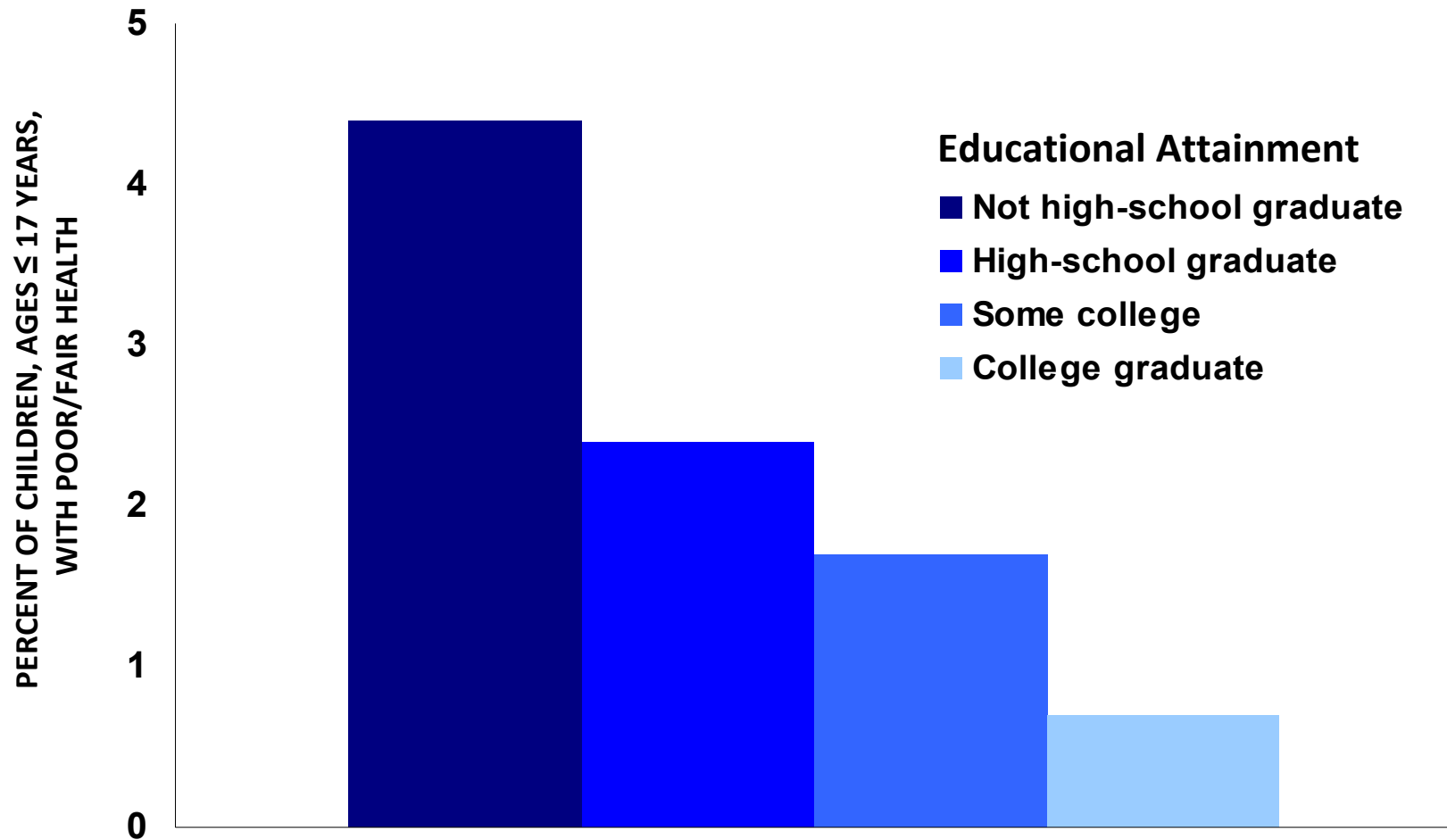
Source: NHIS, 2001-2005

These disparities in health are evident from birth on.



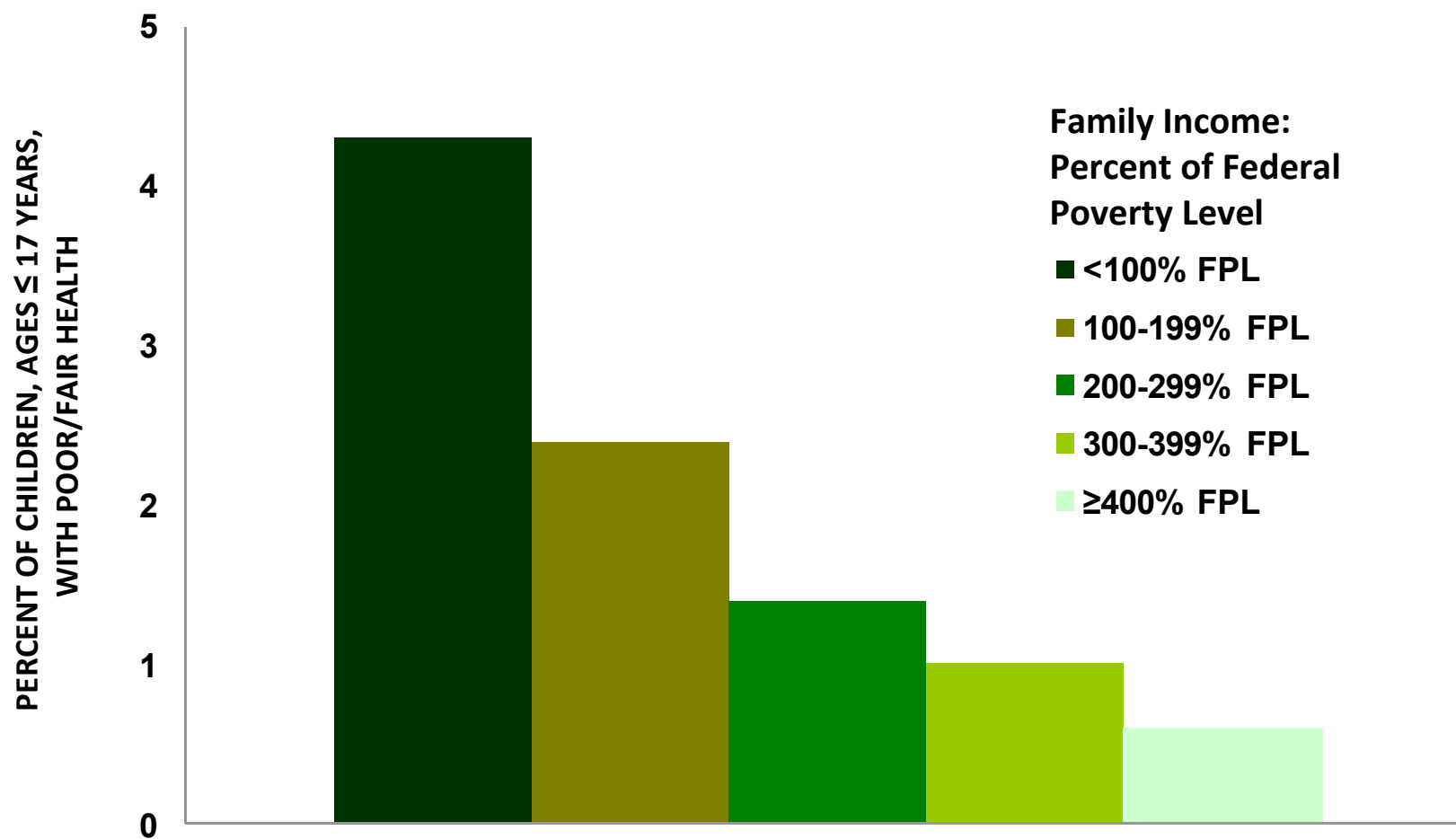
Source: Linked Birth/Infant Death Dataset, 2000-2002 period

Children's health varies with parents' education...



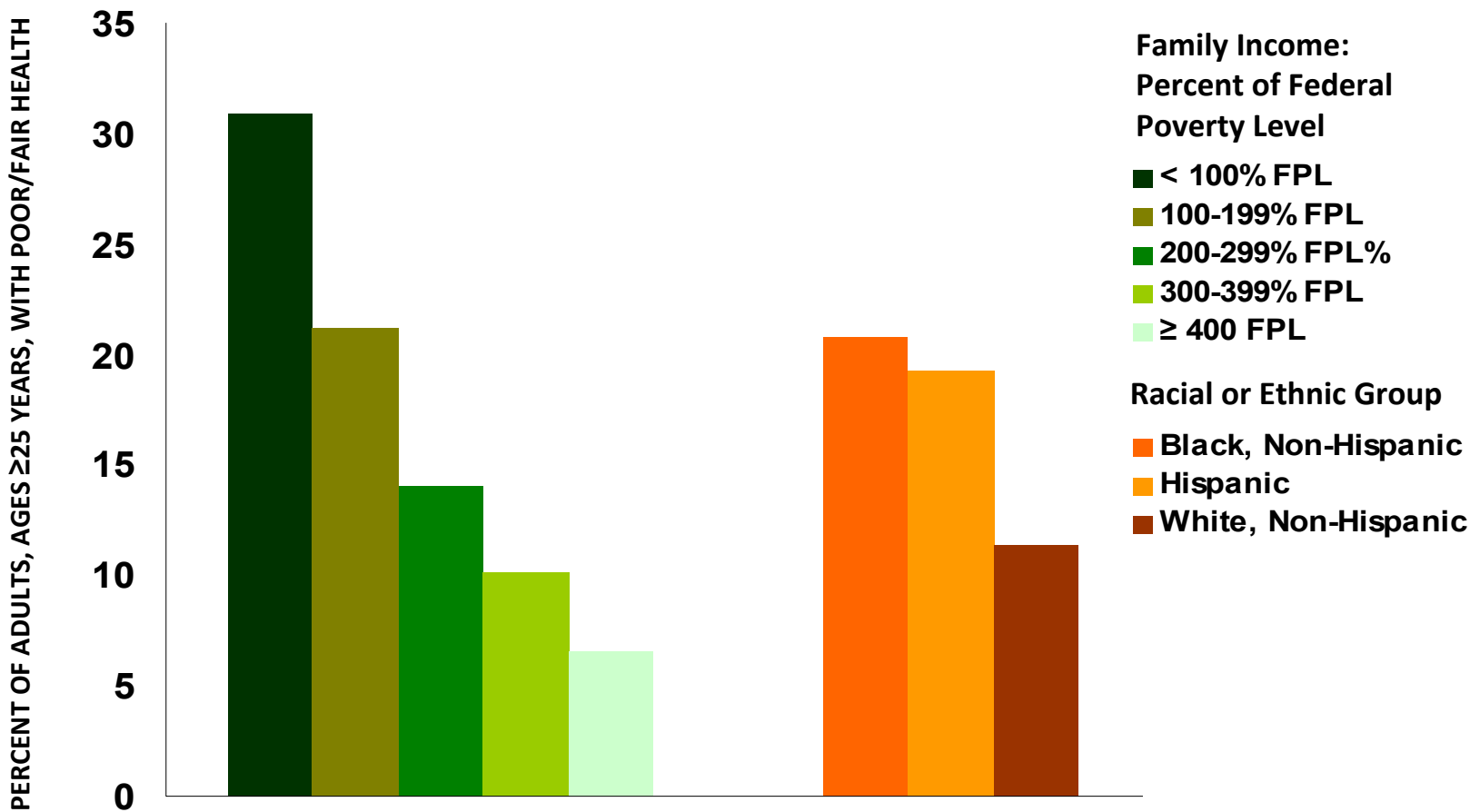
Source: NHIS 2001-2005

...and by family income.



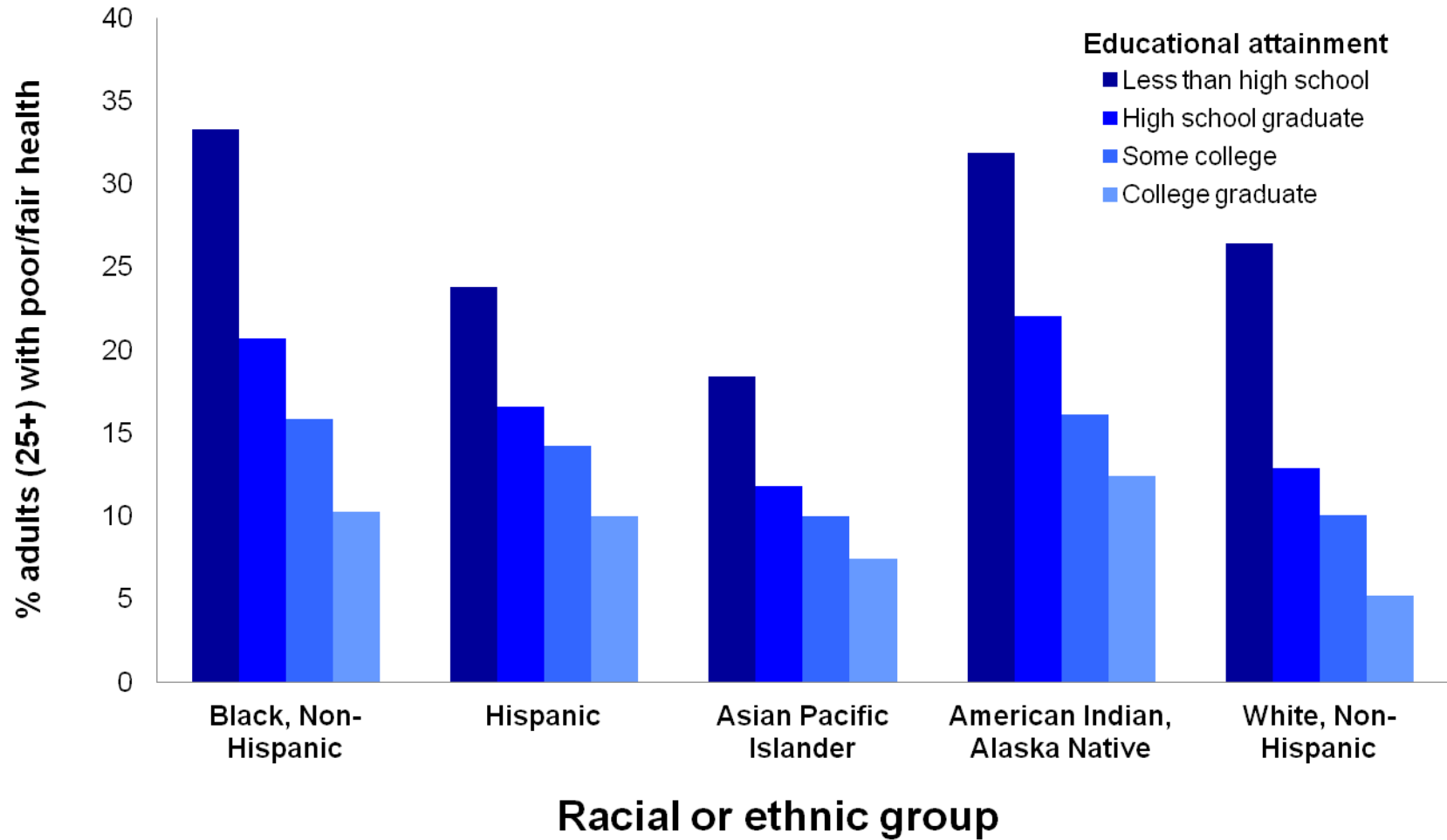
Source: NHIS 2001-2005

Socioeconomic and racial/ethnic disparities— are they measuring the same thing?



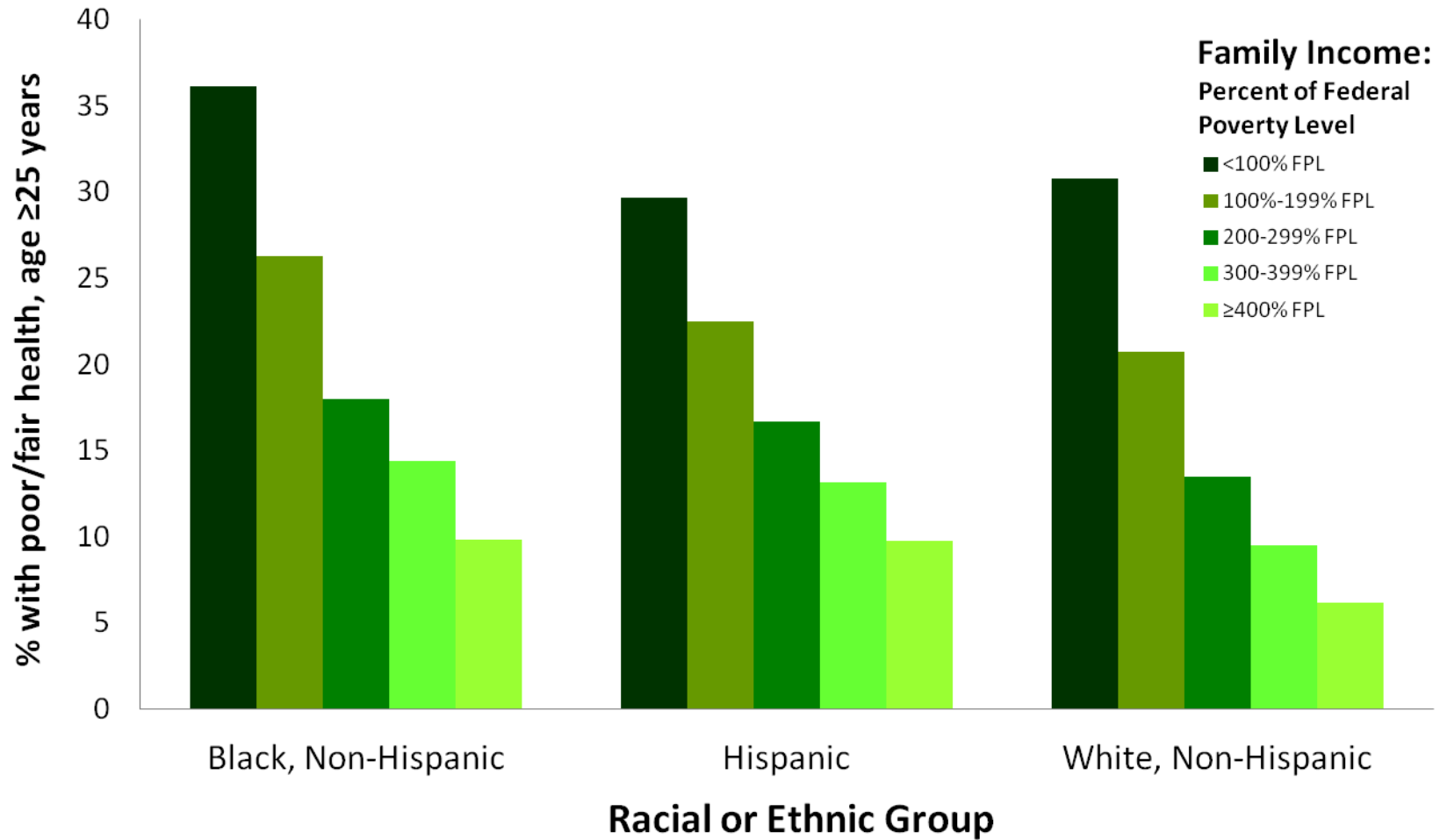
Source: NHIS 2001-2005

Disparities in adult health by education—across racial/ethnic groups



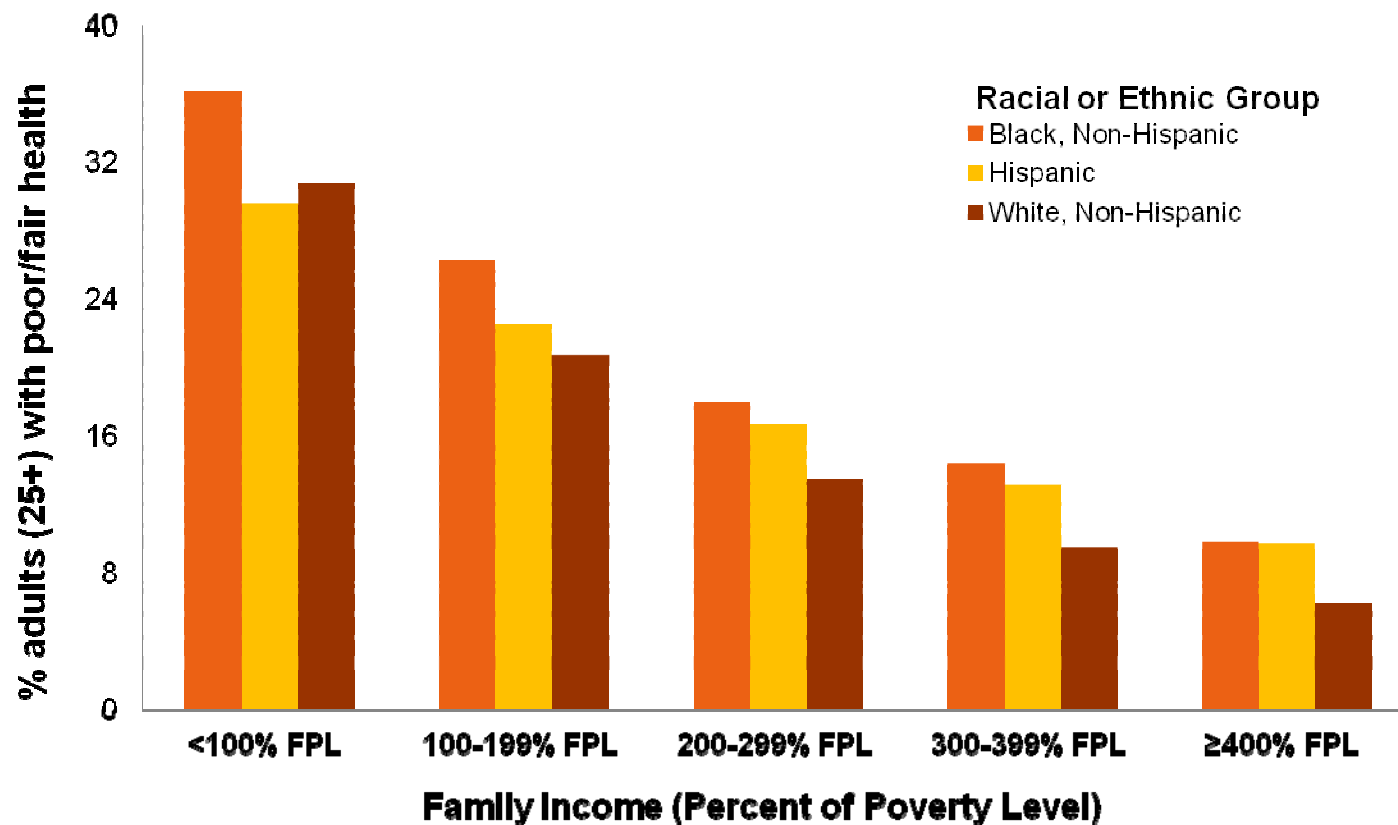
Source: NHIS 2001-2005. Age-adjusted

Disparities in adult health by income — across racial/ethnic groups



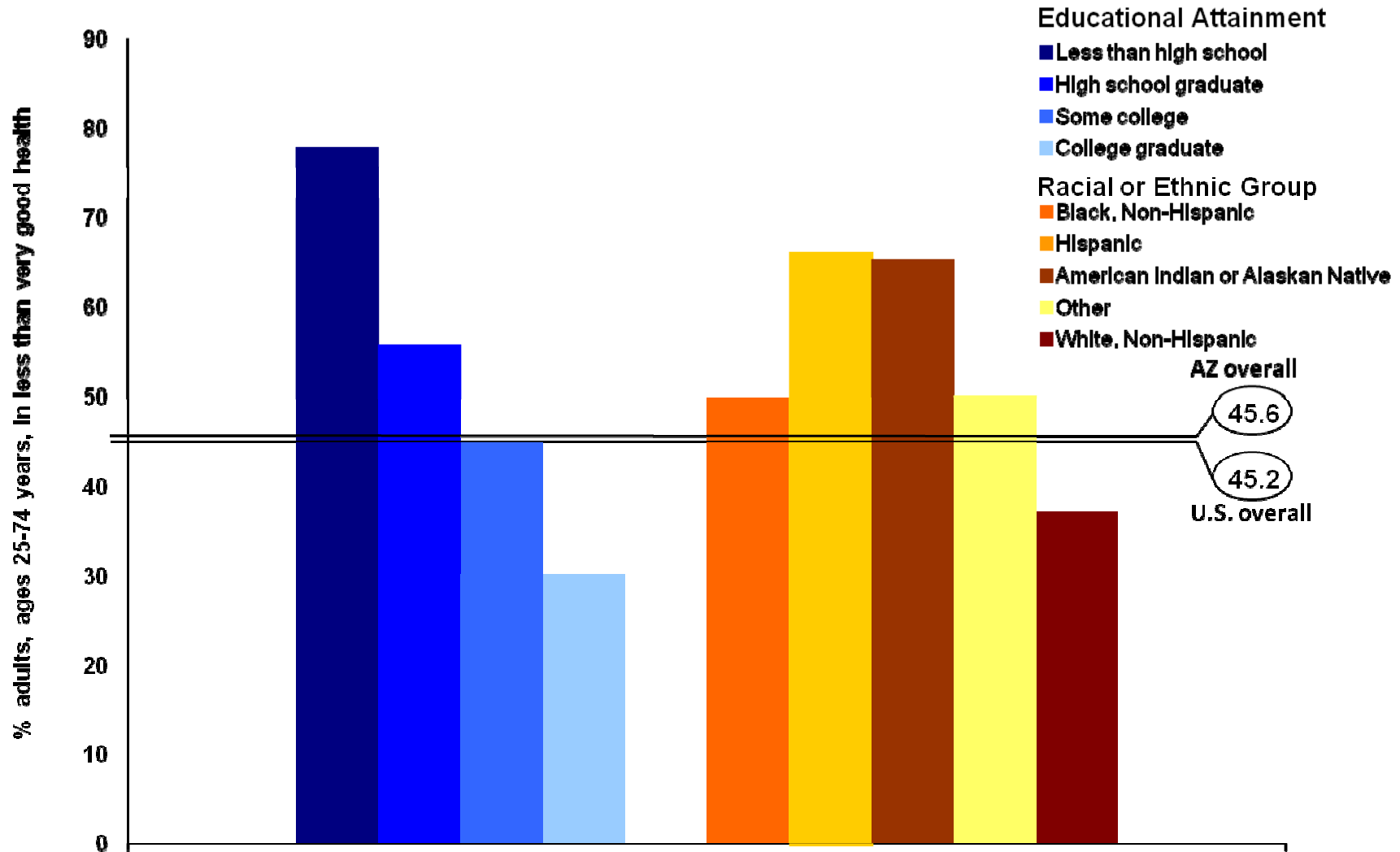
NHIS 2001-2005. Age-adjusted

Racial/ethnic disparities in health—at every income level



Source: NHIS 2001-2005. Age-adjusted.

State-level disparities: Adult health status in Arizona



Source: 2005-2007 BRFSS



Health disparities—an important issue for all Americans

- **Disparities affect the health of middle-class as well as disadvantaged Americans, in every racial/ethnic group**
 - **Those at the bottom tend to have the poorest health, but even those in the middle have poorer health than the highest-income and most-educated groups**
- **When it comes to health, most Americans could be doing better**



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**What explains these disparities, and how
can we reduce them?**



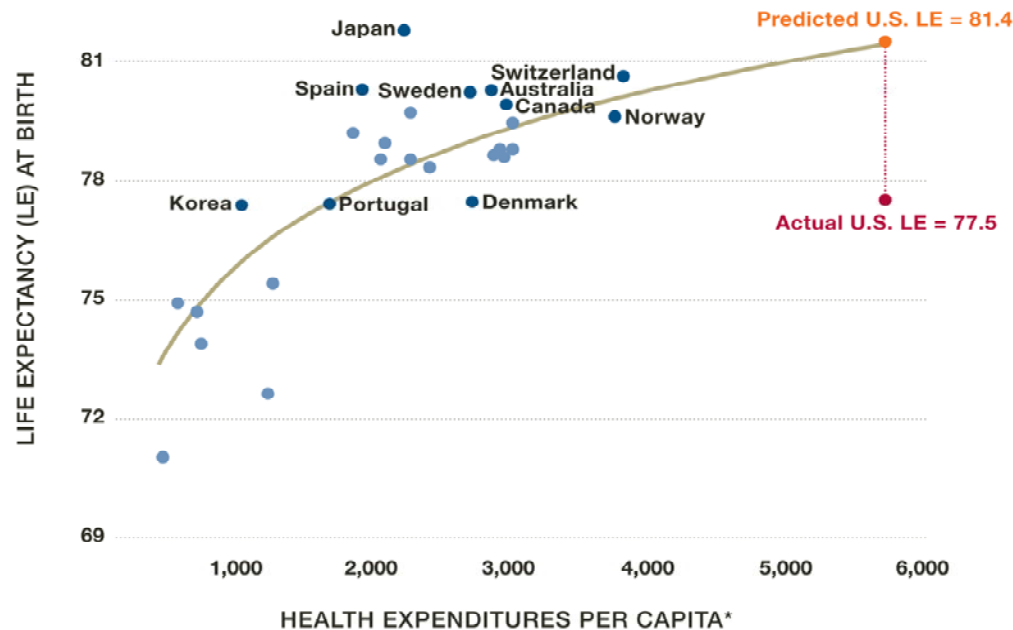
What factors shape our health?

- Genetic makeup
- Climate & natural physical environments
- *Medical care services*
- *Health-related behaviors*
 - *nutrition, smoking, physical exercise*

Understanding the fundamental causes: Medical care is only part of the answer

America Is Not Getting Good Value for Its Health Dollar

The U.S. spends more money per person on health than any other country, but our lives are shorter—by nearly four years—than expected based on health expenditures.



Prepared for the Robert Wood Johnson Foundation by the Center on Social Disparities in Health at the University of California, San Francisco.

Sources: OECD Health Data 2007.

Does not include countries with populations smaller than 500,000. Data are for 2003.

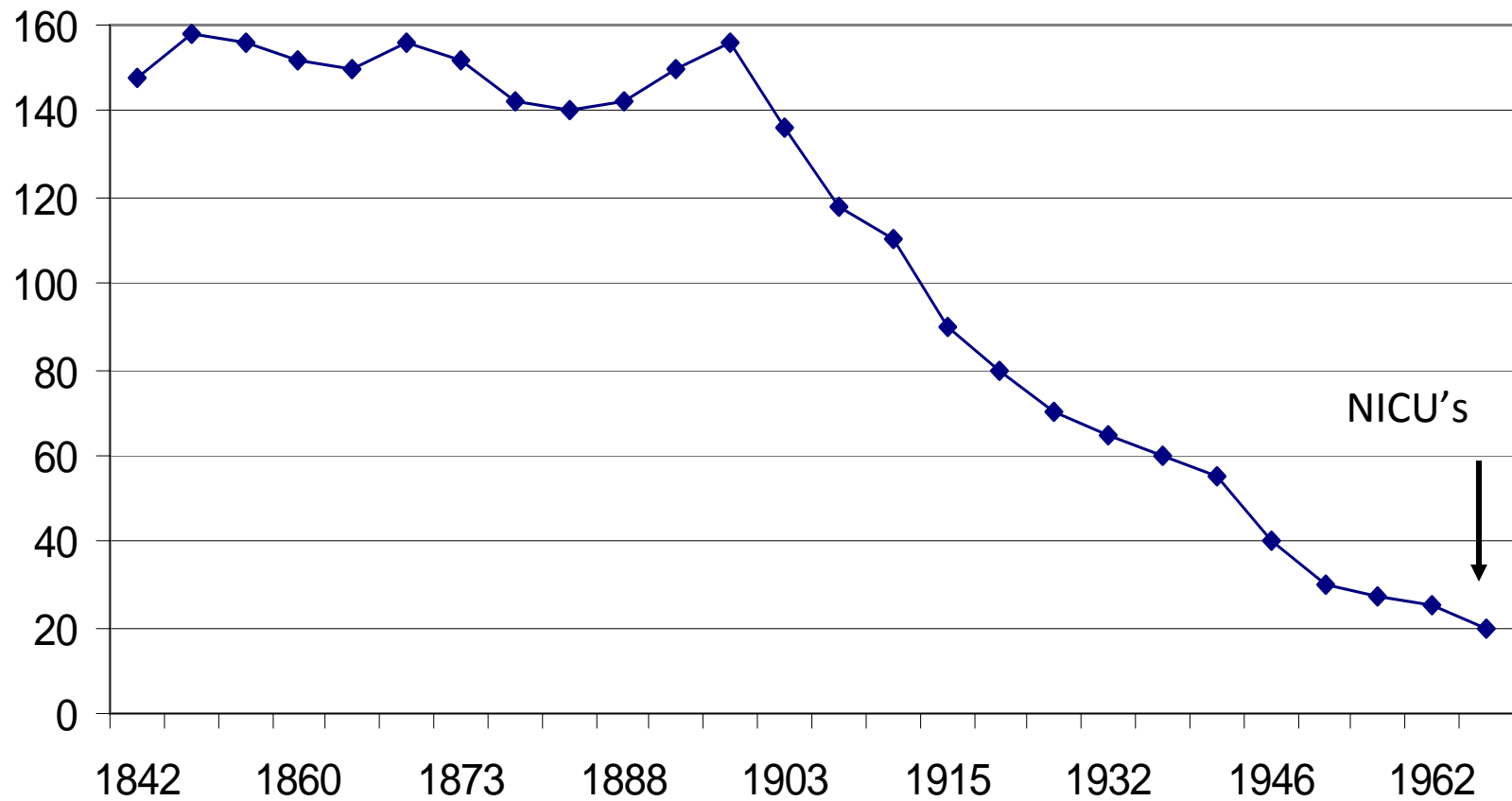
*Per capita health expenditures in 2003 U.S. dollars, purchasing power parity

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www.commissiononhealth.org

More to health than medical care

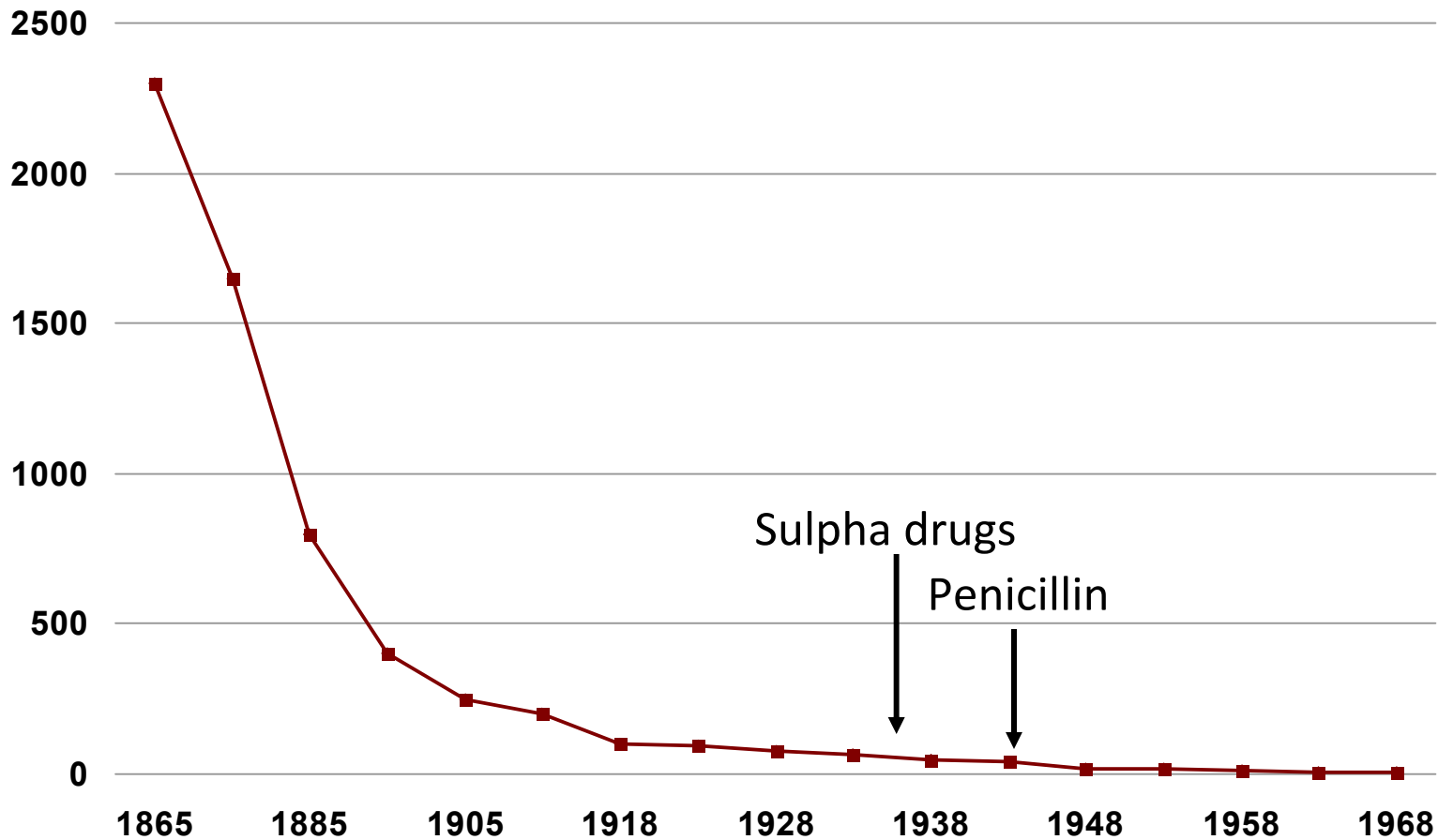
Infant mortality rate: England and Wales



T. McKeown, 1974

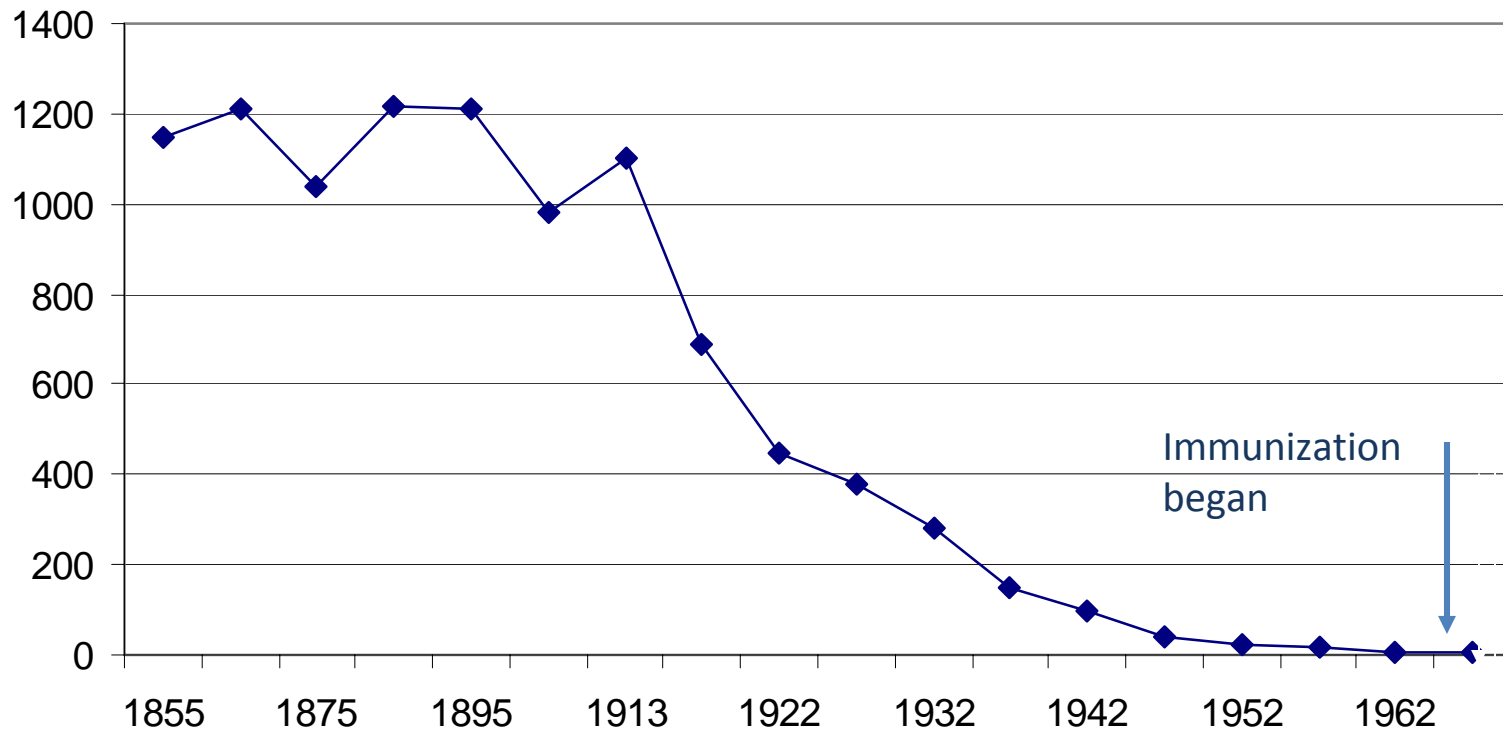
More to health than medical care

Scarlet fever mortality in children < 15: England and Wales



More to health than medical care

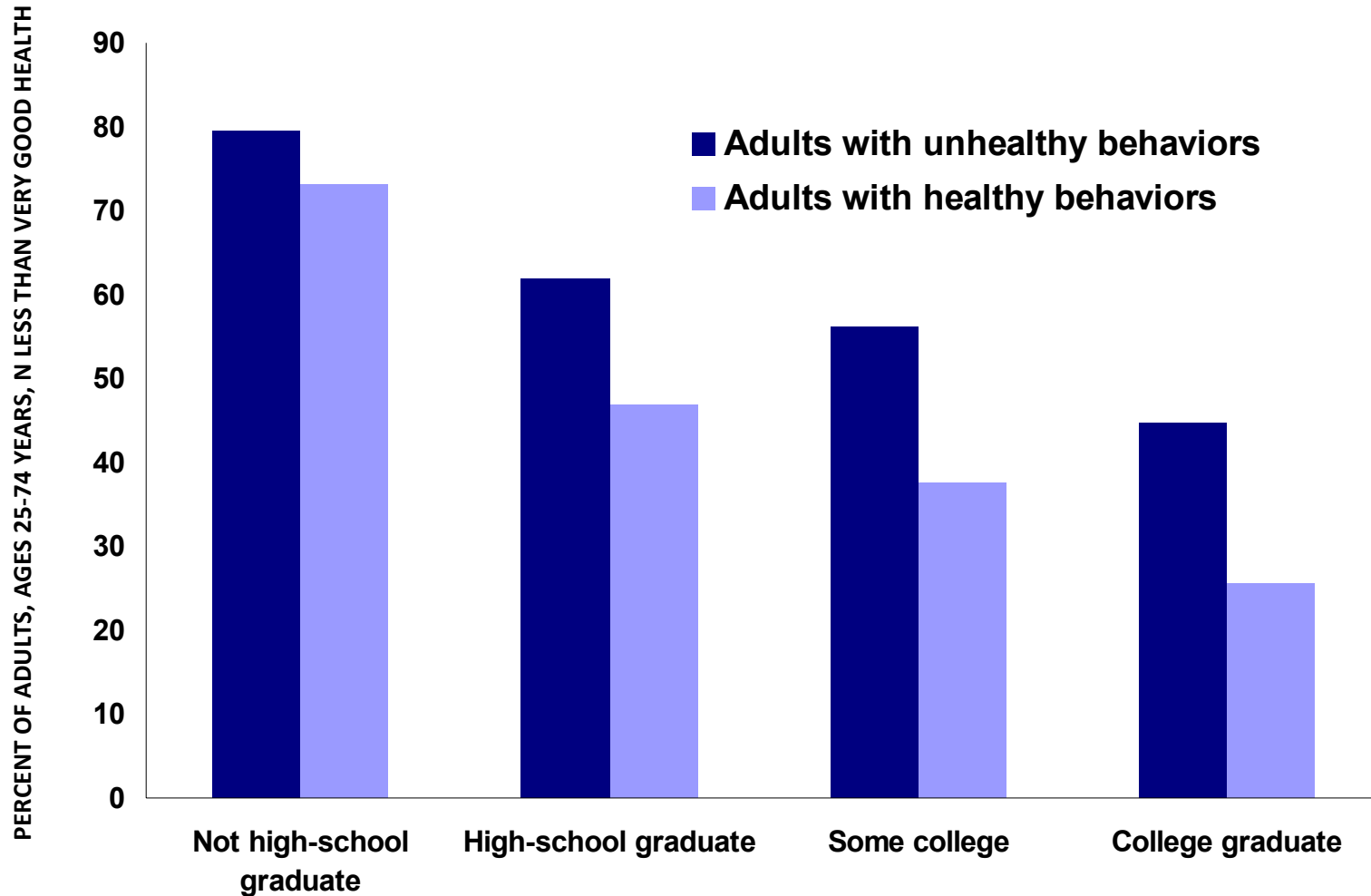
Measles death rate in children < 15: England and Wales



T. McKeown, 1974

More to health than behaviors:

Adult health varies by education and by health-related behaviors.

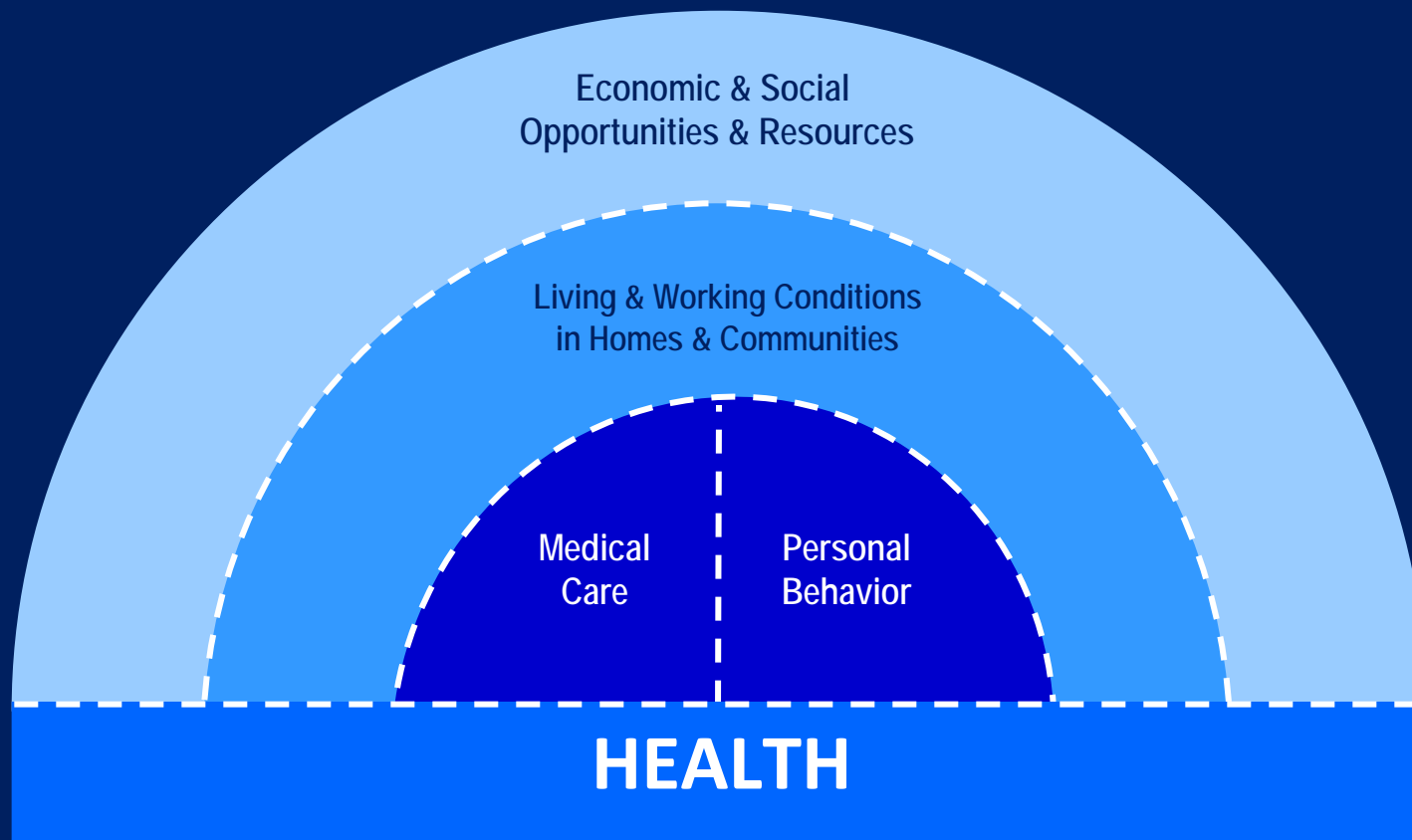




A conceptual framework for addressing disparities: broadening our focus

- **Medical care is essential, but not enough**
- **Individuals are responsible for making health-related choices for themselves and their families**
 - **Nutrition, physical exercise, avoiding risky behaviors and exposures, medical care**
- **Contexts fundamentally shape those choices**
 - **Enabling or constraining people's ability (and motivation) to choose health**

A conceptual framework for addressing disparities: Broadening the focus





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**Our health is shaped by conditions
where we live, learn, work and play**

Health is shaped by conditions in homes and neighborhoods





Housing conditions shape health

- **Hazardous conditions coexist in homes, placing children and families at great risk for multiple health problems**
 - Lead exposures
 - Mold, mites and other allergens
 - Temperature extremes
 - Indoor air pollution
 - Injuries
 - Residential crowding

- **Housing affordability also affects health**

Neighborhood conditions shape health

Physical conditions

- Substandard housing
- Poor air/water quality , exposure to hazardous substances
- “Built environment”

Social conditions

- Social networks & social support

Access to services

- Access to full-service grocery stores, safe places to exercise
- Schools, transportation and other municipal services
- Employment opportunities



Health is shaped by conditions related to work

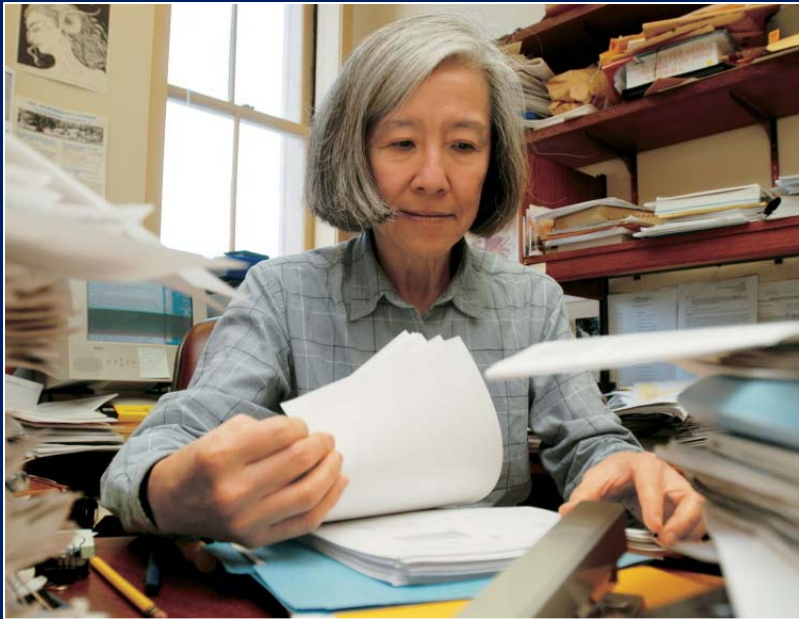
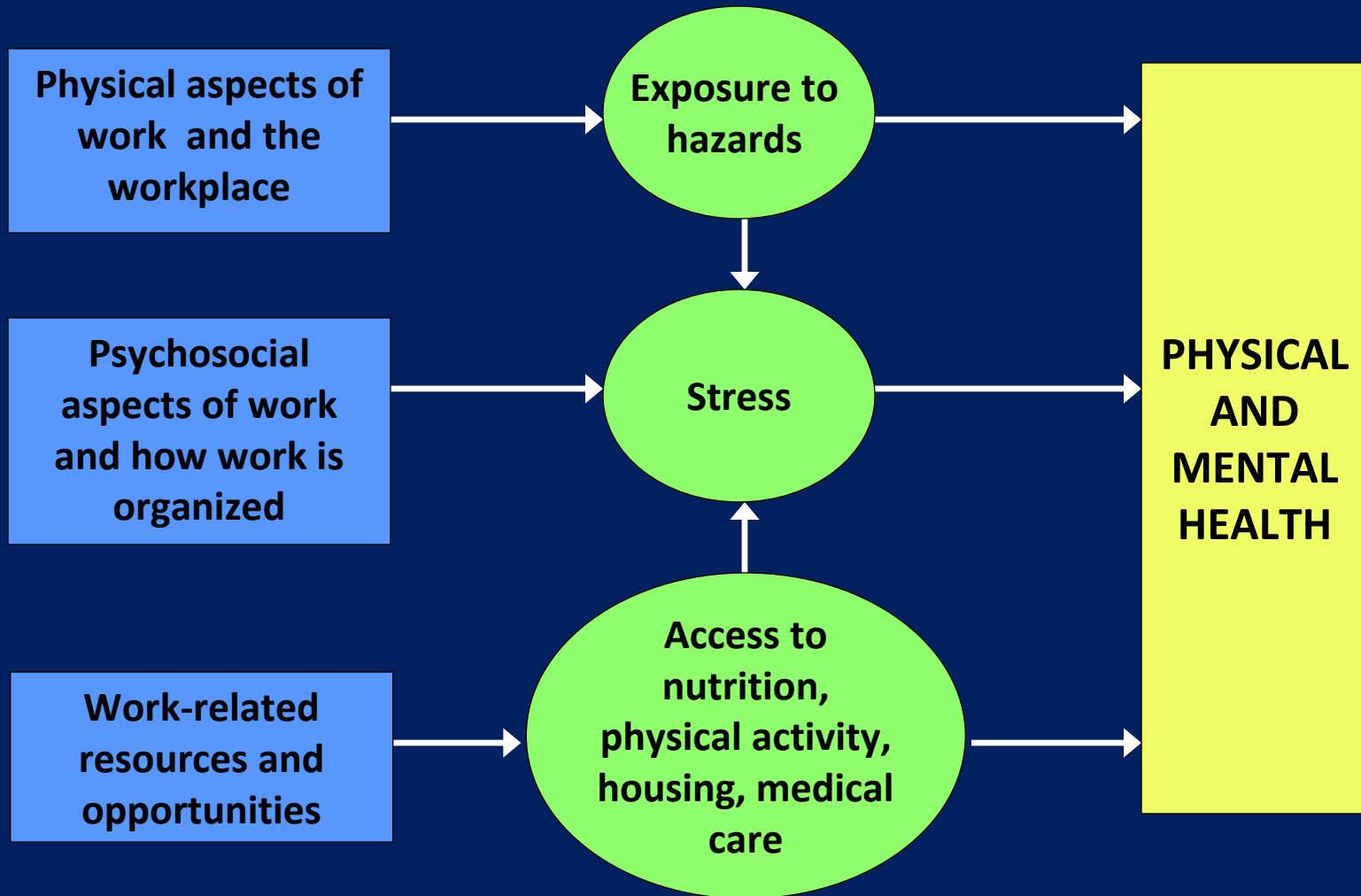


Photo credit: Robert Foothorap



Photo credit: Majed

How work shapes health (or Working conditions shape health)



A conceptual framework for addressing disparities: Broadening the focus





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The links between social advantage/disadvantage and health

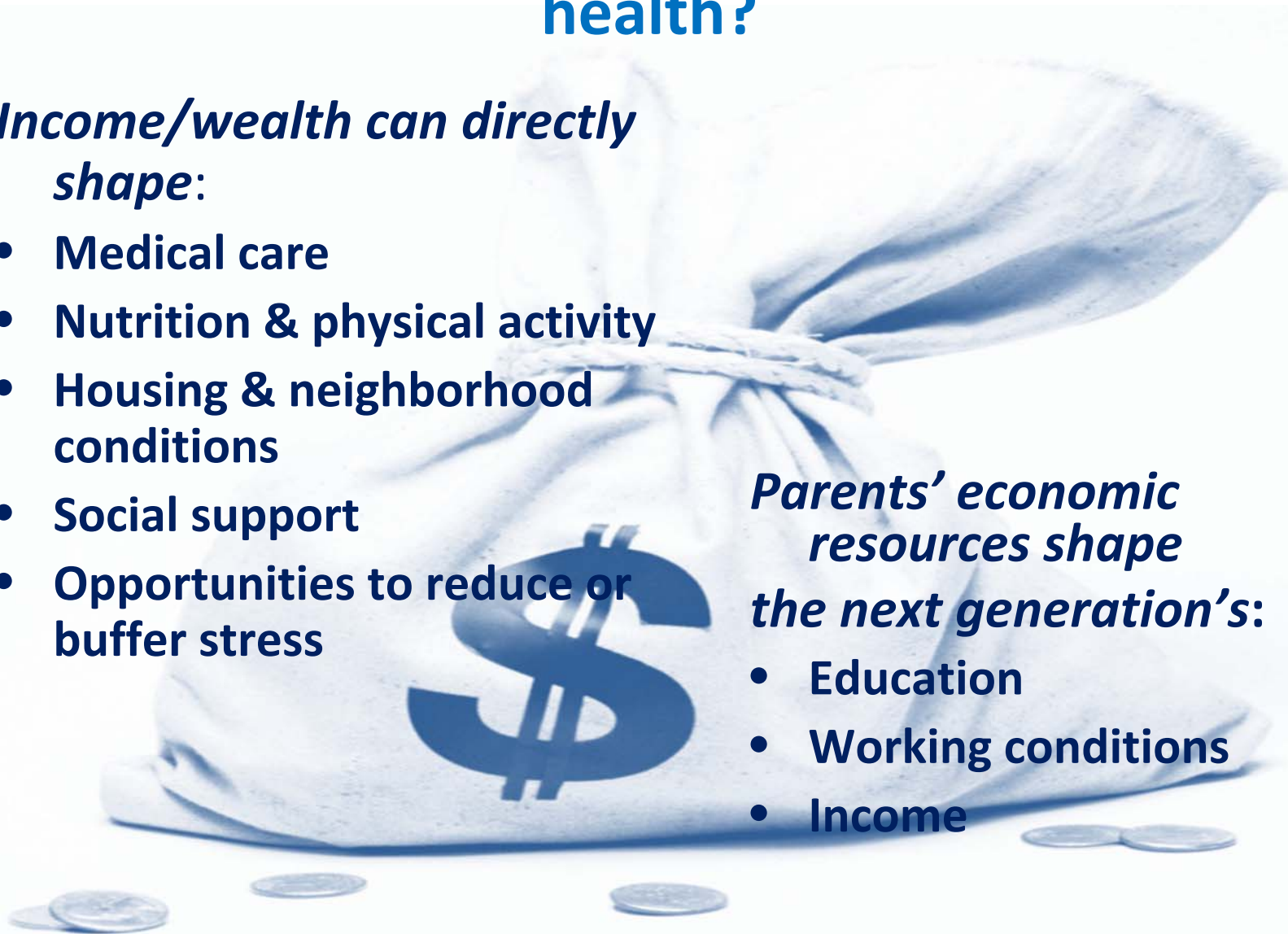
How can economic resources affect health?

Income/wealth can directly shape:

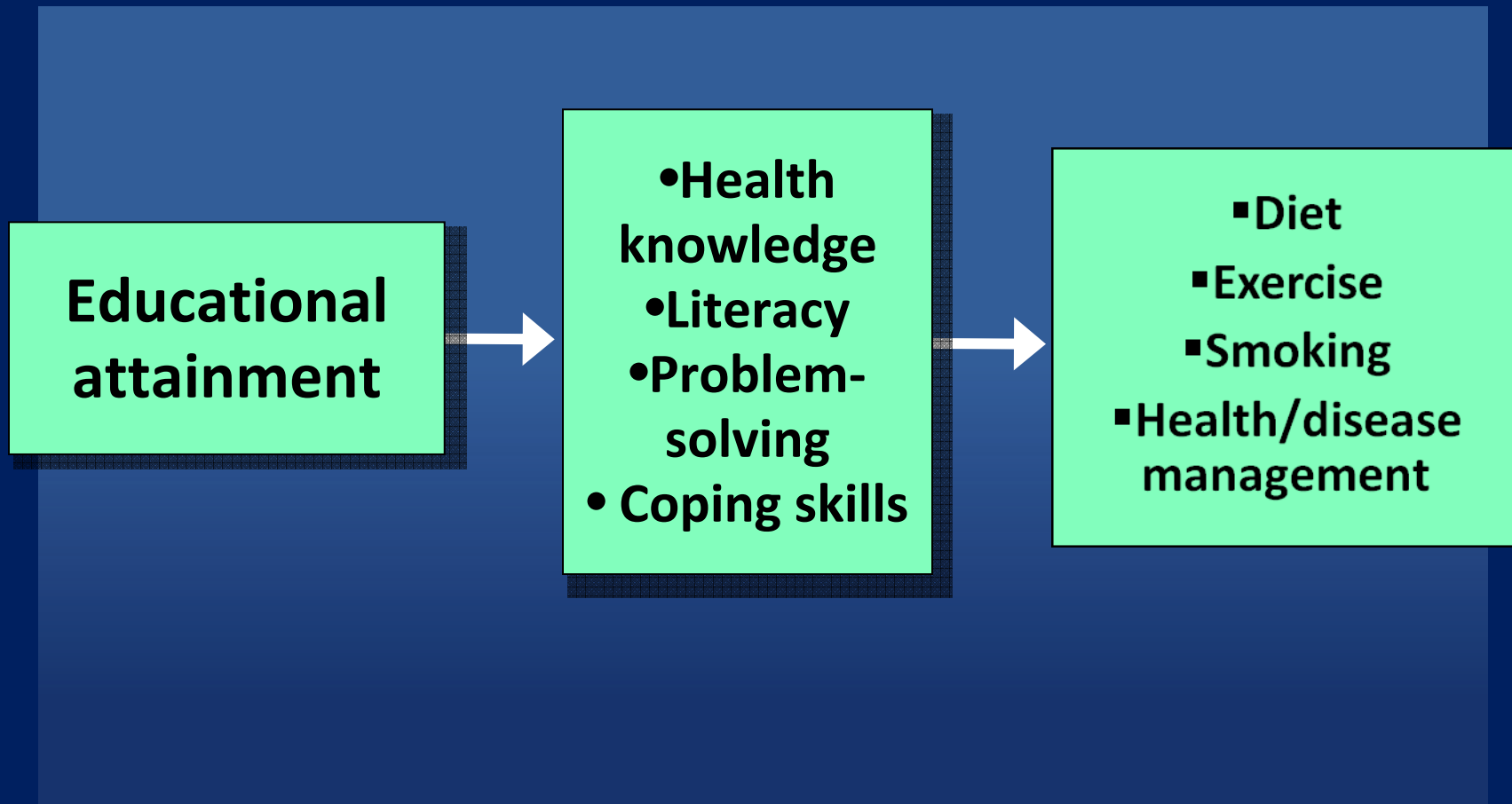
- Medical care
- Nutrition & physical activity
- Housing & neighborhood conditions
- Social support
- Opportunities to reduce or buffer stress

Parents' economic resources shape the next generation's:

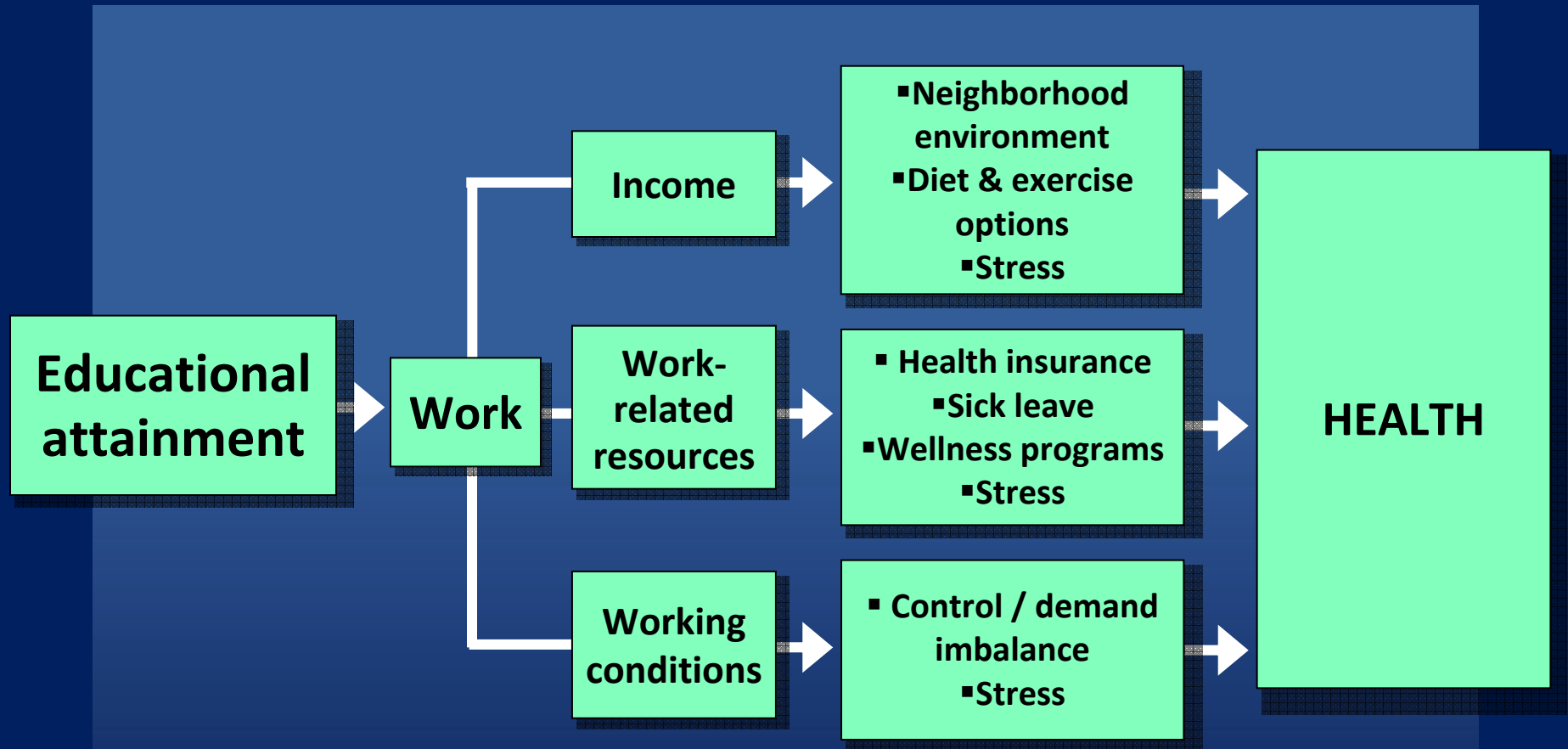
- Education
- Working conditions
- Income



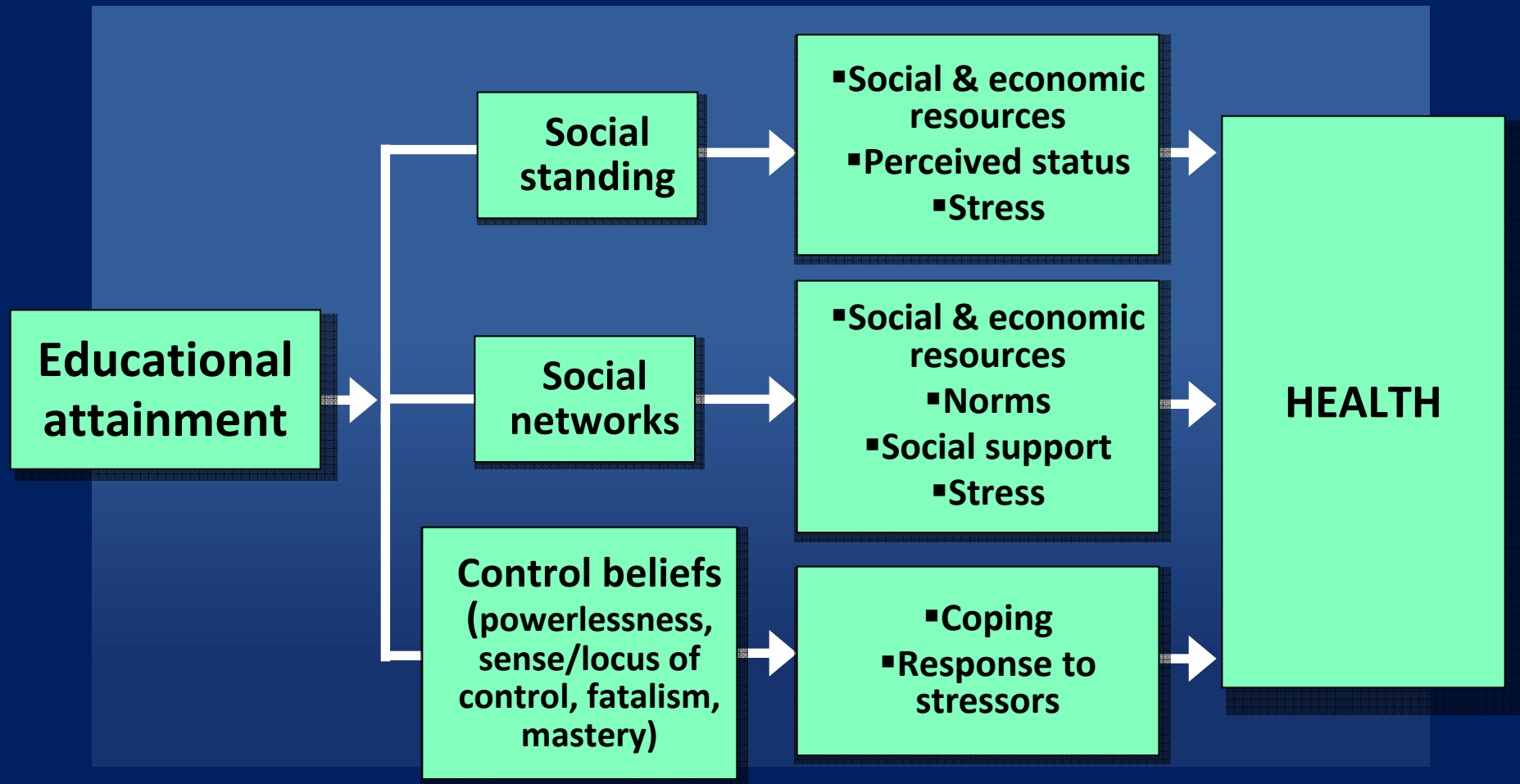
Education can shape health behaviors by determining knowledge and skills



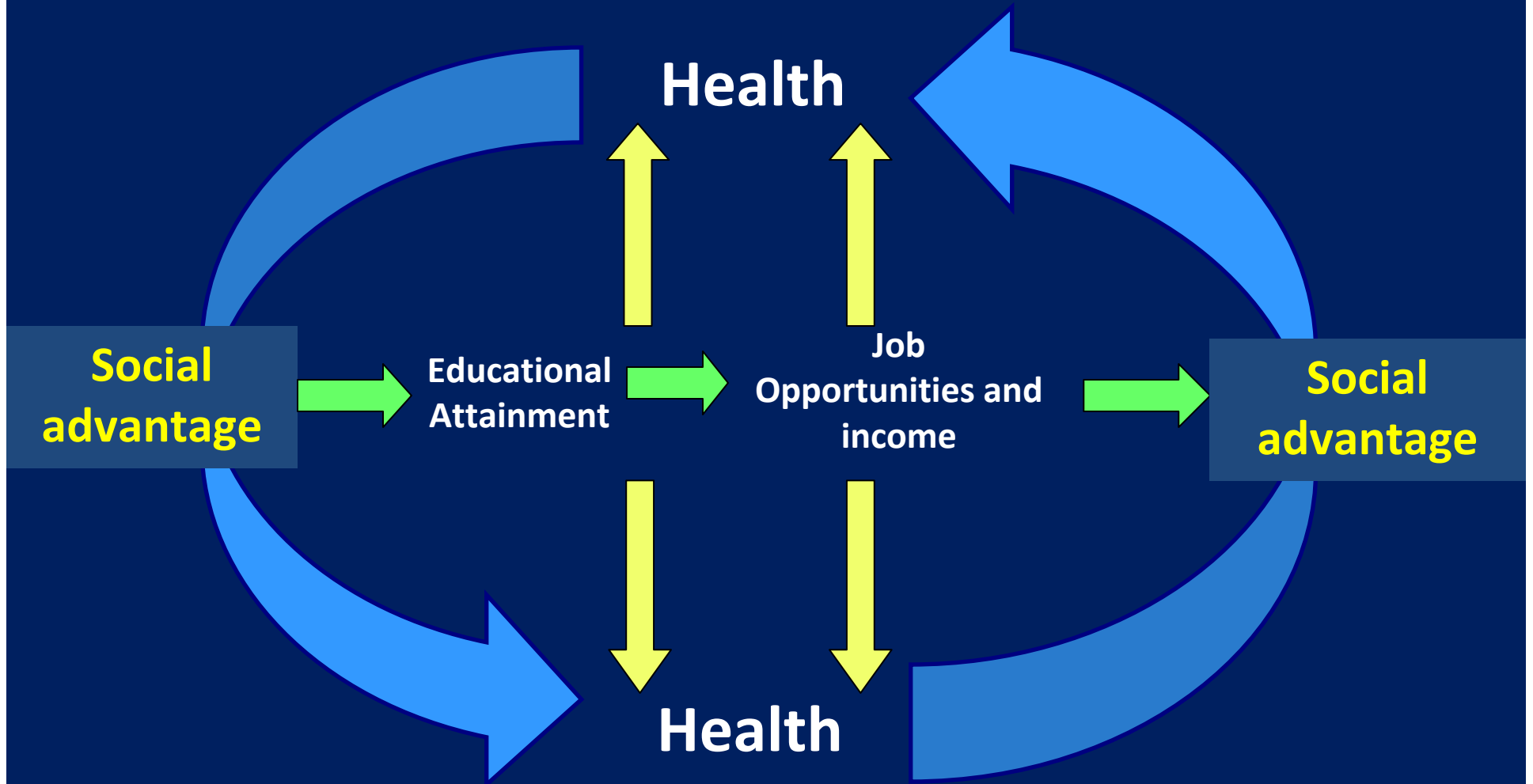
Education can shape health by influencing work and income



Education can shape health through primarily psychosocial pathways



How social advantage/disadvantage shapes health

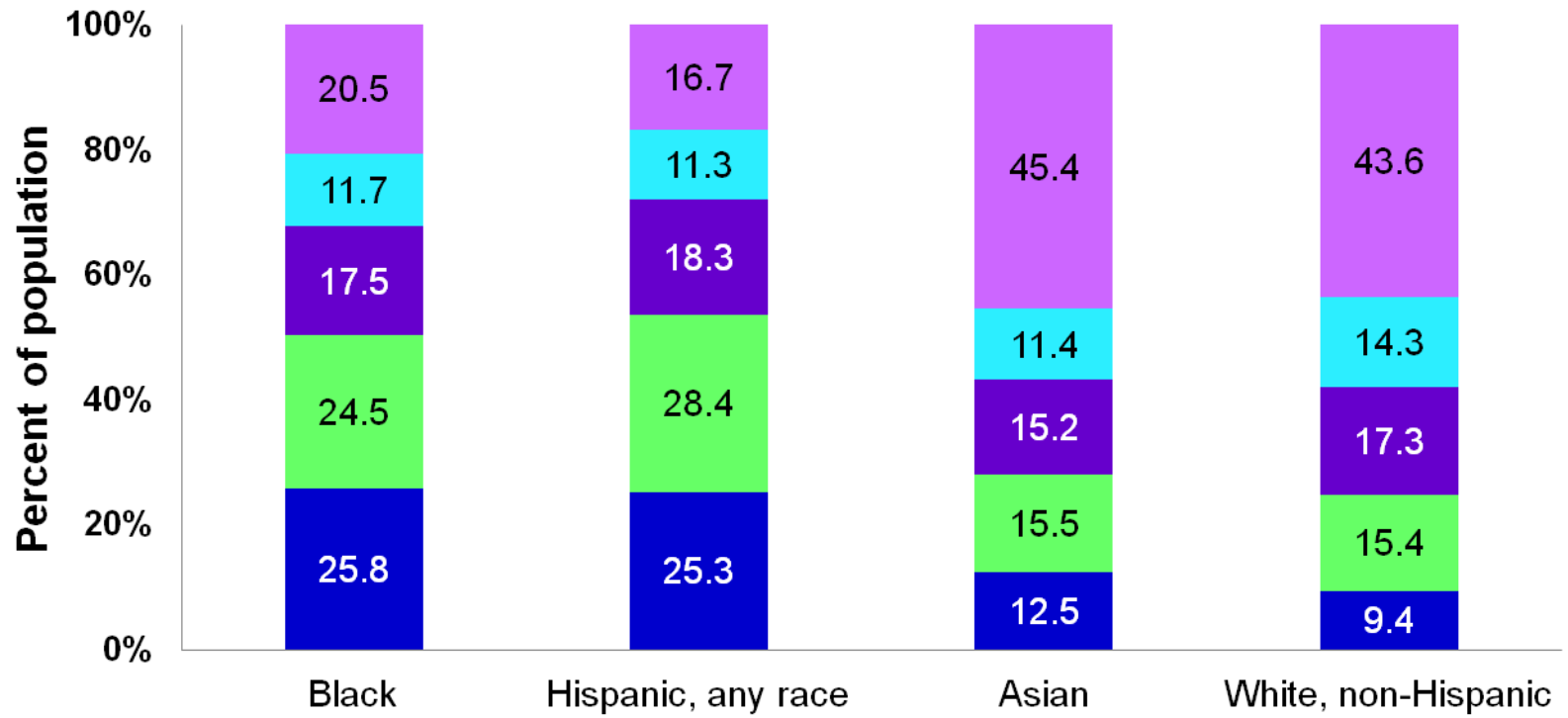


Race/ethnicity and social advantage: the legacy of discrimination

**At a given level of income or education,
African Americans on average:**

- Live in unhealthier neighborhoods
- Have far less wealth and were worse off in childhood
- Experience more hardships with fewer resources to cope

Racial/ethnic disparities in income

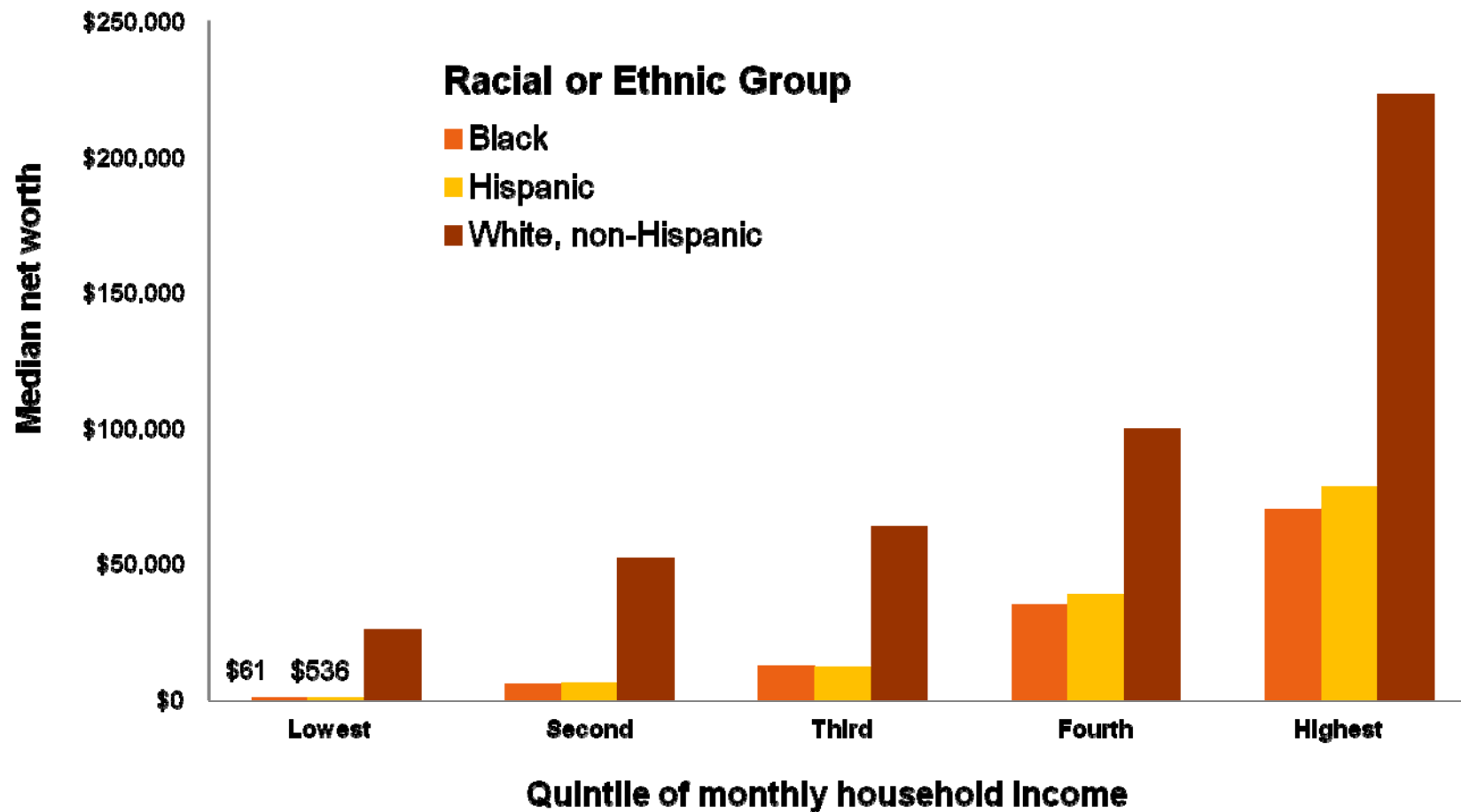


Family income (Percent of Federal Poverty Level)

■ <100% FP
 ■ 100-199%FPL
 ■ 200-299% FPL
 ■ 300-399% FPL
 ■ ≥400% FPL

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

At each income level, whites have far more wealth

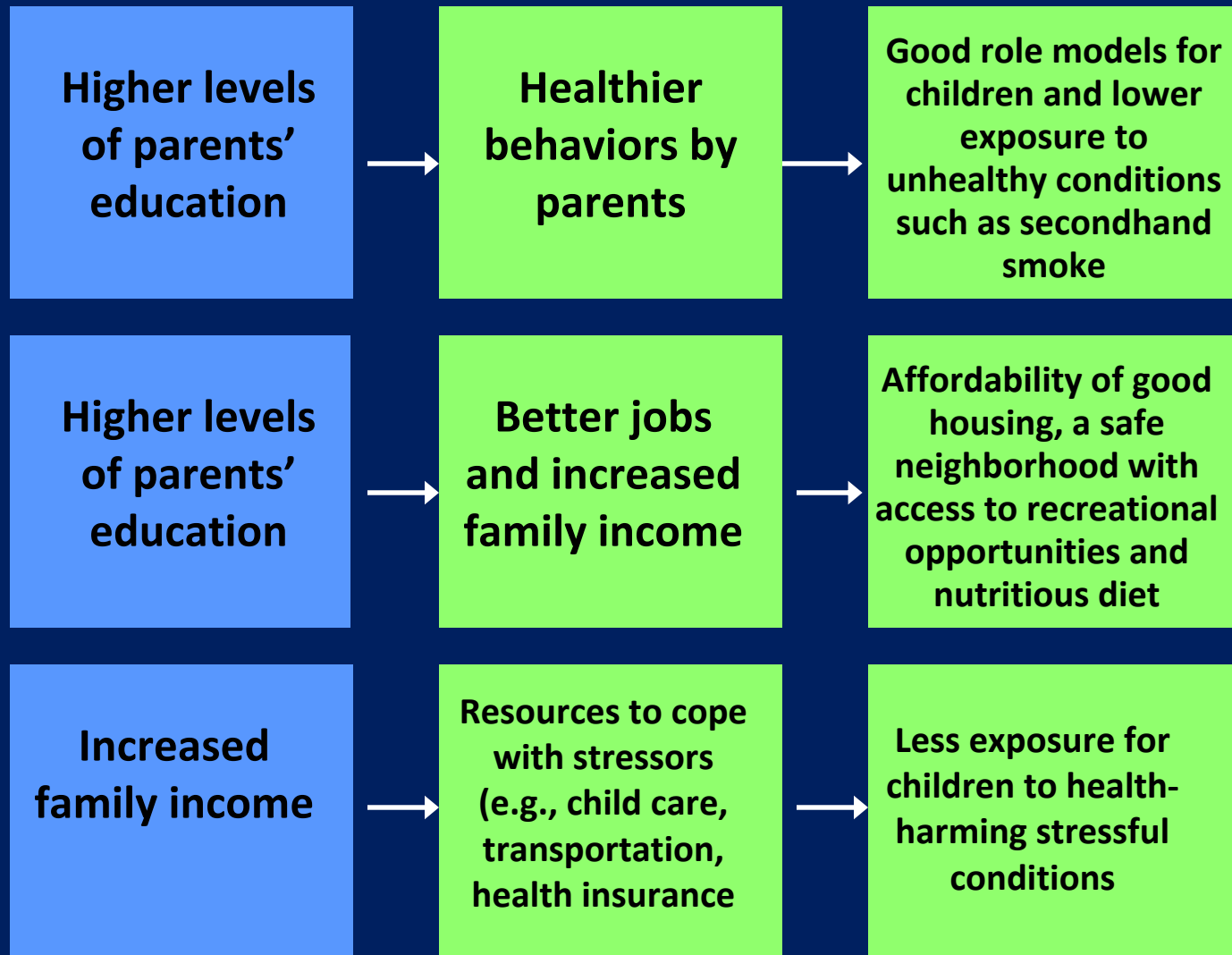


Median net worth (assets minus debts) 2000 Census.
Gottschalck AO. Net Worth & Assets of Households: 2002. U.S. Census Current Population Reports.
SIPP. April 2008.

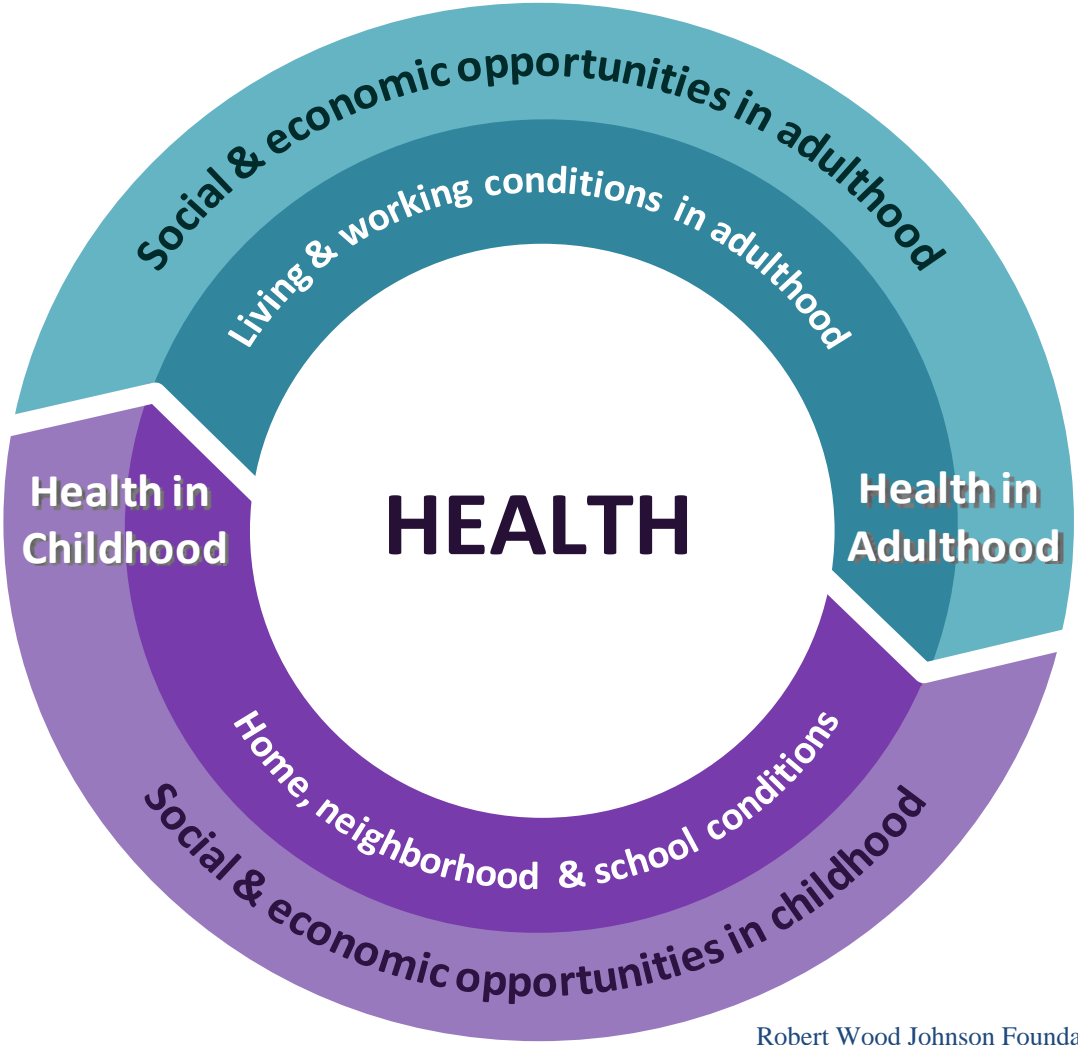
Racial/ethnic disparities in childhood socioeconomic circumstances



How social advantage shapes health in childhood and later in life



Health is transmitted by social advantage across lifetimes and generations



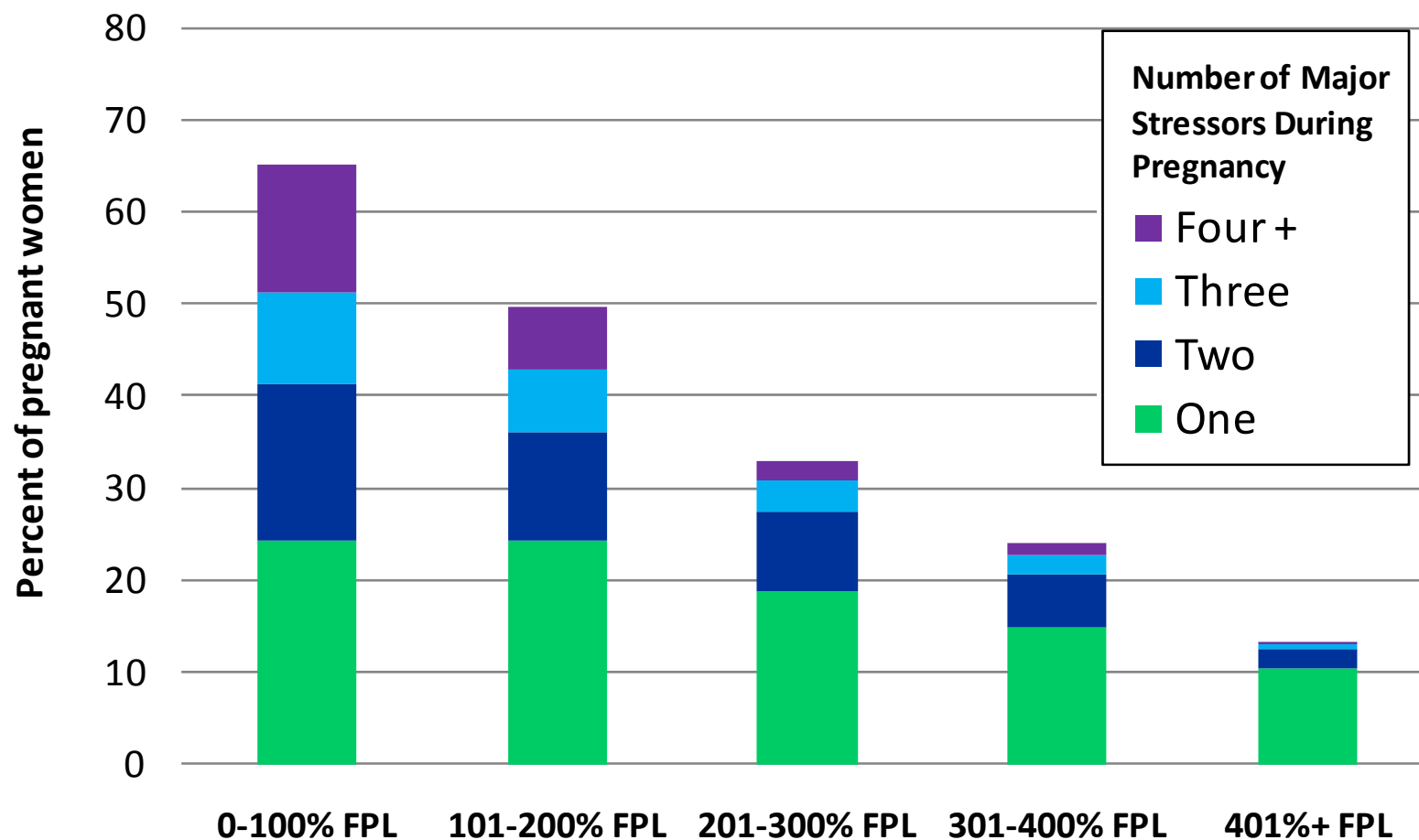
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Commission to Build a Healthier America



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How does social disadvantage get 'under our skin' to affect health?

Stress and social advantage



Stressors: economic hardship, food insecurity, no practical support, no emotional support, separated/divorced during pregnancy, homeless, job loss of spouse/partner, her own involuntary job loss, incarceration of self or partner, a lot of unpaid bills, and domestic violence.



Stress and social advantage: the added effects of racial discrimination

- Structural racial discrimination exposes blacks and Latinos more stress related to worse living conditions and economic hardships
- Overt and subtle incidents of discrimination remain pervasive and stressful
- Even without overt incidents, chronic concern about unfair perceptions or treatment can be stressful



The links between stress and health

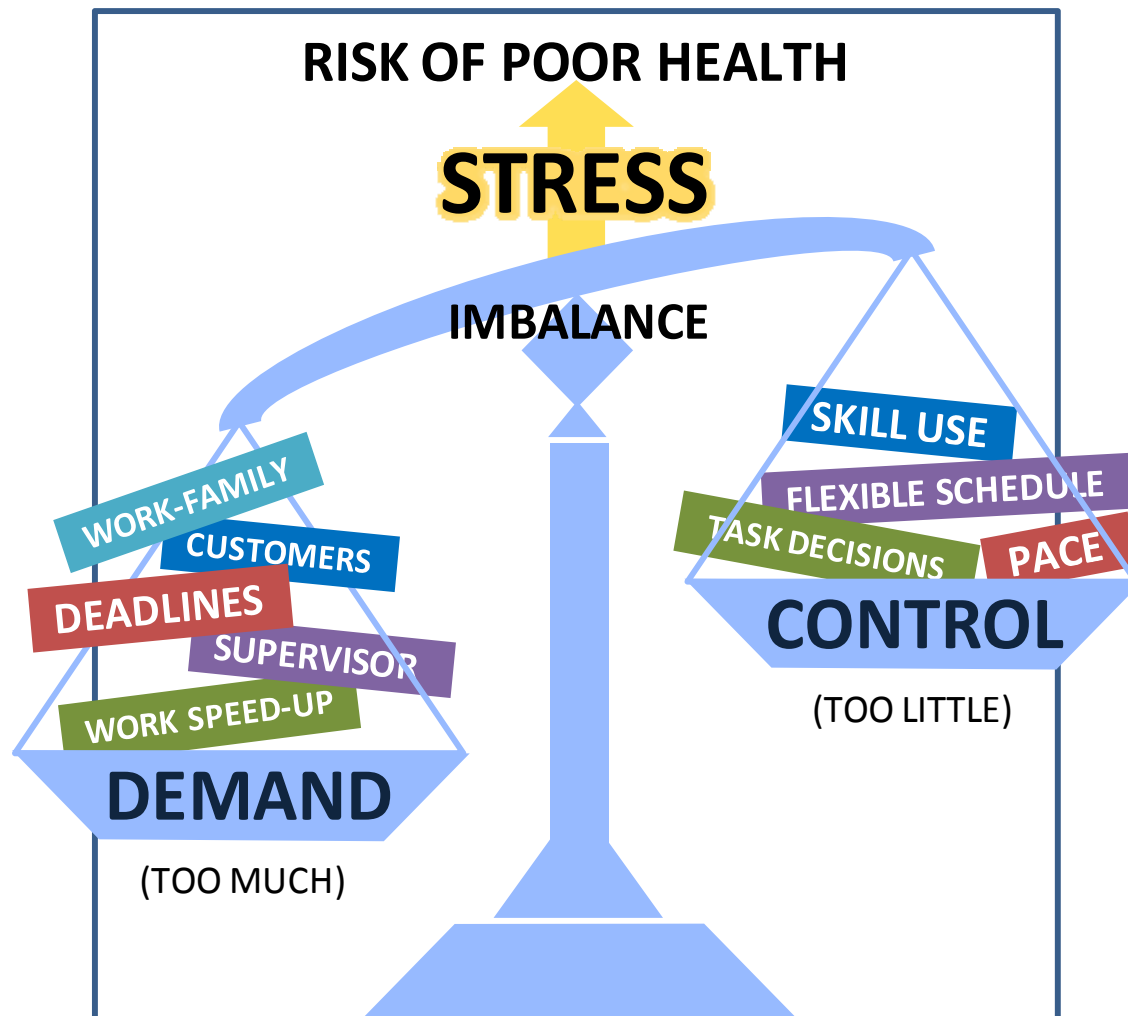
- Preterm birth
- Increased risk of overweight and obesity
- Increased risk of cardiovascular disease



Stress and health

- The health damaging effects are greatest when we experience stress on a chronic basis in our everyday lives

Stress and social disadvantage

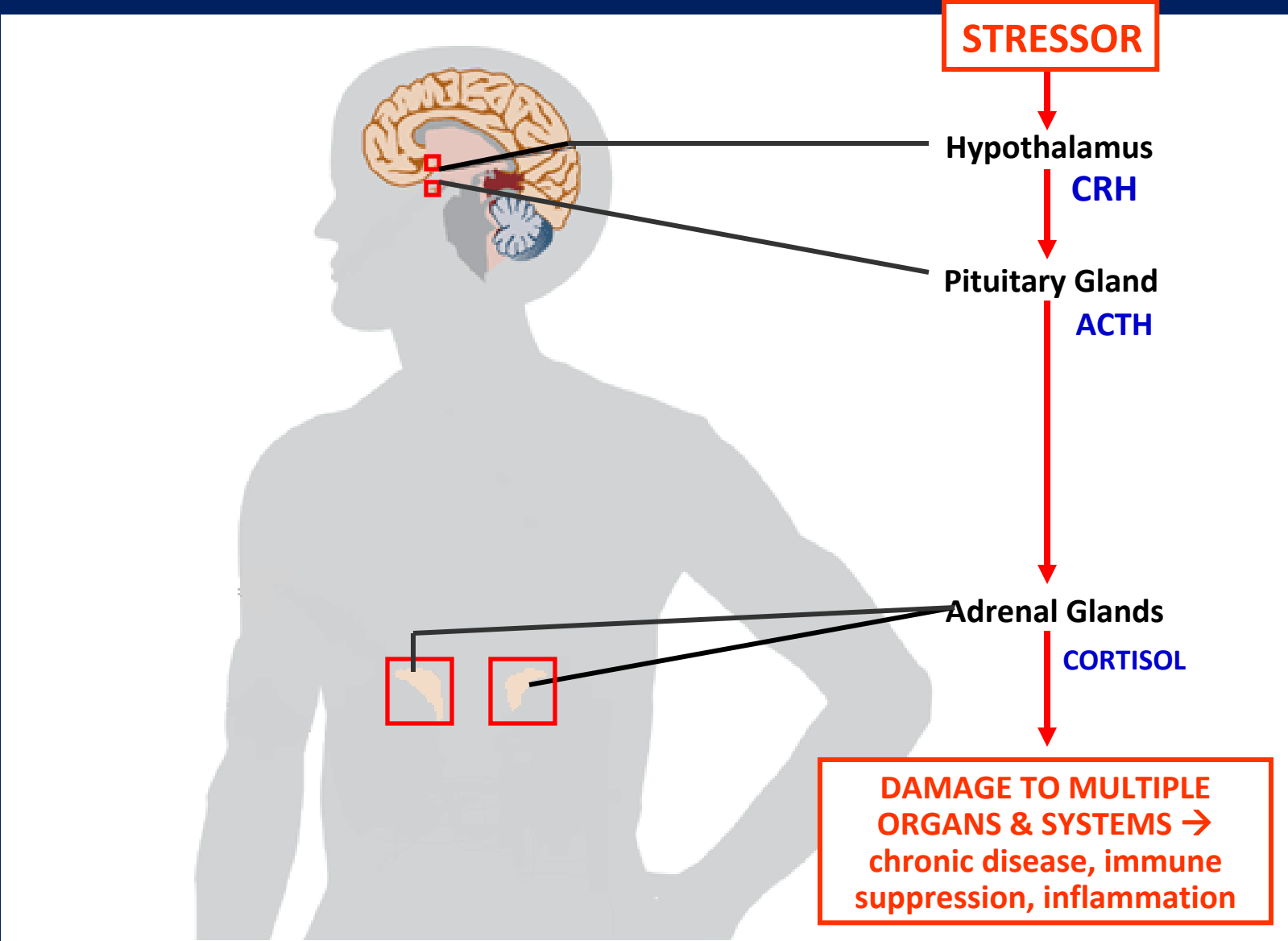




How stress affects health

- Through pathways involving health-damaging behaviors
 - Substance abuse
 - Diet, physical activity
- Through powerful physiologic effects, from childhood on

How stress affects health





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So what about solutions?

What the evidence tell us about ways to improve health and reduce disparities

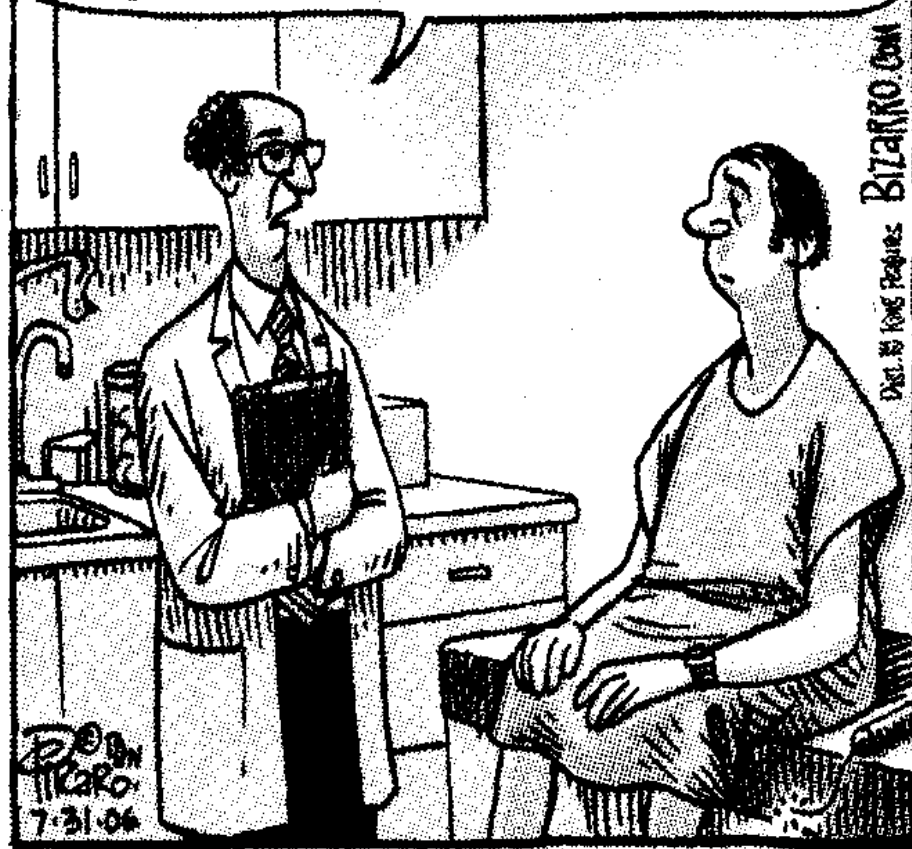
- **People's health is powerfully shaped by their environments**
- **Education and income influence health in significant ways**
- **Factors related to race/ethnicity play a role as well**

© Cartoonbank.com



"I was able to get in one last lecture about diet and exercise."

Find a way to keep your stress level down. What works for me is making a ton of money & having practically free health care.



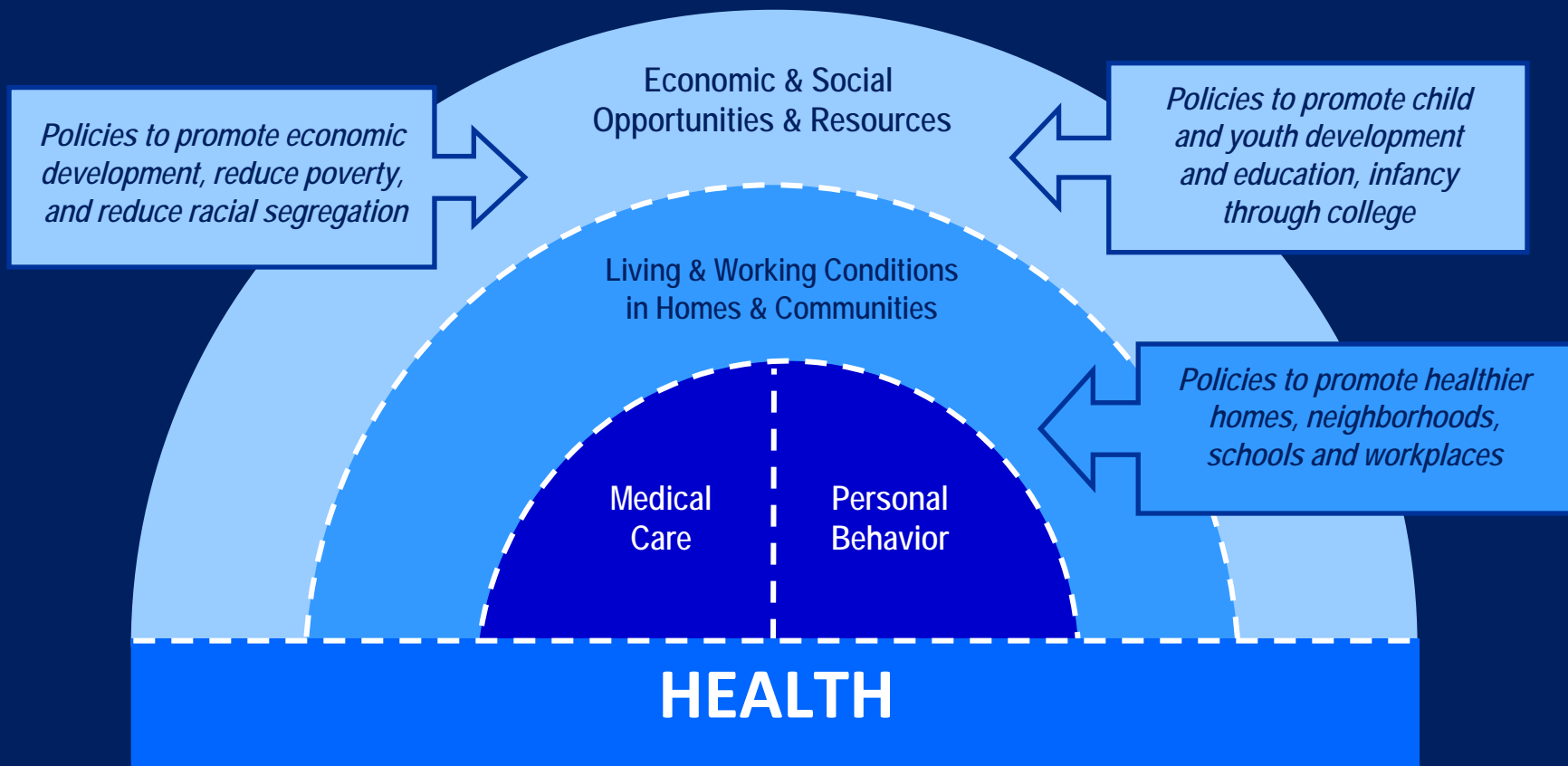
UPSTREAM:
Closer to the fundamental source



DOWNSTREAM:
Closer to the health effects



Addressing health disparities through 'upstream' solutions





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What role can the health sector play?



Steps the health sector can take

- **Provide all sectors with information on health and likely health effects of social policies**
- **Promote awareness and better understanding of racial or ethnic disparities in health**
- **Seek opportunities to link with other sectors in developing interventions**
- **Advocacy on behalf of other sectors**



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Thank you!



Additional resources available at the RWJF website: www.rwjf.org

- ***Overcoming Obstacles to Health , 2/2008***
 - overview of key issues & literature on SDOH
- ***Beyond Health Care: New Directions to a Healthier America, 4/2009***
 - CBHA final report & recommendations
- **Issue brief series: Exploring the Social Determinants of Health**
- **Chartbooks**
 - state-level data on social disparities in health
- **Interactive calculator tool**
 - examining links between income, education and health at county & state-levels