

3

Social Determinants of Health

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Public Health
Learning Modules

Using **Healthy People 2020**
to Improve Population Health



ASSOCIATION FOR PREVENTION TEACHING AND RESEARCH



College of Health Professions
and Social Work
TEMPLE UNIVERSITY*

3

Section 1: What are the social determinants of health?



Healthy People 2020 Social Determinants of Health



NEIGHBORHOOD AND BUILT ENVIRONMENT

- Quality of Housing
- Crime and Violence
- Environmental Conditions
- Access to Healthy Foods



HEALTH AND HEALTHCARE

- Access to Health services—including clinical and preventive care
- Access to Primary Care—including community-based health promotion and wellness programs
- Health Technology



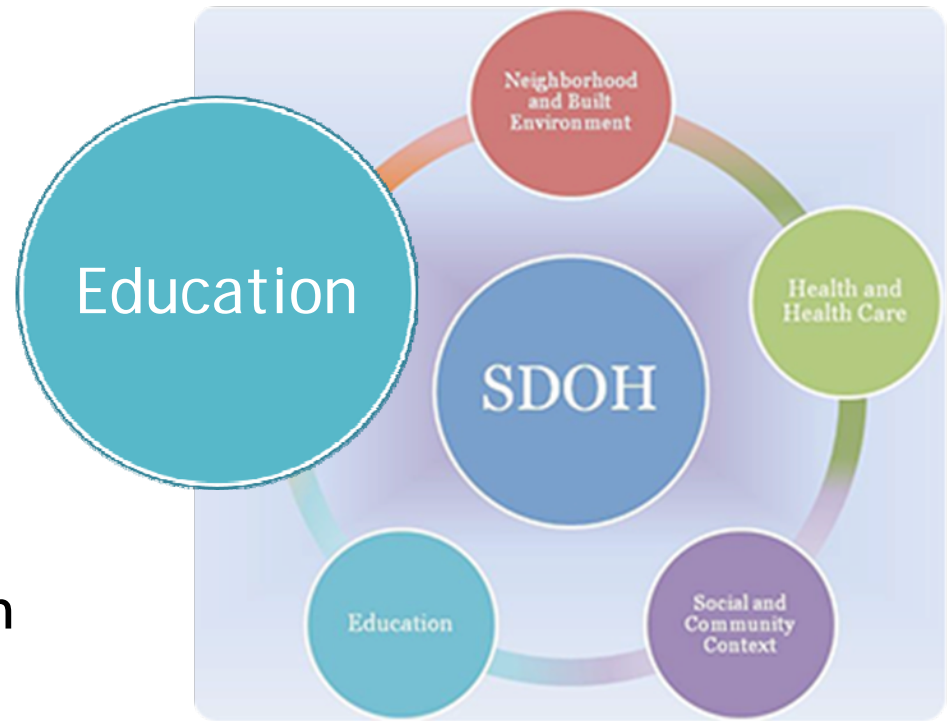
SOCIAL AND COMMUNITY CONTEXT

- Family Structure
- Social Cohesion
- Perceptions of Discrimination and Equity
- Civic Participation
- Incarceration/Institutionalization



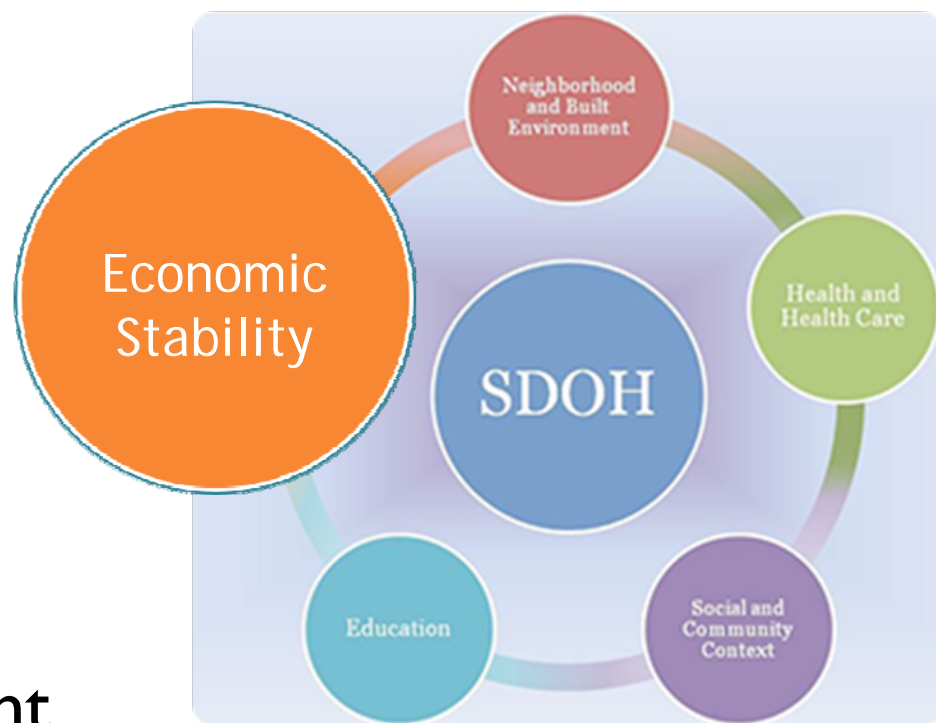
EDUCATION

- High School Graduation Rates
- School Policies that Support Health Promotion
- School Environments that are Safe and Conducive to Learning
- Enrollment in Higher Education



ECONOMIC STABILITY

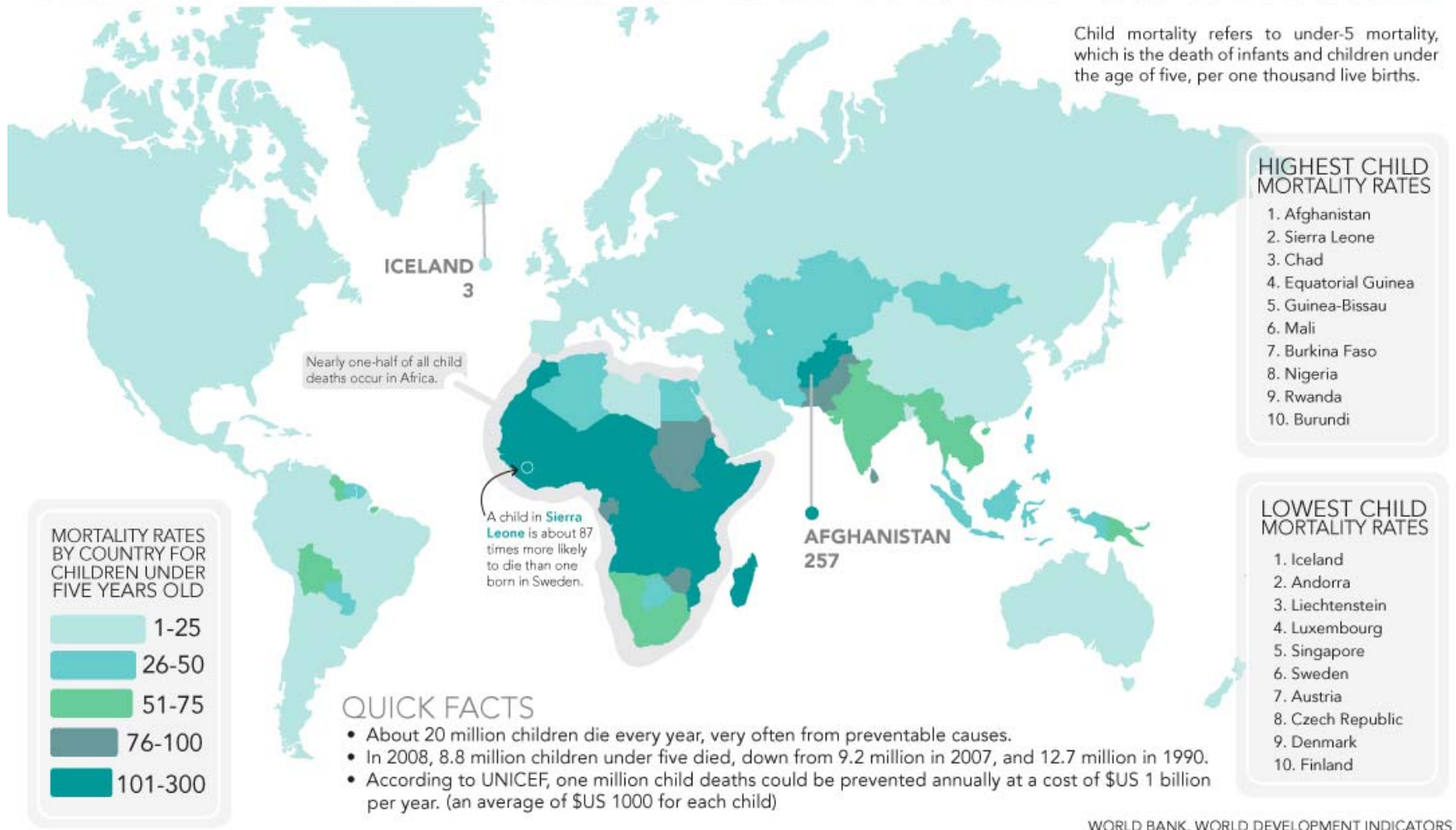
- Poverty
- Employment Status
- Access to Employment
- Housing Stability (e.g., homelessness, foreclosure)



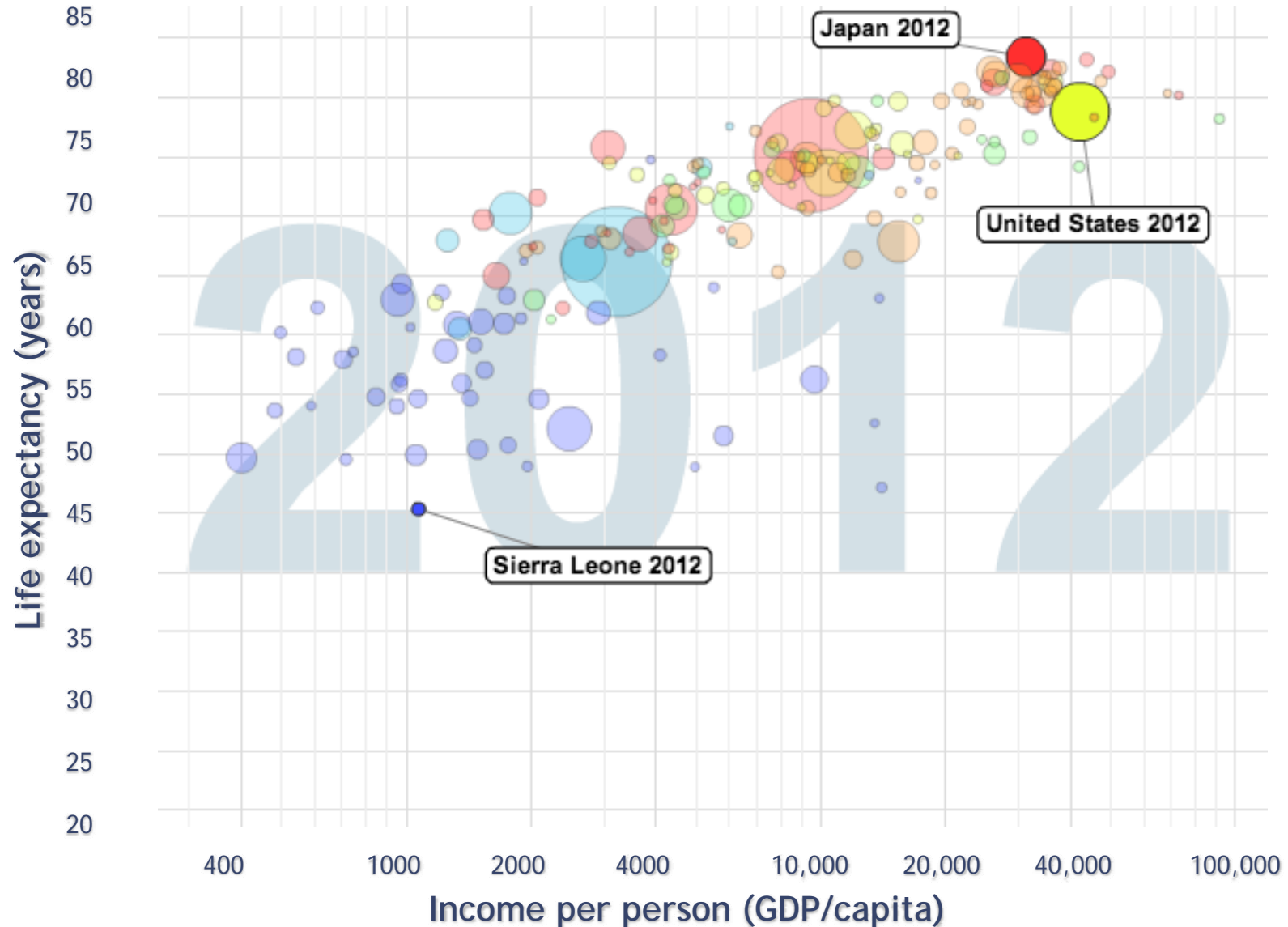
How do social determinants impact **POPULATION HEALTH?**

Child Mortality Rate Worldwide

THE WORST PLACES IN THE WORLD TO BE A KID

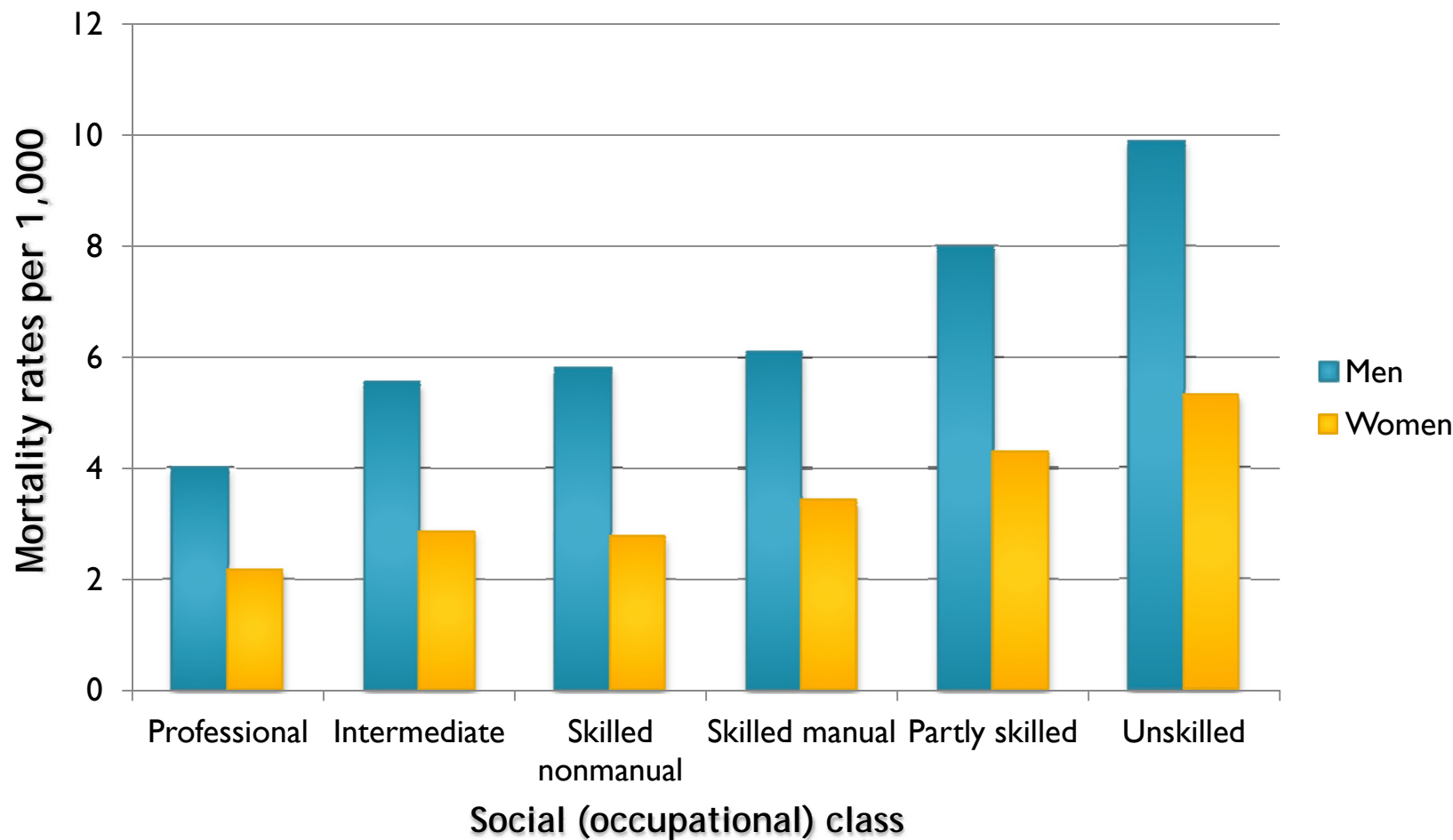


Life Expectancy by GDP Worldwide



Health disparities are
visible even *within*
specific countries.

Inequalities in Mortality Rates in the United Kingdom in 1971 among Persons aged 15 to 64



Source: Feinstein JS. The relationship between socioeconomic status and health: a review of the literature. *Millbank Quarterly*. 1993;71(2):279-322

Why are these data compelling?

- Differences in mortality were observed across the entire socioeconomic gradient.
- National health insurance did not eliminate the gradient.
- These civil servants were followed long-term. Status in mid-life predicted late-life health.

Does this apply in the United States?

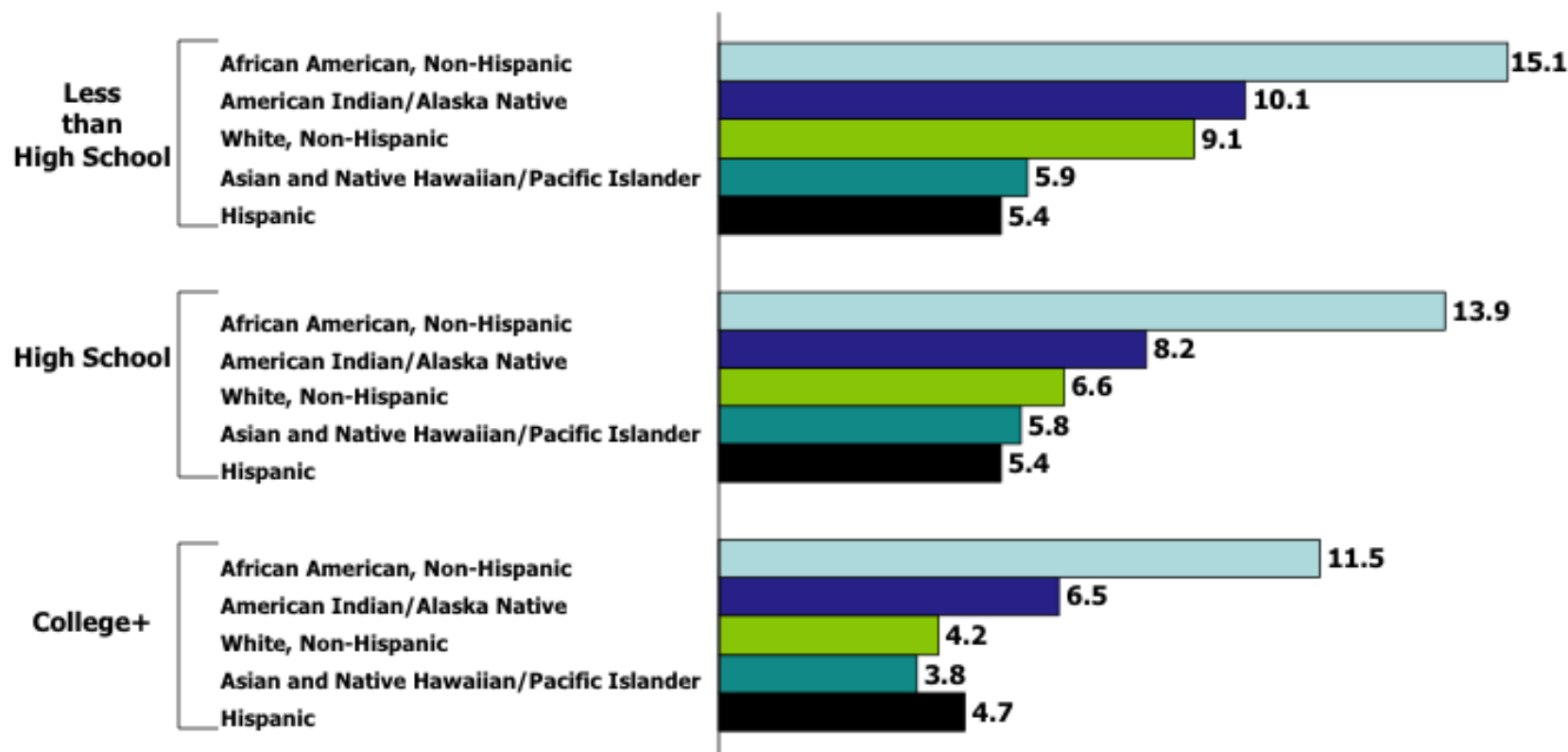
Health Disparities

Differences in health and longevity are apparent by race as well as income and other measures of socioeconomic status.

- Race: In the U.S., black men live on average 6 years less than white men
- Education: In the U.S., adults who did not graduate from high school can expect to live ~7 years less than people with more education

Infant Mortality Rates for Mothers Age 20+, by Race/Ethnicity and Education, 2003-2005

Infant deaths per 1,000 live births:



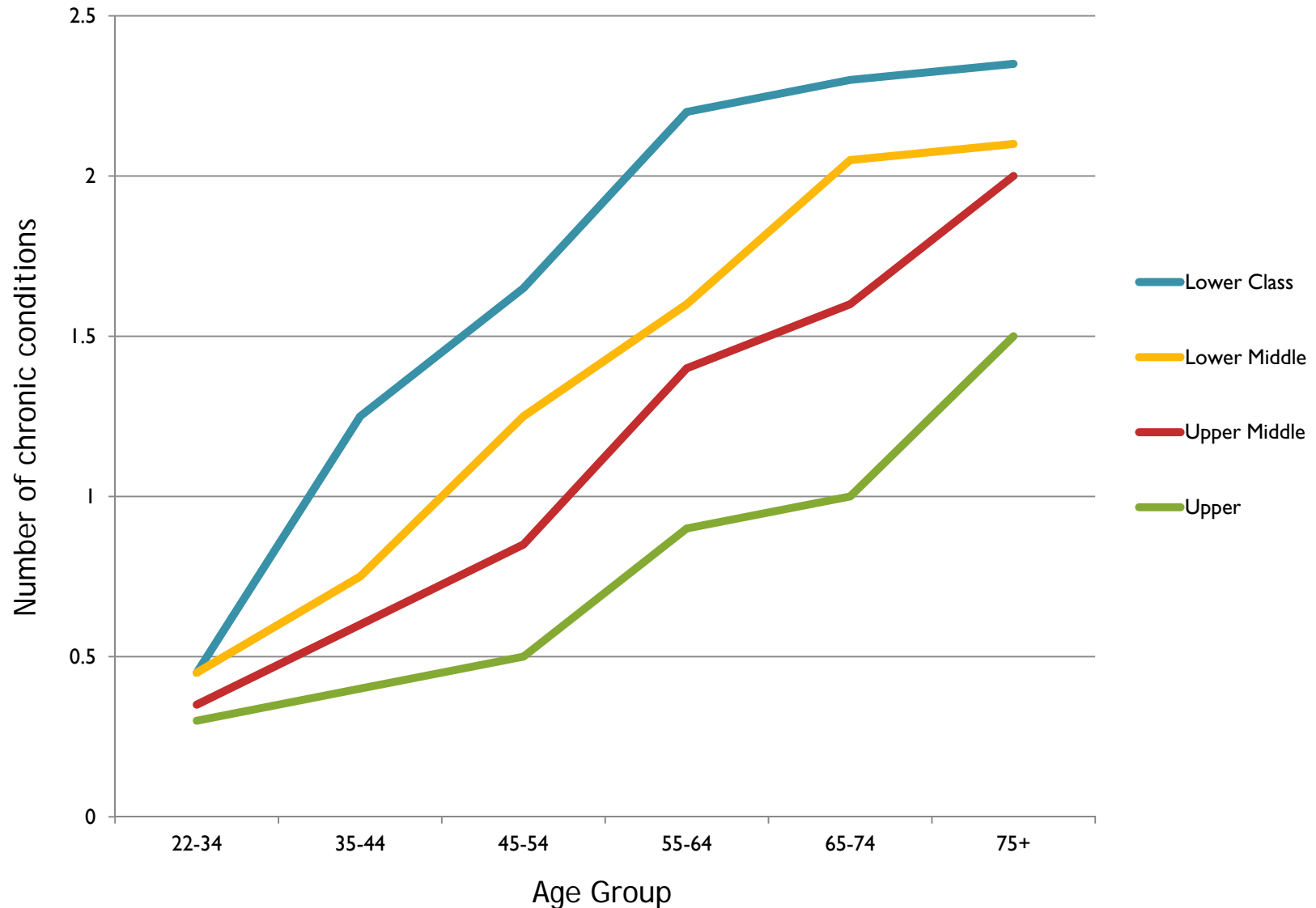
NOTES: Data reported for 37 states, DC, and NYC.

DATA: Centers for Disease Control and Prevention/National Center for Health Statistics, National Vital Statistics System, Linked Birth/Infant Death Data Set.

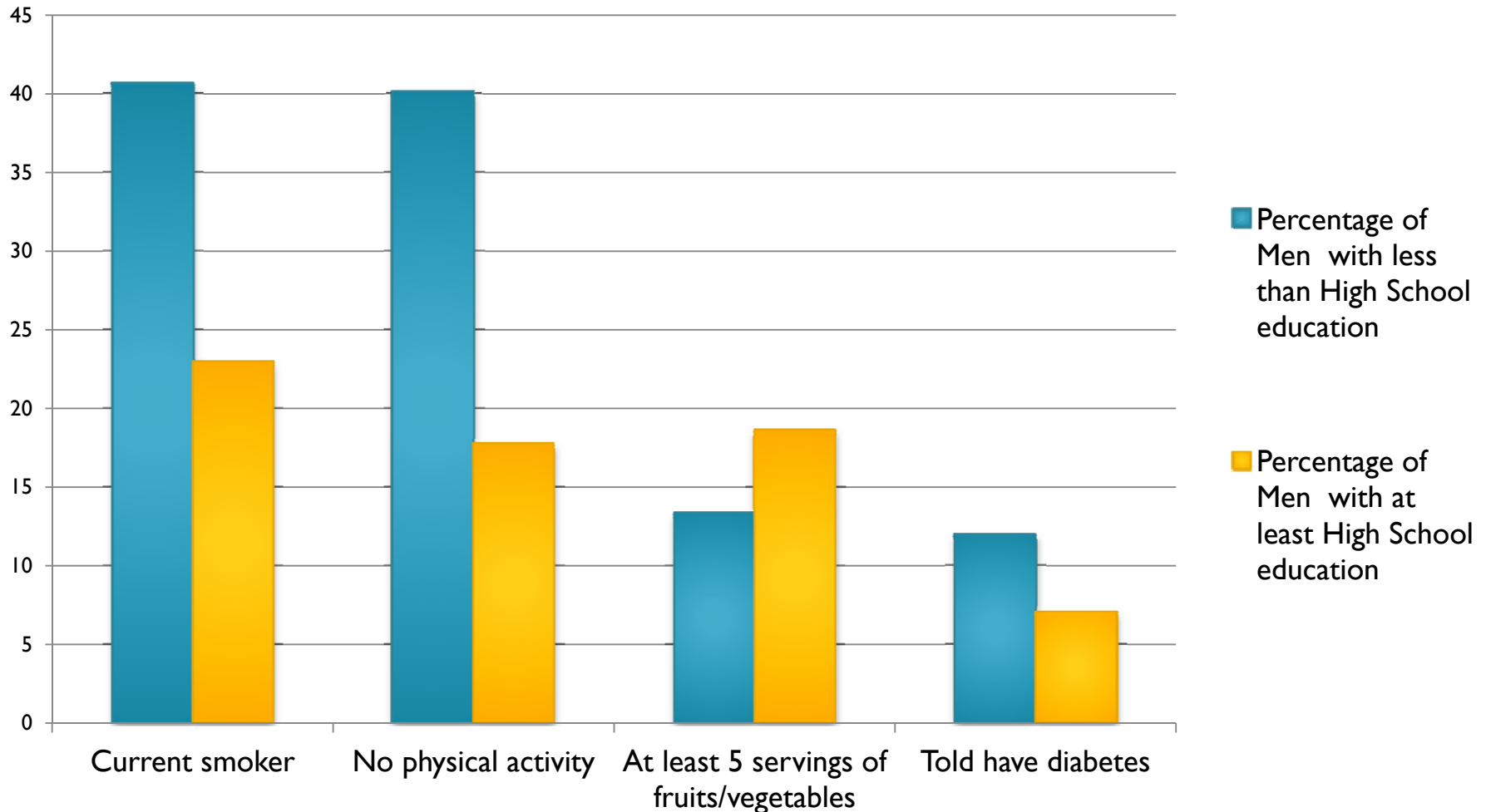
SOURCE: *Health, United States, 2008*, Table 19.



Number of Reported Chronic Conditions According to Socioeconomic Status

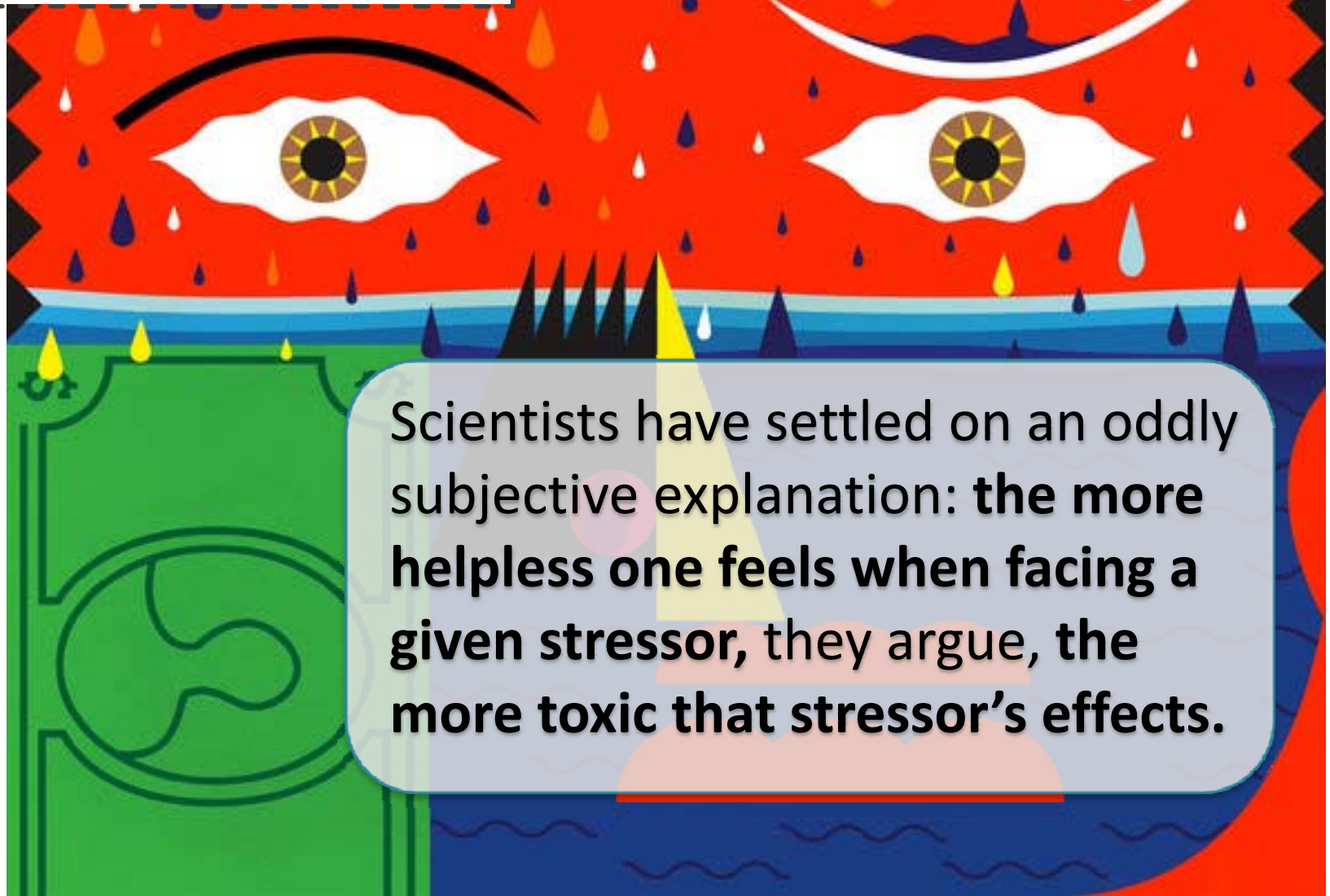


Risk Factors According to Education Status

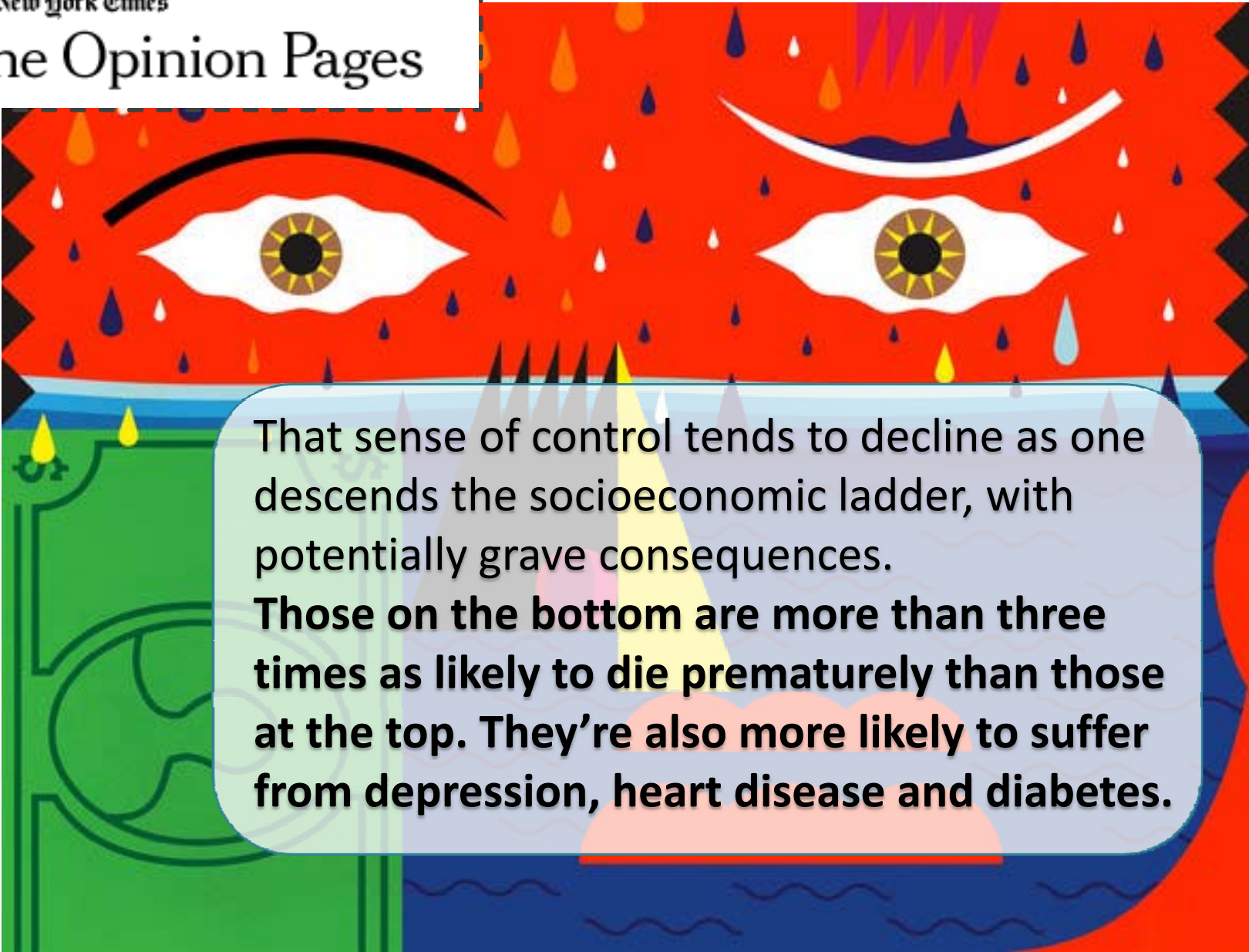


Source: Mensah GA et al., State of disparities in cardiovascular health in the United States. *Circulation*. 2005;111:1233-1241.





Scientists have settled on an oddly subjective explanation: **the more helpless one feels when facing a given stressor, they argue, the more toxic that stressor's effects.**



That sense of control tends to decline as one descends the socioeconomic ladder, with potentially grave consequences.

Those on the bottom are more than three times as likely to die prematurely than those at the top. They're also more likely to suffer from depression, heart disease and diabetes.

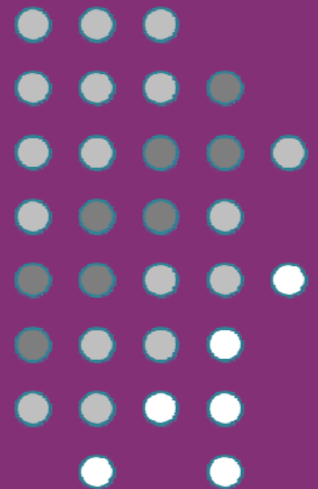
It is critical to track these disparities in health to understand who is at greatest risk, and it is important to ask:

Why do the conditions for health vary so much from place to place and across population groups?

The conditions for health are established in our **policies**—not just in health policy, but also in policies regarding the funding of **schools**, the provision of price supports for certain foods and not others, and the **marketing of foods and tobacco**, for example. The social determinants of health are deeply intertwined with Our policies and programs on a national level, on a local level—and even closer to home in our schools and workplaces.

Many Healthy People 2020 objectives relate to social determinants of health.

Consider the role of school environments and school policies.



School policies and environments as social determinants of health

Objective: Increase the proportion of schools with a school breakfast program

Baseline:	68.6 percent of schools overall, including public and private elementary, middle, and high schools, had a school breakfast program in 2006
Target:	75.5 percent
Target-Setting Method:	10 percent improvement
Data Source:	School Health Policies and Practices Study (SHPPS), CDC/NCHHSTP

School policies and environments as social determinants of health

Objective: Increase the proportion of adolescents whose parents consider them to be safe at school

Baseline:	86.4 percent of adolescents aged 12 to 17 years had parents who reported that they felt their child was usually or always safe at school, as reported in 2007
Target:	95.0 percent
Target-Setting Method:	10 percent improvement
Data Source:	National Survey of Children's Health (NSCH), CDC and HRSA/MCH

School policies and environments as social determinants of health

Objective: Increase the proportion of the nation's public and private schools that require daily physical education for all students

Baseline:	3.8 percent of public and private elementary schools required daily physical education for all students in 2006
Target:	4.2 percent
Target-Setting Method:	10 percent improvement
Data Source:	School Health Policies and Practices Study (SHPPS), CDC/NCHHSTP

3

Section 2: Employment, material resources and health



ECONOMIC STABILITY

- Poverty
- Employment Status
- Access to Employment
- Housing Stability (e.g., homelessness, foreclosure)



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- Being unemployed may be as dangerous as certain high-risk professions.

Unemployment may exert a negative influence on health by reducing access to needed material resources.

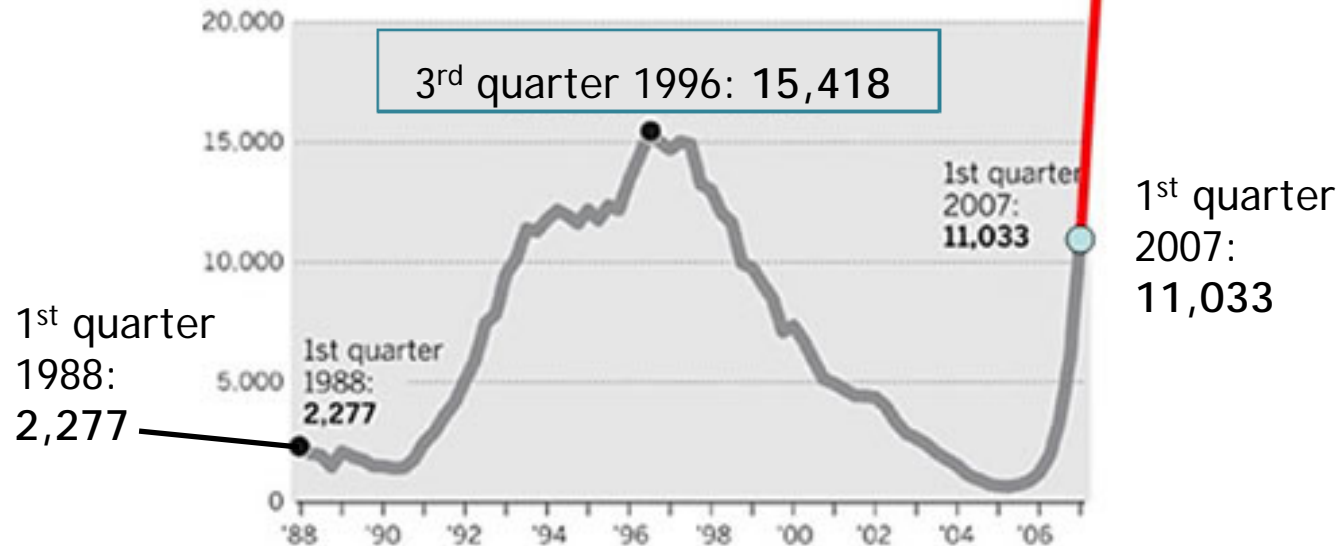
The recent wave of mortgage foreclosures offers a case study on the social determinants of health.

1st quarter
2008:
47,171

Mortgage foreclosures

Home foreclosures are up sharply in California as many borrowers struggle to make higher payments on adjustable-rate mortgages.

Number of foreclosures statewide, quarterly data



1st quarter
2007:
11,033

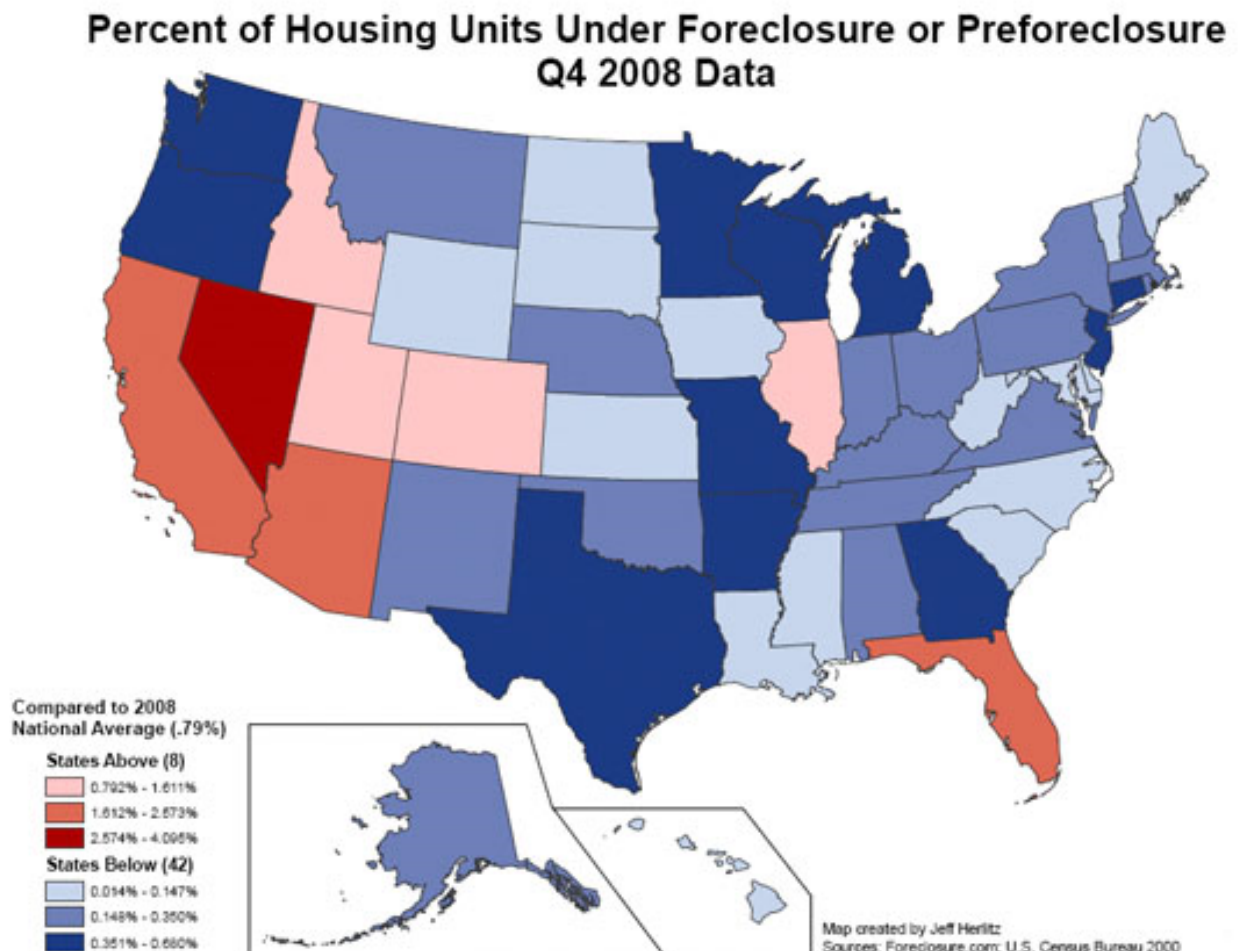
Source: DataQuick Information Systems

Los Angeles Times

Source:

http://www.socketsite.com/archives/2008/04/perspective_on_california_foreclosures_and_the_housing.html

Areas most affected by the foreclosure crisis



Source: [Jeff Herlitz](#), Foreclosure.com, U.S. Census Bureau

States with darker red shading had higher foreclosure rates. States with blue shading had foreclosure rates below the national average, with lighter shades of blue corresponding with lower foreclosure rates.

By Catherine Rampell

Source: NYTimes, March 2, 2009



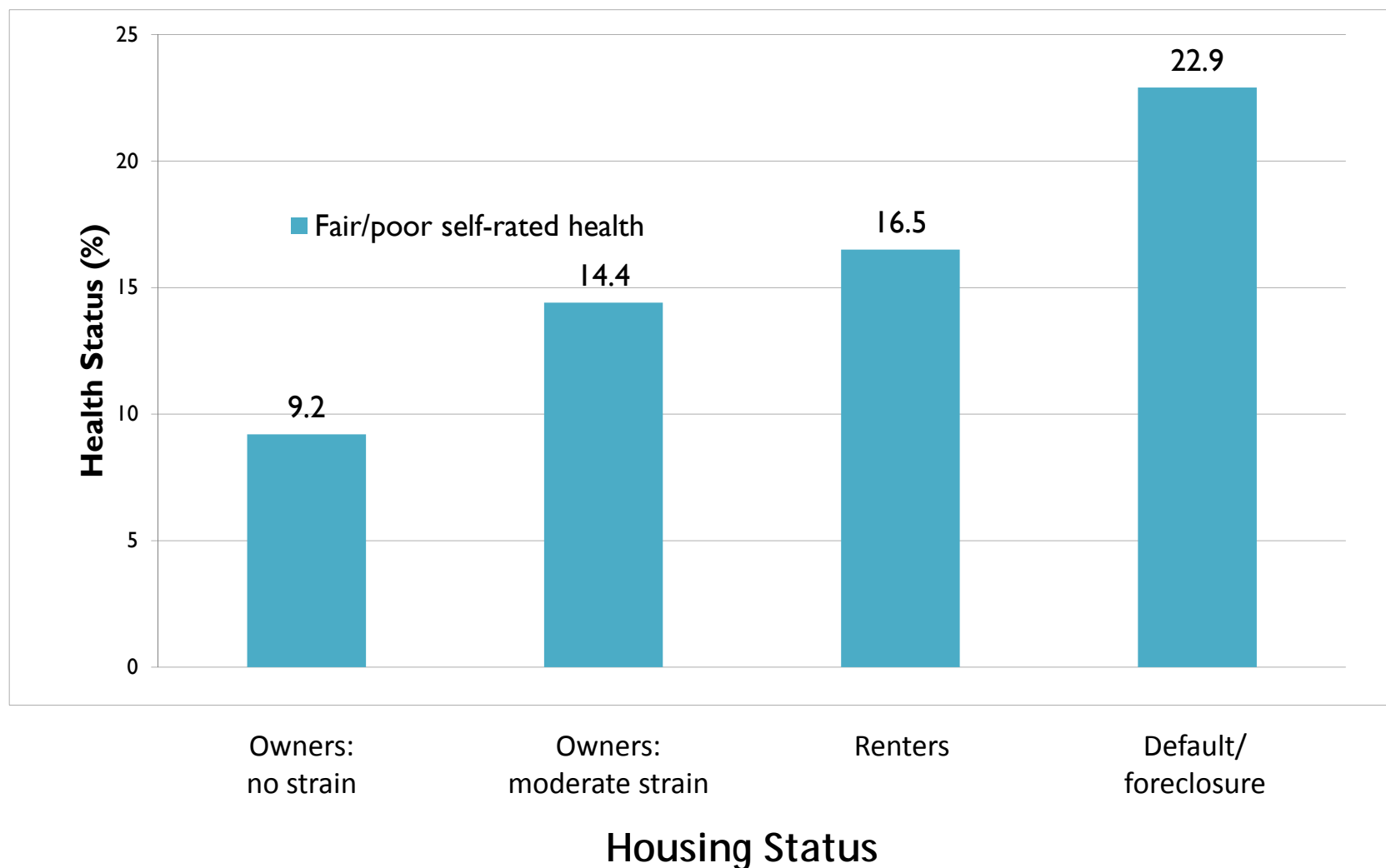
Foreclosure:

Mary Ann Herrera at her home in San Antonio, Monday, Feb. 23, 2009. Under the threat of foreclosure, Herrera asked her brother to paint the words "Help!!" and "Foreclosure!!" on her home recently in the hopes of receiving assistance. (AP Photo/Eric Gay)

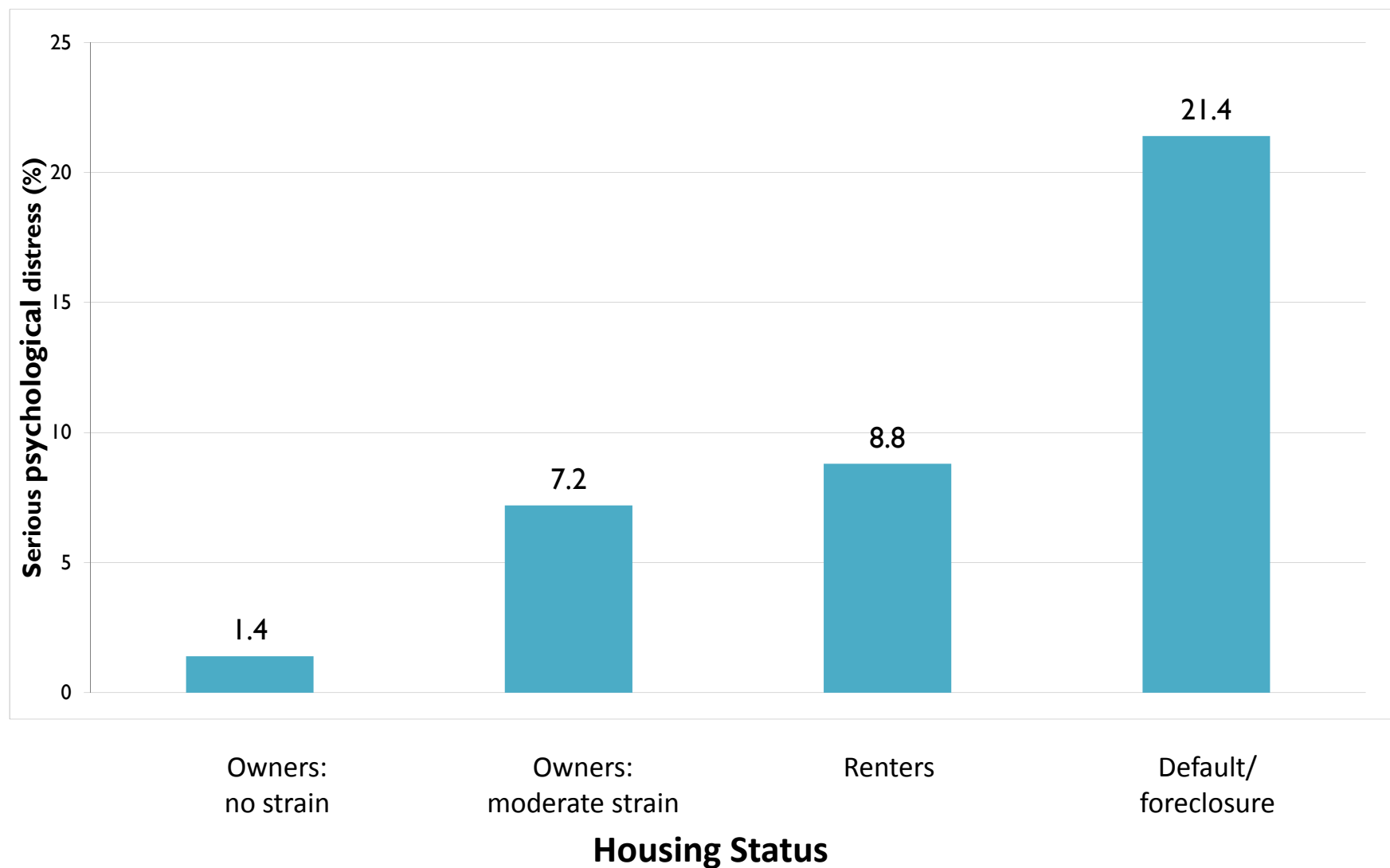


Foreclosure Rallies: Carmen Ruiz, whose home is under foreclosure, listens as supporters of Acorn, Association of Community Organizations for Reform Now, protest outside a home under foreclosure in South San Francisco, Tuesday, Nov. 25, 2008. Several rallies in Northern California were planned on Tuesday calling for lawmakers to help on a moratorium of foreclosures. (AP Photo/Paul Sakuma)

Homeowners in default or foreclosure often reported low levels of overall health.



Prevalence of serious psychological distress by housing status



Mental health impairment is common among homeowners in foreclosure.

- 13X higher prevalence of serious psychological distress in the foreclosure group, after adjustment
- Physical symptoms far more common in foreclosure group.
- Few respondents cited health costs as the major reason for foreclosure.
- But many reported foregone health care.

Relative Odds of Incident Depressive Symptoms, Health Declines, Food Insecurity, and Cost-Related Medication Nonadherence by Mortgage Delinquency Status

Health Measure	Times more likely than in non-mortgage-delinquent
New onset of elevated depressive symptoms	8.60
Major decline in self-rated health	1.39
New onset of food insecurity	7.53
New onset of cost-related medication nonadherence	8.66

Source: Alley DE et al., Mortgage delinquency and changes in access to health resources and depressive symptoms in a nationally cohort of Americans older than 50 years. *Am J Public Health*. 2005;101(12):2293-2298.



The Garza family has been living since October in the Costa Mesa Inn, where 9-year-old Celine Shares a bed with two younger brothers, toys and schoolbooks piled on the floor. Photographer/ Source: Monica Almeida/The New York Times, From the article "As Jobs Vanish, Motel Rooms Become Home", Author: Erik Eckholm; March 10, 2009