



CENTER on  
SOCIAL  
DISPARITIES  
in HEALTH



University of California  
San Francisco

# The social determinants of maternal and child health and health disparities

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DataSpeak October 28, 2010



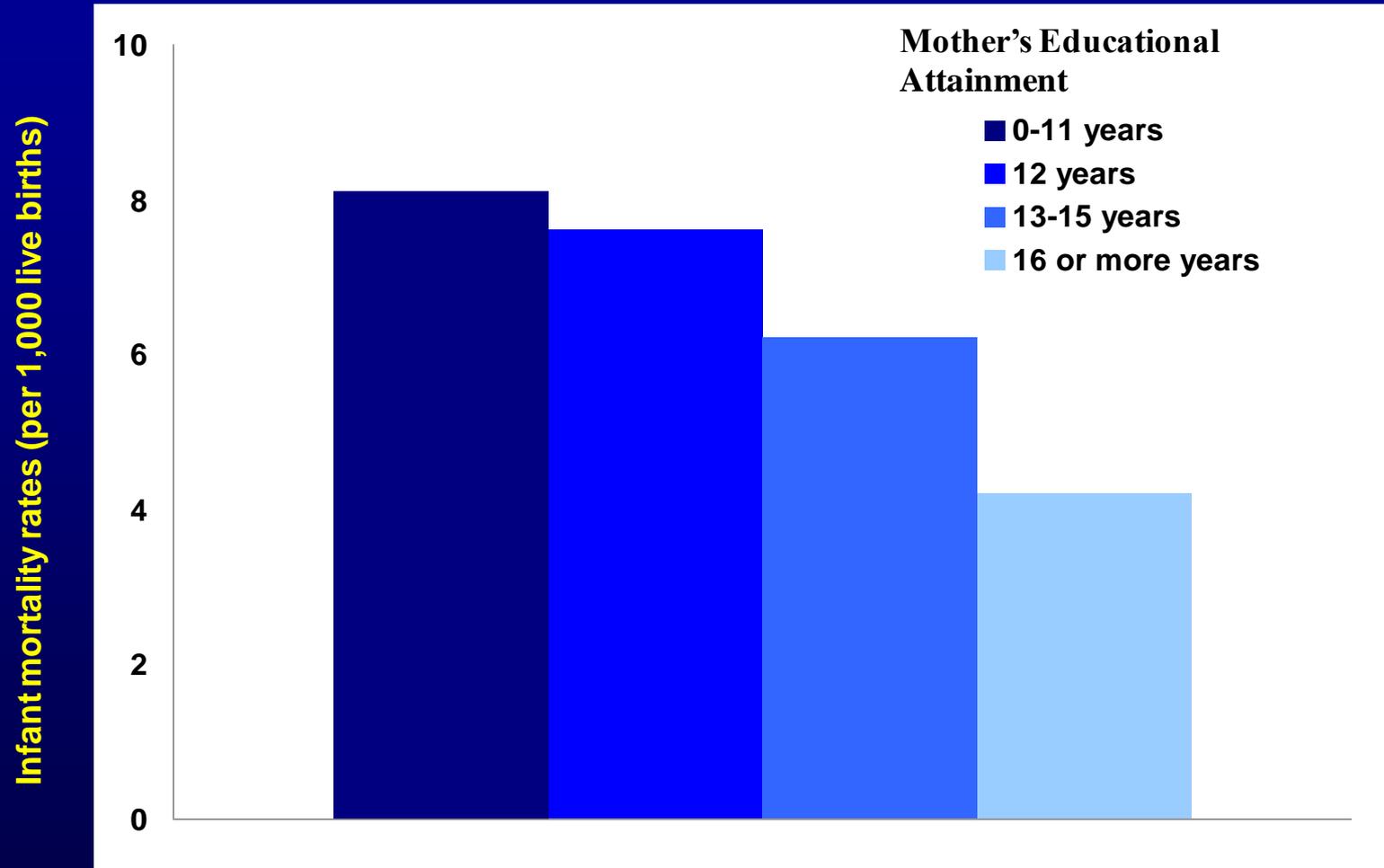
# Large racial/ethnic disparities in health

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For example:

- A baby born to an African-American (black) woman is twice as likely to die before reaching her or his first birthday as a baby born to a European-American (white) woman
  - A black woman is 3 to 4 times more likely to die of pregnancy complications than a white woman—even after considering age, number of previous births, and education
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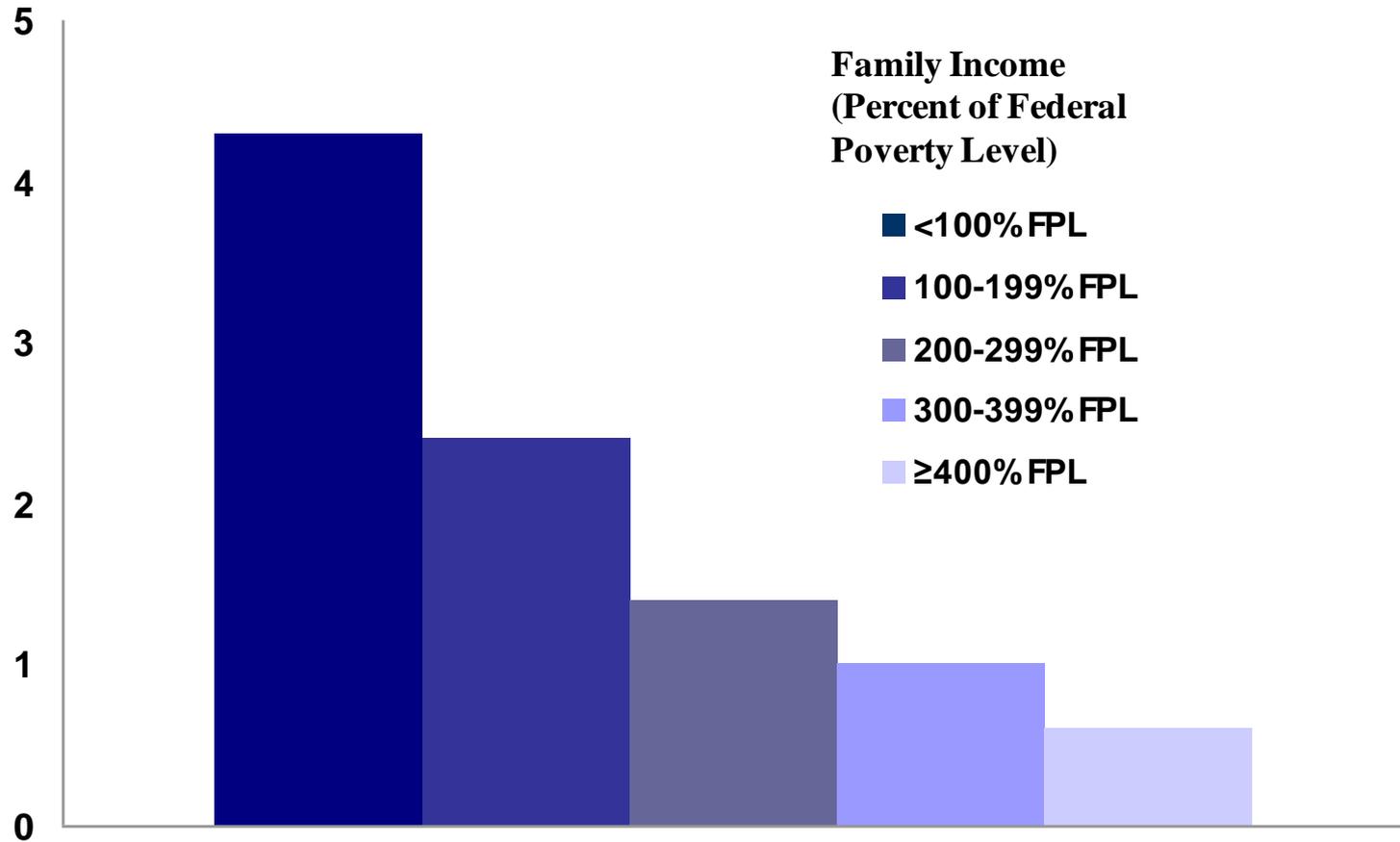
# Infant mortality varies by maternal education



Source: Matthews TJ, MacDorman MF. *Infant Mortality Statistics from the 2004 Period Linked Birth/Infant Death Dataset*. National Vital Statistics Reports, vol 55 no 15. Hyattsville, MD: National Center for Health Statistics, © 2008 Robert Wood Johnson Foundation.

# Poor/fair child health varies by parents' income

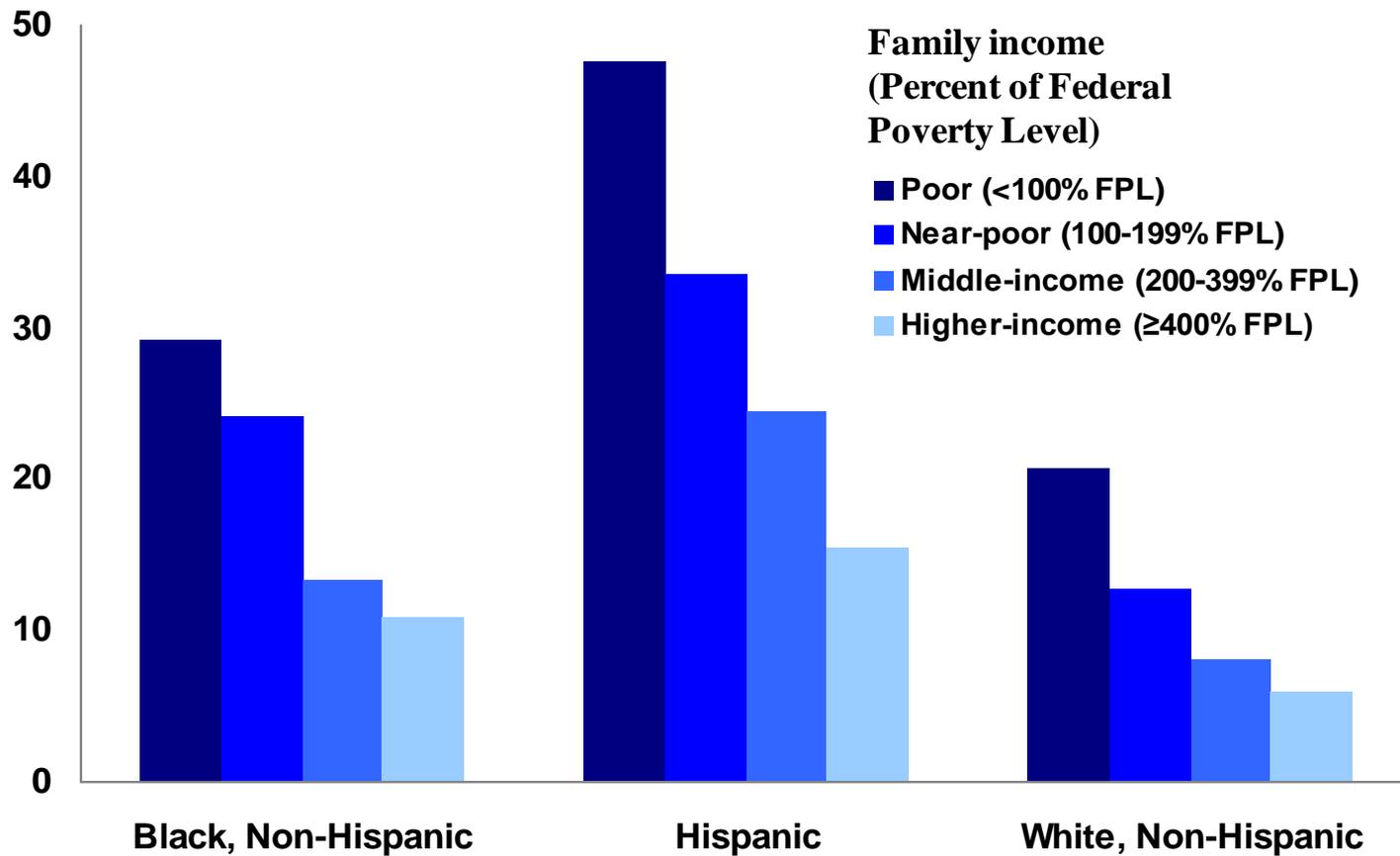
Poor/fair health among children ages ≤17 years



Source: NHIS, 2001-2005

# Poor/fair child health varies by income within racial or ethnic groups

Percent of children, ages ≤17 years, in less than very good health



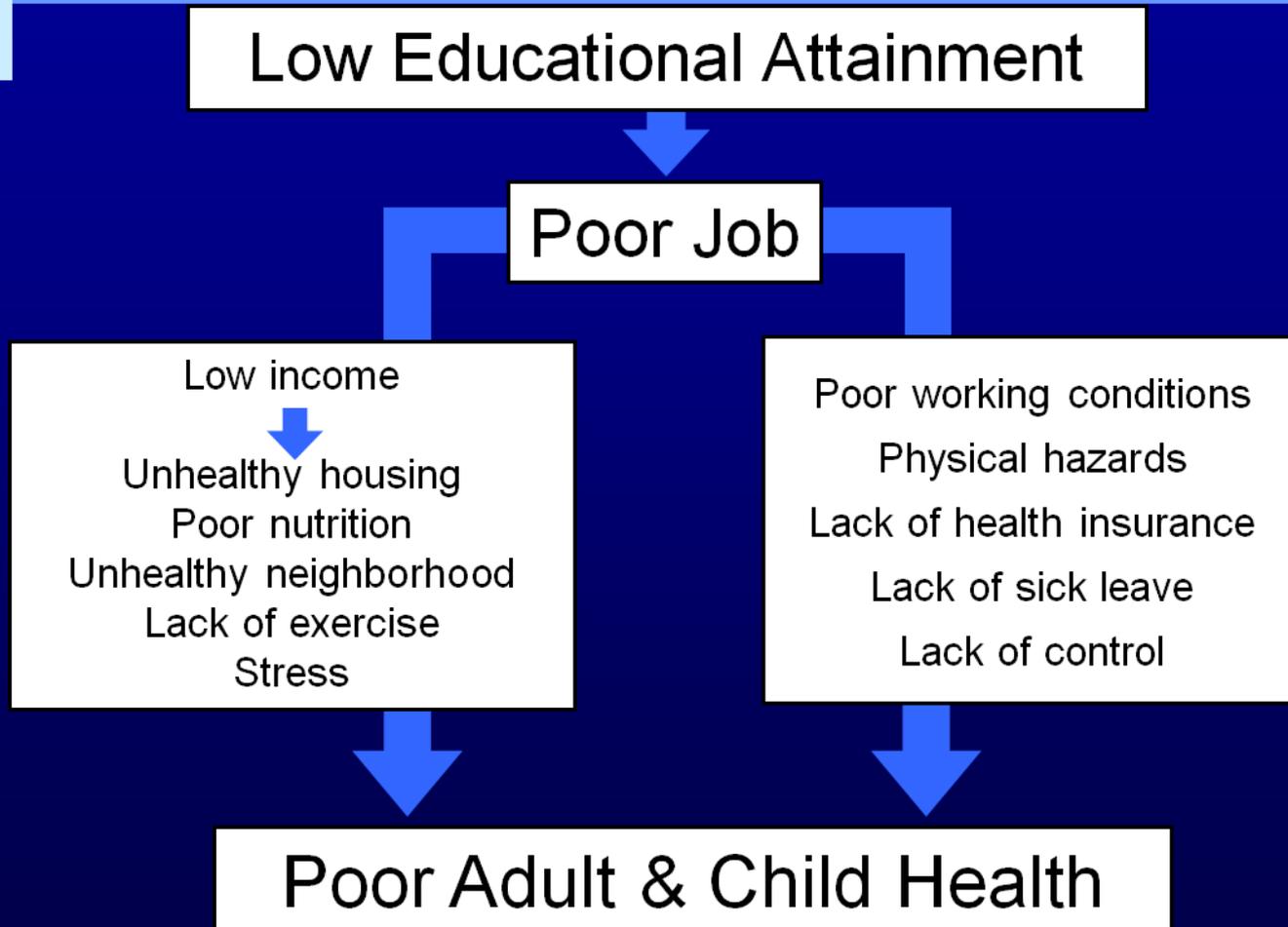


# What influences health?

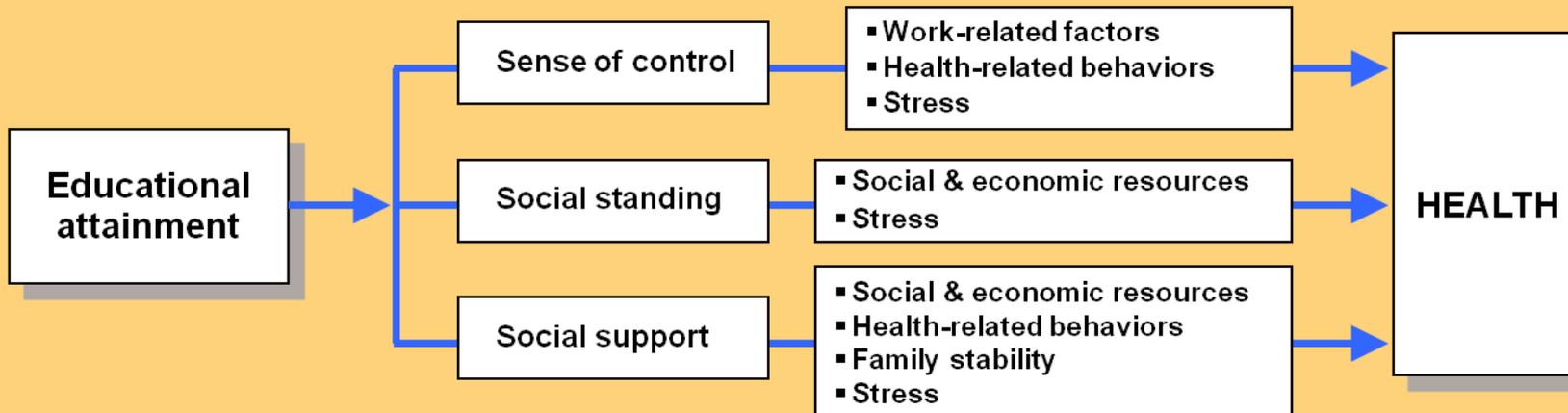
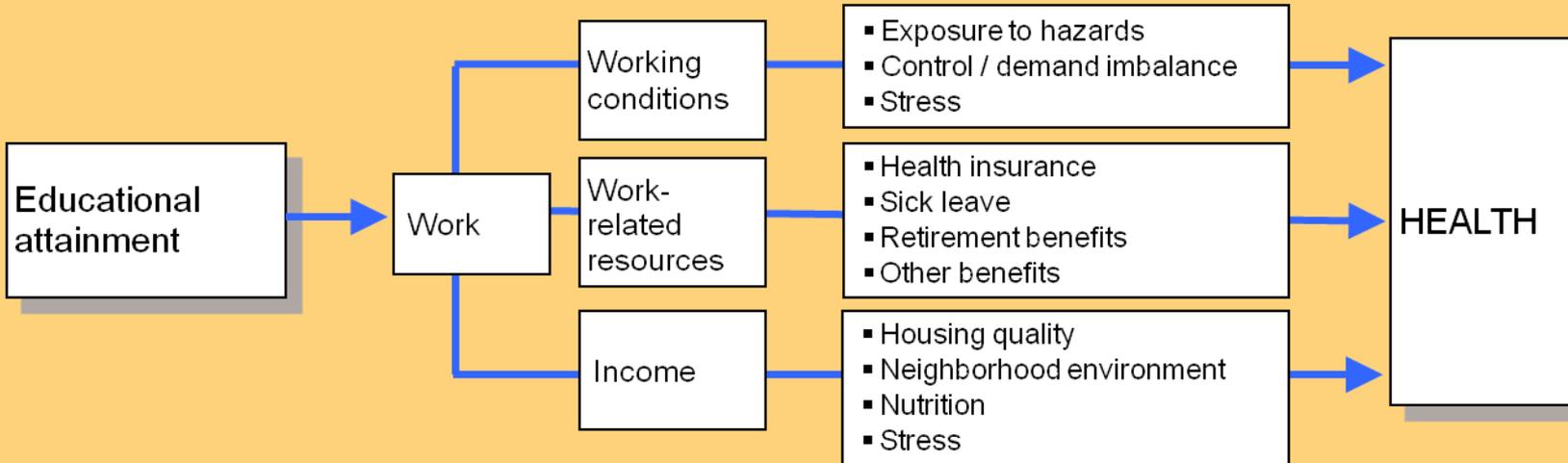
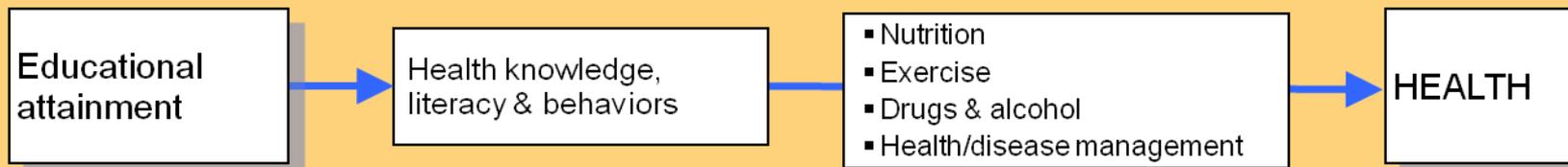
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- Medical care
  - Genetic make-up
  - Climate and natural physical environment
  - Behaviors: diet, exercise, alcohol, drugs...
  - What else?
  - And what influences the influences?
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# What influences health? What influences the influences?



# How could education affect health?

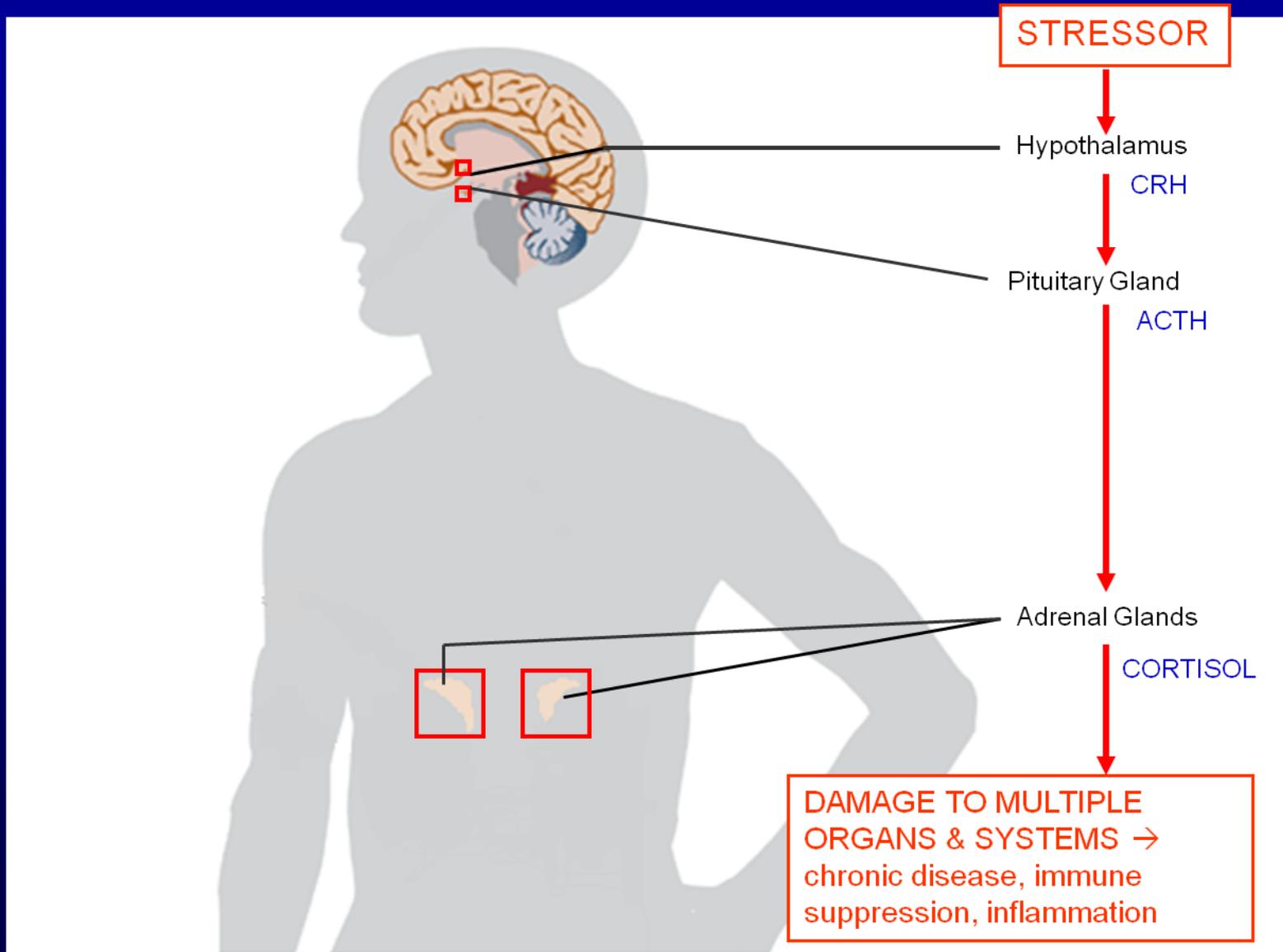


# How could a neighborhood affect health?

- Physical danger - crime
- Safe & pleasant places to exercise
- Lead, air pollution, other toxic exposures
- Access to healthy food
- Social networks & support
- Role models, peer pressure
- Stress, fear, anxiety, despair
- Quality of schools



# How could stress affect health?





# Chronic stress in childhood

## Stress across the life course

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- Poverty/low income is often stressful
  - Stress during critical periods and/or chronic stress in childhood could lead to ill health in adulthood through neuro-endocrine, immune, and/or inflammatory pathways, e.g.
    - Adult chronic disease
    - Low birth weight, preterm birth
    - Neuro-endocrine dysregulation with lifelong effects
  - Cumulative effects of stress over lifetime
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# What about racial/ethnic disparities?

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On average, compared with blacks and Latinos, whites:

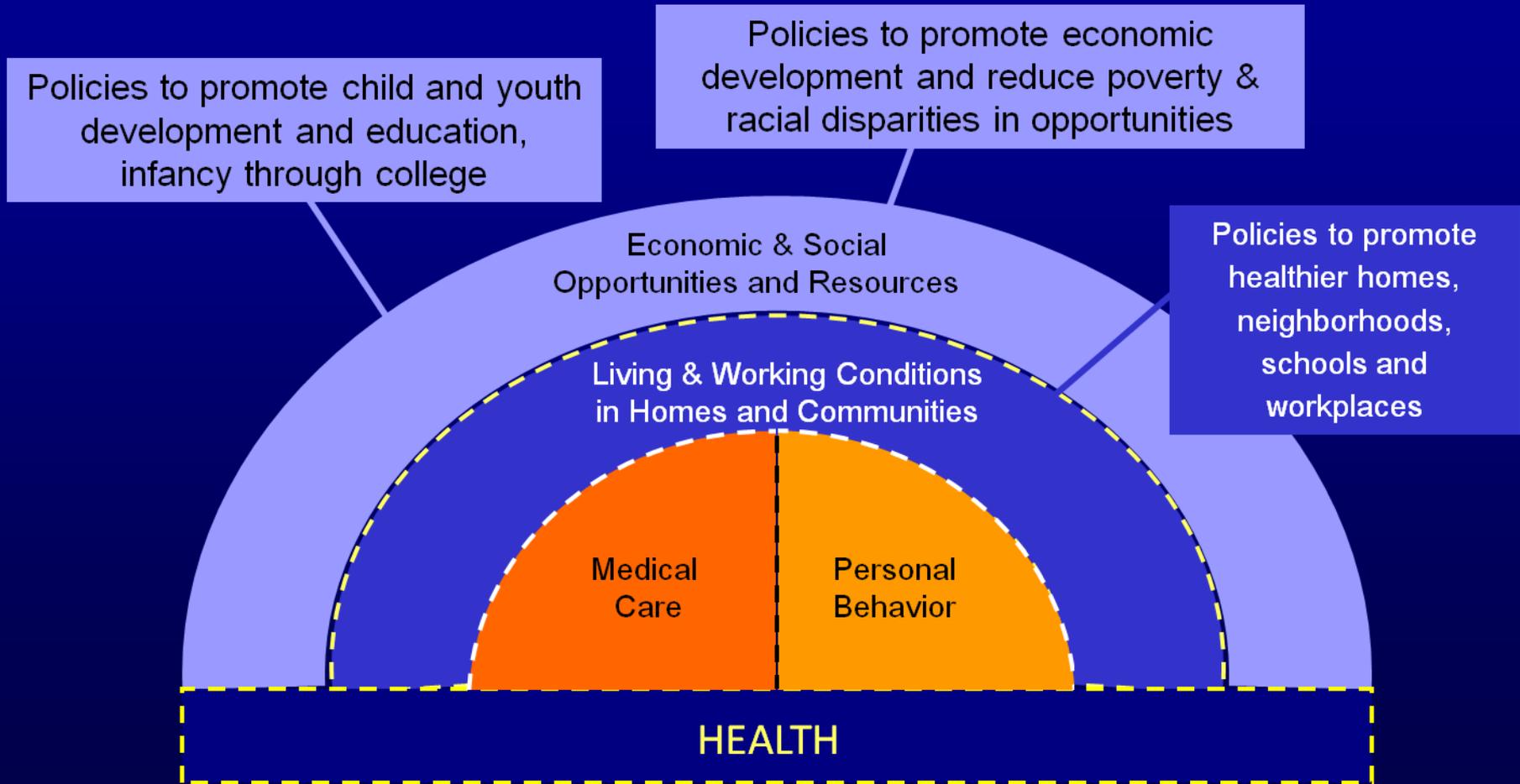
- At a given educational level, have higher incomes
  - At a given income level:
    - Have more wealth
    - Live in better-off neighborhoods
  - At a given current income/educational level, had more advantaged childhoods
  - All these can influence health
    - via multiple pathways, including stress
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# Understanding racial/ethnic disparities in MCH

- Race often captures unmeasured socioeconomic factors
  - Childhood experience, depth of poverty, wealth, educational quality, neighborhood conditions
  - Health-damaging or promoting exposures
  - More stress, fewer resources to cope
- Added stress of living in a society with a legacy of discrimination
  - Not just overt incidents or intentional bias
  - Structural racism built into institutions, even without intent
  - Pervasive vigilance, anticipating unfair treatment or judgment

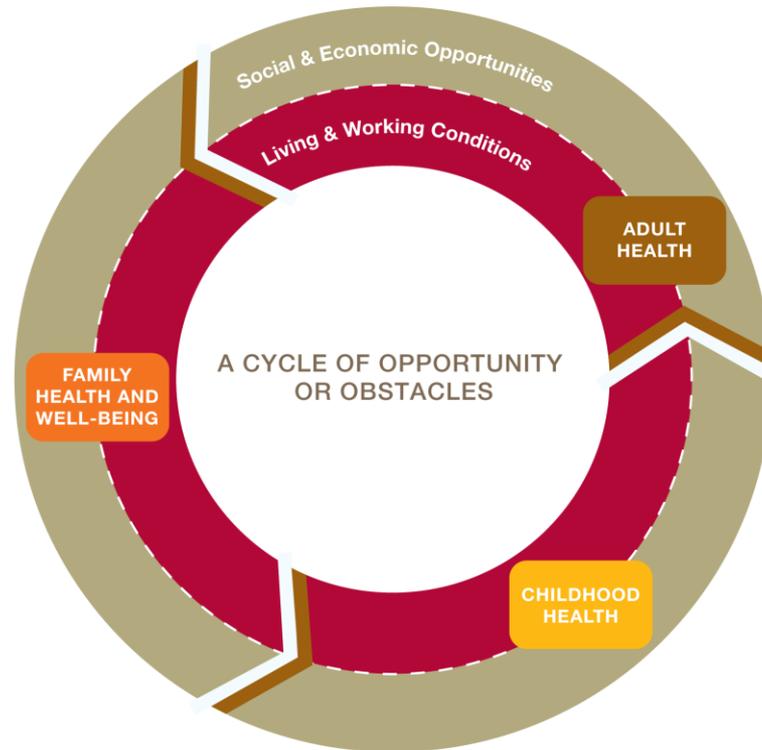
# Finding solutions: Understanding the importance of social factors for health



# Finding solutions: Understanding how social advantage & health are transmitted across lifetimes and generations

## Social Advantage and Health Across Lifetimes and Generations

Social disadvantage and health disadvantage accumulate over time, creating ever more daunting obstacles to health.





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