

Health inequalities, social determinants, and surveillance



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Risk Factor Surveillance

“Our future survival is predicated
upon our ability to relate within
equality”

--A. Lorde

Session Questions

1. What are inequalities and social determinants in public health?
2. Why do they matter?
3. What are the challenges in addressing these issues?
4. What is being covered or should be covered in surveillance systems?
5. What does the future hold regarding surveillance for these issues?

What are social determinants of health?

- Social determinants of health are the economic and social conditions that influence the health of individuals, communities, and jurisdictions as a whole
- Social determinants of health are about the quantity and quality of a variety of resources that a society makes available to its members

The Solid Facts – 2004

WHO Europe

- The social gradient
- Stress
- Early life
- Social exclusion / poverty
- Work
- Unemployment
- Social support
- Addiction
- Food
- Transport
- Gender

Across the life course

Underpinnings of Social Determinants of Health

- Population focus – healthy public policies
- Upstream from individual risk factors
- Achieving full capacity for health and well-being and not just access to health care

Social Epidemiology

“The branch of epidemiology that studies the social distribution and social determinants of states of health”*

- treating factors like income inequality as independent risk factors, not confounders
- much of work to date with archival data, using broad indicators
- need to move beyond education, occupation, income

*Berkman and Kawachi

Social Change & Movements

- Collective action for societal change
- Often changing political structures via protest
 - civil rights
 - feminist movement
 - peace movement

Social Causes: Built Environment

As early as 1870, in *Public Parks and the Enlargement of Towns*

Urban & park planner Fredrick Law Olmsted identified the strong link between good public health and community design

Importance of exercise and access to fresh air and sunlight



Social Causes: War



The WHO Commission on SDH

- Established in 2005
- “Action on the Social Determinants of Health: lessons form previous experiences”
http://www.who.int/social_determinants/resources/action_sd.pdf
- The concept of surveillance is not explicitly mentioned

Challenges for Surveillance

1. Do we adequately understand the social causes/evidence base?
2. Should we measure the causes vs. readiness for a social movement?
3. Does any of this lead to effective interventions and improvement in population health?

For surveillance, understanding causes

- Social class
 - Low social class consistently linked with low health status across countries
- Evidence-based approaches
 - Growing evidence for sociocultural interventions
 - Housing and health
 - Improvements to the built environment

Possible Interventions for Health Enhancing Social Environments

- 1 Adequate public investment in education
- 2 “Living wages” to move working families above poverty
- 3 Access to quality health care for all ages
- 4 Mixed income housing to decrease segregation by socioeconomic status
- 5 Programs to reintegrate stigmatized populations
- 6 Adequate health benefits with employment

Example:

From research literature:

What are effective interventions in the social and physical environments to improve health?

Example: Housing and health (from US Community Guide)

The spatial concentration of poverty has been shown to have an adverse effect on a range of life experiences, from isolating families from employment opportunities to limiting youth to inferior education, dangerous neighborhood conditions, and harmful environmental conditions.

Family housing interventions

- Provide affordable housing
- Decrease residential segregation by socioeconomic status
 - deconcentration interventions:
mixed-income housing developments
 - dispersion interventions:
tenant-based rental vouchers

Key Findings:
Intentional injuries, victimization, and
neighborhood safety

Effect measure	Median
Household member victimized by crime against person or property (6 studies)	6% decrease
Neighborhood social disorder (6 studies)	16% decrease

For surveillance, what to measure

- Some existing data exist
- Social determinants indicators can be useful
- Identifying causal agents vs. confounders

Confounding



1. Z associated with X;
2. Z associated with Y; and
3. Z not an intermediate step between X and Y

SES in the Causal Pathway

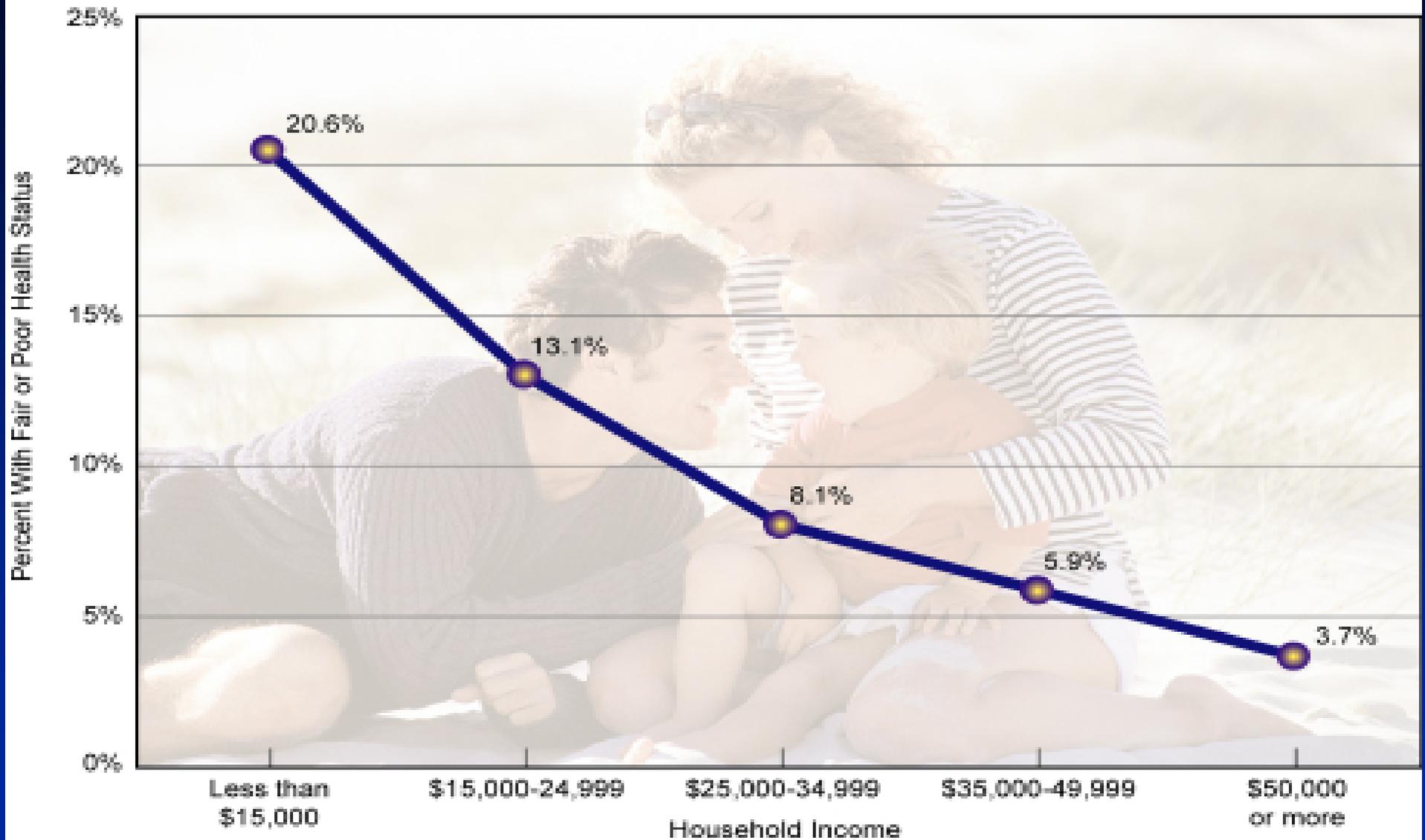


Adjusting for SES would attenuate or eliminate the association between ethnicity and health

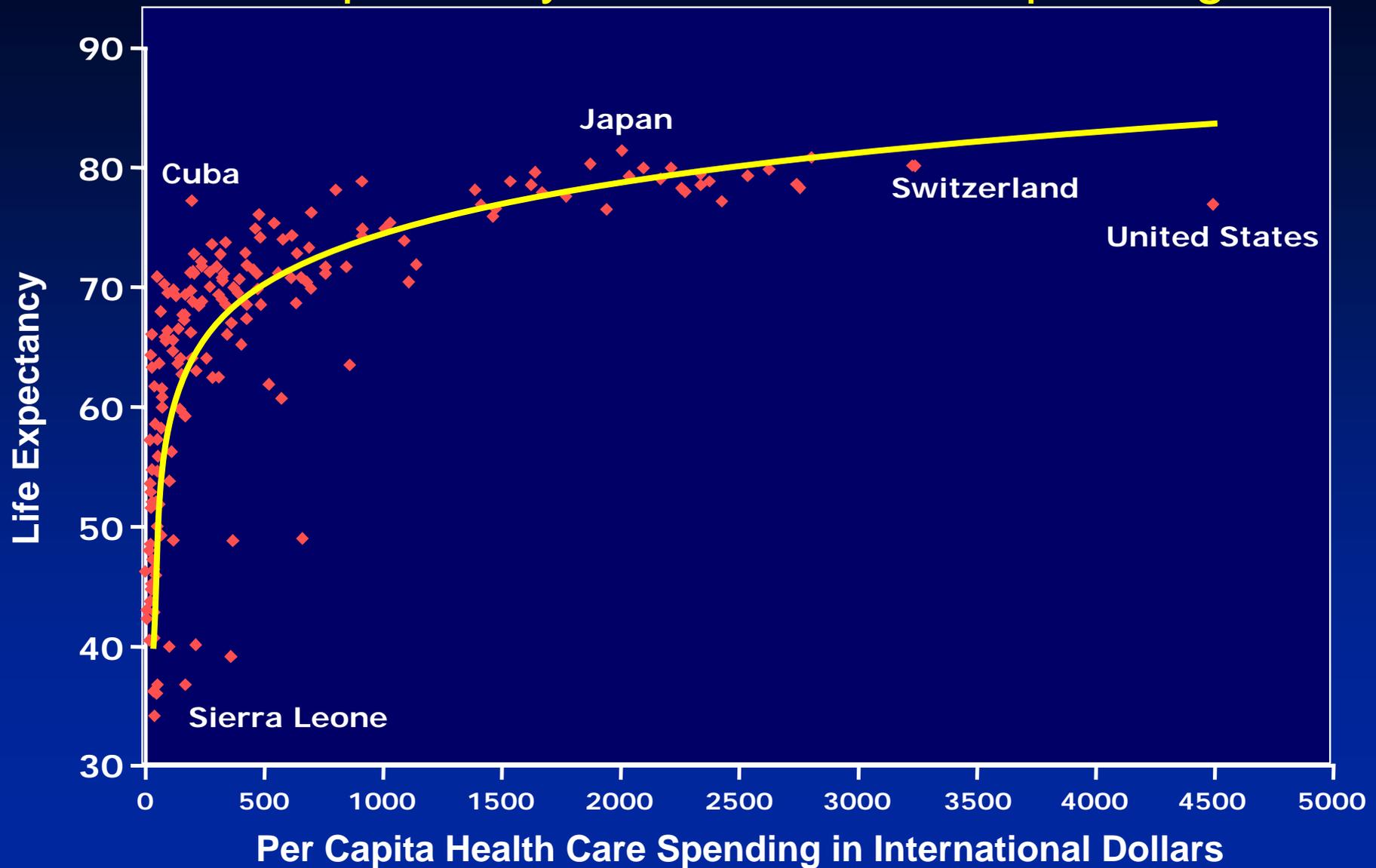
- fallacy in equating race/ethnicity with biology
- trying to understand if ethnicity shows *independent effect*

The picture may be simple,
but more often, very complex

Relationship Between Household Income and Fair or Poor Health Status



Life Expectancy vs. Health Care Spending



<http://ucatlas.ucsc.edu/spend.php>

What do various systems cover?

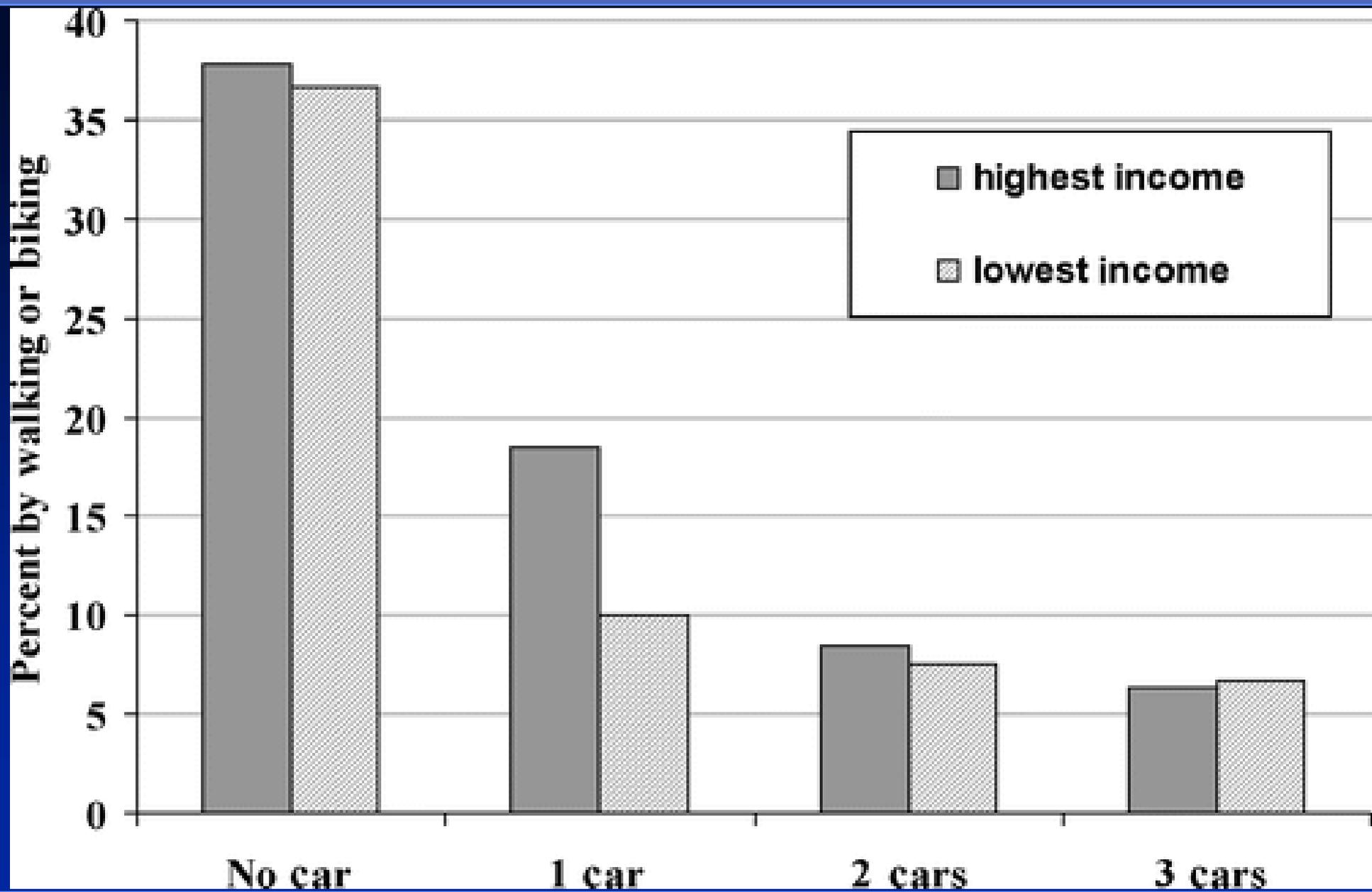
- US BRFSS

- Optional modules with questions such as

- Do you own or rent your home?
 - In the past 30 days, have you been concerned about having enough food for you or your family?
 - Within the past 12 months at work, do you feel you were treated worse than, the same as, or better than people of other races?

What do various systems cover?

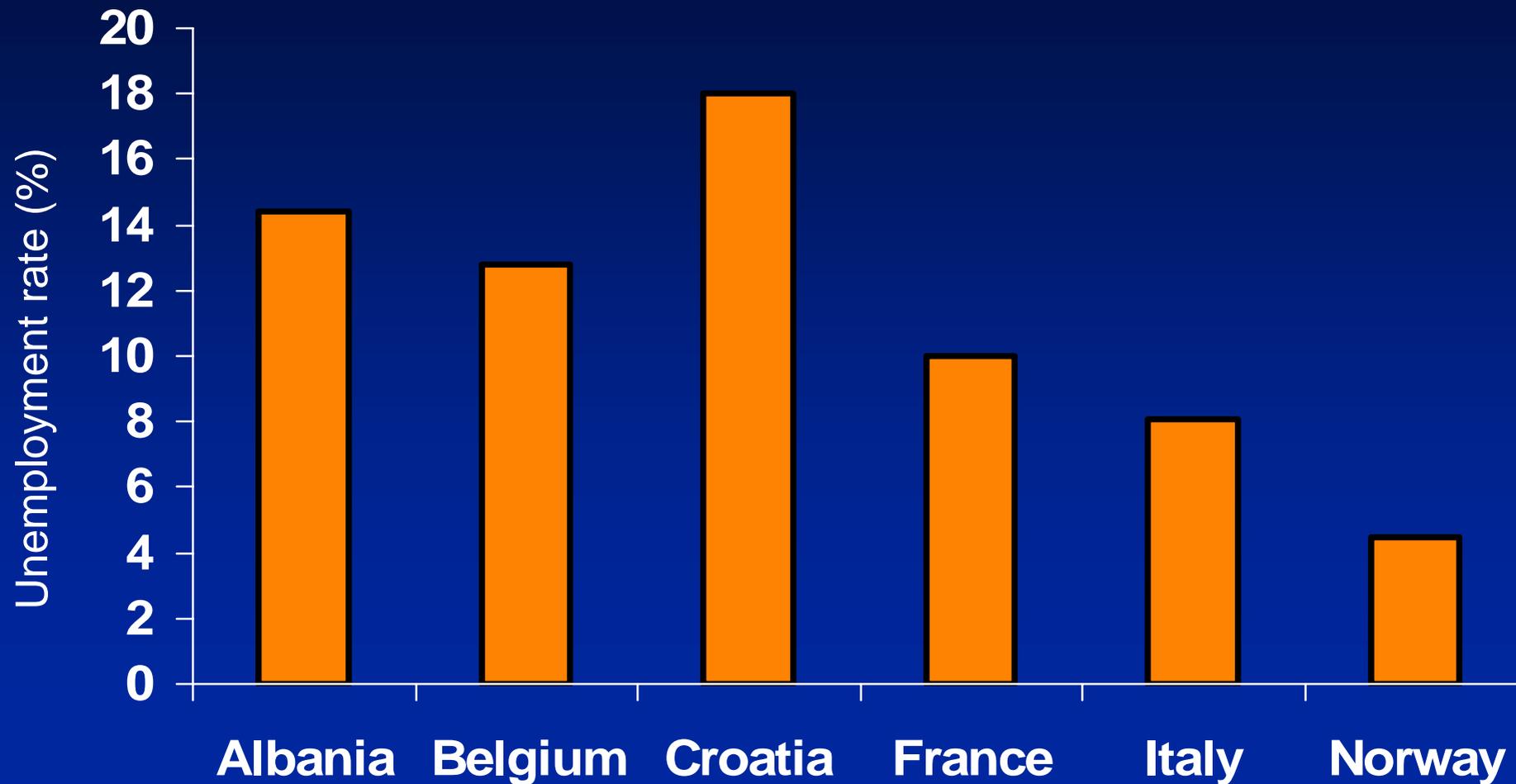
- Data Set Directory of Social Determinants of Health at the Local Level
 - Covers 12 dimensions including
 - Economy
 - Median per capita income
 - Housing
 - Percent of housing units vacant
 - Public Health
 - Local government expenditures on health
 - Transport
 - No. of automobiles per household



What do various systems cover?

- WHO Health for All database
 - Range of indicators covering
 - Demographic and socioeconomic factors
 - Unemployment rate
 - Ave. population density
 - Environmental
 - % of population with access to sewer system
 - Health care utilization
 - Total health expenditures per person

Unemployment rate in Selected EU countries

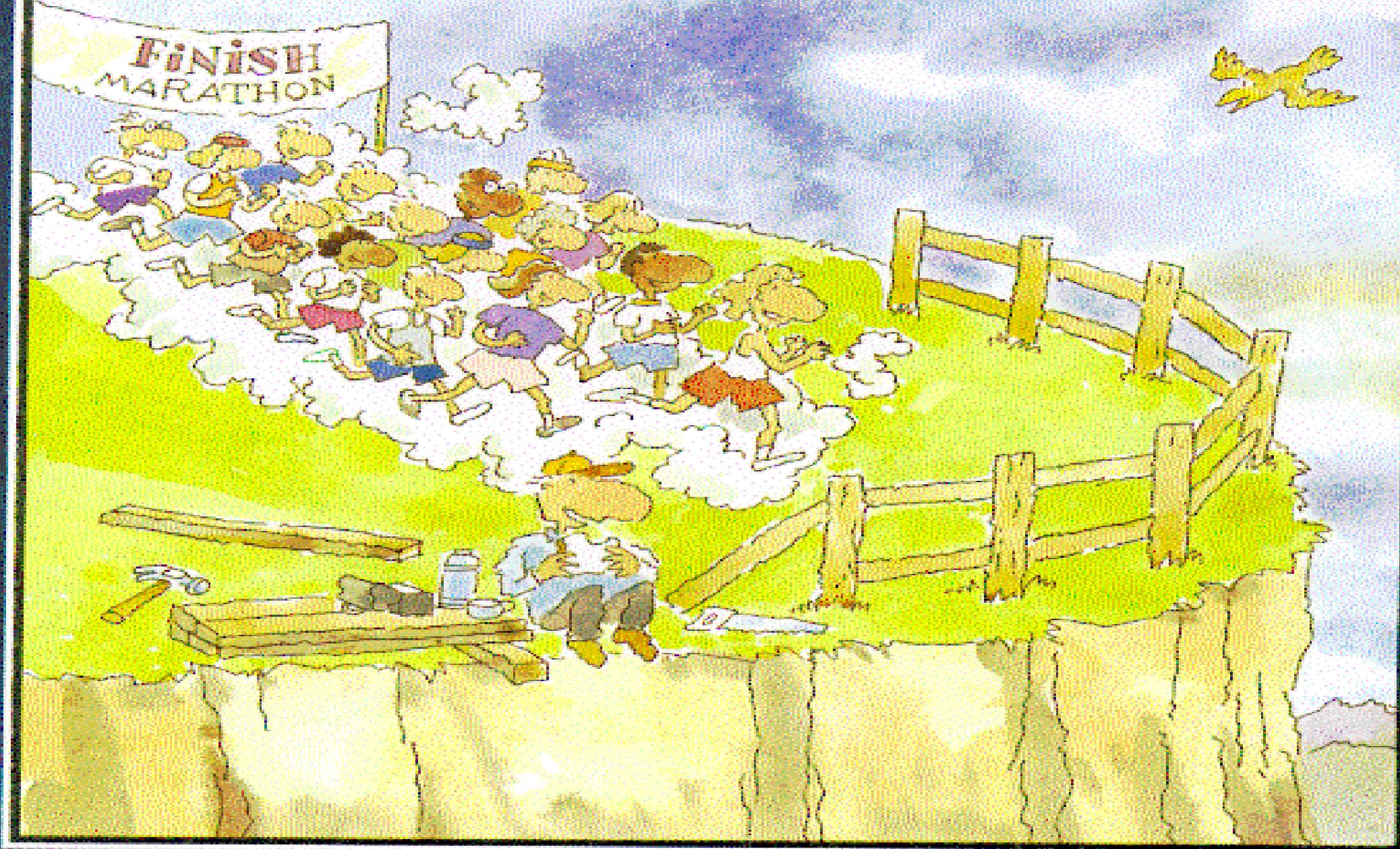


Public policy should focus on the unequal distribution of *high risk social conditions* that shape population health



The Future

- Continue to develop the evidence base on social determinants and interventions
 - Cannot wait for all questions to be answered
- Further refine issues for surveillance
 - Archival vs. new items
- Foster international collaboration
 - Testing of new measures
 - Building the evidence base
 - Global surveillance
- We do not know all of what should be measured
 - But we do know “what gets measured, gets done!”



"It makes more sense to put a strong fence around the top of the cliff than an ambulance down in the valley."

— Joseph Malins