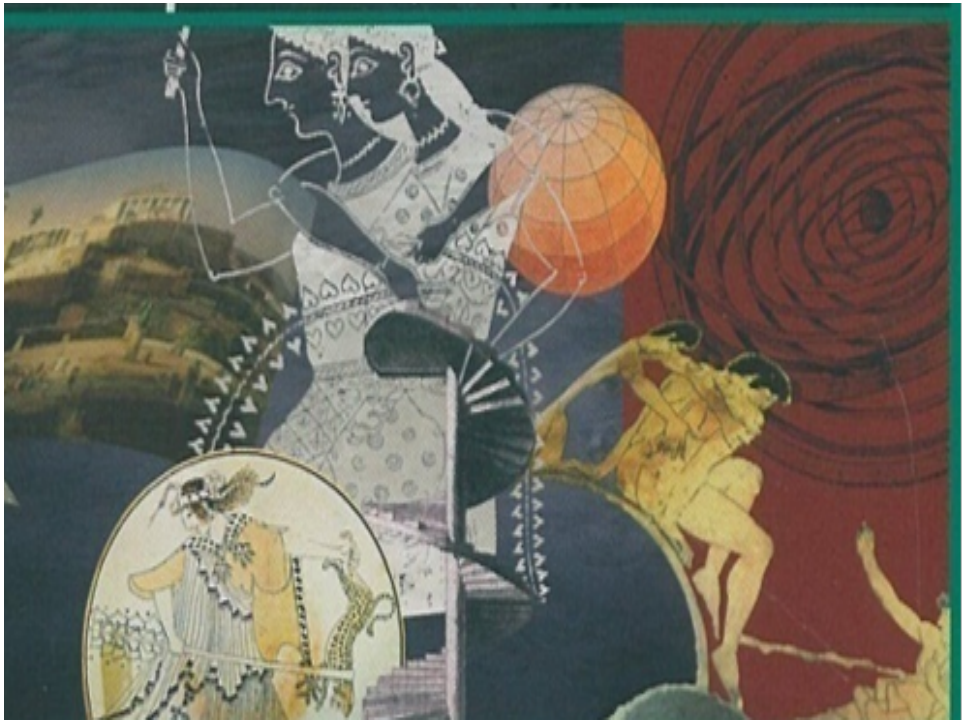


Advancing Health Equity:
Expanding Our Understanding About What Creates Health

Edward P. Ehlinger, MD, MSPH
Commissioner, Minnesota Department of Health
September 26, 2017

DEPARTMENT OF HEALTH

Health is essential to the success of the university and society

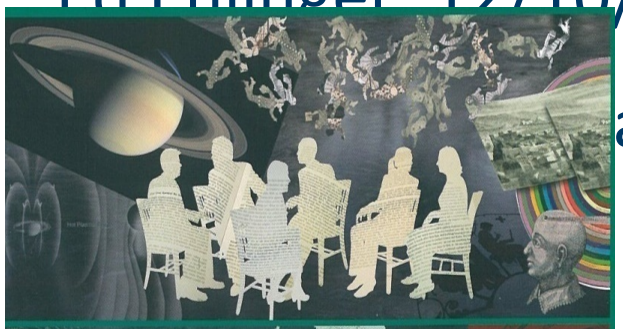
"When health is absent, wisdom cannot reveal itself, art cannot become manifest, strength cannot fight, wealth becomes useless, and intelligence cannot be applied."

Gary Hallmann

The success of all sectors of our society is essential to our health and the university helps makes that happen

"Health is absent when wisdom cannot reveal itself, art cannot become manifest, strength cannot fight, wealth becomes useless, and intelligence cannot be applied."

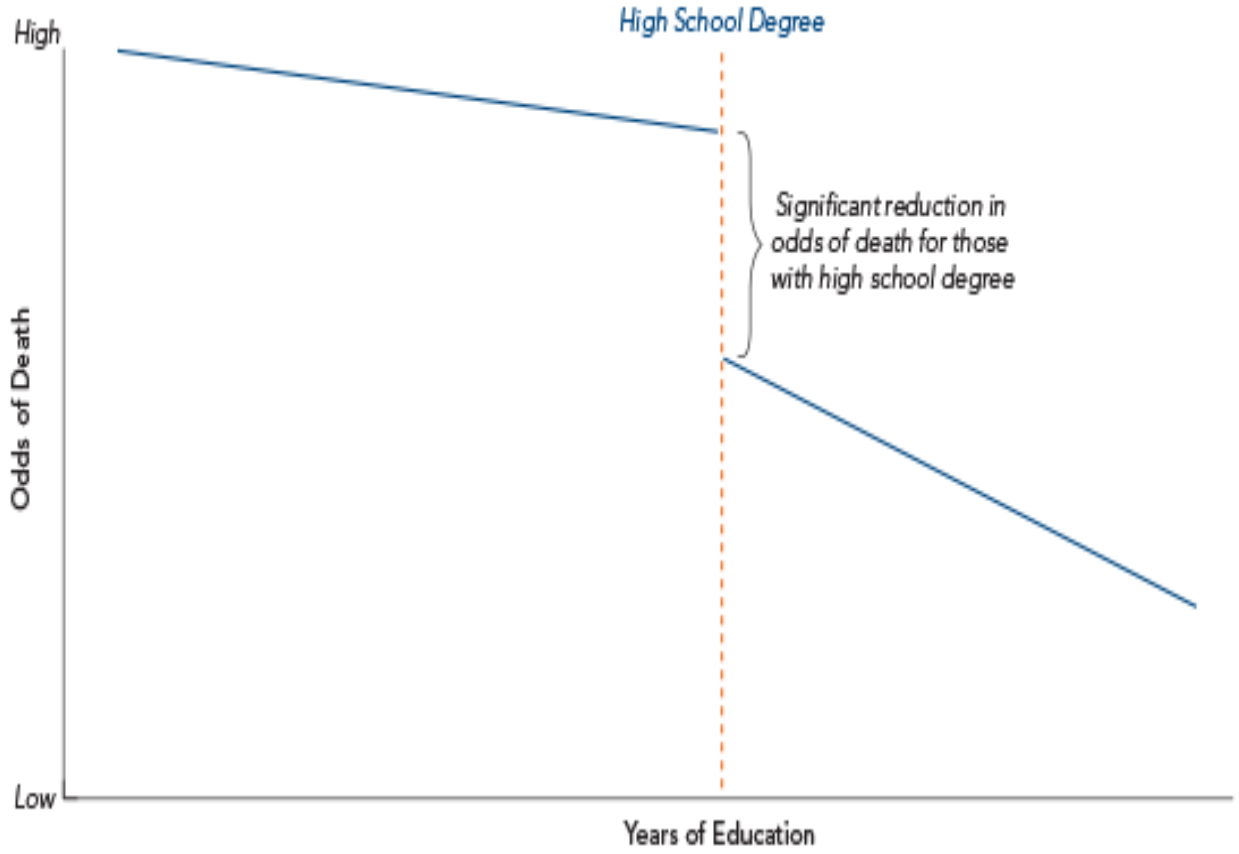
Ed Ehlinger, 12/10/2015 CE



a

Gary Hallmann

Relationship Between Educational Attainment and Mortality for U.S. Adults



Source: Jennifer Karas Montez et al., "Educational Attainment and Adult Mortality in the United States: A Systematic Analysis of Functional Form," Demography 49, no. 1 (2012): 315-36..

Ruth Boynton, MD
Health Service Director 1936-1961

- Director of Division of Child Hygiene at MDH
- First Dean of the School of Public Health
- First MCH Director in School of

- Executive Committee of MPH
- Fellow of APHA
- Pioneer in TB control
- Secretary of ACHA

President of Minnesota State Board of Health

T. S. Eliot
born on September 26, 1888

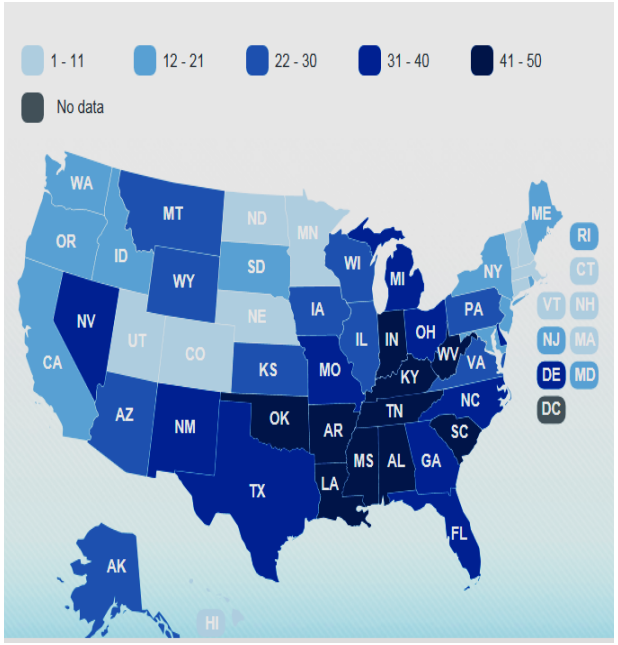
"Where is the Life we have lost in living?

Where is the wisdom we have lost in knowledge?

Where is the knowledge we have lost in information?"

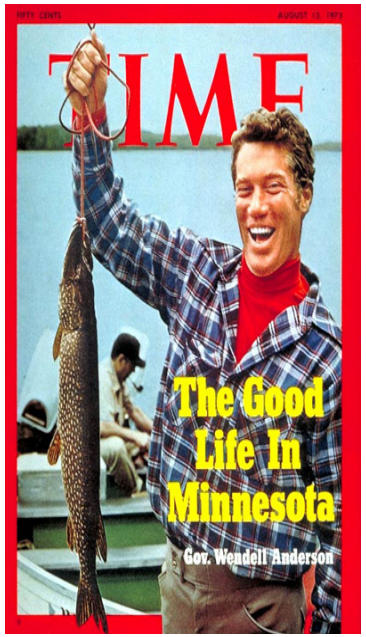
Minnesota is a healthy state

Healthcare system: #1
Health of Seniors: #1
Life expectancy: #2
Well-being index: #3
Infant mortality: #4
Life expectancy after 65: #6

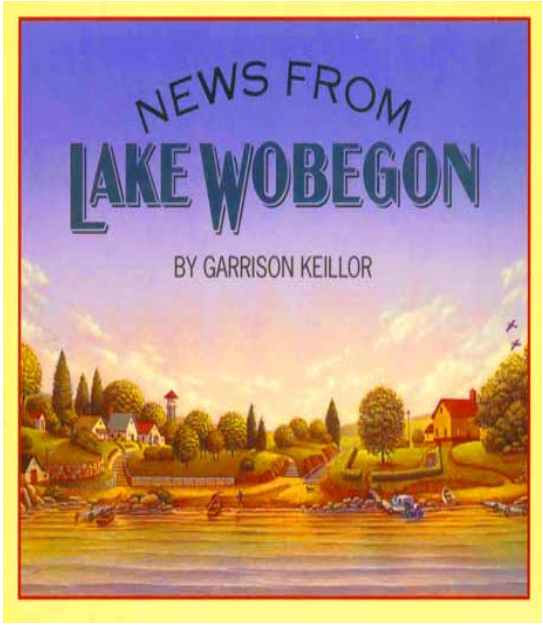


- **State Health Ranking – MN #4**
- MN – Best Place to Retire
- Healthiest Cities Rank – Minneapolis #1

Minnesota is a healthy state

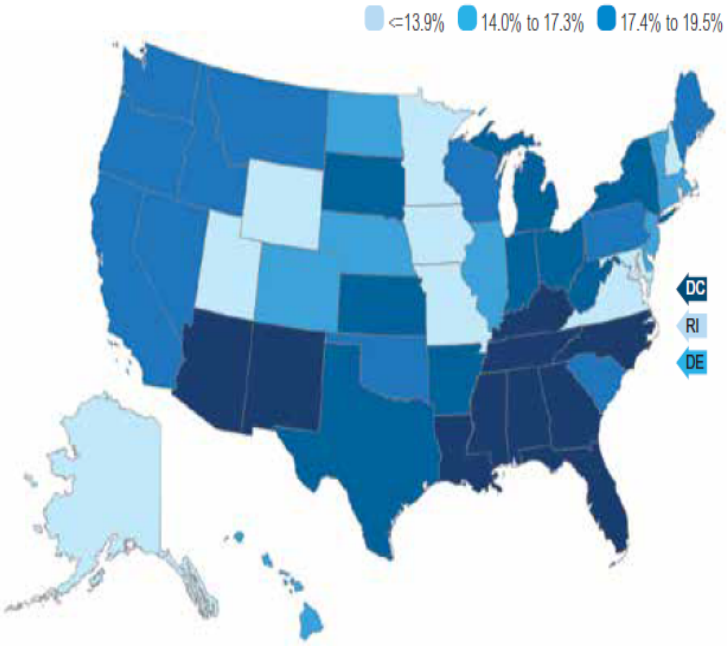


Minnesota!
Where the women are strong,
The men are good looking,
And all our health statistics
are above average –
Unless you are
a person of color or
an American Indian

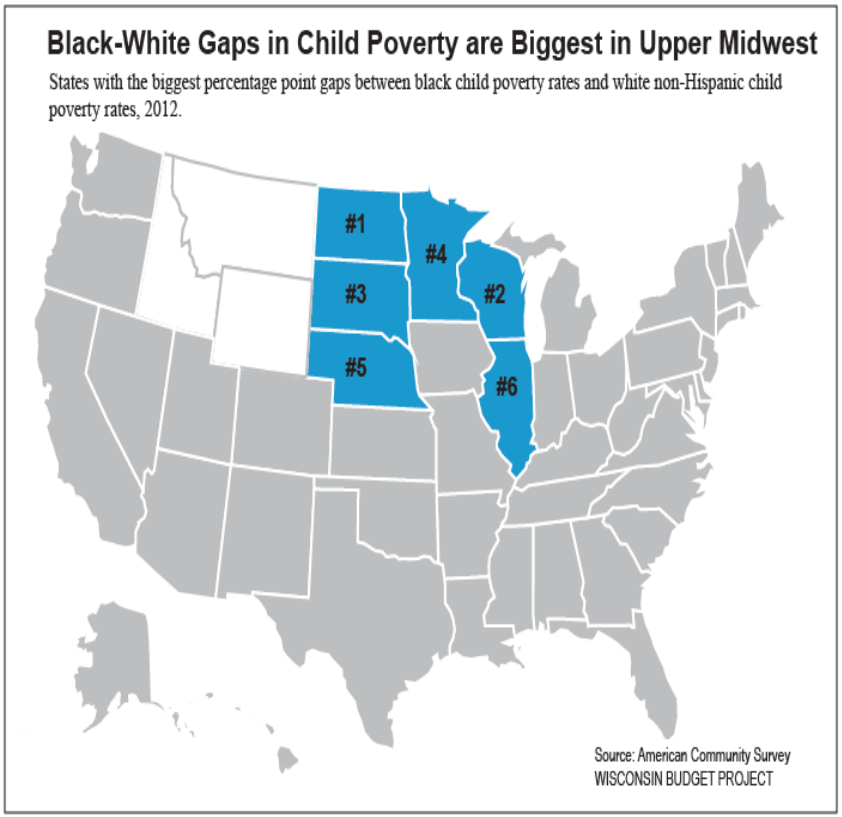


Children in Poverty by State

Percentage of children younger than 18 years who live in households at or below the poverty threshold

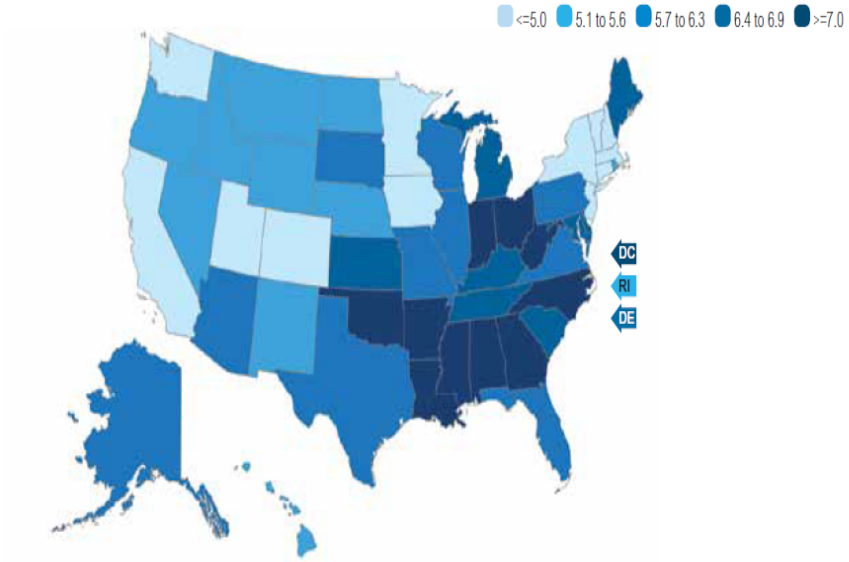


AMERICA'S HEALTH RANKINGS® 2016 ANNUAL REPORT



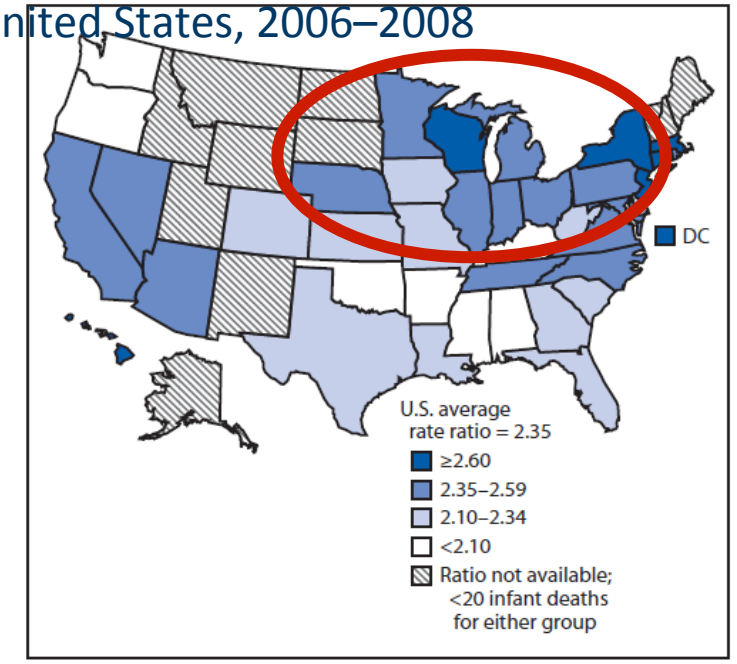
Infant Mortality by State

Number of infant deaths (before age 1 year) per 1,000 live births



AMERICA'S HEALTH RANKINGS® 2016 ANNUAL REPORT

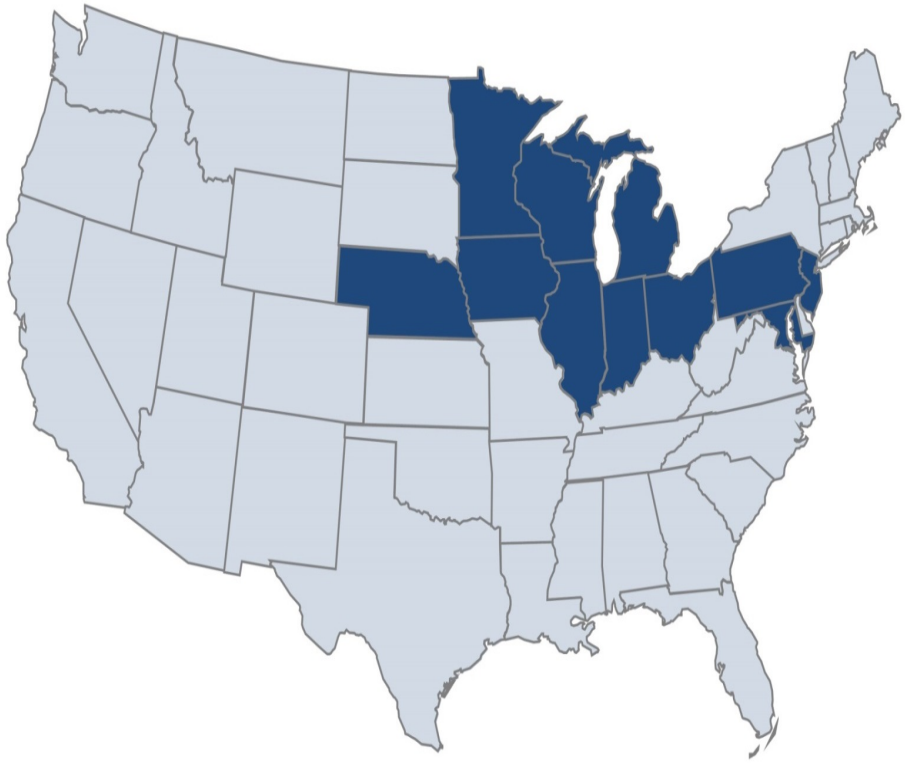
Ratio of non-Hispanic black and non-Hispanic white infant mortality rates,* by state — United States, 2006–2008



Source: National Vital Statistics System, NCHS, CDC

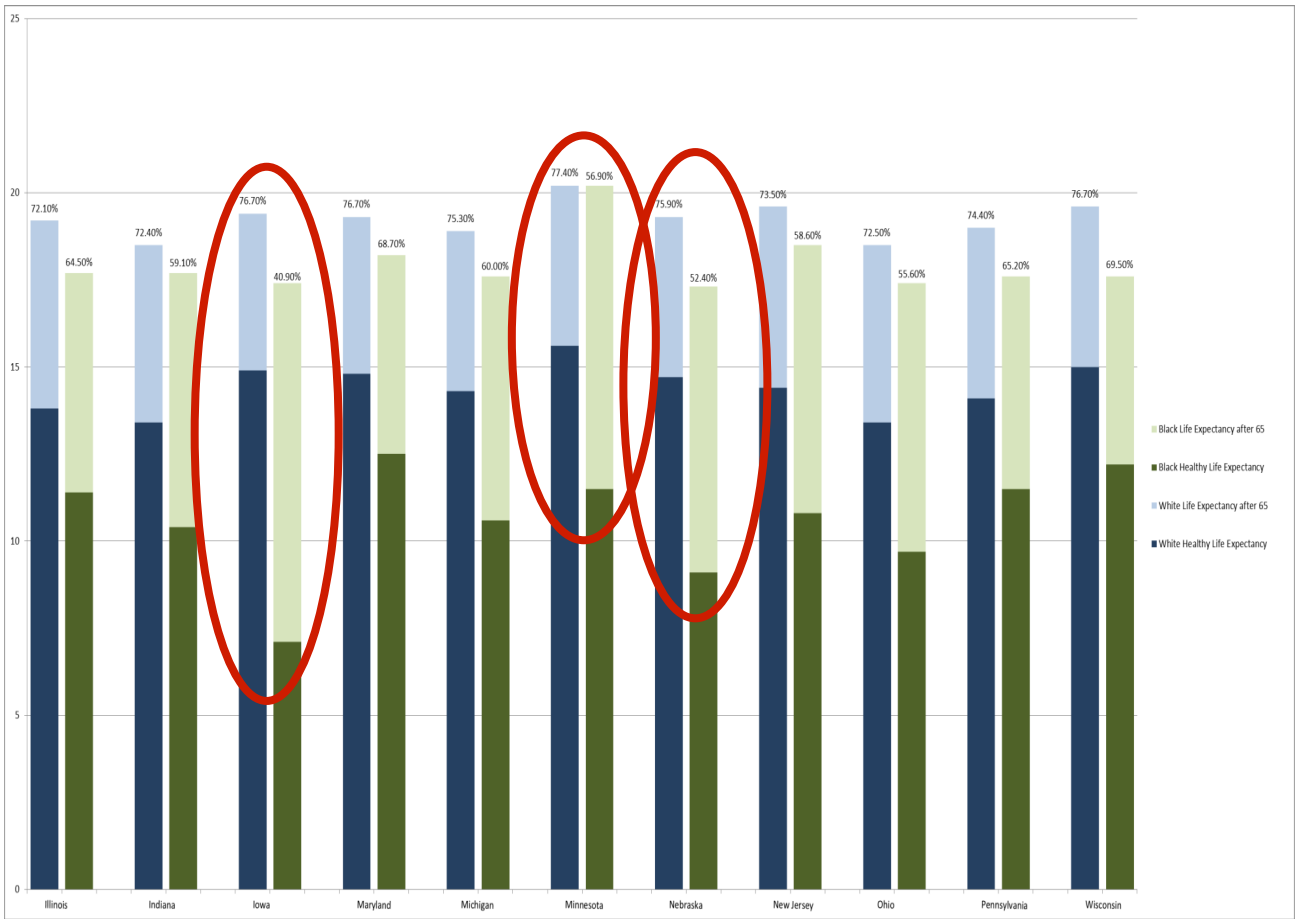
Big Ten Academic Alliance States

- **Universities**
  - Chicago
  - Illinois
  - Indiana
  - Iowa
  - Maryland
  - Michigan
  - Michigan State
  - Minnesota
  - Nebraska
  - Northwestern
  - Ohio State
  - Penn State
  - Purdue
  - Rutgers
  - Wisconsin



Disparities in Birth Outcomes are the tip of the health disparities iceberg

Life Expectancy/Health Life Expectancy After age 65 - By Race



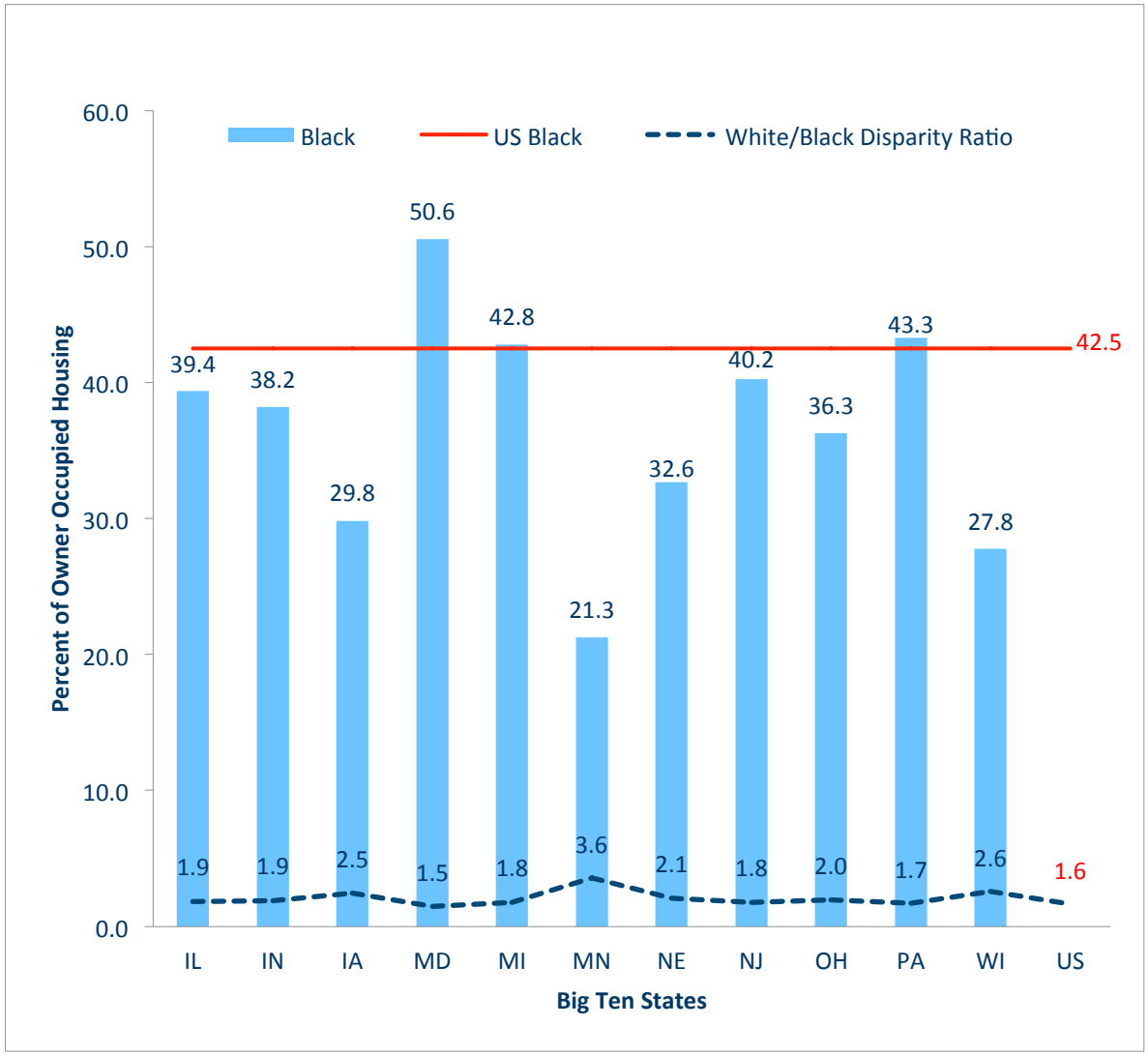
7.6/1.1 13.1/1.2 35.8/1.8 8.0/1.1 15.3/1.2 20.5/1.3 23.51/4 14.9/1.2 16.9/1.3 9.2/1.1 7.2/1.1

White/Black disparity – difference in % / ratio

Disparities in health are the tip of the societal disparities iceberg

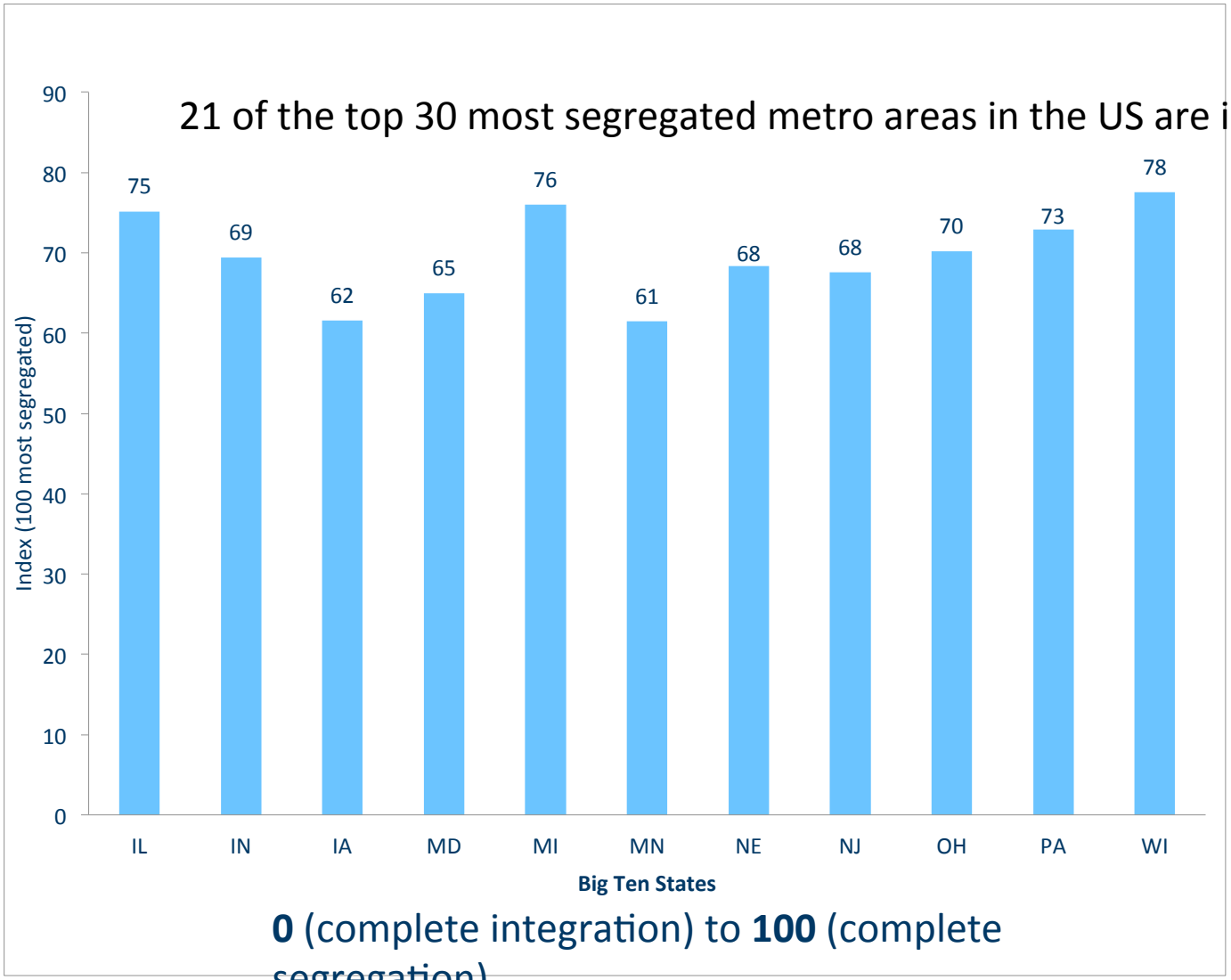
Four Year High School Graduation Rates – SY 2010-2011

Owner Occupied Housing, 2012 ACS



2005-2009 Black-White Segregation Index

21 of the top 30 most segregated metro areas in the US are in Big 10 state

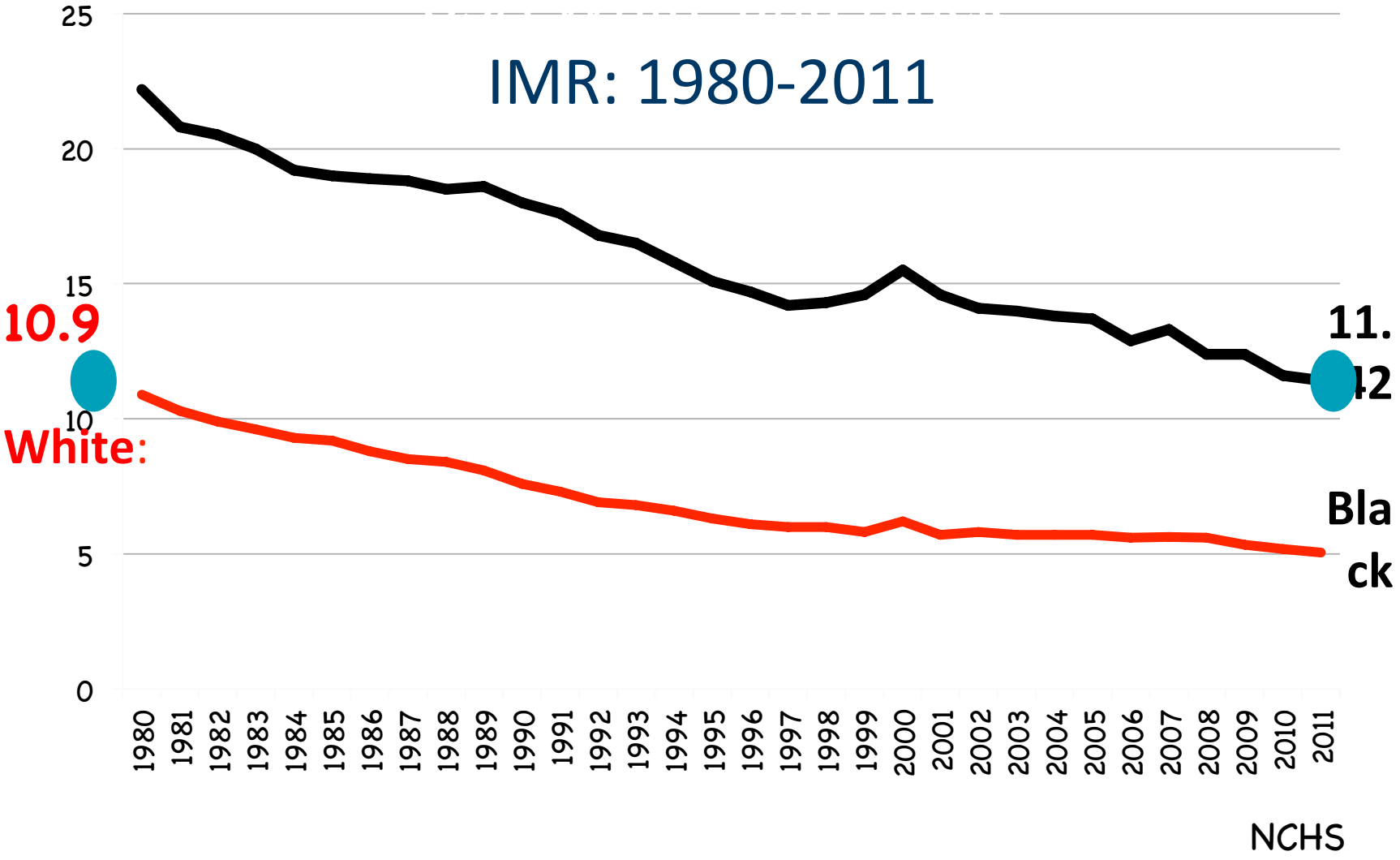


0 (complete integration) to **100** (complete segregation)

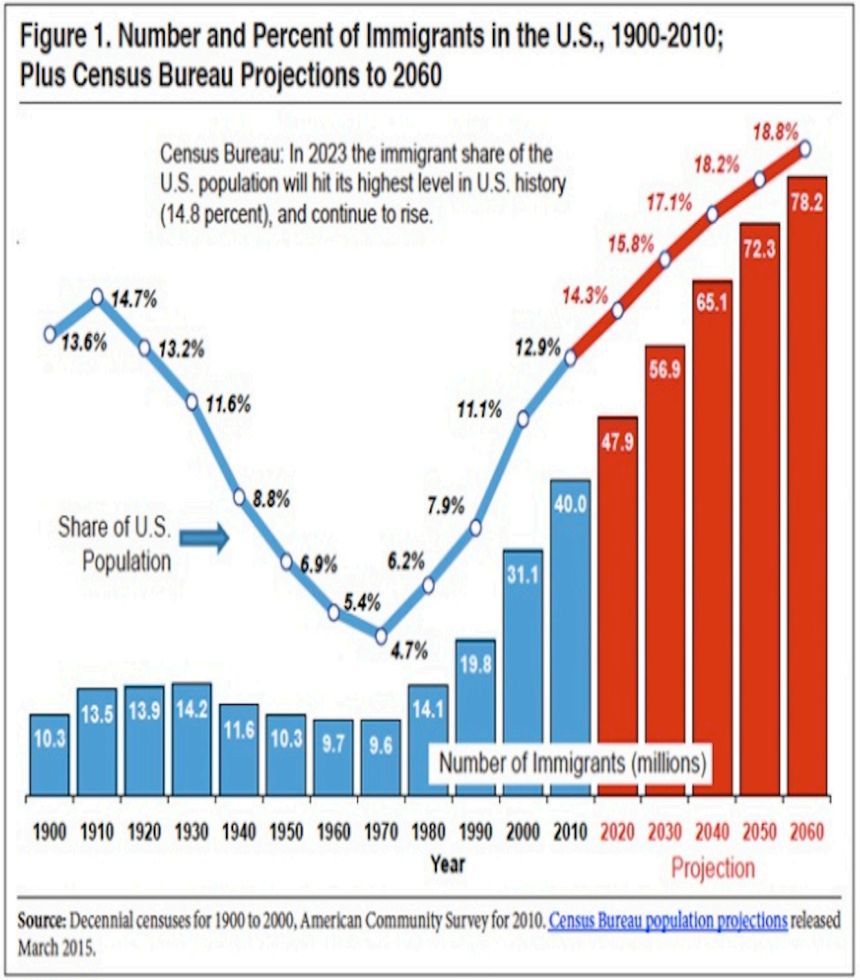
Advancing health and health equity is not about averages.
It's about creating opportunities for everyone to be healthy.

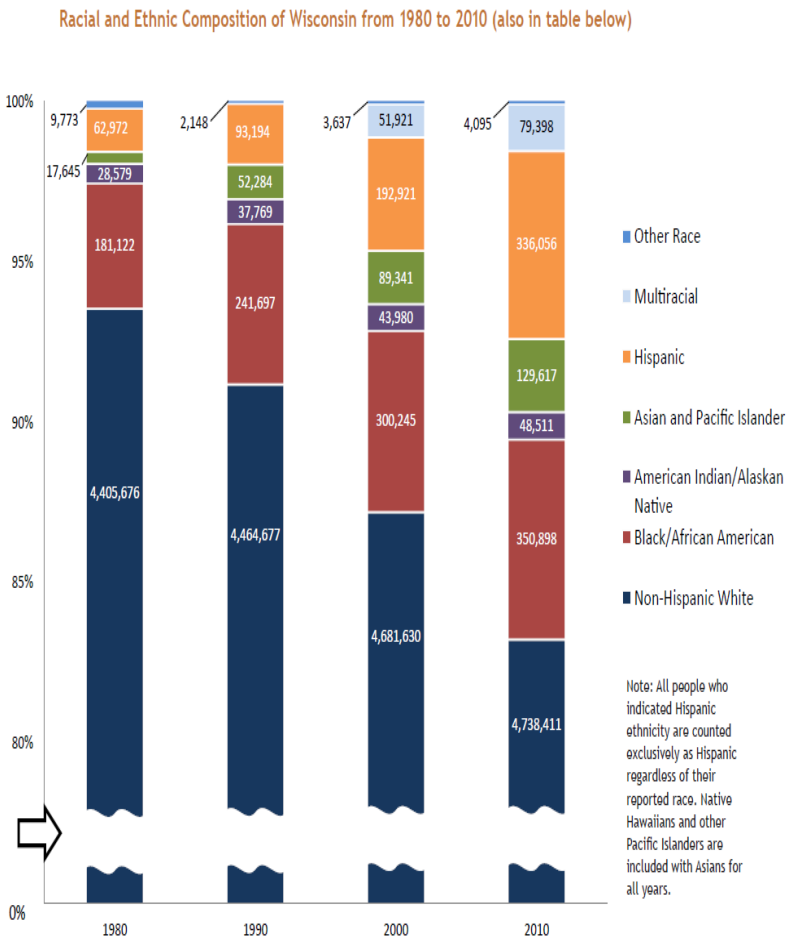
The opportunity to be healthy is not equally available everywhere or for everyone.

One way to measure opportunity



Why Should People Be Concerned About



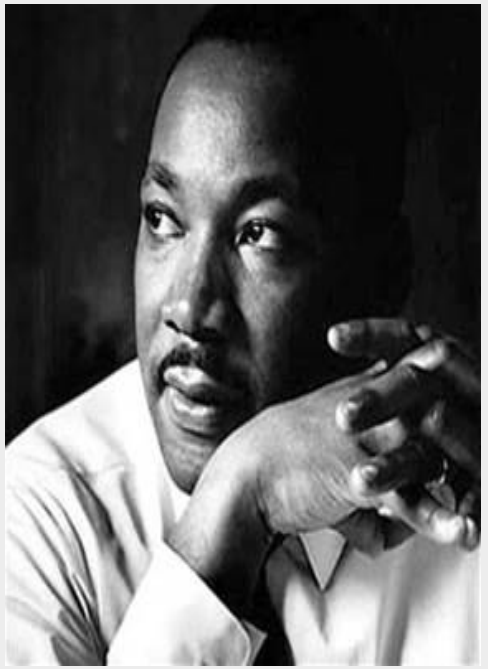


It's a math problem

It's a social justice problem…

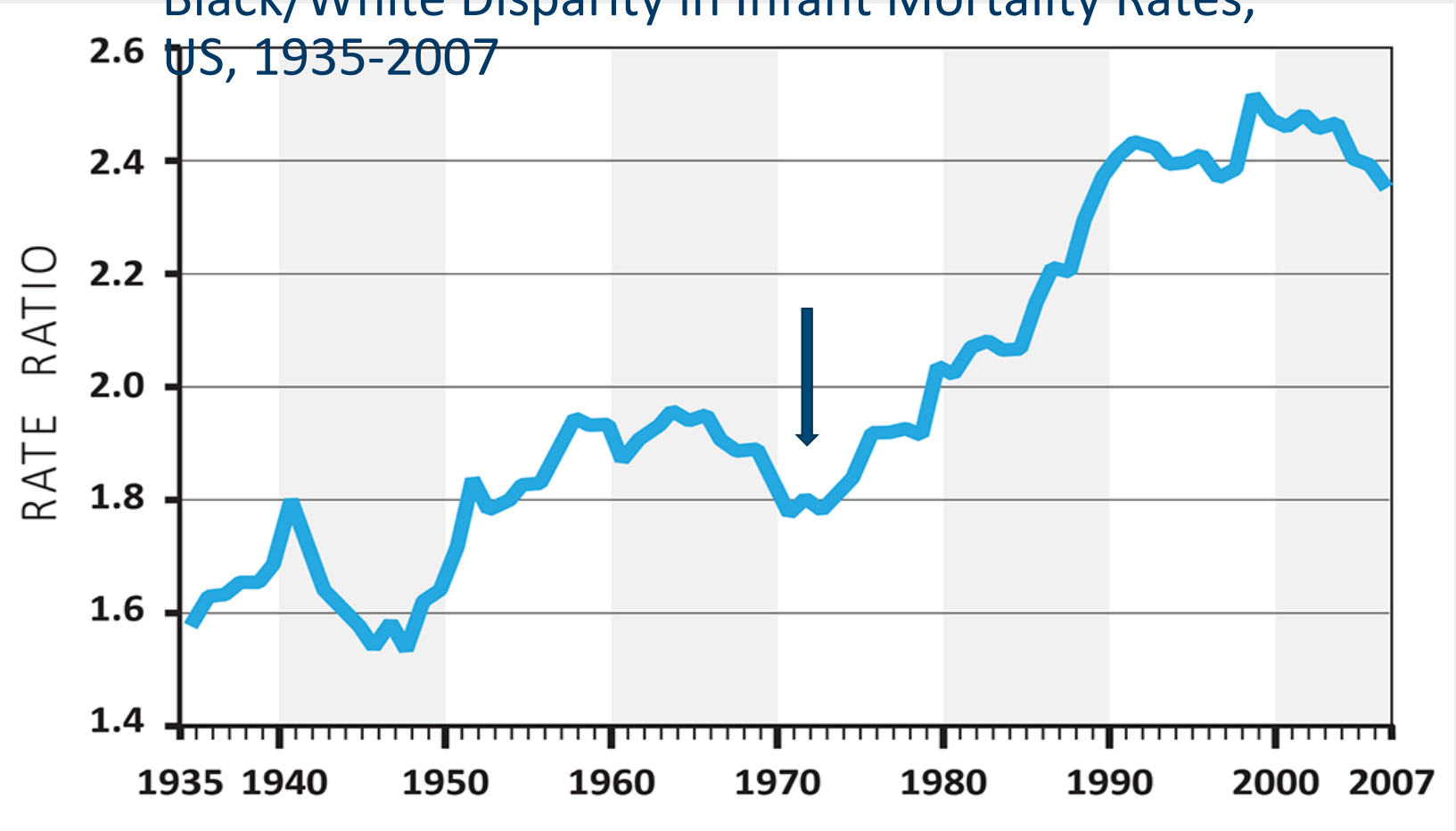
"Injustice anywhere is a threat to justice everywhere. We are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly, affects all indirectly."

MLK, Jr, Letter from Birmingham Jail, April 16, 1963



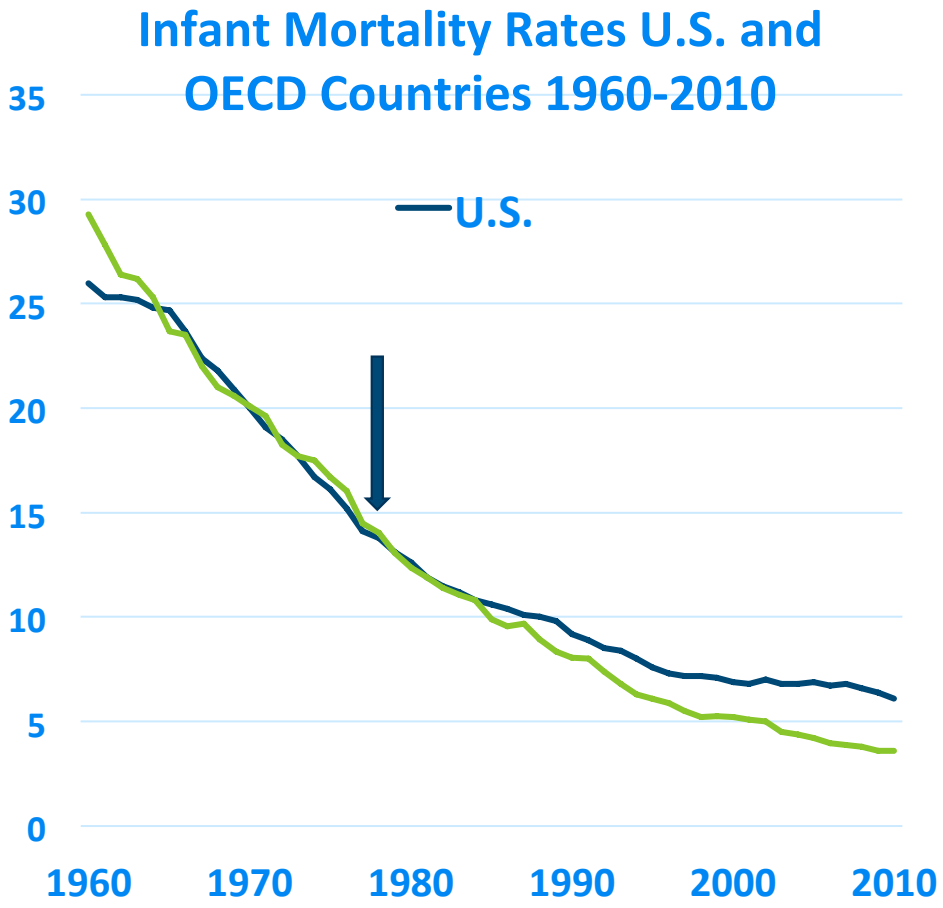
"Injustice anywhere…

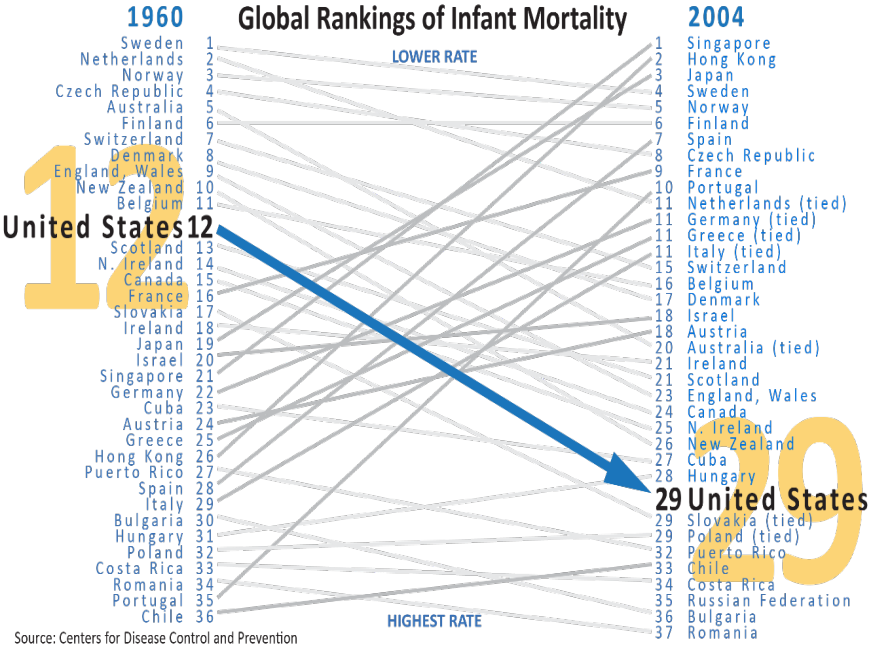
Black/White Disparity in Infant Mortality Rates, US, 1935-2007



National Center for Health Statistics, Health United States, 2009 (updated)

…is a threat to justice everywhere.”

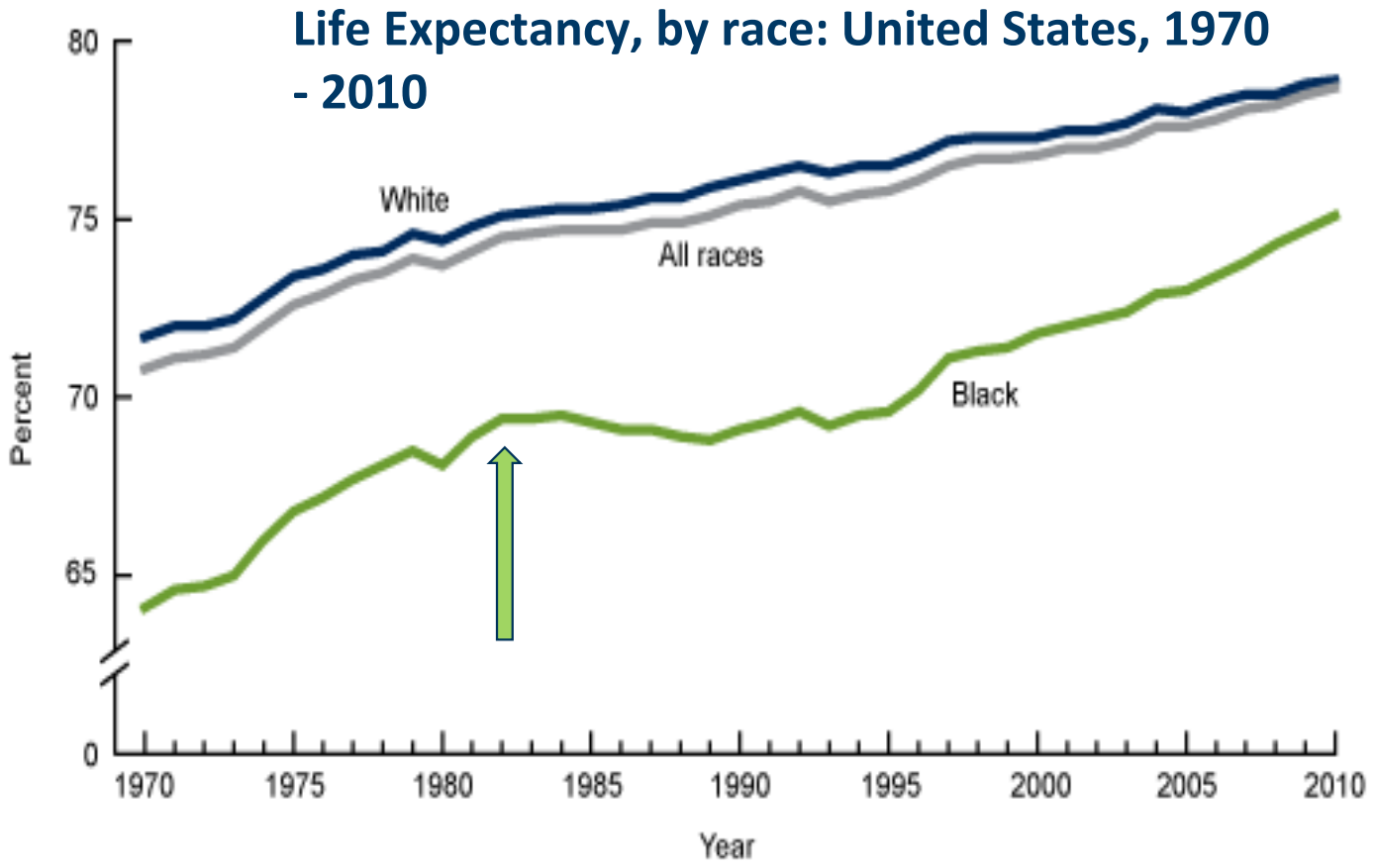




2015 – 38th

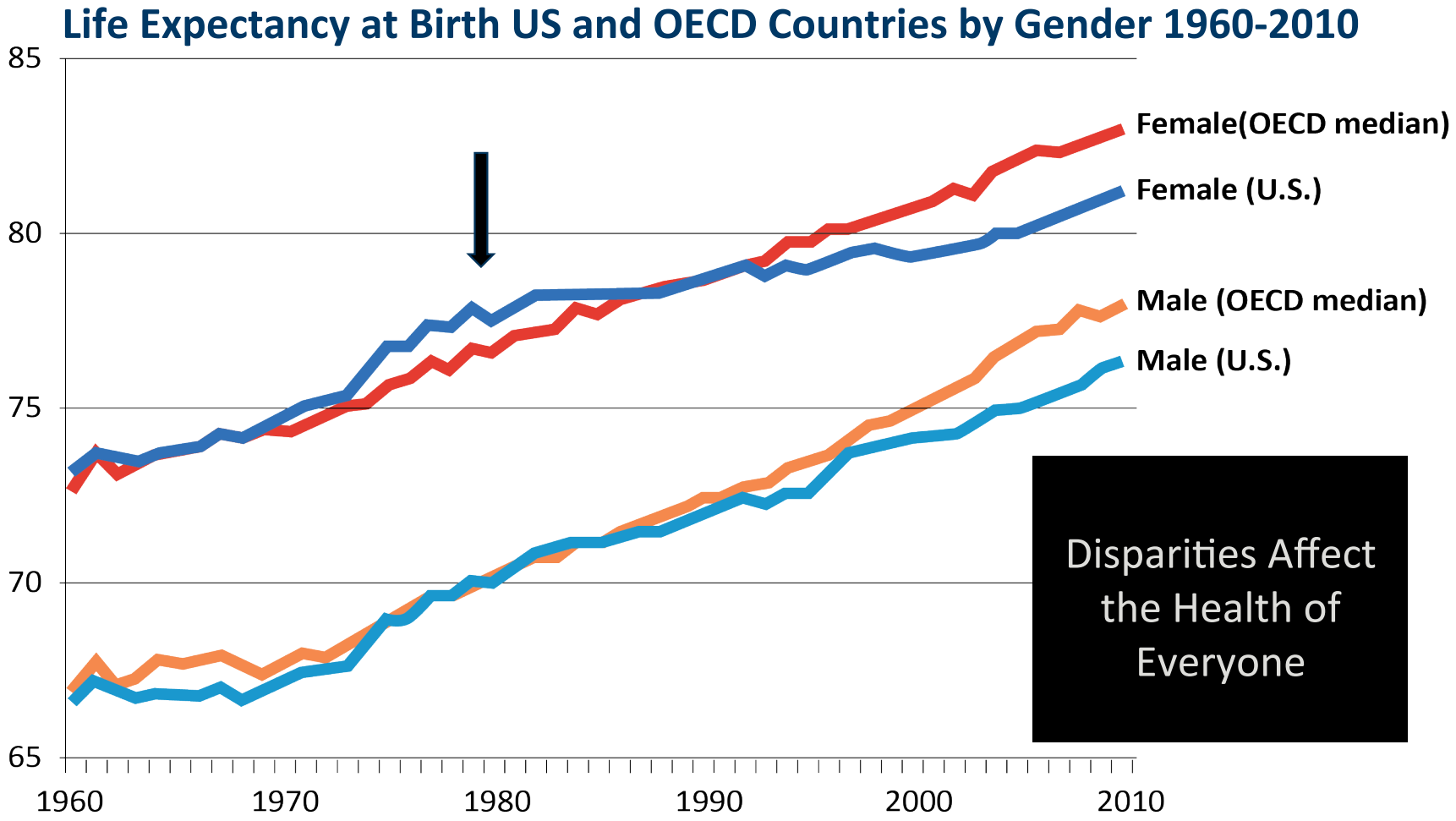
Source: http://stats.oecd.org, accessed 6-10-16

"Injustice anywhere…

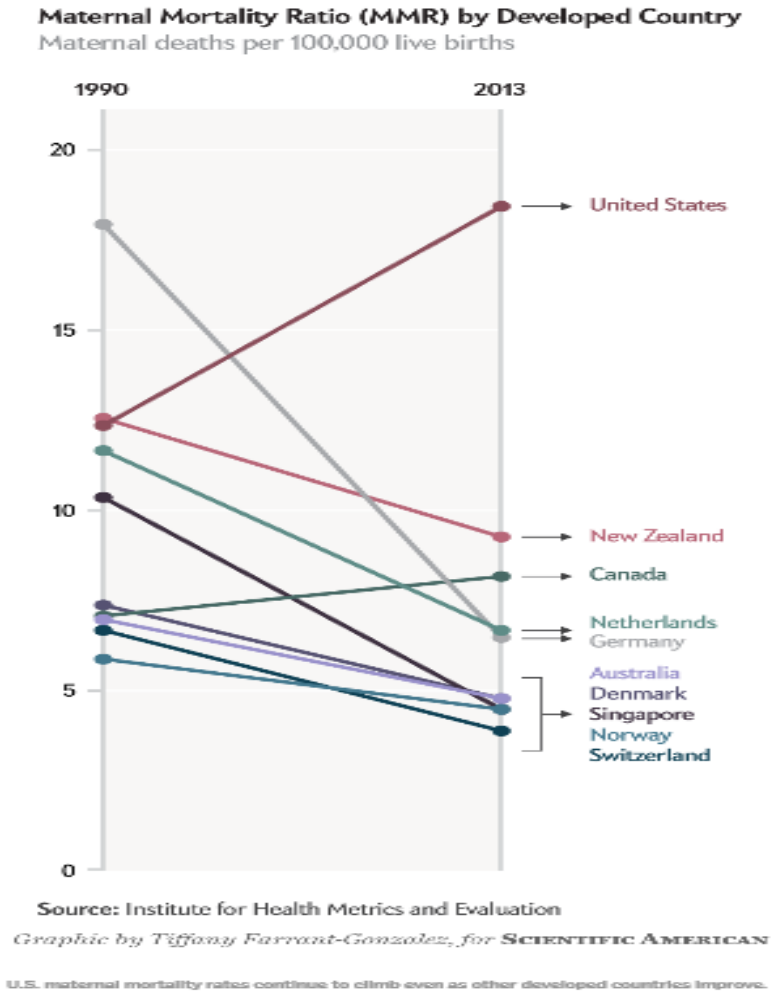


SOURCE: CDC/NCHS, National Vital Statistics System, Mortality.

…is a threat to justice everywhere."

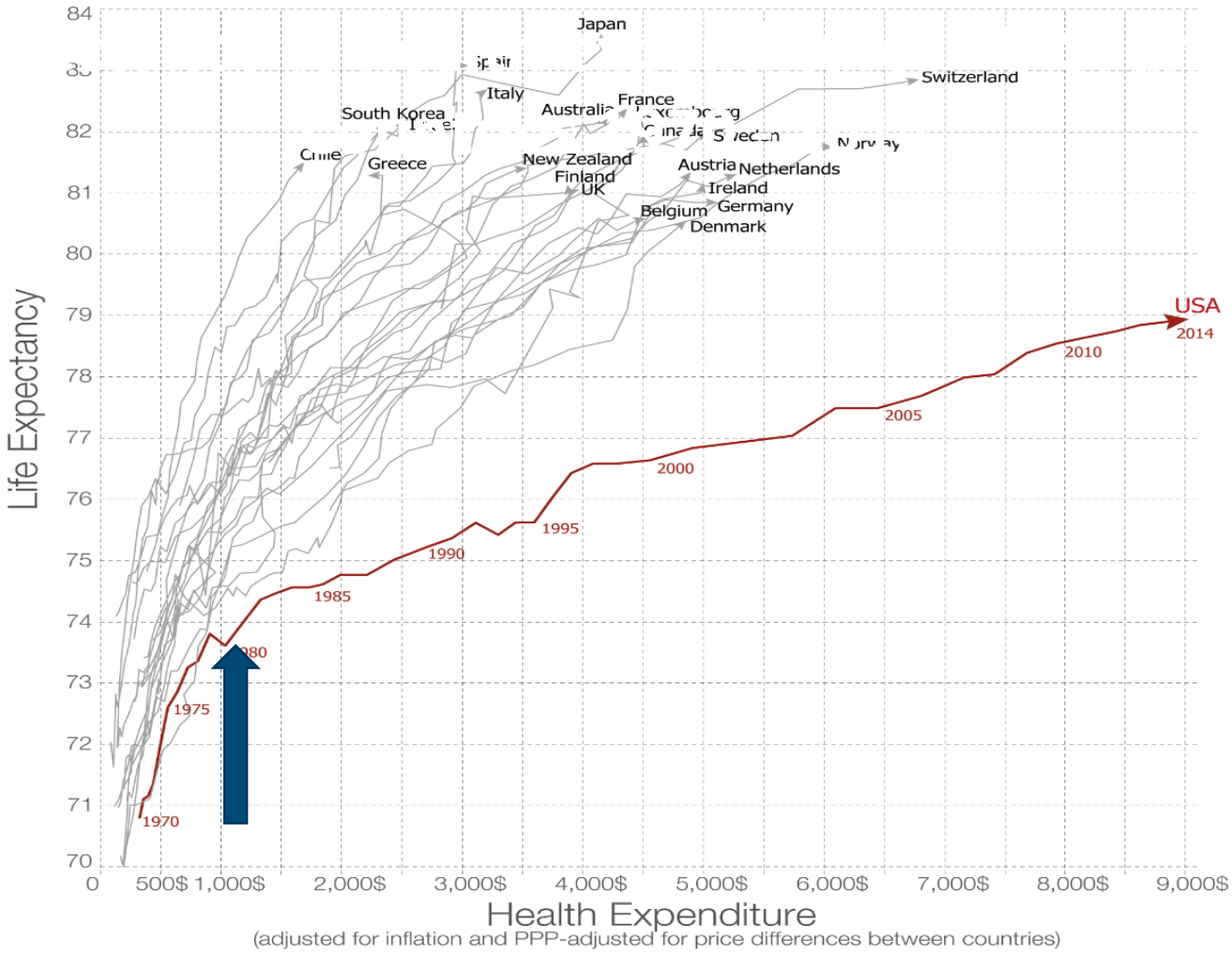


U.S. Ranked 49th in Maternal Mortality in 2008



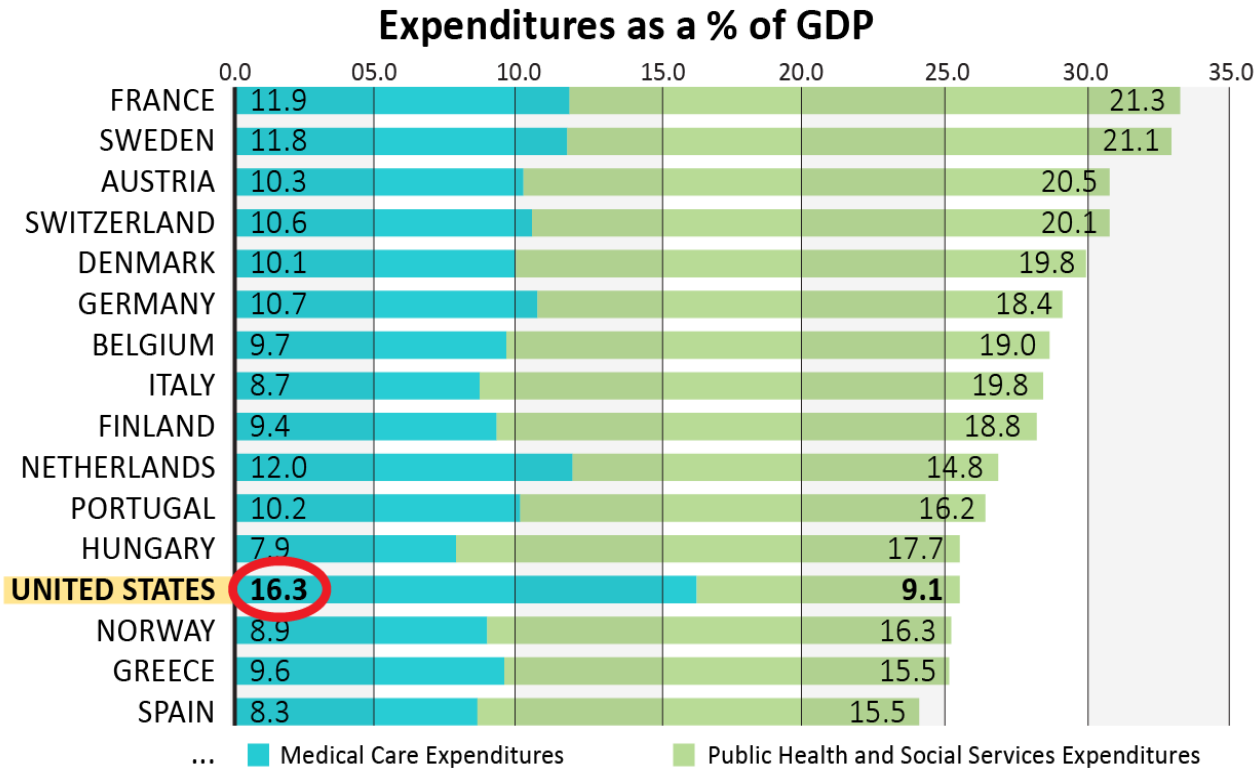
Data from UNICEF, WHO, UN Population Fund,
and World Bank with standardized methodology.

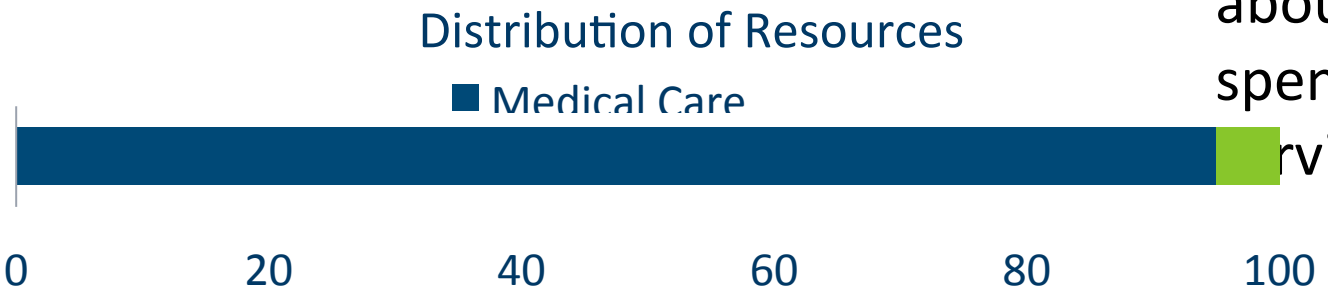
Improvements slowed when we increased our investments in healthcare



Data source: Health expenditure from the OECD; Life expectancy from the World Bank Licensed under CC-BY-SA by the author Max Roser.
The data visualization is available at OurWorldinData.org and there you find more research and visualizations on this topic.

Total Investment in Health and Human Services





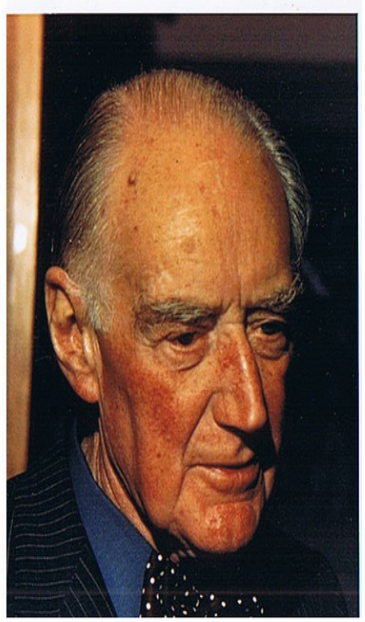
In OECD, for every $1 spent on health care, about $2 is spent on social services.

In the U.S., for every $1 spent on health care, about 55 cents is spent on social services.

"What Sets the Goals of Public Health?"

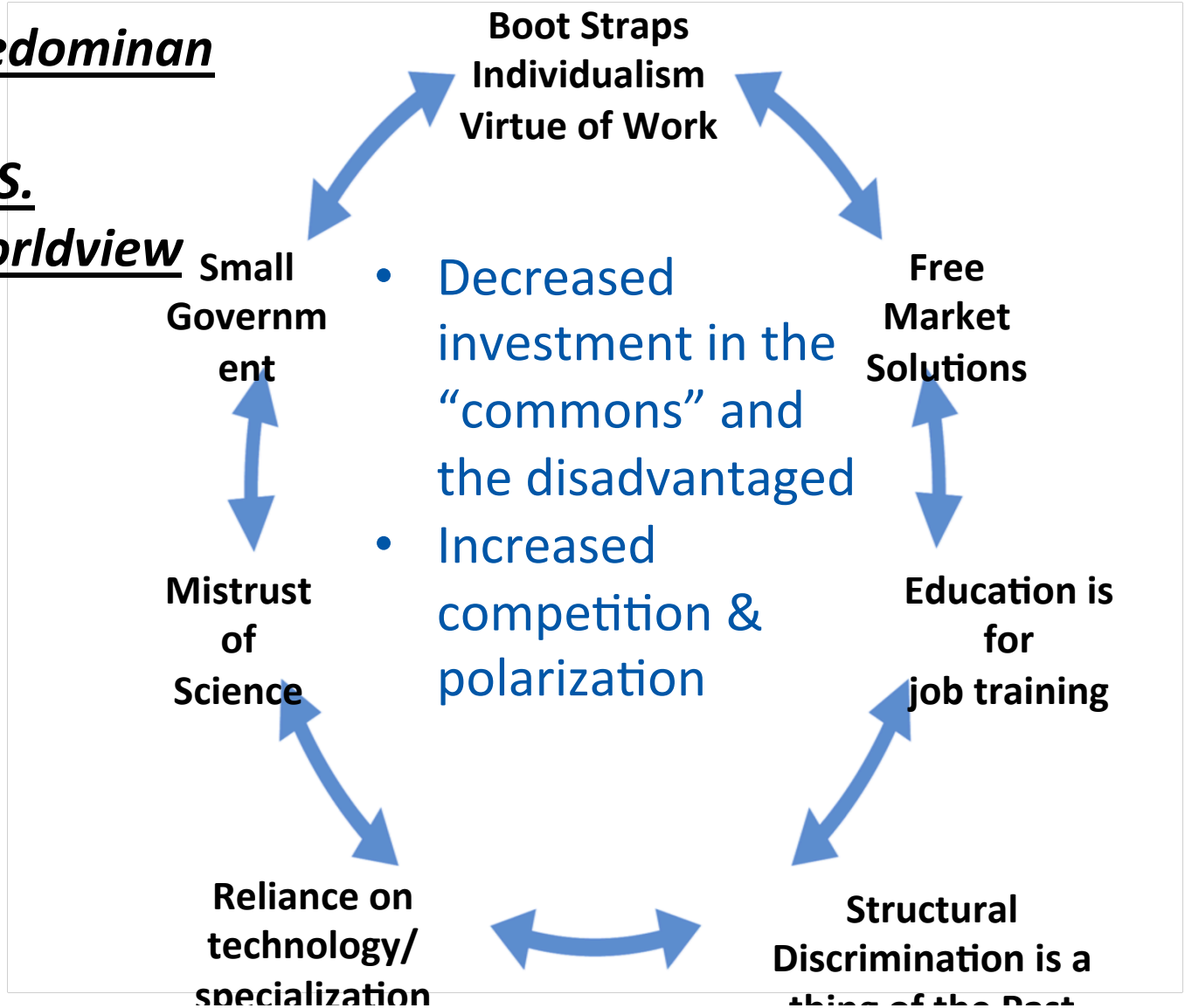
Sir Geoffrey Vickers - 1958

"The landmarks of political, economic and social history are the moments when some condition passed from the category of the given into the category of the intolerable. I believe that the history of public health might well be written as a record of successive re-definings of the unacceptable."



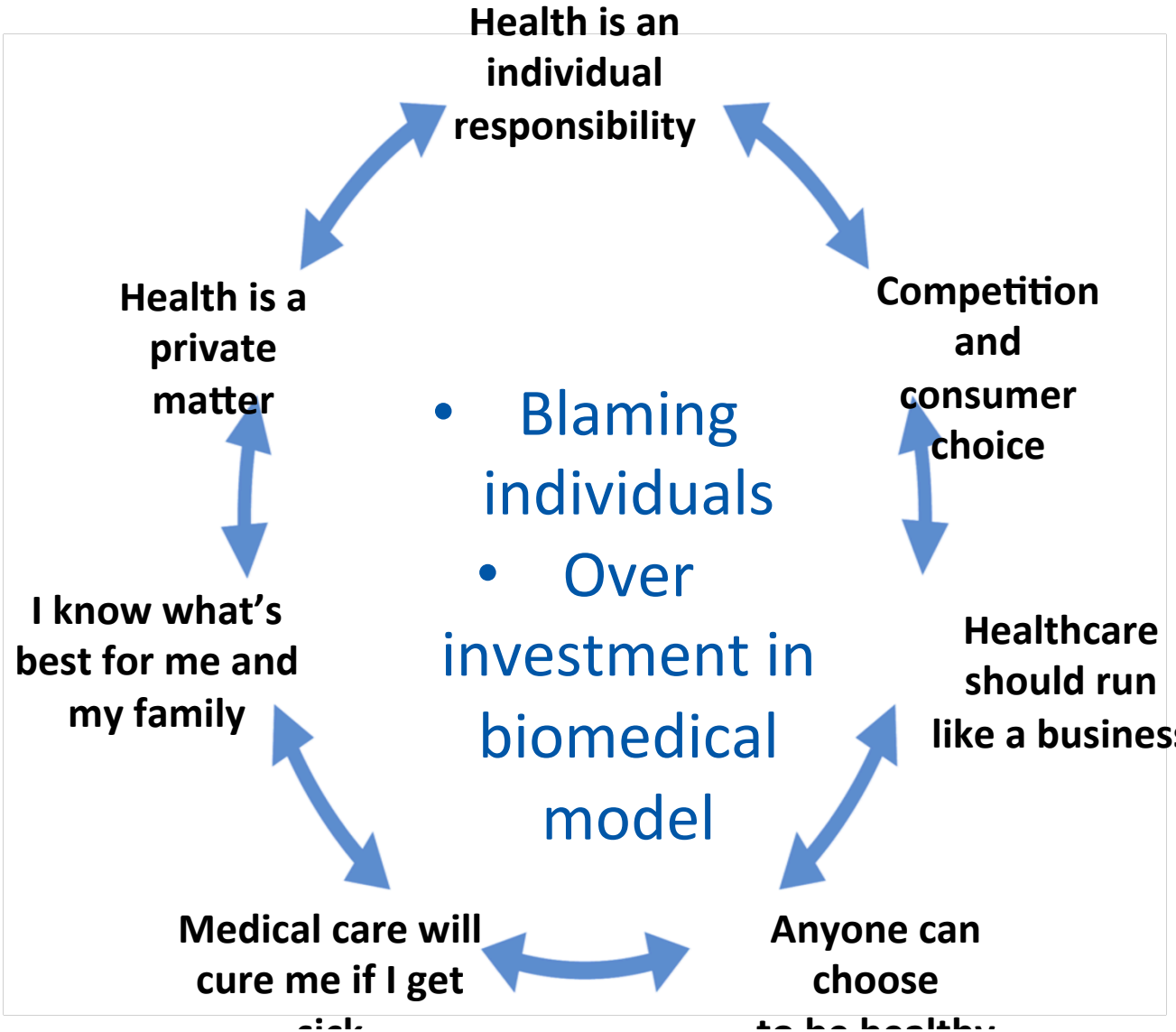
How did this happen?

Predominant U. S. Worldview



- Decreased investment in the "commons" and the disadvantaged
- Increased competition & polarization

Dominant Contemporary Health Narrative



The Dominant Health Narrative is:

- People would be healthy if they worked hard; made good choices about diet, physical activity, and substance use; and had good medical care.

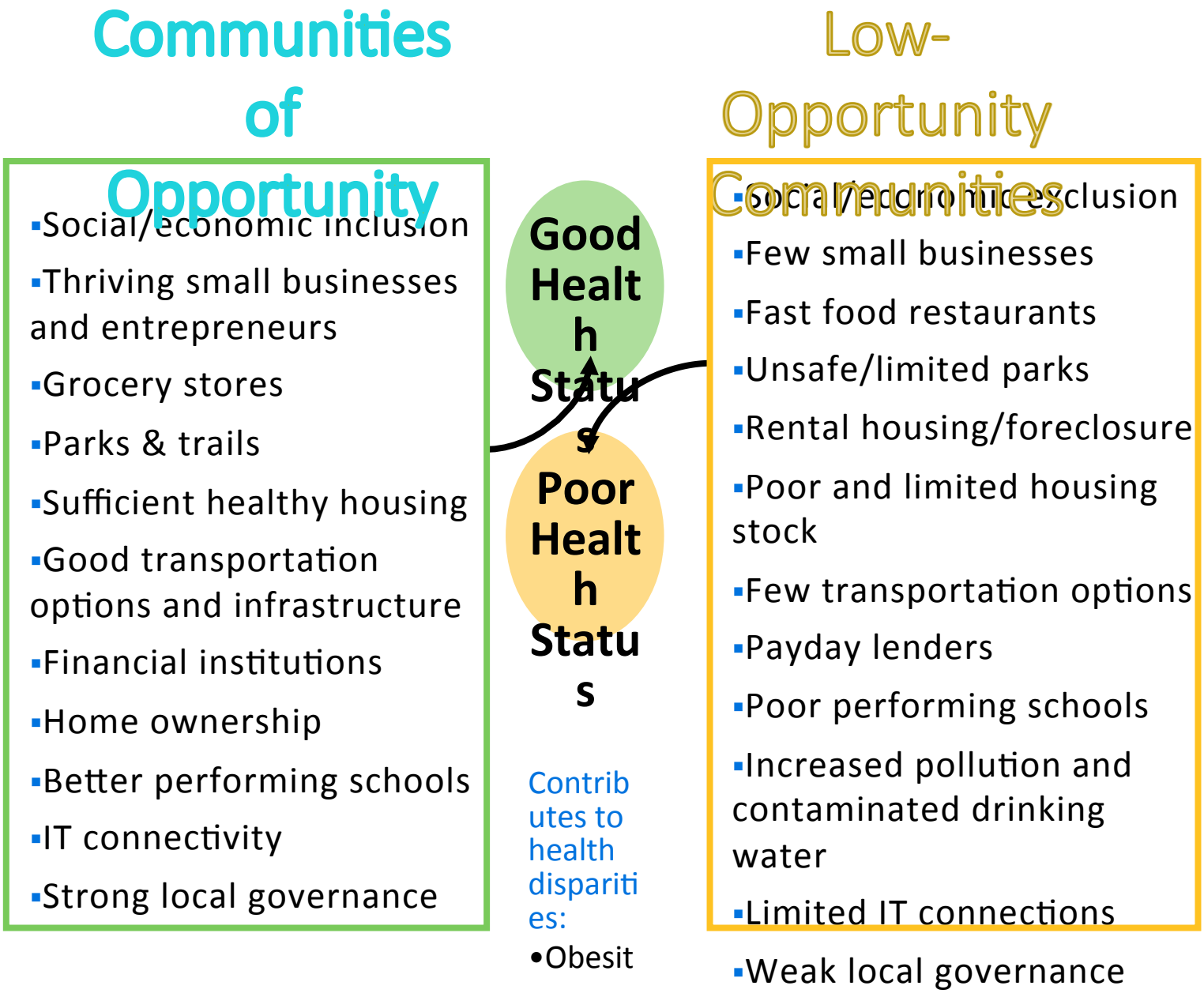
- Health is the responsibility of individuals until they get sick, then it becomes the responsibility of the healthcare

To Advance Health Equity, We Need a Different Approach

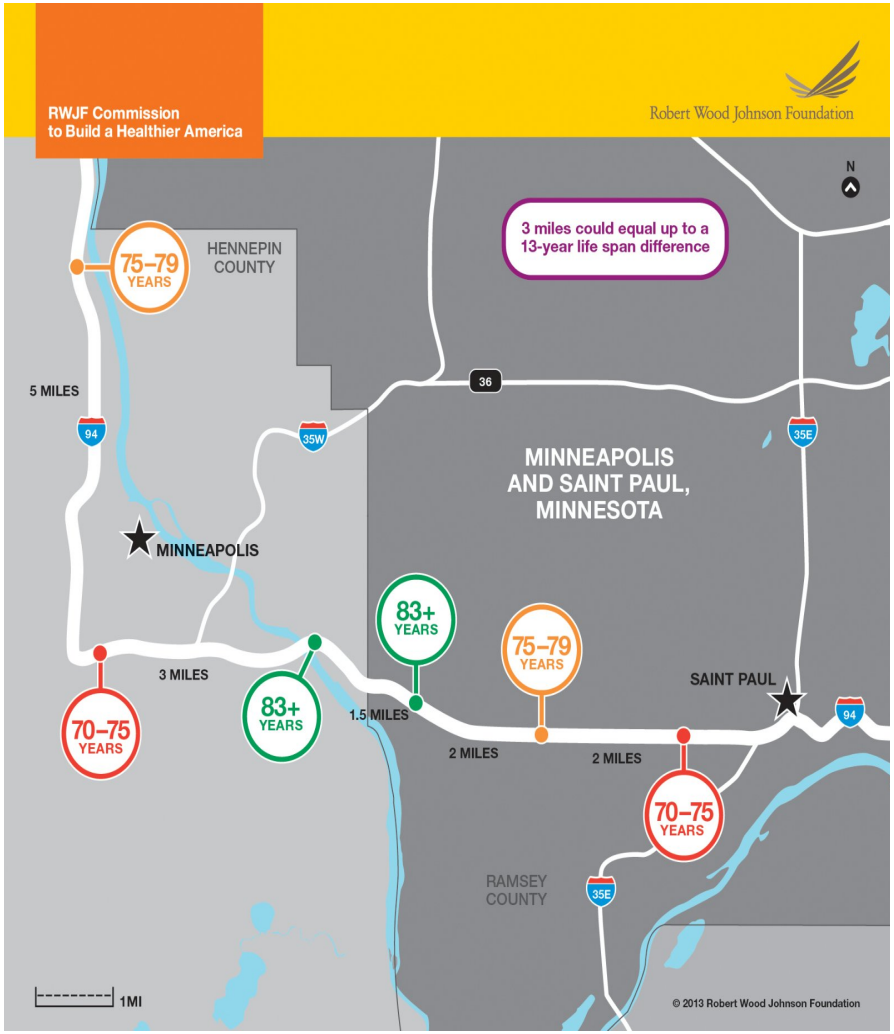
"Public health is what we, as a society, do collectively to assure the conditions in which (all) people can be healthy."

The Future of Public Health
Institute of Medicine, 1988

Living Conditions Impact Health



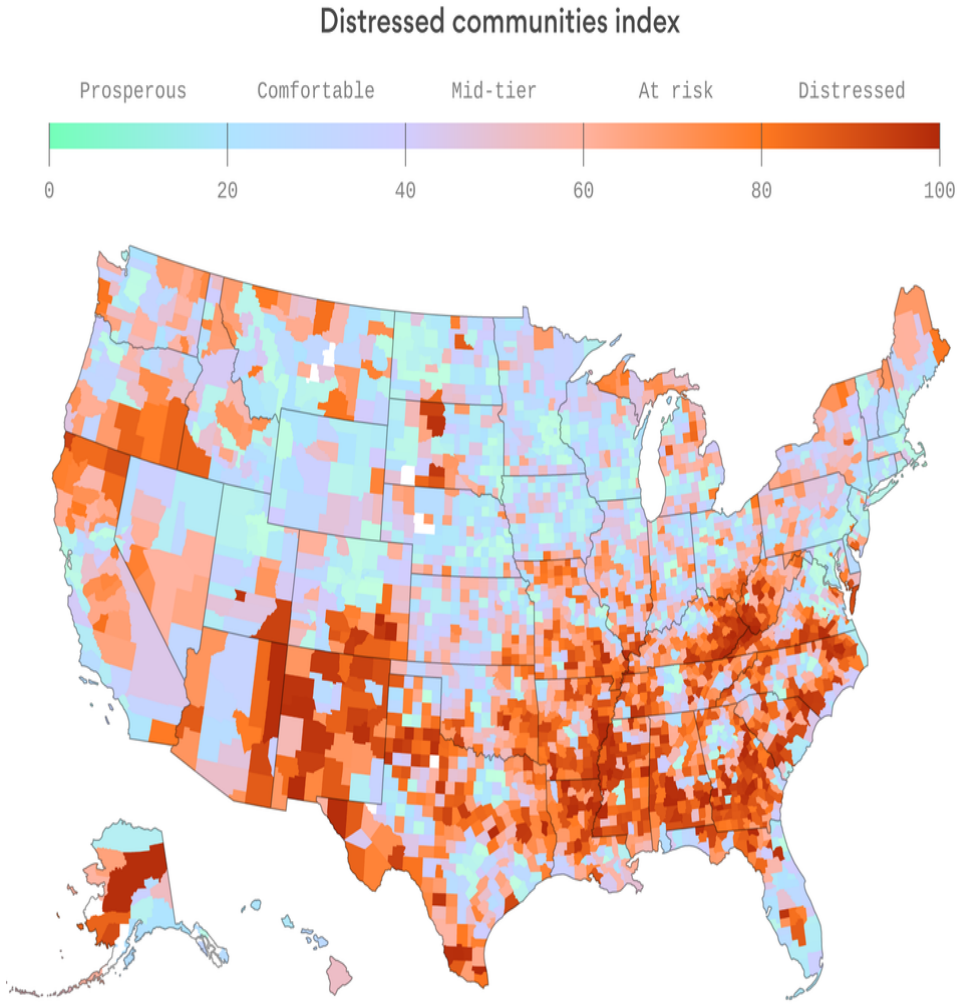
Living Conditions Impact Health



Social Determinants of Health

The conditions and circumstances in which people are born, grow, live, work, and age. These circumstances are shaped by the distribution of money, power, social

Living Conditions Impact Health

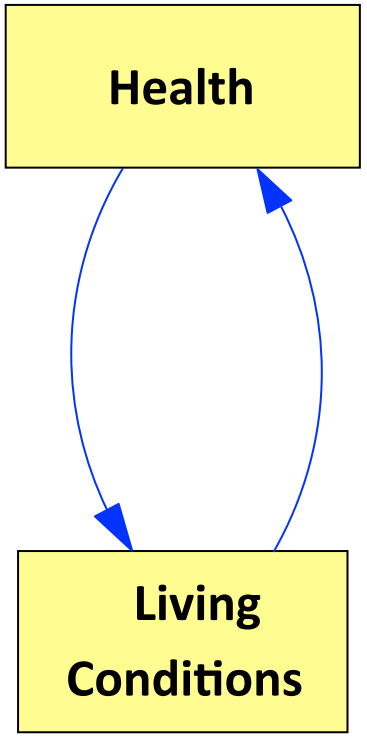


- People in distressed areas die five years earlier than people in prosperous regions.
- Mortality rates from mental health conditions 64% higher in distressed areas.

- DCI (no HS degree, unstable housing, adult unemployment, poverty, income ratio, employment rate change, change in est. business

Data: Economic Innovation Group Distressed Communities Index; Map: Lazaro Gamio / Axios

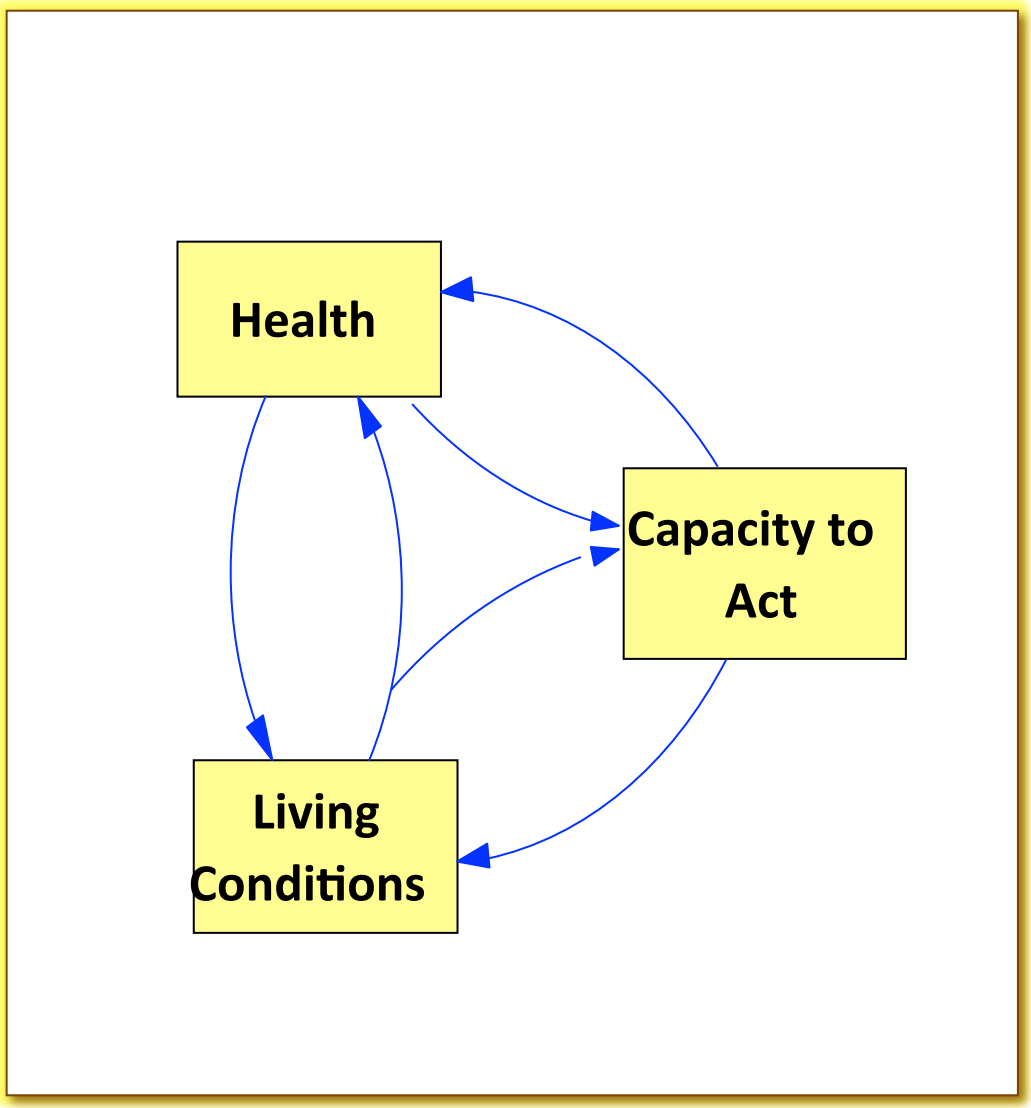
Living Conditions Impact Health



Some populations have a more difficult time than others in impacting living conditions

Public health has few skills in changing living conditions.

Changing the Conditions that Affect Health Requires the Capacity to Act

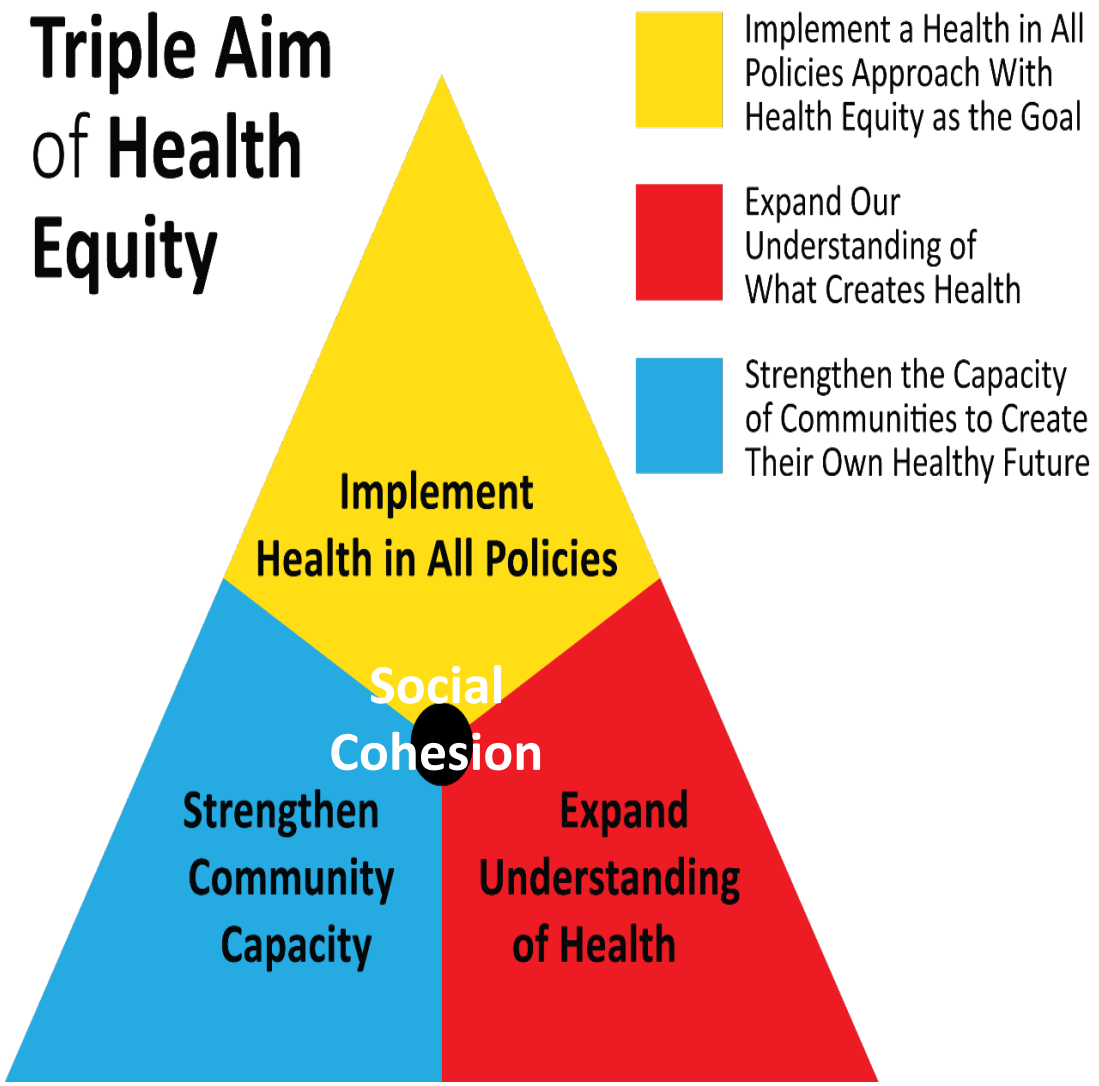


Structure work to achieve our overall aim: Create/Strengthen our "**Capacity to Act**"

Organize the

- **Narrative**: Align the narrative to build public understanding and public will.
- **Resources**: Identify/shift the way resources, systems and processes are structured.
- **People**: Directly impact decision makers, develop relationships, align interests

The Public Health Approach to Advancing Health Equity and Optimal Health for All



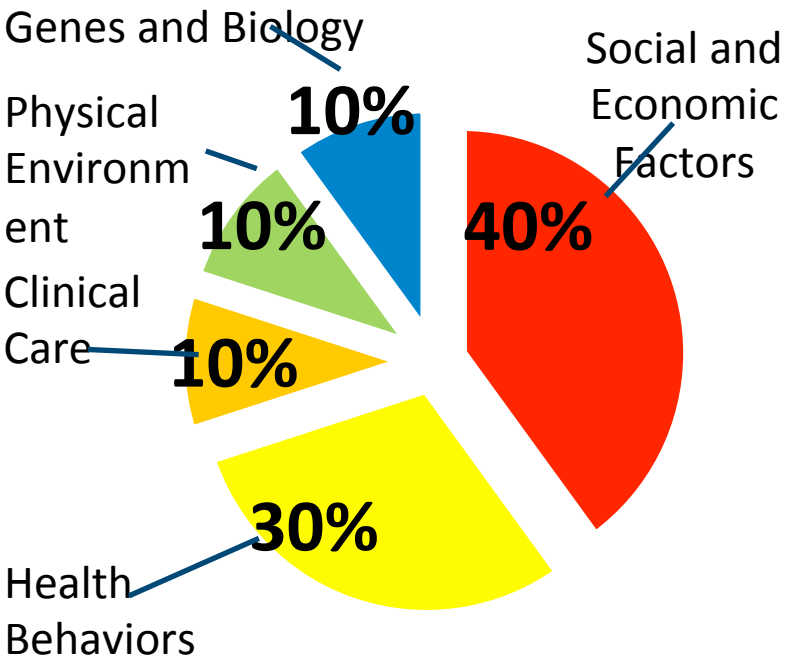
Expand our understanding about what creates health

Importance of Narrative

"Public sentiment is everything. With public sentiment, nothing can fail; without it nothing can succeed. Consequently he who molds public sentiment, goes deeper than he who enacts statutes or pronounces decisions. He makes statutes and decisions possible or impossible to be executed."

Expand the Understanding of What Creates Health

Determinants of Health



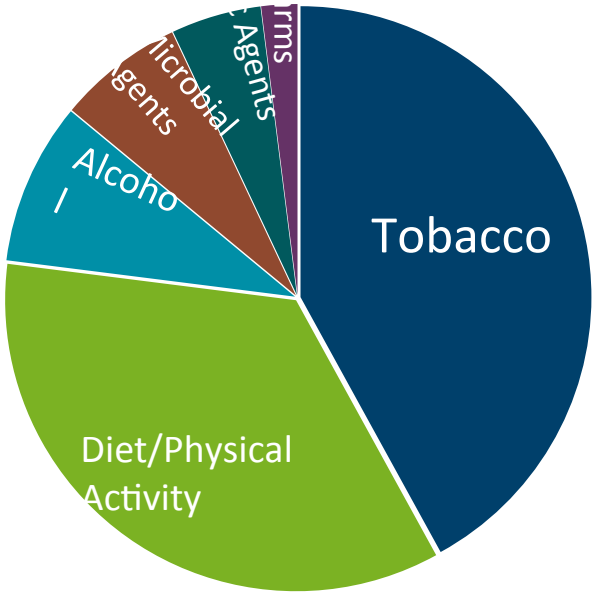
Determinants of Health Model based on frameworks developed by: Tarlov AR. *Ann N Y Acad Sci* 1999; 896: 281-93; and Kindig D, Asada Y, Booske B. *JAMA* 2008; 299(17): 2081-2083.

World Health Organization. Ottawa charter for health promotion. International Conference on Health Promotion: The Move Towards a New Public Health, November 17-21, 1986 Ottawa, Ontario, Canada, 1986. Accessed July 12, 2002 at http://www.who.int/hpr/archive/docs/ottawa.html.

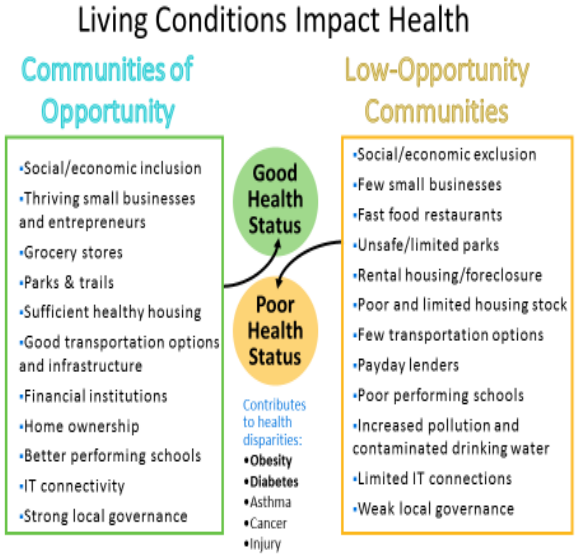
Necessary conditions for health (WHO)

- Peace
- Shelter
- Education
- Food
- Income
- Stable eco-system
- Sustainable resources
- Social justice and equity
- IT connectivity
- Mobility
- Health Care
- Social responsibility

Attributable Causes of



- Tobacco 42%
- Diet/Physical Activity 35%
- Alcohol 9%
- Microbial Agents 7%
- Toxic Agents 5%
- Firearms 2%



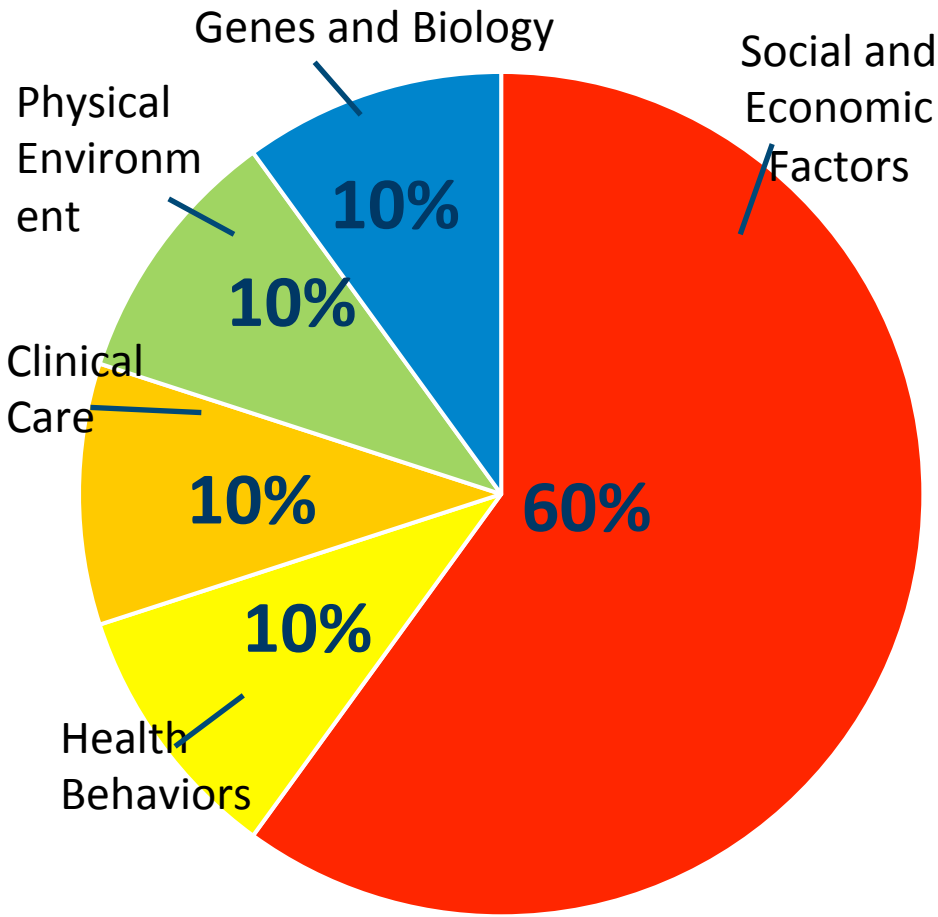
Each year in the United States:

$15.3 Billion is spent marketing tobacco

$6 Billion is spent marketing alcohol

McGinnis JM, Foege WH. Actual causes of death in the United States. JAMA. 1993;270:2207

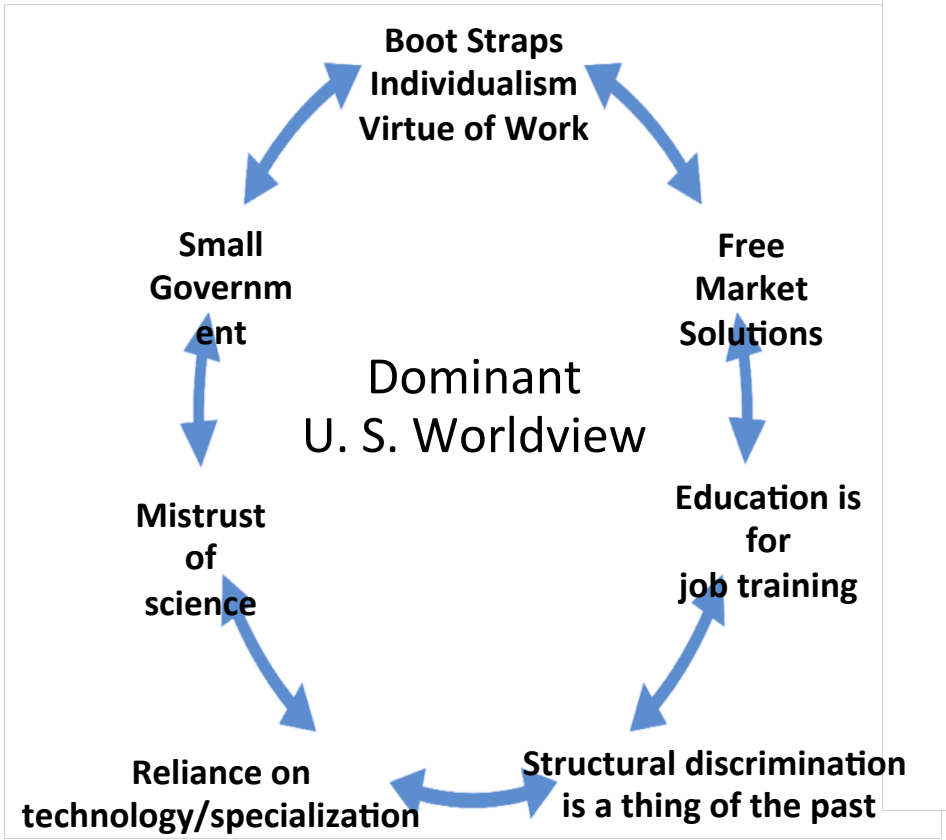
Expand the Understanding of What Creates Health



Determinants are created & enhanced mostly by policies and systems that impact the physical and social environment

Ehlinger's beliefs about the contributions to health determinants

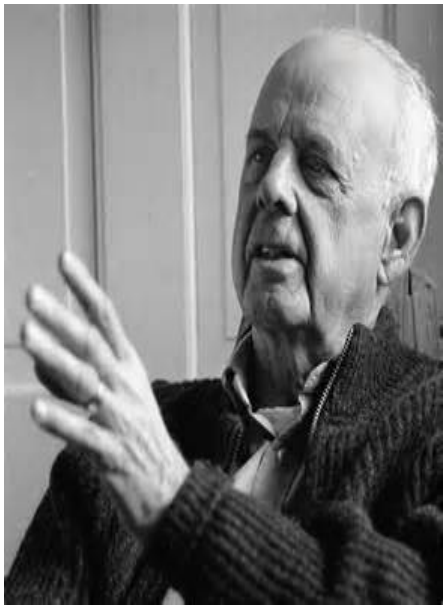
Expand the understanding about what creates health.
Contrasting/Alternative Worldviews



Alternative Health Narrative

Alternative World View

"We have lived by the assumption that what was good for us would be good for the world. We have been wrong. We must change our lives so that it will be possible to live by the contrary assumption, that what is good for the world will be

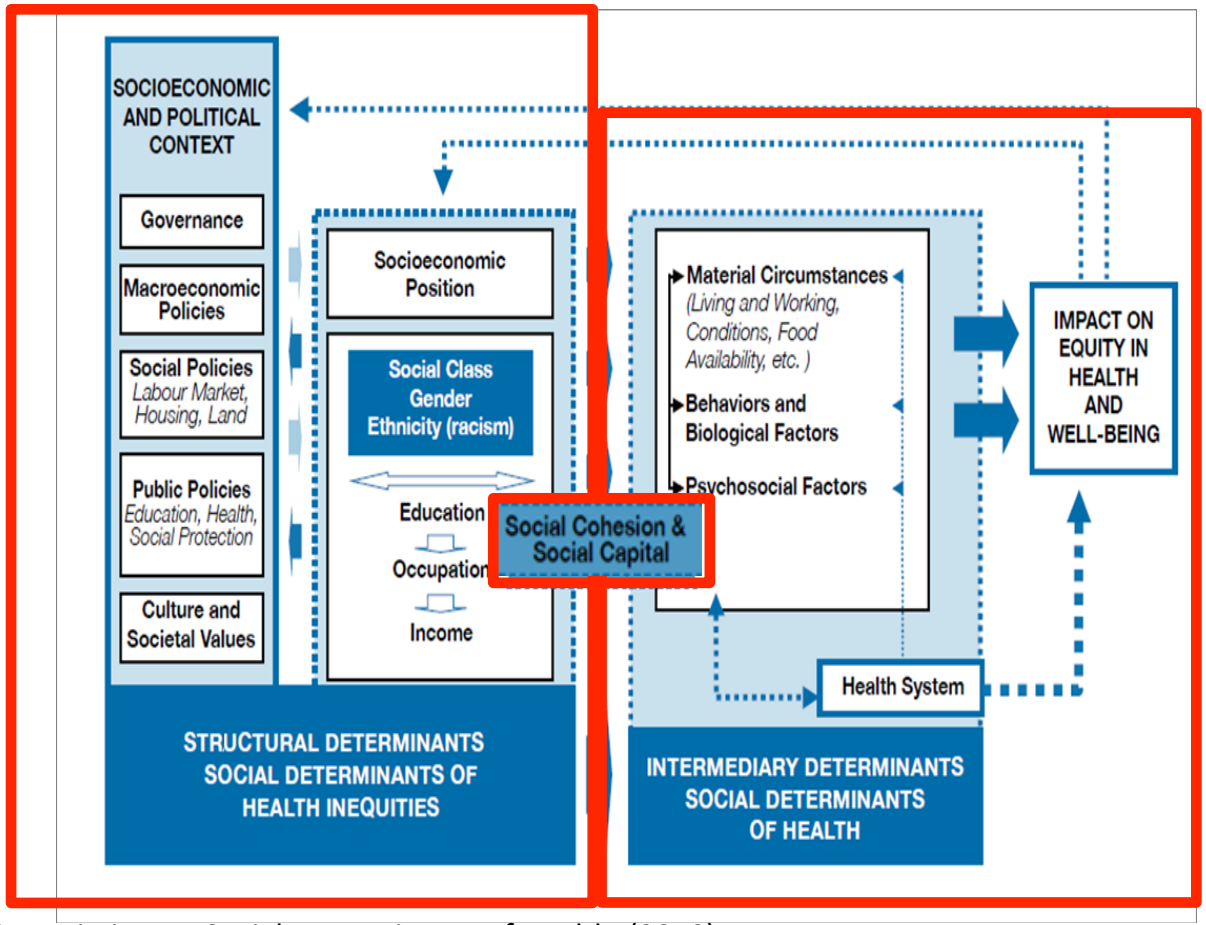


Implement a Health in All Policies Approach with Health Equity as the Goal

- **Minimum Wage**
- **Paid Leave**
- **Criminal justice**
- **Energy**
- **Transportation**
- **Broadband connectivity**
- **E-Health**
- **Housing/ Homelessness**

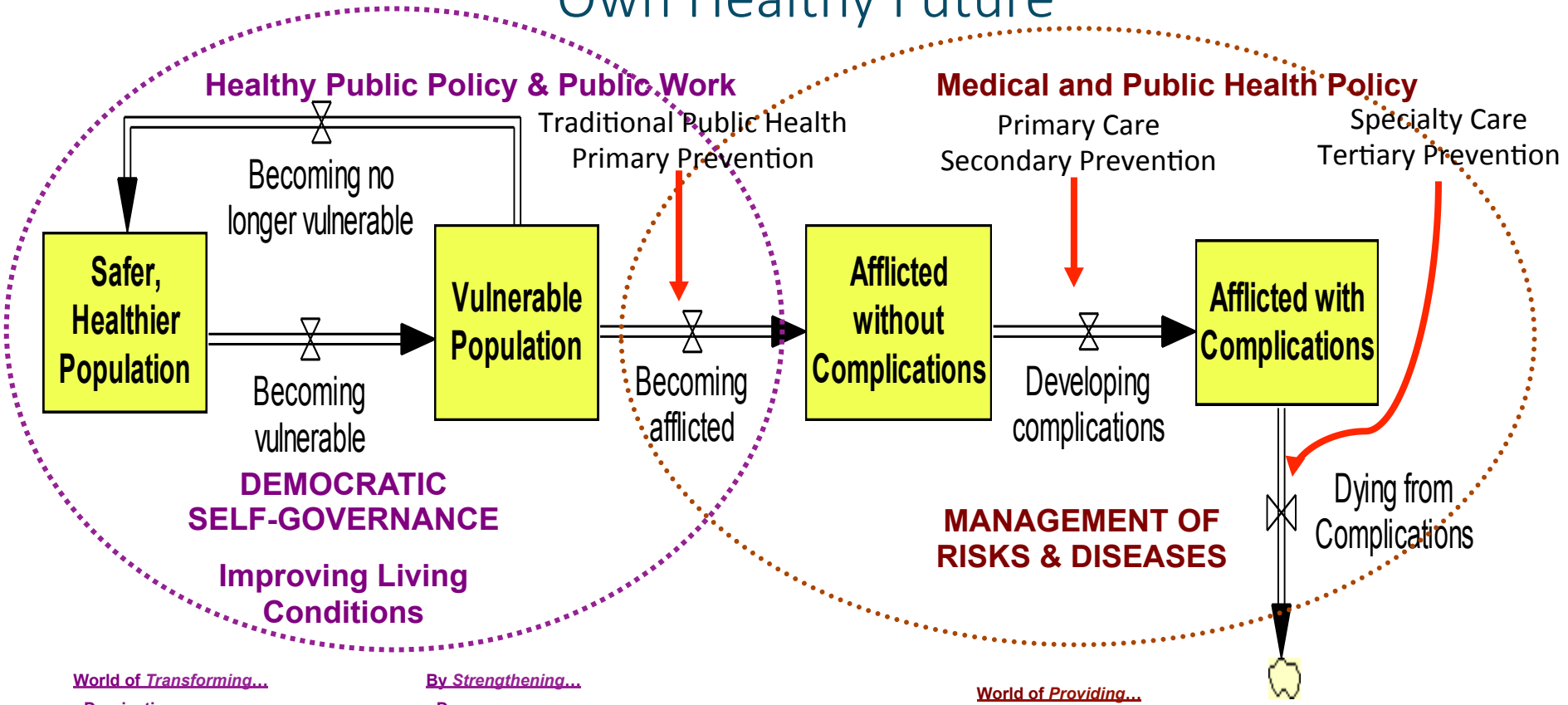
- **Air/Water quality**
- **Ag Buffer strips**
- **Food Charter**
- **Marriage Equity**
- **Payday Lending**
- **Freedom to Breathe**
- **Health Care**

Implement Health in All Policies Approach with Health Equity as the Goal



Commission on Social Determinants of Health. (2010). *A conceptual framework for action on the social determinants of health*. Geneva: World Health Organization.

Strengthen the Capacity of Communities to Create Their Own Healthy Future



World of *Transforming…*

- Deprivation
- Dependency
- Violence
- Disconnection
- Environmental decay
- Stress
- Insecurity
- Etc…

By *Strengthening…*

- Democracy
- Mutual accountability
- Leaders and institutions
- Plurality
- Freedom
- Foresight and precaution
- The meaning of work
- Etc…

World of *Providing…*

- Health education
- Screening tests
- Disease management
- Pharmaceuticals
- Clinical services
- Physical and financial access
- Etc…

"…the community in the fullest sense is the smallest unit of health…to speak of the health of an isolated individual is a contradiction in terms."

Wendell Berry in Health is Membership

Milstein B. Hygeia's constellation: navigating health futures in a dynamic and democratic world. Atlanta, GA: Syndemics Prevention Network, Centers for Disease Control and Prevention; April 15, 2008. Available at: http://www.cdc.gov/syndemics/monograph/index.htm

Social Cohesion

- *"A proper community is a commonwealth: a place, a resource, an economy. It answers the needs, practical as well as social and spiritual, of its members - among them the need to need one another. The answer to the present alignment of political power with wealth is the restoration of the identity of community and economy.*

Asking the Right Questions Can Advance Health Equity

Expand Understanding

- *What values underlie decision-making process?*
- *What is assumed to be true about the world and the role of the institution in the world?*

Health in All Policies

- *What are the health and equity implications of the policy/ program?*
- *Who is benefiting and who is left out?*

Support Community Capacity

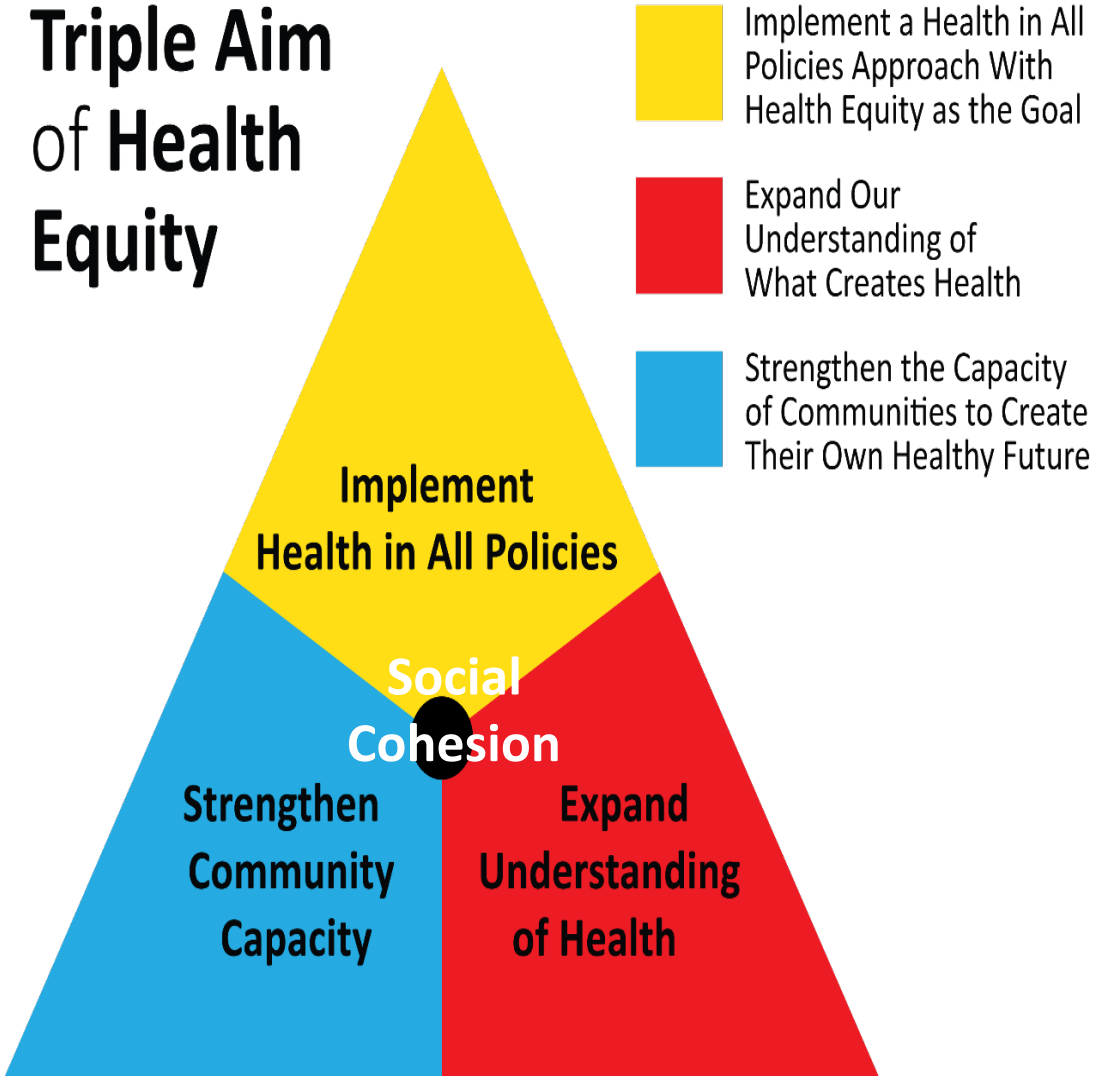
- *Who is at the decision-making table, and who is not?*
- *Who is being held accountable and to whom?*

http://www.health.state.mn.us/divs/chs/healthequity/

Asking the Right Questions Is a Path to Action for Change

- *What would it look like if equity was the starting point for decision-making?*
- *Our work would be different.*

Our work would be to Advance Health Equity and Optimal Health for All by:



Asking the Right Questions Is a Path to Action for Change

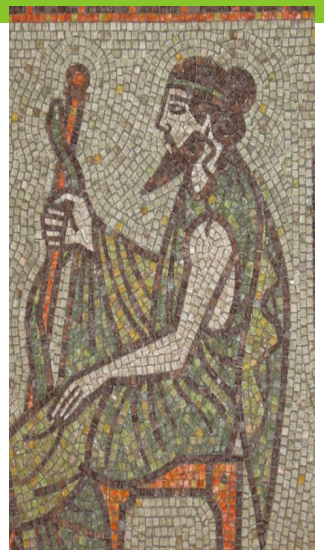
- *What would it look like if equity was the starting point for decision-making?*
- *Our work would be different.*
- *But it would also be going back to our roots*

T. S. Eliot
born on September 26, 1888

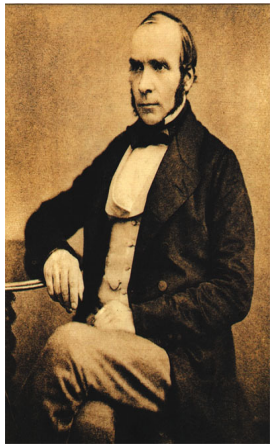
"We shall not cease from exploration, and the end of all our exploring will be to arrive where we started and know the place for the first time."
T. S. Eliot

Back to the Original Hippocratic Oath

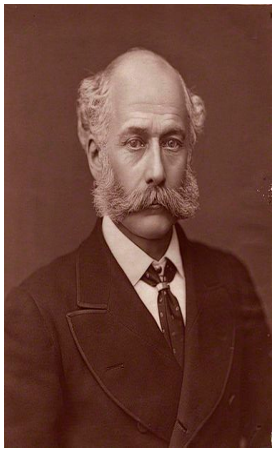
I swear by Apollo, the healer, Asclepius, Hygeia, and Panacea, and I take to witness all the gods, all the goddesses, to keep according to my ability and my judgment, the following Oath and agreement…



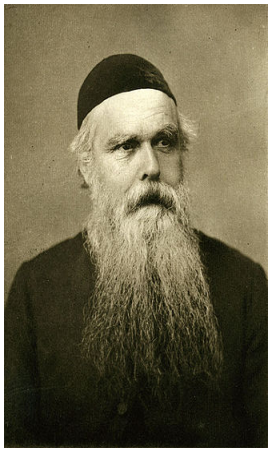
Back to the 1854 - 1865 Cholera Epidemic In London Changed living conditions



Dr. John Snow



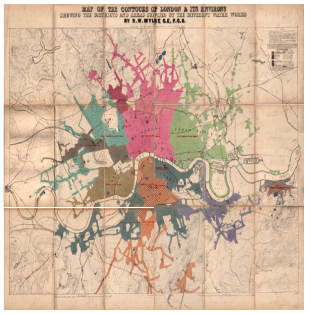
Sir Joseph Bazalgette



Rev. Henry Whitehead

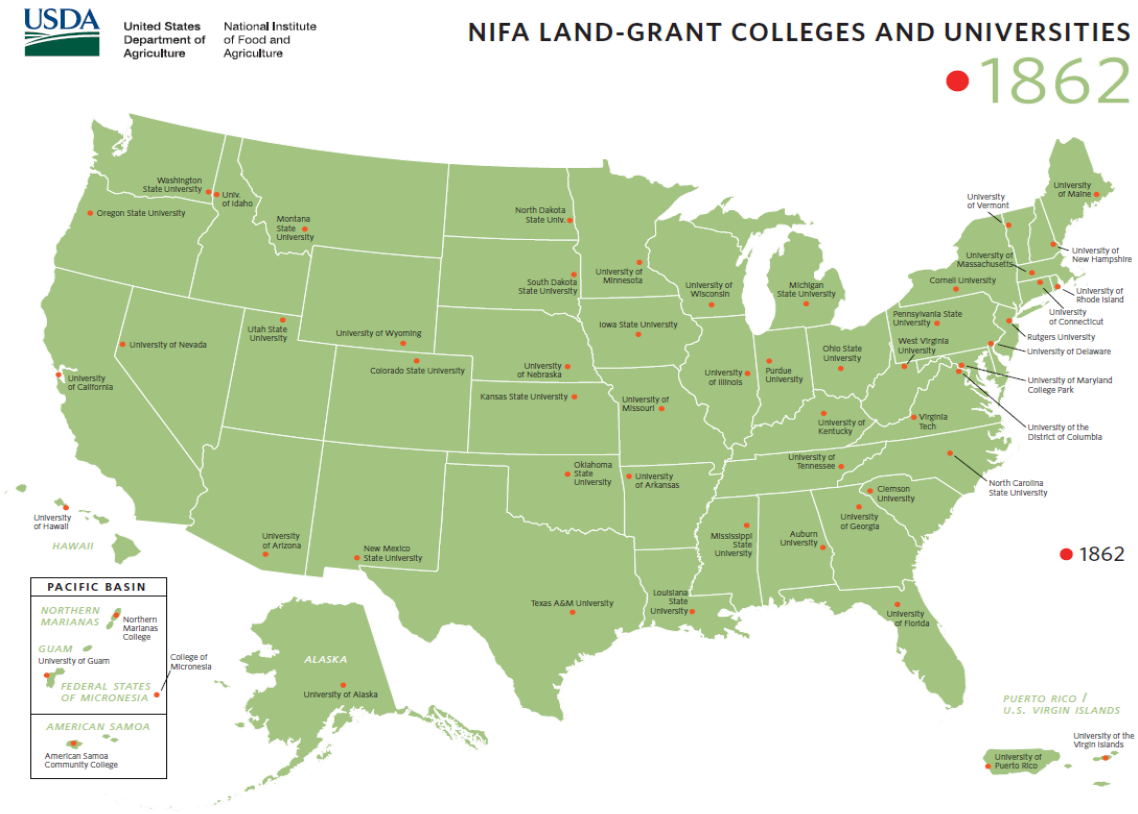
Broad Street Memorial Pump

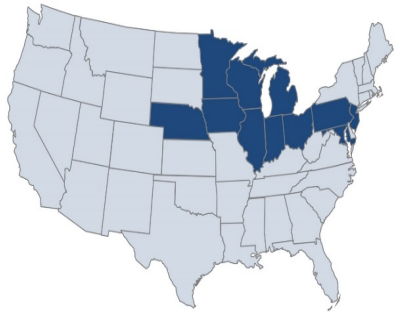
Abbey Mills Pumping Station (the Cathedral of Sewage)
Board of Guardians



Water Map of London 1854

Back to our investment in public agencies to address social issues to advance the public good.



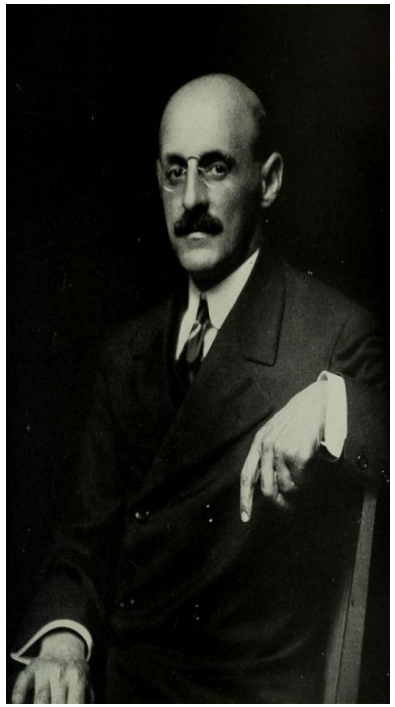


The mission of Land Grant Universities: focus on practical academic disciplines to **address issues created by changing economic conditions and social class.**

Back to our professional values and miss

Abraham Flexner
1910

*"…the **physician's function is fast becoming social and preventive,** rather than individual and curative… (do) not to forget that directly or indirectly, **disease has been found to depend largely on unpropitious environment…**a bad water supply, defective drainage, impure food, unfavorable occupational surroundings…**(these) are matters for 'social regulation,'** and **doctors***



Back to early definitions of public health - 1920

C.E.A. Winslow, Dean
Yale School of Public Health

Public health is the science and art of :
Preventing disease. Prolonging life, and
Promoting health and efficiency through **organized community effort** for…

a. the **sanitation** of the environment
b. the control of **communicable infections**
c. the **education** of the individual in personal hygiene
d. the organization of **medical and nursing services** for the early diagnosis and preventive treatment of disease, and
e. the development of the **social machinery** to insure everyone a **standard of living**

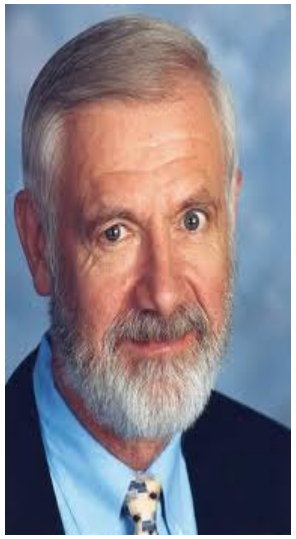
Back to a Health in All Policies approach to community health

1965-1967 - 89th Congress War on Poverty

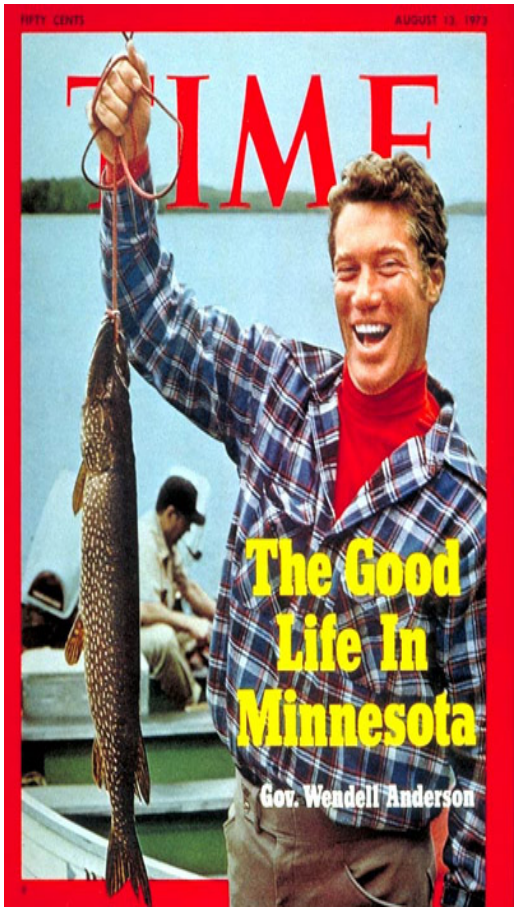
- Expanded Title V – C and Y, MIC, and FP Projects
- Head Start
- Medicare and Medicaid
- Neighborhood health centers
- Food stamps
- The Voting Rights Act
- Job Corps
- VISTA
- Peace Corps
- School lunch program
- Older Americans Act
- Elementary & Higher Education Act
- Housing & Urban Development Act
- The Freedom of Information Act
- Cigarette labeling and advertising act
- Public Works and Economic Development Act
- National Foundation on the Arts and the Humanities Act
- Immigration and Nationality Act
- Motor Vehicle Air Pollution Control Act,
- Highway Beautification Act,
- National Traffic and Motor Vehicle Safety Act
- National Historic Preservation Act

Back to the core philosophy of Public Health

- *"The philosophy behind science is to discover truth.*
- *The philosophy behind medicine is to use that truth for the benefit of your patient.*
- *The philosophy behind public health is social justice."*
    - *William Foege – CDC director, 1977-1983*



Back to Why is Minnesota a Healthy State



- *We had a social conscience.*
- *We invested in the "public good."*
- *We were civil and we*

T. S. Eliot
born on September 26, 1888

"Where is the Life we

have lost in living?

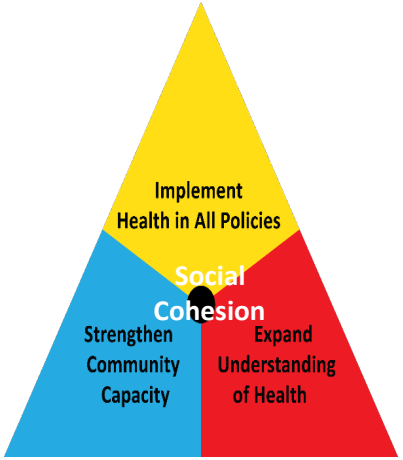
Where is the wisdom we

have lost in knowledge?

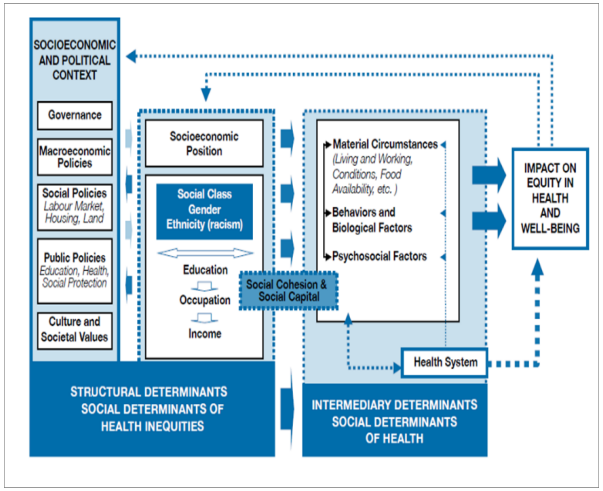
Where is the knowledge

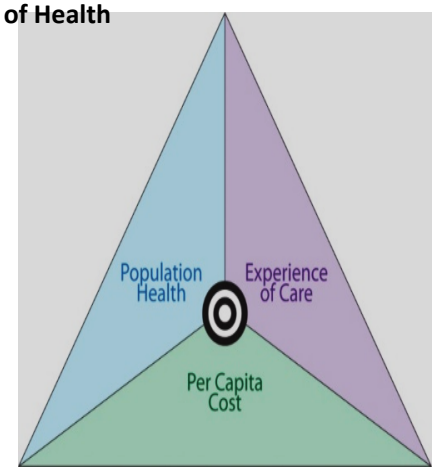
"Public health is what we, as a society, do collectively to assure the conditions in which (all) people can be healthy."

Institute of Medicine (1988), *Future of Public Health*



WHO Framework on Social Determinants of Health





We all do better when we all do better. Paul Wellstone

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