

# **Eliminating Health Disparities at the Root**

**CA Health Benefit Exchange Board  
12/18/2012**

**Tony Iton, M.D., J.D., MPH  
Senior Vice President  
The California Endowment**

# NIH

- Despite notable improvements in the overall health of the Nation in the last two decades, there continue to be striking disparities in the burden of illness and death among African Americans, Hispanics, American Indians and Alaska Natives, Asian Americans, Native Hawaiians and other Pacific Islanders, and underserved groups such as disadvantaged rural Whites. –NIH/NIMHD 2012

# HP 2010

## **Goal 1: Increase Quality and Years of Healthy Life**

- The first goal of Healthy People 2010 is to help individuals of all ages increase life expectancy *and* improve their quality of life.

## **Goal 2: Eliminate Health Disparities**

- The second goal of Healthy People 2010 is to eliminate health disparities among segments of the population, including differences that occur by gender, race or ethnicity, education or income, disability, geographic location, or sexual orientation.

# Definition of Health Disparities

- “Differences in the incidence, prevalence, mortality and burden of diseases and other adverse health conditions that exist among specific population groups in the United States”

-NIH Working Group on Health Disparities

# HP 2020 Health Disparities

- A particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion

# HP 2020 Health Equity

- The attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities.



# Life expectancy

... is the **average**  
lifespan a newborn  
can expect



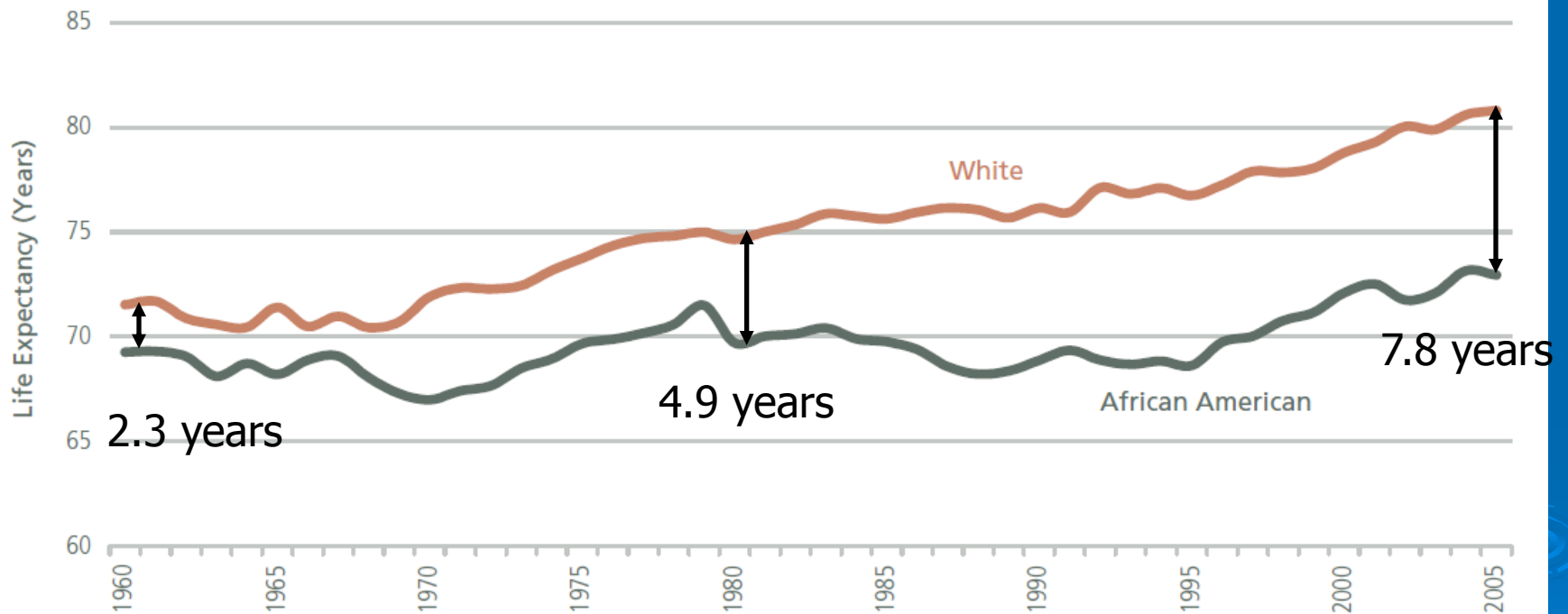
STATE FILE NUMBER		CERTIFICATE OF DEATH		3200701000029	
STATE OF CALIFORNIA		USE BLACK INK ONLY. NO ERASURES, WHITEOUTS OR ALTERATIONS		LOCAL REGISTRATION NUMBER	
1. NAME OF DECEDENT — FIRST (Given)		2. MIDDLE		3. LAST (Family)	
DONALD		H.		DUCK	
A.K.A. ALSO KNOWN AS — Include full AKA (FIRST, MIDDLE, LAST)		4. DATE OF BIRTH mm/dd/yyyy		5. AGE Yrs.	
		02/14/1937		69	
9. BIRTH STATE/FOREIGN COUNTRY		10. SOCIAL SECURITY NUMBER		11. EVER IN U.S. ARMED FORCES?	
FINLAND		243-65-9974		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> UNK	
12. MARITAL STATUS (at time of death)		7. DATE OF DEATH mm/dd/yyyy		8. HOUR (24 Hours)	
NEVER MARRIED		01/16/2007		0034	
13. EDUCATION — Highest Level/Degree (see worksheet on back)		14/15. WAS DECEDENT HISPANIC/LATINO(A)/SPANISH? (if yes, see worksheet on back)		16. DECEDENT'S RACE — Up to 3 races may be listed (see worksheet on back)	
06		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		CAUCASIAN	
17. USUAL OCCUPATION — Type of work for most of life. DO NOT USE RETIRED		18. KIND OF BUSINESS OR INDUSTRY (e.g., grocery store, road construction, employment agency, etc.)		19. YEARS IN OCCUPATION	
TEACHER		EDUCATION		4	
20. DECEDENT'S RESIDENCE (Street and number or location)		21. CITY		22. COUNTY/PROVINCE	
348 8TH AVE		ALAMEDA		ALAMEDA	
23. ZIP CODE		24. YEARS IN COUNTY		25. STATE/FOREIGN COUNTRY	
94501		3		CA	
26. INFORMANT'S RELATIONSHIP		27. INFORMANT'S MAILING ADDRESS (Street and number or rural route number, city or town, state, ZIP)			
SUE -, MOUSE		345 HIGH ST, OAKLAND, CA 94601			
28. NAME OF SURVIVING SPOUSE — FIRST		29. MIDDLE		30. LAST (Maiden Name)	
-		-		-	
31. NAME OF FATHER — FIRST		32. MIDDLE		33. LAST	
THOMAS		-		DUCK	
34. BIRTH STATE		35. NAME OF MOTHER — FIRST		36. MIDDLE	
CA		MINNIE		-	
37. LAST (Maiden)		38. BIRTH STATE		39. DISPOSITION DATE mm/dd/yyyy	
UNKNOWN		UNKNOWN		01/22/2007	
40. PLACE OF FINAL DISPOSITION		41. TYPE OF DISPOSITION(S)		42. SIGNATURE OF EMBALMER	
RES		CR/RES		MANUEL FLORES	
345 HIGH ST, OAKLAND, CA 94601		43. LICENSE NUMBER		44. NAME OF FUNERAL ESTABLISHMENT	
EMB6370		CLARENCE N COOPER MORTUARY INC		45. LICENSE NUMBER	
01/18/2007		FD381		46. SIGNATURE OF LOCAL REGISTRAR	
ANTHONY ITON, M.D.					
101. PLACE OF DEATH		102. IF HOSPITAL, SPECIFY ONE		103. IF OTHER THAN HOSPITAL, SPECIFY ONE	
EDEN MEDICAL CENTER		<input checked="" type="checkbox"/> IP <input type="checkbox"/> ER/OP <input type="checkbox"/> DOA		<input type="checkbox"/> Hospice <input type="checkbox"/> Nursing Home/LTC <input type="checkbox"/> Decedent's Home <input type="checkbox"/> Other	
104. COUNTY		105. FACILITY ADDRESS OR LOCATION WHERE FOUND (Street and number or location)		106. CITY	
ALAMEDA		20103 LAKE CHABOT RD		CASTRO VALLEY	
107. CAUSE OF DEATH		108. DEATH REPORTED TO CORNER?		109. BIOPSY PERFORMED?	
(A) IMMEDIATE CAUSE (Final disease or condition resulting in death)		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
(B) PNEUMONIA		REFERRAL NUMBER		110. AUTOPSY PERFORMED?	
(C) BRONCHITIS		HRS 0		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
(D) SEQUENTIALLY LIST CONDITIONS, IF ANY, LEADING TO CAUSE ON LINE A. ENTER UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST		DAYS		111. USED IN DETERMINING CAUSE?	
				<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
112. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RESULTING IN THE UNDERLYING CAUSE GIVEN IN 107		113. IF FEMALE, PREGNANT IN LAST YEAR?			
DEMENTIA		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNK			
113. WAS OPERATION PERFORMED FOR ANY CONDITION IN ITEM 107 OR 112? (if yes, list type of operation and date.)		114. I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE DEATH OCCURRED AT THE HOUR, DATE, AND PLACE STATED FROM THE CAUSES STATED.		115. SIGNATURE AND TITLE OF CERTIFIER	
NO		Decedent Attended Since		GARY WINSETT BROWN M.D.	
		Decedent Last Seen Alive		A38965	
116. TYPE ATTENDING PHYSICIAN'S NAME, MAILING ADDRESS, ZIP CODE		117. DATE mm/dd/yyyy		118. TYPE ATTENDING PHYSICIAN'S NAME, MAILING ADDRESS, ZIP CODE	
MICHAEL ANDREW HOGARTH M.D.		02/03/2006		2315 STOCKTON BLVD, SACRAMENTO, CA 95817	
119. I CERTIFY THAT IN MY OPINION DEATH OCCURRED AT THE HOUR, DATE, AND PLACE STATED FROM THE CAUSES STATED.		120. INJURED AT WORK?		121. INJURY DATE mm/dd/yyyy	
MANNER OF DEATH <input type="checkbox"/> Natural <input type="checkbox"/> Accident <input type="checkbox"/> Homicide <input type="checkbox"/> Suicide <input type="checkbox"/> Pending Investigation <input type="checkbox"/> Could not be determined		<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNK		122. HOUR (24 Hours)	
123. PLACE OF INJURY (e.g., home, construction site, wooded area, etc.)					
124. DESCRIBE HOW INJURY OCCURRED (Events which resulted in injury)					
125. LOCATION OF INJURY (Street and number, or location, and city, and ZIP)					
126. SIGNATURE OF CORONER / DEPUTY CORONER		127. DATE mm/dd/yyyy		128. TYPE NAME, TITLE OF CORONER / DEPUTY CORONER	
STATE REGISTRAR		A B C D E		FAX AUTH. # CENSUS TRACT	



# Race and Racism Matters:

## Health Inequities by Race/Ethnicity

Figure 5: Historical Life Expectancy at Birth, Alameda County

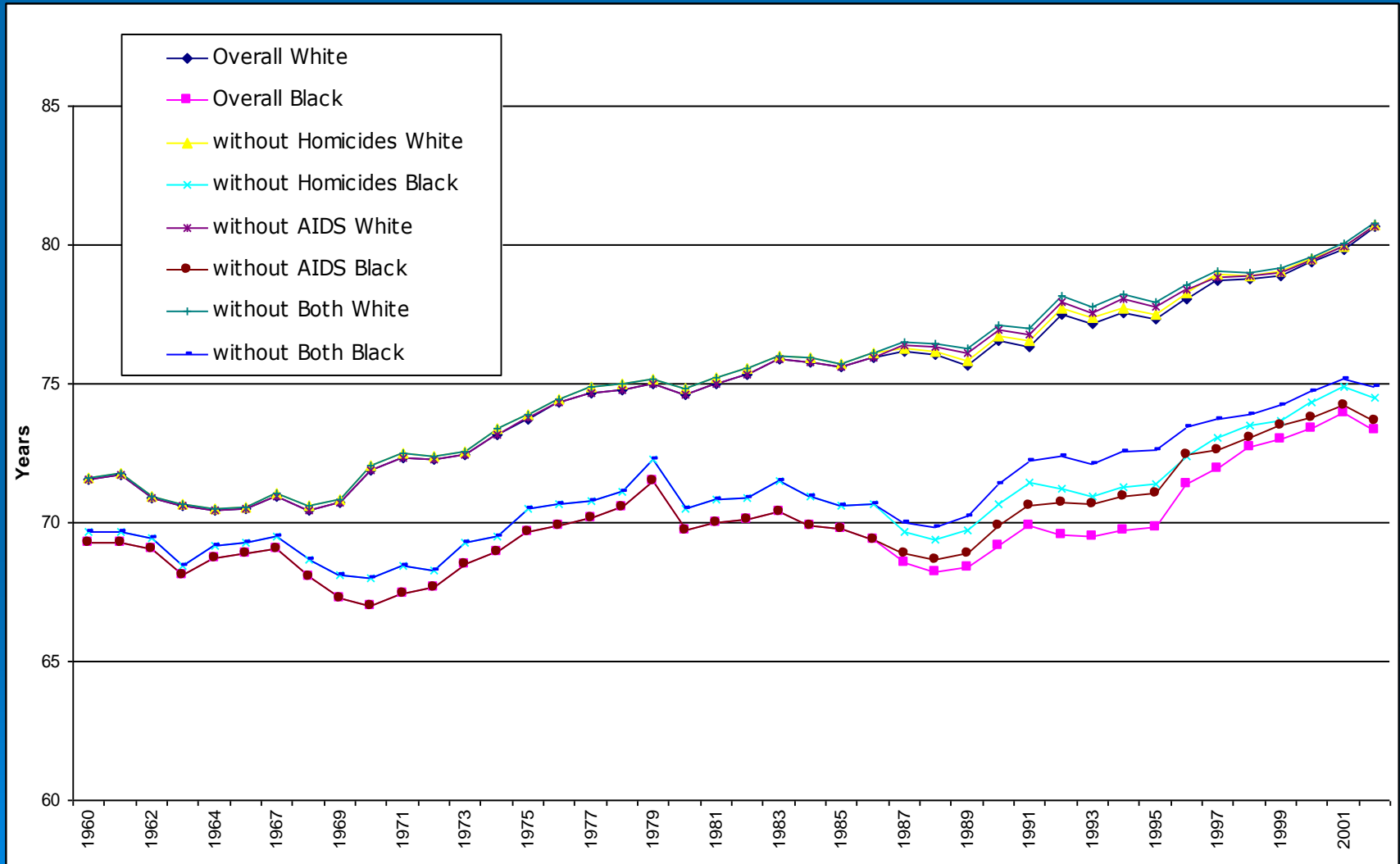


Note: White and African American defined regardless of Latino origin.

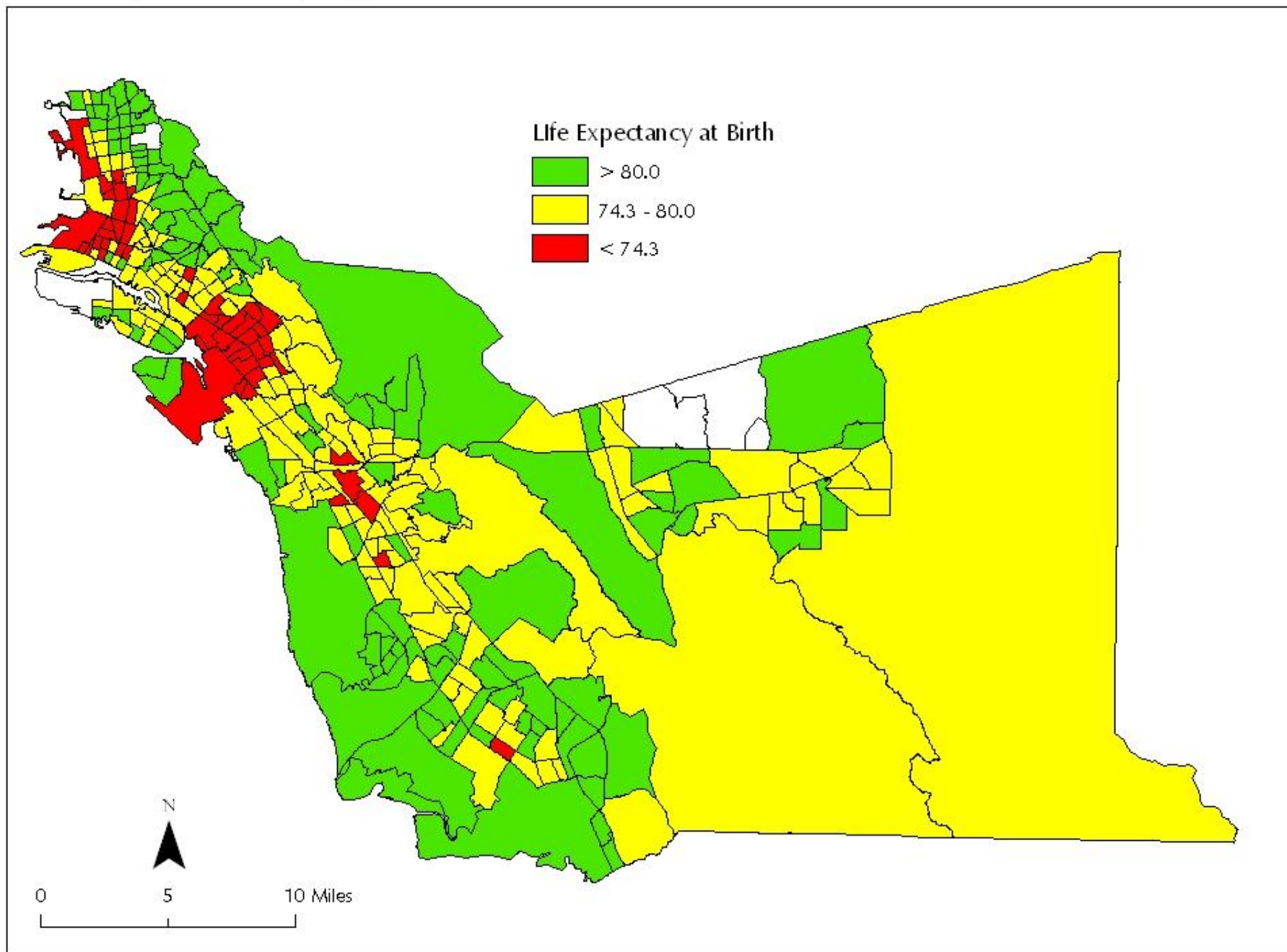
Source: Alameda County vital statistics files, 1960-2005.

# Race and Racism Matters:

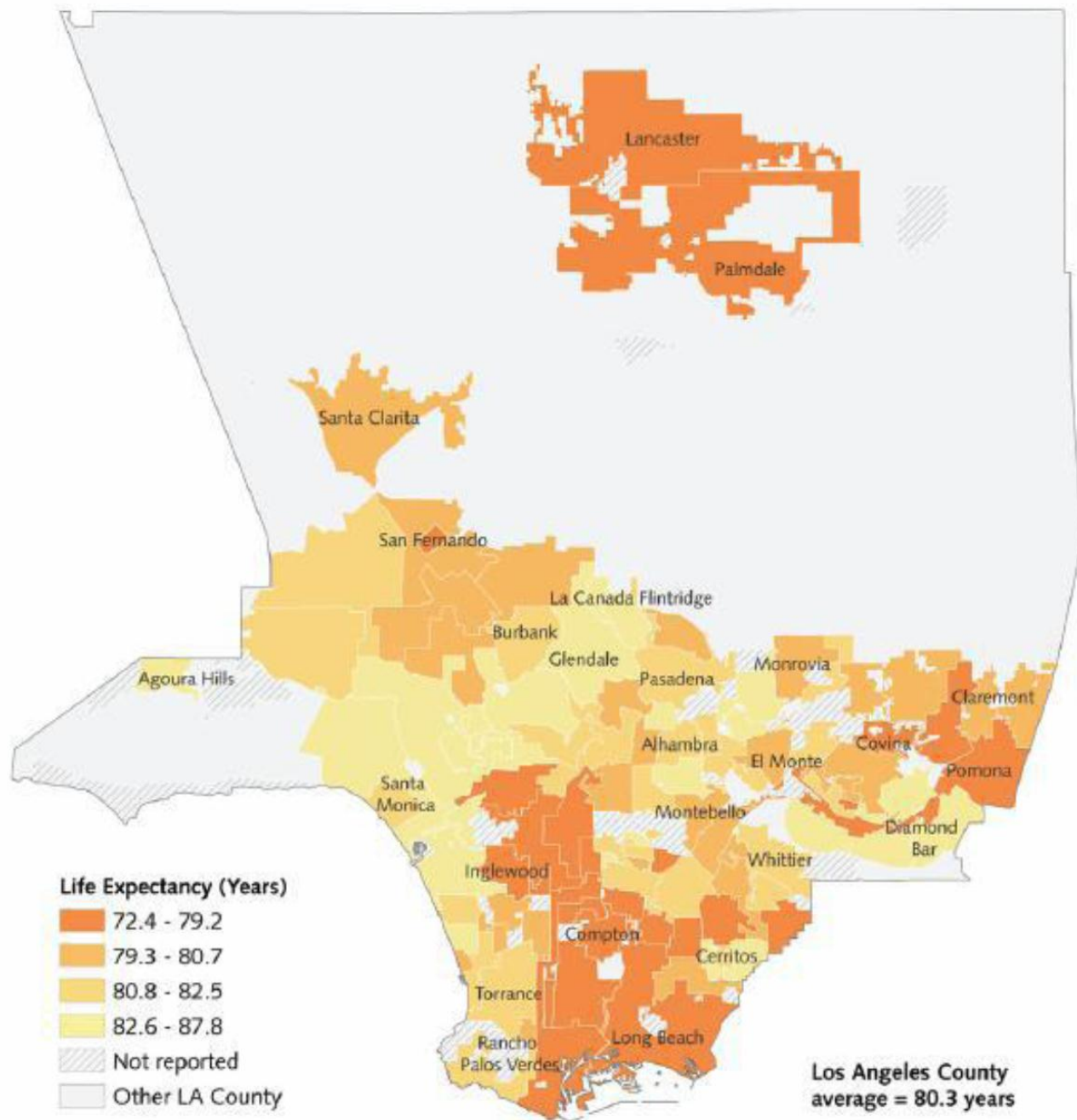
## Health Inequities by Race/Ethnicity



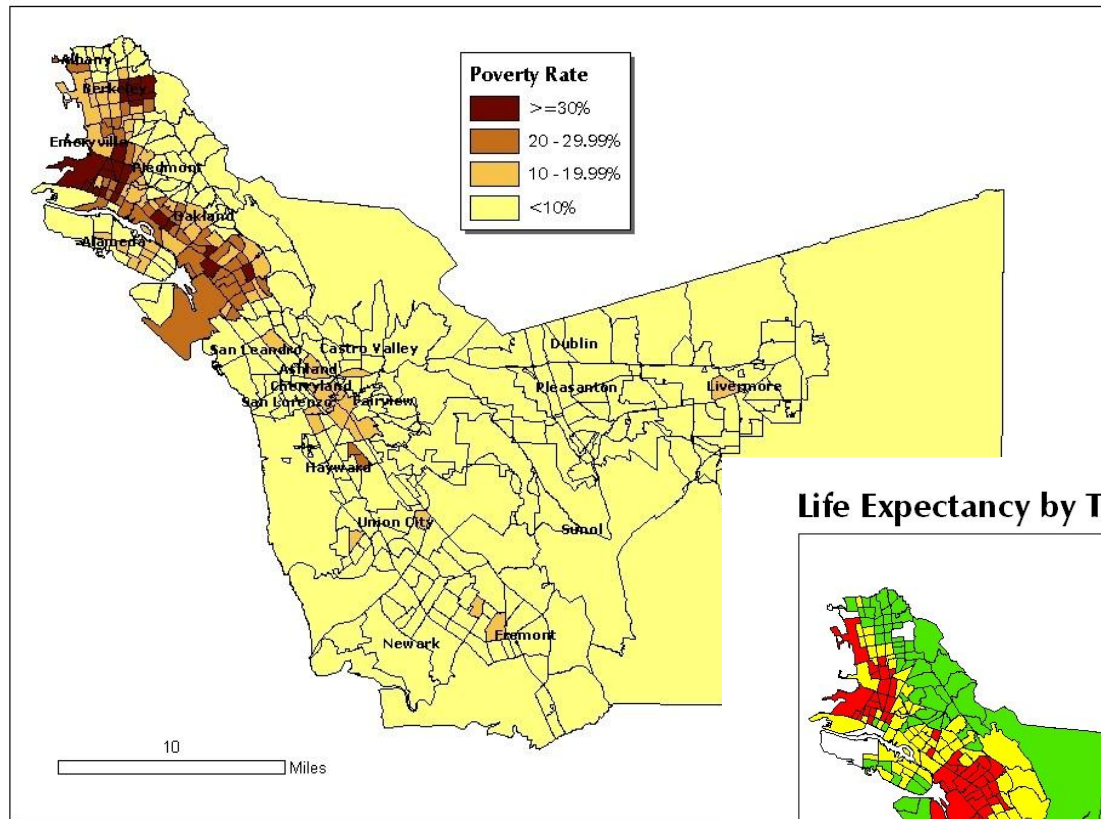
# Life Expectancy by Tract



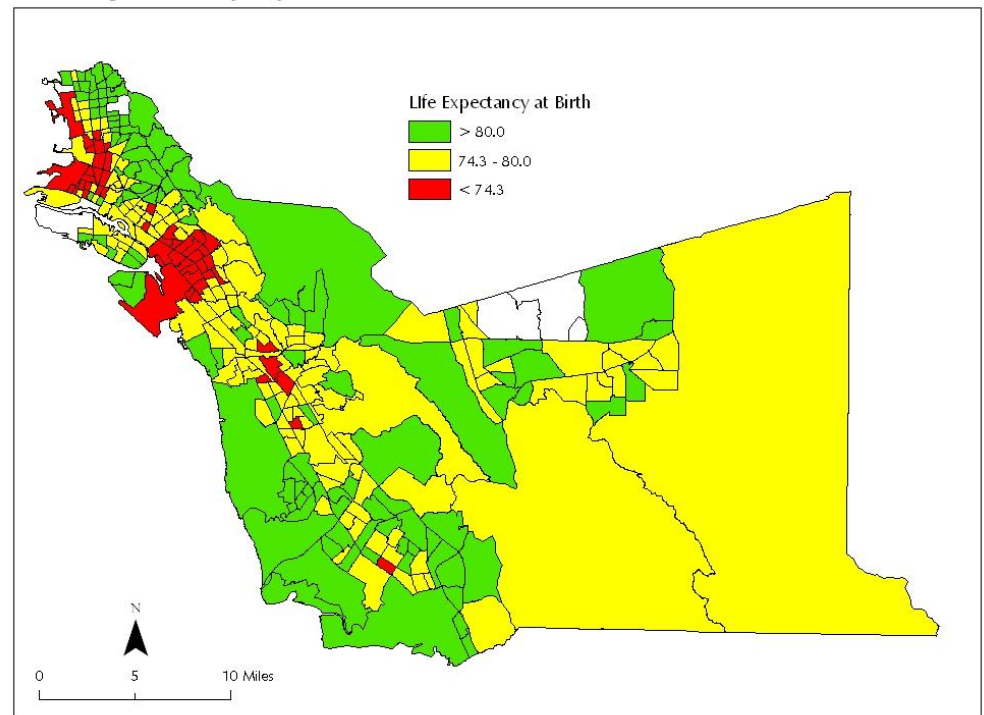
Source: CAPE, with data from vital statistics 1999-2001.



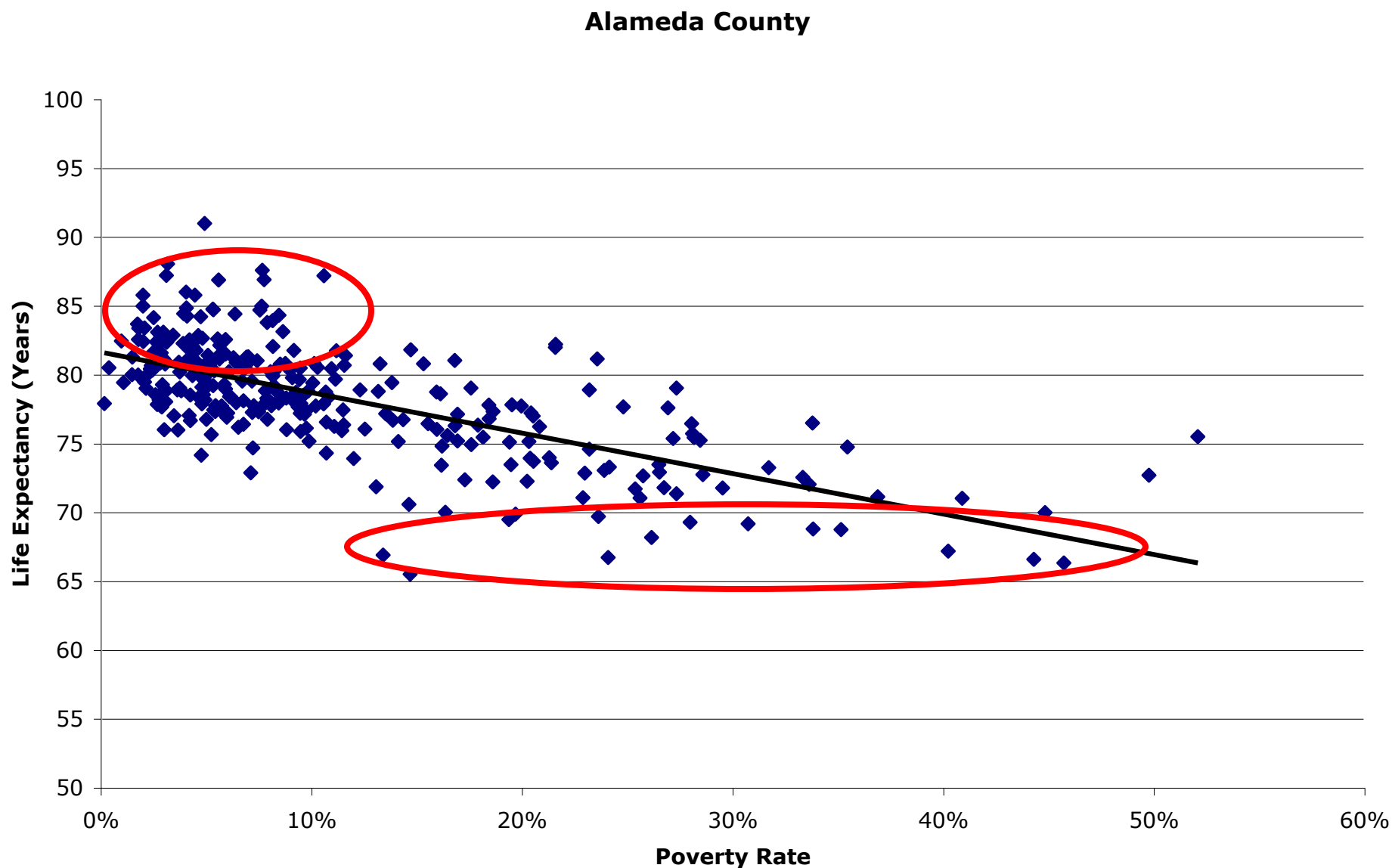
# Alameda County Poverty



## Life Expectancy by Tract



# Life Expectancy by Poverty Group 2000-2003





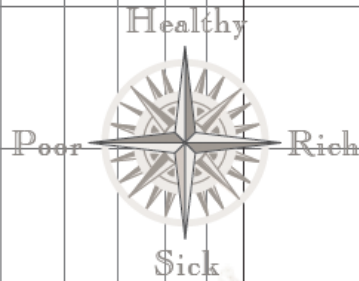
Health Life expectancy at birth (years)

# Gapminder World Map 2010

Low-income countries

Middle-income countries

High income countries



China

Mexico

Japan

USA

India

Colour by region:



Size by population:



Data are for 2009 for all 192 UN member states and the other 5 countries and territories with more than 1 million people (Hong Kong, Taiwan, Palestine, Puerto Rico and Kosovo). Free to copy, share and remix but attribute Gapminder. For sources see:

[www.gapminder.org](http://www.gapminder.org)  
<http://www.gapminder.org/worldmap>

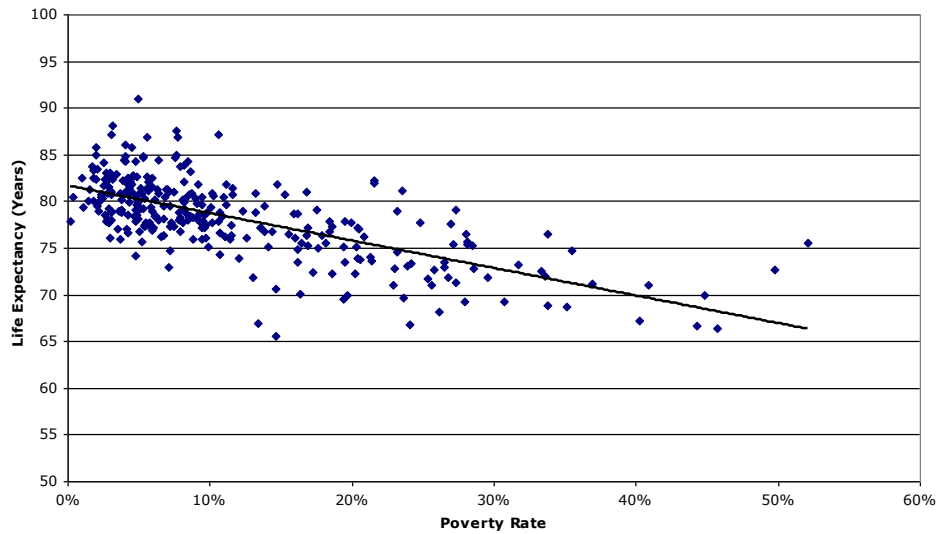


Money GDP per person in US dollars (purchasing power adjusted) (log scale)

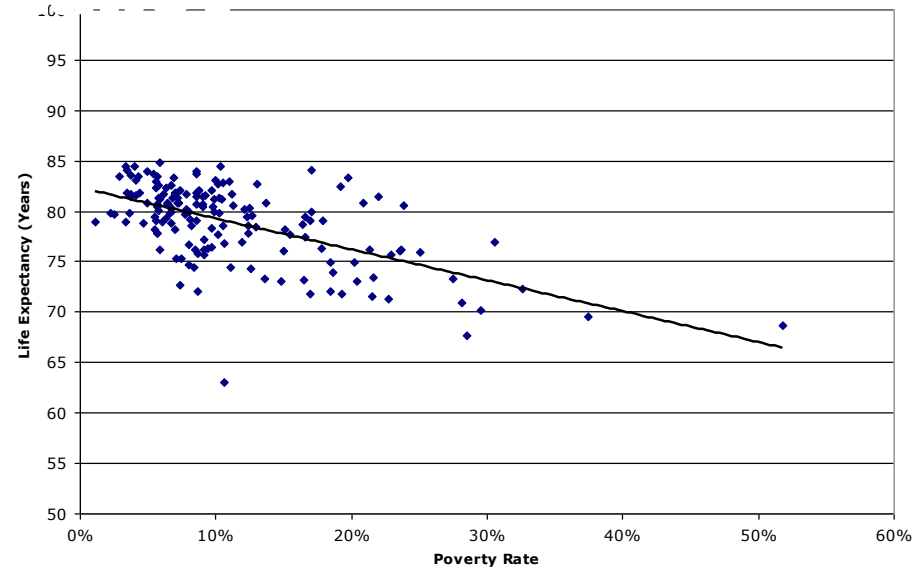
GAPMINDER

# Tract Poverty vs. Life Expectancy

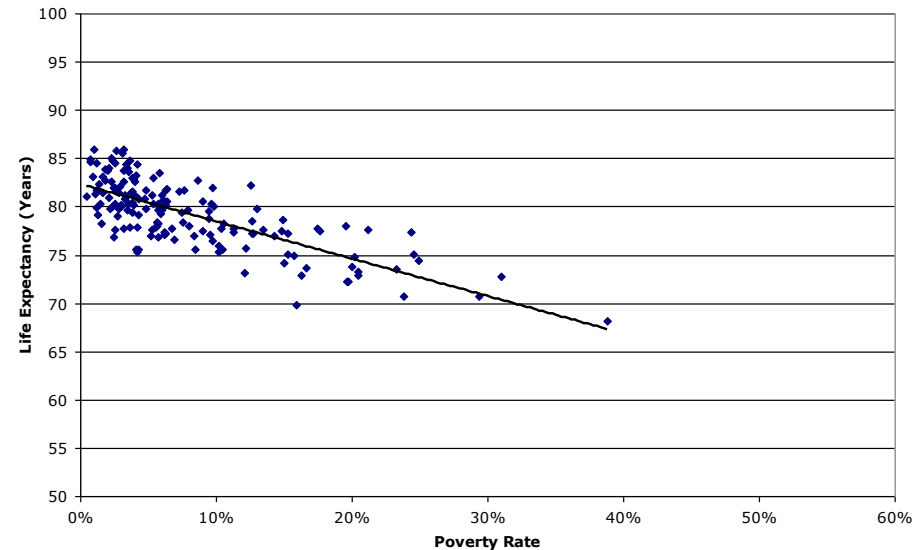
**Alameda County**



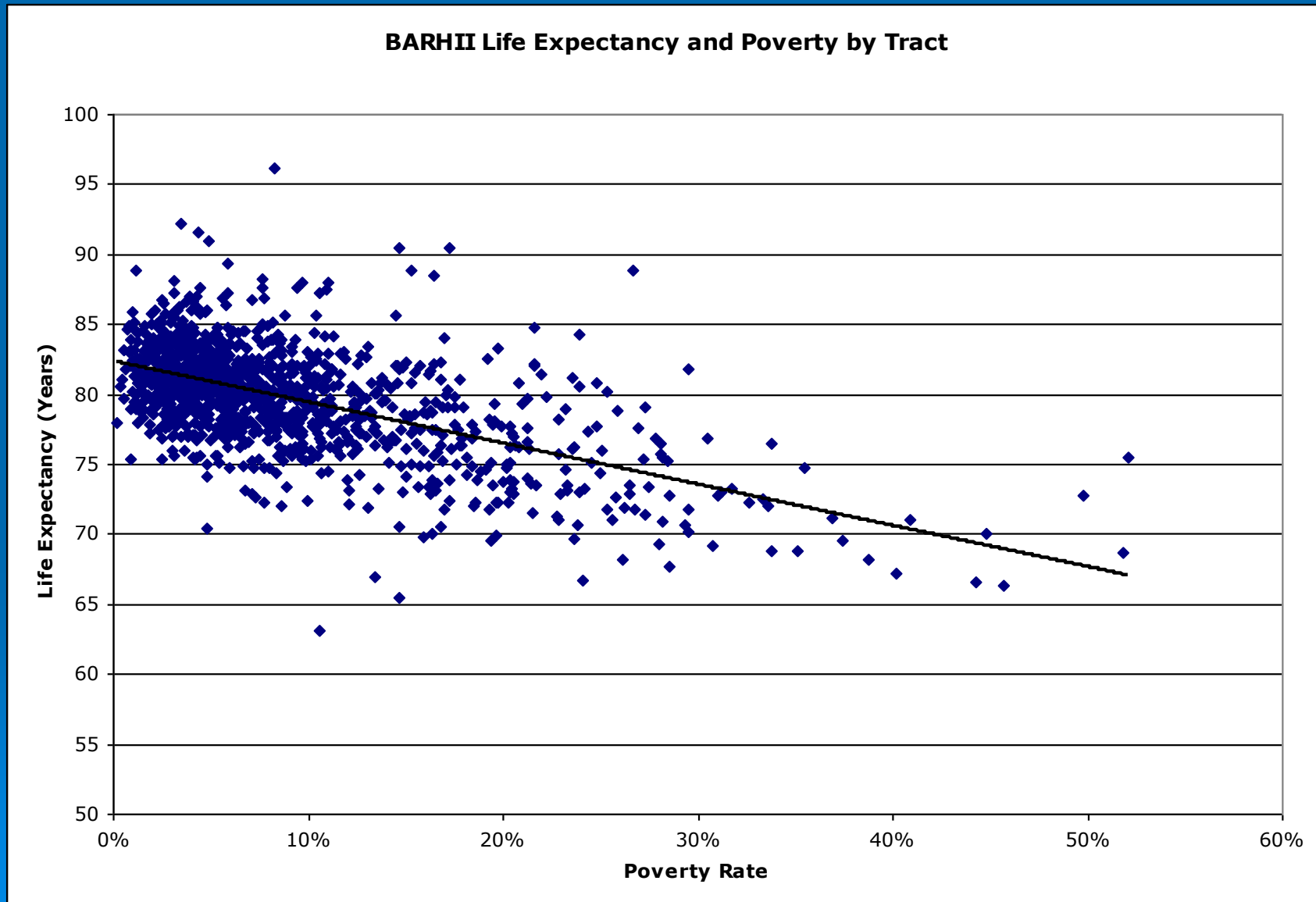
**San Francisco County**



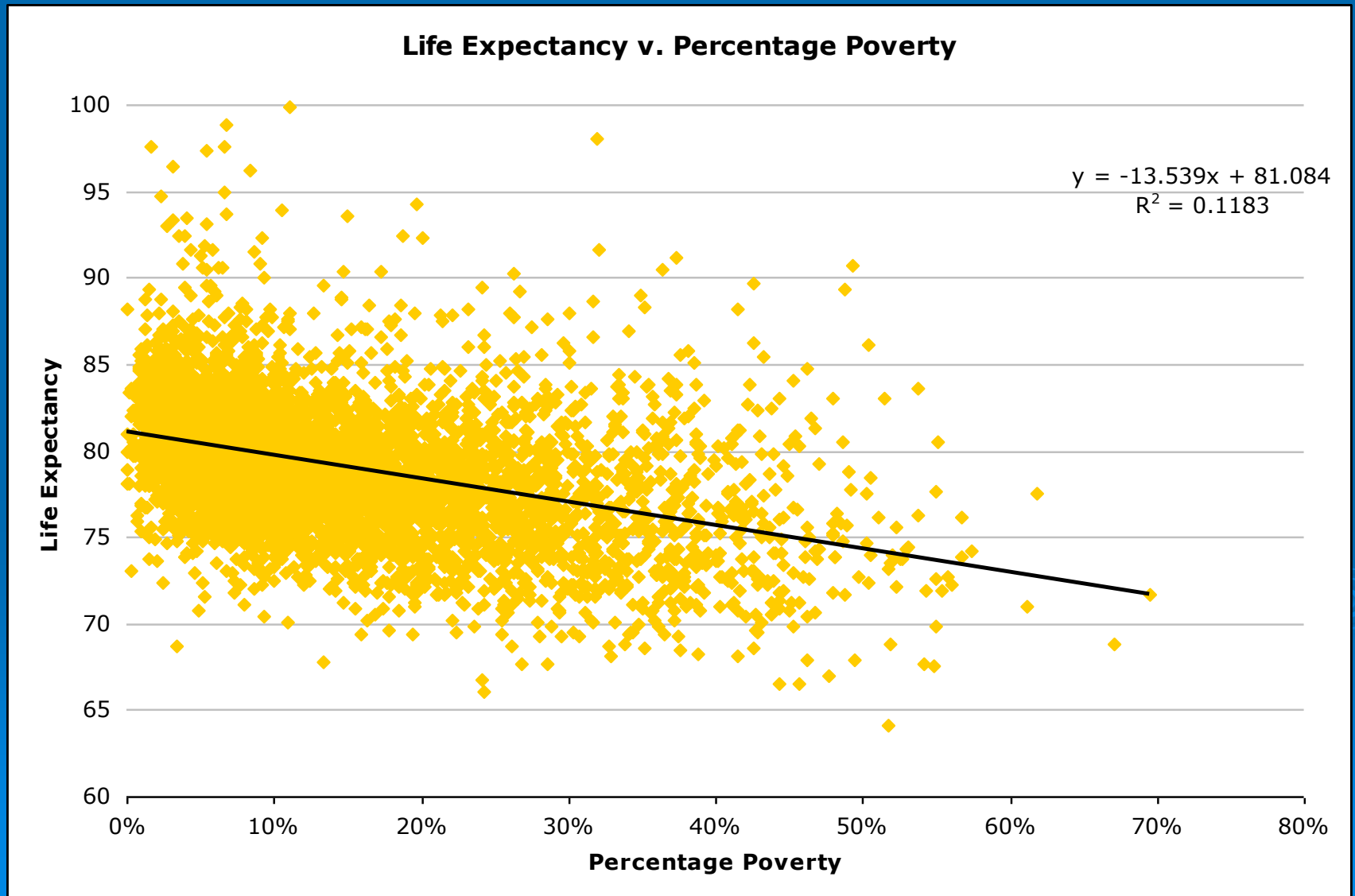
**Contra Costa County**



# Bay Area Poverty vs. Life Expectancy



# California Poverty vs. Life Expectancy



# Cost of Poverty in San Francisco Bay Area

- *Every additional \$12,500 in household income buys one year of life expectancy*
- *(Benefit appears to plateau at household incomes above \$150,000)*
- *Similar gradients in Baltimore, NYC, Philadelphia, Hennepin County (Minneapolis-St. Paul), Colorado, California, AND Cuyahoga County (\$6304/year of life)*

# The shape of health to come: prospective study of the determinants of 30-year health trajectories in the Alameda County Study

George A Kaplan,<sup>1\*</sup> Peter T Baltrus<sup>2</sup> and Trivellore E Raghunathan<sup>3</sup>

A 30 year longitudinal study of nearly 7000 Alameda County residents from 1965 forward. Those residents with household income 1 SD above mean were 25% less likely to die prematurely, 1 SD below mean were 35% more likely to die early.





# The NEW ENGLAND JOURNAL of MEDICINE

## SPECIAL REPORT

Volume 352:1138-1145

March 17, 2005

Number 11

### A Potential Decline in Life Expectancy in the United States in the 21st Century

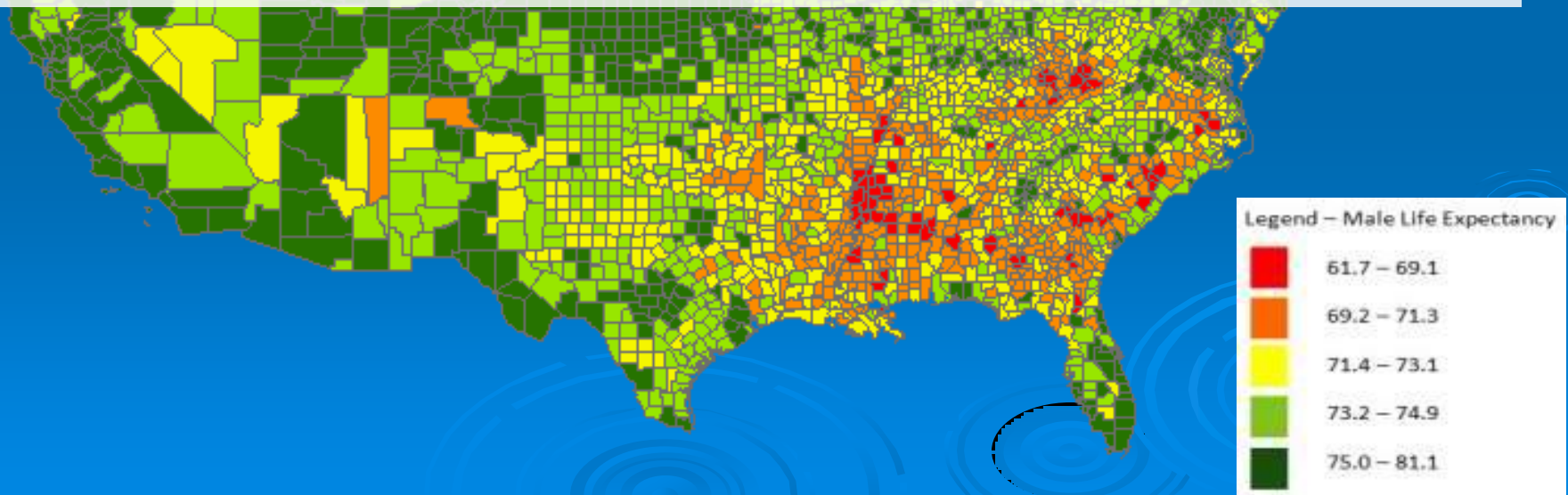
*S. Jay Olshansky, Ph.D., Douglas J. Passaro, M.D., Ronald C. Hershow, M.D., Jennifer Layden, M.P.H., Bruce A. Carnes, Ph.D., Jacob Brody, M.D., Leonard Hayflick, Ph.D., Robert N. Butler, M.D., David B. Allison, Ph.D., and David S. Ludwig, M.D., Ph.D.*

#### ABSTRACT

Forecasts of life expectancy are an important component of public policy that influence age-based entitlement programs such as Social Security and Medicare. Although the Social Security Administration recently raised its estimates of how long Americans are going to live in the 21st century, current trends in obesity in the United States suggest that these estimates may not be accurate. From our analysis of the effect of obesity on longevity, we conclude that the steady rise in life expectancy during the past two centuries may soon come to an end.

# US Male Life Expectancy 1987-2007

Between 2000 and 2007, more than 80% of US counties fell in standing against the average of the 10 nations with the best life expectancies in the world, known as the international frontier.-IHME



# Geographic and Racial Variation in Premature Mortality in the U.S.: Analyzing the Disparities

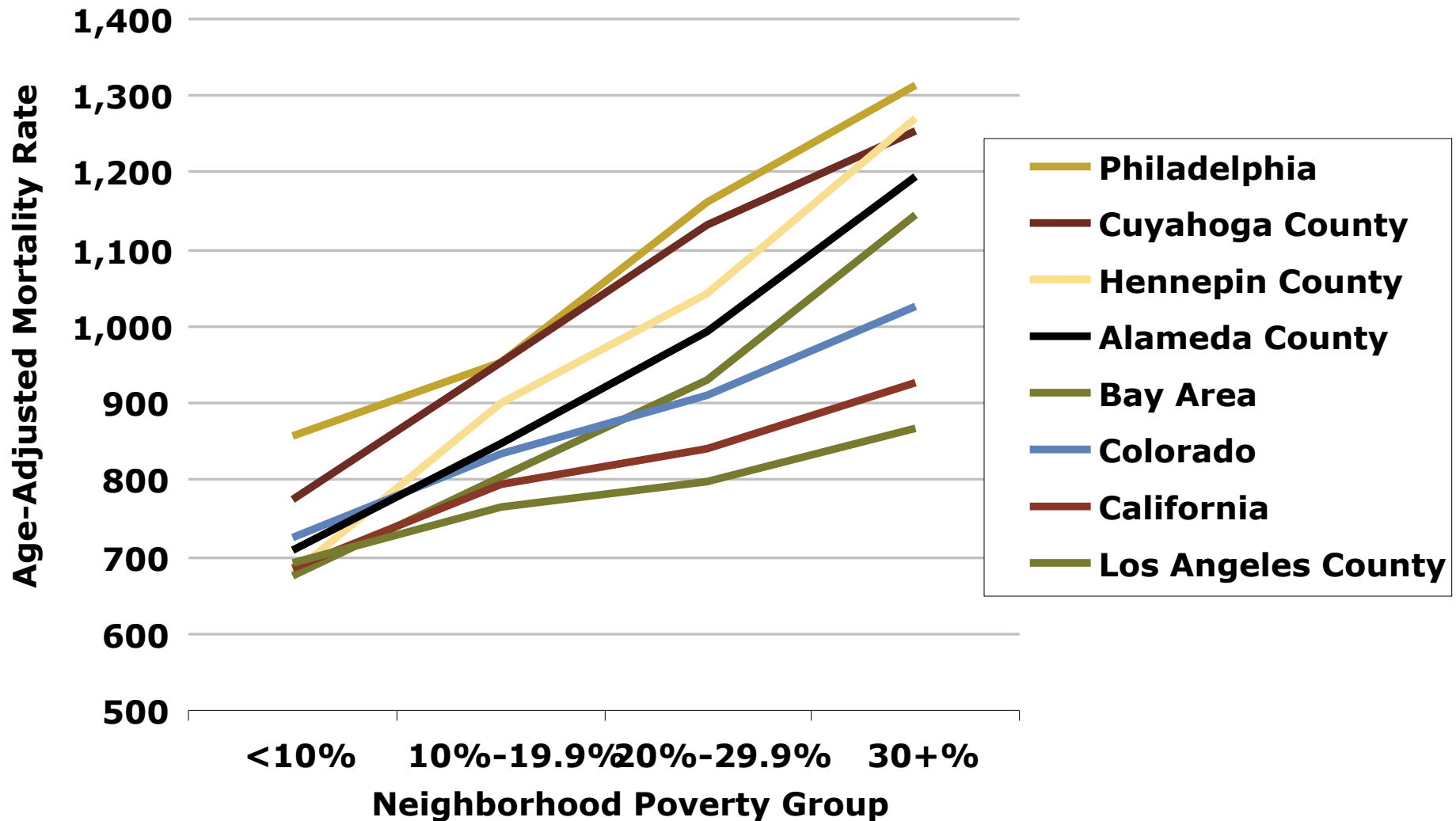
Mark R. Cullen<sup>1\*</sup>, Clint Cummins<sup>2</sup>, Victor R. Fuchs<sup>1,2</sup>

**1** General Medical Disciplines, Stanford University School of Medicine, Stanford, California, United States of America, **2** Departments of Economics and Health Research and Policy, Stanford University, Stanford, California, United States of America

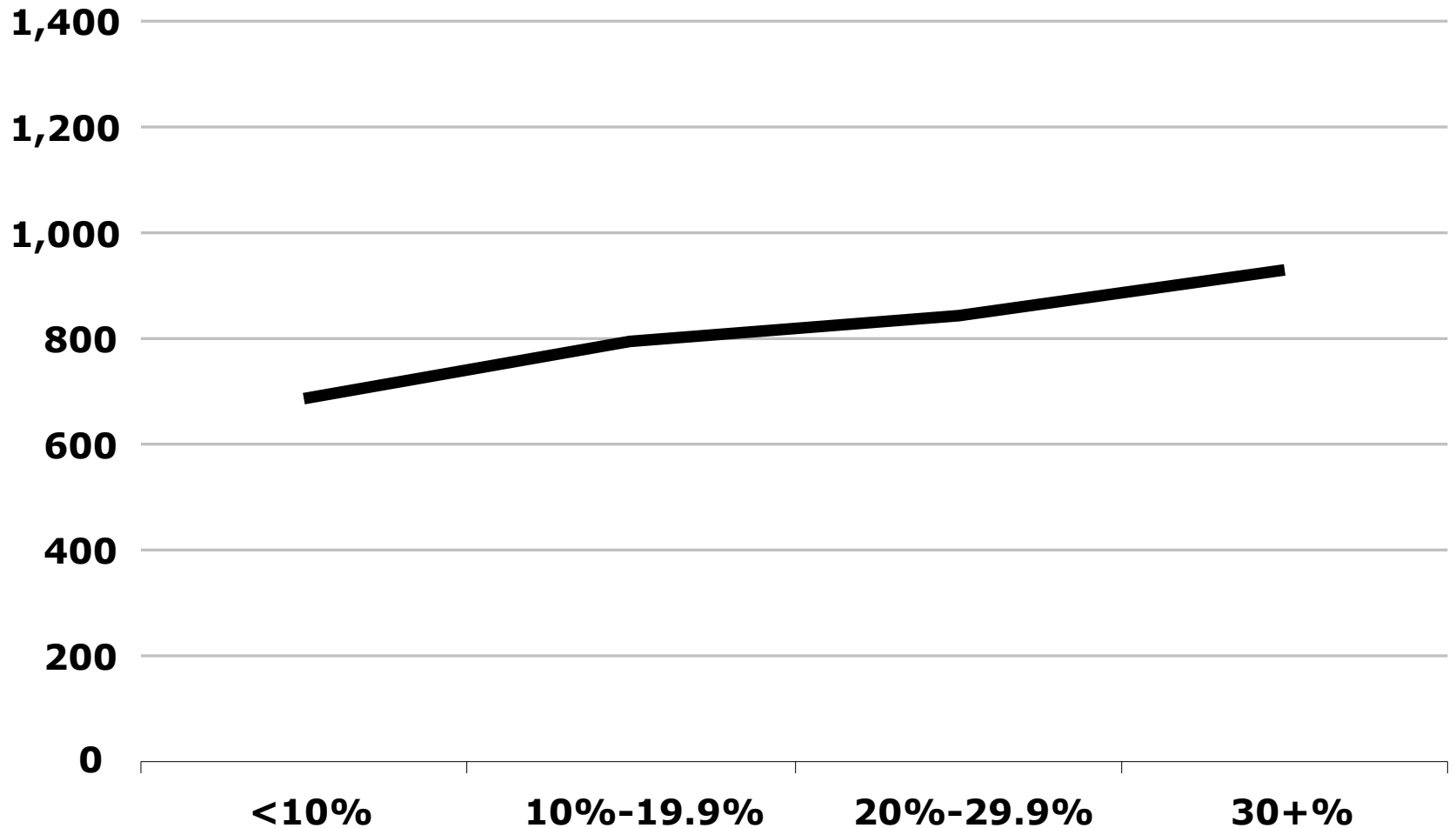


**“Geographic and racial disparities,” said first author Mark Cullen, MD, “are best understood as related to disparities in education, occupations and the like, which are strongly associated with outcomes in every county we studied, whether it was large, small, urban, rural, Southern or not.”**

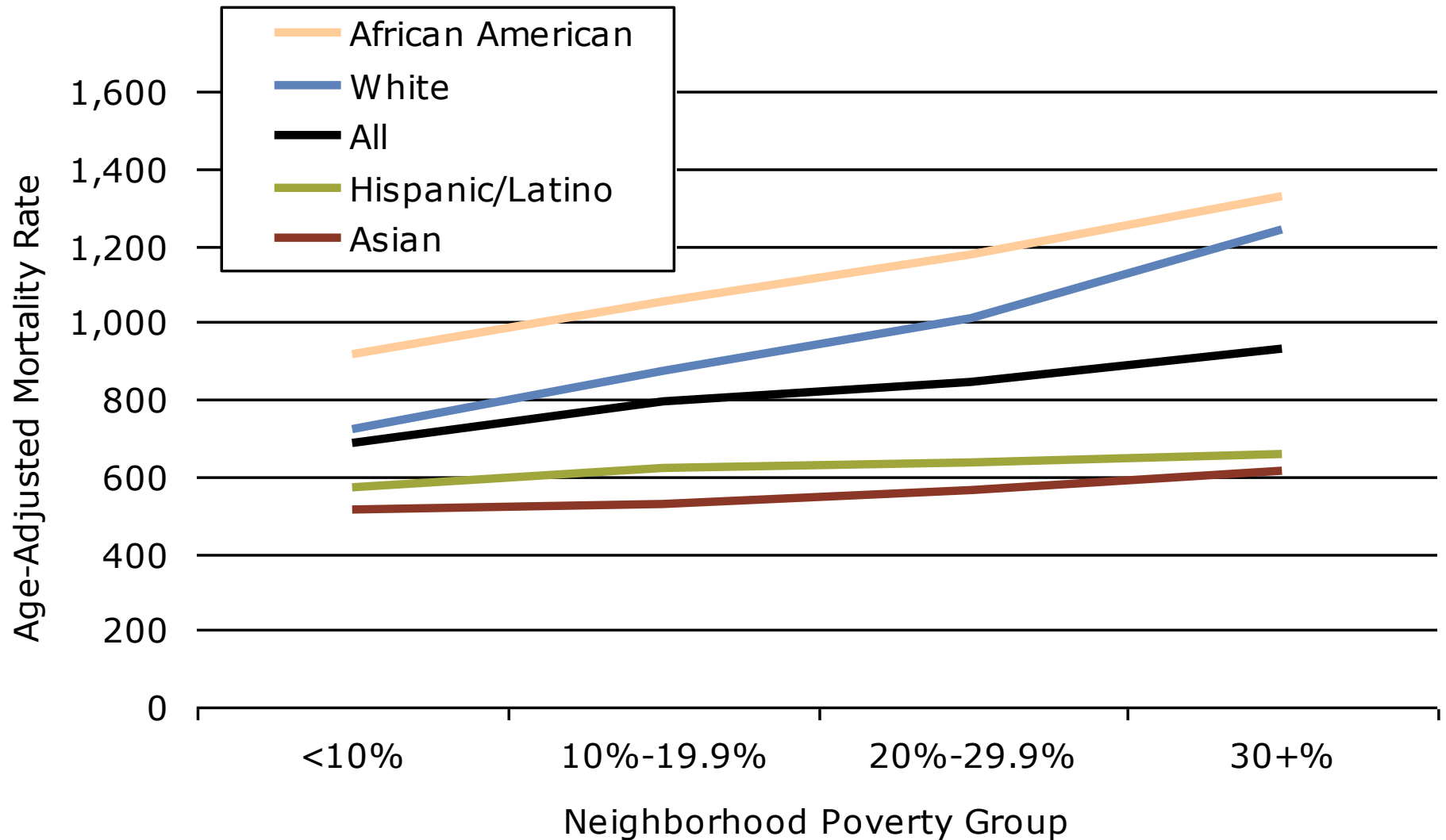
# Social Gradients Various Jurisdictions



# California Social Gradient

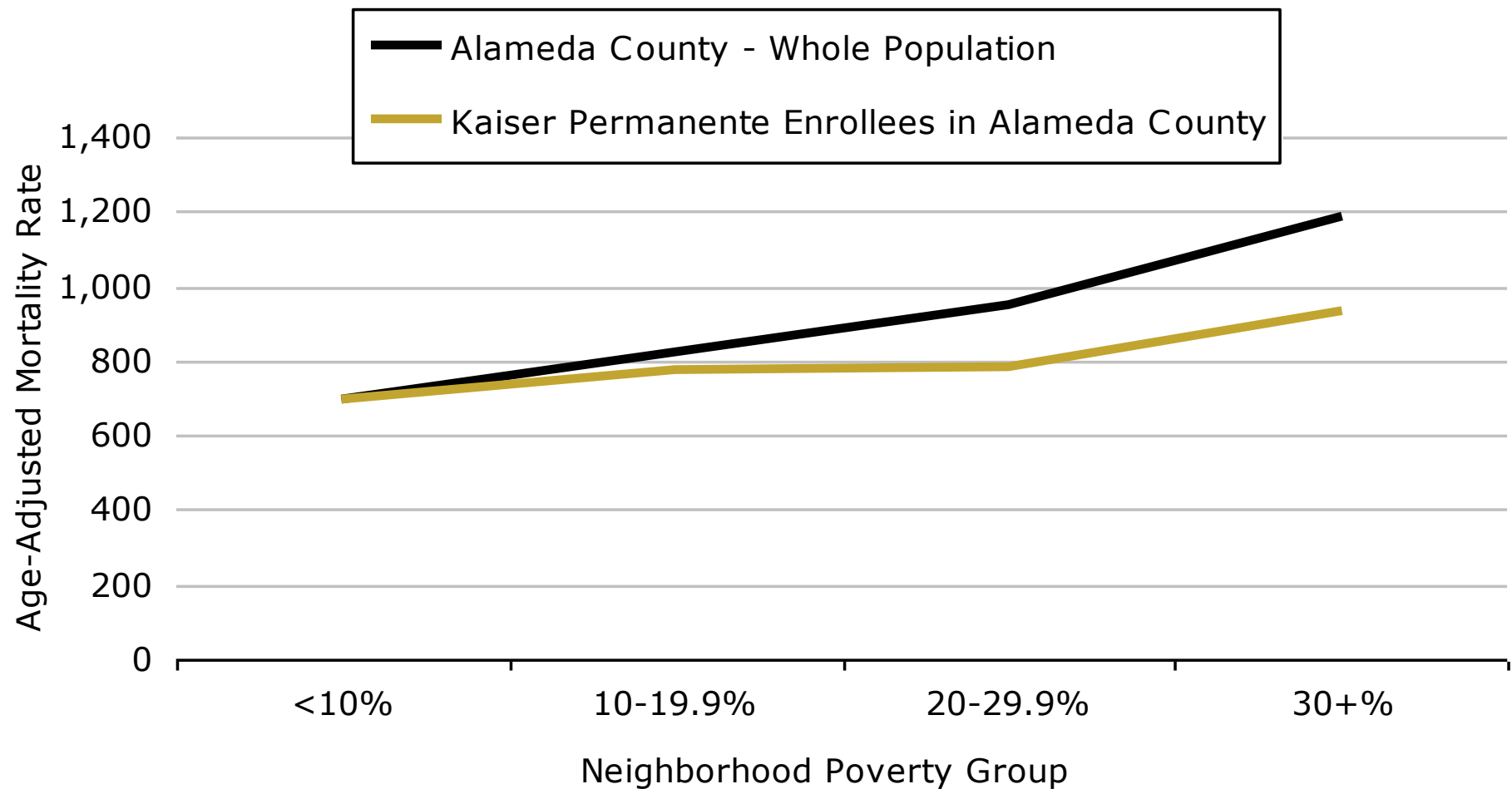


# California Social Gradient by Race/Ethnicity





# Insured vs. Whole Population



% of AC  
pop'n

32.3%

29.9%

26.0%

22.0%

ZIP CODE  
94301  
LIFE EXPECTANCY

73

how.org



ZIP CODE  
94301  
LIFE EXPECTANCY

86

Your ZIP Code  
shouldn't predict  
how long you'll live.

health  
happens  
here



ZIP CODE  
90002  
LIFE EXPECTANCY

73

# Disparities are the tip of the iceberg...





# **The Health of White Americans**



# US Whites

	Life Expectancy
<b>US White</b>	<b>78 years</b>
Chile	78 years
Costa Rica	78 years
Cuba	78 years
Slovenia	78 years
Kuwait	78 years

# US Whites Living Shorter Lives Than:

- 79 years: Belgium, Denmark, Finland, Malta, Portugal, Spain, Sweden, U.K., Korea
- 80 years: Austria, Cyprus, Germany, Greece, Ireland, Netherlands, Norway, New Zealand, Singapore
- 81 years: Canada, France, Iceland, Israel, Italy
- 82 years: Switzerland, Australia
- 83 years: Japan
  
- 26 countries

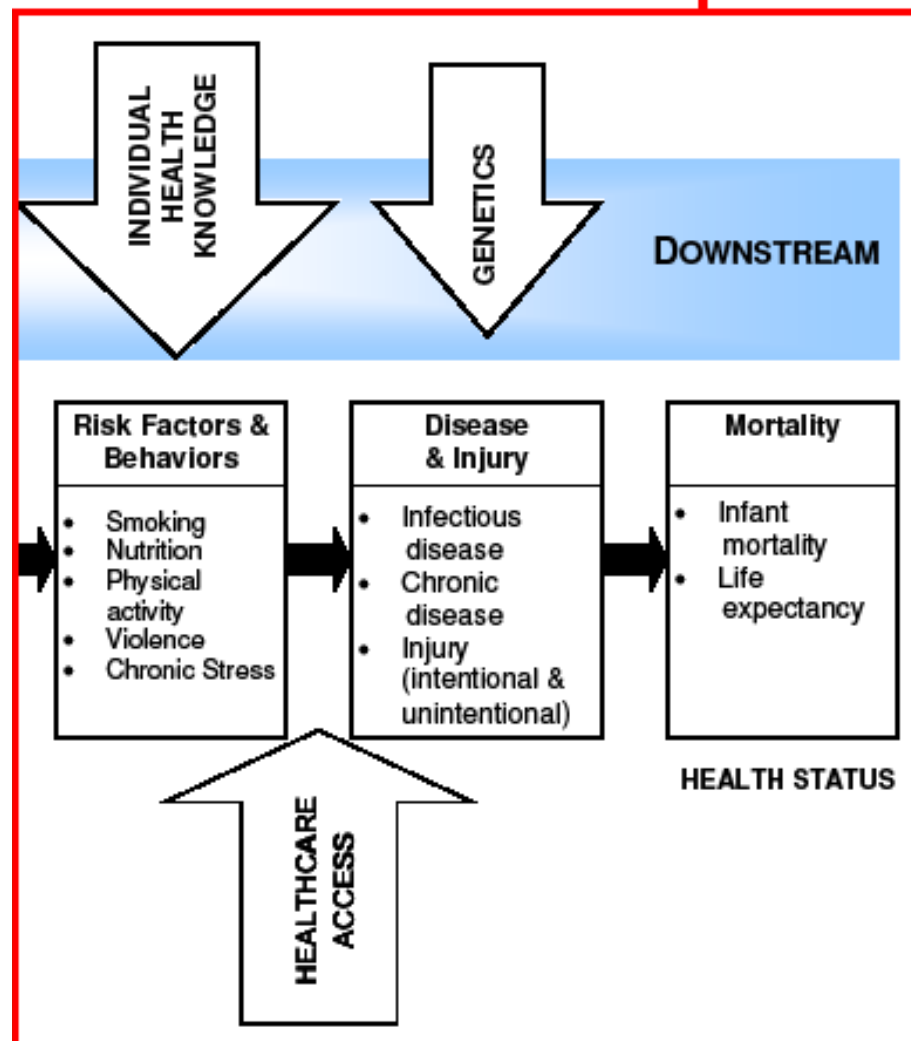


# Understanding Health at the Macro Level

- Despite our wealth, the U.S. is unhealthier across the board than our peers.
- There is evidence that flattening the social gradient improves the health of all. (Not a zero sum proposition).
- Focused upstream interventions (policy and place) may offer promise.

# A Framework for Health Equity

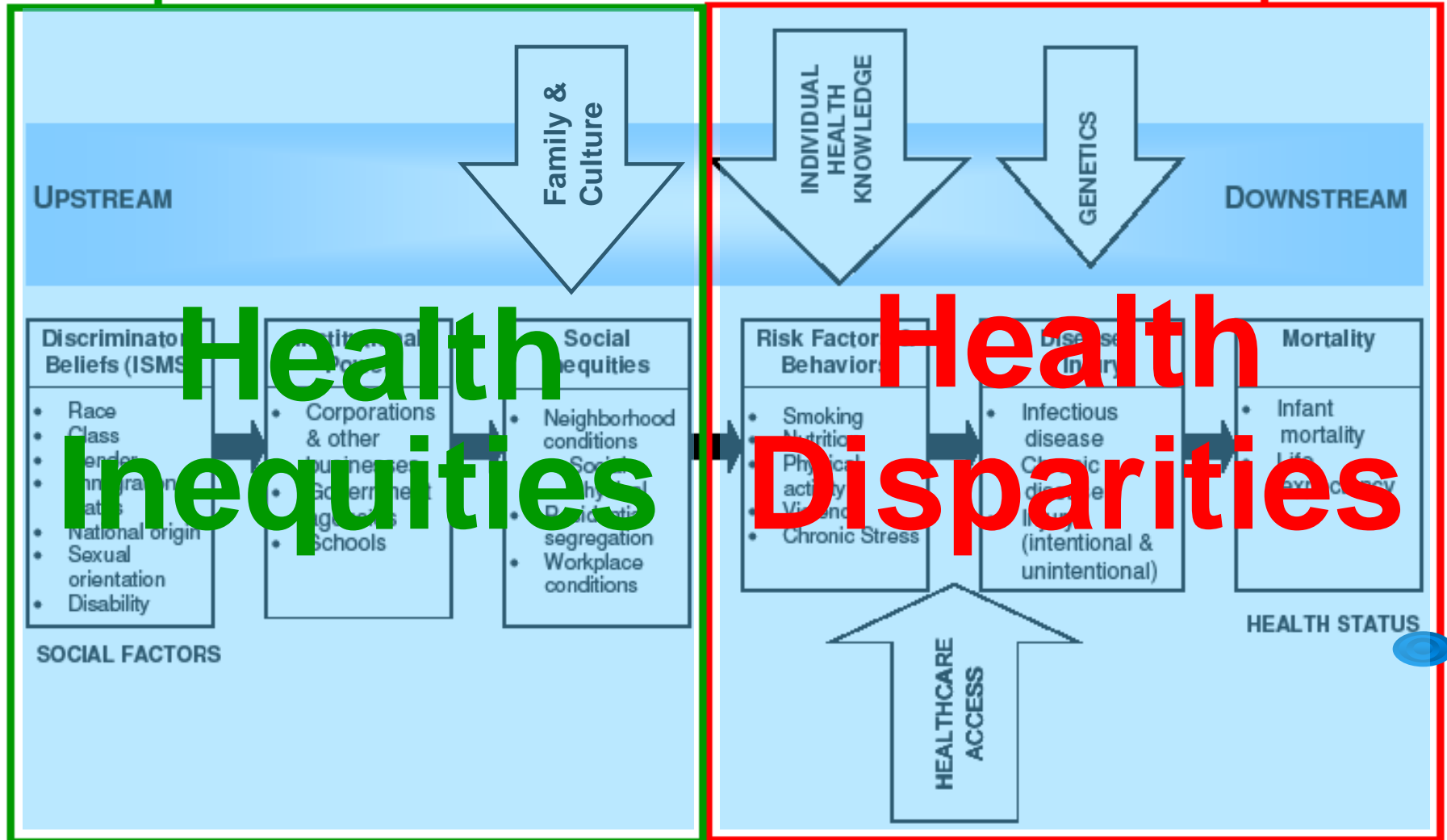
Medical Model



# A Framework for Health Equity

Socio-Ecological

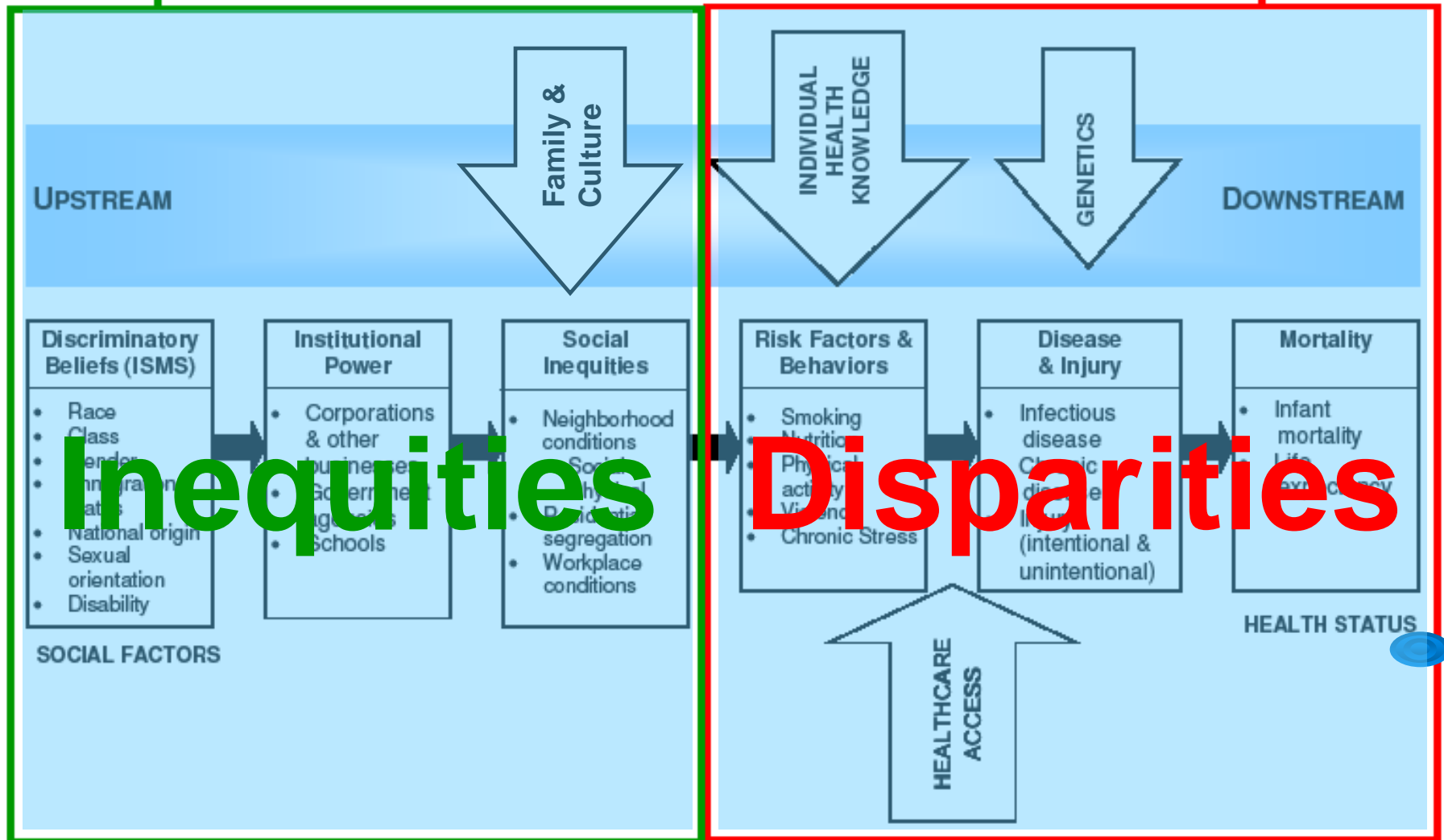
Medical Model



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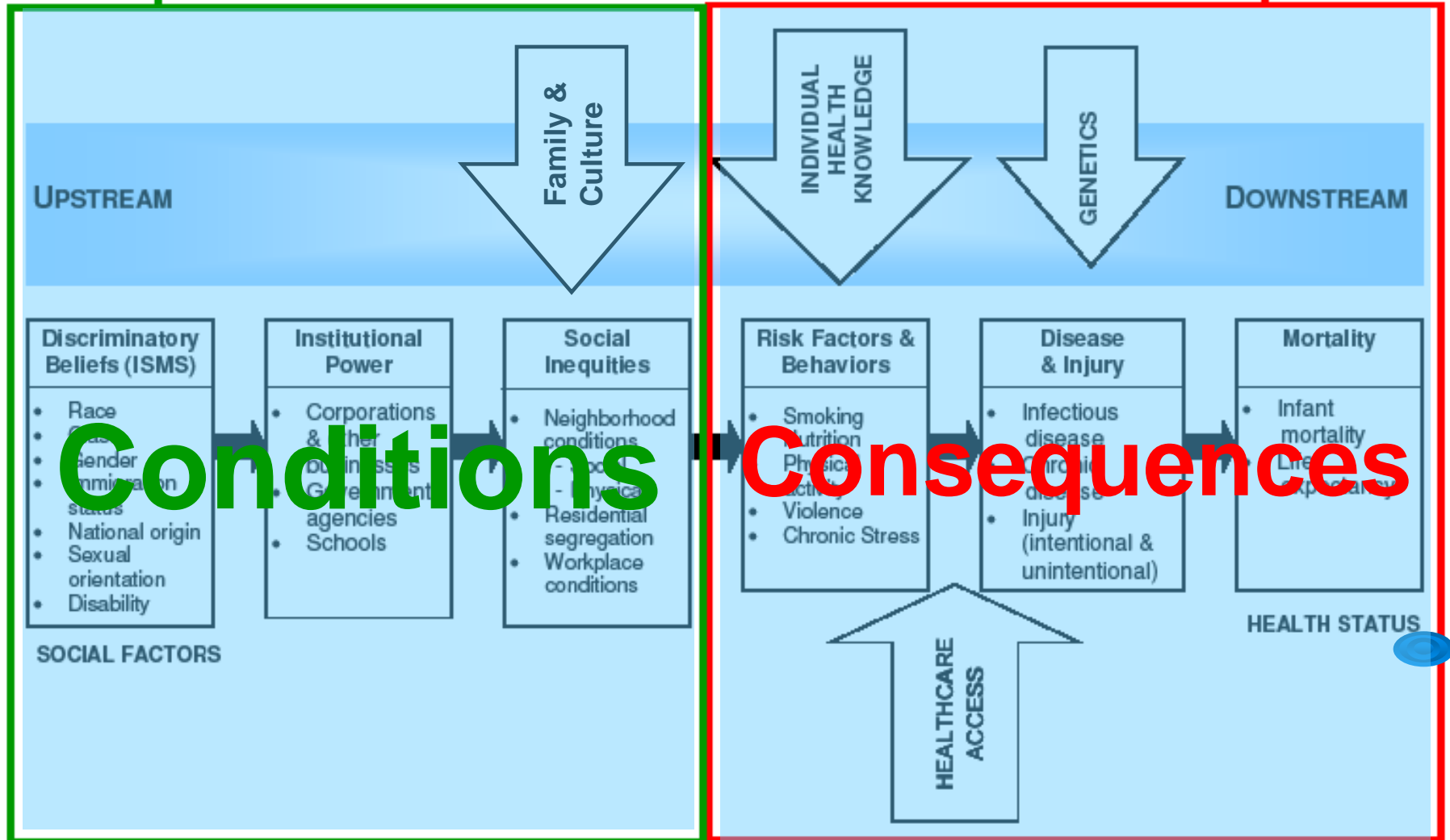
Medical Model



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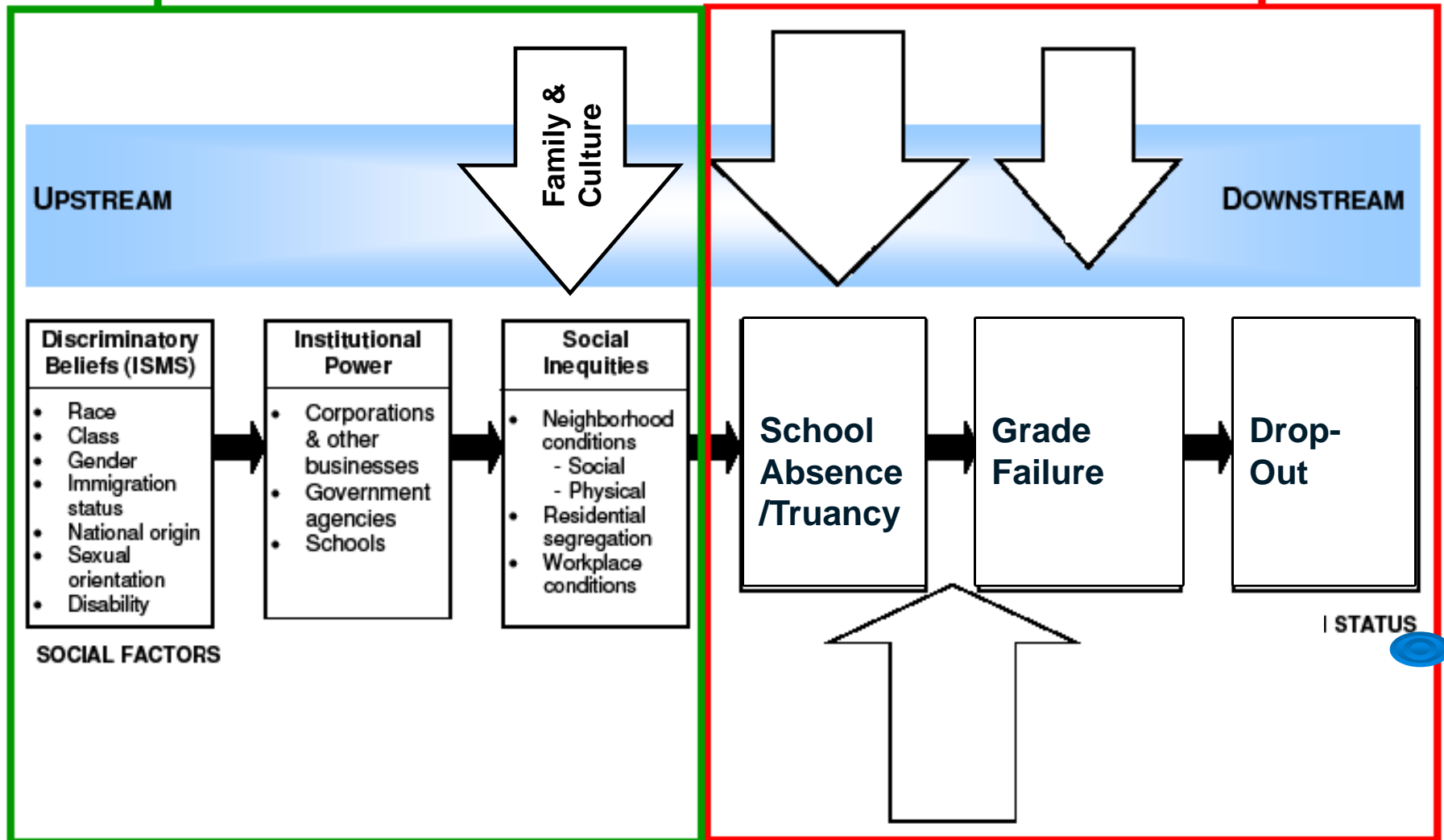
Medical Model



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Socio-Ecological

Medical Model

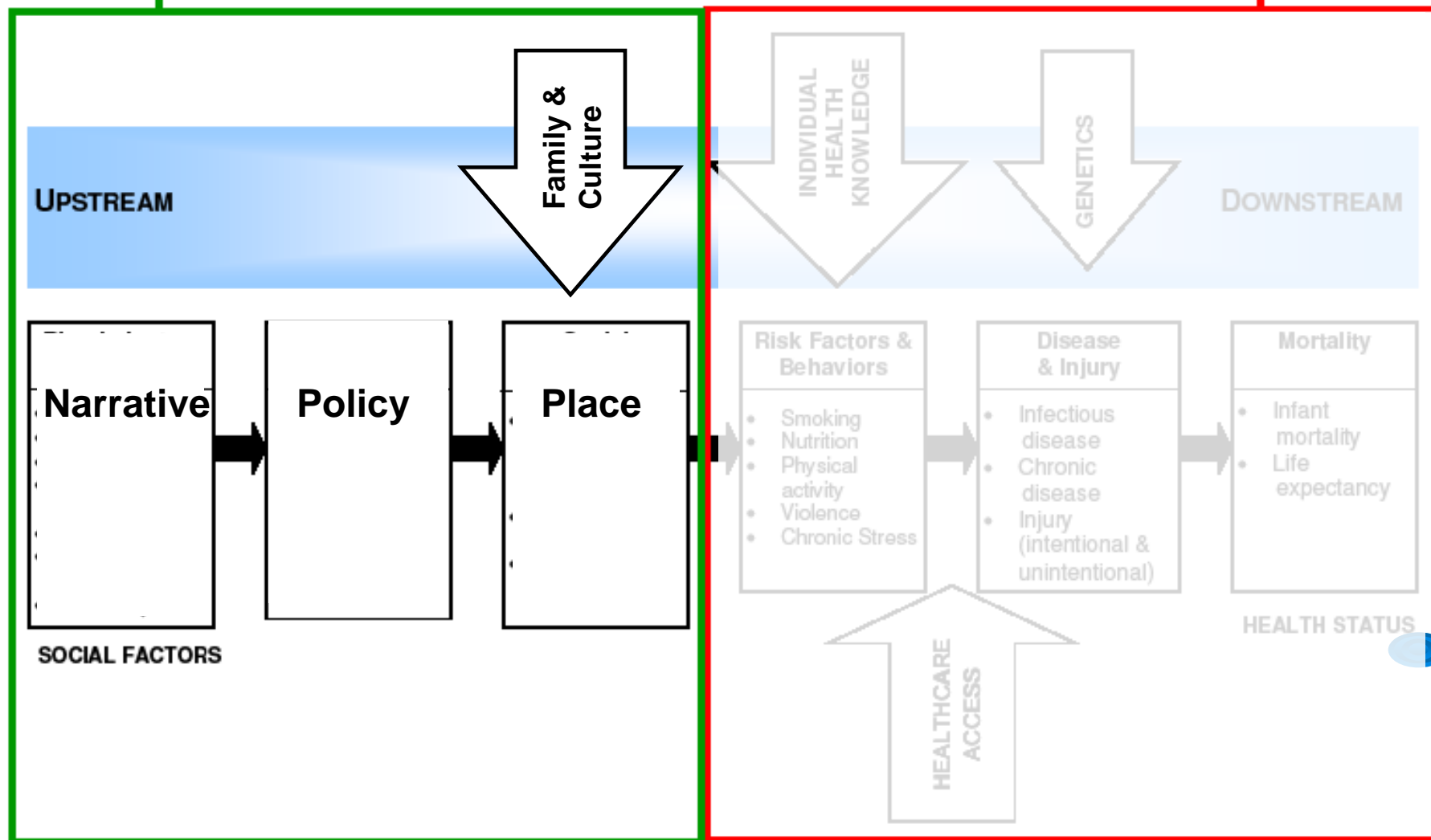




# A Framework for Health Equity

**Socio-Ecological**

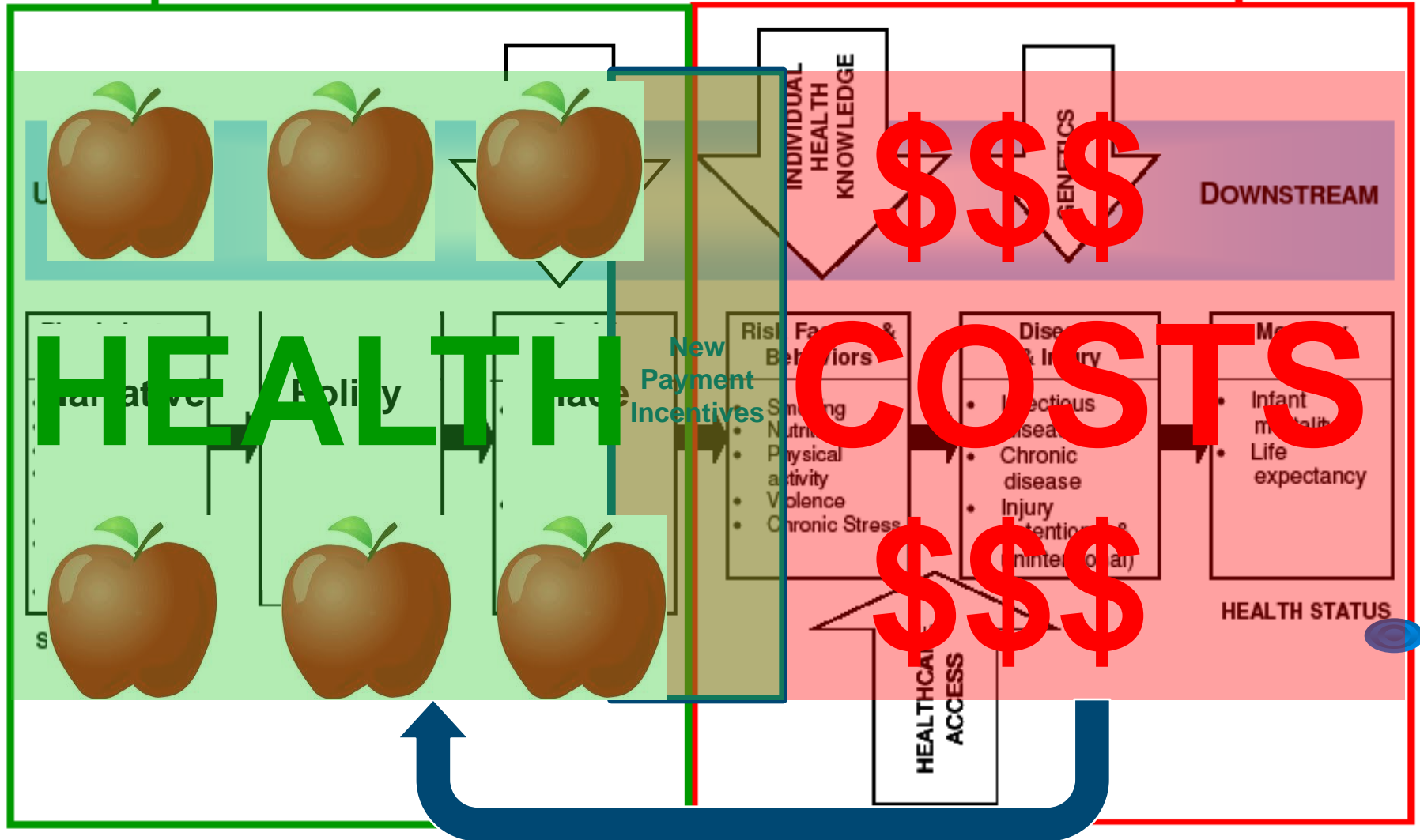
**Medical Model**



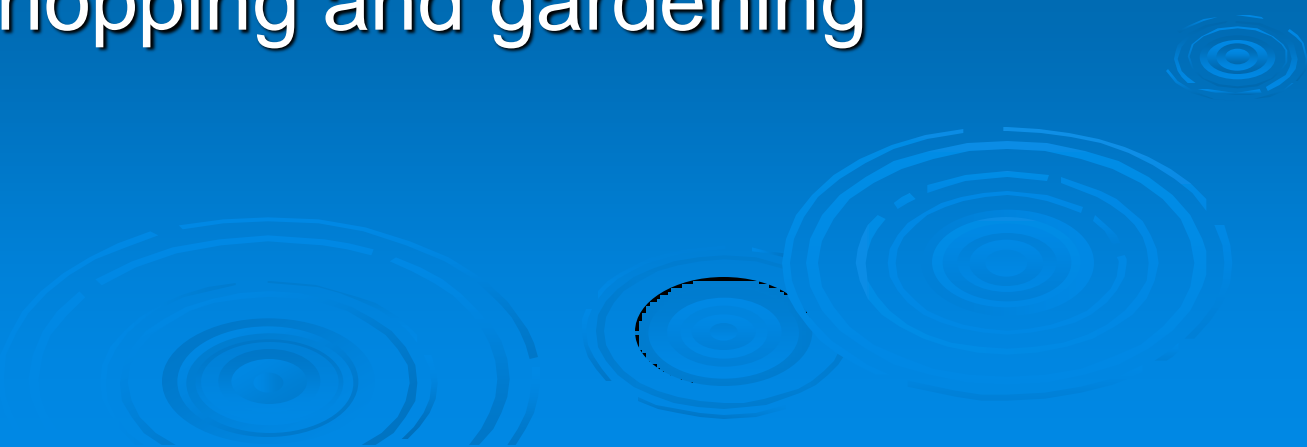
# A Framework for Health Equity

Socio-Ecological

Medical Model



# The Interface Between The Clinic & The Community

- Health homes
  - Promotoras
  - In home interventions (asthma, nurse home visitation)
  - Telehealth
  - Cooking, shopping and gardening programs
  - SBHCs
- 

# Contact Information

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The California Endowment

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