

# Covid-19: Challenges and Opportunities of Addressing Health Equity in MA

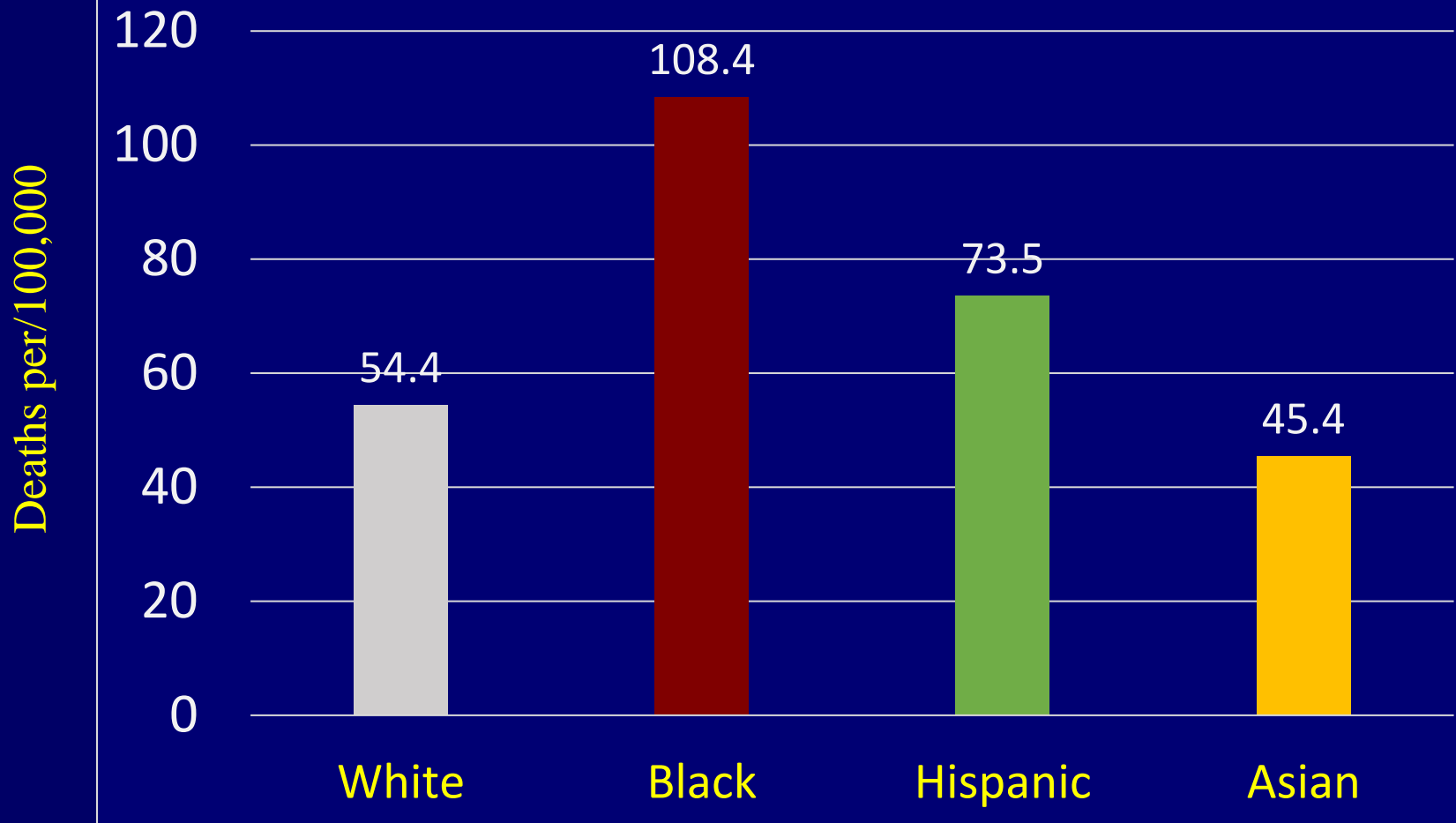
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Chair, Department of Social and Behavioral Sciences  
Professor of African & African American Studies and of  
Sociology

Harvard University

# Deaths of Covid-19

Deaths Through October 13, 2020



# Covid-19 Deaths by Race

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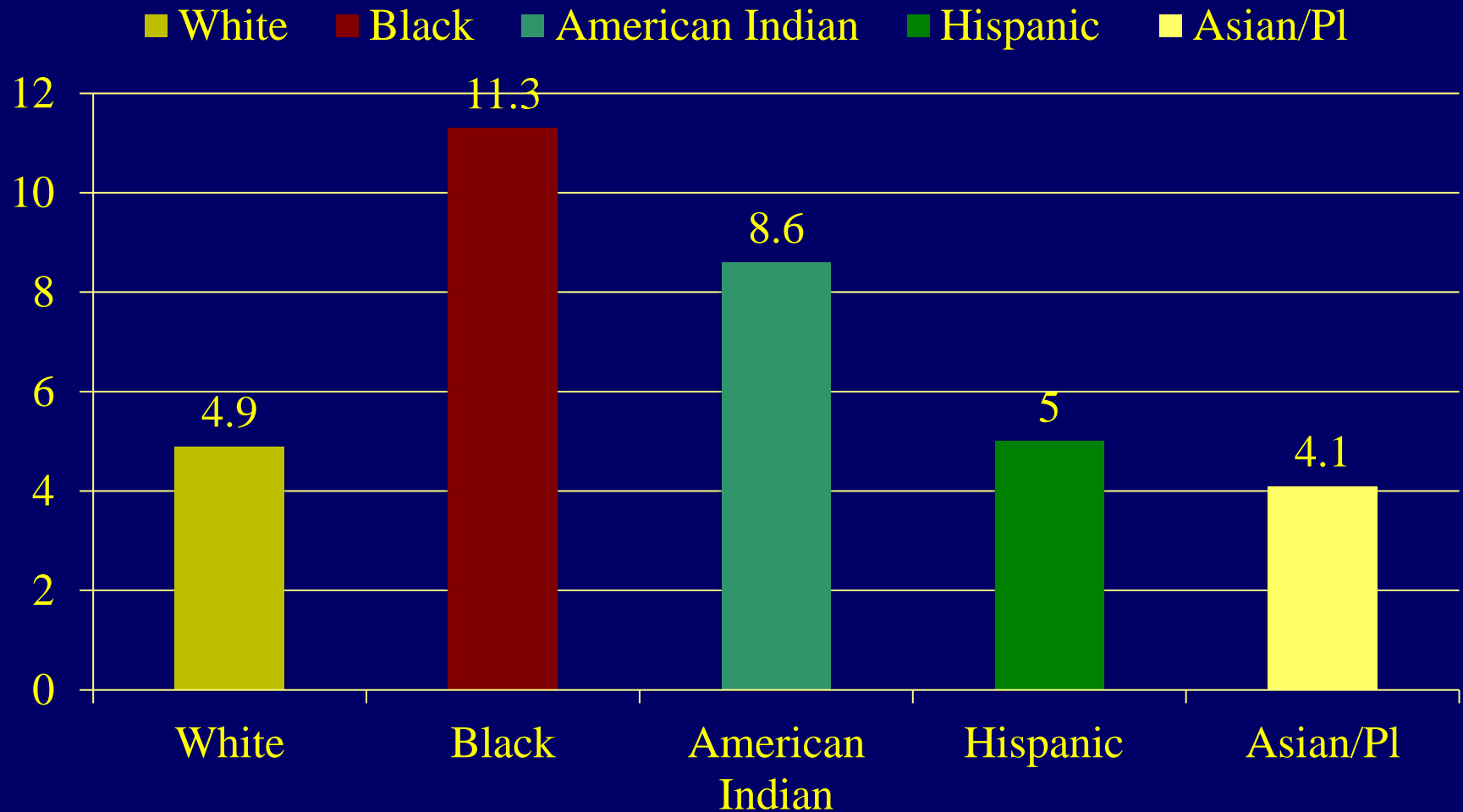
- If all racial/ethnic groups had died at the same rate as white Americans, at least:
  - 21,800 Black Americans
  - 11,400 Latino Americans, and
  - 750 Indigenous Americanswould still be alive



*Around the Globe, Race Matters for  
Health*

# Infant Mortality in the U.S., 2015

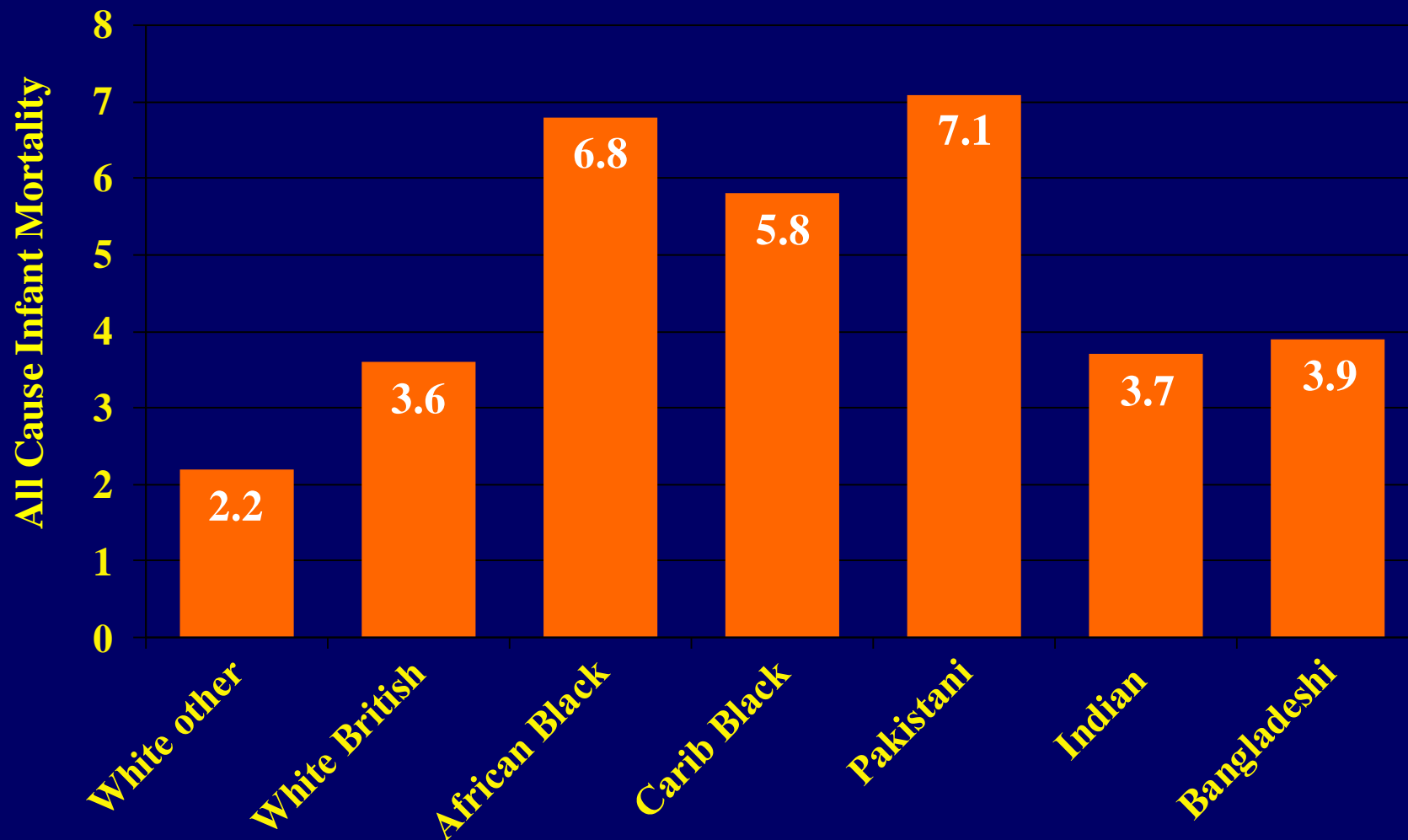
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# Infant Mortality by Ethnicity

## England 2014

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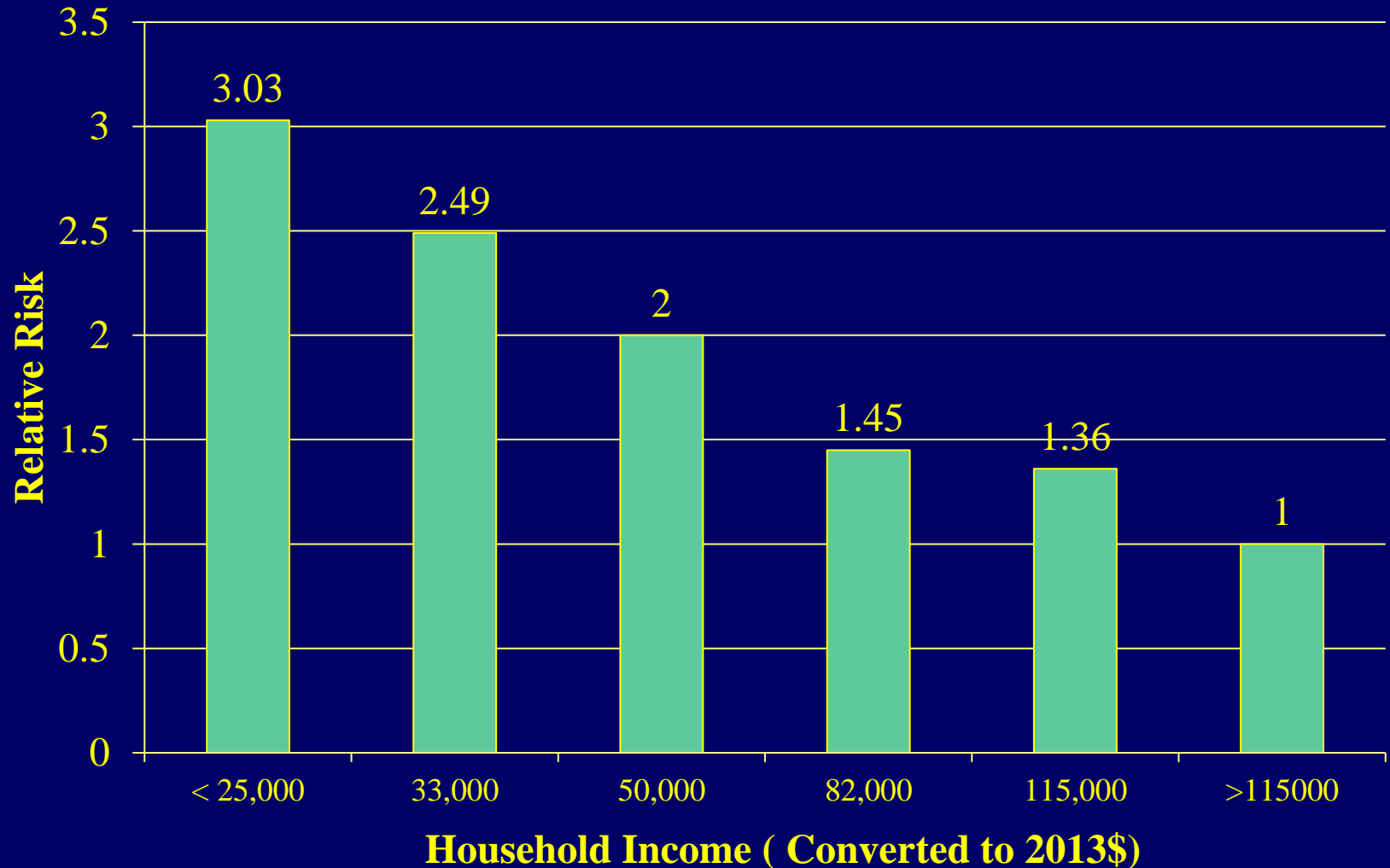


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Deaths per 1,000 live births. Public Health England, 2018

There are large Inequities in Health  
by Socioeconomic Status (SES)

# Relative Risks of All-Cause Mortality by Household Income Level: U.S. Panel Study of Income Dynamics



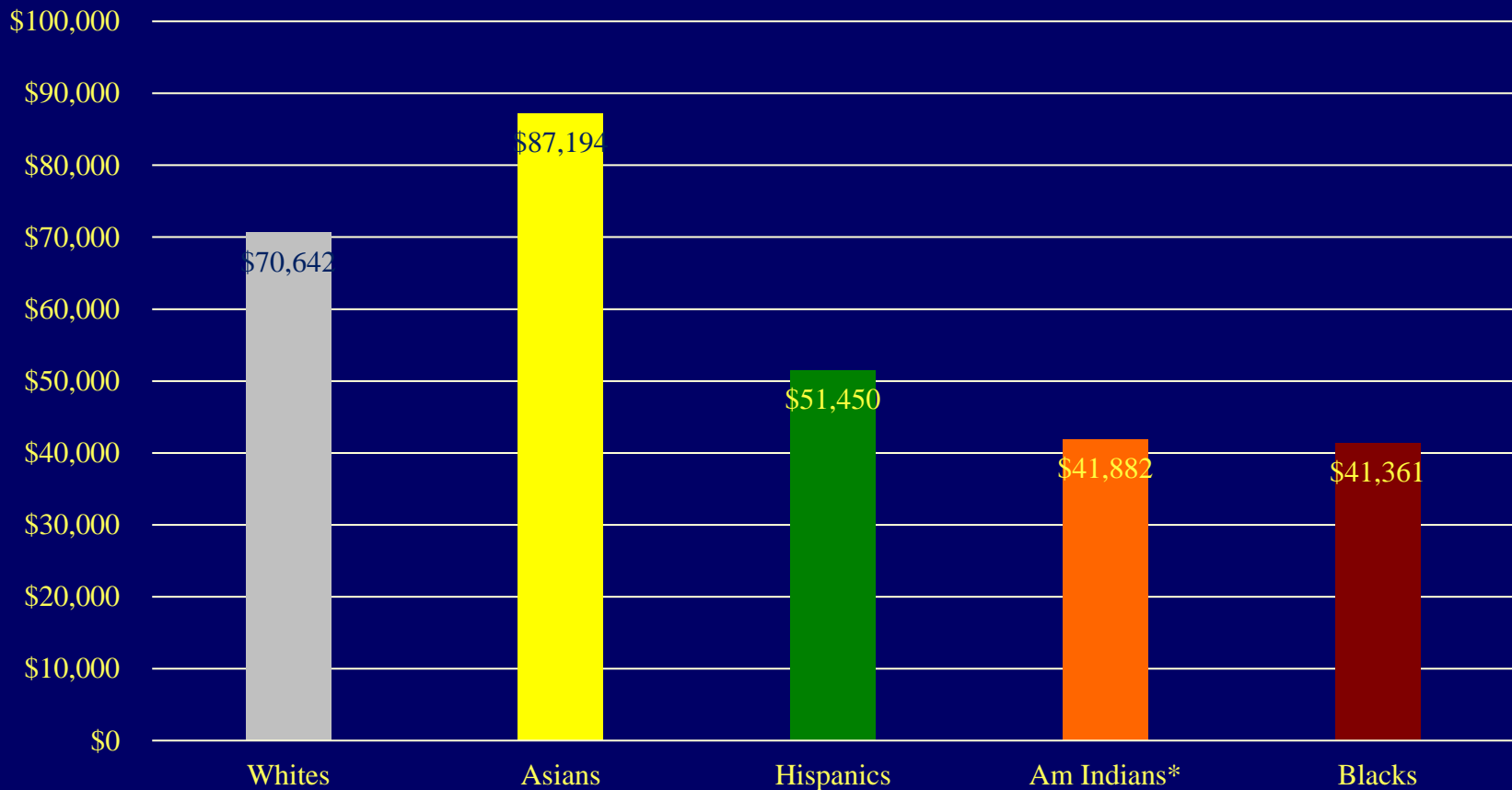


There are large Racial Inequities in  
SES in the U.S.

# Median Household Income and Race, 2018

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## Racial Differences in Income are Substantial:



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U.S. Census Bureau, Semega et al., 2019; \*for 2017; US Census Bureau, ACS, 2017

# Median Household Income and Race, 2018

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## Racial Differences in Income are Substantial:

**1 dollar**



**Whites**

**1.23 dollar**



**Asians**

**73 cents**



**Hispanics**

**59 cents**



**Am Indians\***

**59 cents**



**Blacks**

Large racial gaps in income  
markedly understate the racial gap  
in economic status

# Wealth versus Income

- Home ownership
- Other real estate
- Checking, savings, money market accounts, CDs
- Vehicles
- Businesses
- IRA/Keogh, stocks, bonds, mutual funds, treasury bills
- Subtracting mortgages and debt



# Median Wealth and Race, 2016

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For every dollar of wealth that Whites have,



Blacks have 10 cents



Latinos have 12 cents



Other Races have 38 cents





# Relative Wealth by Ethnic Group, 2014-16

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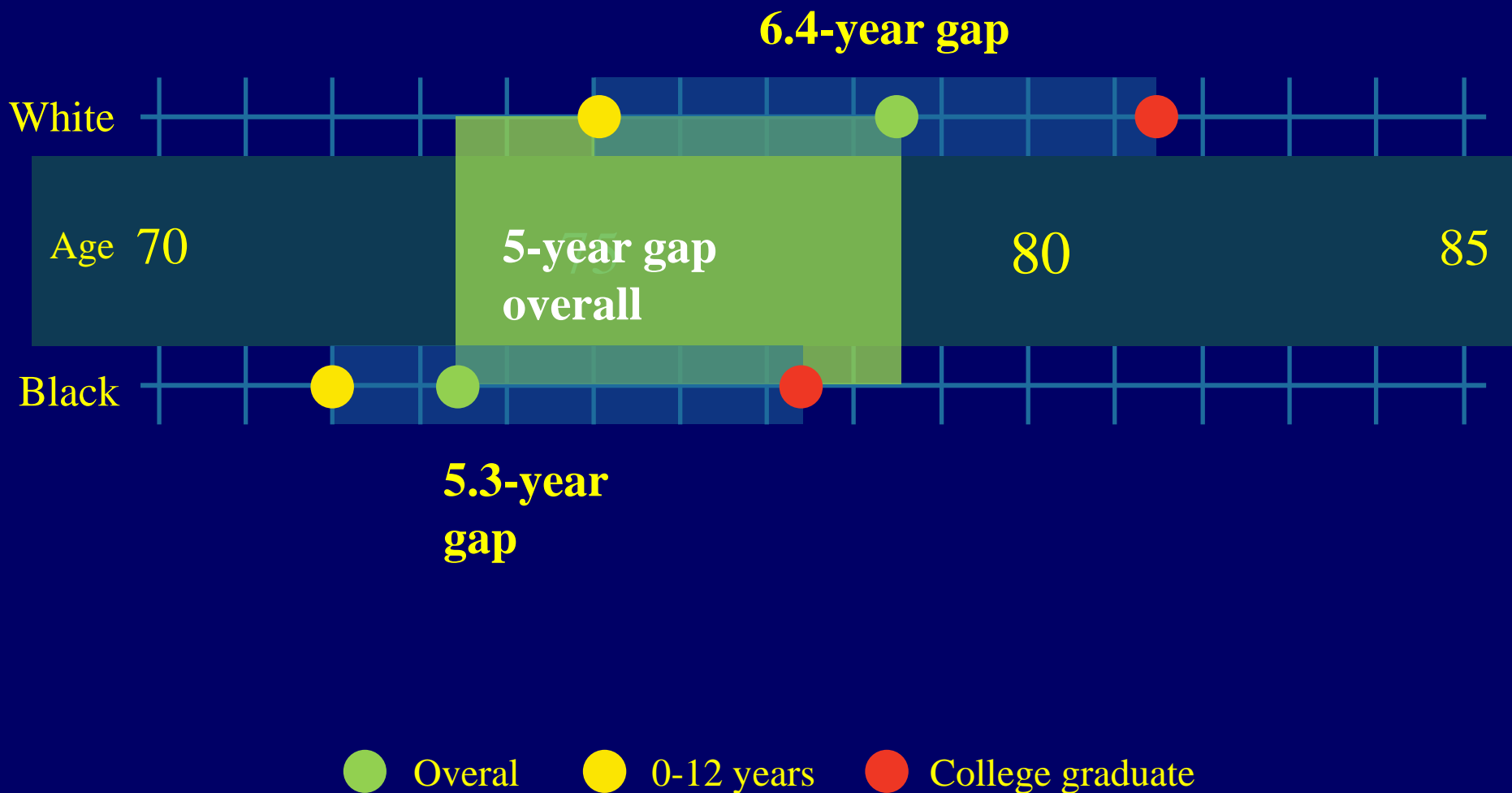
Racial Differences in Wealth are Substantial:



# **Added Burden of Race**

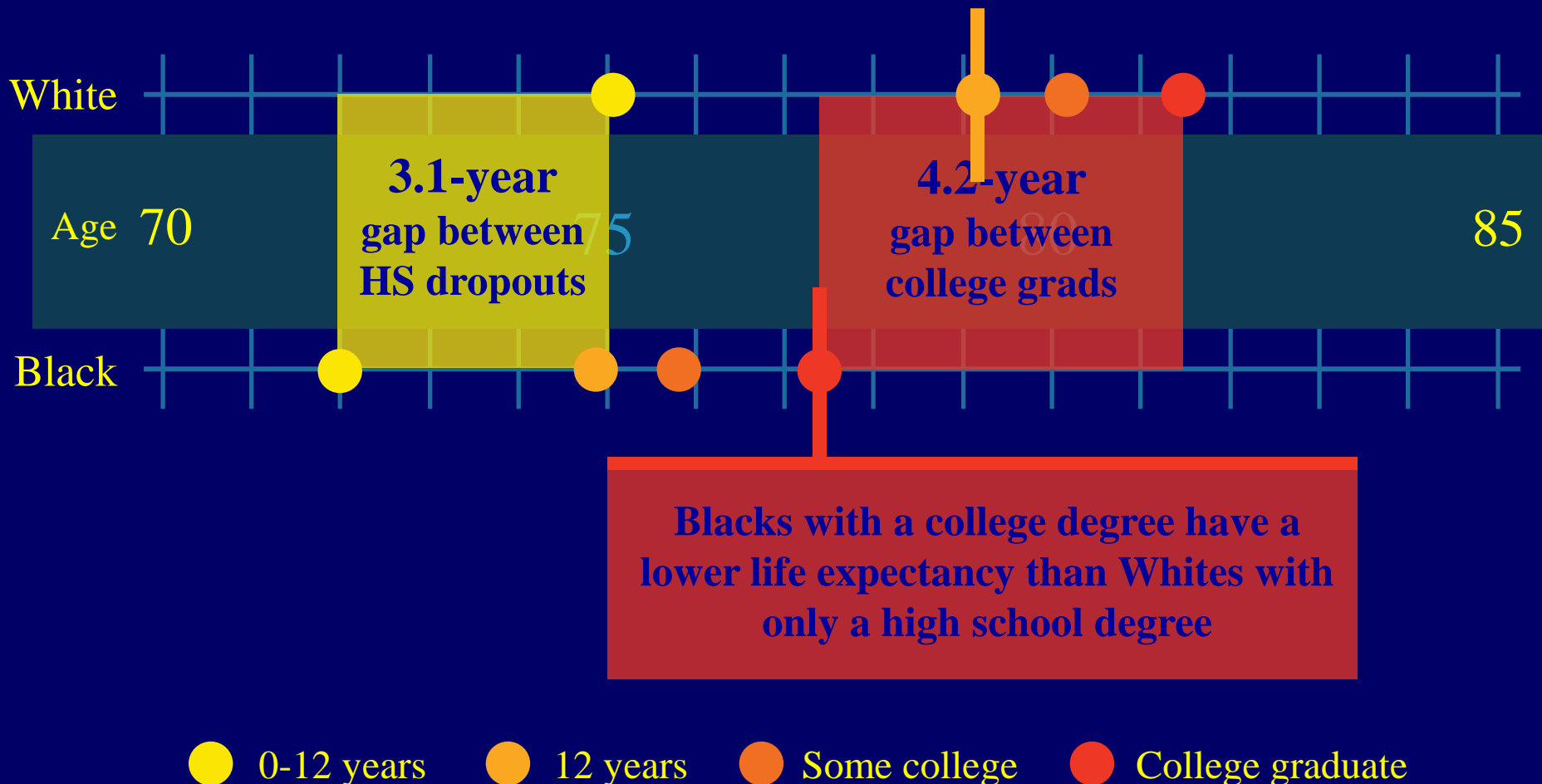


# Life Expectancy at Age 25 Based on Level of Education

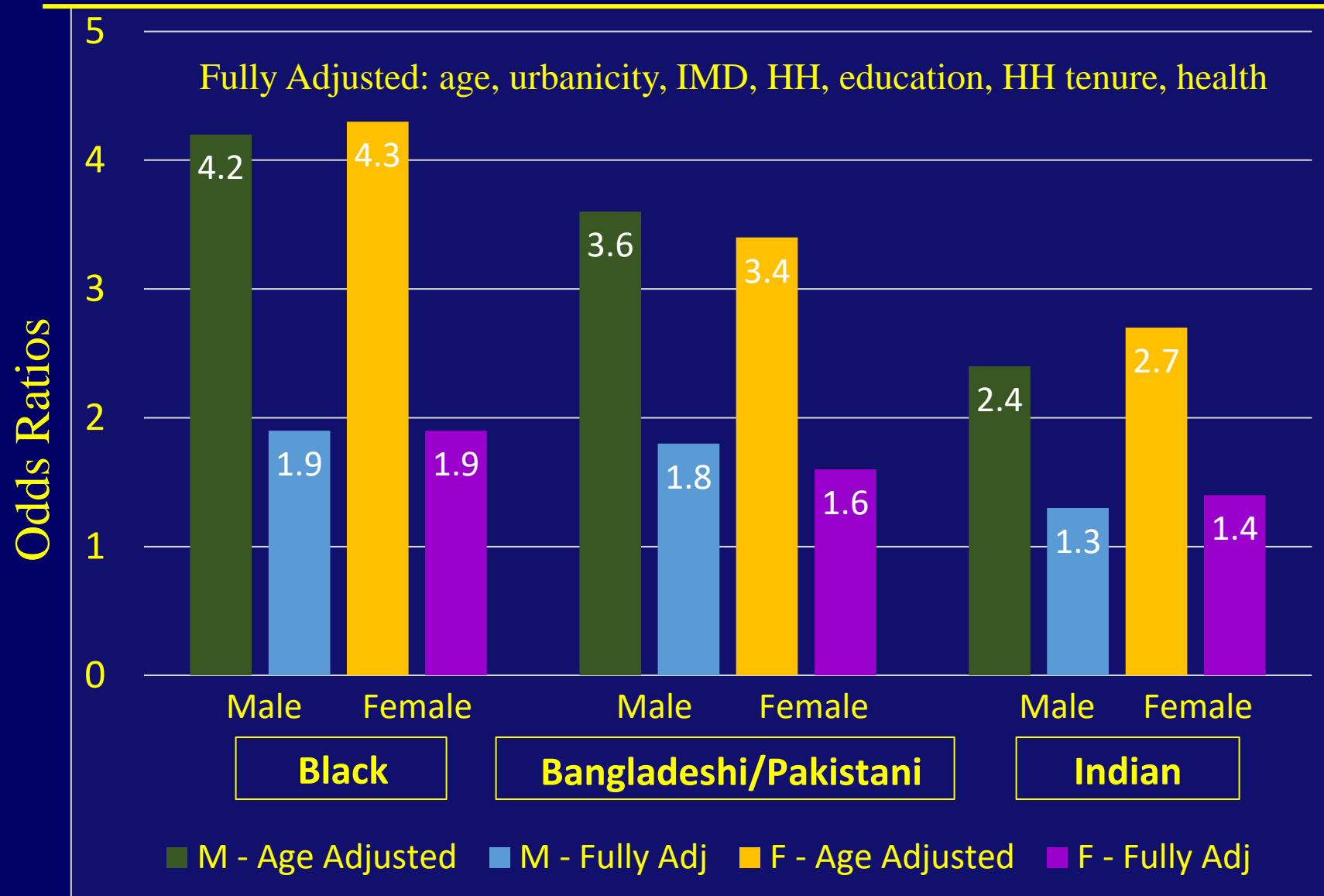


# Life Expectancy at Age 25

## Race Still Matters



# Covid-19 Deaths, Relative to Whites



# Why Does Race Still Matter?

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Could racism be a critical missing piece of the puzzle to understand the patterning of racial disparities in health?

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# Racism Defined

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- Racism: an organized system that,
  - categorizes and ranks
  - devalues, disempowers, and
  - differentially allocates opportunities/resources
- The development of racism is typically undergirded by an ideology of inferiority in which some population groups are regarded as being inferior to others
- This leads to the development of
  - negative attitudes/beliefs (prejudice and stereotypes) to out-groups, and
  - differential treatment (discrimination) by individuals and social institutions

*Individual vs  
Institutional/Structural/Systemic  
Discrimination*

# Institutional Discrimination: Waiting to Vote

Average number of minutes, 2012 Presidential Election

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African Americans  23 min

Latinos  19 min

Asian Americans  15 min

Native Americans  13 min

Whites  12 min

# Institutional Processes

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- Length of time waiting to vote linked to the residence of the voter and the policies and procedures (budgeting and space constraints and local administrative procedures) linked to place:
  - How many voters being served by a polling site?
  - How many precincts in a given area?
  - Staffing of a precinct affects how long it takes to vote
-



*Residential Segregation* is an example of  
Structural/Institutional Racism that has  
pervasive adverse effects on health  
and development

# Place Matters

Residential Segregation is  
a striking legacy of racism

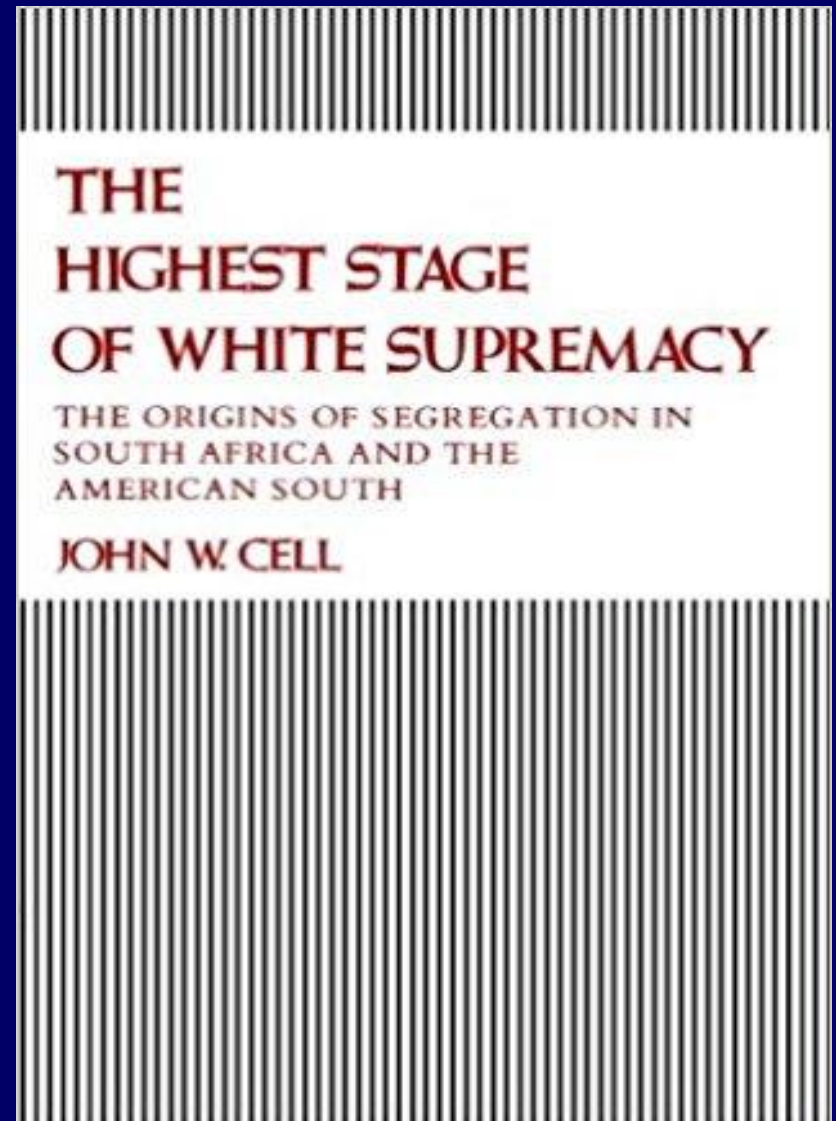


- As is the forced removal and relocation of indigenous peoples
- The institutionalized isolation and marginalization of racial populations has adversely affected life chances in multiple ways

# Racial Segregation Is ...

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- One of the most successful **domestic policies** of the 20<sup>th</sup> century
- "the dominant system of racial regulation and control" in the U.S



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John Cell, 1982

# How Segregation Works

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Segregation is like a toxic emission produced by an industrial plant. Like carbon monoxide it is often imperceptible but causes illness and death as valuable resources disappear:

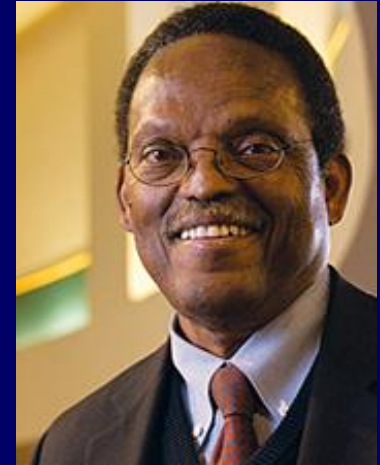
- Quality schools
- Safe playgrounds
- Good jobs
- Healthy air, water, etc.
- Safe housing
- Transportation
- Healthcare



# Racial Differences in Residential Environment

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In the 171 largest cities in the U.S., there is not even one city where whites live in equal conditions to those of blacks



“The worst urban context in which whites reside is considerably better than the average context of black communities.”



# Neighborhood Opportunity Index

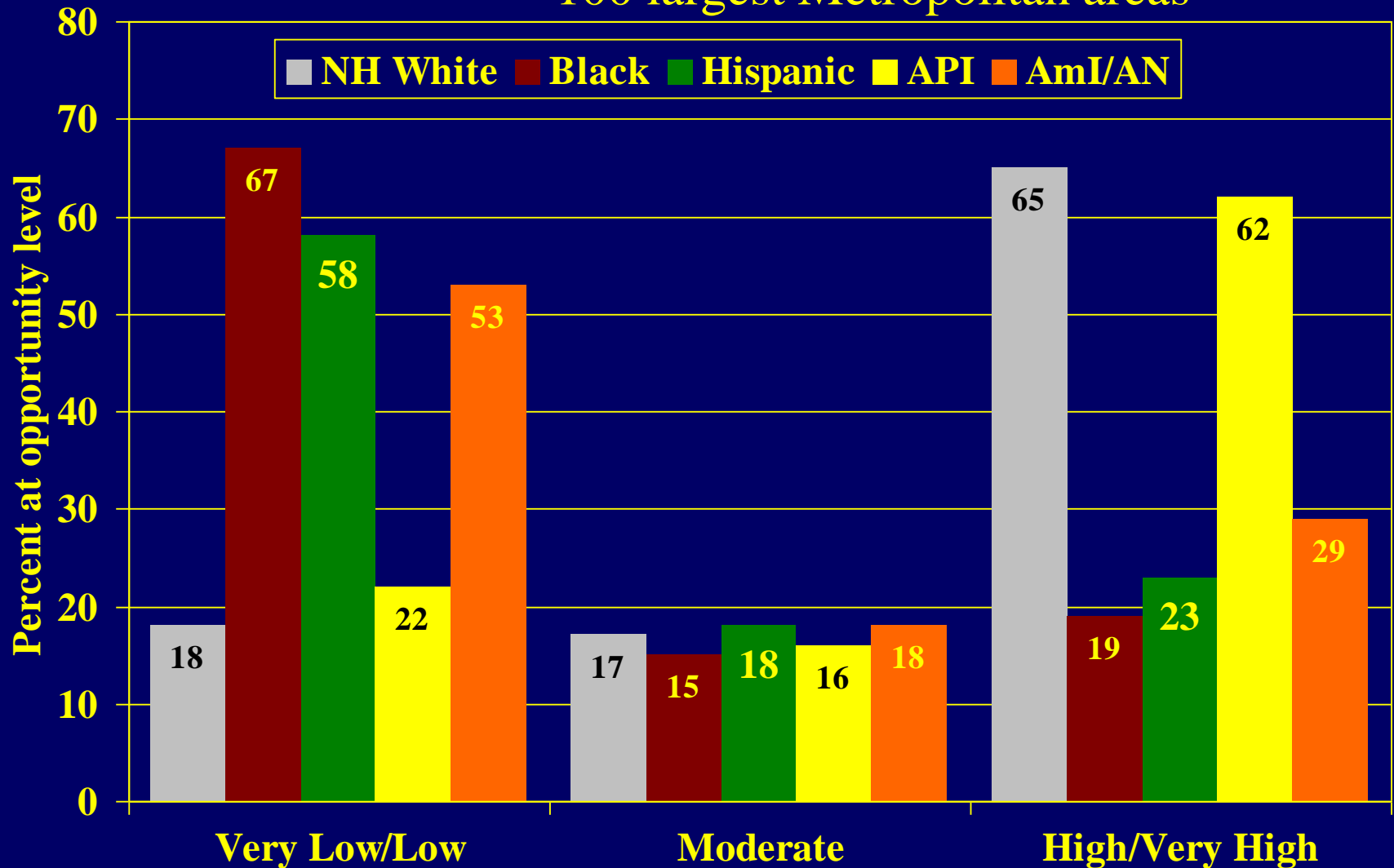
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1. **Institutions:** number & quality of schools, early childhood centers
2. **Influences shaping norms and expectations:** (high school graduation rate, adults with high skill jobs)
3. **Economic Resources:** income, home ownership, employment, public assistance
4. **Environmental Quality:** air, water, soil pollution, hazardous waste sites
5. **Resources for health:** green space, healthy food outlets, walkability



# Percentage of Children at Neighborhood Opportunity Level

100 largest Metropolitan areas



*Segregation Creates the Large  
Racial/Ethnic Differences in SES*



# Residential Segregation and SES

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A study of the effects of segregation on young African American adults found that the elimination of segregation would erase black-white differences in:

- Earnings
- High School Graduation Rate
- Unemployment

And reduce racial differences in single motherhood by two-thirds

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# An Intergenerational Study

- Inequity usu. studied in one generation
- Intergenerational analysis, linking parents & kids, US pop, 1989-2015
- Black boys have lower earnings than white boys in 99% of Census tracts in America (controlling for parental income)
- Why? They live in neighborhoods that differ in access to opportunity
- Black boys do well in neighborhoods with good resources (low poverty) *and* good race-specific factors (high father presence, less racial bias)
- The problem: there are essentially no such neighborhoods in America



# Inequities by Design

- Racial inequities in SES that matter for life & health do not reflect a broken system
  - Instead, they reflect a carefully crafted system, functioning as planned – successfully implementing social policies, many of which are rooted in racism
  - They are not accidents or acts of God
  - Racism has produced a truly “rigged system”
- 



# What Low Economic Status Means

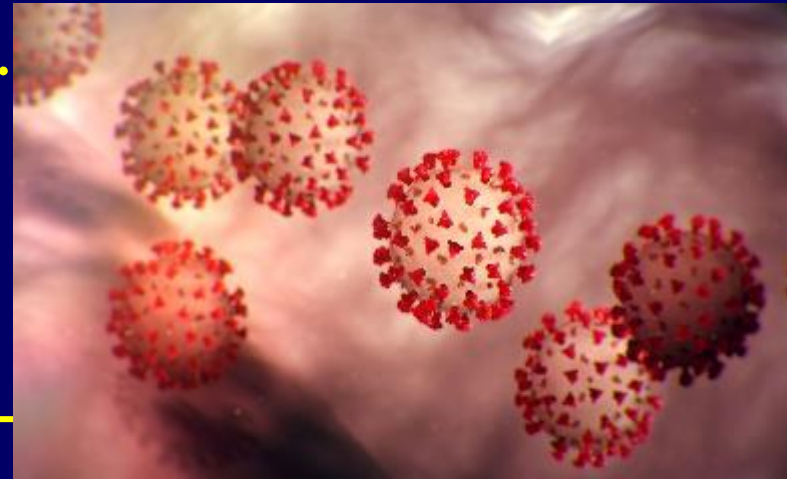
## We are in the same storm but in different Boats



# Low Income and Covid-19

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- Not everyone can work from home
  - For low-wage, non-salaried workers with unpredictable and unstable hours, working from home is a luxury
  - In poor neighborhoods, with overcrowded housing, social distancing is not a viable option.
  - Low income & minority workers overrepresented among essential workers – our drivers, building maintenance staff and grocery store employees.
  - People who struggle financially often struggle to live a healthy life
- 





# Race/Ethnicity, Stress and Health

Lower economic status, living in disadvantaged, segregated, neighborhoods and exposure to racism leads to higher levels of:

1. Economic Stressors
2. Psychosocial Stressors
3. Racial Discrimination
4. Physical & Chemical Stressors



# Air Pollution and Covid-19

- Air pollution is associated with hypertension and asthma
- These are linked to more severe severe cases of Covid-19
- Air pollution linked higher death rates from Covid-19
- Poor & minority communities at higher risk (power plants, industries, car and truck emissions)



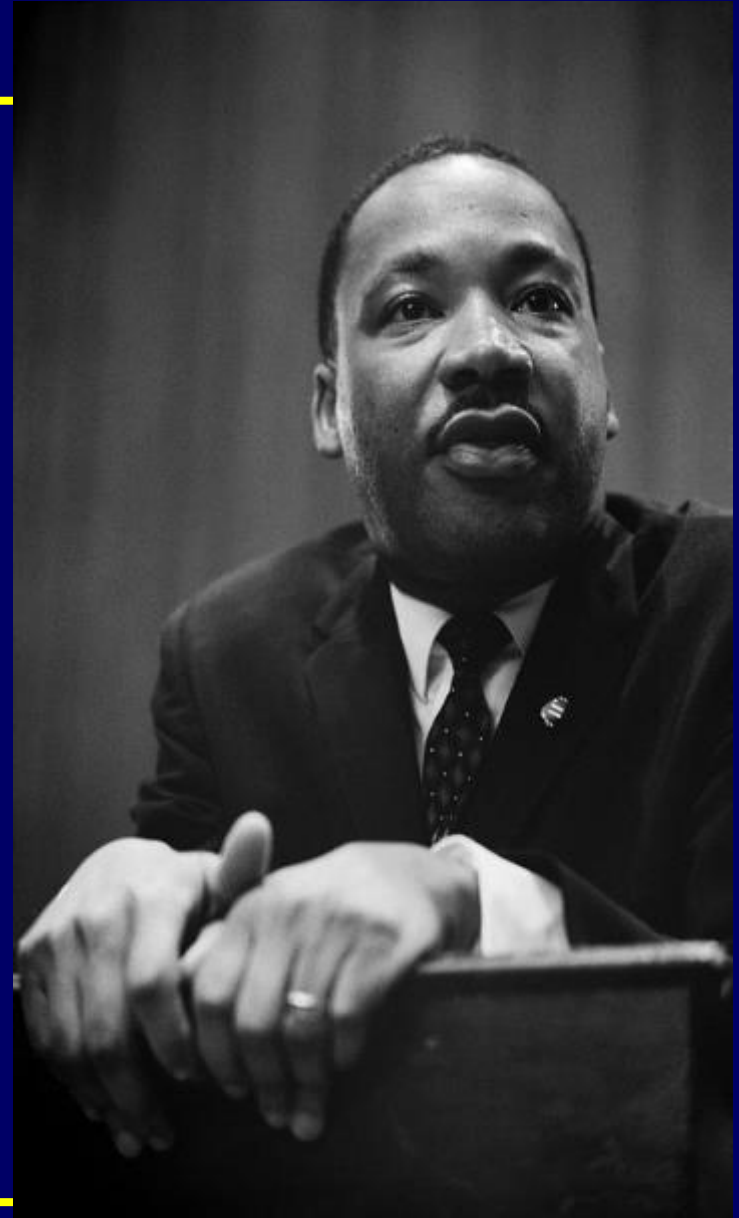
# MLK Quote

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“... Discrimination is a hellhound that gnaws at Negroes in every waking moment of their lives declaring that the lie of their inferiority is accepted as the truth in the society dominating them.”

Martin Luther King, Jr. [1967]

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Experiences of discrimination are a  
source of Toxic Stress

# Every Day Discrimination

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In your day-to-day life how often do these happen to you?

- You are treated with less courtesy than other people.
- You are treated with less respect than other people.
- You receive poorer service than other people at restaurants or stores.
- People act as if they think you are not smart.
- People act as if they are afraid of you.
- People act as if they think you are dishonest.
- People act as if they're better than you are.
- You are called names or insulted.
- You are threatened or harassed.

What do you think was the main reason for these experiences?

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# Everyday Discrimination & Adult Health

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Incident

- Metabolic Syndrome
- CVD outcomes
- Breast cancer
- Type 2 diabetes

Nicotine dependence  
Binge eating  
Smoking & drug use  
At-risk drinking

CAC (coronary artery calcification)  
IMT (intima media thickness)  
Visceral fat  
HRV  
Atrial fibrillation

Adult onset asthma  
Nocturnal amb. BP  
Cognitive function  
Increases in SBP, DBP

Sleep duration  
Sleep quality

Inflammation (CRP, IL-6, e-selectin)  
Cortisol  
Telomere length  
Allostatic load

Waist circumference  
Obesity  
Weight gain

Breast cancer screening  
Cervical cancer screening  
Lower adherence  
Delays in seeking treatment

DSM Disorders  
Emotional Distress  
Well-being  
Changes in personality

# The Consequences

*“Accelerated Aging”*

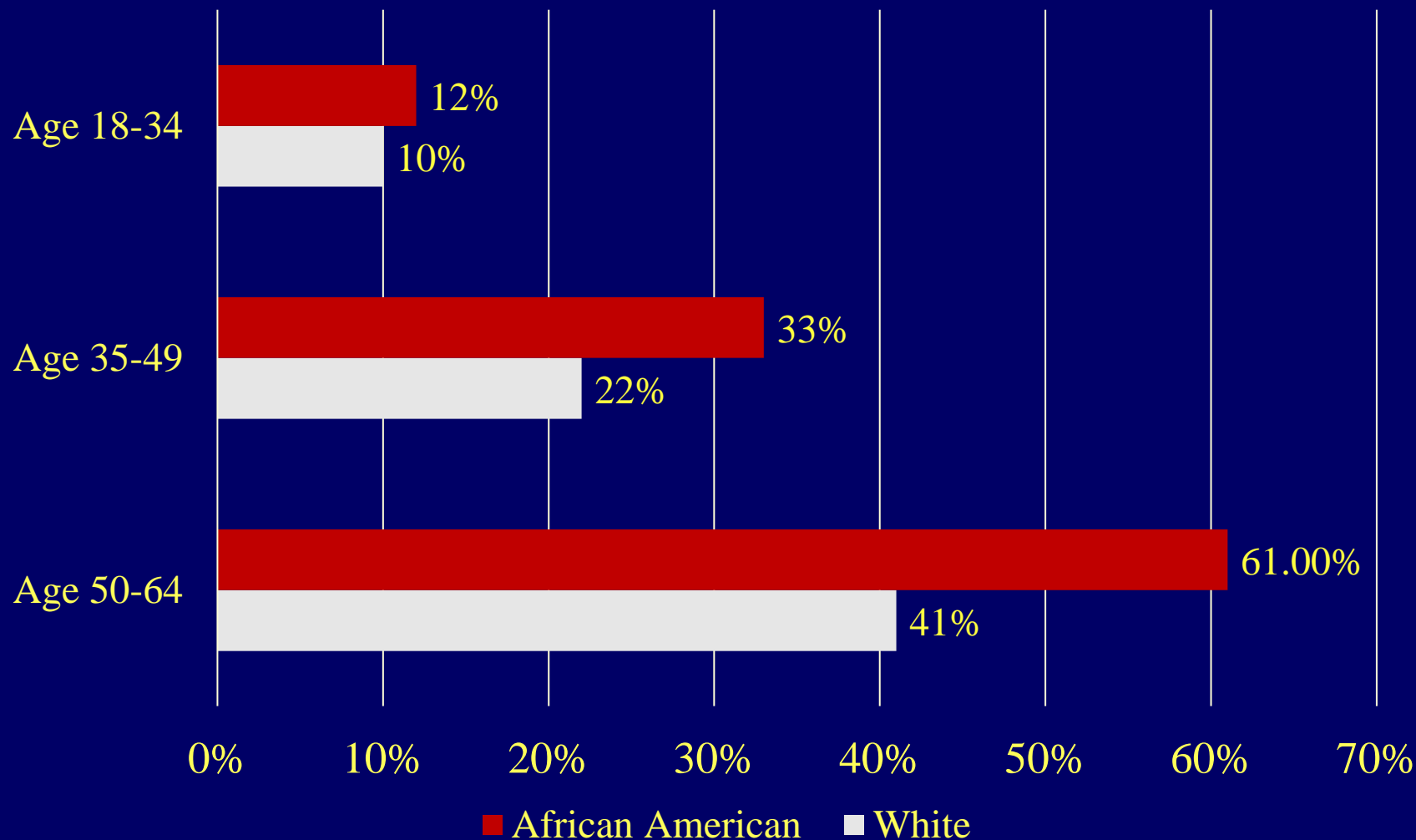
*“Premature Aging”*

*Biological “Weathering”*

*Earlier Onset of Chronic Disease*

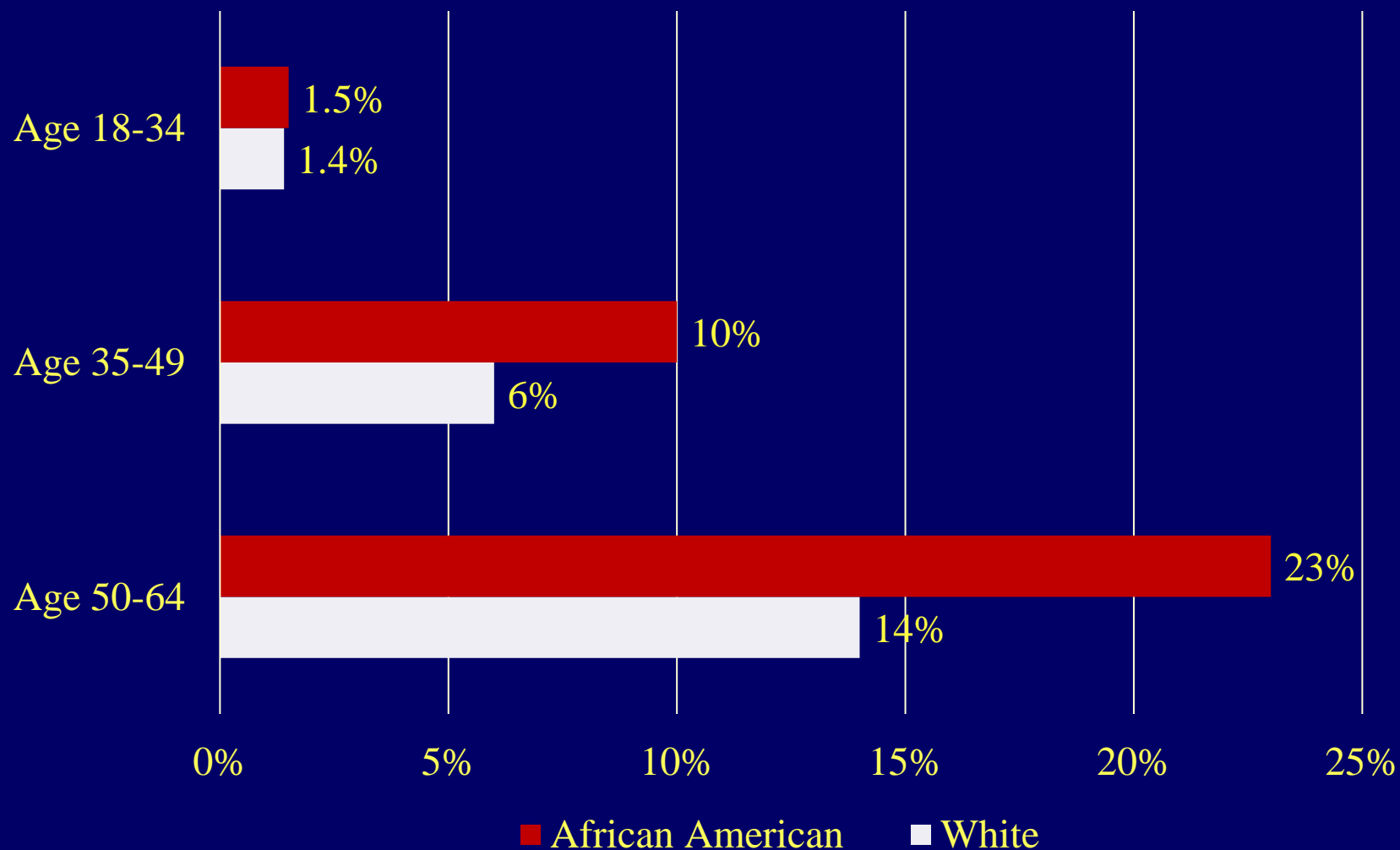
# Earlier Onset of High Blood Pressure

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# Earlier Onset of Diabetes

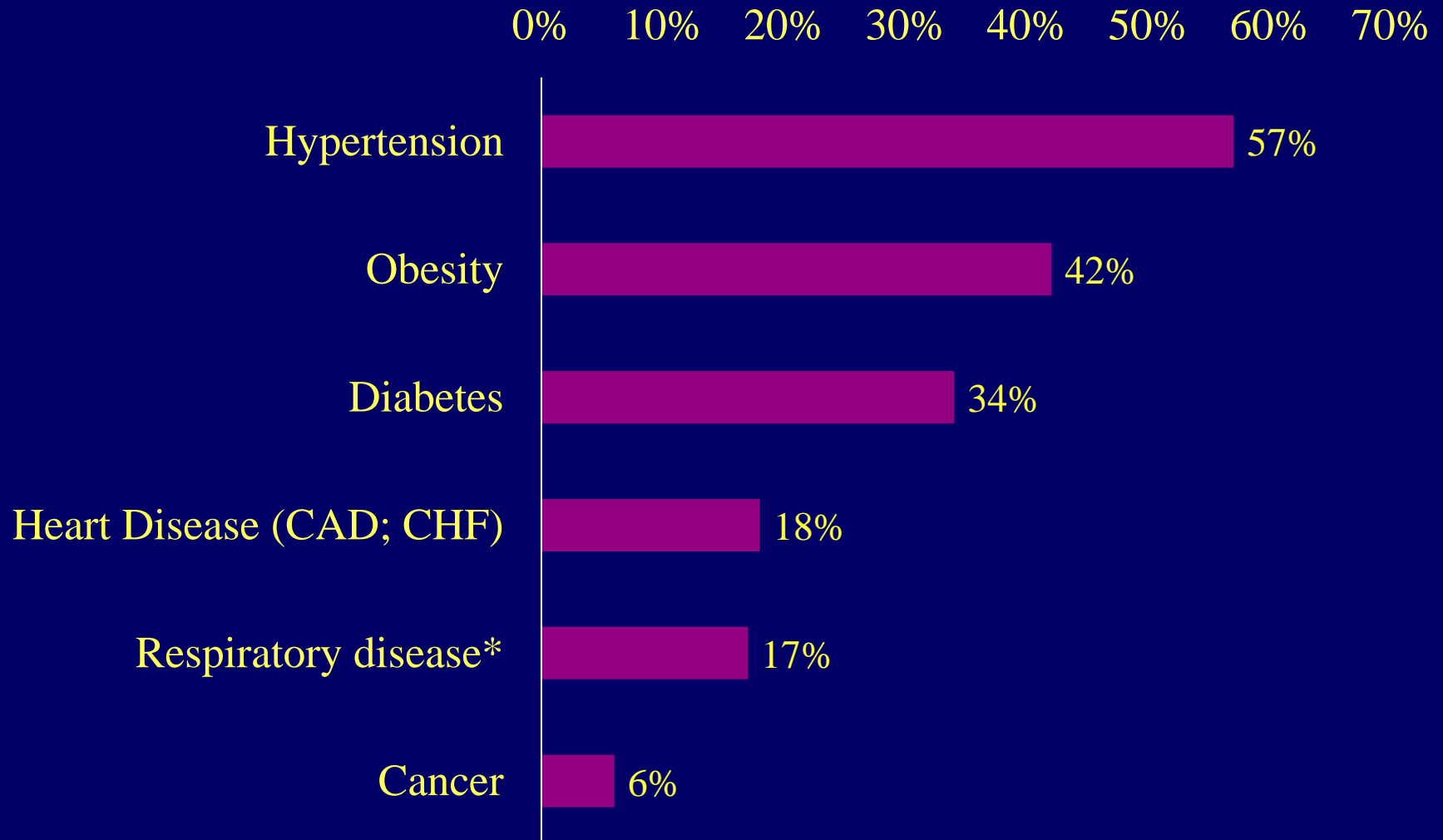
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# Comorbidities of Covid-19 Patients

5,700 patients, 12 NY hospitals, March 1 to April 4; Av age :63

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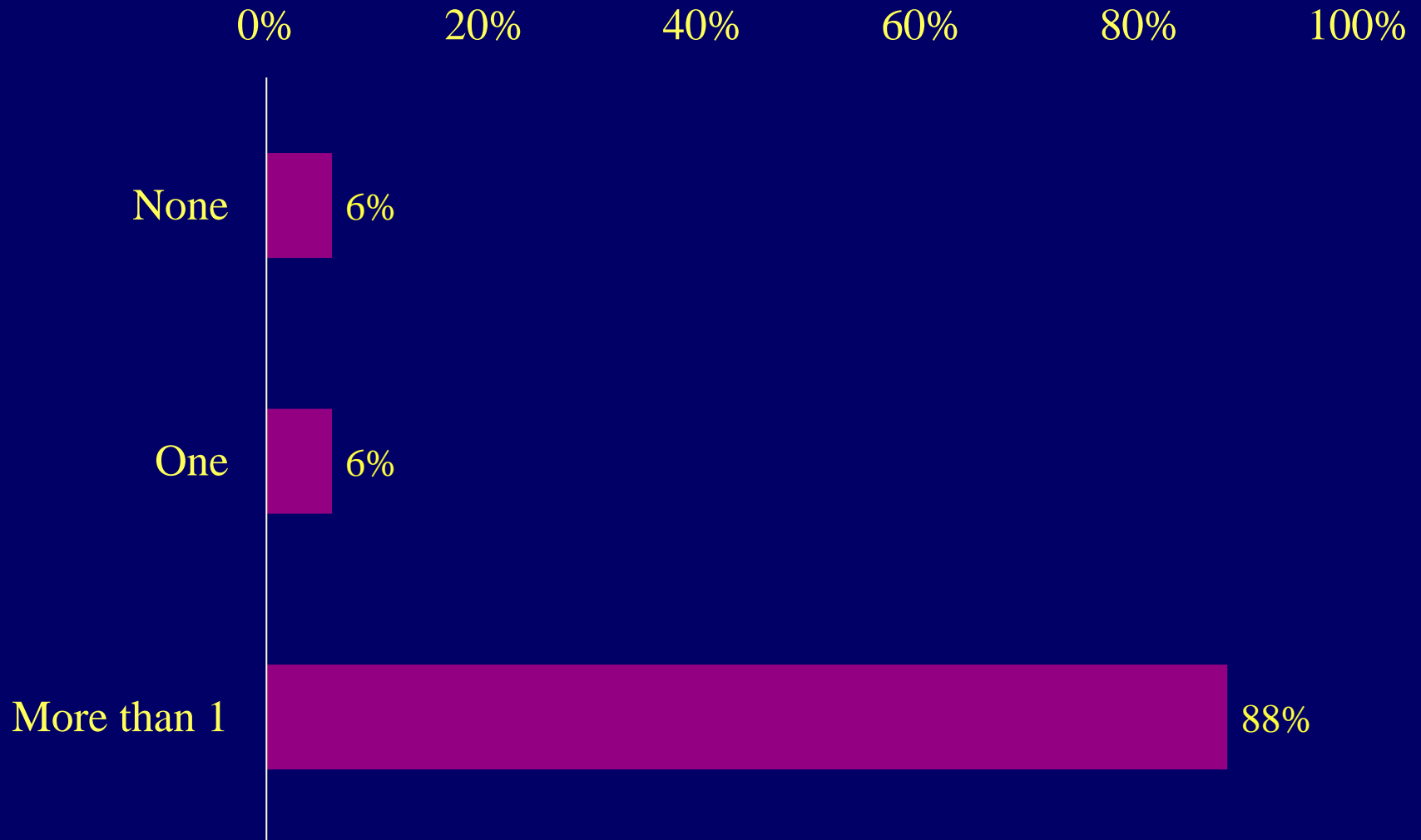


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Safiya Richardson et al. JAMA, April 22, 2020 \*(Asthma 9%, COPD 5%, sleep apnea 3%)

# Number of Comorbidities, Covid-19 Patients

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What Can We Do?

# Strategy

## Short-term Economic Relief

Minimizing the burden of economic stress on the health of the most vulnerable

# Depth of Economic Collapse and Recession

- Only 25% of workers laid off or furloughed at the height of the pandemic lockdown received unemployment benefits
- Unequal Recession: Whites have recovered more than half of jobs lost between April & February;
- Blacks have recovered a third
- Hispanics saw largest job losses and most ground to make up
- Include wealth in assessment of need



pixabay

Strategy

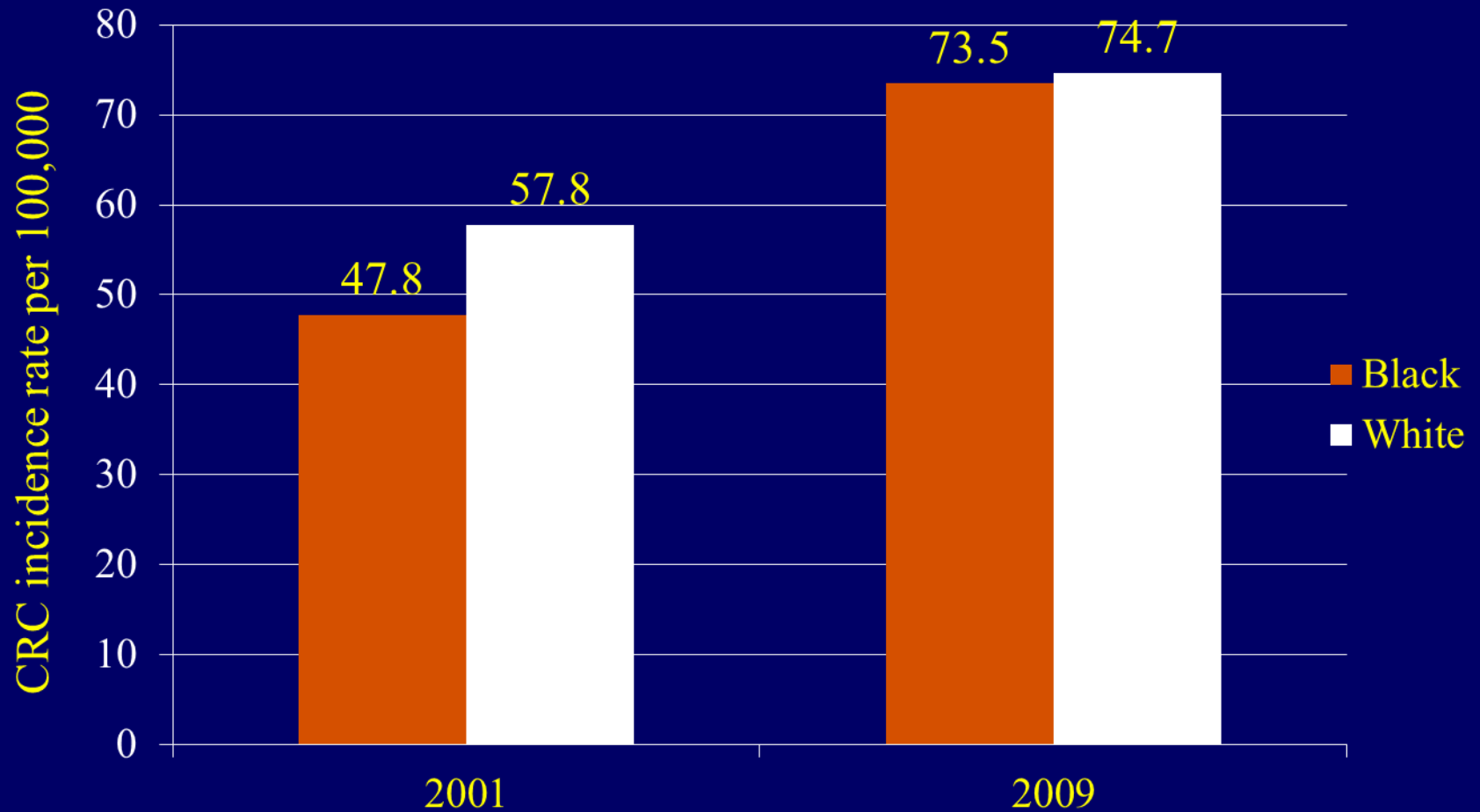
Innovative Use of Medical Care  
to Address Racial/ethnic  
Inequities in Health

# Colorectal Cancer (CRC) Intervention

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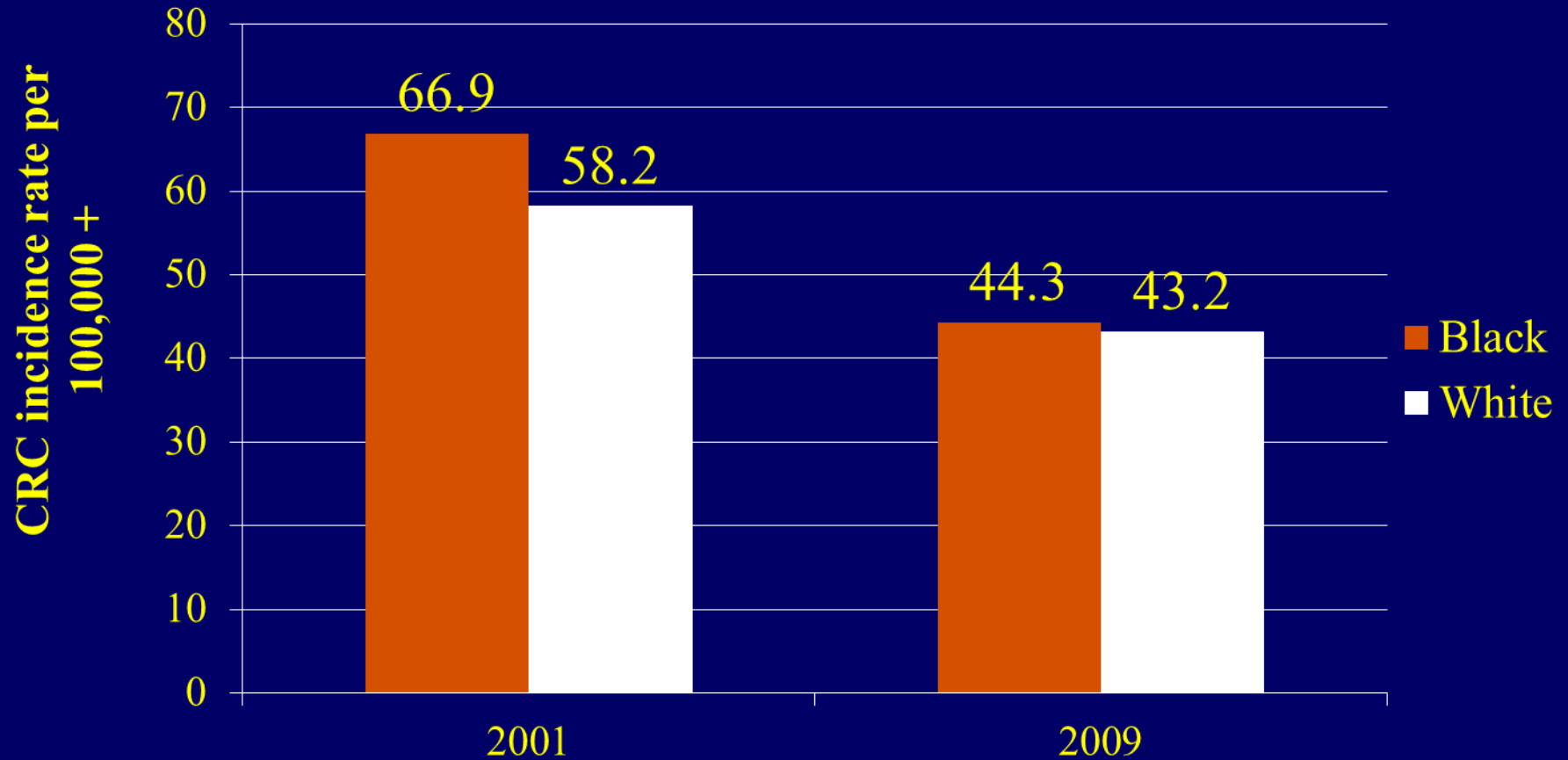
- State of Delaware fully funds a CRC screening program promoting colonoscopy in 2002
- Provides reimbursement for uninsured residents up to 250% of Federal poverty level (FPL)
- Other state residents eligible through other insurance
- Cancer screening nurse navigator system added in 2004, at each of the 5 acute care hospital sites
- Cancer treatment program added in 2004: covers costs of cancer care for 2 years for newly diagnosed uninsured if income under 650% FPL
- Special outreach efforts for African Americans

# Eliminated screening disparities



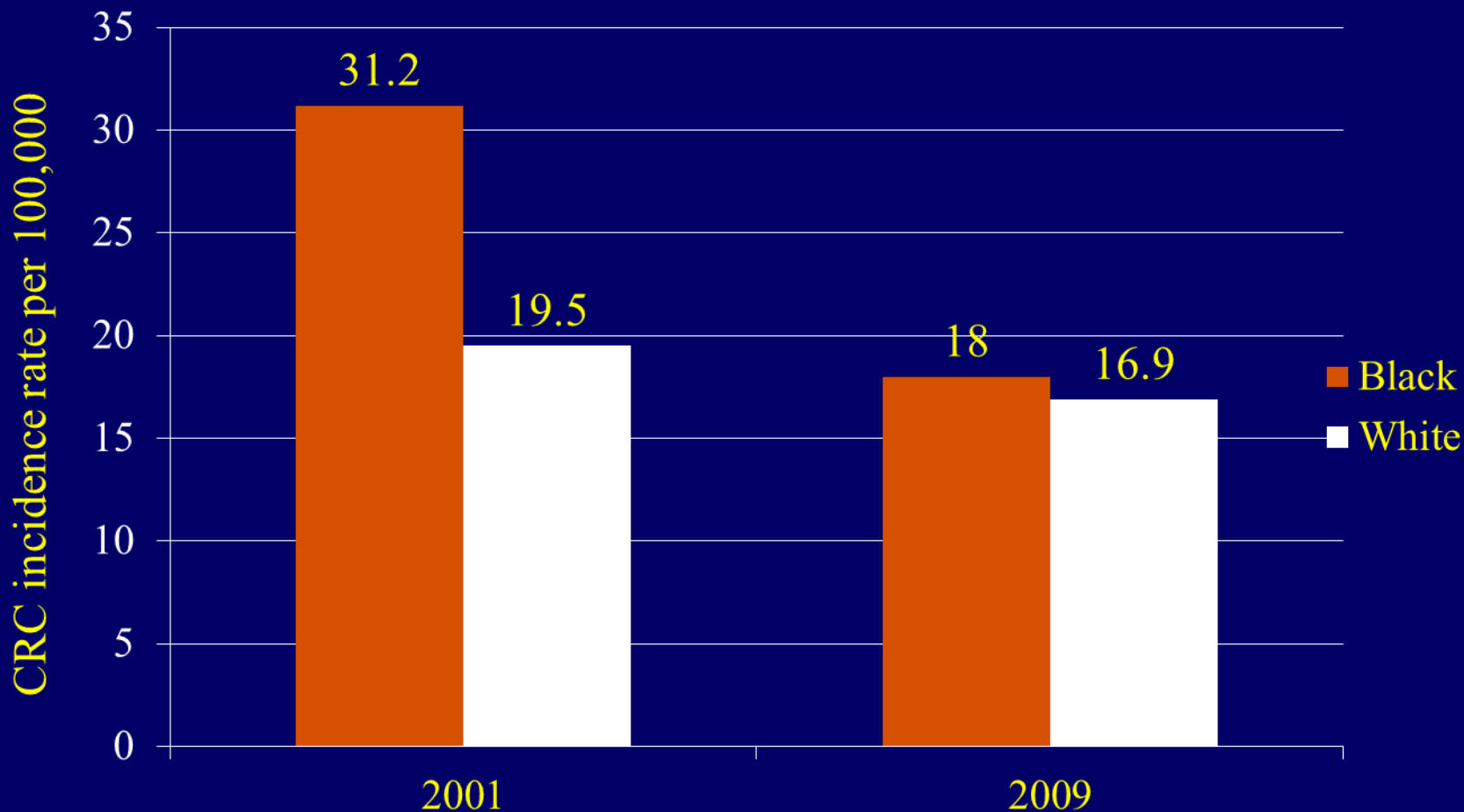
3 – year average, age adjusted

# Equalized Incidence rates



3 – year average, age adjusted

# Near Elimination of Mortality Difference



3 – year average, age adjusted



# Colorectal Cancer: Cost Savings

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- The annual bill for the screening and the treatment program was \$7 million
- The annual savings from reduced incidence of Colorectal Cancer was \$8.5 million

# Strategy

Renewed Investments in Eliminating  
Inequities in the Receipt of High  
Quality Care



# UNEQUAL TREATMENT

CONFRONTING RACIAL AND ETHNIC  
DISPARITIES IN HEALTH CARE

INSTITUTE OF MEDICINE

Eliminating  
Inequities in the  
Receipt of High  
Quality Care

# Building More Health into the Delivery of Medical Care

Diversifying the Workforce to meet the  
Needs of all Patients

# Race of MD Newborn Survival

- Study of 1.8 million hospital births in Florida from 1992 to 2015
- When cared for by white doctors, black babies are 3 times more likely than white newborns to die in hospital
- Disparity cut in half when black babies are cared for by a black doctor
- Biggest drop in deaths in complex births and in hospitals that deliver more black babies
- No difference between MD race & maternal mortality



# Strategy

Addressing Election-related Stressors to  
minimize pathogenic consequences of  
socio-political stress

# 2016 Election Led to Heart Attacks & Strokes

- Hospitalization rate for heart attacks & strokes was 1.62 times higher in the two days after the 2016 presidential election, compared with the same two days in the prior week
- Stress linked to political campaigns, rhetoric and election outcomes can directly harm health



# Long-term Strategy #2

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**Create Communities of Opportunity to minimize, neutralize and dismantle the systems of racism that create inequities in health**





# Communities of Opportunity

- Ensure access to quality care
- Invest in early Childhood
- Reduce Childhood Poverty
- Enhance Income and Employment Opportunities for Youth and Adults
- Improve Neighborhood and Housing Conditions
- Provide Care that Addresses the Social context
- Raise Awareness levels of Racial Inequities and Build Political Will to Address them



# Communities of Opportunity

Improve Neighborhood and Housing  
Conditions

# Purpose Built Communities

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- Based on efforts in Atlanta's East Lake district
  - Purpose Built Communities uses integrative strategies including cradle-to-college educational opportunities, mixed-income housing, early child development programs, employment support and recreational opportunities
  - Community engagement and philanthropy
  - **Key:** addressing all of the challenges faced by disadvantaged communities simultaneously
  - Purpose Built Communities in Atlanta, New Orleans, Indianapolis, Charlotte, among others
-

# Implementing the Purpose Built Model



**Strong local leadership. A proven national model. Best in class partners.**

# East Lake Meadows - 1995

## Safety

- 18x national crime rate
- 90% of families victims of a felony each year
- \$35 million a year drug trade

## Housing

- 100% public housing
- 1400 residents in 650 apartments
- 40% of units unlivable

## Employment

- 13% employment
- 59% of adults on welfare
- Median income of ~\$4,500

## Education

- One of lowest performing schools in Georgia
- 5% of 5<sup>th</sup> graders meet state math standards
- 30% graduation rate

# Villages of East Lake - Present

## Safety

- 73% reduction in crime
- 90% lower violent crime

## Housing

- High-quality, privately managed housing
- Mixed-income (50% public housing, 50% market rate)
- 1400 residents in 542 apartments

## Employment

- 75% employment in public housing, remainder in job training, elderly or disabled
- Median income of ~ \$15k in public housing households

## Education

- ~1500 in Pre-K through 10<sup>th</sup>
- 98% meet or exceed state standards
- A top performing school in Atlanta and the state

# Principles of Purpose Built Communities

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- Address all challenges faced by poor communities simultaneously
- (work across silos of education, housing, public safety, child care, employment, and nutrition)
- Comprehensive, integrated, place-based solutions
- Independently run, cradle-to-college high-quality education
- Quality mixed-income housing
- Affordability for low-income households
- Services: employment support, social services, workforce development, recreation, wellness

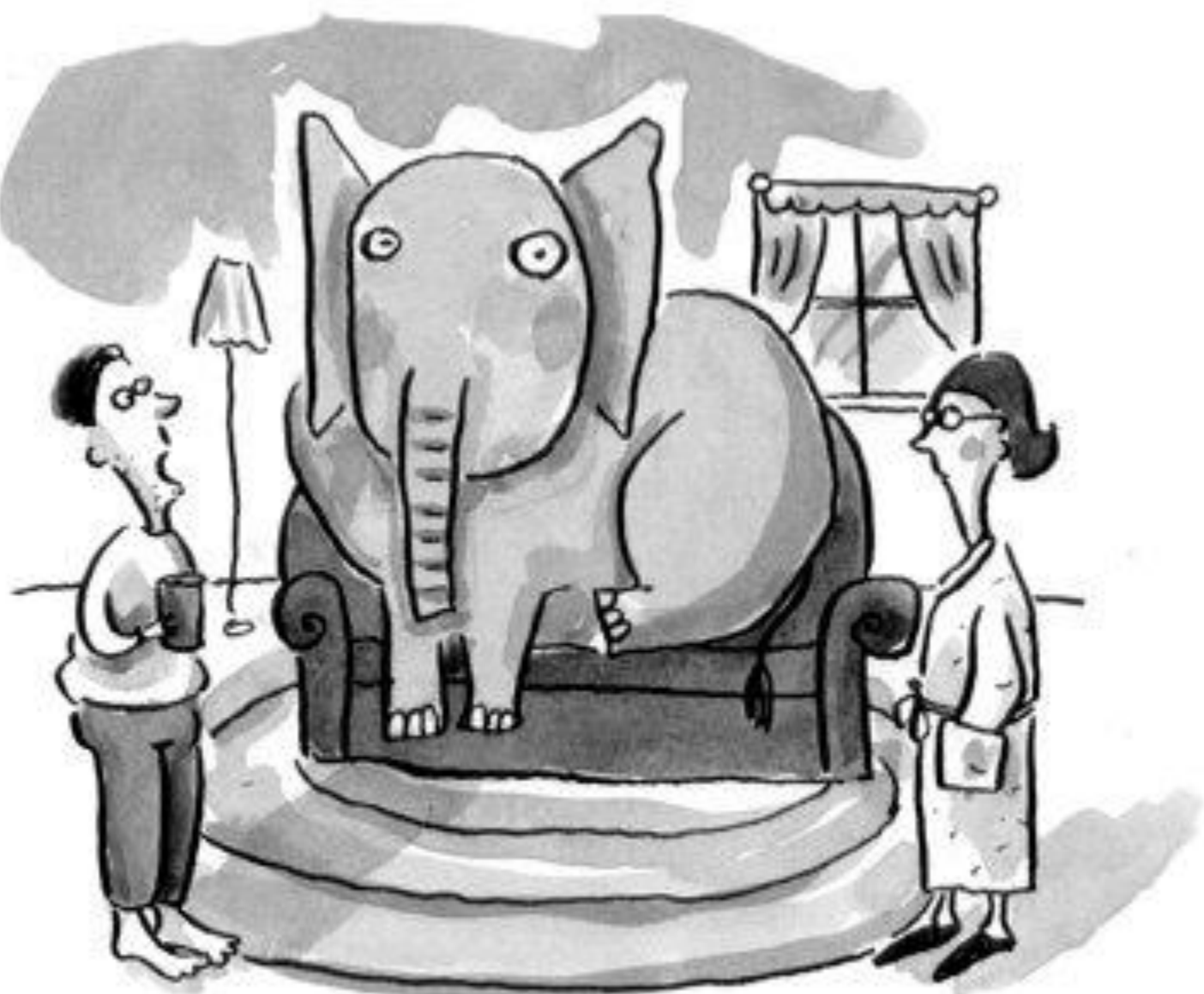
# Long-term Strategy #3

We need to Raise Awareness  
levels of Racial Inequities and  
Build Political Will to Address  
them



What Is Holding Us Back?

What are the Barriers we have to Address?



***What elephant?***

Tomassi

# 3 Communication Challenges

1. We need to raise awareness levels of the problem of inequities in health
2. We need to build the science base that will guide us in developing the political will to address racial and SES inequities in health
3. We need to build empathy, that is, identify how to tell the story of the challenges of the disadvantaged in ways that emotionally connect and resonate with the public

# The Real Challenge

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## *An Empathy Gap?*



<https://www.phila.gov/personnel/Jobs/NonCivilServiceJobOpps.html>

*“The most difficult social problem in the matter of Negro health is the peculiar attitude of the nation toward the well-being of the race. There have... been few other cases in the history of civilized peoples where human suffering has been viewed with such peculiar indifference”* W.E. B. Du Bois, 1899 [1967] p.163

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# Recent Review on Empathy Gap

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- Studies of empathic responses in brain activity when viewing suffering of persons of one's own race vs. members of another race
- Racial ingroup bias consistently found in brain imagery studies in Europe, Africa, Asia, and the U.S.
- Stronger empathic neural response to the pain of same race versus other race individuals, using a variety of stimuli
- This racial bias in neural responses more consistent than self-reports of empathy



# Reducing Social Inequities in Health

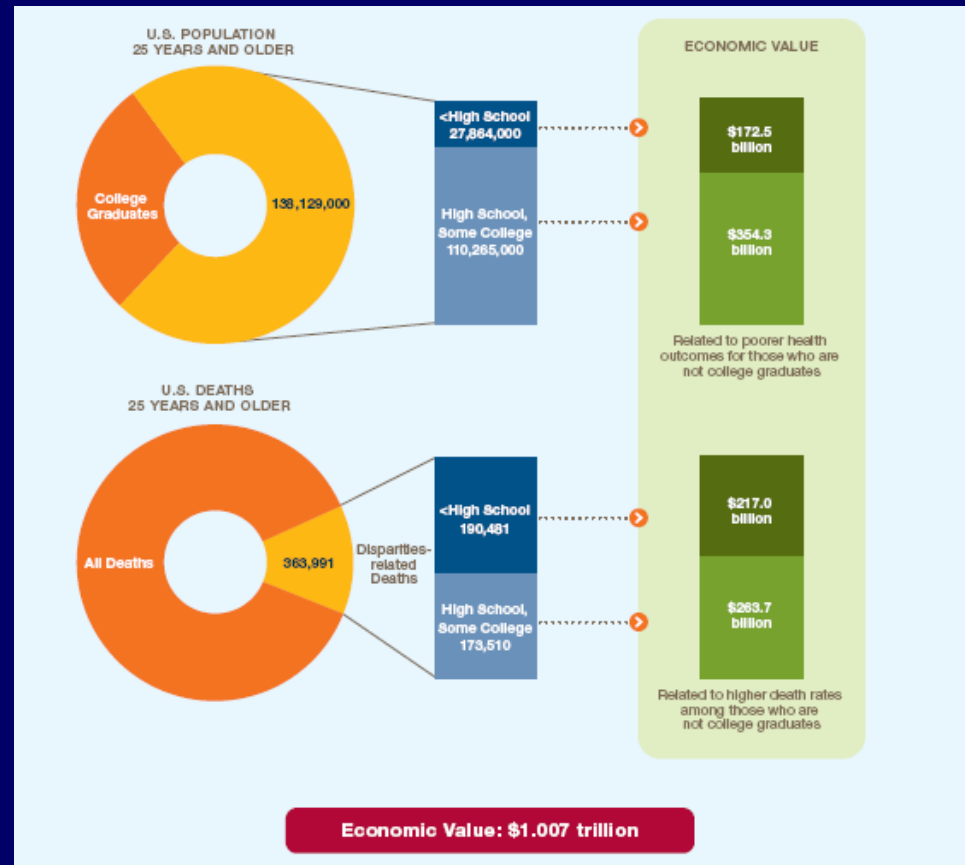
Why Should We Care?

# Costs of Inaction

Socioeconomic and Racial Disparities  
in health are really costly to our  
society

# Economic Gains from Reducing SES Health Inequities

If all adult Americans had the better health of college graduates, they would live longer and healthier lives and these improvements would translate into economic gains \$1.007 trillion annually.





# Total Costs of Racial Disparities, 2003-2006

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- Medical Care Costs = \$229.4 Billion
- Lower worker productivity & premature death costs = \$1,008 Trillion
- Total Costs = \$1.24 Trillion
- More than GDP of India (12<sup>th</sup> largest economy)
- \$309.3 Billion annual loss to the U.S. economy
- Doing nothing has a cost that we should not continue to bear

# Annual **Additional** Economic Benefits - 1

If we eliminate Racial Inequities by 2050, we would have

- **Additional \$8 trillion U.S. GDP** (more than GDP of every country, except US & China)
- **Additional \$3.3 trillion in earnings** (by closing gaps in productivity & opportunity)



Unsplash.com

## Annual **Additional** Economic Benefits - 2

- **Additional \$2.6 trillion** in consumer spending (\$330B on food, \$860B on housing, \$440B on cars & transportation and \$90B on clothes & services)
- **Additional \$1.4 trillion** federal tax revenues and **\$325B** state/local tax revenues
- Increase of **0.5%** in long-term annual growth rate of US economy



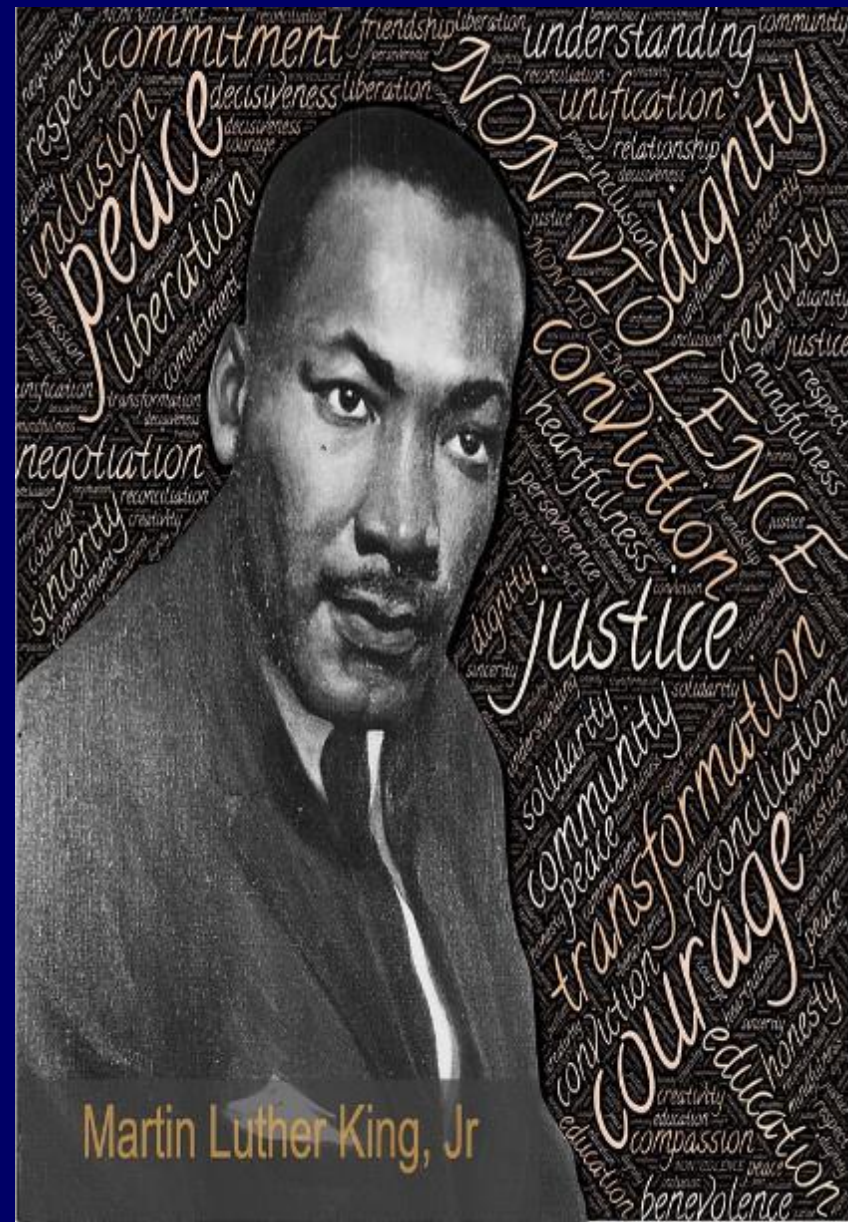
Unsplash.com

# CITI Group: Racism Cost \$16 Trillion GDP Loss

## 4 Key racial gaps :

- \$13 trillion loss in business revenue; discriminatory lending to Black entrepreneurs (6.1 million jobs not generated as a result)
- \$2.7 trillion in income loss due to disparities in wages
- \$218 billion loss (2 decades of discrimination in housing credit)
- \$90 to \$113 billion in lifetime income loss due to discrimination in accessing higher education

"True compassion is more than flinging a coin to a beggar; it understands that an edifice which produces beggars needs restructuring."





# A Call to Action



“Each time a man stands up for an ideal, or acts to improve the lot of others, or strikes out against injustice, he sends forth a tiny ripple of hope, and those ripples build a current which can sweep down the mightiest walls of oppression and resistance.”

- Robert F. Kennedy

# Further Reading

David R Williams & Lisa A. Cooper,  
“*Reducing Racial Inequities in Health:  
Using What We Already Know to Take  
Action.*” International Journal of  
Environmental Research and Public  
Health, 16 (4), 606, 2019.