

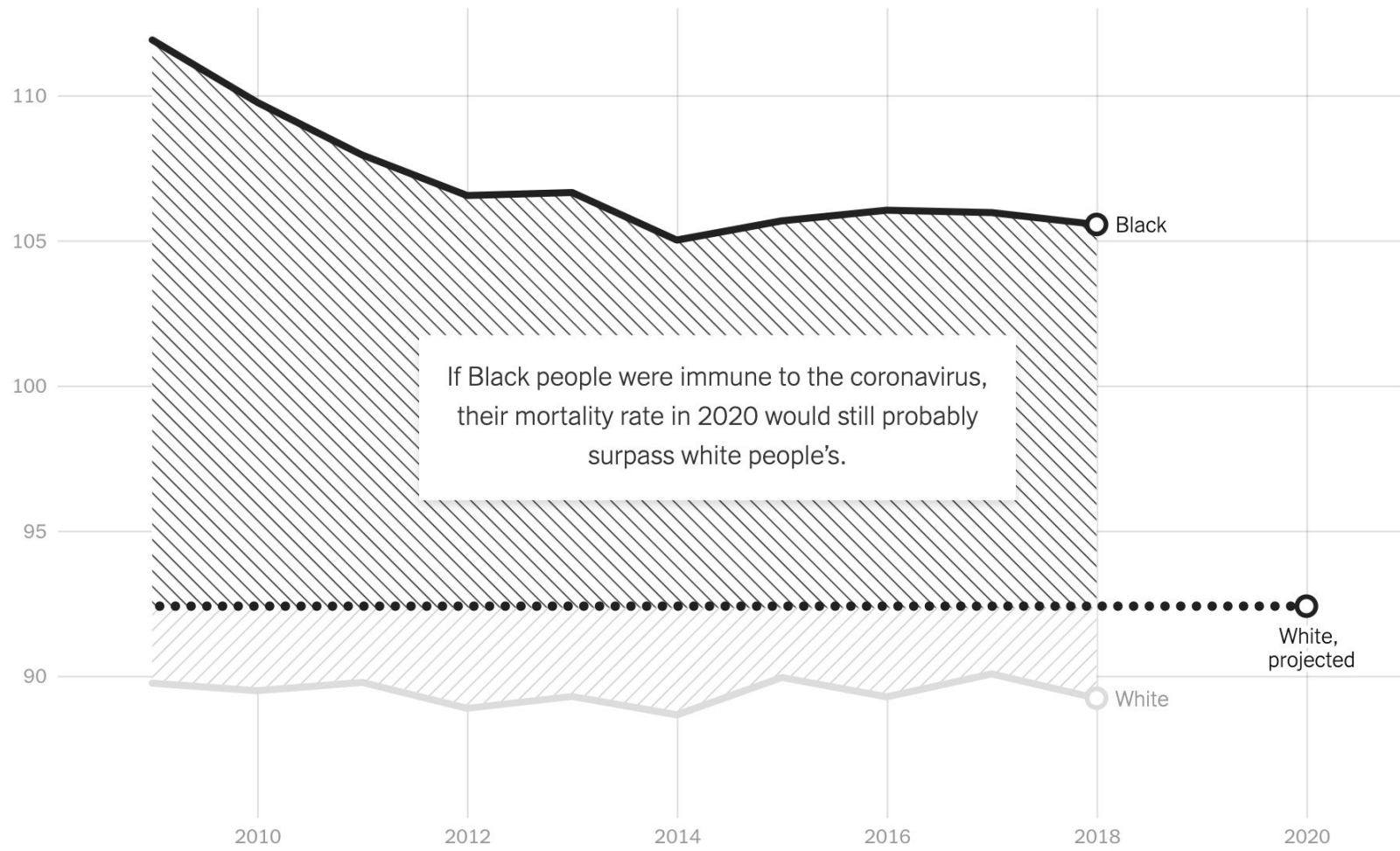
how they got
away with

MURDER:

The Impact of Racism on Healthcare

Trina Van (Temple, 2016)
Vanessa LaBryer (Pitt Oakland, 2020)

Deaths per 10,000



Note: Mortality rates are adjusted for age. The projection for 2020 uses 2017 mortality as a baseline, applying shares of non-Hispanic white Covid-19 mortality to total excess deaths for each state as of July 25. - Source: Elizabeth Wrigley-Field, "U.S. Racial Inequality May Be as Deadly as Covid-19"

*WHY THE RACIAL
DISPARITY?*

Slavery in America (post 1700s)

- Solidarity between white/black servants was feared by elite
- Implications:
 - Increased importation of African slaves only
 - **"white", "negro", "Indian" became legal categories**
 - Laws regulating relationships between whites and inferior groups
 - Constantly changing

Slavery in America (post 1700s)

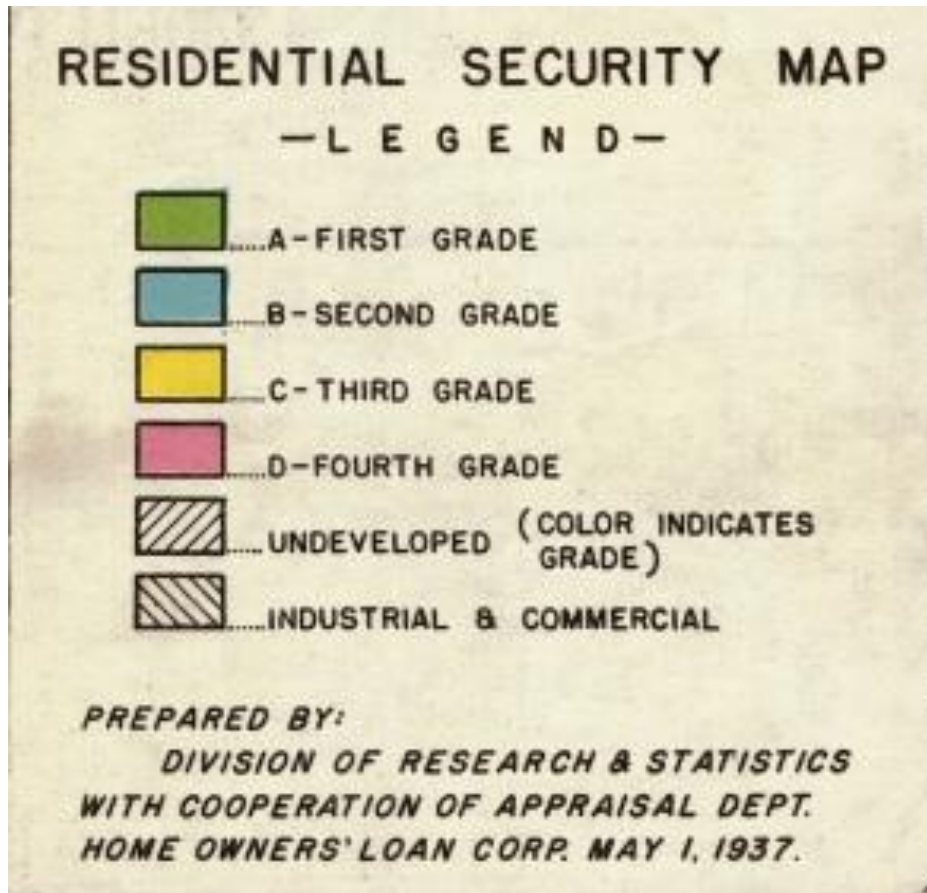
- Invention of the use of "race" as we know it today
 - Perception of physical characteristics
 - Subconscious categorization
- Political agenda
 - Eugenics
 - Antimarrriage laws
 - Forced sterilization

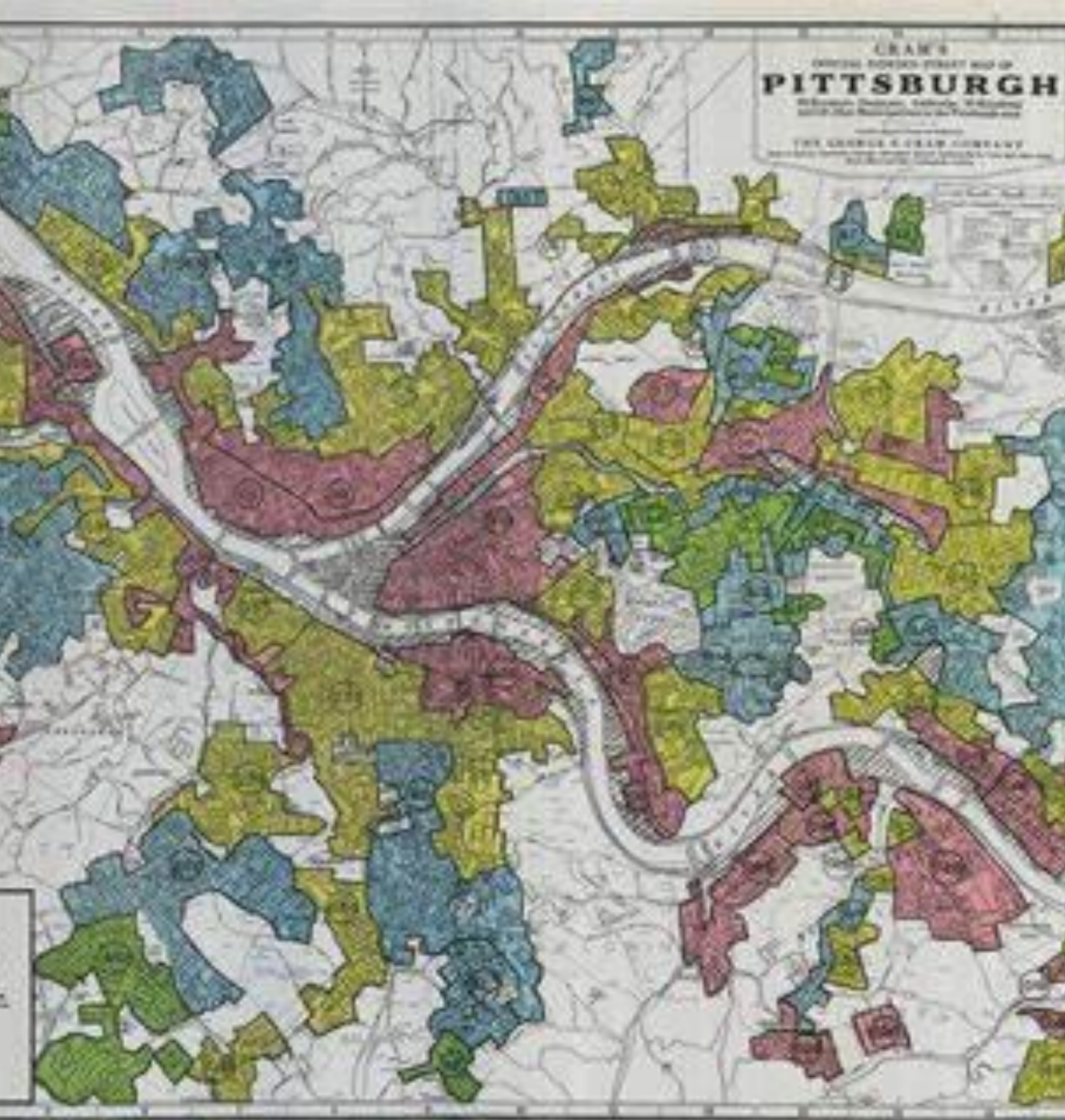
Racist Myths in Medicine

- **1851:** Dr. Samuel Cartwright argued that forcing physical labor on Black slaves helped their lungs “vitalize” blood
- **1860s:** Union Army docs determined that Black Union soldiers had smaller lungs based on chest measurements
 - concluded that Black people were more susceptible to pulmonary disease
- **1960s:** Dr. Jonathan Metzler described “protest psychosis,” a schizophrenia where Black men harbored “delusional anti-whiteness” after listening to Malcom X
 - without treatment, these men threatened not only their own sanity, but also the social order of White America

Redlining

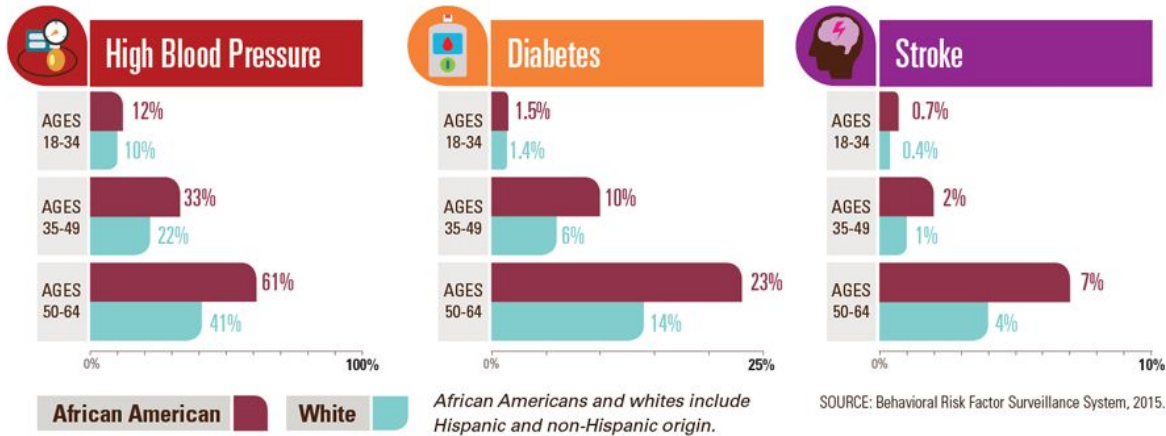
- Part of a New Deal initiative (1940s-1970s)
- Real estate agents graded America's largest cities based on their perceived risk
 - Red line surrounding area = high risk
 - Green/blue/yellow line surrounding area = lower risk
- Areas with redlining received less funding/credit for:
 - Infrastructure
 - Mortgages
 - Public services/businesses
- Almost **90% of African Americans** lived in a redlined area





Effects of Redlining

- Redlined areas were subjected to:
 - Worse education
 - **More poverty**
 - More vacancy
 - Less public transportation
 - **Less access to hospitals/healthcare**
 - Food insecurity



African Americans are more likely to die at early ages from all causes.

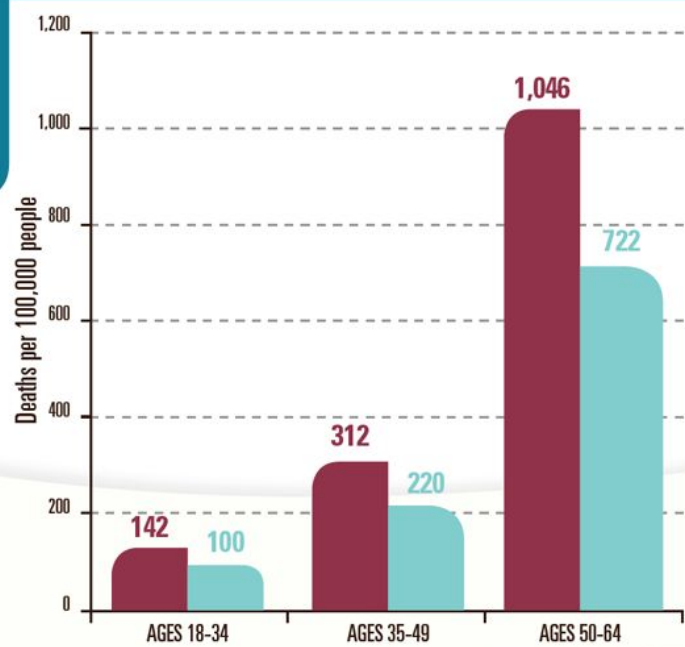
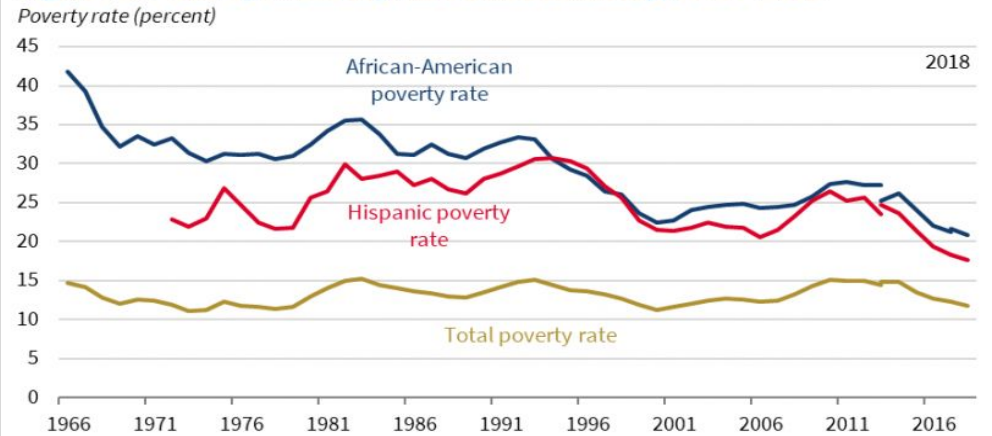


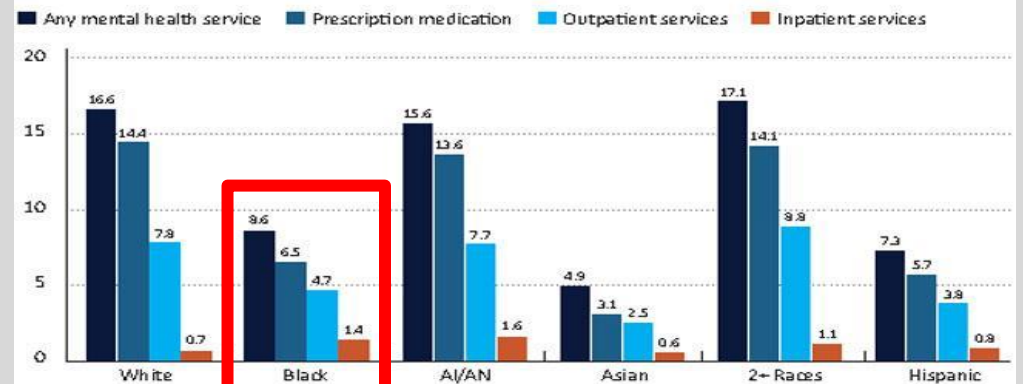
Figure 1. Poverty Rates by Race and Ethnicity, 1966–2018



Source: Current Population Survey Annual Social and Economic Supplement.
 Note: The data for 2013 and beyond reflect the implementation of the redesigned income questions. The data for 2017 and beyond reflect the implementation of an updated CPS ASEC processing system.

Figure 3. Use of mental health services is relatively low among blacks, Asians and Hispanics.

Annual average percent use by adults of mental health services, by race/ethnicity and service type, 2008–2012

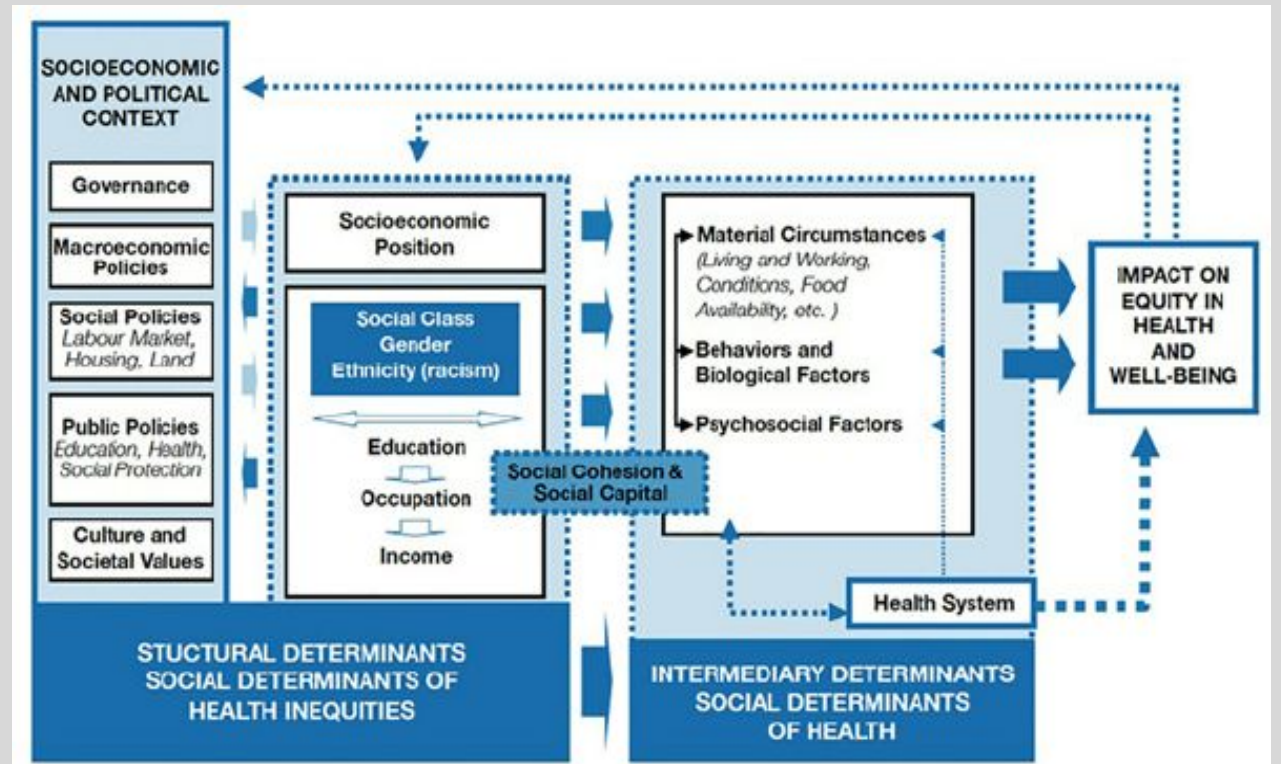


Note: AI/AN = American Indian/Alaska Native

Source: Substance Abuse and Mental Health Services Administration, 2015.

Ethnicity/Racism as an SDH

- SDH = Social Determinants of Health
 - Economic and social conditions that affect individual and group differences in health
- Racism determines:
 - Type of food consumed
 - Available economic resources
 - Education/employment/income
 - Etc.
- Racism causes poor health outcomes



Adverse Childhood Experiences

5 Urban ACEs:

- Neighborhood Safety & Trust
- Bullying
- Witness Violence
- Racism
- Foster Care

14 total ACEs

ABUSE



Physical



Emotional



Sexual

NEGLECT



Physical



Emotional

HOUSEHOLD DYSFUNCTION



Mental Illness



Incarcerated Relative



Mother treated violently



Substance Abuse



Divorce

CDC-Kaiser Permanente ACE Study

- Data gathered from 1995-1997
- 9,508 survey respondents
- **1 in 6 adults experienced 4+ ACEs**
 - **Strong, dose-response relationship** ($p < 0.05$) between number of childhood exposures and various diseases
- 2013 study showed 37% of Philadelphians reported 4+ ACEs

Individuals who experienced 4+ ACEs are...

- 2x more likely to have **cancer**
- 2x more likely to have **ischemic heart disease**
- 4x more likely to have **COPD**
- 2.5x more likely to have a **stroke**

... than individuals who experienced 0 ACEs.

Table 16. Health Risk Behaviors by ACE Score

Health Risk Behavior	ACE Score		
	0 ACE	1-3 ACE	4+ ACE
Multiple Sexual Partners	0.8% (n=2)	7.2% (n=48)	14.1% (n=76)
Suicide Attempt	0.7% (n=2)	2.3% (n=18)	17.8% (n=114)
Substance Abuse Problem	1.7% (n=5)	0.9% (n=7)	6.1% (n=39)

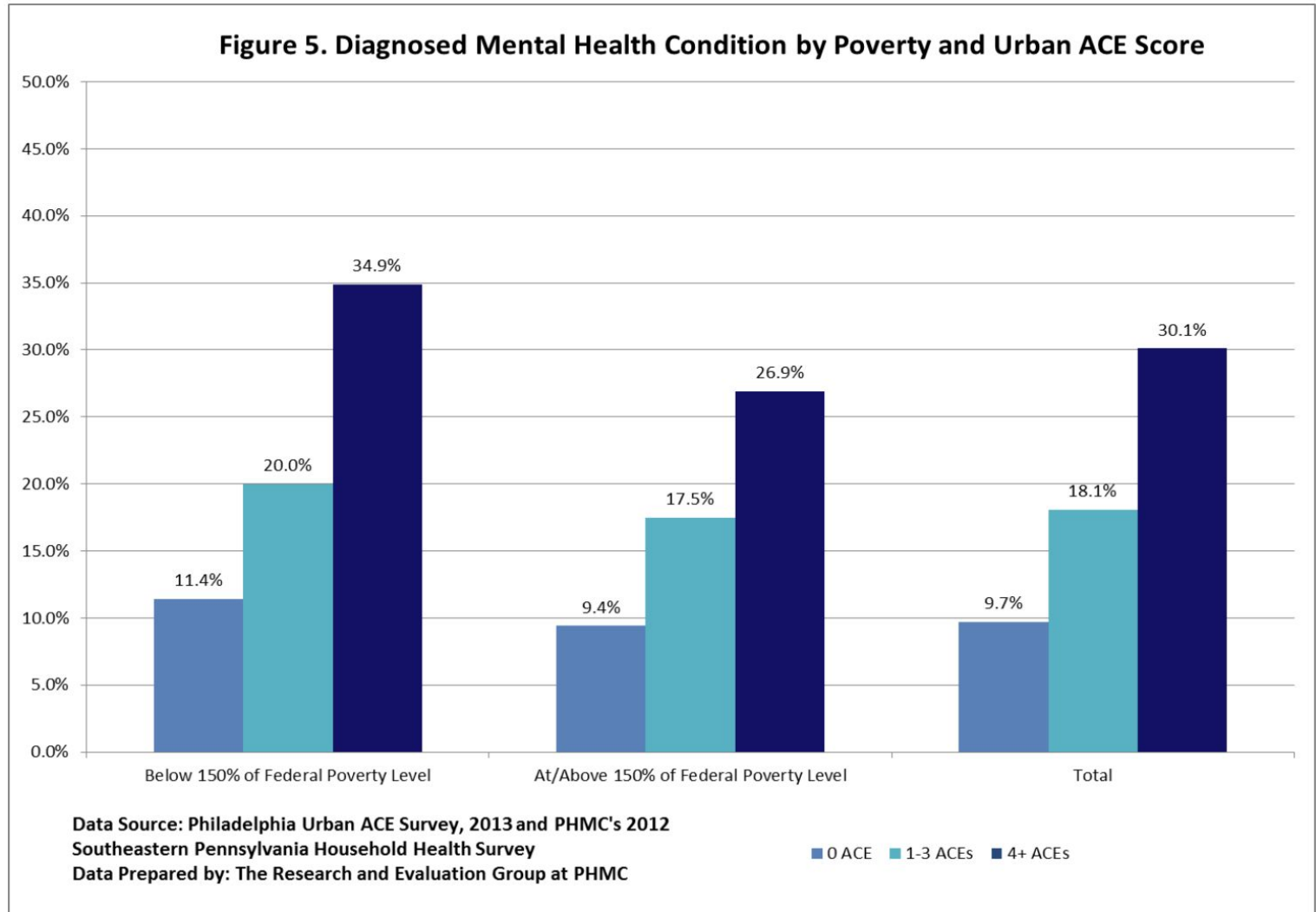
Data Source: Philadelphia Urban ACE Survey, 2013 and PHMC's 2012 Southeastern Pennsylvania Household Health Survey. Data Prepared by: The Research and Evaluation Group at PHMC

SMOKING AND OTHER RISKY HEALTH BEHAVIORS PUT INDIVIDUALS AT INCREASED RISK FOR CANCER, INFECTION, ADDICTION, AND DEATH.

Individuals who experienced 4+ ACEs were over 3x more likely to be diagnosed with a mental health condition.

This association was particularly noticeable among those living in poverty.

Figure 5. Diagnosed Mental Health Condition by Poverty and Urban ACE Score



***INSTITUTIONAL
RACISM
IN MEDICINE***

Explicit and Implicit Bias

- “Tuskegee Study of Untreated Syphilis in the Negro Male” (1932-1972)
 - The US Public Health Service enrolled 600 Black men and withheld treatment to document the progression of their symptoms
 - Scientists believed that Black people suffered more cardiovascular symptoms rather than neurological ones due to their “underdeveloped” brains
- Physicians amputate the legs of Black patients at five times the **rate** of White patients

‘Black people’s nerve-endings are less sensitive than White people’s’

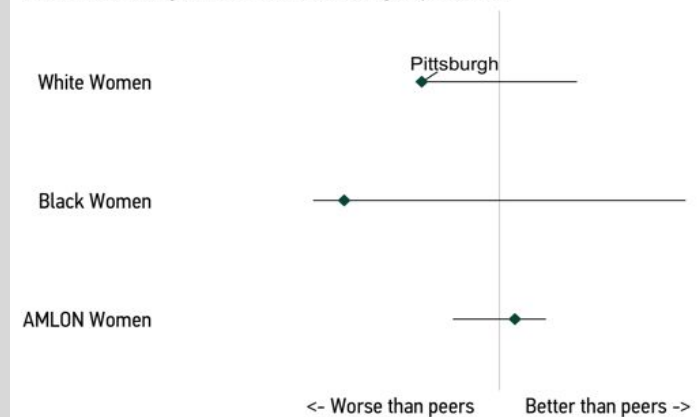
- In a cohort of 28 residents, 14% believed the above statement to be true
- Doctors are half as likely to give their Black cancer patients morphine than White cancer patients
- Doctors are half as likely to prescribe pain meds to Latino patients suffering from a long bone fracture than White patients
- Patients with sickle cell anemia suffer from acute chest syndrome and pain crises due to obstruction of the blood vessels

Racism and Childbirth

- Black babies account for:
 - 1/3 of births
 - 3/4 of infant deaths
- Black women are:
 - 3-4x more likely to have a complication or death
 - 49% higher risk for giving birth prematurely
- Toxic stress
- Worse in Pittsburgh
 - Redlining

Fetal mortality rate, Pittsburgh vs. peer cities

Lines indicate range of variation for Pittsburgh's peer cities.

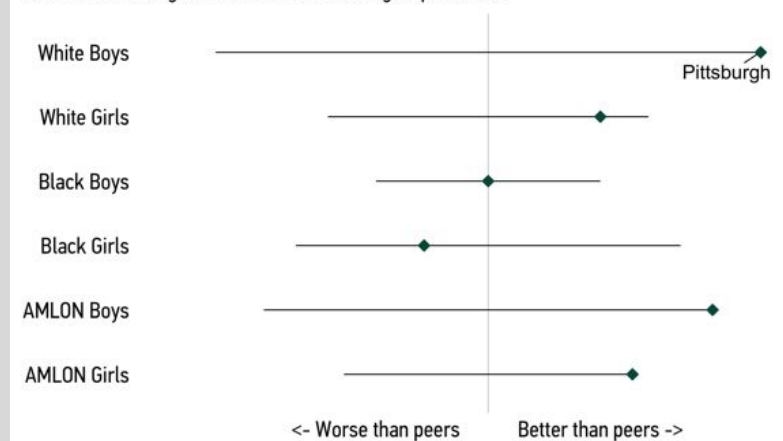


Source: Pittsburgh Gender Equity Commission (David H. Montgomery / CityLab)



Infant mortality rate, Pittsburgh vs. peer cities

Lines indicate range of variation for Pittsburgh's peer cities.



Source: Pittsburgh Gender Equity Commission (David H. Montgomery / CityLab)



*RACISM IN
DIAGNOSES*

‘2yo African American female with fever and cough’

- In medical school, students are taught to identify patients by their age, race, and sex
- This patient suffered from multiple bouts of pneumonia throughout her childhood without a true diagnosis
- Finally, at 8 years old, a radiologist read her chest X-ray and said, “Who’s the kid with cystic fibrosis?”
- **Physicians use crude proxies to help with differential diagnoses that can negate the full picture**

Racial Groupings and COVID-19

Rate ratios compared to White, Non-Hispanic Persons	American Indian or Alaska Native, Non-Hispanic persons	Asian, Non-Hispanic persons	Black or African American, Non-Hispanic persons	Hispanic or Latino persons
Cases ¹	2.8x higher	1.1x higher	2.6x higher	2.8x higher
Hospitalization ²	5.3x higher	1.3x higher	4.7x higher	4.6x higher
Death ³	1.4x higher	No Increase	2.1x higher	1.1x higher

COVID Toes

- In an international dermatology registry, over 700 cases were cataloged
 - only 34 Hispanic patients were included
 - only 13 Black patients were included



A patient of Southeast Asian descent with so-called Covid toe ...

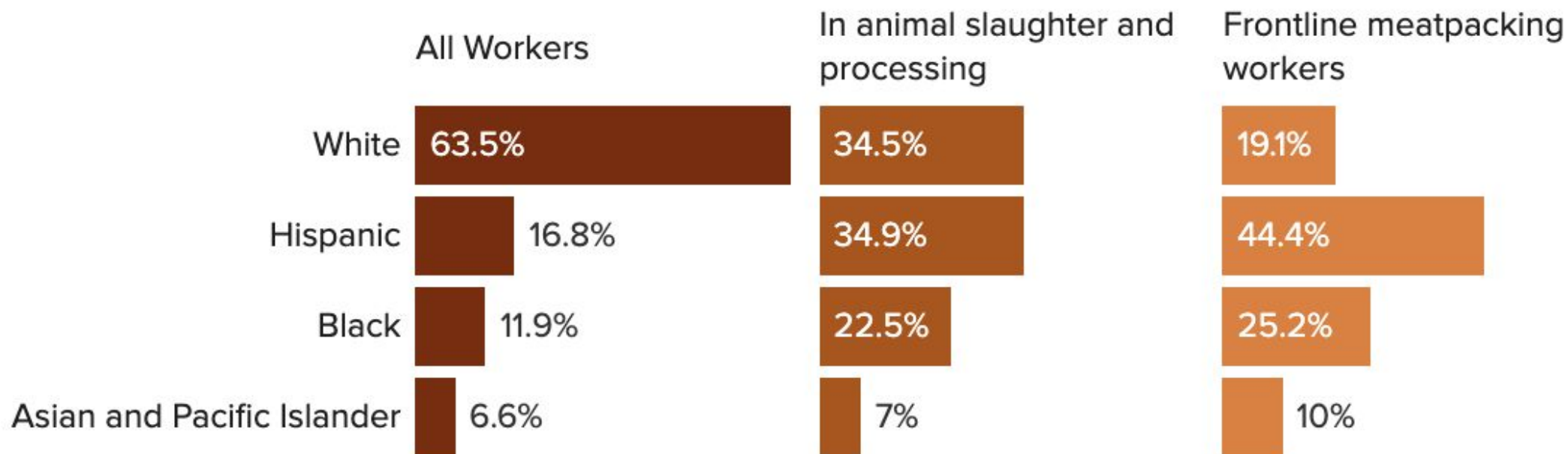


... and the same condition on a white teenager. Northwestern University, via Associated Press

Racism and COVID-19

- After the abolishment of slavery, Jim Crow Laws and "Black codes" detailed where Black people worked and how much they were paid
 - **Now, 17% of America's frontline workers are Black** when they only make up 12% of the entire workforce
 - 26% of public transit workers
 - 18% of trucking, warehouse, postal service workers
 - 18% of healthcare workers
 - 14% of convenience and grocery store workers

Race and ethnicity of meatpacking workers



Racism and COVID-19

- **17% of America's frontline workers are Black**
 - Unjustly low wages, lack of paid sick leave, lack of PPE
- **Outbreaks** in prisons, immigration detention centers, and homeless shelters
- Black people have **60% more diabetes and 40% more hypertension** compared to White people
 - residential segregation, food deserts
 - chronic discrimination and stress □ ACEs
- **Lack of universal healthcare** halts access to diagnosis and treatment of comorbidities as well as COVID-19

*RACISM IS A
SOCIAL
DETERMINAN
T OF HEALTH.*

QUESTIONS?



In Your Breakout Rooms...

- What are some health disparities that you have seen on a personal, national, and international level?
 - Can you think of historical events that may have contributed to these disparities in health outcomes?
 - Can you think of stereotypes that perpetuate these disparities?
- Discuss examples (personal or otherwise) of racism in healthcare and their impact on patients and their families.
- Discuss how racism in healthcare impacts public and global health.



On Your Own...

- Reflect on your own implicit biases.
 - Can you think of a time when you could have approached a situation in a different manner?
 - How can you actively eradicate them?
- What can you do to make your workplace, learning environment, and/or home anti-racist?

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Learning Objectives

By the end of the program, attendees should have an increased awareness and understanding of racism as a social determinant of health. More specifically, attendees should be able to:

- contextualize how slavery and overt racism in the United States has severely disadvantaged the Black community and other minority populations and continues to do so.
- describe historical examples of institutional racism in science and medicine.
- discuss how institutionalized racism, discrimination, and implicit bias in healthcare all affect patients' well-being and perpetuate social and health disparities.
- refute racially-biased myths in medicine.
- understand the effects of adverse childhood experiences (ACEs) on health.
- reflect on health disparities seen on a personal, national, and international level and discuss historical events that created them and stereotypes that perpetuate them.
- explore their own implicit biases and actively work to eradicate them.
- adapt anti-racist policies and educational materials in their respective homes, schools, and workplaces.



RACISM IN DIAGNOSES