THE PERFECT STORM – WHEN 3 PANDEMICS COLLIDE:

HEALTH INEQUITY, RACISM & COVID19

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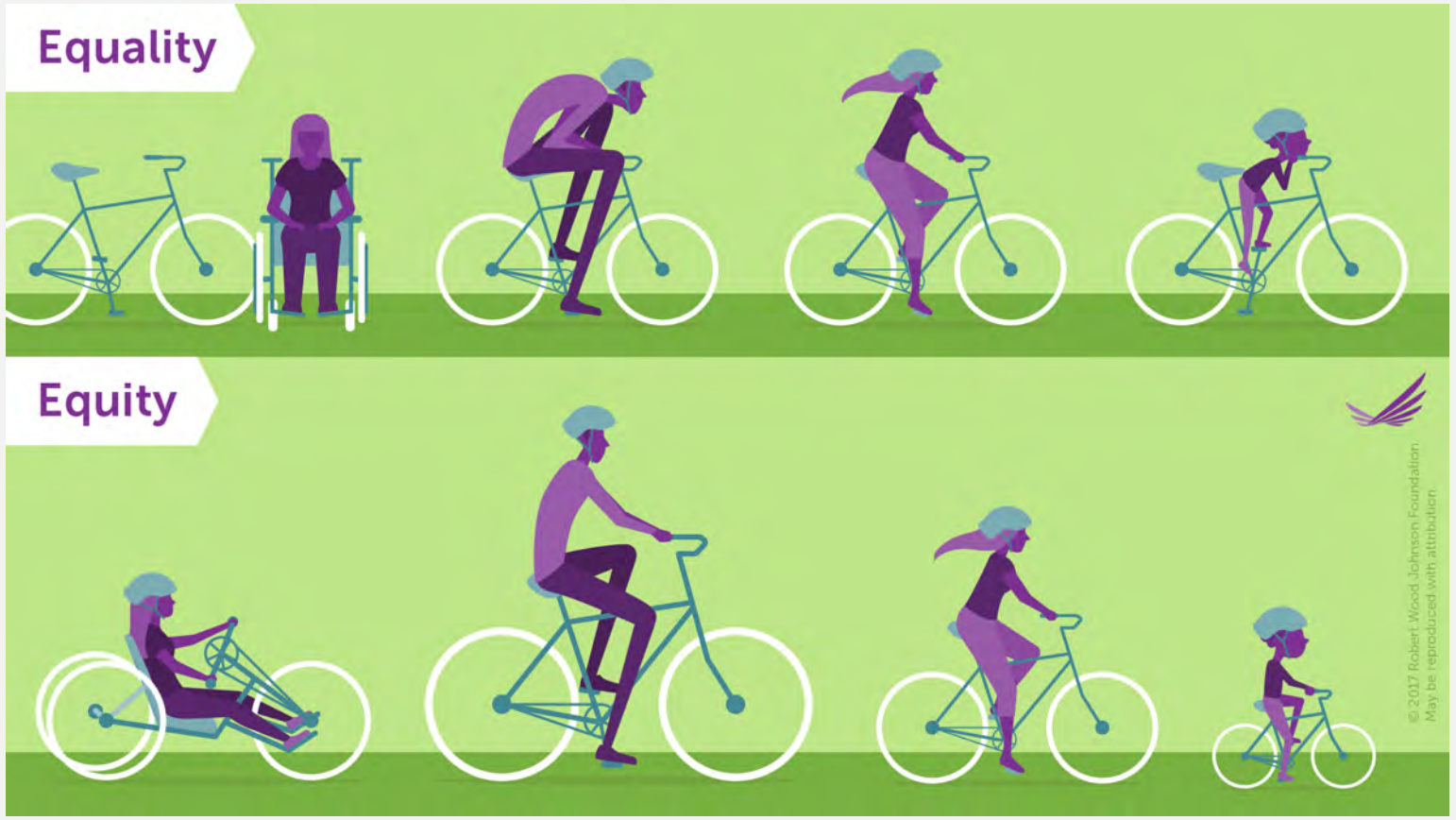
OBJECTIVES:

Recognize	Recognize the key factors which lead to health disparities: • Social determinants of health • Implicit biases • Institutional barriers/Structural racism
Use	Understand how these health/social inequities put racial minorities at disproportionately at increased risk of dying from COVID-19
Create	Create solutions to mitigate health inequity through community partnerships, education and health care delivery

DEFINING HEALTH DISPARITIES

- differences in health outcomes and amongst different groups of people
- higher burden experienced by one group over another in terms of:
  - Illness
  - Injury
  - Disability
  - Mortality



https://www.cdc.gov/minorityhealth/strategies2016/index.html

WHAT GROUPS ARE VULNERABLE TO HEALTH DISPARITIES? (CDC 2018)

- Vulnerable Populations:
  - difficulty communicating
  - difficulty accessing medical care
  - need help maintaining independence

- Socially disadvantaged populations:
  - Race or ethnicity
  - Gender
  - Education or income
  - Disability
  - Geographic location
  - Sexual orientation/identity

WHAT CONTRIBUTES TO HEALTH DISPARITIES?

- INDIVIDUAL BEHAVIORS
- SOCIAL DETERMINANTS OF HEALTH
- IMPLICIT BIAS
- HEALTH EFFECTS OF RACISM

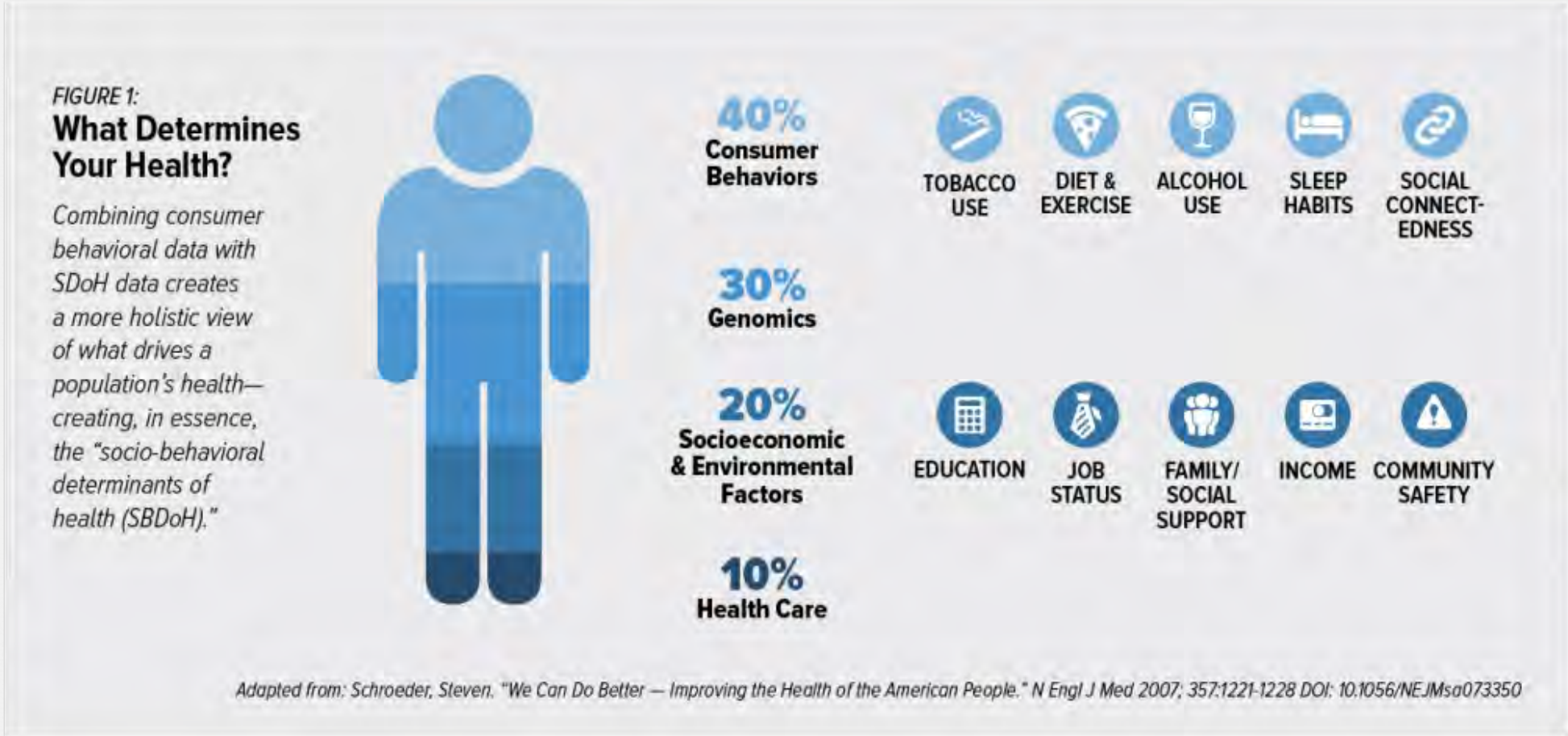
SOCIAL DETERMINANTS OF HEALTH

SOCIAL DETERMINANTS OF HEALTH

Social Determinants of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education			
Support	Walkability				

The conditions in which people live, learn, work, and play contribute to their health. (CDC 2018)



Health of an individual and community does not depend on medicine alone

Poor health due to factors outside walls of medical facility

SDoH account for 80% of health outcomes

FOOD INSECURITY

- Higher rates of obesity[1]
- Urban food deserts[2]
- Cost differentials[3]

Coleman-Jensen A, Nord M,. Household Food Security in the United States in 2011. Washington, DC: USDA; September 2012. Economic Research Service.

Larson N et al Neighborhood environments, disparities in access to healthy foods in the US 200 Am J Prev Med 36(1) 74-81

Andreyeva T et al Availability and prices of foods across neighborhoods The case of New Haven CT 2008 Health Affairs 27(5) 1381-1388

UNSAFE NEIGHBORHOODS:

- 45% - multiple moves, overcrowding, physically inadequate housing
- Fewer parks, green spaces, bike paths, recreational facilities[1]
- Crime, traffic and unsafe play spaces[2]
- Low income students spend less time being active in PE and have less recess[3]

.Gordon-Larson P, et al Inequalities in the built environmentunderlies key health disparities in physical activity and obesity 2006 Pediatrics 117(2) 417-424

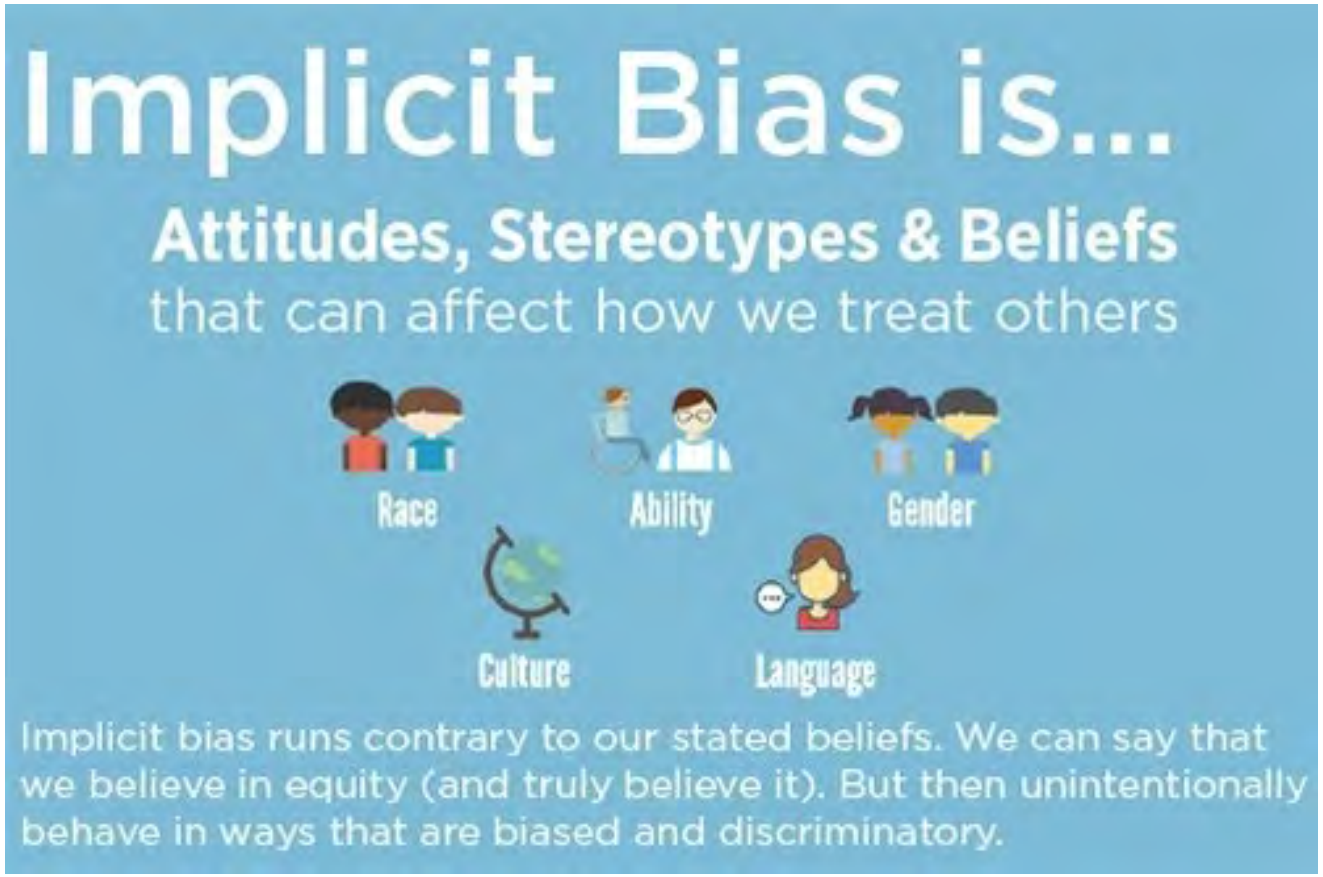
2.Gordon-Larson P et al Barriers to physical activity, qualitative data on caregivers perspective and practice Am J Prev Med. 27(3) 218-2233 Barros R et al School recess and group

IMPLICIT BIAS IN HEALTHCARE

"Few people are capable of expressing with equanimity opinions which differ from the prejudices of their social environment."

– Albert Einstein

IMPLICIT BIAS

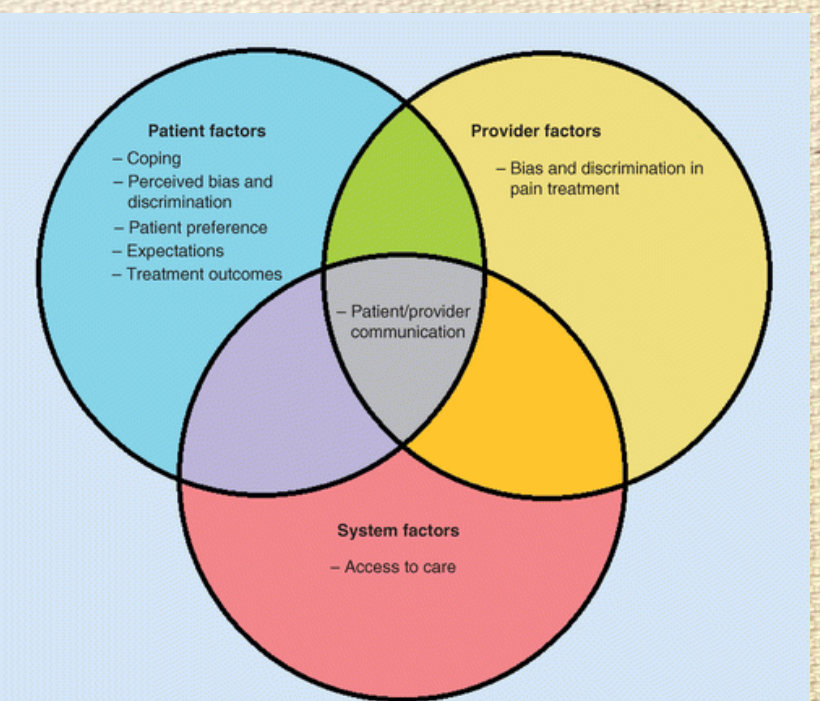


IMPLICIT BIAS & RACE: PAIN CONTROL

- **Black patients 22% less likely than White patients to receive any pain medication**
  - Salimah, et al, "Time to Take Stock: A Meta-Analysis and Systematic Review of Analgesic Treatment Disparities for Pain in the United States," *Pain Medicine,* February 2012.

- **minority children are less likely to receive opioids and achieve optimal pain reduction.**
  - Goyal, et a, "Racial and Ethnic Differences in Emergency Department Pain Management of Children With Fractures," *Pediatrics,* May 2020

- "***disparities in pain experiences and treatment among racial/ethnic groups compared to White counterparts***:
  - **have their pain underestimated by providers**
  - **receive less comprehensive diagnoses**
  - **have less access to analgesic medications – opioids for pain management**
    - Meints, "Racial and ethnic differences in the experience and treatment of noncancer pain management," *Pain Mangagement,* 2019



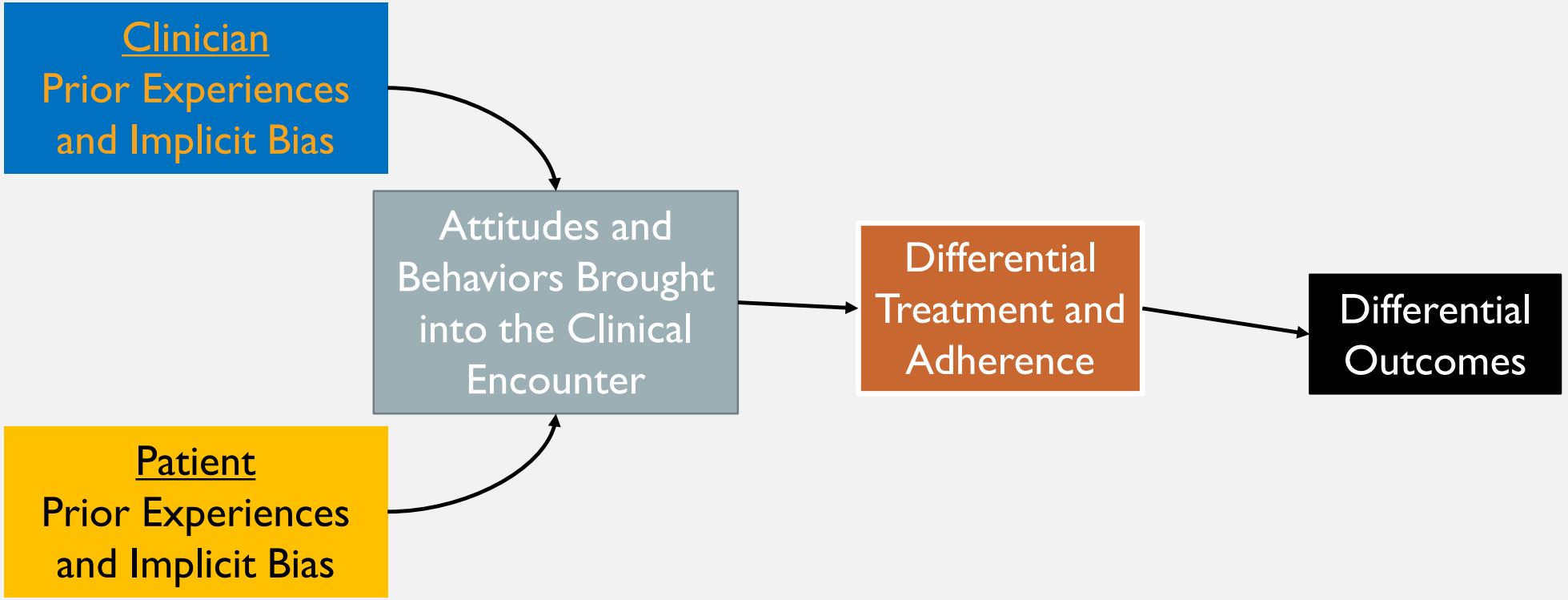
IMPLICIT BIAS & RACE:

- MORE likely to undergo lower limb amputations for **diabetes** (2003)
- 60% less likely to be treated with home **hemodialysis**
- 47% less likely to be treated with **peritoneal dialysis**.
- *Norris KC, Williams SF, Rhee CM, et al. Hemodialysis Disparities in African Americans: The Deeply Integrated Concept of Race*

- more likely diagnosed as **psychotic**
- BUT….
  - less likely to be given anti-psychotic medications
  - more likely to be hospitalized involuntarily
  - regarded as "potentially violent"
  - Placed in restraints/isolation

Benson, 1983

HOW DOES IMPLICIT BIAS OPERATE IN HEALTH CARE OUTCOMES

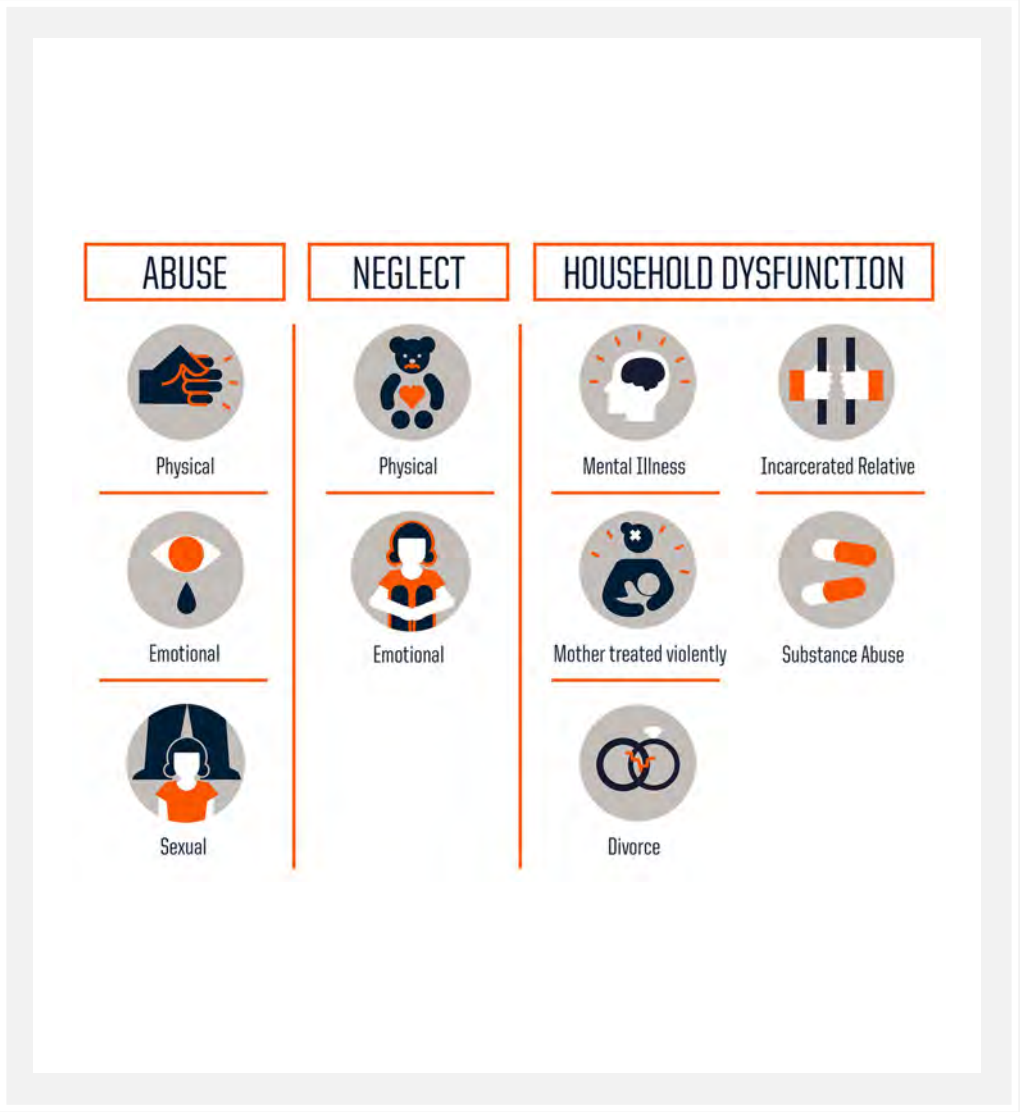


Source: Blair IV, Steiner JF, Havranek EP. Unconscious (Implicit) Bias and Health Disparities: Where Do We Go from Here? *The Permanente Journal*. 2011;15(2):71-78.

HEALTH EFFECTS OF RACISM

"As pediatricians, we are always learning and striving to provide better care for all of our patients…Using race as a proxy for biology or genetics can lead to inequitable care and outcomes."

– AAP President, Lee Savio Beers, MD FAAP



http://acestoohigh.com/got-your-ace-score/

ADVERSE CHILDHOOD EXPERIENCES

- ***"Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The ACES Study"***
  - *American Journal of Preventive Medicine, 1998*
- 17,000 participants
- tracked health outcomes and health care use in adults

↑ NUMBER OF ACES → ↑ RISK FOR NEGATIVE HEALTH OUTCOMES

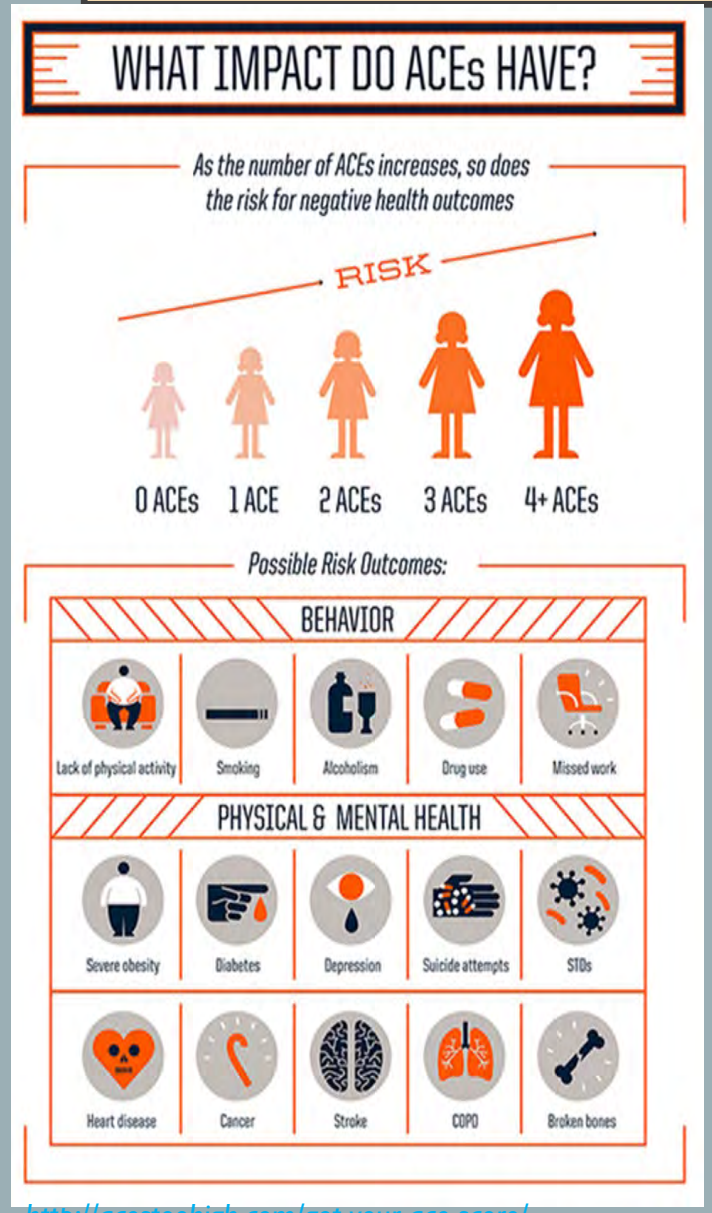
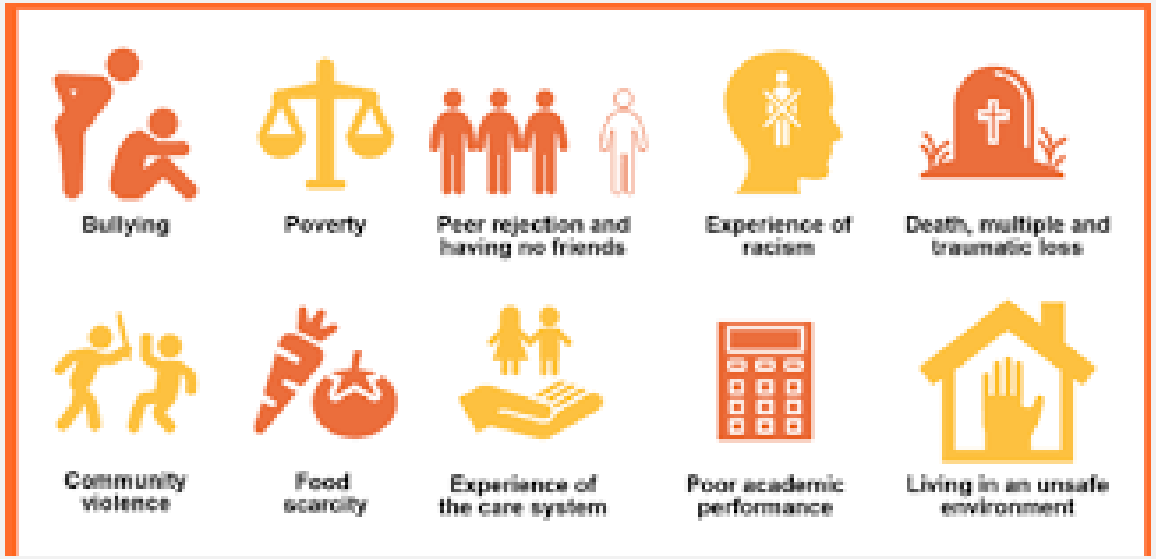


Table 1. ACE-Related Odds of Having a Physical Health Condition[1]

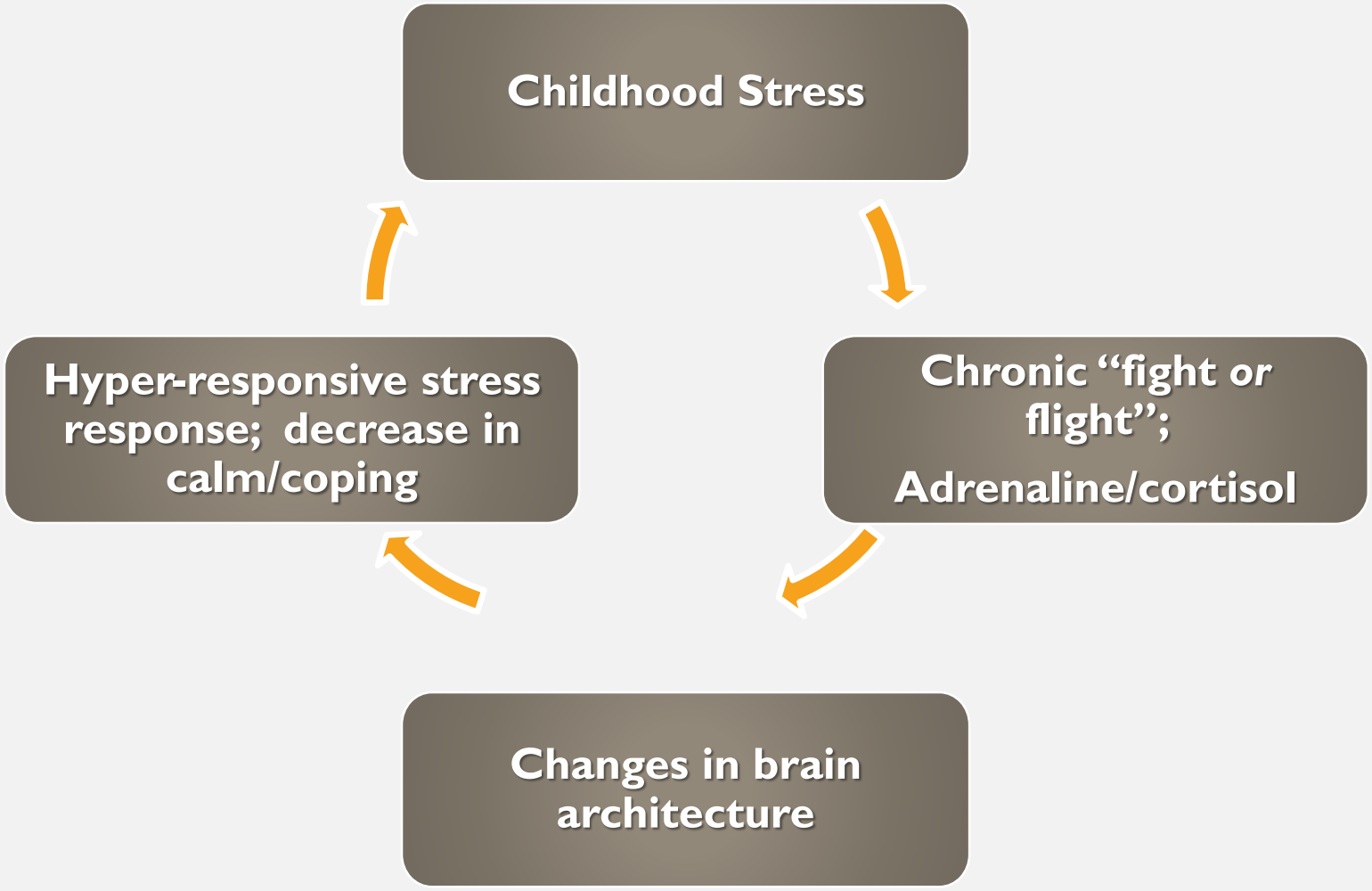
Health Condition	0 ACEs	1 ACEs	2 ACEs	3 ACEs	4+ ACEs
Arthritis	100%	130%	145%	155%	236%
Asthma	100%	115%	118%	160%	231%
Cancer	100%	112%	101%	111%	157%
COPD	100%	120%	161%	220%	399%
Diabetes	100%	128%	132%	115%	201%
Heart Attack	100%	148%	144%	287%	232%
Heart Disease	100%	123%	149%	250%	285%
Kidney Disease	100%	83%	164%	179%	263%
Stroke	100%	114%	117%	180%	281%
Vision	100%	167%	181%	199%	354%

http://acestoohigh.com/got-your-ace-score/

ADVERSE COMMUNITY EXPERIENCES

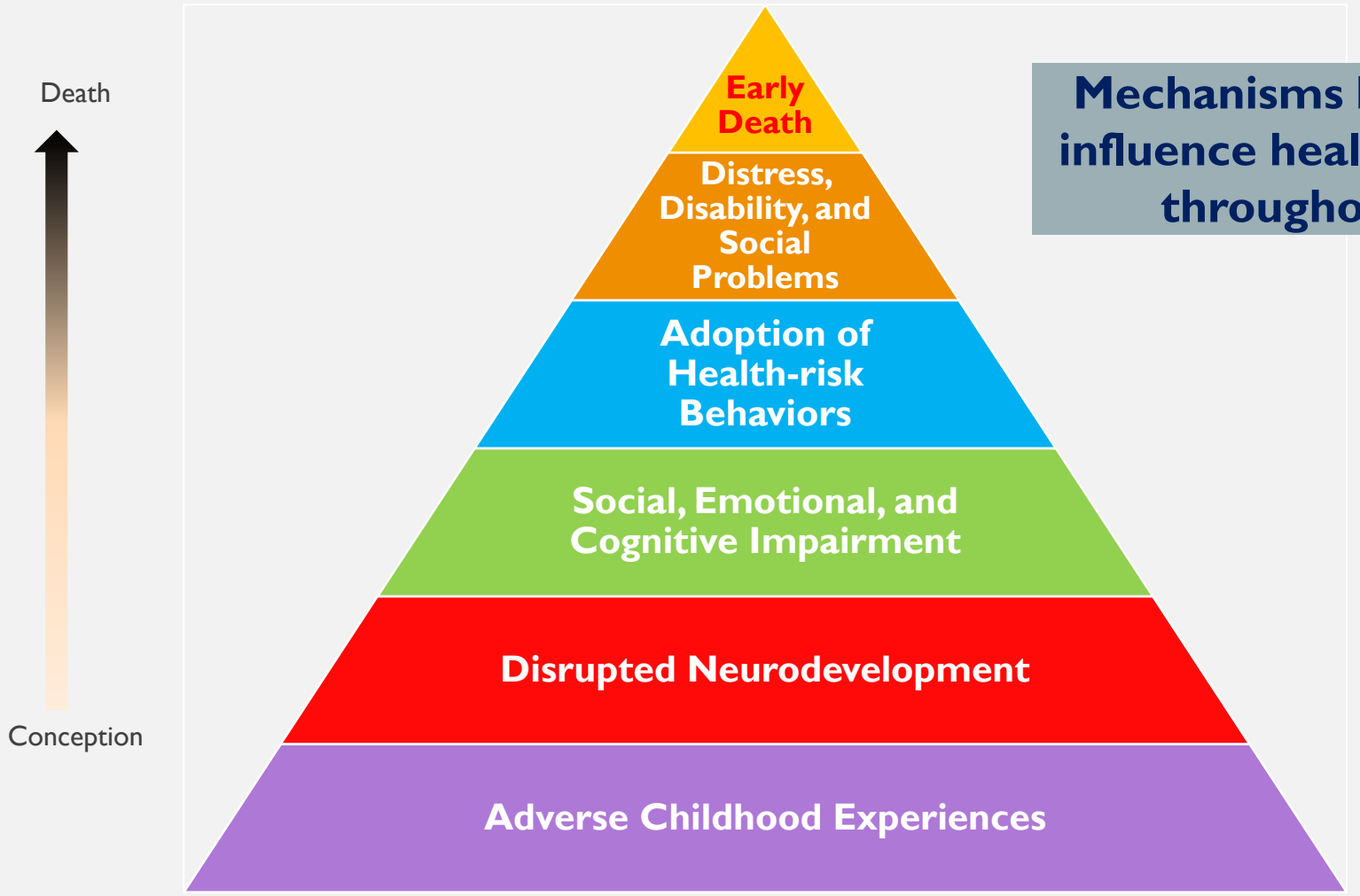


BRAIN DEVELOPMENT AND TOXIC STRESS



Dr. Collen Kraft "The First 1000 Days: The Importance of Early Brain and Childhood Development"

HOW ACES IMPACT HEALTH

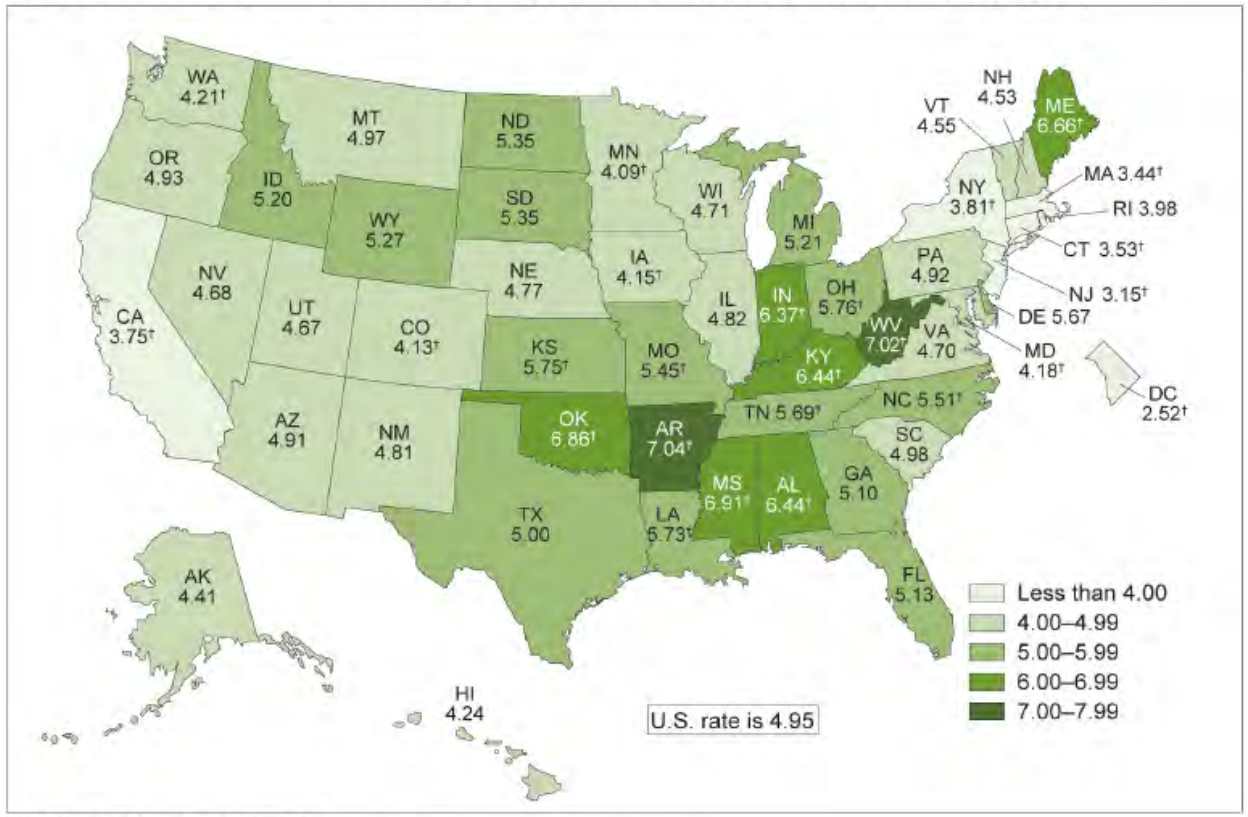


Mechanisms by which ACEs influence health & well-being throughout lifespan

ACES IN NEW JERSEY

- Nearly half of all people in NJ experience at least 1 ACE
- children of color and low-income backgrounds more susceptible to experiencing ACEs
- Children with multiple ACEs experienced by:
  - 27% of African-American children
  - 22% of Latino children
  - 16% of white children

Figure 2. Infant mortality rates for infants of non-Hispanic white women, by state: United States, 2013–2015

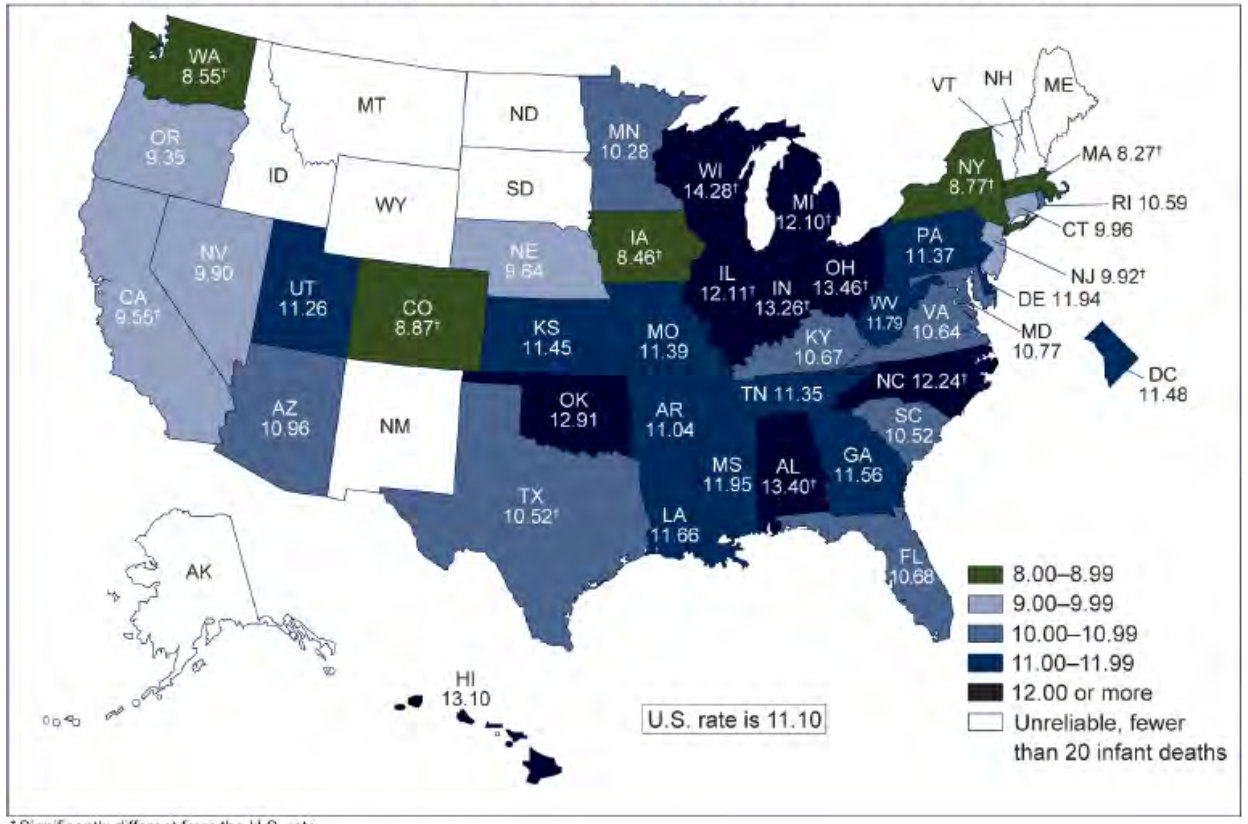


† Significantly different from the U.S. rate.
NOTES: Rates ranged from 2.52 to 7.04 per 1,000 live births.
Access data table for Figure 2 at: https://www.cdc.gov/nchs/data/databriefs/db295_table.pdf

NJ INFANT MORTALITY RATE (IMR)

AMONGST LOWEST IN US FOR WHITE INFANTS

Figure 3. Infant mortality rates for infants of non-Hispanic black women, by state: United States, 2013–2015



† Significantly different from the U.S. rate.
NOTES: Rates ranged from 8.27 to 14.28 per 1,000 live births.

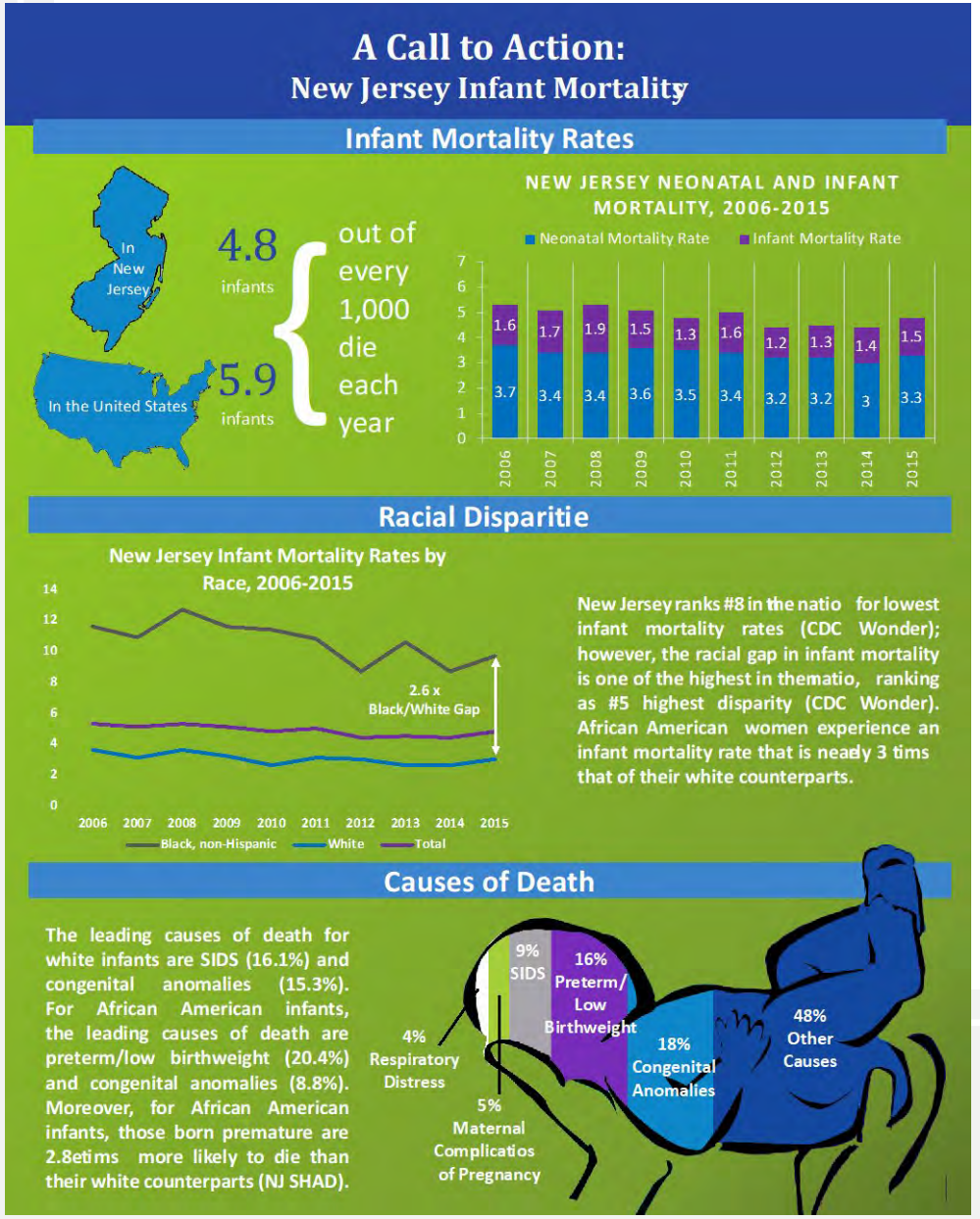
NJ IMR AMONGST LOWEST IN US FOR **BLACK INFANTS**

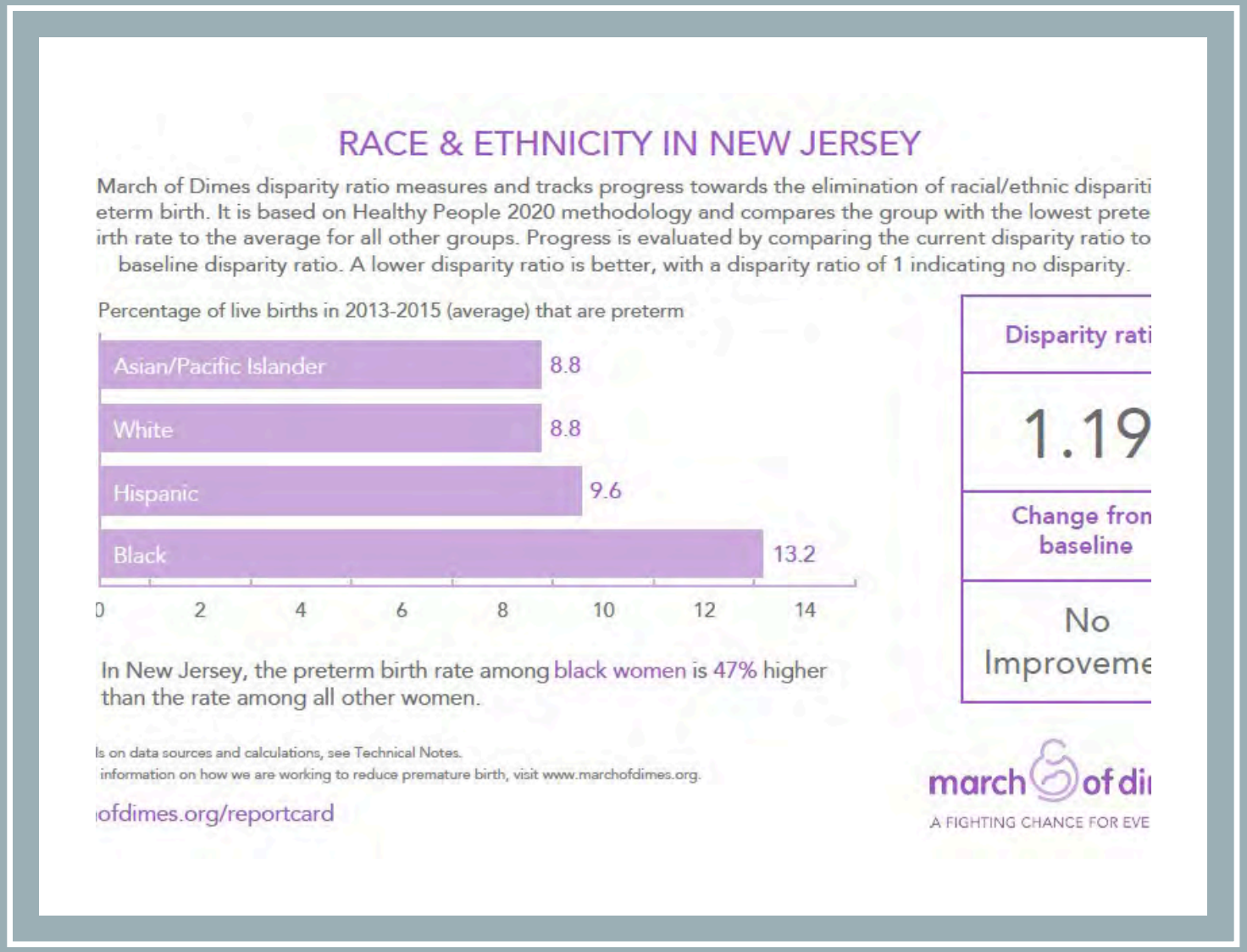
BLACK INFANTS

3X MORE LIKELY

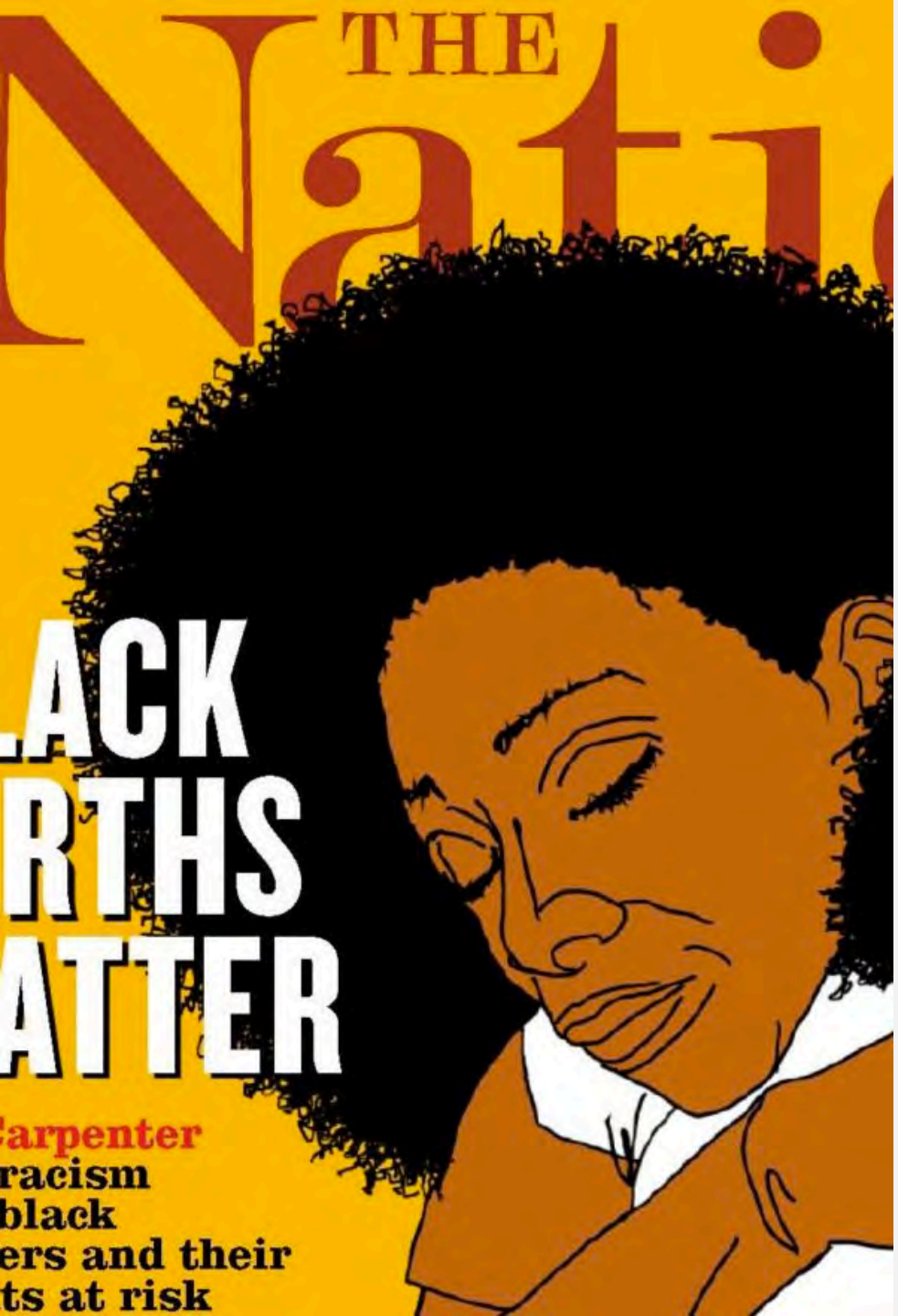
THAN WHITE INFANTS TO DIE DURING IST YEAR OF LIFE

(2011-2013)





NJ PRETERM BIRTH RATES (2017)



WHAT'S KILLING AMERICA'S BLACK INFANTS? RACISM IS FUELING A NATIONAL HEALTH CRISIS.

BY ZOË CARPENTER – MARCH 2017

- **"…what happens outside a woman's body—not just during the nine months of pregnancy—can profoundly affect the biology within"**

CDC:

- 22% more likely to die from heart disease
- 71% more likely to die from cervical cancer
- 243% more likely to die from ante/post-partum-rltd causes

- factors contributing to pregnancy-rltd death:
  - cardiomyopathy
  - thrombotic pulmonary embolism
  - eclampsia

"WEATHERING" AND AGE PATTERNS OF ALLOSTATIC LOAD SCORES AMONG BLACKS AND WHITES IN THE UNITED STATES.

GERONIMUS ET AL, AMERICAN JOURNAL OF PUBLIC HEALTH, 2006:

ALLOSTATIC LOAD: *cumulative wear and tear on body's systems due to repeated adaptation to stressors*

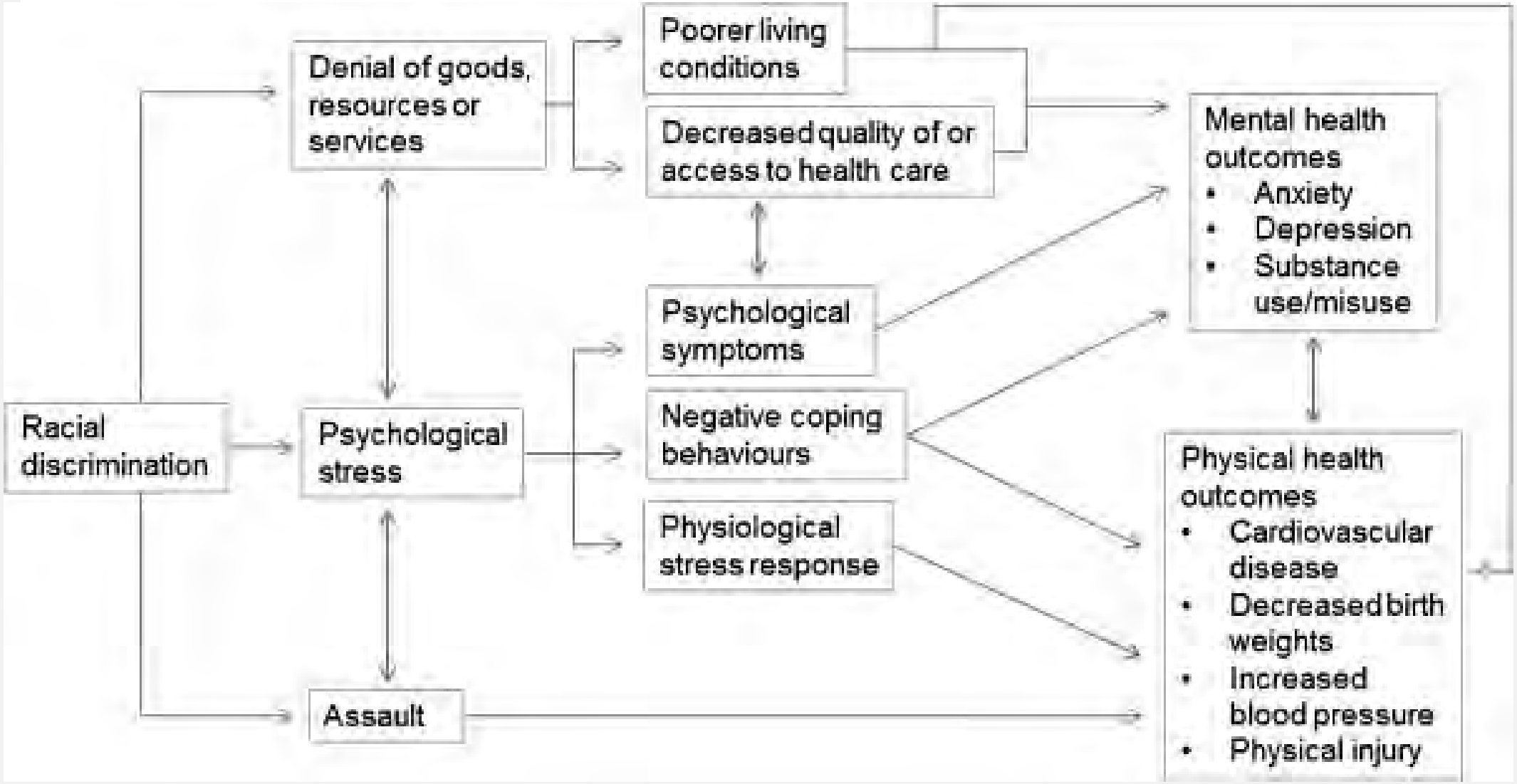
WEATHERING: *Black Americans' health deteriorates more rapidly than other groups' because they bear heavier allostatic load*

DOUBLE JEOPARDY

- ***Black immigrant women (African and Caribbean) who arrived in U.S. as adults enjoy better birth outcomes than native-born African American women***
- - Geronimus, et al, University of Michigan:**2016**

- ***"black women with advanced degrees 5x more likely to lose infants than white women who hadn't graduated from high school"***
- -*Carpenter 2019*

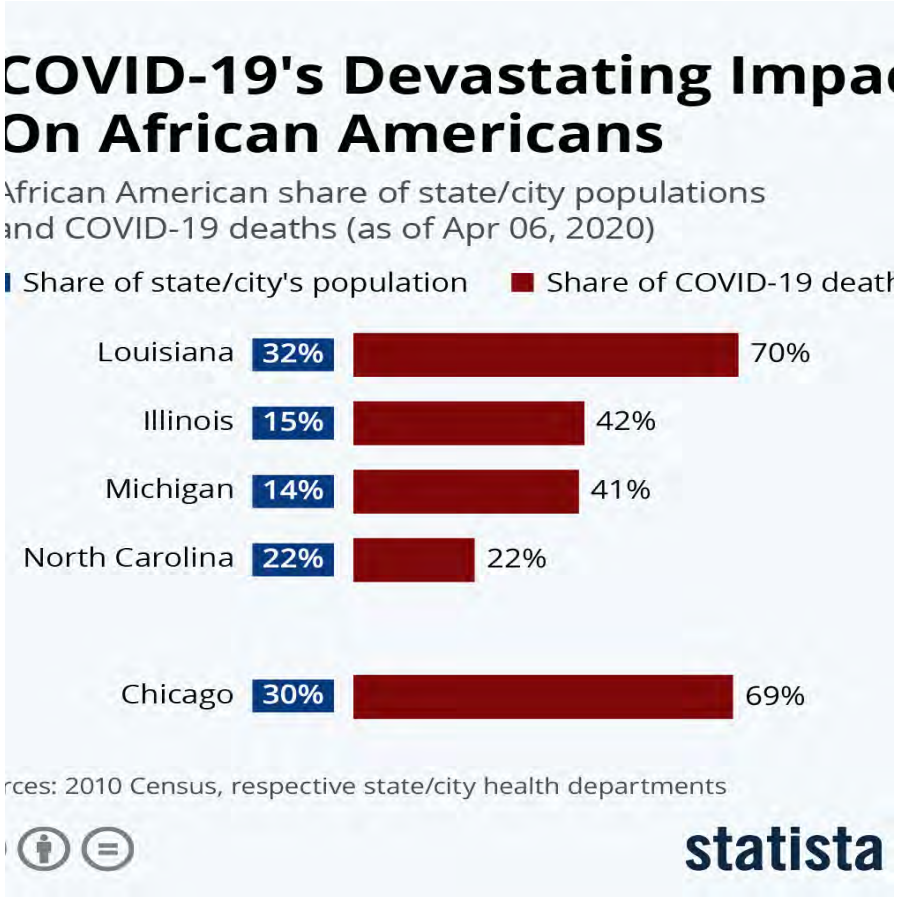
DISCRIMINATION = SOCIAL DETERMINANT OF HEALTH

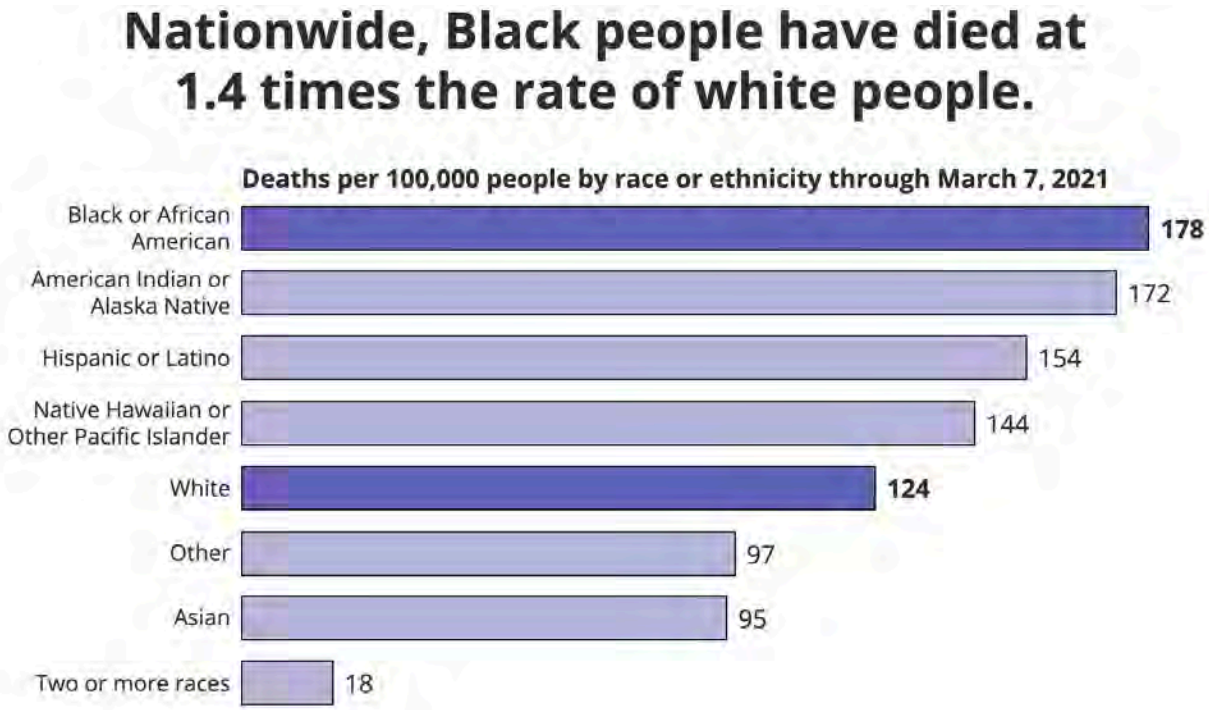


HEALTH DISPARITIES & COVID-19

"Decades of structural racism have prevented so many Black and Brown families from accessing quality health care, affordable housing, and financial security, and the coronavirus crisis is blowing these disparities wide open."

-Senator Elizabeth Warren



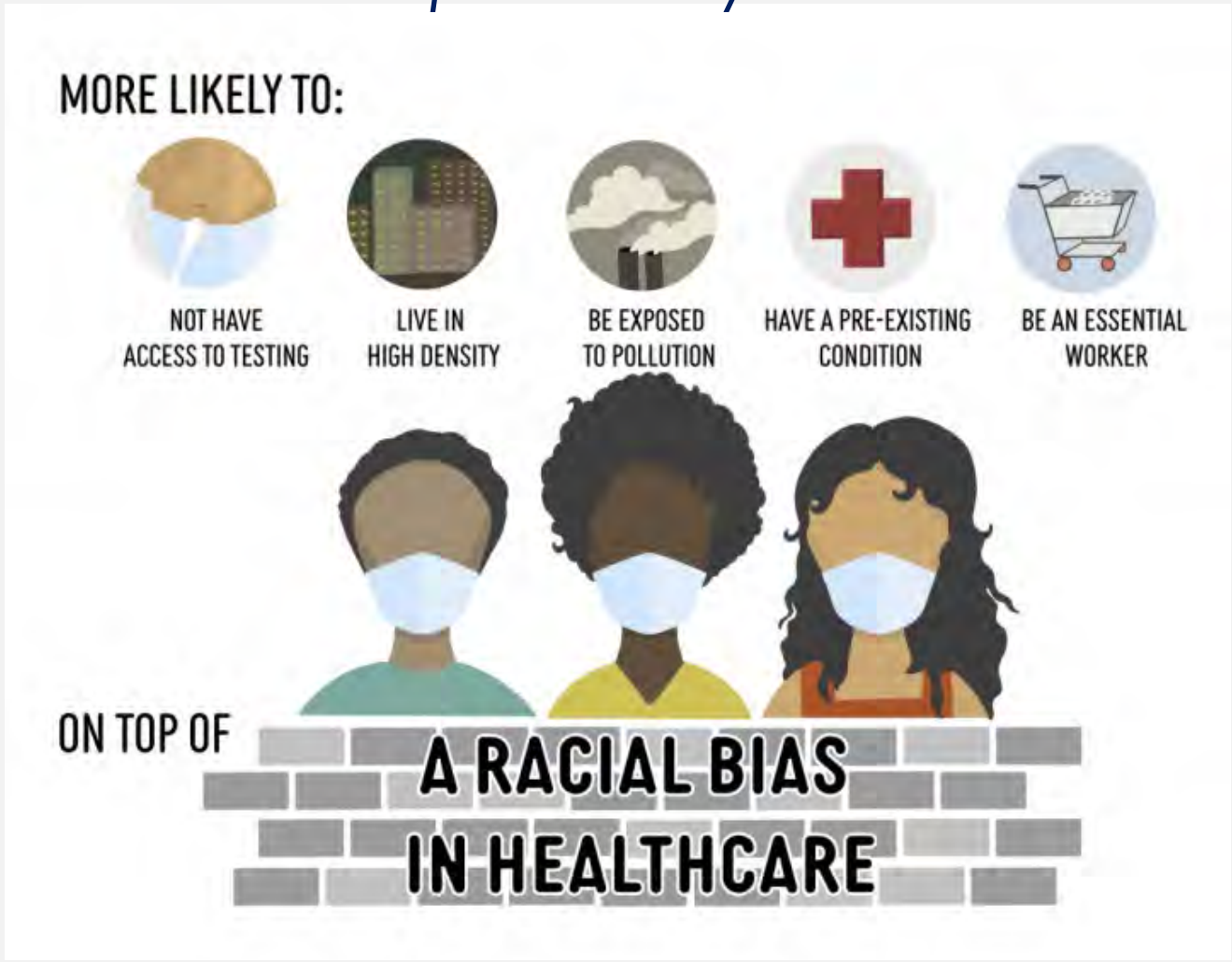


COVID RACIAL DATA TRACKER

BOSTON UNIVERSITY CENTER FOR ANTI-RACIST RESEARCH

African-Americans represent 3% of the nation's population BUT
24% of the COVID-19 related deaths

COVID-19 death rate 6x higher in areas that are predominately Black



"Why is my community suffering more from COVID-19?," Malika Fair, MD, MPH, Senior Director, Health Equity Partnerships & Programs, May 20, 2020

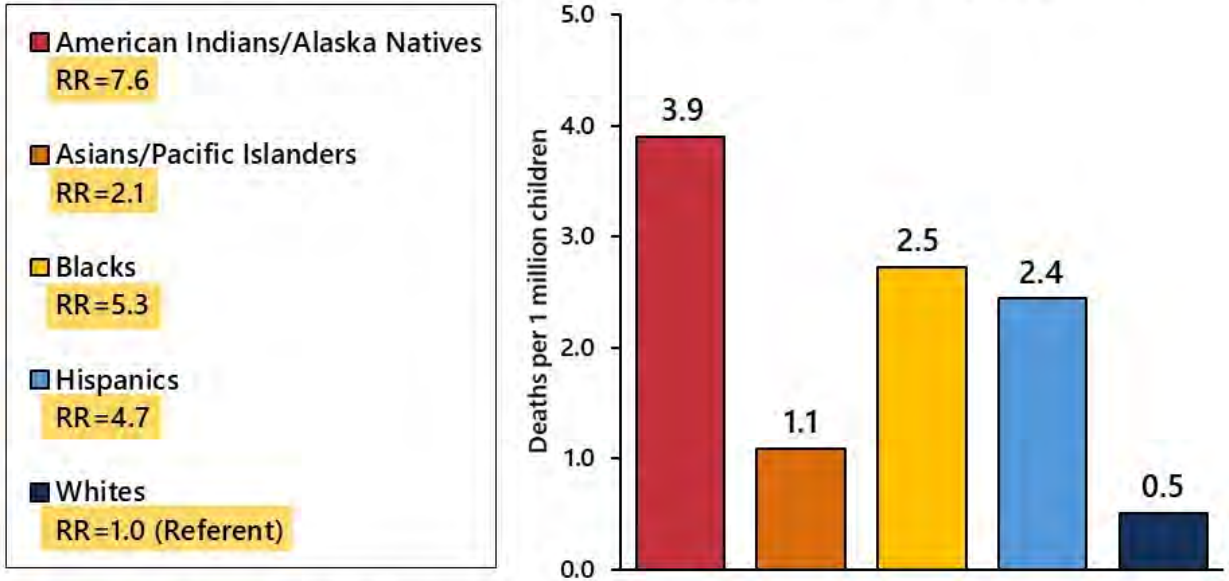
- **Washington DC:**
  - Black residents represent <50% but nearly 80% of COVID related deaths
  - Latinx population: highest per capita infection rates
- **Memphis, TN:**
  - 3 testing sites in predominately Black neighborhoods did not have the supplies to test patients
  - sites in nearby White neighborhoods were fully functional
- **Philadelphia, PA**
  - more testing sites in high-income neighborhoods
  - compared to low-income neighborhoods where more people of color live
- **7 states:**
  - Black people presenting with fever and cough less likely to receive a referral for COIVD-19 testing

- Who can telework?
  - 16% of Latinx workers
  - 20% of Black workers
  - 30% of White workers

The COVKID Project ♥ www.covkidproject.org ♥ @covkidproject

Figure 2.

COVID-19 Child Mortality by Race and Hispanic Ethnicity United States, February 1 to September 19, 2020



Note: RR= Rate Ratio. Total Deaths = 109. Death rates are for ages 0 to 18 years and use total US child populations (2018) as the denominators. In other words, these are population mortality rates, NOT infection fatality rates (IFRs) NOR case fatality rates (CFRs). All race groups include non-Hispanics only. Data from the National Center for Health Statistics: https://data.cdc.gov/NCHS/Provisional-COVID-19-Deaths-Among-Ages-0-18-Years/nr4s-juj3

COVID & POVERTY

Poverty AMPLIFIES COVID-related risks amongst children:

- Crowded housing
- More likely to experience underlying health issues
- Limited space to play
- Difficulty with online schooling
- Lack of disposable cash
- Food insecurity

Single parent homes

- Higher risk of poverty
- Comprise 33% of poor (vs 10% of two-parent families)
- Limited access to childcare assistance (OECD, 2020)

IMPACT ON PHYSICAL HEALTH → OBESITY

- Irregular sleep routines
- Disrupted daily activities
- Decreased physical and outdoor activities
- Cancellation of sports
- Closure of parks and gyms
- Increased use of electronic devices/ screen time

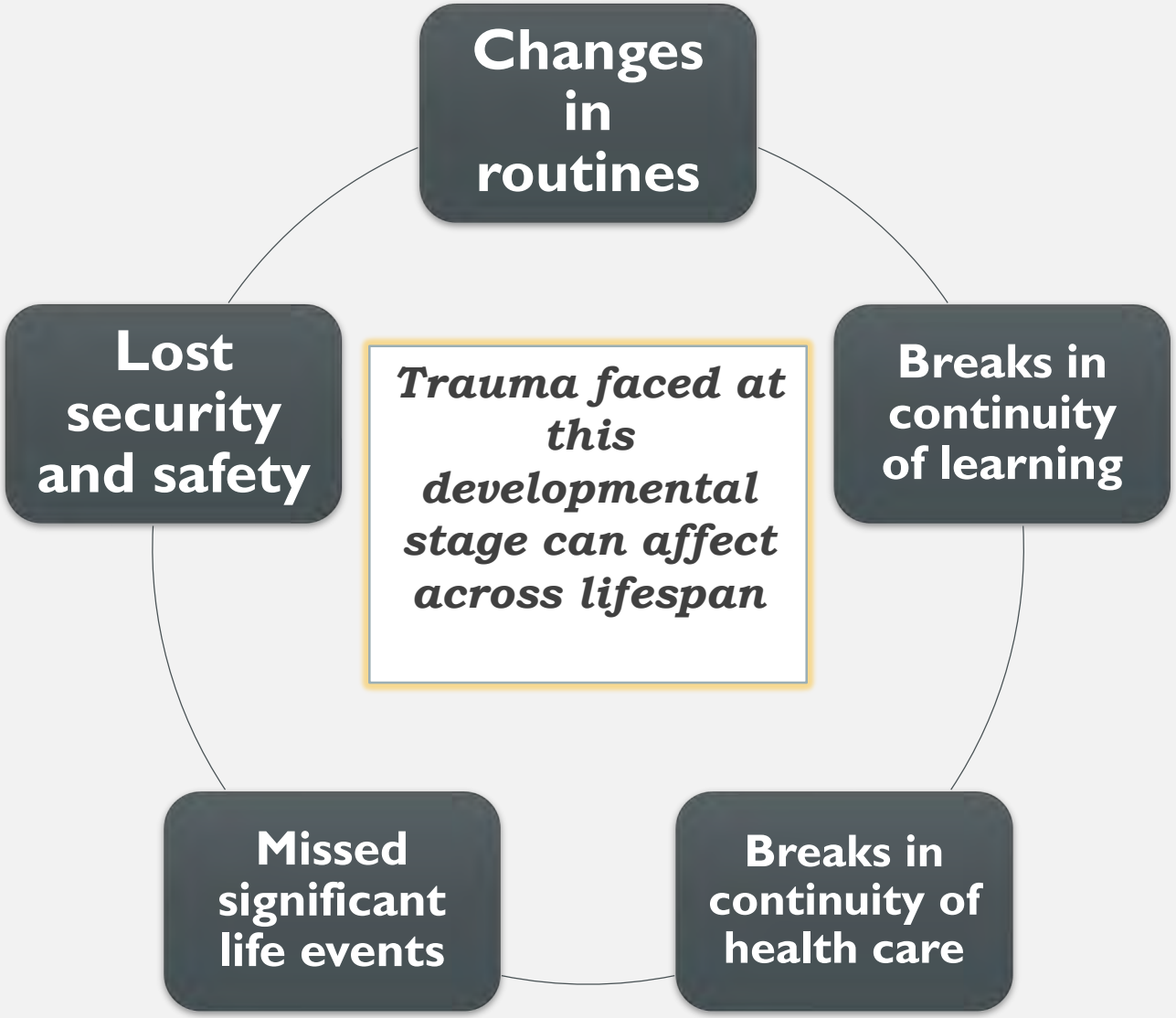
New Jersey Chapter
INCORPORATED IN NEW JERSEY
American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®

INCREASED RISK OF CHILD ABUSE/NEGLECT

- **WORSENING contributing factors (OECD 2019):**
  - Poverty
  - Overcrowded housing
  - Social isolation
  - Intimate partner violence
  - Parental substance abuse
  - Higher toxic stress levels
- **Compromised child protection systems:**
  - Less in-person contact between children and DCP&P
  - Less monitoring of children's well-being
  - Less reporting of concerns
  - Large decreases in reporting of concerns for children's safety and welfare

- *"Longer the period of school closures the higher the possibility that the child will never return to school" – OECD 2019*

COVID'S IMPACT ON CHILDREN'S MENTAL HEALTH - CDC



DISCRIMINATION

- Health care
- Housing
- Education
- Criminal justice
- Finance
- Racism → toxic stress

HEALTHCARE ACCESS & UTILIZATION

uninsured

lack of transportation, childcare, time off of work

language barriers

cultural differences

historical distrust

HEALTH INEQUITY + RACE

+

COVID

EDUCATION/OCCUPATION:

disproportionately represented as "frontline workers"

unable to work from home

not having paid sick days

•HOUSING:

- crowded conditions
- multi-generational households
- risk of eviction

SOLUTIONS?

SOCIAL DETERMINANTS OF HEALTH

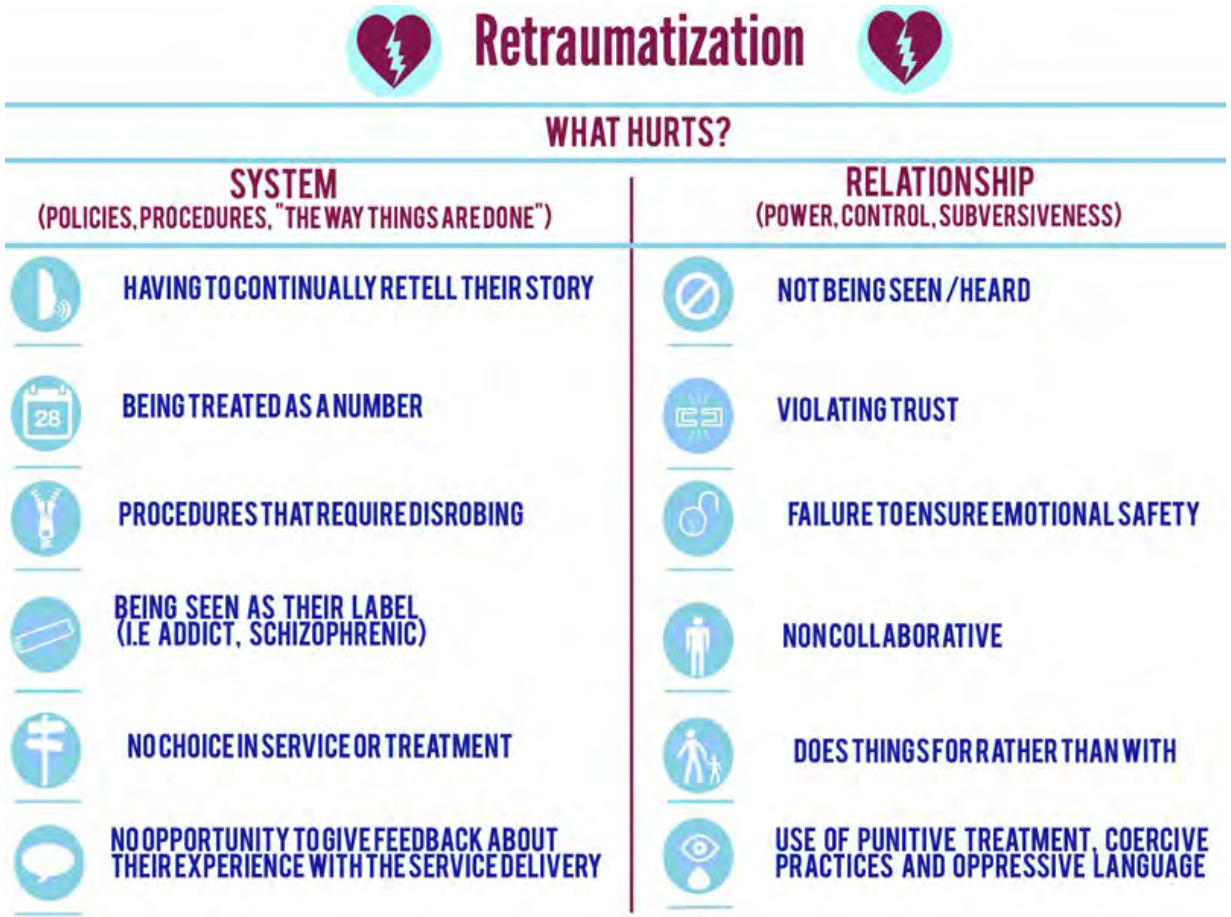
IMPLICIT BIAS

ACES + RACISM

HEALTH INEQUITIES

KEYS TO SCREENING FOR SDOH

- Brief
- Accurate
- Validated
- Use patient input
- Have resources!



TRAUMA INFORMED CARE APPROACH

#ACTIONS4ACES CAMPAIGN

INCREASE PUBLIC AWARENESS OF ACES + ENCOURAGE ADOPTION OF BEHAVIORS THAT CAN MITIGATE THE IMPACT ACES

MISSION: Building resilience in children, families and communities

VISION: To make NJ trauma-informed, healing-centered state

INITIAL AUDIENCE: Law enforcement professionals and education professionals (serving grades Pre-K through 12)

Visit **Actions4ACEs.com** to access the latest campaign information and resources

Campaign Mission and Vision

Educational Materials and Resources

News and Updates about Efforts to Address ACEs in NJ

Calendar of Events

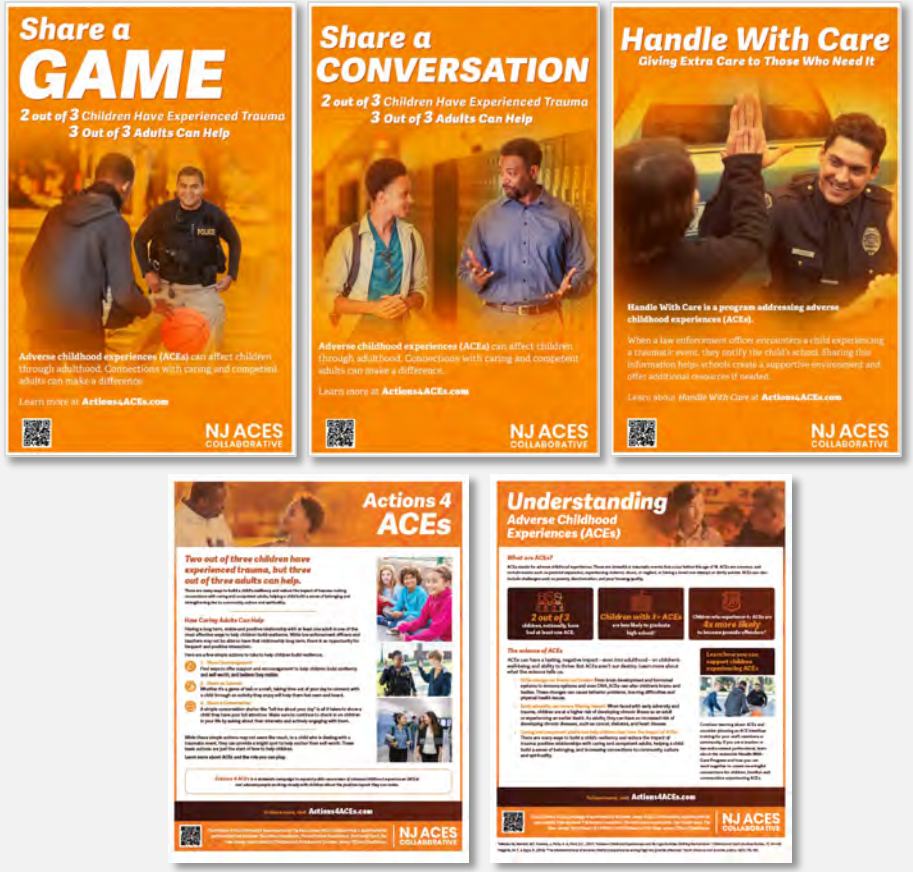
- Including training opportunities with the Office of Resilience

Role of Community and Partners

CAMPAIGN RESOURCES – PRINT MATERIALS

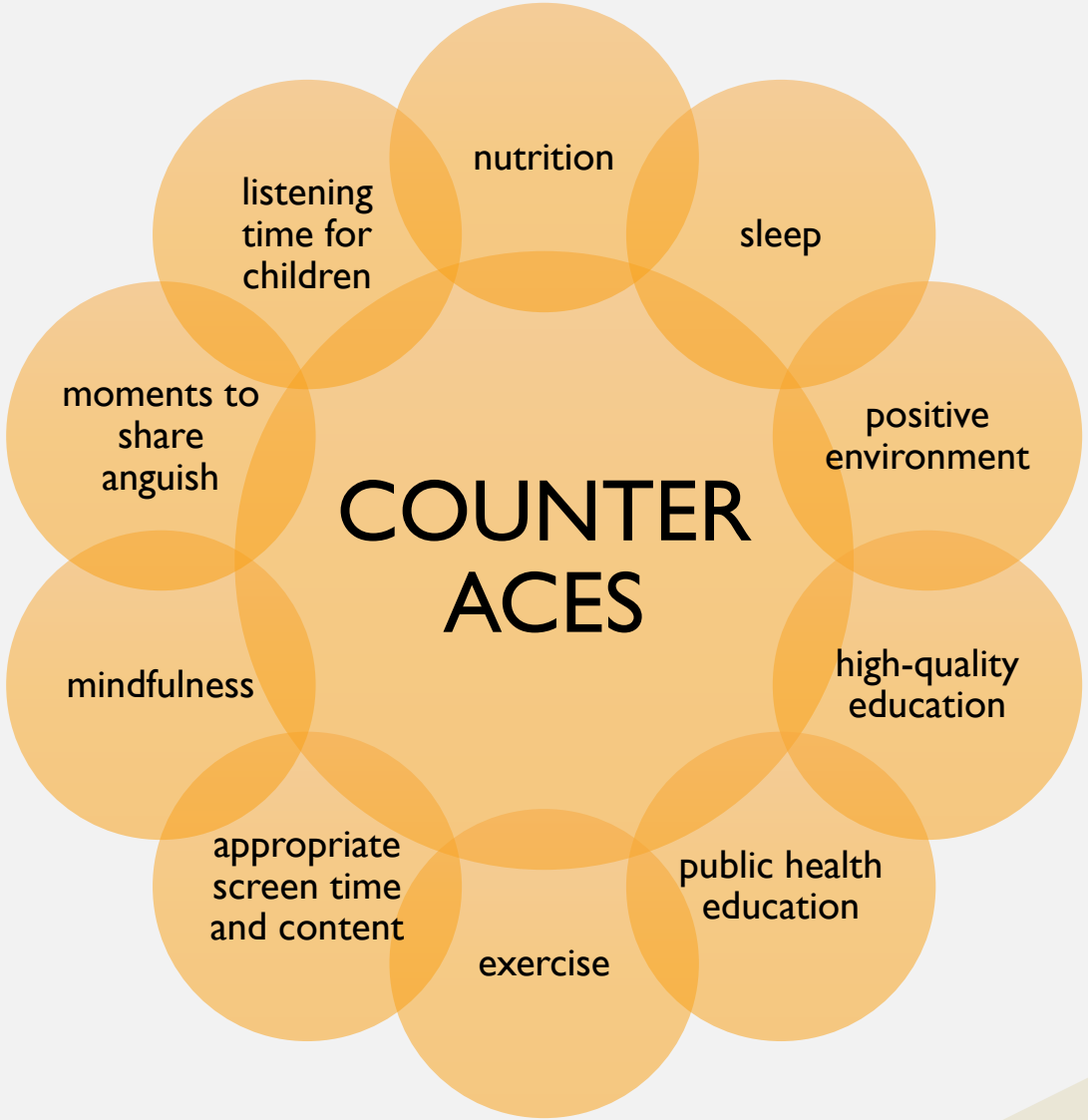
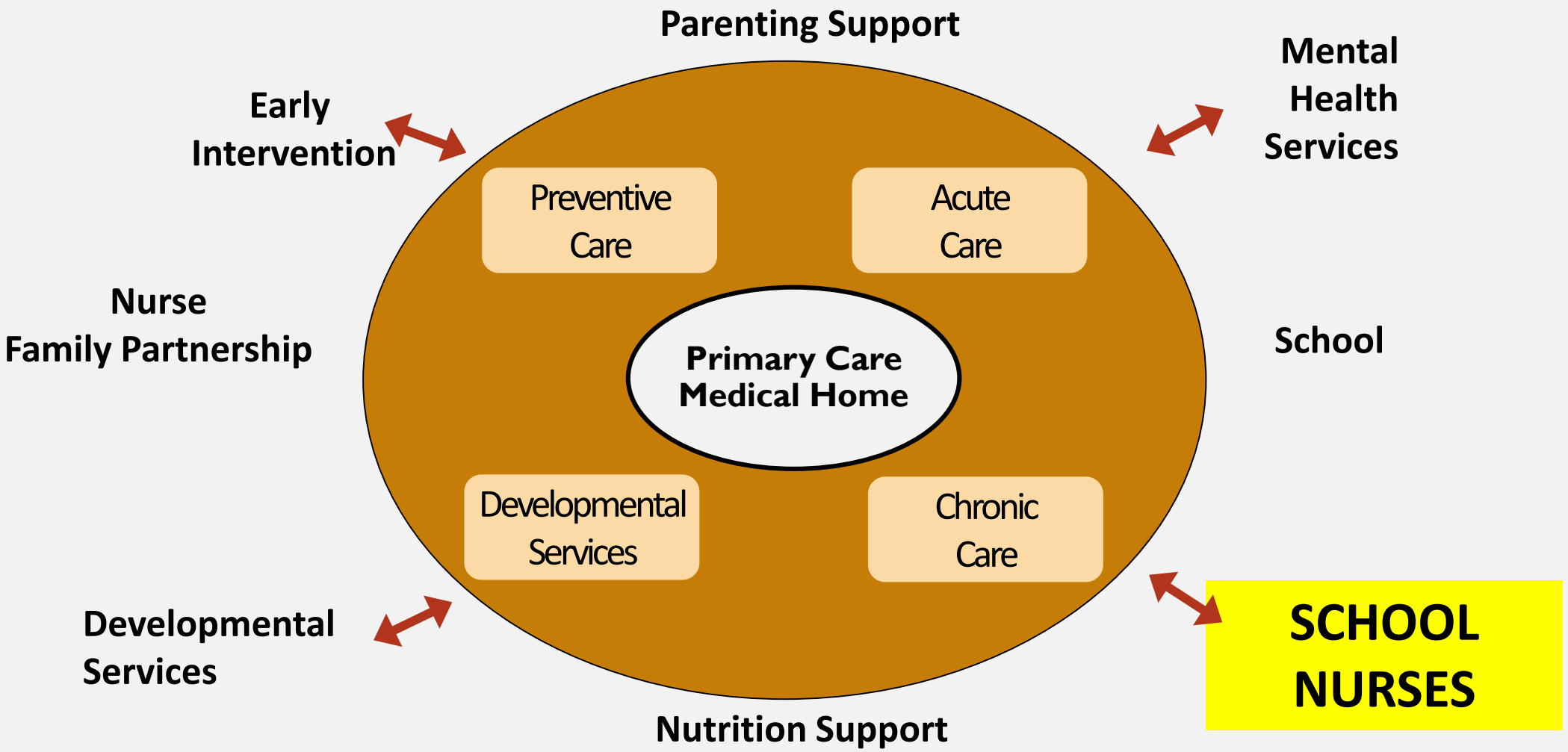
The campaign's print resources can be downloaded for print or shared electronically to help increase awareness among educators and law enforcement professionals

- **Posters**
  - Law Enforcement
  - Educators
  - Handle With Care
- **Fact Sheets**
  - Understanding ACEs
  - Actions 4 ACEs
- **Flyers / Print Display Ads**



Counter-ACEs During COVID:

fundamental to optimal child growth/development



MEDICAL HOME: COMMUNITY RESOURCE MODEL