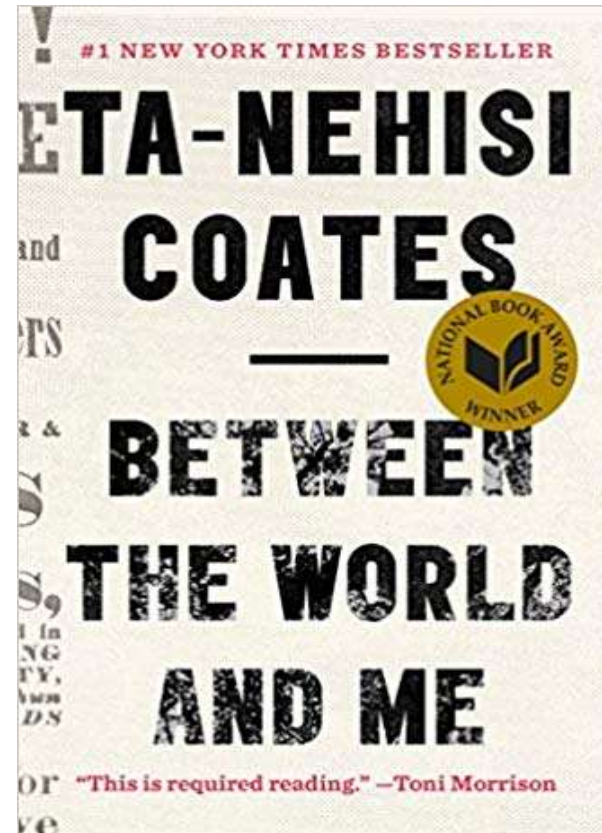


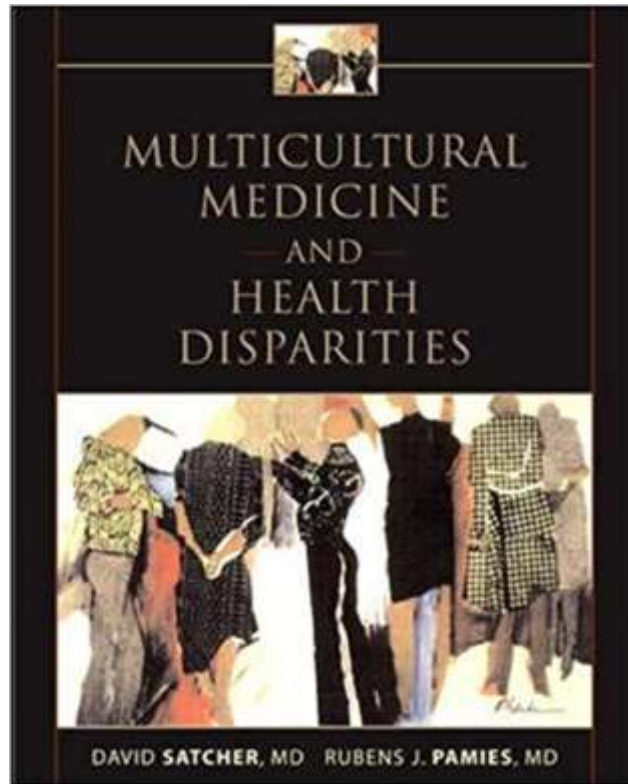
# Health Disparities

# Introduction: The Problem

UVM's Class of 2022 Summer Read, Ta-Nehisi Coates' *Between the World and Me*, describes the hazards of growing up black in inner-city Baltimore in the 1990s. The picture he paints is one of poverty, bad schools, a truculent police force, and everyday threats to the health and well-being of the community's citizens.



# Background



Explored here is the ‘health and well-being’ and equities and disparities of America’s black population that Coates describes. While other populations in the United States, Hispanics, Asians, LGBTQ, and women, may suffer similar and different issues, we will speak directly to the disparities that affect blacks in America.

# Health Disparities – CDC definition

Health disparities are preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations. Populations can be defined by factors such as race or ethnicity, gender, education or income, disability, geographic location (e.g., rural or urban), or sexual orientation. Health disparities are inequitable and are directly related to the historical and current unequal distribution of social, political, economic, and environmental resources.

<https://www.cdc.gov/healthyyouth/disparities/index.htm#1>

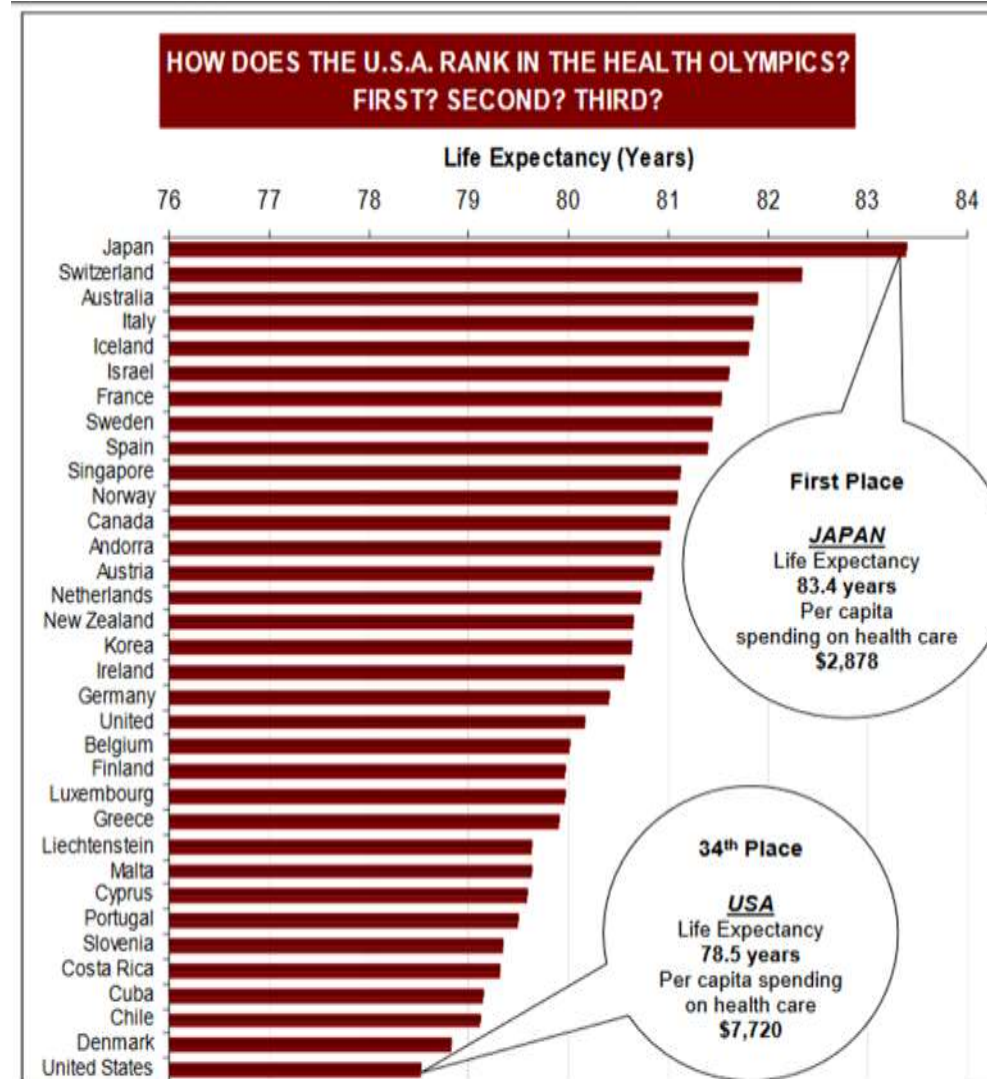
# Social Determinants of Health

Disparities emerge against a backdrop of historical, structural, and institutional inequities, based on race, income and class.

- **Social & Economic Factors** (education, employment, income, family and social support, community safety . . . )
- **Health behaviors** (tobacco use, diet and exercise, alcohol and drug use, sexual activity . . . . .)
- **Health Care** (access to care, quality of care)
- **Physical environment** (air and water quality, housing and transit . . . .)



# America in the World



**We spend twice as much per person on health care.  
Yet our life expectancy is among the worst compared to other rich countries.**

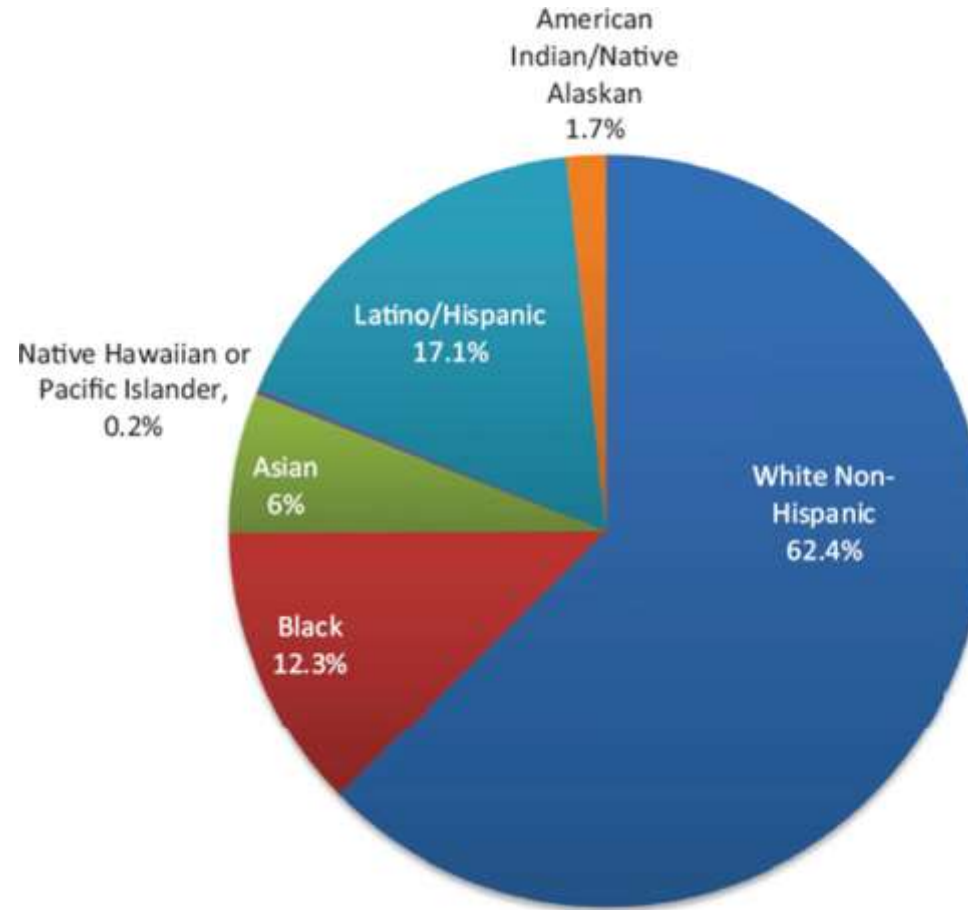
[https://unnaturalcauses.org/assets/uploads/file/Life\\_expectancy\\_olympics\\_2011.pdf](https://unnaturalcauses.org/assets/uploads/file/Life_expectancy_olympics_2011.pdf)

Life expectancy data from: [Human Development Report of the United Nations Development Programme](#).

Health Expenditure data from: [2008 OECD Report](#)

Thanks to Dr. Stephen Bezzuchka MD for originating the Health Olympics

# Data – US Population Racial and ethnic composition of the United States, 2013

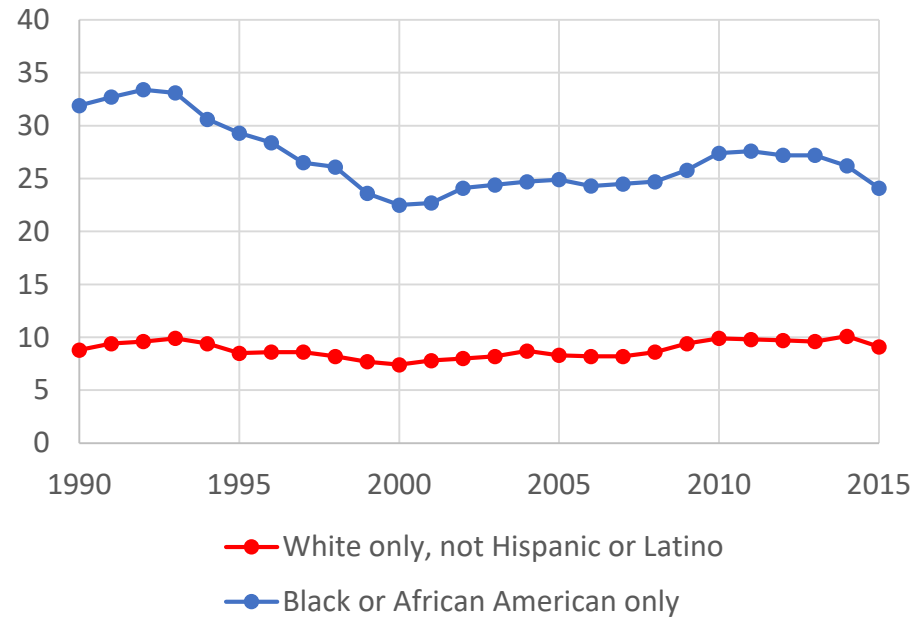


# Background – Socioeconomic Disparities



# Poverty and Education in the US

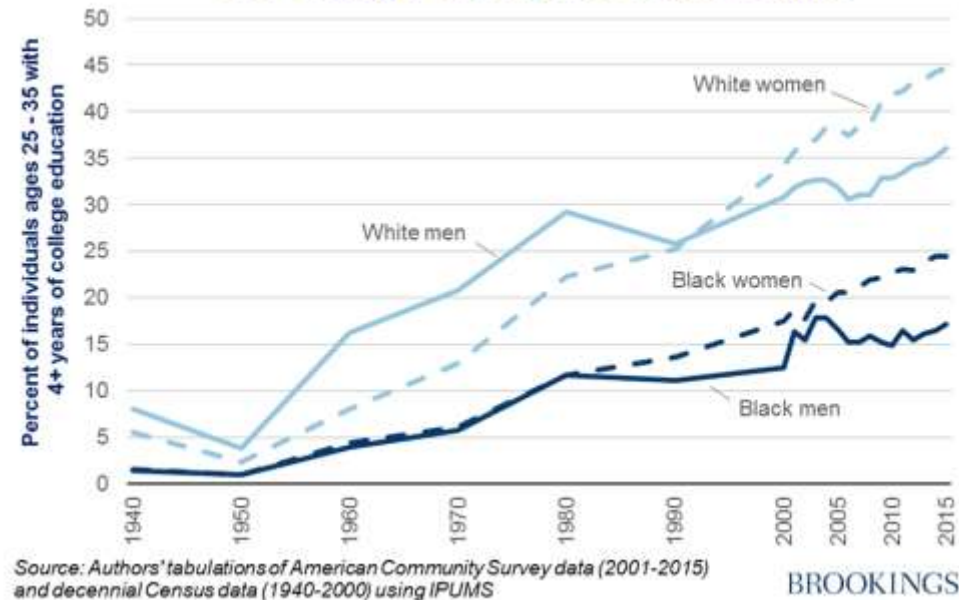
Population Below Poverty Line (%)  
2015 poverty line for family of four: \$24,257



Since the year 2000, the percent by race of population below the poverty line has remained ~15% higher for African Americans compared to Whites.

<https://www.cdc.gov/nchs/hus/contents2016.htm> Table 002

The College Gap by Race and Gender

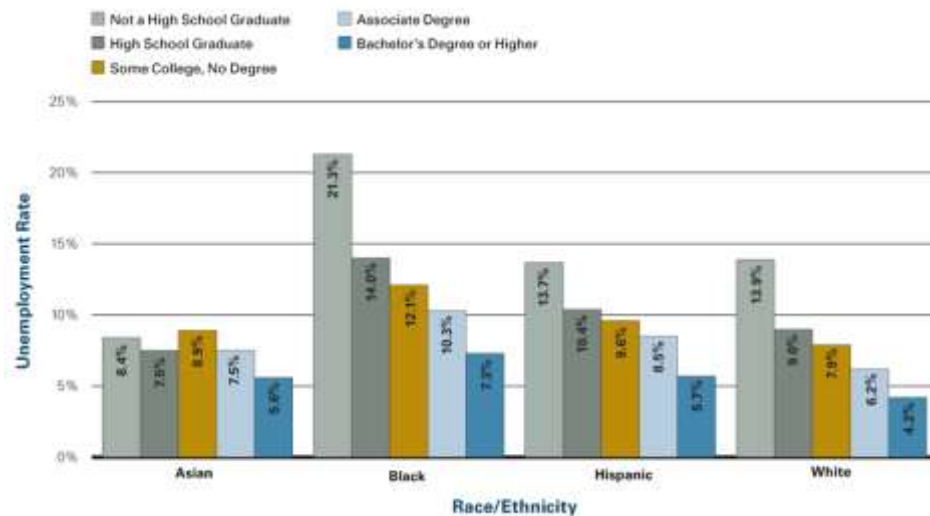


There has been growth in the percent of individuals with 4+ years of college education independent of gender and race, but considerable race-related gaps remain.

[https://www.brookings.edu/wp-content/uploads/2017/12/reeves\\_education\\_race\\_gap1.png](https://www.brookings.edu/wp-content/uploads/2017/12/reeves_education_race_gap1.png)

# Economic Impacts on Race

## Unemployment Rates by Education Level and Race/Ethnicity - 2009

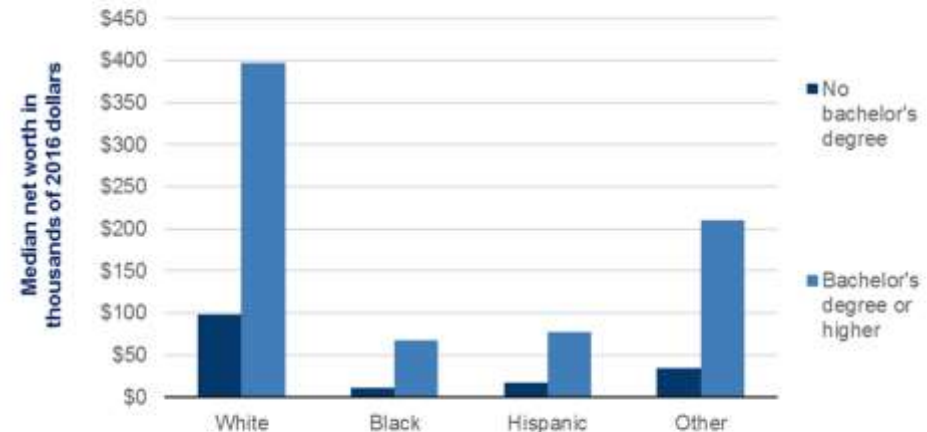


Unemployment rates for African Americans are higher independent of level of education.

<https://trends.collegeboard.org/sites/default/files/1.10b.png>

## College Is Not a Cure for Wealth Gaps

Median net worth of U.S. households in 2016 by race and educational attainment of household head



Source: Lisa J. Dettling, Joanne W. Hsu, Lindsay Jacobs, et al. "Recent Trends in Wealth-Holding by Race and Ethnicity: Evidence from the Survey of Consumer Finances." Federal Reserve Board. September 27, 2017.

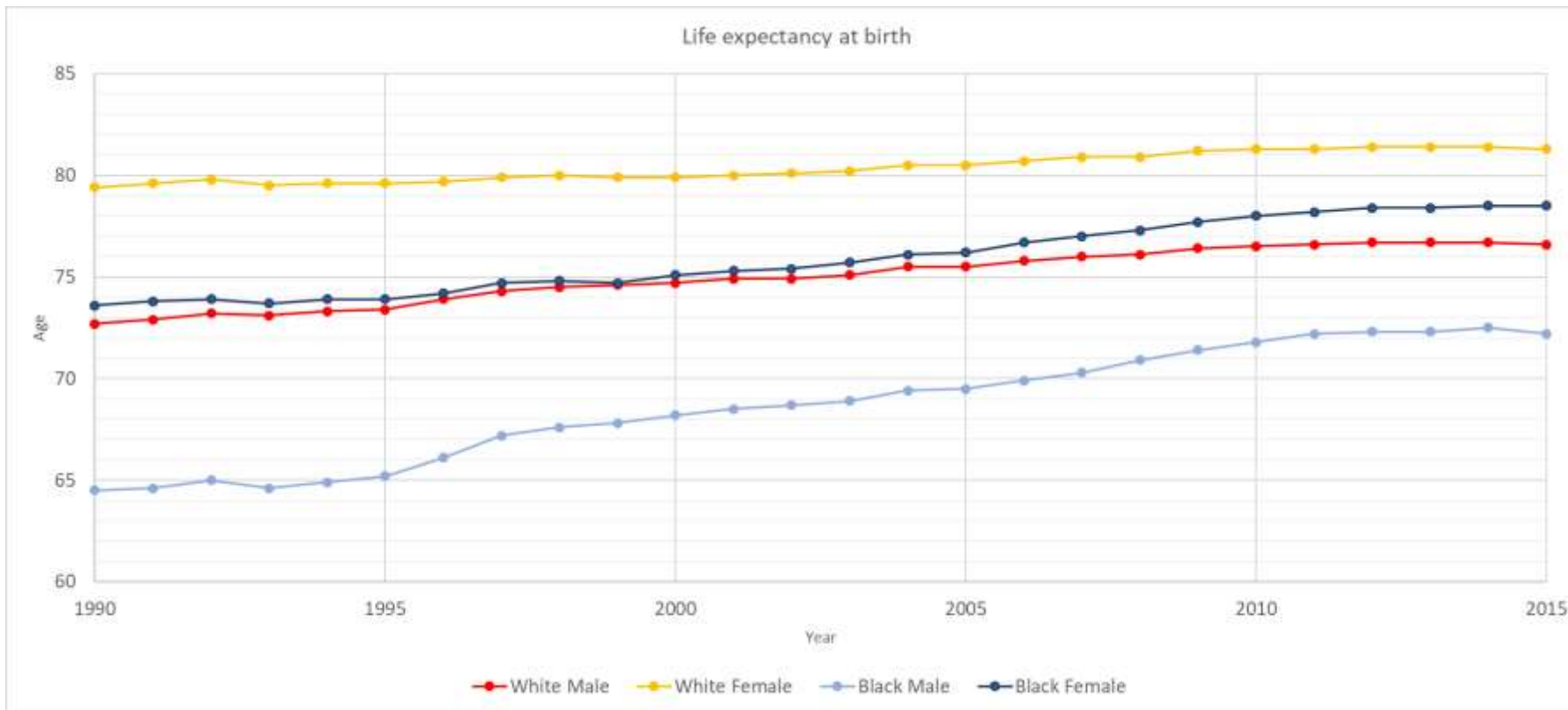
BROOKINGS

Household net worth is an indicator of the opportunities available through inheritance and the income of parents, grandparents... Historical disparities remain today.

[https://i1.wp.com/www.brookings.edu/wp-content/uploads/2017/12/reeves\\_education\\_race\\_gap2.png?w=768&crop=0%2C0px%2C100%2C9999px&ssl=1](https://i1.wp.com/www.brookings.edu/wp-content/uploads/2017/12/reeves_education_race_gap2.png?w=768&crop=0%2C0px%2C100%2C9999px&ssl=1)

# Health Disparities - Data

# Life Expectancy at Birth

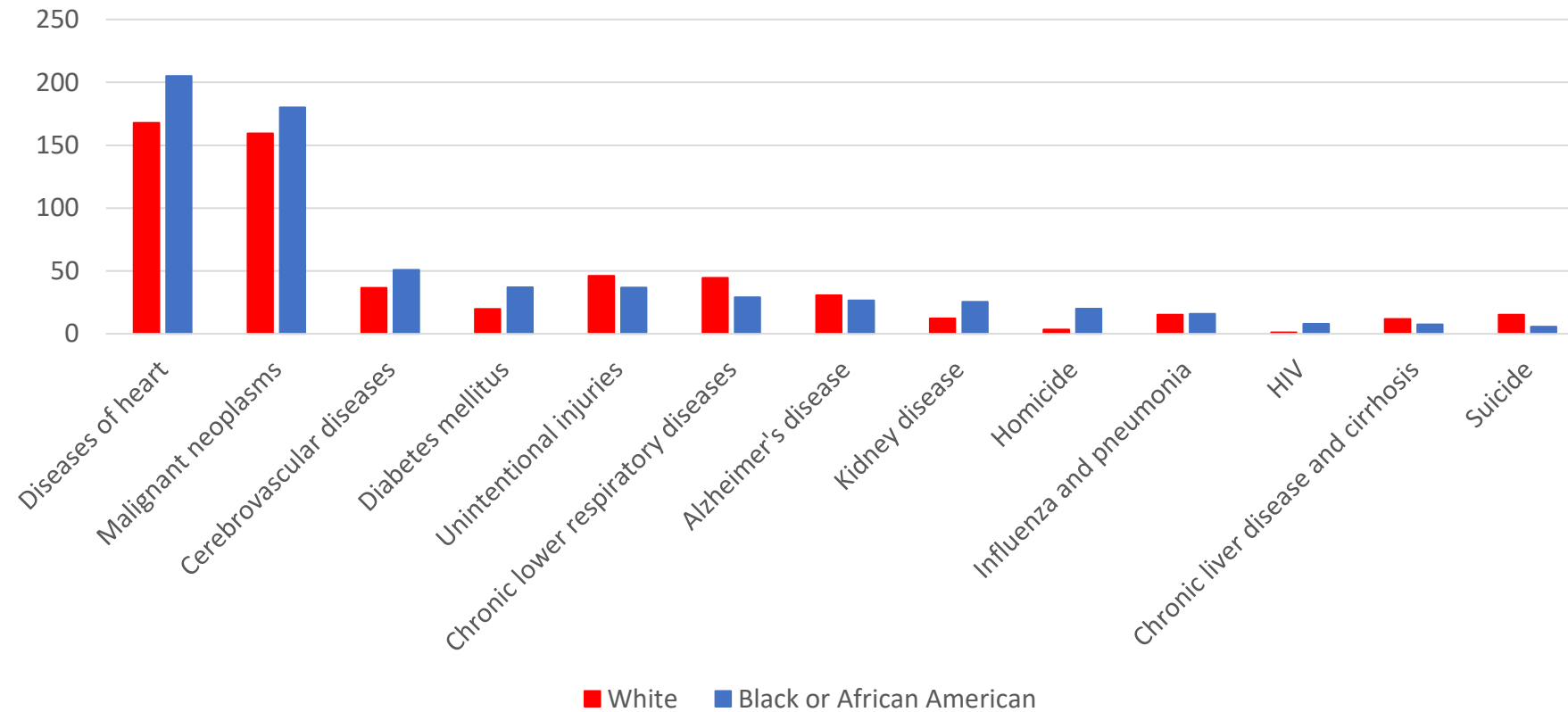


While life expectancy has improved in the past 25 years for both blacks and whites and for both genders, black women and men still lag behind; life expectancy for black men improved the most, but a steady gap remains.

<https://www.cdc.gov/nchs/hus/contents2016.htm> Table 015

# Disparities in Death Rate by Cause

Age-adjusted death rates by cause (2015, per 100,000 population)



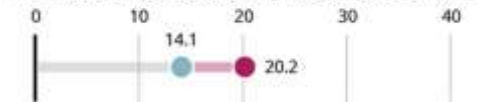
# Selected Diseases and Conditions

## The Black-White Health Gap

Estimated incidence of selected diseases, by race and most recent year

● WHITE ● BLACK

Childhood (2-19 year-olds) obesity rate per 100, 2011-2012



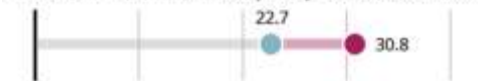
Infant mortality rate per 1,000 live births, 2010



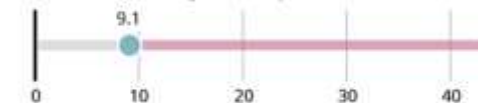
Childhood asthma rate per 1,000, 2013



Breast cancer (female) mortality rate per 100,000, 2006-2010



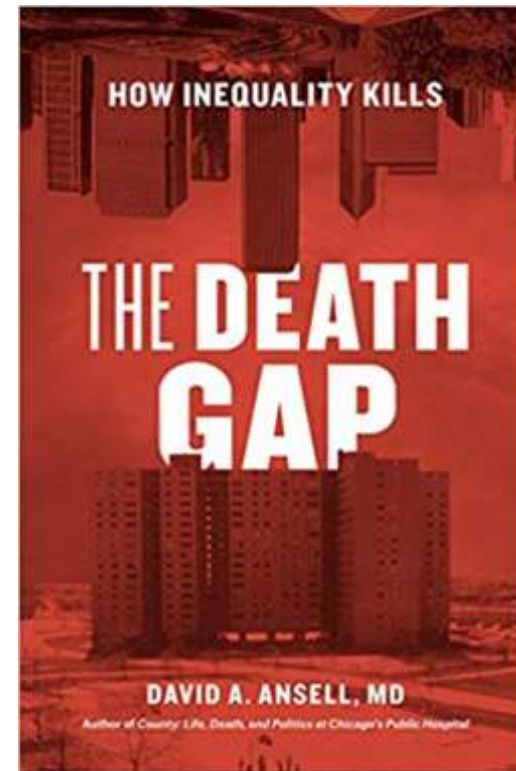
Adult HIV infection diagnosis rate per 100,000, 2010



Notes: All rates are for black and white non-Hispanic populations, except HIV diagnosis rate. Breast cancer mortality rates for whites exclude deaths from D.C., North Dakota, and South Carolina.

Source: Centers for Disease Control and Prevention

THE HUFFINGTON POST

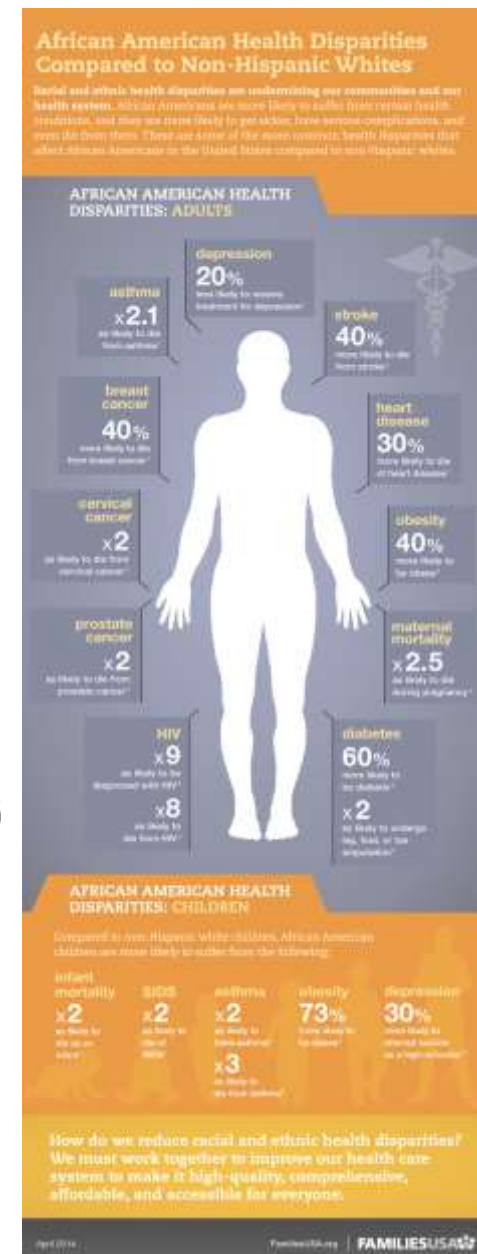
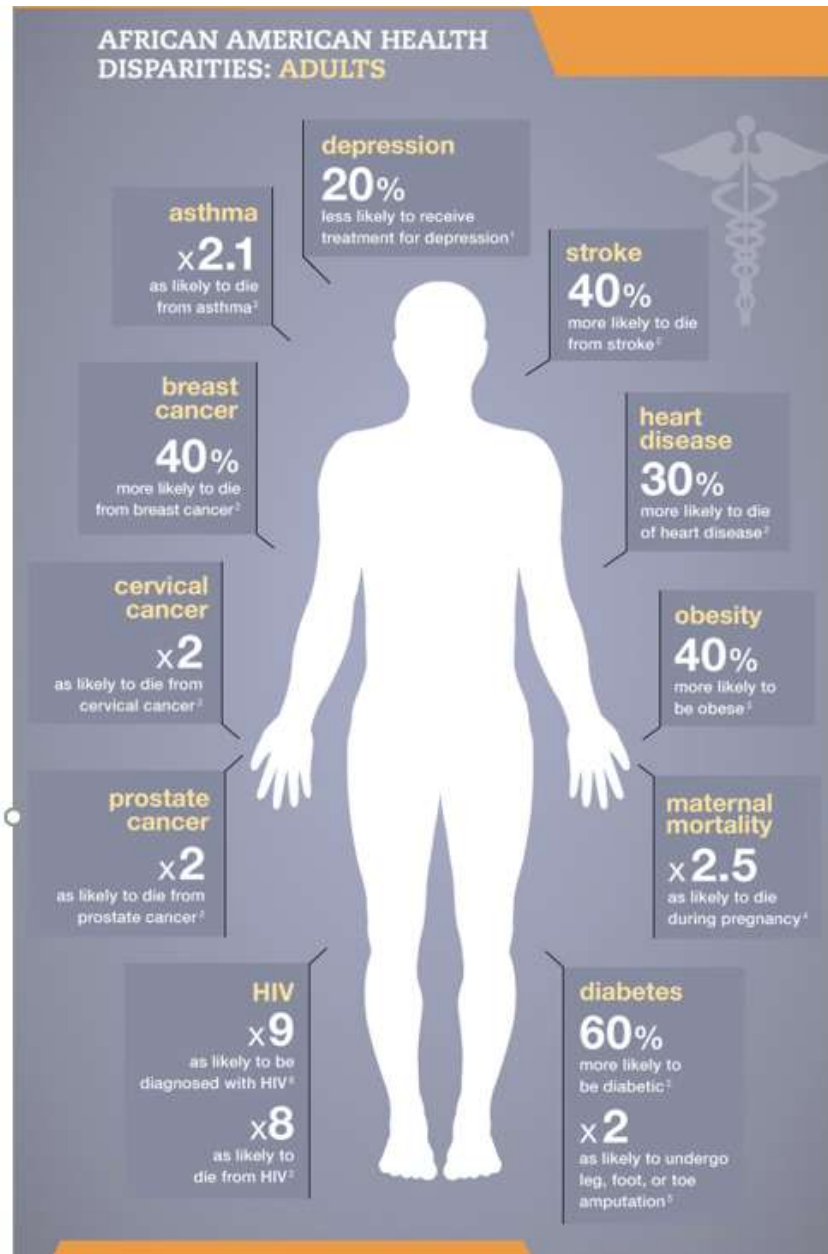


Available at Howe Library - RA418.3.U6 A57 2017

[https://www.huffingtonpost.com/2015/06/29/racial-inequality-health-care-black-v-white\\_n\\_7164140.html](https://www.huffingtonpost.com/2015/06/29/racial-inequality-health-care-black-v-white_n_7164140.html)

# African American Health Disparities compared to non-Hispanic Whites

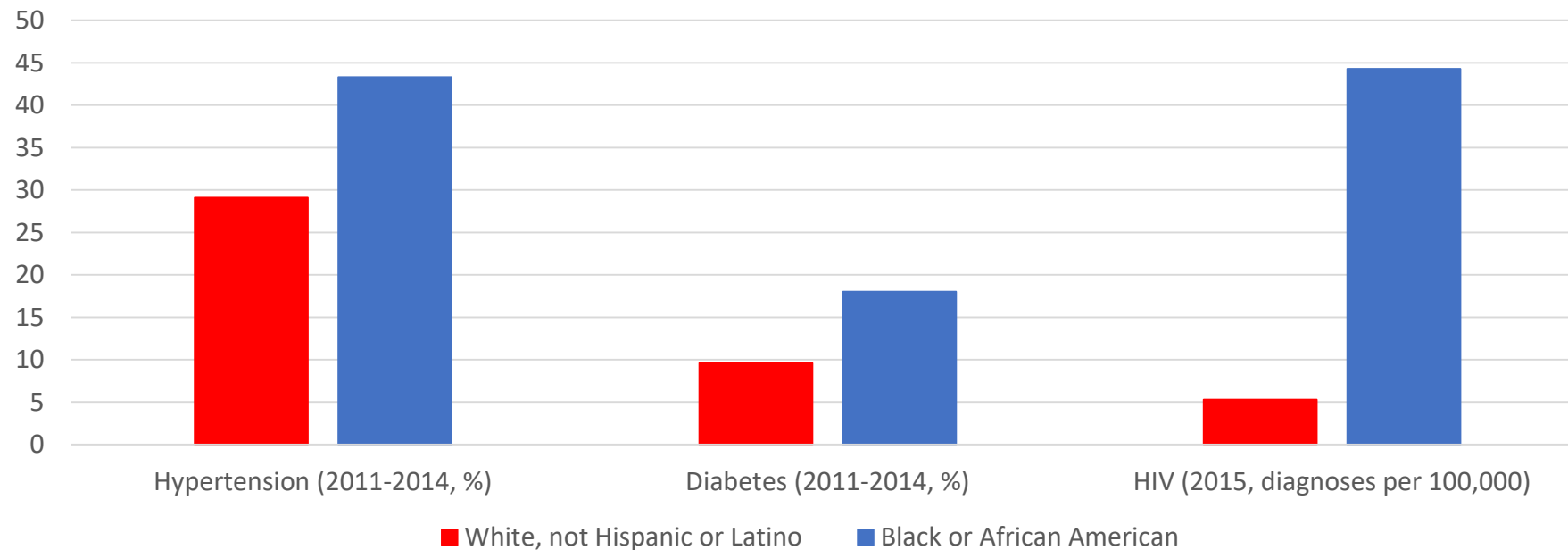
[https://familiesusa.org/sites/default/files/HSI-Health-disparities\\_african-americans-infographic\\_062414\\_final\\_0.jpg](https://familiesusa.org/sites/default/files/HSI-Health-disparities_african-americans-infographic_062414_final_0.jpg)





# Disparities – Selected Diseases

Disparities in selected diseases  
Percent (or diagnoses per 100K) of population with  
disease

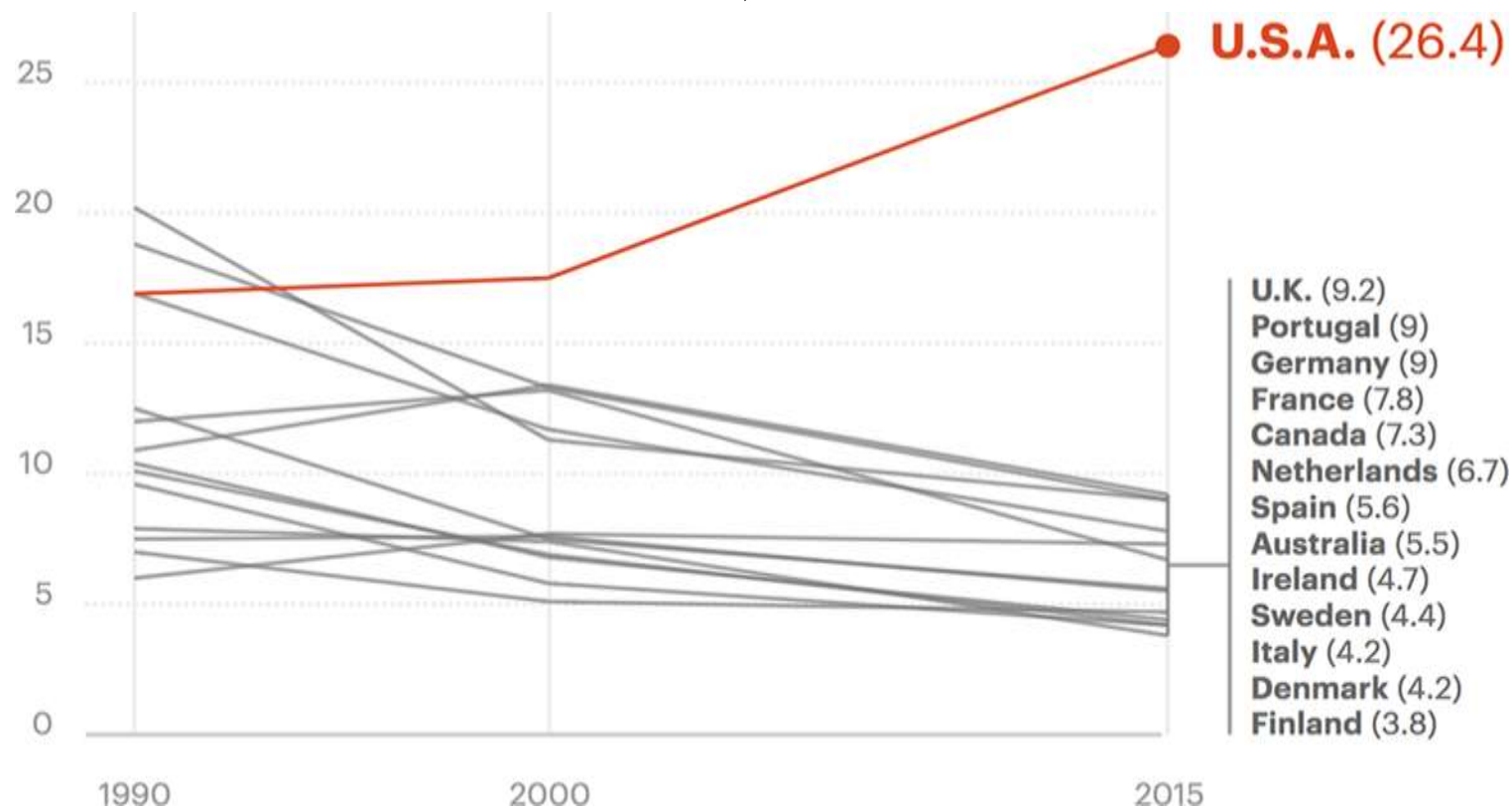


African Americans suffer disproportionately from these chronic illnesses.

<https://www.cdc.gov/nchs/hus/contents2017.htm>



# Maternal Mortality Is Rising in the U.S. As It Declines Elsewhere (Deaths per 100,000 live births)



["Global, regional, and national levels of maternal mortality, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015,"](#) *The Lancet*.  
Only data for 1990, 2000 and 2015 was made available in the journal. Source: *The Lancet* Credit: Rob Weychert/ProPublica

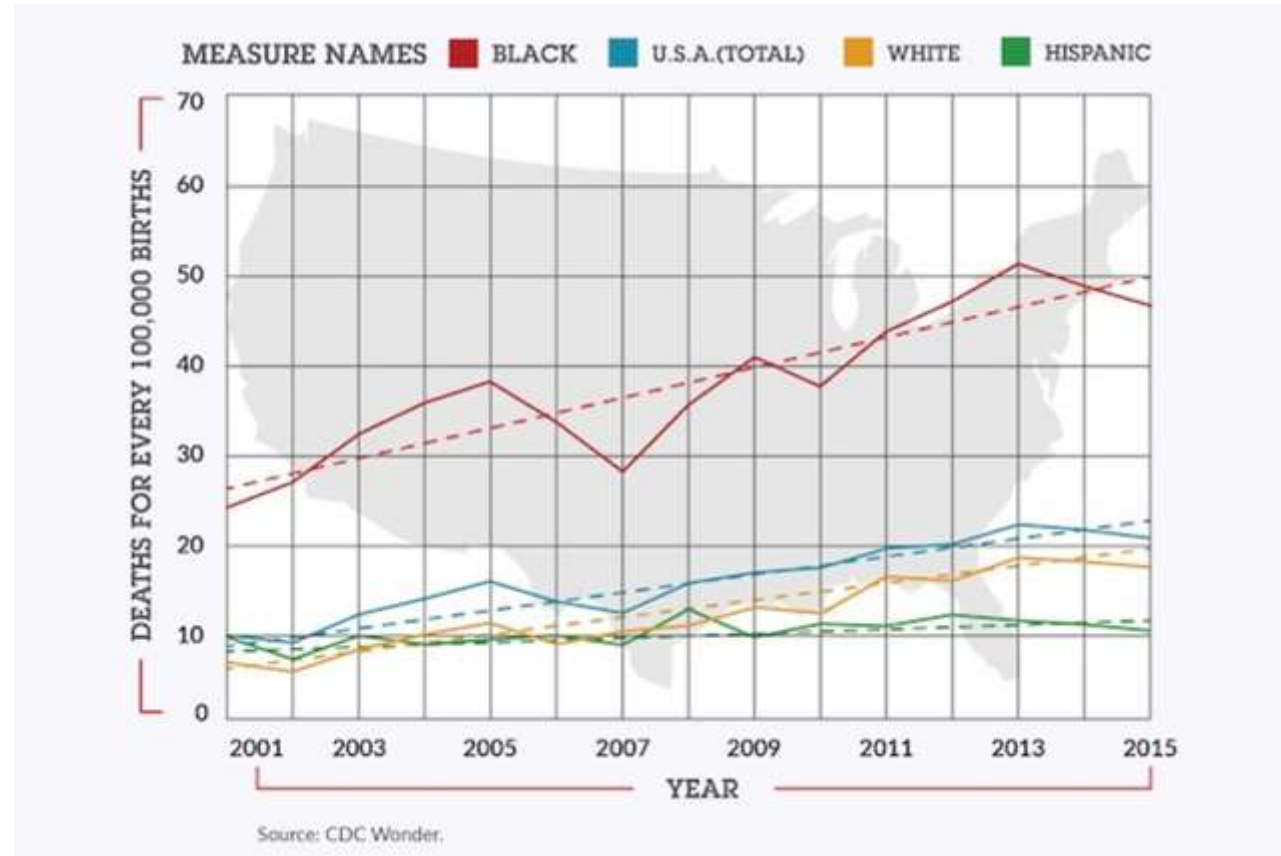
# Maternal Mortality in the U.S.



<https://cdn2.sph.harvard.edu/wp-content/uploads/sites/32/2015/12/MaternL-mortality-in-the-United-States.jpg>

# Maternal Mortality in the US

Maternal mortality for both black and white women has doubled since 2001.



[https://img.webmd.com/dtmcms/live/webmd/consumer\\_asets/site\\_images/article\\_thumbnails/infographics\\_social/2017/11\\_2017/U.S.A.png?resize=650:\\*](https://img.webmd.com/dtmcms/live/webmd/consumer_asets/site_images/article_thumbnails/infographics_social/2017/11_2017/U.S.A.png?resize=650:*)

# Serena Williams almost died

**Serena Williams Could Insist That Doctors Listen to Her. Most Black Women Can't.** (The Nation 1/18/18)

Not even the tennis dynamo Serena Williams is immune from the complications and challenges new mothers face during and after childbirth. Serena gave birth to Alexis Olympia, by emergency C-section, on September 1, 2017, after an uneventful pregnancy. “But the following day, her fresh C-section wound popped open from the intense coughing spells caused by (a) pulmonary embolism, and when she returned to surgery, they found that a large hematoma had flooded her abdomen, the result of a medical catch-22 in which the potentially lifesaving blood thinner caused hemorrhaging at the site of her C-section. She returned yet again to the OR to have a filter inserted into a major vein, in order to prevent more clots from dislodging and traveling into her lungs.” She spent much of the following 6 months bedridden.

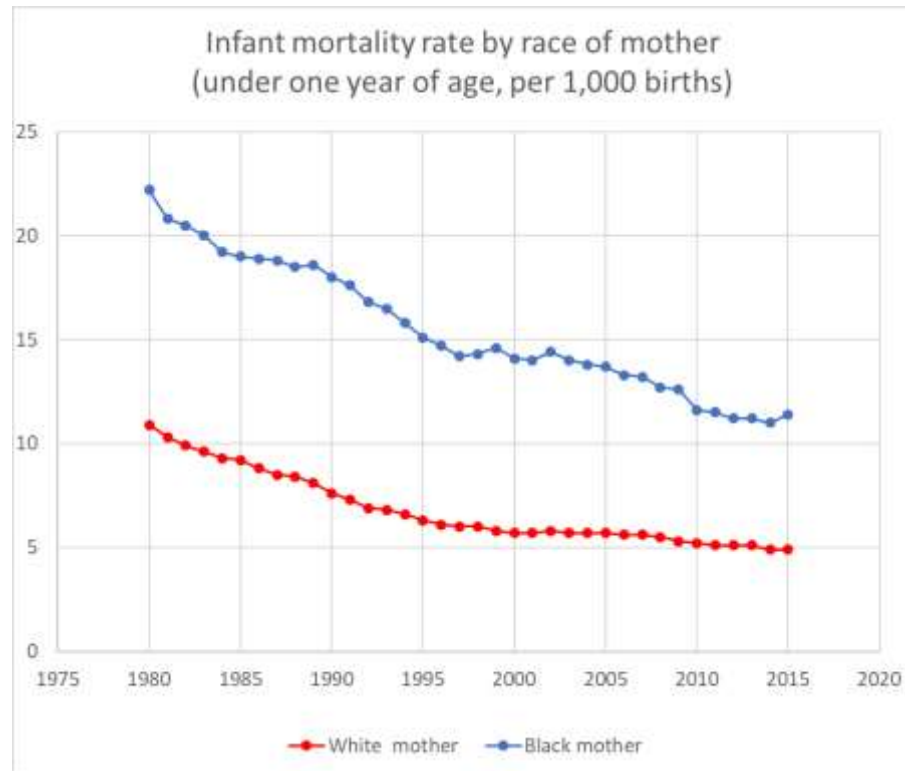
<https://www.vogue.com/article/serena-williams-vogue-cover-interview-february-2018>



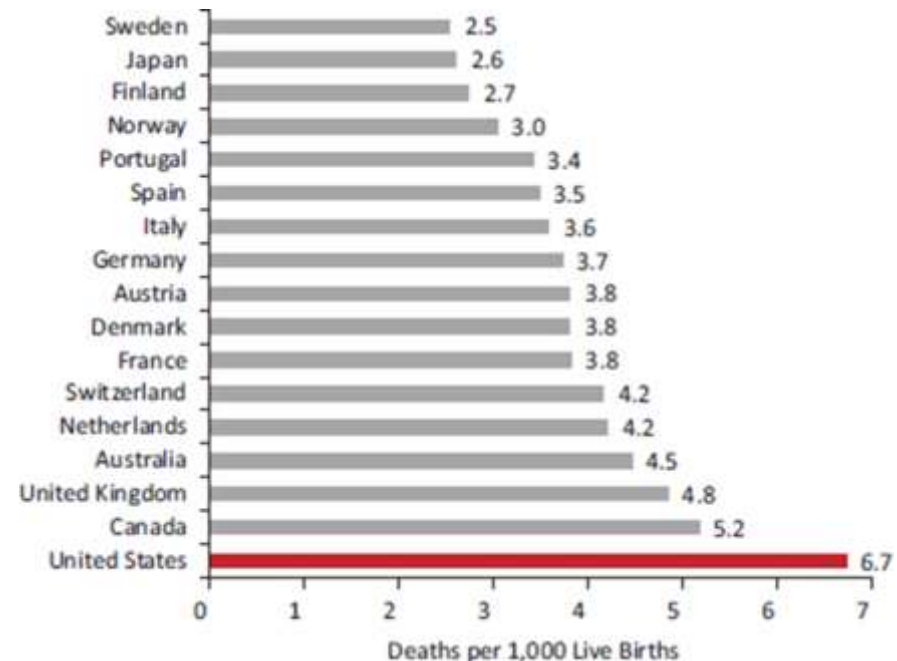
[Serena and daughter Alexis](#)

# Infant Mortality – U.S. Compared to Select Countries

While infant mortality in the US has gone down by a factor of two for both races, a significant gap between black and white remains. Infant mortality in the US is significantly higher than other developed countries.



Deaths per 1,000 live births



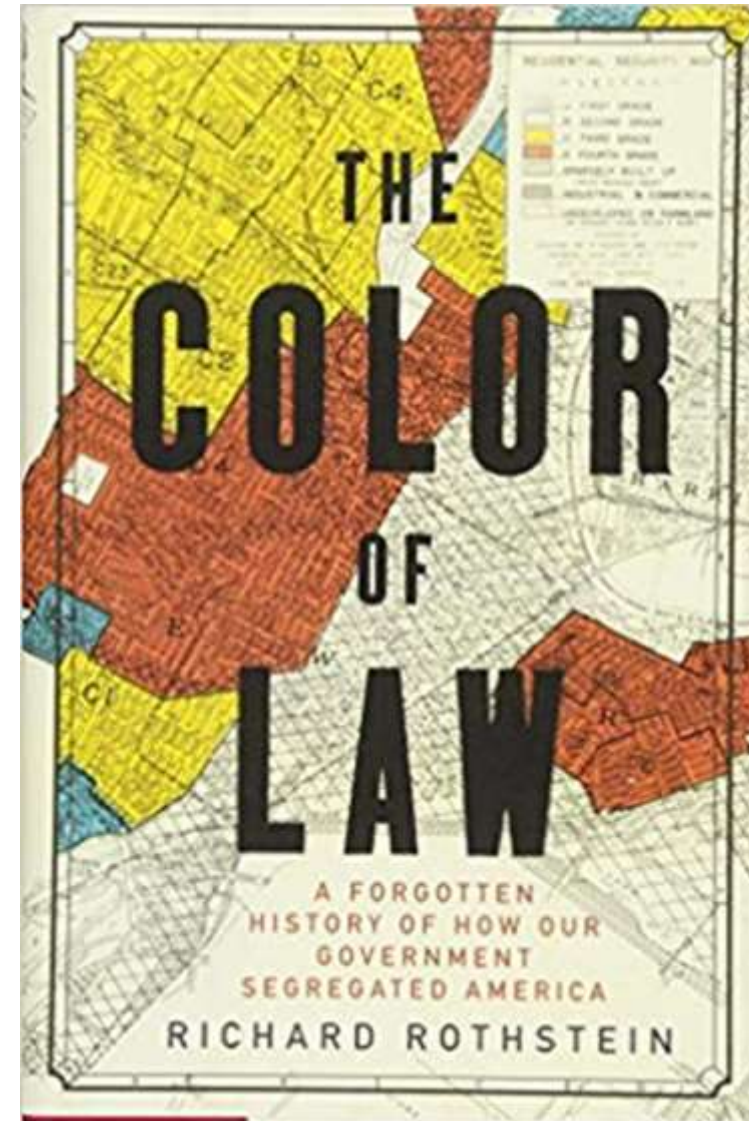


# What Causes these Disparities?

## *Neighborhood is everything*

A cascade of problems occurs in communities and neighborhoods segregated by race. Black communities are more likely to have limited employment, longer job commutes, poorer schools, unsafe living conditions (examples: food insecurity, environmental hazards, neighborhood crime and violence and drug use). For children growing up in these neighborhoods, and adults living in them, these adverse conditions make their mark; high stress becomes a part of their lives, and their health suffers. This 'stress' has been referred to in the medical literature variously, as weathering, or allostatic load, John Henryism, and currently, observations about telomere length. (or, recognizing in black populations the significance of short telomeres.)

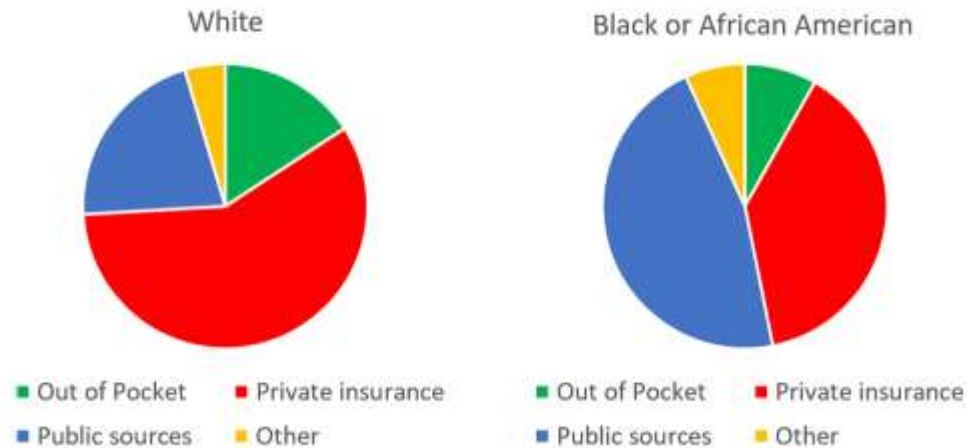
The current disparities have foundations in historically racist policies; evidence of this can be seen in the wealth disparity chart in panel 1.



# Healthcare access

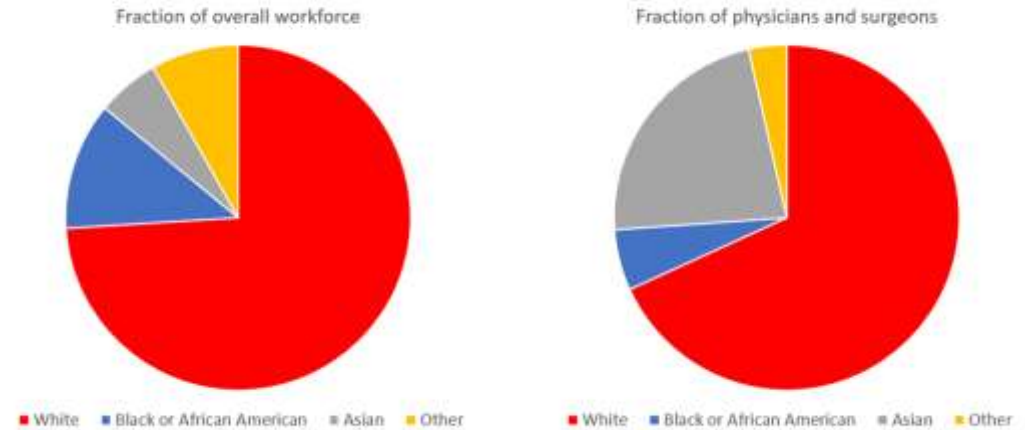
In addition, access to healthcare is fraught; facilities are sparser, blacks are disproportionately uninsured, and they have an historical distrust of the medical system, made worse by a dearth of black physicians in the US.

Sources of payment for health care, 2013



<https://www.cdc.gov/nchs/hus/contents2016.htm> table 098

Disparities – American Physicians, by Race



<https://datausa.io/profile/soc/291060/#demographics>

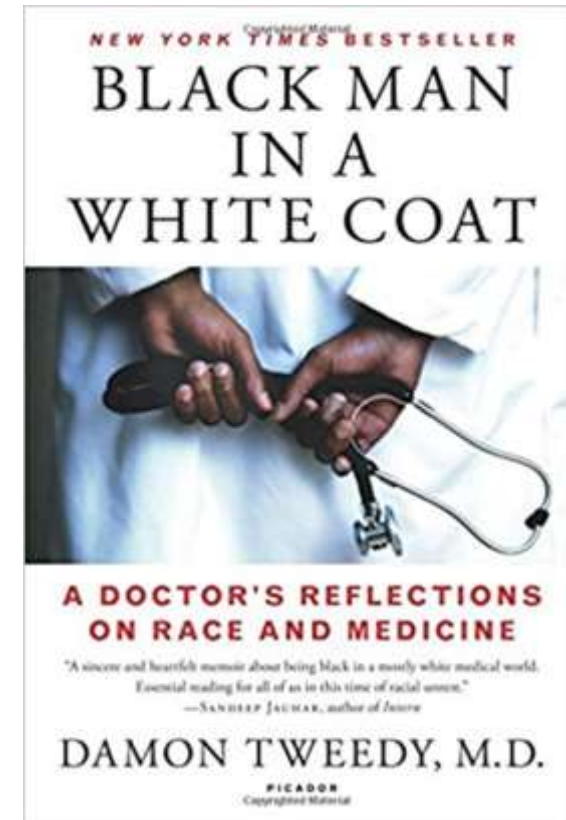
# Black Man in a White Coat: A Doctor's Reflections on Race and Medicine, by Damon Tweedy, M.D.

*A NEW YORK TIMES* BESTSELLER • ONE OF *TIME* MAGAZINE'S TOP  
TEN NONFICTION BOOKS OF THE YEAR

*A LIBRARY JOURNAL* BEST BOOK SELECTION • *A BOOKLIST*  
EDITORS' CHOICE BOOK SELECTION

One doctor's passionate and profound memoir of his experience  
grappling with race, bias, and the unique health problems of black  
Americans

*Black Man in a White Coat* examines the complex ways in which both black doctors and patients must navigate the difficult and often contradictory terrain of race and medicine. As Tweedy transforms from student to practicing physician, he discovers how often race influences his encounters with patients. Through their stories, he illustrates the complex social, cultural, and economic factors at the root of many health problems in the black community. These issues take on greater meaning when Tweedy is himself diagnosed with a chronic disease far more common among black people. In this powerful, moving, and deeply empathic book, Tweedy explores the challenges confronting black doctors, and the disproportionate health burdens faced by black patients, ultimately seeking a way forward to better treatment and more compassionate care.





# Let's Not Forget – Racial Bias Looms Large

Poverty, access to care, culture, communication and decision-making all contribute to disparities. In fact, it is an amalgam of those things, along with the most obvious, but which may be uncomfortable to see and confront in ourselves.

It is bias, explicit and implicit.

# Blind Spot: Hidden Biases of Good People, by Mahzarin R. Banaji and Anthony G. Greenwald

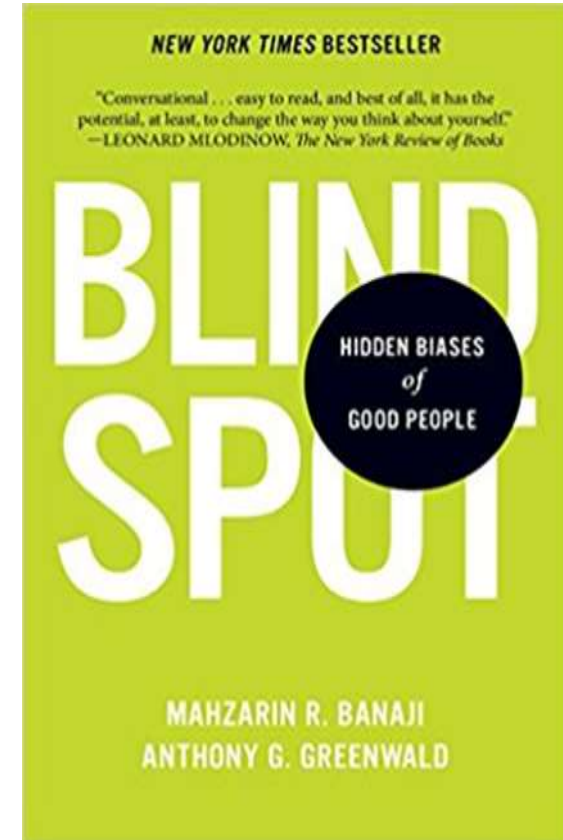
*I know my own mind.*

*I am able to assess others in a fair and accurate way.*

These self-perceptions are challenged by leading psychologists Mahzarin R. Banaji and Anthony G. Greenwald as they explore the hidden biases we all carry from a lifetime of exposure to cultural attitudes about age, gender, race, ethnicity, religion, social class, sexuality, disability status, and nationality.

“Blindspot” is the authors’ metaphor for the portion of the mind that houses hidden biases. Writing with simplicity and verve, Banaji and Greenwald question the extent to which our perceptions of social groups—without our awareness or conscious control—shape our likes and dislikes and our judgments about people’s character, abilities, and potential.

In *Blindspot*, the authors reveal hidden biases based on their experience with the Implicit Association Test, a method that has revolutionized the way scientists learn about the human mind and that gives us a glimpse into what lies within the metaphoric blindspot.

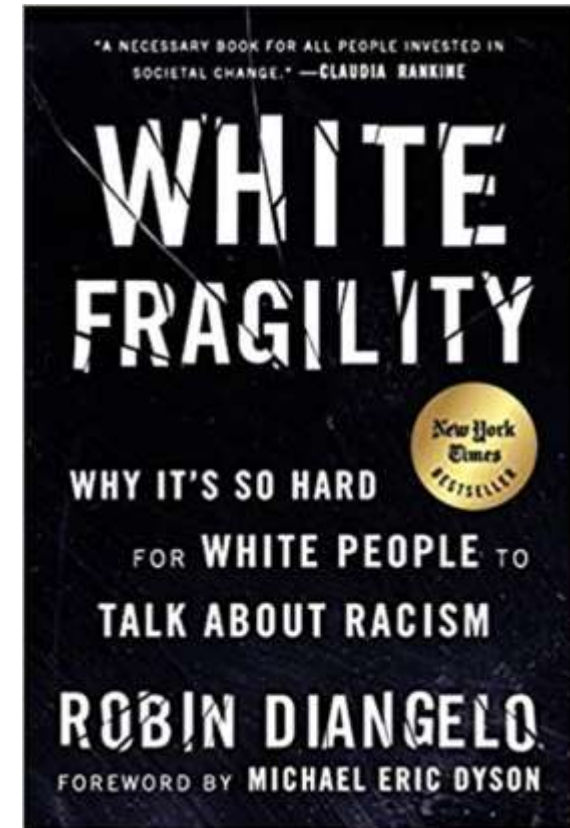


# White Fragility:

## Why it's so Hard for White People to Talk About Racism, by Robin Diangelo

The *New York Times* best-selling book exploring the counterproductive reactions white people have when their assumptions about race are challenged, and how these reactions maintain racial inequality.

In this “vital, necessary, and beautiful book” (Michael Eric Dyson), antiracist educator Robin DiAngelo deftly illuminates the phenomenon of white fragility and “allows us to understand racism as a practice not restricted to ‘bad people’ (Claudia Rankine). Referring to the defensive moves that white people make when challenged racially, white fragility is characterized by emotions such as anger, fear, and guilt, and by behaviors including argumentation and silence. These behaviors, in turn, function to reinstate white racial equilibrium and prevent any meaningful cross-racial dialogue. In this in-depth exploration, DiAngelo examines how white fragility develops, how it protects racial inequality, and what we can do to engage more constructively.



# The Path Forward

# What are good health policies?

- Housing policy is health policy
- Educational policy is health policy
- Anti-violence policy is health policy
- Neighborhood improvement policies are health policies
- Everything that we can do to improve the quality of life of individuals in our society has an impact on their health and is a health policy

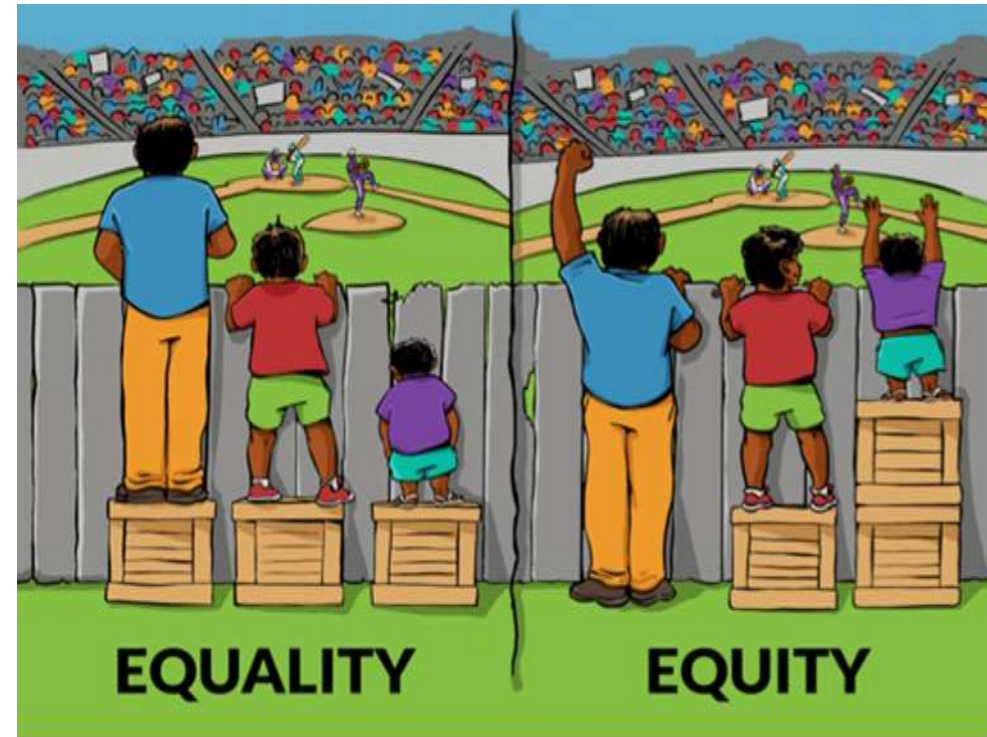
-Dr. David Williams, Harvard School of Public Health

[https://www.unnaturalcauses.org/assets/uploads/file/UC\\_Transcript\\_5.pdf](https://www.unnaturalcauses.org/assets/uploads/file/UC_Transcript_5.pdf)

# What is Health Equity?

Health equity means that everyone has a fair and just opportunity to be healthier. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care.”

<https://www.rwjf.org/en/library/research/2017/05/what-is-health-equity-.html>



[http://www.aasa.org/uploadedImages/Childrens\\_Programs/\\_img/EquityVsEquality.png?n=246](http://www.aasa.org/uploadedImages/Childrens_Programs/_img/EquityVsEquality.png?n=246)

# The Path Forward in the U.S.

Multifaceted cultural change like this will require increased recognition that improving health and achieving health equity will require broader approaches that address social, economic, and environmental factors that influence health. Chief among them is the systemic racism embedded in our society.

# Government and Non-Profit Organizations in the U.S.

- The US government: **Centers for Disease Control, National Institutes of Health, Office of Minority Health, HealthyPeople 2020**, and other agencies are all committed to reducing disparities in the United States healthcare system, and striving to achieve equity for all persons.
- **The Robert Wood Johnson Foundation** devotes their resources to research, grant-making, and community support, “to improve the health and health care of all Americans.”
- **The Kaiser Family Foundation** focuses solely on health policy, a “non-partisan source of facts and analysis, polling and journalism for policymakers, the media, the health care community, and the general public.”
- **ProPublica** produces investigative journalism pieces, occasionally focusing on health and health care issues in the US.





# The Path Forward in Vermont

In Vermont, the black population is too small to bear meaningful statistics about the quality and access of care for that population. But at UVM, the College of Medicine, and the University of Vermont Medical Center, there is strong and ongoing support to address issues of equity, diversity, and inclusion.

# The mission statement of the State Department of Health includes equity as a goal, defining it thus:

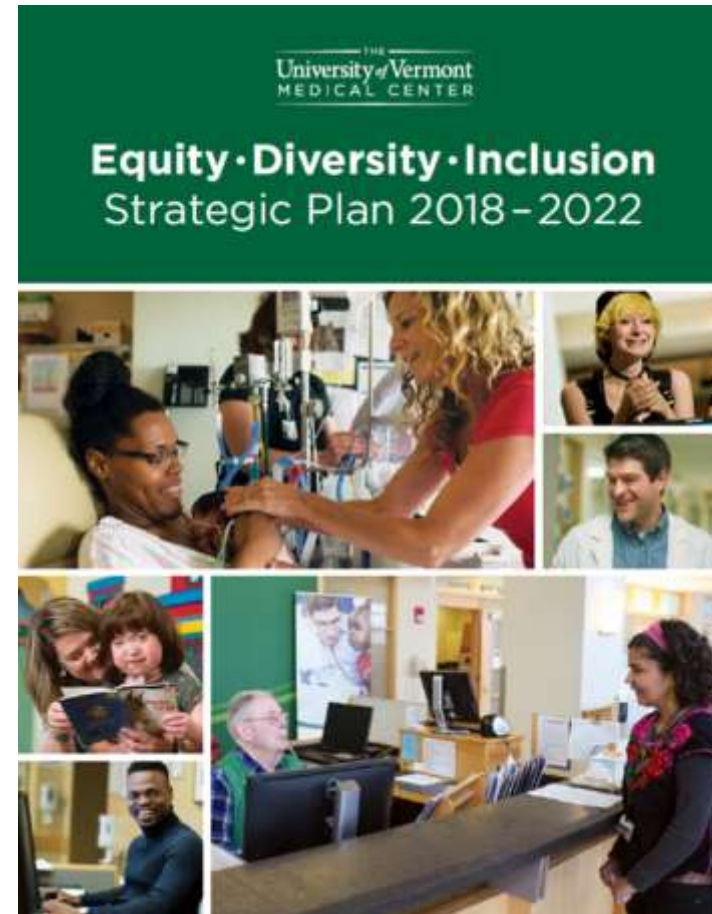
Health equity exists when all people have a fair and just opportunity to be healthy, especially those who have experienced socioeconomic disadvantage, historical injustice, and other avoidable systemic inequalities that are often associated with social categories of race, gender, ethnicity, social position, sexual orientation and disability.

UVM's Center for Health and Wellbeing calls racism a "public health issue" and calls on our community to be "better in dismantling the racism and white supremacy that is embedded in our culture." They call for "Action toward Justice."

The Medical Center recently published their *2018-2022 Equity, Diversity and Inclusion* strategic plan. Through the tactics outlined in the plan, the Medical Center strives to

- improve clinical outcomes and patient care experiences for diverse patient populations
- build a workforce that represents the communities it serves
- leverage the richness of ideas of a culturally diverse workforce to create more culturally responsive solutions and initiatives
- provide a welcoming respectful environment for all

*This is a goal worthy of Vermont!*



# More threads to pull

- John Henryism - As a hypothesis about high blood pressure risk among black Americans, a researcher in 1983 proposed ‘John Henryism’, citing John Henry, the African American ‘steel drivin’ man’ from the old folktale, who, with phenomenal strength and determination, beat a mechanical steam-driven machine in driving railroad spikes, and then promptly died. “John Henryism” was proposed to explain the physical cost of extraordinary effort to succeed despite the apparent hopelessness of dismal socioeconomic status, difficult living conditions, and racism surrounding black Americans.
- The Weathering Hypothesis - In 1992 a “weathering hypothesis” was suggested in reference to the idea that the health of African-American women may begin to deteriorate in early adulthood as a physical consequence of cumulative socioeconomic disadvantage.
- A series investigating the unremitting rise of maternal deaths in this country, particularly among black women, has sparked recent national news. ProPublica has an investigative series: *Lost Mothers*.
- Black Americans are underrepresented in clinical trials for new drugs even when the treatment is aimed at a particular cancer that disproportionately affects them. ProPublica.

# Sources consulted

- Centers for Disease Control - <https://www.cdc.gov/>
- Pregnancy Mortality Surveillance System - <https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pregnancy-mortality-surveillance-system.htm>
- African American Health - <https://www.cdc.gov/vitalsigns/aahealth/>
- Healthy People - <https://www.healthypeople.gov/>
- Health Disparities Data <https://www.healthypeople.gov/2020/data-search/health-disparities-data>
- Unnatural Causes – <https://www.unnaturalcauses.org/>  
Available at Howe Library
- PBS documentary exploring the social circumstances in which we are born, live, and work and which can actually get under our skin and disrupt our physiology as much as germs and viruses. Media and Documents - [https://unnaturalcauses.org/media\\_and\\_documents.php](https://unnaturalcauses.org/media_and_documents.php)
- National Institutes of Health - <https://www.nih.gov/>
- Health Disparities and Health Equity: The Issue Is Justice - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3222512/pdf/S149.pdf>
- Robert Wood Johnson Foundation - <https://www.rwjf.org/>
- What is Health Equity? – <https://www.rwjf.org/en/library/research/2017/05/what-is-health-equity-.html>
- Kaiser Family Foundation - <https://www.kff.org/>
- Disparities Policy - <https://www.kff.org/disparities-policy/issue-brief/disparities-in-health-and-health-care-five-key-questions-and-answers/>
- Key Facts on Health and Health Care - <https://www.kff.org/disparities-policy/report/key-facts-on-health-and-health-care-by-race-and-ethnicity/>
- ProPublica - <https://www.propublica.org/>
- Lost Mothers - <https://www.propublica.org/series/lost-mothers>
- Black Americans in clinical trials - <https://www.propublica.org/article/black-patients-miss-out-on-promising-cancer-drugs>
- Minority Health - <https://www.nimhd.nih.gov/about/>
- Health Disparities Data Widget - <https://minorityhealth.hhs.gov/omh/Content.aspx?ID=11397&vl=1&vlid=4>

# Thanks and Acknowledgements

Stephen Graves - UVM Medical Center Manager: Equity, Diversity, and Inclusion

Kate Bright – Editor, Art Director, Colleague

Jonathan Chapple-Sokol – Data visualization assistance



Angie Chapple-Sokol