The Influence of Pre-conceptual Health on Disparities in Maternal and Infant Mortality

Denise V. Rodgers, MD

RBHS Vice Chancellor for Interprofessional Programs
Professor of Family Medicine and Community Health
Robert Wood Johnson Medical School

Volume 2. Executive Summary

1985-2015

Years of Advancing

Health Equity

Report of the Secretary's Task Force on

Black & Minority Health

Margaret M. Heckler Secretary

U.S. Department of Health and Human Services

Six Causes of Excess Mortality Identified in the Heckler Report

- Cancer
- Cardiovascular and Cerebrovascular Diseases
- Chemical Dependency
- Diabetes
- Homicide, Suicide and Accidents
- Infant Mortality

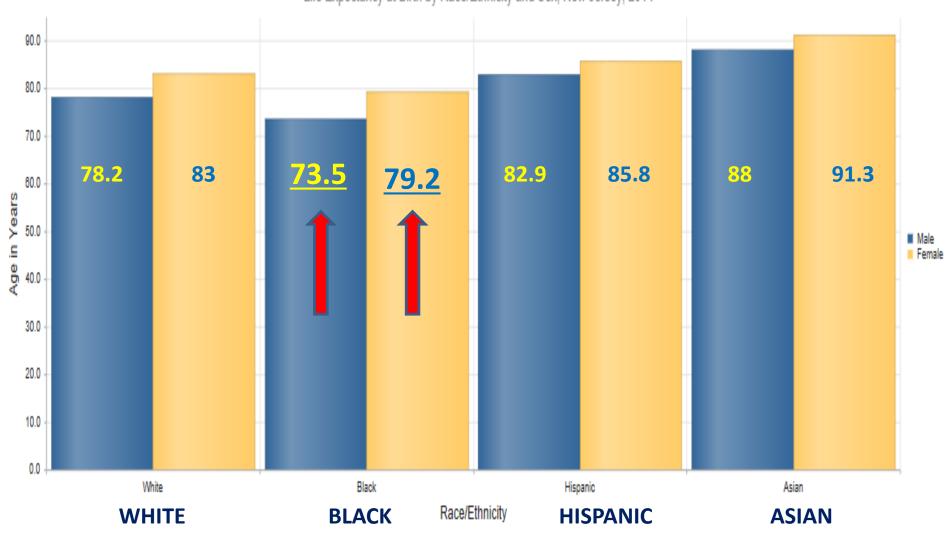
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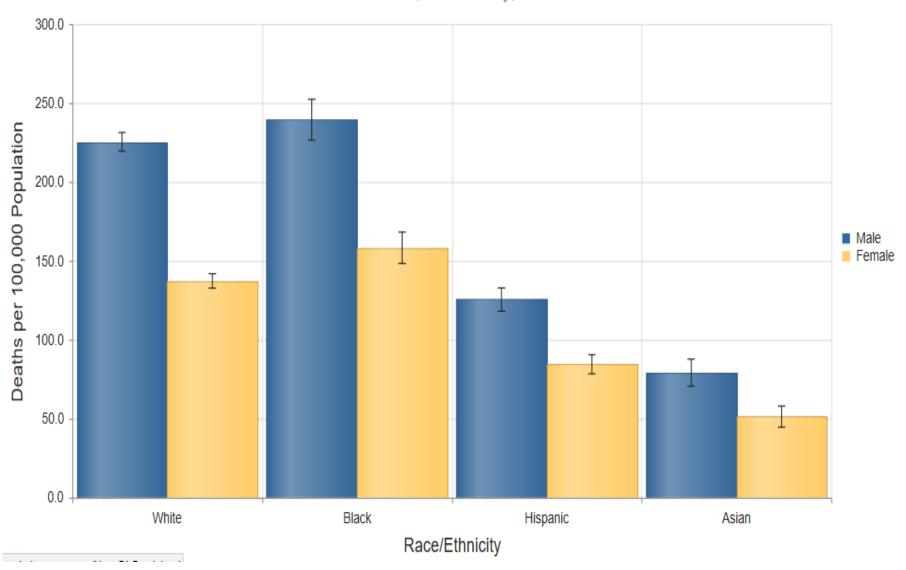
HIV/AIDS

LIFE EXPECTANCY AT BIRTH BY RACE/ETHNICITY/AND SEX NJ 2014

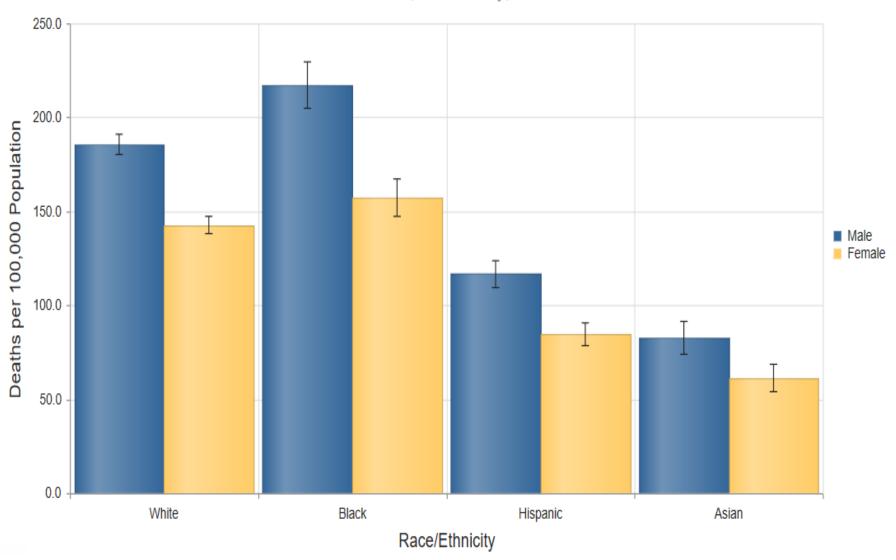




Age-Adjusted Death Rate due to Heart Disease by Race/Ethnicity and Sex, New Jersey, 2015

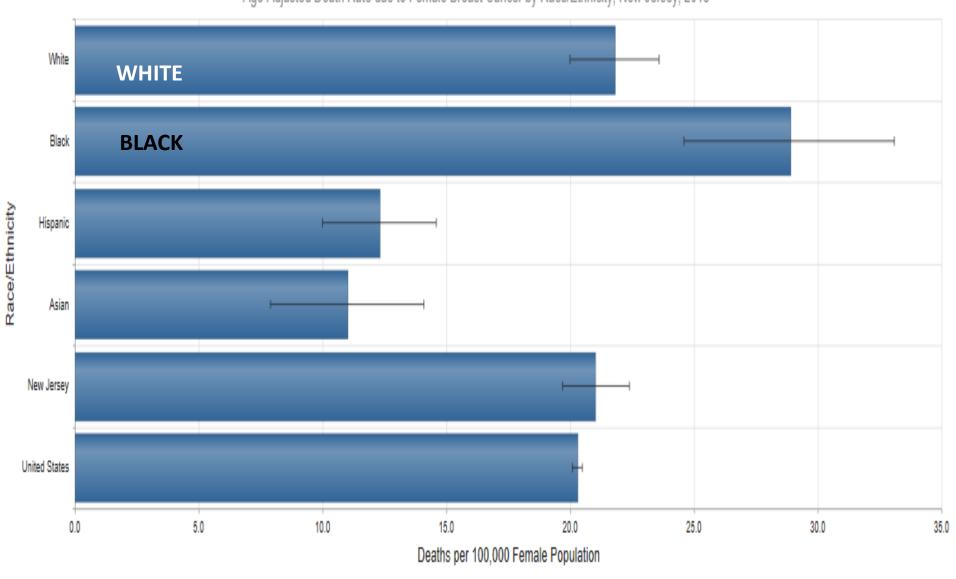


Age-Adjusted Death Rate due to All Cancers by Race/Ethnicity and Sex, New Jersey, 2015

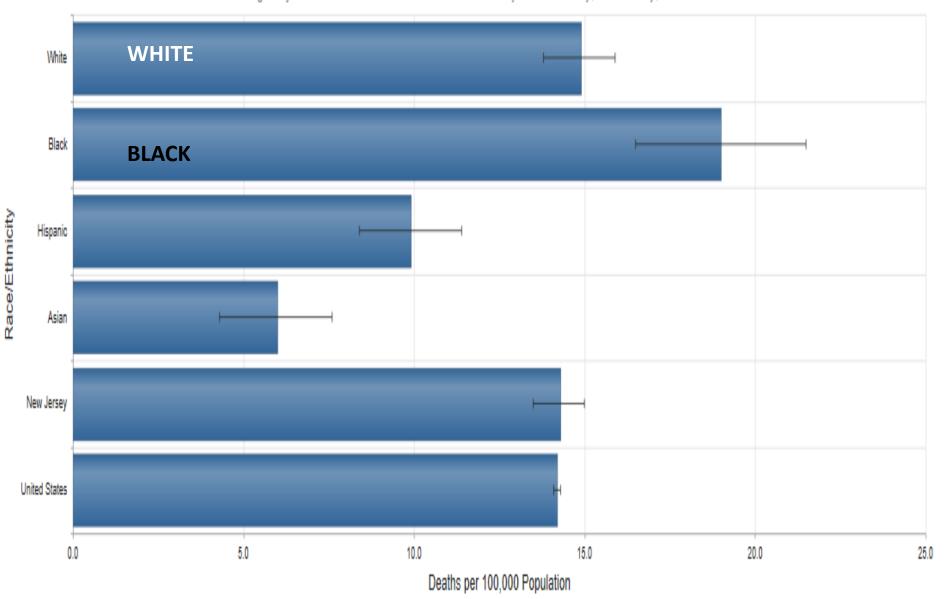


BREAST CANCER

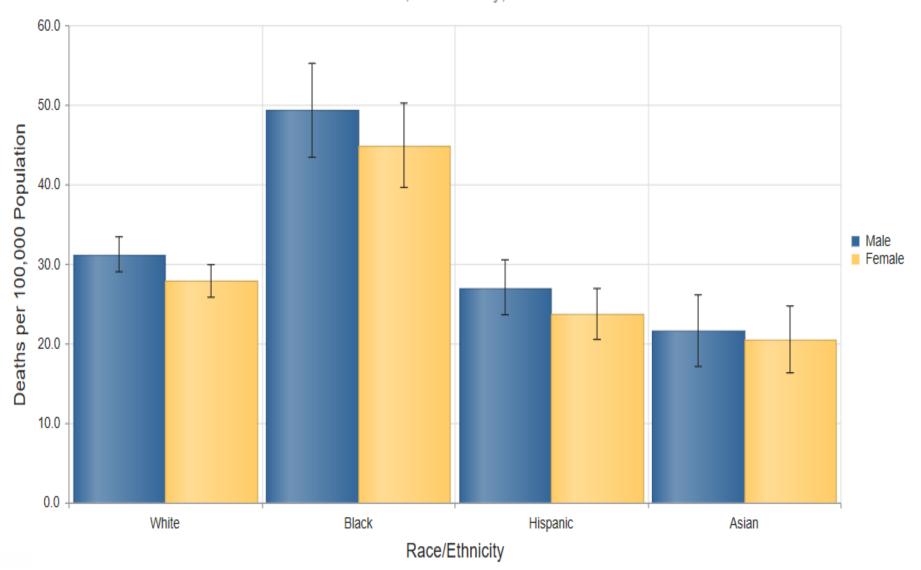
Age-Adjusted Death Rate due to Female Breast Cancer by Race/Ethnicity, New Jersey, 2015



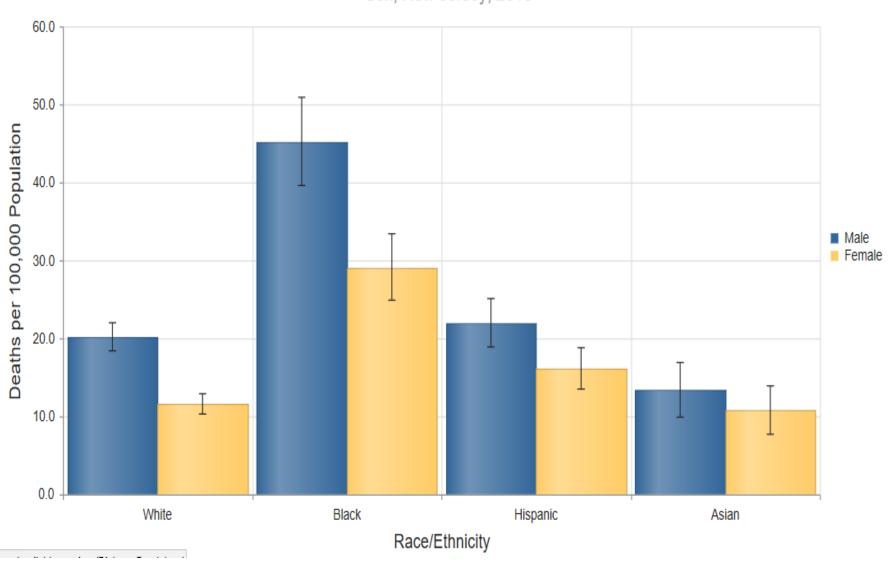
COLORECTAL CANCER
Age-Adjusted Death Rate due to Colorectal Cancer by Race/Ethnicity, New Jersey, 2015



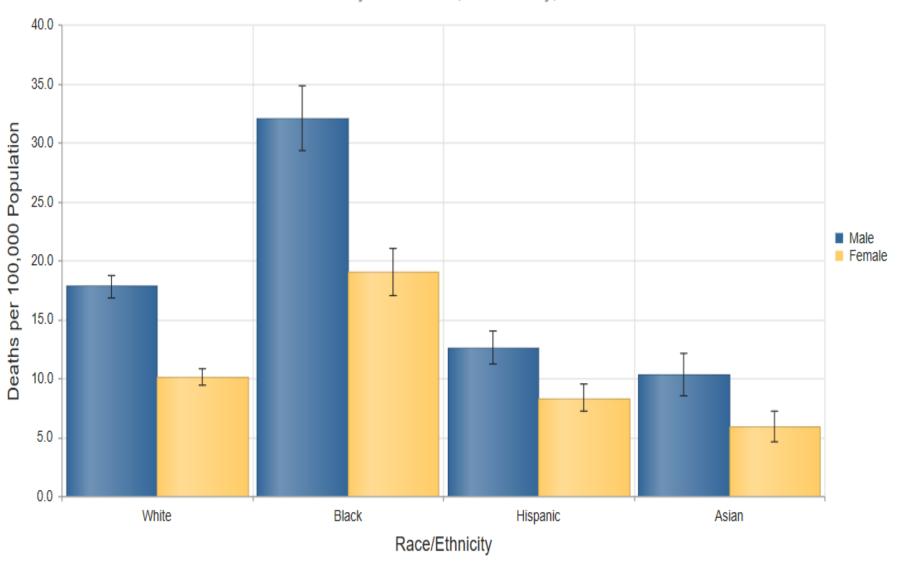
Age-Adjusted Death Rate due to Stroke by Race/Ethnicity and Sex, New Jersey, 2015



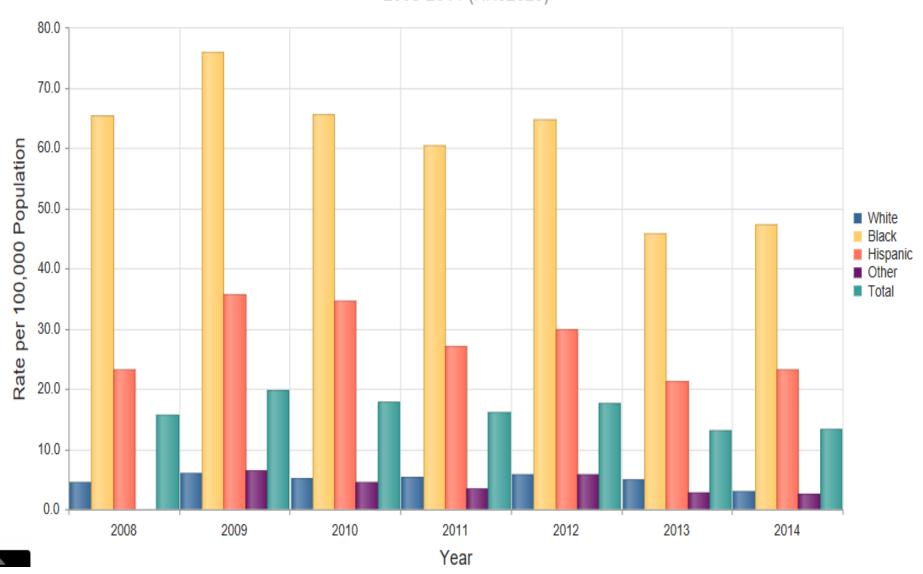
Age-Adjusted Death Rate due to Diabetes by Race/Ethnicity and Sex, New Jersey, 2015



Age-Adjusted Death Rate due to Kidney Disease by Race/Ethnicity and Gender, New Jersey, 2013-2015



HIV Transmission Rate, by Race/Ethnicity, New Jersey, 2008-2014 (HNJ2020)

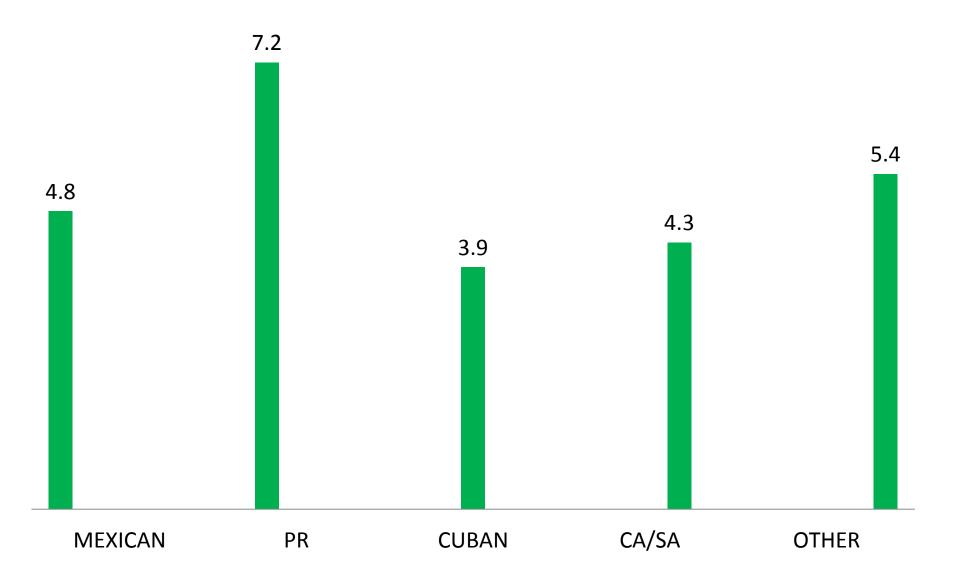


Infant Mortality Rate by Race 1983 - 2013

Health, United States 2015

RACE	1983	2013
White (NH)	9.2	5.1
Black	19.1	11.1
Difference	2.07x	2.18x

INFANT MORTALITY RATES by HISPANIC SUB-GROUP 2014



State-Level Progress in Reducing the Black–White Infant Mortality Gap, United States, 1999–2013

Joedrecka S. Brown Speights, MD, Samantha Sittig Goldfarb, DrPH, Brittny A. Wells, DrPH, CHES, Leslie Beitsch, MD, JD, Robert S. Levine, MD, and George Rust, MD, MPH

AmJ Public Health. 2017;107:775–782. doi:10.2105/AJPH.2017.303689

State-level Progress in Reducing the Black-White Infant Mortality Gap, United States, 1999-2013

Eliminating the Black-White IMR gap would have saved <u>64,876</u> babies during these 15 years.

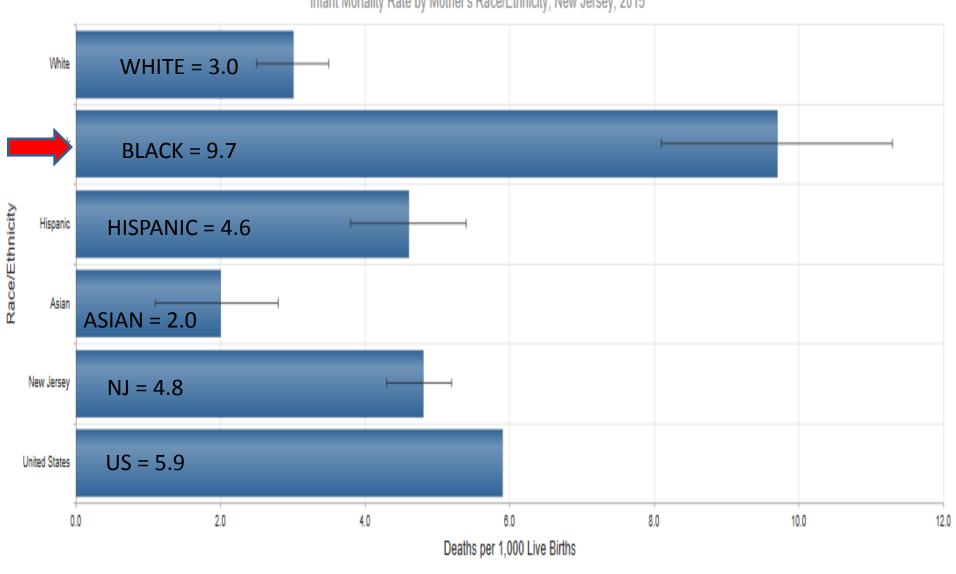
Eighteen states would achieve IMR racial equality by the year 2050 if current trends are sustained.

TABLE 1—State Rankings by Optimal Improvement in Black Infant Mortality Rate: United States, 1999–2013

State	Black IMR (2000) ^a	Black IMR (2012) ^a	% Reduction in Black IMR From 2000 to 2012 ^a	Black IMR Rolling Average 3-Year Rate, 2000–2012, Mean (95% CI)	What if We Were Equal? Number of Black Infant Lives Saved if Rates Were Equal to State's White IMR From 1999 to 2013 (Cumulative) ^b	Year State Would Achieve IMR Equality on Current Trend (95% CI)
Arizona	16.6	10.5	36.5	12.38 (11.18, 13.58)	373	2038 (2036, 2040) ^c
lowa	16.0	10.6	33.5	11.23 (10.19, 12.27)	163	WNC
Massachusetts	9.9	6.7	32.6	8.74 (7.96, 9.51)	592	2025 (2024, 2027) ^c
New Jersey	13.5	9.6	29.2	11.31 (10.63, 11.98)	2 169	WNC
Tennessee	16.0	11.4	28.9	14.82 (13.70, 15.94)	2 114	2029 (2026, 2031) ^c
Colorado	12.7	9.3	26.9	12.97 (11.73, 14.22)	344	2028 (2026, 2031) ^c
Connecticut	13.1	9.6	26.8	12.25 (11.43, 13.07)	566	2039 (2037, 2041) ^c
Nebraska	13.0	9.5	26.6	12.55 (11.44, 13.66)	178	2036 (2034, 2039) ^c
Georgia	13.4	9.9	26.3	12.13 (11.21, 13.06)	4 493	2039 (2037, 2041) ^c
South Carolina	15.3	11.4	25.4	13.17 (12.29, 14.05)	2 147	2035 (2033, 2037) ^c

INFANT MORTALITY NEW JERSEY 2015





Newark Infant Mortality Rate by Race/Ethnicity 2011-2015

Dat	a Table						
	Race/ethnicity combined	5-Year Groups v	Infant Mortality V Rate per 1,000	95% CI LL v	95% CI UL v	Number of Infant v Deaths	Number of Live v Births
4	White, non-Hispanic						
	White, non-Hispanic	2011-2015	**	0.1	6.4	4	1,246
4	Black, non-Hispanic						
	Black, non-Hispanic	2011-2015	9.8	7.9	11.8	100	10,154
4	Hispanic (of any race)						
	Hispanic (of any race)	2011-2015	5.4	3.9	6.9	50	9,283
4	Asian, non-Hispanic						
	Asian, non-Hispanic	2011-2015	**	0.0	17.2	2	276
	Overall	Overall	7.4	6.3	8.6	156	20,959

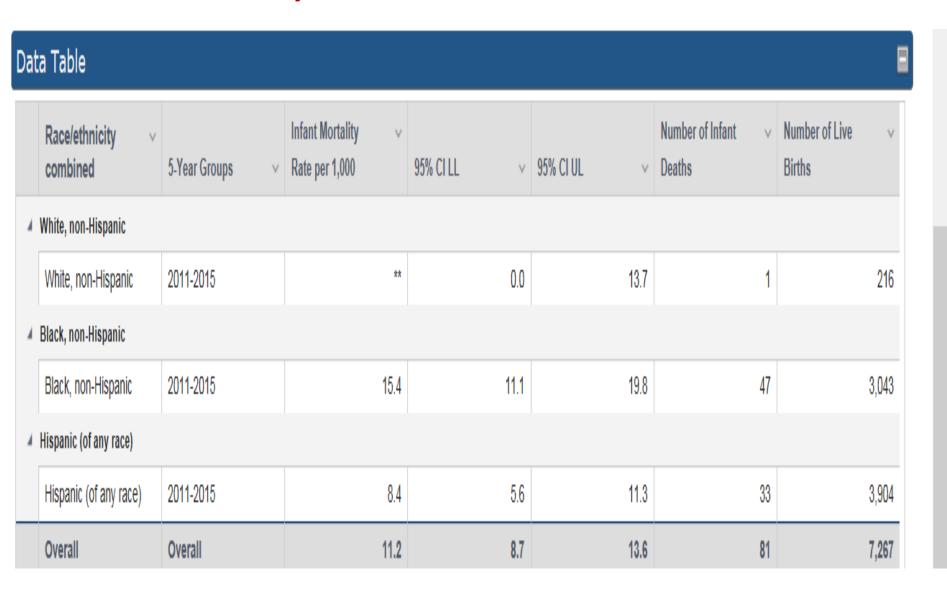
Black infants were 48% of births and 64% of deaths

Atlantic City Infant Mortality Rate by Race/Ethnicity 2011-2015

Dat	a Table						5
	Race/ethnicity v	5-Year Groups v	Infant Mortality Rate per 1,000	95% CI LL v	95% CI UL ~	Number of Infant v Deaths	Number of Live v Births
4	White, non-Hispanic						
	White, non-Hispanic	2011-2015	**	0.0	22.9	3	278
4	Black, non-Hispanic						
	Black, non-Hispanic	2011-2015	24.1	15.6	32.6	30	1,244
4	Hispanic (of any race)						
	Hispanic (of any race)	2011-2015	**	3.8	13.5	12	1,391
4	Asian, non-Hispanic						
	Asian, non-Hispanic	2011-2015	**	0.0	6.6	1	451
	Overall	Overall	13.7	9.8	17.6	46	3,364

Black infants were 37% of births and 65% of deaths

Camden City Infant Mortality Rate by Race/Ethnicity 2011-2015

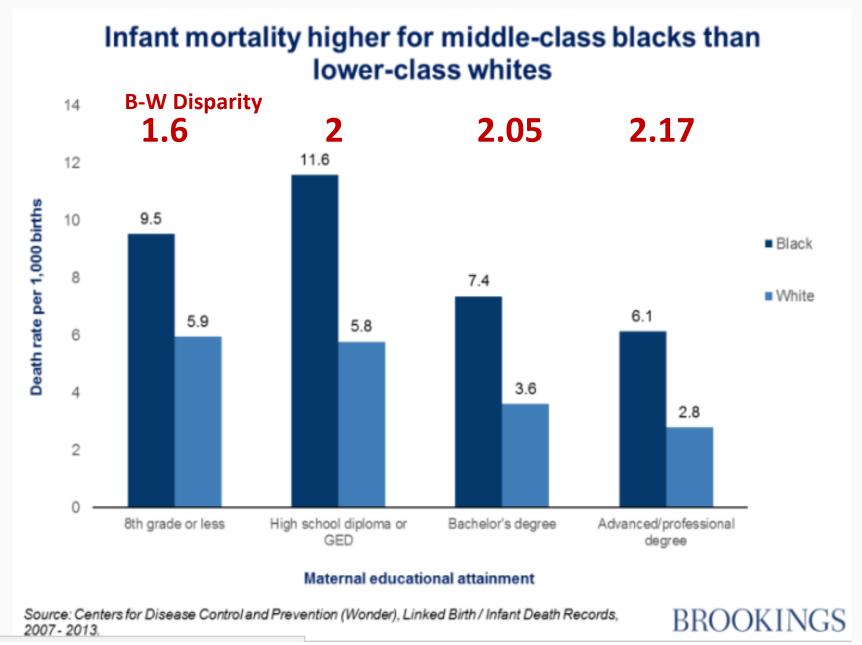


Black infants were 42% of births and 58% of deaths

Mercer County Infant Mortality Rate by Race/Ethnicity 2011-2015

Dat	ta Table						E
	Race/ethnicity v	5-Year Groups	Infant Mortality V	95% CI LL ~	95% CI UL ~	Number of Infant v Deaths	Number of Live v Births
4	White, non-Hispanic						
	White, non-Hispanic	2011-2015	**	1.4	3.7	19	7,418
4	Black, non-Hispanic						
	Black, non-Hispanic	2011-2015	15.1	11.7	18.4	77	5,107
4	Hispanic (of any race)						
	Hispanic (of any race)	2011-2015	5.5	3.5	7.5	30	5,456
4	Asian, non-Hispanic						
	Asian, non-Hispanic	2011-2015	**	1.4	6.6	9	2,249
	Overall	Overall	6.7	5.6	7.8	135	20,230

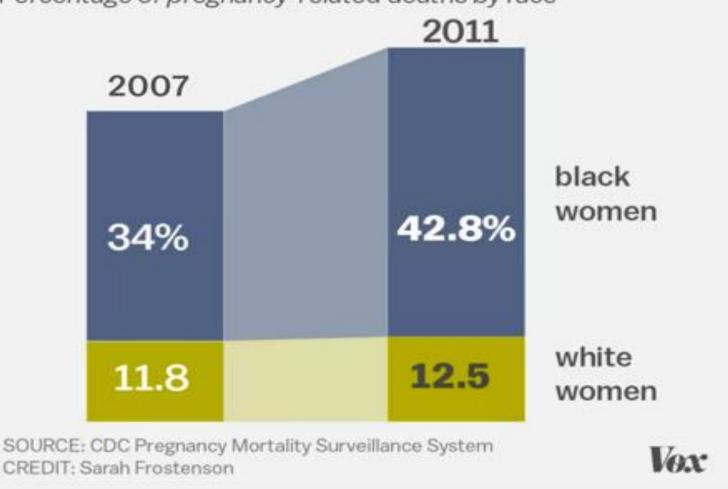
Black infants were 25% of births and 57% of deaths



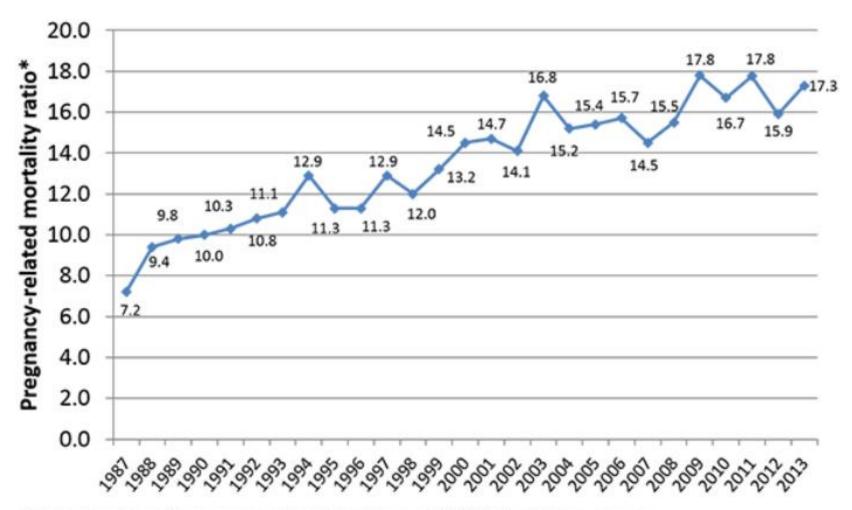
IMR for a Black woman with a HS diploma is nearly 2X IMR for a Black woman with an advanced degree.

America's black-white maternal mortality gap is widening

Percentage of pregnancy-related deaths by race



Trends in pregnancy-related mortality in the United States: 1987–2013



^{*}Note: Number of pregnancy-related deaths per 100,000 live births per year.

https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.html

Maternal mortality and morbidity in the United States of America

Priya Agrawal 3

a. Merck for Mothers, Merck & Co. Inc., 1 Merck Drive, Mail Stop WS2A-56, Whitehouse Station, New Jersey, 08889, United States of America.

Correspondence to Priya Agrawal (email: priya.agrawal@merck.com).

Bulletin of the World Health Organization 2015;93:135. doi: http://dx.doi.org/10.2471/BLT.14.148627

Maternal mortality and morbidity in the United States of America

 Maternal mortality ratio in 1990 12/100,000

Maternal mortality ratio in 2013 28/100,000

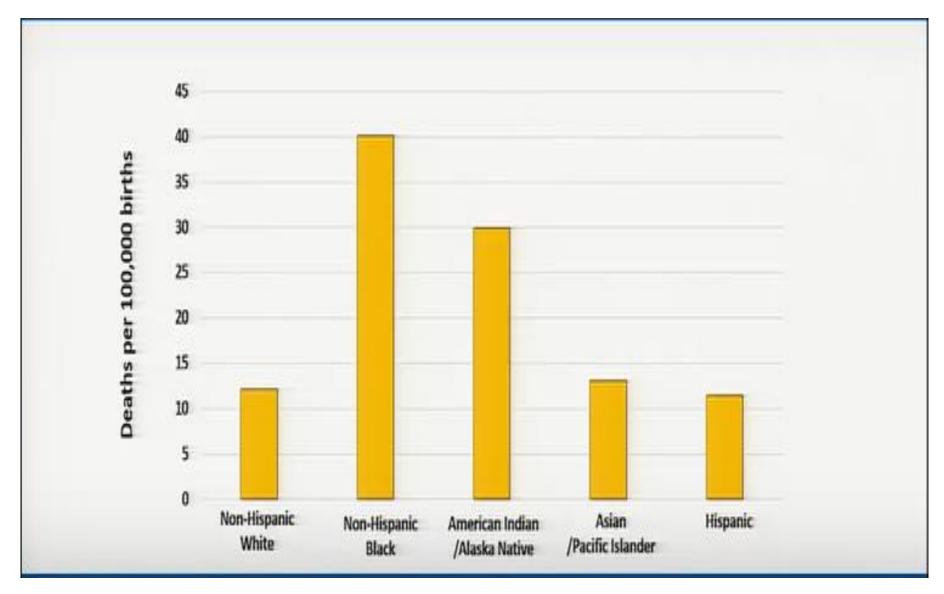
Approximately half of maternal deaths are preventable

Maternal mortality and morbidity in the United States of America

 1200 fatal complications of pregnancy yearly

60,000 near fatal complications of pregnancy yearly

PREGNANCY RELATED MORTALITY BY RACE/ETHNICITY 2006-2013



During 2011-2013 the pregnancyrelated maternal mortality ratio was:

12.7 deaths per 100,000 live births for white women

43.5 deaths per 100,000 live births for black women

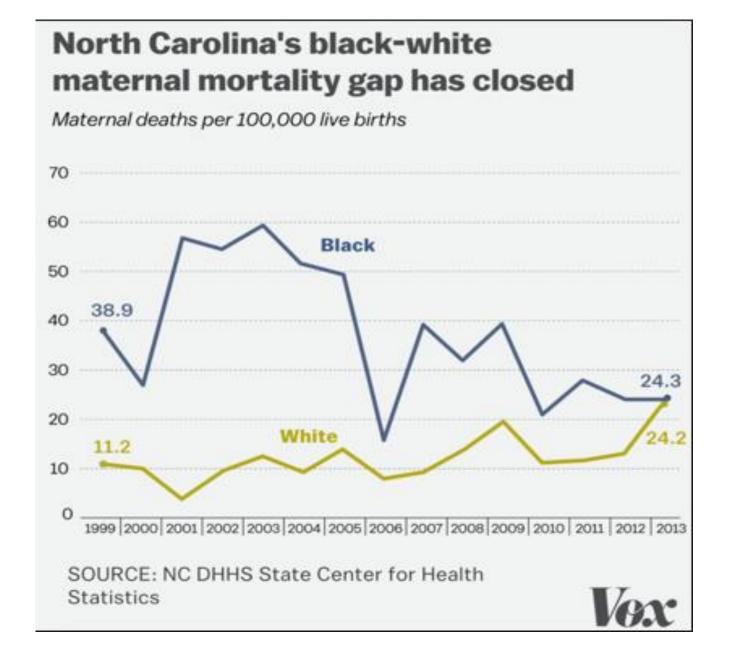
 14.4 deaths per 100,000 live births for women of other races



Black moms die in childbirth 3 times as often as white moms. Except in North Carolina.

The state is focused on helping low-income moms, not on race.

By Julia Belluz | @juliaoftoronto | julia.belluz@voxmedia.com | Jul 3, 2017, 12:00pm EDT



"Alarmingly, the white maternal mortality rate has risen in North Carolina over the years. Health officials there aren't sure what's going on yet, but told me they plan to investigate. And the trend mirrors a uptick nationwide in white mortality that's been linked to opioid abuse, and increases in obesity, diabetes, and cardiovascular disease."

By Julia Belluz@juliaoftorontojulia.belluz@voxmedia.com Jul 3, 2017, 12:00pm EDT

SOCIAL DETERMINANTS OF HEALTH

The social determinants of health are the circumstances in which people are born, grow up, live, work, and age, as well as the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics.

(Social Determinants of Health Key Concepts, World Health Organization).

Median Household Income by Race United States-2015

Total	\$56,516

Asian	\$77,166
<i>T</i> SIGII	711,200

\$45,14	Hispanic
\$4	Hispanic

Median Household Income by Race New Jersey-2016

Total \$76,126

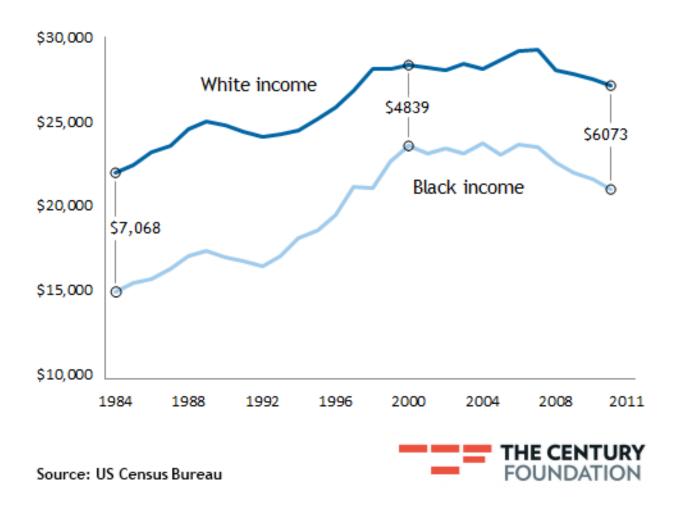
Asian \$109,058

White \$86,361

Hispanic \$52,599

Black \$47,696

The median income gap between whites and blacks narrowed by nearly a third between 1984 and 2000, but has grown 28% in the years since.



FAMILY EARNINGS BY RACE

10th Percentile

YEAR	WHITE	BLACK	HISPANIC	ASIAN
2011	\$9,999	\$0	\$0	\$15,000
2012	\$10,000	\$0	\$0	\$13,200
2013	\$12,000	\$0	\$1,000	\$19,000

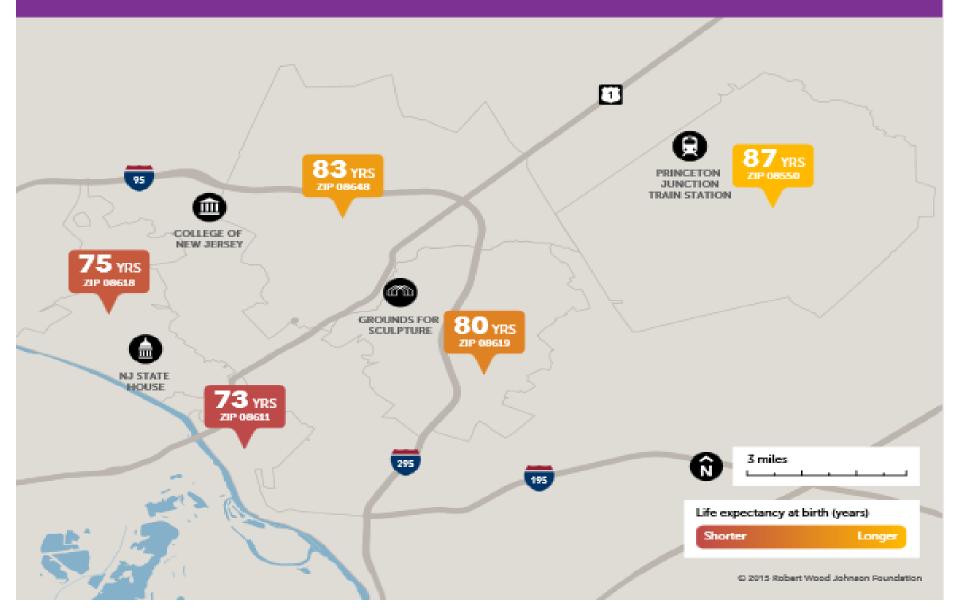
Source: The U.S. Census Bureau, Current Population Survey, March ASEC

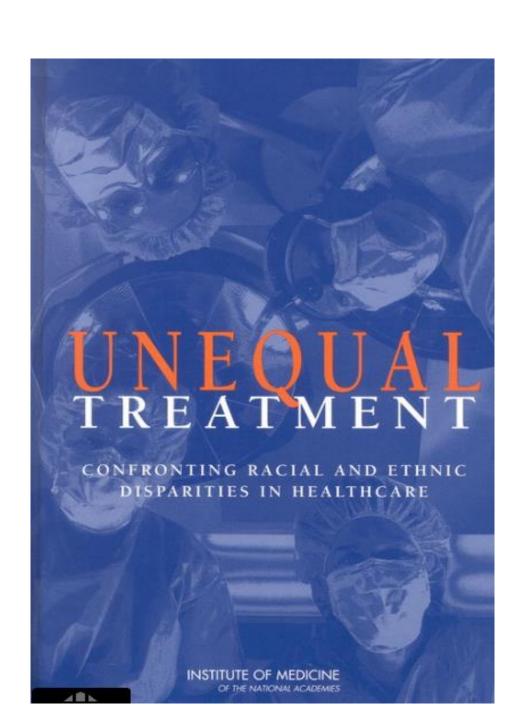
Notes: Calculations done by Chris Wimer and JaeHyun Nam, Columbia University. Earnings include salaries, wages, self-employment, and farm income

Follow the discussion

#CloseHealthGaps

Short Distances to Large Gaps in Health





"Evidence of racial and ethnic disparities in healthcare is, with few exceptions, remarkably consistent across a range of illnesses and healthcare services. These disparities are associated with socioeconomic differences and tend to diminish significantly, and in a few cases, disappear altogether when socioeconomic factors are controlled."

IOM Report - Unequal Treatment (2003)

"The majority of studies, however, find that racial and ethnic disparities remain even after adjustment for socioeconomic differences and other healthcare access related factors."

IOM Report - Unequal Treatment (2003)

Finding 2-1: Racial and ethnic disparities in healthcare occur in the context of broader historic and contemporary social and economic inequality, and evidence of persistent racial and ethnic discrimination in many sectors of American life.

Understanding the role of unconscious bias and racism

What Is Unconscious Bias?



We all have shortcuts, "schemas" that help us make sense of the world. But our shortcuts sometimes make us misinterpret things. That's unconscious bias.

Racism is Prejudice Plus Power







WHAT HOUSING SEGREGATION MEANS TO THE CAPITAL'S NEGROES

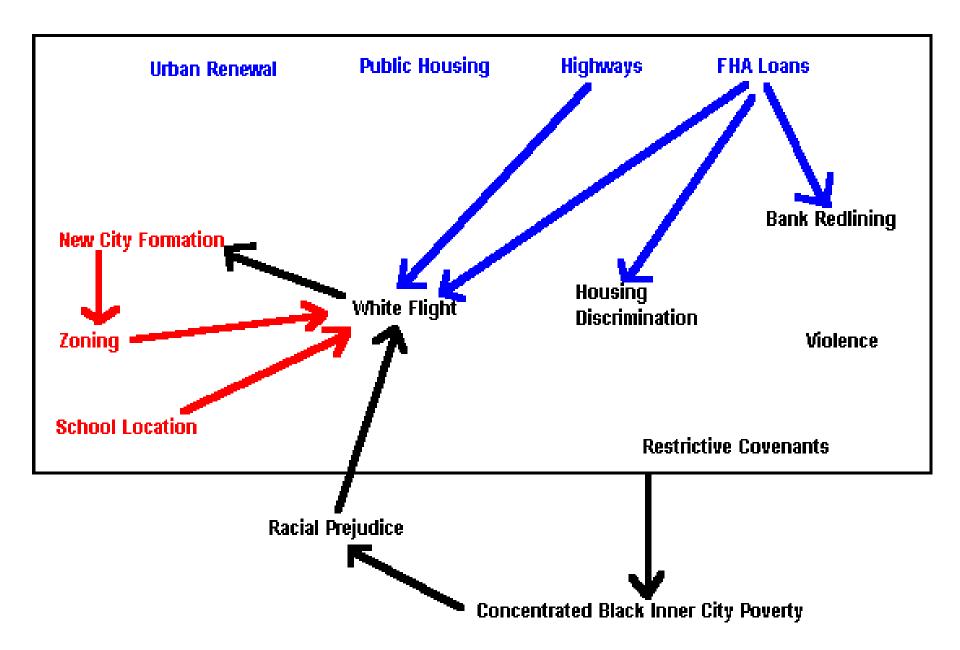


The segregated Negro has little hope of leaving his racial enclosure.





Causes of Residential Racial Segregation



America: Equity and Equality in Health 3

Structural racism and health inequities in the USA: evidence and interventions

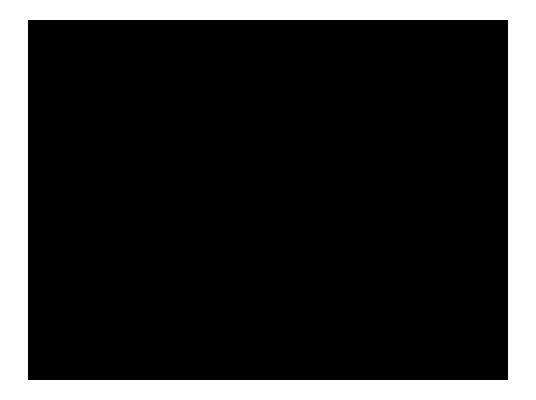
Zinzi D Bailey, Nancy Krieger, Madina Agenor, Jasmine Graves, Natalia Linos, Mary T. Bassett

"...RESIDENTIAL SEGREGATION IS ASSOCIATED WITH ADVERSE BIRTH **OUTCOMES, INCREASED EXPOSURE** TO AIR POLLUTANTS, DECREASED LONGEVITY, INCREASED RISK OF CHRONIC DISEASE AND INCREASED RATES OF HOMICIDE AND OTHER CRIMES"

"RESIDENTIAL SEGREGATION ALSO SYSTEMATICALLY SHAPES HEALTH-CARE ACCESS, UTILISATION, AND QUALITY AT THE NEIGHBOUROOD, HEALTH-CARE SYSTEM, PROVIDER AND INDIVIDUAL LEVELS"









The plague of racism is insidious, entering into our minds as smoothly and quietly and invisibly as floating airborne microbes enter into our bodies to find lifelong purchase in our bloodstreams.

(Maya Angelou)

izquotes.com

What It's Like to Be Black and Pregnant When You Know How Dangerous That Can Be

I knew I had a find a way to have a healthy birth—despite what the statistics were telling me.

By Dani McClain 🛩





https://www.thenation.com/article/what-its-like-to-be-black-and-pregnant-when-you-know-how-dangerous-that-can-be/

sat slack-jawed as I read the work of public-health researcher Arline Geronimus, who has found that the average black woman might be less healthy at 25 than she was at 15, and that African-American women at 35 have the rates of disability of white Americans who are 55. There's something about the American experience that tears away at the black body. I was 38 years old, and so daily slights and structural racism had had plenty of time to take their toll.

Thus my decision, made during the long summer of my third trimester, to take a break from the news, which serves as a constant reminder of two disturbing realities: One, that in carrying a black child, I was carrying a potential Sterling or Castile or Rekia Boyd or Tamir Rice. And two, that my health and that of my child-to-be were largely in the hands of people who, like me, have been watching events unfold in Baton Rouge or Dallas or Ferguson or Chicago—but may have a completely different understanding than me of how race works in this country.

These concerns may seem far-fetched, but during my pregnancy they were very real to me. A 2016 study by the University of Virginia found that about half of the white medical students and residents surveyed held at least one false belief about biological differences between black and white people: that black people's nerve endings are less sensitive than white people's, for instance. Those implicit biases affected the students' abilities to make appropriate decisions about treating black patients. Dr. Norman

Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites

Kelly M. Hoffman, Sophie Trawalter, Jordan R. Axt, and M. Norman Oliver

PNAS April 19, 2016. 113 (16) 4296-4301; published ahead of print April 4, 2016. https://doi.org/10.1073/pnas.1516047113

Edited by Susan T. Fiske, Princeton University, Princeton, NJ, and approved March 1, 2016 (received for review August 18, 2015)

There's something about the American experience that tears away at the black body.



"Black infants in America are now more than twice as likely to die as white infants — a racial disparity that is actually wider than in 1850, 15 years before the end of slavery, when most black women were considered chattel."

Linda Villarosa – NY Times Magazine 4/11/18

"The reasons for the black-white divide in both infant and maternal mortality have been debated by researchers and doctors for more than two decades. But recently there has been growing acceptance of what has largely been, for the medical establishment, a shocking idea:

Linda Villarosa – NY Times Magazine 4/11/18

For black women in America, an <u>inescapable</u>
atmosphere of societal and systemic racism can create
a kind of toxic physiological stress, resulting in
conditions — including hypertension and preeclampsia — that lead directly to higher rates of infant
<a href="mailto:and-mailt

Linda Villarosa – NY Times Magazine 4/11/18

"And that societal racism is further expressed in a pervasive, longstanding racial bias in health care — including the dismissal of legitimate concerns and symptoms — that can help explain poor birth outcomes even in the case of black women with the most advantages"

Linda Villarosa – NY Times Magazine 4/11/18

Grade Point

A black Yale student fell asleep in her dorm's common room. A white student called police.

By Cleve R. Wootson Jr. May 11 Email the author

https://www.washingtonpost.com/news/grade-point/wp/2018/05/10/a-black-yale-student-fell-asleep-in-her-dorms-common-room-a-white-student-called-police/?utm_term=.e2803cb011b1

ESSENCE

HOME • NEWS

Two Black Men Were Arrested For #WaitingWhileBlack At A Philadelphia Starbucks

https://www.essence.com/news/two-black-men-arrested-starbucks



Replying to @MARS0411 @385parkplace and @SGTreport

muslim brotherhood & planet of the apes had a baby=vj

The scars and stains of racism are still deeply embedded in the American society.

John Lewis

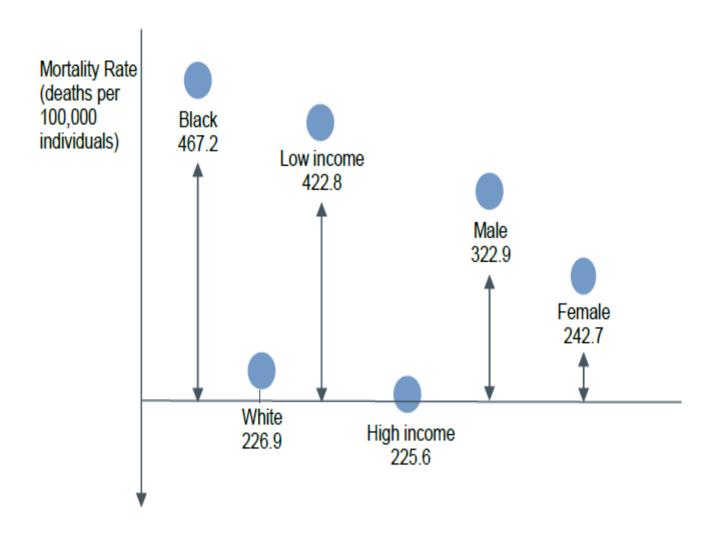
Racism and injustice and violence sweep our world, bringing a tragic harvest of heartache and death.

Billy Graham

People know about the Klan and the overt racism, but the killing of one's soul little by little, day after day, is a lot worse than someone coming in your house and lynching you.

Samuel L. Jackson

Figure 6. Example Bottom-up Approach Summary Measure Showing Disparities in Mortality Rates



"THERE IS NOTHING NEW ABOUT POVERTY. WHAT IS NEW, HOWEVER, IS THAT WE HAVE THE RESOURCES

Martin Luther King, Jr.

from Gis G54 NBLD P G54 Address

