COVID-19 and Racial Disparities: The influence of social determinants

Greg Millett

amfAR

9/24/20

The New York Times

Covid-19 Changed How the World Does Science, Together

Never before, scientists say, have so many of the world's researchers focused so urgently on a single topic. Nearly all other research has ground to a halt.

…for many researchers, the hot zone is no longer an impoverished village in the developing world. It is their hometowns.

Several scientists said the closest comparison to this moment might be the height of the AIDS epidemic in the 1990s, when scientists and doctors locked arms to combat the disease.

History repeats itself

History repeats itself

President Trump exits a briefing on the coronavirus pandemic at the White House on March 26, 2020.
Angerer/Getty Images

Trump is mishandling coronavirus the way Reagan botched the AIDS epidemic

TODAY

HEALTH & WELLNESS

Black, Latino and Asian Americans say they've experienced COVID-related stigma

Even among those who aren't infected, COVID-related discrimination persists, study finds.

The Washington Post
Democracy Dies in Darkness

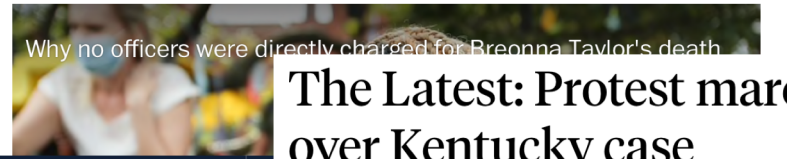
How the coronavirus pandemic helped the Floyd protests become the biggest in U.S. history

People who lost money or jobs because of the pandemic response were more likely to protest with Black Lives Matter

The Washington Post
Democracy Dies in Darkness

Live Updates

Actions of officer who killed Breonna Taylor ruled 'justified'; another indicted on wanton endangerment charge



NEWS

George Floyd had coronavirus, autopsy says

The 20-page document released by the Hennepin County Medical Examiner's Office says an April 3 test on Floyd was positive for the virus' genetic code, or RNA.

The Latest: Protest marches in US cities over Kentucky case

Louisville, Kentucky, police say an officer has been shot amid protests over a lack of criminal charges for officers directly in the shooting of a Black woman, Breonna Taylor

By **The Associated Press**
September 23, 2020, 9:04 PM • 9 min read

Lack of national COVID-19 data

THE HILL

Frustrations grow over incomplete racial data on COVID-19 cases, deaths

BY JESSIE HELLMANN - 05/18/20 05:33 PM EDT

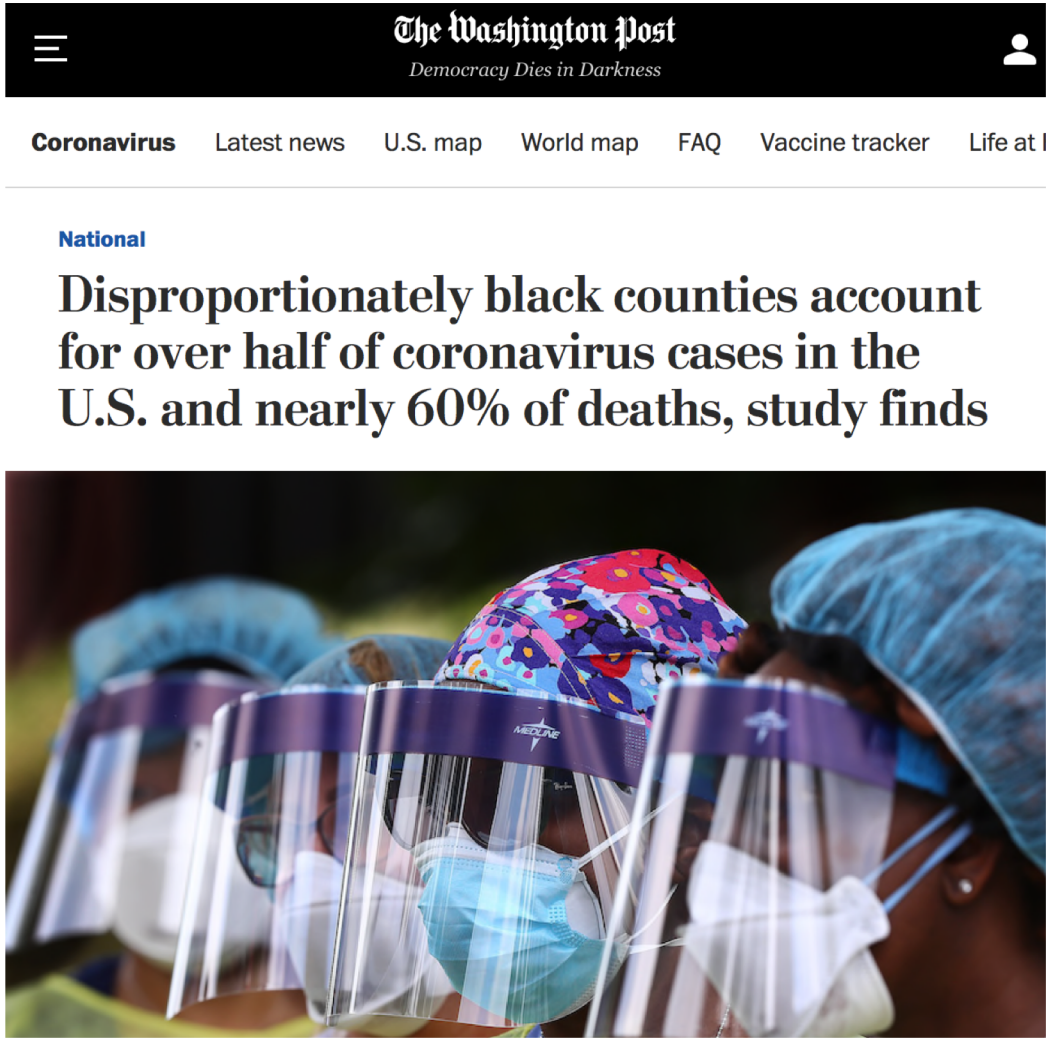
111 COMMENTS

The Washington Post
Democracy Dies in Darkness

Opinions

The CDC must end its silence on the racial impact of covid-19

COVID-19 Impact in Counties with Greater than Average Black Residents



The Washington Post
Democracy Dies in Darkness

Coronavirus Latest news U.S. map World map FAQ Vaccine tracker Life at I

National

Disproportionately black counties account for over half of coronavirus cases in the U.S. and nearly 60% of deaths, study finds

- **91%** of disproportionately black counties are located in the southern US
- COVID-19 cases and deaths increased with proportion of blacks residents in counties
- Although only 22% of counties are ≥13% black, these counties accounted for
  - 52% of national COVID-19 cases
  - 58% of national COVID-19 deaths

- Underlying conditions **did not** explain these disparities
  - Health care access
  - # people in shared housing
  - Unemployment

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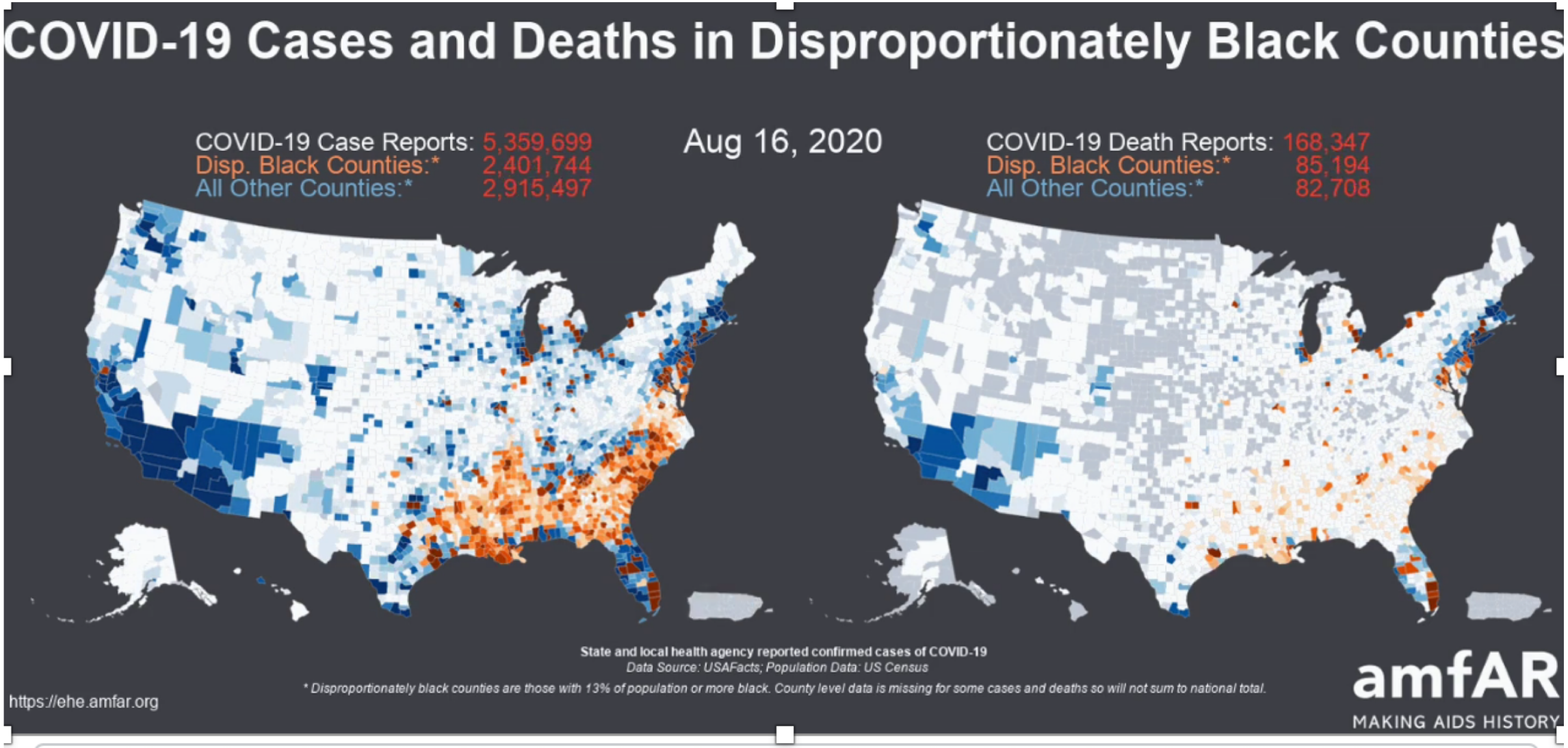


0:28.18

Animation available at https://ehe.amfar.org/inequity

COVID-19 Cases and Deaths in Disproportionately Black Counties

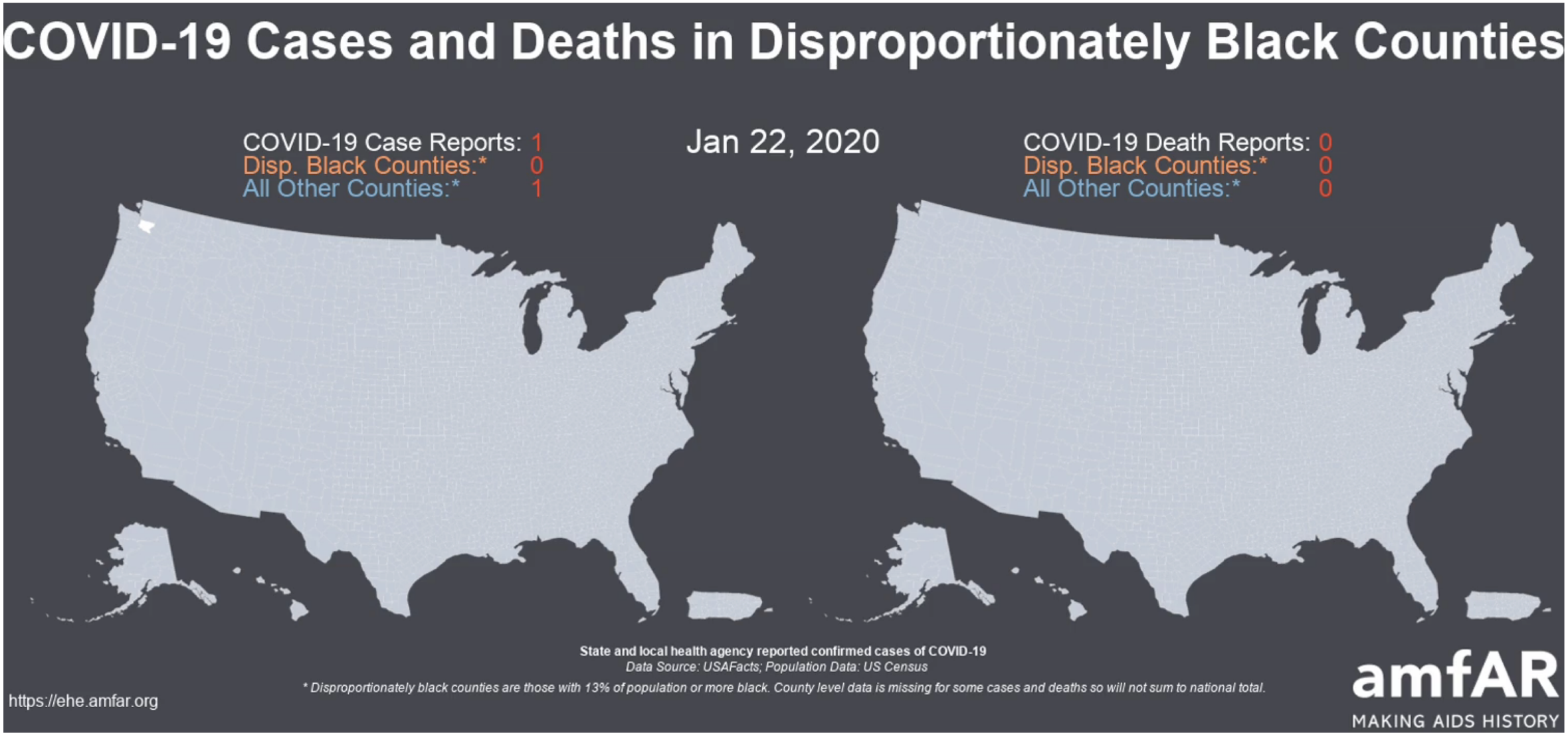
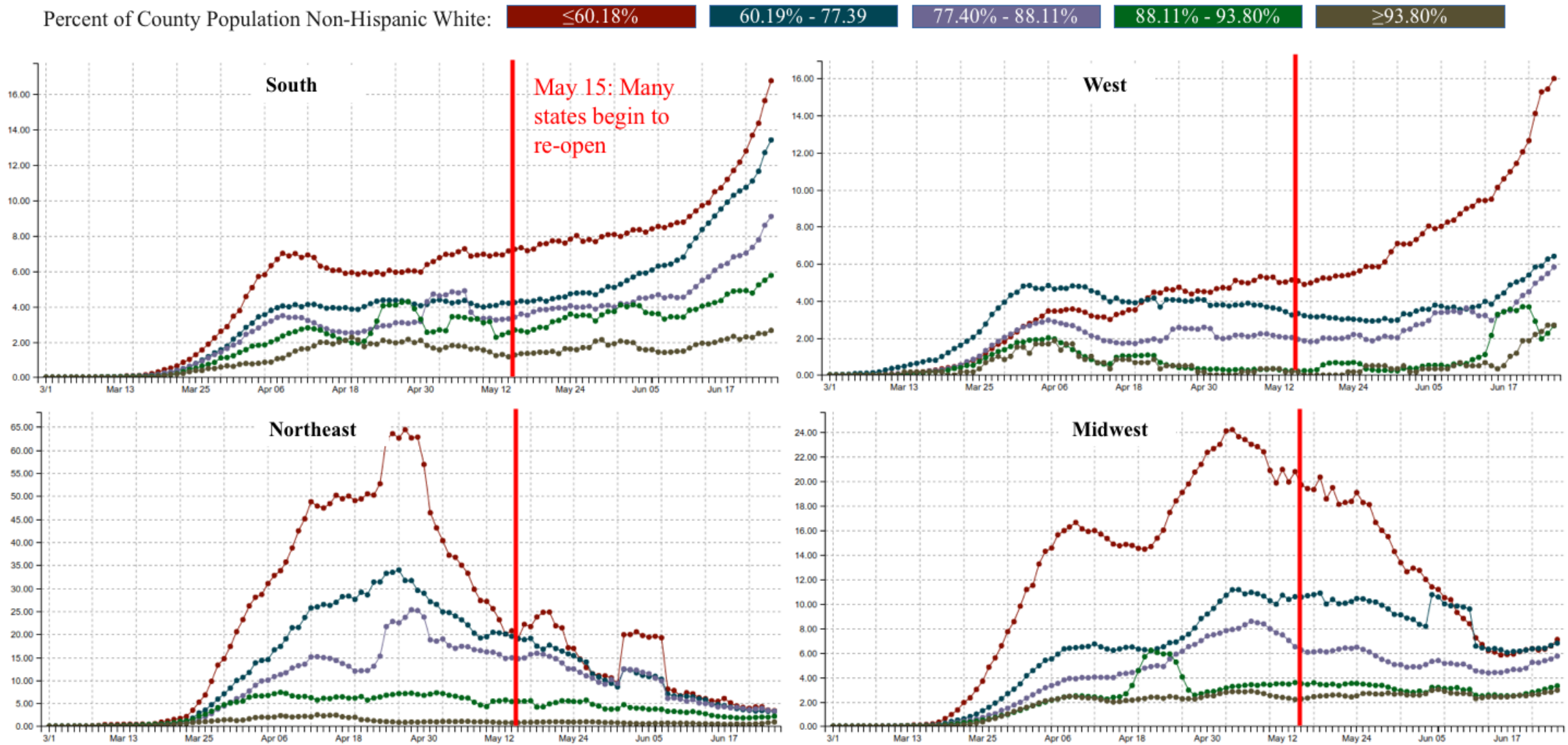


Figure 1. 7-Day Moving Average of New COVID-19 Cases per 100,000 by Percentage of White Residents in U.S. Counties by Region (March 1 – June 25, 2020)



Since re-opening, COVID-19 cases have remained lowest in primarily white counties across region and increased sharply in the most racially diverse counties in the South and West.
(Additional data available at https://ehe.amfar.org/inequity/)

Figure. Hospitalizations vs Population of Racial/Ethnic Subgroups in 12 States

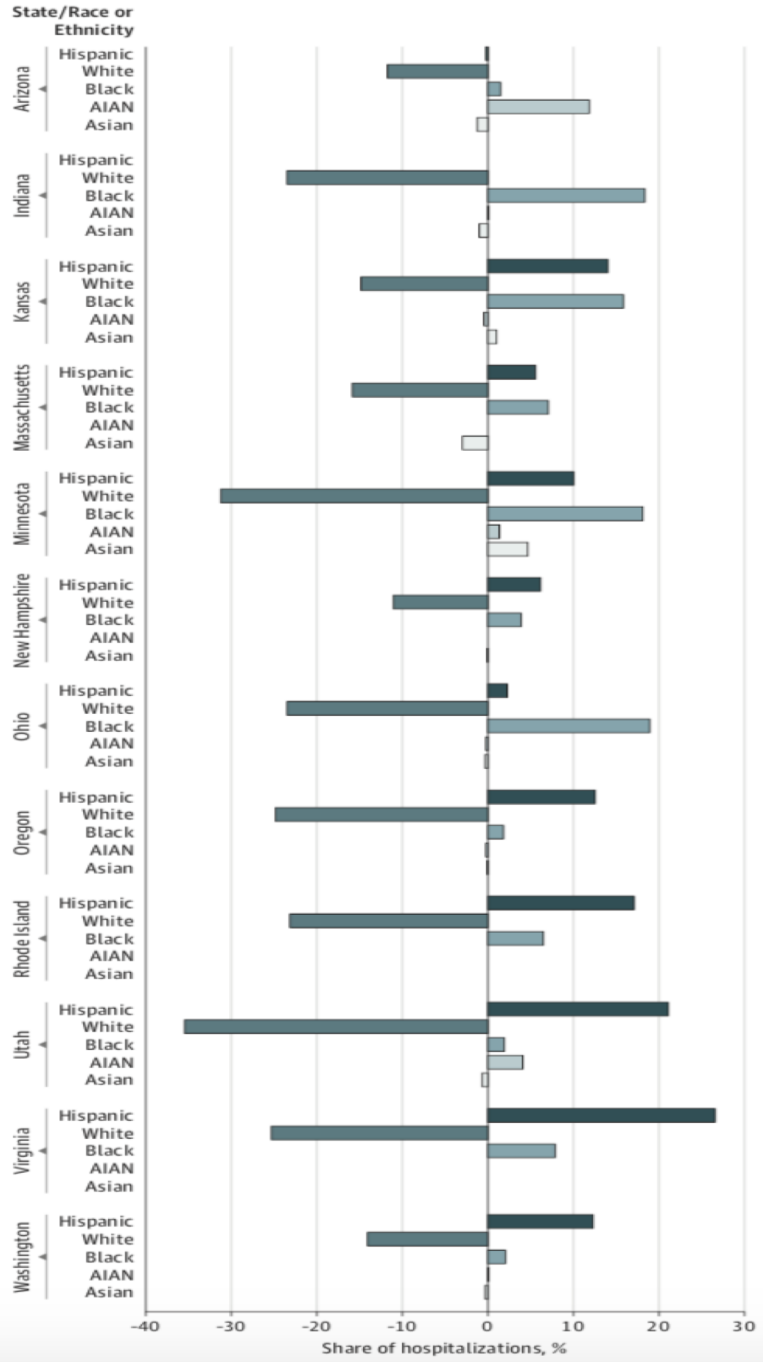
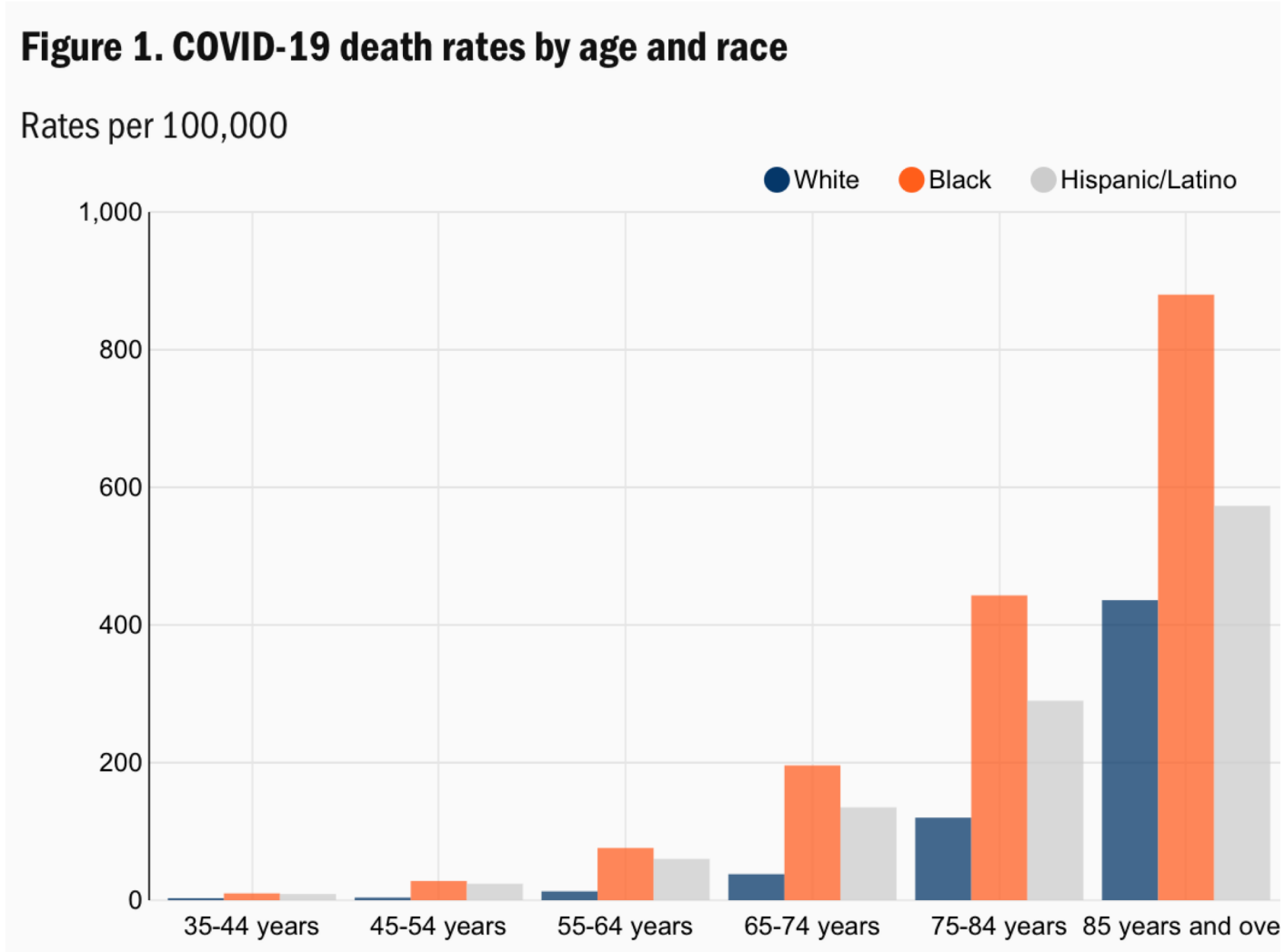


Figure 1. COVID-19 death rates by age and race



HealthAffairs

TOPICS JOURNAL BLOG

RESEARCH ARTICLE COVID-19

HEALTH AFFAIRS > VOL. 39, NO. 9: MEDICARE PAYMENT INCENTIVES, MEDICAID & MORE

COVID-19 And Racial/Ethnic Disparities In Health Risk, Employment, And Household Composition

Thomas M. Selden and Terceira A. Berdahl

AFFILIATIONS

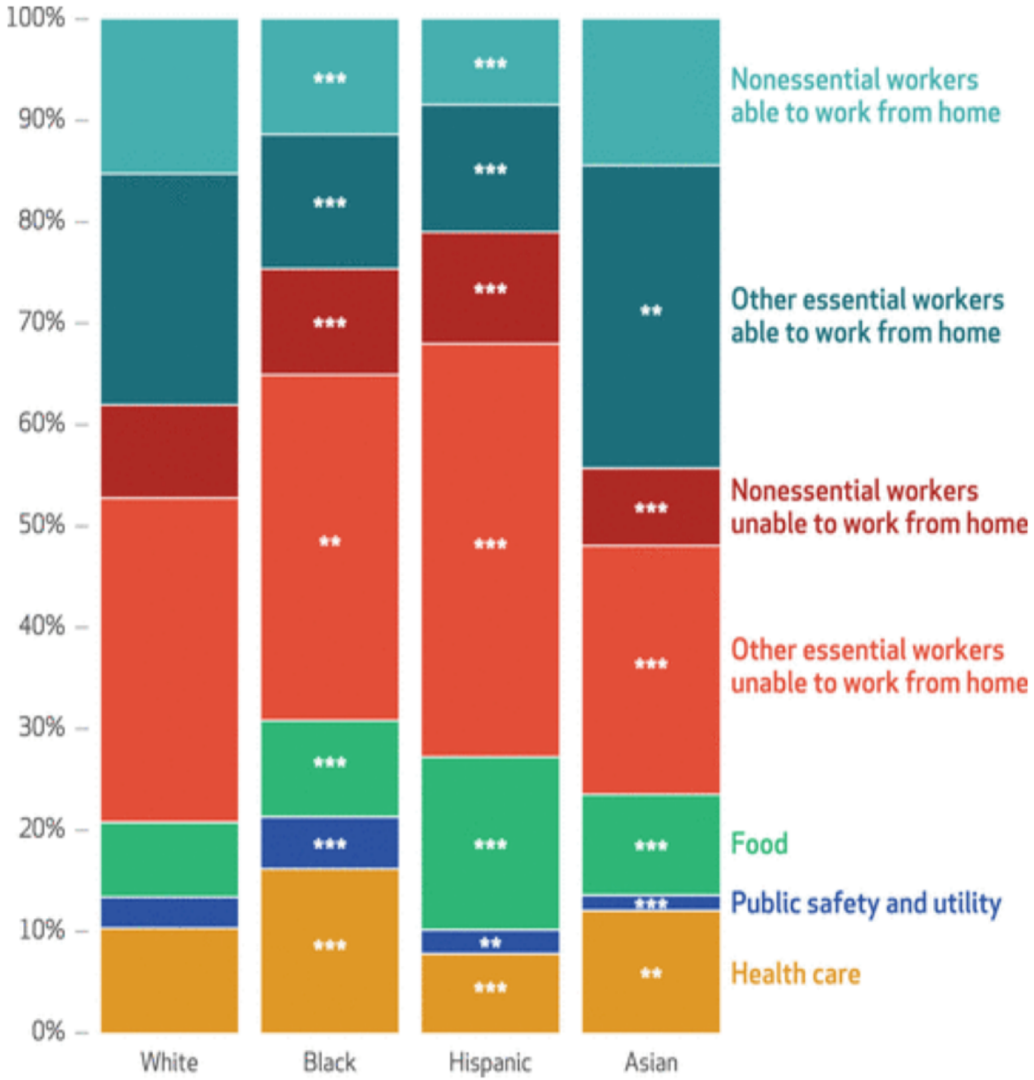
PUBLISHED: JULY 14, 2020 Free Access https://doi.org/10.1377/hlthaff.2020.00897

SECTIONS VIEW ARTICLE PERMISSIONS SHARE TOOLS

ABSTRACT

We used data from the Medical Expenditure Panel Survey to explore potential explanations for racial/ethnic disparities in coronavirus disease 2019 (COVID-19) hospitalizations and mortality. Black adults in every age group were more likely than White adults to have health risks associated with severe COVID-19 illness. However, Whites were older, on average, than Blacks. Thus, when all factors were considered, Whites tended to be at higher overall risk compared with Blacks, with Asians and Hispanics having much lower overall levels of risk compared with either Whites or Blacks. We explored additional explanations for COVID-19 disparities—namely, differences in job characteristics and how they interact with household composition. Blacks at high risk for severe illness were 1.6 times as likely as Whites to live in households containing

Exhibit 4 Job characteristics among US workers, by race and ethnicity, 2014–17



% in households with 1 persons who cannot work remotely:

- **64.5% Latino adults**
- **56.5% Black adults**
- **46.6% White adults**

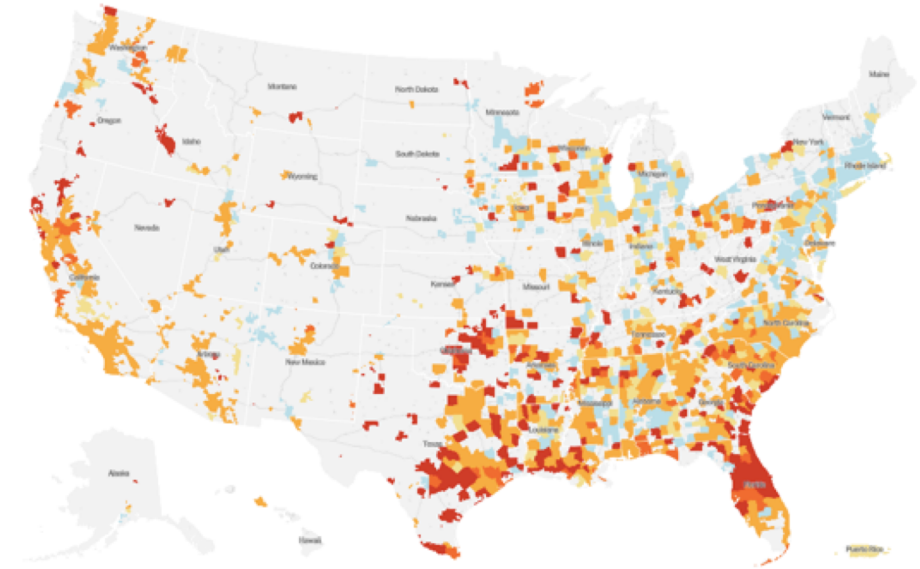
COVID-19 Risk is Rising in the Latinx Community Since Economy Re-Opening

The New York Times

Updates on the surges in Texas, California, Arizona and Florida.

How the number of new cases has changed in the last two weeks

Falling | About the same | Rising → | Few or no cases



The New York Times

Many Latinos Couldn't Stay Home. Now Virus Cases Are Soaring in Their Communities.

Rates of coronavirus infection among Latinos have risen rapidly across the United States.

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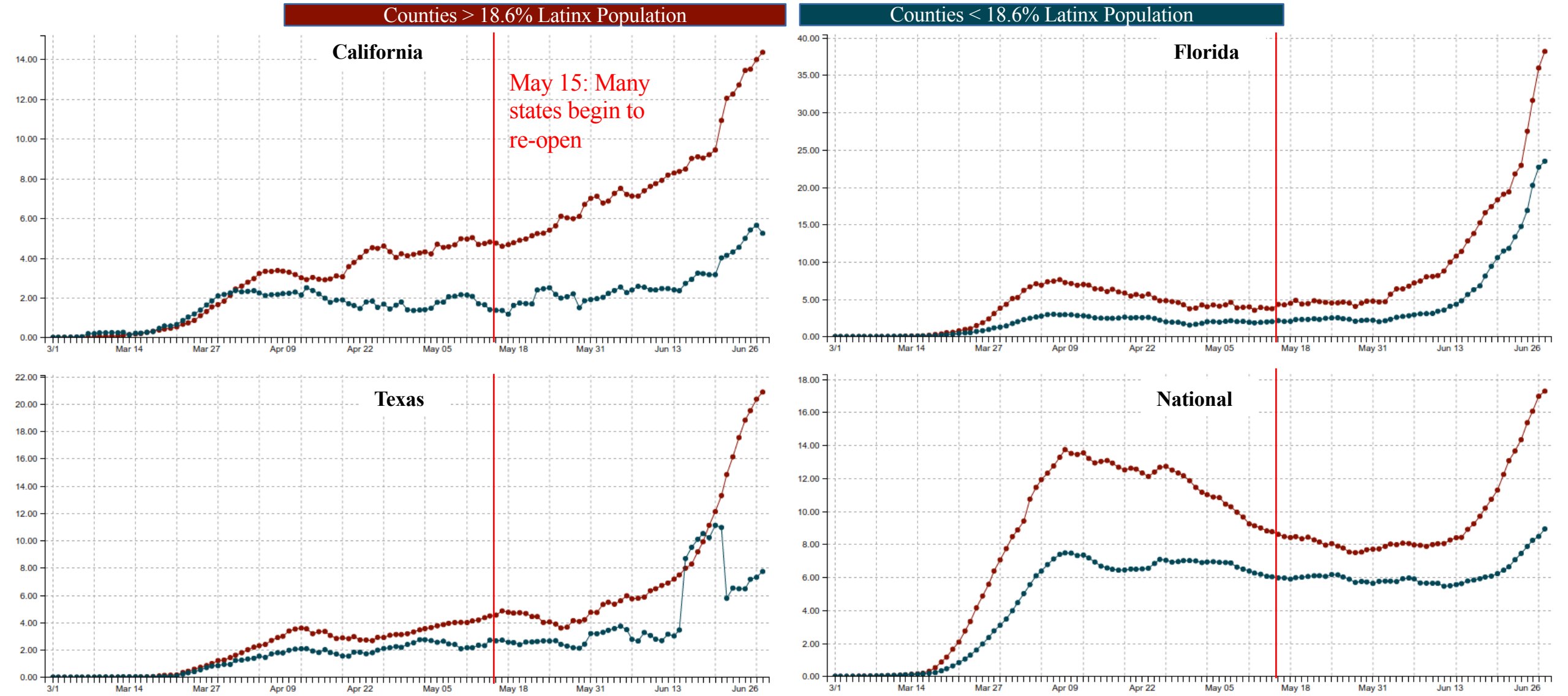
Figure 1: 7-Day Moving Average of New COVID-19 Cases per 100,000 by Percentage of Latinx Population in California, Florida, Texas, and Nation (March 1 – June 29, 2020)



https://ehe.amfar.org

COVID-19 diagnoses since reopening the US have disproportionately impacted Latinx communities

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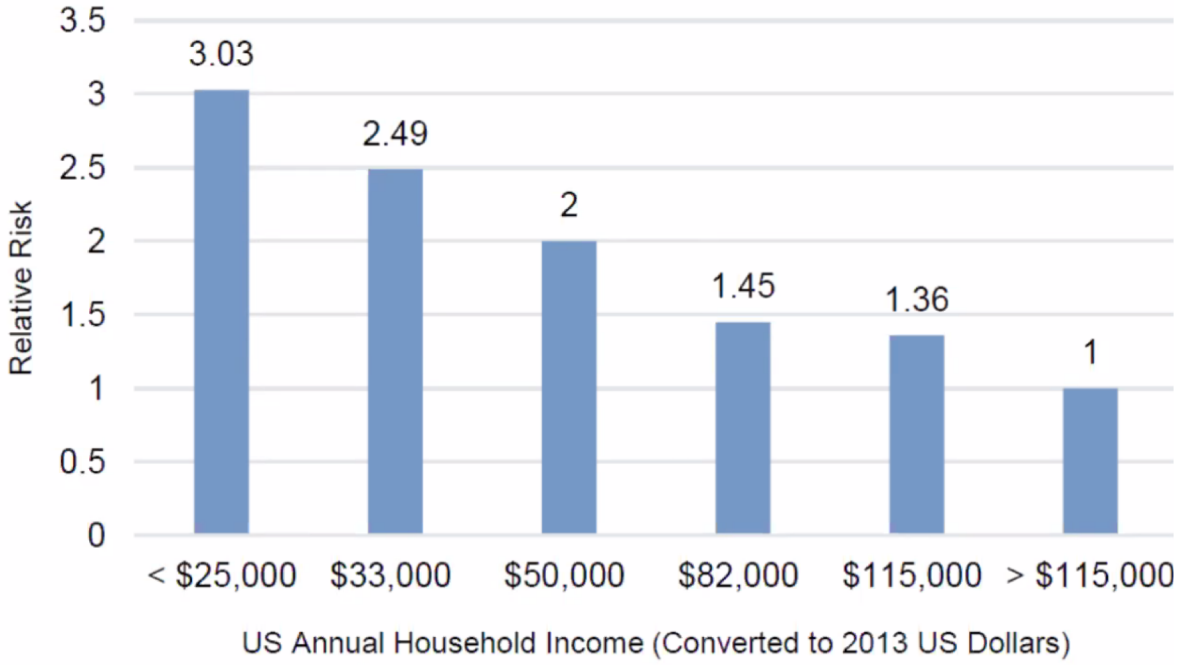
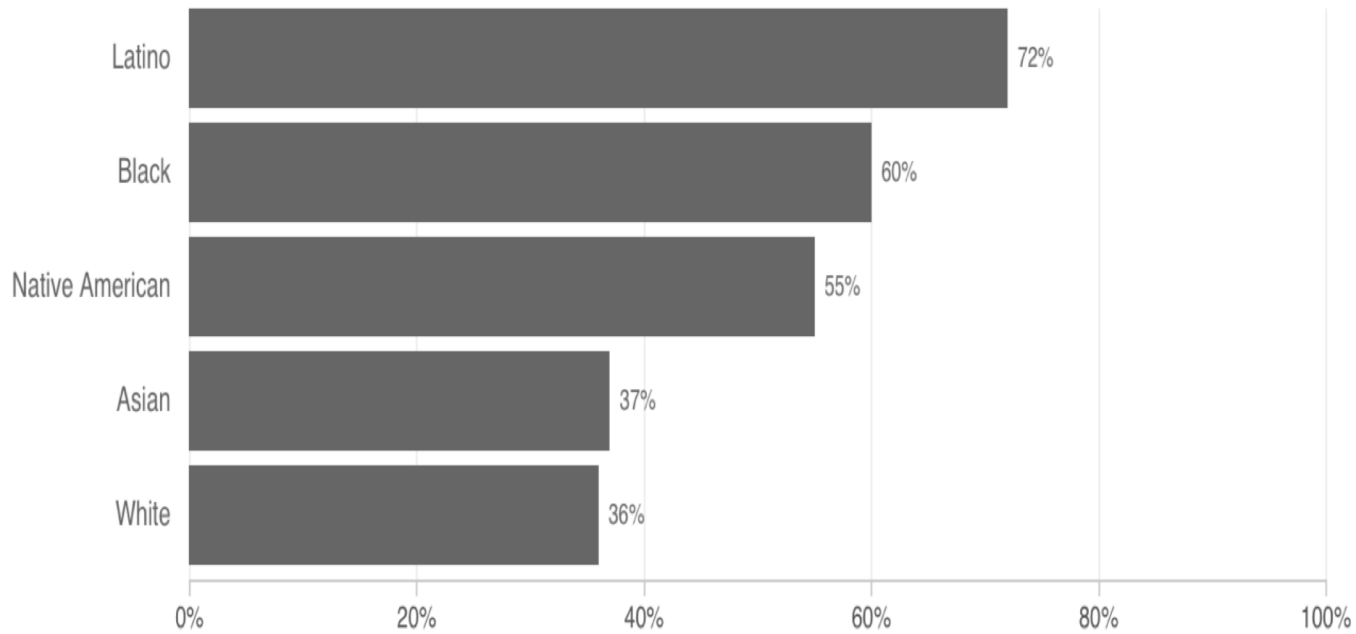
MAKING AIDS HISTORY

Relative Risk of All-Cause Mortality by US Annual Household Income Level in 2016



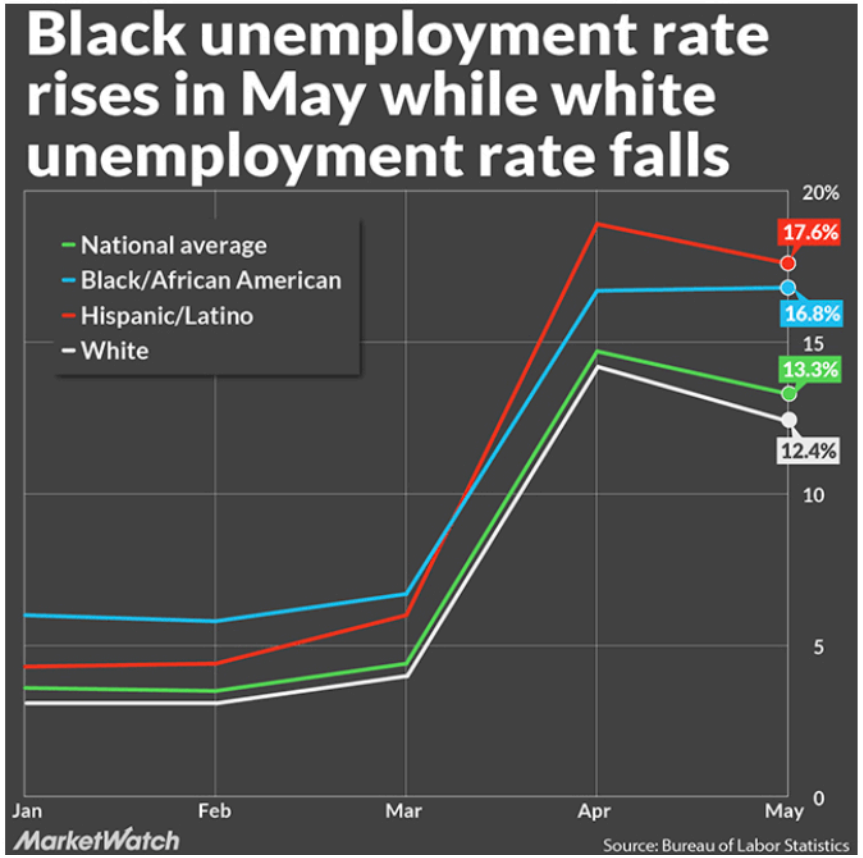
Wyatt R, et al., Achieving health equity: A guide for health care organizations. IHI White Paper. Institute for Healthcare Improvement, 2016

Majority Of Latino, Black And Native American Households Report Serious Financial Problems During Pandemic



COVID-19 & Economic Losses Impact on Black Communities

African-American unemployment soars, as do COVID-19 deaths



POLITICO

CORONAVIRUS

Black community braces for next threat: Mass evictions

A federal moratorium on evictions — which only applies to the 1 in 4 rental units that are backed by the government — expires in a matter of weeks.

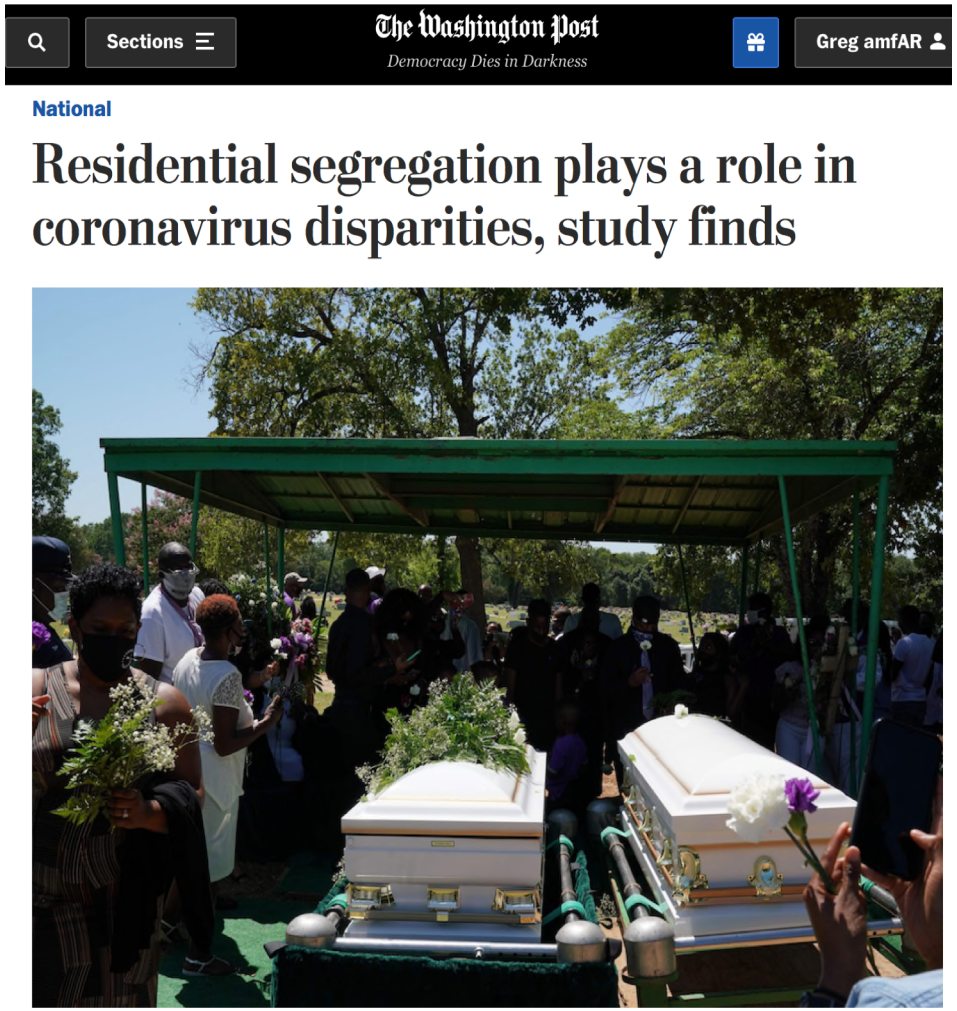
CBS NEWS

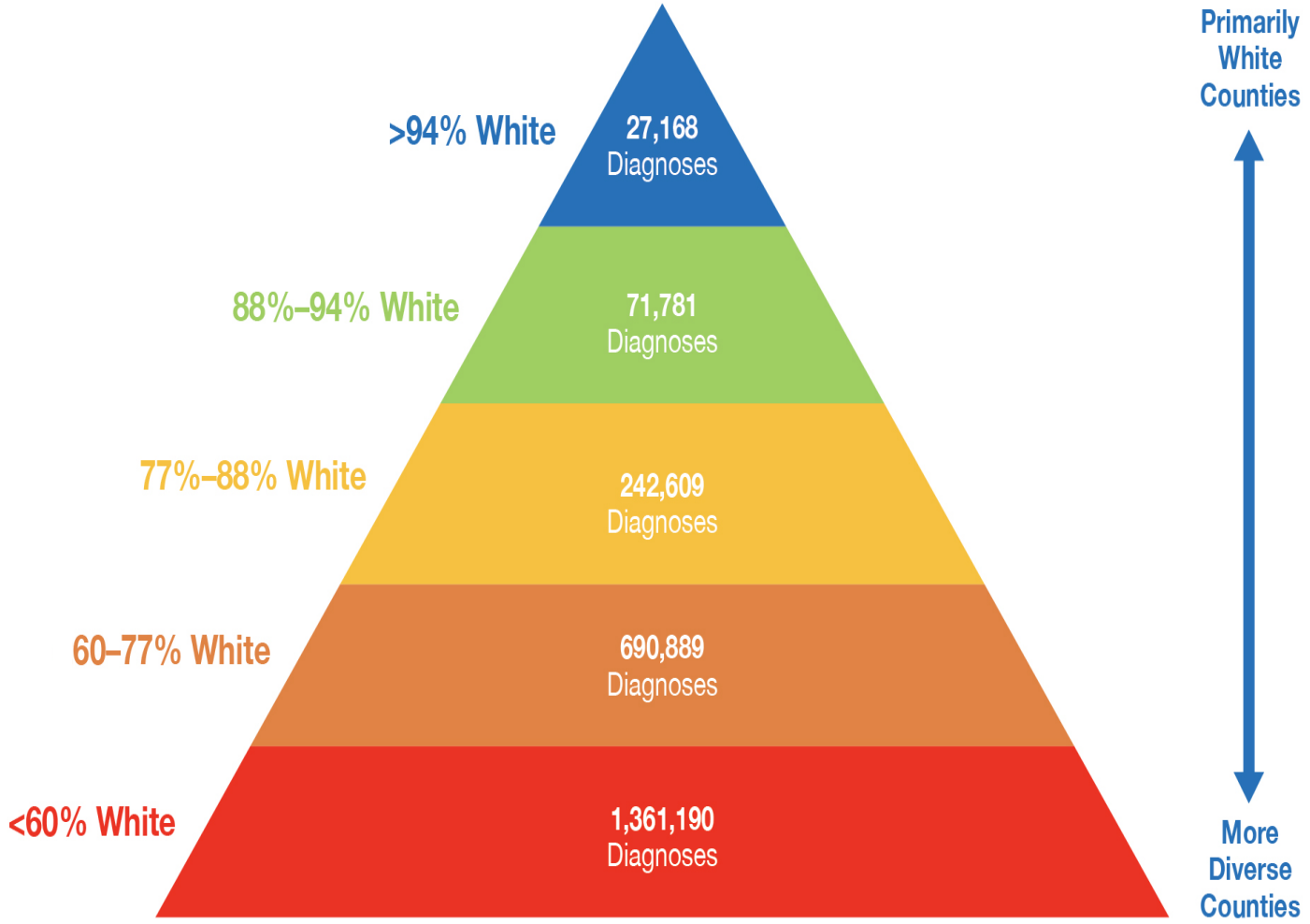
40% of black-owned businesses not expected to survive coronavirus

GROUP	PERCENTAGE CHANGE	NUMBER OF OWNERS IN APRIL	DECLINE
Black	-41%	637,769	-441,347
Immigrant	-36%	2,009,597	-1,110,667
Latinx	-32%	1,412,925	-657,971
Asian	-26%	657,896	-230,632
White	-17%	8,761,531	-1,791,884

Stanford Institute for Economic Policy Research (Fairlie et al, May 2020)

COVID-19 and Residential Segregation





(Millett et al, 2020)

COVID-19 Testing not Located in Black or Brown Communities

THE CORONAVIRUS CRISIS

The Coronavirus Doesn't Discriminate, But U.S. Health Care Showing Familiar Biases

April 2, 2020 · 12:37 PM ET

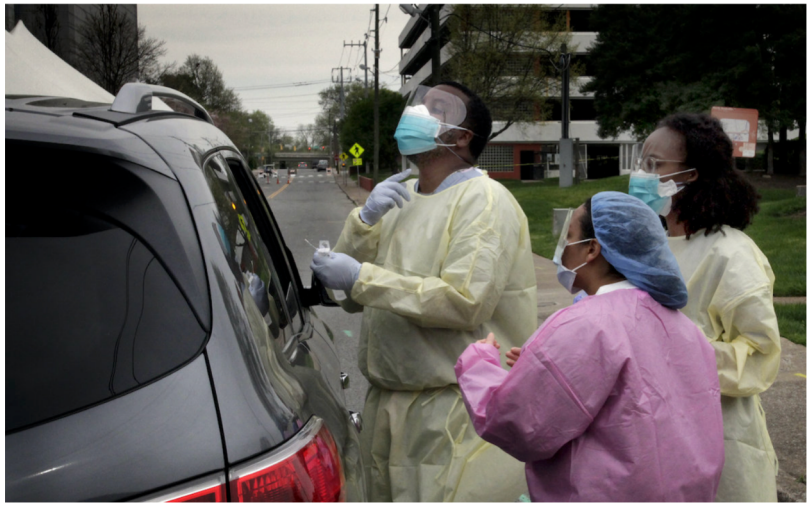
BLAKE FARMER

npr

FROM

3-Minute Listen

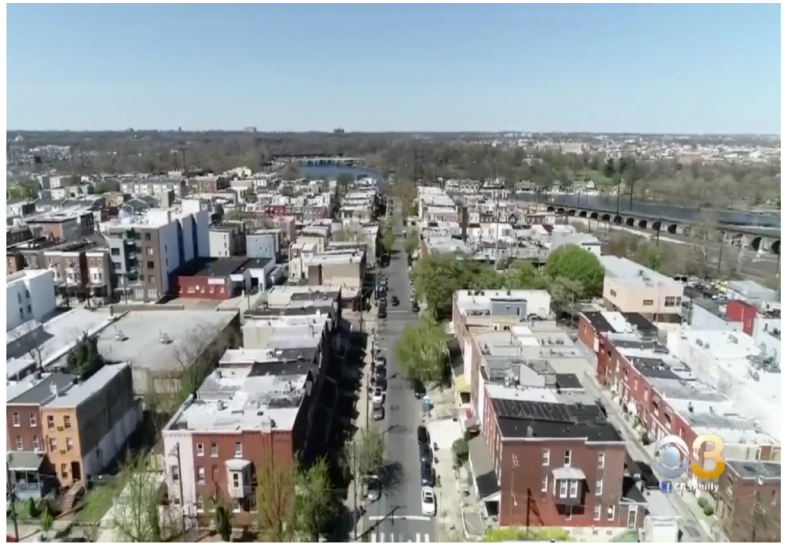
+ PLAYLIST



Coronavirus Philadelphia: Positive Tests Higher In Poorer Neighborhoods Despite Six Times More Testing In Higher-Income Neighborhoods, Researcher Says

CBSN PHILLY

LIVE



THE CORONAVIRUS CRISIS

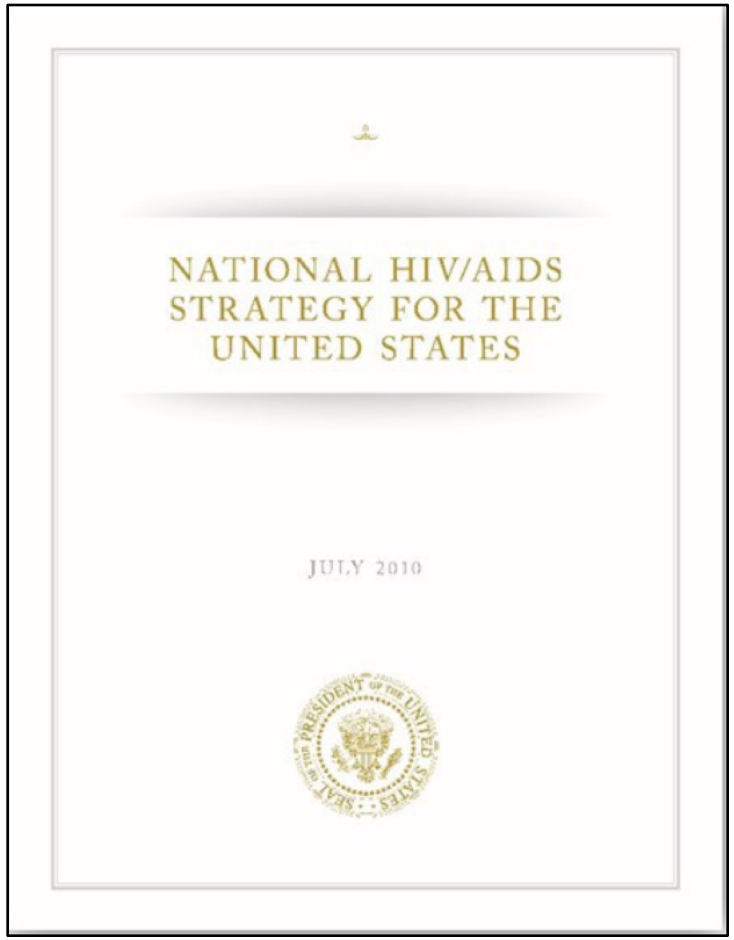
In Large Texas Cities, Access To Coronavirus Testing May Depend On Where You Live

May 27, 2020 · 5:00 AM ET

Heard on Morning Edition

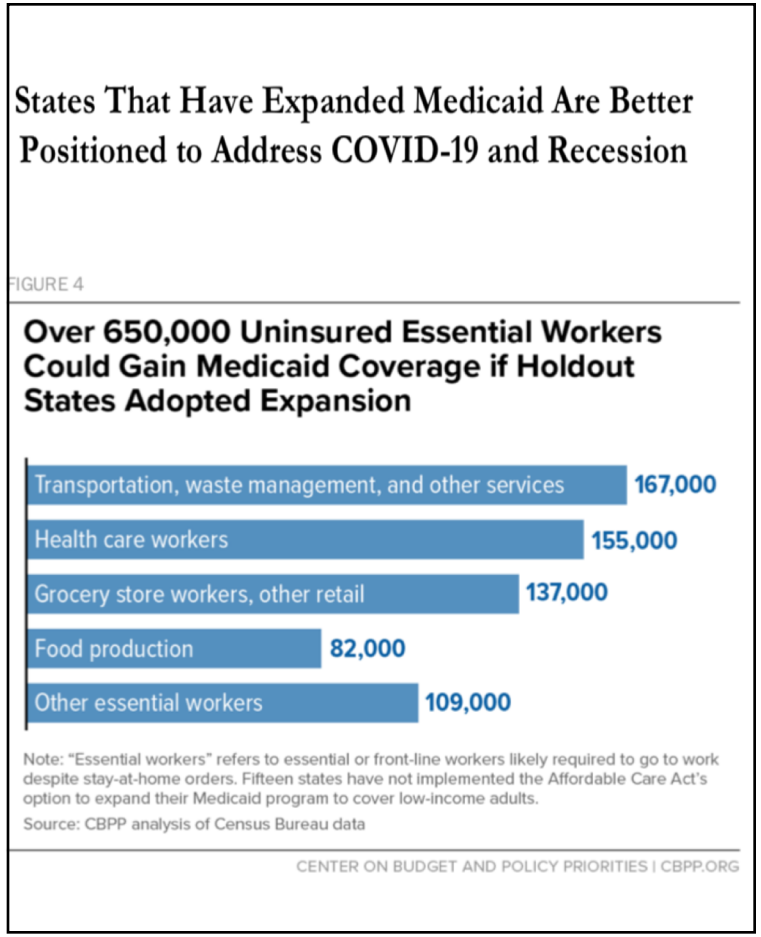
npr

Rectifying COVID-19 (and other) Health Disparities



NATIONAL HIV/AIDS STRATEGY FOR THE UNITED STATES

JULY 2010



States That Have Expanded Medicaid Are Better Positioned to Address COVID-19 and Recession

FIGURE 4

Over 650,000 Uninsured Essential Workers Could Gain Medicaid Coverage if Holdout States Adopted Expansion

Note: "Essential workers" refers to essential or front-line workers likely required to go to work despite stay-at-home orders. Fifteen states have not implemented the Affordable Care Act's option to expand their Medicaid program to cover low-income adults.

Source: CBPP analysis of Census Bureau data

CENTER ON BUDGET AND POLICY PRIORITIES | CBPP.ORG

J. Racial and Ethnic Health Disparities (2015) 2:280–289
DOI 10.1007/s40615-014-0067-6

The Military Health Care System May Have the Potential to Prevent Health Care Disparities

Bosny J. Pierre-Louis · Angelo D. Moore · Jill B. Hamilton

Received: 21 August 2014 / Revised: 11 October 2014 / Accepted: 24 October 2014 / Published online: 6 December 2014

Abstract
Introduction The existence of health disparities in military populations has become an important topic of research. However, to our knowledge, this is the first study to examine health disparities, as related to access to care and health status, among active duty soldiers and their families. Specifically, the purpose of this analysis was to evaluate whether health disparities exist in access to care and health outcomes of patient satisfaction, physical health status, and mental health status according to race, gender, and sponsor rank in the population of active duty soldiers and their family members. *Methods* In this cross-sectional study, active duty army soldiers and family members were recruited from either one particular army health clinic where they received their health care or from an adjacent shopping center frequented by eligible participants. Data were collected using validated measures to assess concepts of access to care and health status. Statistical analysis, including one-way analysis of variance (ANOVA) was performed to investigate differences in study outcome measures across four key demographic subgroups: race, gender, sponsor rank, and component (active soldier or family member). *Results* A total of 200 participants completed the study questionnaires. The sample consisted of 45.5 % soldiers and 54.5 % family members, with 88.5 % reporting a sponsor rank in the category of junior or senior enlisted rank. Mean scores for access to care did not differ significantly for the groups race/ethnicity (p=0.53), gender (p=0.14), and sponsor rank (p=0.10). Furthermore, no significant differences were observed whether respondents were active soldiers or their family members (p=0.36). Similarly, there were no statistically significant subgroup (race/ethnicity, gender, sponsor rank, or component) differences in mean patient satisfaction, physical health, and mental health scores. *Discussion* In a health equity system of care such as the military health care system, active duty soldiers and their family members did not experience disparities in access to care or in important health outcomes of patient satisfaction, physical health status, or mental health status.

Keywords Health disparity · Military health care system · Access to care · Rank · Race · Patient satisfaction · Health status · Socioeconomic status

Electronic supplementary material The online version of this article (doi:10.1007/s40615-014-0067-6) contains supplementary material, which is available to authorized users.

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Introduction

The military health care system is a health equity system that grants equal access and comprehensive health care benefits to a diverse population of beneficiaries. Equity in health means that there is an equal opportunity to be healthy for all populations; whereby, resources are distributed and processes and policies are designed to equalize the health outcomes of disadvantaged groups with more advantaged groups [1]. Not only do members enjoy equal access to prevention and treatment services but also the standards of care are the same for all

BLM Protests have not contributed to COVID-19 Cases

NBER WORKING PAPER SERIES

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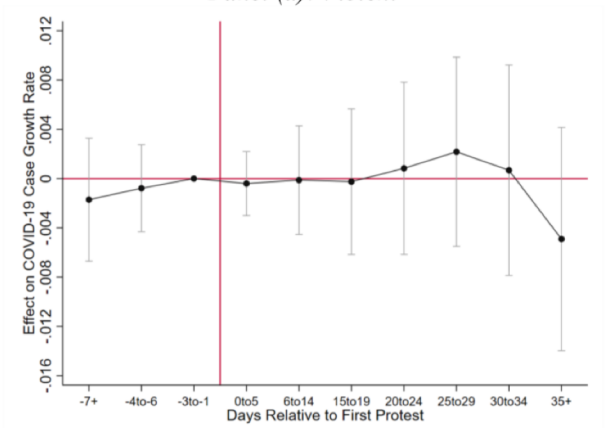
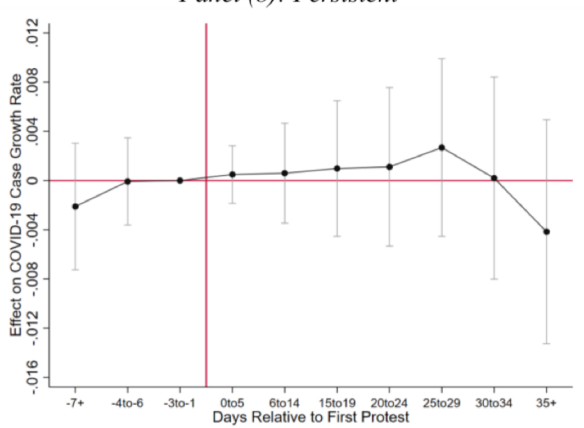
NATIONAL BUREAU OF ECONOMIC RESEARCH
1050 Massachusetts Avenue
Cambridge, MA 02138
June 2020

Appendix Figure 8. Event-Study Analysis of Urban Protests on COVID-19 Case Growth Rate, by Characteristics of Protest

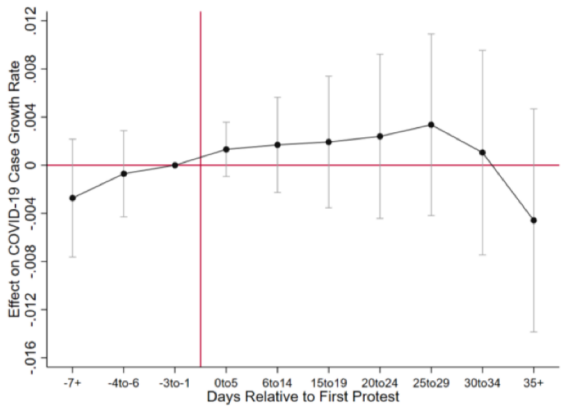
Panel (a): Violent



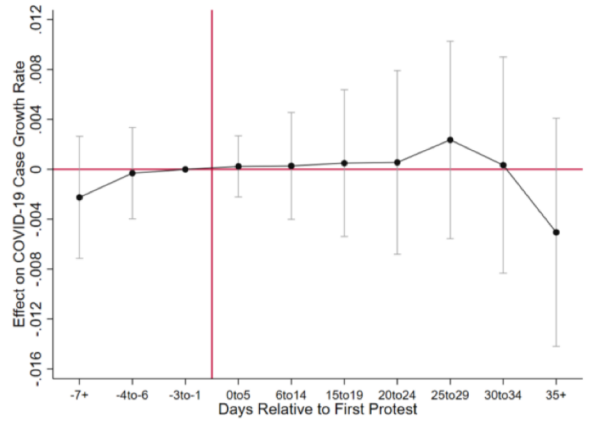
Panel (b): Persistent



Panel (c): Large Protest



Panel (d): Curfew



Greg Millett

Greg.Millett@amfAR.org

DASHBOARD

Race & COVID data

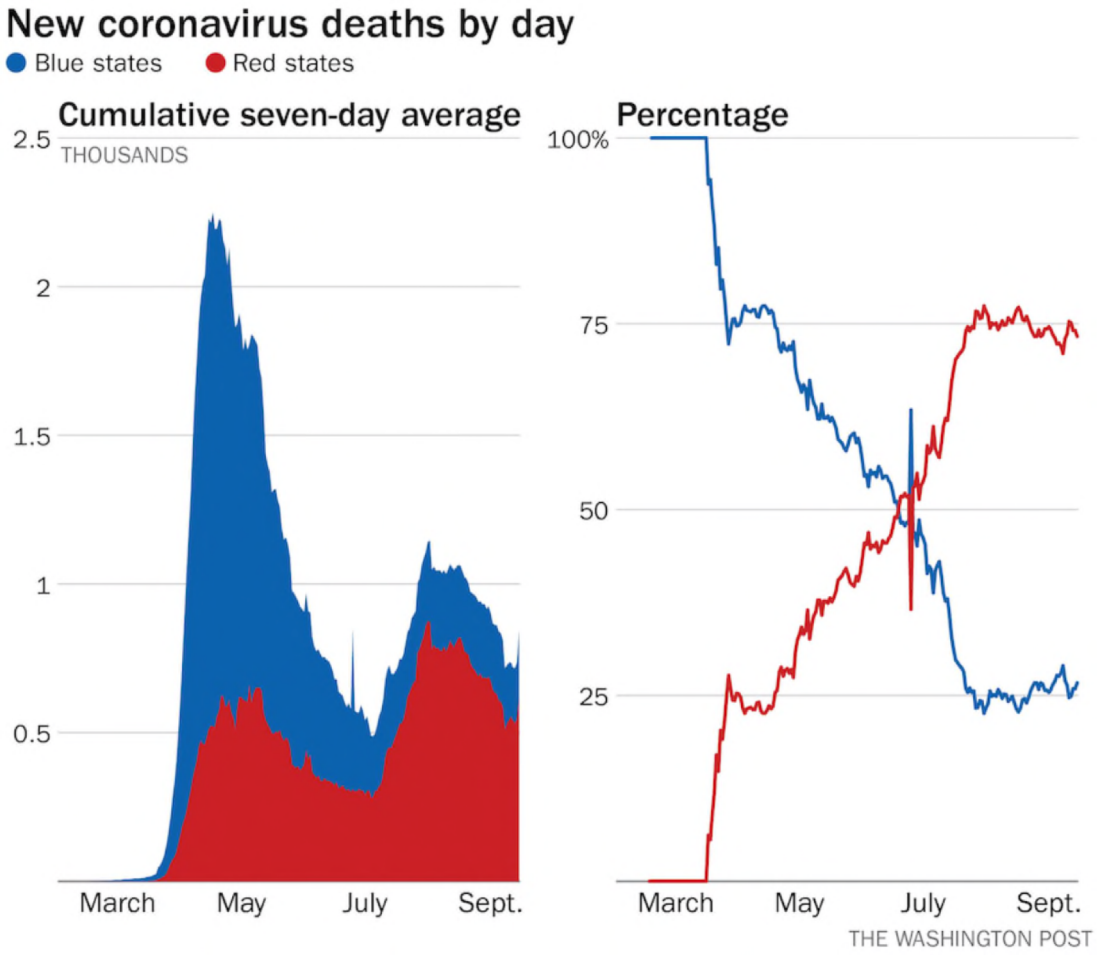
https://ehe.amfar.org/inequity/

(Photo: Mario Tama; Artist: Pony Wave)

Extra Slides

Administration policies that have contributed to the COVID-19 crisis

- Detention centers
- Undermining insurance access– not extending enrollment for exchanges
- Opening economy too early
- Non-scientific school guidance
- Politicizing the science (refusing to wear masks or to social distance)



Disparities in Incidence of COVID-19 Among Underrepresented Racial/Ethnic Groups in Counties Identified as Hotspots During June 5–18, 2020 — 22 States, February–June 2020

Jazmyn T. Moore, MSc, MPH[1]; Jessica N. Ricaldi, MD, PhD[1]; Charles E. Rose, PhD[1]; Jennifer Fuld, PhD[1]; Monica Parise, MD[1]; Gloria J. Kang, PhD[1]; Anne K. Driscoll, PhD[1]; Tina Norris, PhD[1]; Nana Wilson, PhD[1]; Gabriel Rainisch, MPH[1]; Eduardo Valverde, DrPH[1]; Vladislav Beresovsky, PhD[1]; Christine Agnew Brune, PhD[1]; Nadia L. Oussayef, JD[1]; Dale A. Rose, PhD[1]; Laura E. Adams, DVM[1]; Sindoos Awel[1]; Julie Villanueva, PhD[1]; Dana Meaney-Delman, MD[1]; Margaret A. Honein, PhD[1]; COVID-19 State, Tribal, Local, and Territorial Response Team.

On August 14, 2020, this report was posted as an MMWR *Early Release on the* MMWR *website (https://www.cdc.gov/mmwr).*

During January 1, 2020–August 10, 2020, an estimated 5 million cases of coronavirus disease 2019 (COVID-19) were reported in the United States.* Published state and national data indicate that persons of color might be more likely to become infected with SARS-CoV-2, the virus that causes COVID-19, experience more severe COVID-19–associated illness, including that requiring hospitalization, and have higher risk for death from COVID-19 (*1–5*). CDC examined county-level disparities in COVID-19 cases among underrepresented racial/ethnic groups in counties identified as hotspots, which are defined using algorithmic thresholds related to the number of new cases and the changes in incidence.† Disparities were defined as difference of ≥5% between the proportion of cases and the proportion of the population or a ratio ≥1.5 for the proportion of cases to the proportion of the population for underrepresented racial/ethnic groups in each county. During June 5–18, 205 counties in 33 states were identified as hotspots; among these counties, race was reported for ≥50% of cumulative cases in 79 (38.5%) counties in 22 states; 96.2% of these counties had disparities in COVID-19 cases in one or more underrepresented racial/ethnic groups. Hispanic/Latino (Hispanic) persons were the largest group by population size (3.5 million persons) living in hotspot counties where a disproportionate number of cases among that group was identified, followed by black/African American (black) persons (2 million), American Indian/Alaska Native (AI/AN) persons (61,000), Asian persons (36,000), and Native Hawaiian/other Pacific Islander (NHPI) persons (31,000). Examining county-level data disaggregated by race/ethnicity can help identify health disparities in COVID-19 cases and inform strategies for preventing and slowing SARS-CoV-2 transmission. More complete race/ethnicity data are needed to fully inform public health decision-making. Addressing the pandemic's disproportionate incidence of COVID-19 in communities of color can reduce the community-wide impact of COVID-19 and improve health outcomes.

This analysis used cumulative county-level data during February–June 2020, reported to CDC by jurisdictions or extracted from state and county websites and disaggregated by race/ethnicity. Case counts, which included both probable and laboratory-confirmed cases, were cross-referenced with counts from the HHS Protect database (https://protect-public.hhs.gov/). Counties missing race data for more than half of reported cases (126) were excluded from the analysis.§ The proportion of the population for each county by race/ethnicity was calculated using data obtained from CDC WONDER (*6*). For each underrepresented racial/ethnic group, disparities were defined as a difference of ≥5% between the proportion of cases and the proportion of the population consisting of that group or a ratio of ≥1.5 for the proportion of cases to the proportion of the population in that racial/ethnic group. The county-level differences and ratios between proportion of cases and the proportion of population were used as a base for a simulation accounting for missing data using different assumptions of racial/ethnic distribution of cases with unknown race/ethnicity. An intercept-only logistic regression model was estimated for each race/ethnicity category and county to obtain the intercept regression coefficient and standard error. The simulation used the logistic regression-estimated coefficient and standard error to produce an estimated mean and confidence interval (CI) for the percentage difference between and ratio of proportions of cases and population. This simulation was done for each racial/ethnic group within each county. The lower bound of the CI was used to identify counties with disparities (as defined by percentage differences or ratio). The mean of the estimated differences and mean of the estimated ratios were calculated

* https://www.cdc.gov/coronavirus/2019-ncov/cases-in-us.html.

† Hotspot counties are defined as those meeting all of the following baseline criteria: 1) >100 new COVID-19 cases in the most recent 7 days, 2) an increase in the most recent 7-day COVID-19 incidence over the preceding 7-day incidence, 3) a decrease of <60% or an increase in the most recent 3-day COVID-19 incidence over the preceding 3-day incidence, and 4) the ratio of 7-day incidence to 30-day incidence exceeds 0.31. In addition, hotspots must have met at least one of the following criteria: 1) >60% change in the most recent 3-day COVID-19 incidence, or 2) >60% change in the most recent 7-day incidence.

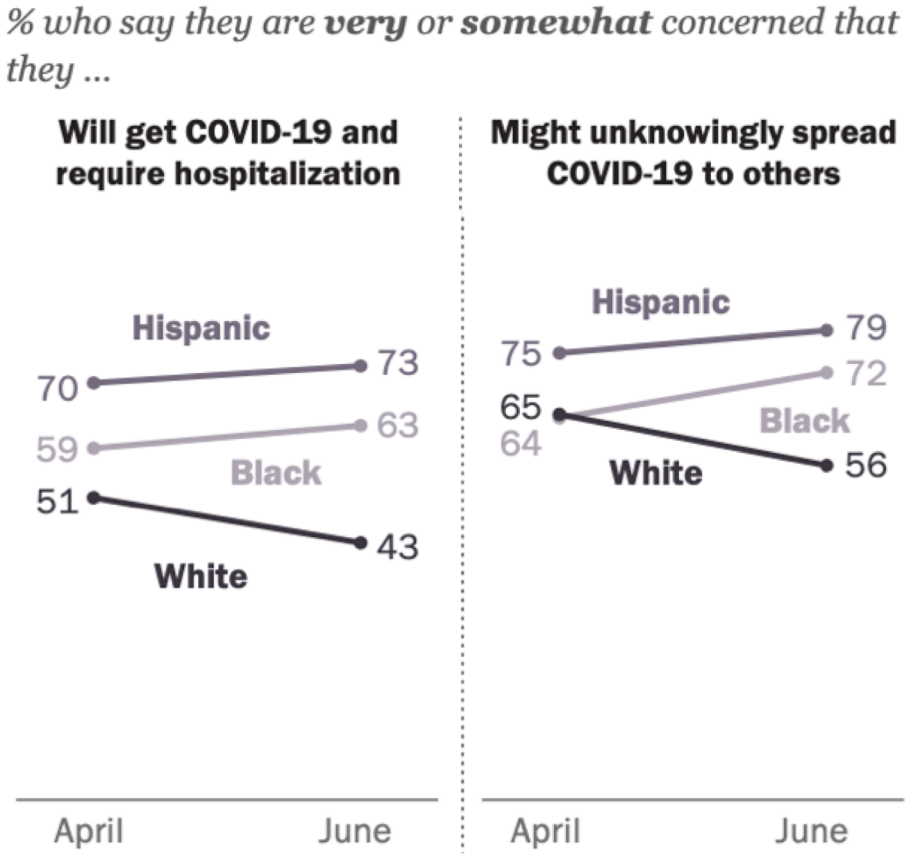
§ Data from 10 of the 126 excluded counties were excluded due to pending data questions.

TABLE 3. Proportion of cumulative COVID-19 cases compared with proportion of population in 79 counties identified as hotspots during June 5–18, 2020 with racial/ethnic disparities* — 22 states February–June 2020

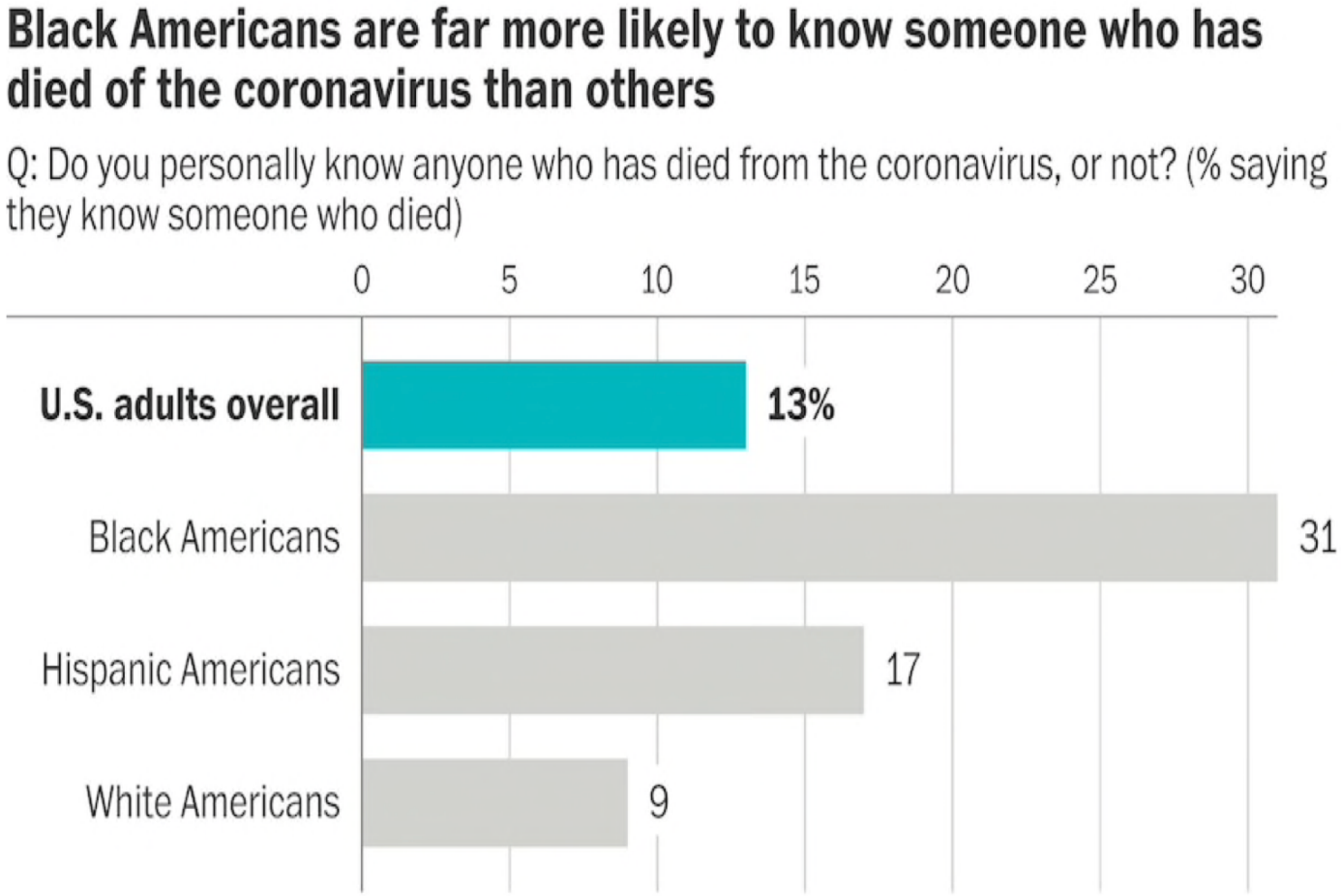
Return

Racial/Ethnic group	Mean of estimated differences, † % (range)	Mean of estimated ratios of proportion of cases to proportion of population§ (range)
Hispanic/Latino	30.2 (8.0–68.2)	4.4 (1.2–14.6)
Black/African American	14.5 (2.3–31.7)	2.3 (1.2–7.0)
American Indian/Alaska Native	39.3 (16.4–57.9)	4.2 (1.9–6.4)
Asian	4.7 (2.7–6.8)	2.9 (2.0–4.7)
Native Hawaiian/Other Pacific Islander	4.5 (0.1–31.5)	8.5 (2.7–18.4)

COVID-19 Concerns Differ By Race/ Ethnicity



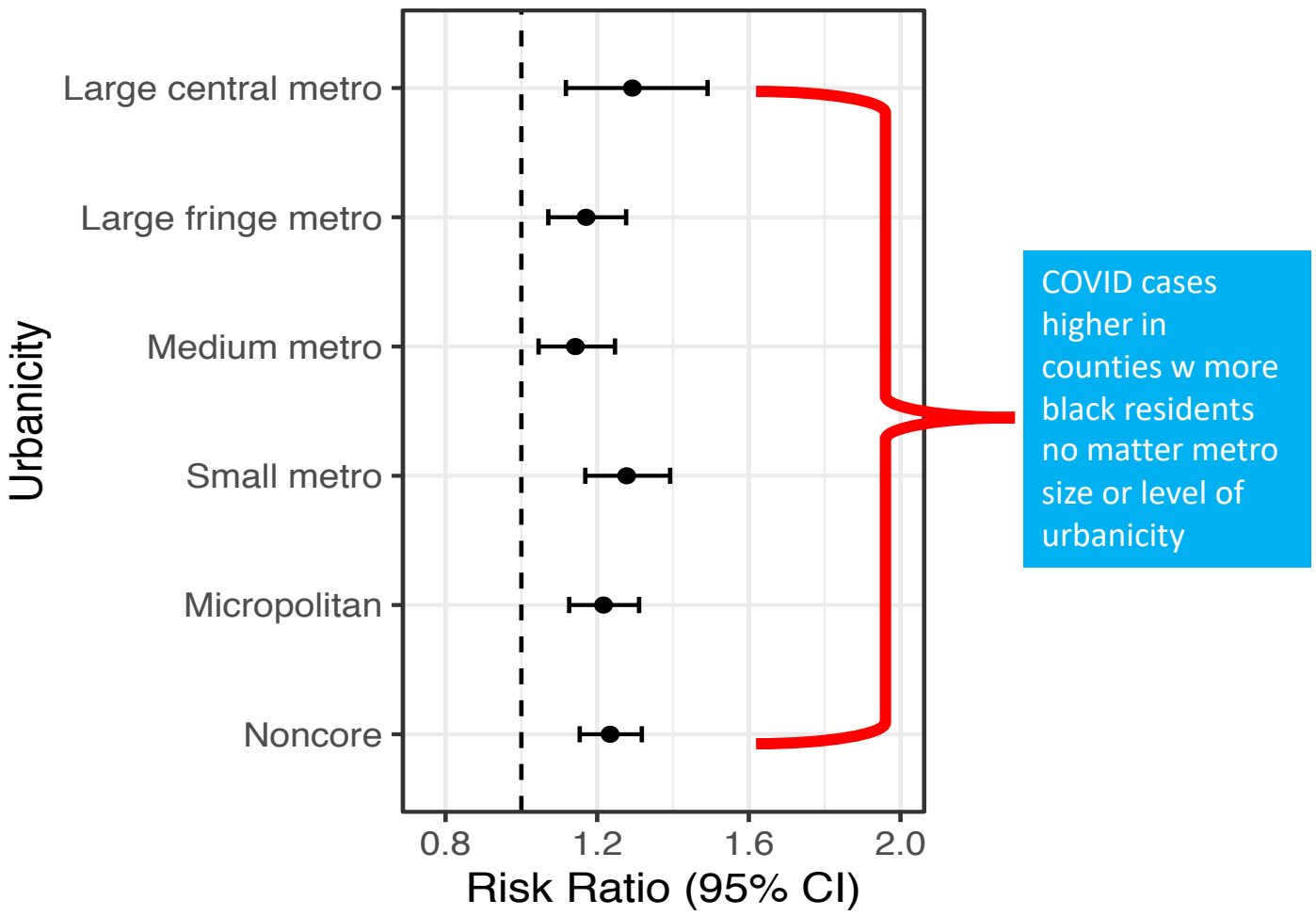
(Pew Poll, June 2020)



(Washington Post-Ipsos Poll, June 2020)

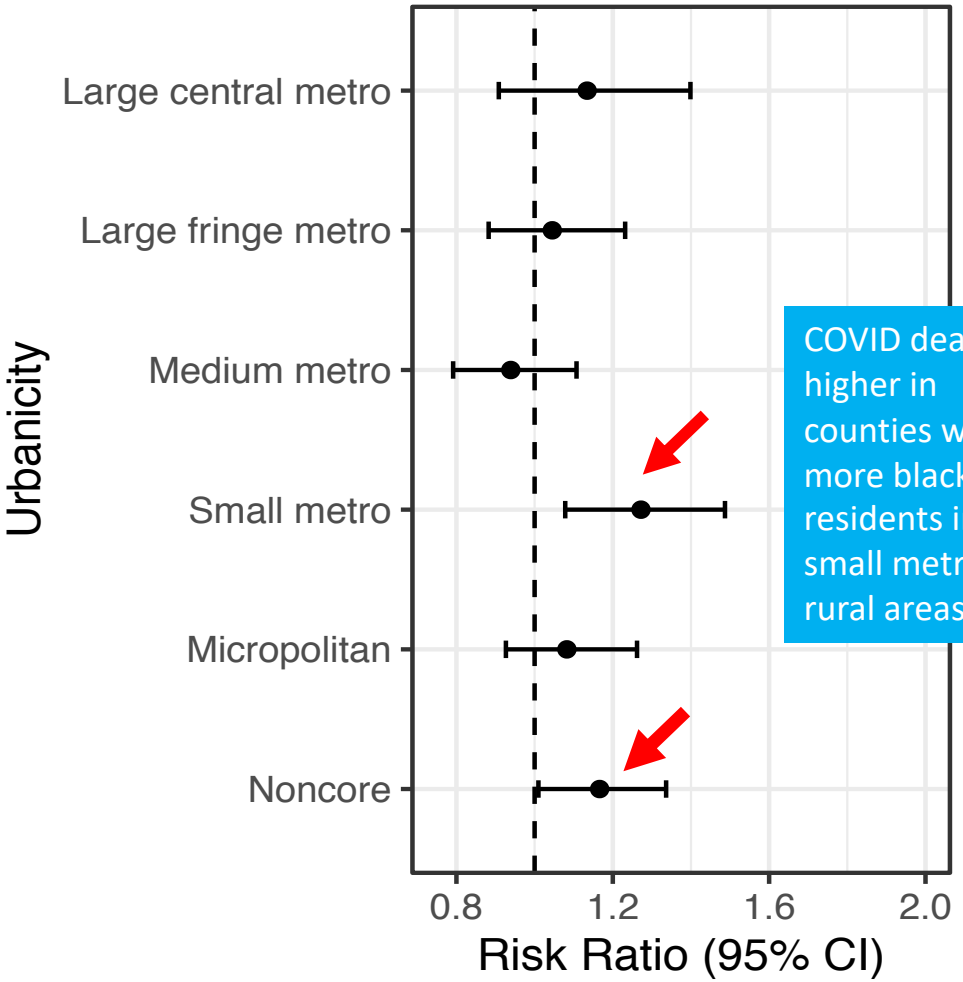
Urbanicity and COVID-19 Cases & Deaths in U.S. Counties with Greater than Average Black Residents

COVID-19 cases



COVID cases higher in counties w more black residents no matter metro size or level of urbanicity

COVID-19 deaths



COVID deaths higher in counties w more black residents in small metro and rural areas

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MAKING AIDS HISTORY