Briefing Before the United States Congress
House Committee on Energy and Commerce
Subcommittee on Health

The Injustice of *Inequitable* Disease

Addressing Racial Health Inequities amid the COVID-19 Pandemic

Rhea W Boyd MD, MPH
Pediatrician and Child and Community Health Advocate
June 17, 2020

Introduction

Alarming evidence from across the country reveals striking racial health inequities in the population-level distribution of infections and deaths related to the US COVID-19 pandemic. Overall, these data reveal a pattern that while disturbing, reflect broader, chronic racial health inequities in the US. Because of that, for some, these findings may be familiar and perhaps even "unsurprising," as some have described them. But it is critical to note that although these patterns are familiar, they are never normal and should not exist. In that regard, the conclusion of this testimony will highlight important ways to address and hopefully end these harrowing inequities.

In addition, while most of the available data on health inequities is captured for adults (individuals greater than 18 years of age), they reflect the unequal burdens borne by Black American, Latinx, Indigenous, and Native Hawaiian/Pacific Islander households and families, that will both directly and indirectly impact the health and well-being of children and youth.

National Racial Health Inequities

The CDC data available by race and ethnicity reveal stark inequities for Black American, Non-Hispanic Asian, and Latinx populations who have disproportionately higher rates of death related to COVID-19 than their proportion of the general population.

Updated June 10, 2020

Jurisdiction of Residence	Indicator	Non-Hispanic White	Non-Hispanic Black or African American	Non-Hispanic American Indian or Alaska Native[2]	Non-Hispanic Asian[3]	Hispanic or Latino	Other[4]
United States	Distribution of COVID-19 deaths (%)	53.3	23.0	0.6	5.2	16.5	1.5
	Weighted distribution of population (%)	42.2	17.5	0.3	10.9	27.3	1.9
Population Size		60%	13%	1.3%	7%	18%	

Source: Centers for Disease Control and Prevention, As of June 10, 2020
Additional Graphics: RW Boyd

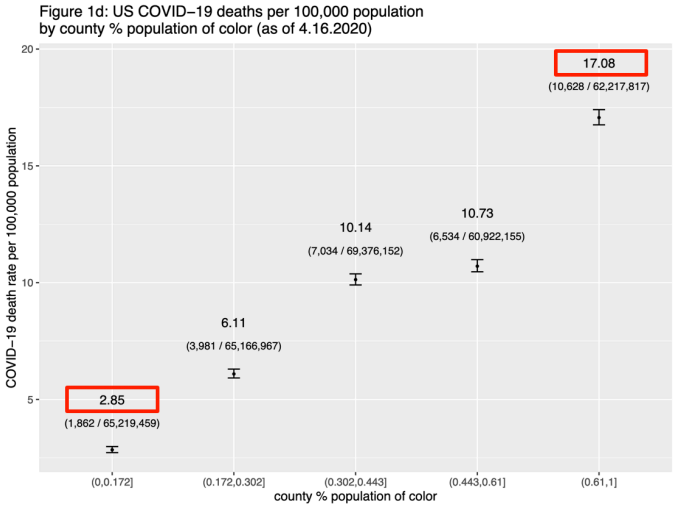
National CDC data available by both race/ethnicity and age reveal Black American and Latinx infants, children, adolescents and young adults also account for a disproportionate number of COVID-19 related deaths.

Updated June 10, 2020

Age group	Total COVID-19 Deaths	Non-Hispanic White	Non-Hispanic Black or African American	Non-Hispanic American Indian or Alaska Native[2]	Non-Hispanic Asian[3]	Non-Hispanic Native Hawaiian and Other Pacific Islander	Non-Hispanic More than One Race	Hispanic or Latino	Unknown[4]
All Ages	95,608	50,935	21,993	543	4,962	71	232	15,751	1,121
Under 1 year	5	2	1	0	0	0	0	2	0
1–4 years	3	1	1	0	0	0	0	1	0
5–14 years	13	2	7	0	1	0	0	3	0
15–24 years	116	23	38	3	3	1	2	44	2

Source: Centers for Disease Control and Prevention, As of June 10, 2020
Additional Graphics: RW Boyd

National county level data reveal the COVID-19 death rate is six times higher for those who live in areas that are predominantly non-white as compared to those who reside in areas that are predominantly white.[1] This is particularly true for majority Black counties, as was reported in the *Washington Post*.[2]



Source: Chen JT, Krieger N. April 2020.
Additional Graphics: RW Boyd

Inaccurate and hateful rhetoric referring to COVID-19 has contributed to a spike in Anti-Asian violence and hate crimes across the US. While not amounting to direct infections, these acts of violence nonetheless affect the physical and mental health of populations of Asian descent during this pandemic.

State-level Racial Health Inequities

Looking closer at the states reporting the largest racial health inequities, the findings are most stark for Black American populations.

Overall, Black Americans have the highest mortality rates and most widespread incidence of disproportionate death.

As of June 10th, according to the APM Research Lab, estimates indicate that Black Americans have, on average, a COVID19-related mortality rate that is 2.3 times the rate for White and Asian populations and 2.2 times the rate of Latinx populations.

The inequity in mortality rates between White and Black populations is the largest in the District of Columbia (6 times as high), Kansas (5 times), Wisconsin (5 times), Michigan (4 times), Missouri (4 times), New York (3 times) and South Carolina (3 times).[3]

Because of this dramatic and startling inequity in mortality rates, in total, 1 out of every 1625 Black Americans in the general US population has now died from COVID-19.[3]

Looking further at the evidence compiled by the APM Research Lab:

"Compared to their representation in the population:

- **Indigenous Americans** are dying above their population share in Mississippi, Arizona and most dramatically, New Mexico.
- **Asian Americans** are dying above their population share in Iowa and Nevada.
- **Black Americans** are dying above their population share in 30 states and most dramatically, in Washington, D.C.
- **Latino Americans** are dying above their population share in Tennessee, Illinois, Wisconsin and New York.
- **White Americans** are dying above their population share in Delaware, Washington, Texas, Massachusetts, Maine, Idaho, Connecticut, Oklahoma and Rhode Island.
- Data for **Pacific Islander Americans** is hampered by poor reporting; however, they are dying at rates roughly equivalent to their population share in the two states that have experienced 10 or more deaths: California and Washington."[3]

- Navajo Nation makes up a disproportionate number of cases within the Indian Health Service.[4]

Taken together, it is important to explore the extent to which the racial health differences emerging amid the COVID-19 pandemic reflect a disparity or an inequity.

Definitions

As a term, "health disparities" are generally defined as differences in health outcomes by population or group affiliation. "Health inequities" are population-level differences in health outcomes that are preventable, unfair, unnecessary, and unjust.[5] This report will detail why the differences in health outcomes emerging amid the COVID-19 pandemic by racial and ethnic groups reflect health *inequities*, rather than simple disparities.

Health inequities arise when populations are *made vulnerable* to illness or disease by practices, policies, laws, or norms that inequitably distribute protections to prevent people from getting sick and inequitably distribute supports to ameliorate sickness and address the social, economic and physical consequences of being ill.

The racial health inequities emerging during the COVID-19 pandemic expose four important inequities, all rooted in forms of racism, that exist and persist across the US and within the US healthcare system, in particular. These inequities include: (1) the inequitable population-level risks of COVID-19 exposure, (2) the inequitable population-level risks of COVID-19 infection, complications and deaths, (3) the inequitable population-level distribution of protections to prevent illness and (4) the inequitable population-level distribution of supports to treat illness and its attendant social, economic, and physical effects.

Population-level risk differs from individual conceptions of risk. Rather than focusing on individual "risky behaviors" that could potentially contribute to illness or disease, population-level risk highlights the systemic factors that systematically disadvantage certain racial and ethnic groups over others.

There are 3 predominant forms of racism - interpersonal, internalized, and structural. This report will focus on structural racism, as it has the most profound impacts on health.

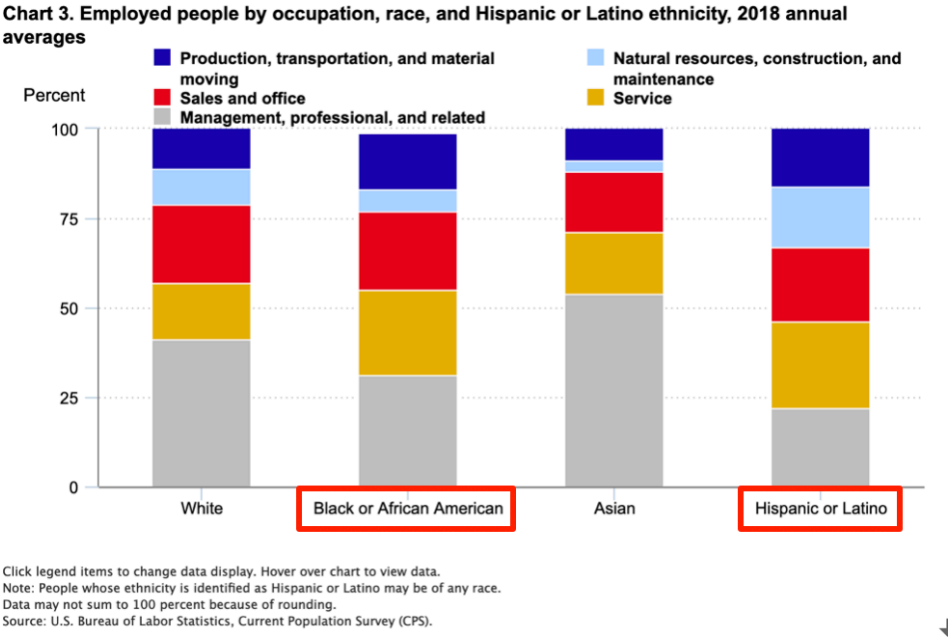
Structural racism is defined as differential access to goods, services, and opportunities within society by race. It refers to how racism is codified in laws and policies and embedded in practices and norms to confer advantages to racial groups deemed superior and disadvantages to

those deemed inferior.[6] Or as Pediatrician and Public Health Expert Dr. Camara Jones puts it, structural racism "often manifests as inherited disadvantage."[7]

The Inequitable Population-Level Risk of COVID-19 Exposure

COVID19 is primarily transmitted through respiratory droplets that can infect humans directly, from an affected human, or indirectly, through contaminated surfaces. Exposure to affected humans or potentially contaminated surfaces is higher for essential workers, those who lack paid sick leave, and those who live, work, learn or play in close proximity to others.

Across the US, Black American and Latinx populations, particularly women, disproportionately work in industries that require sustained public contact, including the service, hospitality, transportation, and home health fields.[8] Thus even as localities issued shelter-in place orders or advised physical distancing to limit COVID-19 exposure and spread, Black American and Latinx populations remained vulnerable to COVID-19, by nature of their work.



Source: Bureau of Labor Statistics. 2018.
Additional Graphics: RW Boyd

These labor patterns and the abundance of Black American and Latinx populations among essential workers also reflect broader forms of segregation and discrimination within the US workforce, as these fields also tend to have high worker turnover, limited worker benefits, and lower median wages.[9]

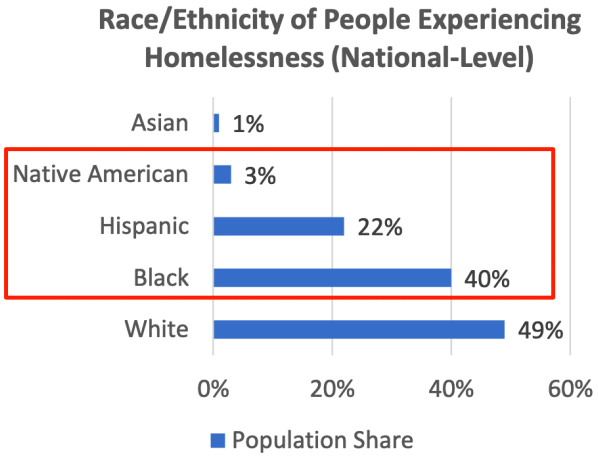
Regardless of their profession, Black American, Latinx, and Indigenous populations also have disproportionately less access to paid sick leave, garner the lowest median wages, and

predominantly live in states that fail to mandate critical worker protections like paid sick leave and living equitable wages.[10]

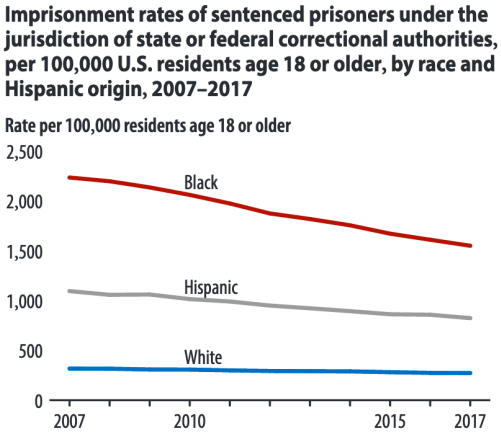
Given early national shortages of protective equipment, many essential workers also labored for weeks without adequate personal protective equipment that could have rendered their working conditions safer from COVID-19.

Legacies of residential segregation and suburbanization have also lead to Black American and Latinx populations disproportionately residing in multigenerational dwellings or dense urban areas where the proximity between people increases risks for COVID19 exposure.

Black American, Latinx, and Indigenous populations are also overrepresented among the homeless, the incarcerated, and detained populations in the US, which confines people in crowded facilities that also dramatically increase risks for COVID-19 exposure. Accordingly, 8 of the 10 largest clusters of COVID-19 infection have occurred in correctional facilities.[11,12]



Source: US Department of HUD. 2018.
Additional Graphics: RW Boyd



Source: Bureau of Justice Statistics. 2019.
Additional Graphics: RW Boyd

The Inequitable Population-Level Risk of COVID-19 Infection + Complications

COVID-19 infection and its complications, including death, is inequitably distributed among racial and ethnic populations in the US. Many have attributed this disproportionality to the higher rates of "underlying illness" or "poverty" that also plague communities of color. However, such simplifications mask the broader forms of racial inequality, driven by structural racism and discrimination in the US, that render populations of color vulnerable to disease and impoverish their communities inter-generationally.

Therefore, the preconditions that render certain racial and ethnic populations *vulnerable* to COVID19 are **not** simply summarized with terms like "underlying illness" or "poverty."

Instead they reveal **legacies** and *current* **practices** of racial exclusion, discrimination, disinvestment and violence that concentrate disadvantage, create adversity, shape population-level opportunities for health and provide conditions for disease.

Conflating the effects of racism with the effects of poverty on COVID19 inequities, also ignores how racial discrimination, exclusion and violence impacts racial and ethnic populations *independent* of their economic status.

Doing so, also inaccurately assumes that those who are disproportionately affected are poor.

Research shows that exposure to racism and experiences with discrimination harm health. For example, growing evidence links self-reported discrimination to preclinical indicators of disease including dysregulation of stress hormones like cortisol, inflammation, coronary artery calcification, allostatic load, and shorter telomere length.[13] Each of these factors contribute to cellular aging, toxic stress, chronic disease, and premature death.

In addition, residential segregation, a form of structural racism, decreases access to quality education and employment opportunities by race in the US, which in turn concentrates poverty within communities of color. Eliminating segregation, one study found, would "erase black-white differences in income, education, and unemployment."[14] Without such measures, the racial income and wealth gap in the US is alarming.

In 2016, for every dollar of income white households received, Latinx and Black households earned only 73 cents and 61cents, respectively.[15] And for every dollar of wealth white households have, Latinx and Black households have 7 and 6 pennies, respectively.[16]

Residential segregation, suburbanization and white flight, and local zoning ordinances also profoundly shape Black Americans disproportionate exposure to air pollution, which as a recent study found, may also increase their COVID-19 related mortality.[17]

The disproportionate burden of police violence, a form of structural racism within communities of color, particularly Black communities, also increases differential risks for underlying mental health impairments and diseases related to chronic stress.[18]

The Inequitable Distribution of COVID-19 Protections

Protections from infectious disease like COVID-19 are inequitably distributed in the US, leaving certain racial and ethnic groups more vulnerable to illness. For example, hand-washing is one of the most important ways to limit the spread of infectious disease. But racial population, not income, is the single greatest predictor of access to clean water in the US.[19]

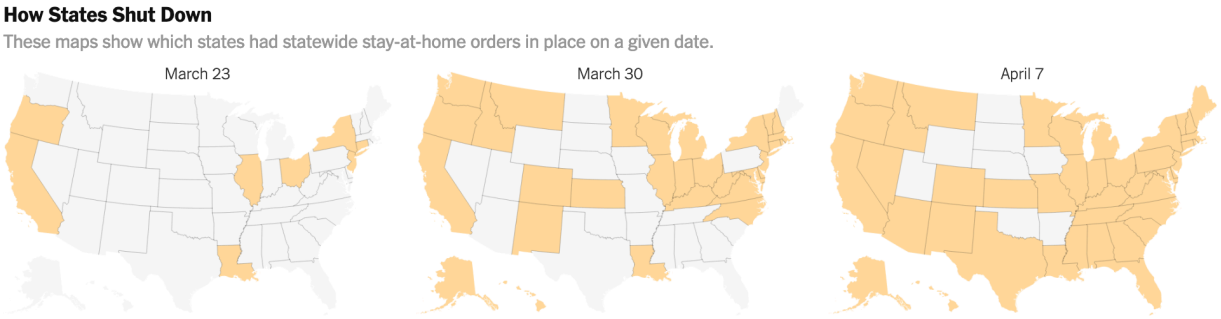
Race is the *strongest predictor* of water and sanitation access.

African American and Latinx populations are about *twice as likely* to lack access to clean water in their homes.

Native Americans are **19 times** more likely to lack access to clean water in their homes.

Thus, when considering how the distribution of clean water impacts exposure and infection risk, it becomes clear how structural racism, in this case operating through residential segregation and public divestment, shapes the distribution of COVID-19 in the US. In addition, disproportionately affected racial and ethnic groups may be more likely to live in settings in which effective isolation for affected individuals is simply not possible.

Populations like Black American, Latinx, and Indigenous households also disproportionately live in states that were slow to issue stay-at home orders and the first to re-open, despite the nearly assured risk, doing so, poses to those populations.[20]

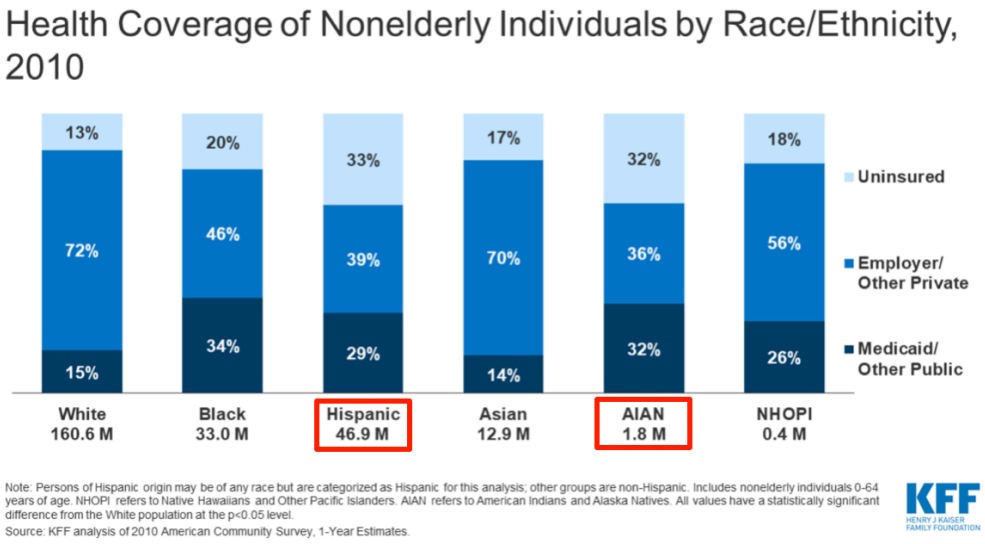


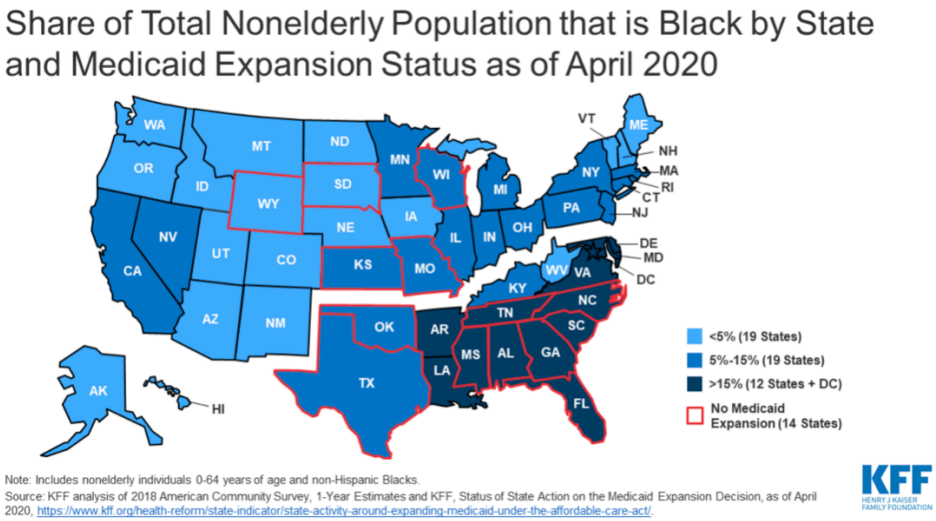
Source: The New York Times. 2019.
Additional Graphics: RW Boyd

The Inequitable Distribution of COVID-19 Supports

Supports to combat or buffer the effects of COVID-19 are inequitably distributed among racial and ethnic groups in the US. This inequity illustrates the prevailing gaps in access and barriers to dignified and equitable care that exist throughout the US.

Overall, data from the Kaiser Family Foundation reveal Latinx and Indigenous populations have the lowest rates of insurance coverage and Black Americans predominantly live in the 14 states that failed to expand Medicaid. Together, these factors significantly limit access to health care services and increase the risk of untreated, underlying illness among Black American, Latinx, and Indigenous populations in the US.





For those able to receive care, differential access to COVID-19 testing also impedes early diagnosis and treatment. For example, a recent study done in a large medical system in California revealed Black Americans were the least likely to be tested in the outpatient setting, which may have contributed to Black Americans higher rates of hospitalizations and requirements for ICU care in the state.[21]

In addition, common rationing algorithms utilized to inform the allocation of scarce healthcare resources during the pandemic, under-valued Black lives, rendering Black patients less eligible for life saving care.[22]

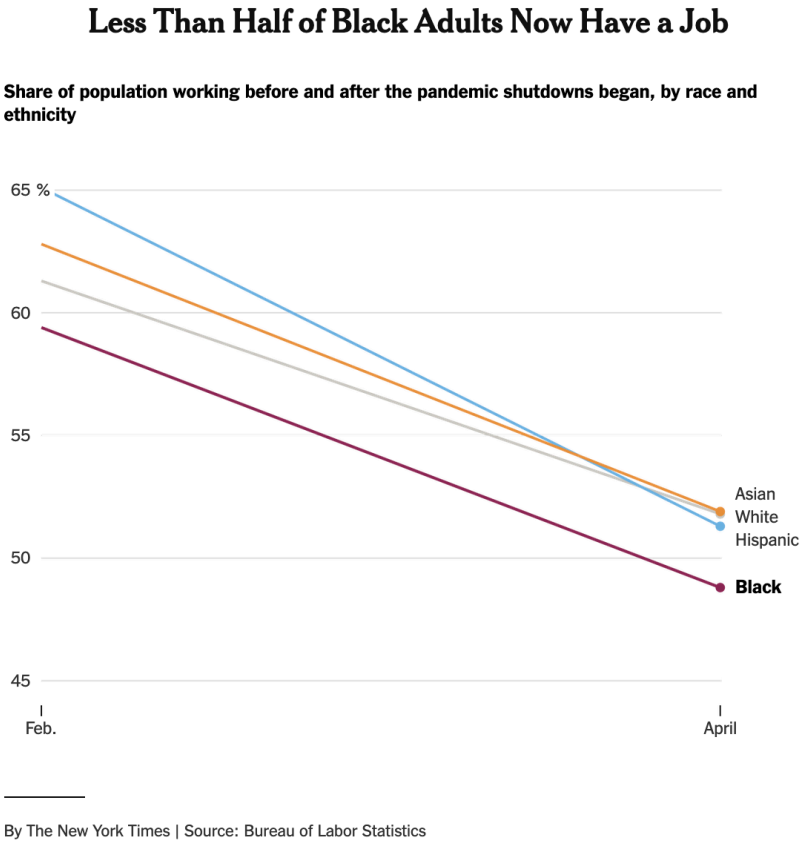
COVID-19 also disrupted months of primary care access for preventative services, including vaccinations and chronic care management, which increases risks for other communicable illness and may worsen chronic disease among populations already burdened by inadequate primary care access.

Black American, Indigenous, and Latinx populations suffer the highest rates of police harassment and violence, and selective policing of those groups during the pandemic, through disproportionate fines or arrests, may contribute to the physical, mental, and economic toll COVID-19 is already taking on these populations. Additionally, recent civil demonstrations decrying the abuses of policing and the police killings of George Floyd, Breonna Taylor, Tony McDade, and Rayshard Brooks in particular, have been met with undue and unsafe police use of force that also increases the risk of COVID-19 exposure and spread. This includes the use of tear gas by police, which in addition to its other harms, also increases the likelihood protestors cough, sneeze, or rub their eyes and mouth - potentially exposing themselves and others to COVID-19.

The economic toll of COVID-19 has also been devastating for Black Americans. While the national unemployment rate has decreased, it has risen 0.1% for Black Americans since April

2020 and is now 16.8%. This tracks with evidence indicating Black Americans have long held the highest unemployment rates in the nation.[23]

And since the pandemic began, more than half of Black adults have lost their job.



Conclusion

The injustice of inequitable disease is that it is preventable, unfair, unnecessary and unjust. As such, racial health inequities in COVID-19 reveal the injustice of racism that prevails in American society and that injustice is making people sick. More can and must be done. And the need for action is urgent.

We must move to abolish racism, from every institution, every practice, every policy and every social norm in which it operates (and too often hides). The future health and well-being of our children and their children will be measured by how well we succeed in this.

The Path Forward: Eliminating Racial Health Inequities

Mandate reporting of COVID-19 Inequities by Race and Ethnicity

Lags in reporting and differences in reporting metrics by state and localities make following and addressing racial health inequities in real time difficult, if not impossible. An equitable response to racial health inequities requires allocating resources based on need. Without accurate, up to date data, the distribution of need is unclear and the populations most affected may not be adequately prioritized.

Institute a Universal Healthcare System

The United States stands alone among developed nations in failing to ensure access to healthcare for each and every citizen. This failure portends future health inequities for all those excluded from the employer-based insurance pools and who lack eligibility for state-sponsored insurance. The prohibitively high costs of health care in the United States means buying into the system, out of pocket, is also unaffordable at the median salary of most Americans.

To chart a path to universal healthcare, the Federal government could begin by expanding eligibility for Medicaid and Medicare programs.[24]

Universal COVID-19 Testing

To adequately test, trace, and treat affected populations, the United States must drastically increase its testing capacity such that every person can be tested, as often as necessary, to limit disease spread. Broad testing capacity could enable testing of students prior to returning to school and workers prior to entering the workplace, to effectively limit potential exposures and clusters of infections.

In addition, such testing expansions should begin in populations disproportionately affected, like counties that have predominantly Black, Latinx or Indigenous populations. Expanded testing capacity should also prioritize those confined in correctional facilities, homeless shelters and encampments, detention facilities, and nursing homes.

Mandate Universal Workplace Protections

The United States should mandate paid sick leave, hazard pay, and access to protective equipment for all workers. These are essential protections that safeguard the US workforce and the US economy by enabling workers to continue vital supply chains and services during pandemics, natural disasters, and other mass public health crises.

Workers with chronic illness should also be able to stay home, to prevent exposure to infectious disease, without the threat or fear of losing their job. For those who work in industries that lack options for virtual labor, they should be eligible for additional government support should they be unable to work.

Expand Federal and State Relief and Continue the Programs Indefinitely

The racial income and wealth gap outlined in this report is enormous and the chasm is being exacerbated by the current economic downturn related to COVID-19. One time payments and limited access to unemployment benefits that excludes certain professions and students grossly underserves the growing economic needs of populations additionally burdened by the economic toll of racism in the US.[25]

Initial approaches might consider raising the federal minimum wage, which has been stagnate at $7.25 since 2009.[26]

Expand Access to Telehealth Services and Provide Insurance Reimbursement for the Online Visits

As healthcare systems balance their capacity to provide crisis and preventative care, Telehealth platforms have offered the possibility of preserving clinical resources and expanding remote access for routine and preventative care. But access to Telehealth services are also inequitably distributed and dependent upon broadband internet access, reliable connections, data plans and digital literacy.

Expanding access to Telehealth services, affordable and data-equipped devices, and affordable and free internet can ensure these new modes of healthcare are accessible to populations regardless of income or regionality.[27]

Expand Access to Housing and Housing Supports

Moratoriums on evictions like those temporarily enacted in California and expansions of housing supports will decrease the numbers of populations confined in crowded conditions.

Address the Needs of Incarcerated Populations

According to a New England Journal of Medicine Perspective's piece entitled, *Flattening the Curve for Incarcerated Populations - COVID-19 in Jails and Prisons*, solutions include "decarcerating," or releasing, as many people as possible, focusing on those who are least likely to commit additional crimes, but also on the elderly and infirm; urging police and courts to immediately suspend arresting and sentencing people, as much as possible, for low-level crimes

and misdemeanors; isolating and separating incarcerated persons who are infected and those who are under investigation for possible infection from the general prison population; hospitalizing those who are seriously ill; and identifying correctional staff and health care providers who became infected early and have recovered, who can help with custodial and care efforts once they have been cleared, since they may have some degree of immunity and severe staff shortages are likely."[28]

Expand access to SNAP, WIC and Government Nutritional Programs

The closure of schools and child care facilities that were sites of vital federal nutrition programs has left millions of Americans at increased risk of food insecurity. Prior too the COVID-19 pandemic, 1 in 5 children in the US lived below the federal poverty line and 1 in 6 were food insecure. Permanently expanding eligibility and access to government nutritional programs can decrease rates of food insecurity that pre-date the COVID-19 pandemic.[29]

[1] Chen JT, Krieger N. Revealing the unequal burden of COVID-19 by income, race/ethnicity, and household crowding: US county vs. ZIP code analyses. Harvard Center for Population and Development Studies. April 2020.

[2] Thiebault R, Tran AB, Williams V. Coronavirus is infecting and killing Black Americans at an alarming rate. Washington Post. April 7, 2020.

[3] APM Research Lab. The Color of Coronavirus: COVID-19 deaths by race and ethnicity in the U.S. Data updated as of June 10, 2020. Accessible via: https://www.apmresearchlab.org/covid/deaths-by-race

[4] Indian Health Service. COVID-19 Data. Accessible via: https://www.ihs.gov/coronavirus/

[5] Whitehead, M. The concepts and principles of equity in health. 1992.

[6] Williams DR, Lawrence JA, Davis BA. Racism and Health: Evidence and Needed Research. *Annu Rev Public Health*. 2019;40:105−125. doi:10.1146/annurev-publhealth-040218-043750

[7] Jones CP. Levels of racism: a theoretic framework and a gardener's tale. *Am J Public Health*. 2000;90(8):1212−1215. doi:10.2105/ajph.90.8.1212

[8] Bureau of Labor Statistics. 2018. Accesible via: https://www.bls.gov/opub/reports/race-and-ethnicity/2018/home.htm

[9] Boyd RW. The Case for Desegregation. The Lancet. 2019.

[10] Desilver D. As coronavirus spreads, which US workers have paid sick live and white don't? Pew Research Center. March 12, 2020. Accessible at: https://www.pewresearch.org/fact-tank/2020/03/12/as-coronavirus-spreads-which-u-s-workers-have-paid-sick-leave-and-which-dont/

[11] NYTimes. Coronavirus in the US: Latest Map and Case Count. Updated as of June 14, 2020. Accessible via: https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html

[12] Equal Justice Initiative. COVID-19's Impact on People in Prison. Updated 5/21/20. Accessible via: https://eji.org/news/covid-19s-impact-on-people-in-prison/

[13] Lewis TT, Cogburn CD, Williams DR. 2015. Self-reported experiences of discrimination and health: scientific advances, ongoing controversies, and emerging issues. *Annu. Rev. Clin. Psychol.* 11: 407–40

[14] Cutler DM, Glaeser EL. 1997. Are ghettos good or bad? *Q. J. Econ.* 112: 827–72

[15] Semega JL, Fontenot KR, Kollar MA. 2017. *Income and poverty in the United States: 2016*. Curr. Popul. Rep. P60–259, US Census Bur., Washington, DC. https://www.census.gov/content/dam/Census/library/publications/2017/demo/P60-259.pdf

[16] US Census Bur. 2014. Wealth, asset ownership, and debt of household detailed tables: 2011. *US Census Bureau*. https://www.census.gov/data/tables/2011/demo/wealth/wealth-asset-ownership.html

[17] Xiao et al. Exposure to Air Pollution and COVID-19 mortality in the US. Harvard TH Chan School of Public Health. April 2020. Accessible via: https://projects.iq.harvard.edu/files/covid-pm/files/pm_and_covid_mortality.pdf

[18] Sewell, AA. The Illness Associations of Police Violence: Differential Relationships by Ethnoracial Composition. Sociological Forum. August 2017. https://doi.org/10.1111/socf.12361

[19] Dig Deep and US Water Alliance. Closing the Water Acess Gap in the United States: A National Action Plan. Nov 2019. Accessible via: http://closethewatergap.org/wp-content/uploads/2020/03/Dig-Deep_Closing-the-Water-Access-Gap-in-the-United-States_DIGITAL_compressed.pdf

[20] NYTimes. See how all 50 states are reopening. Updated as of June 12, 2020. Accessible via: https://www.nytimes.com/interactive/2020/us/states-reopen-map-coronavirus.html

[21] Azar K. et al. Disparities in Outcomes Aong CVOID-19 Patients in a large health care system in California. Health Affairs. Accessible via: https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2020.00598

[22] Chomillo N et al The Harm of Colorblind allocation of scarce resources. Health Affairs. Accessible via: https://www.healthaffairs.org/do/10.1377/hblog20200428.904804/full/

[23] NYTimes. Black Workers Already Lagging Face Big Economic Risks. June 2020. Accessible via: https://www.nytimes.com/2020/06/01/business/economy/black-workers-inequality-economic-risks.html

[24] Hardeman RH et al. Stolen Beraths. NEJM. June 6, 2020. Accessible via: https://www.nejm.org/doi/full/10.1056/NEJMp2021072

[25] NYTimes. FAQ oon Stimulus Checks, Unemployment and the Coronavirus Plan. Accessible via: https://www.nytimes.com/article/coronavirus-stimulus-package-questions-answers.html

[26] US Department of Labor. History of Federal Minimum Wage Rates Under the Fair Labor Standards Act, 1938-2009. Accessible via: https://www.dol.gov/agencies/whd/minimum-wage/history/chart

[27] Velasquez D and Mehrotra A. Ensuring the Growth of Telehealth During COVID-19 Does Not Exacerbate Disparities In Care. Health Affairs. May 8, 2020. Accessible via: https://www.healthaffairs.org/do/10.1377/hblog20200505.591306/full/

[28] Akiyama MJ et al. NEJM. May 28, 2020. Accessible via: https://www.nejm.org/doi/full/10.1056/NEJMp2005687

[29] Dunn CG et al. Feeding Low-Income Children during the COVID-19 pandemic. NEJM. April 30, 2020. Accessible via: https://www.nejm.org/doi/full/10.1056/NEJMp2005638