

Combating the Spread of COVID-19 Includes Strategies that Aim to Dismantle Structural Racism

Andre M. Perry
Fellow, Metropolitan Policy Program, The Brookings Institution

Testimony Submitted to U.S. House of Representatives Committee on Financial Services Task Force on Artificial Intelligence

“Exposure Notification and Contact Tracing: How AI Helps Localities Reopen Safely and Researchers Find a Cure”

July 8, 2020

Chairman Foster and Ranking Member Loudermilk,

Thank you for inviting me to testify today on this extremely important issue affecting millions of people across the country.

The COVID-19 pandemic will continue to take significantly more lives than the approximately 130,000 it has already claimed if the United States government does not invest in tools that are proven to combat the spread of the virus, including strategies that aim to dismantle structural racism. According to an analysis published on July 5 by [The New York Times](#), Latino or Hispanic and Black residents in the U.S. are three times as likely to become infected as their white neighbors. Higher COVID-19 mortality rates among Black and Brown communities reflect the historic devaluation and disenfranchisement of their lives, property and communities. Racism is the preexisting condition that must be accounted for in our battle with the coronavirus.

It’s hard to calculate the damage that the lack of a coordinated, comprehensive federal response has cost families in terms of lives, jobs, and businesses. Those losses will be even more severe if there’s not sizable investments in infection testing, social distancing, mask-wearing mandates, medial supply chain coordination, extended paid leave, supplemental unemployment insurance, hazard pay, and contact tracing. However, the universal application of these preventative tools won’t eradicate the substandard housing, poverty, limited job opportunities, and other conditions of structural racism that underlie racial health inequities.

The effectiveness of contact tracing and other tools in Black neighborhoods will be significantly determined by the extent to which these interventions help eradicate policies and practices that generate racial disparities. COVID-19 interventions should lead to investments in disenfranchised Black and Brown communities; expanded contact tracing should heighten outcomes in Black- and Latino- or Hispanic-owned firms, raise employment, and increase community involvement.

Racism already takes years off [Black and Brown people's lives](#), and its impacts facilitate the rapid spread of the virus. Black and Brown communities cannot afford for COVID-19 interventions to come at the expense of our long-standing battle against racism. Consequently, we must apply a racial equity lens to our forays into digital contact tracing and exposure notifications.

This written testimony presents three general concerns regarding artificial intelligence in contact tracing as it pertains to structural racism and racial bias. First, contact tracing and exposure notification are not necessarily remedies for structural inequality. In their article “Structural Racism and Health Inequities,” UCLA public health professors Gilbert Gee and Chandra Ford write, “Structural racism is defined as the macro level systems, social forces, institutions, ideologies, and processes that interact with one another to generate and reinforce inequities among racial and ethnic groups.” Structural racism refers to how society’s policies and practices serve to aid White families in building wealth and limit Black families from accessing similar opportunities. Contact tracing and other public health tools are not neutral; they can exacerbate or mitigate the impacts of structural racism.

A second concern taken up by this testimony revolves around representation. Contact tracing systems should include the people from the communities that have historically been excluded from other systems that generate better health and economic outcomes. From the tech tools that are developed to the contact tracers hired, Black and Brown people must be included in any effort to expand contact tracing.

Third, AI tools in health pose the same risk that they do in other fields. AI is only as good as the information and values of the programmers who design it, and their biases can ultimately lead to flaws in the technology and amplified biases in the real world. Our expedition into digital tools must demand greater recruitment and investment in Black and Brown tech firms, rigorous reviews and testing for racial bias, and more engagement and involvement from local communities.

What’s at stake

The think tank APM Research Lab compiled one of the most comprehensive databases on COVID-19 mortality outcomes by race. As of June 24, 2020, [APM found](#) that—at 65.8 deaths per 100,000 (or one in 1,500)—Black Americans’ mortality rate is approximately 2.3 times as high as the rate for Whites and Asian Americans, about twice as high as the Latino or Hispanic and Pacific Islander rate, and 1.5 times as high as the Native American rate. APM wrote that if people of color had died of COVID-19 at the same rate as White Americans, “at least 15,000 Black Americans, 1,500 Latino Americans and 250 Indigenous Americans would still be alive.”

Underlying the disproportionate death rates are what researchers call “social determinants of health”—neighborhood conditions shaped by public policy that predict for life expectancy. To mitigate the spread of COVID-19, the Centers for Disease Control and Prevention (CDC) recommends [social distancing](#) measures: avoiding mass gatherings and maintaining at least six

feet of distance from other people. For decades, however, Black people and Native Americans have been subject to a different kind of social distancing in America: segregation, discrimination, and devaluation. COVID-19 doesn't discriminate, but past and present policies in housing, financial services, transportation, education, criminal justice, and other sectors do.

Inherently anti-Black policies not only influence where we live, but shape the quality of our lives. Policies built on a racial hierarchy isolated Black and Native American people closer to polluters and in areas more susceptible to natural disasters. History has shown that social distancing through racist housing policies such as [redlining](#) extracted wealth from communities of color, eliminating a crucial buffer against the financial shock of a crisis such as today's.

According to my [research](#) with David Harshbarger and Gallup's Jonathan Rothwell, homes of similar quality in neighborhoods with similar amenities are worth 23% less in Black-majority neighborhoods than in neighborhoods with very few or no Black residents. After accounting for factors such as housing quality, neighborhood quality, education, and crime, owner-occupied homes in Black neighborhoods are undervalued by \$48,000 on average, amounting to a whopping \$156 billion that these homeowners would have received if their homes were priced at market rate.

Social isolation through policy discrimination has extracted significant wealth from Black families. According to the Federal Reserve's [most recent numbers](#), White families had a median family wealth of \$171,000 in 2016. Black and Latino or Hispanic families had \$17,600 and \$20,700, respectively—making these households far more susceptible to pandemics of this scale.

“For life expectancy, money matters,” [according](#) to the Harvard Gazette. Wealthier people live longer, but the COVID-19 pandemic has revealed that our fates are more intertwined than we think. Due in part to a lack of access to managerial positions, Black workers are [overrepresented](#) in occupations that require face-to-face contact, such as health care support, personal care, and protective services, as well as in [gig-economy jobs](#). While business in these sectors has been [rising](#) during the pandemic, the nature of these jobs places workers at greater risk for contracting the virus, with many employers refusing to offer paid sick leave. White-collar workers can telecommute, receive paid time off, and socially distance while remaining financially secure, but the most vulnerable members of society are forced to choose between their work and their health.

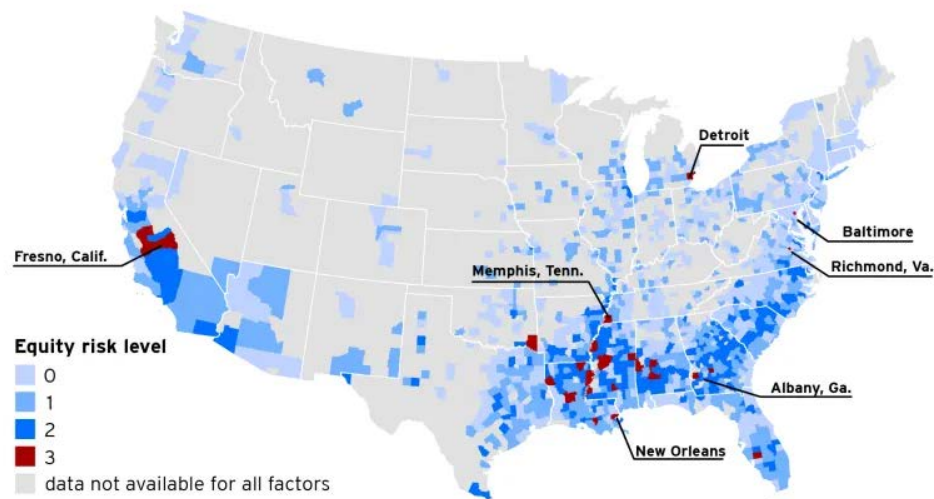
Far from a cure, historical social distancing created a social disease that has made many of us sick—literally. According to a [2019 study](#), residential segregation makes Black communities more susceptible to hospital closings. Another study, published by [Medical Care Research and Review](#) in 2014, found that an increase in the concentration of Black people in a neighborhood is associated with a corresponding decrease in the availability of surgical equipment. Social distancing for Black people should not continue to be another form of discrimination.

Discrimination based on race and place are clearly associated with COVID-19's spread. According to [Brookings analysis of CDC data](#), “Black people are dying from COVID at roughly

the same rate as white people more than a decade older,” which highlights how the places that have been most hard hit by COVID are Black communities. According to [APM Research Lab](#), Black South Carolinians—who represent about 27% of the state’s population—made up 48% of COVID-19 fatalities. In Washington, D.C., Black people are 46% of the population but nearly 75% of COVID-19 fatalities. And in Michigan, where Black people make up only 13% of the population, 41% of the dead have been Black. But indigenous lives have also been ignored, in Mississippi, the Native American death rate is nearly 450 per 100,000, for context, the state’s White death rate is 24 per 100,000.

MAP 1

Places with equity risk factors similar to New Orleans are located primarily in the Deep South U.S. counties, 2018



NOTE: EQUITY RISK LEVEL REFLECTS THE NUMBER OF TIMES THE COUNTY APPEARS IN THE TOP QUINTILE OF ALL COUNTIES FOR POVERTY RATE, MULTIGENERATIONAL HOUSEHOLDS, AND GAP IN WHITE/BLACK LIFE EXPECTANCY.

Source: Brookings analysis of 2018 5-year American Community Survey estimates and 2018 National Center for Health Statistics Mortality Files via countyhealthrankings.org.

B Metropolitan Policy Program
at BROOKINGS

The above map sheds light on areas which have a high “equity risk level,” determined by high rates of poverty, inequitable health outcomes, and [multigenerational family cohabitation](#). We measure poverty by the share of families below the poverty line (from Census Bureau estimates), inequitable health outcomes by the gap in [life expectancy](#) between Black and White residents, and multigenerational family cohabitation by the share of the population of family members living in households in which they are neither spouses nor children of the head of household. Counties are ranked by the number of metrics in which they fall in the top quintile, with those in the top 20% for each risk factor shown in red.

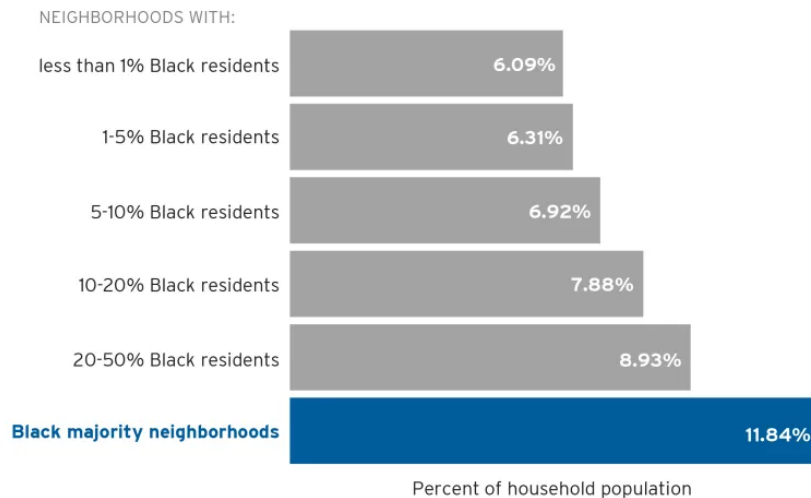
As an example, New Orleans shows how the virus thrived in a Black-majority city where basic structural inequities and intrinsic qualities have come to bear. In Orleans Parish, the poverty rate for families is 17.8%—well above the national figure of 10.1%. Life expectancy for White

residents is 80 years, compared to 75 years for Black residents. Of people living in households, 9.4% are extended family members, compared to 7.4% nationwide. These shocking numbers place Orleans Parish in the top 20% of all counties on each metric.

Due to decades of discriminatory policymaking, correlations between [poverty](#), [life expectancy](#), and predominantly Black communities are well documented. Similarly, poverty is correlated with levels of multigenerational family living, which has a positive correlation with the share of the Black population. Poverty and housing is strongly influenced by past economic and housing policy.

FIGURE 1

Black majority neighborhoods have higher rates of multigenerational family cohabitation
Percent of household population that are extended family by neighborhood type



Source: Brookings analysis of 2014-2018 ACS 5-year estimate

B Metropolitan Policy Program
at BROOKINGS

The other counties in this cohort are primarily scattered across the Southeast, particularly in areas throughout Louisiana, Mississippi, and Alabama with high Black population concentrations. Most counties in this classification are rural, but the cohort notably includes counties outside of the Deep South with large Black cities, including Detroit, Baltimore, and Richmond, Va., as well as Fresno, Calif., a city with a Black population of around 8%.

We're all susceptible to the [White supremacist myth](#) that claims the conditions in Black communities are mainly the result of Black people's collective choices and moral failings. But it is historic and systemic [housing devaluation](#), [economic injustice](#), and [discrimination in health care](#) that have created the [conditions](#) that increase rates of morbidity and mortality, especially during this unprecedented pandemic. Our interventions must not exacerbate structural racism's impacts. Unfortunately, federal officials have ignored the realities of structural racism in recent recovery efforts. In order to facilitate COVID-19 response efforts, [the Department of Labor](#) suspended "all affirmative action obligations of supply and service and construction

contracts.” Meanwhile, the staggered, insufficient rollouts of multiple legislative relief packages—[including the Payroll Protection Program](#)—left out too many firms owned by people of color. Our health efforts should not follow suit.

America’s digital divide, artificial intelligence, and racial health disparities

According to the CDC, [contact tracing](#) is the process of “identifying people who have an infectious disease (cases) and people who they came in contact with (contacts) and working with them to interrupt disease spread.” Digital exposure notification is essentially the same, but as the [memorandum](#) for this hearing states, it “requires explicit user consent for how data is used and collected, does not collect location data, and does not identify consumers to other consumers.” In concert with other tools, contact tracing and digital exposure notification can disrupt the chain of transmission by identifying levels of exposure to people and places.

However, these technological tools bring up another issue related to racial equity: America’s digital divide and unequal access to the internet. While there are certainly racial gaps related to cell phone and broadband access, the digital divide is becoming less about access and more about the quality of usage. [According to the Pew Research Center](#), White, Black, and Latino or Hispanic Americans have roughly the same rate of smartphone usage, which is important for digital tracing. However, digital tracing efforts will require users to opt in, which requires a basic level of trust in public health authorities and software developers. [Brookings research](#) has shown that Black Americans are less likely to take part in voluntary digital contact tracing. Due to a history of unequal treatment, including [unethical experimentation](#) and a [track record of unequal outcomes](#), Black Americans have good [reason to mistrust](#) the equity of the nation’s health care apparatus. This is why Black and Brown communities need contract tracers and app developers who are from the neighborhoods they serve.

Data shows that Black patients experience better outcomes [when their doctors are also Black](#). One explanation for this effect is that a shared background promotes a [greater level of trust and better communication](#). [Surveys](#) also show racial bias in the assessment of pain and treatment recommendations for Black patients, in which 25% of medical residents stated that Black patients have thicker skin than White patients. Unequal outcomes today, especially in [maternal mortality rates](#), show that when it comes to health care, race matters.

Analogously, manual contact tracers rely on skills of interpersonal communication and empathy in order to build trust and receive and interpret information. If we hire an army of White tracers to track the spread of the virus, we should expect unequal or even negative results in Black communities. In addition, if we do not hire local Black and Brown people to serve those neighborhoods, we exacerbate the community wealth gap, which also serves as a barrier of protection against infection. Hiring Black and Brown manual tracers offer an opportunity to add jobs to neighborhoods that are experiencing higher levels of unemployment.

Artificial intelligence has transformed almost every aspect of our lives, and soon, contact tracing will be no different. The automation of this long-standing public health tool is imminent, and the speed and efficiency of such digital tracing services can save lives. But as with all technological applications that use AI, we should prepare for racial bias that will negatively impact Black and Brown communities. We've already seen the risks of using biased algorithms in the healthcare: UnitedHealth's use of a medical algorithm steered Black patients away from getting higher-quality care. In criminal justice, software used to forecast the risk of reoffending [incorrectly marks Black defendants as future criminals](#) at twice the rate of White defendants.

With all contact tracing mechanisms, we should avoid attaching fines and fees to individual violations that become apparent in the data. Criminalization and financial penalties would further burden people already encumbered by structural racism.

We need more due diligence and intellectual exploration before we deploy AI technology to communities. Systemic racism and discrimination are already embedded in our health, housing, and educational systems. Developers must intentionally build AI systems through a lens of racial equity if the technology is not going to generate outcomes that reflect the biases of the developers.

The limits of contact tracing in Black communities

Black-owned businesses and workers are highly engaged on frontlines of the COVID-19 pandemic. Black Americans are [more likely to be part of the essential workforce](#). Black-owned firms with paid employees generated nearly \$128 billion in receipts in 2017, with the largest share (\$24.5 billion, or 19%) earned in the healthcare and social services sector. Some of the top industries for Black-owned businesses, by number of firms, include occupations that are directly combating the virus or are most impacted by the country's social distancing measures:

- Thirty-two percent of all Black-owned businesses with paid employees are in the [health care and social assistance](#) professions, which includes independent practices of physicians, as well as continuing care/assisted living and youth services.
- Eight percent of Black-owned businesses are in [administrative, support, waste management, and remediation services](#), which includes call centers, temp agencies, collection bureaus, and recycling and waste management facilities.
- Seven percent of Black-owned businesses are in [retail trade](#), which includes everything from grocery stores to home furnishings to gasoline. (Restaurants are not included in this.)

If contact tracing efforts alert an essential worker that they've been exposed, what are they to do? Generally, Black people know they are working and living in high-risk areas, but they have few alternatives. People of color simply cannot afford preventative measures that do not address the underlying racism that situates them between a rock and a hard place.

Conclusion

BROOKINGS

QUALITY. INDEPENDENCE. IMPACT.

As more Black and Brown people are exposed to these racial inequities, more will die from COVID-19. The proliferation of the coronavirus forces us to see our inherent connections in a way that our public policy has not always recognized. Individual recovery is contingent upon how much we collectively live by the principle of being “all in this together.” If undocumented residents are sick, the country’s citizens will be as well. If Black and Latino or Hispanic people suffer from COVID-19’s effects, so will Asian Americans and White people. Being aware of our vulnerability is not the main problem—the trap of racism is.