



Commentary

Racial Capitalism Within Public Health—How Occupational Settings Drive COVID-19 Disparities

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Epidemiology of the US coronavirus disease 2019 (COVID-19) outbreak focuses on individuals' biology and behaviors, despite centrality of occupational environments in the viral spread. This demonstrates collusion between epidemiology and racial capitalism because it obscures structural influences, absolving industries of responsibility for worker safety. In an empirical example, we analyzed economic implications of race-based metrics widely used in occupational epidemiology. In the United States, White adults have better average lung function and worse hearing than Black adults. Impaired lung function and impaired hearing are both criteria for workers' compensation claims, which are ultimately paid by industry. Compensation for respiratory injury is determined using a race-specific algorithm. For hearing, there is no race adjustment. Selective use of race-specific algorithms for workers' compensation reduces industries' liability for worker health, illustrating racial capitalism operating within public health. Widespread and unexamined belief in inherent physiological inferiority of Black Americans perpetuates systems that limit industry payouts for workplace injuries. We see a parallel in the epidemiology of COVID-19 disparities. We tell stories of industries implicated in the outbreak and review how they exemplify racial capitalism. We call on public health professionals to critically evaluate who is served and neglected by data analysis and to center structural determinants of health in etiological evaluation.

capitalism; COVID-19; health disparities; occupational health; racism; work

Abbreviations: COVID-19, coronavirus disease 2019; NHANES, National Health and Nutrition Examination Survey; NIOSH, National Institute of Occupational Safety and Health; PPE, personal protective equipment; SARS-CoV-2, severe acute respiratory syndrome coronavirus-2.

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From the criminal complaint against Derek Chauvin by the State of Minnesota, Hennepin County, May 29, 2020 (1):

Mr. Floyd is over six feet tall and weighs more than 200 pounds . . . Floyd had underlying health conditions including coronary heart disease and hypertensive heart disease. The combined effects of Mr. Floyd being restrained by police, his underlying health conditions and

any potential intoxicants in his system likely contributed to his death.

On Twitter, Benjamin Crump wrote, "Independent medical examiners determined #GeorgeFloyd's death was due to asphyxia from sustained forceful pressure." From his full statement (2):

[T]he manner of Mr. Floyd's death was caused by asphyxia due to neck and back compression . . . Sustained pressure on the right side of Mr. Floyd's carotid artery impeded blood flow to the brain, and weight on his back impeded his ability to breathe . . . "[H]e would

be alive today if not from the pressure applied to his neck by fired officer Derek Chauvin and the strain on his body from two additional officers kneeling on him,” said lead attorney Crump.

The racialized use of individual-level risk factors is starkly evident in the aftermath of George Floyd’s recent murder. We see how scientific evidence is used to attribute risk to Floyd’s individual biology, in the form of the now familiar racial refrain of “underlying health conditions,” as well as risky behavior on the part of the deceased, whose physiological response to physical violence is presumed to have involved “potential intoxicants,” shifting the cause of death away from police violence. The same racialized narrative is prominent in the medical literature on coronavirus disease 2019 (COVID-19). The attribution of increased acquisition risk to individual-level etiologies—including higher rates of comorbidities and sociocultural differences such as health-seeking behavior and intergenerational cohabitation (3)—overshadows differential transmission related to structural factors (4), in particular, work environments. In this commentary, we tell stories about illness and work. We argue that the most salient commonality among workplace settings most responsible for the spread of COVID-19 are the racial and ethnic demographics of their work forces and clientele. We further argue that the greatly amplified transmission risk occurring in these settings is not because of an inherent vulnerability of Black, Brown, or immigrant workers. Rather, a system of racial capitalism that preceded the pandemic structurally concentrates exposures and exacerbates COVID-19 risk for these worker populations, through replication of historical inequities and state-supported corporate neglect of worker protection (5, 6). Moreover, we argue that epidemiology as a discipline has selectively produced and promoted quantitative findings to justify and further this system of racial capitalism. The inequities evident in the ongoing COVID-19 pandemic offer an opportunity to redress our role in producing racially disparate health outcomes.

RACIAL CAPITALISM, THE INVERSE HAZARD LAW, AND THE COOPTING OF EPIDEMIOLOGY

Pirtle recently proposed in the journal *Health Education & Behavior* that “Racial capitalism is a fundamental cause of the racial and socioeconomic inequities (within COVID-19 in the United States) . . .” (6, p. 1) “Racial capitalism,” a term coined by Cedric Robinson (7), refers to the centrality of race in structuring social and labor hierarchies in capitalist economies. This system ensures “a vulnerable supply of low-wage workers” through “dual-wage systems, racially-exclusive labor unions, racialized divisions of labor, sharecropping, and related practices” (8, p. 528). Consistent with the theory of racial capitalism, Black and Latinx individuals are overrepresented in the low-paying jobs deemed “essential” in the President’s “Coronavirus Guidelines for America” issued during the first months of the US COVID-19 outbreak (9–11). Therefore, Black and Latinx people are disproportionately likely to work in jobs in which they are compelled to risk exposure to COVID-19. We and others argue that this elevated occupational risk is a major driver

of the disproportionately high rates of COVID-19 infection, hospitalization, and mortality experienced by Black, Indigenous, and Latinx Americans (6, 12–14). For instance, the COVID-19 mortality rate among both Black and Latinx patients is over twice that of White patients in New York City (15). Many Indigenous populations share structural barriers to health experienced by Black and Latinx communities (e.g., job precarity) (12), but there is limited available data on COVID-19 within Indigenous Nations. While the infection rate in the Diné (Navajo People’s) Nation is nearly the highest per capita, US federal support has been minimal for Indigenous Nations, and COVID-19 outcomes specific to Indigenous Nations are largely excluded from US reports (12).

However, there are high-exposure jobs in which workers do not experience elevated risk of COVID-19 or severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) infection. For instance, medical doctors have infection rates similar to the general public despite high levels of exposure to the SARS-CoV-2 virus in their workplaces (16). This paradoxical finding is consistent with Krieger et al.’s (17) Inverse Hazard Law. The Inverse Hazard Law states that hazards accumulate inversely with power and resources in US workplaces. In the case of COVID-19, adequate personal protective equipment (PPE) greatly reduces risk of being infected with SARS-CoV-2 (18). As described later in this commentary, workers in high-status, high-wage jobs with predominantly White workforces, such as physicians, experience lower risk of SARS-CoV-2 infection (19) than other workers in similarly high-exposure work settings. Jobs that are structured around the supply of low-wage workers of color who do not have the power and resources to demand workplace protections or leave the high-hazard jobs are the ones among whom COVID-19 risk is especially high because adequate PPE is not provided in high-exposure jobs.

How does epidemiology support the interests of racial capitalism? In her scholarship on the history of race and medicine, Dorothy Roberts describes how focusing on “underlying” health conditions and behavioral risk factors allows society “both to ignore how disease is caused by political inequality and to justify an unequal system by pointing to the inherent racial difference that disease supposedly reveals” (20, p. 85). Under racial capitalism, attention is drawn away from workplace hazards by arguing that workers are inherently at high risk of ill health due to their own racial and behavioral susceptibilities, masking and justifying how labor is structured to concentrate risky, low-wage work among non-White or otherwise marginalized workforces. Contemporary, “mainstream” epidemiology’s technocratic focus on individual-level biological and behavioral risk factors (21–23) readily supplies data used to justify high levels of ill health observed among low-wage workers. In particular, “mainstream” epidemiology colludes with racial capitalism by producing disproportionately more work documenting individual-level susceptibility than it does investigating more plausible alternative workplace-level explanations for workforce disparities (22). Moreover, as we demonstrate in the empirical case study below, much of “mainstream” work in epidemiology is structurally racist in that it serves to reinforce and, post hoc, justify pervasive

narratives of biological and cultural inferiority of Black and Brown people (24).

CASE STUDY: RACIALIZED METRICS IN WORKERS' COMPENSATION CLAIMS

The collusion of epidemiology with racial capitalism is particularly insidious because racial capitalism can leverage statistical methodology that is perceived as objective to hide even obviously racist distributions of health (25, 26). Below we present an example from occupational health that demonstrates how epidemiologic data is strategically used to downplay the effects of occupational exposures on poor health and thus minimize financial exposure of the corresponding industries.

Lung function and hearing loss are metrics commonly monitored in manufacturing industries due to Occupational Safety and Health Administration regulations (27, 28). These metrics are proxies of health impacts of hazardous work environments in manufacturing settings (29). Moreover, lung impairment and hearing loss are frequent grounds for workers' compensation claims (30). Workers' compensation is a legal process in which workers file claims in relation to illness and injury resulting from job tasks and exposures. Compensation is paid by industry when the court rules in favor of the worker (30). Therefore, strategies that minimize identification of worker injuries directly benefit the owners of and investors in the businesses employing those workers.

The epidemiologic literature on lung function and hearing

In the United States, on average, Black adults tend to have worse lung function but better hearing than White adults (31, 32). Seminal epidemiologic analyses of the National Health and Nutrition Examination Survey (NHANES) III (1988–1994) concluded that lung function among “African-Americans” is 12%–15% lower than among “Caucasians” (31). The epidemiologic data indicate the opposite for hearing. Numerous US cohort studies have concluded that Black adults tend to have better hearing than White adults (and women tend to have better hearing than men) (32–35). Epidemiologic studies suggest that the minimum noise levels must be 25%–45% louder to be detected by White Americans compared with Black Americans (34, 36).

Workers' compensation for lung and hearing impairment

Workers qualify for compensation only when they reach a set level of impairment. For lung function, workers are typically eligible for compensation when their lung capacity performance is lower than 90% of their predicted lung capacity. The predicted values are based on age, sex, height, and race (37, 38) and come from equations by Hankinson et al. (31) based on their epidemiologic studies of NHANES III data. The equations set expected lung capacity for Black adults 15% lower than that for White adults. In other words, Black workers must experience 15% worse

lung function than White workers to qualify for workers' compensation.

In contrast to lung function, no race-based decrement is applied to hearing loss disability thresholds. If workers can show that their impaired hearing is not attributable to any degenerative or genetic disorder, they are eligible for compensation of 70 weeks' pay for 1 impaired ear and 150 weeks' pay for 2 ears being impaired (37). In spite of the epidemiologic evidence demonstrating better hearing for Black adults versus White adults and for women than men, workers are evaluated using only their observed hearing test results (32–35). Hearing loss disability qualifications are made based on the average of decibel thresholds a worker demonstrates, regardless of a worker's race or sex.

Empirical simulation: workers' compensation awards with and without race “corrections”

We examined the effects of this selective application of epidemiologic data on workers' compensation claim payouts. For lung function, we used a demonstration database of deidentified Black and White workers provided with the National Institute of Occupational Safety and Health (NIOSH)'s Spirometry Longitudinal Data Analysis Software (39). The workers are representative of workers from occupational settings with high exposure to particulate matter (39). For hearing, we used data from the 2005–2006 NHANES, which is representative of the US Black and White adult populations during a similar time period to the NIOSH data. We restricted the sample to respondents aged 20–65 years who reported “ever having job exposure to loud noise” (40). We estimated the percentage of workers who met the respective thresholds for a disability claim under 2 conditions: the current standard and a counterfactual scenario in which race adjustments were (hearing) or were not (lung function) used. For the counterfactual hearing-loss condition, we applied a conservative 25% decrement to White workers, based on age-adjusted population estimates (34, 36). For the counterfactual lung function condition, we eliminated the race correction from the predicted lung function equation.

Figure 1 shows Black workers' and White workers' distributions of lung capacity and hearing as they would be measured to evaluate compensation. The solid curves are the conditions currently in practice: race-specific equations for lung function and the race-neutral absolute threshold for hearing. The dashed lines are the counterfactual conditions: elimination of race “correction” for lung function and addition of White decrement “correction” for hearing. The vertical lines show the thresholds for initial compensation. Those workers to the left of the line would be eligible for compensation.

Using the current algorithms for predicted lung function, 60% of White workers and 81% of Black workers qualify for compensation. When applying an algorithm to Black workers that is not race corrected, 94% of the Black workers would qualify for compensation. Using the current, not race-corrected, algorithm for predicted hearing, 43% of white workers and 70% of Black workers would qualify for compensation. When imposing a race-specific

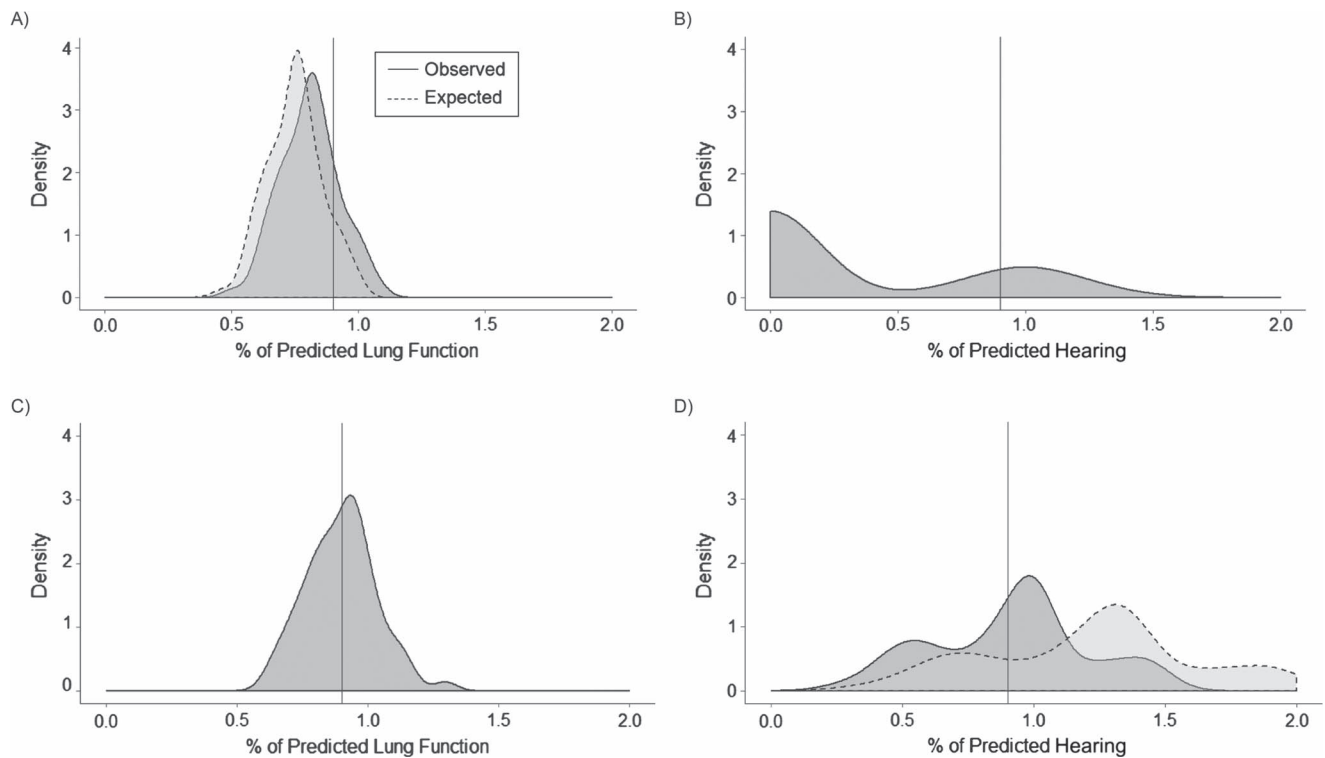


Figure 1. Distributions of percent of predicted lung function (National Institute of Occupational Safety and Health Spirometry Longitudinal Data, 1999) and hearing (National Health and Nutrition Examination Survey, 2005–2006) under race-based correction conditions among Black and White workers, United States. A) Distributions of lung capacity among Black workers; B) distributions of hearing among Black workers. C) Distributions of lung capacity among White workers. D) Distributions of hearing among White workers. These distributions represent how they would be measured to evaluate compensation. The solid curves are the conditions currently in practice: race-specific equations for lung function and the race-neutral absolute threshold for hearing. The dashed lines are the counterfactual conditions: elimination of race “correction” for lung function and addition of White decrement “correction” for hearing. The vertical lines show the thresholds for initial compensation. Those workers to the left of the line would be eligible for compensation.

adjustment for White workers, only 38% of White workers would qualify.

Discussion of empirical case study

In all 4 scenarios in Figure 1, Black workers exhibit greater impairment than White workers. Even in the case of hearing, where Black Americans generally have less impairment than their White counterparts (32), Black workers fare worse in the end. The hearing finding is evidence in favor of the theory of racial capitalism and the Inverse Hazard Law: Greater exposure to noise hazards or lack of workplace protections could explain why Black workers experience much greater hearing loss despite better hearing in the general population.

Our analysis of workers’ compensation claims makes explicit one mechanism by which racial capitalism enriches industries. In the counterfactual scenario of no Black lung-function correction but a White hearing correction, industry would owe 31% more in workers’ compensation payouts (this calculation is based on applying the average payout associated with each workers’ compensation award in a typical state (30)). Of course, applying a Black race correction

to lung function and a White race correction to hearing would theoretically reduce industry payouts even more. So why are race corrections for lung function uncontested, standard practice in occupational regulations and occupational epidemiology research (37, 41) while race corrections for hearing are not? First, as shown by the 31% statistic above, the Black race correction is more profitable to industry than a White race correction. Under racial capitalism, Black workers experience more work-related health damage because they are concentrated in riskier, less protected jobs. Therefore, “corrections” that understate the extent of their damaged health will be disproportionately more valuable to industry than corrections that understate workplace impacts on less-exposed populations. Second, consistent applications of race corrections would undermine the narrative of inherent Black biological inferiority that helps make racial capitalism so profitable. Exposing the fact that Black workers in high-noise jobs experience more hearing impairment even though a race correction is applied to account for the typically worse hearing of White adults makes more obvious the likelihood that the greater hearing damage observed among Black workers is actually because of the workplace setting. That logical connection in turn suggests that other

health harms disproportionately experienced by Black workers are also because of the organization of work.

We end this section with a note about epidemiology's complicity with racial capitalism in regard to damage to hearing and lung function. As we've described above, the field of epidemiology has published and promoted the use of race-"corrected" equations for lung function (where Black adults tend to perform worse) but not for hearing (where Black adults tend to perform better). Moreover, smoking status, a strong predictor of lung capacity, is not included in the lung function reference equations: Hankinson et al. (31) restricted their NHANES III analysis to "lifelong nonsmoking subjects." Because Whites in the United States are more likely to smoke and with more intensity (42), exclusion of smoking from the equations likely overstates the "predicted" lung function of White workers, making them even more disproportionately likely and other workers relatively less likely to qualify for workers' compensation based on impaired lung function. Whatever the intentions of these analytical and dissemination decisions, the overall impact of this body of epidemiologic research is to reinforce a narrative of Black workers' biological inferiority, increasing the financial gains that industries can reap by using racial capitalism as an organizational strategy.

RACIAL CAPITALISM IS DRIVING WORKPLACE TRANSMISSION OF SARS-COV-2

Next we briefly discuss key industries implicated in the spread of the SARS-CoV-2 virus in the United States. We group the work settings by the demographic compositions of the workers or the clientele served. Applying theories of racial capitalism and Inverse Hazard Law, we argue that the risks associated with these workplaces are highly patterned by race/ethnicity and immigrant status.

Meat packing and agricultural workers

From farmworkers to meat packers to supermarket-chain employees and food-delivery workers, the extreme vulnerability of labor forces across the food-production system demonstrates that while industrial agriculture work is considered essential, the workers themselves are treated as expendable (14). Moreover, the concentration of US industrial agriculture in the South and the lack of workplace protections for the predominantly Black and Latinx workers reflect the ongoing legacies of plantation slavery (5). In meat packing, where congregate work is standard and several major outbreaks are occurring (43), the worker population is 35% Latinx despite Latinx workers making up only 18% of the national workforce (10). Further, 34% of this industry's workers are non-White versus 22% of the national workforce. Industry generates perverse incentive structures with regard to testing within facilities by denying sufficient sick leave support (5). While the Centers for Disease Control and Prevention recommends employer-initiated interventions to prevent transmission (43), company leadership engages in territorial stigmatization (44) by blaming high rates of SARS-CoV-2 infection on community

transmission and worker behaviors (45). Not only does this narrative minimize public awareness of the extent of disease spread, but it also erases worker visibility and facilitates management misconduct in mitigating outbreaks.

Construction workers

The construction industry employs nearly 7 million workers, with an estimated 14% of construction workers being undocumented, although this is likely an underestimate. Austin, Texas, is home to an estimated 50,000 construction workers, about 50% of whom are undocumented and more than 50% of whom make below poverty-level wages (46–48). Despite early orders by local government declaring construction workers "nonessential" and subject to stay-at-home orders (49), and despite an epidemiologic study identifying significant risk of hospitalization for COVID-19 if construction workers were to resume work (50), under the influence of building and real-estate industries the state governor quickly intervened with a statewide order deeming all construction work as "essential" (51). By early April it was clear that construction workers, Latinx workers in particular, were falling sick and being hospitalized for COVID-19 at disproportionately higher rates than the general public (51–53). The majority of cluster cases in Austin were linked to construction work sites, and surveillance testing for coronavirus among construction workers yielded a positive rate of approximately 3.5 times the average rate at drive-through surveillance sites (54). The flawed dominant narrative blames workers in this industry by attributing high disease transmission to multigenerational households, inadequate personal hygiene, and poor health literacy (55). However, despite citywide requirements for construction employers to support strict physical-distancing guidelines and personal hygiene recommendations, no oversight mechanism exists and workers report ongoing lack of access to personal protective equipment (56).

Health-care workers

The health-care workforce providing for patients with COVID-19, in general, experiences the highest risk of contracting the virus (57). Disaggregation of this sector reveals disparities in disease risk that mirror the race and gender disparities that epidemiologists and sociologists have documented for decades (58). While even high-status physicians, who are most likely to be White men, face potential job loss if they speak out about lack of PPE (59), workers in lower-prestige and lower-paid jobs within the health-care system are experiencing the greatest burden of COVID-19 (60, 61). These jobs include custodial staff, nurses, and domestic care providers—positions disproportionately filled by women of color (10). Several structural factors increase these workers' vulnerability to the disease, including the need to work multiple jobs because of low wages (potentially at different facilities with high exposure potential), consistent job precarity, and limited ability to provide their own PPE (5, 6) in the context of inadequate employer and governmental protections despite their extreme vulnerability.

Nursing homes and assisted-living facilities

On June 4, 2020, after persistent pressure from activists, families, public health professionals, and journalists, the Centers for Medicare and Medicaid Services posted the first set of COVID-19 nursing home data. These data showed that, as of May 31, 2020, there were 95,000 confirmed cases and close to 32,000 deaths in the 88% of Medicare and Medicaid nursing homes reporting—accounting for about 5% of confirmed cases and a third of the deaths in the United States (62). Mergers, acquisitions, and takeovers have consolidated about 67% of US nursing-home beds within for-profit facilities that are increasingly owned by large corporate providers (63). The staffing ratio of high-skilled and higher-paid professionals (e.g., registered nurses and licensed practical nurses) to less-skilled and lower-paid professionals (e.g., certified nursing assistants) has decreased drastically (64, 65). In fact, certified nursing assistants now provide close to 80% of caregiving duties in nursing homes, resulting in a cost-savings for owners who reduce the registered-nurse and licensed-practical-nurse staff (65).

The demographic characteristics and precarity of nursing assistants reflects historical continuities in the racialized and gendered labor of caregiving (66). Certified nursing assistants are disproportionately women of color, and disproportionately Black; 20% are born outside of the United States, and just under half have no formal educational training beyond high school (67). They serve predominantly US-born White residents at low wages (median hourly wage, \$11.87) (67). They are injured on the job 3.5 times more often than an average worker in the United States (67). Due to precarious and/or part-time contracts, approximately 20% are uninsured, even while potentially working at multiple nursing homes to make ends meet. Within the context of the COVID-19 pandemic, nursing home staff have not been provided appropriate levels of PPE, information about COVID-19 cases within facilities, access to testing, or data about risk overall (68–70). Nursing-home employees have reported retaliation and job loss because of complaints of lack of PPE and inappropriate work conditions throughout the COVID-19 pandemic (69).

Moreover, the nursing homes primarily supported by Medicare and Medicaid are less resourced with sufficient PPE, cleaning materials, and appropriate staffing levels, leading to gaps in care and hygiene, as well as minimal client interaction with skilled staff (71). Even after controlling for funding sources, location, size, and a range of other factors, nursing homes are racially/ethnically segregated, with those facilities occupied mostly by marginalized populations having the worst conditions; nursing homes with primarily Black and Latinx residents have consistently poorer quality, more violations, and disproportionate burden of infectious disease (70).

Carceral facilities: jails, prisons, and detention centers

Carceral facilities differ from the other workplaces described above in that a predominantly White workforce oversees a disproportionately Black and Latinx population (72). We include these facilities here because jails, prisons,

and Immigration and Customs Enforcement detention centers are major sites of SARS-CoV-2 transmission (73–75). Further, narratives employed by facility management to refuse COVID-19-related worker requests mirror strategies employed under racial capitalism in the work settings described above. Management's narratives emphasize the innate susceptibility of Black and Latinx prisoners to COVID-19 morbidity and negative racialized behaviors. For instance, 2 press releases from the US Department of Justice Federal Bureau of Prisons reported deaths of inmates Patrick Jones and Nicholas Rodriguez on March 28, 2020, and April 1, 2020, respectively. One sentence was nearly identical: "... Mr. [Jones/Rodriguez], who had long-term, pre-existing medical conditions which the [Centers for Disease Control and Prevention] lists as risk factors for developing more severe COVID-19 disease, was pronounced dead by hospital staff." The next sentences list the age, sex, and charges (both drug-related) of which the men had been convicted (76, p.1).

People who are incarcerated in US facilities are at high risk of being infected with SARS-CoV-2, not because of pre-existing medical conditions or crimes they may have committed. The incarcerated face a high risk of being infected because of crowded, enclosed spaces; limited access to protective equipment, including masks; limited access to SARS-CoV-2 testing and humane isolation spaces; and limited access to basic hygiene supplies, such as soap and hot water (75). However, the staff of carceral facilities have also complained about elevated infection risks (74, 75). In federal facilities, workers have asked for more tests, more PPE, hazard pay, and extended leave when exposed to infection or because of their own health conditions or conditions of family members. Each of these requests comes with financial costs, and they have often been met with resistance by the Bureau of Prisons and other managers of carceral facilities (73, 74). COVID-19 deaths of inmates reflect the extent and seriousness of SARS-CoV-2 transmission in carceral facilities. Statements that focus on the susceptibility of Black inmates such as Jones to COVID-19 death distract from the facility conditions that escalate SARS-CoV-2 transmission—facility conditions that workers partially share. True worker protection would require a rethinking and restructuring of carceral facilities and systems entirely.

HOW SHOULD PUBLIC HEALTH ADDRESS RACIAL CAPITALISM?

In this commentary, we argue that the role of workplaces in SARS-CoV-2 transmission illustrates how racial capitalism operates. We observe a concentration of SARS-CoV-2 exposure among low-wage and essential-worker populations who are disproportionately racial and ethnic minorities and immigrants. In nursing homes, the sector associated with a third of US COVID-19 mortality (62), workers are predominantly women of color and low-wage employees, who lack appropriate PPE. Our analysis also reflects Krieger et al.'s Inverse Hazard Law (17). Even within high-exposure workforces, we observe stratification with regard to providing PPE. An increasing number of deaths among nurses (77) and nonclinical hospital staff (78) are attributable to

inadequate provision of PPE, notably more common than among their physician counterparts, who have greater protections. Finally, across all occupational settings, narratives of innate susceptibility (20), territorial stigmatization (44), and individual behavioral explanations (6) abdicate corporate responsibility and associated government policies to provide safe environments, adequate PPE, paid sick leave, and SARS-CoV-2 testing. These narratives instead impose blame on workers for the hazards they experience at work.

We recognize that the disparities in incidence and mortality related to COVID-19 stem from centuries of US industrial development that depends on structural racism to thrive (7). Our analyses have salience beyond the scope of this outbreak. As with all diseases for which workplace environment is a root cause, the most marginalized workers with the least power and resources (e.g., people who are undocumented residents, incarcerated, people of color, women, or lesbian, gay, bisexual, transgender, or queer) are least likely to have access to testing for infectious diseases and most likely to be missed in cohort enumeration (17). During the COVID-19 outbreak, public health institutions are not collecting and/or suppressing complete testing, workplace, and demographic information (12, 79). Despite—or perhaps because of—underlying risks, decision-makers have been reluctant to release data regarding COVID-19 cases, deaths, and hospitalizations associated with nursing homes, with some going as far as insinuating it was “bad for business” (80, 81). At minimum, all COVID-19 researchers in the United States should routinely collect data on occupation and stratify data summaries by race, ethnicity, and gender whenever possible. At the least, we must strive toward a field of inquiry in which political influence does not compromise public health practice. We urge COVID-19 researchers and public health professionals more broadly to engage with occupational hazards as root causes of diseases and disparities.

One of epidemiology’s founding legends is John Snow’s removal of the Broad Street pump (82). Would we be talking reverentially about John Snow if he’d done a study of individual-level risk factors for cholera death among those admitted to the regional hospital? Ford and Airhihenbuwa’s (83) Public Health Critical Race praxis calls on public health professionals to question the ways in which we recreate racism through our study designs, information collection, research questions, and data-analysis methods. By ignoring and misrepresenting root causes of poor health among workers, we absolve industries and government leaders of their responsibility for equitable health protection. In the midst of the COVID-19 crisis, we have an opportunity to critically evaluate our methods and take measurable steps toward promoting social justice and health equity.

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