

Structural Discrimination in Pandemic Policy: Essential Protections for Essential Workers

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Abstract: An inordinate number of low wage workers in essential industries are Black, Hispanic, or Latino, immigrants or refugees — groups beset by centuries of discrimination and burdened with disproportionate but preventable harms during the COVID-19 pandemic.

I. Introduction

Minoritized and socially disenfranchised populations have suffered disproportionate morbidity and mortality during every U.S. public health emergency.¹ The COVID-19 pandemic is no different. Structural discrimination and resulting inequities were aptly demonstrated by both the treatment of and health outcomes for low-wage workers, such as long-term care workers, home health aides, and food supply workers during the first year of the pandemic.² These essential workers were harmed not only by the virus but by the compounded disadvantages of structural racism in worker protection policies, health care access and quality, and social programs.³ Moreover, those working in meat processing plants would not have prepared to be part of an essential workforce in the way that health care and emergency services workers do.

Among the food supply workers, meat-processing workers are a case study in the ways disease outbreaks thrive in the presence of long-standing structural discrimination and policy makers steeped in white supremacy — meaning the political, legal, and social structures that consistently advantage and privilege the interests of white-identified people and groups such that subrogation is normalized.⁴ The responses

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of the federal government, many states, and the meat industry to COVID-19 outbreaks and heightened SARS-CoV-2 transmission risks worked in concert to induce, rather than prevent, harm. Key federal and state policy makers and regulatory bodies, including the Centers for Disease Prevention and Control (CDC) and Occupational Safety and Health Administration (OSHA), upheld white supremacist principles in their construction of the value of “essential work” by the many low wage minoritized workers in this category. The criteria for qualifying as an essential business have been criticized for being vague, which, as a result, allows more industries to qualify as essential thereby putting more workers at risk. Many essential workers that suffered significant harms are non-white. For example, the CDC reported in July 2020 that 87% of COVID-19 cases in meat processing plants involved minoritized workers, specifically in Hispanic (56%), Black (19%), and Asian (12%) workers.⁵ White workers only represented 13% of the cases while representing approximately 30% of meat-processing workers nationwide.⁶ These agencies failed to account for existing structural racism, the inherent value of the workers and their communities, the nature of the threat of an aerosolized virus, and the prioritization of industry goals over worker safety. Across the board, policy makers failed to reckon with structural forces and meet their ethical and legal obligations to protect the health of already disenfranchised and disempowered workers. The policies and practices that combined with existing structural inequities to harm these workers have been described elsewhere, along with strong recommendations for anti-racist policies to enhance workplace protections and ameliorate financial, food, housing, and health insecurity.⁷ We echo the critical need for sweeping changes to worker protections.

The focus of this article is to draw attention to a narrow, but mostly overlooked, issue of the inequities in commitments to and funding for pandemic preparedness outside the context of traditional health care settings, using meat-processing workers as an example. These inequities meant that when the COVID-19 pandemic began, the evidence base was essentially non-existent for the effectiveness of respiratory protective equipment (RPE) and personal protective equipment (PPE) to reduce infection transmission and other infection prevention and control (IPC) measures under conditions of use inside meat-processing plants. This essay begins with a review of the history of pandemic inequities, and then turns to the structural and institutional factors that contributed to the disproportionate impact of COVID-19 on meat-processing workers. We review the failures to include non-acute care health workers in pandemic planning and

research and examine the application of both solidarity and the concept of interest convergence to ground the inclusion of multiply marginalized essential workers in ongoing pandemic research and planning. We conclude by offering additional recommendations for (1) special attention to structural discrimination in the IPC preparedness and response efforts in critical infrastructure industries and (2) enhanced funding for applied and translational research on IPC measures, including PPE effectiveness for reducing respiratory pathogen transmissions under the conditions of use by workers in essential industries.

II. Pandemics, Structural Discrimination, and Structural Violence

Over the past several centuries, there has been a major influenza pandemic every 10 to 30 years.⁸ In epidemics and pandemics, minoritized low-wage workers were left worse off than white workers.⁹ Historical evidence demonstrates the enduring harms of white supremacy for the health and welfare of minoritized populations. In the 1918 influenza pandemic in the U.S., Black populations had a higher case fatality rates than did their white counterparts,¹⁰ the impact on Indigenous communities was severe,¹¹ and low wage workers experienced higher case rates and disease related morbidity and mortality.¹² Nearly a century later, those impacts were mirrored in the 2009 H1N1 outbreak, during which Latino migrant farm workers faced numerous structural barriers to H1N1 prevention and treatment, and were widely stigmatized as disease vectors.¹³ Hispanic, Indigenous, and Black populations also had consistently higher rates of H1N1 disease, with hospitalization rates more than double that of white people in the U.S.¹⁴

Despite the history of health injustice in previous pandemics and calls from scholars for attention to structural discrimination in pandemic planning,¹⁵ the COVID-19 pandemic progressed along the same patterns with minoritized and multiply-marginalized populations suffering disproportionate harm,¹⁶ including in the workplace.¹⁷ For example, as of July 30, 2021, 300 meat processing workers have died from COVID-19 among the close to 60,000 who contracted the virus,¹⁸ with an unknown number experiencing “long COVID.”¹⁹ That is roughly 12,000 cases per 100,000 workers, a number unmatched in any other field.²⁰

A. The Example of Meat-Processing Workers

Meat processing work has long been among the most hazardous occupations.²¹ Workers describe high levels of dehumanization and disregard by the industry.²² Workplace protections and worker empowerment

have also eroded over time.²³ As the industry has consolidated into the hands of fewer, more powerful companies, they have also aggressively sought to reduce regulatory constraints, increase production speeds,²⁴ under-report workplace injuries,²⁵ and uphold arbitrary and punitive disciplinary point systems,²⁶ which are made possible, in part, because the industry also eliminated unionized workers while recruiting workers who are not positioned to assert their rights.²⁷ Today, meat-processing workers are disproportionately marginalized by virtue of multiple intersecting identities,²⁸ including their country of origin, limited English proficiency, immigration and refugee status, socioeconomic status, rural locale, and race and ethnicity.²⁹

issued a voluntary joint interim guidance with the Centers for Disease Control and Prevention (CDC).³⁶ The Department of Labor also took separate affirmative steps to telegraph to industry that strict adherence to joint OSHA/CDC guidance for Meat Processing was not required and in fact, the federal government would *assist the meat industry rather than workers* in certain circumstances if a meat corporation was sued by workers.³⁷ The CDC's actions also upheld existing power structures. For example, the CDC issued IPC guidance to protect acute care health care workers—a group with higher incomes, education, social power, and fewer workers from minoritized groups — beginning on January 17, 2020,³⁸ and continued updating it as evidence emerged to ensure safety of health care

Combined with federal action that kept meat processing plants open despite outbreaks, decisions to recommend less protective RPE and PPE, and the failure of OSHA to require evidence-based workplace protections were an indicator of decision makers' judgments about the relative worth of these workers. The federal government and private industry upheld white supremacist power structures and committed further acts of structural violence against meat processing workers, who were left with a choice between working with the significant risks of infection and the loss of their already fragile food and housing security. In addition to structural changes to remedy existing health and economic injustices, commitments by industry and governments to structurally competent pre-pandemic preparedness are necessary.

During the onset of COVID-19, meat processing facilities became among the largest epicenters of COVID-19 outbreaks in the United States.³⁰ Workers in meat processing facilities were particularly vulnerable to COVID-19 due to the high density of workers and prolonged close contact of personnel and indoor work environments.³¹ After spring 2020 outbreaks at several large meat processing facilities, the multi-billion-dollar meat industry acted swiftly to apply political pressure on federal actors to protect their bottom line.³² As a result, meat-processors were effectively deemed “essential” workers by an executive order issued by then President Trump (April 28 EO).³³ Facilities remained open or re-opened despite outbreaks with inadequate and inconsistent levels of IPC across the industry.³⁴

Federal agencies also failed to protect workers. The Occupational Safety and Health Administration (OSHA) declined to issue an emergency temporary standard (ETS) to protect these workers,³⁵ and instead

workers.³⁹ Of course, health care workers faced dire challenges in supply and staffing shortages, but their workplaces are accustomed to protecting them from infectious diseases. On the other hand, workers in the meat-processing industry lacked basic IPC guidance for safety in their workplace more than a month after the outbreaks began.⁴⁰ The CDC/OSHA interim guidance was finally released only April 26, 2020 — only 48 hours before the April 28 EO was signed in the midst of ongoing outbreaks.⁴¹

As further evidence emerged that masking is one of the most effective non-pharmaceutical interventions for reducing COVID-19 transmission,⁴² protections for meat processing workers, such as industry wide mask mandates, did not increase in response.⁴³ Increased scientific understanding of airborne SARS-CoV-2 transmission warranted stepped up safety measures (e.g., more protective face coverings such as fit tested N-95 respirators, air filtrations systems, dedensifying measures etc.) to mitigate the risk to workers.⁴⁴ Yet,

neither the CDC guidance nor the position of OSHA changed, and there was a clear deficit in research and resources to adequately protect workers. Instead, the CDC issued a scientific brief that acknowledged airborne transmission in discrete environments (e.g., congregate settings, poor ventilation, etc.) but did not address IPC guidelines to protect essential workers accordingly.⁴⁵ They continued working despite the lack of reasonable protections (N95 filtering facepiece respirators, air filtration systems) and appropriate commitments from the government and industry to protect them from COVID-19 infection.⁴⁶

Combined with federal action that kept meat processing plants open despite outbreaks, decisions to recommend less protective RPE and PPE, and the failure of OSHA to require evidence-based workplace protections were an indicator of decision makers' judgments about the relative worth of these workers. The federal government and private industry upheld white supremacist power structures and committed further acts of structural violence against meat processing workers,⁴⁷ who were left with a choice between working with the significant risks of infection and the loss of their already fragile food and housing security.⁴⁸ In addition to structural changes to remedy existing health and economic injustices, commitments by industry and governments to structurally competent pre-pandemic preparedness are necessary.⁴⁹

B. Structural Discrimination in Planning and Research

Structurally competent emergency and pandemic preparedness efforts should include explicit attention to the multiply marginalized.⁵⁰ While considerable financial resources have been devoted to pandemic influenza preparedness planning at the federal and state levels, national planning efforts do not address protecting low-wage, multiply marginalized workers in essential industries.⁵¹ One group of researchers previously called for the inclusion of meat processing workers in pandemic planning;⁵² however, those calls were based on the risks of occupational zoonotic influenza infection and the potential for the emergence of novel pathogens in these settings rather than occupational risk of person to person inhalation transmission of a pandemic pathogen.⁵³ The existing research on workplace infectious disease transmissions are not targeted to the conditions of use in meat processing plants.⁵⁴ Prior research on the application and effectiveness of IPC measures in meat processing facilities is sparse to non-existent:⁵⁵ we found no research in the context of PPE or engineering controls effectiveness for reducing occupational exposure to respiratory viral pathogens

with pandemic potential in meat processing workers before the COVID-19 outbreaks. In fact, there is little evidence of research for effectiveness of IPC measures in non-health care workplaces at all; a 2018 systematic review of social distancing effectiveness in workplaces was the first (and possibly only) systematic review of such measures in the workplace.⁵⁶ The implication being IPC strategies to reduce transmission depend on a contextual evaluation of the workplace and workers involved. Given that much of IPC is based on practices in healthcare that are focused on patient safety,⁵⁷ emerging scientific evidence on SARS-CoV-2 with relevance to IPC measures for meat processing facilities, long-term care facilities, and non-healthcare essential industries were challenging to interpret and adapt into protective guidance in real time.⁵⁸

Instead, appropriate planning should include widespread study and modeling of the effectiveness of PPE and other workplace administrative and engineering controls *before* a pandemic. In its absence, scientists were forced to start without directly applicable research,⁵⁹ and infectious disease scientists were left translating evidence-based IPC guidelines developed in healthcare settings for use in meat processing.⁶⁰ Yet, the differences between the conditions of use in health care and those in meat-processing plants are quite stark — they are also dissimilarly resourced and regulated, with varied prioritization of safety, compliance, and worker education on the effective use of RPE and PPE and adherence to other IPC measures.⁶¹ Any forward looking public health guidance to protect workers from future pandemics must ensure equity in research and preparedness when it comes not only to vaccine and therapeutic allocation, but IPC measures for essential workers.

III. Ethical Considerations for Worker Protections

Early in a pandemic, disproportionate burdens create obligations for regulators and employers to keep workers as safe as possible, which, in turn minimize possible harms to others, including to their families and other community members.⁶² An antiracist approach calls for affirmative commitments to effectively reposition these workers in ways that account for structural voids in pandemic protections.

A. Shared Vulnerability

During the first few months of the COVID-19 pandemic, messaging responding to shared vulnerability to a spreading virus was emphasized, especially as more white people fell ill. The media and public health agencies responded by encouraging masking as

a form of “we’re all in this together” type of solidarity.⁶³ Solidarity acknowledges interdependence within a community,⁶⁴ and solidarity underpins how we take account for our shared vulnerability through the delivery and maintenance of important social infrastructures — a relational concept based on common interests and mutual advantage.⁶⁵ Solidarity also recognizes the equal moral worth of people across a population. Dawson and Jennings conception of solidarity in public health ethics requires a public action, motivated by correcting past or present injustices, as well as advocating for and protecting others.⁶⁶ It necessitates that we improve health and well-being and reduce suffering through action.⁶⁷ To demonstrate solidarity in the context we have described, government officials would need to act to help those working in essential industries by enacting measures for the delivery and management of infection prevention and control to protect their health and well-being. Though there is shared vulnerability to an emerging infectious disease, our experiences in the pandemic demonstrate disparate vulnerabilities due to structural inequality.⁶⁸ Marginalized workers continued to work without protections that science deemed necessary — as structural and individual racism allowed their continued invisibility and the normalization of their subrogation.

Effective safety practices and regulation necessitate research to develop appropriate and effective IPC measures, RPE, and PPE products. Research and innovation can serve to demonstrate how the health and safety of essential workers furthers both government and employer interests. Of course, this is not actual solidarity, which depends on treating others as having inherent value regardless of their social power or the benefits they confer on others. Solidarity also falls short, in part, because it does not account for the disparate vulnerabilities due to structural inequalities, and the way that privileges in protections are conferred on some by the state through regulations and institutions.⁶⁹

B. Shared Benefits

Although solidarity in its purest form does not involve benefit to oneself, the concept of interest convergence may be helpful to influence protective laws and policies in future emergencies. Critical race scholar Derrick Bell theorized that laws and policies that benefited Black Americans were only likely to be passed if they also served an interest to the white majority.⁷⁰ The concept of interest convergence has been applied in numerous legal and policy concepts,⁷¹ and it is apt in public health law as well.⁷² Take the meat processing example. The spread of the virus presented hardships

for the meat processing industry and state economies. If employers had information showing how use of IPC measures could help avoid reduction in production and financial losses without also incurring the sequela of continued outbreaks, lawsuits, and negative press, perhaps they may have implemented measures consistently. Similarly, if government actors had contextual data showing efficacy of IPC measures in the workplace, even governments “captured” by the industry may have acted expeditiously to protect workers and the economic interests of the industry. Research demonstrating IPC measures that satisfy the health and safety interests of workers along with the long-term business interests of the industry are needed.

IV. The Need for Commitments in Planning and Research

Pandemic planning and research must explicitly include non-health care essential workers. The industries, governments, and consumers that benefit from their labor have a moral obligation to advocate for their protection. Moral claims, however, have rarely superseded interests in entrenched power structures and selective economic gain; therefore, the planning should account for the converging interests of the oppressors and the oppressed in appropriate workplace IPC measures. During the initial wave of a pandemic, the level of and adherence to IPC interventions will largely determine the extent of transmission, morbidity, and mortality until medical counter measures (vaccines and therapeutics) are widely available.⁷³ However, IPC measures, which are largely based on practices in healthcare need to be expanded to worker safety in non-healthcare essential industries and workplace settings. Creating research-driven public health guidance and protections for vulnerable workers is an important step toward detailing how to mitigate structural discrimination, as well as establishing essential workers’ rights and obligations prior to future epidemics or pandemics.

To begin to scope out appropriate preparedness plans, translational and applied research on IPC in a variety of workplace settings is needed. A central recommendation necessary to achieve any level of equity in protections is to fund research on IPC measures (protective equipment, engineering controls, administrative controls) to inform preparedness efforts for essential industries, as well as cost-effectiveness and outcomes research to quantify how IPC measures save both financial and human capital. Currently, the National Occupational Research Agenda (NORA), which is a partnership program to stimulate innovative research and promote widespread adoption of

improved workplace health and safety practices thus in many ways guiding National Institute of Occupational Safety and Health (NIOSH), must update its agenda to include further research on IPC for epidemics and pandemics to account for inequity in disease burden resultant from inequity in protections.⁷⁴ Specifically, additional funding should be allocated for NIOSH and other federal health agencies to address research gaps specifically for worker safety in essential industries with high numbers of minoritized and low wage workers. Federal funding should be provided to support state, local, and professional efforts to develop workplace hazard-assessment and control programs that include recognition and identification of aerosol exposures and prioritize workplace controls at the top of the hierarchy of controls.⁷⁵ Moreover, federal funding should support a robust research agenda targeted to workplace settings with high numbers of minoritized workers that includes: modeling research to support predictive transmission dynamics and disease spread to support rapid IPC guidance development based on emerging evidence, research on the role and design of ventilation; development and deployment of evidence based and inexpensive ventilation assessment tools and methods; training, fit-testing, and related respiratory-protection program support for all essential industries that lack the necessary resources and expertise to establish effective respiratory-protection programs.⁷⁶ Furthermore, to adequately address structural racism for meat processing and similarly situated essential workers, policy solutions and research agendas must be informed by sustained engagement with worker communities. Those in power, including professionals in occupational health and safety, emergency and pandemic preparedness and health security, and worker advocacy groups should demand that any future planning and research proceed with a focus on structural inequities, informed by the lessons of COVID-19 and other pandemics.

V. Conclusion

Public health agencies work to protect people from health threats. The COVID-19 pandemic demonstrated how the lack of evidence-based IPC guidance harmed multiply marginalized workers. To protect these populations, funders must prioritize scientific, preparedness, and bioethics projects aimed at protecting vulnerable workers. To avoid repeating the structural violence inflicted on low-wage essential workers during the pandemic, research and preparedness efforts should center on multiply marginalized workers' needs *before* the next epidemic or pandemic.

Note

The authors do not have any conflicts of interest to disclose.

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