

DISSERTATION

COVID-19, POLICYMAKING, AND THE PRODUCTION OF HARM IN THE
MEATPACKING SECTOR

Submitted by

India M. Luxton

Department of Sociology

In partial fulfillment of the requirements

For the Degree of Doctor of Philosophy

Colorado State University

Fort Collins, Colorado

Summer 2024

Doctoral Committee:

Advisor: Stephanie Malin

Tara Opsal

Jennifer E. Cross

Joshua Sbicca

Annabel Ipsen

Heidi Hausermann

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ABSTRACT

COVID-19, POLICYMAKING, AND THE PRODUCTION OF HARM IN THE MEATPACKING SECTOR

In March 2020, the United States was forced to respond to the impending threat of COVID-19. Businesses, schools, and many of society's institutions shuttered in hopes of preventing mass transmission. And yet, meatpacking plants remained open. By September 2021, over 59,000 meatpacking workers tested positive for COVID-19 and close to 300 workers had died from the virus (Douglas 2021). In this dissertation, I document the socio-political, structural, and institutional roots of high rates of COVID-19 transmission among meatpacking workers—and the impacts of firm decisions and federal, state, and local governance structures on workers. I utilize literature pertaining to industrialized animal agriculture, political economy, green criminology, and racial capitalism to analyze the intersections among policymaking and production of harm within the meatpacking sector. Drawing on 39 in-depth interviews, critical policy ethnography, and content analysis, I explore the impacts of labor and food policies on the safety and wellbeing of meatpacking workers prior to and during COVID-19.

Through an extended multiscalar case study of the JBS plant in Greeley, Colorado, I trace the involvement of agribusiness actors in federal, state, and local level policymaking during COVID-19. I examine how legacies of racialized labor exploitation have enabled firms to uphold the treadmill of meat production and perpetrate hazardous working conditions—conditions further upheld through corporate self-regulation, rather than federal intervention. I document how regulatory power of the federal agencies tasked with protecting worker and public health, including

the CDC and OSHA, has been greatly diminished in recent years due to declined funding, staff capacity, and a neoliberal political structure that favors corporate self-responsibility over state enforcement. I argue that a system of harm has been codified into the regulatory system; harm that emerges directly from policymaking and the outcomes of a neoliberal capitalist political-economic system. Throughout this dissertation, I analyze how meatpacking workers' vulnerabilities during COVID-19 were amplified by issues of procedural injustice and historical legacies of racial inequality and exploitation. I conclude with a discussion of theoretical and policy implications and offer suggestions for future research.

ACKNOWLEDGEMENTS

This dissertation would not have been possible without my community: thank you. For the last nine years, the Sociology department has, in my ways, been my home. It is here that I met life-long friends, developed meaningful academic relationships, and received an immense amount of personal and professional development. It is bittersweet to say goodbye.

To my mentors: Stephanie Malin, you have been an invaluable source of support, kindness, encouragement, and friendship— who you are inspires me not only as a scholar but as an individual. Thank you for being my advisor. *Jeni Cross*, you believed in me, extended numerous opportunities that cultivated my interdisciplinary research skills, and encouraged me to pursue a PhD. *Tara Opsal*, you provided not only mentorship but an extended fur family that has offered endless emotional support throughout my graduate school journey. *Annabel Ipsen*, I am forever grateful for our collaboration and for your support: your guidance, feedback, and willingness to talk through roadblocks and brainstorm ways to move forward have been critical to my success. To my undergraduate advisor, *William Force*, who opened the world of sociology to me in a time where I felt lost and guided me through graduate school applications: thank you. *Burton Porter*, thank you for keeping my dad's memory alive. I will always remember our campus coffee dates and philosophical conversations fondly. This work represents many years of mentorship and support from faculty members, including my committee: *Stephanie Malin, Jennifer Cross, Tara Opsal, Annabel Ipsen, Joshua Sbicca, and Heidi Hausermann*— I am indebted to you all.

To my friends: Becca Eman, I am grateful for all that you have brought to my life; for the weekend escapes (which you so thoughtfully plan!); and for both the fun and hard times we have shared together. I can always count on you. *Bailey Mellott*, who provides unconditional love and

support, and who reminds me there is more to life than working. *Danielle Creech*, whether we laugh or cry, I always feel better talking to you. *Bria Willert*, I could not have asked for a better friend to share the triumphs and tribulations of a PhD with. To my college friends: *Gianna Albanese, Shannon Rowe, and Catariny Depina*: we made it. With gratitude, to my graduate school friends: *Shelby Coopwood, Kelly Shreeve, Hannah Love, Carolina Banuelos, Mel Constantine-Miseo, Kellie Alexander*: I could not have done this without you.

To my family: Mom, your confidence in me has inspired so much of who I am. Your relentless strength has encouraged me to do difficult things, to never give up, and to treat failures as mere steppingstones. I would not be here without you. *Jared*, thank you for coming to Fort Collins and pursuing a PhD of your very own: as your little sister, I have always looked up to you. Your insights were invaluable to this dissertation. *Maya*, I love you. *Audrey*, I have been in school your entire life. Watching you grow up reminds me how much this world is worth fighting for. I will always love you. *Jimma* and *RP*, our time was cut too short. I will keep your memory alive, always, by travelling, reading, and doing everything we loved. *Dad*, you would be proud: I have in fact done good things, shown kindness to others, and explored rich, creative, and joyful avenues.

To my partner: Pascal, you have been a constant source of support over the last eight years. Thank you for encouraging me, for being the best formatter and Word document wrangler I could have asked for, and most of all, for being you. Your love of learning, commitment to creating a better world, and good spirit are infectious. To many more years of exploring the world together.

To all who participated in this study: thank you for trusting me with your stories and for your generosity. This dissertation would not have been possible without you.

There are so many others who helped shape this work and played a key role in my intellectual and personal development over the years— thank you.

PREFACE: THE STORY OF SAUL SANCHEZ¹

It was March 19, in the evening. My mom called us and told us my dad got home from work and he looked really strange. He looked like he didn't feel good at all. He went straight to bed. There's six of us, so my mom contacted all of us, and I'm recovering from cancer. I can't go if it's coronavirus. My sister is a nurse, same as my brother, so my sister went down, took his temperature. "He felt like he had a stomachache," she said.

The next day, he feels sick again, he got home sick again. Then that weekend, my sister, the nurse, saw him. He said he was feeling better, but she took his temperature. He still had a temperature, and she told him he should go to a doctor.

"It's fine. I think I'm fine, I just ate something bad," my dad said.

Then, thank God, he was off this week. We were going to travel to El Paso for spring break. Me and him always arrange our vacations together, and we were going to go down there.

"I don't think it's a good idea, because he's not feeling well," my sister said.

"That's fine, we don't have to. I'll just go to work. He needs to get better."

Then, come Tuesday, I got a text from my sister. She said my dad has been trying to get in to see his doctor.

"I don't think he can walk. I think he can't breathe", she said. She texted all of us, me and my brothers. "Take him to the hospital," my other sister, that's a nurse, said.

When I got there, they said they took him, but they won't allow anybody in the hospital, which I understand because of the coronavirus.

Since then, he's been on a ventilator. We haven't heard. They told us he was very sick. They did test him for coronavirus and said he had it.

Then we contacted JBS. I did. I called them that Wednesday to let them know because I was worried about other employees. They have a lot and I think this is huge. I'd think they'd want to know.

"My dad tested for coronavirus. He's very sick."

When I called, I got, first of all, the answering machine and then I finally called main corporate office in Greeley and they sent me to HR, which I just left a voicemail. I never heard anything. The next day I called again. They probably don't care. My dad's on vacation right now. He has the

¹ The transcript of Saul's story was shared by the *Greeley Tribune* and is reproduced here.

week off, but I'm thinking about the other employees that are there, so wherever he got it, it's not going to be spread. So, I called again and called corporate. I've tried and called, left messages. Nobody's answering me.

"Well, we'll send you to HR again." This time, one of their secretaries answered. She couldn't understand what I was saying. She only spoke mostly Spanish.

"I can speak to you in Spanish. My dad is this person, he's worked here 30 years, this is his name, he's sick with coronavirus. I think you guys should take some safety measures," I said.

"Um, do you have his employee ID number?" she replied.

"No. This is the name of his supervisor. Please have her call us and we can tell her what's going on," I said.

We've yet to hear from anybody. He's in the hospital. He's 78 years old. He's not doing well. He's on 65% on oxygen. It's been very hard for my family. I do think about the other employees there. How come they are exempt from taking safety measures, from protecting their workers? The secretary had no idea.

"I'm telling you one of your employees tested positive for coronavirus and he was working there."

"Ok, here's the fax number, so the doctors can send information so he can keep his job."

Oh my gosh. Like I'm praying to God, he doesn't go back there.

He's a hard worker. We've asked him to retire many times. He doesn't have the need to work. "I don't know what I'd do if I don't work", he says. He volunteers all the time when they're running short of people. We're like "Dad, you don't need to."

That was the thing the doctor told us: "He's very healthy for his age, unfortunately his age is working against him, but other than that."

I feel bad for the employees there. I just hope they're taking preventative measures because it's just horrible. Everybody else is taking— if your employees are that essential, and I love meat like the next, but especially if they're elderly, take care of them, please stay home.

It's been very hard. My dad is very well known. Everybody loves him. I don't know how many people have reached out. Very humble, very giving, and a very hard worker.

I was so thankful he was off this week because he'd probably have died there. He would have gone to work, especially knowing the need. At the same time, I want to make sure JBS does think about their employees. This is an example of the reality. People say, "who knows the real story", but here's a guy with six kids, 13 grandkids, and we've had the worst week ever because of this.

Our dad means everything to us.

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CHAPTER 1: INTRODUCTION

On April 7th, 2020, the first JBS worker from the Greeley, Colorado plant died: Saul Sanchez. Saul's story, shared by his daughter, is one that resonated for many meatpacking workers and their loved ones in the early months of COVID-19. Fear, a lack of information about COVID-19 due to its novel and unprecedented nature, and the pressure to continue working created a highly risky environment for meatpacking workers. These risks intersected with a pre-existing dangerous workplace, structural vulnerabilities, and a fragmented governance structure. Workers' health suffered—due to intersecting variables, including agribusiness interference in policymaking processes, preference for firm self-regulation over federal intervention, and pre-existing issues associated with consolidation and the rapid speed of production of industrial animal agriculture. By September 2021, over 59,000 meatpacking workers tested positive for COVID-19 and close to 300 workers had died from the virus (Douglas 2021). At this time, 291 JBS workers at the Greeley plant had tested positive for COVID-19 and 8 workers had died, one of whom worked in the corporate office (Bradbury 2020).

On April 28, 2020, meatpacking plants were designated as essential infrastructure under the Defense Production Act of 1950. The 2020 Executive Order stated that “it is important that processors of beef, pork, and poultry in the food supply chain continue operating and fulfilling orders to ensure a continued supply of protein for Americans” (85 FR 26313). In declaring meatpacking plants as “essential critical infrastructure”, meatpacking workers were positioned as essential workers. However, as I document throughout this dissertation, despite being constructed as “essential”, there were no enforceable safety and health guidelines designed to protect meatpacking workers and limit disease transmission. The public health outcomes of this decision

have been immense: both for workers and for their surrounding communities. Research has documented that the presence of a large-scale beef, pork, and chicken meatpacking plant increased per capita COVID-19 infection rates by 110%, 160%, and 20% respectively (Saitone, Schaefer, and Scheitrum 2021). Residents of counties with meatpacking plants were between 51% and 75% more likely to have contracted COVID-19 by July 21, 2020, and 37% more likely to die from the virus, even when analysts controlled for risk factors including race, ethnic background, average income, household size, portion of workers in frontline jobs, elderly population and population in prisons and nursing homes (Taylor, Boulos, and Almond 2020). Furthermore, aggregate data suggested that 334,000 COVID-19 infections were attributable to meatpacking plants in the U.S., with associated mortality and morbidity costs totaling more than \$11.2 billion (Saitone, Schaefer, and Scheitrum 2021). The decision to keep meatpacking plants like JBS open had ripple effects for workers, their families and loved ones, and the broader communities they call home.

In this dissertation, I assess the socio-political, structural, and institutional factors that shaped high rates of COVID-19 transmission amongst meatpacking workers. Drawing on in-depth interviews, critical policy ethnography, and content analysis, I explore the impacts of labor and food policy on the safety and wellbeing of meatpacking workers prior to and during COVID-19. Through an extended multiscalar case study of the JBS plant in Greeley, Colorado, I trace the involvement of agribusiness actors in federal, state, and local level policymaking during COVID-19. I examine how legacies of racialized labor exploitation have enabled firms to perpetrate hazardous working conditions: conditions further upheld through corporate self-regulation, rather than federal intervention. I document how legal and citizenship status, language barriers, and limited other economic opportunities have compounded meatpacking workers' disempowerment, including their abilities to organize and strike for better working conditions. I argue that a system

of harm has been codified into the regulatory system; harm that emerges directly from policymaking and the outcomes of a neoliberal capitalist political-economic system. Throughout, I document how meatpacking workers' vulnerabilities during COVID-19 were amplified by issues of procedural injustice and historical legacies of racial inequality and exploitation.

Theoretical Overview

In this research, I draw upon three important bodies of literature: 1) industrialized animal agriculture, 2) green criminology, and 3) racial capitalism. First, I provide a review of industrialized animal agriculture through a political-economic lens and document the power that agribusiness exercises over the regulatory frameworks and structure of the food system (Ashwood, Diamond, and Walker 2019; Howard 2015; Leonard 2014; Lyson and Welsh 2005; Silbergeld 2016). I document the role of neoliberalism in limiting regulation of industrial animal agriculture, shifting the responsibility of regulation from the state to the market (or firm self-regulation). I trace the rise of industrial animal agriculture and key trends that have driven the transition from small scale, diversified animal agriculture to an increasingly consolidated, industrialized sector. I utilize the treadmill of production (ToP) (Schnaiberg, Pellow, and Weinberg 2000; Schnaiberg, Pellow, and Weinberg 2004) to illustrate how the prioritization of profit shapes policymaking related to the meatpacking sector and the subsequent harms embedded within this sector. I argue that the limited oversight of agribusiness firms has led to socio-environmental issues associated with animal agriculture, including a precarious labor force, worker safety concerns, and public health and environmental consequences (Ashwood et al. 2019; Broadway and Stull 2008; Eisnetz 2009; Leonard 2014; Bennett 2014; Howard 2016; Silbergeld 2016). I build on literature related to industrialized animal agriculture by assessing how the regulatory system privileges agribusiness profit accumulation and, in turn, the ways that these biases accelerate social harms.

Second, I use green criminology as a framework to examine policymaking processes related to the meatpacking sector during COVID-19 and the harms embedded within this sector. Green criminology expands the criminological focus of crimes, criminals, and the legal system to additionally investigate harms. Prior green criminological research has focused on pollution, regulation, corporate and state criminality, and forms of law enforcement and rule regulation (Brisman and South 2013; Lynch and Long 2022). An important tenet of green criminology is the role of law in shaping and maintaining powerful economic interests through environmental lawmaking and enforcement processes (Lynch, Stretesky, and Long 2020). In examining the role of the political economic system in shaping harms related to the meatpacking sector, I extend green criminology to assess harms against people embedded in environmentally harmful (or risky) industries. I trace how policymaking related to the meatpacking sector upholds corporate interests, at the cost of worker wellbeing and safety. In documenting how harms embedded within the meatpacking sector are politically and economically constructed, I contribute to limited green criminology literature which locates harm within state and economic relations (White 2013; Ruggiero and South 2013). Moreover, green criminological inquiries on industrialized animal agriculture have predominately focused on harms against animals and the impacts of meatpacking facilities on host communities (Fitzgerald, Kalof, and Dietz 2009; Porcher 2011; Muller 2018). In contrast, I focus on the institutionalized harms embedded within the industrialized animal agriculture and the impacts of these harms on workers.

Third, I bring racial capitalism into conversation with green criminology to assess *who* is most impacted by these harms and the role of racialized labor exploitation in sustaining the treadmill of meat production. While workers were touted as “essential”, decades of research on meatpacking workers paints them as a disposable and highly vulnerable population, illustrating

patterns of racial capitalism that devalue workers and accentuate their surplus status (Pulido 2016). Racial capitalist scholars assert that capitalism is premised on exploitation based on social and culture differentiation and highlight the centrality of race in structuring social and labor hierarchies in capitalism (Pulido 2016; Sze 2020). In the United States, 80% of meatpacking workers are people of color, 71% are non-citizens, and 37% are foreign born (Dollar and Stuesse 2020). These demographics are directly linked to firm recruitment efforts of immigrants and refugees into the meatpacking sector. The preference for a minoritized workforce illustrates dynamics of racial capitalism; where workers are devalued and exploited based on their race and ethnicity and yet, their labor is necessary for continuing capitalistic production (Frydenlund and Dunn 2022). I argue that racialized labor exploitation is a key mechanism for sustaining the ToP and serves as a “racial fix” to labor issues that threaten production (Carillo 2021).

Drawing upon these bodies of literature, I advance an understanding of how COVID-19 policymaking reflected agribusiness economic and political power and ensured the continued exploitation of a minoritized workforce. Building upon racial capitalism, I highlight the intersectionality of race, labor exploitation, and capitalist production within the meatpacking sector. While political economic literature related to industrialized animal agriculture has documented the linkage between policy decisions and inequalities, there has been little focus on how these inequalities are mechanisms of legal harm. I expand the scope of green criminology beyond environmental harms to include broader social harms inflicted by policies favoring environmentally hazardous industries like the meatpacking sector, contributing to a more comprehensive understanding of how regulatory systems perpetuate social injustices.

Research Design

In this dissertation, I document the socio-political, structural, and institutional roots of high rates of COVID-19 transmission among meatpacking workers—and the impacts of firm decisions alongside federal, state, and local level governance on workers. I assess 1) what institutional, structural and sociopolitical factors shaped meatpacking policymaking during COVID-19; 2) how COVID-19 affected policymaking and enforcement for meat production at the local, state, and national levels; and 3) how have structural inequalities and historical legacies of racial exploitation shaped the experiences of meatpacking workers prior to and during COVID-19.

To analyze the multiscalar nature of agribusiness power in policymaking and the subsequent impacts, I focus my inquiry on the JBS plant in Greeley, Colorado. The Greeley plant is the headquarters for JBS America, currently employs 5,000 people, and is the largest beef meatpacking plant in the country (Fendt 2020). As JBS is the largest meatpacking firm in the world, it plays an integral role in local, regional, and national economies—and thus has amassed considerable economic and political power. I selected the Greeley plant because of the significant COVID-19 outbreak at the facility, its close proximity to Fort Collins, and the powerful role of JBS in the agribusiness sector. Although I was not able to visit the JBS plant directly due to issues of site access, the close proximity of the plant provided the ability to develop relationships with key informants and conduct in-person interviews.

Furthermore, because JBS is the area's leading employer, Greeley can be characterized as a “modern company town,” where a dominant employer employs a large portion of the total local labor force (Willingham and Ajilore 2019). When the labor market becomes concentrated, dominant employers such as JBS can exert significant influence in local political and economic decisions. Greeley is also unique in that it is located in Weld County: one of two counties in Colorado that is a “home rule” county. Home rule is a governance structure that enables local governments

to act and legislate on local matters (Bernard 2020). In turn, county governance supersedes state law. This was particularly notable during the COVID-19 pandemic, in which home rule counties such as Weld County were able to resist statewide mandates, such as mask orders and business closures. The intersection between Weld County's governance structure and the embedded nature of JBS in the local economy warranted further investigation to understand how socio-political decisions influenced high rates of transmission.

While I use the JBS plant in Greeley as an extended case study to examine the socio-political origins of COVID-19 transmission, I analyze it in relation to the broader landscape of state, federal, and local policy decisions that shape meatpacking worker vulnerability. In drawing on in-depth interviews, content analysis, and critical policy ethnography, I assess the multiscalar involvement of agribusiness firms in governance and the subsequent implications on worker health, safety, and wellbeing. This multi-scalar method to data collection and analysis enabled me to assess harm embedded within meatpacking sector from the individual firm level to local, state, and federal governance structures.

Drawing on 39 in-depth interviews conducted with local, state, and federal representatives, workers, worker advocates, attorneys, and reporters, I trace the impacts of agribusiness power in public health and labor policy, as well as the impacts on workers during COVID-19 and beyond. In addition to in-depth interviews, I conducted critical policy ethnography and content analysis to triangulate my investigation into the institutional, structural, and political decisions that contributed to high COVID-19 transmission rates in the meatpacking sector. Given that direct observation of the policymaking process is difficult, analyzing documents and publicly available information provided a way assess power dynamics and policy decisions relevant to meatpacking plants prior to and during COVID-19. This data included industry reports, press releases, relevant

policies associated with high rates of COVID-19 transmission (e.g., line speed increase), policy briefs, associated bills and regulatory actions—including then-President Trump’s Executive Order, governmental agency (such as OSHA, USDA, County Health Departments, CDC reports) statistics, studies, and press releases, and reports and records. In total, I gathered 270 unique documents, most of which spanned multiple pages. Analyzing existing documents, news stories, reports, and documents provided a deeper understanding of the policy decisions that shaped the vulnerability of meatpacking workers prior to and during the pandemic.

Significance of the Study

This research documents the socio-political and institutional factors that shaped high rates of COVID-19 transmission in the meatpacking sector. Drawing on literature related to industrialized animal agriculture, green criminology, and racial capitalism, I illustrate the role of political economy in shaping the harms experienced by meatpacking workers—a predominately racially and ethnically minoritized workforce. In doing so, I extend green criminology to explore harms against workers embedded within environmentally risky industries, and the interconnection between harm and public health outcomes. Furthermore, in analyzing the role of racialized labor exploitation in the meatpacking sector, I trace how dynamics of racial capitalism sustain the current treadmill of meat production and who suffers the consequences. I build upon racial capitalism and literature on environmental justice to illustrate the harms associated with racialized labor exploitation and the outcomes of socially and environmentally risky workplaces on workers. Although environmental justice research has largely focused on the disproportionate exposure to environmental pollution on minoritized communities (Bullard 1990; Mohai and Bryant 1992; Hurley 1995; Mohai et al. 2009; Timmons Roberts et al. 2018), worksites too can be sites of environmental injustice (Carillo and Ipsen 2021). In expanding beyond community environmental

impacts to explore the impacts on workers, a more robust understanding of how power relations embedded within the ToP drive social harm is made possible.

In assessing the nexus between industry power, local and state policy, and the constructed disposability of “essential” meatpacking workers, I provide novel empirical data that contributes to green criminology literature through a focus on state and economic relations. Methodologically and empirically, my research contributes to an existing empirical gap in various literatures through conducting in-depth interviews with industry actors, advocacy and labor organizations, workers, and state and health representatives regarding high rates of COVID-19 transmission in the meatpacking sector. At present, research on COVID-19 transmission and meatpacking plants has been limited to secondary data analysis and survey data (Dyal et al. 2020; Taylor, Boulous, and Almond 2020; Stull 2020; Struthers, Montford, and Wotherspoon 2021; Carrillo and Ipsen 2021; Ramos et al. 2021). Existing research on policymaking challenges during COVID-19 has also been largely limited to secondary data analysis (Jones and Hameiri 2021; Grønnegaard Christensen and Mortensen 2023), which does not capture the perspectives of regulatory officials or the historical and contemporary contexts that posed barriers to effective collaboration and policymaking.

This research documents the role of industry actors, corporate practices, and state and federal policy in fueling high rates of COVID-19 transmission in meatpacking plants. I argue that the influence of agribusiness spans across multiple levels, a power that has been enabled by a neoliberal political-economic structure, deregulation, and regulatory capture. I contend that dominant agribusiness firms have been able to manipulate policies and regulations to their advantage, leading to compromised safety standards and the prioritization of corporate interests at the expense of community and worker welfare. In exploring how public health governance was utilized at the behest of corporate interests and practices, I build upon green criminological

research, which locates harm in economic and state relations, and provide evidence of how this manifested at the local level (White 2013; Ruggiero and South 2013). I argue that not all harms are the direct outcomes of policies and instead, can be the outcomes of institutional arrangements, including a fragmented governance structure and the erosion of regulatory oversight.

Moreover, I provide robust empirical evidence that challenges industry and state actors' claims that high COVID-19 transmission among workers was the result of lifestyle practices, rather than policy failure. These findings can have important implications for workers who are currently facing industry contestations related to worker's compensation for illness and death due to difficulties in attributing workers' points of exposure and contraction of COVID-19. My empirical data illustrates the need for the USDA, OSHA, and states to actively enforce health and safety standards without influence from meat and trade associations and companies. These findings are critical not only for addressing the immediate challenges of the meatpacking worker vulnerability but also for strengthening the resilience of workplace safety regulations in the face of future health emergencies.

Dissertation Overview

Throughout this dissertation, I document the impact of agribusiness firms on the policymaking process and the ways firms leverage policies and policy loopholes to their advantage. In the following chapters, I review the literature, my research methods and study design, my findings, and conclude with a discussion of research contributions and implications. In Chapter Two, I document the concentration and consolidation of the meatpacking sector and the subsequent impacts. I use political economy and green criminology to assess how the current system fosters harms for workers, the environment, and host communities. Drawing on racial capitalism, I illustrate how the meatpacking sector disproportionately harms marginalized

communities and workers, perpetuating a system where the most vulnerable bear the brunt of environmental and social costs. In Chapter Three, I describe my methodological approach, including my research design, sample, data collection, data analysis, the role of reflexivity, and research limitations.

In Chapter Four, I focus my analysis on the federal level and provide an overview of the regulation of the meatpacking sector. Here, I document factors leading to the erosion of OSHA and USDA's regulatory power related to food and worker safety and the impacts. In Chapter Five, I assess the relationship between local and state governance structures and the public health outcomes for meatpacking workers. In Chapter Six, I document how the racial and ethnic demographics of meatpacking workers intersected with their vulnerabilities to exploitation, unsafe working conditions, and health risks during COVID-19. Then, I discuss procedural injustices embedded within the Colorado workers' compensation system and the outcomes of workers' compensation policies during COVID-19. I conclude this chapter with a discussion of workers organizing in the face of the COVID-19 pandemic.

In Chapter Seven, I conclude this dissertation with a discussion of theoretical implications, research contributions, and identify policy recommendations based on my findings. In analyzing the harms embedded within the meatpacking sector, I highlight the urgent need for multiscalar policy reforms. Enhanced accountability and oversight across local, state, and federal levels are crucial for improving worker health and safety, while diminishing agribusiness influence in policymaking. This also includes addressing the procedural injustices embedded within the workers' compensation system and bolstering the power of regulatory agencies such as OSHA and USDA to ensure robust oversight of worker safety and public health standards without interference from meatpacking firms.

CHAPTER TWO: LITERATURE REVIEW

The story of industrialized animal agriculture is a story about power. In this chapter, I detail how key agribusiness firms rose to power, with the assistance of government actors and policies and the subsequent consequences. Literature on the political economy of industrialized animal agriculture has documented the power that agribusiness exercises over the regulatory framework and structure of the food system (Lobao and Stofferahn 2008; Leonard 2014; Silbergeld 2016; Howard 2016). However, this literature has yet to assess the inequalities embedded within policy decisions, inequalities that become mechanisms of harm. The power of these companies, juxtaposed against the limited power of workers that uphold these firms, has resulted in troubling power dynamics and a highly unjust and inequitable system of production. I explore the outcomes of corporate agribusiness power, under-regulation, and policymaking on meatpacking workers in the COVID-19 era. In doing so, I assert that while largely legal, the harms experienced by meatpacking workers exemplify state-corporate and green crime, contributing to a more nuanced analysis of harm and its political economic roots (White 2013; Ruggiero and South 2013).

First, I provide a brief history of corporate concentration and consolidation of the industrialized animal agriculture sector, highlighting the role of political economy. I discuss the treadmill of production (ToP) and the multiscalar power relations of agribusiness actors, detailing how economic interests intersect with policymaking and the social and environmental consequences associated with the current system (Schnaiberg and Gould 1994; Schnaiberg, Pellow, and Weinburg 2000). Second, I turn towards a discussion of green criminology and the structural and legal harms associated with industrialized animal agriculture, contributing to limited green criminology literature that locates harm within state and economic relations (White 2013;

Ruggiero and South 2013). Third, I detail the physical and psychological outcomes of meatpacking work and the social location of workers. Throughout, I assess the structural violence embedded within this sector and argue that the role of firm and industry in the policymaking process, and the subsequent policy exemptions and leverage of policy loopholes, has cultivated deadly harms for workers, the environment, and meatpacking communities. In doing so, I draw connections between environmental justice, racial capitalism, and the disproportionate impact of industrialized animal agriculture on racially and economically marginalized workers and communities (Bullard 1990; Brown 2007; Wing, Cole, and Grant 2000; Pulido 2016). In merging scholarship on the political economy of industrialized animal agriculture with green criminology, I trace the multiple ways that the political economic system fuels harms associated with industrialized animal agriculture.

A Brief History of Industrialized Animal Agriculture

In the United States, intensive animal production emerged in the wake of World War II and has now become normal operating procedure for poultry and swine. Today, intensive livestock operations (ILOs) and concentrated animal feeding operations (CAFOs) dominate animal agriculture (McLeod-Kilmurray 2012). Both are defined according to the density of animals per square feet or meter and more often the number of animal units (McLeod-Kilmurray 2012). The literature on animal agriculture industrialization uses a variety of definitions, including “quantitative scale, specialization of growing and killing facilities, organizational structure and degree of corporate control, the degree of fossil fuel–driven technologies used over human labor, or the relative standardization of engineered animals” (Blanchette 2019: 188). Globally, the number of land animals killed for consumption exceeds 80 billion annually, demonstrating the efficient albeit horrific nature of this system (Ritchie, Rosado, and Roser 2019). In the U.S., more

than 500,000 people work in the animal slaughter and processing sector (Rho, Brown, and Fremsted 2020).

The slaughterhouse emerged as an institution during the 19th century, accompanying the broader transition from agrarian to industrial societies (Fitzgerald 2010). By the 1800s, animal slaughtering had become an industrialized, mass scale mode of production in the US. The Chicago Stockyard was at the forefront of mechanizing the industry, with their development of the conveyer belt to increase production speed and efficiency (Fitzgerald 2010). In the 1990s, a new era of animal agriculture was led by the Iowa Beef Processing (IBP) revolution and by vertical integration. The IBP revolution was premised on economies of scale, constructing large meatpacking capacity plants, utilizing automation technologies such as conveyer belts, and processing meat into cuts rather than shipping larger sides of beef for butchers to process (Fitzgerald 2010; Blanchette 2019). This allowed IBP to increase both the pace of work and profit through on-site processing and increased distribution (Blanchette 2019). Due to transportation and refrigeration innovations, meatpacking facilities no longer need to be close to urban areas, and many relocated to rural areas. Most of the towns where IBP purchased or constructed plants had populations of less than 25,000 (Broadway 1998). These towns were also frequently located in right-to-work states, avoiding the higher costs associated with unionized labor (Broadway 1990).

Today's systems of animal agriculture are defined by their highly concentrated and consolidated nature. Mergers and acquisitions have shaped the consolidation of agribusiness actors, with top producers merging – and subsequently increasing their power. Vertical integration has drastically changed the market, the workplace, and the ways that meat is produced (Leonard 2014). Integration refers to “an organizational structure in which the overall control of production is centered in one economic entity and all activities related to production are carried through direct

control or contractual arrangements” (Silbergeld 2016:43). Integration is premised on concentration, confinement systems, and contract farming. Contracting has enabled major meatpackers to dictate procedures of growing such as confinement barns, feed, and the use of pharmaceuticals through contracts with farmers (Blanchette 2019). Although integration is not the same as a monopoly, it has similar impacts on restraining trade and reducing the economic power of competitors and workers. Vertical integration increased the power of agribusiness, while decreasing the wellbeing of host communities, farmers, and workers (Leonard 2014).

By the end of the 20th century, one in four hogs was produced by ten companies and seven of every ten were being grown under contract with large firms (Hendrickson et al. 2013). By 2011, only four firms processed 82% of the 34,000,000 cows killed annually in the United States (Hendrickson et al. 2013). The three largest firms globally are currently JBS of Brazil, WH Group of China, and Tyson of the US. These large multi-national corporations dominate animal production and account for 83.5% of beef production, 66% of pork production, and 58.5% of chicken production (Hendrickson 2015). Mergers and acquisitions have shaped the consolidation of agribusiness actors, subsequently increasing their power as top producers blend. JBS, for example, purchased a 64% stake in Pilgrim’s Pride in 2009, bought Smithfield’s U.S. beef operations in 2008, and in 2008, acquired U.S. based Swift & Company, a leading pork and beef supplier (Johnson 2009). Currently, JBS is now the largest meat producer in the world, with an annual revenue of \$50 billion (Gelles 2023).

As these three companies dominate the market, they hold the ability to set prices and terms, diminishing competition, leading to increased costs for consumers and decreased profits for producers (Howard 2016). Furthermore, due to integration, their control over the entire meat supply chain, from animal farming practices to processing standards, allows them to influence

production methods favoring efficiency and cost reduction (Hendrickson et al. 2020). This centralized control impacts labor practices and corporate power, as workers in meatpacking plants contend with demanding conditions, long hours, and safety concerns as companies strive to maximize productivity and minimize operational costs (Genoways 2014). These companies also engage in extensive lobbying efforts that shape public policies and regulations governing the industry, affecting issues such as animal welfare standards, environmental regulations, and worker protections (Bennett 2014). Deregulation of the industrialized animal sector has allowed industry operators to self-regulate worker safety, food safety, and animal welfare – despite their vested interests in maintaining the status quo.

Next, I turn towards a deeper discussion of how these companies have risen in power vis-à-vis the political economic sphere and the consequences.

Policy and Power

Many of the consequences associated with agribusiness relate to existing policies and structures of power and the current capitalist political economic structure. Capitalism is a system of economic and social relations marked by private property, private ownership of capital, the commodification of labor power, the exchange of goods and services by “free” individuals participating in “free” markets, and the use of market mechanisms to control the production and distribution of those goods and services (Muller 2013). In the late 1970s and early 1980s, following the breakdown of embedded liberalism, the neoliberal state was formed to “re-establish the conditions for capital accumulation and to restore the power of economic elites” (Harvey 2005:19). While its definition and applications are often contested, neoliberalism can best be understood as “as a diverse and interlinked set of practices that reflects a heightened, evolved, and destructive form of capitalism” (Malin 2015:16). Neoliberalism is expressed through policy discourse such as

privatization, marketization, state deregulation, market-friendly reregulation, and the creation of self-governing individuals (Malin 2015; Malin and Kallman 2022). Neoliberalism advocates for free-market mechanisms to efficiently allocate resources and drive economic growth without the interference of the state. A key tenet of neoliberalism is individualism, where individuals have autonomy in their economic and social choices and thus the state's responsibility for social support provisions is limited. Although the idea behind neoliberalism is that wealth will “trickle down” to lower social classes, this has yet to happen. Instead, the elite class has expanded their economic power through leveraging neoliberal policies such as privatization and marketization, while those in lower economic statuses have become increasingly exploited (Gordon 2019).

To understand how agribusiness actors were able to utilize policies and the neoliberal state to their advantage, it's important to assess the intersection between government, power, and corporate interests. Neoliberalism's emphasis on free-market principles and limited government intervention has cultivated an environment where powerful corporations can exert significant influence over policies that affect their interests. Due to economic capital, dominant industrial agriculture firms can shape policies and contest those that threaten production and profit (Bennett 2014; Lyson and Raymer 2000). Furthermore, neoliberal policies advocate for deregulation and have subsequently reduced government oversight in various industries, including industrialized animal agriculture. Neoliberalism plays a key role in limiting regulation of industrial animal agriculture, placing the onus of responsibility on industry to self-regulate rather than on the state (Kreuziger 2005). In turn, agricultural firms operate with fewer restrictions, impacting areas like environmental protection, labor standards, and competition (Lyson and Raymer 2000). As a result of limited anti-trust enforcement, these corporations have consolidated their market control, further solidifying their influence over policymaking. In a neoliberal system, the state is biased to promote

the interests of those who own the means of production and produces legislation and regulatory frameworks that largely benefit corporations (Harvey 2005). Moreover, firms play a key role in policymaking and regulatory processes. In doing so, they have become deeply embedded within the structure of the state (here, the US federal government), fueling environmental and social injustices while reaping profits (Carillo and Pellow 2021). Neoliberalism has cultivated an environment of deregulation and capitalistic expansion, shaping the conditions where corporate power and the treadmill of production, which I discuss next, has thrived.

The Treadmill of Production and Industrialized Animal Agriculture

The “treadmill of production” (ToP) is the idea that modern capitalist societies are driven by an unending commitment to growth despite social and ecological costs (Schnaiberg and Gould 1994). The ToP framework highlights capitalism’s continuous push to grow and expand production and markets, centered on the persistent drive to invest in capital to generate goods from the environment (Schnaiberg and Gould 1994; Schnaiberg, Pellow, and Weinberg 2002). In its pursuit of growth, the ToP prioritizes economic expansion and growth above all other concerns. At its core, the ToP is based on the political economy of production and how class relations and social structures influence environmental degradation (Schnaiburg 1980). Schnaiburg (1980) links capitalist production processes and their reliance on fossil fuels as driving environmental pollution—pollution that is enabled by the political economic system and a state which upholds the economic interests of producers. Three actors are embedded in the ToP: producers, which transform extracted resources into products; the state, which supports the expansion of production; and labor, which is key to keeping the treadmill running (Schnaiburg 1980). Although the state *can* play a role in slowing the treadmill, the pursuit of profit and capital accumulation and corporate

interests has overshadowed regulations aimed at environmental protection (Gould, Pellow, and Schnaiberg 2008; Carillo and Pellow 2021).

The ToP draws attention to political-economic structures, the pursuit of economic expansion, and the costs of increased production on a finite set of resources. As markets and production expand, especially through multi-national corporations, greater demands are placed on the environment for raw materials (“withdrawals”) and more waste and pollution are produced (“additions”) (Schnaiberg, Pellow, and Weinberg 2000). Higher production levels, the application of new manufacturing technologies, and the trend toward the accumulation of capital has increased and accelerated environmental damage (Schnaiberg, Pellow, and Weinberg 2000). Notably, the ToP and subsequent capital accumulation has benefitted those who control the ToP (“shareholders”) and who hold power over the stakeholders of production, such as laborers and community members (Gould, Pellow, and Schnaiburg 2004). In the ToP, human health costs and environmental degradation are externalized when calculating bottom lines and profit margins. This becomes even more insidious under neoliberal policy regimes due to growing deregulation and self-regulation, which has furthered enabled the ToP to persist despite its consequences.

Industrialized animal agriculture is a clear example of the ToP and the environmental and social costs associated with this model. First, confinement agriculture is associated with rising greenhouse gas emissions, pollution, environmental degradation, and loss of biodiversity. In the process of raising and killing animals for consumption, a significant amount of land, food, and water is needed (e.g. “withdrawals”). The global percentage of water required for industrialized animal production is between 27% to 33% – a substantial portion of a finite resource (Gerbens-Leenes, Mekonnen, and Hoekstra 2013; Scanes 2018). Strikingly, 77% of the world’s agricultural land is used for animal agriculture, including grazing land and land used for animal feed production

(Ritchie, Rosado, and Roser 2022). These statistics demonstrate the magnitude of resources withdrawn to support the treadmill of animal production. Industrialized animal agriculture also produces “additions” to the environment, including greenhouse gas emissions and water, air, and soil pollution (Steinfeld et al. 2006; Weis 2013). Industrial animal agriculture operations cause air pollution in the form of methane, nitrous oxide, and gaseous ammonia, which contribute to global warming and respiratory health problems (Bennett 2014). Animal manure also generates between 50% and 85% of the United States’ airborne ammonia emissions, which contributes to the acidification of soil and water (Spellman and Whiting 2007). Given the environmental degradation linked to industrialized animal agriculture, and its estimated global value of \$1.4 trillion, it provides a clear example of how profit and production overshadow environmental concerns.

However, while the ToP highlights the environmental outcomes of expanded production and markets in sectors like industrialized animal agriculture, it focuses less on social costs and the impact on labor (Schnaiberg, Pellow, and Weinberg 2000; Schnaiberg, Pellow, and Weinberg 2004). Gould, Pellow, and Schnaiburg (2002) identify two outcomes of the ToP on workers: 1) most workers experienced a decline in wages and job opportunities due to reduced unionization and relocating industry to countries with less stringent environmental or labor laws and 2) a small portion of workers benefited from the ToP through their incorporation into the treadmill and subsequent material gains. However, the latter portion of workers benefitting from the ToP became increasingly sparse as labor costs have been reduced in favor of higher firm profits. To accomplish lower labor costs, there was a rise in de-unionization, de-skilling of workers, and an increased reliance on technological advancements and automation over human labor (Schnaiberg, Pellow, and Weinberg 2000). Changes in the meatpacking industry, discussed later, mirror these patterns.

Although the environmental outcomes of the ToP have been well-studied, research on the labor dynamics embedded within the ToP is more limited. Obach (2004) identifies three ways that labor sustains the ToP: through collective bargaining, political advocacy, and as an ideological force. Unions, rather than slowing the ToP, have powered it by making material gains for workers the focus of their efforts. In advocating for higher wages for workers and economic growth, unions have supported the ToP and legitimized the idea that economic growth is the solution to social inequality. In framing the slowing of the ToP as harming workers, organized labor and the state support increased production (Gould, Pellow, and Schnaiberg 2008). Curran (2017) also contends that worker-consumers are complicit in supporting the ToP through being locked into a “treadmill of consumption” and highlights the role of capital, purchasing power, and conspicuous consumption. However, Curran (2017) neglects the power dynamics that trap many workers into supporting the ToP by selling their labor. It is certain that the ideologies of consumerism are deeply embedded within capitalism, however, the realities of capitalism also necessitate the selling of one’s labor power to survive (Gordon 2019). And yet, as labor standards have been eroded in favor of profit accumulation, those working to sustain the ToP are frequently exposed to unsafe working conditions and exploitation. While unions can slow the speed of the ToP through supporting increased labor standards to enhance worker safety (Obach 2004), their power and presence has been greatly reduced under neoliberalism.

Furthermore, while the ToP does acknowledge the exploitation of labor power to maintain production, a robust analysis of *whose* labor power is exploited has been largely absent. The exploitation of racial and socio-economic minorities is a key mechanism sustaining the ToP and circumventing barriers that threaten its survival (Carrillo 2021). Carrillo (2021) identifies three racialized processes (spatial, political, and cognitive) that enable the ToP to persist; drawing

connections between racialized spaces and the segregation of pollution, the racialized dimensions of political processes, and the role of racial identity politics in supporting or contesting state intervention related to environmental degradation. Other research has focused on how racial and socio-economic minorities have protested outcomes related to the ToP, including environmental degradation and subsequent community pollution, and in doing so, threatened to slow the ToP (Edwards 2009; Sbicca 2012; West 2015). Overall, though, research on the ToP, the role of labor exploitation, and racialized power dynamics is scant. To better understand the role of racial exploitation as mechanism of sustaining the ToP, increased scholarly attention and research on labor dynamics embedded within the ToP is necessary.

Deregulation, Lobbying, and Corporate Power

In an era where private capital greatly influences political structures, the state is reluctant to impose restrictions and regulations on industry (Schnaiberg, Pellow, and Weinberg 2000; Harvey 2005; Carillo and Pellow 2021). Furthermore, the power of agribusiness entities in the political realm has been magnified by regulatory capture, a phenomenon in which regulatory agencies become unduly influenced by the industries they are tasked with regulating (Pickard 2019). Regulatory capture can be facilitated by the close relationships formed between regulators and industry representatives, often stemming from a “revolving door” where regulatory officials move into industry roles and vice versa (Friedrich 2015). The revolving door of regulatory officials and industry actors often means that regulators share the perspective and interests of those whom they are tasked to regulate. It also results in regulators who may be “reluctant to regulate aggressively if doing so would jeopardize the prospect of securing future employment” (Friedrich 2015:208). In this way, regulatory capture can result in “lobbying from within”, where regulators have internalized the interests and culture of their industry counterparts (Yates and Cardin-Trudeau

2021). Regulatory capture can also result from intense industry lobbying efforts, financial contributions to political campaigns, and even the framing of policy issues to benefit industry actors. The consequences of regulatory capture are substantial and include weakened oversight, reduced regulatory stringency, and, ultimately, enhanced industry power.

Lobbyists play a key role in interfering with the independence of regulatory agencies and promoting the economic interests of agribusiness. Since 2000, the entire U.S. agribusiness industry, including meat and dairy companies and other agricultural sectors, has allocated approximately \$750 million to support federal political candidates. To put this into perspective, the U.S. energy sector spent \$1 billion over the same period (OpenSecrets 2022). Between 1998 and 2019, the agribusiness sector directed \$2.5 billion toward lobbying efforts, surpassing the sums spent by the defense industry which spent \$2.4 billion (Lazarus, McDermid, and Jacquet 2021). In 2020, 75% of meat processing lobbyists were “revolvers”, meaning they had previously been former governmental regulators, Congressional staff, and even members of Congress (Open Secrets 2022). Major meat lobbyist and industry groups include North American Meat Institute (NAMI), National Chicken Council (NCC), National Cattleman’s Beef Association (NCBA), and American Association of Meat Processors (AAMP). These organizations play significant roles in shaping meatpacking policies and regulations through lobbying efforts, advocacy, and political contributions.

The state has thus become increasingly implicated in supporting and subsidizing industrialized animal agriculture through policy action and deregulation – further exemplifying regulatory capture. The advantage of dominant firms was facilitated through policy actions such as “higher direct subsidies, barriers to entry, unequal enforcement of violations, reduced labor costs, lower rates of unionization, more government assistance to supplement below subsistence

wages, and reshaped dietary patterns through increased consumption of meat and more highly processed meats” (Howard 2016: 6). In recent years, the US has spent \$10 billion annually in farm subsidies (Howard 2016). These subsidies are not distributed equally but are weighted to the largest farms. In total, 86 percent of funding goes to the top 20% of recipients: further increasing their economic power and propping up low market prices (Howard 2016). High levels of consumption are maintained through artificially low prices enabled by subsidies, the externalization of significant environmental and social costs, and diminishment of concerns related to animal cruelty and worker safety (Howard 2016; Pachirat 2011). Subsidies are critically important in allowing operating costs for the meat sector to remain low, while profits remain high. In fact, the scope of government subsidies provided to key industry actors suggest that without this support, ownership within the global meat industry would be far less concentrated (Howard 2016).

Through firm alliances, a small number of corporate actors have been able to control the food system by pushing for increased state support and manipulating prices and policies (Howard 2016). In this sense, agribusiness is not only involved in a relationship with the state but also exercises decisive influence over public policy and the structure of the food system. Federal policies, agencies, and subsidies have allowed large producers to dominate the sector. Some examples: The Farm Credit Administration worked closely with Tyson to extend government backed loans to contract farmers, loans which are defaulted to taxpayers if the farmer cannot pay the cost (Leonard 2014). Although the 1986 Tax Reform Act closed this loophole for farms who made more than \$25 million annually, it facilitated a large amount of revenue for agribusiness in the early years of industrializing animal agriculture. The Farm Service Agency (FSA) spends millions in taxpayer dollars to ensure that there is a steady supply of cheap loans for new contract farmers (Leonard 2014). Furthermore, the Freedom to Farm Act disbanded production controls

and allowed farmers to grow at their discretion, resulting in the overproduction of corn, wheat, and soybeans. This act privileged large corporations by eliminating production controls, reducing operating costs, and increasing firm profits (Leonard 2014). One study found the Freedom to Farm Act resulted in \$947 million a year in saving for industrial hog producers alone (Leonard 2014).

Moreover, research has documented that the Black farmers have largely been unable to benefit from these loans and federal programs due to historical discriminatory lending (Tyler et al. 2014). The absence of Black farmers as loan recipients and the prevalence of people of color within agricultural systems further illuminates' issues of institutionalized racism ala the state (Tyler and Moore 2012; Tyler et al 2014). Agriculture has historically been dependent on people of color through historic legacies of slavery, yet this population has not reaped the benefits of federal loan programs that disproportionately benefit corporate actors and white farmers. This historical disparity in access to federal loan programs underscores a deeper pattern ingrained within the system: the workings of racial capitalism, which I discuss next.

Racial Capitalism and Structural Violence

Racial capitalism captures “the sense that existing capitalism exploits through culturally and socially constructed differences, such as race, gender, religion and nationality and is lived through those uneven formations” (Lowe 2015: 149-150). Racial capitalism illuminates the centrality of race in structuring social and labor hierarchies in capitalism (Sze 2020). The constructed disposability of ethnic and racial minorities allows capitalism and the state to pursue policies which have detrimental impact on the people and on the environment (Pulido 2016). The devaluation of people of color has been characterized as a “racial state of expendability... [a] fundamental and existential life devaluation, a perpetual susceptibility to obliteration with legal impunity” (Márquez 2013: 44). Legal impunity is key component of racial capitalism, as it allows

individuals to be treated as disposable by the state with few consequences. In devaluing the lives of workers, and the environment, the dynamics of racial capitalism provide a key mechanism to uphold the ToP. Furthermore, using the analytical framework of racial capitalism is useful to identifying *who* is most impacted by environmental degradation and a state which has ceded power to corporate actors: those who are racially and economically marginalized.

Racial capitalism also links to literature on environmental justice (EJ) and environmental racism, which has documented the inequitable impacts of environmental pollution of different social classes and racial/ethnic groups (Bullard 1990; Mohai, Pellow and Timmons Roberts 2009). EJ scholars have established that race, ethnicity, and class are key factors in who is most likely to be exposed to environmental pollution and environmental hazards (United Church of Christ 1987; Bullard 1990; Mohai and Bryant 1992; Hurley 1995; Mohai et al. 2009; Timmons Roberts et al. 2018). Building upon EJ, racial capitalist scholars have drawn further attention to how devalued communities are disproportionately exposed to pollution not only by corporate actors, but by a political economic system that has devalued their lives (Pulido 2016; Pulido 2017; Sze 2020). Pulido (2017), for example, illuminates how sites of environmental racism are not only sites of environmental pollution stemming from industrial emitters but are also sites that display the outcomes of a neoliberal state. Although the environmental justice and racism literature frequently focuses on environmental exposure and the creation of “sacrifice zones”, where community members are exposed to environmental pollution due to industrial activity, worksites can also be sites of risk and exposure (Carrillo and Ipsen 2021). This is the case for meatpacking: where the majority of workers are people of color, are exposed to health and safety risks in the workplace, and have little legal protection (Carrillo and Ipsen 2021). During COVID-19, pre-existing

exposure to workplace risk was intensified in the pursuit of production and profit; risk that was enabled by the state and reflects dynamics true to racial capitalism.

The demographics of meatpacking workers also illustrates how racial capitalism operates by exploiting racially minoritized workers. In the U.S., 45% of meatpacking workers are low income, 80% are people of color, and 52% are immigrants (Taylor, Boulos, and Almond 2020). Meatpacking facilities are one of the few remaining manufacturing industries in the U.S. where a high school diploma, previous work experience, and the ability to speak English are not necessary for employment—factors that contribute to its largely poor, immigrant, and/or people of color workforce (Broadway and Stull 2008). Meatpacking workers experience financial and physical hardship, earn low wages, and typically occupy vulnerable positions in society (Broadway and Stull 2008; Broadway and Stull 2010; Eisnitz 2009; Muller 2018; Pachirat 2011). Patterns of labor recruitment also show that industry operators repeatedly seek out the most vulnerable workers and exploit them to maintain high profit margins, often at the cost of worker safety. When workers have organized or made demands to increase safety and wellbeing, industry has historically sought new pools of exploitable labor through the language of labor shortages (Freshour and Williams 2020; Stuesse and Helton 2013). Racial and ethnic differences can create divisions that hinder worker organizing, as do structural constraints and precarious employment. The steady supply of surplus labor has further weakened workers' collective bargaining power, while reifying the vulnerability and disposability of workers (Freshour and Williams 2020; Stuesse and Helton 2013).

As a large proportion of meatpacking workers have historically been undocumented immigrants, many are unable to advocate for themselves due to limited political and economic power. Fear of retaliation in the form of deportation is an omnipresent risk. Racial capitalism defines these dynamics as well. In some cases, following workers' complaints, immigration and

ICE raids have ensued (Genoways 2016). One example: line speed increases at plants owned by Hormel resulted in worker exposure to toxins and the subsequent development of a rare degenerative neurological disease now known as progressive inflammatory neuropathy (Genoways 2016). When sick workers fought for accommodations and sick pay, Hormel launched an immigration review (Genoways 2016). Furthermore, following the largest mobilization of undocumented workers in a general strike in 2006, ICE conducted several workplace raids, including at the then-Swift & Co facility in Greeley, Colorado (Freshour 2017).

Meatpacking work, and those who uphold this system, can thus be understood as reflecting dynamics of racial capitalism and as a site of structural violence. Structural violence, or “social arrangements that put individuals and populations in harm’s way”, is a distribution closely tied to relations of power and social conditions (Gálvez 2018:7). These social arrangements are structures of oppression, in that they hinder life chances, social mobility, and shape health disparities (Farmer 2004). Structural violence is also deeply interlocked with racial capitalism—as this system is premised on historical inequities, state-supported neglect of worker protection, and a population constructed as largely disposable. The “who” of meatpacking work is key to understanding the formation of structural violence in this context. The practices and outcomes of agribusiness entities and state policies have helped create a distinct underclass—an exploitable, and largely disposable, workforce consisting of largely poor people of color. Given structural violence is characterized by the institutionalized nature of harm—and that meatpacking workers are typically vulnerable populations that lack political, economic, and social power—meatpacking is a site of structural violence. The vulnerability of workers is not inevitable; rather, it is manufactured through the social production of risk. The risks and outcomes experienced by workers are not the product of

individual choices but are shaped by racial capitalism, structural violence, and deep inequalities enabled by multiscalar agribusiness power relations upheld by the state.

Multi Scalar Power Relations

In addition to the influence of agribusiness firms in federal policymaking, meatpacking firms exert power at the local and state level. Through lobbying groups and political donations, powerful industry actors have come to play a dominant role in shaping state policy decisions and contesting policies that threaten production and profit (Sheingate et al. 2017; Kasa 2008; Jarosz 2009). For example, the economic power of agribusiness has been used to discredit state bills that attempted to maintain rural farmers rights and limit industry impacts (Lobao and Stofferahn 2007). While nine Midwestern states (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma, South Dakota, and Wisconsin) have adopted laws that restrict corporate involvement in agriculture, there has been increased pressure from agribusiness to relax or rescind these laws (Lyson and Welsh 2005). These bills have been challenged in the courts under the dormant Commerce Clause, with key wins for large-scale operators in South Dakota and Iowa that diminished the restrictions on corporate farming (Lobao and Stofferahn 2007). In 1991, Oklahoma modified its laws to allow corporations to have more flexibility. In 1993, Missouri exempted three counties and, in 1995, Kansas allowed for county exemptions (Lyson and Welsh 2005). The outcome of these cases sets a dangerous precedent for other anti-corporate farming bills to be overthrown or weakened.

In some US states, confinement agriculture was made possible only when corporations co-opted “right-to-farm” laws designed to protect small farmers from encroaching suburbs by blocking odor-based nuisance lawsuits (Blanchette 2019). These laws suggest a defense of farming livelihoods against industrialization and urban sprawl (Ashwood, Diamond, and Walker 2019).

However, these rights are not nearly as innocuous as they seem. Right-to-farm laws have hindered neighbors' rights to clean air and water—fueling issues of environmental injustice—and protected industrial scale agribusiness interests over the interests of rural, poor communities (Ashwood, Diamond, and Walker 2019). This is possible through vague definitions of farming and what counts as a “nuisance”; enabling industrial operations to pollute through using broad terminology of what counts as farming (Ashwood, Diamond, and Walker 2019). Right-to-farm laws have allowed industrial scale operations to remain protected and dominant over the property rights of others. These laws also make it increasingly difficult or risky for people defending their homes and broader community to sue by placing the burden of litigation fees and the burden of proof on them, rather than on the corporation (Ashwood, Diamond, and Walker 2019). In Wisconsin, for example, a substantial threat to public health or safety must exist to prove that a nuisance exists. If this is proven, defendants must pay litigation expenses, some of which can cost hundreds of thousands of dollars. Since the enactment of this law in 2009, the amount of nuisance cases brought to court has decreased dramatically (Ashwood, Diamond, and Walker 2019).

Local level impacts.

At the local level, meatpacking facilities are frequently located in rural areas and are often the dominant employer in the area. The restructuring of industry attracted and often deliberately recruited an immigrant population to these areas (Broadway 1998; Johnson-Webb 2002; Krissman 2000). Firms such as Tyson, Swift & Co., and Pilgrim's Pride have been charged with conspiracy to smuggle in immigrants and knowingly hiring them despite lacking the necessary paperwork (Freshour 2017). Factory farms and meatpacking plants are isolated to more rural, often poorer areas with no or little social capital and political power – demonstrating patterns of environmental injustice (Wing and Wolf 2000). Wing, Cole, and Grant (2000) found that swine facilities are

located disproportionately in communities with higher levels of poverty, higher proportions of non-white people, and higher dependence on wells for household water supply. The economic impact of their operations is substantial, with both positive and negative effects on regions where they operate, including job creation in rural areas and simultaneous economic vulnerability (Hendrickson et al. 2015). These companies are difficult to influence and regulate, and the communities that host them are reluctant to challenge their practices due to reliance on employment (Broadway and Stull 2010).

Research documenting the effects of meatpacking facilities on communities can be categorized in three ways: impact on the physical environment and human health, the impact on workers, and social impacts on communities. Major issues include environmental problems associated with confinement agriculture and meatpacking plants, physical and psychological consequences for workers, and increased social problems in host communities (Broadway 2007; Broadway and Stull 2008; Jacques 2015; Lobao and Stofferahn 2007; Wing, Cole, and Grant 2000). The literature overwhelmingly reports that industrialized farms are related to relatively worse conditions for socio-economic wellbeing, social fabric, social disruption, class composition, and environment (Broadway 2007; Fitzgerald, Kalof and Dietz 2009; Lobao and Stofferahn 2007). Broadway (2000; 2007) documented numerous community changes related to meatpacking plants, including increased pressure on social services, domestic abuse, housing shortages, and the diversification of what are typically homophilous towns. Meatpacking towns also provide social services to non-English speaking residents, which can be difficult due to a lack of available translation services and the diversity of language needs (Broadway and Stull 2006).

Despite the documented negative impacts of meatpacking facilities on host communities, these plants bring economic opportunities and thus carry considerable influence in the local

economic and political realm. As firms are often the dominant employer in the area, these communities are often characterized as modern company towns, where residents' economic livelihoods tie closely to meatpacking plants given its status as the town's dominant employer (Hendrickson 2015; Willingham and Ajilore 2019). Firms frequently donate to host communities, including sponsoring local events, supporting food pantries, and funding community infrastructure including new housing developments. JBS, for example, invested one hundred million dollars during COVID-19 in communities with JBS plants in an initiative called "Hometown Strong", one of the largest rural community investment programs to date (JBS 2022). This funding has been utilized by local communities to invest in parks and recreation projects, to build affordable housing, and to support education programs (JBS 2023). Greeley, Colorado alone has received \$7 million from JBS through this initiative (JBS 2023).

Through donations and their dominant status as the town's major employer, meatpacking firms such as JBS become embedded in the local economic sphere. Furthermore, firms often engage in political contributions to local candidates and parties, advocating for candidates that are favorable to the industry. By financially supporting candidates who align with their interests, these corporations can shape the political landscape in their favor (Carpenter and Moss 2013). Due to their economic significance, firms can exercise economic leverage in negotiations with local governments. They may seek tax incentives or subsidies in exchange for maintaining or expanding their operations, putting pressure on local officials to meet their demands (Leonard 2014). Local politicians often prioritize policies that maintain or expand these plants, as they provide jobs and contribute to the local economy. This influence can result in decisions that prioritize corporate interests over other community concerns (Leonard 2014). After all, if a town's political environment is not conducive to maintain firm profit and power, firms have the ability to relocate

into areas which are. Communities, then, become victims of “environmental blackmail” as do workers (Bullard 2019). The economic power of agribusiness in local communities, and the threat of firm relocation, has reduced the power of communities to contest issues associated with production and has accepted pollution as “business-as-usual”. This is further compounded for workers, who are predominately immigrants and refugees, and often do not have other economic opportunities: creating a situation where they are vulnerable to exploitation, are exposed to risk, and have little alternative economic options or meaningful labor protection.

According to data from the Bureau of Labor Statistics, the percentage of meatpacking workers who are union members dropped from 56.7% in 1983 to just 14.7% in 2020 (Bureau of Labor Statistics 2021). This decline is due to a few factors: some employers in the industry have actively engaged in anti-union campaigns, including intimidation tactics and retaliatory actions against workers who express interest in unionizing (Chang et al. 2021). While meatpacking wages have historically been above average manufacturing wages, they fell below the manufacturing average in 1983 and were documented as 24% lower than the average manufacturing wage by 2002 (Muller 2018). Today, wages are 44% lower, and the average wage is less than \$15 an hour (Stauffer 2019). As industries consolidated and moved to rural and right-to-work areas—and as work became deskilled and reliant upon an immigrant work force—large firms reduced union power and wages, while increasing production and profit. A decline in union representation, a reliance on immigrant workforce, and a rapid speed of production have created a dangerous and exploitative work environment.

Given the multi-scalar power of agribusiness, and subsequent implications on the policymaking process and working conditions, green criminology is a key framework to assess political economic roots of harm. Next, I provide an overview of green criminology as it relates to

the meatpacking sector and review the ways this framework enables a deeper understanding of (legal) harm.

The Case for a Green Criminological Investigation

Green criminology provides a criminological perspective to investigating environmental harms, ecological injustice, and the study of environmental laws and criminality, which includes crimes affecting the environment and non-human nature (Lynch and Long 2019). Green criminology expands focus from traditional criminology conceptions of crime to include harm. By harms, I mean acts that are legal and yet have detrimental outcomes on the environment and on people. Green criminology literature highlights the varying constructions of “green”, “crime”, and “harm” (Lynch and Stretsky 2003; White 2003; Nobles 2018; Johnson, Schwartz, Inlow 2020). Whereas the corporate construction of green crime is associated with “unauthorized acts or omissions that violate the law and are therefore subject to criminal prosecution and sanctions” (Situ and Emmons, 2000: 3), the environmental justice construction defines green crime as “an act that (1) may or may not violate existing rules and environmental regulations; (2) has identifiable environmental damage outcomes; and (3) originated in human action” (Lynch and Stretsky 2003: 227). These varying definitions of green crime are closely linked to existing power structures and economic interests. Economic interests play critical roles in determining whether harmful acts will be treated as criminal and subsequent criminal prosecution and sanction processes. Notably, environmental harms least likely to be the focus of law are those that have the greatest direct impact on marginalized groups (Lynch and Stretsky 2003).

Harm and crime are thus socially, historically, economically, and politically structured. Environmental crime has risen in prominence since the 1970s, with the establishment of the EPA in the 1980s playing a pivotal role in the criminal enforcement of environmental violations

(Johnson, Schwartz, Inlow 2020). And yet, despite the increase of environmental crimes, the vast majority of violations go unpunished and are dealt with administratively and civilly. Despite the importance of large industrial actors in creating pollution, regulatory processes disproportionately affect smaller operators who lack the economic capital to conduct internal self-policing or to employ extensive legal representation (Molnar, Hoban, and Brant 2002; Johnson, Schwartz, Inlow 2020). Moreover, cases often hold employees responsible for infractions, rather than the firm at large; this, in turn, can fuel further firm violations given limited liability at the corporate level (Johnson, Schwartz, Inlow 2020). These firm violations are directly linked to the breaking of existing laws. *But what if no laws have been broken and harm has still ensued?* Concepts of harm should include activities that are legal but still have detrimental impacts on people and the environment (White 2003).

Green criminologists highlight the need to assess the role of powerful actors in policy processes when interrogating acts of environmental harm and crime. State corporate crimes, or harms, can result from inequitable or poor policymaking processes. Furthermore, green criminologists draw attention to how environmental harm is rooted in a political-economic system that prioritizes economic expansion and growth over the environment (Johnson, Schwartz, and Inlow 2020; Lynch 2022; Lynch, Stretesky, and Long 2020; Lynch and Long 2022). In doing so, green criminologists have assessed the relationship between the ToP, the state, and environmental harms (Long, Stretesky, and Lynch 2014; White 2004; Johnson, Schwartz, and Inlow 2020; Lynch 2022). Relatedly, green criminologists have begun to draw attention to the public health impacts of environmental harm and green crime (Jarrell, Lynch, and Stretsky 2014; Lynch, Stretsky, and Long 2017). However, these illnesses and their linkage to exposure to environmental pollution

often remain contested by the state, industry, and even public health due to the prevalence of the dominant bio-medical health model (Lynch, Stretsky, and Long 2017).

In a neoliberal system, the impacts of exposure to harm on health is largely contested. Instead, the dominant bio-medical health model places the burden of responsibility for health on the individual (McCormick 2012; Cardona 2021; Vera 2020). The difficulty to establish a causal link between environmental contamination and health further compounds the ability for individuals and communities to receive justice. Instead, the dominant biomedical health model shifts blame from industry and the state to the individual. In doing so, it profoundly shapes how people perceive, experience, and cope with the risks associated with exposure to pollution (Brown 2007). Acknowledging the production practices have resulted in negative public health consequences would necessitate a change in these practices, potentially slowing the treadmill and impeding upon profits. Literature on environmental health is robust; complimenting green criminology through linking exposure to corporate and state pollution to experiences of harm, however, a green criminological analysis of environmental health issues is far more limited (Lynch, Stretsky, and Long 2017; Lynch 2018; Lynch and Long 2019).

The state's ability to ensure public health has been thwarted by its role in upholding the ToP and, subsequently, the state has enabled environmental and social harm to persist through the treadmill of law. The "treadmill of law" (ToL) is premised on the role of law in shaping and maintaining powerful economic interests through environmental lawmaking and enforcement processes (Lynch, Stretsky, and Long 2020). The ToL refers to how "environmental laws and regulations reflect and reinforce economic relations that legitimate and replicate treadmill of production practices and interests" (Lynch, Stretsky, and Long 2020: 109). In leveraging environmental regulations to the benefit of corporate actors, and in limiting enforcement of these

regulations in favor of self-regulation, the ToL demonstrates the intersection between policy, production, and pollution. Although the ToL is premised on environmental regulation and environmental lawmaking, this framework can also be extended to other areas which threaten the ToP such as labor laws.

Furthermore, the ToL highlights the influence of corporate actors and financial donations in shaping the environmental enforcement process. Environmental laws “reflect power arrangements that allows production to continue while protecting the more privileged members of US society in the process” (Lynch, Stretesky, and Long 2020: 112). In Long et al.'s (2012) study on coal mining companies, they found a significant association between environmental enforcement actions against coal companies and an uptick in political donations made by those companies before the violations occurred. The positive and significant association between donations and enforcement demonstrates the role of corporate economic power in shaping regulation and enforcement. Similarly, Stretesky, Long, and Lynch (2013) examined the impact of EPA enforcement on the volume of toxic releases by companies over time and found no substantial evidence about the impact of enforcement measures on improved practices. In fact, Stretesky, Long, and Lynch (2013) found that the most penalized companies responded to fines by expanding production rather than scaling it down. These outcomes raise fundamental questions regarding the state's role in mitigating ecological disorganization and cast doubts on the effectiveness of financial penalties (Stretesky, Long, and Lynch 2013). The limited effectiveness of financial penalties is evident by limited enforcement and a preference for firm self-regulation and low penalties when firms are held accountable for environmental pollution. Furthermore, these fines do little to deter future pollution as firms who are found in violation have continued to engage

in harmful modes of production (Stretesky, Long, and Lynch 2013; Long, Stretesky, and Lynch 2016; Barrett et al. 2018).

Regulatory Gaps in the Industrialized Animal Sector

As discussed above, the economic power of firms plays a key role in both policymaking and in enforcement of environmental regulations. In the industrialized animal sector, few regulations exist to require corporate responsibility for environmental and public health (Howard 2016). Though the United States has various animal protection and environmental laws, these laws largely fall short of protecting farm animals and addressing industrial farm pollution (Bennett 2014). The animal laws—namely the Humane Slaughter Act and the Animal Welfare Act—neglect to provide for the safety, health, and proper treatment of animals farmed for food. Notably, chickens are exempt from these laws. Environmental laws such as the Clean Water Act, Clean Air Act, Comprehensive Environmental Response, Compensation, and Liability Act, and Emergency Planning and Community Right to Know Act do little to protect against pollution and environmental degradation (Bennett 2014). A lack of protective laws disproportionately impacts residents of host communities, animals, and workers. Host communities face severe environmental injustices when their local air, water, and environment becomes degraded and polluted by large meatpacking facilities and confinement farms, all while lacking legal protection (Bennett 2014). Furthermore, the New Poultry Inspection System (NPIS) and the New Swine Inspection System (NSIS) also reflect profit over safety, as these systems reduced the number of USDA inspector spot-checks and accelerated the speed of production, despite the risks faced by workers (Carillo and Ipsen 2021).

Exemption from these rules has been accomplished largely due to lobbying and industry power—further exemplifying the role of agribusiness in the ToL and regulatory capture (and ToP,

as discussed above). In North Carolina, for example, which has the most swine facilities in the US, political candidates received more than \$1 million from Smithfield's political action committee (Howard 2016). Smithfield is one of the largest hog producers and processors and has been the subject of numerous environmental charges due to poor conditions associated with their facilities. Following this donation, CAFOs were granted exemption from zoning laws and most pollution liabilities (Howard 2016). Current environmental laws thus do not adequately regulate factory farms, despite these regulations having the potential to strictly prohibit excessive pollution from factory farms, and increase the welfare of farm animals, workers, and communities in doing so (Bennett 2014). As a result, proving non-compliance with environmental statutes and rules has been made increasingly difficult, as industrial animal agriculture is immune to many environmental protection laws (Ashwood et al. 2019). These laws illustrate how the regulatory system reflects the interests of industry. Consequently, laws focus more on *liability* than on *harms*, resulting in little corporate responsibility for environmental and public health. In turn, there is a need for research that goes beyond legal liability to spotlight the harms that current regulatory structures underwrite. Extending the green criminological framework to include a nuanced discussion of institutionalized, legal, and state sanctioned harms is necessary. Given that many of harms experienced by workers, animals, and by host communities are largely legal and thus not a "crime", a more nuanced analysis of harm is critical to addressing these issues.

Green Criminology and Industrialized Animal Agriculture

In relation to industrialized animal agriculture, green criminological research has highlighted environmental justice concerns, including the legal yet socially and environmentally hazardous outcomes associated with industrialized pig farming (Wyatt 2014). Other criminological research focuses on animal crimes, such as animal abuse as an indicator for human

abuse but neglects structural sources of animal abuse like factory farming (Agnew 1998; Cazaux 1999; Beirne 2002; Beirne 2004). An additional body of work has focused on the impacts of meatpacking facilities on crime rates in host communities (Fitzgerald, Kalof, and Dietz 2009; Jacques 2015). For example, Jacques (2015) found the presence of a meatpacking facility corresponded with a 22% increase in total arrests, a 166% increase in arrests for rape, and a 90% increase in the number of arrests for offenses against the family, as compared to counties without meatpacking facilities. Fitzgerald, Kalof, and Dietz (2009) found that meatpacking work was associated with high rates of crime, and this association became stronger with the size of the meatpacking facility. Studies on meatpacking communities have documented dramatic increases in crime that have outpaced population increases, yet a nuanced understanding of what drives these social problems is more limited (Fitzgerald, Kalof and Dietz 2009; Jacques 2015; Porcher 2011).

Importantly, Stretsky, Long and Lynch (2013a:109) draw attention to the role of the political economic system in fueling harms related to animals. Stretsky, Long and Lynch (2013a) argue that for animal abuse to be included within green criminology, studies must demonstrate how the ToP produces animal harm. In the process of transforming animals into commodities, animals experience significant harm due to poor living conditions and inhumane methods of slaughter (Stretsky, Long and Lynch 2013). Due to the breadth of animals produced for profit, Stretsky, Long and Lynch (2013:127) argue that “animal abuse on corporate factory farms is the most widespread form of animal abuse in the world.” As Stretsky, Long, and Lynch (2013) focus their orientation of green crimes as being couched within the political-economic system, the intersection between animal abuse and the ToP is of paramount importance. However, there is limited green criminological literature which assesses the harms experienced by workers in sustaining the ToP related to animal production and the “shared suffering” of workers and animals,

documenting a need for further research (Porcher 2011). Further research is necessary to shift the focus from documenting increased rates of crimes in host communities to spotlight the state-corporate harms experienced by meatpacking workers—and the structural roots of these harms.

Literature related to the industrialized animal agriculture sector has documented the physical and psychological harms of working in the meatpacking sector. Negative health and psychological outcomes of working in meatpacking facilities have been reported, including struggling with addiction issues, abusing spouses and loved ones, and physical consequences (Eiznitz 2009). Health implications of meatpacking work include chronic fatigue, arthritis, tendonitis, neurological issues, chronic bronchitis, organic toxic dust syndrome, and fainting (Blanchette 2019; Eiznitz 2009; Genoways 2016). Workers labor for low wages in physically demanding jobs characterized by monotonous, repeated movements. The repetitive motion of the production line has also been linked to increased rates of injury and various ailments. Employees suffer physically from the demanding nature of their jobs and the speed at which they operate, and 25% are documented as being ill or injured every year (Muller 2018). Poor training, low wages, and dangerous working conditions contribute to high employee turnover, which averages 5-9% per month (Broadway and Stull 2010). A 2009 study found that 52% of workers felt that meatpacking conditions had become less safe, with the vast majority citing line speed as the cause (Nebraska Appleseed 2009). Increased workforce to maintain line speed has resulted in additional issues such as overcrowding, increasing rates of injury (Genoways 2016).

This work is inherently violent, but the lack of regulations and pressure for efficiency result in significant mental and physical consequences (Eiznitz 2009). Research shows persistent lack of attention placed on safety by supervisors and that many safety precautions, such as monthly meetings, are performative rather than proactive (Broadway and Stull 2010). Streamlined

inspection reduced inspectors' abilities to detect conditions that would stop the line and reduced the number of animals sampled for contamination/disease (Eisnitz 2009; Pachirat 2011). Qualitative research conducted with inspectors illustrated a lack of power, limited ability to report their concerns due to fear of retaliation, and the pressure to 'look away' when there is an issue (Eisnitz 2009; Genoways 2016; Pachirat 2011). As there are no substantial consequences for plants that repeatedly violate safety regulations, plants have little incentive to prevent violations and many incentives to maintain their current rates of production. Meatpacking facilities have been documented as issuing rewards to quality control auditors if the line was off for less than ten minutes per day (Genoways 2016).

While harm has been embedded within the logics of meatpacking, and workers are largely unable to contest working conditions due to their social location, little research currently assesses the outcome of institutionalized harm on workers, animals, and host communities. Workers suffer physically and psychologically from the structure of meatpacking work; a structure that has been enabled through the political-economic sphere. Deregulation, corporate self-regulation, and the pace of work has cultivated a dangerous working environment. These impacts are further intensified through the exploitation of immigrant and refugee workers; a population that is reluctant to contest worker safety issues due to fear of retribution. Although research on poor working conditions and their impacts is robust, less focus has been placed on how the state enables this system of harm to persist. Drawing green criminology into conversation with literature on industrialized animal agriculture illuminates how corporate actors and the state intersect to create a system of harm, a system that will continue to negatively impact workers, animals, host communities, and the environment if systemic action is not taken.

Conclusion

Decades of deregulation and consolidation in the industrial animal agriculture sector have had important impacts on animal welfare, workers, host communities, and the environment. As the industry became consolidated and integrated, vulnerabilities along the food chain were created. The consolidation and integration of the industry have yielded significant power to a few key players, with profound implications for production methods, labor practices, and public policy. The COVID-19 pandemic further underscored the vulnerabilities inherent in this system. Pre-existing issues associated with meatpacking, including consolidation, labor precarity, and multiscale power relations were amplified during COVID-19. Taking a sociological perspective to examine the rise and subsequent impacts of industrialized animal agriculture illuminates troubling patterns of industry power at the expense of host communities, workers, and the environment. Meatpacking work relies on largely immigrant and refugee populations that have little political or economic power to contest dangerous working conditions, issues of food safety, or animal welfare (Broadway and Stull 2007).

Throughout this chapter, I explored legacies of power, worker vulnerability, and the merit of a green criminological analysis. Government policies, agribusiness lobbyists, under-regulation, and subsidies have played critical roles in expanding the power and scale of a few meat processing corporations. Green criminology provides a framework to analyze political-economic origins of harm in the meatpacking sector and document how crimes are constructed by institutional actors and relations of power (Beirne 2004; Taylor 2011; Taylor and Fitzgerald 2018). By bringing green criminology into conversation with scholarship on industrialized animal agriculture, I documented the interconnections between agribusiness and the state, and suggest that this allegiance was a critical component of sustaining the treadmill of meat production at the expense of worker safety. I argued that agribusiness's multi-scale power is shaped by neoliberalism, market-driven policies,

deregulation, and regulatory capture— allowing dominant agribusiness firms to wield influence over policies and regulations, compromising safety standards and favoring corporate interests over community and worker well-being. The treadmill of production illuminates how economic interests intersect with policymaking and the social and environmental consequences associated with production (Schnaiberg and Gould 1994; Schnaiberg, Pellow, and Weinburg 2000). Racial capitalism illustrates how these policies disproportionately harm marginalized communities and workers, perpetuating a system where the most vulnerable bear the brunt of environmental and social costs.

Throughout this chapter, I documented the structural violence embedded within the meatpacking sector, the industry's influence in the policymaking process, and the socio-environmental consequences. The limited oversight of agribusiness firms has led to socio-environmental issues associated with animal agriculture, including a precarious labor force, worker safety concerns, and deadly public health and environmental consequences (Ashwood et al. 2019; Broadway and Stull 2008; Eisnetz 2009; Leonard 2014; Bennett 2014; Howard 2016; Silbergeld 2016). My research has important implications for interrogating the outcomes of corporate power in public health decisions and the need to create greater autonomy between corporate actors and the political sphere. The collusion between agribusiness, policymakers, and regulators has facilitated an environment where worker safety standards are compromised, environmental regulations are sidestepped, and both workers and communities surrounding meatpacking plants bear the brunt of the resulting socio-environmental hazards. The relationship between industry and the political-economic sphere not only perpetuates systemic injustices but highlights the urgent need for comprehensive policy reforms that prioritize the protection of workers, the environment, and host communities over corporate profit and power.

CHAPTER THREE: METHODS

This dissertation is premised on exploring: 1) what institutional, structural and sociopolitical factors shaped meatpacking policymaking during COVID-19; 2) how COVID-19 affected policymaking and enforcement for meat production at the local, state, and national levels; and 3) how structural inequalities and historical legacies of racial exploitation have shaped the experiences of meatpacking workers prior to and during COVID-19. In this chapter, I outline my research methods. First, I provide an overview of my research site. Then, I discuss the qualitative research methods utilized: critical policy ethnography, content analysis, and in-depth interviews. Finally, I provide an overview of my sample, a discussion of data collection challenges, and the role of reflexivity in data collection and analysis.

Extended Case Study & Research Site Background

The extended case method (ECM) is useful for investigating the larger social forces that shape the case's conditions (Burawoy 1998). ECM is associated with developing the "macro foundations of a microsociology" through the process of relating cases to the society in which they are embedded (Burawoy 1991:280). This method is particularly useful for providing an analysis on external social forces, power dynamics, and connecting social patterns to theory (Tavory and Timmermans 2009). ECM is premised on case study selection guided by theoretical considerations. In my research, I focus my analysis on JBS Foods Headquarters (henceforth referred to as JBS) located in Greeley, Colorado. I use JBS as a case study to explore the socio-political roots of COVID-19 transmission, while connecting this case to a broader structural landscape of state, federal, and local policy decisions that continually render meatpacking workers vulnerable.

JBS of Brazil is the largest meatpacking firms in the world, with the other two powerful firms being WH Group of China and Tyson of the US. These large multi-national corporations dominate animal production and account for 83.5% of beef production, 66% of pork production, and 58.5% of chicken production (Hendrickson 2015). I selected this site due to the extent of COVID-19 outbreak at the facility, its proximate location to Fort Collins (allowing extended and frequent access), and the embedded nature of agribusiness in local, regional, and national economies. Greeley is the largest city in Weld County, a county that is the leading producer of beef cattle, grain, sugar beets, and dairy in Colorado (Weld County 2023).

Greeley, Colorado, is representative of many meatpacking towns: what was once a homophilous, predominately white, rural area (once settler colonialism was underway) has been transformed by agriculture and the presence of a meatpacking facility. Greeley is located in Weld County, Colorado, where settlers began building communities in the 1850s (Weld County Government 2023). By 1870, ranching and agriculture began in the area, and the population was composed predominately of European settlers. In the 1920s, sugar beet farming was a key component of the area's economy; with German Russians, Japanese-Americans, and, later, Mexican and Latin American workers recruited for labor by the Great Western Sugar Company (Mehls and Mehls 1998). However, by the 1970s, sugar beet production had decreased, as available acreage declined due to increasing corn production for livestock, weather-related harvest issues, and rising supplies of sugar cane and high fructose corn syrups (Fox 2016).

In the late 19th century, Weld County emerged as a prominent hub for cattle ranching and beef production. The availability of vast grazing lands and an ideal climate for livestock rearing attracted ranchers and meatpackers to the area (Weld County Government 2023). In 1930, a new form of agricultural production under Monfort, Inc: cattle feedlots. However, the area also faced

local agricultural labor shortages, making it challenging to maintain a steady workforce. During the 1940s, the Bracero program was utilized to address labor shortages by allowing Mexicans to obtain temporary work permits, subsequently increasing the local population ("Ramadan redux"... 2009). In 1960, Monfort, Inc. expanded its cattle feedlots to include meat processing, a move that had lasting effects on Greeley's labor market and community demographics (Swanson 2002).

In the decades that followed, issues with labor including low pay, subsequent strikes, and discrimination against unionized employees led to the plant being purchased by ConAgra in 1987. For instance, in 1980—following a 73-day pay-increase strike—the Monfort plant closed, resulting in the loss of 1,200 jobs (Swanson 2002). Two years later, the plant reopened with lower hourly wages and no union representation, two changes that helped the plant cut labor costs by 25% ("Meatpacking has a long history..." 2006). In 1987, ConAgra Foods bought the plant for \$365.5 million, a sale linked to a market downturn and a U.S. Supreme Court ruling that refused to block consolidation in the industry (Swanson 2002). In 1998, the U.S. Department of Labor fined Monfort, Inc \$1.2 million for not paying employees overtime and \$2.2 million in backpay; one year later, ConAgra consolidated all beef companies under its ownership to ConAgra Foods. In 2002, Swift & Co purchased ConAgra and took ownership of the plant in Greeley. At this time, the plant demographics were 75% Latino, and 60% of workers were monolingual Spanish speakers (Swanson 2002).

In 2006, U.S immigration officials raided six meatpacking plants owned by Swift & Co, including the now-JBS plant in Greeley. Across these sites, 12,000 people were detained and 1,300 people were ultimately deported (Kammer 2009). Although there is no verified statistic, sources have estimated that 23% of Swift & Co.'s employees were undocumented immigrants at the time of the 2006 ICE raids, demonstrating the significant population of undocumented immigrants in

this sector (Kammer 2009). To replace Latinx workers, JBS immediately began recruiting Somali and Burmese refugees who had historically resettled in metropolitan areas like Denver and Colorado Springs (Hausermann et al. 2021). Changing racial and ethnic demographics in Greeley reflect the surge of refugee meatpacking workers following the ICE raid, with 1,200 Somalians and 600 Burmese documented in the area in 2012 and accounting for 15% of the plant's workforce by 2013 (Hausermann et al. 2021; Murray 2013). This is a stark contrast to pre-raid demographics, where 90% of workers were Latinx (Marston, Nelson, and Behr 2016). Today, Greeley's population is 40% Latinx, 3% Black or African American, 1% Asian, 12% foreign-born, and a 25% of residents speak a language other than English at home (US Census Bureau 2022).

The economic impact of the meatpacking sector in the area is substantial, with JBS currently the city's largest employer at nearly 5,000 jobs (Weld County 2023). Due to the concentrated nature of the labor market and the role of JBS as the area's leading employer, Greeley has been characterized as a "modern company town" (Willingham and Ajilore 2019). Politically, Weld County has been historically dominated by the Republican Party, with 57.6% of residents voting for the Republican candidate in the 2021 election (Colorado Secretary of State 2023). This conservative political climate has historically extended to the composition of the county's board of County Commissioners, where the majority of Commissioners have been Republicans, significantly influencing policy decisions. Weld County's status as a prominent center for oil and gas production in Colorado has also led to a political environment supportive of the energy industry, resulting in policies conducive to unconventional oil and gas development and an area which has one of the highest well-to-people density ratios in the U.S (Malin 2020).

Furthermore, Weld County is unique in that it is one of two counties in Colorado that is a “home rule” county². Home rule is a governance structure that enables local governments to act and legislate on local matters (Bernard 2020). Counties with home rule powers can use their expanded authority to attract businesses and industries that align with their economic development objectives, offering incentives, creating business-friendly environments, and implementing policies to promote growth. There are strengths and weaknesses to home rule governance. On one hand, County Commissioners can tailor governance based on the local context of Weld County versus a statewide approach. Home rule counties are less constrained by state requirements as they are not required to follow state statutes in matters of local and municipal concern and thus do not have state interference in these matters (Mamet 2018). Other advantages include flexibility in county procedures, such as enacting local ordinances, finances, and in elections (Mamet 2018).

However, home rule also brings the potential for conflict, as differences in policies and regulations between local governments and the state can lead to legal disputes or challenges (Benson 2007). In home rule counties, county governance supersedes state law. This was particularly notable during the COVID-19 pandemic, in which home-rule counties such as Weld County were able to resist statewide mandates, such as mask orders and business closures. Weld County is governed by five elected County Commissioners who serve as the primary decision makers in local governance, including public health decisions. This governance structure further highlights the importance of research on how local, state, and federal policymaking can shape public health outcomes, particularly during unprecedented events like the COVID-19 pandemic.

As of September 2021, 291 JBS workers in Colorado tested positive for COVID-19 and 8 workers died, one of whom worked in the corporate office (Bradbury 2020). Following an OSHA

² Although there are only two home rule counties in Colorado, there are 101 home rule towns and cities in the state (Mamet 2018).

COVID-19 plant inspection in September 2020, the plant was fined \$15,615 for “failing to protect employees from exposure to the coronavirus” (OSHA 2020). The JBS plant is not unique: close to 60,000 meatpacking workers tested positive and nearly 300 died in the United States (Douglas 2021).

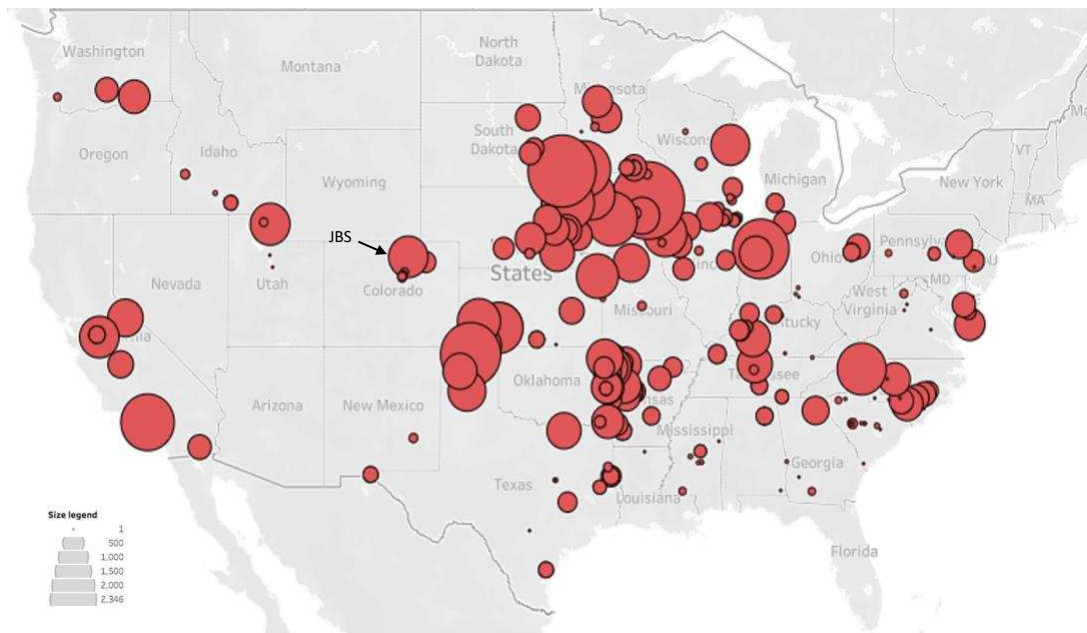


Fig. 1. Map of COVID-19 outbreaks in meatpacking plants (Douglas 2021)

The prominence of JBS as a major player in the meatpacking industry situated Greeley as an ideal site for analyzing the convergence socio-political factors, public health outcomes, and labor dynamics in meatpacking plants pre- and post-COVID-19 pandemic. Furthermore, in my analysis of Weld County, I explore how local governance structures, agribusiness dependence, and pre-existing political structures can shape public health outcomes. The historical, economic, and demographic context of meatpacking in the area provided the opportunity to examine the multiscalar socio-political dimensions of COVID-19 transmission in meatpacking plants using qualitative research methods.

Qualitative Research Methods

Qualitative research methods emphasize the meanings, experiences, and views of participants to make sense of the phenomena in question (Mays, Pope, and Popay 2005). Qualitative research is often used to pursue detailed knowledge of an event, experience, or situation (Ragin, Nagel, and White 2004). Instead of drawing from a large sample of an entire population, qualitative researchers seek to acquire information from smaller groups of individuals (Ragin, Nagel, and White 2004) to understand the embedded and lived experiences of various phenomena. Rather than attempting to prove something, or provide a universal explanation for a phenomenon, qualitative research seeks to describe a system of relationships using insight gained from participant observation, fieldwork, and qualitative interviews. The research questions I ask are best answered using these methods, which include: 1) What institutional, structural and sociopolitical factors shaped policymaking for meatpacking during COVID-19?; 2) How did COVID-19 affect policymaking and enforcement for meat production at the local, state, and national levels?; and 3) How have structural inequalities and historical legacies of racial exploitation shaped the experiences of meatpacking workers prior to and during COVID-19?

To answer these questions, I used content analysis, critical policy ethnography, and interviews. Below, I describe my approaches in utilizing each method. Throughout, I utilized a multiscale approach to data collection to link micro- and meso-level outcomes to structural drivers and vulnerabilities (see Figure 2). Utilizing this multi-scalar framework enabled me to examine the complex dynamics within the meatpacking industry through various levels of analysis, from the individual firm level to local, state, and federal governance structures (Smith et al. 2020).

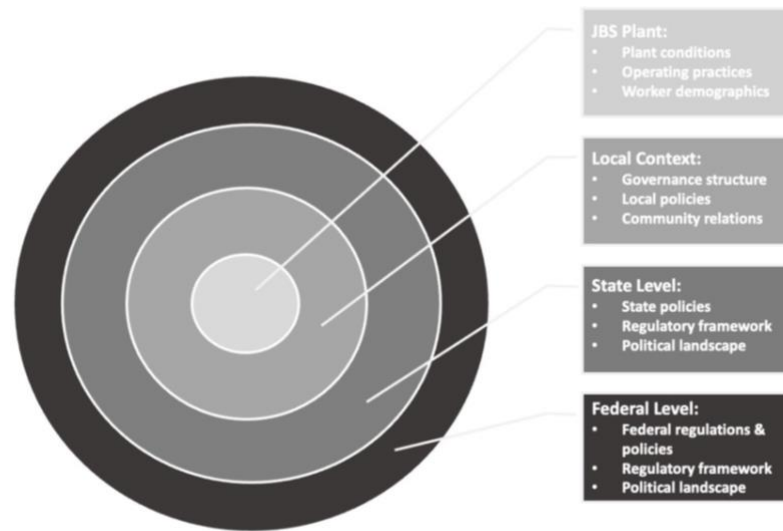


Fig. 2. Multiscalar approach

While I focused my extended case study on JBS, this approach was key for situating this extended case study into a broader landscape of agribusiness power and the subsequent impact of this power on workers.

Qualitative Content Analysis

I used qualitative content analysis to investigate the institutional, structural, and political decisions that have contributed to high COVID-19 transmission rates in meatpacking. Content analysis is a systematic method of analyzing written, verbal, or visual communication messages, with the goal of “providing knowledge, new insights, a representative of facts, and a practical guide to action” (Elo and Kyngäs 2007:108). I used content analysis to identify trends and patterns within policy documents, news stories, reports, and other written communications (Elo and Kyngäs 2007). This included recognizing recurrent themes, key phrases, and narratives across documents. This was crucial to identifying how certain policy decisions were framed and justified and the political, contextual, and structural factors influencing these choices (Neuendorf 2016). Analyzing existing documents, news stories, reports, and documents provided a deeper understanding of the policy decisions that shaped the vulnerability of meatpacking workers during the pandemic.

I collected secondary data from March 2020 to September 2021. Data that extended beyond this timeframe, which was relevant to understanding COVID-19 and meatpacking plants, was included on a case-by-case basis. To select my data sources, I identified regional newspapers in Colorado that have published articles related to COVID-19 and meatpacking, such as *The Colorado Sun* and *Greeley Tribune*. I also included national newspapers, due to their coverage of COVID-19 and meatpacking facilities, including: *The New York Times*, *The Guardian*, *The Washington Post*, and *The Denver Post*. I identified key advocacy organizations and independent news sources that were reporting on COVID-19 and meatpacking facilities, which included: *Civil Eats*, *ProPublica*, *Public Citizen*, *The Counter*, *Food and Environment Reporting Network*, and *the Midwest Center for Investigative Journalism*. To gather documents from these sources, I used NewsBank and Nexis Uni, two online news databases that facilitates large downloads of files. Search terms include: “COVID-19 OR pandemic*” and “JBS AND Greeley”. I used online archives of newspapers to gather documents unavailable through these databases.

I also gathered information on on-going lawsuits, industry reports and documents, and relevant policies and regulatory actions, such as OSHA fines and citations, through manual internet searches. While I was collecting secondary data, the Select Subcommittee on the Coronavirus launched an investigation on the meatpacking industry’s response to COVID-19. This investigation published an interim report in September 2021 and a final report in 2022, which included links to documents, letters, facility inspections, complaints, interviews, email records, and other communications concerning COVID-19 in meatpacking plants. I reviewed all documents and downloaded them for analysis, excluding those that were outside my research parameters. I also collected state and federal data on site records of worker complaints, facility inspections, and worker illness and death from COVID-19 using manual searches of databases maintained by

Midwest Center, FERN, OSHA, and others. As my analytical methods were iterative across data sources, I describe them below after I review the other data collection methods I used.

Critical Policy Ethnography

To explore the relationships between socio-political decisions and the experiences of meatpacking workers during COVID-19, I drew on critical policy ethnography. Policy ethnographies “provide useful qualitative data that give a nuanced and realistic ground-level view of policies too often analyzed abstractly from the top” (Dubois 2009:220). Critical policy ethnographic research can provide a deeper understanding of how policies shape the lived experiences of individuals and the power dynamics which undergird policy decisions (Dubois 2014). Critical policy ethnographies differ in form, but predominately focus on illuminating how policies construct individual and group experiences, as well as power dynamics embedded within policymaking processes (Hankivsky et al. 2014). Critical policy ethnography can “generate critical background information, with specific attention to the processes and mechanisms by which policy problems are identified, constructed, and addressed” (Hankivsky et al. 2014: 3). This method is useful for assessing government priorities and the inequities and privileges created by policy responses. Critical policy ethnographies can also be transformative, in that they can offer alternative policy solutions aimed at social and structural changes that may reduce inequities and promote social justice (Hankivsky et al. 2014).

Beyond assessing the outcomes of policies, critical policy ethnography can provide an account of individuals and entities associated with policy decision-making processes (Dubois 2014). Documents are a key part of this investigation, as they are a “crucial objectification of policies and a major aspect of bureaucratic work” (Dubois 2014: 17). Given that direct observation of policy-making processes is difficult, analyzing documents and publicly available information

can provide ways to investigate power dynamics, negotiations, and policymaking. Drawing on secondary data and in-depth interviews with labor, food system, and health officials, I assessed policy decisions relevant to meatpacking facilities and how they influenced the vulnerability of workers during the COVID-19 pandemic and beyond.

My secondary data includes industry reports, press releases, relevant policies associated with high rates of COVID-19 transmission (e.g., line speed increase), policy briefs, associated bills and regulatory actions—including then President Trump’s Executive Order, governmental agency (such as OSHA, USDA, CDC) statistics, studies, and press releases, and reports and records. This data was key for my green criminological analysis—assessing the state and structural level factors which have shaped the current regulatory structure, limited corporate liability, and immense profits and inequality. This data also provided empirical evidence to support the role of agribusiness actors in policymaking, relevant to my analysis of how harm is mediated through the legal sphere and the state. After completing data collection and analysis (discussed later) of secondary data, I moved to the next stage of data collection: in-depth interviews.

Interviews

In addition to secondary data, I gathered primary qualitative data through semi-structured in-depth interviews³. Interviews allow researchers to explore matters that are unique to the interviewee, such as their lived experiences, meaning making processes, and perception of a phenomenon (McGrath, Palmgren, and Liljedahl 2019). In semi-structured interviews, the interview guide is a list of topics and broader questions that encourage participants to speak freely

³ During my doctoral research, I also collaborated with Dr. Annabel Ipsen as a research assistant on her meatpacking labor project in northern Colorado. Due to the nature of conducting interviews with vulnerable populations during a global pandemic, and limited resources, we collaborated on eight interviews where our research interests overlapped. This collaboration sought to minimize the impact on interviewees and maximize limited resources. In these cases, we cowrote interview guides and share intellectual property of that data.

and address topics and experiences that the participant feels is relevant (Lofland et al. 2006). My semi-structured interview guide included questions about the interviewee's occupation, their experiences during COVID-19 and its impact on their work, and perceptions of how COVID-19 impacted the meatpacking sector and workers (see Appendix A). Through interviews with key stakeholders—including workers, officials, and policymakers—I aimed to capture the lived experiences and perspectives that were not fully elucidated through my other data sources. Interviews enriched my understanding of the structural, institutional, and political dynamics shaping the vulnerability of meatpacking workers prior to and during the pandemic.

Interview recruitment, sampling, and process.

To recruit participants, I relied on purposive and network sampling. The inclusion criteria for participation included people who: work(ed) in a meatpacking facility during COVID-19; worked as public health representatives and officials; acted as labor and meatpacking worker advocates; or worked as local, state, and federal employees and officials. Representatives, employees, and officials were selected based on their proximity to the meatpacking sector, e.g., individuals engaged in public health decision-making, meatpacking worker health and safety guidance, and other structurally relevant roles. These were frequently bureaucrats at USDA, OSHA, and CDC, as well as meatpacking lobbyists engaged in the policymaking process. In other cases, these were local, regional, and state worker advocates who had testified on behalf of workers. Many of these documents had redacted email addresses, so I turned to the internet to compile contact information when possible. Although I was able to glean contact information for many individuals on my initial list, I was not always successful and subsequently had to eliminate a small number of individuals from this initial sample. In addition to identifying potential participants during document analysis, I engaged in manual internet searches to identify actors on

a more localized level, including County Commissioners, county and state health and labor officials, and worker advocates. I also leveraged local personal contacts to recruit a small sample of workers, a population I struggled to recruit due to issues of access.

After compiling a list of contact information for potential participants, I began recruitment. I engaged in a two-pronged strategy: calling phone numbers and emailing participants. For officials, this often meant also reaching out to their office managers and assistants to schedule an interview. I contacted each participant three times before ceasing my efforts if I had yet to receive a response. As I conducted interviews, I recruited additional participants through network sampling, where I asked interviewees to recommend friends and colleagues who met the criteria for inclusion. Network sampling is particularly useful when the research topic is on a sensitive issue, and this requires the knowledge of insider to locate people (Biernacki and Waldorf 1981). This chain referral process allowed me to reach two populations that are relatively hard to access: meatpacking workers and bureaucrats.

While network sampling has been criticized as having limited representativeness of a population, as well as issues associated with verifying the accounts of those interviewed, these were not substantial limitations in my research. As I was concerned with decision-making processes of public officials and representatives and the subsequent impact on meatpacking workers, I was not aiming to generate a random sample. When interviews no longer produced new insights, I reached data saturation and ceased conducting interviews.

I conducted interviews from August 2022 to March 2023. In total, I conducted 39 in-depth interviews, including two joint interviews with two people. My sample was composed of 38 individuals, as I conducted follow-up interviews with two participants (see Table 1).

Table 1. Participant sample

Participant Group	# of Interviews	# of Interviewees
Workers	5	4
Attorneys and Reporters	5	5
Advocacy Groups and Union Representatives	6	6
State and Federal Representatives	19	19
Local Officials	4	4

Each interviewee provided an important standpoint on the structural components of regulatory and policy decision-making spaces, given their institutional roles and locations. Local, state, and federal actors provided key perspectives related to governance, public health policy, labor policy, and worker safety oversight across scales. Attorneys provided further information on the legal aspects and rights of meatpacking workers and challenges with receiving worker's compensation before and during COVID-19. Workers included current and former JBS workers, key for documenting their lived experiences. Advocacy participants were affiliated with advocacy groups, community organizations, and labor unions and provided detail to the experiences of meatpacking workers pre- and post-pandemic.

Interviews took place in-person, over the phone, or over a video conferencing platform (Zoom and Microsoft Teams), depending on interviewee preference, their geographic location, and scheduling constraints. For the in-person interviews, I frequently met participants at coffee shops in the area, their offices, and less frequently, their homes. Interviews lasted an average of 60 minutes. Interviews were recorded with the consent of the participant and later transcribed verbatim. In two cases where the participants were primarily Spanish speakers, I recruited a bilingual assistant, who helped conduct and transcribe their interviews.

Data Analysis

After gathering my secondary data, I created a spreadsheet and documented the source location, date of publication, date of access, source type, and a brief description of the source. In total, I gathered 270 unique documents, most of which spanned multiple pages. I printed each document and organized by source type in binders. Source types included: newspaper articles, governmental reports, lawsuit documents, site inspections and complaints, safety guidance, company reports, email records, policies, associated bills and regulatory actions, policy briefs, letters, memorandums, press releases, and testimonies. After organizing my secondary data, I began coding the data thematically using a line-by-line approach (Saldana 2016). I used open coding to identify initial codes related to emergent themes of labor precarity, the role of the state, narratives, COVID data, regulations, and safety precautions.

In analyzing my secondary data, I used content analysis to document patterns, themes, and trends within the data at a descriptive level (Neuendorf 2019). Content analysis allowed me to extract valuable information from a range of documents, reports, and media sources. While content analysis provided me with key background information, I used critical policy ethnography to provide a higher-level analysis of my various data sources and findings. Critical policy ethnography offered an analytic lens through which I could critically examine policies relevant to the meatpacking sector both before and after the onset of the pandemic. This approach enabled me to scrutinize not only the content of policies but also the underlying ideologies, power structures, and social implications embedded within them. This framework was key to assessing the accounts of federal, state, and local officials related to the policymaking processes during COVID-19. After completing my first round of open coding, I reviewed the codes to identify linkages between power, policy, agribusiness, and the state. These themes informed my interview guide development and participant recruitment strategy.

After completing interviews and transcribing them, I analyzed interview transcripts on NVivo, a qualitative data analysis software. I opted for an inductive and iterative approach, focusing on techniques such as open coding, category development, and abstraction to transition from specific findings to broader, more generalized insights (Elo and Kyngäs 2008). Taking an iterative and inductive approach to data collection and analysis provided the opportunity to probe deeper into developing themes and concepts. Following the initial round of line-by-line coding of interviews (Saldana 2016), I revisited the coded interview transcripts and organized and collapsed codes into larger analytic themes. Throughout this process, I composed memos to document emerging hypotheses, analytical questions, and evolving interpretations (Emerson et al. 2011), providing guidance as I worked towards a more comprehensive understanding of the data.

In critical policy ethnography, data triangulation between documents and interview transcripts is beneficial to analyze the nuances within policy processes and their impacts (Denzin 2018). This approach not only strengthens the reliability of findings but also enables a richer contextualization of policy-related issues (Denzin 2018). As I analyzed the interview data, I revisited my secondary data to explore linkages between my datasets. Documents such as policy reports, legislative records, and official communications provided insights into the formal dimensions of policies and policymaking, while interview data captured the lived experiences and perspectives of stakeholders. Moreover, email records provided a unique lens to explore policy dynamics and interactions that spanned beyond my interview sample. These records helped identify other key actors in the policymaking process, including meat agribusiness, that I was not successfully able to recruit to participate in an interview. In this way, the email records served to provide a behind the scenes look of policymaking, discussions around COVID-19 in the meatpacking sector, and the role of industry actors. Furthermore, triangulating between my

primary and secondary datasets allowed me to collaborate interview accounts and add nuance to publicly available written records.

Challenges and Limitations

A major challenge in this research was accessing and recruiting workers to participate. This was informed by a multitude of factors, including language barriers, fears of potential repercussions from their employers (such as job loss or workplace harassment), and lack of available contact information or contact sources. Although I was able to interview a small number of workers, for these reasons they are under-sampled in relation to my other participants. However, community organizers and advocates in the area were able to provide additional written information (either sent via messages or notes from phone call conversations) that workers had shared with them. I drew on these narratives to deepen my understanding of working conditions during the COVID-19 pandemic and the barriers that made worker interview recruitment difficult.

Although I anticipated recruiting policymakers to be a challenge, purposive sampling, clear confidentiality procedures, and network sampling garnered a sample of people who were willing to be interviewed. As I was speaking with public health officials and representatives, who may fear disclosing controversial or troubling information, ensuring confidentiality was of utmost importance. All respondents were given a pseudonym, any identifying information was obscured, and I followed IRB standards for maintaining a secure database with their contact information. In my writing, I employ broad terms such as “local official” or “bureaucrat” or “USDA official” instead of specific job titles to avoid disclosing individuals' identities or professional roles.

In addition to challenges with recruitment, another limitation of this study is the focus on one case study site versus a more comparative approach. Comparing across site locations may have increased the generalizability of my findings, as well as illuminated how differences in local and

state contexts shaped policy dynamics and subsequent impacts for workers. Focusing on one site, though, provided a level of depth to my data collection that would have been difficult to replicate in a comparative case study. This is particularly notable given limited funding which would have enabled me to 1) spend extended time in the field to identify and recruit local contacts and 2) establish a history of the area. In focusing my analyses on the JBS plant, I document the intricate connections between local and state governance structures, their policy dynamics, and the consequent impacts on meatpacking workers.

My secondary data also provided information across site locations and a more comprehensive understanding. This data provided a unique lens to explore state and federal level dynamics, in that I drew on CDC, OSHA, and USDA reports, testimonies, and email records between meat industry associations and local, state, federal officials. While I focused my analysis of federal and state policies on JBS, this data illustrated patterns across firms. For example, email records documented the role of agribusiness lobbyists and meat executives in policymaking at the federal, state, and local level. Interviews with federal actors and national workers' advocacy organizations also enabled me to understand policy dynamics, and subsequent impacts, beyond my case study site. The multiscalar approach to data collection facilitated a broader understanding of sociopolitical factors related to COVID-19 transmission in meatpacking plants.

Although a comparative approach may have provided further nuances on industry practices and local contexts, an extended case study allowed for a comprehensive examination of the interconnectedness between local and state governance systems and their impact on the health of meatpacking workers. Furthermore, focusing on one site location strengthened my understanding of the racialized consequences of labor market power and the meatpacking sector. Expanding beyond the JBS plant, and exploring this phenomenon through a multiscalar approach, enabled me

to document broader patterns and trends. In using a multiscalar approach, I argue that an allegiance between industry actors and the state exists across geographic areas, an allegiance which has led to severe socio-environmental harms.

Reflexivity and Positionality

Reflexivity is particularly important in qualitative research methods, such as interviews, where the researcher's presence and interpretation are integral to the research process. Reflexivity acknowledges that researchers are not neutral observers but are actively involved in shaping the research through their choices, perspectives, and interactions with participants (Hammersley and Atkinson 2007). I integrated reflexivity into the data collection and analysis process, recognizing my own perspectives, beliefs, and assumptions and their potential influence on the research findings (Reeves, Kuper, Hodges 2008). My positionality as a white, liberal, vegan, highly educated woman is important to note. This research rose out of my deep commitment to documenting the harms associated with the industrialized animal agriculture: harms which impact animals, the environment, workers, and communities. Reflexivity was a key component of assessing how my own beliefs may have shaped my interpretation of the data. For example, while I questioned narratives that centered on the necessity of meat, this was not a part of my formal analysis. Given the deeply embedded nature of meat in our society, I viewed these narratives as reflective of the cultural fabric that normalizes industrial scale meat production and consumption.

During interviews, I also consciously "bracketed", e.g., set aside my assumptions to better understand the viewpoints of participants, even when those viewpoints challenged my own beliefs. As I embarked on primary data collection, I was exposed to a variety of perspectives, experiences, and thoughts—many of which contradicted my initial conceptions. In the beginning, it seemed quite straightforward: regulatory agencies had enabled agribusiness interests to take priority over

protecting worker safety. However, as I spoke with regulatory officials, I was exposed to differing perspectives and the challenges faced by bureaucrats due to institutional and structural constraints: challenges that provided me with a more multifaceted understanding of policymaking during COVID-19. These interviews added nuance to my understanding of COVID-19 outbreaks in meatpacking plants, providing more context on the negotiations and challenges that policymakers and bureaucrats endured in an unprecedented public health crisis. Often, interviews provided more contextual information regarding policymaking challenges that I was not able to glean through document analysis.

As I identify as a feminist researcher, I also believe it is critical to represent informants in a manner that does not betray trust and acknowledges their standpoints. Feminist researchers take responsibility for the representation of participants, taking care in their writing to respectfully represent positionality (Cherry, Ellis, DeSoucey 2011). Throughout my data collection process, I engaged in “member checking” to ensure an accurate representation of the lived experience of the participants being studied. Lincoln and Guba (1986:77) describe member checks as “the process of continuous, informal testing of information” and as a crucial technique for establishing credibility. Member checking entailed asking probing questions during interviews, referring to themes garnered during my document analysis, and corroborating the accounts of other participants during subsequent interviews and secondary data collection and analysis. During analysis, I moved back and forth between my various participant accounts to illustrate the nuances associated with policymaking processes, the subsequent impacts on workers, and the perspectives shared across interviewees. Having a diverse set of accounts and experiences strengthened my understanding of the data, as well as enabled me to practice reflexivity during analysis through providing multiple perspectives.

CHAPTER FOUR: OVERSIGHT OF THE MEATPACKING SECTOR

In this chapter, I provide an overview of the regulation of the meatpacking sector. I assess regulation at the federal level as it relates to meatpacking, including worker safety, labor policy, and public health. I draw on secondary data analysis, critical policy ethnography, and in-depth interviews to analyze policymaking and the impacts of a fragmented regulatory framework on worker safety and public health. I first summarize the regulation of the meatpacking sector and provide an overview of the agencies tasked with regulating food and worker safety. Next, I analyze the role of agribusiness actors and lobbyists in COVID-19 policymaking, documenting the interplay between industry interests and policy outcomes. Finally, I turn towards a discussion of the overlap between food safety and worker safety, highlighting how regulatory fragmentation coupled with regulatory capture heightened the difficulties in developing and enforcing worker safety standards during the pandemic.

Throughout this chapter, I document factors leading to the erosion of OSHA and USDA's regulatory power related to food and worker safety. These include legacies of underfunding, understaffing, and increased corporate power and self-regulation – factors I link to outcomes of neoliberalism. I also analyze how pre-existing issues associated with meatpacking, including increased line speeds and decreased inspections, shaped outcomes related to COVID-19 transmission and worker vulnerability. Importantly, changes in line speed and inspection regulations have been driven by corporate actors and reflect the rise of corporate power in the policymaking power. In tracing corporate involvement in policymaking during COVID-19, I strengthen an understanding of how the political economic system shapes harms related to worker wellbeing and safety (Johnson, Schwartz, and Inlow 2020; Lynch 2022; Lynch, Stretesky, and

Long 2020; Lynch and Long 2022). Although some harms were caused directly by policies, I suggest that other harms are the product of a weakened regulatory framework. Rather than directly harmful policy actions, an erosion of regulatory power, limited collaborative pathways, and regulatory fragmentation between the agencies tasked with ensuring worker and food safety intensified the harms experienced by meatpacking workers during COVID-19.

In focusing my analysis at the federal level and exploring how meatpacking executives and lobbyists worked together to push forth policies that prioritized production over worker safety, I illustrate the influence of agribusiness in both the regulatory framework and structure of the food system (Leonard 2014; Silbergeld 2016; Howard 2016). Although green criminologists have researched food regulation, such as food safety issues and food-borne disease outbreaks (see Leighton 2022; Lynch and Long 2019), research on the harms associated with meatpacking sector is scant and has largely focused on crime rates in meatpacking communities and harms to animals, workers, and the surrounding environment (Wyatt 2014; Fitzgerald, Kalof, and Dietz 2009; Jacques 2015; Porcher 2011; Muller 2018; Taylor and Fitzgerald 2018). Research related to agribusiness involvement in the policymaking process and subsequent harms experienced by workers is even more limited; with green criminologists calling for increased attention to the institutionalized harms embedded within the industrial animal complex (Taylor and Fitzgerald 2018; Tourangeou and Fitzgerald 2020).

In drawing on secondary data sources and in-depth interviews with worker, health, and food safety officials, I provide a novel, critical analysis of how agribusiness leveraged the COVID-19 pandemic to push policies that benefitted their interests and maintained meat production, despite the risks faced by workers. Furthermore, I draw on interviews with bureaucrats to document the barriers they faced during COVID-19, including the outcomes of underfunding and

limited staff capacity, coupled with regulatory fragmentation and limited collaborative pathways. Declined staff capacity, virtual inspections, and a lack of COVID-19 standards amplified the impacts of the pandemic on workers whilst highlighting the need for increased agency regulatory power and collaboration to better respond to unprecedented health crises. To my knowledge, no one has yet published qualitative research on the policymaking challenges faced by labor, health, and food system institutions during the COVID-19 pandemic. The findings in this chapter provide key information related to the institutional, structural, and socio-political contexts that shaped high transmission rates and harm in the meatpacking sector and emphasize the need for enhanced regulatory capacity and greater autonomy between corporate actors and the political sphere.

Who is Regulating the Meatpacking Sector?

The United States Department of Agriculture

The meatpacking sector is primarily regulated through United States Department of Agriculture (USDA) and the Occupational Health and Safety Administration (OSHA). The USDA's mission is to "support the American agricultural economy to strengthen rural communities; to protect and conserve our natural resources; and to provide a safe, sufficient, and nutritious food supply for the American people" (USDA 2016). The USDA is comprised of 29 agencies, who are tasked with various responsibilities including marketing US agricultural products, conducting research, protecting US agriculture resources from pests and disease, administering farm commodity programs, and ensuring food safety (USDA 2016). Of the 29 agencies, the two which are highly relevant to the meatpacking sector are the Food Safety and Inspection Service (FSIS) and the Animal Plant Health Inspection Service (APHIS) (USDA 2021). FSIS is responsible for ensuring the safety and quality of meat and poultry products and conducts inspections at meat processing plants to verify that they adhere to sanitation and safety standards

(FSIS 2023). These inspections encompass various stages of production, from slaughter and processing to packaging and labeling. APHIS, on the other hand, conducts surveillance, monitoring, and research to detect and respond to emerging threats to agriculture and the environment (USDA APHIS 2023). This includes ensuring that imported animals meet health and safety standards and that agricultural products comply with federal requirements.

The USDA plays a key role in maintaining a safe food supply and agricultural sector; however, its focus is on food safety *not* worker safety. Key USDA policies and guidelines related to meatpacking are the Federal Meat Inspection Act (FMIA), Humane Methods of Slaughter Act (HMSA), the Poultry Products Inspection Act (PPIA), Hazard Analysis Critical Control Point (HACCP), New Poultry Inspection System (NPIS), New Swine Inspection System (NSIS) and the Packers and Stockyard Act (FSIS 2023; USDA 2023). The bulk of these policies are premised on ensuring meat and meat products are processed in sanitary conditions without undue animal suffering, while the Packers and Stockyard Act focuses on ensuring fair competition in the market. Under PPIA, NSIS, and NPIS, plants develop, implement, and maintain their HACCP systems' procedures to prevent contamination (FSIS 2023).

Over the years, there have been several developments regarding the regulation of line speeds and inspection procedures in meatpacking plants. In 1997, FSIS initiated faster line speeds and deregulatory measures in some chicken and pig meatpacking plants through the HACCP-Based Inspection Models Project (HIMP) (Replogle and Winders 2021). In 2012, FSIS proposed a rule to increase line speeds for chicken plants but decided to permit only 20 HIMP chicken plants to operate at faster speeds due to opposition. Notably, these plants all increased overall production following the permit (Replogle and Winders 2021). In 2017, the National Chicken Council submitted a petition to the FSIS and requested a waiver system to allow poultry plants to operate

without line speed limits, emphasizing increased production volume. FSIS initially denied the petition but later began granting line speed waivers to additional poultry plants. In 2019, FSIS finalized the Pig Slaughter Deregulation Rule, permitting all pig plants to opt out of line speed limits, reduce the number of federal inspectors, and delegate inspection responsibilities to meatpacking personnel (Collins 2019). As a justification for revoking line speeds, FSIS highlighted a 12.49% increase in production and an estimated \$87.64 million increase of industry profits (Replogle and Winders 2021). However, the consequences of line speed increases were not included in these justifications—consequences which include increased rates of worker injury and exacerbation of environmental impacts (Replogle and Winders 2021). This deregulation also reduced federal oversight, transferring inspection responsibilities historically performed by FSIS officials to meatpacking employees, reducing the number of FSIS inspectors in the plant conducting inspections in favor of privatized inspections (Chapman et al. 2021).

The Occupational Health and Safety Administration

While food safety is regulated through USDA, the Occupational Health and Safety Administration (OSHA) under the Department of Labor regulates worker safety. OSHA was created in 1970 to “assure safe and healthful conditions for workers by setting and enforcing standards and providing training, outreach, education, and compliance assistance” (OSHA 2023:6). Currently, OSHA covers 29 states, including Colorado (OSHA 2023). States that are not covered by OSHA have approved state plans, which must be at least as affective as the federal OSHA program (OSHA 2023). A key tenet of OSHA’s mission is developing and enforcing occupational and health standards and conducting inspections to evaluate safety conditions, addressing safety violation complaints, and providing guidance to both employers and employees on adhering to safety regulations. Initial OSHA regulations focused primarily on industrial

workplaces and set the foundation for addressing workplace hazards across various sectors (Weil 1991). The standards covered aspects such as fall protection, hazardous materials handling, and machine guarding, among others (OSHA 2023). Over time, OSHA oversight expanded to include a range of workplaces and industries and industry-specific regulations tailored to address unique hazards (OSHA 2023).

To enforce safety and health standards, OSHA utilizes a multi-pronged approach that includes inspections, citations, penalties, and compliance assistance. OSHA inspections can be either programmed (scheduled) or unprogrammed (unscheduled). Programmed inspections are often targeted based on high-risk industries, injury and illness rates, or specific hazards. Unprogrammed inspections can occur in response to complaints, reports of severe injuries or fatalities, referrals from other agencies, or as part of OSHA's emphasis programs, which are temporary programs that focus OSHA's resources on particular hazards and high-hazard industries (OSHA 2019). During an OSHA inspection, compliance officers conduct a workplace inspection to identify hazards, assess compliance with safety and health standards, and issue citations and penalties based on observed violations (Representatives of Employers and Employees 1971; Consultation with Employees, 2013; Abatement Verification, 1998). Employers can request an informal conference with OSHA to discuss citations, penalties, abatement requirements, and potential settlement agreements (Employer and Employee Contests Before the Review Commission, 2007). Employers also have the right to contest OSHA citations and penalties, which are reviewed by the Occupational Safety and Health Review Commission (OSHRC).

Under OSHA law, employers are responsible for creating a safe workplace for employees and upholding workplace safety and health standards. Some of the key elements of OSHA guidelines for employers include: display the OSHA Job Safety and Health poster, inform workers

about chemical hazards, provide safety training, keep accurate records of work-related injuries and illness, post OSHA citations and injury data where workers can see them, notify OSHA within 7 hours of a workplace fatality or within 24 hours of work-related in patient hospitalization, amputation, or loss of an eye, and not retaliate against workers for using their rights under the law (OSHA 2023). Employees have the right to file a confidential complaint, participate in an OSHA inspection, file a complaint with OSHA if they have been retaliated against as the result of using their rights under OSHA, and file a complaint if punished for acting as a whistleblower. They also have the right to receive information and training about hazards and OSHA standards, receive copies of work related injuries and illnesses that occur in their workplace, results from tests and monitoring, and copies of their workforce medical records, participate in an OSHA inspection, file a complaint with OSHA if they have been retaliated against as the result of using their rights under OSHA, and file a complaint if punished for acting as a whistleblower (OSHA 2023).

Another key element of OSHA is related to the agency's recordkeeping requirements for workplace injuries and illness, which is implemented through OSHA Form 300, often referred to as "300 logs". Employers are required to record all work-related injuries and illnesses that result in death, days away from work, restricted work, transfer to another job, or medical treatment beyond first aid (General Recording Criteria, 2011). The form includes fields for recording details such as the date of the injury or illness, a description of the incident, the affected body part(s), and the number of days away from work (Forms, 2023). Employers must maintain these records for at least five years following the end of the calendar year of the record and must post an annual OSHA Form 300A summary, which summarizes the number of injuries and illnesses that year, in a visible location at the workplace from February 1 to April 30 each year (Annual Summary, 2023).

Although there are no guidelines unique to meatpacking plants, existing OSHA standards cover basic workplace protections and hazards related to this sector. This includes requirements for exposure to bloodborne pathogens, respiratory protection, personal protective equipment, hazard communication, machine guarding (e.g., mandating the use of guards and safety mechanisms of machinery), and ensuring safe walking-working surfaces. Moreover, the “general duty clause” of the Occupational Safety and Health Act of 1970 can be used to cite employers for violating their duty to provide a workplace free from recognized hazards that are likely to cause harm, even when no particular standard applies (OSHA 2023).

The Center for Disease Prevention and Control

While the Center for Disease Prevention and Control (CDC) is not a regulatory agency, nor does it typically oversee the meatpacking sector, it is important to note given the nature of COVID-19 as a public health crisis. The CDC “conducts critical science and provides health information that protects our nation against expensive and dangerous health threats and responds when these arise” (CDC 2023a). The CDC is organized under eight divisions and has twelve centers and institutes, all of which are tasked with specific responsibilities. The National Institute for Occupational Safety and Health (NIOSH), for example, focuses on occupational safety and health, conducting research, developing guidelines, and providing recommendations to protect workers from workplace hazards (CDC 2023b). As the CDC is a public health agency responsible for disease prevention, monitoring, and control, research is at the heart of its work in order to understand, prevent, and control various health issues (CDC 2023a).

A weakened regulatory framework.

As discussed above, OSHA and USDA play key roles in regulating food and worker safety related to the meatpacking sector. Notably, meatpacking plants are amongst the most dangerous workplaces in the United States. According to OSHA data from 29 states, an average of 27 meatpacking workers a day suffer amputation or hospitalization (OSHA 2023). Despite having fewer employees compared to other companies with record injury rates, meatpacking and poultry companies were amongst the most dangerous. In fact, JBS had the eighth highest number of severe injuries of the companies listed in the data set (Berkowitz and Dixon 2023). However, this data accounts only for overnight hospitalizations and amputations; excluding other serious injuries or illnesses like COVID-19. The hazardous working conditions of meatpacking plants, including line speed, dangerous machinery, repetitive motions, and reliance on immigrant and refugee labor has created a highly risky, yet underregulated environment.

The regulatory framework governing worker safety and food safety has experienced significant erosion over the years due to several factors. This erosion is linked to changes in the broader political landscape, which has included increased deregulation and reduced government intervention in the private sector (Malin and Kallman 2022). This shift has led to budget cuts and reduced staffing for regulatory agencies, limiting their capacity to enforce and oversee safety standards effectively. These changes embody the outcomes of neoliberal policy measures, which promote reduced state intervention in favor of market interests (Malin and Kallman 2022; Jones and Hameiri 2021). Industry lobbying and influence have also played a significant role in eroding food safety and worker safety regulations. Powerful industry actors have sought to weaken regulations that they perceive as barriers to profitability (Yates and Cardin-Trudeau 2021). This has led to the relaxation of certain safety standards and the prioritization of business interests over public health and worker safety. A lack of stringent measures, inadequate enforcement, and limited

resources have rendered government agencies like OSHA less effective in implementing and monitoring safety regulations across workplaces.

Due to its limited funding and understaffing, OSHA has faced significant challenges in effectively enforcing regulations and conducting workplace inspections nationwide. OSHA's annual budget is a mere \$600 million – only 7.5% of the Environmental Protection Agency's budget (Patel and Davis 2023). Furthermore, funding for OSHA's enforcement activities and inspections have not keep pace with inflation, which led to both a decline in the number of OSHA inspectors and a decrease in the frequency of inspections (Berkowitz 2020). In 2020, OSHA had the lowest number of on-board inspectors in the last 45 years, with a total of 862 inspectors to cover millions of workplaces (Berkowitz 2020). OSHA also had not filled 42% of its top leadership career positions (Berkowitz 2020). Former OSHA officials have also linked the decrease in the number of inspectors to hiring freezes during Trump's first year in office and inspectors leaving the agency following his election (Campbell and Yeradi 2020).

This reduction in staff and limited resources has hindered the agency's ability to adequately monitor and enforce workplace safety standards. Between February 1 and October 26, 2020, OSHA received 15% more complaints but performed 50% fewer inspections when compared to a similar period in 2019 (Department of Labor 2021). Although OSHA did not collect data on all inspections during the pandemic, of the data collected, a fifth of inspections were virtual (Department of Labor 2021). The number of OSHA inspections conducted during the first three years of the Trump administration (FY 2017-19) were also thousands of inspections per year lower than any three-year period under the Bush or Obama administrations (Berkowitz 2020). Inspections during COVID-19 were limited due to low numbers of inspectors, a rise in virtual inspections, and a reliance in companies to self-adjust and implement worker protections as the

pandemic unfolded (Campbell and Yeradi 2020). Notably, OSHA issued just eight citations, totaling less than \$80,000, to major meatpacking companies during the Trump administration (Select Subcommittee on the COVID-19 Crisis 2021). Thus, while OSHA's role is to protect workers and enhance workplace safety, COVID-19 illuminated weaknesses in the agency's regulatory capacity.

Much like OSHA, the effectiveness of the CDC as a public health agency was obstructed during the pandemic. The CDC faced allegations of political interference during the pandemic, with critics arguing that political considerations were affecting the agency's decision-making and guidance (Schiff and Mallinson 2023; Mandavilli 2023). Instances included changes to CDC guidance on topics like mask-wearing, testing, quarantine time length, and the reopening of schools (Bandler et al. 2020). Political officials, including then-President Trump, have been documented as influencing the agency's decision-making and compromising the agency's independence (Lipton et al. 2020; Mandavilli 2023). Like the USDA and OSHA, the CDC also faced resource limitations, including budget cuts and staffing shortages, that posed a barrier to effective and swift decision making in creating public health guidance. Broader public health staffing shortages and reduced budgets amplified this. Compared to 2009, there are 26,000 fewer employees at state, county, and municipal health agencies (Simoes and Jackson-Thompson 2023). Furthermore, the CDC faced barriers in public communication, including reports that the Trump administration controlled the agency's messaging, control which led to decreased public trust in the agency (Schiff and Mallinson 2023). Although limited efficacy and reduced autonomy of agencies such as the CDC and OSHA was highlighted during the pandemic, these institutional weaknesses are embedded in a larger, historical pattern of decreased governmental investment and the rise of corporate power in neoliberal governance structures.

During the Trump administration, OSHA and USDA also exemplified the outcomes of regulatory capture. The agencies' leadership appointments favored individuals with ties to industries they were meant to regulate, raising concerns about conflicts of interest. A few examples: Loren Sweatt, the Deputy Assistant Secretary of Labor for Occupational Safety and Health at OSHA, was previously an attorney who defended companies against OSHA citations (Press 2020). Eugene Scalia, the Secretary of Labor, whose legal background includes representing corporate clients and having led an industry-funded effort to reject OSHA's ergonomic regulation to improve worker and health safety (Philpott 2020). Sonny Purdue, the U.S. Secretary of Agriculture, worked to promote poultry expansion in Georgia during his time as the state governor and ran Perdue Partners, a global agribusiness trading company (Cooke 2017). Dr. Mindy Brashears, USDA's Under Secretary for Food Safety, has received hundreds of thousands of dollars in funding and donations from the meat industry, including at least \$100,000 from the pork industry and from the lobbying groups North American Meat Institute (NAMI) and National Cattlemen's Association (Collins 2019; "Researcher who took money..." 2020). Both groups lobbied for her nomination and confirmation to the USDA. These appointments diminished the agencies' commitment to rigorous enforcement of worker and food and safety regulations and reduced its independence from industry.

In the next section, I provide key findings related to the role of agribusiness in the policymaking process and further document the implications of a weakened regulatory framework and regulatory capture on worker safety.

The Role of Agribusiness in Policymaking Processes

Pushing for Industry-Oriented Policies

As COVID-19 cases rapidly increased and facilities faced shutdown, powerful agribusiness executives and lobbying groups worked with the federal government to draft a Presidential Executive Order that would ensure maintained production, despite the risks. After decades of consolidation, there are about 800 federally inspected meatpacking facilities in the United States, but only a small percentage account for the billions of animals that are slaughtered. In the cattle industry, 98% of slaughtering and processing is done by as few as 50 plants (USDA 2020). In 2010, only five plants accounted for 56% of cattle that were slaughtered. In the pig industry, 57% of slaughtering is done by twelve plants (USDA 2020). In turn, this creates a bottlenecking issue when plants work at reduced capacity or are closed.

As local and state health department began to threaten plant closures across the United States, and worker absences continued to spike, industry actors and lobbyists began strategizing how to keep plants open and workers working. In late March 2020, Tyson Foods announced the temporary closure of its pork processing plant in Columbus Junction, Iowa, following a COVID-19 outbreak that was linked to hundreds of infections and two deaths (Reinitz 2020). As other meatpacking plants faced shutdowns due to growing rates of COVID-19 transmission, Tyson Foods published a 2-page ad in the *New York Times*, *Washington Post*, and *Arkansas Democrat-Gazette* that warned "*millions of pounds of meat will disappear*" from the national food supply chain if the COVID-19 outbreak forced plants to close (Stull 2020). In the days following, as meatpacking plants faced the potential of shut down due to high rates of COVID-19 transmission and community spread, industry executives worked closely alongside agriculture lobbyists to push for policies that enabled plants to stay open.

First, faced with growing labor shortages, industry actors began to strategize how to best navigate worker absenteeism through policy actions. On March 30th, 2020, Mark Dopp, Chief Operating Officer and General Counsel of NAMI, wrote to Greg Ibach, the former Under Secretary for Marketing and Regulatory Programs at USDA:

The Department of Labor (DOL) should be encouraged, as part of its guidance to employees and employers regarding the CARES act, to clarify that healthy employees will not qualify for unemployment benefits unless their employer furloughs them or lays them off or they satisfy one of their statutorily identified reasons. For example, a food company worker may move to and from his or her place of employment, even in a quarantine area because the food industry is a critical industry (Email from Mark Dopp to Greg Ibach, March 30, 2020).

Subsequent email exchanges continue to highlight the need for policies which hindered meatpacking workers' ability to access unemployment if they were to be fired for absenteeism. Growing rates of employee absenteeism posed problems to a sector which already has high rates of employee turn-over.

On April 3rd, 2020, in an email exchange with Eugene Scalia, Secretary of Labor at the time, Julie Anna Potts, President and CEO of NAMI, wrote:

I want to re-emphasize that the slowdowns and shutdowns you heard described today are significant and getting worse each day. Whether due to fear or a misguided idea that unemployment benefits are available simply because of fear of going to work, hearing a strong and consistent message from the President or Vice Present like that delivered by the Governor of Nebraska is vital: being afraid of COVID-19 is not a reason to quit your job and you are not eligible for unemployment benefits. We need that reinforcement throughout all levels of government (Email from Julie Anna Potts to Secretary Sonny Perdue, April 3, 2020).

By early April, as plants continued to face closures due to rising outbreaks, industry actors and lobbyists had scheduled a meeting with Secretary Purdue to further advocate for policies and public messaging aimed at keeping workers working. The day prior to the call, Potts sent an email with specific talking points for industry actors to use – stating “*your sense of urgency from the company level is the most important*” and “*I think all of you have agreed on the importance of*

asking the Secretary to elevate the need for messaging about the importance of our workforce stating at work to the POTUS or VP level” (Email from Julie Anna Potts to Noel White et al., April 2, 2020). Some examples: *“unemployment benefits should not be provided to people who quit their job”*, *“it is unimaginable that Congress intended to create an incentive, much less a path, for food industry workers to choose unemployment over food”*, and *“the administration should support exculpating critical industry businesses from certain liability actions”* (Email from Julie Anna Potts to Noel White et al., April 2, 2020). These talking points have a central theme: the need for meatpacking workers to continue working and, relatedly, targeted messaging and support from the federal level.

When advocating for federal policies aimed at keeping plants in operation, lobbyists and executives framed messaging at the essential nature of meat production, and subsequently the need for meatpacking workers to fulfill their *“patriotic duty”* due to the threat of a *“total protein supply chain collapse”* if plants continued to close. Narratives from agribusiness actors, including executives and lobbyists, highlighted the importance of workers *“fulfilling their patriotic duty”* during COVID-19, continuing to work despite growing risks and rates of illness amongst their workers. Meatpacking workers were touted as *“patriotic and heroic Americans”* who were invaluable to maintaining the food supply. For example, on April 8, 2020, during a daily coronavirus briefing, then-Vice President Mike Pence described food chain workers as the *“most important people”*, below healthcare workers, during COVID-19 (Bloomberg 2020). He stated:

The most important people are working in the food supply, from our farmers to our ranchers to our processors, distributors, truckers, to our grocers. Americans are keeping food on the table for our fellow Americans. Let me begin by saying what I said to some of the most CEOs of meat and grain in the country. Companies like Tyson Foods and Hormel Foods today, not just these companies but to all of the hard-working people working in our food supply chain today: thank you. Thank you for what you are doing to keep those grocery store shelves stocked. Thank you for showing up to work every day and working hard to keep our food supply rolling in America...it’s been these heroic Americans from the farm

to the fork that have made it possible for Americans to have one less worry. They are truly inspiring heroes.

After applauding the “heroes” of the food system sector, Pence called upon workers to continue to work due to their vital roles in the food system (Bloomberg 2020). Referencing rising plant closures to worker absenteeism (rather than growing COVID-19 outbreaks), he emphasized:

That being said, I did hear from industry⁴ that there have been reports of some plants having reduced capacity because of people having concerns about exposure to the coronavirus. In fact, over the last several days, there have been some incidents of worker absenteeism and some plants have been forced to close temporarily. So, on behalf of the President and our entire team and our grateful nation, let me say to all of you that are working in the food industry at every level across the country: just understand that you are vital and you are doing a great service to the people of the United States of America. We need you to continue, as a part of what we call our critical infrastructure, to show up and do your job and know that we are going to continue to work tirelessly with all of your companies to make sure that that workplace is safe.

Given that most meatpacking workers are not native-born U.S. citizens and spend years waiting for work visas or to be displaced as refugees in the U.S., claims centered on their patriotic responsibility are striking. The paradox of meatpacking workers being described as “*heroes*”, “*Americans*”, who are fulfilling a “*patriotic duty*” in the broader context of ICE raids, growing deportation rates and border militarization, and limited pathways for citizenship reveals their constructed value as labor to be exploited, rather than human beings deserving of protection.

As lobbyists continued to advocate for policies and public messaging aimed at incentivizing workers to remain working, local and state decisions increasingly posed a threat to maintaining plant operations including plant closures at the Smithfield Foods Plant in Sioux Falls, South Dakota, Cargill Plant in Hazleton, Pennsylvania, and a JBS Plant in Worthington, Minnesota

⁴ Email records document that the day before the briefing, NAMI’s director, Julie Anne Potts, arranged a call between Vice President Mike Pence and NAMI members. The next day, the call was referenced as earning “immediate results” and the email included video links of Pence’s remarks related to food system workers and encouraged email recipients to “share with employees and across social channels”.

(Huber 2020; Karnowski 2020). These plant closures posed a threat to firm profitability and reflected decisions made at the local and state levels. Decisions made at these levels reflect the absence of federal directives related to worker safety—as well as the impacts of devolved federal regulation. Devolved federal regulation leads to inconsistent approaches to disease mitigation across plant locations. On April 11, 2020, Potts complained to other lobbyists and meatpacking executives that:

Plants are being closed. Health departments are making decisions (Greeley), governors are making surprise decisions (Sioux Falls), health departments are showing up unannounced at plants (Waterloo IA)... it's too much to put in email right now but our friends at Smithfield, JBS, and Tyson have been working today too (Email from Julie Anna Potts to Eric Zito et al., April 11, 2020).

Notably, these three plants were the site of over 3,000 worker infections and 16 deaths during the first year of the pandemic (Select Subcommittee Investigation 2022). Subsequent emails detailed the need to draft an Executive Order (EO) which would allow plants to stay open, place power at the federal rather than local level, and protect meatpacking companies from future liability lawsuits. The EO would be made possible under the Defense Production Act (DPA), a wartime authority, which grants the President of the United States broad powers to influence domestic industry in the interest of national defense. In designating meat and poultry in the food supply chain as critical and strategic materials, the EO would permit the Secretary to issue regulations, orders, and/or take other actions to promote continued operations of meatpacking and meat processing facilities.

Analysis of publicly available documents illustrated the role of industry actors and their lobbyists in shaping the language, direction, and implications of the EO. On April 16th, 2020, a National Beef executive emailed Potts and asked if the purpose of the EO was to “*give us protection from state and local authorities from intervening in our operations*”. Potts responded

that *“I think it’s two-fold: to give federal protection for the ability to operate and to seek some liability protection for doing so pursuant to federal direction”* (Email from Julie Anna Potts to Tim Klein, April 16, 2020). The categorization of meatpacking as essential infrastructure meant that, in many cases, these plants would be exempt from some state and local health orders that might have otherwise mandated temporary closures or reductions in production capacity to facilitate social distancing and safety measures. This exemption would also allow meatpacking plants to continue operating even when COVID-19 outbreaks occurred among their workers, putting employees at greater risk.

By framing meatpacking as essential infrastructure under the DPA, industry representatives could argue that any interruption in production would have severe consequences for the nation's food supply. On April 16th, 2020, lobbyists and industry executives from Tyson, Smithfield, JBS, Cargill, National Beef, Hormel, Seaboard, and Clemens sent a letter to the White House that stated:

The growing list of protein plants that have shuttered across our country is alarming. There have been circumstances where plants have closed involuntarily for indefinite and varying periods of time by state and local interdictions. It is impossible to keep the grocery stores stocked if plants are not running....

We respectfully implore you to issue an Executive Order as soon as possible declaring that critical infrastructure food companies must continue their operations- even in the face of COVID-19- so that they can continue to process, produce, and deliver food to the country.... we also urge you and your Administration, include Drs. Fauci and Birx, to spread a message of calm among American people to quell the fear driven absenteeism that is also imperiling our ability to operate (Email from Ken Sullivan et al. to White House, April 16, 2020).

Two days later, email records illustrate that a call was scheduled with industry executives and then-President Trump to discuss the EO. Potts followed this email with talking points for industry executives to present to the President, including the need for a federal response due to patchwork local directives, highlighting the urgency of the situation, and asked industry executives to prepare

their two to three priorities for a federal directive. On April 22, 2020, Potts wrote “*no doubt about it.... our collaboration on the letter opened the door and we are so grateful for that... I feel we now have the door propped open with the some WH [White House] staff that want to help and it is encouraging*” ((Email from Julie Anna Potts to Neil Dirks et al., April 22, 2020). A subsequent email from Potts in this email chain further documented the role of lobbyists and industry actors in the drafting of the Executive Order, stating that “*after talking about a critical infrastructure executive order, invoking the Defense Production Act, the Dep Sec asked to see a suggestion and said he would vet it at the USDA*” (Email from Julie Anna Potts to Neil Dirks et al., April 22, 2020). However, although email records documented rising hope about the potential of the EO order, growing outbreaks and plant inspections posed a threat to continued operation and intensified the urgency in pushing forth the EO.

These email records document clear involvement of agribusiness actors, including executives and lobbyists, in drafting the EO. Further, narratives pushed forth by agribusiness firms and lobbyists centered on fear: fear of commodity shortages and fear of worker shortages and absenteeism. Fear of commodity shortages and the threat of a protein supply breakdown was leveraged to push for public and political support to maintain meatpacking operations. To combat worker absenteeism, agribusiness actors pushed for policies that incentivized workers to continue working, including enhanced messaging about limited eligibility for unemployment benefits for essential workers if they were fired for absenteeism. The policies promoted by agribusiness actors, and their push for an EO that would enable meatpacking and meat processing facilities to remain in operation, reflect the logics of the treadmill of production (ToP) where production is paramount (Schnaiberg and Gould 1994; Schnaiberg, Pellow, and Weinburg 2002). To maintain meat production, lobbyists turned toward policy directives: highlighting the interconnection between

the political-economic system and the interests of powerful institutions in the policymaking process (Lynch, Stretsky, and Long 2020). As I discuss next, the economic interests and prioritization of profit and production over people played a critical role in shaping guidance related to the health and safety of meatpacking workers.

Voluntary versus mandated guidance.

In April 2020, an outbreak at the Smithfield Plant in Sioux Falls, South Dakota led to 904 COVID-19 cases and two deaths. In response, the CDC conducted a series of site inspections before identifying recommendations aimed at increasing worker safety before the plant could re-open (Charles 2020). Before these site-specific recommendations were finalized, though, Ken Sullivan, then-CEO of Smithfield Foods, provided significant feedback aimed at weakening them. In an email to Greg Ibach, former Under Secretary for Marketing and Regulatory Programs at USDA, Sullivan wrote:

The starred recommendations are problematic for a 110-year-old, 8 story plant. As discussed, social distancing is the single most challenging thing to achieve in a (dis)assembly production environment. Workers are often shoulder to shoulder and the plant in general is a beehive of activity. As you know, Sioux Falls is not different in that regard to any other plant (Email from Ken Sullivan to Greg Ibach, April 21, 2020).

The email contained a CDC report with recommendations, scribbled with objections and calculations about the cost of implementing safety measures such as PPE distribution. When recommended in the CDC report to ask individuals if they had any symptoms, Sullivan wrote “*Everyday?*” and calculated that it would take 63 hours to gather this information from all employees. When suggested to provide additional sick leave or a more generous sick leave policy for employees, Sullivan wrote “*What does that have to do with this?*”

In the days following the email exchange, the CDC report was altered and ultimately included more references to language such as “if possible” and “when feasible”. The initial report

used the terms "feasible" twice and "possible" 11 times, while in the revised report, these words appeared 9 and 20 times, respectively. These qualifiers made guidance voluntary, rather than mandatory, and limited implementation of safety measures. Although not all recommendations would have been feasible to implement in a short time frame, due to requiring infrastructural and operational changes, many recommendations were focused on immediate changes that were, in fact, feasible – such as providing PPE and testing, sick pay, and increasing the spatial distance of workers to enable social distancing. Furthermore, the final report included two additional paragraphs that further highlighted the voluntary nature of recommendations, stating “*the recommendations in this memorandum are steps that Smithfield Foods may want to consider implementing to address the conditions we identified at the plant. These recommendations are discretionary and not required or mandated by CDC*” (CDC Memorandum 2020).

In a publicly available interview transcript with Dr. Henry Walke, who served as incident manager of CDC’s COVID-19 response from July 2020 through September 2021, he noted the role of the USDA in shaping these language changes (“Trancribed Interview of Henry Walke” 2022). In reference to changes in the April 22nd CDC Smithfield memo, he commented:

The way I remember this conversation, the general conversation was USDA talking about industry concerns... there was this general concern that our guidance would incorporate, or at least acknowledge, that there were some actual physical barriers or challenges in implementing guidance in these settings.

When probed by the interviewer if “*the changes that ultimately made it into the April 22nd memo kept workers worker safe and were aligned with the best science at the time*”, Dr. Walke identified his initial resistance to making these changes.

We don’t like to put these types of waffle words into our guidance, ‘if feasible’, for example. I think it undermines the clarity of the guidance itself. These are the recommendations. And so, I was resistant to try to incorporate this type of language into our guidance because it really muddies the guidance, when we start putting these waffle words into it... I think if we include phrases like that, ‘if feasible’, then it dilutes our

recommendations... it could manifest by undermining the whole recommendation. So basically, people could opt out of our guidance because it wasn't feasible. I think that's the harm, that we provide such a- it's so wishy washy that- is it guidance at that point? And is it a CDC recommendation or not? ("Transcribed Interview of Henry Walke" 2022).

Although Dr. Walke expressed resistance towards using this language in recommendations to Dr. Redfield, the director of the CDC, he ultimately conceded stating that "*Dr. Redfield is the director*" and that he "*wanted to include this language*" and "*so that's what we did*" ("Transcribed Interview of Henry Walke" 2022). In reference to why he added the qualifiers, Dr. Redfield, in a publicly available interview transcript, referred to "*very, very passionate presentations [that] were made to the Task Force by the Department of Agriculture*" ("Transcribed Interview of Robert Redfield" 2022). Dr. Redfield stated that he drew on narratives from these presentations from Secretary Purdue, who he considered "*the expert*", stating that "*the real risk to these workers was not because they were in the plant... it was that these workers lived in congregate settings*" and "*I became convinced that the Secretary of Agriculture's concerns were right, that if this thing goes on too long, we're going to have a protein shortage*" ("Transcribed Interview of Robert Redfield" 2022). These concerns aligned with industry talking points: workers, not the plant, were the root of transmission; the potential for a protein supply chain collapse; and the need for flexible suggestions versus mandated guidance to keep plants in operation.

Involvement of agribusiness actors in shaping guidance related to worker safety illustrates a prioritization of profit over people. Despite Dr. Walke's hesitancy to include "waffle words"—or words that did not provide clear direction on implementing safety guidance, phrases like "if possible" and "if feasible"—were prevalent in the CDC's recommendation to the Sioux Falls Smithfield plant and the broader CDC guidance issued to meatpacking plants. Presentations made by the Secretary of Agriculture influenced objective policymaking related to disease mitigation efforts in a plant that was suffering from a significant COVID-19 outbreak. Fears of a protein

shortage further compounded objective policymaking and illustrate how the economic interests of agribusiness actors shaped policymaking and public health guidance; upholding production even when faced threats like a pandemic.

Although these qualifiers demonstrate the role of agribusiness in the policymaking process, it is important to note that these recommendations were always just that: recommendations. Unlike OSHA, who is a regulatory agency, the CDC operates as a public health agency with the authority to provide recommendations and guidance but lacks the legal power to enforce mandatory regulations on businesses and industries. In an interview I conducted with Edward, an occupational health official, he highlighted how these guidelines were already voluntary versus mandatory, due to the CDC's lack of regulatory authority. He observed:

In this case, it's all recommendations. They [meatpacking firms] are not required to do any of it. I think there may have been some people farther up the review chain as time went on that because--- they were active sentences, right? It was like install ventilation fans here or ... stagger break time. So, without knowing the background of this, there's no regulatory authority, it could read that way... I think some of the language changes that occurred was because people didn't realize that were already just recommending this, you could do it or not do it. So, things were put in like remove fans, if feasible. If possible, do this or that, or the other to make it--- saying where you don't really need to do that, but really wasn't needed in the first place, in my opinion, because they were just recommendations.

Thus, while language was changed to reflect the voluntary nature of guidelines, it was pre-emptive. In other words, guidelines were recommendations rather than enforceable regulations from the outset given the CDC's lack of regulatory power. Corporate self-regulation, rather than government intervention, reflects how neoliberalism has devolved federal regulatory power in favor of allowing corporations to regulate themselves.

Edward also explained that feedback he received on recommendations was framed under the guise of consistency, rather than creating evolving guidance based on growing knowledge of COVID-19:

I was asked at one point by people up the chain to change some of my recommendations and to more match what--- because my first report came out, and then the second one came out that had some of the language changed. And then my third one came out, and they kind of wanted to do some of the same things. And you know, I was far enough along in my career that I was like, you can change it, and you can word it however you want. Just I won't sign it. Just take my name of it. And they backed down and let it stand as it was.

But that was internal. That was internal pressure. And I think... they wanted things to be consistent because that raises questions why? You have, quote unquote, a strongly written one, one that had some influence and then you're back here, why? But my argument was ... this is all recommendations, the company can throw it in the trash can and not do anything with it, but where it became a little less recommendation and may be a requirement. And this was their prerogative to do but some local health departments said, well, in order to reopen, you need to take these steps, but that was them using it. It's kind of like in normal times. You know, we tell people we're not OSHA, we're not going to fine you or cite you. But we do send copies of our work to OSHA. OSHA decides to read our report and says 'this seems like a really bad place. I think we're going to do an inspection'. OSHA has that right.

Although the guidance and recommendations were voluntary, these reports were wielded by local health departments to request implementation before re-opening plants that were closed due to outbreaks. While reports did not contain mandated recommendations, they did provide guidance to enhance worker safety and slow the speed of disease transmission.

Other interviewees highlighted how the feedback process around creating and disseminating guidance created tensions, even guidance which was voluntary. The “slow speed” of document approval was amplified during the pandemic, as was the pressure to modify documents. For example, Margie, a CDC official, spoke about the process of getting clearance for documents during COVID-19:

I think it was interesting to learn and see was, even though CDC as the, you know, leading public health agency—with our state partners, with the input of industry, with all of these things—could develop the best prevention strategy, testing strategy, whatever it was. There was additional layers of clearance above us that we had to go through. And so, I was often very late at night receiving input and comments on testing strategies and documents that sometimes were based in science. And sometimes were not based in science. And so it was a real lesson to me to learn how do I best navigate that? What are my core values as a scientist and as a public health advocate in this and how do I address those? And it was the first time in my career that I actually felt like my neck was on the line for actually doing

the work that I felt was needed to protect the safety and health of the public, and really looking at how different groups and organizations weighed economics perhaps in relation to public health and safety. And just kind of figuring out well, what is--- where do I stand? What are my core values? And what am I willing to put forward to really work on this?

Here, Margie illuminated the challenges she faced on an individual level in relation to getting clearance on documents. She delineated feedback in two ways: that based in science and that which was not based in science. This created a tension in her ability to carry out her work and the work of the CDC—to protect the safety and health of the public. Later, she explained that “*other entities might have had different priorities when it came to looking at the guidance*”, priorities which created challenges when receiving feedback and developing recommendations.

The tensions faced by Margie and Edward during the policymaking process, including navigating feedback that diverged from their values, illustrates the moral and ethical dilemmas faced by bureaucrats working within larger institutions impacted by deregulation. For example, Margie reflected on the economic values of groups and organizations, and how these economic values overshadowed her personal values related to public health and safety. These tensions illuminate a broader pattern: when production and profit outweigh public health and wellbeing, policymaking reflects corporate, rather than public, interests. This is a central contradiction of capitalism and neoliberalism—profit over people, even when it is people who are necessary to carrying out the labor required to sustain production. Although Margie and Edward were not regulatory officials, as representatives of public and occupational health, both identified industry interference as a central challenge in creating and implementing disease mitigation strategies.

In contrast to the CDC, OSHA **does** have regulatory power to enact guidelines and enforce compliance. Under law, OSHA is authorized to issue an emergency temporary standard (ETS) to protect workers who are “exposed to grave danger from exposure to substances or agents determined to be toxic or physically harmful from new hazards” (Standards, 2022). Given COVID-

19 was an unprecedented public health crisis, and there were documented outbreaks at meatpacking plants, there was sufficient evidence of the need for a new standard. Carol, a labor expert, echoed the need for an emergency temporary standard and criticized their response:

OSHA should have put out an emergency temporary standard covering all workers right away. And then OSHA should have gone and done inspections in the plant. OSHA did not go into those plants. And that was a decision from the top. And OSHA always has... protective gear for workers to go in, because they're always dealing with very dangerous chemicals, asbestos ... so they could have protected workers. The CDC immediately should have allowed public health departments to shut down plants once it started spreading so quickly. They had to shut down. They had to move workers apart. USDA should not have you know, just bend over backwards to do whatever the industry wanted.

Carol's request for OSHA to administer an ETS was not an isolated one. By March 6, the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO) had petitioned OSHA to use its authority to issue an ETS for infectious disease ("Letter to Eugene Scalia" 2020a). In April 2020, 29 state senators further requested action from OSHA in an open letter ("Letter to Eugene Scalia" 2020b). The letter stated:

We call on you to direct OSHA to (1) immediately issue an ETS for infectious disease; (2) issue additional interpretations regarding existing standards to increase enforceable protections; (3) develop comprehensive guidance regarding what all employers must do to protect their workers and notify employers of your intent to enforce key portions of existing CDC and OSHA guidance under the "general duty clause" of the Occupational Safety and Health Act, and (4) withdraw harmful guidance recently issued, including the guidance allowing most employers not to record COVID-19 cases amongst workers and OSHA's recent enforcement policy not to perform on-site workplace inspections of most worker complaints regarding COVID-19.

Their demand remained unanswered. Rather than use its regulatory agency to enact a new standard, OSHA continued to rely on voluntary guidance. Why? According to a public statement released of Lauren Sweatt, former Principal Deputy Assistant Secretary:

Working on a formal rulemaking at the same time the healthcare industry is responding to the COVID-19 public health emergency is counterproductive to both the public health response and robust stakeholder engagement. For example, the efforts employers would take to document compliance with such a standard would distract them from other vital response activities (GAO 2023).

In other words, as accountability for compliance would be taxing, OSHA preferred to utilize existing standards that impose obligations on employers to protect workers. Again, these standards reflect a preference for self-regulation rather than governmental intervention. These include standards related to PPE and sanitation requirements that were seen to be directly and indirectly addressing the potential for infectious disease transmission. Moreover, OSHA determined that it lacked “sufficient” evidence to find that infectious diseases generally pose a grave danger to worker safety (U.S. Department of Labor Office of Inspector General Audit 2021).

A reluctance to issue an ETS, and a preference for corporate self-regulation and voluntary measures, is endemic of the de-regulation that intensified during the Trump administration. Federal regulatory roll-back measures were pronounced, with a preference for corporate regulation over federal regulation. Before Trump left office in 2021, 54% of the administration’s 213 rulemakings were classified as de-regulatory (Wallach and Kennedy 2022). Importantly, 26% of these rulemakings were categorized as related to health and labor. The political landscape of the Trump administration, and subsequent de-regulation efforts, provided a critical backdrop to challenges to policymaking during COVID-19. Voluntary risk management, rather than mandated guidelines, placed the responsibility on corporations rather than federal, state, or local regulatory agencies.

Voluntary guidelines were not only a way for companies to evade liability but also, for regulatory agencies. In my interview with Jake, an employee of OSHA, he discussed how the agency used vague language to protect themselves from legal culpability:

At the end of the day, you gotta understand OSHA can't tie itself, right. They can't. We can't bind our hands. So a lot of the regulations are somewhat vague. And there's a lot you have to go from the regulation to our letter of interpretation and there's preambles to the regulations and a bunch of other stuff that that goes down in there because OSHA can't, we can't tie our hands too much, right? Because we're a federal entity, and then you start tying your hands and then lawyers can go in and find loopholes to everything, and yada, yada, yada, yada.

When it comes to language in the legal world, or even in the contract slash government world. Of course, language matters, right? Logic and language is a very big deal. And *shall* and *should* have two completely different meanings. *Must* and *will* have completely different meanings. Right? And it's all about how you put that in there. And what that means if you say you will do this, that means you will do this, if you say you must do this, there's some open interpretation.

Moreover, mandated requirements require enforceability. For agencies that are chronically understaffed and underfunded, the question of enforcement looms. Enforcing mandatory guidelines would require additional resources for monitoring, compliance, and potential legal actions. Instead, voluntary guidelines provide regulatory agencies with flexibility to carry out their mission, while placing the onus of responsibility on industry operators.

The voluntary language for specific plants under investigation, including the Smithfield Foods Plant in Sioux Falls and the JBS Plant in Greeley, carried into shaping CDC/OSHA guidelines for all federally inspected plants. Released April 26, 2020, the federal guidance contained information related to “cleaning of shared meatpacking and processing tools; screening employees for the coronavirus before they enter work facilities; managing workers who are showing symptoms of the coronavirus; implementing appropriate engineering, administrative, and work practice controls; using appropriate personal protective equipment; and practicing social distancing at the workplace (CDC 2020). This guidance was controversial and received significant pushback from lead industry executives, including Smithfield’s CEO who referred to it as “*worse than nothing*” and a “*middle finger from the gov’t*” in an email exchange, and lobbyists such as Potts who “*was hoping this thing would come wrapped in stronger messaging about the presumption that plants would need to stay open*” and worried that guidelines “*will be read as CDC buying into the theory that the plant is the problem*” (Email from Julie Anna Potts to Andre Nogueira et al.. Apr. 26, 2020).

Passing the Executive Order

Disappointed by the CDC/OSHA guidelines, lobbyists and industry executives continued to advocate for an EO. Between April 18th and April 27, 2020, one day following the release of the guidelines, industry representatives were in frequent communication with the White House and USDA concerning the EO. This included an initial draft of the order sent April 21st, drafted by NAMI with feedback from industry representatives. Although the records did not indicate a reply, the EO, “Delegating Authority Under the Defense Production Act with Respect to Food Supply Chain Resources During the National Emergency Caused by the Outbreak of COVID–19”, was issued one week later with multiple instances of similar language (see Figure 3).

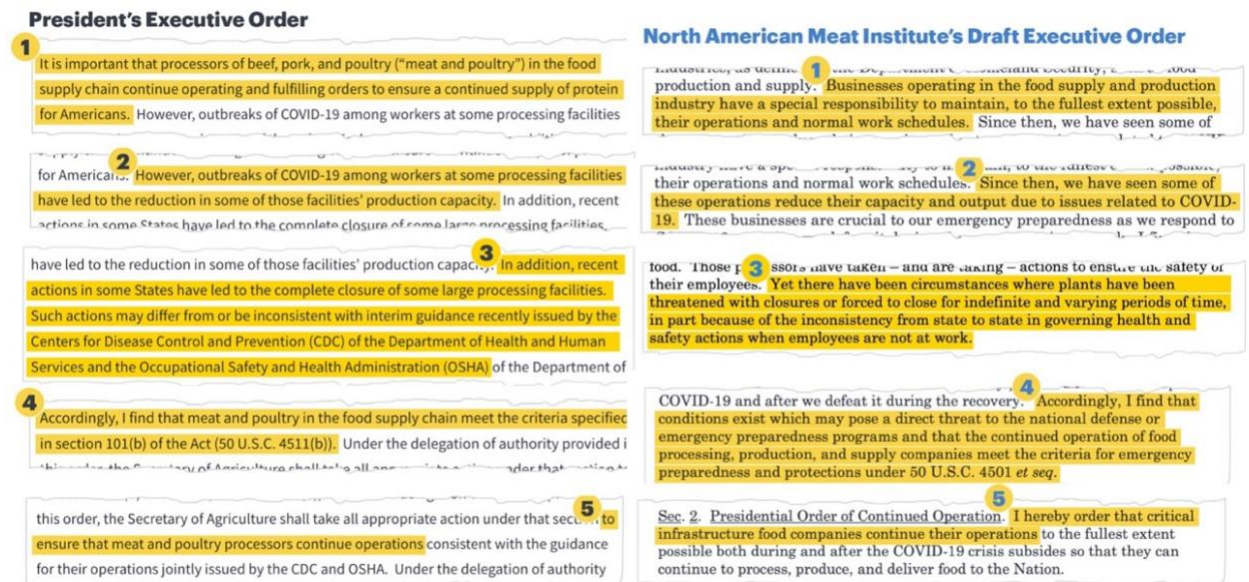


Fig. 3. Commonalities in the Executive Order (85 FR 26313), image modified from Grabell and Yeung (2020)

Both orders highlighted: 1) the need for meat and poultry processors to continue operation, 2) the impact of COVID-19 on plants' production capacities, 3) the implications of varied guidance at the local, state, and federal level on plant closures, 4) that meat and poultry processors meet the criteria for emergency preparedness and protections, and 5) the need to ensure continued operations.

Following the EO's passage on April 28, 2020, the Vice President of Communications at NAMI wrote "*The White House has requested Meat Institute members issue positive statements and social media about the President's action on behalf of the industry, about the Order itself, and about how it will help ensure the food supply chain remains strong*" and concluded the email with a list of talking points to be utilized (Email from Sarah Little to Sarah Little et al., April 29, 2020). These coordinated efforts were largely successful in securing a favorable outcome for the meatpacking industry during the peak of the pandemic: continued production. Furthermore, not only did email records document industry interference prior to the release of the DPA, the request to issue positive statements following the order's enactment demonstrates a close allegiance between agribusiness and the White House. Additionally, while the order did not order plants to stay open, it provided the legal impetus for plants to challenge local and state level orders to pause operations. The role of agribusiness actors in the EO demonstrated the significant influence that industry lobbying exerted on government decisions and policies. The DPA also indicates the prioritization of production continuity over worker safety, illuminating a broader tension between public health and economic interests.

The tension between public health and economic interests reflects our current capitalist political-economic structure, where production and profit are the utmost priorities (Lynch and Long 2022). In the face of a global pandemic, political actions, including the EO and voluntary CDC/OSHA guidance, enabled the current mode of production to persist, despite the risks. Agribusiness actors successfully lobbied for policies where their economic interests were deeply embedded—policies that did little to protect the health and safety of meatpacking workers. In addition to the EO, lobbyists and industry executives wielded the pandemic to push for other policy changes and exemptions, including line speed waiver increases. On an email with multiple USDA

officials, a lobbyist from the National Chicken Council referenced a prior call and “*one of the issues we discussed was regarding the current line speed limits and how flexibility in those limits would help us ensure we can maintain production during these uncertain times*” and referenced sending a follow-up letter to Dr. Brashears (Email from Ashley Peterson to Ashley Smith et al, April 13, 2020). In response, a USDA official replied that “*we will make sure the right folks are aware*” (Email from Lillie Brady to Ashley Peterson et al., April 13, 2020).

In the months following, the USDA allowed fifteen poultry processing plants to increase line speeds during the pandemic, more than the agency had ever approved in a month, compromising both food safety and worker safety (Berkowitz 2020). Notably, all fifteen plants had records of severe injuries, all 10 under OSHA’s jurisdiction had been cited for violations, and over half had COVID-19 outbreaks (NELP 2020). In fact, several had on-going COVID-19 outbreaks when the waivers were granted. Additionally, in spring 2020, FSIS issued its first-ever line speed waiver for a cattle plant. Although the Biden administration withdrew these line-speed waivers in 2021, these speeds were in effect during the peak of the pandemic and were linked to higher rates of transmission (Taylor, Boulos, and Almond 2020). Poultry plants with line-speed waivers were 10 times as likely to have COVID-19 cases compared to plants without waivers and plants that received line-speed waivers also had relatively more county-wide cases (Kindy, Mellnik, Hernandez 2021; Taylor, Boulos, and Almond 2020). Furthermore, 41% of poultry plants with waivers had reported COVID-19 cases, compared to less than 4% for other poultry plants (Kindy, Mellnik, Hernandez 2021).

Line speed waivers and line speed increases approved during the pandemic illustrate that agribusiness actors capitalized on the pandemic to push forth other policies that benefitted them. Constructed fear about meat shortages and the need to continue production or face a “protein

supply chain collapse” were powerful discursive frames that influenced policymaking processes. In pushing for policies that enabled the treadmill of meat production to persist, agribusiness actors demonstrated how economic systems that prioritize profit above other concerns fueled harms (Johnson, Schwartz, and Inlow 2020; Lynch 2022; Lynch, Stretesky, and Long 2020; Lynch and Long 2022). These harms were codified into the regulatory structure and influenced COVID-19 transmission rates amongst workers and their communities. Pre-existing safety issues were compounded by the state’s failure to enact meaningfully worker safety protections and instead, pushed forth policies that accelerated socio-harms such as line speed increase waivers and the EO.

While workers were touted as ‘essential’, these policy decisions reified their vulnerability and, in doing so, treated them as if they were disposable. Further, the threat that plant closures posed to the meatpacking sector illustrated the system’s fragility. Legacies of industry consolidation and concentration have created bottlenecks when plants work at reduced capacity or are closed. Mass production has resulted in a highly profitable, yet vulnerable and fragile sector. Rather than addressing issues related to consolidation and concentration, agribusiness actors successfully leveraged constructed vulnerability to their benefit: successfully pushing forth federal policy directives and voluntary guidance that enabled companies to evade accountability for implementing disease mitigation strategies and subsequent liability issues. Instead, risk was placed onto workers.

Next, I turn towards a discussion of the overlap between food safety and worker safety, highlighting how regulatory capture coupled with regulatory fragmentation further shaped the harms embedded with the COVID-19 response.

De-regulation and Regulatory Fragmentation

While agribusiness actors played a key role in drafting policies that benefitted industry interests, regulatory capture was intensified by a pre-existing fragmentation in the regulatory framework. When responsibilities are dispersed across multiple regulatory agencies, coordination and communication between these entities becomes challenging. In the context of meatpacking, this division is evident in the separation between worker and food safety policymaking. Such fragmentation can create gaps and overlaps, making it difficult to address issues that straddle the boundaries of these agencies. In meatpacking, this divide has historically meant that the realms of food safety and worker safety remain separate. The resulting lack of collaboration and coordination provided industry actors and lobbyists with an enhanced opportunity to exploit weaknesses in oversight systems, paving the way for regulatory capture, where industry interests, rather than the public good, take center stage in the policymaking process.

Interviews with officials illuminated how regulatory fragmentation amplified policymaking challenges during COVID-19. Interviewees described their agencies as “*locked in tradition*”, “*reluctant to change*”, and highlighted the “*inertia*” that “*sets in when you are working in a regulatory context.*” This regulatory context, and delineation between worker and food safety, posed challenges to coordination and communication across agencies. Respondents identified that pre-existing processes and communication channels (both intra-agency and interagency) were not as robust as they could be. In my interview with Diana, a USDA official, she spoke about the Food Safety and Inspection Service’s (FSIS) historical “hands-off” approach to occupational health.

Historically, FSIS has kind of taken a hands-off approach from occupational health requirements, like we've said, ‘Okay, that's OSHA's lane’, you know, industry... that's who you respond to or report on those things. We're pretty much food safety only. And what we learned from COVID is that... it's not necessarily black and white, like... if a company is doing things or not doing things that has an occupational health risk for our employees, but indirectly there's a food safety risk because we can't verify food safety. And also, their employees are going to be affected by the same thing and they're the ones that are supposed

to be ... implementing their hazard plan. So, it is related to food safety, you know, occupational health and food safety overlap. I think we've established now that it's not so much that some things are in OSHA's lane, other things are in FSIS's lane. It's more that... we need to be coordinated. And both agencies need to be aware of things that are of mutual interest to both agencies, and we can work together to address those issues that are of mutual interest.

Here, Diana identified the shortcomings associated with this fragmented approach, highlighting the interconnected risk between worker safety and food safety. Historically, FSIS has adhered to a relatively laissez-faire approach regarding occupational health requirements, with the understanding that such matters fell within the purview of the OSHA, as well as the industry's own responsibility due to corporate self-regulation. This delineation of responsibilities separated FSIS's primary focus on food safety from OSHA's jurisdiction over worker safety. Yet, as Diana aptly points out, occupational health risks are not isolated and also have implications on food safety.

Diana isn't the first to acknowledge the interplay between food and worker safety issues. Since 1995, OSHA and FSIS have had in place a memorandum of understanding (MOU) on worker safety that is intended to help ensure the safety and health of workers in meat and poultry plants. While this MOU recognizes the overlap between worker safety and food safety and guides collaboration, including training, information sharing, and addressing referrals on workplace hazards, it has been critiqued as inadequate and vague (GAO 2023). One example: although OSHA and USDA met during the pandemic to discuss overlapping areas of concern related to the meat industry, these meetings did not include FSIS field staff who had direct knowledge of plant conditions (GAO 2023). In 2022, the MOU was updated to enhance collaboration between the two agencies, including data sharing and specifically identifies infectious diseases such as COVID-19 as hazards that FSIS should refer to OSHA (GAO 2023). COVID-19 illustrated how occupational health risks can have indirect repercussions on food safety—including issues related to verifying food safety, implementing hazard plans, and processing animals in due time.

During COVID-19, issues with worker safety impacted not only the workers, but animals and producers as well. Due to consolidation, a closure of 30 to 40 plants during COVID-19 resulted in beef and pork slaughtering capacity being cut by 25% and 40%, respectively (Kevany 2020). Throughout my interview with Becky, a USDA official, she highlighted how the issues associated with worker safety and subsequent plant closures created a ripple effect across the sector.

I think when COVID hit... there were a lot of issues with worker safety, not worker safety, but worker illness and slaughter plants, and they just couldn't keep enough staff. And then people were getting really worried. And there was a backlog of animals that couldn't be slaughtered... As far as I know, USDA did not financially support those producers, kind of who got caught and couldn't slaughter. So, they had to either--- some of them did kind of a humane euthanasia because there was nowhere for those animals to go. Others, you know, just had to get creative and find other places to send them, other ways to hold those animals a little bit longer, and maybe over finish them before they could go. And then at the slaughter plants themselves, it was just a massive effort to improve worker safety.

She explained how plant closures and staffing issues led to delays in processing animals; delays that led to farmers having to kill some of their herd if they were not able to be slaughtered in a timely manner. Some animals simply cannot be processed through conventional meatpacking facilities when they reach a certain size, such as pigs, who now have a rapid six-month growth process that is difficult to slow down. This led to many farmers being forced to cull their herd in the early months of the pandemic, with more than 10 million hens and up to 10 million pigs culled due to shutdowns (Kevany 2020).

Related to the fragility created by consolidation and concentration, the meatpacking sector's focus on efficiency has resulted in systemic vulnerabilities. Farmers experienced severe issues when animals were not able to be processed in their set time, further illustrating how mass production, while highly profitable for agribusiness entities, is riddled with contradictions and vulnerability. Like the health and safety risks placed onto workers, contract farmers suffered economic losses due to the sector's vulnerability. It was not until July 2021 that the Pandemic

Livestock Indemnity Program (PLIP) was enacted to cover the cost associated with culling animals (Abott 2021). As this program was enacted retroactively after peak plant closures, there was a vested interest in keeping plants open to avoid profit losses. Moreover, the program stipulates that producers must have owned the animals when they were killed, disqualifying processors and contract farmers. In 2017, 49% of the value of livestock production was raised under contract agreements (MacDonald and Burns 2019). Contract farmers, rather than corporate agribusiness firms, largely suffered from plant closures.

A focus on efficiency, hierarchy, and standardization—key features of bureaucracy—shaped the COVID-19 response (Grønnegaard Christensen and Mortensen 2023). Siloes between worker and food safety were not the only places of regulatory fragmentation. Diana also pointed to a historical lack of collaboration between Animal and Plant Health Services (APHIS) and FSIS, and while she commented that this has been shifting, it had led to past communication gaps.

I think in the last few years, we've been really improving our collaborations with APHIS, our sister agency within USDA. And they're the animal health plant inspection service, they do a lot of the pre-harvest side of things. They establish relationships with producers. And this is the end of the food production chain that we don't have any regulatory jurisdiction over. And so, in the past, I think actually relationships between FSIS and APHIS were a little cold. There were some tensions here. And, and I'm not seeing it, that isn't 100% gone away. But I think in recent years, we've been able to establish some really effective partnerships and, and clearer and more open communication. Like it's not like, 'Okay, this is our information', you have to be FSIS in order to know. It is more like, 'Hey, we're seeing this. What do you know about this on your end?' And ... there's more kind of collegiality and openness and so that's it. That's an important shift for more interagency communication coordination and communication within USDA.

Despite APHIS and FSIS being couched within the USDA, communication and coordination between the agencies has been historically limited. In times of crisis, like the COVID-19 pandemic, a lack of established collaborative pathways, regulatory specialization, and information control resulted in communication gaps. These gaps were echoed in an interview with Becky from APHIS,

who highlighted how various responsibilities related to the regulation of meatpacking plants exist across USDA subagencies:

The heaviest intersection with meatpacking would come from the Food Safety Inspection Service, which is not part of APHIS. But it is part of USDA. And so, they're the people who have inspectors in the plants, you know, all the time doing the food safety work. We do a lot of the up-until-they're-ready-to-be-slaughtered kind of work. So, we have to respond if there's a suspect of disease, or, you know, they've noticed a lesion and they say, Wow, that's one of the regulatory diseases that we work on, then they would engage veterinary services, and we would get involved.

Because responsibilities are delegated across USDA sub-agencies, there has historically been little overlap between FSIS and APHIS except in times where public health and/or food safety intersects with animal health. In turn, communication channels and pathways have been historically limited—despite a shared commitment to ensuring food safety.

Furthermore, due to the regulatory separation between worker and food safety, the USDA has no regulatory authority over issues of worker safety. However, Diana from FSIS documented how, in a few cases, FSIS inspectors leveraged food safety regulations to enhance the safety of their inspectors. If a plant is in operation, and does not fall under the NSIS or NPSIS, an inspector is mandated to be there. She recalled:

Basically, they would pull inspectors out their plant, if they would not ... mandate mask use and, you know, do other things. If they were in a high transmission area, like, we basically said, you are at risk of not having inspectors, because we have to protect our inspectors. And like I said, if you don't have inspectors, you can't operate. So that was that was the stick, really the main stick, that we could kind of wave in front of their face. And that did get some compliance on the end.

While these repercussions were aimed at increasing inspector safety, they had a domino effect of enhancing the safety of workers in the meatpacking plant through forced compliance to OSHA and CDC guidelines. Moreover, as meatpacking plants were deemed essential infrastructure under then-President Trump's DPA, it became increasingly difficult to close plants or cease production

completely. Instead, some inspectors and FSIS field staff pushed for plants to follow guidelines to protect their inspectors, and subsequently, meatpacking workers.

However, leveraging FSIS inspectors to threaten plant closures was not well received by industry operators. Rather than using these threats to enforce safety procedures and guidance to improve the conditions for **all** employees, lobbyists encouraged firms and FSIS to “*get separation between the inspector and company employees*”. For example, following a case where an inspector was in close proximity to a worker who had tested positive and had subsequently threatened to leave their shift and thus cease plant operations for the day, Mark Dopp, senior vice president of regulatory and scientific affairs for NAMI, wrote to Paul Kiecker, Administrator for the U.S. Department of Agriculture's Food Safety and Inspection Service that “*we have to protect our inspectors so we will not allow anyone to be within 1 meter of any inspector and built separation spaces between inspectors and employees*” (Email from Mark Dopp to Paul Kiecker et al., April 10, 2020). A few days later, Norm Roberston, vice president of regulatory and scientific affairs for NAMI, also emailed Kiecker to address issues related to a decline in inspectors due to exposure, stating that “*we can't start sidelining individuals at FSIS or in the industry because they may have been exposed. We all may have been exposed at this point*” (Email from Norm Robertson to Paul Kiecker et al., April 15, 2020). When FSIS did attempt to wield its regulatory power to enhance the safety of their inspectors, and subsequently drew attention to case rates, these accounts demonstrate that lobbyists pushed back.

A lack of historical collaboration between USDA and OSHA amplified the power of agribusiness, while limiting the opportunity to engage in collaborative policymaking aimed at food and worker safety and to leverage the knowledge of plant inspectors, who too felt concerned for their safety. Bureaucracy's focus on standardization, hierarchy, and specialization has influenced

the design and coordination (or lack thereof) of agencies in charge of enforcing food and safety regulations. It has also shaped weaknesses in regulatory frameworks; weaknesses that have been intensified by neoliberalism and were made evident in the COVID-19 response (Jones and Hameiri 2021). Regulatory fragmentation and the rise of corporate self-regulation has further cultivated an environment that is highly vulnerable to risk. While direct harm resulted from the EO and corporate involvement in crafting self-serving policies that hurt workers and even contract farmers, regulatory fragmentation created indirect harms. The structure of the regulatory apparatus, and a lack of interagency and intra-agency collaboration, resulted in poorly coordinated responses to disease transmission in meatpacking plants. A neoliberal and capitalist political-economic structure intensified the harms experienced by workers, while maintaining profit for powerful firms. Harms, then, are not always related to violations of law and, indeed, can be the outcome of everyday practices and institutional arrangements, including regulatory fragmentation and deregulation (Walters 2006). The deregulation of the industry has had important implications for both food safety and for worker safety, as well as in codifying a system of harm into the regulatory framework, which I turn towards next in discussing OSHA's enforcement during COVID-19.

OSHA's Enforcement During COVID-19

In the early months of the pandemic, OSHA received dozens of official complaints from meatpacking workers, with workers stating that “management was forcing people with Covid symptoms to continue coming to work; that social distancing guidelines weren't enforced; and that they had inadequate protective equipment” (Chang et al. 2021). Despite the spike in complaints, and rapidly increasing case rates, OSHA conducted a mere 30 inspections of meatpacking plants in the first four months of the pandemic (Chang et al. 2021). Furthermore, OSHA did not inspect 40% of meatpacking plants where at least one employee had died of COVID-19. Instead, OSHA

conducted only 10 virtual inspections of meatpacking plants after reports of deaths (Bagenstose and Axon 2021). OSHA also did not track if inspections were tracked onsite or remotely in its data system until it was audited by the Office of Inspector General in 2020 and then began tracking remote inspections retroactively (Office of Inspector General Audit 2021).

Reliance on virtual inspections and on phone correspondence with plant officials limited enforcement efforts. In my interview with Santiago, an OSHA representative, he spoke about his experiences conducting inspections during COVID-19. For instance, he asserted:

On-site investigation was very limited to certain particular cases. So, the general marching orders were do as much as you can over the phone without exposing yourself. And if you have to go to the site, then try to find a place that is outdoors where you can do some social distancing. And you got to wear your PPE or whatever were the guidelines that CDC had. We had to be wearing that if we were in that facility or close to that facility. So, they put out the directive of how we were going to do that. Then, they also put out job safety analysis to protect us. And they obviously, we had some training and everything that comes with that to protect us. I could tell you, the three inspections that I did. I did them over the phone, the entire, the entire, the entire thing.

OSHA, then, provided clear instructions on how their employees should protect themselves to limit exposure, including wearing PPE, conducting inspections over the phone or virtually, and providing training. Meatpacking workers, on the other hand, did not receive the same level of protection. Without being physically present in plants, inspectors cannot verify the accuracy of information provided by employers nor can they identify hazards visually. Instead, they rely on reports from employers and remote interviews (via the phone or virtual conferencing platforms) with workers to assess risks. Virtual inspections demonstrate a trust in the company to self-regulate, report worker safety issues, and follow voluntary risk management guidance. These virtual inspections enhanced corporations' power to self-regulate and evade plant shutdowns, placing responsibility for worker protection on companies rather than on OSHA or state or local health departments.

Both of my OSHA interviewees highlighted pre-existing barriers in conducting interviews with workers—such as a fear of retribution, including deportation, and a general lack of information about the purpose of OSHA. In my interview with Jake, an OSHA compliance officer, he spoke about workers’ lack of knowledge about OSHA and language barriers, two factors that make conducting an inspection and gathering information about workplace violations difficult. He observed:

They’re not from here. They don’t understand what OSHA is. They don’t even know who we are, they don’t even know we’re there for them. And they don’t—all they know is as government guy, gringo... it is difficult sometimes, because, number one, you got the language barrier. Number two, you do have that government beside your name, and they don’t--- they’re afraid of us. I mean, you have to break that barrier as well, which is a huge barrier. You know, I would expect even from an enforcement perspective, and it’s even a much larger barrier, but just coming in, saying you’re OSHA, and they’re just, they’re automatically like no, no, no.

This was echoed by Santiago, who drew on prior examples:

I’ve shown up to sites where they think I am customs and immigration, and they leave...I’ve showed up sites where they’re like, I’m not going to talk to you, no matter what, I’m not talking to you. And then I’ll figure out a way to get their contact information. And we subpoena them and sometimes, I’ve had cases where they leave the country. There’s nothing that I can do.

Although workplaces are required to place “Know Your Rights” OSHA posters in visible areas, there is no requirement for these posters to be accessible in multiple languages and the poster is currently only available in English and Spanish from OSHA. When probed about the requirements for posters, Jake reminded me of the agency’s preference for open-ended recommendations: *“Remember, we don’t tie our hands. We don’t say that you have to post this in English, we say you have to post this poster.”* Vague recommendations, while protecting OSHA and the industry, can undermine the accessibility of information, particularly noteworthy in a diverse workplace such as meatpacking plants.

Due to language barriers, workers may not be aware of OSHA's role in workplace safety protection nor understand the goal of workplace investigation. Instead, workers may fear speaking with OSHA officials due to their precarious employment status. In turn, this can hinder the ability for OSHA actors to gather information related to safety violations, further weakening the agency's workplace oversight and resulting in issues of procedural injustice. When workers are not aware of their rights, or the function of OSHA as an agency to protect their health and safety, reporting safety concerns is unlikely. This is further compounded by the precarious economic and social position of many meatpacking workers, who are immigrants and refugees, and fear retribution.

The nature of COVID-19 also posed difficulties for tracing disease transmission at the workplace. Santiago explained some of the challenges of tracing disease contraction and holding companies accountable for outbreaks:

As one employee goes to work, I mean, it's a virus, you don't know where they got [it]. I mean, they may have been exposed at the hospital. But they were probably more than 99% of the time, they were probably exposed somewhere else too. So, it's almost impossible to tie that back to the workplace. Because you never know. I mean... it's not like it's a stubbed toe where you can say, yeah, that corner did it. So that's the major issue. It was a constant fight to try to figure out, you know, you have to do the contact tracing and work with public health to be able to go and figure out all that. I mean, it was a nightmare just trying to do it. And you never knew whether you had to put it on to 300 logs or not.

This account sheds light on broader issues concerning workplace safety, accountability, and the role of regulatory agencies like OSHA. First, definitively linking COVID-19 infection to the work environment was difficult due to the nature of the illness, as COVID-19 could be contracted in various community settings. This was echoed by workers' compensation lawyers in interviews. Unlike other workplace exposures and injuries, such as asbestos or amputation due to machinery, COVID-19 was a more omnipresent risk and thus harder to definitively trace to the occupational setting. In the context of OSHA and COVID-19, the challenge with contact tracing highlights the importance of having clear and adaptable guidelines for employers to follow during public health

crises. OSHA's response to COVID-19 involved providing general guidance rather than specific standards, which created challenges in terms of enforcement and accountability. In turn, OSHA's regulatory power was weakened and lent itself to criticisms related to the agency's response and efficacy.

Many of my interviewees placed the onus of responsibility for failing to protect workers on OSHA. Interviewees pointed to the agency's underfunding, which was heightened during the Trump administration, and how limited inspections amplified disease transmission and worker vulnerability. Edward, an occupational health expert, reflected that *"they [OSHA] were politically restricted, I think. That was just the nature of things. They're chronically underfunded and understaffed."* Carol, a labor expert, also spoke at length about OSHA's abdication of responsibility, asserting:

OSHA failed. It abdicated its responsibility. It could have played an enormous role. And I thought it would, and I was stunned that they said they weren't going to do inspections. In fact, at the beginning of the pandemic, they got so many complaints. They didn't do any inspections. But what they did do is they gave the company like a thumbs up, you know, we just want to make sure, we've got a complaint and the company said I'm doing everything we can and they said great... OSHA, which is supposed to assure that companies are providing safe conditions did the exact opposite. They never went in the plant, they never did an inspection. They just took the company's word for it. And, you know, that's not how they operate ever. That's not their mission. It was part of the administration's strategy of just do not make waves with this pandemic, and especially don't require employers to protect workers and mitigate the spread and just deny it. So, we're just blaming it on immigrant workers.

Here, Carol illustrates how corporate self-regulation and virtual inspections shaped limited and ineffective responses. OSHA's response to the pandemic fell short of the agency's purpose: to assure safe and healthful working conditions by setting and enforcing standards. Instead of setting COVID-19 specific standards, and conducting on-site inspections when receiving complaints, the agency trusted that meatpacking plants would follow voluntary guidance and correct worker safety issues. Corporate self-regulation, rather than federal involvement, coupled with institutional

weaknesses, including understaffing and an administration that aligned with corporate interests, led to a failure of OSHA to adequately respond and address workers safety issues.

OSHA and the JBS Plant in Greeley, Colorado.

In addition to a surge of virtual inspections and a lack of enforceable guidelines, OSHA was also critiqued as slow to respond to complaints at meatpacking plants. The JBS Plant in Greeley, Colorado reflected this broader pattern. An initial complaint of issues of worker safety and a lack of COVID-19 protective measures at the JBS Plant in Greeley, Colorado was logged in July 2020 (see Figure 4). The complaint provides details on a lack of implemented safety precautions, lack of access to PPE, incentive pay for attendance records, and a lack of record keeping related to COVID-19 cases.

U. S. Department of Labor
Occupational Safety and Health Administration
Notice of Alleged Safety or Health Hazards

Complaint Number	
Establishment Name	JBS
Site Address	800 N. 8th Ave Greeley CO 80631
Site Phone	Site FAX
Mailing Address	
Mail Phone	Mail FAX
Management Official	Telephone
Type of Business	
HAZARD DESCRIPTION/LOCATION. Describe briefly the hazard(s) which you believe exist. Include the approximate number of employees exposed to or threatened by each hazard. Specify the particular building or worksite where the alleged violation exists. The Company has not created an environment that allows workers to social distance, workers are close together in the locker rooms, the Cafeteria and throughout the entire plant, this is contrary to CDC guidelines and OSHA recommendations; Employees throughout the plant do not have access to drinking water; The Company is not requiring supervisors to wear appropriate PPE; The Company has tied incentive pay to perfect attendance, this is increasing the risk of COVID19; The Company is not recording COVID19 cases. This is a formal complaint, JBS has had over 200 confirmed cases of COVID19, and 7 deaths, there is a new outbreak with interns. The Hazards are located throughout the entire plant. The Drinking water seems to be a bigger issue in the Fab and Kill/Harvest department	

Fig. 4. Complaint to OSHA on behalf of JBS workers

And yet, it wasn't until September of 2020 that OSHA fined JBS \$15,615 for COVID-19 violations (OSHA 2020). The OSHA citation (2020) stated:

On or about and at times prior to March 25, 2020, the employer did not develop or implement timely and effective measures to mitigate the exposure of SARS-CoC-2, the virus that causes Coronavirus Disease 2019 (COVID-19). Employees throughout the

establishment worked in close proximity to each other during the COVID-19 pandemic exposing them to the hazard of contracting COVID-19. Hundreds of employees contracted the virus and developed symptoms ranging from mild irritation to severe illnesses that resulted in at least 51 hospitalizations and six fatalities due to COVID-19 related illnesses. As of July 30, 2020, the employer had confirmed cases at the establishment.

The citation included a series of methods that were considered as recognized and feasible means of hazard abatement, including establishing social distancing, implementing barriers and protective measures, symptom screenings, and working with local and state health officials to identify exposed individuals. The imposed fine represented the highest penalty for a violation of the general duty clause (\$13,494), the sole type of enforceable violation related to COVID-19 hazards, as OSHA did not issue specific COVID-19-related standards. A secondary “other-than-serious” violation was added to this fine (\$2,121) based on the failure to provide a copy of an OSHA 300 Log to a UFCW Local 7 representative until a month after their request. These logs are mandated to be provided by the end of the next business day following the request.

The total fine was criticized by labor advocates and workers as being nothing more than a slap on the wrist for the multi-billion-dollar company, as well as an injustice to the 9 JBS workers in Greeley who lost their lives due to COVID-19. In my interview with Juan, a union employee that represents JBS workers, he deemed OSHA’s response as inadequate and characterized the relationship between the union and OSHA as fractured as a result. He asserted:

We had our expectations of OSHA, and they did not meet our expectations or even come close to it. And I mean, this local union actually picketed OSHA, because of their failure to keep our members safe. Since then, OSHA has reached out; they want to repair this relationship. But I will tell you that in the middle of the pandemic, you know, especially during the lockdowns when we were trying to get in contact with OSHA to try to get information, try to get them to do something, really, it was a very slow response. And at times, these inspectors wouldn't even come out. And because they knew it wasn't safe. They themselves knew that it was not safe, and that's why they wouldn't to come out but yet, they wouldn't do anything to help our members.

Later, he discussed how the union had pushed OSHA to consider implementing an ETS to enhance worker protections but to no avail – stating that “*OSHA didn't do much to keep our members safe. And really, that's their only job.*” In interviews, other local community organizations also critiqued OSHA’s response to JBS and questioned its efficacy in reducing further workplace violations. Sofia, a community organizer, expressed frustration at OSHA for not only failing to protect workers during the pandemic but setting a precedent for a lack of accountability for JBS:

OSHA was negligent. I do believe that... I think the only one who was advocating for anything was the union. You know, they were struggling to get change. \$15,000 was hardly punishment at all. Chump change, really... I suspect there will be a mentality of ‘Hey, we’re not going to put this kind of money into this or... reduce a shift’... We just need to really keep that accountability piece, you know, because OSHA did us a disservice. The \$15,000 fine... that’s not accountability. That was more like, a partnership for them.

This perspective was echoed by other interviewees including Ron, a worker’s compensation lawyer, who noted:

We’re literally talking about a company that makes a billion dollars, if you were fined \$100 million, which I know they haven’t been. That’s 1%. And during COVID-19, they were fined like \$15,000, I think, for eight workers that died. It's the equivalent. To me, the COVID situation is the equivalent of being in a DUI accident. And the judge just saying, ‘Okay, well, how much did you make this year? Let's all fine you .0001 of what you made.’ And I mean, of course, it's worth it to them. What all that's doing is encouraging them to keep doing what it is that they're doing. All they want to curb is the national spotlight. They just don't want any more national spotlight.

Other advocates in the area pointed to prior fines JBS has received from OSHA, including a \$59,000 fine after a worker fell into a vat of chemicals used to process animal hides and subsequently died and a \$175,000 fine after a worker’s arm was amputated in a conveyer belt, both in 2021 (OSHA 2021). These fines were based on violations related to unsafe lifting process; for hazardous chemical and training violations; for exposing workers to severe injuries from lack of machine guarding, such as crushed fingers or hands, burns, amputations, or blindness; and failure to properly control energy sources on machinery during service and maintenance. These citations

are linked to violations of worker safety. However, as there was no OSHA violation specific to COVID-19, the only enforceable standard was the general duty clause.

In contrast to other violations, the general duty clause carries a max of \$13,653 per violation. To issue a general duty clause citation, OSHA must prove: 1) the employer failed to keep the workplace free of a hazard to which its employees were exposed, 2) the hazard was recognized, 3) the hazard was causing or was likely to cause death or serious physical harm, and 4) feasible and useful method to correct the hazard was available (Duties of Employers and Employees, 2022). This clause has been frequently challenged by employers, with arguments premised on if the violation meets the criteria of the general duty clause, whether the employer had knowledge of the hazard, and whether feasible means of abatement were available. Employers may also challenge the severity of the citation and the proposed penalties, such as in the case of JBS's COVID-19 fine. While the combined citation was proposed at \$15,615, the fine was later reduced to \$14,502 and the settlement stipulated that JBS must adhere to an updated "Safe Work Playbook" and establish a team of company representatives and third-party experts (OSHA 2022). This team will evaluate operations at JBS meat processing plants and collaborate on the creation and execution of a preparedness plan for infectious diseases (OSHA 2022).

Low fines, such as the JBS COVID-19 fine, perpetuate a system where industry can risk the safety of their employees and face few if any legal or economic repercussions. Green criminologists have also questioned the efficacy of fines; finding that most violations go unpunished and when corporations are fined, these fines do little to prevent future violations from occurring (Lynch 2022; Johnson, Schwartz, and Inlow 2020). Instead, these fines serve as the de facto cost of doing business. Not only, then, does the state fail to prevent lawbreaking behavior from occurring, it supports this behavior through corporate self-regulation and a weakened

regulatory framework. In cases of worker safety issues, OSHA's limited criminal sanctions and minimal financial penalties for employers have contributed to the ongoing disregard for policies and a lack of corporate-level compliance. Lack of enforceable standards, a declined staff capacity, and reliance on virtual inspections created a perfect storm for disease transmission during COVID-19. The absence of clear, enforceable standards specific to the pandemic left employers and employees navigating uncharted territory, often without clear guidelines on how to mitigate risks effectively. Consequently, issues related to worker safety were exacerbated by regulatory gaps and regulatory capture – strengthening the power of agribusiness at the behest of worker safety.

Conclusion

Drawing on in-depth interviews with USDA, CDC, and OSHA representatives, content analysis, and critical policy ethnography, I traced federal institutional, structural, and socio-political contexts that shaped high transmission rates amongst meatpacking workers. First, I documented that because the meatpacking sector is regulated by the USDA and OSHA, a separation between food and worker policymaking exists. While the USDA is broadly tasked with ensuring food safety and a food supply, OSHA's mission is focused on ensuring a safe work environment for employees. And yet, there are no unique regulations that address worker safety issues at meatpacking plants – despite their dangerous working conditions. Fewer workplace inspections and less stringent enforcement of safety regulations has created an environment in which workers face greater risks of workplace accidents and occupational illnesses.

While OSHA and the USDA should have played key roles in balancing the risks of industrial animal agriculture with food and worker safety, I found that the regulatory power of these entities has been significantly eroded. I argued that COVID-19 amplified the structural deficits of chronic underfunding, understaffing, industry interference, and a subsequently

weakened regulatory framework. Existing gaps in federal regulation related to the meatpacking sector—including the transition from federal inspectors to company inspectors (aka self-regulation)—heightened line speed limits, and a lack of meatpacking sector-specific worker safety guidelines intensified the impacts of COVID-19 on meatpacking workers. The implications of OSHA's regulatory capture and funding constraints were substantial during COVID-19, including the absence of enforceable COVID-19 specific safety standards and clear guidance.

These findings highlight the importance of adequately staffing and funding regulatory agencies *and* maintaining their independence to protect the well-being of workers. A major limitation of voluntary guidelines, such as those provided by the CDC, is the absence of enforcement mechanisms. Because firms were encouraged, but not required, to adopt guidelines, they could be adopted inconsistently – shaping disparities in COVID-19 mitigation efforts and a lack of corporate liability. Meatpacking firms, rather than the state, were entrusted to follow voluntary risk management and comply with OSHA/CDC guidance with few accountability measures in place. The staggering volume of injuries in meatpacking plants, and the daily risks faced by workers, indicates there is a strong need for stricter, enforced policies related to enhancing workers' safety and increased federal involvement, rather than corporate self-regulation. The lack of stringent regulations illuminates how policies both directly and indirectly create systems of harm; enabling workplace injuries and illness to continue without meaningful intervention.

Throughout this chapter, I also illustrated how powerful agribusiness companies and lobbyists worked alongside the government to promote policies which benefitted their economic interests, at the costs of worker safety and wellbeing. I assessed how pre-existing issues associated with regulatory grey areas and the influence of agribusiness actors were amplified during the pandemic. I've contributed novel empirical data that documented the challenges faced by CDC,

OSHA, and USDA officials when navigating the COVID-19 pandemic. Existing research on policymaking challenges during COVID-19 has been largely limited to secondary data analysis (Jones and Hameiri 2021; Grønnegaard Christensen and Mortensen 2023), which does not capture the perspectives of regulatory officials or the historical and contemporary contexts that posed barriers to effective collaboration and policymaking. Drawing on interview data and critical policy ethnography, I argued that regulatory fragmentation and the erosion of regulatory power intensified harms experienced by workers. These findings expand green criminological literature by documenting how a system of harm is embedded within neoliberal governance structures; expanding understanding of harm to include harms that are not just the product of laws and violations but the outcomes of our current political-economic system (Lynch and Long 2022; Lynch, Stretesky, and Long 2020). Perhaps, these harms are even more insidious than direct violations of the law, as they have been codified into the regulatory structure.

In a sector such as meatpacking where economic interests are often prioritized over worker safety, the lack of required safety measures, corporate self-regulation, and eroded regulatory power of OSHA shaped higher rates of transmission. These findings are critical not only for addressing the immediate challenges of the meatpacking worker vulnerability but also for strengthening the resilience of workplace safety regulations in the face of future health emergencies. Rather than corporate self-regulation and voluntary risk management strategies, agencies like OSHA need to be directly involved with workplace monitoring and on-site investigation, as well as setting new standards that address the multiple hazards faced by meatpacking workers daily. Moreover, as I documented thorough this chapter, enhanced inter-agency and intra-agency collaboration, funding, and policy attention to corporate consolidation and concentration is critical to strengthening the resiliency of our food system.

CHAPTER FIVE: LOCAL AND STATE LEVEL POLICYMAKING, PUBLIC HEALTH, AND THE MEATPACKING SECTOR

In the previous chapter, I provided an overview of federal policymaking related to the health and safety of meatpacking workers prior to and during COVID-19. I highlighted how pre-existing regulatory fragmentation at the federal level, including the erosion of the USDA's and OSHA's regulatory power, shaped outcomes related to COVID-19 transmission and worker vulnerability. I documented the role of agribusiness actors and lobbyists in COVID-19 policymaking processes and their implications. In this chapter, I examine how COVID-19 affected policymaking and enforcement for meat production at the local and state levels. I focus my analysis on JBS and Weld County, a historically Republican County, and illustrate how local public health decisions reflected a neoliberal approach to governance and worker safety.

First, I analyze the interconnections between state and local-level public health governance, highlighting how Weld County's designation as a home county empowered County Commissioners as key public health decision makers. I also assess how the economic and political power of JBS influenced decision making processes and public health guidance at the local level. Next, I move to a discussion of the individual responsibility approach to disease mitigation adopted by the county and the role of limited state enforcement, which further enabled a neoliberal approach to policymaking. This individualization of responsibility reflects the dominant biomedical health model, where responsibility for health is placed at the individual level, rather than the state level (Brown 2007). Finally, I provide an overview of the implications of county-level public health guidance and JBS's COVID-19 response on the health of meatpacking workers. Sadly, in the first year of the pandemic, 291 workers at the JBS plant in Greeley contracted COVID-19 and 8 ultimately died (Bradbury 2020).

Throughout this chapter, I document how pre-existing issues associated with public health governance, including underfunding and understaffing, exacerbated the negative impacts of COVID-19 on meatpacking workers. These outcomes were further amplified by a county governance structure that placed the power of public health decision making on County Commissioners, rather than trained public health officials. In turn, Weld County's public health response reflected the broader neoliberal and laissez faire ideologies of elected officials, placing the onus of responsibility on individuals rather than implementing county wide guidance aimed at disease mitigation. In placing the burden of responsibility for health on the individual, rather than on local and state institutions, I argue that these mitigation strategies illustrated the dominant biomedical health model and neglected structural dimensions linked to health outcomes (Brown 2007; Vera 2020; Cardona 2021).

Furthermore, I document how this individual-level response carried over into JBS's disease mitigation strategy and trace how pre-existing issues associated with meatpacking work, including line speed and close proximity of workers, intensified disease transmission. I analyze how racial and ethnic demographics were used to blame on workers for disease transmission, pointing to the living conditions of workers, rather than the structural, institutional, and socio-political factors that shaped COVID-19 case rates in the meatpacking sector. Throughout this chapter, I analyze the role of neoliberalism, the treadmill of production (ToP), treadmill of law (ToL), and industry interests in shaping county public health governance and the subsequent outcomes (Schnaiberg and Gould 1994; Schnaiberg, Pellow, and Weinburg 2000; Lynch, Stretsky, and Long 2020).

State and Local Level Public Health Governance

In the United States, the governmental public health system is comprised of 51 states (including district of Columbia), 2,794 local health departments and 565 federally recognized

American Indian and Alaska Native tribal public health agencies (Hyde and Shortell 2012). Most state public health departments, about 55%, are independent agencies within state government; however, 45% are located within an umbrella agency such as Department of Health and Human Services (HHS). Although federal policies influence state and local public health practices, states have flexibility in their public health authority and functioning (Salinsky 2010). For example, while federal funds for public health infrastructure often support targeted efforts aimed at specific diseases or risks, states determine how services will be provided (Salinsk 2010). As federal grants are often program-specific, they do not stipulate the scope or organization of public health activities (Salinsky 2010).

Furthermore, organizational models of state-local relationships vary across the US. In fact, 29 states, including Colorado, have a decentralized model, where local public health agencies are organizationally independent of the state agency and thus are governed primarily by local authorities (Salinksy 2020). In contrast, six states have a centralized organizational structure where the state governs and operates local public health agencies. Thirteen states operate under a hybrid model where some jurisdictions operate decentralized local public health agencies and others rely on state agencies, due to lacking a local health department (Salinsky 2010). Two states (Rhode Island and Hawaii) do not have local public health agencies and rely on state agencies for public health provisions. Whether under the administration of local or state government, local public health agencies typically bear direct operational responsibility for delivering most public health services available within specific jurisdictions. State health departments, on the other hand, are responsible for promoting public health and implementing disease prevention and preparedness plans, supporting local health departments, and collecting data related to disease surveillance (Trust for American Health 2023).

In Colorado, the Colorado Department of Public Health and Environment (CDPHE) is the state health department responsible for public health matters. They set public health policies, regulations, and guidelines for the entire state. Local health departments, on the other hand, carry out state public health rules while providing public health services. For example, the local health department in Weld County (WCDPHE) is organized into four divisions: clinical and community health services; environmental health services; health education, communication, and planning; and administration and finance, including the Board of Public Health (WCDPHE Brochure 2023). Each division has targeted responsibilities such as providing immunizations, family planning, air testing, and conducting food safety inspections.

Given the flexibility of state and local health departments in defining their public health role, there is a somewhat fragmented public health governmental infrastructure. This fragmentation has been exacerbated by a historical underfunding of public health; with funding for local and state health departments reduced by 17% in the last decade (Eger and House 2021). The CDC, who is the primary source for state, local, tribal, and territorial health departments, has had only a 6% budget increase, after adjusting for inflation, in the last decade (Trust for American Health 2023). Even more alarming is the CDC's budget for preparedness and response—which has been cut in half in the last ten years (Eger and House 2021). Despite the United States spending \$4.3 trillion on annual health expenditures, only 4.4% goes to public health and prevention (Trust for American Health 2023). Moreover, for state and local health departments to ensure a minimum set of public health services for the public, they would need an 80% increase in workforce size (de Beaumont 2021). This chronic underfunding and understaffing has hindered the capacity of local, state, and federal public health agencies to respond to public health events and emergencies, including COVID-19.

The devolution of governance to state and local public health systems and services, rather than a centralized federal public health model, further exemplifies the impact of neoliberalism where healthcare has become increasingly privatized and governmental capacity to lead community-level health interventions has been greatly reduced in favor of individual level approaches (Malin and Kallman 2022; Vera 2020). The chronic underfunding of state and local agencies has resulted in a weakened and fragmented healthcare system; reifying a neoliberal model where market forces drive healthcare. Neoliberal policies emphasizing individual responsibility and privatization have exacerbated health inequities and disparities, with minoritized communities having the highest rates of being uninsured (Malin and Kallman 2022). Beyond differences in coverage rates, racially and economically minoritized communities are more likely to live in areas that expose them to pollution, to face barriers in receiving accessible healthcare, and to have higher rates of illness and death (UCC 1987; Ndugga and Artiga 2023; Timmons Roberts, Pellow, and Mohai 2009). The lack of accessible healthcare and a fragmented, neoliberal public health model amplified the outcomes of COVID-19, which I discuss next.

The COVID-19 Context

In January 2020, COVID-19, caused by the novel coronavirus SARS-CoV-2, first emerged in the United States, with initial cases reported in the state of Washington (Holshue et al. 2020). The virus quickly spread to various parts of the country and became a global pandemic—leading to school closures, stay-at-home orders, social distancing requirements, mask mandates, and more. In the early months of the pandemic, very little was known about transmission, incubation, and treatment. As the pandemic progressed, it became known that COVID-19 is primarily transmitted through respiratory droplets when an infected person coughs, sneezes, talks, or breathes, making close contact with infected individuals a significant risk (CDC 2022). Common symptoms of

COVID-19 include fever, cough, and shortness of breath. Some individuals remain asymptomatic carriers, while others may experience a wide range of symptoms, including loss of taste or smell, fatigue, muscle aches, and gastrointestinal symptoms (CDC 2022). The severity of COVID-19 ranged widely; many cases were mild, some led to long term complications, and others were fatal. Individuals with pre-existing conditions, that were 50+, and who are racial and ethnic minorities had higher COVID-19 mortality rates (CDC 2022). As of April 2023, there have been 104 million cases of COVID-19 in the United States and 1.1 million deaths amongst these cases (Eflein 2023).

Social determinants of health were predictably reflected in COVID-19's impacts, which were felt intensely in marginalized communities and communities with high populations of "essential workers", who were also disproportionately people of color (Hawkins 2020). Workers who were employed in essential industries like meatpacking had higher risk of infection, with Black and Latinx workers being disproportionately more likely to be employed in jobs where they risked greater exposure to COVID-19 (Hawkins 2020). In comparison to white workers, Black and Latinx workers were more than twice as likely to be employed in the meatpacking industry in 2019 (Hawkins 2020). In the CDC's analysis of COVID-19 in the meatpacking sector, of the 9,919 cases in 21 states with reported race/ethnicity, 87% occurred among racial and ethnic minority workers (Waltenburg et al. 2020).

Although COVID-19 was a risk faced by all, certain industries were more prone to outbreaks, dependent on the structure of work, proximity of workers, and pre-existing conditions that amplified the risk of transmission. Meatpacking plants were particularly vulnerable to high levels of transmission due to the high density of workers; extended periods of close interaction amongst workers on the production line; indoor work settings featuring limited space in the cafeteria and locker room areas; and a workforce characterized by a range of cultural and linguistic

backgrounds, who frequently lack access to healthcare and other workplace protections (Herstein et al. 2021). Additionally, the indoor climate of plants, designed to keep meat products cold for food safety purposes, was linked to higher COVID-19 risk, as were plant ventilation systems that spread pathogenic bioaerosols (Taylor, Almond, and Boulos 2020). Finally, the fast pace of work and its physically demanding nature makes mask-wearing more difficult to sustain, and to masks getting wet more quickly. This is problematic: wet masks are harder to breathe through and can create fog on required personal protective equipment (PPE) goggles, which makes already hard work even harder; they are also linked to higher aerosol spread of the virus (Abboah-Offei 2021; Stull 2020). As discussed in the previous chapter, the characterization of plants as essential infrastructure meant that workers were exempt from stay-at-home orders.

Although federal health authorities like the CDC, OSHA, and the World Health Organization (WHO) provided guidance on COVID-19 and issued recommendations on safety measures to control the spread of the virus, these national guidelines were layered on top of state and local-level regulations. For example, in Colorado, COVID-19 mitigation efforts varied between state and local health departments. While the state issued state-wide mandates—including the issuance of public health orders, mandatory mask mandates, social distancing guidelines, business restrictions, and capacity limits for gatherings—enforcement was at the local level. This led to variances and inconsistencies with mitigation efforts which were further compounded by fragmentation of local and state health department authority. The interface between local and state health departments in Colorado, like in many U.S. states, is shaped by the state's public health system and local governance structures, including the presence of home rule counties. In two cases, Colorado's local health departments are in home rule counties, including Weld County.

Public Health, Agribusiness Interests, and Home Rule

In Weld County, Colorado, the local health department, County Commissioners, and the Board of Public Health are essential actors in the governance and oversight of public health activities at the local level. WCDPHE, as the local health department, is responsible for promoting public health within the county and providing services such as disease control, immunizations, and inspections related to environmental health. County Commissioners—as elected officials and the governing body of the county—play pivotal roles in funding and overseeing the local health department's operations. In their roles as elected officials, the five County Commissioners appoint one member from six geographic areas to the Board of Public Health, as well as three at-large members, for a total of nine members on the Board of Public Health. The Board of Public Health acts as an intermediary between the local health department and County Commissioners, primarily reviewing bio-solid and septage applications and providing recommendations (“Board of Public Health” 2023). However, County Commissioners have the ultimate authority over public health decisions, ordinances, and guidance under the county’s governance structure. As County Commissioners are elected officials, they frequently do not have training in public health.

Across my interviews with local political officials, all participants highlighted the benefits of home rule governance in enabling a localized approach to governance and providing flexibility to policymaking during COVID-19. However, due to their status as elected officials, Commissioners are less insulated from their constituents as compared to public health officials, which can influence public health decisions. In an interview with John, a local official, he identified the unique position of Commissioners as a central challenge to objective decision making:

The challenge is that they're all elected officials, so they are politicians, and so... they're going to have their finger on the pulse of their constituents who can be very vocal, whereas a Board of Health would have some insulation against that... There's pros and cons to it.

And that's one of the realities of it is that they're going to be attuned to their constituents, and if one constituent calls up and complains, well, they obviously had them in their ear already and so, they're going to be like, 'Okay, you guys gotta adjust the messaging'. And so that's what [the health department] did... Again, that's the reality of it. I don't have an opinion on it. That's the reality of it.

This challenge was intensified during COVID-19, particularly due to the politicized nature of the pandemic. Weld County is a historically Republican county and County Commissioners reflect this: with all five seats occupied by Republicans in 2020 (Watson-Fisher 2020). The right political leaning of Weld can be linked to the county's extractive and agriculturally based economy, discussed further below, with the county being described as a place that "values its independence, fiercely protecting it from what many [there] call government overreach" (Boyce 2021). In turn, the county's political affiliation influenced not only policymaking surrounding mitigation efforts at the county level but community perception of the virus. A 2020 PEW report found less than half of Republicans believed that COVID-19 was a major threat to the health of the US population, in comparison to 85% of Democrats (Tyson 2020). Political affiliation has been correlated with mask-wearing, with belief in the legitimacy of the pandemic, and with concerns about contracting and/or spreading the virus (Tyson 2020). Thus, the political affiliation of elected representatives such as Weld County Commissioners, and the affiliation of their broader community, played an important role in COVID-19 response efforts.

For example, while many counties in Colorado adopted mask mandates, social distancing, gathering restrictions, and business restrictions, Weld County took a more laissez faire approach where individuals were entrusted to make responsible decisions and businesses remained open. Frank, a local governmental official who referred to running the county "*like a business*", linked the necessity of this approach as being due to the essential nature of the county:

You people in Denver, Boulder, you're members of the laptop class, you pack up your laptop and go home. I got somebody about a mile that way cutting meat so you can eat and

so you can stay at home. We're in ag processing manufacturing. In my narrative with the media at that time, I said, 'Well, Weld County can't close because we're essential. We need to stay open, so you can stay home.'

The county's agriculturally based economy was a key rationale for keeping businesses open—including JBS, the town's number one employer. Furthermore, the model of running the county as if it were "*a business*" reflects neoliberal ideologies that promote economic activity over public health considerations. The ideologies of neoliberalism view markets as governing social life and, in turn, policies are aimed at ensuring economic activity persists rather than ensuring social and environmental wellbeing (Harvey 2005; Vera 2020).

Historically, Weld County has been premised on agriculture and oil and gas, with the county being the state's number one producer of oil and gas and the leading producer of beef cattle, grain, sugar beets, and dairy production ("Agriculture in Weld County" 2023). In the words of one public health interviewee, "*meatpacking and agriculture and the cattle industry is the government of Weld County for the most part.*" A 2000 report documented that agriculture and agribusiness accounted for 36% of the county's economic activity and meatpacking plants accounted for 14% of economic activity—demonstrating the key role of meat production in the county's economy (Seidl and Weiler 2000). With 75% of county's 2.5 million acres devoted to farming, the county agricultural activity has resulted in annual profits of \$1 billion USD ("Agriculture in Weld County" 2023). JBS operations in Weld County alone has a payroll tax of \$11 million, a workforce of 5,000 people, and works with 175 producers in the area who raise cattle prior to slaughter at the plant (JBS 2020). JBS has also provided millions of dollars of funding for various community initiatives and events, such as the Greeley Stampede (JBS 2023c).

Strikingly, then, JBS is a key economic actor in the area, a position which has led to considerable political influence. In an interview with Ron, a worker's compensation lawyer, he

observed that JBS's economic power allowed them to drive public health decision making at both the state and local level. He remarked:

What's Polis [the Colorado Governor] going to say, 'Okay, yeah, we need to shut down the plant. We need to send these 6000 people home'... What does that really mean? We're going to shut down JBS and piss them off. Any state in this country... will give them tax write offs to move there... I mean, where do you think those 6000 people are going? Right? They're going straight to unemployment. I mean, you're paying unemployment, you're paying unemployment, we're paying unemployment. There's... not a politician, or a regulator, or anybody who's going to say, let's shut down 6000. Let's increase our taxes and incur ... what is going to come from the windfall of no work... JBS has the power. JBS can up and move anywhere they wanted, at any point. So, this entire state, this entire county, and this entire city has to walk this balance of how do I make JBS happy.

Rather than Weld County implementing regulations related to public safety and health—regulations which would have impacted the scale of production—their policies reflected a commitment to maintaining economic activities and, in doing so, utilized their home rule governance structure to the benefit of firms such as JBS. The economic interests of JBS informed Weld County's public health guidance strategy, a strategy that enabled continued production despite the risks faced by workers. The prioritization of production over people was enabled by a localized governance structure, a legacy of deregulation and corporate power, and a historically weakened state and federal regulatory framework.

In my interviews with Weld County officials, all referenced home rule when discussing the county's response to COVID-19. However, home rule counties do have to operate within the framework established by the CDPHE and are responsible for the implementation of state health regulations and delivery of public health services at the local level. This being said, Frank saw the county's home rule status as protecting the county from following the state's mandates, mandates which he believed the state lacked the authority to provide:

We took a decidedly different tactic than a lot of counties did because of our unique form of government. Because of being a home rule, we weren't so subservient to the Colorado Department of Public Health and Environment. And so, Weld County took a decidedly

Weld County reaction to this. A lot of people say, you— you denied the virus. No, I didn't deny the virus. I thought it was serious, serious. I was very concerned. But at the same time, it puts a very test of our Constitution. It puts our constitutions to the test. When you talk about authority, and I've talked about authority a lot since the pandemic broke out... They [the state] didn't have the authority. The authority that they're taking wasn't granted in constitution or statute, they were just simply writing up these orders, and they didn't have authority. And if you truly believe in government that stays within its lane. We used our Department of Public Health and Environment to put out information to help people make decisions about 'Gee, should I open, should I close, should I...?'— but we weren't going to utilize a public health order.

This question of authority and legitimacy related to public health orders and mandates was echoed by other local officials and public health officials. Neoliberal ideals, including autonomy from state interference and regulation in favor of individualism, espoused by Weld County elected officials illustrate the power of “ideational embeddedness” on governance structures (Somers and Block 2005). “Ideational embeddedness” is the notion that rules, conventions, and norms shape both a commitment to neoliberalism and market dynamics and the subsequent governance structure necessary to uphold these commitments (Somers and Block 2005). In Weld County, upholding free market dynamics and trusting in the power of the individual to make informed health decisions reflected a deep commitment to the norms of neoliberalism. Furthermore, it is through this ideational embeddedness that policy decisions are shaped and implemented; highlighting how neoliberalism is both a *process* and a policy model.

A key tenet of neoliberalism is an eroded regulatory framework and limited state intervention in favor of individualism and the free market (Harvey 2005). In an interview with John, a local official, he discussed the relationship between the state health department, the county, and the lack of oversight:

You know, they are the state health department, we are the local health department. They don't give any oversight. We are a home rule county. So, we make our own decisions. We do what we need to do in our day-to-day operations. Although they do provide some funding to us, that comes from the general fund. That's collected... from all taxes, a variety of taxes, excess taxes. And so... for instance, we get money from the marijuana tax, we get

money from the tobacco tax. The general fund gets us some funds based on population, percentages and that sort of thing. So... it's a cordial relationship. But we don't look to them for approval on really anything. We are self-governed, so we do what we need to do. Sometimes they'll ask for a courtesy meeting, you know, like, so that we're on the same page. Or vice versa, we'll invite them into a meeting like usually during the bigger disease outbreak, where our epidemiologist and teams talking to their epidemiologists on team, and just so that we're coordinating together. But on other stuff, we just do what we need to do the job. And they stay out of our way. And we stay out of their way.

Although the state does not provide oversight on local public health matters, it does provide funding based on the general fund. Because the county health department operates independently from the state, a lack of regulatory oversight had important implications for public health decisions and outcomes, and, relatedly, worker vulnerability. Since the county is self-governed, public health decisions reflected the pro-market and pro-individual ideology of county officials, an ideology that is deeply imbued with neoliberal norms. As “neoliberalism understands market systems as regulators of the states” (Malin and Kallman 2022: 53), the role of the state is to uphold market interests, rather than public interests, further driving issues of worker vulnerability. As illustrated in the above interview excerpt, the lack of regulatory oversight at the state level has resulted in a fragmented approach to public health, where local level decisions were made autonomously from state recommendations.

When asked if there were tensions related to Weld County’s differing response to COVID-19, John explained that the state had threatened to pull funding, but ultimately did not take that drastic action:

I mean, the state had their orders. Weld County didn't follow them exactly. And they sometimes didn't like it. The governor didn't like it. He threatened to withhold funding from us on a couple of times. We're like, ‘Okay, withhold the funds. Fine.’ But they never did. They never did withhold the funds... It's a learning opportunity for the state, I think, to realize that... you can have your mandates, but they're not necessarily going to be followed by every county exactly the way you want it. Because we have local governance, and that's what local governments means is we govern locally.

The tensions between Weld County and the state reflected power struggles related to the regulatory framework; with Weld having wielded its home rule status to uphold market interests and, in the process, contested state public health orders and faced potential penalties in the form of the loss of funding. Media sources also documented the potential of Weld County losing access to emergency funds from the county and business licenses, with Governor Polis having stated that he would *“take whatever steps necessary to protect the health of the residents of Weld County”* and expressed concerns over Weld County’s public health response (“Weld County plans...” 2020). However, the threat to pull funding was just that: a threat. In other words, it appeared that the local governance structure protected Weld County from retribution when their response differed from that of the state and from other counties in the area.

The lack of state intervention in the county’s public health decision-making also reflected a legacy of neoliberalism, where state power has become increasingly limited and market-oriented policy has flourished (Harvey 2005; Lobao, Lazarus, and Hooks 2014). Undergirding this market-oriented policy are the norms of individualism; where individuals bear the responsibility for their health, production and profit is prioritized, and the state works alongside corporate interests to their benefit.

In the context of public health, Weld County's home rule status granted the county government the authority to enact and enforce certain public health measures and regulations independently of the state government. For example, Weld County's COVID-19 mitigation strategy differed from the statewide approach taken by the CDPHE. In my interview with a state public health official, they clarified that the state has no legal authority over local public health departments:

We don't have authority over local public health departments. They are their own entities. And they're either county level or regional, multi-county. We do give them funds, and we

do have contracts. So, we have contractual relationship, but we don't have any legal authority over them.

Due to this, Weld County was able to implement its own policies related to mask mandates, business restrictions, and other mitigation measures. This resulted in differences in regulations and recommendations within the county compared to other counties in Colorado, as well as important outcomes for case rates in the county.

By April 2020, the county had 1,339 positive cases and 82 deaths—third in the state, behind the case rates of Denver and Aurora counties, both of which are more densely populated (Ferrier and Duggan 2020). In comparison, Larimer County, which neighbors Weld County and has a slightly higher population, had 291 cases and 18 deaths (Ferrier and Duggan 2020). Notably, Larimer County's approach was much stricter than that of Weld County, implementing state-at-home orders, business and school closures, and social distancing requirements. In contrast, Weld County believed in the power of “individual responsibility” to make informed choices when it came to public health and officials referenced that “*one size does not fit all*” and the “*essential*” nature of Weld County due to its agricultural and extractive economy that informed the county's policymaking processes.

When elected officials deemed agricultural activity and production in the county to be essential, county governance reflected logics of the treadmill of production (ToP), where policy decisions prioritize business interests over environmental concerns (Schnaiberg and Gould 1994). Although the ToP framework is largely focused on the environmental externalities and costs associated with unsustainable modes of production, there are social costs to this model too, including labor issues associated with the demands of production, exposure to pollution, hazardous working conditions, and a state which had ceded power to corporate actors to self-regulate (Schnaiberg, Pellow, and Weinburg 2002). These social costs were particularly pronounced during

COVID-19, where the prioritization of economic interests overshadowed public health concerns. The logics of the ToP, then, influence not only environmental regulation but also labor and public health regulation that may impede production and profit.

Weld County public health policymaking also demonstrates the role of the treadmill of law (ToL) in enabling and reinforcing laws and regulations that “legitimize and replicate ToP practices, relationships, and interests” (Lynch, Stretsky, and Long 2020: 3). Although the ToL is focused on environmental law and policymaking, public health and labor laws, or lack thereof, play a key role in maintaining the ToP. The lack of regulatory oversight in neoliberal systems further upholds the power of the ToP, in that the economy, rather than public health, is seen as the utmost priority. There is a clear connection between the regulatory framework, i.e. the ToL, and maintaining the interests of corporate actors in the ToP (Lynch, Stretsky, and Long 2020). ToP and neoliberal ideologies have become so pervasive and widespread that they have become the norm in contexts of U.S. governance and deregulation, shaping the belief systems of elected officials and their subsequent governance structure.

County public health policymaking also demonstrates how the ToL is multiscalar in nature; with local level rules and regulations playing a key role in upholding the treadmill of production and maintaining economic activity (Lynch, Stretsky, and Long 2020). Limited county level public health guidance reflected a neoliberal approach to public health guidance, where the onus of responsibility falls on the individual. An individualized approach to health fails to account for social determinants of health, and in turn, exacerbates existing social inequalities, including socioeconomic status, race, and access to healthcare with those who are the most marginalized impacted disproportionately (Brown 2007). In Weld County, a neoliberal approach to addressing COVID-19 led to voluntary recommendations that benefitted firms such as JBS while intensifying issues of

worker vulnerability due to exposure to risk in the plant and the constrained ability for workers to act ‘responsibly’ in a high-risk and underregulated environment.

Individual responsibility and a lack of enforcement.

In the absence of county mandates, individuals were encouraged to take personal responsibility for adhering to health guidelines, such as mask-wearing and social distancing. When asked about the county’s disease mitigation strategy, John stated:

We never had any mandates, mandates that businesses close. We didn't mandate masks, it was all left up to individuals. And we certainly put the data out there. We were allowed to put the data out there, the information out there, but there were no mandates.

To share information about COVID-19, the county launched a COVID-19 dashboard in April 2020 that included the number of cases reported in the last week, the cumulative incidence rate per 100,000 residents, a 7-day average positive test, a 7-day admission rate per 100,000 residents, and the number of deaths in the last month (“Weld County COVID-19 Data” 2023). In the early months of the pandemic, the *Greeley Tribune* also published a weekly report on COVID-19 in the county summarizing changes in weekly positive testing rates, hospitalization rates, deaths, and, importantly, as it was not published on the county dashboard, outbreak locations. Rather than guidance from the county level, officials trusted the public to make informed decisions based on the information publicly provided— reflecting a commitment to a neoliberal and individual-level approach to disease mitigation. And yet, in individualizing responsibility for health, social and structural determinants of health, including citizenship status, race, socio-economic status, and occupation, are not addressed and responsibility for doing so is evaded.

The reliance on individual responsibility became a cornerstone of Weld County’s response strategy, particularly in the absence of mandates and enforcement measures. Frank, who described

himself as “*very smarmy*” and “*very almost patriotic*” when it came to governance, heavily relied on individual responsibility versus county mandates during the pandemic. He explained:

It really boiled down to principle for me. My principle is a belief in the individual. And belief in in constitutional government that stays within its own lane, which is what I truly believe in. Then it was put to the test because some people reacted just by writing orders and mandating them, locking doors, and arresting people and putting them at home. And they were all out of their lane. I think of it today. And I think, and I hate to sound so dramatic, but the truly, our constitutional form of government was put to the test more so than what people realize. And we were on the brink, on the brink of going *slaps desk* to an authoritarian society... either you believe in our form of government, or you don't.

Here, Frank exemplifies a commitment to the individual and to individual responsibility; further illustrating how the “ideational embeddedness” of neoliberal norms shaped his governance strategy (Somers and Block 2007). Rather than using the governance to issue local mandates, Frank directly critiqued these mandates, and, relatedly, governmental interference, as being couched within authoritarianism. Because Frank viewed these mandates as being undemocratic measures of social control, he questioned not only the authority of the state but the role of government in public health. He continued:

What about keeping people safe? No, I want people safe, I didn't want anybody to get the virus. But... if you believe in in the way that we're set up, you must believe in individual responsibility and personal responsibility. Ultimately, I can provide you all the information, that's the proper role of government. For me to hold your hand and tell you to or not to do something, I'm not going to make a decision for you, [that's] not the proper role of government. You as an individual in a society must make that decision for yourself. And it all, it all boiled down to that whether you whether you believe in the power of the individual, or whether you believe in the power of government.

Rather than state mandates or local-level interventions, Frank believed in individual responsibility and preferred a disease mitigation strategy that enabled individuals to make decisions related to their health, as they saw fit.

The power of the individual to make informed choices and to keep themselves safe was heavily stressed by Frank and by Robert, another local governmental official, throughout their interviews. Robert remarked:

People need to be responsible. That's what we said all along... Leave it to local government. We can do this and we trust in our people, we got criticism making noise. I think it was because just as I said, you know, our message out to the people was 'We believe in you. We trust in you. You're adults, you're responsible. If you're sick, stay home, if you're really sick, get to the doctor. If it's that bad, you probably need to get the ER. But we're not telling you this is what you're going to do.'

Individuals, not local or state governance, were thus viewed to be responsible for public health. However, this neoliberal approach to disease mitigation and governance neglected the social determinants of health and structural factors that limit individuals to act freely, as well as the influence of individual action on collective wellbeing. In placing the responsibility on individuals, rather than the state, county officials evaded responsibility for public health outcomes.

Furthermore, this strategy was shaped by the neoliberal perception that government regulations, including those pertaining to public health, should be minimized in favor of individual responsibility, and maintaining economic interests. In turn, this leads to an institutional breakdown: where government power and social services are eroded in favor of individual responsibility, a responsibility that is constrained by the structural and social locations of community members. Not all individuals are able to be 'responsible' equally, and even more so when they are working in a high-risk environment. The lack of local level guidance in favor of an individual responsibility approach to disease mitigation disproportionately impacted those who were the most vulnerable. Insufficient and inconsistent local level guidance was enabled by a patchwork federal approach to public health that empowered counties like Weld to act independently from national recommendations.

Notably, there were tensions associated with this individual-level approach to disease mitigation, including with then-Director of WCDPHE, Dr. Mark Wallace. According to publicly released email records, Dr. Wallace disagreed with the local official's stance on keeping businesses open, despite rising case rates, and the lack of county-wide mitigation efforts. In an April 2020 email to County Commissioners, he wrote:

The relative ineffectiveness of actions and interventions to control transmission in Weld County, as evidenced by our ongoing high case rates, raise serious concerns and considerations for staging reopening. Weld County has not met the threshold for reopening of a downward trajectory of cases. Any relaxation of restrictions should be cautiously staged given the risk of even wider spread of the disease (Ragan 2020).

However, lacking the authority to contest Commissioners due to their decision-making power in county governance, his objections remain unheard. The very next day, the county issued "safer-at-work" guidelines that allowed all businesses within the county to reopen following the expiring of a state-wide mandate (Ferrier and Duggan 2020). This was a stark contrast to Polis's "safer-at-home" executive order, which provided guidance on school closures, social distancing requirements, business operations, and advised mask wearing (Safer at Home, 2020).

Weld County's individual responsibility strategy for combating COVID-19 also reflected the lack of enforcement capacity of the local and state health department. Local officials commented on limited enforcement for public health orders; both due to funding constraints and staffing capacity, as well as a lack of legitimacy of public health to enforce guidance and mandates. Simon, a local official, commented on the discrepancy between state public health orders, limited enforcement, and county level power:

Here in Weld County, the Board of Health is your County Commissioners. They may have an advisory board, Board of Health, but that's not a governing board, the ultimate governing board. Then, you have the state trying to issue public health orders that follow the entire state. And then the question becomes, okay, the state puts out these very broad public health orders. But they literally have no ability to enforce them. And then the county can adopt similar, you know, adopt kind of their own public health orders mimicking the

state, and then they have the ability within the county to enforce them. But then if you have a county that disagrees with that, they don't issue the public health orders, and there is no real enforcement of those public health orders in the county.

A lack of enforcement capacity was used to question not only the authority of the state, but the authority of the public health department. Limited enforcement, and relatedly, governmental involvement in public health, highlights the outcomes of neoliberalism, in which the regulatory capacity of public agencies has historically been eroded in favor of individualism and free market fundamentalism.

Later in our interview, Simon noted the community's response to enforcement coming from the public health department and also used rhetoric related to the power of individual freedom as outweighing local mandates:

In this country, people are not accustomed to being told where they can go and what they can do and what they have to wear and all these other things. I mean, that's something that, I would say, for the most part people find very attractive about living in the United States is the individual freedoms. Then you have this. I mean, it's one thing I think for people to say, 'Oh, well, there's something going on, there's a curfew or, you know, evacuation and public safety kind of thing'. And this was a public safety [issue], but it was really public health that was leading. And I think... public safety has a lot more experience with dealing with these big turn emergencies, we don't necessarily have that expertise. And people were, 'Who is telling me I can't do this? It's not the sheriff's department, or it's not like the legislature. It's, you know, public health is now dictating whether my business stays open or not, or whether I'm able to feed my family or not.'

Furthermore, as Simon pointed out, public health was seen as lacking credibility and authority in enforcing public health mandates. Public health has been couched within the dominant biomedical health model, where responsibility for health is individualized and thus services, programs, and activities related to public health largely operate at the individual level. Thus, public health was ill equipped to navigate a public health matter at the community-level and a response that required collective efforts, such as mask wearing and vaccinations. Because this model has become embedded within the broader consciousness, the public is also not accustomed to navigating public

health matters that require a community response—evident in the contentious nature of mask wearing and other COVID-19 mitigation guidelines.

Not only did the public question the legitimacy of these state public health orders and who was enforcing them, but so did local governmental officials. In what Robert, a local governmental official, referred to as a “respectful conversation” with Jared Polis, the Colorado governor, he questioned how the state would enforce orders. He observed:

You know, Governor, we understand the stances that you're presenting to the citizens here. But one size does not fit all, and what you're suggesting to present here, we can't even enforce it. We don't have the manpower to enforce it. So, if you're ordering, putting these executive orders out, how are you going to enforce these? ... You know, Governor, how are you going to enforce this? Yeah, you're saying, you want to shut these businesses down. How are you gonna do it? We're not gonna do it. Our sheriff's office has another responsibility. You don't have a staff to do it? Where are you going to find the staff to do this other branch of government to go enforces enforcement come from?

In questioning the authority of state orders, and limited enforcement power, local governmental officials highlighted weaknesses associated with the state’s regulatory power. Furthermore, the fragmentation between local and state governance illustrates the breakdown that occurs when political will to protect public health, public trust, and public safety is overshadowed by a commitment to neoliberal policy approaches. When the state is largely absent, and local level governance is left to embrace a business-as-usual political and public health strategy without obstruction, an institutional breakdown occurs. In the case of Weld County, this breakdown was evident in the state’s limited regulatory and enforcement power and a neoliberal local level governance structure that relied on individual responsibility rather than county policy. The focus on individual responsibility was pronounced in Weld County due to the absence of enforcement measures and local-level jurisdiction, with the understanding that residents and businesses would largely need to make their own decisions regarding public health precautions.

In a context such as Weld County, where the conventions of neoliberalism have become widely accepted and embedded into the regulatory framework, a lack of public health oversight led to inequitable health outcomes for minoritized populations, including meatpacking workers. Because the interests of corporations have historically been prioritized over worker wellbeing, workers are more vulnerable to negative health outcomes, health outcomes that were amplified during COVID-19. Given limited state level engagement on public health matters in a neoliberal system, workers also have little recourse for public safety and health issues—further driving issues of vulnerability. The individual-level response to disease mitigation embraced by Weld County, discussed above, neglected the social and economic contexts which undergird the autonomy for an individual to make “responsible” decisions. Incentives to continue working, including barriers to receiving sick pay or healthcare or access to tests, meant that in some industries, workers continued to work despite rising case rates or even having COVID-19 symptoms. This was particularly pronounced for meatpacking workers, who are predominately immigrants and refugees, low-income, frequently lack access to healthcare, and comprise a significant amount of JBS’s workforce: a major outbreak site in the community.

“The plant is not the problem”: racialized narratives and responsibility.

In the United States, almost half (44%) of meatpacking workers are Latinx and one quarter are Black (Fremsted, Rho, and Brown 2020). Strikingly, 38% of meatpacking workers are foreign born, more than double than the national workforce, and 70% of workers are non-citizens (US Bureau of Statistics 2020). Close to half (45.1%) of meatpacking workers live in low-income families, e.g., below 200% of the poverty line, and 12% live below the poverty line (Rho, Brown, and Fremsted 2020). Furthermore, the national median salary income for meatpacking workers is \$30,485 (Stuesse and Dollar 2020). In contrast, the median household income for Weld County is

\$80,843—close to triple the average median income of meatpacking workers. The racial, ethnic, and socio-economic status of meatpacking workers had important implications for how disease transmission was understood and who was blamed for higher COVID-19 case rates in the meatpacking sector. In an individual-level approach to health, workers rather than the plant were seen to be at the epicenter of disease spread.

For example, rather than a limited public health strategy being at the center of disease transmission, the living conditions of workers were often blamed for high rates of disease transmission. This narrative was touted by lobbyists, agricultural executives, and federal policy makers, as discussed in the previous chapter, and provided a powerful strategy to shift blame from the plant to the workers. In a publicly available interview transcript (“Transcribed Interview of Robert Redfield” 2020), then-director of the CDC, Dr. Robert Redfield stated that:

The real risk to these workers was not because they were in the plant. And this was one of the hardest things that the CDC tried to get people to realize. It was that these workers lived in congregate settings that weren’t meant for the volume of people that were in the bedroom. There workers went to and from work in vans that were meant for six people, but they had 20 people in it. So, I kept arguing that what we needed to focus was preventing infection in the congregate setting and in the vans to and from.

As Dr. Redfield played a key role in the weakening of CDC guidelines related to meatpacking plants, including the approval of adding language and qualifiers such as “if feasible” to recommendations, the view that workers’ living conditions, rather than the plant, had real policy implications. Later in the interview transcript (“Transcribed Interview of Robert Redfield” 2020), Dr. Redfield remarked that:

I kept arguing, what we needed to focus was on preventing infection in the congregate setting and in the vans to and from. But I also felt strongly, and I didn’t make a lot of head wind there, they should make labor standards. Rather than worry about if we have Plexiglass, you should make labor standards on how these meatpackers house these people and transmit them. We had many arguments about that. My view was to get at the cause.

Workers, rather than their working conditions—enabled through a legacy of de-regulation and corporate power in the policymaking process—were seen to be responsible for spreading COVID-19. In placing responsibility on workers, state and firm responsibility for public health outcomes were largely absolved.

Moreover, instead of the CDC assuring the health of workers in the plant via federal health guidance, Dr. Redfield shifted the responsibility to the Department of Labor and suggested a need for labor standards. Both labor and health standards were necessary to combating the spread of COVID-19 at meatpacking plants, and yet, these agencies were largely absent. Instead of addressing structural and socio-political factors related to disease transmission, workers were left to contend with a high-risk working environment with little oversight or protection. Limited engagement from CDC and OSHA in addressing threats to worker health in favor of voluntary guidelines and firm self-regulation heightened worker vulnerability, while simultaneously enabling firms to blame workers for disease transmission.

Like at the federal level, local officials also pointed to the living conditions of workers as spreading COVID-19, rather than the plant being a main site of transmission. Frank, for example, explained why JBS was such an outbreak site in the community by reflecting on the living arrangements of workers, not on the plant:

Apparently, they buy houses and they rip down on the walls. Because they're used to living very communally. There's no walls, traditionally, in their culture... and so there's no bedrooms, there's no— any of that kind of stuff. They tear down the walls and that is the way they live. But... that's not conducive to social distancing. So, we had real breakouts in communities, because when they would go to the plant, and come home, they would infect their entire family, which might go to schools.

Here, Frank identified worker living conditions as not being conducive to social distancing, while recognizing that when workers would return from the plant, they would spread the infection – pointing to the plant as the site of disease contraction whilst simultaneously shifting the blame to

workers. Frank's statements related to the living arrangements of workers are imbued with racialized sentiments that other workers; blaming the spread of disease on cultural factors rather than analyzing the economic factors which make multi-family housing a necessity for many immigrant and refugee families. These statements situated workers ("they") as others, drawing on racialized stereotypes that draw a distinction between workers and the broader community ("we"). Poor living conditions of workers are justified as "normal" and as "cultural" rather than as outcomes of racial capitalism. In blaming workers for disease transmission, Frank absolved responsibility from county governance decisions that deemed workers to be essential whilst simultaneously failing to implement county-wide disease mitigation strategies or hold JBS accountable for worker health protections.

Narratives that the living conditions of workers drove COVID-19 failed to assess structural factors, including socio-economic status, that lead to higher rates of shared housing amongst refugees and immigrants. Thomas, an industrial hygienist, also emphasized living conditions as spreading the virus, rather than plant working conditions. He commented:

The other thing that is a big factor in this, it's just the living conditions of the folks that work at these plants. I don't really have a lot to say about that. But that is definitely a big factor. You have 10 people living in a two-bedroom, apartment, right? And they all are exposed to all these people at work every day. So, when you talk about disease transmission, your ability to cohort workers goes out the door when you have, you know, 10 of these workers living together. And I mean, it's just... poor living conditions for them.

Because health was placed at the individual level, and in the absence of county-level disease mitigation strategies, those who were most economically vulnerable lacked the ability to protect themselves. Relatedly, John, a local official, also linked higher county case rates to an inability of community members to quarantine when exposed to the virus. He stated:

When you look at the death rates, people are like, yeah, but you guys had a higher infection rate. Well, again, we have so much double up housing. People can't isolate. They can't quarantine. What are they gonna do? Where are they gonna go? That's why we had,

partially where we had similar higher rates, at least in the initial months of the pandemic. Yes, we did have some different approaches. But even people who wanted to follow advice couldn't because they just physically could not do it.

Despite recognizing that many people couldn't isolate or quarantine due to living arrangements, rather than the county or JBS providing alternative accommodations, individuals remained responsible for higher case rates in the county compared to neighboring counties. Again, the rhetoric of individuals driving higher case rates in the county, rather than county policies and a lack of community-scale disease mitigation efforts, overshadowed the county's responsibility and role in disease transmission. Indeed, these narratives related to worker living conditions as spreading COVID-19 neglected structural-level perspectives and maintained individualistic frameworks for disease mitigation responsibility. Although cultural factors certainly do shape the frequency of multi-generational family housing, economic factors are a critical influence in the living conditions of workers, and thus, in the spread of disease transmission.

Individual responsibility and racialized narratives that not only othered workers—but *blamed* them for higher case rates—demonstrates that while workers were “essential” to carrying out the labor necessary to keeping JBS open, they were not offered meaningful health protections. Instead, workers and their living conditions were blamed for being sources of disease transmission rather than systemic and structural factors. Placing blame on workers, rather than on JBS and broader public health policymaking, not only individualized responsibility but also illustrated who bears the cost of the ToP in a system of racial capitalism. According to the CDC, close to 90% of meatpacking workers who contracted COVID-19 between April and May 2020 were racial and ethnic minorities (Waltenburg et al. 2020). Racial and social differentiation embedded within a system of racial capitalism exposed meatpacking workers to higher risks and deemed their labor, not their lives, to be essential (Pulido 2016; Sze 2020). The devaluation of meatpacking workers

was evident in discourse surrounding their culpability for higher rates disease transmission, while absolving the state and JBS from responsibility for worker health outcomes.

Although meatpacking was deemed to be critical infrastructure and the labor of meatpacking workers was framed as essential, the workers themselves were devalued. Local, state, and federal policy promoted the interests of powerful meatpacking companies while failing to protect those whose labor was essential to maintaining high rates of production. Instead of county or state level intervention, meatpacking companies, including JBS, were tasked to implement safety precautions for workers; precautions that were voluntary rather than mandatory. The meatpacking industry leveraged its existing power to become entrusted with managing the pandemic and controlling disease spread, promoting self-regulation over state interference. Next, I turn towards a discussion of JBS's disease mitigation strategy, a strategy which neglected to incorporate an intersectional approach to risk management in favor of continued production and worker vulnerability.

JBS & the 2020 COVID-19 Outbreak

By March 2020, workers at the JBS plant began exhibiting symptoms of COVID-19. As documented in a publicly available public health order, from March 1st – April 2nd, 2020, Weld County hospitals and clinics registered 277 visits from JBS employees or their family members—a stark contrast to a mere two visits logged just one month prior in February. Between March 25th – April 10th, 43 cases of COVID-19 were confirmed and among these cases, 14 were hospitalized, 8 were intubated, and two deaths were associated with the outbreak.

On April 7th, 2020, the first worker died: Saul Sanchez, whose story was shared at the beginning of this dissertation. Saul, 78, was a father of 6 and a Mexican immigrant who had worked at the plant for over 30 years. In the early 1970s, he left his job as the manager of fifteen pharmacies

in Ciudad Juarez to seek other employment opportunities and support his daughter, Patty, who was suffering from kidney failure (Nieberg 2020). After a stint at a landscaping job in Parker, he moved to Greeley, where his family joined him and later the family opened the town's first Spanish bakery in 1992. In Greeley, Saul began working at JBS until his death in 2023. He was a cornerstone of the JBS worker community, referred to as "Papa" by many workers, and was known for his kindhearted nature and strong work ethic. As he lay in the hospital bed, he spoke to his daughter on the phone and asked her to relay a message: *"Please call JBS and let them know I'm in the hospital... let them know I will be back"* (Fortin 2020). Days later, he died. His story was shared by his family to the media to shed light on rising case rates in the plant and the need for county interference to shut down the plant and implement worker safety measures. Although first reported locally, Saul's story was highlighted in national newspapers including *The New York Times*, *The Washington Post*, *Reuters*, and *NPR* – increasing the attention that not only JBS was receiving, but the local and state health department.

Dr. Mark Wallace, then-director of the Weld County Department of Public Health and Environment, moved into action as he learned about rising case rates linked to the plant—both from reports from county hospitals and a surge of media attention that drew attention to JBS working conditions. Publicly available email records documented that Dr. Wallace reached out to both Andre Nogueira, CEO of JBS, and the state health department to identify a plan aimed at disease mitigation.

On April 10th, three days after Sanchez’s death, Dr. Wallace and Jill Hunsaker Ryan, the director of the CDPHE, released a public order that stated the plant would voluntarily close from April 13th until April 24th, 2020 to “*make sure disease control measures are put into place, including a testing protocol and cleaning of the plant.*” The order also stipulated the following would need to be completed prior the plant re-opening:

- ORDER**
1. Effective immediately, the JBS Inc. meat packing plant in Greeley, Colorado shall be closed, which shall immediately disrupt transmission of COVID-19. JBS Inc. must successfully implement all of the following requirements, in consultation with WCDPHE and CDPHE:
 - Conduct an employee testing and screening program to begin this weekend and extend for as long as necessary for public health and safety, as determined by county and state public health officials. Protocols need to be led and approved by the public health agencies. We request your assistance in communicating with employees, contractors, inspectors, and others with regular activities in the facility. The testing program shall
 - include a symptom and exposure screening and employee identification component developed by the public health agencies;
 - assure that sick people are not exposing others during testing, and
 - include an ongoing testing and monitoring program for employees that test negative;
 - Identify ill workers and their contacts and ensure their exclusion from work for the minimum necessary isolation (at least 7 day) and quarantine (14 day) periods;
 - Identify asymptomatic, non-exposed workers who may be permitted to work after the closure period;
 - Establish effective exposure, symptom and fever screening procedures for workers and policies for the exclusion of workers who screen positive;
 - Implement public health reporting procedures for all symptomatic and exposed workers;
 - Implement policies and procedures that ensure social distancing of all workers, this includes but is not limited to procedures for safe movement through the facility during arrival and departure from work and break times;
 - Provide adequate access to PPE and hand washing and hand sanitizing equipment;
 - Ensure that housekeeping and food service staff and contractors are adhering to the cleaning and disinfecting guidelines set forth by the Centers for Disease Control and Prevention (CDC) and are using EPA approved disinfectants on surfaces throughout the facility;
 - Ensure that any non-employees who have been in contact with the plant, including housekeeping and food service staff, inspectors, and contractors are notified of the COVID-19 outbreak at the plant and provided the opportunity for testing.
 - Increase signage and other communication in the appropriate languages to educate workers about COVID-19 symptoms and the importance of social distancing, appropriate mask use, and hand hygiene in languages appropriate for workers in the facility;
 - Plan for re-opening with a reduced level of staffing that ensures social distancing can be maintained at all times during each shift; and
 - Work with WCDPHE and CDPHE on a plan to re-open with adequate, ongoing measures in place to prevent transmission and ensure worker safety.
 2. JBS Inc. must consult with WCDPHE and CDPHE in its implementation of these requirements, and share all requested information associated with this disease outbreak investigation, including the following for each employee: name, date of birth, address, phone number, primary language, work shift, responses to symptom and exposure screening questions, test results, and any other knowledge of illness or exposure.
 3. JBS Inc. must develop a sequestration housing plan and share it with the State’s Unified Command Center: Mike Willis, Director of Emergency Management. The plan should identify how you will assure that healthy employees who have tested negative are housed in a way that protects them from future community and household exposures and includes ensuring accommodation of access and functional needs, morale and welfare, including access to meals that include options accommodating dietary and religious standards, behavioral/mental health support, technology for contact with family and cultural/religious practices.
 4. People who are identified as having COVID-19 or exposure to a case of COVID-19 should be excluded from work as described above, and also should be placed on leave and temporarily housed away from other workers that they cohabitate with for 7 days (isolation of cases) or 14 days (quarantine of exposed individuals). This housing should not be co-located with sequestered workers and should also include accommodation for access and functional needs, including access to meals that include options accommodating dietary and religious standards, behavioral/mental health support, technology for contact with family and cultural/religious practices.
 5. Finally, we ask that you work with the Colorado Department of Labor and Employment to provide possible benefit assistance to the JBS impacted workers during this closure. Please contact Patrick Teegarden CDLE Director of Policy and Legislation at patrick.teegarden@state.co.us or 303.908.0866 to coordinate messaging and assistance for your workforce.

Fig. 5. Public Health Order 20-25 Immediate Closure of the JBS Meatpacking Plant

The order was not well received by a variety of powerful players: not by JBS, county officials, or, importantly, the White House.

Multiple interviewees reported that county government worked alongside Andre Nogueira, CEO of JBS, and the White House to ensure the plant would re-open and would not face another plant closure. Frank, a local governmental official, referenced collaborating with Mr. Nogueira, and subsequently, Governor Polis, to keep the plant open. He recalled:

So right around Easter, so it was either late March, early April of that 2020 year, where we were working with the international president from JBS. And we were freaking out because people didn't, people don't realize how fragile our protein supply is. There are three major plants in the United States that handle like 90% of our protein supply. And they want to close one of them down? You would have had starvation. 'You got to find a way Governor, so shut up *laughs* work with us, not against us'... We had to work directly with their [JBS] company bosses, with their plant managers kind of thing. And those people worked directly with our Department of Public Health and Environment. And what we had to say is closing is not an option. We can't close *slaps desk*.

So therefore, how can we operate safely? Well, we had to, you know, widen out the spacing and the distancing on their lines over there. We had to set up plex glass, we had to go through all the protocols, and all that kind of stuff. And our folks in the Department of Public Health utilizing the information from the CDC, you know, they did a great job over there and working with those some of those essential businesses and helping them stay open. Were there cases over there? Yeah, there were. In fact, was JBS an outbreak a lot? Yeah, it was a lot. I mean, it's Weld County's number one employer. And so that's the point you had to begin with. Governor wanted to close them down. I was on the phone with the Governor multiple times. He wanted to close them down. He was going to come up here and close them down. And ultimately JBS agreed— 'Here's what we're going to do, we're going to close down three days.' And they closed down... to institute all these safety precautions and all these kinds of new protocols. And then they opened back up... And they had, they had a few outbreaks over there. In fact, they had six deaths... it was an interesting time. But we kept the nation's protein supply going.

Frank's justification for keeping the plant open largely mirrored the narratives of lobbyists and industry executives at the time: the need to ensure continue production to prevent "starvation" and keep the nation's protein supply intact and that closing was not an option. These narratives underscored the necessity of keeping meatpacking plants open, whilst failing to include a consideration of who was at most risk: meatpacking workers. Fear about meat shortages, rather than fear about worker and community health, took center stage in policy discussions and ultimately influenced local, state, and federal governance decisions. The logics of neoliberalism, the ToP, and racial capitalism informed priorities related to meatpacking infrastructure and the need to continue business-as-usual while holding workers, not public health agencies or JBS, responsible for their safety.

One day after the initial order, Jill Hunsaker-Ryan, the director of the CDPHE, emailed Dr. Wallace and wrote:

JBS was in touch with the VP who had Director Redfield [the director of the CDC] call me... they want us to use CDC's critical infrastructure guidance, (sending asymptomatic people back to work even if we suspect exposure but they have no symptoms) even with the outbreak at present level. Are you okay with that? I am if you are. Thanks (Fendt 2020).

Dr. Wallace replied, "*Yes I am.*" Although the federal government was largely absent when it came to implementing public health protections and interventions, they intervened at the local level on behalf of JBS. In other words, federal governance was robust when it came to upholding the ToP through the ToL and weak in implementing public health protections and social safety nets. The local-level and federal neoliberal strategy for public health benefitted JBS at the expense of their minoritized workforce.

An interviewee who requested to be off-the-record provided further details on the pushback Dr. Wallace and the local health department received from both the federal government and from JBS, perhaps shaping his agreement to weaken the order. He remembered:

During the early days, Dr. Wallace was still there. He wanted to shut JBS down. And they got pushback from JBS. Vice President Pence was on the phone saying 'this is an essential business'. And so there was some— there was communication challenges there, because as a public health official, he was seeing that there were high infection rates. And they needed to do a deep clean and put in some standards to protect the workers. And so, from the federal level, I mean, the White House got involved mostly just to say, 'This is an essential business, you can't shut them down.' JBS then voluntarily closed for like a week or so. And then did some cleaning. Deep cleaning and required people to wear masks and distance and that sort of thing. So, there was some protocols put into place. And they did screen everybody before they came to work.

This call was mentioned by multiple other interviewees and by media sources, as was the announcement of Dr. Wallace's early retirement from the health department on April 27th, 2020.

Dr. Wallace was subsequently replaced by Mark Lawley as a temporary hire, who had no public health background and instead, had previously been deputy chief of Mountain View Fire Rescue

in Longmont, Colorado. Although records document the county had received 299 applicants, including at least 11 highly qualified ones, Lawley was the only one interviewed (Meade 2020). Interviewees referenced Lawley as “*someone who would do nothing*”, a “*stooge*”, and a “*Yes man*”, whereas Commissioners referred to him as “*someone they had complete confidence in*” while simultaneously hiring three medical officers to support him in his role as director.

As I was not able to interview Dr. Wallace directly, I relied on media reports and disclosures from fellow interviewees to understand what led to his departure from the WCDPHE. Both alluded that his retirement was linked to disagreeing with the Commissioners. One interviewee commented that:

He [Dr. Wallace] felt he had a moral responsibility. And they were tying his hands. Those were the two. He reported to—those are his bosses. And I just think that he couldn't continue. Because... he knew the truth. And he wasn't—I don't think he was going to water it down to keep a job. I respect him for what he did. You know, I can't speak for Mark. But my impression, just with how active he is now... he believes the medical importance of masking, vaccines, that kind of thing. So I think—I'll say I think—it was just because they were ordering him to do something that he couldn't.

Wallace was not alone: at least 181 state and local public health leaders across 38 states resigned, retired, or were fired between April 1- December 2020 (Barry-Jester, Recht, and Smith 2020). By October 2021, more than 500 public health officials had left their jobs (Baker and Ivory 2021). In other words, during the pandemic, one in 8 Americans lived in a community that lost its public health leader (Barry-Jester, Recht, and Smith 2020). Although the loss of some officials can be explained by retirement, a National Association of County and City Health Officials (NACCHO) survey found that extensive pressure from elected officials, subsequent interference with public health measures, and efforts to diminish the authority of public health officials during the pandemic were a large factor in public health officials leaving their jobs (NACCHO 2021).

At the time of the JBS closure, industry executives and lobbyists were also working closely together to prevent the fate of JBS from happening to other plants, as discussed in the prior chapter. The Executive Order (EO), passed one day after JBS reopened, empowered firms to maintain the current mode of production. Although the EO did not dictate that plants were required to stay open—and local and state governments play a crucial role in implementing federal directives—it provided firms such as JBS with the power to contest local and state guidance. Furthermore, local and state policies and dynamics influenced the interpretation of the order. In Weld County, the order's focus on maintaining production mirrored the stance taken by local governmental officials: the need for continued production and economic activity.

Safety Precautions & Pre-Existing Issues

Following the plant closure, JBS re-opened on April 24, 2020. Prior to its reopening, a CDC team (one industrial hygienist, three veterinary epidemiologists, and one medical epidemiologist) visited the plant and provided an overview of recommendations aimed at improving worker safety and curbing the speed of disease transmission. These pre-shift recommendations included: enhancing the screening process to measure each worker's temperature individually, including clarifying how to take temperatures; procuring FDA-approved thermal imaging systems for temperature checking; post screening questions in the commonly spoken languages by workers; providing on-site testing for workers who have fevers and / or symptoms; conducting contact tracing of work-related contacts upon positive COVID-19 tests; instructing workers who tested positive to stay home from work; establishing written return to work protocols for workers; modifying leave, benefits, and / or pay policies to provide additional sick leave; and considering providing surgical masks to all workers as they become available for purchase (CDC Memorandum 2020). During shift recommendations included: reducing overall

processing animal numbers and maintaining six feet of distance between workers; that barriers should not be used as a replacement for maintaining six feet between workers; providing accessible and language inclusive education to management, supervisors, workers, and union stewards related to COVID-19 safety measures, such as mask wearing, reporting symptoms, sick leave policies, social distancing; and increasing the accessibility and availability of handwashing and sanitizing stations (CDC Memorandum 2020). Like the broader OSHA/CDC recommendations for meatpacking plants, these were suggestions rather than mandatory recommendations.

Although JBS had promised to test all employees prior to re-opening, this promise remained unfilled. Instead, according to a public statement from JBS spokesman Cameron Bruett, JBS made “*the more aggressive decision to quarantine all team members*” vis-à-vis the plant’s temporary two-week closure (Meade 2020). At the time of the plant’s re-opening, state data documented 245 cases linked to the plant, Colorado’s second largest outbreak after the Sterling Correctional Facility. According to an April 2020 JBS Press release, the Greeley plant—and all JBS plants—had voluntarily adopted the following safety measures:

- Relaxing attendance policies so people don’t come to work sick
- Requiring sick team members to stay home from work
- Increasing sanitation and disinfection efforts, including whole facility deep-cleaning every day
- Promoting physical distancing by staggering starts, shifts and breaks, and increasing spacing in cafeterias, break and locker rooms, including plexiglass dividers in key areas
- Dedicating staff to continuously clean facilities
- Temperature testing all team members prior to entering our facilities, including the use of hands-free thermometers and thermal imaging testing technology
- Providing extra personal protective equipment (PPE), including protective masks that are required to be worn at all times
- Removing vulnerable populations from our facilities, offering full pay and benefits
- Waiving short-term disability waiting periods
- Providing free 100% preventative care to all team members
- Offering free LiveHealth Online services that allow for virtual doctor visits at no cost

Although these safety measures focused on actions JBS was taking, there was little information publicly available about implementation or outcomes related to these safety measures. Some of these actions, including continuously cleaning facilities and increasing sanitation and disinfection efforts, were focused on surface transmission, despite growing evidence that COVID-19 was not spread on surfaces, and thus did little to combat the airborne risk of COVID-19 spread (Fortin 2020). Instead, these actions shifted the focus from preventing the spread of COVID-19 through temporary closures or structural changes to taking actions aimed at reducing, not eliminating, risk.

However, elected officials were confident in the safety measures adopted by JBS, with Robert referencing a tour for elected officials prior to the plant's reopening:

When they had configured the plan for protection for their employees and everything else, they actually had a tour for the elected officials here... And one of the things that really just had me sit up was when they started talking through this. They said that a pandemic hadn't even been announced here in the United States. They have plants in Brazil and everywhere else, you know, they are a Brazilian company. So, this was already happening outside the United States... They were already making changes there... They were preparing here before it was even truly announced here in the United States.

In JBS offering a tour for elected officials, they exemplified a continued partnership with local and state officials. This partnership was critical to maintaining JBS's self-regulation when it came to health and safety precautions and enabling production to continue. Robert believed that JBS had prepared for the pandemic to the best of their ability and failed to examine how this preparation had still led to high case rates. Instead, he questioned the legitimacy of claims made from worker advocates in the community. He stated:

So, they [JBS] said we were taking immediate action where you had those citizens here that were advocating for the minority groups here saying that 'people need to stand up for them, you're not standing up for them. You're issuing their death sentences'... the company, JBS announced that they were doing everything they could. And I believe in my heart... they were reacting as quickly [as they could]. They were very proactive prior to COVID-19 even being announced... it's just a shame that so many things were so emotional.

Here, Robert exemplified an allegiance to JBS in his role as an elected official, believing that the company had been proactive in preparing for COVID-19 risks, despite contrary evidence and the divergent claims of worker advocates and community organizers in the area. Robert's commentary also reflected a broader tension: the claims of the company and the experiences of workers and those who were advocating on their behalf. Workers' experiences differed from company narratives and provided a story that deeply conflicted with and countered the accounts of JBS and elected officials. A confluence of factors—working in environments with limited social distancing, financial incentives to keep working, lacking access to sick pay or healthcare—created a situation where individual workers, many of whom were already vulnerable due to their immigrant and refugee status, faced particularly high risks of exposure to and transmission of the virus. Despite blaming COVID-19 spread on the racial and ethnic background of workers, intersectional vulnerabilities, such as citizenship status, language differences, and economic inequalities were not included in JBS's disease mitigation response.

Furthermore, pre-existing safety and health issues amplified difficulties in disease mitigation efforts. The structure of meatpacking work, where workers work in close quarters, made following social distancing guidelines challenging. Thomas, an industrial hygienist, also noted the proximity of workers and crowded working conditions as a key risk factor for disease spread:

These people are standing shoulder-to-shoulder right next to each other. There's not too many places where people stand shoulder-to-shoulder and there's even fewer places where people stand... shoulder-to-shoulder along the line and then three feet away on the other side of the conveyor, you have the same thing. So, they're shoulder-to-shoulder and face-to-face. And they're shoulder-to-shoulder and face-to-face in a loud, cold environment. So in order to communicate with somebody across from you, you have to speak loudly. And I think what we know now is speaking loudly is bad thing. Viral aerosol than anything else... I think those are really the risk factors. It's just the proximity. And then they're crowded no matter where they are... they're crowded in the lunchroom. They're crowded in the locker rooms; they're crowded on the lines. And that's just a function of these old plants.

In other words, focusing solely on social distancing on the line neglected other places of transmission. To address the proximity of workers, JBS implemented plastic dividers on the line and in the cafeteria, a tent outside to expand cafeteria space, and staggered shifts to reduce crowding as employees entered the plant. These safety precautions did increase the ability of workers to socially distance. However, they did not target the underlying factors associated with crowded line conditions: a rapid line speed that requires close proximity.

Interviewees and media sources also documented an attendance system and a work culture that encouraged workers to continue working, even if they were symptomatic. For example, before COVID-19, workers had 7.5 attendance points before being fired. This number decreased to 6 (Schlitz 2020). This conflicted with JBS's claim of "*relaxing attendance policies so people don't come to work sick*" and "*requiring sick team members to stay home from work*". Moreover, recovering points is an arduous process that involves calling an English-only hotline and then submitting documentation of the call to the union (Schlitz 2020). Furthermore, to incentivize workers to continue working, JBS also implemented an attendance bonus of \$600. Thus, even though JBS had announced actions related to keeping workers at home, they simultaneously invoked policies that incentivized workers to work. These attendance bonuses capitalized on the economic vulnerability of workers, while constructing the illusion of choice. Workers were "choosing" to continue to work, even if this choice was influenced by firm policy and their precarious economic position. Again, individual level responsibility for health overshadowed the role of JBS and the county in disease mitigation.

When discussing safety precautions implemented at the plant, Thomas noted how workers typically did not call out of work and the historical role of attendance bonuses in constraining precautionary behavior:

Turnover is a big problem with these plants, because it's hard work, and it's not fun. So, you have to figure out a way to encourage people to come to work. If you have an attendance bonus, and you're sick, you know, the motivation to go to work is a whole lot more than to say, you know, 'I'm sick, I need to stay home. And it's important not to spread this to my coworkers', which I'm not even sure many of them really understood that concept at the beginning. So most of these workers will never call off sick. Because if they call off sick, I mean, I'm talking pre-pandemic, you know. They're gonna go to work... when they have a cold, when they have--- when they're sick, because they're living paycheck to paycheck, and they get a bonus for the number of consecutive days that they come to work. So that's a huge incentive. So... I think in terms of one of the major factors that really made it a huge hotspot, that's one of them.

Here, Thomas highlighted how attendance bonuses constrained the ability of workers to make health decisions that are unencumbered by financial incentives. Furthermore, these bonuses and incentives exacerbated a lack of established guidance related to how to call of work both pre-pandemic and during COVID-19. Thomas reflected:

But I think the other thing is... there was a lack of understanding of when I should go to work, and when I shouldn't go to work. It took a while to get there to say... you have these symptoms do not come to work. And when they first said that, most of these people had no idea how to call off work, which sounds crazy, right? But that they'd never done it. It was not even in their make-up to ever call off sick, they were not intending to call off sick.

Because workers were not informed about when they should go to work or symptoms related to COVID-19 that should have resulted in subsequent testing, workers continued to work. Contrary to the idea that it was not in their “make-up” to call out sick, the tendency to continue working is reflective of the social and economic location of meatpacking workers and a neoliberal system that prioritizes production over people. As many workers are low-income, economic vulnerabilities overshadowed their ability to stay home when ill. These economic vulnerabilities were compounded by a lack of procedural justice when it came to knowing how to call out of work during COVID-19.

In my interview with Manuel, a local union representative who played an intermediary role between workers and human resources, he reflected on the challenges inaccessible information posed to workers calling out. He stated:

My grievance was some people didn't know how the process, what numbers to call, and there were times where – because I was the one communicating with the company, saying, ‘look, what numbers should they call because they're calling me? Obviously, they're not calling you because you have a hotline, and they call it, they leave a message and you call them back. And due to the volume of calls, they're not calling anymore because they can't get through. So they are calling me. I need to know what numbers to call’... But if it wasn't for the Union getting involved, it would have been ‘I don't see anything’, ‘I don't know anything’. The fact that I had it on paper, I mean, I had logs of people just keep calling me and ‘let me get back to you’, ‘let me get back to you’.

In their interviews, both Manuel and Thomas documented a lack of knowledge about the process of calling out sick, as well as the difficulties due to a pre-existing work-while-sick culture. This was exacerbated by a lack of established paid sick leave policy. In my interview with David, a Department of Labor official, he reported that they had “come down hard on them for paid sick leave... [which] is a new law in Colorado because of the pandemic that says all employers must provide 80 hours of paid sick leave.” Because paid sick leave had not been established by JBS, workers were left to contend with an employer who claimed to relax attendance policies while capitalizing on a lack of accessible information related to the process of calling out sick and, instead, incentivized workers to continue working through attendance bonuses.

Although paid sick leave appeared nebulous from interviews and media reports, the plant’s policy of “*removing vulnerable populations from our facilities, offering full pay and benefits*” was utilized by one worker I interviewed, Alejandra. Workers that were 60+ were able to stay home and still receive pay in the early months of the pandemic. It is notable that the reason she was aware of this policy was because of her adult daughter, who had a friend who worked in Human

Resources. When Alejendra was told JBS was no longer providing pay for those 60+ and she was to return to work, she reflected on her ultimate decision to quit:

I was scared. I was still scared. I was afraid to return because they have a lot of people with COVID. And I said, ‘if they are not going to pay me [anymore], I’m going to quit’... I was thinking of working the whole year of 2020. It was my plan to work the whole year and then retire. I wanted to get some money, buy new furniture, buy things that I’m not going to be able to later [once I am retired]. But no, the plan doesn’t work. My plan doesn’t work.

Her two adult daughters had encouraged her decision, stating that it wasn’t safe or worth the risk.

Although Alejendra was nearing retirement and ultimately decided to quit, other workers were not in this life position. For these workers, they greatly feared losing their jobs if they did not show up to work. As JBS is the predominant employer in the area and offers relatively high pay and low barriers to entry (by not requiring credentials such as high school education, English language speaking skills, prior relevant work experience), job loss was a real threat.

On July 9, 2020, the CDPHE and WCDPHE conducted a follow-up visit to observe the changes made to the plant following prior visits by the CDC (April 14 and 16, 2020) and WCDPHE visits (April 8 and 23, 2020). Overall, the team found that JBS had implemented a variety of safety measures, including: increased availability of masks for workers with subsequent increases in mask wearing; installed additional hand hygiene stations; adjusted work hours to maintain a longer time for workers to transition between shifts; installed stainless steel barriers to separate spacing where six feet distance was not achievable; and that, at the time, the plant was operating at approximately 90% capacity. This report does illustrate that, from the perspective of public health officials who toured the plant, JBS had implemented increased safety procedures. However, the slow response to implement COVID-19 measures, the county’s limited interference, and the broader federal landscape of limited enforceable public health measures and guidance led to 291 workers at the JBS Greeley plant contracting COVID-19 and the loss of eight lives: Saul Sanchez,

Tibursio River Lopez, Eduardo Conchas de la Cruz, Daniel Avila Loma, Tin Aye, Way Ler, and two individuals whose names were not publicly disclosed (Bradbury 2020).

Conclusion

In this chapter, I assessed how COVID-19 affected policymaking and enforcement for meat production at the local and state levels. I analyzed how local level policies regarding COVID-19 took the economic and political interests of powerful agribusiness firms such as JBS into greater consideration than its predominately racial and ethnic minority workforce. Drawing on interviews, critical policy ethnography, and content analysis, I found that Weld County's home rule governance structure played a critical role in empowering the county to adopt voluntary COVID-19 measures that were inconsistent with those of the state and differed from other nearby counties.

Furthermore, a lack of state enforcement amplified the ability for local governmental officials to contest state-level guidance, both directly and indirectly. Individual level responsibility was the cornerstone of Weld County's public health response, whereby individuals were entrusted to make responsible decisions. The ideational embeddedness of neoliberalism in governance decisions was a key mechanism that shaped the county's pro-business and individual level disease mitigation strategy (Somers and Block 2005). However, this approach neglected structural factors that shape exposure and disease transmission. This disease mitigation strategy reflected neoliberal tenets and a reliance on the individual-centered biomedical model (Brown 2007; Vera 2020; Cardona 2021). The dominant biomedical model thrives under neoliberal systems, as it places health responsibility on individuals rather than the state—evading accountability for health programs and policies aimed at ensuring public health in favor of an individualized approach. This model enabled firms and businesses such as JBS to continue operation, even when limited safety precautions had been implemented. In 2020, JBS reported a record net revenue of \$51.7 billion

(NRDC 2021), a record that was enabled through lax COVID-19 regulations at the federal, state, and local level that did little to hamper production activities at the cost of worker health and safety.

Although the plant closed for two weeks, this decision was hard won and not unanimous across public health and county officials. Following this decision was a leadership change at the WCDPHE and the loss of then-director, Dr. Mark Wallace. Interviewees and media sources also documented the direct involvement of the White House and JBS CEO in identifying a plan to re-open the plant, suggesting industry interference in the policymaking process at the local, state, and federal level (as discussed in the prior chapter). Furthermore, the individual-level responsibility strategy embraced by the local government failed to account for structural, institutional, and socio-political factors that constrained the ability of meatpacking workers to make autonomous health decisions. Instead of acknowledging the plant as a site of disease transmission, cultural factors such as shared housing were blamed for outbreaks amongst workers. Although workers were deemed to be “essential”, the lack of implemented safety precautions illustrates that it was their labor, not their lives, that was essential to ensuring continued production.

This chapter’s findings support prior research on the role of industry in the policymaking process and the role of the ToP, and relatedly, ToL in prioritizing business interests above all. Because the state has acquiesced to the interests of powerful corporations, policymaking upholds the ToP and maintains the economic interests of firms (Stretsky, Lynch, and Long 2020). For example, Lynch, Stretsky, and Long (2020) drew attention to how environmental laws reflect economic relations that replicate treadmill of production interests and practices. In my findings, I demonstrate how the ToL is not unique to environmental regulations and policymaking that threaten to slow the ToP, and instead, these patterns persist in worker safety and public health policymaking. In exploring how public health governance was utilized to the behest of corporate

interests and practices, I build upon green criminological research which locates harm in economic and state relations and provide evidence of how this manifested at the local level (White 2013; Ruggiero and South 2013). My local-level findings align with prior research on industry-state relationships, which has documented the power that agribusiness exercises over the regulatory framework and structure of the food system (Lobao and Stofferahn 2008; Leonard 2014; Silbergeld 2016; Howard 2016). As neoliberal norms have become deeply embedded with Weld County's governance structure, elected officials pushed forth policies that prioritized business and economic activity rather than public health.

Through exploring the multiscalar nature of these economic and state relations, from the federal to the local level, I found that the power of JBS enabled policies that reflected business interests, rather than public health concerns, and that this pattern was solidified across scales of governance to uphold the ToP (Long, Strestky, Lynch 2020). JBS thus successfully leveraged its existing economic and political power to influence governance decisions and public health policy in favor of corporate self-regulation over state interference. These findings also point to local-level dynamics and industry relationships, documenting how the context of a modern company town influenced policymaking during COVID-19. When a dominant employer employs a large portion of the labor force, and the local labor market is thus concentrated, employers can wield significant influence in political decisions (Willingham and Ajilore 2019). Through political donations and their status as the town's number one employer, JBS has become embedded in Weld County's economic sphere: shaping the county's political landscape to their favor.

A central theme across findings is the role of industry's economic and political power in public health guidance and the subsequent implications for those who are structurally and economically vulnerable: meatpacking workers. Pro-business and neoliberal ideology of elected

officials resulted in a laissez faire approach to public health, where JBS was enabled to continue operation and the responsibility for worker health fell at the individual level. These findings suggest that to improve the health and safety of meatpacking workers, and to expand the power of public health departments, the governance structure of Weld County must be challenged. Participation from a diverse group of stakeholders that are impacted by public health guidance is necessary to improve procedural equity in the decision-making process. The power to create and enforce public health guidance should not be restricted purely to elected officials as doing so results in an uneven and inequitable approach to policymaking.

Furthermore, increased enforcement of disease mitigation and accountability at the local, state, and federal level is key to enhancing the health and safety of workers and reducing the power of agribusiness in the policymaking arena. As this chapter, and the previous chapter, illustrated: the power of agribusiness has become embedded within multiscalar forms of governance to such an extent that there is a need for a stronger regulatory framework that is independent of corporate interests. Rather than laws upholding the ToP and enabling the social consequences through an absence of state intervention, increased policy attention must be focused on combating the ToP and moving towards more socially just and sustainable modes of production. Worker safety and broader community public health should take precedence over maintaining firm economic profits. In an era where we face increasingly unprecedented global environmental and public health crises, there is a clear need to create greater autonomy between corporate actors and the local, state, and federal political sphere.

CHAPTER SIX: MEATPACKING WORKERS, LABOR, AND LEGACIES OF EXPLOITATION

In Chapter 4, I provided an overview of regulation of the meatpacking sector and the institutional, structural, and socio-political contexts that shaped high rates of COVID-19 transmission. In Chapter 5, I documented how COVID-19 affected policymaking and enforcement for meat production at the local and state levels and how pre-existing issues associated with public health governance at the local and state levels amplified outcomes of COVID-19 on meatpacking workers. Building upon these findings, I now bring my analysis to workplace, the scale experienced by workers. I provide an overview of legacies of racial exploitation and structural inequalities that have sustained the treadmill of meat production, while embedding workers in a system of harm. I detail how the racial and ethnic demographics of workers intersected with their vulnerabilities to exploitation, unsafe working conditions, and health risks during COVID-19.

Drawing on in-depth interviews with workers' compensation attorneys, I illustrate how meatpacking firms continue to capitalize on the racial and ethnic demographics of workers, resulting in significant procedural injustices that delay medical treatment and compensation. I argue that the flaws embedded within the workers' compensation system benefit firms, harm workers, and represent another avenue to enable the survival of racial capitalism in the meatpacking sector. This analysis contributes to limited research that has documented meatpacking workers' compensation (Schofield et al. 2023; Stuesse 2018) and includes qualitative accounts from workers' compensation attorneys to provide further details about the challenges associated with workers' compensation processes both prior to and during COVID-19.

Finally, I conclude this chapter with a discussion of worker organizing in the face of the COVID-19 pandemic. I contend that worker mobilization can be used as a tool to combat the

dynamics of racial capitalism and shift power from the firm level to workers. Although worker organizing has been limited by the structural conditions of racial capitalism, there is great potential for workers to work alongside unions, community groups, and labor advocates to demand better working conditions. Throughout this chapter, I build upon my previous findings and document how the harms embedded in federal, state, and local policymaking impact workers' lives. In doing so, I provide a multiscale analysis of how racial capitalism is organized across institutions to uphold the meatpacking sector and the subsequent impact on workers.

Racialized Labor Exploitation

As discussed in the literature review, the demographics of meatpacking workers are linked to legacies of labor exploitation and the recruitment of immigrant and refugee laborers in this sector (Freshour 2017; Genoways 2014; Frydenlund and Dunn 2022). As economic opportunities are limited for immigrants and refugees, especially in rural areas, the relatively high pay of meatpacking and low barriers to employment has positioned the meatpacking industry as a powerful actor in the local labor market—and as a key force in shaping county demographic changes. These patterns rang true in Greeley, as well. Frank, a local official, reflected both on the nature of meatpacking work and of JBS's recruitment strategy as shaping county demographics.

He stated:

I hate to be this way, but it is nasty, ugly work. I wouldn't want to work there. I like cows, they're tasty. But it is hard work. And they have to look at different kind of labor pools. And a lot of times, especially [before] JBS, [it] was very, very heavily Hispanic, when Monfort ran it. Because a lot of members of Latino community would come in and get jobs here. And so, we would have, you know, a lot of Mexican nationals that would come here and work. When it became JBS, that's when it opened up to so many different kinds of nationalities. Because JBS literally has an international recruiting presence.

Notably, JBS Foods purchased Swift & Co in 2007, one year following the plant's ICE raid.

Although the international nature of JBS may have led to increased global recruitment efforts, the

consequences of growing ICE raids and the development of identity verification systems reduced the meatpacking sector's ability rely on undocumented immigrants as key components of their labor market and profit— driving the need to identify a new supply of exploitable labor. In reflecting on the nature of meatpacking work, Frank naturalized the “*nasty, ugly*” aspects of meatpacking work as necessitating a different labor pool from white residents: a labor pool of immigrants and refugees. Likewise, when explaining factors shaping the racial and ethnic demographics of Greeley, Simon, a local official, commented that “*we’ve got the industry, the agribusiness, and the immigrant refugee populations. They bring with them skill sets that translate very well to work right away in Weld County [and do the] work that needs to be done.*”

These racialized narratives are not unique to local actors and have been expressed by others, including the head of the U.S.-Mexico Chamber of Commerce who claimed that “*we’re [Americans] not willing to do these jobs anymore, but immigrants, like always, are willing to do it to provide for their families*” (cited in Whittaker 2005: 44). Narratives about immigrants’ “willingness” to take jobs that are seen as undesirable to Americans normalize exploitation as a voluntary choice, rather than the product of systemic oppression within racial capitalism. These claims normalize the racialized labor dynamics shaping the meatpacking workforce, rationalizing that the high percentage of immigrants and refugees in the sector is a product of their individual skillsets and work ethics, rather than the systematic outcome of racial capitalism, broader geopolitics, and recruitment efforts of meatpacking firms.

In a stark contrast, some worker advocates and labor experts highlighted the reliance on immigrant and refugee labor as being an intentional, exploitative design of the meatpacking sector, rather than a product of immigrants’ and refugees’ willingness to work in the sector. In my interview with Carol, who has worked for decades advocating for enhanced meatpacking worker

safety and protection, she described historical changes of the meatpacking sector and subsequent recruitment of immigrant and refugees. She explained:

Meatpacking was a middle-class job in the late 70s. People made about \$60,000 with overtime. And by the mid-80s, they were making half that because the industry as a whole just decided that that they were going to restructure. There were companies like IBP that decided.... they [would] change their structure They deskilled the jobs. And they recruited very heavily in the 80s, immigrant workers. That pipeline still exists and most of the workers in plants are immigrant workers and also refugees... So this work was really hard and backbreaking, but it was better than where they came from, and they were very grateful... It's not like at Amazon where you have workers [who have] gone through high school and some of them college and they know this is a job for 1,2,3 or 4 years and they're very aware of their rights. You have a much more vulnerable population in Greeley, at JBS. And by design, everywhere... It's a very exploitive industry by design.

Carol's account identifies three central changes in the sector: 1) restructuring of the meatpacking industry; 2) deskilling of jobs; and 3) subsequent recruitment of immigrant and refugee workers to replace what had previously been a predominately white workforce. In the 1980s, 70% of meatpacking workers were white; in 2019, the number dwindled to a mere 20% (Chang et al. 2021; Fremsted, Brown, and Rho 2020). As Carol recognized, the large percentage of immigrants and refugees has enhanced the industry's ability to exploit structural vulnerabilities and capitalize on issues of procedural injustice, including language barriers, lack of familiarity of labor rights in the United States, and varying citizenship statuses.

Firms have profited on the precarious social and economic positions of immigrants, expanding profit margins and maintaining a steady supply of labor, even in the face of high turnover rates and the geographically isolated location of plants. However, in the last two decades, ICE raids at meatpacking plants have also become more frequent, as have stricter immigration policies and identity verification systems like E-Verify, which have heightened the difficulty of hiring undocumented immigrants (McConnell 2019; Elk 2018). Interviews provided insights on the hiring process prior to the 2006 ICE raid, and the subsequent impacts of the raid. For example,

in my interview with one worker, Alejandra, she described how despite lacking employment paperwork, she was able to secure a job at the plant. She explained:

I heard about the job from one of my husband's friends. He told us about the job. It wasn't easy for me to go in and to work over there. Because by that time, there was a lot of people illegally working there. So, it was full, they don't have room for more people. So, we came in July... as soon as we come here [to Greeley], I went over there to fill in an application. I start every Monday calling. And finally in December 2003, I started there... At that time, it was a lot of [undocumented] people. A lot of people, a lot of hard-working people.

Later, when I asked what had attracted Alejandra to the position, she highlighted the economic opportunity. She stated:

You don't have to have any degree, nothing. They pay more money. That's why I applied there. And I thought... it's going to be more easy for me to get the job because by that time, I really needed it. And what a big company, so maybe we have more benefits, more potential, more everything. It was not too bad, but not too good.

Alejandra's story is one that resonates for many meatpacking workers: the need for work that does not require employment paperwork, that provides a relatively high wage, and a lack of alternative employment options. For many, structural factors—not voluntary choices—shape the pursuit of meatpacking work.

Although there is no verified statistic, sources have estimated that 23% of Swift & Co.'s employees were undocumented immigrants at the time of the 2006 ICE raids, demonstrating the significant population of undocumented immigrants in this sector (Kammer 2009). Across the six Swift & Co. plants that were targeted, 12,000 people were detained and 1,300 people were ultimately deported. Although Alejandra had received a work visa before the ICE raid, recalling the sheer panic of workers and the fear that reverberated throughout the plant brought tears to her eyes. She described what it was like that day:

It was really too sad. It really surprised every employee, I think. Because it was in the morning and there wasn't a break in the morning. Then they said, 'okay, now we are going to go on break everybody'. Why? Sometimes, we do because there is something wrong with the chain, so we already know. But that time, everything was okay. And they say

‘okay, everybody goes to the cafeteria’. We started downstairs and we see that there is a lot of police, a lot of police officers, ICE police officers, border patrol downstairs. A lot [voice breaking]— a lot of police in the cafeteria. So, it was too hard for the people to run away. It wasn’t easy to run away... It was a sad day.

Ultimately, the raid led to the detainment of 273 and deportation of 132 workers in Greeley (Peters 2007; Lofholm 2013). As some employees were terminated prior to the raid, and second shift workers did not come to work following the news of the raid, this number underrepresents the extent of undocumented immigrants at the plant. Family members, including 200 children of workers who lost one or more parent after they were deported, suffered greatly (Lofholm 2013).

Despite the high percentage of undocumented workers at the plant, management was not formally charged with knowingly hiring undocumented workers. Sofia, a community organizer, questioned why workers were punished, rather than those who hired them.

It harms the people they depend on. You know, publicly... they're very conservative. And... no, we don't want migrants here... we don't want to have them. Hell, they need them. They depend on them. Who else is going to work these farms? Who is going to work at JBS? They hire them. But they'll complain, be the first to complain. You know, and that's what I've always said, you know, quit deporting families. If you don't want this in the community, stop your employers from hiring. If there's a violation, the employers need to be punished. Not the innocent, hardworking people.

Here, Sofia illustrates a fundamental paradox embedded within the logics of racial capitalism: those who are most valuable in the agribusiness labor market are those who have been constructed as the least valuable economically and socially. Because agribusiness depends on minoritized labor, it has become reliant on racialized exploitation; exploitation that is codified in the regulatory system. This idea was echoed by Maria, another community organizer:

They're the poorest of the poor. Because if you think about it, many of these people still qualify... their income still qualifies for social services, such as food stamps. All local taxpayers, whether they understand it or not, you know, are providing support for JBS itself. Subsidizing JBS. It's not the government. It's us. But very few people stopped to think about that. And think about all these people [who think immigrants] are a drain on our communities, when the question should be, why aren't they getting paid more? You know, why would they take so much crap from this company? And still work there. The

need, right? There is no way that you have hundreds of workers, and you have no idea. I don't buy that not for a second.... I say this all the time, if we were really serious about cracking down on illegal immigration, what we could start with is jailing the people that employ them and recruit them.

The system thus shapes not only a steady supply of immigrant labor, upholding low wages through social services (for those who qualify), but also has created a workforce that is unlikely to protest poor working conditions and wages due to fear of retribution.

The ability to exploit a racially minoritized workforce is further upheld through federal punitive systems that charge employees, rather than employers, with violations of employment law. Swift & Co. reported losses between \$40 and \$50 million due to the ICE raids and costs from subsequent pay increases and hiring bonuses (including a \$1,500 initial sign-up bonus) to recruit new workers (Flora, Prado-Meza, and Lewis 2011). However, these profit losses do little to address the underlying issue: reliance on racialized labor exploitation in the meatpacking sector. Instead of increasing pay, addressing worker safety issues that shape high rates of employee turnover, or pushing for policy changes that would provide undocumented workers with a pathway to citizenship, firms have capitalized on exploiting structural vulnerabilities that limit workers' power. Racialized labor exploitation thus serves as a key mechanism to sustain the treadmill of production and circumvent labor issues that threaten its continuation.

Pre-Existing Working Conditions

Although COVID-19 posed a new risk to the health and safety of meatpacking workers, these plants have historically been plagued by high rates of injury, illness, and worker exploitation. Interviewees' accounts of physical and psychological harm related to working in the meatpacking sector mirrors others scholarship on worker safety issues; echoing patterns of labor right violations, a violent work environment intensified by under-regulation and power dynamics, and the shared

suffering of both workers and non-human animals (Broadway and Stull 2008; Broadway and Stull 2010; Eiznitz 2009; Muller 2018; Pachirat 2011; Porcher 2011). These dynamics illuminate the role of racial capitalism in the meatpacking industry: devaluing lives, leveraging racial and ethnical differences to firm advantage, and reaping the rewards of labor that has been constructed to be exploited. State policies have facilitated racial capitalism, and its harmful impacts, to persist—even during a public health crisis.

Many of my interviewees linked the hazards faced by meatpacking workers during the pandemic to outcomes of historical contexts and conditions. These included under-regulation, decreased regulatory capacity of agencies like OSHA and USDA, and a rise in corporate power (as I described in Chapter 4). When asked about working conditions at meatpacking plants, interviewees described plants as “*really dangerous*”, “*unseemly*”, “*tough*”, and “*the bottom of the barrel in terms of jobs*.” Workers themselves described injuries sustained from working on the line, including carpal tunnel, repetitive motion injuries, and seeing their fellow workers suffer physically and psychologically. In my interview with Rosa, a JBS worker, she described pain in her hands, resulting from repetitively cutting meat day after day.

I really didn't like what I was doing. I didn't like the knife. You had to learn how to sharpen the knife. If you can't have a knife that was sharpened, your day is going to be hard. I would struggle... My hands would hurt and my hands were all numb and my fingers were locked in. But then I got used to it. And I would do exercises. They used to have these doughnuts, what they called them.... But they were really hard. So, you had to be able to squeeze them. And then we did exercises, they would give those exercises. But your hands would hurt.

Likewise, in my interview with Alejandra, a JBS worker who had worked at the plant for almost two decades before her retirement, she described the physical demands of line work:

It's hard and you have to wear a mask, the apron and everything covers you to protect yourself from the other employees next to you with the knife... The equipment you wear, it's heavy. It's hard, the job. It is hard. It is a hard job.... When I started, remember I told you I used that spatula [to scrape fat off the carcasses]? It was a little too much pain in my waist. I had to take medications. Pills [for the] pain and to let me sleep. Because it was

hurting. For two weeks [I took the medication]. Then I say, no. It's not good for me to take too many pain pills. I have to live with it. To live with the pain and I'm just not taking any more [pills]. I am used to [living] with the pain... It became like normal.

Although Alejandra's roles at JBS changed over the years, she described all of her positions as "hard" and as causing her pain, pain that she ultimately accepted as her new normal. Both Alejandra and Rosa described how they had learned to live with the pain; viewing the pain as an inevitable outcome of their work and as something they "got used to". Other workers have experienced injuries that require amputation, or in some cases, have been fatal. Alejandra, for example, described seeing the body of a mechanic who had been killed while repairing a conveyor belt while on her way to her line position one morning. According to OSHA News Release archives and public violation history, JBS has received numerous citations in the last decade, with proposed penalties totaling over \$300,000. These ranged from fatal safety and health violations, including multiple amputations and at least three deaths, to "less-than-serious" violations that pose a threat to worker health and safety, but likely would not cause death or serious bodily harm.

Workplace safety violations are not unique to JBS and are mirrored in plants across the United States. In my interviews with labor advocates who represent workers from a number of meatpacking plants, they described multiple examples of labor violations, including inability to take bathroom breaks, drink water, and the overall dehumanization of workers. Drawing on examples from a plant in Missouri, Angelo described the conditions experienced by workers:

A lot of workers, they say that sometimes they don't take their medicines. Because they don't want to drink water. Because if they drink water, they have to go to the bathroom and they are not allowed in the plants up here. Some people have actually urinated in their pants. Or defecated. I hear from people that are wearing diapers... they are facing problems with no bathroom breaks, workers with a lot of repetitive motion. I mean, excessive pieces of meat that they have to process per minute, which produces a lot of repetitive motion injuries, especially shoulders or back or feet, and their wrists, hands, fingers. A lot of people getting into accidents as well. As fast as they work, it's higher—the risk of suffering accidents, or repetitive motion injuries and higher level of stress, which is something that affects them psychologically too. A lot of people are having mental problems because of

that, because they work a lot under too much stress, too much pressure from the supervisors, managers. So that creates a really hostile environment for everyone in there. And in some cases, even violence and a violent environment to work.

Angelo illustrates not only the poor conditions of workers, but how these conditions are upheld through federal policies including line speed increases that have increased the speed of production, and subsequently, the injuries experienced by workers. Federal policies thus enable the harmful work environment to persist through corporate self-regulation and policies premised on profit accumulation, rather than worker protection. Workers suffer physically, and also mentally, due to the stress of their job, a violent work environment, and pressure from management to maintain the speed of production. At JBS, workers, worker's compensation lawyers, and worker advocates all detailed multiple injuries, including an employee who had been run over by a forklift, employees who had lost limb(s), and multiple cases of employees who suffered from carpal tunnel and repetitive motion injuries.

In addition to physical outcomes, interviewees documented how employees suffer psychologically from meatpacking plant work. In my interview with Angelo, he told the story of Hector, an immigrant from Honduras:

We were having a conversation regarding his working conditions, and how he feels working in the plants. And he said Angelo, 'when I'm going to work. I park my car in the parking lot and when I get out of my car, I feel like my humanity is staying in the car. Because from then, I feel like an animal. Because that's how I get treated inside the plant. That's how I feel like they treat us. I feel like an animal and in some cases, I feel like I'm a machine. You just keep working, working, working'.

Hector's description of being treated like "*an animal*" and "*a machine*" illustrates the dehumanization meatpacking workers face. Angelo continued, describing how Hector turned to alcohol to cope with the physical and psychological harm he experienced on a daily basis:

I remember that case because he was actually a religious guy. And he said that in his life, he never drank alcohol before. When he took this job, he said, 'Angelo, I feel when I get out of work, all I want is to drink something that makes me feel like I can relieve that pain

and that problems that I'm bringing on my mind after getting out of work'. He actually became an alcoholic. I cannot forget what he told me. When he said, 'Well, I'm leaving my humanity in my car'. And I felt like an animal because that's how I'm being treated. I still remember that. And the stories like Hector's are very common. I mean, that's very common up here. All the things that they are facing in the workplace.

Hector's story is not unique and mirrors patterns found by other scholars, who have documented the fragmentation and physical/psychological separation that occurs to distance oneself from meatpacking work (Jacques 2015). Animals suffer from mass-industrialized killing, but so do workers who have to contend both with a dangerous work environment and the violent work required to transform living animals into consumable commodities (Porcher 2011; Muller 2018). In the process of dehumanization, workers too become externalities of a system that depends on both human and non-human animal exploitation.

In a system of racial capitalism, while the labor of racially and ethnically marginalized individuals is valued, their lives are not (Pulido 2016; Pulido 2017; Sze 2020). While the physical and psychological impacts described by interviewees are striking, they are not unique. Compared to the average American workers, meatpacking workers are three times more likely to suffer from serious injuries and beef and pork workers are seven times more likely to suffer from repetitive strain injuries (Stauffer 2019). In 2017, meatpacking workers were more than 15 times more likely to suffer from an occupational illness than the average private sector worker. According to OSHA data from 2004 – 2013, more than 150 workers at meat and poultry plants died from work-related injuries (Stauffer 2019). Injury and illness rates have been documented as underreporting the extent of harms endured by meatpacking workers, due to discrepancies between recording and reporting injuries and illness and issues of procedural injustice, including fear of retribution from management (GAO 2016; Stauffer 2019).

Intersecting Vulnerabilities and Procedural Injustices During COVID-19

Due to broader immigration policy and structural vulnerabilities, the racial and ethnic demographics of workers have shaped a largely fearful, and thus, compliant workforce. Across my interviews with worker advocates, all identified fear as a key factor that kept employees working during COVID-19. Scrolling through her Facebook messages while we talked at a local coffee shop, Maria, a community organizer in the area, highlighted some of the stories she had heard from workers in the early months of the pandemic.

We've been hearing stories from people inside that they were afraid to because they were afraid to be terminated. They needed their jobs. So, we were hearing that they were violating state mandates of like, people were still working shoulder to shoulder. They didn't have the social distancing that is required, they were given PPE but it was like a mask a week, a disposable mask a week. And there was a lot of threats towards them from supervisors to, you know, not speak out, not complain, and people were getting sick... 'You just stay here and work, basically, endure it. If you complain, you'll be fired.' I mean, it was a total totalitarian atmosphere... These people were just so fearful. You think about as a human, you're worried about yourself, but you're worried about taking it home to your kids. Your parents. I mean, this is pretty stressful. Then you're being told, 'if you don't do this, you're gonna lose your job'.

In some cases, this fear was explicit: with workers stating that their supervisor pressured them to continue to work and to not complain. Pressure from management to continue working, even amidst risk, is not unique to COVID-19 working conditions. It is well documented that meatpacking workers have limited ability to report safety concerns due to fear of retaliation, including job loss (Pachriat 2011; Genoways 2014; Eisnitz 2009). Furthermore, as plants have historically not received substantial consequences for safety or working violations, there is little accountability at the federal level for enhancing workers' rights vis-à-vis more stringent occupational health and safety guidelines (Genoways 2014; Replogle and Winders 2021). Reporting issues of safety concerns and violations, then, are constrained not only by fear but by pre-existing failure to address safety violations in a meaningful way; a failure which may outweigh the risk-to-benefit ratio of reporting.

Explicit pressure from supervisors and management to continue working—and a largely absent local, state, and federal regulatory framework—constrained workers’ ability to advocate for enhanced safety. In other cases, fear was implicit rather than explicit and built on legacies of power dynamics. The social and economic contexts of meatpacking workers has thus rendered them vulnerable to workplace exploitation and cultivated a labor force that is less likely to complain against safety infractions and violations. Kyle, a local reporter, discussed a culture of fear at the JBS plant and linked this fear to the refugee and immigrant status of workers:

Multiple to thousands of them are new to this country. They don't know anyone but their own family. Half a dozen to a dozen people are relying on the salary that they're making. They're don't know what worker's rights mean or are; they don't know how to contact or what a worker's rights attorney is. There's a lot of ways that you can take advantage of people like that, is I guess what I'm getting to. Where you don't know where you are, well you do know for a fact that these people don't know what resources they have. And maybe don't have access to these resources. And just kind of gently put on them, if you will, this idea of, if you say something, you'll be in trouble. And you don't have to actually threaten, you don't have to actually say 'if you say something, we will fire you', you just have to ... kind of imply it. It's kind of this thing that corporate America does worldwide, but it's probably a little easier when most of these folks are from Somalia, and Mexico. And, you know, all these other places. We had a ton of folks from Haiti. And... they have their own community, but most of the community is in the plant... All they know is what they know. And there's a little bit of a bubble there.

As many workers are immigrants and refugees, United States worker safety regulations differ from those of their home countries, further fueling both procedural injustices and worker safety risks. Because many meatpacking workers are foreign-born, firms are able to capitalize on a lack of knowledge about resources and / or recourse for issues related to worker safety.

Furthermore, as meatpacking workers are often isolated from their broader community due to language barriers and cultural differences, their community is often other workers. Thus issues of procedural justice continue without contestation. In this way, firms exploit issues of procedural justice to their advantage: profiting off not only the labor of immigrant and refugee laborers, but

off their social location. Kyle reflected on how this power, while not illegal, serves corporate interests:

There's a lot of ways to abuse that power without doing anything even illegal or technically inappropriate. So, my instinct is that there was just a lot of kind of cultural fear there. And I very much doubt that there was any effort because it serves the corporation too... that cultural fear, whether or not you develop it, is in the interest of the corporation to take advantage of. And so, I would be shocked beyond belief if there were any effort to dispel that fear to tell folks 'hey, look, like talk to HR, talk to your lawyer'. 'Talk to your union rep'. I mean, I know for a fact some of that never happened. I really doubt that there was a lot of effort made to be like, 'hey, no, yeah, we're not gonna fire you. If... you talk to the press, we're not gonna fire you'. I doubt that was said. It may have been implied for all I know. There was more to it. But I don't know for a fact that there was anything specifically said. I mean, I'm sure they said, hey, don't do that.

In contrast to using explicit threats, firms and management benefit from a lack of worker awareness and information related to worker safety in the United States. Rather than provide information to enhance workers' understanding of community resources, including who to report safety issues to and how to apply for compensation in cases of injury, firms profit from these procedural injustices and the social and economic context of workers. Ethnic, cultural, and social differences benefit firms in that they enable low-wage production to persist at the cost of worker wellbeing and safety. Racial capitalism is perpetuated not only by the recruitment of marginalized workers but a broader social system that has little social support or safety net to offer those who are most vulnerable, compounding issues of worker vulnerability (Frydenlund and Dunn 2022). Fear of retaliation, language barriers, and a lack of awareness about their rights exacerbates workers' vulnerability to exploitation, at the benefit of corporate power and profit.

The recruitment of marginalized workers into the meatpacking sector has thus served as a "racial fix" for labor issues which threatened to impede production and corporate profit in the meatpacking sector. As asserted by Carrillo (2021:642), "race and racism are mechanisms for circumventing the barriers that slow the speed of production." First, the "racial fix" to unionization

and labor shortages was through the recruitment of undocumented workers to work in a sector that is plagued with worker safety issues. Then, following ICE crackdowns and immigration reform, meatpacking firms transitioned to a reliance on refugee labor. This “racial fix” is aligned with racial capitalism, in that the labor of marginalized people is necessary to upholding capitalist production and it is through devaluing and exploiting difference that the ToP persists (Pulido 2017; Carrillo 2021). Rather than addressing labor issues with the meatpacking sector, firms were able to leverage racialized differences to their advantage. As many refugees come to the United States with histories of trauma, including political persecution, spending extended periods of time in refugee camps, and escaping war, their expectation of working conditions and worker safety can differ from native born citizens. In turn, companies exploit these differences to their advantage to normalize unsafe and risky working conditions— enabling the ToP to continue.

Language barriers and issues with JBS’s disease mitigation strategy.

Multiple interviewees identified language barriers as a central challenge to sharing information with workers about COVID-19 mitigation strategies, and, subsequently, in workers receiving information. This was not unique to the JBS plant in Greeley: in Nebraska, only 44% of meatpacking workers had been informed about how to wear and clean for masks (Herstein et al. 2021). Thomas, an industrial hygienist, identified language barriers as the key challenge for enhanced worker safety.

The biggest challenge in a plant like that, in terms of safety and health is that you know, you may have 50 different languages spoken in one of these plants. And if you're a safety and health manager responsible for a workforce that speaks 50 different languages, including, you know, Swahili, it's like, how are you going to do training for these workers? And how are you going to make sure that they understand, you know, what they're supposed to do in terms of this fast-moving pandemic? So, I think the biggest challenge is just getting the information out in a way that people can understand it.

The diversity of workers, and a lack of established measures for communication, amplified challenges to information dissemination and accessibility of information during COVID-19. Due to language barriers and issues of procedural justice, many workers had limited access to crucial information about their rights, safety regulations, or available resources.

According to the Census Bureau (2020), the top language spoken nationally by meatpacking workers are Spanish (65%), English (5%), Vietnamese (2.4%), Karen languages (2.3%), Cushitic languages (2.2%), and other (22.8%). Although some workers speak Spanish, many speak other languages including regional dialects. In the JBS plant, the diversity of languages spoken by workers was a major challenge for Ari, a worker, who noted:

You've got people with a less maybe less than a middle school education. Some of them didn't even speak Spanish. They spoke the dialect. And I couldn't even properly communicate with any of the Asian or African workers. I can only speak English and Spanish.

Later, she provided more details about communication barriers.

What happened was, they had put it on us. The people in line just checking temperatures, because that's what I was advised to do. They put it on us to send people home. And tell them 'no, you got to go home' or 'no, you gotta go test'. And they would give us a piece of paper to hand to them. That piece of paper was in English. I even offered to translate. One lady in particular came to me and she's like, I don't— she told me in Spanish. 'I don't speak any English. I don't know what this says. I don't know what it says and I have nobody at home to read this.' And I then told my one of the supervisors, she was the nurse supervisor. I said, 'do we have this in Spanish?' She's like, 'No, that's all we got.' And I'm like, well, like 'we can translate this'. No, that's just what we have.

Throughout her interview, Ari expressed concern about the gaps related to the reliability of the temperature checking and questioning process and the lack of language accessibility. Although Ari was bilingual and was able to communicate with workers in Spanish, despite not being explicitly instructed to do so, this was not the norm for screeners.

Ari's concerns were echoed in a publicly available affidavit written by Sarah Jean-Buck, a temporary worker who was hired for temperature screening at JBS ("Affidavit of Sarah-Jean Buck" 2022). In the affidavit, Sarah stated:

Donald and Cecilia [my supervisors] explained that my job was to have employees walk through the camera, take their mask off, and then when they got to me, I would give them a mask if needed. I was not given a training manual or list of instructions. I was not instructed to ask anything. A week or so into working at the JBS screening, it occurred to me that I should probably ask each employee questions like whether they were feeling okay, had been sick recently, or were experiencing common COVID-19 symptoms. So, on my own, I started asking employees whether they had a cough, fever, chills, or shortness of breath in the last three days. Donald remarked that this was a good idea, but also said I should just ask an employee if they were feeling okay with a thumbs up as so many of them did not speak or understand English. There were no materials in languages other than English.

To achieve procedural justice, employees should understand the procedures in place for various aspects of their work, including safety protocols, reporting mechanisms, and processes related to health screening. At the JBS plant, a failure to address language barriers in the screening process obstructed procedural justice, in that workers were not provided with information in a language they understood. Because employees were not provided with the opportunity to voice concerns or issues related to their health, nor were testers trained to ask follow-up questions to employees, efforts to accurately assess symptoms were limited in their efficacy. Despite Sarah raising concerns about language accessibility to management, nothing was done. She stated:

I was not told to ask any questions. I was only told to check an employee's temperature and give them a mask. English is not the main language for a lot of JBS employees so even when I started asking questions on my own accord, it is not likely most people understood what I was saying. JBS instructed me to get a thumbs up or down, but the workers did not give thumbs down. I still do not think they understood what we were doing. There was a sign before the tent with questions about symptoms, but it was only in English with a few pictures. I asked Donald and Cecilia about providing questions in other common languages spoken at the plant, but they said there were too many languages to try to do that. ("Affidavit of Sarah-Jean Buck" 2022)

Both Ari and Sarah experienced similar difficulties in completing their job due to a lack of language accessibility and limited training. Furthermore, both accounts documented other issues associated with the temperature and symptom checking process, including faulty temperature guns, the inability to probe workers about their symptoms, and insufficient access to PPE.

During our interview, Ari described the process of temperature checking, asking workers about symptoms, and providing masks.

There was a tent outside. People would form a line. We were at a table. I was at a table, we had a computer, that thermometer and a chair. People would walk down through the tent and the line there was taped to show social distancing. That was the biggest thing we did have to constantly remind people. Usually, it was men that gave us a problem rather than the women to make sure that they social distanced. And then we would just read them the basics. 'Are you experiencing any symptoms?' And then 'no', and then offer them a mask. And some people would ask me for more than one. And I would just give it to them. And that's when I found out that once they were inside, they weren't given any more, they would get wet and weren't replaced. And little by little people just started to talk to me a little bit more. I mean, I started to get concerned when people were asking me for like, five, six masks at a time.

Here, Ari also identified concerns related to the provision of PPE for workers once they entered the plant; PPE was that was key to reducing disease transmission. Later in her interview, Ari also documented other issues associated with JBS's COVID-19 response, including who was responsible for sending workers home. Rather than management informing workers about next steps when they were symptomatic, including how and where to access testing, it was the responsibility of temperature screeners. In turn, this created issues related to a lack of workers reporting symptoms to screeners, due to fear of missing work. Ari stated that:

They [workers] knew that I couldn't let them go to work. So they just would kind of nod [when I asked about symptoms]. And then just keep going. You know, nothing. They would say 'nothing', 'nothing' to let me know that they don't have symptoms. And then the stuffy nose. 'Oh, allergies'. I can't argue with them... they live paycheck to paycheck. I mean, of course, they're gonna lie. I'm sure there was tons of people going through that line who had symptoms. And who should have been in quarantine.

Ari also explained that when JBS stopped paying for testing in the summer of 2020, it was also the temperature screeners' responsibilities to tell workers that they needed to go through their insurance or pay a \$100 test fee. However, at least 14 percent of workers in meatpacking plants don't have health insurance (Blumberg, Corlette, and Simpson 2020). In her affidavit, Sarah stated that when workers found out they had to pay for a COVID-19 test, even after complaining of symptoms, that they *"changed their mind once they hear they need to pay, saying some excuse like 'it is just my sinuses acting up'"* ("Affidavit of Sarah-Jean Buck" 2022).

In addition to issues associated with reliability of symptom reporting, Sarah described problems associated with the temperature-taking process, including faulty temperature guns:

The temperature gun did not work. It would provide only the same few temperatures over and over again. Sometimes, it would register the exact same temperature for many people in a row, which is not realistic or accurate. I would say to Donald something to the effect of "this is not working, it is reading the same temperature for the past ten people" and he would respond something to the effect of "oh you're on a streak, it's fine." And I would say no, we are not all the exact same temperature. The issue with the temperature gun was consistent throughout the time I worked as a screener, which was approximately two months. My final week at JBS, around mid-July, the first digit on the temperature gun would not display. I accidentally broke the gun when I dropped it on the ground. It had lines on the screen but should not show you the full number. For example, you might see .3 but you wouldn't know if the temperature was 100.3 or 97.3. JBS would not replace it because Cecilia thought it was sufficient that you could kind of see the temperature reading. But it was broken – I know it was broken because I broke it. ("Affidavit of Sarah-Jean Buck" 2022)

Faulty temperature testing benefited JBS in that workers were not adequately screened, and thus continued to work, while perpetuating issues of worker safety and worker vulnerability. Even when workers had high temperatures, management evaded their responsibility to test workers, finding excuses for high temperatures, in favor of having them continue to work. Accounts of faulty temperature screening demonstrated that despite JBS implementing safety measures, the reliability and validity of these precaution was inconsistent.

Furthermore, because workers were not provided with language inclusive and accessible materials related to the screening process, they were denied the opportunity for meaningful health protection. Instead, faulty temperature testing and a performative screening process benefited JBS at the cost of ensuring worker safety. The combination of economic and social vulnerability, a culture of fear, lack of protections, and systemic issues in the industry amplified the disproportionate impact of COVID-19 on meatpacking workers and revealed the intersection of racial disparities and capitalist exploitation. Public health policies reified economic power, codifying ToP interests and practices into policy, all while exacerbating issues of worker vulnerability and exploitation (Lynch, Stretesky, and Long 2020). Labor exploitation, enabled by a weak regulatory framework and limited meaningful safety precaution, highlighted how the industry prioritized profit over worker safety.

Next, I turn to a discussion of workers' compensation and how the workers' compensation system is limited in its ability to compensate workers for work-related injury and illness both prior to and during COVID-19.

Disposable yet Essential: Labor Rights and Workers' Compensation

In the United States, workers are eligible for worker's compensation—e.g. financial and medical benefits—when injured, suffering from an occupational disease, or otherwise impaired by their workplace. Workers' compensation benefits often include coverage for medical expenses, lost wages, vocational rehabilitation, and survivor benefits in case of death (CDLE 2023a). Worker's compensation typically operates on a no-fault basis, meaning that employees are entitled to benefits regardless of who is responsible for the injury or illness. Although there is a federal worker's compensation system under the Department of Labor (DoL), the regulations and penalties differ across states. Variances in state policies include which workers are covered, the terms of

worker's compensation insurance, and penalties for companies who do not have worker's compensation insurance. Furthermore, not all employees are covered under workers compensation: including contract workers, casual employees (workers who do not have a set number of hours), and, in some states, agricultural workers (Johnson 2022).

In Colorado, workers' compensation is administered by the Division of Workers' Compensation, which oversees claims, resolves disputes, and ensures compliance with state laws and regulations. Moreover, all businesses are required to have workers' compensation insurance, regardless of the number of employees, the hours worked (e.g. part time employees), and if employees are members of the same family (CDLE 2023a). Companies get worker's compensation insurance from private insurance firms, similar to the system of auto insurance and medical insurance or can self-insure if they have more than 300 employees and assets of at least 100 million dollars (CDLE 2023a).

When an employee is injured at work, the employer must: provide a list of designated providers, report the injury promptly⁵ to the workers' compensation agent, conduct an accident investigation, and collaborate with the insurance carrier on (CDLE 2023b). Employees, on the other hand, need to report the injury within 10 days in writing, seek care from the designated provider list, file a claim within two years of their injury, and respond to the employer's liability claim, typically with the help of a workers' compensation attorney (CDLE 2023c). If the claim is approved, workers can receive reimbursement for medical costs, lost wages, and, in cases of impairment, receive monetary compensation based on the level of impairment. In fatal workplace accidents, workers' compensation provides payment to surviving dependents and spouses and covers some of the funeral costs (CDLE 2023c).

⁵ Injuries must be reported 1) within 24 hours in the case of death or if three or more employees were injured in the same accident or 2) within 10 days if these terms are not met.

The workers' compensation system is complex and can be difficult to navigate for workers; especially those who are foreign-born, in precarious working conditions, and often not informed about the necessary steps and procedures required to successfully receive workers' compensation. Beyond this, management has been reported as questioning the legitimacy of workers' compensation complaints, stemming from broader U.S. discourse that paints immigrants as "cheating the system" to gain economic advantage and social mobility (Broadway and Stull (2008). Although workers may hire an attorney who assists with navigating the system, and represents them throughout the claim process, language barriers can pose a significant barrier to finding representation. Moreover, companies like JBS are able to leverage policy and procedural loopholes to their advantage: hindering the ability of workers to receive workers' compensation.

Interviews with workers' compensation attorneys provided insights to challenges in the workers' compensation system, describing the system as a battle of "*David vs Goliath*", "*frustrating*", "*disheartening*", and as a "*game of leverage*". These sentiments were expressed by workers' compensation attorneys, workers advocates, *and* other occupational experts. In my interview with Thomas, an industrial hygienist, he identified numerous ways that meatpacking companies leverage policy loopholes to their benefit, at the expense of workers' safety. He stated:

The kinds of things that you saw the meatpacking industry do.... I'm not even referencing a single company. But what you saw them do was they would do things like send a person out for surgery in the morning, and then bring them back to work that same day, on a different job in order to not would have to report this injury. So if they could bring that guy back the same day, they didn't have to report the injury. It was like all of these... almost cheating the rules to make sure that their injury rates were not, you know, that they remain below the radar. [It is] really just egregious in the way they treated workers and injured workers.... That's the best case... the other way is, you have a worker who has a problem. These workers are pretty easy to get rid. Pretty easy to replace. This whole disposable worker sort of philosophy that has been prevalent in meatpacking since the beginning.

In addition to identifying how the meatpacking industry skirts workers' compensation regulations, including reporting injuries, Thomas identifies the underlying philosophy of workers being

disposable and replaceable that inform company behavior. These sentiments illustrate patterns of racial capitalism; where workers are largely disposable when their labor power becomes thwarted due to injury and other occupational illnesses.

Elaine, who has been representing JBS workers for decades and was described as a “*crusader*” by her colleague Ron, provided further insights on how companies like JBS evade workers’ compensation claims and legal accountability. These tactics included referring employees to an “Active Release Therapy” (ART) chiropractic program rather than medical treatment, providing on-sight treatment to workers through an in-house clinic, delaying providing information to her firm related to her clients’ cases, and utilizing racial and cultural differences to JBS’s advantage. In one example, Elaine described how one of her clients had been hit by a forklift twice while on the job. Yet, she was derailed into the ART program for 10 months, rather than directed to a doctor to receive care for her back injury. Deferring workers to the ART program not only neglects necessary medical treatment but is used as a tactic to limit the ability of workers to provide documentation of their injury and delay medical treatment. It also serves as a tactic to limit the reporting of injuries to OSHA, in that workers receive care for “*alteration and discomfort*” rather than workplace injuries. In turn, this impedes the ability of workers to receive workers’ compensation.

Ron also noted that workers are not often aware of their rights and are encouraged to keep working, visit the in-house clinic, and not report workplace injuries. He observed:

They [management] intimidate the workers to come forward on the injuries in the first place. And falsely educate... There's not even somebody there... if you get off the line, to be able to talk to somebody, the person that you're being taught to, has either been taught, or just doesn't understand that you can go see a doctor... The natural first instinct is ‘no, get back on the line, continue to work’, ‘oh, if you've got to see, buddy, you know, if you go see a doctor, you're gonna have to pay for it out of your pocket’. So, once they make that doctor selection, the claimant can go schedule that doctor's appointment, but they are led to believe in the health clinic, well, that's something we'll do for you. They don't do it. They

keep either just keeping them on this ridiculous icing program, until the claimant complains enough and says, 'I want to see a doctor', and then they finally get to, or they put them in this ART thing. And... they don't know it's chiropractic care. They don't know what they're getting. They don't, at least the ones were asking recently, they don't know what specialties or skills that people have in that health clinic. They don't know if they're nurses, they don't know if they're doctors.

Like the culture of fear that prevents workers from reporting safety concerns, workers are reluctant to report injuries. Racial and ethnic differences benefit JBS, as workers have limited knowledge about their workplace rights, including a right to medical treatment. For those who do report injuries, miseducation and lack of transparent information about available medical care and recourse for injuries hinders their ability to receive necessary care and subsequent compensation. These are just a few examples of how companies like JBS leverage procedural injustices to their benefit; not only reducing records of injuries but the ability of workers to receive compensation for workplace injuries.

These stories of procedural injustices were not only expressed by Elaine and Ron, but all of the workers' compensation attorneys I interviewed. They detailed the difficulties in receiving information from JBS about injuries, medical records, and other necessary information to successfully file a claim with the Workers' Compensation Division. Elaine reported that the process of receiving information can take "*hundreds of hours*" and the discovery process can take years, delaying compensation to workers. Ron echoed this, stating that the most difficult aspect of this process is receiving information from JBS. He commented:

I think the largest, most difficult thing is that... there is this acceptance of we don't have to give you everything. Yeah, we don't have to tell you what's going on... we don't have to tell you which doctor is the supervisor at the in-house clinic, which is required by the state if there is one. We don't... have to tell you the credentials of the people providing treatment. We don't... if you have a repetitive motion issue, and you're supposed to be on quarter count, meaning that you're supposed to be 25% reduced. We don't have to give you the chain speed to prove that we are following doctor's orders or anything like that. Like there's this air of, we don't have to show you.

The difficulties in receiving information from JBS, as well as the diversion of workers to in-house clinics and chiropractic care rather than medical treatment is a clear example of procedural injustice. Moreover, given that the attorneys identified workers are not aware of their rights to receive medical care, or even the qualifications of those who are treating them, there are procedural injustices embedded within multiple stages of the workers' compensation process. These injustices benefit JBS, at the cost of timely workers' compensation payment or even payment at all.

Furthermore, when there is a dispute between the injured worker and the insurance carrier about impairment and compensation, workers must initially pay out of pocket for a Division Independent Medical Examination (DIME). As many meatpacking workers are low-income, this cost poses a significant barrier to contesting the insurance carrier. Richard, a workers' compensation attorney, described how JBS denies claims based on perceived injury level and uses their economic power to their advantage, hiring physicians and expert witnesses who represent firm interests during the claim process. He stated:

They'll deny stuff. And they'll deny stuff based on medical reasons, not that the injury—not that the event didn't occur, but that the event either didn't cause an injury or the event didn't cause an injury to a particular body part. And that's when injured workers get—it gets very challenging for them. Because the insurance companies, you can imagine, can afford to send... the injured worker to a doctor who will say that. Oftentimes, the treating physicians might just go along with it. And then the injured worker is faced with ... if you want to fight it, you can but you have to get a doctor and that's going to be \$1,000 to \$2,000. Which is a lot of money.

The precarious economic position of workers serves as a clear benefit to JBS, a multi-billion-dollar company, thwarting workers' abilities to contest claims, seek alternative medical care, and even limiting the reporting of injuries in the first place.

These cases can span years of litigation and as reported by my interviewees, typically result in settlements. Ron described the settlement process as the following:

I tell everybody who settles... with JBS... there's going to be a number that's going to equally piss you off as much as it's going to piss JBS off to write the check. So, you're both going to be unhappy in the situation. Understand that from the get-go. The second thing is... and I say it during intake, which is, you're not going to get much money from this. The goal for us is to try to get you as much medical treatment as we can. But the little, the puny amount of money that you're going to get at the end of this. I need you to be ready to put it somewhere else so that you can make a living somehow, without having to go back there. So if you like graphic design, check out what it costs to go to UNC or AIMS and figure out what it is. And hopefully, we get you enough money to pay for that. Pay for some bills along the way while you're doing it. And you can get the hell out of this bad abusive relationship that you're in. And to me, that's the success.

Here, Ron expresses not only the limited money workers receive from workers' compensation, but the importance of workers investing the money into securing alternative modes of employment. Deeming the relationship between JBS and workers as an "*abusive relationship*", he highlights the exploitation embedded within meatpacking work. Workers' compensation is merely one mode where this labor exploitation is illustrated; alluding to the devaluation of workers lives far beyond cases of injury and impairment.

As illustrated across these narratives, the workers' compensation system is plagued with issues that benefit firms like JBS, at the cost of worker wellbeing. JBS has capitalized on the precarious economic position of workers and has leveraged racial and cultural differences to their advantage, benefitting from a culture of fear, lack of transparent information about medical care, and a complex workers' compensation system. Procedural injustices are rampant: from directing workers to chiropractic care rather than medical treatment, underreporting issues, and withholding information from attorneys to reduce the likelihood of successful claims. These issues provided an important backdrop and context to workers' compensation cases during COVID-19: an unprecedented public health crisis with no unique OSHA standards, further compounding issues of worker justice.

Workers' Compensation in the COVID-19 Era

Across my interviews with worker's compensation lawyers and DoL officials, all interviewees highlighted the difficulty workers faced when applying for worker's compensation due to COVID-19. Many of these barriers centered on the difficulty in tracing the point of exposure back to the workplace, which was a unique condition of COVID-19. For example, Charles, a DoL official, highlighted the difference between occupational illness and occupational injury:

We had an enormous number of COVID-19 claims filed as a result of COVID. So, it's not an injury in the traditional sense. It's what we would call an occupational illness. That's an illness that you contracted in the course in scope of your work, that normally traditionally, we're talking about things like asbestosis... things that [impact] you [if you] work in a factory. You got exposure to this, and you got this disease and, you know, COVID, it's very different in that it's not just a work-related exposure.

In other cases of worker illness and injury, including amputation, carpal tunnel, or repetitive motion injuries, workers and attorneys can more easily argue that the workplace has resulted in short or long-term impacts requiring compensation. Even then, worker's compensation lawyers face difficulties, as I discussed above. During COVID-19, though, exposure was not limited to the workplace and instead could have occurred in the broader community. In this way, COVID-19 became a contested workplace illness, due to difficulty in establishing the point of exposure. This became a central defense of JBS when negotiating workers' compensation related to long-term COVID-19 impacts, including fatalities.

Proving workplace exposure was difficult, as described by Richard, an attorney. He detailed how the primary contestation to COVID-19 related claims was identifying the point of exposure as the workplace. He stated:

The primary defense was, well, it's a global pandemic, everyone's getting it everywhere. ... it's not, like, it just can't be shown that the person, your client caught it here... We have to look at a number of things in order to, to prove our case. So one of the things that we're looking at was, was okay, what are our clients doing when they're not working? Are they going out to parties?... Did they go to New Orleans for Mardi Gras, where a bunch of people came down with it in 2020, etc. So, they have to kind of show where they were,

what they were doing outside [of work]. Number two was, was there anybody in the family who got it before they did? Because if they got it after they did, then we could say, well, yeah, you know, the spouse, the children got it, because Dad came home with it, right. But if it's the reverse, where mom has it, or kids have it before, then that tends to support that the infection probably occurred at home. And then the third thing that you kind of have to show is exposure at work was very different than... going to the store, right? When you go to the store, it's a big crowd, you're not with the same people for hours of time, etc. And then finally, have to show that there were other people in that same department will also start coming down with symptoms, preferably, on again, before and after, you know, so those are kind of some factual things that went into it.

Because COVID-19 transmission was also occurring in the broader community, and not just workplaces, significant proof was necessary to demonstrate the point of disease contraction. As detailed by Richard, this included: 1) documenting activities outside of work; 2) assessing family disease transmission; 3) contrasting work-related exposures with broader community exposure; and 4) contact tracing with fellow employees and workers to document workplace, rather than community, spread.

Olivia, another worker's compensation attorney, echoed the experiences of Richard when she detailed the steps she took to prove COVID-19 workplace exposure. Although she initially thought that the process of qualifying for worker's compensation would be easy due to the documented outbreak at the JBS plant, her experiences proved to be challenging. She recalled:

When I was contacted by these employees, I actually thought this was going to be kind of easy. Right? Because once you can kind of isolate the workplace as the exposure point. It should be pretty easy for the insurance carrier to admit liability. We have the lowest burden of proof under the law. In comp, we have to prove exposure by a preponderance of the evidence. And that means, in layman's terms, that we only have to convince a judge that it's more probable than not that the exposure happened on the job. So that's like 51%. If there's... we don't have to beyond a reasonable doubt like beyond 99%... we just have to make it seem more probable than not that the exposure happened on the job.

So that seemed pretty self-explanatory to me at the beginning of taking on these cases, of course. Our courts did not see that clearly, and actually did make us get into proving the particular exposure for each particular employee, which I guess makes sense on an individual basis. But when you have the scale of the outbreak at JBS, and you excluded the home environment, right, if you show the spouse doesn't have COVID, that the other people who live in the house didn't have COVID. You show that the employees at that time were

under a stay-at-home order. So, people couldn't really even go to grocery stores during that time or wouldn't have been going anywhere socially. So, you exclude those possibilities for the exposure. And you have a documented confirmed outbreak through CDPHE at JBS. That was the route we took.

Stay-at-home orders, documented COVID-19 outbreaks, and the proof of exposure by preponderance of the evidence enabled Olivia to successfully settle several of her client's claims. It did take considerable effort and time, though, and many of the barriers faced in general workplace compensation litigation were intensified during COVID-19. This included the obstruction of information about the extent of COVID-19 outbreaks at the plants from JBS, which Olivia described as a game of "*hide the ball*":

With JBS in particular, they played hide the ball, most the time. We had to have multiple motion hearings to force them to turn over documents to me... we do something called discovery where we ask and we send in a lot of written questions to our opposing party, and they have to answer them under oath and they have to produce documents. That's generally called discovery. JBS obstructed. That was their basic game was to obstruct our request for information, which we then would have to go back to court and compel them to do over and over again, to play, hide the ball and not give us the information that we wanted.

Later, she detailed the information she was requesting from JBS: information that was critical to proving workplace exposure.

We were interested in the dimensions of the plant, specifically, because you have medical expert testimony who's going to testify about how far the aerosols will travel when you when somebody talks... So, we wanted the dimensions of the plant to get into the ... crowding of spaces... times when breaks would occur, how people enter the building. There's a tunnel, where people enter JBS, the specs of that, how many people would be in that plant at certain time. Whether or not JBS knew that there were employees who had tested positive for COVID, where those employees worked... You have to be kind of careful because the plant can't disclose any identifying health information. But... we refer to them in generic terms where people were at the plant at a given time, whether they tend to test positive, [and have] contact with our particular clients. CDPHE required employers to notify them. We called it an outbreak if there were two cases, two cases within two weeks, two cases confirmed. So CDPHE actually kept stats of that when employers notified them that they had positive cases. And so, I wanted, every time JBS reported those cases to CDPHE. What PPE was provided when? Those kinds of questions. What cleaning protocol was undertaken?

Ultimately, Olivia did receive the necessary information to prove that her clients had, in fact, most likely contracted COVID-19 at JBS. However, JBS's obstruction of key information required multiple hearings, and leveraging information that was mandated to be reported to CDPHE. Rather than going to trial, all of Olivia's and Richard's JBS COVID-19 worker's compensation cases were ultimately settled, even in the cases that were initially denied.

Interviewees also documented that worker's compensation cases were delegated to the most severe COVID-19 cases, including long-term impacts and death, rather than short-term. This was due to the barriers in the settlement process, high rates of COVID-19 compensation disputes, increased community spread that increased difficulties related to establishing workplace exposure, and, following action by the DoL, JBS's ultimate purchase of a short-term disability policy that covered wage loss due to COVID-19. For the workers and families of workers who did pursue worker's compensation, the length of time for claims to be approved impacted their ability to cover medical care, funeral costs, and other expenses. Initial denial of claims further compounded this, with families such as Saul Sanchez's, the first worker at the JBS plant to die from COVID-19, having to endure not only the loss of their loved one but a lengthy battle for justice (Fendt 2020). Not only were families seeking payment related to funeral costs, lost wages, and medical costs, but accountability for JBS.

However, the confidentiality clauses of the settlements eliminated the ability of workers, and their families, to share details of their cases. In turn, this reduced media attention and the spotlight on COVID-19 in the meatpacking sector at the time. In my interview with Olivia, she highlighted the impacts of these confidentiality clauses, as well the continued denial of firm liability:

If you're settling out of court with a confidentiality clause— all of the settlements, by the way, denied liability. So there's no judicial findings of liability... They're confidential. So

[it's a] difficult situation. I think, when you're a disadvantaged, injured worker, and you're offered a good sum of money to settle a case. I think it's another way that big corporations or large money entities kind of get what they want. It discourages litigation, I guess, because it's hard as a disadvantaged person to turn down a large sum of money.

Power dynamics, then, shape not only working conditions within the plant but discourage litigation against firms. Furthermore, the denial of liability set an important precedent for other cases; enabling JBS to evade responsibility despite their inconsistent approach to disease mitigation. Like other contested illnesses, establishing a point of exposure benefitted firms in that they were able to deny responsibility. The precarious economic position of workers thus benefits firms both as a mechanism of labor exploitation and as a means to hinder legal recourse in cases of severe injury or impairment.

Although a presumptions bill, based on the claim that an employee's exposure to, or contraction of, COVID-19 is work-related or is a compensable injury or disease, was introduced to the Colorado General Assembly in 2020, it ultimately did not pass (SB20-216). This bill would have increased the ability of essential workers, like meatpacking workers, to successfully receive workers' compensation. Even prior to COVID-19, the workers' compensation system was plagued with procedural justice issues that hindered the ability for workers to receive monetary compensation for impairment and delayed medical treatment for injured workers. COVID-19 further illustrated the weaknesses in the current Colorado workers' compensation system for meatpacking workers, due to the difficulty in establishing the plant as the source of infection, as well as no specific OSHA standards for COVID-19 transmission. Not only were workers coerced to maintain working through the Executive Order, company incentivizes, and limited sick-pay policies, but those who lost their lives or suffered long-term COVID-19 impacts endured a lengthy battle for economic justice.

The workers' compensation system thus serves as an arm to enable the perpetuation of worker exploitation with little legal recourse; illustrating how racial capitalism operates across institutions. The state continues to facilitate the production of harm in the meatpacking sector through the regulatory apparatus; enabling issues of procedural justice to persist without meaningful intervention. Prior to COVID-19, workers struggled to receive compensation when injured or impaired in the workplace due to the procedural injustices embedded within the workers' compensation system. These pre-existing issues were further exacerbated during the pandemic, as COVID-19 became a contested workplace illness. Meeting the criteria for COVID-19 as an occupational illness was difficult, due to the nature of the disease and its spread throughout the community, versus being an isolated occupational illness. Contesting the workplace as a site of exposure, despite JBS being an outbreak site in the early months of the pandemic, coupled with a culture of fear, a precarious structural location, and the obstruction of information from JBS, limited the success of workers' compensation claims (and likely, reduced the number of claims made at all).

While workers have historically not reported issues associated with labor exploitation, including protesting workers' compensation claims publicly, COVID-19 presented an imminent safety threat that required organizing in the absence of federal, state, or local directives to enhance worker safety. Next, I turn towards a discussion of worker organizing during COVID-19.

Worker Organizing in the Face of COVID-19 and Beyond

The unprecedented risks of COVID-19, and the widespread fear surrounding infection, mobilized meatpacking workers, their families, and broader community members to advocate for increased workplace protection and safety mechanisms. Although workers are routinely exploited through low wages and hazardous working conditions, COVID-19 amplified workplace risks and,

in turn, highlighted the historical lack of worker protection. Anonymous reports from workers, shared by two of my interviewees, detailed growing resentment towards JBS and the need for mobilization in absence of firm, local, state, and federal action.

Workers explained that JBS's priority was production, rather than their safety. For example, one worker stated:

It's been like they don't care. We have families. I have my kids. They're grown but I have a grandson. My mom is ill, my grandma's ill. I can't afford to be ill because they want to keep production going. That's not fair. They're saying \$600 bonus, stipulation is you have to be there and you can't call in. Our union reps aren't there. There were papers in the locker room because they're not essential workers. So that's not fair. There's a lot of people, ladies, a bunch of ladies and men. It's not fair. We have families. We need to work but our families are our priorities.... They should put our safety first because without us, there is no production. Nobody. Without us, they can't push that product. We should be their priority as their employees. It's not fair.

As this worker recognized, without their labor, production would be thwarted. However, rather than offering meaningful protections, including sick leave and a more generous absentee policy, workers were incentivized to continue working through bonuses. Structural constraints, including being the primary source of income for their family, limited the ability of workers to take off work. Again, the precarious economic position of workers was utilized to the advantage of firms like JBS, and was bolstered by a largely absent federal, state, and local government.

Other workers echoed this idea of their work conditions being unfair and the need for workers to act in the face of mistreatment and what they perceived to be an absent union. For example, the spouse of one worker reported:

They don't care about our people. All they're doing is worrying about themselves, production, getting the meat out, sending it around. They don't care about our people suffering to keep that place going... The union ain't doing nothing for these people. I tell my husband 'Get people together, a job can be replaced'. But your family can't. Walk out. You can replace your job. I know that there's a lot of people there working undercover with no papers... Somebody needs to help these people out. The people we're turning to is Channel 7 and other resources.

Again, claims made by workers center on the prioritization of production, rather than people. In the absence of firm action and union intervention, workers turned to media sources and local advocacy groups to spread awareness and demand for change. Both community organizers I interviewed spoke about the growing number of messages and calls they received from not only JBS workers, but their family members. They described workers as being “*afraid to work*” yet “*afraid not to work*” and detailed the early stages of worker activism and the role of local groups in mobilizing workers. Furthermore, although workers described the union as being absent, news accounts highlight the advocacy of the UFCW Local Chapter 7, including filing a grievance related to work conditions, the need for PPE, and speaking to the media regarding the conditions experienced by workers during COVID-19 (Bradbury 2020; Fendt 2020). In my interviews with union representatives, both identified that the union played a key role in pressuring OSHA to inspect the plant and played an intermediary role in communicating with workers about how to call in sick to HR.

Sofia, a local organizer, also described how in the beginning of the pandemic, community members and advocates showed support for JBS workers by standing outside of the plant. She reflected:

We were there first day. And we got some fist pumps from the workers. And the next day, they [JBS] put those big semi-trucks in the front so that the workers couldn't see us. We could see the legs coming out, you know, going outside, take a smoke, or whatever. And we would just get loud. So, they know we were there. [It sent a message] we're here.

Although she identifies that JBS attempted to shield workers from community members who were engaging in activism, and the subsequent mobilization of workers, their efforts were futile. On April 1st, 2020, following the announcement that 10 workers had contracted COVID-19, 1,000 workers walked off the job (Elk 2020). This walk-out was one of the largest mobilization efforts of JBS workers at the Greeley plant to date and traversed beyond racial and ethnic divisions.

For example, while 200 Somalian workers walked off the job in September 2008, in protest of a lack of religious accommodations, the COVID-19 walk-out was not limited to Somalians workers and spanned across worker positions and racial and ethnic identities. Not only did workers became more aware of their bargaining power when they act collectively, but also how to mobilize a large number of workers. Maria explained how workers communicated about the walk-out while on the line:

It was both Somalian and Latino [workers]. Word kind of traveled down the line, like, 'Hey, we're gonna walk'. There's a specific shift... I think it was during the day. So, it was A shift. And so, they got together [while] working next to each other. And they all told each other, 'We're going to do this, we're going to walk out at such and such time, on break time.' So when they go out to break, they all started just [leaving], we're not going back. ... they sent me pictures from inside the plant where there was nobody on the line.

Maria described the walk-out as *"unheard of"* and *"beautiful"* and as a critical component of workers spreading awareness of poor working conditions not only locally, but nationally. As a result of the walkout, employees received increased PPE provisions and sick pay when quarantined for COVID-19. Importantly, action was not limited to the walk-out. Family members, like those of Saul Sanchez, and workers themselves shared their story with first local and then national newspaper, drawing attention to poor working conditions and demanding justice. These stories spanned beyond the JBS plant; drawing national attention to the risks experienced by workers during COVID-19 and prior to the pandemic (Chang et al 2021; Honig and Genoways 2020; Goodmin 2021; Klemko and Kindy 2020).

Furthermore, these collective efforts made it difficult to ignore the hazardous conditions experienced by meatpacking workers, which Maria reflected as being the historical tendency.

I can see how some people might not care about what's going on at JBS because likely those people are the minority. So those people, the othering, makes it easy to really not discuss, not think about or advocate for. I bet that if they were half of that population were white, it would have been different.

Racial capitalism benefits not only firms through the process of devaluing individuals based on their racial and ethnic status, but broader societal silence on labor exploitation. Although racial and ethnic differences, and processes of “othering”, have historically enabled community members and consumers to ignore the risks faced by minoritized workers, the collective fear of COVID-19 was an advantage to garnering public attention to poor workplace conditions. While the racialization of workers and the devaluation of their lives in a system of racial capitalism has enabled the evasion of public recognition of the risks experienced by workers, COVID-19 was a unique opportunity to increase awareness.

Although structural constraints, including citizenship status, limited economic opportunity, and a subsequent “culture of fear” have limited meatpacking worker organizing, the 2020 walk-out is an example of what workers can accomplish when they mobilize and work together. Successful worker organizing poses a threat to production and profit and, instead, places power on the worker rather than the firm level. Perhaps, it is collective mobilization which holds the potential to combat racial capitalism and the devaluation of minoritized workers. Although racial and ethnic divisions amongst workers may hinder collective mobilization, in the face of an omnipresent public health threat, workers successfully acted and increased wages, sick pay, and enhanced their ability for future mobilizations. When workers act together and showcase that it is their labor which sustains the current mode of production, firms concede to their demands. The ability for workers to improve their working conditions would be further bolstered by a more involved federal government, including OSHA, and a reduced ability for firms to implement policies that benefit their economic interests rather than the interests of workers, animals, host communities, the environment, and even consumers.

Conclusion

In this chapter, I documented how structural inequalities and historical legacies of racial exploitation shaped the experiences of meatpacking workers prior to and during COVID-19. Scholars have documented the intentional recruitment of minoritized workers into meatpacking plants; a population that industry targeted due to hazardous working conditions, high rates of employee turnover, and lower rates of worker organizing and unionizing compared to their white counterparts (Broadway 1998; Chang et al. 2021; Freshour 2017; Frydenlund and Dunn 2022; Johnson-Webb 2002; Krissman 2000). Building upon this research, I assessed the recruitment of marginalized workers into the meatpacking sector in Greeley and beyond and highlighted how narratives surrounding the recruitment of workers normalize this sector as being ideal for immigrants and refugees due to their “skillset” and “work ethic”, rather than a reflection of racial capitalism. I described how those who have been constructed as the most economically and socially vulnerable are also the most valuable in the meatpacking labor market, illustrating a fundamental paradox of racial capitalism (Pulido 2016; Pulido 2017; Sze 2020).

Second, I documented the poor working conditions experienced by meatpacking workers and the subsequent impacts on their psychological and physical wellbeing. Although the impacts of meatpacking work on workers have been well-documented (Broadway and Stull 2008; Broadway and Stull 2010; Eiznitz 2009; Muller 2018; Pachirat 2011; Porcher 2011), I assessed how poor working conditions intensified the impacts of COVID-19 on workers. I argued that the racial and ethnic demographics of workers serves to uphold corporate profit and the current mode of production; reflecting an institution upheld by the dynamics of racial capitalism and by the state (Freshour 2017). The social and economic context of labor of minority and immigrant workers was exploited in the industry's prioritization of profit; an exploitation that was enabled by an eroded regulatory framework that placed responsibility for health on workers, rather than on the

state. Despite increased risks, many workers continued working due to financial pressures, incentives, fears of job loss, or retaliation.

Moreover, I documented that issues of procedural injustice were rampant: with inaccessible information due to language barriers and a lack of readily available translated materials, with workers reporting uncertainties about the process of calling out sick, and, importantly, a lack of communication pathways to report safety and health issues. Because information, policies, and safety procedures were primarily communicated English, despite the diversity of JBS workers, procedural equity was compromised. A lack of procedural justice for workers impeded their ability to access information related to JBS COVID-19 policies, understand their rights, or effectively engage in discussions related to safety and health concerns.

Third, I analyzed how the Colorado workers' compensation system is another avenue to uphold firm power and capitalize upon the structural vulnerabilities of meatpacking workers. Drawing on in-depth interviews with workers' compensation attorneys, I provided an overview of the procedural injustices embedded within the system and the ways in which JBS leverages policy loopholes to their benefit. This included underreporting workplace injuries, re-directing workers to in-house treatment and chiropractic care, a lack of transparent information about medical treatment options, and delaying providing information requested by attorneys. I analyzed workers' compensation claims during COVID-19 and the contestation surrounding workplace exposure; documenting how firms like JBS denied liability despite being an outbreak site in the early months of the pandemic. As the research on experiences of workers' compensation attorneys who represent meatpacking workers is limited (Schofield et al. 2023), and qualitative descriptions are non-existent, these accounts are critical to developing a more just and equitable system for those who are the most vulnerable. Addressing the flaws embedded within the workers' compensation

system is critical to providing workers who have been harmed by a dangerous and underregulated workplace with necessary medical care and financial support.

Throughout, I demonstrated the role of the state in enabling the production of harm to persist vis-à-vis policies that perpetrate the treadmill of production, as well as a preference of corporate self-regulation over federal intervention. The ability of JBS, and meatpacking firms more broadly, to exploit workers and expose them to hazardous and physically demanding work conditions is enabled through the regulatory system and limited avenues of workers to seek justice, including the workers' compensation system. Firm and state allegiance is thus key to upholding a regulatory system that promotes profit over people and, in the process, has facilitated a system of social harm to be perpetuated (Lynch, Stretesky, and Long 2020).

Finally, I documented how workers mobilized to respond to the threats posed by COVID-19 and demanded increase safety protection and pay. Although workers have contended with a poor work environment for decades, the unprecedented nature of the pandemic and the additional risks it posed provided a catalyst for organizing and collective action. At the JBS plant, 1,000 workers participated in a walk-out in the early months of the pandemic. When workers become aware of the dynamics of racial capitalism and their critical role in upholding production, and subsequently withhold their labor power as a mode of resistance, there is great potential to enhance workplace conditions. Worker organizing, increased federal intervention, and subsequently decreased corporate power in the policymaking arena, is critical for developing a more just mode of production.

CHAPTER SEVEN: CONCLUSION

In March 2020, the United States was forced to respond to the impending threat of COVID-19. Businesses, schools, and many of society's institutions shuttered in hopes of preventing mass transmission. And yet, meatpacking plants remained open. This decision laid bare historical patterns of corporate consolidation and concentration and the sociological and public health impacts associated with the current structure of industrialized animal agriculture.

In this dissertation, I have analyzed the socio-political, structural, and institutional factors that shaped high rates of COVID-19 transmission amongst meatpacking workers. Throughout, I highlighted how the vulnerabilities of meatpacking workers during COVID-19 were exacerbated by procedural injustices and longstanding legacies of racial inequality and labor exploitation. I documented the impact of agribusiness firms on the policymaking process both prior to and during COVID-19 and highlighted the ways firms leverage policies and policy loopholes to their advantage. From collaborating with the federal government to deem plants as "essential infrastructure" to contesting COVID-19 workers compensation claims, I assessed the multiscalar involvement of agribusiness actors in policymaking and the subsequent implications on worker health, safety, and wellbeing.

Through content analysis, critical policy ethnography, and in-depth interviews with local and state representatives, I examined how the embedded nature of agribusiness in the economy has led to political power, a power that was yielded during the COVID-19 policymaking process. In-depth interviews with food, labor, and public health bureaucrats provided insights on the challenges faced during COVID-19 and the outcomes of regulatory fragmentation and erosion on policymaking. I documented how the regulatory power of federal agencies tasked with protecting

worker and public health, including the CDC and OSHA, has been greatly diminished in recent years due to declined funding, staff capacity, and a neoliberal political structure that favors corporate self-responsibility over state enforcement. I advanced an understanding of how state government and local level policies regarding COVID-19 took the economic and political interests of powerful agribusiness firms such as JBS into greater consideration than its predominately racial and ethnic minority workforce.

By conducting in-depth interviews with industry actors, advocacy and labor organizations, workers, and state and health representatives, my research enables us to better understand disease transmission as a systemic harm to workers *and* to host communities. Furthermore, I argued that not all harms are the direct outcomes of policies and, instead, can be the outcomes of institutional arrangements, including a fragmented governance structure and the erosion of regulatory oversight. In doing so, I expand scholarly understanding of harms as being embedded within political economic systems. In the following conclusion, I provide an overview of my findings in relation to my research questions before discussing the theoretical implications, future research directions, and policy implications.

Revisiting the Research Questions

Throughout this dissertation, I explored the impacts of federal government, local level governance, and firm decisions on workers. In Chapter Four, “The Oversight of the Meatpacking Sector”, I analyzed how COVID-19 transmission rates in the meatpacking sector were shaped by institutional, structural, and socio-political contexts. First, I provided an overview of OSHA and USDA and their regulatory responsibilities and capacities in relation to the meatpacking sector. I documented that because OSHA regulates worker safety and USDA regulates food safety, a separation exists between food and worker safety. In turn, I traced how this regulatory

fragmentation has intensified health and safety issues experienced by meatpacking workers. Furthermore, I analyzed the impacts of neoliberal political economic structures on these agencies; documenting how underfunding, understaffing, and the rise in corporate self-regulation over federal intervention has weakened agencies' regulatory power. I documented how powerful agribusiness companies and lobbyists worked alongside the government to promote policies that benefitted their economic interests, including the Executive Order, at the costs of worker safety and wellbeing. I argued that voluntary COVID-19 guidelines benefited firms, who were able to evade accountability and enforcement, at the cost of worker wellbeing and public health.

In Chapter Five, "Local and State Level Dynamics, Public Health, and the Meatpacking Sector", I moved my analysis on policymaking during COVID-19, and the subsequent impacts on meatpacking workers, from the federal level to the state and local level. First, I provided an overview of the governance structure of Weld County and the impact of home rule governance on policymaking, including its role in enabling a county-level approach to COVID-19 disease mitigation. I characterized this approach as a neoliberal, individualized responsibility strategy that failed to incorporate structural factors that shape exposure and disease transmission, especially in a high-risk work environment like the JBS plant. In this individual-level approach to health, workers rather than the plant were seen to be at the epicenter of disease spread. I argued that this rhetoric exemplified the dominant biomedical model which individualizes health (Brown 2007) and, in doing so, simultaneously absolved institutions and entities from responsibility for collective health outcomes.

Subsequently, I traced the implications of limited county-wide guidance on the health and safety of meatpacking workers. Limited enforcement at the county and state levels echoes patterns observed at the federal level, including guidance from OSHA and CDC that was not only vague,

but largely voluntary and thus not enforceable. This bolstered the ability of JBS to remain in operation, while intensifying the risks for meatpacking workers.

In Chapter Six, “Meatpacking Workers, Labor, and Legacies of Racial Exploitation”, I examined how structural inequalities and historical legacies of racial exploitation shaped worker’s experiences before and during the pandemic. First, I documented how the racial and ethnic demographics of meatpacking workers are the product of firm recruitment practices, immigration policy, and labor market dynamics. I documented how racial and ethnic demographics have cultivated a “culture of fear” that has resulted in workers being hesitant to report safety issues due to fear of retribution, including job loss. I found that issues of procedural injustice were rampant in JBS’s disease mitigation strategy, including: inaccessible information due to language barriers and a lack of readily available translated materials; workers reporting uncertainties about the process of calling out sick; and, importantly, a lack of communication pathways to report safety and health issues. In continuing to exploit the labor of marginalized ethnic and racial groups during COVID-19, firms like JBS perpetuated a cycle of worker vulnerability, where these workers faced increasingly risky employment conditions and inadequate health and safety protections. I assessed the psychological and physical outcomes of working in the meatpacking sector and the ways in which poor working conditions intensified the impacts of COVID-19 on workers. I argued that the racial and ethnic demographics of these workers served to bolster corporate profits and maintained the current mode of production during an unprecedented public health crisis.

Building upon my findings related to legacies of exploitation and structural vulnerabilities, I also examined the procedural injustices embedded within the Colorado Workers’ Compensation system. Pre-existing issues related to information transparency, underreporting injuries, and contesting workplace injuries were further compounded during the pandemic, where COVID-19

became a contested workplace illness. Because COVID-19 was not isolated to the workplace, firms like JBS contested the plant as the site of disease contraction and subsequently denied liability. I asserted that the Workers' Compensation system serves as an arm to uphold firm power and racialized labor exploitation, while diminishing justice for injured or impaired workers. However, drawing on the 2020 worker mobilization at the JBS plant, I illustrated how workers organized in response to threats posed by the pandemic and demanded increased wages and safety protections. The success of this walk-out holds great potential for future worker mobilizations and organizing.

Theoretical Implications

In this dissertation, I drew on literature related to industrialized animal agriculture, green criminology, and racial capitalism. I highlighted the role of the political economic system in shaping the current system of industrialized animal agriculture and the treadmill of meat production. In bringing green criminology into conversation with scholarship on industrialized animal agriculture, I assessed the interconnections between agribusiness, federal, state, and local level governance, and suggest that these state-industry allegiances were critical components of keeping meatpacking plants open in the pursuit of profit, at the expense of public health. While the literature on industrialized animal agriculture has documented the linkage between policy decisions and inequalities, there has been little focus on how these inequalities act as mechanisms of legal harm. Drawing on in-depth interviews, content analysis, and critical policy ethnography, I showed how harm has been embedded and codified within the regulatory system, stemming both from policymaking and the outcomes of a neoliberal capitalist political-economic framework. This research has important theoretical implications for the treadmill of production, racial capitalism, and green criminology.

First, while the treadmill of production (ToP) has primarily been used to the environmental impacts of mass production (Schnaiberg, Pellow, and Weinberg 2000; Schnaiberg, Pellow, and Weinberg 2004), I extended this framework to assess labor issues for workers embedded within environmentally damaging sectors. I argued that the logics of the ToP influence not only environmental regulation but also labor and public health regulations that may impede production and profit. The state's reluctance to impose stringent regulations that would threaten the ToP has perpetuated a system where social, environmental, and economic injustices flourish. I documented how meatpacking industry executives and lobbyists strategically utilized existing partnerships with federal actors to push for policies that benefitted them, while decreasing worker safety. Public health policymaking demonstrated the role of the treadmill of law (ToL) in enabling and reinforcing laws and regulations that "legitimize and replicate ToP practices, relationships, and interests" (Lynch, Stretsky, and Long 2020: 3). Although the ToL is focused on environmental law and policymaking, I argued that public health and labor laws, or lack thereof, play a key role in maintaining the ToP. Public health policymaking also demonstrates how the ToL is multiscalar in nature; with local, state, and federal level rules and regulations playing a key role in upholding the treadmill of production and maintaining economic activity (Lynch, Stretsky, and Long 2020).

In analyzing the intersection between the ToL and the ToP, I expanded both frameworks beyond environmental policymaking and outcomes to interrogate racialized labor dynamics and public health outcomes in environmentally damaging sectors (Schnaiberg 1980; Schnaiberg, Pellow, and Weinburg 2002; Lynch, Stretsky, and Long 2020). The ToP's focus on environmental outcomes related to unsustainable production has yet to fully include an assessment of how this production impacts workers and the power relations that undergird labor dynamics. I integrated racial capitalism into the ToP to assess labor issues in environmentally hazardous industries like

the meatpacking sector. I argued that racialized labor exploitation is embedded within the meatpacking sector to maintain the ToP and is upheld through immigration policy, corporate self-regulation, and the political-economic system. In doing so, I expanded the ToP through assessing *how* the regulatory system privileges agribusiness profit accumulation, the ways that these biases accelerate environmental and social harms, and *who* is most impacted.

In analyzing how the racial and ethnic demographics of workers were exploited to advantage firms and have historically served as a “racial fix” to labor issues in the meatpacking sector, I documented how power relations embedded within the ToP drive social harm (Carrillo 2021; Pulido 2017). I argued that labor dynamics within this sector are premised on racial capitalism and exploitation, where workers face hazardous conditions, low wages, and limited job security. Historical legacies of racialized exploitation in the meatpacking sector illustrate the industry’s dependence on racial devaluation; a devaluation that has provided not only a labor pool but economic profit and the perpetuation of the treadmill of meat production. Limited safety precautions and state intervention demonstrates how racial capitalism operates by exploiting and endangering the labor of minority workers in the pursuit of profit, as well as how policies and governance decisions are imbued with neoliberal and racial capitalistic norms (Pulido 2016). I asserted that historical legacies of racialized labor exploitation in the ToP were reinforced by a governance structure that prioritized production over the wellbeing of these workers during COVID-19, policies that did little to combat unsafe working conditions and a disregard for the health and safety of not only meatpacking workers, but their broader community.

Although some green criminological literature has explored food crimes (Leighton 2022; Roberts 2015), an in-depth analysis of the meatpacking sector through this lens has yet to be done. Furthermore, limited green criminological research has analyzed public health impacts of

environmental harm and green crime (Jarrell, Lynch, and Stretsky 2014; Lynch, Stretsky, and Long 2017). In assessing the public health consequences of working in the meatpacking sector during COVID-19, I've contributed novel empirical data related to the intersection between labor, harm, and health. Furthermore, I've provided key insights on how COVID-19 was contested as an occupational illness—despite the absence of federal intervention and safety measures aimed at disease mitigation and the extent of disease outbreak in meatpacking plants.

This research has key implications for deepening green criminology's engagement with the political economic sphere, by documenting how a system of harm is embedded within industrialized animal agriculture and codified through the current regulatory system. These findings contribute to existing green criminological literature that locates harm in political-economic relations, as well as extends this literature to explore harms against workers who work in environmentally risky and harmful sectors (Walter 2006; White 2013; Ruggiero and South 2013; Long, Stretsky, Lynch 2020; Fitzgerald and Taylor 2018; Tourangeou and Fitzgerald 2020). Patterns related to environmental law and policymaking that uphold corporate interests while ignoring environmental and economic injustices rang true in the meatpacking sector; with corporate actors successfully leveraging economic and political power to push for policies that maintained the treadmill of production, despite the risks faced by workers (Lynch, Stretsky, and Long 2020). By exploring the multiscale nature of these economic and state relations, from the federal to the local level, I found that the power of JBS enabled policies that reflected business interests, rather than public health concerns, and that this pattern was solidified across scales of governance to uphold the ToP (Long, Stretsky, Lynch 2020). In analyzing these patterns, I demonstrated how the political economic structure of capitalism, particularly its neoliberal variety,

influenced COVID-19 transmission rates in the meatpacking sector (Lynch and Long 2022; Lynch, Stretesky, and Long 2020).

In tracing how political-economic relations shaped policymaking processes relevant to the meatpacking sector during COVID-19, and subsequent impacts on worker wellbeing, this dissertation also contributes to green criminology research that locates harm in political-economic relations (White 2013; Ruggiero and South 2013). In expanding beyond the environmental harms associated with meatpacking plants, I also developed green criminology to include a discussion of other harms: social harms. In doing so, I asserted that meatpacking plants are sites of green crime due to not only environmental and social harms, but the political-economic roots of these harms. I fill an identified gap in the green criminology literature by focusing on meatpacking plants as sites of green crime, shifting theoretical focus from individual acts of animal abuse to institutionalized and structural forms of violence (Beirne 2004; Taylor 2011; Taylor and Fitzgerald 2018). In doing so, I assessed the harms experienced by workers in sustaining the ToP related to animal production and the “shared suffering” of workers and animals (Porcher 2011). In focusing on the structural and legal harms associated with industrialized animal agriculture, rather than crimes, this research has important implications for further green criminological inquiries on this sector (Lynch and Stretesky 2007; White 2003; Nobles 2018; Johnson, Schwartz, Inlow 2020).

Future Research Directions

The findings from this dissertation have important implications for future research. Although this dissertation provided key findings related to the role of agribusiness in policymaking processes during COVID-19, further research could expand beyond the pandemic to assess historical and on-going involvement from agribusiness firms and lobbyists in the policymaking process. Data related to lobbying and its subsequent outcomes would provide further insights on

the intersection between agribusiness' economic and political power. As I asserted throughout this dissertation, historical legacies of firm power in the policy arena had important implications for the health and safety of meatpacking workers during COVID-19. Further investigation into policymaking process prior-to and post COVID-19 would provide a deeper understanding of the historical and contemporary power of agribusiness firms and the subsequent outcomes on workers, host communities, animal welfare, and the environment.

Second, increased research on how to foster and strengthen interagency capacity and collaboration is necessary. In 2022, OSHA and FSIS's 1994 MOU was updated to enhance collaboration between the two agencies, including data sharing and specifically identifies infectious diseases such as COVID-19 as hazards that FSIS should refer to OSHA (GAO 2023). Given the presence of FSIS personnel in many plants, there is a clear opportunity to enhance the protection of plant workers and food system security through leveraging existing resources and interagency missions. Although the MOU creates a mechanism for collaboration, further research is needed to identify *how* collaboration will occur and to evaluate subsequent outcomes. Further in-depth interviews with representatives from OSHA and USDA would be beneficial to identify goals related to collaboration and barriers related to actualizing interagency coordination. Social network analysis could provide key insights on interagency collaborative pathways and existing gaps. Enhancing communication and interagency channels for documenting and responding to worker safety issues is critical to improve the working conditions for meatpacking workers.

Third, further research across geographic locations is necessary to better understand the relationship between local contexts and state and federal policymaking. Future research to capture the variances between firm, facility type (e.g., beef, pork, and chicken), and geographic location could be beneficial to identify nuances in plant conditions and localities that may have shaped

policymaking and subsequent impacts. Differences in local and state policies, including right-to-work laws and various local political structures such as “home-rule”, likely have important implications for the health and safety of meatpacking workers. Comparative research across geographic locations can expand an understanding of how industry and state power relations result in patterns of inequitable risk. As regulations such as line speeds related to pork, poultry, and cattle meatpacking plants differ, comparing across sector types may illustrate important points of divergence and convergence in relation to policies that impact worker safety. Beyond this, comparing across size and scale of facilities can provide further information on the relationship between facility size and worker safety issues. Conducting detailed analyses of various firms, considering their size, ownership structure, and operating practices, would illuminate how specific plant conditions and corporate policies, such as attendance incentives, impacted workers' health and safety in the COVID-19 era.

Due to issues of access, workers are underrepresented in my interview sample. Increased research on worker perspectives related to worker safety issues and the workers' compensation system is necessary. Investigating the workers' compensation system from the standpoint of those directly impacted can provide further information about process, issues, and adequacy of benefits. This includes research examining factors such as the complexity of navigating the system, delays in receiving compensation, and disparities in outcomes. Further research can inform policy recommendations aimed at strengthening worker protections, improving workplace safety standards, and enhancing the efficacy of the workers' compensation system.

Policy Implications

To improve the health and safety of meatpacking workers, there is a critical need to expand the regulatory power of USDA and OSHA and enhance interagency collaboration and

coordination. Enhanced accountability and oversight across local, state, and federal levels are crucial for improving worker health and safety, while diminishing agribusiness influence in policymaking. Greater workplace protections and workplace safety for meatpacking workers, including improved access to health care, health benefits, and legal protections and compensation for death, injuries, and illness is critical. The impacts experienced by meatpacking workers during COVID-19 were not unique, rather, COVID-19 magnified pre-existing issues of worker safety.

At the federal level, the power and capacity of regulatory agencies like the USDA and OSHA must be bolstered to ensure robust oversight of worker safety and public health standards without interference from meatpacking firms. Given these agencies have been chronically underfunded and understaffed, increased funding is key to improve capacity to respond to issues related to worker and food safety. This includes developing increased standards that are specific to the meatpacking sector to address the dangerous and hazardous working conditions. Furthermore, as 42% of top leadership positions in OSHA had not been filled in 2020 (Berkowitz 2020), increased efforts must be placed on hiring trained leaders to expand the agency's capacity to respond to worker safety issues. Beyond this, funding and policies should be directed towards developing interagency partnerships and pathways for communication, collaboration, and coordination. A weakened regulatory framework lends itself to interference from agribusiness firms, as well as a decreased ability to respond swiftly and effectively to worker safety issues. To address agribusiness involvement in the policymaking process, regulations aimed at diminishing the influence of lobbying are key. This may involve eliminating or largely reducing the extent of financial donations, and, instead, having a transparent and open process for feedback related to policy directives.

Moreover, as research on the effectiveness of financial penalties on deterring violations and lawbreaking has not shown substantial changes in firm operating behaviors (Stretesky, Long, and Lynch 2013), this further points to the need for systemic change, increased firm accountability, and increased federal oversight. A \$15,000 fine will do little to change firm operating practices, however, fines that substantially impacts firm profits may have a larger impact. Further, beyond financial penalties, increased oversight at the federal level is necessary to responding pro-actively to worker safety threats. Given that workers may fear retaliation if they report safety concerns, plant inspectors can play a critical role in documenting and reporting workplace issues. Bolstering the power of unions, and the presence of union stewards within plants, is another avenue to better protect workers. In right-to-work states, where employees are not unionized, supporting local worker advocacy groups is even more critical. These groups play key roles in educating workers about their rights and empowering workers to organize for better working conditions.

Beyond leveraging inspectors, unions, and local advocacy groups to improve worker safety, expanding pathways to citizenship for meatpacking workers can enhance their ability to organize for better working conditions and reduce fear of retaliation in the form of deportation or visa loss. The precarious structural position of meatpacking workers has resulted in a “culture of fear”, where employees are hesitant to voice concerns about safety issues due to fear of retribution. To empower workers, increased pathways to citizenship are critical. Employer-sponsored visas, like the H-2B visa, empower firms to hire immigrants for short-term seasonal work, while intensifying power dynamics between immigrants and firms. To improve working conditions, workers must be able to voice concerns. Stronger anti-retaliation measures are needed to truly protect workers and enable the opportunity to report safety issues without fear. Furthermore,

increased efforts to include worker voices in policies aimed at worker safety issues is key, as their lived experiences should inform the safety and health rules designed to protect them.

At the state level, addressing the flaws and procedural injustices embedded within the Colorado workers' compensation system is necessary. While there are laws in place related to the timely and transparent sharing of information in workers' compensation cases, there is limited oversight to ensure this is occurring. As reported by attorneys in my sample, there are no substantial penalties when firms fail to disclose information in a timely manner or at all. In turn, workers' compensations cases may span months, if not years, delaying timely compensation and benefits to injured workers. Beyond this, in-house treatment and diverting workers to chiropractic care hinders the ability for workers to receive objective medical treatment related to their injuries. Workers should be informed about medical treatment options, including the type of care they require, and provided with transparent information related to their injury and subsequently compensated in a timely and equitable fashion.

At the local level, findings related to role of industry's economic and political power in local policymaking demonstrate a need for increased oversight. To improve the health and safety of meatpacking workers, and to expand the power of public health departments, the reconfiguration of local political structures is necessary. As Weld County is a "home rule" county, local mandates differed from state and federal directives during COVID-19. The absence of enforceable public health guidelines in favor of individual-level responsibility had important implications for not only the safety and wellbeing of meatpacking workers, but the broader community. Dialogue between local, state, and federal actors should be fostered to enhance public health decision making. Relatedly, as local governmental officials have the authority to create and issue public health

guidelines, participation from a diverse group of stakeholders that are impacted by public health guidance is necessary.

Conclusion

This dissertation contributes a more nuanced understanding of policymaking during COVID-19 and the subsequent impacts on meatpacking worker and community disease transmission. Until now, previous research has been limited to secondary data analysis and quantitative data (Dyal et al. 2020; Taylor, Boulous, and Almond 2020; Stull 2020; Struthers, Montford, and Wotherspoon 2021; Carrillo and Ipsen 2021; Ramos et al. 2021). Throughout my findings, I've contributed novel empirical data that provides a deeper understanding of policymaking related to the meatpacking sector during COVID-19 and its multiscalar impacts. These findings offer insights into how policy decisions made at various levels—local, state, and federal—affect the working conditions and well-being of meatpacking workers during COVID-19 and beyond. This dissertation has important implications for addressing the issues embedded within the meatpacking sector at the local, state, and federal levels. To improve the conditions of workers, increased policy attention is critical. “Essential” workers deserve to be recognized as such: as critical components of not only our food system but of our societies. Creating more just and equitable modes of production requires significant change not only from policymakers, but from the firms themselves. Addressing legacies of racialized labor exploitation, regulatory fragmentation, and the prioritization of production above socio-environmental wellbeing is paramount to building a more resilient and just food system.

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APPENDICES

APPENDIX A: INTERVIEW GUIDES

Interview Guide for Regulatory Officials

- 1) Tell me a little bit about yourself.
 - a. What is your job title?
 - b. How long have you been in this position?
 - c. Have you always worked in this type of work?
- 2) What do you do in this role? How was your role impacted by COVID-19?
 - a. What are some of your responsibilities?
 - b. What are some of the challenges in your position? Opportunities?
- 3) Can you tell me more about how [AGENCY NAME]? What are the major tasks of the agency?
 - a. How has [AGENCY NAME] changed over time?
- 4) I am really interested in learning more about how essential workers were impacted by the COVID-19 pandemic, such as meatpacking workers. How does your work relate to the meatpacking sector?
 - a. Are there any [AGENCY NAME] policies that are important to mention regarding meatpacking? Which ones?
 - b. What type of data is collected on meatpacking? How is data utilized to drive decision making processes? How is data shared across the [AGENCY NAME] and collaborative partners, such as other federal and state agencies?
- 5) From your perspective, how did COVID-19 impact the meatpacking sector? Can you talk about some of the issues particular to meatpacking in the current context? For example, shortage of workers, backlog of meat to process, supply chain issues, meat prices, environmental, health, and/or worker safety changes?
- 6) In 2020, the Defense Production Act deemed meatpacking plants to be essential infrastructure. Although limited in its scope, the order was widely interpreted as requiring meat processing facilities to reopen and remain operational during the pandemic, even during outbreaks. What role, if any, did this act play in terms of the response to COVID in meatpacking plants?
- 7) What institutional pressures make your work challenging to do? Can you give me an example?
- 8) How does the federal, state, and local policy environment shape your work?
- 9) What other state and federal agencies does your department collaborate with? For example, what is the relationship between [AGENCY NAME] and [AGENCY NAME]?
 - a. Are there other relevant or connected agencies we should discuss?

- 10) What measures have been taken to minimize the effect of the pandemic on essential workers, especially meatpacking workers?
 - a. How have those strategies and policies changed over time as we learned more about the pandemic?
- 11) What insights have been gained or best practices in terms of dealing with a crisis of this magnitude? What policies were effective/less effective?
- 12) Is there anything else that you would like to discuss? Or are there any questions I haven't asked that I should have?
- 13) Is there anyone else that I should talk about these issues? Could you put them in touch with me?

Interview Guide for Worker's Compensation Attorneys

- 1) Tell me a little bit about yourself.
 - a. What is your job title?
 - b. How long have you been in this position?
 - c. Have you always worked in this type of work?
- 2) What do you do in this role?
 - a. What are some of your responsibilities?
 - b. What are some of the challenges in your position?
- 3) Can you tell me more about how Worker's Compensation law works? What is the process like for workers? What are some of the challenges or problems with the current law? What types of claims are typically made?
 - a. What is the role of unions and companies in helping or hindering claims?
- 4) I am really interested in learning more about workers compensation and meatpacking workers. Can you speak a little about the JBS workers compensation cases you have had? What is the process like?
 - a. Does the process of a COVID-19 worker's compensation claim differ from other types of claims?
 - b. How does this work? I'm thinking about the cases where workers died and/or had prolonged illness. Were they covered under workers compensation? Did these cases go to court? Were there any cases that were successful that you are aware of (regarding COVID)?
 - c. How do workers prove that COVID-19 was contracted at work, rather than elsewhere? What happened to the legislation that CO tried to put in place about this?
 - d. What happens when a claim is denied?
- 5) Were there cases that were settled out of court? Of the cases that you saw in meatpacking, what percentage went to court, were settled out of court, nothing happened

beyond an initial discussion? Can you explain why you think each took these different routes?

- 6) Are there any policies that are important to mention regarding COVID-19 and worker's compensation claims? Which ones?
- 7) How have worker's compensation policies changed during the pandemic? What measures have been taken to minimize the effect of the pandemic on essential workers, such as meatpacking workers?
- 8) How have those strategies and policies changed over time as we learned more about the pandemic?
- 9) What insights have been gained or best practices in terms of dealing with a crisis of this magnitude? What policies were effective/less effective? Were those at the fed/state/county level?
- 10) Is there anything else that you would like to discuss?
- 11) Is there anyone else that I should talk about these issues? Could you put them in touch with me?

Interview Guide for Local Elected Officials

- 1) Tell me a little bit about yourself.
 - a. What is your job title?
 - b. How long have you been in this position?
- 2) What do you do in this role?
 - a. What are some of your responsibilities?
 - b. What are some of the challenges in your position? Opportunities?
- 3) How did COVID-19 impact the work that you do?
- 4) What is the relationship between the Weld County Commissioners and the county health department? What about the state health department?
- 5) I am really interested in learning more about how essential workers were impacted by the COVID-19 pandemic, such as meatpacking workers. How does your work relate to the meatpacking sector?
- 6) In some cases, meatpacking plants such as JBS were closed early in the pandemic. What information influenced plant closures?
 - a. Who played a role in that closure? Which agencies? Was this arrangement particular to Colorado? Any idea how it was different from other states?
 - b. Did the decision-making tend to be localized at the local, state, or federal level?

- 7) In 2020, the Defense Production Act deemed meatpacking plants to be essential infrastructure. Although limited in its scope, the order was widely interpreted as requiring meat processing facilities to reopen and remain operational during the pandemic, even during outbreaks. What role, if any, did this act play in terms of the response to COVID in meatpacking plants in Colorado?
- 8) I noticed that some states like Colorado reported COVID data in meatpacking whereas other states did not release any data. Why do you think that is? Do you think that helped or hindered dealing with the situation?
- 9) What local, state, and federal agencies does your department collaborate with?
 - a. Are there other relevant or connected agencies we should discuss?
- 10) How does the federal and state policy environment shape your work?
- 11) What institutional pressures make your work challenging to do? Can you give me an example? How does this differ in Colorado compared to a state like Arkansas?
- 12) What measures have been taken to minimize the effect of the pandemic on essential workers, especially meatpacking workers?
- 13) What insights have been gained or best practices in terms of dealing with a crisis of this magnitude? What policies were effective/less effective?
- 14) Is there anything else that you would like to discuss? Or are there any questions I haven't asked that I should have?
- 15) Is there anyone else that I should talk about these issues? Could you put them in touch with me?

Interview Guide for Public Health Officials

- 1) Tell me a little bit about yourself.
 - a. What is your job title?
 - b. How long have you been in this position?
 - c. Have you always worked in this type of work?
- 2) What do you do in this role? How was your role impacted by COVID-19?
 - a. What are some of your responsibilities?
 - b. What are some of the challenges in your position? Opportunities?
- 3) I am really interested in learning more about how essential workers were impacted by the COVID-19 pandemic, such as meatpacking workers. How does your work relate to the meatpacking sector?

- 4) In some cases, meatpacking plants such as JBS were closed early in the pandemic. What information influenced plant closures?
 - a. Did your agency play a role in that closure? Other agencies? Was this arrangement particular to Colorado? Any idea how it was different from other states like Arkansas?
 - b. Did the decision-making tend to be localized at the local or state level or federal level?
- 5) In 2020, the Defense Production Act deemed meatpacking plants to be essential infrastructure. Although limited in its scope, the order was widely interpreted as requiring meat processing facilities to reopen and remain operational during the pandemic, even during outbreaks. What role, if any, did this act play in terms of the response to COVID in meatpacking plants in Colorado?
- 6) What measures have been taken to minimize the effect of the pandemic on essential workers, especially meatpacking workers?
- 7) What insights have been gained or best practices in terms of dealing with a crisis of this magnitude? What policies were effective/less effective?
- 8) What institutional pressures make your work challenging to do? Can you give me an example? How does this differ in Colorado compared to a state like Arkansas?
- 9) How does the federal policy environment shape your work?
- 10) What is the relationship between county health departments and state health departments?
- 11) What other state and federal agencies does your department collaborate with? For example, what is the relationship between Weld County Health and the CDC?
 - a. Are there other relevant or connected agencies we should discuss?
- 12) Is there anything else that you would like to discuss? Or are there any questions I haven't asked that I should have?
- 13) Is there anyone else that I should talk about these issues? Could you put them in touch with me?

Interview Guide for COVID Interventionalists

- 1) Tell me more about your role as Covid Interventionalist Specialist for Weld County.
 - a. What did you do in this role? What did you do before?
 - b. What were some of your responsibilities?
 - c. What were some of the challenges in your position? Opportunities?
- 2) What was your experience like working for the JBS Plant as a COVID interventionalist?
 - a. What was your training process?

- b. When did you work there?
- 3) What information did JBS provide information regarding COVID-19 to workers?
 - a. How was it provided? Did that information change over time?
- 4) Did JBS implement new safety measures during the pandemic?
 - a. When did they begin implementing safety precautions?
 - b. What safety precautions were implemented? (eg, PPE, testing, line distancing, pay incentive, early retirement etc)
 - a. How were screenings conducted?
 - i. What were workers asked?
 - ii. How were language barriers navigated?
- 5) Can you tell me a little bit more about what happened when someone tested positive?
 - a. Who would they report to?
 - b. Where would people get tested (at the facility, in the community, etc)?
 - c. Did workers know when someone had tested positive? How did they find out?
 - d. Were workers able to be compensated while out sick? How did they receive this compensation?
 - e. What was the process for returning back to work like?
- 6) Do you feel the safety precautions implemented were adequate? Why/why not?
 - a. Were there any issues with safety precautions? If so, what?
- 7) Was there a process for reporting safety issues?
 - a. What was it? Who did workers report to? Who did you?
 - b. Were there challenges associated with reporting safety and health issues?
 - c. Did the county health department get involved? Did you report issues?
- 8) Is there anything else that you would like to discuss? Or are there any questions I haven't asked that I should have?
- 9) Is there anyone else that I should talk about these issues? Could you put them in touch with me?

Interview Guide for Advocates

- 1) Tell me a little bit about yourself.
 - a. What is your job title?
 - b. How long have you been in this position?
 - c. Have you always worked in this type of work?
- 2) What do you do in this role?
 - a. What are some of the challenges in your position? Opportunities?
- 3) Can you tell me more about the history of [ORGANIZATION NAME]?

- a. What are the goals?
 - b. Who is involved?
 - c. What are the challenges you face?
- 4) I am really interested in learning more about how essential workers were impacted by the COVID-19 pandemic, such as meatpacking workers. How does your work relate to the meatpacking sector?
- 5) What environmental, health, and safety risks do you feel accompany meatpacking work?
 - a. In your opinion, were risks increased during COVID-19? Why/why not?
- 6) What measures have been taken to minimize the effect of the pandemic on essential workers, especially meatpacking workers?
 - a. What do you think meatpacking companies could have done differently?
- 7) What insights have been gained or best practices in terms of dealing with a crisis of this magnitude? What policies were effective/less effective?
- 8) What institutional pressures make your work challenging to do? Can you give me an example?
- 9) What other local and state and federal agencies does [ORGANIZATION NAME] collaborate with?
 - a. Are there other relevant or connected agencies we should discuss?
- 10) How does the federal policy environment shape your work?
- 11) Is there anything else that you would like to discuss? Or are there any questions I haven't asked that I should have?
- 12) Is there anyone else that who might be open to discussing these issues with me? Could you put them in touch with me?

Interview Guide: Workers

1. Tell me a little bit about yourself.
 - a. How old are you?
 - b. Where are you from?
 - c. What is your race/ethnicity?
 - d. When did you start working at JBS? What attracted you to the job? What was the application process like? What did you do before working at JBS?
 - e. What is your job?
 - a. What do you do in this role?
 - b. Has it changed over the years? If so, how?
2. What is it like to work at JBS?

- a. How were you trained to do your job?
 - b. What was the hardest part of your job? Why?
 - c. In your personal experience, what health and safety risks exist in your job?
 - i. Who do you tell when there is a health or safety risk? Why?
3. How has JBS changed over the years?
 - a. Were there any key events that shaped these changes?
 - b. Do you see differences in *who* works at JBS over the years? What type of differences?
4. Now, I want to talk with you about COVID-19. Do you remember when you first heard about COVID-19?
 - a. Who/where did you learn this information?
 - b. What information was provided to you?
 - c. What was it like to work during COVID-19 pandemic?
5. Did JBS provide information regarding COVID-19 to workers?
If yes,
 - a. What information was provided? How was it provided? Did that information change over time?
6. Did JBS implement new safety measures during the pandemic?
If yes,
 - c. When did they begin implementing safety precautions?
 - d. What safety precautions were implemented? (eg, PPE, testing, line distancing, pay incentive, early retirement etc)
 - a. How did you learn about these safety measures?
 - e. Do you feel these safety precautions were adequate? Why/why not?
 - f. Was there a process for reporting safety issues?
 - a. What was it? Who did you report to?
 - b. Were there challenges associated with reporting safety and health issues?
7. Can you tell me a little bit more about what happened when someone tested positive?
 - a. Who would they report to?
 - b. Where would people get tested (at the facility, in the community, etc)?
 - c. Did you know when someone had tested positive? How did you find out?
 - i. Did you fear catching COVID-19 due to your job?
 - d. Were workers able to be compensated while out sick? How did they receive this compensation?
 - e. What was the process for returning back to work like?
8. JBS closed for two weeks during COVID-19. What was different when you came back?
 - a. Were safety procedures implemented? Which?
9. What was the role of the union during the pandemic? Are you a member? Were they helpful? In what ways?

10. Many workers were diagnosed with COVID-19 and some even died.
 - a. What has JBS's response been for those people and their families? The union's?
 - b. Do you think it is sufficient? Why/why not?
11. In 2021, JBS was fined \$15,000 by OSHA for failing to protect workers. What do you think about this fine?
12. Looking back, what do you think JBS could have done differently to protect workers?
13. Are there any other questions I should ask?
 - a. Observations or experiences you'd like to share?
14. Is there anyone that comes to mind that you think I should talk to?
 - c. Are you comfortable providing their information to me?

APPENDIX B: SELECT FIGURES

President's Executive Order

- 1 It is important that processors of beef, pork, and poultry ("meat and poultry") in the food supply chain continue operating and fulfilling orders to ensure a continued supply of protein for Americans. However, outbreaks of COVID-19 among workers at some processing facilities
- 2 However, outbreaks of COVID-19 among workers at some processing facilities have led to the reduction in some of those facilities' production capacity. In addition, recent actions in some States have led to the complete closure of some large processing facilities.
- 3 In addition, recent actions in some States have led to the complete closure of some large processing facilities. Such actions may differ from or be inconsistent with interim guidance recently issued by the Centers for Disease Control and Prevention (CDC) of the Department of Health and Human Services and the Occupational Safety and Health Administration (OSHA) of the Department of
- 4 Accordingly, I find that meat and poultry in the food supply chain meet the criteria specified in section 101(b) of the Act (50 U.S.C. 4511(b)). Under the delegation of authority provided i
- 5 to ensure that meat and poultry processors continue operations consistent with the guidance for their operations jointly issued by the CDC and OSHA. Under the delegation of authority

North American Meat Institute's Draft Executive Order

- 1 the Department of Homeland Security, the food production and supply. Businesses operating in the food supply and production industry have a special responsibility to maintain, to the fullest extent possible, their operations and normal work schedules. Since then, we have seen some of
- 2 their operations and normal work schedules. Since then, we have seen some of these operations reduce their capacity and output due to issues related to COVID-19. These businesses are crucial to our emergency preparedness as we respond to
- 3 ssors have taken – and are taking – actions to ensure the safety of their employees. Yet there have been circumstances where plants have been threatened with closures or forced to close for indefinite and varying periods of time, in part because of the inconsistency from state to state in governing health and safety actions when employees are not at work.
- 4 Accordingly, I find that conditions exist which may pose a direct threat to the national defense or emergency preparedness programs and that the continued operation of food processing, production, and supply companies meet the criteria for emergency preparedness and protections under 50 U.S.C. 4501 *et seq.*
- 5 Sec. 2. Presidential Order of Continued Operation. I hereby order that critical infrastructure food companies continue their operations to the fullest extent possible both during and after the COVID-19 crisis subsides so that they can continue to process, produce, and deliver food to the Nation.

Fig. 3. Commonalities in the Executive Order (85 FR 26313), image modified from Grabell & Yeung (2020)

U. S. Department of Labor
Occupational Safety and Health Administration
Notice of Alleged Safety or Health Hazards

		Complaint Number		
Establishment Name	JBS			
Site Address	800 N. 8th Ave Greeley CO 80631			
	Site Phone		Site FAX	
Mailing Address				
	Mail Phone		Mail FAX	
Management Official	[REDACTED]		Telephone	[REDACTED]
Type of Business				
HAZARD DESCRIPTION/LOCATION. Describe briefly the hazard(s) which you believe exist. Include the approximate number of employees exposed to or threatened by each hazard. Specify the particular building or worksite where the alleged violation exists. The Company has not created an environment that allows workers to social distance, workers are close together in the locker rooms, the Cafeteria and throughout the entire plant, this is contrary to CDC guidelines and OSHA recommendations; Employees throughout the plant do not have access to drinking water; The Company is not requiring supervisors to wear appropriate PPE; The Company has tied incentive pay to perfect attendance, this is increasing the risk of COVID19; The Company is not recording COVID19 cases. This is a formal complaint, JBS has had over 200 confirmed cases of COVID19, and 7 deaths, there is a new outbreak with interns. The Hazards are located throughout the entire plant. The Drinking water seems to be a bigger issue in the Fab and Kill/Harvest department				

Fig. 4. Complaint to OSHA on behalf of JBS workers

ORDER

1. Effective immediately, the JBS Inc. meat packing plant in Greeley, Colorado shall be closed, which shall immediately disrupt transmission of COVID-19. JBS Inc. must successfully implement all of the following requirements, in consultation with WCDPHE and CDPHE:

- Conduct an employee testing and screening program to begin this weekend and extend for as long as necessary for public health and safety, as determined by county and state public health officials. Protocols need to be led and approved by the public health agencies. We request your assistance in communicating with employees, contractors, inspectors, and others with regular activities in the facility. The testing program shall
 - include a symptom and exposure screening and employee identification component developed by the public health agencies;
 - assure that sick people are not exposing others during testing, and
 - include an ongoing testing and monitoring program for employees that test negative;
- Identify ill workers and their contacts and ensure their exclusion from work for the minimum necessary isolation (at least 7 day) and quarantine (14 day) periods;
- Identify asymptomatic, non-exposed workers who may be permitted to work after the closure period;
- Establish effective exposure, symptom and fever screening procedures for workers and policies for the exclusion of workers who screen positive;
- Implement public health reporting procedures for all symptomatic and exposed workers;
- Implement policies and procedures that ensure social distancing of all workers, this includes but is not limited to procedures for safe movement through the facility during arrival and departure from work and break times;
- Provide adequate access to PPE and hand washing and hand sanitizing equipment;
- Ensure that housekeeping and food service staff and contractors are adhering to the cleaning and disinfecting guidelines set forth by the Centers for Disease Control and Prevention (CDC) and are using EPA approved disinfectants on surfaces throughout the facility;
- Ensure that any non-employees who have been in contact with the plant, including housekeeping and food service staff, inspectors, and contractors are notified of the COVID-19 outbreak at the plant and provided the opportunity for testing.
- Increase signage and other communication in the appropriate languages to educate workers about COVID-19 symptoms and the importance of social distancing, appropriate mask use, and hand hygiene in languages appropriate for workers in the facility;
- Plan for re-opening with a reduced level of staffing that ensures social distancing can be maintained at all times during each shift; and
- Work with WCDPHE and CDPHE on a plan to re-open with adequate, ongoing measures in place to prevent transmission and ensure worker safety.

3. JBS Inc. must develop a sequestration housing plan and share it with the State's Unified Command Center: Mike Willis, Director of Emergency Management. The plan should identify how you will assure that healthy employees who have tested negative are housed in a way that protects them from future community and household exposures and includes ensuring accommodation of access and functional needs, morale and welfare, including access to meals that include options accommodating dietary and religious standards, behavioral/mental health support, technology for contact with family and cultural/religious practices.

4. People who are identified as having COVID-19 or exposure to a case of COVID-19 should be excluded from work as described above, and also should be placed on leave and temporarily housed away from other workers that they cohabitate with for 7 days (isolation of cases) or 14 days (quarantine of exposed individuals). This housing should not be co-located with sequestered workers and should also include accommodation for access and functional needs, including access to meals that include options accommodating dietary and religious standards, behavioral/mental health support, technology for contact with family and cultural/religious practices.

5. Finally, we ask that you work with the Colorado Department of Labor and Employment to provide possible benefit assistance to the JBS impacted workers during this closure. Please contact Patrick Teegarden CDLE Director of Policy and Legislation at patrick.teegarden@state.co.us or 303.908.0866 to coordinate messaging and assistance for your workforce.

Fig. 5. Public Health Order 20-25 Immediate Closure of the JBS Meatpacking Plant

LIST OF ABBREVIATIONS

AAMP	American Association of Meat Processors
AFL-CIO	American Federation of Labor and Congress of Industrial Organizations
APHIS	Animal Plant and Health Inspection Service
ART	Active Release Therapy
CDC	Center for Disease Control
CDPHE	Colorado Department of Public Health and Environment
DIME	Division Independent Medical Examination
DoL	Department of Labor
DPA	Defense Production Act
ECM	Extended Case Method
EJ	Environmental Justice
EO	Executive Order
FERN	Food and Environment Reporting Network
FMIA	Federal Meat Inspection Act
FSA	Farm Service Agency
FSIS	Food Safety and Inspection Service
HACCP	Hazard Analysis Critical Control Point
HHS	Department of Health and Human Services
HIMP	HACCP-Based Inspection Models Project
HMSA	Humane Methods of Slaughter Act
ICE	U.S. Immigration and Customs Enforcement

MOU	Memorandum of Understanding
NACCHO	National Association of County and City Health Officials
NAMI	North American Meat Institute
NCBA	National Cattleman's Beef Association
NCC	National Chicken Council
NIOSH	National Institute for Occupational Safety and Health
NPIS	New Poultry Inspection System
NSIS	New Swine Inspection System
OSHA	Occupational Safety and Health Administration
OSHRC	Occupational Safety and Health Review Commission
PLIP	Pandemic Livestock Indemnity Program
PPE	Personal Protective Equipment
PPIA	Poultry Products Inspection Act
ToL	Treadmill of Law
ToP	Treadmill of Production
USDA	United States Department of Agriculture
WCDPHE	Weld County Department of Public Health and Environment
WHO	World Health Organization