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Mass Incarceration, COVID-19, and Race as Exposure to Early Death

Traci Schlesinger Ph.D.

In Memory of Dr. Traci Schlesinger

Her life, her scholarship and work, her devotion to social justice, and her commitment to those she fought for, taught, and mentored, shall never be forgotten.

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Traci Schlesinger, Ph.D.

BIO

TRACI SCHLESINGER, PHD, was associate professor and director of graduate studies in sociology at DePaul University and a board member of the Pretrial Justice Institute. Dr. Schlesinger was born and raised in New Jersey, in the largely white working-class town of Dumont. Few of her friends or family had attended college. She received her Associates degree in Women's Studies from Bergen Community College, her BA from Fordham University in Sociology, and her PhD from Princeton in Sociology. She was hired by DePaul as an assistant professor of Sociology in 2004 and was tenured as an associate professor in 2012.

Questions about how criminalizing and punishing systems maintain white supremacy in the contemporary United States informed her research, teaching, activism, and policy work. Her work on state criminalization and punishment as racism examined a variety of cites, from the centers of the carceral state inside prisons to the softer carceral geographies of diversion, pretrial supervision, and school discipline. Dr. Schlesinger published her research in *Crime & Delinquency*, *Criminology & Public Policy*, *Feminist Formations*, *Future of Children*, *Justice Quarterly*, *Race & Justice*, *Youth Justice*, and other scholarly journals. Additionally, the ABA, the ACLU, the US Department of Justice, and others cited her research in numerous amicus briefs

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submitted for cases challenging money bail, including *Walker v. Calhoun* and *O'Donnell v. Harris County*. Dr. Schlesinger was working with the Community Justice Exchange and local bail bonds in seven jurisdictions to examine the expansion of nonfinancial conditions of pretrial release over the past five years, until her sudden passing in December 2021.

Dr. Schlesinger was a scholar and activist in equal measure, and she dedicated her life to social justice work. The focus of her research was her analysis and critique of the criminal justice system, in particular its production and maintenance of racial stratification in the post-civil rights era United States. In an interview, Dr. Schlesinger noted that she chose DePaul because of its mission of social justice and its location in a large city. Both her research and her teaching had tremendous impact. She is nationally recognized as an expert in her field, and she was a transformative teacher for students at both the undergraduate and graduate levels, receiving an Excellence in Teaching Award in 2011. More information about her life's work can be found here: https://las.depaul.edu/academics/sociology/faculty/Pages/traci-schlesinger.aspx

Summary: A majority of the largest single-site outbreaks of COVID-19 infections in the United States have been in prisons and jails since the beginning of the pandemic. These outbreaks threaten the lives and well-being of incarcerated people, correctional staff, and people who live in the communities to which incarcerated people return. This study employs both linear and logistic multivariate regression models to examine data from the UCLA's COVID Prison Data Project, IPUMS CPS [Integrated Public Use Microdata Series—Current Population Survey], the National Center for Health Statistics, and the Prison Policy Initiative to better understand the facility, county, and state-level predictors of COVID-19 infections and deaths in correctional facilities. The study finds that while some facility-level characteristics are associated with infections and deaths, county-level racial and economic characteristics matter more. In particular, facilities in counties with more Latinx and Indigenous people and lower average incomes have higher infection rates. Likewise, the odds that someone in a facility has died from COVID-19 are higher in counties with more Latinx people, lower average incomes, more college graduates, and fewer people who never married. Moreover, state-level policy changes to address this crisis have failed to do so effectively. While this study is unable to access how county-level characteristics influence these facility-level outcomes, it does demonstrate a clear connection between racialization and exposure to early death.[1]

The basic facts of mass racialized incarceration in the United States are well known and oft repeated. The US quadrupled its rates of incarceration during the last quarter of the twentieth century (Mauer, 2002; Tonry, 1996; Western, 2007). As a result, while the US is home to only 5 percent of the world's population, it is home to 25 percent of the world's incarcerated population. On any given day, 2.2 million people are in prison or jail, and nearly 5 million people spend time in local jails over the course of a year (Bertram and Jones 2019). Black and Indigenous people are six times more likely, and Latinx people three times more likely, than are white people to be imprisoned during their lives and these disparities are durable across gender (Schlesinger, 2008). Racial biases in policing (Beckett, Nyrop, and Pfingst, 2006), in criminal law (Tonry, 1996), and in criminal processing (Wooldredge et al., 2015) work to create and maintain these disparities. This racialization of criminalization and punishment help cement racial inequities in a broad range of outcomes, including employment (Pager, 2007) and incomes (Western, 2002; Western and Pettit, 2005), quality of family life (Lopoo and Western, 2005; Western and McLanahan, 2000), and physical and mental health (Wildeman, 2012).

1 *Editor's note:* Dr. Schlesinger wrote her paper according to the *APA Publication Manual* rules of style, commonly used for works in her field of study. Although *Vincentian Heritage* typically mandates papers adhere to the *Chicago Manual of Style*, it was decided to honor Dr. Schlesinger's choice in light of the paper's content. A complete list of cited works can be found at the end of the article.

Focusing on incarceration's impact on health reveals the following. First, prisons and jails are amplifiers of infectious diseases, in part because the conditions that can keep diseases from spreading—including social distancing, frequent hand washing, and condom use—are nearly impossible to achieve in these facilities. Going to prison increases people's odds of contracting sexually transmitted infections, HIV, hepatitis C, and tuberculosis (TB) (Bick, 2007). Because both TB and COVID-19 are airborne, analyses of incarceration's impact on people's odds of contracting TB are particularly relevant to this study. Controlling for race, gender, poverty, and employment status, alcohol, cigarette, and drug consumption, and weight, exercise frequency, and prior health problems, research finds that going to prison increases people's odds of contracting TB by between 79 and 83 percent (Massoglia, 2008; Massoglia and Schnittker, 2009). Studies examining the culture genotypes of TB positive people inside jails find that between 18 and 79 percent of people—depending on the study—had isolates with DNA fingerprints matching those of other TB positive people, suggesting intra-facility transmission (Jones et al., 1999; MacNeil et al., 2005). These infections spread to communities when people are released; only one-third of one percent of all people living in the US but four percent of women whose partner has been incarcerated have been diagnosed with TB (Rogers et al., 2012).

Second, having been incarcerated, having a partner, parent, or other loved one who has been incarcerated, and living in high-incarceration neighborhoods are each associated with many of the chronic health issues that increase people's odds of having severe cases of COVID-19 and of dying from COVID-19. Going to prison is associated with increases in BMIs (Gates and Bradford, 2015), having hypertension (Massoglia, 2008; Wang et al., 2009), developing left ventricular hypertrophy (Howell et al., 2016; Wang et al., 2009), and having asthma (Frank et al., 2013). Experiencing parental incarceration increases youth's odds of developing asthma, diabetes, obesity, low-grade inflammation, and decreases their overall health (Boch and Ford, 2015; Roettger and Boardman, 2012; Turney, 2014; White, West, and Fuller-Thomson, 2020). When compared to women who do not have an incarcerated family member, women with family members who are currently incarcerated are 44 percent more likely to be obese, almost three times as likely to have had a heart attack or stroke, and twice as likely to report being in poor health (Lee et al., 2014). Finally, people who live in neighborhoods with incarceration rates in the top quartile have odds of being diagnosed with dyslipidemia and metabolic syndrome that are 47 and 67 percent higher, respectively, than do individuals matched on age, sex, race, BMI and smoking history who live in neighborhoods with the same levels of poverty, healthy foods access, and crime rates (Topel et al., 2018). Individuals residing in neighborhoods with incarceration rates in the top quartile have diminished access to care, less access to specialists, less trust in physi-

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Signage posted to the John T. Richardson Library warning guests of restricted access during the COVID-19 pandemic. March 16, 2020.

Courtesy DePaul University/Jeff Carrion

cians, and less satisfaction with the care they receive than do individuals living in low-incarceration rate neighborhoods. This spillover affects even those least likely to experience incarceration themselves, including the insured, those over 50, women, white people, and those with incomes far exceeding the federal poverty threshold (Schnittker et al., 2015).

Given these facts, it is no surprise that a majority of the largest, single-site outbreaks of COVID-19 infections in the U.S have been in prisons or jails since the beginning of the pandemic (Covid Prison Project, 2020). Nearly 20 percent of the prison population has tested positive for COVID-19, an infection rate that is five times and an age-adjusted mortality rate that is three times that of the general population (Saloner et al., 2020). As of January 29, 2021, at least 372,569 imprisoned people and 89,524 people working in prisons have tested positive for the novel coronavirus and 2,296 imprisoned people and 142 prison staff have died from COVID-19 (Covid Prison Project, 2020). Overcrowding, insufficient sanitation, poor ventilation, limited PPE availability, and inadequate healthcare make prisons, jails, and detention centers amplifiers of COVID-19 outbreaks (Couloute, 2020). Moreover, incarcerated people are considerably more likely to have the chronic health conditions linked to high COVID-19 fatality risk (Binswanger, Krueger, and Steiner, 2009) and carceral medical care is often under-funded and under-staffed (Vaughn and Carroll, 1998). As a result, the danger of COVID-19 may be particularly acute in carceral settings. Preliminary research supports this conjecture. Among those with COVID-19, incarcerated people are more likely than others to be admitted to the intensive care unit, require vasopressors, be intubated, and die than are those who are not incarcerated (Altibi et al., 2020). Finally, when people are released from correctional facilities, they bring COVID-19 home with them, disproportionately to Black and Brown communities with high incidence of underlying health conditions. Corroborating this, one study finds that jail community cycling accounts for 55 percent of the variance in case rates across zip codes in Chicago and 37 percent of the variance in rates across zip codes in Illinois (Reinhart and Chen, 2020). In this way, mass racialized incarceration may be among the primary drivers of racial disparities in COVID-19.

Data and Method

To understand the predictors of COVID-19 infection rates and deaths, this study uses both OLS [ordinary least squares] and logistic multivariate regressions to examine the relationships between facility and county-level characteristics and state-level decarceration policies on one hand and facility-level COVID-19 infection rates and the odds that there was a death at the facility on the other. The study examines a dataset constructed by merging data from several publicly available sources—including 2010, 2018, and 2019 IPUMS USA (Ruggles et al., 2020), the 2013 National Center for Health Statistics (NCHS) (Rothwell, Madans, and Arispe, 2014), the UCLA's Covid Behind Bars Data Project (CBBDP) (Dolovich and Littman, 2020), and the Prison Policy Initiatives' report, *Failing Grades: States' Responses to Covid-19 in Jails & Prisons* (SRCJP) (Widra and Hayre, 2020)—with data collected from the most recent population reports issued by either each state's Department of Corrections (DOC) or the federal Bureau of Prisons (BOP). The diversity of these data sources enables the study to examine the impact of facility level characteristics, county-level context, and state-level policies on both facility-level COVID-19 infection rates and the odds that someone in a facility has died from COVID-19.

Response Variables

This study has two response variables. The first is the rate of COVID-19 infections per 100,000 people in correctional facilities—including prisons, jails, and halfway houses. To calculate COVID-19 infection rates, I gathered population counts for each facility from the most recent population reports from each state—either November 2020, December 2020, or January 2021—that releases these reports and lists population by facility. These reports provided population data from 902 of the 1226 facilities from the CBBDP.[2] Next, I divided the number of reported COVID-19 cases in the CBBDP by the total population in the facility from these reports and multiplied this result by 100,000, giving us the number of cases per

2 While the CBBDP includes numbers of COVID-19 cases in the facility, it only has population counts for a small number of facilities—and some of these population numbers contradict the numbers in state's DOC's population reports. As such, this study uses population numbers for each state Department of Corrections population reports.

100,000 residents.[3] Finally, I transformed the infection rate by multiplying it by the natural log to correct for skewness in the variable. Facilities have a mean infection rate of 288 positive COVID-19 tests per 100,000 incarcerated people. The second response variable is whether a facility has reported a COVID-19 related death. The sample for these models contains all 648 facilities that report COVID-19 deaths. While facilities range from reporting 0 to 43 COVID-19 deaths, 60 percent of facilities report not having any COVID-19 deaths. As a result, the study whether anyone has died from COVID-19 at the facility, counting facilities with no deaths as one outcome and those with any COVID-19 deaths as the other outcome.

Predictor Variables

Facility-level variables: Models include the following facility characteristics—security level, gender of those held, whether the facility is a reentry wing of a prison or jail, and whether the facility is a carceral hospital. Facilities are coded as maximum, medium, minimum or community security. All facilities that hold people each in their own cell are coded as maximum; this includes supermax, administrative max, and maximum-security facilities. Facilities that primarily hold people in double cells, with two people in each cell, are coded as medium security. Those that hold people primarily in dormitories are coded as minimum security. Finally, those based in the community—primarily community based halfway houses—are coded as community. Thirty percent of facilities in the sample have wings of differing security levels. To reflect this, the study codes facilities as having each relevant security level. For example, 275 facilities contain both maximum and medium security wings and are coded as both maximum and medium. Thirty-six percent of facilities are either all maximum security or have a maximum-security wing; 49 percent of facilities either are all medium security or have a medium security wing; 48 percent of facilities either are all minimum security or have a minimum-security wing; 11 percent of facilities are community-based facilities. While 72 percent of all facilities house only men, 11 percent house only women, and 16 percent house both men and women. Fourteen percent of facilities are reentry wings of prisons or jails; these are distinct from community based halfway houses as they are in higher security facilities. Finally, 4 percent of all facilities are carceral hospitals; while many prisons and some jails have hospital facilities, these particular facilities are stand-alone carceral hospitals. Each measure of facility-level characteristics come from the websites of each state Department of Corrections and the federal Bureau of Prisons.

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3 Because the CBBDP notes each positive test result as a case, and some facilities test people more than once—to decide when to move someone out of administrative segregation, for example. As a result, the maximum rate is 235,000—or 235,000 positive COVID-19 tests for 100,000 people.

County-level variables: This study includes both jails and prisons. County-level characteristics are likely to be associated with infection rates in jails as they gesture at both the people incarcerated in the facility, the people who staff the facility, and the resources the county has to respond to public health threats, for instance by providing PPE to staff and incarcerated people. County-level characteristics may also be associated with infection rates in prisons through their relationship to the staff of the facility and perhaps through their relationship to state level funding. County-level characteristics in the study include the percent of people in a county who are Asian, Black, Indigenous, Latinx, the average personal income, the percent of residents who are college graduates, the percent of people who have never married, and the urbanicity of a county. Measures of race, education, income, and marital status come from the 10 percent 2010 IPUMS USA sample, the 5 percent 2018 IPUMS ACS sample, and the 1 percent 2019 IPUMS ACS sample. Measures of urbanicity are from the NCHS. The IPUMS data includes information on people from 781 counties, 652 of which match with the counties in the CBBDP.[4] While models control for the percent of the county who are Asian, Black, and Latinx, they control for quintiles of the percent of the county who are Indigenous in order to allow for nonlinear effects. While the average county is only 2 percent Indigenous, some counties are 39 percent Indigenous. Using quintiles allows for the possibility that each additional percent Indigenous in a county is not associated with the same change in COVID-19 correctional facility infection rates. For example, though changes in the percent of a county's population that is Indigenous from 2 to 12 percent may not be associated with COVID-19 correctional facility infection rates, changes in the percent of the population that is Indigenous from 15 to 25 percent may be. The average county is 2 percent Indigenous, 5 percent Asian, 13 percent Black, and 15 percent Latinx. In the average county, personal income is $21,685, 19 percent of residents are college graduates, and 45 percent of residents have never married. Finally, on the NCHS 6-point urban-rural scale, where lower numbers designate more urban, the average county scores a 4.4. Four percent of the counties in the sample are large central metropolitan areas, 12 percent are large fringe metropolitan areas, 13 percent are medium metropolitan areas, 12 percent are small metropolitan areas, 20 percent are micropolitan areas, and 38 percent are non-core areas.[5]

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4 The 2019 IPUMS sample did not include enough counties for this analysis.

5 Metropolitan counties include 1) large central metro counties are Metropolitan Statistical Areas (MSA) of 1 million population that either contain the entire population of the largest principal city of the MSA, are completely contained within the largest principal city of the MSA or contain at least 250,000 residents of any principal city in the MSA; 2) large fringe metro counties in MSA of 1 million or more population that do not qualify as large central; 3) medium metro counties in MSA of 250,000-999,999 population; 4) small metro counties are counties in MSAs of less than 250,000 population; 5) micropolitan counties in micropolitan statistical areas; and 6) noncore counties are in neither metropolitan nor micropolitan statistical areas: NCHS Urban-Rural Classification Scheme for Counties.

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A drinking fountain is blocked off in Arts and Letters Hall on the Lincoln Park Campus due to COVID-19 safety guidelines, August 3, 2020. DePaul reconfigured all of its buildings, offices, and classrooms to comply with safety and social distancing guidelines during the pandemic.

Courtesy DePaul University/Jeff Carrion

State-level variables: When COVID-19 began tearing through correctional facilities in spring 2020, some jurisdictions enacted changes in policies or practice meant to slow the virus's spread. These included stopping jail admissions and releasing designated people from prison—either those with underlying medical conditions, those at the end of their sentence, or those who had been sentenced for minor crimes and who had little or no prior history. Models include a normalized index of these policies and practices taken from the underlying data for Prison Policy Initiatives report, *Failing Grades: States' Responses to Covid-19 in Jails & Prisons* (SRCJP), which includes a policy score for every state except for Illinois, which had pending legislation at the time the Prison Policy Initiative released the SRCJP. While the SRCJP scores states from 1 to 100, these scores only range from 8.15 to 29.50, with a mean score of 17, meaning they gave every state a failing grade. The study matched these state policy scores to each county in the final dataset and dropped observations from Illinois in models that examine the impact of changes in policy. Descriptive statistics for each of the variables included in the models are listed in Table 1.

Findings

Tables 2 and 3 report the results from three multivariate ordinary least squared (OLS) and three multivariate logistic regressions. Let's take a minute to consider how to interpret these results. First, these models cannot determine causality, only association. Second, while the OLS models tell us the amount of change in infection rates associated with each variable, expressed through each variable's coefficient, the logistic models tell us the change in the odds that a facility has had a COVID-19 related death, expressed through each variable's odds-ratio. Third, these models allow us to understand the association of each predictor variable to the response variable at given levels of each of the other predictor variables. In other words, for models that include facility security level and county-level average income, the models tell us the association of average income with infection rates given a particular security level. Fourth, models tell us both the size of an association and its significance. For example, the exponentiated coefficient for private facility in Model 2.1 is .62, and the table shows two asterisks after this exponentiated coefficient. Since numbers above 1 connote positive change, while those below 1 connote negative change, this means that private facilities have death rates that are 48 percent lower than public facilities. The two asterisks tell us that the p-value is under .01, meaning that there is a less than 1 percent chance that the model would find this result if there isn't a negative association between private ownership and facility infection rates. As noted in the tables, one asterisk means that there is a less than 5 percent chance, two that there is a less than 1 percent chance, and three that there is a less than .1 percent chance that the model would find this result if there isn't an association between that predictor variable and the response variable. When tables show a ŧ after a coefficient, this means that there is a less than 10 percent chance that the model would find this result if there isn't an association between that predictor variable and the response variable. To avoid presenting these results as more definite than they are, the text does not discuss the size of these marginal associations. Finally, the r-squareds and pseudo r-squareds tell us the percent of variance in the response variable—either infection rates or odds that there's been a death—that each model explains.

Table 2 reports the coefficients and standard errors from a series of OLS regressions. Because the response variable is logged-transformed, the table reports exponentiated coefficients, which represent percent change for the facility-level characteristics—all of which are binary—and numeric change for the county and state-level characteristics, which are linear. As a reminder, each exponentiated coefficient is a measure of the association with that variable and facility-level infection rates, holding each of the other variables in the model constant. Model 2.1 finds that privately owned or operated facilities are associated with infection rates that are 48 percent lower than those at public facilities. While 55 percent of the privately owned or operated facilities in the database are community-based halfway houses, this model controls for security level of facility and thus suggest that the effect of private ownership exists within security levels. The model also finds that being a medium or minimum-security prison or jail is associated with facility-level infection rates that are 21 and 47 percent higher, respectively, than those at community-based facilities. Maximum and supermax security facilities, where people are most often housed in single cells, have infection rates that are not significantly different from those of community-based facilities. Facilities that house only women are associated with infection rates that are 44 percent lower than those at facilities that house only men; facilities with both men and women have infection rates that are not significantly different from those that house only men. The positive association between being a carceral hospital and infection rates is marginally significant (p=.07). Notably, the r-squared (.05) shows us that these facility-level predictors explain only 5 percent in the variance of infection rates across facilities. This suggests that while these facility-level predictors are significantly related to infection rates, other factors that these models do not consider are far more predictive.

To better understand the predictors of facility-level infection rates, Model 2.2 adds county-level characteristics to the facility-level characteristics included in Model 2.1. This model finds that facility-level infection rates are 53 percent lower in facilities that are privately owned or operated than in those that are publicly owned and 43 percent lower in facilities that only house women than those that house only men. Once again, the association between being a carceral hospital and infection rates is marginally significant (p=.06). County-level racial characteristics are also predictive of facility-level infection rates. Each increase in the percent Latinx in a county is associated with 3480 more infections, per 100,000 people. Likewise, each increase in the Indigenous population quintile of the county is associated with a 1,000 more infection, per 100,000 people. None of the measures of socioeconomic characteristics of counties—average income, the percent of residents who are college graduates, and the percent of residents who have never married—are significantly associated with facility-level COVID-19 infection rates. This model explains 15 percent in the variance of infection rates across facilities (r-squared = 15).

Finally, Model 2.3 adds the Prison Policy Initiatives COVID-19 normalized prison policy score to each model and has findings that closely mirror those of Model 2.2. The model finds that facility infection rates are 49 percent lower in facilities that are privately owned and 43 percent lower in facilities that only house women, that each increase in the Indigenous population quintile of a county is associated with an increase of 1 in facility infection rates. The percent of a county's residents who are Latinx is marginally positively associated with facility-level infection rates in this model (p=.08). Likewise, the association between the SRCPJ policy score and infection rates is positive and marginally significant (p=.07). The positive association suggests that states with the worst outbreaks enacted more decarceration and public health policies. Its marginal significance is not surprising given that numerous analyses suggest that no state has truly done enough to combat the spread of COVID-19 in prisons and jails. In fact, the SRCJP gave each state either a D or an F and no state has reduced its prison population by more than 5 percent, and most populations are climbing again after brief drops (Widra and Hayre, 2020). This model explains 14 percent of the variance in infection rates across facilities.[6]

Table 3 reports the odds-ratios and 95 percent confidence intervals from a series of logistic regressions. Each odds-ratio is a measure of the association with that variable and whether there was a COVID-19 death at a facility, holding each of the other variables in the model constant. Model 3.1 finds that the odds that someone has died from COVID-19 at a maximum or medium security facility are about twice as high as they are in community-based facilities—184 percent and 214 percent higher, respectively. While the higher rates in maximum security facilities may seem surprising given single celling, turnover in and out of facilities—including transfer between facilities—may explain much of this. Minimum-security facilities are marginally positively associated with higher facility-level death rates than at community-based facilities (p=.08). Facilities that only house women have odds of having a COVID-19 related death at a facility that are 68 percent lower than those that house only men. Facilities that are carceral hospitals are marginally more likely (p=.12) to have had someone die from COVID-19. Notably, the pseudo r-squared (.08) shows us that these facility level predictors explain only 8 percent in the variance of infection rates across facilities.

Model 3.2 adds county-level predictors to those facility-level predictors included in Model 3.1 and finds that a facility's odds of having had someone die from COVID-19 are 87 percent lower in privately owned facilities, and are nearly three times and more than twice as high in medium (OR = 2.88) and minimum-security (OR = 2.22) prisons and jails than in community-based facilities. Facilities that only house women have odds of having a COVID-19 related death at a facility that are 85 percent lower than those that house only men. Being a carceral hospital is marginally positively associated with having had a COVID-19 related death (p=.06). County-level racial and economic characteristics are also predictive of facilities' odds of a having had a COVID-19 related death. Each increase in the percent Latinx in a county is associated with having 37 times the odds of a having a COVID-19 related death at a facility. Moreover, each increase in income quintile and the percent of people who have never been married is associated with a .53 percent and 17 percent decrease in the odds of that someone at the facility has died from COVID-19, respectively. Each increase in the percent of people who are college graduates is associated with an 18 percent increase in the odds that someone at the facility has died from COVID-19. This model explains 23 percent of the variance in death rates across facilities (pseudo r-squared = 23).

Finally, Model 3.3 adds the SRCPJ policy score to each model and has findings that

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6 The decrease in R-squared form Model 2.2. to Model 2.3 is likely because the latter model excludes all Illinois counties, since the PPI does not give IL a score, decreasing the sample size and the degrees of freedom.

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Olivia Kennedy, sophomore political science major, finishes a Zoom class in Arts and Letters on the first day of school. September 9, 2020, on DePaul's Lincoln Park Campus.

Courtesy DePaul University/Randall Spriggs

closely mirror those of Model 3.2. The odds that someone at the facility has died from COVID-19 are three times as high (OR=2.96) in medium -security prisons and jails than in community-based facilities while death rates in maximum and minimum-security facilities are not significantly different from those in community-based facilities. The odds that someone at the facility has died from COVID-19 at facilities that only house women are 72 percent lower than those that house only men. Facilities that are carceral hospitals are only marginally positively associated with the odds that someone at the facility died from COVID-19 (p=.06). County-level racial and economic characteristics are also predictive of facility-level infection rates. Increase in the percent Latinx in a county are marginally positively associated with the odds that someone at the facility died from COVID-19 (p=.06). Each increase in income quintile and the percent of residents who have never been married is associated with a .47 and 20 percent decrease, respectively, and each increase in the percent of people who are college graduates with a 14 percent increase in the odds that someone at the facility has died from COVID-19. Each increase in the SRCPJ policy score is associated with a 13 percent increase in the odds that a facility is a high death rate facility. This model explains 26 percent in the variance in death rates across facilities (pseudo r-squared = 26).

The positive association between the SRCPJ policy score and facility-level COVID-19 infection rates and deaths suggests that states with the worst outbreaks enacted more decarceration and public health policies. A separate model examining this association finds that facility-level infection and death rates are both predictive of the SRCPJ policy score, with each increase in infection rates being associated with a quite small but significant increase in the score (.004) and each increase in death rates being associated with a substantial increase in the score (32).

While the findings of this study are suggestive, they are only preliminary. Future research can tease out these findings by 1) operationalizing policy and practice changes using state, city, and DOC policy changes; 2) using longitudinal data to examine the impact of policy and practice changes on facility infections and deaths; 3) examining the impact of carceral COVID-19 outbreaks on community outbreaks; and 4) examining the impact of DOC vaccinations programs on both facility and community-level infection and death rates.

Discussion & Policy Recommendations

Ruth Gilmore defines racism as “the state-sanctioned and/or extra-legal production and exploitation of group-differentiated vulnerabilities to premature death, in distinct yet densely interconnected political geographies” (2007:261). This study joins her work in examining how the control of space—and of people through the control of space—is key to the production and exploitation of these vulnerabilities to premature death. Not only are facility-level indicators of how people are sorted in space—like security level—associated with facility infection rates and the odds that someone in a facility has died from COVID-19, but the racialization and resource deprivation of neighborhoods are also significantly associated with these outcomes.

While incarceration always harms the physical and mental health of those who experience it, their partners and children, and their communities, the impact of this harm is exponentially larger during this pandemic. We must work to improve health care policies and practices for incarcerated and newly released people. First, states must prioritize vaccinations for all people in congregate living facilities, vaccinating those held in prisons, jails, and detention centers during the same stage that they vaccinate those in nursing homes and assisted living facilities. Given the spread of new, more contagious strains, it important that these vaccinations happen now. While some states, like Illinois, are doing this, most are not. Additionally, given the atrocious history of medical experimentation on prisoners, many of those held in correctional facilities are wary of COVID-19 vaccines. DOC vaccination campaigns should include having those who incarcerated people address both their concerns and how vaccinations may help facilities return to in-person visits and protect the people whom they love. Second, DOCs should stop charging incarcerated people for basic products—such as soap and masks—that can protect them from illness and eliminate medical copays for those in jails and prisons. Third, DOCs can ensure that staff has sufficient paid sick leave and PPE. Finally, the Biden administration’s health care expansion plan should explicitly include making all people held in prisons and jails and people in the first year after their release eligible for and automatically enrolled in Medicaid. Additionally, state and city governments should offer free clinics for those in the first year after release, offering immunization programs, infectious disease screening and treatment, and harm-reduction services (Bick, 2007; Møller et al., 2010).

However, there is no way to address the public health threat of mass incarceration fully without large scale decarceration. State DOCs and the BOP can each work to reduce the number of people in prison. The simplest way for prisons to substantially reduce admissions is by refusing to admit people for technical violations of probation and parole rules, behaviors that include being out after 9:00 p.m., failing to secure a job, and having a beer. Additionally, states can release people nearing the end of their sentence, people in minimum-security facilities and on work release, people who are medically vulnerable or older, and people whose conviction is for a less serious crime. In addition, cities and counties can reduce the number of people in local jails by not arresting or prosecuting people for low level crimes, presumptively granting people who are arrested and charged nonfinancial releases and releasing people currently in jail simply because they do not have the money to post bail. To formalize these practices, states should eliminate money bail, replacing it with the presumption of release. States can use New Jersey, Illinois, Washington, DC, Los Angeles, and New York City as imperfect models for these programs. Because of the high turnover in jails, if a typical jail stopped admitting people entirely, its population would be cut in half in one week. If that same jail cut admissions in half, its population would decrease by more than 25 percent in one week (Widra and Hayre, 2020). Jail administrators can also accelerate releases of people currently in custody.

COVID-19 outbreaks in correctional facilities have already devastated incarcerated people and their loved ones—leading to large scale use of solitary confinement, the end of in-person visits, and other measures that increase people's isolation in addition to constant fear of illness and death. The more contagious strains now spreading may well amplify this devastation. Without quick action on vaccinations for all those in carceral facilities and large scale decarceration, COVID-19 will not only continue to spread like wildfire inside prisons and jails, but it will also continue to contribute to the high infection and death rates in Black and Brown neighborhoods. Due to the scale and racialization of mass incarceration, there is no way to address racial disparities in COVID-19 infections and deaths without addressing mass incarceration itself.

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Table 1 Descriptive Statistics

		Mean	S.D.	Min	Max	N
Response Variables						
Covid 19 Infection Rate	Per 100,000	287.70	302.71	.00	2323.01	1063
Covid 19 Death	Yes/No	1.71	4.30	.00	42.86	1063
Facility-Level Predictor Variables						
Security						
Maximum	Yes/No	.36	.48	.00	1.00	1063
Medium	Yes/No	.49	.50	.00	1.00	1063
Minimum	Yes/No	.48	.50	.00	1.00	1063
Community	Yes/No	.11	.31	.00	1.00	1063
Gender						
Women's Facility	Yes/No	.11	.32	.00	1.00	1063
Men's Facility	Yes/No	.72	.45	.00	1.00	1063
Mixed Gender	Yes/No	.16	.37	.00	1.00	1063
Type						
Reentry Wing	Yes/No	.14	.35	.00	1.00	1063
Carceral Hospital	Yes/No	.04	.20	.00	1.00	1063
County-Level Predictor Variables						
Race						
Asian	Percent	.05	.07	.00	.62	652
Black	Percent	.13	.13	.01	.67	652
Indigenous	Quintile	2.99	1.41	1.00	5.00	652
Latinx	Percent	.15	.16	.01	.98	652
SES						
College Grad	Percent	.19	.07	.07	.58	652
Personal Income	Quintiles	2.98	1.41	1.00	5.00	652
Never Married	Percent	.45	.05	.28	.63	652
Urban						
Urban-Rural Scale	5-Point Scale	4.44	1.60	1.00	6.00	1063
State-Level Predictor Variables						
Policy and Practice Score	Normalized	16.96	4.58	8.15	29.50	1063

Note: Data come from UCLA's Covid Behind Bars Data Project, DOC and BOP population reports, DOC and BOP websites, IPUMS USA, the NCHS, and PPI.

Table 2: What are the Facility, County, and State-level Predictors of Infection Rates in Carceral Facilities?

		Model 2.1	Model 2.2	Model 2.3
Facility				
	Private	.62**	.47**	.51 ŧ
		.15	.27	.39
	Maximum	.88	1.12	1.22
		.09	.17	.19
	Medium	1.21*	1.05	1.17
		.09	.16	.19
	Minimum	1.47***	1.02	1.05
		.09	.16	.19
	Women's	.66**	.60*	.57*
		.14	.24	.27
	Mixed Gender Facility	.86	1.21	.71
		.16	.22	.38
	Non-Community Reentry Wing	1.19	.94	1.25
		.15	.24	.29
	Hospital	1.46 ŧ	1.76 ŧ	1.77 ŧ
		.21	.30	.34
County				
	Asian		.21	.47
			1.01	1.27
	Black		.60	.66
			.79	.93
	Latinx		3.48*	3.86 ŧ
			.58	.77
	Indigenous		1.17**	1.19*
			.06	.08
	Income		1.05	1.11*
			.10	.11
	College Graduate		1.00	1.00
			.02	.02
	Never Married		1.00	.99
			.03	.03
	Urbanicity		1.12 ŧ	1.12
			.08	.09
State				
	Policy & Practice Score			1.04 ŧ
				.02
Constant		9.44***	5.50	2.37
		.09	1.22	1.52
R-squared		.05	.15	.14
N		1072	335	247

Note: Data come from UCLA's Covid Behind Bars Data Project, DOC and BOP population reports, DOC and BOP websites, IPUMS USA, the NCHS, and PPI. The table includes exponentiated coefficients and standard deviations for each variable included in the models. p=<.1 ŧ; p=<.05*; p=<.01**; p=<.001***

Table 3: What are the Facility, County, and State-Level Predictors of a Carceral Facility Having Had a COVID-19 Related Death?

		Model 3.1	**Model 3.2**	**Model 3.3**
Facility				
	Private	.93	.13**	.15
		.51-1.69	.03-.57	.01-2.15
	Maximum	1.84***	1.60	1.71
		1.28-2.65	.80-3.20	.74-3.96
	Medium	2.14***	2.88**	2.96*
		1.51-3.04	1.42-5.84	1.24-7.06
	Minimum	1.36ŧ	2.22*	1.72
		.96-1.93	1.10-4.43	.72-4.14
	Women's	.32***	.15**	.28*
		.17-.58	.05-.52	.08-1.01
	Mixed Gender Facility	.54 ŧ	.49	2.02
		.29-1.03	.18-1.36	.33-12.46
	Non-Community Reentry Wing	.53 ŧ	2.23	.93
		.27-1.03	.68-7.36	.21-4.06
	Hospital	1.92ŧ	4.08 ŧ	3.79 ŧ
		.84-4.42	.94-17.83	.64-22.46
County				
	Asian		.02	.06
			.00-4.76	.00-82.83
	Black		1.20	1.24
			.03-52.89	.01-129.35
	Latinx		36.58*	57.68 ŧ
			2.05-617.10	.92-3612.63
	Indigenous		.86	.80
			.66-1.13	.54-1.18
	Income		.47***	.47*
			.29-74	.26-.82
	College Graduates		1.18***	1.14*
			1.08-1.30	1.02-1.28
	Never Married		.83**	.80*
			.72-.96	.67-.96
	Urbanicity		.95	1.03
			.66-1.36	.64-1.63
State				
	Policy & Practice Score			1.13*
				1.02-1.24
Constant		.43**	663.83*	704.53 ŧ
		.30-.61	1.33-331227.10	.25-2023658.00
Pseudo R-squared		.08	.23	.26
N		642	228	151

Note: Data come from UCLA's Covid Behind Bars Data Project, DOC and BOP population reports, DOC and BOP websites, IPUMS USA, the NCHS, and PPI. The table includes odds-ratios and confidence intervals for each variable included in the models. p=<.1 ŧ; p=<.05*; p=<.01**; p=<.001***

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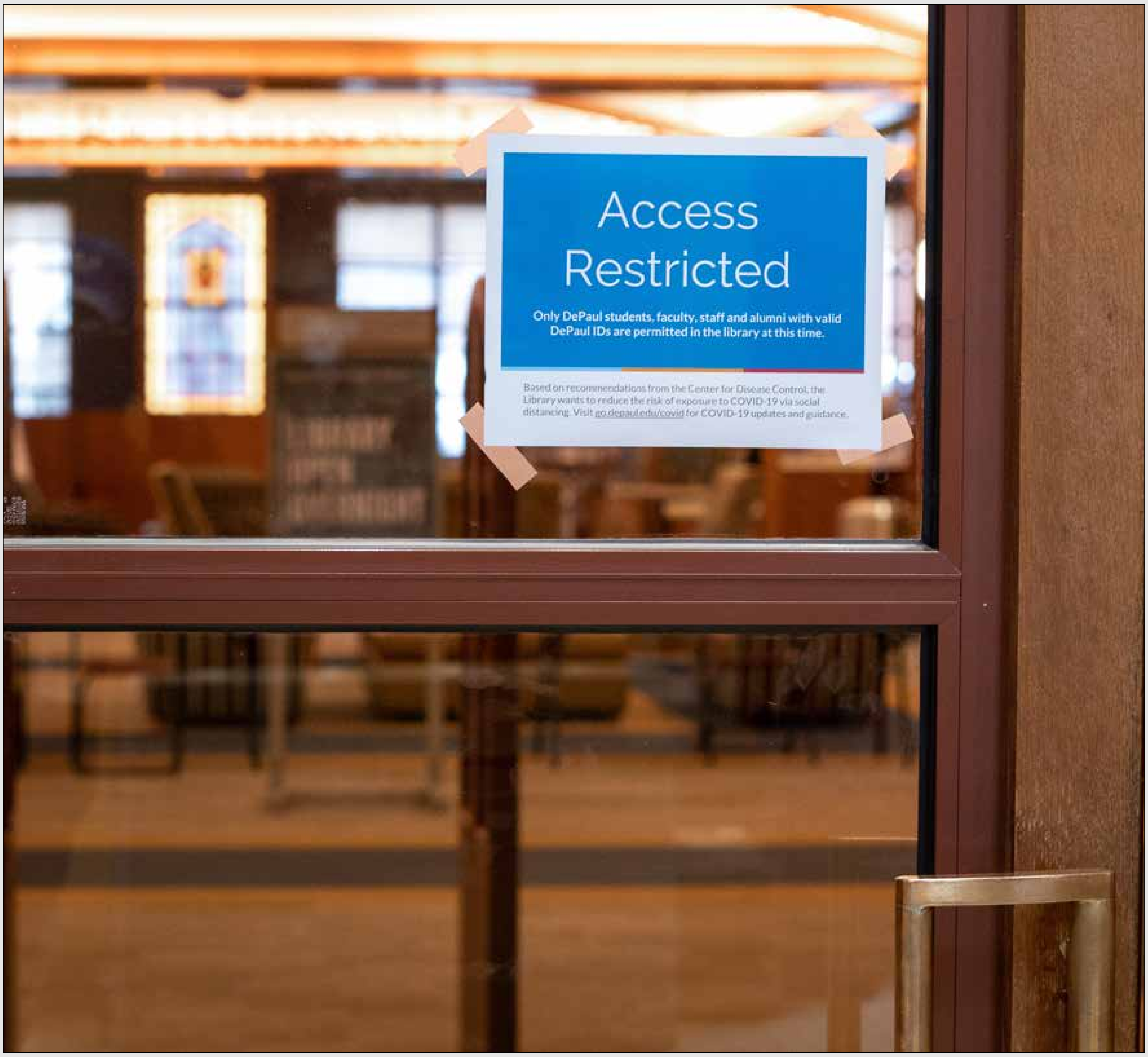

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Signage posted to the John T. Richardson Library warning guests of restricted access during the COVID-19 pandemic. March 16, 2020.

Courtesy DePaul University/Jeff Carrion

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A drinking fountain is blocked off in Arts and Letters Hall on the Lincoln Park Campus due to COVID-19 safety guidelines, August 3, 2020. DePaul reconfigured all of its buildings, offices, and classrooms to comply with safety and social distancing guidelines during the pandemic.

Courtesy DePaul University/Jeff Carrion

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Olivia Kennedy, sophomore political science major, finishes a Zoom class in Arts and Letters on the first day of school. September 9, 2020, on DePaul's Lincoln Park Campus.

Courtesy DePaul University/Randall Spriggs