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The Covid-19 pandemic and the future of the prison

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Title: The Covid-19 Pandemic and the Future of the Prison

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Abstract

Since the discovery of the “jail disease,” probably typhus, in the 18th Century, health experts have recognized that the prison is a near perfect incubator of contagious disease. Early in the Covid-19 pandemic, therefore, public health authorities and human rights groups advocated immediate and sustained decarceration of overcrowded prisons to save lives and stop the spread of the virus. Yet, decarceration efforts globally were uneven and largely failed to live up to expectations. Instead, prison systems typically sought to control the spread of Covid-19 by imposing strict “lockdowns” on prisoner movement that bordered on long-term solitary confinement in many jurisdictions. The consequences of these severe conditions on prisoners’ mental and physical health are only just emerging. The ramifications for future prison reform efforts may be more profound. If a deadly pandemic is not enough to instigate a reimagining of the role of prison in society, it is unclear what could.

* * * *

Disease has played a central role in shaping episodes of public controversy about the humanity of punishment. Disease has a distinctive power to strip away the general invisibility of life that takes place behind the walls of prison, and narrow the gulf that normally separates the fate of prisoners from the imagination of the free. These moments have been particularly consequential because of their potential to motivate legal elites ... to "see" the existing penal regime anew and actively to reimagine the American prison. (Simon 2013, p. 223)

In his sweeping history of the “medical model” in prison, Jonathan Simon argues that disease has been the primary catalyst of change in prison policy and practice since the origins of the institution. Beginning with what the English reformer John Howard described as the “jail disease” (presumably typhus) that spread through prisons in the late 1700s, Simon argues that the correctional enterprise has been “repeatedly reshaped by moments of heightened concern about disease, prisons, and the general health of the public” (p. 218). New diseases and new discoveries in medicine and public health, he argues, led to “periodic transformations [in] ... correctional philosophy and ultimately constitutional understandings of the prison” (p. 218).

Labelled the worst public health crisis for a generation (Maycock and Dickson 2021; Maycock 2022), the Covid-19 pandemic appears to be a perfect example of history repeating itself. From its onset, the pandemic has highlighted the extreme vulnerability of incarcerated populations. By February 29, 2020, half of reported Wuhan Covid-19 cases were within the city’s penal institutions, and an outbreak at a prison 450 miles away was traced to Wuhan

officials who had visited and possibly infected seven prison guards and 200 prisoners (Barnert, Ahalt, and Williams 2020). The first Covid-19 diagnosis in a US prison was announced in March 2020 (Pitts and Inkpen 2020) and the first death was only weeks later, on March 26, 2020. Within eight months, the number of prisoner deaths from Covid-related illnesses exceeded the number of prisoners executed in the United States during the preceding 30 years, creating a "new death penalty" (Mortaji et al. 2021, p. 801).

In 2021, the UN Office on Drugs and Crime estimated that approximately 550,000 prisoners around the world had at that point had contracted the virus, resulting in an estimated 4,000 fatalities (UNODC 2021). By July 15, 2022, the US prison death toll alone reached nearly 2,900 with over 600,000 reported cases tracked according to the Covid Prison Project (2022). Covid-related mortality rates have been estimated to be at least 2.5 times higher in prison than in the general population in different jurisdictions (Braithwaite et al. 2021; Toblin and Hagan 2021) and infection rates are estimated to be up to 5.5 times higher (Edge et al. 2021; Marquez et al. 2021; Byrne et al. 2022). These figures are almost certainly underestimates, as many prison systems are suspected of not disclosing complete or accurate information (Lemasters et al. 2020; Natolli et al. 2020). Human Rights Watch (2022, para. 1) observes: "Many countries around the world are not monitoring and reporting on Covid-19 infection, death, and mitigation efforts in detention settings." Furthermore, these figures do not include deaths of infected prisoners after release; nor do they include populations in jails where controlling Covid can have dramatic impact (Byrne et al. 2022). For instance, at the end of 2021, Rikers Island in New York City reported that over 17 percent of its jail population tested positive (CNN 2021). Similar patterns can be found in penal institutions around the world (Franco-Paredes et al. 2020; Dunkel, Harrendorf, and van Zyl Smit 2022).

As Simon suggests, this pandemic will almost certainly re-shape how prisons are understood, and incarceration is practiced. What that impact will look like, however, is not obvious. At the outset of the pandemic, penal systems internationally had to choose between at least two potential responses if they were to save lives and prevent the spread of the disease inside and outside the justice system. The most obvious option – advocated by the United Nations and numerous human rights organizations – was large-scale decarceration, defined by the National Academies of Science, Engineering, and Medicine (2020, p. 15) as "the process of reducing the number of people in correctional facilities by releasing those currently incarcerated and by diverting those who might otherwise be incarcerated."

The pandemic led to the previously unthinkable shutting of schools, universities, workplaces, funeral homes, sporting events, and nearly every other aspect of social life in order to save lives and stop the spread of disease. Penal institutions are almost unparalleled in their ability to spread Covid-19 internally and to the wider community (Presidential Health COVID-19 Equity Task Force 2021). Overcrowded prison systems and jails could have enacted decarceration and excarceration measures (defined by Drucker 2018 respectively as getting people out of prison and stopping putting more people in) to prevent deaths and protect the public. Of course, this is exactly what several countries around the globe did (HRW 2020).

By far the more common response, however, was to enact penal "lockdowns" involving heightened levels of isolation and containment (Dunkel, Harrendorf, and van Zyl Smit 2022). Rather than decarceration, prison systems around the world implemented an experiment in solitary confinement at a massive scale. In other words, in order to save lives, prison systems did more of what prisons do best: isolating residents from human contact.

This stark choice between decarceration and heightened lockdown could shape the future of the prison for decades (Simon 2013). In the following sections, we examine both options in depth. In Section I, we begin with an analysis of the spread of disease both within penal institutions and from prisons to the wider public. Prison populations are uniquely vulnerable to viruses like Covid-19, both because of the backgrounds of people in prison and because of the nature of penal institutions. We begin Section II by reviewing the case for substantial decarceration in light of these vulnerabilities. The reality of decarceration fell badly short of the ambitions of reformers who called for swift action to reduce overcrowding and save lives. In this section we review both the successes and the multiple failings of decarceration in practice and address the question of “what went wrong” with prison releases worldwide.

In Section III, we review what happened to the people who remained inside prison during the pandemic. Instead of or in addition to decarcerating, most prison systems engaged in forms of “lockdown” resembling widespread solitary confinement. We assess emerging research regarding the effects of this vast lockdown on prisoners’ mental health and well-being. In doing so, we draw upon an array of global examples; however, most of our focus is on the United States, which has the world’s highest incarceration rate (Fair and Walmsley 2021). In Section IV, however, we also draw upon original data collected as part of our own 18-month study, co-produced with the User Voice organization, involving 10 prisons in England and Wales. British prisons experienced a dramatic, system-wide lockdown that has had a measurable impact on the mental health and well-being of the incarcerated.

Finally, Section V concludes that, with some notable exceptions, state responses to the pandemic in prisons around the globe have been an immense failure, on almost every level, but most especially a failure of imagination or what Davis (2003, p. 103) calls the “stultifying idea that nothing lies beyond the prison.” Decarceration responses were far too cautious, in most jurisdictions releasing only small numbers of prisoners at the lowest risk levels. Yet, the pandemic exposed the prison’s enormous vulnerabilities for public health. As almost perfect incubators for spread of infectious diseases such as Covid, prisons presented serious health risks to both those living and working inside them, and to the wider communities outside. In short, prisons put communities at heightened risk. Stripped of any pretense toward rehabilitation or any countervailing policy justification, the prison’s survival is deeply puzzling, especially when so many other institutions (from schools to offices to places of worship) were closed and reinvented through use of technology in order to prevent the spread of disease.

Prisons have not survived the pandemic unchanged, however. They were radically transformed. Yet, in many jurisdictions, this took the form of a regression to their most basic state of pure punishment and social isolation. Emerging research suggests that this massive social experiment in prolonged solitary confinement -- explicitly proscribed by United Nations revised Standard Minimum Rules for the Treatment of Incarcerated People, known as the “Mandela Rules” -- may be having enormous adverse effects on the mental health and well-being of those confined in these extraordinary conditions. The long-term effects will be shouldered by communities over the next decade.

The implications for the future of the prison are particularly bleak, suggesting the near impenetrability of carceral logic in many countries with the largest prison systems. That is, if states cannot decarcerate during a pandemic, it is difficult to imagine a context in which substantial decarceration could be contemplated. At the same time, the efforts of a minority of prison systems globally give hope that the structural mechanisms exist for rapid decarceration if states have the political will to make it happen. The experiences of the

pandemic in prisons over the last three years have raised awareness within the medical community of the considerable public health threats posed by mass incarceration. This may ultimately expand the base of support for decarceration and penal abolition.

I. Confinement and Contagion

Since their origins, prisons have been places of illness and disease (Braun et al. 1989; Valway et al. 1994; Young et al. 2005; Franco-Paredes et al. 2020). For instance, well before the 2020 Covid outbreak, San Quentin Prison in California was the site of two previous influenza epidemics (Chaddock 2018) and an eruption of swine flu in 2009 (Reutter 2010). The first influenza outbreak was documented by Dr. Leo Stanley; between 500 and 1000 of San Quentin's 1900 prisoners contracted the "Spanish Flu" in 1918 (Arnold 2018; Hawks et al. 2020). Stanley (1919), who had worked in the prison since 1913, traced the first wave to one prisoner who was transferred from Los Angeles County Jail on April 13, 1918. By May 26 of that year, Stanley reported 101 admissions to the prison hospital, seven cases of bronchial pneumonia, and three deaths. Since then, there have been multiple waves of influenza outbreaks among prison populations internationally, especially in 1957-58 and 2003 (Franco-Paredes et al. 2020).

In a systematic review of existing studies, Baussano and colleagues (2010) found that the rate of tuberculosis (TB) in prisons was as much as 23 times higher than in the general population and that the rate of latent TB infections was as much as 26.4 times higher. Hepatitis rates are 9 times higher among prison populations than in the general population (Gough et al. 2010; Dolan et al. 2016; Getaz 2019; Kinner et al. 2020; Wegel, Wardak, and Meyer 2022) with around 15 percent of prisoners internationally testing positive for Hepatitis C (Harm Reduction International [HRI] 2020). Finally, approximately 3.8 percent of prisoners globally are thought to be living with HIV. Research suggests that these individuals can face fear, hostility, prejudice, and indifference from prison staff (Belenko et al. 2016).

Prisons are vulnerable to outbreaks of infection and disease for many reasons. They include pre-existing health conditions of the incarcerated population, widespread overcrowding, high mobility of staff and short-term inmates, poor living conditions, and limited access to healthcare (Maruschak, Berzofsky, and Unangst 2015; Novisky 2018; Akiyama, Spaulding, and Rich 2020).

Prison populations may be disproportionately ill-equipped to fight (and survive) infectious diseases because of pre-existing health vulnerabilities. First, the prison population now contains a far greater number of medically vulnerable, elderly prisoners as a result of the extraordinary lengthening of US prison sentences over the past four decades (Tonry 2016) – including a quadrupling of the number of people serving life sentences between 1984 and 2017 (The Sentencing Project 2017). Indeed, between 1993 and 2018, US prisons experienced a 400 percent increase in the number of adult inmates aged 55 or older (Carson and Sabol 2016; Bronson and Carson 2019). Second, prison populations have disproportionately high rates of chronic medical conditions such as obesity, diabetes, cardiovascular disease, and hypertension (Williams et al. 2012). Of course, incarcerated people are also far more likely to suffer from mental health problems, especially addiction and substance abuse disorders (Haugebrook et al. 2010). These issues are compounded by health inequities relating to socioeconomic status, race, and incarceration (Link and Phelan 1995; Phelan and Link 2015; Franco-Paredes et al. 2020; Lemasters et al. 2020). All these factors make the prison

population much more vulnerable to hospitalization or death as a result of contracting the coronavirus (see esp. Prost et al. 2021).

The experience of imprisonment is in itself a serious risk factor for numerous diseases. Drawing on Link and Phelan (1995)'s "social cause" framework, Novisky and colleagues (2021, p. 1630) argue that "incarceration is a potent structural driver of health inequalities that must be considered as a fundamental social cause of disease." This framework explains correlations between socioeconomic status and health "across time and place," indicating that social factors are integral to understanding health inequity due to unequal access to resources that create health protection in some groups and increase risk for others. Novisky and colleagues extend this conception by proposing that incarceration is a fundamental cause of health disparity, due to its relation to the four fundamental social cause criteria: multiple disease outcomes; multiple risk factors for disease and death; access to resources; and the reproduction of this association between prison and health across time and place. These risks are compounded by "intramural factors," policies within facilities that increase vulnerability to viruses, and "extramural factors" including the levels of prison staff rotating in and out of facilities daily, population "churn," and the absence of mass testing of residents and staff (Novisky 2021, pp. 1637-38).

Overcrowding, chief among these intramural factors, has been the subject of the most research on the public health risks of incarceration. Research on the differential manifestation of Covid-19 in prison suggests that every 10 percent increase in prison population results in a 14 percent risk increase in Covid-19. Prisons running at 70-100 percent capacity increase their risk three-fold, and those at 100 percent capacity increase risk five-fold (Leibowitz et al. 2021). With prisons in at least 125 countries chronically overcrowded (HRW 2020), this is a considerable issue. Research further suggests that contagion risk is heightened by poor ventilation, lack of sanitation and hygiene, poor nutrition, lack of autonomy regarding preventative measures, and inequitable medical care -- all of which are endemic in penal environments globally (Lemasters et al. 2020; Altibi et al. 2021; Chin et al. 2021; Toblin and Hagan 2021; Kim et al. 2022; Klein et al. 2022).

Movement of incarcerated people from one facility to another for administrative reasons also increases risks of contamination (Parsons and Worden 2021). Using analyses of time-series data from one mid-size prison in the US, Brinkley-Rubenstein and colleagues (2021) found significant associations between the rate of weekly transfers and positive Covid-19 cases. For example, in May 2020, 122 men were transferred from California Institute for Men to San Quentin, and within days, almost a third of the San Quentin population tested positive for Covid-19, with 28 individuals dying.

Those in prison are also more likely to suffer serious health consequences after contracting Covid-19. Altibi et al. (2021) found that of all patients hospitalized in two settings in Michigan, incarcerated people during a two-month period were more likely to present with fever, tachypnea, hypoxemia, and markedly elevated inflammatory markers than were their community-based counterparts. Furthermore, the study found that people in prison were more commonly admitted to intensive care and had higher rates of mortality within 30 days of admission (Altibi et al. 2021). Brelje and Pinals (2021, p. 197) observe: "Impaired provision of health care is particularly problematic because, at baseline, the imprisoned population has an increased rate of chronic medical conditions compared to the general population (Maruschak et al. 2016). These chronic conditions increase prisoners' risk of morbidity and mortality if infected by SARS-CoV-2."

The ramifications of these intramural and extramural factors, moreover, follow prisoners after release, creating “significant implications” for “spread of and susceptibility to Covid-19” (Novisky et al. 2021, p. 1638). These factors include insecure housing, barriers to health care access, and return to neighborhoods with disproportionate levels of Covid-19 due to “structural marginalization” regarding health care access, unemployment, housing density and stability, and structural discrimination.

This is just one way in which the pandemic risks of penal institutions extend into the communities in which they are sited (Drucker ; et al. 2015). For instance, failure to contain the spread of Covid in custodial settings carried severe potential consequences for diverse communities outside the prison gates, from “the homeless encampments in Los Angeles, California, to the rural households surrounding Maine State Prison” (Barnert, Ahalt, and Williams 2020, p. 966): “Outbreaks that occur within these facilities are likely to spread to the community, and outbreaks in communities are likely to spread to prisons. Preventing significant outbreaks within these facilities will, therefore, benefit not only the prisoners who are uniquely situated but also the general public (Brelje and Pinals 2020, p. 195).”

Big city jails in particular, with their daily influx of detainees, often briefly released for court and health appointments, become hotspots of contamination, both inside institutions and in their wider communities (Barnert, Ahalt, and Williams 2020, p. 964; see also Collica-Cox and Molina 2020). With their transient, short-term populations rotating in and out, porous city jails, especially, can act as vectors for infection to the communities around them. Reinhart (2021, section 2, para. 2) notes: “Neglect of the welfare of incarcerated populations boomerangs back upon the rest of the United States, multiplying harm in many forms: biological, psychiatric, economic, and social. Even just short pre-trial detention in a jail followed by acquittal inflicts long-term disadvantages on individuals and their communities.”

In addition to the churn of entering and exiting prisoners, the long list of commuters into and out of penal facilities includes prison staff, medical staff, legal professionals, maintenance workers), outside rehabilitation and education providers, and, in normal times, visitors, inspectors, and researchers.

Although proving a causal link between these institutions and community outbreaks is difficult (Murphy 2021), several studies have highlighted broad public health implications, including increased Covid-19 infection rates in areas surrounding jails and prisons (Hooks and Sawyer 2020; Lofgren et al. 2020; Sims, Foltz, and Skidmore 2021). Reinhart and Chen (2020) explored this at Cook County Jail in Chicago, which reported in January 2022 that over 450 staff members and over 430 detainees had tested positive. They found that jail–community cycling accounted for 55 percent of case rate variance across Chicago ZIP codes and 37 percent of variance across Illinois. By April 19, 2020, jail-community cycling through Cook County was associated with 15.7 percent of documented Illinois cases. In the authors’ view, current arrest and jailing practices “in highly policed neighborhoods” were turning arrested people into “potential disease vectors” in their communities. They argue (Reinhart and Chen 2020, p. 1417) that this may “bear partial responsibility” for the “striking racial disparities” of Covid-19 with the African American population.

II. The Covid Decarceration: What Went Wrong?

From the beginning of the pandemic, the potentially catastrophic effects of Covid-19 on people living in or near penal institutions were widely recognized by experts in fields ranging from epidemiology to criminology to medicine and law (Jiménez et al. 2020; Hwang, Kim, and Havins 2021; Leibowitz et al. 2021; Murphy 2021). Early modeling in these fields suggested that decreasing overcrowding through prison depopulation should be a central strategy in saving lives and reducing Covid-19 transmissions (Academies of Science 2020; Malloy et al. 2021). As a result, almost immediately, numerous calls for large-scale decarceration measures emerged (Strassle and Berkman 2020). The primary justifications can be broken down into cases based on:

- human rights (Commissioner for Human Rights 2020; Inter-American Commission on Human Rights 2020; Bagaric, Isham, and Svilar 2021)
- public health and epidemiology (Barnert, Ahalt and Williams 2020; Sivashanker et al. 2020; Murphy 2021), and
- ethics and social justice (Reinhart and Chen 2020; Denney and Valdez 2021).

Despite these overlapping arguments, the numbers released during the first two years of the pandemic fell far short of expectations (Clear 2020; Lockwood 2021), begging the question of what went wrong.

A. The Case for Decarceration

When cases began spreading in prisons and jails in early 2020, the United Nations High Commissioner for Human Rights, Michelle Bachelet, highlighted the urgent need for governments to take action to protect incarcerated people, including pressing states to reduce prisoner numbers (OHCHR 2020a). In particular, she highlighted the need to release “those particularly vulnerable to Covid-19... older detainees and those who are sick, as well as low-risk offenders,” while providing for “the specific health-care requirements of women prisoners, including those who are pregnant, as well as those of inmates with disabilities and of juvenile detainees” (OHCHR 2020a, para. 7). This was reinforced by the United Nations Inter-Agency Standing Committee (IASC) which called for prioritizing the release of “children, persons with underlying health conditions, persons with low risk profiles and who have committed minor and petty offenses, persons with imminent release dates and those detained for offenses not recognized under international law” (IASC 2020, p. 3).

Releasing incarcerated people during a contagion crisis was framed as an issue of international human rights law, with the UN Standard Minimum Rules for the Treatment of Prisoners (2015) setting out the obligation of states to safeguard the mental health and well-being of prisoners (OHCHR 2020a). The Council of Europe Commissioner for Human Rights (2020) reminded member states that efforts should be made to find alternatives to the deprivation of liberty in order to safeguard human rights standards, as outlined by the European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT) in its COVID-19 Statement of Principles (CPT 2020). This aim was reiterated by the Inter-American Commission on Human Rights (IACHR 2020a) in Resolution 01/20, “Pandemic and Human Rights in the Americas,” calling for identification of those whose status could be converted to an alternative to imprisonment (IACHR 2020b). In addition, the IASC stressed that the pandemic provided “an opening for engagement with police...[and other] law

enforcement institutions as well as the judiciary about risks and opportunities related to pre-trial detention” (IASC 2020, p. 3).

Medical experts focused on the public health threat posed by imprisonment. In an editorial, the *American Journal of Public Health* emphasized that the most urgent front-line strategy for correctional facilities must be population reduction “to limit spread and improve containment” (Barnert, Ahalt, and Williams 2020, p. 964). Likewise, the *British Medical Journal* urged that “healthcare needs to lead the charge ... (and) urgently organize to advocate for safe decarceration.” The pandemic was seen to highlight “the deep interconnections between public health and social justice,” further widening inequalities in communities at the intersection of race and disability who disproportionately bore “the human and economic cost” of incarceration (Sivashanker et al. 2020, p. 1). States were urged to develop comprehensive plans to address custodial setting risk, in an effort to prevent incarceration enacting “cruel and unusual punishment” (Barnert, Ahalt, and Williams 2020, p. 965). Early in the pandemic, with support from Arnold Ventures and the Robert Wood Johnson Foundation, the National Academies of Sciences, Engineering, and Medicine (2020) formed an ad hoc committee with expertise in law, medicine, public health, and social sciences to provide a blueprint for decarceration during the Covid pandemic. Their report recommended that large-scale release and decarceration efforts were “an appropriate and necessary mitigation strategy” for containing Covid-19 (p. 88).

From a social justice perspective, the emerging picture of prison and jail contagion risk levels led to grassroots mobilization, with activists inside and outside prisons rallying around decarceration demands. A significant element of this mobilization in the US focused on the effects of Covid-19 on specific racial and ethnic groups in and out of prison (Apm Research Lab 2020; Reinhart and Chen 2020; Farr 2021; Novisky et al. 2021). The Color of Coronavirus Project reports that the national Covid-19 mortality rate for Pacific Islander, Latino, Indigenous, and Black Americans between March 2020 and February 2021 was twice that of the White and Asian population, a difference which triples when adjusted for age (Apm Research Lab 2020). Farr (2021, P. 14) observes, “Neither public health nor political strategies for COVID-19 prevention and containment have provided Black, Latinx, and Indigenous people the necessary means to protect themselves,” with mass incarceration and the “deeper history of racialized custody” key factors these communities face. Denney and Valdez argue that pre-existing “racial vulnerability” fed into the spread of Covid-19 in prison, “mainly among race-class subjugated (RCS) communities” (2021, p. 863).

The impact of the pandemic on these groups was heightened by three enmeshed factors which “compound[ed] racial vulnerability”: health care inequity on the basis of class and race; “external shocks” disproportionately affecting RCS communities; and government responses that entrenched the inequitable effects (Denney and Valdez 2021, p. 863). Predictors of higher community Covid-19 rates including mean household size, proportion of food service workers, number of foreign-born noncitizens, and pre-existing health issues are all prevalent features of RCS populations. These factors were compounded by government responses that “disregarded or harmed RCS communities,” including rushed reopening of the economy and slackening of public health measures, despite rising death rates within these communities (Denney and Valdez 2021, p. 865).

Finally, an additional element of the grassroots mobilization was the “ableist” implications of Covid-19 responses. The American Civil Liberties Union and disability rights groups campaigned for release of disabled persons imprisoned for non-violent offenses. As Schotland (2021, para. 1) observed, disabled prisoners face “multiple and overlapping injustices and

oppressions” including “race and ethnic discrimination, poverty, trauma, multiple physical impairments, mental illness, and/or cognitive limitations.” In the US prison system, disability levels are three times higher than in the general population, and in US jails, four times higher (Schotland 2021). Disability added an intersecting and additional risk to justifications for court sentences when “conditions of confinement are so dangerous they violate human rights” (Schotland 2021, para. 3).

In short, the public health risks of Covid-19 intersected with human rights and ethical concerns creating a broad coalition of support for decarceration. Beyond the risk of prisons acting as an amplifying contagion vortex during the pandemic, the risks inside were seen potentially to breach both the 8th Amendment of the US Constitution’s prohibition of “cruel and unusual punishment” and, more broadly, obligations of governments set out in the European Convention on Human Rights (1950) and the UN’s Mandela Rules (United Nations 2015). For legal observers, the elevated “risk” of incarceration caused by the pandemic raised additional issues regarding the legal principle of “proportionality” that requires that severity of punishments be proportionate to the seriousness of breaches of law for which they are imposed. With imprisonment during the pandemic “more burdensome than was previously understood,” decarceration was a policy more “consistent with the proportionality principle” (Bagaric, Isham, and Svilar 2021, p. 127).

B. Decarceration in Practice

Despite these arguments from disparate quarters, the numbers of released prisoners in the first two years of the pandemic were far lower than anticipated in most countries (Lockwood 2021). Across the globe, reviews by Harm Reduction International (HRI) and Human Rights Watch (HRW) suggested that at least 109 countries enacted decarceration measures between March-June 2020 with the potential to release around 5 to 6 percent of the 11 million people in prison worldwide (HRI 2020; HRW 2020a). However, not all announced release schemes were actually implemented (Grierson 2020c; HRW 2020a, 2020b), and many of those that were fell “significantly short of expectations and the significant political commitments made in the name of public health” (HRI 2020, para. 6). Moreover, many releases were temporary, with released prisoners reimprisoned at later stages of the pandemic. By the end of 2021, the global prison population was estimated to be 10,771,204, a rate of 140 per 100,000. This represented an *increase* from 10,743,619 prisoners in 2018, but a decrease in real terms from 45 per 100,000, with all continents but the Americas experiencing population drops (Fair and Walmsley 2021). Penal Reform International’s *Global Prison Trends 2022* describes current prison expansion globally to be “at an all-time high” with a population around 11.5 million.

Some countries did, however, achieve more substantial and sustained decarceration. This was especially the case in countries with long-standing issues with prison overcrowding. Before the pandemic, the Philippines had one of the world’s most overcrowded prison systems, operating at 537 percent of capacity in its 400 prisons and jails (Arambulo et al. 2021). By October 2020, nearly 82,000 prisoners and detainees were released in one of the largest such initiatives globally (Arambulo et al. 2021). In Kenya, reduction initiatives included scaling down services and activities in the justice system for 30 days; a directive to dispense with police bonds for low-level offenses; and suspension of new admissions to custodial institutions. Additionally, after reviewing 19,000 case files, the High Court in Kenya decided that 15,379 prisoners should be released, have their sentences reduced, or be placed on a community service order (Deche and Bosire 2020). Other decarceration efforts highlighted by the Harm Reduction International analysis in 2020 include India releasing over 66,000 people (14 percent of the population); Iran issuing 10,000 pardons and releasing 75,000 of its 240,000

prisoners (over 30 percent); Iraq reducing its 45,000 population by just under 40 percent; and Myanmar pardoning 27 percent of its 92,000 prisoners (HRI 2020).

The Council of Europe (2022) reports that the Covid-19 pandemic resulted in prison population reductions in 49 prison administrations of 52 member states, due largely to reduced crime rates and court backlogs in conjunction with various release schemes. The Portuguese government in 2020 planned to release around 10 percent of the prison population, approximately 2000 prisoners, including those serving sentences under two years and those nearing the end of a sentence for non-violent crimes, corruption, drug trafficking, or state actors. Portugal also enacted an “exceptional presidential pardon” for the release of many individuals over the age of 65 with pre-existing health issues (Frois 2020, p. 25). Likewise, France decreased its prison population by an estimated 20 percent in the pandemic’s first year (HRI 2020).

These were exceptions to the general rule, however. Decarceration was far less successful in most countries. Zeveliva and Munof (2020) found that only 16 of 47 jurisdictions in the Council of Europe effectively implemented decarceration measures in the first year of the pandemic. Overall, imprisonment rates decreased by only around 2.3 percent across the continent primarily due to decreases in crime and backlogs in the courts (Council of Europe 2022). The Prison Service of England and Wales had a particularly troubled experience. In April 2020, the Ministry of Justice announced that it would release up to 4,000 prisoners, about 5 percent of the population (Grierson 2020*a*). Over 2,000 electronic monitoring tags were purchased to facilitate the releases. The chair of the Independent Advisory Panel on Deaths in Custody (IAPDC) warned that the scheme was “hard to understand, difficult to explain and close to impossible to deliver” with processes and eligibility criteria “mired in complexity and risk aversion” (Grierson 2020*b*, paras. 2-6). By the end of June 2020, only 57 individuals had been released, six mistakenly. The Conservative Government lost its political nerve. By October 2020, the scheme was “closed.” In total, 275 individuals were released, a fraction of one percent of the overall prison population (Grierson 2020*c*).

Of course, the success of decarceration around the world largely depended on the United States, which holds a quarter of the world’s prisoners (Fair and Walmsley 2021). The scale and complexity of criminal justice systems in the US means that a wide variety of disparate strategies were required rather than the centralized, top-down approach taken in smaller countries with a single prison system. For example, California expanded use of “good time” credits to promote prisoner release while also establishing a statewide emergency bail schedule to reduce use of cash bail and lower jail populations (Prison Policy Initiative 2021). Inevitably, these multiple, overlapping, and enmeshed local, state, and national initiatives were neither universally nor consistently implemented resulting in wide variation across states and localities (Council on Criminal Justice 2020, p. 5).

The Bureau of Justice Statistics reported a 15 percent drop in state prisoners by the end of 2020 (Carson 2021). Three states were able to decrease their overall prison populations by over a quarter in this first year of the pandemic: West Virginia (33 percent), New Jersey (31 percent), and Connecticut (26 percent) (Byrne et al. 2022). However, most of these drops are not the result of prisoner release strategies, but rather can be explained by the dramatic 40% drop in prison admissions in the first year of the pandemic – a result of crime declines, court delays, and temporary suspension of transfers from local jails (Sawyer and Wagner 2022). Prisoner numbers started to increase again in 19 states between January 2021 and January 2022 (Vera Institute of Justice 2022). The Prison Policy Initiative (2021, p. 1) concluded that

US lawmakers have “failed to reduce prison and jail populations enough to slow the spread of Coronavirus” (see also Lemasters et al. 2020; Lockwood 2021).

At the federal level, more systematic attempts were made to decarcerate with mixed success. In March 2020, Attorney General William Barr asked the Bureau of Prisons (BOP) to transfer older and medically vulnerable prisoners to home confinement if they were low-risk and convicted of non-violent crimes (Office of the Attorney General [OAG] 2020a; Bagaric, Isham, and Svilar 2021). By April 3, 2020, only 552 prisoners had been released (Prescott, Pyle, and Starr 2020). The CARES Act (2020) authorized federal prisons to release elderly prisoners and those convicted of non-violent crimes to home confinement (Office of the Attorney General [OAG] 2020b; Prison Policy Initiative 2021). Recognizing the limited facilities of the federal probation system, Barr also authorized BOP to release prisoners to home confinement even if electronic monitoring was unavailable (OAG 2020b). However, his memo, warned against “too liberal releases” and urged continued incarceration of the vast majority of prisoners sentenced for violent offenses (Prescott, Pyle, and Starr 2020a, para. 17). Finally, the Trump Department of Justice announced that released individuals whose terms extended beyond the pandemic must be returned to prison (Bagaric, Isham, and Svilar 2021). The Biden administration rescinded that policy, giving discretion for sentences to be finished at home (Prison Policy Initiative 2022).

In all, between March 2020 and August 2022, over 46,000 federal prisoners were placed on home confinement for part of their sentence as a result of these initiatives (US Bureau of Prisons 2022a). The federal prison population dropped from 177,214 to 155,562 between the end of 2019 and the end of 2020, but had risen again to 158,162 as of August 2022 (US Bureau of Prisons 2022b). As Clear (2021, p. 1419) writes: “These numbers may seem large. They are not. ... If the aim is to target people in prison who are elderly, infirm, or doing time for less serious crimes, there is plenty of room to release more people from confinement.”

C. Impediments to Successful Decarceration

Reflecting back on the first two years of the pandemic, the question becomes “what happened to decarceration?” Given the perceived risk of Covid-19 to the public and the extreme protective measures taken in nearly every other sector in society, the lack of substantial decarceration of prisons raises considerable questions.

Stringent eligibility requirements for release initiatives were one major obstacle. Release schemes largely followed IASC (2020) recommendations concerning release of medically vulnerable and elderly prisoners and those nearing the ends of their sentences. However, as Prescott and colleagues (2020a, 2020b) point out, two-thirds of people in prison over age 55 in the United States are serving long sentences for offenses considered to be “violent crimes.” As such, the majority of older, at-risk prisoners were precluded from Covid-responsive release measures.

Another impediment concerns drug users. The UN Human Rights Office of the High Commissioner highlighted distinct risks faced by drug users because of chronic health problems and socioeconomic marginality and urged consideration of early release for people convicted of non-violent drug offenses (OHCHR 2020b). Nonetheless, by June 2020, 25 percent of countries undertaking decarceration initiatives “explicitly excluded people incarcerated for drug offences” (HRI 2020, para. 5).

In addition to impeding decarceration efforts, this decision created racial disparities by deeming drug offenders to be riskier than white-collar offenders. In one analysis, Hager (2020) found that only seven percent of African American prisoners were considered sufficiently low risk for release compared with 30 percent of whites (non-US citizens with immigration-related offenses were ineligible). Likewise, the Council on Criminal Justice (2020, p. 3) observed that pandemic decarceration efforts in the US “may have exacerbated some racial and ethnic disparities.” As jail populations began to decrease in the early months of the pandemic, the disproportionate confinement of minorities increased (Council on Criminal Justice 2020, p. 3). Such biases were not limited to the United States. Miranda and colleagues (2021) found in Portugal that public opinion about decarceration was more favorable to early release of White than of Black prisoners. They conclude that documented racial disparities in policing and sentencing may also be “present in the early-release decisions, even when it represents an important measure to address the Covid-19 pandemic” (Miranda et al. 2021, p. 10).

US policies governing compassionate release of disabled prisoners were also said to be “too narrowly drawn,” and were administered “too stringently by the wardens, prosecutors, and judges” (Schotland 2020, section 1). Implementation of compassionate release required “ad hoc litigation” and depended too much on criteria for release applied to individuals. Compassionate release applicants usually had no right to counsel; outcomes too often depended on individual prisoners' resources. Nearly 98 percent of release applications by federal prisoners were denied; only 156 were approved (Neff and Blakinger 2020). Similar failings occurred in many countries. The São Paulo Court of Justice in Brazil, often called “the epicenter” of the pandemic in the Global South, for example, also ruled against the vast majority of compassionate release petitioners (Pires de Vasconcelos, Machado, and Wang 2020, p. 1473).

Issues also emerged concerning support and services for safe and secure reintegration of released prisoners. Portuguese reports highlighted that “dozens of inmates were simply given one day’s notice and left at the prison gate, with their possessions in a handbag or a bin bag” with no means of transport and restricted public transport (Fois 2020, p. 26). Fois asks whether the deficiencies in implementation of release policies heightened Covid-19 risks for those released, “in effect abandoning rather than liberating them – in a global pandemic emergency” (Fois 2020, p. 26). Lockdown measures outside of prisons created a “compromised community environment” for released prisoners including diminished reintegration services, lessened socioeconomic activity, and overwhelmed mental health and social security services (Shepherd and Spivak 2020, p. 59). These problems disproportionately affected particular groups, including homeless people and members of indigenous groups (Ricciardelli et al. 2021; Schneider 2021). UN recommendations urged that those released from prison during the pandemic should be provided support with housing and health care (IASC 2020, p. 4; OHCHR 2020, para. 9). Releasing prisoners without addressing structural inequalities and service deficits can impede reintegration efforts (National Academies of Science, Engineering, and Medicine 2020).

Overall, implementation of decarceration was neither as widespread nor as efficient as it should have been. Globally, most states failed not only to prevent Covid-19 spread within prison systems, but “also did little to prevent the transmission of the virus from prison and jail hotspots to nearby surrounding communities... ignoring, downplaying, and distorting this systematic failure left communities exposed” (Hooks and Sawyer 2020, para. 3). In the context of a global environment of unprecedented policy initiatives to reduce the spread of Covid, the failings of decarceration became all the more stark. Schotland (2021, section 8) concludes that

“the neglect of prisoners during the pandemic reflects a combination of racism, classism, disablism and stigma” and that there was “no countervailing public policy justification” for incarceration in such dangerous conditions.

III. The Covid Lockdown

With only a small fraction of incarcerated populations released, prison administrations everywhere were faced with the challenge of containing a highly contagious and deadly disease under near impossible conditions (Pont et al. 2021; Dunkel, Harrendorf, and van Zyl Smit 2022). As in other workplace or residential environments, penal institutions introduced standard mitigation practices, including the use of lateral flow and PCR testing, enhanced sanitization, personal protective equipment, and, beginning in 2021, vaccination (Cloud et al. 2020; Mortaji et al. 2021). Prisons around the world sought to become “Covid responsive” in much the same way as previously they sought to achieve “gender responsiveness” or “trauma responsiveness” (Bloom, Owen, and Covington 2003; Durr 2020).

The delivery of these measures differed in quality and speed across jurisdictions and between individual prisons. For instance, in July 2021, the World Health Organization reported that more than 84 percent of Spanish prisoners had been fully vaccinated against Covid-19, but only 34.4 percent in Finland (WHO 2021). A number of studies suggest vaccine hesitancy played a role in low rates of uptake, particularly in some US states (but not in California; see Kwan et al. 2022). Prison populations are often over-represented in clinical trials (Lieu et al. 2022) and, perhaps unsurprisingly, have been found to have high levels of medical mistrust (Chin et al. 2021; Stern et al. 2021).

The most controversial community mitigation measure in most contexts was the introduction of strict policies prohibiting social congregation. Public spaces from nightclubs to children’s play parks were closed, and members of the public were urged (sometimes required) to stay in their homes. In what became known as the Covid-19 “lockdown,” residents of most countries found their ability to socialize with others outside their household legally curtailed, with nearly unprecedented restrictions imposed on all aspects of social life, including congregating with outsiders inside one’s own home. “Lockdowns,” in the form of restrictions on out-of-cell time, swiftly became the heart of Covid-responsivity practices in prisons everywhere (Brandon and Dingwall 2022; Dunkel, Harrendorf, and van Zyl Smit 2022). In their comparative survey, Zeveliva and Nazif-Munof (2020) found that all Council of Europe member states, as well as Belarus and Kazakhstan, implemented “lockdowns” of various severity in the first year of the pandemic. Essentially, prisons did what prisons do best: lock residents away from human contact. In this section, we explore the “intended and unintended consequences” of these “strict medico-carceral measures” (Durnescu and Morar 2020, pp. 1144-45). We draw in particular on a recently completed case study of the effects of the Covid-19 lockdown in prisons in England and Wales (User Voice/QUB 2022).

A. Locking Down the Locked Up

Prior to the pandemic, 50,000 to 80,000 prisoners in the US were held in solitary on a given day. During the pandemic, this increased by 500 percent to 300,000 (Cipriano 2021). Yet, even ordinary incarceration in the early months of the pandemic could be considered a form of solitary confinement. According to Rule 44 of the United Nations revised Standard Minimum Rules for the Treatment of Incarcerated People, known as the “Mandela Rules,”

solitary confinement is defined as confinement for at least 22 hours a day, without meaningful contact. The Mandela Rules proscribe the use of such confinement for more than 15 days at a time. Yet, initial research suggests that prisoners in much of the world were confined to their cells for 23 hours each day for months at a time at the beginning of the pandemic (Zeveliva and Nazif-Munof 2020; Prisoners Education Trust 2021; Dunkel, Harrendorf, and van Zyl Smit 2022; Heard and Padfield 2022). Informal association time between prisoners, group counseling, workshops and classrooms, gym activity, religious services, family visits, and more were discontinued, and prisons were reduced to something akin to their nineteenth century origins as places of isolation and solitude. Although this enforced social distancing almost certainly mitigated the spread of the Covid-19, saving lives, it is also unquestionable that “indefinite or prolonged solitary confinement is an inhumane or degrading form of treatment and, in its more extreme manifestations, a form of torture” (Mulgrew and van Zyl Smit 2022, p. 596).

Heard’s (2020, 2022) comparative analysis of prison regimes, before and after the onset of the pandemic, provides a rare glimpse into what this change looked like in ten countries (Australia, Brazil, England and Wales, Hungary, India, Kenya, the Netherlands, South Africa, Thailand, and the United States). Almost all suspended prison visitation for family and friends beginning in March 2020 (Anthony et al. 2022). Prior to the pandemic, prisoners in South Africa averaged around 5 visits per month. Those in the Netherlands and Australia averaged one per week, and those in Thailand reported meeting with visitors through an outdoor partition several times each week. For the first months of the pandemic, all visits essentially ended across the surveyed countries except in Thailand, where the time families were allowed was reduced from 20 to 10 minutes (Heard and Padfield 2022). Some jurisdictions sought to compensate for this dramatic shutting down of contact with the outside world. In the United States, the federal Bureau of Prisons (BOP) facilitated 500 minutes of free calls each month for each prisoner (US BOP 2020). In the United Kingdom, in-cell telephones were installed in half of prisons (Heard 2020; Brandon and Dingwall 2022). This acknowledged the inherent difficulties in expecting dozens of prisoners safely to share a single payphone, especially when each prisoner was allowed out of cell only for an hour (User Voice 2021). In addition, new technology which facilitated online family visits (known as “purple visits”) were introduced in many facilities (House of Commons 2020).

Restrictions on visitation were not confined to family, but also encompassed legal representatives. Prison-based research essentially came to a halt; thus the voices of those in prison were largely absent from public debates (Pyrooz et al. 2020; Maycock and Dickson 2021). Of course, some studies captured the views of those who had loved ones in prison (Lockwood et al. 2021; Minson 2021; McDonald et al. 2022), and others drew on data derived from letters and blogs written by prisoners (Armstrong, Davis, and Pickering 2020; McDonald et al. 2020; Prison Reform Trust 2020a; Fair Trials 2021; Sorge et al. 2021; Maycock 2022). Prison inspections were also suspended in many jurisdictions (Dunkel et al. 2022), although in England and Wales the inspectorate carried out interviews with women, men, and children in 6 prisons between September 30 and November 5, 2020 (HMCIP 2021). In 2020, the World Health Organization stated that the pandemic should not be used to prevent external inspection bodies and human rights agencies from obtaining access to prisons, yet research indicates that this recommendation was seldom followed. Charities, human rights agencies, and independent monitoring bodies were denied access in numerous jurisdictions (Heard 2021; Mulgrew and van Zyl Smit 2022).

Although prisoners have a right to the same medical care as those on the outside, this access was sharply curtailed in many jurisdictions during the first years of the Covid pandemic (Pont et al. 2021). Hutchings and Davies (2021) found that prisoners during the pandemic sometimes waited 14 weeks for a doctor's appointment, extending already long waiting times. In many jurisdictions, the suspension of group-based rehabilitation activities had implications for both mental health and progress toward parole release. Heard (2022, p. 627) argues that ending group therapeutic activities denied those in prison "the opportunity to demonstrate good behavior or rehabilitation and made it harder to prepare for release...because there would be nothing to inform the relevant risk assessments or recommendations."

Finally, the lockdown conditions were often elongated as a result of pandemic-related staffing shortages (Akiyama, Spaulding, and Rich 2020; Wang et al. 2020; Nowotny, Kapriske, and Brinkley-Rubenstein 2021; Pont et al. 2021; Vest 2021). In some countries, understaffing and lack of experienced staff worsened conditions experienced by prisoners and resulted in violence, protests, hunger strikes, and riots (Heard and Padfield 2022). Riots were reported to have broken out in more than 22 prisons in Italy over a two-day period in March 2020 (Sorge et al. 2021). In England, the pandemic caused massive turnover in prison staff with more leaving than could be hired, including the most experienced senior staff. Currently, around a third of officers have been in post for less than three years, compared to one in eight in 2010 (Cooney 2021). Staffing issues have also contributed to deteriorating healthcare with unavailability of prison escorts leading to missed appointments. Like the prisoners they work with, prison staff faced considerable health risks, including mental health risks; absentee levels in prison systems have been extremely high throughout the pandemic (Kathari et al. 2021).

B. Effects of the Lockdown

It is too early to assess the long-term consequences of the pandemic lockdown on the lives of those in prison. Emerging evidence suggests that the extreme isolation, cessation of visits, lack of meaningful activity, and deteriorating relationships with prison staff may be taking an immense toll on the mental health of prisoners (Johnson et al. 2021; Brandon and Dingwall 2022; Kim et al. 2022). Casey and colleagues (2021, p. 481) found:

The experience of lockdown was both traumatising and punitive for people who were already marginalised and subject to criminal justice control...In effect, the severity of sentences for people completing custodial sentences and community sentences increased. Crucially, both people in prison and people under supervision suffered extension to and exacerbation of the ways in which punishment suspends and disrupts their lives; their efforts to progress towards a life beyond punishment were often frustrated and stalled.

Pre-pandemic research suggests that incarceration itself is associated with a 45 percent increase in the odds of suffering major depression (Kessler, Berglund et al. 2005; Schnittker, Massoglia, and Uggen 2012). These effects are magnified by the experience of long-term solitary confinement, which has been found to have "often devastating psychological consequences" (Wildeman and Anderson 2020, p. 107; see also Smith 2006; Shalev 2011; Haney 2018). Incarcerated people who experience solitary confinement have higher rates of Post Traumatic Stress Disorder (PTSD), self-harm, and suicide (Kaba et al. 2014), and experience long-lasting physical, neurological, and physical health problems (Smith 2006; Haney 2018; Luigi et al. 2020; Jahn et al. 2022). Wildeman and Anderson (2020) found that, compared with the general population, people subjected to solitary confinement in Norway were almost ten times more likely to die within five years of release. Cloud and colleagues

(2020, p. 2738) observe: “The hallmarks of solitary confinement — social isolation, physical idleness, and sensory deprivation — lead to immense psychological suffering and lasting trauma, and too often result in self-harm, violence, and suicide, even after only relatively short periods of time.”

The cessation of visits from outside is also likely to undermine the precarious mental health of imprisoned people (Sorge et al. 2021). Research since the early 1990s suggests positive effects of family visits on a variety of outcomes for prisoners (Hairston 1988; La Vigne et al. 2005; May, Sharma, and Stewart 2008; De Claire and Dixon 2015; Woo et al. 2016; Turanovic and Tasca 2019). Research findings consistently show positive effects of visits on reduced symptoms of depression in female and adolescent prisoners and positive associations between visits and reduced rule breaking behavior, reduced recidivism, and improved chances for survival in the community after release (La Vigne et al. 2005; De Claire and Dixon 2015). Hewson (2020, p. 569) argues that the systematic elimination of visits “could lessen the use of social support for mitigating against and coping with mental distress, and the risk of suicide and self-harm. This scarcity of social support might make adjustment to prison more difficult, risking the use of maladaptive coping strategies.” Furthermore, suspension of visits in many countries led to dramatic loss of access to essential items often brought in by family, such as medicine, food supplies, clothing, and sanitary products (Heard 2021; Bucarius and Sandberg 2022).

Ironically, the lockdown may have even exacerbated susceptibility to Covid-19. Novisky and colleagues (2021) argue that highly restrictive Covid-responsivity measures can increase vulnerability because of increased cortisol levels resulting from elevated levels of stress associated with isolation. In short, Covid-responsivity as practiced in many parts of the world was achieved at considerable cost to the physical and mental health of prisoners. As Lachs and Hurley (2021, p. 55) conclude: “In light of the well-documented harm that solitary confinement can cause, it is a practice that should be prohibited by law and must not form part of the response to Covid-19. Safer alternatives exist, like reducing the number of people detained in prisons.”

IV. A Case Study of the Pandemic Lockdown in England and Wales

Prior to the onset of the pandemic, HM Prison Service of England and Wales was widely viewed to be in a state of crisis (Brennan 2020; Corker 2020). For a decade, prisons had faced dramatic budget cuts, staff shortages, poor infrastructure, and an overcrowded system that had nearly doubled in size from a population of 44,246 in 1993 (Ministry of Justice 2013) to 83,023 at the end of 2019 (HMPPS 2019). Levels of violence, suicide, and self-harm were at or near record levels in the years leading up to the pandemic (HMPPS 2022a). The former Conservative Party Minister for Prisons Rory Stewart compared the prisons he visited (unfavorably) to war zones he had worked in during his military experience: “Violence had tripled to 30,000 assaults a year, every institution was overcrowded, filthy and rat- and drug-infested” (Cohen 2022, para.11).

The first Covid-19 infection was reported in HMP Manchester in March 2020. Within two months, 21 prisoners and 7 prison staff died at the high security facility (Heard 2022; Heard and Padfield 2022). Overall, just over 200 people in prisons in England and Wales died having

tested positive for Covid-19 between the onset of the pandemic and July 31, 2022 (Ministry of Justice 2022). It could have been much worse. In April 2020, modeling conducted by HM Prison and Probation Service (HMPPS) and Public Health England suggested that 800 to 2,000 more prisoners might die as a result of the pandemic if no action was taken to reduce contact in prisons (Townsend et al. 2020; HMIP 2021).

As terrifying as that possibility was, it also represented an opportunity to make dramatic changes to a prison system that was already in a desperate state. As the Chair of the Prison Officers Association for England and Wales stated in August of 2020, “Returning to chaos is not an option” (Fairhurst 2020, section 2). In other words, British prisons could have followed the lead of other European countries, such as France, Switzerland, and Portugal, and initiated swift decarceration, even seeking to return numbers to 1990s levels in order to close dysfunctional and unsanitary Victorian era prisons.

Decarceration efforts in England and Wales were, however, shambolic. Only a fraction of one percent of prisoners were released (Grierson 2020c). Scotland and Northern Ireland, which have separate and independent prison systems, fared considerably better (Morrison and Graham 2022; O’Connell et al. 2022). In England and Wales, the prison population did drop from 83,023 at the end of 2019 to 79,092 by the end of 2021 (HMPPS 2020; HMPPS 2022a). For the most part, this resulted from falling crime rates during the Covid period and from courts running at lower capacity rather than from explicit efforts at decarceration. Indeed, the prison population is now rising again with 81,274 prisoners in the last week of August 2022 (HMPPS 2022b). Moreover, these same court backlogs led to delays in processing cases of remanded defendants, resulting in periods of incarceration longer than the normal “custody time limit” of six months, leaving remand imprisonment rates at the highest level since 2010 (Dimsdale and Saunders 2022a).

Instead of decarceration, the prison system’s primary strategy for mitigating the spread of the virus was a drastic 23-hour lockdown, involving a suspension of visits and almost all out-of-cell activities including workshops, group therapy, and education (House of Commons’ Justice Committee 2020, July 27). These severe conditions were mitigated in some but not all facilities by the introduction of in-cell telephones and technology allowing for online “purple visits” with family members (House of Commons 2020; Brandon and Dingwall 2022; Heard and Padfield 2022).

Although criticized by prison reform groups (e.g., Prison Reform Trust 2020b; User Voice 2021), the lockdown was described as a “blessing in disguise” by the head of the Prison Officer Association and some politicians (UK Justice Committee 2020, June 23). Proponents touted, in particular, huge drops in levels of violence among prisoners and against prison staff (BBC 2020, Oct 8). These drops from historic highs in 2019 were, however, both predictable and meaningless given that prisoners were allowed out of their cells for only one hour per day. More surprisingly, the initial statistics collected by prisons indicated no immediate increase in officially recorded self-harming behaviors in men’s prisons in 2020 as might have been expected. (Notably, women’s prisons experienced a significant increase in both 2020 and 2021; HMPPS 2022). The Prison Officers Association chief observed that “The government should listen to the experts in prisons – the staff – who say the situation is now safer and more stable” as a result of the draconian lockdown (BBC 2020, Oct. 8).

In those early days of the pandemic, the government had little choice about whom to listen to, as no external observers were allowed inside the prisons except eventually HM Inspectorate of Prison. As a result, for the first several months of the pandemic, prisoners’ voices were

seldom heard in the media or elsewhere (Prison Reform Trust 2020a; User Voice 2021). On September 18, 2020, *The Guardian* newspaper invited submissions: “Tell us: What are pandemic conditions like in UK prisons?” A website where responders could upload their stories was provided, although almost no one in British prisons had access to the internet to respond.

In this context, the authors and our partner organization User Voice succeeded with a funding application to the UK’s Economic and Social Research Council to develop a participatory action research project in ten prisons (Fine and Torre 2006). Participatory research methods, in which “research participants are regarded as potential collaborators in the co-production of knowledge and become co-researchers” seek to “fundamentally change the dynamic of research” (Schubotz 2019, p. 3). One of our initial premises was more pragmatic: if outside researchers could not get into prisons, then perhaps people in prison could be trained to conduct their own study of prison conditions. This is what we did. During summer 2021, we delivered an accredited 2-day “peer research methods” course to 99 prison residents from 10 facilities, outlining the basics of participant observation, interviewing, and peer surveying. These peer researchers became the “eyes and ears” of the prison, writing field notes, doing one-on-one interviews, and collecting over 1400 completed surveys from fellow prisoners. We returned to three of the prisons to analyze the anonymized results in collaboration with the peer research volunteers.

The findings painted a striking portrait of the pandemic lockdown from the perspective of the imprisoned. At the time interviews were conducted (summer 2021), nearly 60 percent of survey respondents said they had not had a single in-person visit since the pandemic began. Eighty-five percent said they were out of their cells for an hour or less per day during the first six months of the pandemic. Over 80 percent said they were still out of their cells for less than two hours per day at the time of the interviews in 2021. Moreover, few agreed with the Prison Officers Association assessment that the lockdown was a “blessing in disguise.” Only 1 in 5 agreed that the lockdown reduced violence and bullying. Just 8 percent agreed that “This prison is listening to the concerns of residents.” Most importantly, over two-thirds agreed that “mental health has never been worse in this prison.”

To confirm these assessments, we included two validated mental health measures in the peer survey: the Patient Health Questionnaire-9 (PHQ-9) measure of depression and the Generalised Anxiety Disorder-7 (GAD-7) used to screen for post-traumatic stress and related conditions. These two scales are widely used as screening tools in care settings and in epidemiological surveys. They have been used extensively in studies both of the general public during the pandemic and in prison settings prior to the pandemic, thus allowing for multiple comparisons. A PHQ-9 score between 5–9 points indicates “mild depression,” 10–14 points indicates “moderate depression,” 15–19 points indicates “moderately severe depression,” and 20 or more points indicates “severe depression.”

The mean PHQ-9 score for our sample of prisoners during the pandemic was 13.9 -- at the high end of “moderate depression” and more than 4 times higher than the general population norm of 2.91 (Kocalevent et al. 2013). For context, it is useful to compare this score to research findings during the pandemic when mental health suffered throughout most sectors of society. In two studies of the general public in Britain during the pandemic, Shevlin and colleagues (2022) found mean a PH-Q scores of 5.37, whereas Jia and colleagues (2020) found PHQ-9 scores averaging 7.69. It is also useful to compare our findings to research in prisons prior to the pandemic. In a large-scale prevalence study of 1,205 male prisoners in England and Wales conducted in 2019, Butcher and colleagues (2021) found that around 20.7 percent scored over

15 on the PH-Q (i.e. in the “severe” depression categories). Nearly half (49 percent) of our sample scored over 15.

The statistics on the measurement of anxiety disorder (GAD-7) are equally stark. Like the PHQ-9, the GAD-7 is calculated by aggregating scores on self-reported measures of symptoms such as inability to sleep and inability to control one’s worries. The measure is also used for screening three other common anxiety disorders — panic disorder, social anxiety disorder, and post-traumatic stress disorder (or PTSD). A score of 10 or more represents the generally accepted cut-off point for identifying potential cases of anxiety disorder, with a score of 15 and above suggesting severe anxiety. The mean GAD-7 score for our sample was 10.67 compared to the population norm of 2.95. In studies of the wider British population, Shevlin and colleagues (2022) found mean GAD-7 scores of 5.15, and Jia and colleagues (2020) found GAD-7 scores of 7.69. The median score for our prison sample was 11, indicating that just over half were reporting symptoms consistent with PTSD and over one-third (34.9 percent) were in the “severe anxiety” category of 15 and up. In a prison survey conducted in 2019, Butcher et al. (2021) found that only around a third of British prisoners (31.4 percent) scored above 10 and only 18 percent above 15. In our research during the lockdown, 52.5 percent scored above 10 and 34.4 percent scored over 15. These comparisons suggest a considerable deterioration in prisoners’ mental health over the lockdown period with measures of severe anxiety nearly doubling.

Although adverse mental health effects of solitary confinement are well established (Shalev 2011; Haney 2018), seeing statistics like these for a sample of over 1400 ordinary prisoners across 10 British prisons is truly striking. The consequences of this mental health crisis may only be beginning to be understood. In 2021, British prisons saw a record 371 deaths in prison, of which 86 were self-inflicted, representing a 28 percent increase from the previous year (HMPPS 2022). Remand prisoners accounted for 40 percent of self-inflicted deaths (Dimsdale and Saunders 2022*b*) despite being only 16 percent of prisoners.

V. Prisons after the Pandemic

The Covid-19 pandemic has exposed the gaps, deficits, and inadequacies of carceral institutions globally in failing to respond adequately to a major public health risk. Despite previous outbreaks ranging from typhus to SARS, few prison systems could be said to have been “sufficiently prepared for a large-scale public health crisis” in 2020 (Council on Criminal Justice 2020, p. 5). At the same time, the prioritization of in-prison mitigation over decarceration strategies demonstrated the robustness and near impenetrability of carceral logic internationally.

In 2020-21, the unthinkable became reality across the world. Whole cities and town centers essentially closed. Schools and workplaces shut their doors; weddings, funerals, sporting events, and other gatherings were cancelled or held without spectators; regulations prohibited socializing in groups and controlled nearly every aspect of social life. In this remarkable and unprecedented context, the prison regime not only remained firm, but became more extreme in its punitive form.

This is particularly remarkable considering the historic lack of evidence that prisons actually reduce recidivism. Petrich and colleagues’ (2022) meta-analysis of 116 existing studies of the effects of custodial sanctions found no evidence that incarceration reduced recidivism above

and beyond community penalties. The authors conclude that “Incarceration cannot be justified on the grounds it affords public safety by decreasing recidivism” (p. 353). As such, available evidence suggests that decarceration efforts could be expanded “with no increased threat to public safety” (Byrne et al. 2022, p. 18). For instance, recidivism data for the 7,251 US federal prisoners released under the First Steps Act (2018) through September 2020, suggests a reoffending rate of only 11.3 percent (OAG 2020; see also Harvey, Taylor and Wang 2020; Wegel, Wardak, and Meyer 2022). In August 2022, the US Bureau of Prisons reported that of the 11,000 people released early from Federal Prisons as party of the CARE Act, only 442 had been returned to prison and only 17 of those were returned for committing new crimes (most of which were drug-related) (Johnson 2022). As Clear (2021, p. 1423) writes, fears of a “crime wave” emerging from early release programs appear extremely exaggerated on the basis of existing evidence: “It should be plain that the effects of a handful of moderately earlier releases on public safety are bound to be negligible.”

In short, the Covid-19 pandemic proved that mass decarceration and excarceration is feasible, even on a global scale. Even if that process failed to reach its full potential, even reducing prison populations by 5 percent worldwide can be seen as something of a success. At the very least, proactive efforts in a minority of prison systems demonstrate that mechanisms are available to address overcrowding and implement decarceration, illuminating pathways for real change (Wegel et al. 2022). For example, after struggling for decades to reduce overcrowding in its prison system, Kenya used the impetus provided by Covid to implement rapid decarceration in 2020 – described as a “silver lining in the Covid-19 cloud” (Deche and Bosire 2020, p. 921).

However, that these mechanisms exist and many countries nonetheless struggled to decarcerate even chronically overcrowded prison systems represents a warning sign for those hoping the pandemic would be “the catalyst” for mass decarceration (Bagaric et al 2021, p. 124). The turn toward a heightened form of solitary confinement occurred notwithstanding the well-documented health risks associated with this kind of forced isolation (Cloud et al. 2015) . Even successful decarceration efforts may prove temporary, with reincarceration emerging in numerous countries (HRW 2020*b*). In India, by December 2020, an estimated 90 percent of those released during Covid had been returned to prison (Dhanuka 2022). Following release of around 35,000 prisoners, Brazilian prisons experienced a 19 percent increase in its prison population by July 2020 (Rodriguez and Khouri 2022). More recent increases can also be seen in Portugal (Rodrigues and Pinto 2022) and France (Herzog-Evans 2022). These returns to the status quo cast real doubt on any expectation that the pandemic will foster “sustained structural changes vital for future pandemic preparedness and public health” (Reinhart and Chen 2020, p.1412). Herzog-Evans (2022, p. 220) writes: “It has quickly become clear that there will be no Utopian ‘day after.’ Indeed, no reform is currently being planned to try and draw upon the potentially positive dimensions of the crisis or to learn from the mistakes which have been made.” Considering that the contagion risks exposed in the past two years are not unique to Covid-19, but have been “reproduced across time and space,” (Novisky et al. 2021, p. 1638), this suggests a troubling trend for future outbreaks.

Still, the lessons learned from the Covid pandemic can help inform future decarceration efforts. Amy Fettig (2022, p. 419) of The Sentencing Project, for instance, argues that United States’ efforts were “largely incompetent, inhumane and contrary to public health policy,” but nonetheless provide “a roadmap for policy priorities and legal reform in our ongoing need to decarcerate.”

Finally, if there is a silver lining, globally, it is that the pandemic may have alerted the wider public health and medical communities to the risks penal institutions pose to public safety. Sivashanker and colleagues (2020, pp. 1-2), in the *British Medical Journal*, observe: “Despite the clear health risks, healthcare organisation have not broadly organised to advance decarceration as a public safety measure. ... Covid-19 is a call to healthcare workers and organizations to help tackle the deeper sociopolitical root causes of disease, and to intervene before the harm is done. That call is nowhere clearer than in our broken criminal justice system. It’s time to pick up our loudspeakers and insist on caring for all.” History suggests that such voices can be crucial in shaping penal futures (Simon 2013).

References

- Akiyama, Matthew J., Anne C. Spaulding, and Josiah D. Rich. 2020. "Flattening the Curve for Incarcerated Populations - Covid-19 in Jails and Prisons." *The New England Journal of Medicine* 382(22):2075–77.
- Altibi, Ahmed M., Bhargava Pallavi, Hassan Liaqat, Alexander A. Slota, Radhika Sheth, Lama Al Jebbawi, Matthew E. George, Allison LeDuc, Enas Abdallah, Luke R. Russell, Saniya Jain, Nariné Shirvanian, Ahmad Masri and Vivek Kak. 2021. "Characteristics and Comparative Clinical Outcomes of Prisoner Versus Non-Prisoner Populations Hospitalized with Covid-19." *Scientific Reports* 11(1):1–9. <https://doi.org/10.1038/s41598-021-85916-w>
- American Civil Liberties Union. *Mass COVID-19 Model Finds Nearly 100,000 More Deaths Than Current Estimates, Due to Failures to Reduce Jails*. New York: ACLU. https://www.aclu.org/sites/default/files/field_document/aclu_covid19-jail-report_2020-8_1.pdf
- APM Research Lab. 2020. *The Color of Coronavirus: COVID-19 Deaths by Race and Ethnicity in the US*. United States: American Public [Media](https://www.apmresearchlab.org/covid/deaths-by-race). <https://www.apmresearchlab.org/covid/deaths-by-race>
- Arambulo, Hannah Kristianne Marie, Caroline Therese Sahagun, and Hazel T. Biana. 2021. "Covid-19: Back to Healthcare Basics in Philippine Prisons." *Journal of Public Health* 43:342–43. <https://doi.org/10.1093/pubmed/fdab056>.
- Armstrong, Sarah, Lucy Pickering, Betsy Barkas, Oona Brooks, Christopher Bunn, Michele Burman, Nicola Burns et al. 2020. "Left out and locked down: impacts of COVID-19 for marginalised groups in Scotland." Project Report. Glasgow: University of Glasgow. <http://eprints.gla.ac.uk/236416/>
- Arnold, Catharine. 2018. *Pandemic 1918: The Story of the Deadliest Influenza in History*. London: Michael O'Mara Books.
- Bagaric, Mirko, Peter Isham, and Jennifer Svilar. 2021. "The Increased Exposure to Coronavirus (Covid-19) for Prisoners Justifies Early Release: And the Wider Implications of

This for Sentencing-Reducing Most Prison Terms Due to the Harsh Incidental Consequences of Prison." *Pepperdine Law Review* 48:121–74. <http://dx.doi.org/10.2139/ssrn.3754846>

Barnert, Elizabeth, Cyrus Ahalt, and Brie Williams. 2020. "Prisons: Amplifiers of the Covid-19 Pandemic Hiding in Plain Sight." *American Journal of Public Health* 110:964–66. <https://doi.org/10.2105/ajph.2020.305713>.

Baussano, Iacopo, Brian G. Williams, Paul Nunn, Marta Beggiato, Ugo Fedeli, and Fabio Scano. 2010. "Tuberculosis Incidence in Prisons: A Systematic Review." *PLoS Medicine* 7(12):1–10. <https://doi.org/10.1371/journal.pmed.1000381>.

BBC News. 2020. "Coronavirus: Curbs 'A Blessing in Disguise for Prisons'." 8 October. <https://www.bbc.co.uk/news/uk-politics-54387023>

Belenko, Steven, Richard Dembo, Michael Copenhaver, Matthew Hiller, Holly Swan, Carmen Albizu Garcia, Daniel O'Connell, Carrie Oser, Frank Pearson and Jennifer Pankow. 2016. "HIV Stigma in Prisons and Jails: Results from a Staff Survey." *AIDS and Behavior* 20(1):71–84. <https://doi.org/10.1007/s10461-015-1098-7>

Bloom, Barbara, Owen Barbara, and Stephanie Covington. 2003.. *Gender-Responsive Strategies. Research, Practice, and Guiding Principles for Women Offenders*. Washington DC: US Bureau of Prisons, National Institute of Corrections. <https://nicic.gov/gender-responsive-strategies-research-practice-and-guiding-principles-women-offenders>

Braithwaite, Isobel, Chantal Edge, Dan Lewer, and Jake Hard. 2021. "High Covid-19 Death Rates in Prisons in England and Wales, and the Need for Early Vaccination." *The Lancet Respiratory Medicine* 9:569–70. [https://doi.org/10.1016/S2213-2600\(21\)00137-5](https://doi.org/10.1016/S2213-2600(21)00137-5)

Brandon, Avril, and Gavin Dingwall. 2022. *Minority Ethnic Prisoners and the COVID-19 Lockdown: Issues, Impacts and Implications*. Bristol: Policy Press.

Braun, M. Miles, Benedict I. Truman, Barbara Maguire, George T. DiFerdinando, Jr, Gary Wormser, Raymond Broaddus, and Dale L. Morse. 1989. "Increasing Incidence of Tuberculosis in a Prison Inmate Population: Association with HIV Infection." *JAMA* 261:393–97. <https://doi.org/10.1001/jama.1989.03420030067031>

Brelje, Andrea Berkemeier, and Debra A. Pinals. 2021. "Provision of Health Care for Prisoners During the Covid-19 Pandemic: An Ethical Analysis of Challenges and Summary of Select Best Practices." *International Journal of Prisoner Health* 17:194–205. <https://doi.org/10.1108/ijph-07-2020-0042>

Brennan, Pauline K. 2020. "Responses Taken to Mitigate COVID-19 in Prisons in England and Wales." *Victims & Offenders* 15(7-8):1215–33.

Brinkley-Rubinstein, Lauren, Katherine Lemasters, Phuc Nguyen, Kathryn Nowotny, David Cloud, and Alexander Volfovsky. 2021. "The Association between Intersystem Prison Transfers and COVID-19 Incidence in a State Prison System." *PLOS ONE* 16(8):1–6 <https://doi.org/10.1371/journal.pone.0256185>

Bronson, Jennifer, and Anne E. Carson. 2019. *Prisoners in 2017*. Washington, DC: US Department of Justice, Bureau of Justice Statistics.
<https://www.bjs.gov/content/pub/pdf/p17.pdf>

Bucerius, Sandra, and Sveinung Sandberg. 2022. "Women in Prison." In *Prisons and Prisoners*, edited by Michael Tonry and Sandra Bucerius. Vol. 51 of *Crime and Justice—A Review of Research*, edited by Michael Tonry. Chicago: University of Chicago Press.

Butcher, Elizabeth, Christopher Packham, Marie Williams, Joanne Miksza, Adarsh Kaul, Kamlesh Khunti, and Richard Morriss. 2021. "Screening male prisoners for depression and anxiety with the PHQ-9 and GAD-7 at NHS Healthcheck: patterns of symptoms and caseness threshold." *BMC Psychiatry* 21(1): 1-11.

Byrne, James, Don Hummer, Sabrina S. Rapisarda, and Kimberly R. Kras. 2022. "The United States Government's Response to COVID-19 Outbreaks in Federal, State, and Local Corrections." In *The Impact of COVID-19 on Prison Conditions and Penal Policy*, edited by Frieder Dunkel, Stefan Harrendorf, and Dirk Van Zyl Smit. London and New York: Routledge.

Carson, E. Anne. 2021a. *Prisoners in 2020 – Statistical Tables*. Washington, DC: US Department of Justice, Bureau of Justice Statistics.
<https://bjs.ojp.gov/library/publications/prisoners-2020-statistical-tables>

Carson, E. Anne. 2021b. *Federal Prisoner Statistics Collected under the First Step Act, 2021*. Washington, DC: US Department of Justice, Bureau of Justice Statistics.
<https://bjs.ojp.gov/library/publications/federal-prisoner-statistics-collected-under-first-step-act-2021>

Carson, E. Anne, and William J. Sabol. 2016. *Aging of the State Prison Population, 1993-2013*. Washington, DC: US Department of Justice, Bureau of Justice Statistics.

Casey, Ryan, Fergus McNeill, Betsy Barkas, Neil Cornish, Caitlin Gormley, and Marguerite Schinkel. 2021. "Pervasive Punishment in a Pandemic." *Probation Journal* 68:476–92.
<https://doi.org/10.1177/02645505211050871>.

Chaddock, Don. 2018. "Unlocking History 1918 Flu Pandemic Puts Prison Medical Staff to Test." *California Department of Corrections and Rehabilitation*. October 18.
<https://www.cdcr.ca.gov/insidecdcr/2018/10/18/1918-flu-pandemic-puts-prison-medical-staff-to-test/>

Chin, Elizabeth T., David Leidner, Theresa Ryckman, Yiran E. Liu, Lea Prince, Fernando Alarid-Escudero, Jason R. Andrews, Joshua A. Salomon, Jeremy D. Goldhaber-Fiebert, and David M. Studdert. 2021. "Covid-19 Vaccine Acceptance in California State Prisons." *New England Journal of Medicine* 385(4):374–76.

Chin, Elizabeth T., Theresa Ryckman, Lea Prince, David Leidner, Fernando Alarid-Escudero, Jason R. Andrews, Joshua A. Salomon, David M. Studdert, and Jeremy D. Goldhaber-Fiebert. 2021. "Covid-19 in the California State Prison System: An Observational Study of Decarceration, Ongoing Risks, and Risk Factors." *Journal of General Internal Medicine* 36:3096–3102. <https://doi.org/10.1007/s11606-021-07022-x>.

Cloud, David H., Cyrus Ahalt, Dallas Augustine, David Sears, and Brie Williams. 2020. "Medical isolation and solitary confinement: balancing health and humanity in US jails and prisons during COVID-19." *Journal of General Internal Medicine* 35(9): 2738-2742.

Cipriano, Andrew. 2021. *Solitary Increased by 500 percent During Pandemic*. The Crime Report. October 6. <https://thecrimereport.org/2021/10/06/solitary-increased-by-500-during-pandemic-report/>

Clear, Todd R. 2021. "COVID-19 and Mass Incarceration." *Rutgers University Law Review* 72:1417–33.

Cloud, David H., Ernest Drucker, Angela Browne, and Jim Parsons. 2015. "Public Health and Solitary Confinement in the United States." *American Journal of Public Health* 105(1):18–26.

Cohen, Nick. 2022. "How Many More Charlie Todds Must There be before Our Prisons are Reformed?" *The Guardian*. January 29. <https://www.theguardian.com/commentisfree/2022/jan/29/how-many-more-charlie-todds-must-there-be-before-prisons-reformed?fbclid=IwAR3tXWb6cYlXWhKi8CvZu49-sCyzFq4MbvivkmrC8uNi2o5E6MFeWmKywhA>

Collica-Cox, Kimberly, and Louis Molina. 2020. "A Case Study of the Westchester County New York's Jail Response to Covid-19: Controlling Covid While Balancing Service Needs for the Incarcerated-a National Model for Jails." *Victims & Offenders* 15:1305–16. <https://doi.org/10.1080/15564886.2020.1820923>.

Cooney, Francesca. 2021. *Prisons After Lockdown: Restrictions, Regimes and Recovery*. London: Prisoners Education Trust <https://www.prisonerseducation.org.uk/2021/07/prisons-after-lockdown-restrictions-regimes-and-recovery/>

Conectas Human Right News. 2020. "Brazil has Second Largest Covid-19 Infection Rate in Prisons." 26 November. <https://www.conectas.org/en/noticias/brazil-has-second-largest-covid-19-infection-rate-in-prisons>

Corker, Richard. 2020. *Expert Report: Covid-19 and Prisons in England and Wales*. London: Howard League for Penal Reform. https://howardleague.org/wp-content/uploads/2020/04/2020_04_01_COKER_Report_HL_PRT.pdf

Council on Criminal Justice. 2020. *Experience to Action: Reshaping Criminal Justice After Covid-19*. Washington DC: Council on Criminal Justice. https://assets.foleon.com/eu-west-2/uploads-7e3kk3/41697/final_report_-_designed.83f2289da58b.pdf

Council of Europe. News. 2022. "Council of Europe's Annual Penal Statistics: Covid-19 Pandemic Helped Reduce Europe's Prison Population." 5 April. <https://www.coe.int/en/web/portal/-/council-of-europe-s-annual-penal-statistics-covid-19-pandemic-helped-reduce-europe-s-prison-population>

Council of Europe: Commissioner for Human Rights. Statement. 2020. "Covid-19 Pandemic: Urgent steps are Needed to Protect the Rights of Prisoners in Europe." 6 April.

<https://www.coe.int/en/web/commissioner/-/covid-19-pandemic-urgent-steps-are-needed-to-protect-the-rights-of-prisoners-in-europe>

Council of Europe. 2022. *Annual Penal Statistics on Prison Populations for 2021*. Strasbourg: Council of Europe.
https://wp.unil.ch/space/files/2021/04/210330_FinalReport_SPACE_I_2020.pdf

COVID Prison Project. 2022. Washington, DC: COVID Prison Project.
<https://covidprisonproject.com/>

Davis, Angela. 2003. *Are Prisons Obsolete?* New York: Seven Stories Press

De Claire, Karen, and Louise Dixon. 2017. "The effects of prison visits from family members on prisoners' well-being, prison rule breaking, and recidivism: A review of research since 1991." *Trauma, Violence, & Abuse* 18(2): 185-199.

Deche, Mercy, and Conrad Bosire. 2020. "The Silver Lining in the Covid-19 Cloud: An Appraisal of Accelerated Prison Decongestion in Kenya." *Victims & Offenders* 15:921–32.
<https://doi.org/10.1080/15564886.2020.1827470>.

Denney, Matthew G. T., and Ramon Garibaldo Valdez. 2021. "Compounding Racialized Vulnerability: Covid-19 in Prisons, Jails, and Migrant Detention Centers." *Journal of Health Politics, Policy & Law* 46:861–87. <https://doi.org/10.1215/03616878-9156019>.

Dhanuka, M. 2022. "India." In *The Impact of COVID-19 on Prison Conditions and Penal Policy*, edited by Frieder Dunkel, Stefan Harrendorf, and Dirk Van Zyl Smit. London and New York: Routledge.

Dimsdale, Connie, and Tom Saunders. 2022a. "‘The System has Collapsed’ Covid Backlog sees Number of People on Remand in Prison at Highest Level since 2010." *Inews*. January 10. <https://inews.co.uk/news/delay-and-uncertainty-is-killing-people-as-remand-inmates-account-for-40-per-cent-of-suicides-in-prison-1380167>

Dimsdale, Connie, and Tom Saunders. 2022b. "Delay and Uncertainty is Killing People as Remand Inmates Account for 40 Percent of Suicides in Prison." *Inews*. January 10. <https://inews.co.uk/news/delay-and-uncertainty-is-killing-people-as-remand-inmates-account-for-40-per-cent-of-suicides-in-prison-1380167>

Dolan, Kate, Andrea L. Wirtz, Babak Moazen, Martial Ndeffo-Mbah, Alison Galvani, Stuart A. Kinner, Ryan Courtney et al. 2016. "Global Burden of HIV, Viral Hepatitis, and Tuberculosis in Prisoners and Detainees." *The Lancet* 388:1089–1102.
[https://doi.org/10.1016/S0140-6736\(16\)30466-4](https://doi.org/10.1016/S0140-6736(16)30466-4)

Drucker, Ernest. 2013. *A Plague of Prisons: The Epidemiology of Mass Incarceration in America*. New York: New Press.

Drucker, Ernest, ed. 2018. *Decarcerating America: From Mass Punishment to Public Health*. New York: New Press.

Dünkel, Frieder, Stefan Harrendorf, and Dirk van Zyl Smit, eds. 2022. *The Impact of COVID-19 on Prison Conditions and Penal Policy*. London and New York: Routledge.

Durnescu, Ioan, and Ioana Morar. 2020. "An Examination of the Romanian Prison System During the Covid-19 Pandemic. Are 'Zero Cases' Possible?" *Victims & Offenders* 15:1133–47. <https://doi.org/10.1080/15564886.2020.1829766>.

Durr, Patricia. 2020. *Trauma-Informed Work with People in Contact with the Criminal Justice System*. September 2020. Suffolk: Clinks. <https://www.clinks.org/sites/default/files/2020-09/Clinks%20Evidence%20Library%20Trauma-informed%20work%20with%20people%20in%20contact%20with%20the%20criminal%20justice%20system%202020.pdf>

Edge, Chantal, Jake Hard, Lucy Wainwright, Donna Gipson, Verity Wainwright, Jenny Anita Mehay. 2021. Working Paper. *Covid-19 and the Prison Population*. London: The Health Foundation. <https://www.health.org.uk/publications/covid-19-and-the-prison-population>

European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT). 2020. *Statement of Principles Relating to the Treatment of Persons Deprived of their Liberty in the Context of the COVID-19 Pandemic*. Strasbourg: Council of Europe.

Fair Trials. 2021. "Locked up in Lockdown: Life on Remand During the Pandemic." *Fair Trials*. June 24. <https://inews.co.uk/news/delay-and-uncertainty-is-killing-people-as-remand-inmates-account-for-40-per-cent-of-suicides-in-prison-1380167>

Fair, Helen, and Roy Walmsley. 2021. *World Prison Brief*, 13th ed. London: Birkbeck College, University of London, Institute for Criminal Policy Studies. https://www.prisonstudies.org/sites/default/files/resources/downloads/world_prison_population_list_13th_edition.pdf

Fairhurst, Mark. 2020. "National Chair: Returning to Chaos is Not an Option." London: Prison Officers Association. <https://www.poauk.org.uk/news-events/news-room/posts/2020/august/national-chair-returning-to-chaos-is-not-an-option/>

Farr, Paddy. 2021. "Toward a Critical Race Analysis of the Covid-19 Crisis in Us Carceral Institutions." *Critical Social Policy* 42(2):177–96. <https://doi.org/10.1177/02610183211001495>

Fettig, Amy. 2021. "Can COVID-19 Teach Us How to End Mass Incarceration?" *University of Miami Law Review* 76:419–46.

Fine, Michelle, and María Elena Torre. 2006. "Intimate Details." *Action Research* 4:253–69. <https://doi.org/10.1177/1476750306066801>.

Franco-Paredes, Carlos, Katherine Jankousky, Jonathan Schultz, Jessica Bernfeld, Kimberly Cullen, Nicolas G. Quan, Shelley Kon, et al. 2020. "Covid-19 in Jails and Prisons: A Neglected Infection in a Marginalized Population." *PLoS Neglected Tropical Diseases* 14:1–4. <https://doi.org/10.1371/journal.pntd.0008409>.

Fróis, Catarina. 2020. "Covid-19 Pandemic and Social Distancing in Prisons." *Anthropology Today* 36:25–26. <https://doi.org/10.1111/1467-8322.12578>.

Getaz, L. 2019) "Better Control of Infectious Diseases." *Prison-Info* 2:20–23.

Gough, Ethan, Mirjam C. Kempf, Laura Graham, Marvin Manzanero, Edward W. Hook, Al Bartolucci, and Eric Chamot. 2010. "HIV and Hepatitis B and C Incidence Rates in Us Correctional Populations and High Risk Groups: A Systematic Review and Meta-Analysis." *BMC Public Health* 10 (177):1–14. <https://doi.org/10.1186/1471-2458-10-777>.

Greener, Mihal. 2021. "Covid Bail': The Response of Victorian Courts and Prisons in Navigating the Impact of Covid-19." *Current Issues in Criminal Justice* 33:89–93.

Grierson, Jamie. 2020a. "UK Coronavirus Prison Plan on Hold after Six inmates Freed in Error." *The Guardian*. April 18. <https://www.theguardian.com/society/2020/apr/18/uk-coronavirus-prison-plan-suspended-after-six-mistakenly-released>

Grierson, Jamie. 2020b. "Prison Release Schemes Almost Impossible to Deliver, Says Watchdog." *The Guardian*. May 31. <https://www.theguardian.com/society/2020/may/31/prison-release-schemes-close-to-impossible-to-deliver-says-watchdog-coronavirus>

Grierson, Jamie. 2020c. "Early-release Scheme for Prisoners in England and Wales to End." *The Guardian*. 19 August. <https://www.theguardian.com/society/2020/aug/19/prisons-inspector-england-wales-warns-of-mental-health-problems-from-severe-coronavirus-restrictions>

Guerri, Cristina, Marta Marti and Albert Pedrosa. (N.D). "Compilation of Measures Taken by Prison Administrations Against COVID-19." Wordpress Blog. <https://covid19prisons.wordpress.com/>

Hager, Eli. 2020. "How Bill Barr's Covid-19 Prisoner Release Plans Could Favor White People." The Marshall Project. March 28. New York: The Marshall Project. <https://www.themarshallproject.org/2020/03/28/how-bill-barr-s-covid-19-prisoner-release-plan-could-favor-white-people>

Hairston, Creasie Finney. 1988. "Family ties during imprisonment: Do they influence future criminal activity." *Fed. Probation* 52: 48.

Haney, Craig. 2018. "The Psychological Effects of Solitary Confinement: A Systematic Critique." In *Crime and Justice—A Review of Research*, vol. 47, edited by Michael Tonry. Chicago: University of Chicago Press.

Harm Reduction International (HRI). 2020. *Covid-19, Prisons and Drug Policy. Global Scan -March-June 2020*. June 17. London: Harm Reduction International. https://www.hri.global/files/2020/07/10/HRI_-_Prison_and_Covid_briefing_final.pdf

Haugebrook, S., K. M. Zgoba, T. Maschi, K. Morgen, and D. Brown. 2010. "Trauma, Stress, Health, and Mental Health Issues among Ethnically Diverse Older Adult Prisoners." *J Correct Health Care* 16:220–29. <https://doi.org/10.1177/1078345810367482>.

Hawks, Laura, Steffie Woolhandler, and Danny McCormick. 2020. "Covid-19 in Prisons and Jails in the United States." *JAMA Internal Medicine* 180:1041–42. <https://doi.org/10.1001/jamainternmed.2020.1856>.

Heard, Catherine. 2020. "Commentary: Assessing the Global Impact of the Covid-19 Pandemic on Prison Populations." *Victims & Offenders* 15:848–61. <https://doi.org/10.1080/15564886.2020.1825583>.

Heard, Catherine. 2022. "Prison populations before and during the pandemic: lessons from COVID:19 about over-incarceration and it's consequences for health." In *The Impact of COVID-19 on Prison Conditions and Penal Policy*, edited by Frieder Dunkel, Stefan Harrendorf, and Dirk van Zyl Smit. London: Routledge.

Heard, Catherine, and Nicola Padfield. 2022. "England and Wales." In *The Impact of COVID-19 on Prison Conditions and Penal Policy*, edited by Frieder Dunkel, Stefan Harrendorf, and Dirk Van Zyl Smit. London and New York: Routledge.

Her Majesty's Prison and Probation Service (HMPPS). 2020. *Prison Population Figures: 2019*. <https://www.gov.uk/government/statistics/prison-population-figures-2019>

Her Majesty's Prison and Probation Service (HMPPS). 2022a. *National Statistics: Safety in Custody Statistics, England and Wales: Deaths in Prison Custody to December 2021, Assaults and Self-harm to September 2021*. London: Ministry of Justice. <https://www.gov.uk/government/statistics/safety-in-custody-quarterly-update-to-september-2021/safety-in-custody-statistics-england-and-wales-deaths-in-prison-custody-to-december-2021-assaults-and-self-harm-to-september-2021>

Her Majesty's Prison and Probation Service (HMPPS). 2022b. *Prison Population Figures: 2021*. London: Ministry of Justice. <https://www.gov.uk/government/statistics/prison-population-figures-2021>

Her Majesty's Prison and Probation Service (HMPPS). 2022c. "Population and Capacity Briefing for Friday 26 August 2022." London: Ministry of Justice. <https://www.gov.uk/government/publications/prison-population-figures-2022>

Her Majesty's Inspectorate of Prisons (HMIP). 2021. *What Happens to Prisoners in a Pandemic?* London: HM Inspectorate of Prisons. <https://www.justiceinspectrates.gov.uk/hmiprisoners/wp-content/uploads/sites/4/2021/02/What-happens-to-prisoners-in-a-pandemic.pdf>

Herzog-Evans, Martine. 2022. "France." In *The Impact of COVID-19 on Prison Conditions and Penal Policy*, edited by Frieder Dunkel, Stefan Harrendorf, and Dirk Van Zyl Smit. London and New York: Routledge.

Hewson, Thomas, Louise Robinson, Najat Khalifa, Jake Hard, and Jennifer Shaw. 2021. "Remote Consultations in Prison Mental Healthcare in England: Impacts of Covid-19." *BJPsych open* 7(49):1–3. <https://doi.org/10.1192/bjo.2021.13>.

Human Rights Watch (HRW). 2022. "UN: Make Reporting on Covid-19 in Prisons Mandatory." April 22. [UN: Make Reporting on Covid-19 in Prisons Mandatory | Human Rights Watch \(hrw.org\)](https://www.hrw.org/news/2022/04/22/un-make-reporting-on-covid-19-in-prisons-mandatory)

Human Rights Watch (HRW). 2020a. "Covid-19 Prisoner Releases Too Few, Too Slow." May 27. <https://www.hrw.org/news/2020/05/27/covid-19-prisoner-releases-too-few-too-slow>

Human Rights Watch (HRW). 2020b. "Announced Releases of Detainees in the Justice System Due to Covid-19." https://www.hrw.org/sites/default/files/media_2020/05/announced_releases_detainees_covid_19.pdf

Hooks, Gregory, and Wendy Sawyer. 2020. "Mass Incarceration, COVID-19 and Community Spread." Prison Policy Initiative. <https://www.prisonpolicy.org/reports/covidspread.html>.

House of Commons Justice Committee. 2020. *Coronavirus (Covid-19): The Impact on Prisons: Government Response to the Committee's Fourth Report of Session 2019–21*. London: House of Commons. <https://committees.parliament.uk/publications/4074/documents/40487/default/>

Hutchings, Rachel, and Miranda Davies. 2021. *Towards a Better Understanding of Health Care Access Challenges for Prisoners*. London: Nuffield Trust. <https://www.nuffieldtrust.org.uk/files/2021-10/prisoner-health-literature-review.pdf>

Hwang, Seung Joon, Min Ju Kim, and Weldon E. Havins. 2021. "Decreasing Inmate Populations to Mitigate Effects of Covid-19 in State Prisons." *Journal of Legal Medicine* 41:20–21. <https://doi.org/10.1080/01947648.2021.1914477>.

Inter-Agency Standing Committee (IASC). 2020. *IASC Interim Guidance on COVID-19: "Focus on Persons Deprived of Their Liberty."* London: IASC. <https://interagencystandingcommittee.org/other/iasc-interim-guidance-covid-19-focus-persons-deprived-their-liberty>

Inter-American Commission on Human Rights (IACHR). Press Release. 2020a. "IACHR Concerned About Specific Risks Faced by Persons Deprived of Liberty in the Americas During the COVID-19 Pandemic." *Organization of American States*. https://www.oas.org/en/iachr/media_center/PReleases/2020/212.asp

Inter-American Commission on Human Rights (IACHR). 2020b. *Resolution 1/2020. Pandemic and Human Rights in the Americas*. Organization of American States. Washington DC: Organization of American States. <https://www.oas.org/en/iachr/decisions/pdf/Resolution-1-20-en.pdf>

Jahn, Jaquelyn L., Nicolette Bardele, Jessica T. Simes, and Bruce Western. 2022. "Clustering of Health Burdens in Solitary Confinement: A Mixed-Methods Approach." *SSM - Qualitative Research in Health* 2 (100036):1–8. <https://doi.org/10.1016/j.ssmqr.2021.100036>

Jia, Ru, Kieran Ayling, Trudie Chalder, Adam Massey, Elizabeth Broadbent, Carol Coupland, and Kavita Vedhara. 2020. "Mental health in the UK during the COVID-19 pandemic: cross-sectional analyses from a community cohort study." *BMJ open* 10, no. 9: e040620.

Jiménez, Monik C., Tori L. Cowger, Lisa E. Simon, Maya Behn, Nicole Cassarino, and Mary T. Bassett. 2020. "Epidemiology of Covid-19 among Incarcerated Individuals and Staff in Massachusetts Jails and Prisons." *JAMA Network Open* 3:1–4.

Johnson, Carrie. 2022. "Released during COVID, Some People Are Sent Back to Prison with Little or No Warning" National Public Radio. <https://www.npr.org/2022/08/22/1118132380/released-during-covid-some-people-are-sent-back-to-prison-with-little-or-no-warn>

Johnson, Luke, Kerry Gutridge, Julie Parkes, Anjana Roy, and Emma Plugge. 2021. "Scoping Review of Mental Health in Prisons through the Covid-19 Pandemic." *BMJ open* 11:1–8. <https://doi.org/10.1136/bmjopen-2020-046547>.

Kaba, Fatos, Angela Solimo, Jasmine Graves, Sarah Glowa-Kollisch, Allison Vise, Ross MacDonald, Anthony Waters et al. "Disparities in mental health referral and diagnosis in the New York City jail mental health service." *American journal of public health* 105, no. 9 (2015): 1911-1916.

Kessler, Ronald C., Patricia Berglund, Olga Demler, Robert Jin, Kathleen R. Merikangas, and Ellen E. Walters. 2005. "Lifetime Prevalence and Age-of-Onset Distributions of DSMIV Disorders in the National Comorbidity Survey Replication." *Archives of General Psychiatry* 62:593–603. <https://doi.org/10.1001/archpsyc.62.6.593>.

Kim, Hannah, Emily Hughes, Alice Cavanagh, Emily Norris, Angela Gao, Susan J. Bondy, Katherine E. McLeod, Tharsan Kanagalingam, and Fiona G. Kouyoumdjian. 2022. "The Health Impacts of the COVID-19 Pandemic on Adults Who Experience Imprisonment Globally: A Mixed Methods Systematic Review." *PLoSone* 17(5):1–24. <https://doi.org/10.1371/journal.pone.0268866>

Kinner, Stuart A., Jesse T. Young, Kathryn Snow, Louise Southalan, Daniel Lopez-Acuña, Carina Ferreira-Borges, and Éamonn O'Moore. 2020. "Prisons and Custodial Settings Are Part of a Comprehensive Response to Covid-19." *The Lancet Public Health* 5:e188–e89. [https://doi.org/10.1016/s2468-2667\(20\)30058-x](https://doi.org/10.1016/s2468-2667(20)30058-x).

Klein, Michael, Melissa A. Kowalski, Youngki Woo, Courtney Solis, Maria Mendoza, Mary K. Stohr, and Craig Hemmens. 2022. "The Novel Coronavirus and Enforcement of the New Separate System in Prisons." *Criminal Justice Policy Review* 33(2):206–30. <https://doi.org/10.1177/08874034211023572>

Kocalevent, Rüya-Daniela, Andreas Hinz, and Elmar Brähler. 2013. "Standardization of the depression screener patient health questionnaire (PHQ-9) in the general population." *General hospital psychiatry* 35(5): 551-555.

Kothari, Radha, Andrew Forrester, Neil Greenberg, Natasha Sarkissian, and Derek K. Tracy. 2020. "COVID-19 and Prisons: Providing Mental Health Care for People in Prison, Minimising Moral Injury and Psychological Distress in Mental Health Staff." *Medicine, Science and the Law* 60(3): 165-168.

Kwan, Ada, David Sears, Stephano Bertozzi and Brie Williams, eds. 2022. *California's State Prisons During the COVID-19 Pandemic: A Report by the CalPROTECT Project*. California: CalPROTECT. <https://amend.us/wp-content/uploads/2022/05/2022-0501-CalPROTECT-Report.pdf>

Lachs, Andreea, and Monique Hurley. 2021. "Why practices that could be torture or cruel, inhuman and degrading treatment should never have formed part of the public health response to the COVID-19 pandemic in prisons." *Current Issues in Criminal Justice* 33(1): 54-68.

La Vigne, Nancy G., Rebecca L. Naser, Lisa E. Brooks, and Jennifer L. Castro. 2005. "Examining the Effect of Incarceration and In-prison Family Contact on Prisoners' Family Relationships." *Journal of Contemporary Criminal Justice* 21(4):314–35.

Leibowitz, Abigail I., Mark J. Siedner, Alexander C. Tsai, and Amir M. Mohareb. 2021. "Association between Prison Crowding and Covid-19 Incidence Rates in Massachusetts Prisons, April 2020-January 2021." *JAMA Internal Medicine* 181:1315–21.

Link, Bruce G., and Jo Phelan. 1995. "Social Conditions as Fundamental Causes of Disease." *Journal of Health and Social Behavior* 35:80–94. <https://doi.org/10.2307/2626958>.

Lemasters, Katherine, Erin McCauley, Kathryn Nowotny, and Lauren Brinkley-Rubinstein. 2020. "Covid-19 Cases and Testing in 53 Prison Systems." *Health & Justice* 8(1):1–6. <https://healthandjusticejournal.biomedcentral.com/track/pdf/10.1186/s40352-020-00125-3.pdf>.

Lockwood, Kelly. 2021. "'Lockdown's changed everything': Mothering Adult Children in Prison in the UK during the COVID-19 Pandemic." *Probation Journal* 689(4):458–75.

Lofgren, Eric, Kristian Lum, Aaron Horowitz, Brooke Madubonwu, and Nina Fefferman. 2020. "The Epidemiological Implications of Incarceration Dynamics in Jails for Community, Corrections Officer, and Incarcerated Population Risks from COVID-19." *MedRxiv* 1-35. <http://conacyt.repositorioinstitucional.mx/jspui/handle/1000/3351>

Luigi, Mimosa, Laura Dellazizzo, Charles-Éduardo, Giguère, Marie Helene. Goulet, and Alexandra Dumais. 2020. "Shedding Light on "the Hole": A Systematic Review and Meta-Analysis on Adverse Psychological Effects and Mortality Following Solitary Confinement in Correctional Settings." *Front Psychiatry* 11 (840):1–11. <https://doi.org/10.3389/fpsy.2020.00840>.

Malloy, Giovanni S. P., Lisa Puglisi, Margaret L. Brandeau, Tyler D. Harvey, and Emily A. Wang. 2021. "Effectiveness of Interventions to Reduce Covid-19 Transmission in a Large Urban Jail: A Model-Based Analysis." *BMJ Open* 11(042898):1–9. <https://doi.org/10.1136/bmjopen-2020-042898>.

Marquez, Neal, Julie A. Ward, Kalind Parish, Brendan Saloner, and Sharon Dolovich. 2021. "Covid-19 Incidence and Mortality in Federal and State Prisons Compared with the Us Population, April 5, 2020, to April 3, 2021." *JAMA* 326:1865–67. <https://doi.org/10.1001/jama.2021.17575>.

Maruschak, Laura M., Marcus Berzofsky, and Jennifer Unangst. 2015. *Medical Problems of State and Federal Prisoners and Jail Inmates, 2011-12*. Washington DC: US Department of Justice, Bureau of Justice Statistics. <https://bjs.ojp.gov/content/pub/pdf/mpsfj1112.pdf>

May, Chris, Nalini Sharma, and Duncan Stewart. 2008. *Factors Linked to Reoffending: A One-year Follow-up of Prisoners Who Took Part in the Resettlement Surveys 2001, 2003 and 2004*. London: Ministry of Justice.

Maycock, Matthew, and Graeme Dickson. 2021. "Analysing the Views of People in Custody About the Management of the COVID-19 Pandemic in the Scottish Prison Estate." *International Journal of Prisoner Health* 17(3):320–34. <https://doi.org/10.1108/IJPH-09-2020-0065>.

Maycock, Matthew. 2022. "'Covid-19 has Caused a Dramatic Change to Prison Life'. Analysing the Impacts of the Covid-19 Pandemic on the Pains of Imprisonment in the Scottish Prison Estate." *The British Journal of Criminology* 62(1):21–33. <https://doi.org/10.1093/bjc/azab031>

McDonald, Alysha D., Luca Berardi, Justin E. C. Tetrault, Kevin D. Haggerty, and Sandra M. Bucerius. 2022. "More of the Same, Only Worse: COVID-19 and the Administrative Burdens Facing Loved Ones of Incarcerated Men." *The British Journal of Criminology* 20:1–17. <https://doi.org/10.1093/bjc/azac026>

Minson, Shona. 2021. *The Impact of COVID-19 Prison Lockdowns on Children with a Parent in Prison*. Oxford: University of Oxford, Centre for Criminology. https://childhub.org/sites/default/files/library/attachments/the_impact_of_covid-19_prison_lockdowns_on_children_with_a_parent_in_prison.pdf

Ministry of Justice. 2013. *Story of the Prison Population: 1993–2012 England and Wales*. London: Ministry of Justice. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/218185/story-prison-population.pdf

Ministry of Justice. 2022. *HM Prison and Probation Service COVID-19 Official Statistics*. London: Ministry of Justice. <https://www.gov.uk/government/collections/hm-prison-and-probation-service-covid-19-statistics-monthly>

Miranda, Mariana P., Rui Costa-Lopes, Gonçalo Freitas, and Catarina L. Carvalho. 2021. "Early Release from Prison in Time of Covid-19: Determinants of Unfavourable Decisions Towards Black Prisoners." *PloS one* 16 (0252319):1–17. <https://doi.org/10.1371/journal.pone.0252319>.

Morales, Mark. 2021. "Inmates at NYC's Rikers Island Jail in the Midst of 'Emerging Crisis' Related to Omicron Surge." December 22. *CNN*. <https://kyma.com/news/2021/12/22/inmates-at-nycs-rikers-island-jail-in-the-midst-of-emerging-crisis-related-to-omicron-surge/>

Morrison, Katrina and Graham, Hannah. 2022. "Scotland." In *The Impact of COVID-19 on Prison Conditions and Penal Policy*, edited by Frieder Dünkel, Stefan Harrendorf, and Dirk van Zyl Smit. London: Routledge.

Mortaji, Parisa, Michaele Francesco Corbisiero, Michael A. Vrolijk, Andrés F. Henao-Martínez, and Carlos Franco-Paredes. 2021. "Chronicle of Jails and Prisons Covid-19 Deaths Foretold." *American Journal of the Medical Sciences* 361:801–02. <https://doi.org/10.1016/j.amjms.2021.01.002>.

Mulgrew, Roisin, and Dirk van Zyl Smit. 2022. "International Human Rights and COVID-19 in Prisons: Medical Isolation and Independent Oversight." In *The Impact of COVID-19 on Prison Conditions and Penal Policy*, edited by Frieder Dunkel, Stefan Harrendorf, and Dirk Van Zyl Smit. London and New York: Routledge.

Murphy, Philip J. 2021. "Unlocking the Means of Covid-19 Spread from Prisons to Outside Populations." *American Journal of Public Health* 111:1392–94. <https://doi.org/10.2105/ajph.2021.306401>.

National Academies of Sciences, Engineering, and Medicine 2020. *Decarcerating Correctional Facilities during COVID-19: Advancing Health, Equity, and Safety*. Washington, DC: The National Academies Press.

Natoli, Lauren Jeanne, Kathy Linh Vu, Adam Carl Sukhija-Cohen, Whitney Engeran-Cordova, Gabriel Maldonado, Scott Galvin, William Arroyo, and Cynthia Davis. 2022. "Incarceration and COVID-19: Recommendations to Curb COVID-19 Disease Transmission in Prison Facilities and Surrounding Communities." *International Journal of Environmental Research and Public Health* 18(9790):1–7. <https://doi.org/10.3390/ijerph18189790>

Neff, Joseph, and Keri Blakinger. 2020. "Thousands of Sick Federal Prisoners Sought Compassionate Release 98 Percent Were Denied." July 10. New York: The Marshall Project. <https://www.themarshallproject.org/2020/10/07/thousands-of-sick-federal-prisoners-sought-compassionate-release-98-percent-were-denied>

Novisky, Meghan A. 2018. "Avoiding the Runaround: The Link between Cultural Health Capital and Health Management among Older Prisoners." *Criminology* 56(4): 643-678.

Novisky, Meghan A., Chelsey S. Narvey, and Daniel C. Semenza. 2020. "Institutional Responses to the Covid-19 Pandemic in American Prisons." *Victims & Offenders* 15:1244–61. <https://doi.org/10.1080/15564886.2020.1825582>.

Novisky, Meghan A., Kathryn M. Nowotny, Dylan B. Jackson, Alexander Testa, and Michael G. Vaughn. 2021. "Incarceration as a Fundamental Social Cause of Health Inequalities: Jails, Prisons and Vulnerability to COVID-19." *The British Journal of Criminology* 61(6):1630–46. <https://doi.org/10.1093/bjc/azab023>

Nowonty, Kathryn M., and Alex R. Piquero. 2020. "The Global Impact of the Pandemic on Institutional and Community Corrections: Assessing Short-term Crisis Management and Long-term Change Strategies." *Victims & Offenders* 15:839–47. <https://doi.org/10.1080/15564886.2020.1813229>

Nowotny, Kathryn M., Seide Kapriske, and Lauren Brinkley-Rubenstein. 2021. "Risk of Covid-19 Infection among Prison Staff in the United States." *BMC Public Health* 21:1–8. <https://doi.org/10.1186/s12889-021-11077-0>

O’Connell, Ciara, Rogan, Mary, Martyn, Michelle and Maruna, Shadd. 2022. Ireland North and South. In *The Impact of COVID-19 on Prison Conditions and Penal Policy*, edited by Frieder Dünkler, Stefan Harrendorf, and Dirk van Zyl Smit. London: Routledge.

OAG. 2020. *The Attorney General's First Step Act Section 3634 Annual Report*. Washington, DC: US Department of Justice, Office of the Attorney General. <https://www.ojp.gov/Attorney-Generals-First-Step-Act-Section-3634-Annual-Report-December-2020>

Office of the Attorney General. 2020b. Memorandum for Director of Bureau of Prisons. Washington, DC: OAG. <https://www.politico.com/f/?id=00000171-4255-d6b1-a3f1-c6d51b810000>

Parsons, Todd L., and Lee Worden. 2021. "Assessing the Risk of Cascading COVID-19 Outbreaks from Prison-to-prison Transfers." *Epidemics* 37:100532–__. <https://doi.org/10.1016/j.epidem.2021.100532>

Penal Reform International. 2022. *Global Prison Trends 2022*. London: Penal Reform International. <https://cdn.penalreform.org/wp-content/uploads/2022/05/GPT2022-Exec-summary-EN.pdf>

Petrich, Damon M., Travis C. Pratt, Cheryl Lero Jonson, and Francis T. Cullen. 2021. "Custodial Sanctions and Reoffending: A Meta-analytic Review." In *Crime and Justice: A Review of Research*, vol. 50, edited by Michael Tonry. Chicago: University of Chicago Press.

Phelan, Jo C, and Bruce G. Link. 2015. "Is Racism a Fundamental Cause of Inequalities in Health?". *Annual Review of Sociology* 41:311–30. <https://doi.org/10.1146/annurev-soc-073014-112305>

Philips, Kristine. 2021. *USA Today*. "Inmates Sent Home During COVID-19 Got Jobs, Started School. Now, they Face Possible Return to Prison." May 5. <https://eu.usatoday.com/in-depth/news/politics/2021/05/05/trump-memo-says-inmates-sent-home-due-covid-must-return-prison/7194735002/>

Pitts, Wayne J., and Christopher S. Inkpen. 2020. "Assessing the Effects of COVID-19 in Prisons in the Northern Triangle of Central America." *Victims & Offenders* 15(7-8):1044–61. <https://doi.org/10.1080/15564886.2020.1828211>

Pires de Vasconcelos, Natalia, Maira Rocha Machado, and Daniel Wei Liang Wang. 2020. "COVID-19 in Prisons: A Study of Habeas Corpus Decisions by the São Paulo Court of

Justice.” *Rev. Admin. Publica*. 54:1472–85.
<https://www.scielo.br/j/rap/a/SQR9rnxTPjbLwsGFqh8CkBg/?lang=en>

Pont, Jörg, Stefan Enggist, Heino Stöver, Stéphanie Baggio, Laurent Gétaz, and Hans Wolff. 2021. "Covid-19-the Case for Rethinking Health and Human Rights in Prisons." *American Journal of Public Health* 111:1081–85. <https://doi.org/10.2105/AJPH.2021.306170>.

Prescott, J. J., Benjamin Pyle, and Sonja B. Starr. 2020a. “It’s Time to Start Releasing Some Prisoners with Violent Records.” April 13. *Slate News*. <https://slate.com/news-and-politics/2020/04/combat-covid-release-prisoners-violent-cook.html>

Prescott, J. J., Benjamin Pyle, and Sonja B. Starr. 2020b. "Understanding Violent-crime Recidivism." *Notre Dame Law Review* 95(4):1643–___.
<https://scholarship.law.nd.edu/ndlr/vol95/iss4/9>

Presidential COVID-19 Health Equity Task Force. 2021. *Final Report and Recommendations*. Washington, D.C.: U.S. Department of Health and Human Services, Office of the Assistant Secretary for Health.

Prison Policy Initiative. 2021. “COVID-19 in Prisons and Jails.”
<https://www.prisonpolicy.org/virus/>

Prison Policy Initiative 2022 The most significant criminal justice policy changes from the COVID-19 pandemic. [Criminal justice responses to the coronavirus pandemic | Prison Policy Initiative](#)

Prison Reform Trust. 2020a. *CAPTIVE: Covid-19 Action Prisons Project: Tracking Innovation, Valuing Experience. How Prisons Are Responding to Covid-19*. London: Prison Reform Trust. <http://prisonreformtrust.org.uk/project/coronavirus/>

Prison Reform Trust. 2020b. *PRT and Howard League letter to Robert Buckland—Covid-19 and prisons: the next phase*. London: Prison Reform Trust.
<https://prisonreformtrust.org.uk/prt-and-howard-league-letter-to-robert-buckland-covid-19-and-prisons-the-next-phase/>

Prost, Stephanie Grace, Meghan A. Novisky, Leah Rorvig, Nick Zaller, and Brie Williams. 2021. "Prisons and Covid-19: A Desperate Call for Gerontological Expertise in Correctional Health Care." *The Gerontologist* 61:3–7. <https://doi.org/10.1093/geront/gnaa088>.

Pyrooz, David C., Ryan M. Labrecque, Jennifer J. Tostlebe, and Bert Useem. 2021. "Views on COVID-19 from Inside Prison: Perspectives of High-security Prisoners." *Justice Evaluation Journal* 3(2):294–306. <https://doi.org/10.1080/24751979.2020.1777578>

Reinhart, Eric. 2021. “Mass Incarceration has Worsened Pandemic.” 6 February. *Jacobin*.
<https://jacobinmag.com/2021/06/mass-incarceration-covid-19-pandemic-decarceration-safety-health-prisons>

Reinhart, Eric, and Daniel L. Chen. 2020. "Incarceration and Its Disseminations: Covid-19 Pandemic Lessons from Chicago’s Cook County Jail." *Health Affairs* 39:1412–18.
<https://doi.org/10.1377/hlthaff.2020.00652>.

Reutter, David. 2010. "Swine Flu Widespread in Prisons and Jails but Deaths are Few." *Prison Legal News*. February 15. <https://www.prisonlegalnews.org/news/2010/feb/15/swine-flu-widespread-in-prisons-and-jails-but-deaths-are-few/>

Ricciardelli, Rosemary, Sandra Bucerius, Justin Tetrault, Ben Crewe, and David Pyrooz. 2021. "Correctional Services During and Beyond COVID-19." *Facets* 69(1):490–516. <https://doi.org/10.1139/facets-2021-0023>

Rodrigues, Ellen, and Eduardo Khoury. 2022. "Brazil." In *The Impact of COVID-19 on Prison Conditions and Penal Policy*, edited by Frieder Dunkel, Stefan Harrendorf, and Dirk Van Zyl Smit. London: Routledge.

Sawyer, Wendy, and Peter Wagner. 2022. "Mass Incarceration: The Whole Pie 2022." Prison Policy Initiative. 2022. <https://www.prisonpolicy.org/reports/pie2022.html>

Schneider, Luisa T. 2021. "Let Me Take a Vacation in Prison Before the Streets Kill Me! Rough Sleepers' Longing for Prison and the Reversal of Less Eligibility in Neoliberal Carceral Continuums." *Punishment & Society* __: __–__. <https://doi.org/10.1177/14624745211010222>

Schnittker, Jason. 2014. "The Psychological Dimensions and the Social Consequences of Incarceration." *The Annals of the American Academy of Political and Social Science* 651:122–38. <https://doi.org/10.1177/0002716213502922>.

Schnittker, Jason, Michael Massoglia, and Christopher Uggen. 2012. "Out and Down: Incarceration and Psychiatric Disorders." *Journal of Health and Social Behavior* 53:448–64. <https://doi.org/10.1177/0022146512453928>.

Schotland, Sara. 2021. "Let Them Go! Compassionate Release for Disabled Prisoners with Chronic Health Conditions During the Covid-19 Public Health Emergency." *Disability Studies Quarterly* 41: __ – __. <https://doi.org/10.18061/dsq.v41i3>

Schubotz, Dirk. 2019. *Participatory Research: Why and How to Involve People in Research*. London: Sage.

Scientific Advisory Group for Emergencies (SAGE). 2021. *EMG Transmission Group: COVID-19 Transmission in Prison Settings, 25 March 2021*. London: SAGE. <https://www.gov.uk/government/publications/emg-transmission-group-covid-19-transmission-in-prison-settings-25-march-2021>

Sentencing Project. 2017. *Still Life: America's Increasing Use of Life and Long-term Sentences*. Washington DC: The Sentencing Project. <https://www.sentencingproject.org/publications/still-life-americas-increasing-use-life-long-term-sentences/>

Shalev, Sharon. 2011. "Solitary confinement and supermax prisons: A human rights and ethical analysis." *Journal of Forensic Psychology Practice* 11(2-3): 151-183.

Shepherd, Stephane, and Benjamin L. Spivak. 2020. "Reconsidering the Immediate Release of Prisoners During Covid-19 Community Restrictions." *Medical Journal of Australia* 2(13):58–59. <https://doi.org/10.5694/mja2.50672>.

Shevlin, Mark, Sarah Butter, Orla McBride, Jamie Murphy, Jilly Gibson-Miller, Todd K. Hartman, Liat Levita et al. 2022. "Measurement invariance of the Patient Health Questionnaire (PHQ-9) and Generalized Anxiety Disorder scale (GAD-7) across four European countries during the COVID-19 pandemic." *BMC Psychiatry* 22(1): 1-9.

Sims, Kaitlyn M., Jeremy Foltz, and Marin Elisabeth Skidmore. 2021. "Prisons and Covid-19 Spread in the United States." *American Journal of Public Health* 111:1534–41. <https://doi.org/10.2105/ajph.2021.306352>.

Sivashanker, Karthik, Jessie Rossman, Andrew Resnick, and Donald M Berwick. 2020. "Covid-19 and Decarceration." *British Medical Journal* 369:1–2. https://web.archive.org/web/20200710195436id_/https://www.bmj.com/content/bmj/369/bmj.m1865.full.pdf

Smith, Peter Scharff. 2006. "The effects of solitary confinement on prison inmates: A brief history and review of the literature." *Crime and justice* 34(1): 441-528.

Sorge, Antonia, Federica Bassanini, Jennifer Zucca, and Emanuela Saita. 2021. "'Fear Can Hold You, Hope Can Set You Free'. Analysis of Italian Prisoner Narrative Experience of the COVID-19 Pandemic." *International Journal of Prisoner Health* 17(3):406–423. <https://doi.org/10.1108/IJPH-07-2020-0051>

Stanley, Leo L. 1919. "Influenza at San Quentin Prison, California." *Public Health Reports (1896-1970)* 34:996–1008. <https://doi.org/10.2307/4575142>.

Stern, Marc F., Alexandra M. Piasecki, Lara B. Strick, Poornima Rajeshwar, Erika Tyagi, Sharon Dolovich, Priti R. Patel, Rena Fukunaga, and Nathan W. Furukawa. 2021. "Willingness to Receive a COVID-19 Vaccination Among Incarcerated or Detained Persons in Correctional and Detention Facilities- Four States, September–December 2020." *Morbidity and Mortality Weekly Report* 7013:473–77. <https://doi.org/10.15585/mmwr.mm7013a3>

Strassle, Camila, and Benjamin E. Berkman. 2020. "Prisons and Pandemics." *San Diego Law Review* 57:1083–1125.

Toblin, Robin L., and Liesl M. Hagan. 2021. "Covid-19 Case and Mortality Rates in the Federal Bureau of Prisons." *American Journal of Preventive Medicine* 61:20–23. <https://doi.org/10.1016/j.amepre.2021.01.019>

Tonry, Michael 2016. *Sentencing Fragments: Penal Reform in America, 1975-2025*. New York: Oxford University Press.

Townsend, Ellen, Emma Nielsen, Rosie Allister, and Sarah A. Cassidy. 2020. "Key Ethical Questions for Research During the Covid-19 Pandemic." *The Lancet Psychiatry* 7:381–83. [https://doi.org/10.1016/s2215-0366\(20\)30150-4](https://doi.org/10.1016/s2215-0366(20)30150-4).

Turanovic, Jillian J., and Melinda Tasca. 2019. "Inmates' Experiences with Prison Visitation." *Justice Quarterly* 36(2):287–322.
<https://doi.org/10.1080/07418825.2017.1385826>

UK Justice Committee. 2020. *Oral Evidence: COVID-19: The Impact on Prison, Probation and Court Systems*. HC 299. 23 June. London: UK Justice Committee.
<https://committees.parliament.uk/oralevidence/565/html/>

United Nations. 2015. *United Nations Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules)*. UN Doc A/RES/70/175 (17 December 2015) annex.
[Microsoft Word - N1544341 \(un.org\)](#)

United Nations Human Rights, Office of the High Commissioner. 2020a. *Urgent Action Needed to Prevent Covid-19 “Rampaging Through Places of Detention.”* Geneva: OHCHR.
<https://www.ohchr.org/en/statements/2020/03/urgent-action-needed-prevent-covid-19-rampaging-through-places-detention>

United Nations Human Rights, Office of the High Commissioner. 2020b. *Statement by the UN Expert on the Right to Health on the Protection of People Who Use Drugs During the COVID-19 Pandemic*. Geneva: OHCHR. [Statement by the UN expert on the right to health* on the protection of people who use drugs during the COVID-19 pandemic | OHCHR](#)

United Nations Office on Drugs and Crime. 2021. *COVID-19 Guidance Note: Mitigating the Disruptive Impact of Infection Prevention and Control Measures in Prisons: Core Principles and Recommendations*. Austria: UNODC https://www.unodc.org/res/justice-and-prison-reform/nelsonmandelarules-GoF_html/COVID_19_Guidance_Note_IPC_ebook.pdf

US Bureau of Prisons. 2022a. “Frequently Asked Questions Regarding Potential Inmate Home Confinement in Response to the COVID-19 Pandemic.” Washington, DC: US Department of Justice, Bureau of Prisons. <https://www.bop.gov/coronavirus/faq.jsp>

US Bureau of Prisons 2022b. “Population Statistics.” September 1. Washington, DC: US Department of Justice, Bureau of Prisons.
https://www.bop.gov/mobile/about/population_statistics.jsp#bop_pop_table

User Voice. 2021. *The User Voice of Lockdown*. London: User Voice.
<https://www.uservoice.org/wp-content/uploads/2020/07/The-user-voice-of-lockdown.pdf>

User Voice and Queen’s University Belfast. 2022. *Coping with Covid in Prison: The Impact of the Prisoner Lockdown*. London: User Voice. <https://www.uservoice.org/wp-content/uploads/2022/08/User-Voice-QUB-Coping-with-Covid.pdf>

Valway, Sarah E., Sonia B. Richards, Joan Kovacovich, Robert B. Greifiger, Jack T. Crawford, and Samuel W. Dooley. 1994. "Outbreak of Multi-Drug-Resistant Tuberculosis in a New York State Prison, 1991." *American Journal of Epidemiology* 140:113–22.
<https://doi.org/10.1093/oxfordjournals.aje.a117222>.

Vera Institute of Justice. 2022. *People in Prison Winter 2021-22*. New York: Vera Institute of Justice. https://www.vera.org/downloads/publications/People_in_Prison_in_Winter_2021-22.pdf

Vest, Noel, Oshea Johnson, Kathryn Nowotny, and Lauren Brinkley-Rubinstein. 2021. "Prison Population Reductions and Covid-19: A Latent Profile Analysis Synthesizing Recent Evidence from the Texas State Prison System." *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 98:53–58. <https://doi.org/10.1007/s11524-020-00504-z>.

Wang, Jiao, Wenjing Yang, Lijun Pan, John S. Ji, Jin Shen, Kangfeng Zhao, Bo Ying, Xianliang Wang, Liubo Zhang, Ling Wang, and Xiaoming Shi. 2020. "Prevention and Control of Covid-19 in Nursing Homes, Orphanages, and Prisons." *Environmental Pollution* 266:1–6. <https://doi.org/10.1016/j.envpol.2020.115161>

Wegel, Melanie, Sabera Wardak, and Darleen Jennifer Meyer. 2022. "Special Challenges in Dealing the COVID-19 Pandemic in Swiss Prisons." *SAGE Open*, January-March:1-10. <https://journals.sagepub.com/doi/pdf/10.1177/21582440221079789>

Wildeman, Christopher, and Lars H. Andersen. 2020. "Solitary confinement placement and post-release mortality risk among formerly incarcerated individuals: a population-based study." *The Lancet Public Health* 5(2): e107-e113.

Williams, Brie A., James S. Goodwin, Jacques Baillargeon, Cyrus Ahalt, and Louise C. Walter. 2012. "Addressing the Aging Crisis in U.S. Criminal Justice Health Care." *Journal of the American Geriatrics Society* 60:1150–56. <https://doi.org/10.1111/j.1532-5415.2012.03962.x>.

Woo, Youngki, Mary K. Stohr, Craig Hemmens, Faith Lutze, Zachary Hamilton, and Ok-Kyung Yoon. 2016. "An Empirical Test of the Social Support Paradigm on Male Inmate Society." *International Journal of Comparative and Applied Criminal Justice* 40(2):145–69. <https://doi.org/10.1080/01924036.2015.1089518>

World Health Organization. 2021. *News Release*. "Europe Shows High Rates of COVID-19 Vaccination in Prisons." 15 July. [WHO/Europe shows high rates of COVID-19 vaccination in prisons](https://www.who.int/news-room/feature-stories/2021/07/europe-shows-high-rates-of-covid-19-vaccination-in-prisons)

Young, L. C., D. E. Dwyer, M. Harris, Z. Guse, V. Noel, and M. H. Levy. 2005. "Summer Outbreak of Respiratory Disease in an Australian Prison Due to an Influenza a/Fujian/411/2002(H3n2)-Like Virus." *Epidemiology and Infection* 133:107–12. <https://doi.org/10.1017/s0950268804003243>

Zeveleva, Olga, and José Ignacio Nazif-Munoz. 2021. "Covid-19 and European Carcerality: Do National Prison Policies Converge When Faced with a Pandemic?" *Punishment & Society* 0(0):1–25. <https://doi.org/10.1177/14624745211002011>.