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# Institutional Responses to the COVID-19 Pandemic in American Prisons

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## ABSTRACT

The COVID-19 pandemic infiltrated the United States in early 2020, with correctional facilities becoming hot spots for the novel coronavirus shortly thereafter. Using data gathered from Departments of Corrections' official websites, we provide a summary of state and federal prison system responses to COVID-19 as of June 2020. We highlight strengths and deficiencies in system responses as well as pertinent variations across jurisdictions. We conclude with a call for scholars and grant funders to prioritize incarceration-based data collection efforts on COVID-19 so the short and long-term consequences of the pandemic, and systemic responses to it, can be more fully assessed.

## KEYWORDS

Prison experience; prisons; public safety; Covid-19; pandemic; alternatives to incarceration; early release mechanisms; prison reform

## Introduction

The novel coronavirus (COVID-19) pandemic was first documented in the U.S. in early 2020 and spread quickly throughout the country thereafter. As of September 8, 2020, the United States is responsible for 23% of the world's confirmed cases of COVID-19 ( $n = 6,318,978$ ) and 21% of the world's COVID-19 deaths ( $n = 189,456$ ), despite making up only about 4.25% of the global population (Johns Hopkins University, 2020). As with the rest of the world, the pandemic has placed major strains on the United States and has presented substantive challenges to a number of different social institutions, including nursing homes, schools, and churches. Correctional facilities serve as particularly salient examples of vulnerable spaces in the U.S., incarcerating nearly 1.5 million people in prisons (Bronson & Carson, 2019), and processing over 10 million annual jail admissions annually (Zeng, 2020).

The sheer volume of people incarcerated throughout the U.S., coupled with common environmental features of correctional facilities, including overcrowding, reduced sanitation, insufficient access to healthcare, poor ventilation, and inability to socially distance, have posed unique challenges and risks for incarcerated persons and staff during the pandemic (Nowotny et al., 2020). People incarcerated in jails and prisons also tend to have worse health than the general population (Binswanger et al., 2009; Wilper et al., 2009),

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meaning that these spaces disproportionately house health-compromised individuals at baseline. It is therefore not surprising that at the time of this writing, the 15 largest hotspots or “clusters” of COVID-19 cases in the U.S. were all identified as correctional facilities (New York Times, 2020).

Given these circumstances, correctional system responses to the pandemic in the U.S. warrant closer attention. In this paper, we contribute to the literature by providing an overview of institutional responses to COVID-19 in prisons across the United States using data gathered from Department of Corrections’ official websites in June 2020. We focus our analysis on the strengths and deficiencies of system responses as well as pertinent variations that occurred across jurisdictions. We conclude with a discussion of the results of our analysis and offer recommendations for improving correctional responses to the COVID-19 pandemic moving forward.

## Background

In response to the COVID-19 pandemic, governments across the globe have enacted stay-at-home and social distancing orders to mitigate the spread of the virus. These orders mandate that individuals stay home and refrain from interacting with large groups of people to the extent possible, or limit interactions to small groups as needed. Where interaction is unavoidable, the Centers for Disease Control and Prevention (CDC) suggests that people maintain a distance of at least 6 feet from one another, wear personal protective equipment (PPE) such as facemasks, and practice rigorous hand-washing hygiene (Centers for Disease Control and Prevention [CDCa], 2020). Despite these recommended strategies, many prisons and jails have struggled to adhere to basic public health guidelines, largely as a result of inherent limitations within the structure and function of correctional facilities.

Prisons and jails are high-risk settings for the spread of COVID-19 due to a higher background prevalence of other infectious diseases, limited access to healthcare services relative to community settings, and a greatly reduced capacity for practicing social distancing measures in most facilities (Akiyama et al., 2020; Hawks et al., 2020; Kinner et al., 2020). Many institutions are overcrowded in the U.S., further driving residents and correctional officers into close quarters and rendering outbreak prevention more difficult because of greater population density in many prisons and jails (Hawks et al., 2020). Since correctional settings represent particularly high-risk locations for COVID-19 outbreaks, researchers and medical professionals have concluded that many jails and prisons are likely to experience COVID-19 outbreaks and that targeted preventive efforts for correctional facilities must be included in any nationwide outbreak mitigation strategies (Kinner et al., 2020; Marcum, 2020; Montoya-Barthelemy et al., 2020; Wurcel et al., 2020). Specifically, public health and medical professionals have recommended a series of preventive efforts to reduce the risk of COVID-19 outbreaks in correctional facilities that include increased provision of cleaning and sanitizing supplies, rapidly improving testing and isolation capacity, granting early release for medically high-risk and low-level offending segments of incarcerated populations, and consulting with experts in gerontology to prepare for the unique challenges posed by COVID-19 to older incarcerated adults (Malloy et al., 2020; Okano & Blower, 2020; Prost et al., 2020; Wurcel et al., 2020).

It appears that correctional authorities in many states have taken action against the spread of COVID-19, often in response to state-mandated guidelines. Research shows that

places like Los Angeles county, for instance, have adopted preventive measures such as the early release of people convicted of low-level offenses or admitting fewer people into jails (Okano & Blower, 2020). A number of states, including Alabama, Colorado, Massachusetts, Michigan, Ohio, Pennsylvania, and Texas have also reduced their jail or prison populations by releasing people considered to be at low-risk of criminal behavior, as well as those considered to be high risk as far as health status (Prison Policy Initiative, 2020). Despite these efforts, it remains unclear how various states and facilities are incorporating local and federal guidance into actionable policies within facilities to prevent and mitigate the spread of the virus.

Furthermore, scholars are concerned that mitigation efforts to reduce the spread of COVID-19, such as visitation suspensions and isolation strategies, are likely to have unintended consequences, including poorer mental health among prisoner populations (Hewson et al., 2020; Kothari et al., 2020). For instance, incarcerated persons may face increased risks for self-harm and depression due to diminished social contact. Reduced abilities to see loved ones face to face or communicate with them verbally in the midst of a pandemic may raise anxieties and fears about risks for infection, both personally and out of concern for loved ones. Risks for infractions may also increase given that incarcerated individuals who maintain visits are less likely to commit misconduct (Cochran, 2012; Reidy & Sorensen, 2020). Abrupt changes in prison operations, including mask mandates, physical distancing requirements, and reductions in movement, may also increase the potential for misconduct reports given the rapid introduction of new rules that require substantial changes in behavior. Demand for contraband items, including cell phones to connect with family and drugs to cope with likely increases in stress, may escalate. Accumulation of such infractions could then have detrimental impacts on institutional privileges, custody status, and judicial release decisions.

To date, what is known about COVID-19 in correctional facilities across states has largely been culled by data collection efforts from groups like the COVID Prison Project (2020) and the Marshall Project (2020), based on information supplied by cooperating Departments of Corrections. As of September 8<sup>th</sup>, 2020, the COVID-19 Prison Project reports that 119,858 prisoners and 23,695 correctional staff have tested positive for COVID-19. Of those that have contracted the virus, 974 prisoners and 67 staff have died as a result of complications related to COVID-19, bringing the total correctional death toll in the United States thus far to 1,041.

The national case rate of COVID-19 in prisons and jails is estimated to be about 3,251 per 100,000 prisoners, or roughly 5.5 times that of the general U.S. population (Saloner et al., 2020). However, case rates vary considerably across jurisdictions, ranging from .23 (Hawaii) to 321.39 (Arkansas) per 1,000 prisoners as reported by the COVID Prison Project (2020). Adjusted for age and sex distribution, the death rate in prisons is about 39 deaths per 100,000 prisoners, or roughly 3 times higher than the U.S. in general. To illustrate, the number of prisoner deaths range from zero in states like Hawaii, North Dakota, Rhode Island, South Dakota, and Utah to upwards of more than 140 deaths in Texas alone (a rate of about 11 deaths per 10,000) (Marshall Project, 2020). Although updated year-over-year mortality data will be needed to make a firm determination, it is probable that the disproportionate death rate in prisons has contributed to an increase in the all-cause mortality rate in prisons in 2020 compared to 2016 (303 per 100,000 prisoners), the most recent year for which prison and jail mortality data are available (Carson & Cowhig, 2020). Significant heterogeneity in basic

testing and mortality statistics related to COVID-19 among correctional facilities suggests that a better understanding is needed regarding the actual policies put into practice and what is most effective at reducing outbreaks across locales (Malloy et al., 2020).

In addition, largely missing from the research on COVID-19 in correctional facilities are the perspectives of residents confined in prisons and jails. However, Pyrooz et al. (2020) offer an initial qualitative assessment of the challenges of COVID-19 in correctional facilities, based on interviews with a sample of 31 men incarcerated in a maximum security prison in Oregon. The findings demonstrate that prisoners perceive their risk of contracting COVID-19 “not as a matter of if, but rather as a matter of when,” the virus will spread throughout the prison system (Pyrooz et al., 2020, p. 8). Incarcerated individuals are particularly concerned about community spread in correctional facilities via correctional officers who come in and out of the facilities. Yet the respondents in Oregon were not particularly concerned about contracting the virus themselves, in part due to restrictive housing policies that were perceived as advantageous within the context of the pandemic. While many of the respondents in this study felt that Oregon correctional facilities were taking virus mitigation efforts seriously, they also did not trust that an outbreak could be contained once let loose among incarcerated persons. This study provides preliminary insight into the perceptions of risk and treatment availability among incarcerated individuals living in one particular correctional setting, however a greater comparative approach to understanding COVID-19 responses across states is needed to more fully assess the efficacy of actions being taken.

## Current study

In this paper, we present a comparative approach to understand patterned jurisdictional variations in correctional system responses to COVID-19. This is valuable because although prisons and jails are high risk sites for the spread of infectious disease generally (Massoglia, 2008; Nowotny et al., 2020), the severity of the public health threats posed by COVID-19 spread in correctional facilities is likely to fluctuate across states and even individual institutions. Variations may reflect factors including correctional population size and efforts to implement mitigation efforts, for example. In many ways, the fragmented response of the country’s state and federal correctional systems is symbolic of the broader approach to the pandemic throughout the United States as a whole. Thus, our analysis can help to highlight the unique challenges that face an often divided and polarized country that has struggled to confront the singular threat of COVID-19.

Understanding differences in correctional responses is important. Beyond the substantial medical risks of COVID-19 infection in correctional facilities (Reinhart & Chen, 2020), experiences during incarceration can predict access to medical care and perceptions of the correctional health care system (Novisky, 2018). Health conditions are also related to the likelihood of successful reentry (Link et al., 2019; Semenza & Link, 2019). Differences in responses can influence the mental health toll of being incarcerated during a pandemic. This is the case not only because the availability of mental health services in the context of COVID-19 may fluctuate (Liebrenz et al., 2020), but also because the humaneness of confinement during this time is directly dependent upon the measures taken by prisons and jails to protect their confined populations. In short, understanding patterned differences in correctional responses to the pandemic across jurisdictions is likely to assist with

assessing the longer-term consequences of the pandemic tied to physical and mental health, recidivism, and potential 8th amendment litigation efforts.

## Methods

To assess correctional system responses to COVID-19 in the U.S., we relied on a manual web-based data scraping methodology. We first made a list of all 50 state Department of Correction (DOC) websites plus the Federal Bureau of Prisons (BOP)<sup>1</sup> website (total  $n$  of websites = 51). These government websites became the sources for this project. As a team, we created a database in advance of data collection to establish consistency regarding what data needed to be pulled from each website to address our research question. Upon implementation, our database was designed to track the following for each of the 51 correctional jurisdictions: correctional population size; first confirmed COVID-19 case; total tests, cases, hospitalizations, recoveries, and deaths reported among prisoners; total tests, cases, hospitalizations, recoveries, and deaths reported among staff; visitation policy changes; provision of PPE; mitigation efforts; and other important notes about COVID-19 response efforts (e.g., whether there were frequent updates on the reporting website or if these data were easy to find). Thus, we ultimately collected a combination of quantitative and qualitative data to inform our final results.

It is important to note that assessing correctional responses to COVID-19 during the pandemic involves somewhat of a moving target. Information on the number of positive cases and tests change daily, for example.<sup>2</sup> Thus, our goal was to analyze system responses based on the information available across jurisdictions *at that designated point in time*. To accomplish this, we split the labor of scraping data from the 51 sources equally across the research team and did all of our data gathering on the same day. On June 16, 2020, we filled in the data from our respective jurisdictions simultaneously and communicated as a research team while we did so. This helped us to begin establishing similarities and departures in responses across jurisdictions early on. This protocol also allowed us to be responsive in incorporating additional columns in our database during data collection as needed. It became apparent early on, for example, that we should collect information on the extent to which prisoners were being asked to manufacture PPE, as this information emerged multiple times during data collection efforts. We therefore ended up adding a column on prisoner manufacturing of PPE to our database during data collection.

As we entered the data from each website, we also saved copies of supporting documents (e.g., posted response plans, FAQ to family) and screenshots (e.g., announcements about visitation cessation, memos detailing first confirmed COVID-19 cases). We later conducted a content analysis of these documents, adding additional details to our database from them as appropriate. Once all of the quantitative and qualitative data were collected, we analyzed all state and federal systems for commonalities across a number of metrics and categories to identify similarities and differences. The results presented in the next section reflect these efforts and ultimately highlight the patterned strengths and deficiencies in institutional responses to the pandemic within prisons that emerged during data analysis.

## Results

### *Strengths*

#### *(I) Access*

All 51 correctional jurisdiction websites provided some type of online access point for COVID-19 updates. With few exceptions, this access point was readily identifiable and accessible from each website's homepage. Thus, as a whole, correctional jurisdictions were responsive in adding web-based access points so the public could locate COVID-19 information relevant to each correctional jurisdiction. Although the depth of information provided varied across jurisdictions, these web links tended to include information about testing data (e.g., number tested, number of positive cases), COVID-19 related announcements (i.e., changes in visitation policies), information about the precautions being taken, and news releases. While 94% of correctional websites ( $n = 48$ ) posted a direct COVID-19 link housed within the correctional system's official website, in some cases links to COVID-19 information directed users to the state's Department of Health website (e.g., North Carolina, West Virginia) or social media website (e.g., Rhode Island).

#### *(II) Testing*

Eighty-two percent of correctional agencies ( $n = 42$ ) also made efforts to post information about the first confirmed cases to enter their jurisdictions (see [Table 1](#)). Of the jurisdictions providing this information, 64% ( $n = 27$ ) reported their first cases in March, with the first infection reported in Washington on March 12th, 2020. Thirteen more states reported their first cases in April, with Utah and Montana reporting their first cases as late as May and June, respectively. Notably, more than half of the first cases reported across the 42 jurisdictions ( $n = 23$ ) were infections of staff members.

#### *(III) Visitation*

All 51 correctional jurisdictions suspended prisoner visitation to reduce the volume of traffic coming in and out of prisons at any given time, with the vast majority implementing these changes in mid-March. To help offset visitation freezes, 72% of states ( $n = 37$ ) provided incarcerated men and women some combination of free phone calls, video visits, e-mails, and stamps. Among states providing these supplementary communication opportunities, the number of communications and the length of communications varied substantially.

Provision of phone calls ranged from one free five minute call per week (Iowa) to ten free fifteen minute calls per week (Utah). Availability of video visits ranged from one free video visit per week (North Dakota) to three free video visits per week (Kansas). As for e-mails, incarcerated individuals were given anywhere from one (Missouri) to eight (Ohio) free e-mails weekly. Four jurisdictions (Michigan, New Jersey, New York, and Virginia) highlighted their efforts to provide free stamps to enhance communication opportunities in lieu of in person visits. While visitations were halted across the U.S., 18% of jurisdictions ( $n = 9$ ) did specify that these suspensions did not apply to prisoner meetings with attorneys.



**Table 1.** First reported COVID-19 cases.

	March (n = 27)			April (n = 13)	
	First Infection	Person Infected		First Infection	Person Infected
Washington	3–12	Staff	North Carolina	4–1	Prisoner
Georgia	3–18	Staff	Oregon	4–2	Prisoner
New York	3–18	Prisoner	Arkansas	4–3	Staff
Wisconsin	3–18	Staff	New Hampshire	4–3	Staff
Alabama	3–19	Staff	Tennessee	4–3	Prisoner
FBOP	3–19	Prisoner	Nebraska	4–4	Staff
Maine	3–21	Staff	Delaware	4–6	Prisoner
California	3–22	Prisoner	Arizona	4–7	Prisoner
Florida	3–22	Staff	Iowa	4–10	Staff
Michigan	3–22	Prisoner	Wyoming	4–10	Staff
Connecticut	3–23	Staff	Mississippi	4–13	Prisoner
Missouri	3–23	Prisoner	Indiana	4–14	Staff
South Dakota	3–23	Prisoner	Alaska	4–26	Prisoner
Texas	3–23	Staff			
Vermont	3–23	Staff	May (n = 1)		
Illinois	3–24	Staff			
Colorado	3–26	Staff	Utah	5–29	Prisoner
Louisiana	3–26	Staff			
Nevada	3–26	Staff	June (n = 1)		
South Carolina	3–27	Staff			
Ohio	3–29	Staff	Montana	6–9	Prisoner
Pennsylvania	3–29	Prisoner			
Rhode Island	3–29	Staff			
Maryland	3–30	Prisoner + Staff			
Minnesota	3–30	Prisoner			
Kansas	3–31	Staff			
Virginia	3–31	Prisoner			

First infection data were not reported for the following states: HI, ID, KY, MA, NJ, NM, ND, OK, WV.

#### (IV) *Other Mitigation Efforts*

Other preventive responses to the pandemic to protect incarcerated people and correctional officers appear to vary widely from state to state. While sanitization efforts throughout facilities have increased across correctional jurisdictions, sanitation responses ranged from vague descriptions such as “deep cleaning,” to more detailed efforts, including spraying bleach-based disinfectant on surfaces, providing greater accessibility of cleaning supplies to correctional workers and prisoners, spraying the hands of incarcerated individuals with disinfectant, increasing the frequency with which surfaces are cleaned, and placing hand sanitizer dispensers in common areas. Seven jurisdictions (Alabama, Alaska, BOP, Maine, New Mexico, Missouri, Utah) described efforts to post preventive signage and pamphlets regarding hand washing and social distancing measures to reduce the risk of spreading the virus. Others went as far as to host educational townhalls (Pennsylvania) and “sanitation broadcasts” (BOP). Nearly one-third of jurisdictions (n = 15) also noted providing increased access to soap for prisoners at no cost to help encourage frequent hand washing and further assist with sanitation efforts.

Many correctional systems also indicate implementation of preventive screening for correctional officers and staff in some capacity. Forty-one percent of jurisdictions (n = 21) posted materials detailing their policies for mandatory temperature readings and verbal symptom screenings for all staff. Some departments specify that screening is also required for all new prisoners and those being released, although this does not appear to apply to



departments where transfers have been halted or new prisoners are not being accepted. However, regular screening does not generally appear to apply to those prisoners that are already in residence for the majority of the state correctional systems. Thus, screening is largely used to test for symptomatic positive COVID-19 cases among those most frequently moving in and out of the individual facilities. Finally, a number of departments outline a quarantine policy for new prisoners, transfers, and any residents displaying symptoms of the virus. These isolation practices were not outlined for many departments, however, and most state responses appear to focus largely on broader preventive efforts to reduce viral spread.

## **Deficiencies**

### *(I) Testing*

COVID-19 data posted across jurisdictions were not comprehensive and often lacked transparency. One of the driving factors regarding poor data transparency was an obvious lack of testing. In general, mass testing of the incarcerated population was not occurring at the time of our data collection. Thirty-five percent of jurisdictions ( $n = 18$ ) did not include any information on the number of prisoners they had tested for COVID-19 at all, making their testing efforts impossible to assess (see [Table 2](#)). Of the jurisdictions that did provide this information ( $n = 33$ ), the number of tests ranged from 31 (New Hampshire) to 107,684 COVID-19 tests (Texas). Collectively, many states ( $n = 14$ ) had tested less than 5 percent of their prisoner population for COVID-19, with few exceptions testing more than 50% of the incarcerated population (Michigan, Minnesota, Rhode Island, Tennessee, Texas, Vermont, West Virginia).

Testing of staff, which is just as important to understanding the scope of infection rates in correctional facilities, was generally described on jurisdiction websites as the individual responsibility of employees (Texas was one exception). More specifically, the number of confirmed COVID-19 cases reported on jurisdiction websites among staff were based on employees' self-reported disclosures. This means that if staff did not take initiatives to get tested for COVID-19, if they did not call off work because of COVID-19 symptoms, or if they did not share testing information or symptoms with their employers, those data would not be reported under the COVID-19 staff data. As shown in [Table 3](#), only 19% of jurisdictions ( $n = 10$ ) provided data on the number of COVID-19 tests administered among staff. Of the jurisdictions that did provide this information, the number of tests ranged from 17 (Montana) to 31,547 COVID-19 tests (Texas).

[Tables 2](#) and [Tables 3](#) further outline the availability of COVID-19 testing data at the time of our data collection regarding prisoners and staff, respectively. The most common COVID-19 data offered about prisoners was the number of confirmed positive prisoner cases. As indicated in [Table 2](#), all jurisdictions made this information available, although three jurisdictions (Hawaii, Idaho, Wyoming) reported no positive cases to report at the time of data collection. The majority of jurisdictions ( $n = 30$ ) also posted data on the number of deaths of incarcerated people due to COVID-19, although 17 jurisdictions reported no deaths at the time of data collection and four jurisdictions (South Carolina, Washington, West Virginia, and Wisconsin) included no data on prisoner mortality at all. While 64% of jurisdictions ( $n = 33$ ) provided data on the number of prisoners who had recovered from COVID-19, nearly one-third of jurisdictions ( $n = 15$ ) included no data on

**Table 2.** Availability of COVID-19 prisoner data.

	# of Tests	# of Positive Cases	# Hospitalized	# of Deaths	# Recovered
Alabama	✓	✓	—	✓	✓
Alaska	✓	✓	—	*	✓
Arizona	✓	✓	—	✓	✓
Arkansas	✓	✓	—	✓	✓
California	✓	✓	—	✓	✓
Colorado	✓	✓	—	✓	✓
Connecticut	—	✓	—	✓	✓
Delaware	—	✓	—	✓	✓
FBOP	✓	✓	—	✓	✓
Florida	✓	✓	—	✓	—
Georgia	—	✓	—	✓	✓
Hawaii	✓	*	*	*	*
Idaho	✓	*	*	*	*
Illinois	✓	✓	—	✓	✓
Indiana	✓	✓	—	✓	✓
Iowa	✓	✓	—	*	✓
Kansas	—	✓	—	✓	✓
Kentucky	—	✓	—	✓	✓
Louisiana	—	✓	—	✓	✓
Maine	✓	✓	—	*	—
Maryland	✓	✓	—	✓	✓
Massachusetts	—	✓	—	✓	—
Michigan	✓	✓	—	✓	✓
Minnesota	✓	✓	✓	*	✓
Mississippi	✓	✓	—	✓	—
Missouri	✓	✓	—	✓	✓
Montana	—	✓	—	*	—
Nebraska	—	✓	—	*	—
Nevada	—	✓	—	*	—
New Hampshire	✓	✓	—	*	—
New Jersey	—	✓	—	✓	—
New Mexico	—	✓	—	✓	—
New York	—	✓	—	✓	✓
North Carolina	—	✓	—	✓	—
North Dakota	—	✓	—	*	—
Ohio	✓	✓	—	✓	✓
Oklahoma	✓	✓	—	*	✓
Oregon	✓	✓	—	✓	✓
Pennsylvania	✓	✓	—	✓	✓
Rhode Island	✓	✓	—	*	✓
South Carolina	—	✓	—	—	✓
South Dakota	✓	✓	—	*	✓
Tennessee	✓	✓	—	✓	✓
Texas	✓	✓	—	✓	✓
Utah	✓	✓	—	*	*
Vermont	✓	✓	*	*	✓
Virginia	—	✓	✓	✓	—
Washington	✓	✓	—	—	—
West Virginia	✓	✓	—	—	✓
Wisconsin	✓	✓	—	—	✓
Wyoming	—	*	—	*	—

✓ = Data Available; — = Data Unavailable; \* = 0 Cases Reported.

prisoner recoveries at all. The largest gap in information involved hospitalization data, as only two jurisdictions (Minnesota, Virginia) reported data on the number of incarcerated individuals hospitalized as a result of COVID-19.

As with incarcerated persons, the most frequent COVID-19 data offered about correctional staff was the number of positive cases among staff. As can be seen in [Table 3](#), with the

**Table 3.** Availability of COVID-19 staff data.

	# of Tests	# of Positive Cases	# Hospitalized	# of Deaths	# Recovered
Alabama	—	✓	—	*	✓
Alaska	—	✓	—	*	✓
Arizona	—	✓	—	✓	✓
Arkansas	✓	✓	—	✓	✓
California	—	✓	—	✓	✓
Colorado	—	✓	—	*	✓
Connecticut	—	✓	—	*	✓
Delaware	—	✓	—	*	✓
FBOP	—	✓	—	✓	✓
Florida	—	✓	—	*	—
Georgia	—	✓	—	✓	✓
Hawaii	—	—	*	*	—
Idaho	—	*	*	*	*
Illinois	—	✓	—	*	✓
Indiana	✓	✓	—	✓	✓
Iowa	—	✓	—	*	✓
Kansas	—	✓	—	✓	✓
Kentucky	—	✓	—	*	✓
Louisiana	—	✓	—	✓	✓
Maine	—	✓	—	*	—
Maryland	✓	✓	—	✓	—
Massachusetts	—	✓	—	*	—
Michigan	—	✓	—	✓	—
Minnesota	—	✓	—	*	✓
Mississippi	✓	✓	—	*	—
Missouri	—	✓	—	*	✓
Montana	✓	✓	—	*	—
Nebraska	—	✓	—	*	—
Nevada	—	✓	—	*	—
New Hampshire	—	✓	—	—	—
New Jersey	—	✓	—	—	—
New Mexico	—	✓	—	*	—
New York	—	✓	—	✓	—
North Carolina	—	✓	—	✓	—
North Dakota	—	✓	—	*	—
Ohio	—	✓	—	✓	✓
Oklahoma	—	✓	—	*	—
Oregon	—	✓	—	*	✓
Pennsylvania	✓	✓	—	✓	✓
Rhode Island	✓	✓	—	*	✓
South Carolina	—	✓	—	—	✓
South Dakota	✓	✓	—	*	✓
Tennessee	—	✓	—	—	✓
Texas	✓	✓	—	✓	✓
Utah	—	✓	—	—	—
Vermont	—	✓	—	*	✓
Virginia	—	✓	—	—	—
Washington	—	✓	—	—	—
West Virginia	✓	✓	—	—	✓
Wisconsin	—	✓	—	—	✓
Wyoming	—	✓	*	*	✓

✓ = Data Available; — = Data Unavailable; \* = 0 Cases Reported.

exception of Hawaii, all jurisdictions made this information available (however, one jurisdiction, Idaho, reported no positive cases among staff at the time of data collection). Most jurisdictions (n = 30) also provided data on the number of staff who had recovered from COVID-19. As with the prisoner data, hospitalization data on staff were especially lacking. In fact, the only available COVID-19 staff hospitalization data came from three

jurisdictions that reported no hospitalizations had taken place among staff at the time of data collection (Hawaii, Idaho, Wyoming). As for mortality data, 29% of jurisdictions (n = 15) provided data on the number of correctional staff who had died of COVID-19 at the time of data collection, while 53% (n = 27) reported no correctional staff deaths and 17% (n = 9) provided no data on staff mortality at all.

## *(II) Personal Protective Equipment*

Regarding PPE, we found that while 55% of jurisdictions (n = 28) did provide some type of equipment for incarcerated persons and correctional staff by mid-April, distribution of these supplies, as well as guidelines for their use, varied considerably across jurisdictions. For example, in Michigan, all prisoners and staff were provided with three masks per person and were expected to wear masks at all times. Yet, in other jurisdictions, masks for incarcerated individuals were actually banned for wear due to security reasons (e.g., Nevada), were only provided to a portion of the prisoner population (e.g., Delaware), were provided, but not required for wear (e.g., Oregon, Pennsylvania, South Carolina), or were set aside for staff first (e.g., Florida, South Dakota). The Federal Bureau of Prisons' policy stated that staff were required to wear masks when working in certain areas (e.g., quarantine or isolation units), but could "opt not to wear masks when walking on the compound." In Hawaii, masks were only required for symptomatic prisoners and staff. Other jurisdictions were more difficult to assess, such as West Virginia, which stated that those in quarantine should wear face masks "only if there is a sufficient supply," Florida, which stated masks were "provided as needed," and Tennessee, which stated masks were "being distributed as they are being produced."

## *(III) Other Mitigation Efforts*

As for other mitigation efforts, we recognize that hand sanitizer is generally not available to incarcerated persons due to its high alcohol content and its classification as contraband in many prisons and jails. Our analysis determined that these parameters largely remained, even in the face of a pandemic. Specifically, we found only 10 jurisdictions that stated hand sanitizer was freely available in the prisons: Alaska, California, Delaware, Indiana, Massachusetts, New York, South Carolina, Tennessee, Vermont, and Wisconsin. In some cases, bans on hand sanitizer were temporarily lifted to make it available, but restrictions remained. For example, correctional officers were permitted to distribute hand sanitizer to prisoners in limited quantities in Ohio and South Dakota, and exceptions for hand sanitizer were permitted "for medical workers with approval of the superintendent" in West Virginia. Explanations were provided in some cases for continued bans on hand sanitizer, including that hand sanitizer can result in "potential alcohol misuse" (e.g., Colorado).

## **Discussion**

In summary, most prison jurisdiction systems across the United States have provided information on their public websites regarding the measures being taken to prevent the spread of COVID-19 across their facilities. The majority of the systems have engaged in certain preventive measures to reduce the risk of virus spread by educating prisoners on

hand washing and social distancing measures, increasing sanitization efforts, providing staff and prisoners with some cleaning supplies, and regularly screening correctional officers and staff members. Yet, as with many issues in the American criminal justice system, responses have not been uniform and often vary substantially from one jurisdictional system to the next. This is most apparent when considering the deficiencies in response to the COVID-19 pandemic within correctional facilities. Thus, the overall correctional response to the pandemic has largely mirrored the broader response from the United States government as a whole, relying on individual states and fragmented systems to implement their own policies rather than working to protect citizens through coherent and unified guidance.

We offer three main recommendations to correctional departments for strengthening the efficacy of their responses to COVID-19. First, mass testing in all facilities is needed (see also Marcum, 2020). More than a third of jurisdictions ( $n = 18$ ) did not provide any information on the number of prisoners tested for COVID-19 and 80% of jurisdictions ( $n = 41$ ) did not provide any information on the number of staff tested for COVID-19. Hospitalization data was rarely reported for either prisoners or staff. These gaps in information severely limit correctional jurisdictions from documenting the full scope of the problem that prisons are grappling with, thereby hindering the deployment of crucial resources and response efforts. Central to mass testing should be a requirement for correctional facilities to test all of their staff at no cost to the staff themselves, increasing the likelihood that asymptomatic cases of COVID-19 will be detected. Even if greater testing is occurring than is being reported online, greater transparency regarding the results of this testing to the public and the families of those in correctional facilities is needed.

Second, correctional jurisdictions must work to ensure adequate provision of PPE and availability of tools for proper hand hygiene, including hand sanitizers. The public health harms related to deficiencies in the provision of PPE and hand sanitizer in some U.S. jurisdictions are substantial. Facial coverings are a critical preventive tool in reducing risk for COVID-19 infection, as they can reduce the spray of respiratory droplets when worn properly (Konda et al., 2020). According to the CDCb (2020), masks are especially necessary for prevention in close quarters where social distancing measures range from difficult to impossible to implement. Such circumstances undoubtedly include prisons. Yet, multiple jurisdictions either did not provide unrestricted access to facial coverings or did not require staff or prisoners (or both) to use them – even months into the pandemic. The importance of hand hygiene in combatting the spread of COVID-19 is also vital (Kratzel et al., 2020). This is especially true when people lack unrestricted access to sinks for hand washing, which is the case in many prisons where incarcerated persons share bathrooms with dormitories of dozens, if not hundreds, of other adults. If hand sanitizer must remain a restricted from of contraband for those in prisons, then facilities should look to find ways of distributing the sanitizer in select amounts via correctional officers on a regular basis.

Notably, these barriers to prevention were in place for incarcerated persons while 21 jurisdictions posted details – and in some cases promotional videos – on their websites detailing incarcerated persons' efforts to mass produce COVID-19 equipment (e.g., masks, hospital gowns, sanitizer, soap, disinfectant, face shields). We note an important regional difference here in that mass production efforts of COVID-19 supplies by prisoners were most often described by southern jurisdictions (Florida, Georgia, Kentucky, Louisiana, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia). In Virginia and

Texas, incarcerated people were making 15,000 masks per day and 20,000 masks per day at the time of our analysis, respectively. Incarcerated individuals in North Carolina were responsible for producing 957,200 bars of soap, 281,376 bottles of disinfectant spray, 15,260 gallons of antibacterial liquid soap, and 7,952 gallon jugs of hand sanitizer.

As further illustration, individuals incarcerated in Tennessee were producing 1,000–5,000 masks daily at the time of our analysis, despite the fact that not all prisoners in Tennessee had access to masks. The Florida Department of Corrections released a memo on April 11<sup>th</sup> stating that prisoners would begin producing masks, which would first “be issued to correctional officers, probation officers, and staff in high risk geographic areas of the state” and “then to institutions which have large at-risk inmate populations.” We argue that these parameters, which establish a culture of denying access to basic preventive health measures during a pandemic, while simultaneously exploiting as laborers the very individuals denied that access, is especially cruel. If those in correctional facilities are going to be producing PPE, it seems only humane that they should be provided full access to PPE themselves.

Finally, we underscore the need for those living in prisons and jails to have continued access to a means of connecting with family and friends when visitation rights have been suspended. Feelings of isolation, degraded mental health, and increased risk for violence and misconduct may all result from a lack of social contact and reduced support from family members and friends among prisoners, especially amidst the uncertainty and chaos of the global pandemic (Biggam & Power, 1997; Jiang et al., 2005). Although our analysis shows that many states have, in fact, increased opportunities for phone or video calls available to prisoners during the suspension of visitation privileges, there remains stringent time restrictions or fees associated with these methods of communication. As long as visitation rights remain suspended, we recommend that facilities consider offering more digital options (especially video conferencing via tablets) with fewer restrictions that are not cost-prohibitive. Doing so can assist with maintaining well-being and social support for incarcerated individuals and their families.

As for future research directions, we call for research that explores how being incarcerated during the COVID-19 pandemic has impacted individuals’ physical and mental health. Pandemic-related criminological research thus far has focused primarily on changes in crime rates due to COVID-19 (see Mohler et al., 2020; Payne & Morgan, 2020; Payne et al., 2020; Piquero et al., 2020), but the detrimental effects of the virus are more far-reaching than that. Beyond risks for COVID-19 infection, which are substantial, the stress of being incarcerated is likely to be elevated in the context of a pandemic given not only fears of infection, but the many policy changes that directly influence quality of life for incarcerated persons. For example, the increase in social isolation following cuts to familial visitation in an atmosphere that already lacks social contact might have especially detrimental effects, both in the short and long term. Reductions in institutional movement and lockdowns are likely to have resulted in decreased access to exercise, movement, and mobility, an especially important consideration for older incarcerated adults (Prost et al., 2020). Moreover, research indicates the physical and psychological harms of solitary confinement are severe and include sensory hypersensitivity and loss of identity (Reiter et al., 2020), post-traumatic stress disorder (Hagan et al., 2018), and chronic somatic diseases (Gamman, 1995; Haney, 2003). We encourage future scholars to explore how efforts to quarantine large numbers of incarcerated individuals during the pandemic may have increased exposure to solitary

confinement-like living conditions for incarcerated persons, both in practice and in its effects.

Variations in correctional responses across institutions also warrant further study, especially with regard to whether or not more stringent policies mirroring evidence-based guidance and CDC guidelines significantly reduced the number of cases and collateral health consequences in those prisons and jails. One idea is to examine whether facilities that provided all staff and incarcerated persons with PPE *and* required wear of PPE had lower case rates or self-reported COVID-19 symptoms than facilities that did not. Moreover, a deeper understanding of why differences in correctional responses occurred in the first place would be beneficial. Considering the explicit recommendations made by the CDC, all correctional facilities should have adopted nearly identical responses to the pandemic in order to prevent outbreaks. Our results, however, demonstrate this did not occur.

Lastly, we encourage expansions in reentry and decarceration research. The pressing need to quickly reduce prison and jail population sizes across the country forced certain jurisdictions to release these persons early (see also Abraham et al., 2020). While we were unable to address these efforts in our study, moving forward this information can be highly beneficial to the study of reentry and risk assessment, as well as for sentencing reform (specifically sentencing reduction). If future research finds that those who were released early posed no increased threat of recidivism, this can serve as evidence in support of reductions in sentences and may hopefully contribute in some way to the problem of prison and jail overcrowding in general.

Like all research, ours must be considered with respect to its limitations. First, and related to our point above, there was a significant amount of missing information for certain metrics across facilities, especially in regard to testing and hospitalization data, as well as with respect to decisions on intakes, transfers, and early releases. These data were largely missing from DOC websites, yet hold significance for policy. For example, policies that permitted transfers of incarcerated individuals to continue across institutions – especially in large volume – likely exacerbated risks for spread of the virus by moving around potentially already-infected (perhaps asymptomatic) persons to new, uninfected locations. Alternatively, had correctional jurisdictions collectively pursued options for meaningful reductions in prison population sizes early on, overall risks for infection within institutions would have likely declined and options for incorporating CDC guidelines would have likely been more practical. Unfortunately, the current study gathered no data on the procedures or effects of these policies, mainly because such efforts were not highlighted in any kind of patterned manner by jurisdictions at the time of our data collection. It is clear that correctional departments must improve data collection and dissemination efforts to the public and these improved efforts can inform future research using more comprehensive data.

Secondly, our assessment necessarily only provides a snapshot of correctional system responses based on information available at one point in time. This means that our data cannot account for any changes made after the fact or policies that were potentially implemented but not communicated publicly through individual jurisdiction websites. Thus, our findings should be interpreted within that context. Yet, we were still able to gather a great deal of data across jurisdictions and our analysis does provide a comparative summary that can be used as a starting point for further analyses.



Another potential limitation is that all of the data here are provided by the correctional facilities themselves (rather than by incarcerated people, correctional officers, or other staff members). As such, the analysis reflects information provided in a public-facing context and may not necessarily reflect the reality of day-to-day life in certain prisons or the perspectives of those living and working in these facilities. This underscores the need for continued research that includes the perspectives of those embedded within facilities, as offered initially by Pyrooz et al. (2020). Lastly, despite the many adults incarcerated in U.S. jails, the current research did not include any information on jail-based responses to the COVID-19 pandemic. We encourage future scholars to conduct similar comparative analyses with jails to what we have offered here. However, such efforts will likely require substantial resources considering not only the number of jail jurisdictions throughout the U.S., but the more transient populations confined in jails relative to prisons.

## Conclusion

The United States continues to disproportionately suffer the ravages of the COVID-19 pandemic, despite many instances of peer industrialized nations responding effectively to the virus in many parts of the world. Absent even remotely competent federal leadership, the correctional response to COVID-19 appears to reflect the broader response of the U.S. in many ways, often deferring to individual states and ad hoc policies for controlling outbreaks rather than following unified guidance across facilities and correctional systems. This shortcoming is particularly notable with respect to data collection and transparency regarding testing and hospitalization information for those in prisons, as well as in the provision of preventive supplies. Correctional facilities remain high-risk locales for outbreaks and it is imperative that policies moving forward protect those who are most vulnerable while ensuring equity in access to those protections.

## Notes

1. While we include the Federal Bureau of Prisons (BOP) as one of fifty-one jurisdictions in our analysis, it was not our focus. The federal response is the focus of a separate article (Hummer, this issue).
2. To offer one further example, mortality data posted by the Ohio Department of Corrections changed midway through the pandemic from one indicator (“number of confirmed COVID-19 related inmate deaths”) to two indicators (“number of probable COVID-19 related inmate deaths” and “number of confirmed COVID-19 related inmate deaths”).

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